Nortel Networks Symposium Call Center Server

Software Installation and Upgrade Guide

Product release 3.0   Standard 2.0   September 2000

NØRTEL
NETWORKS™

P0910112

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Product release:	3.0
Document release:	Standard 2.0
Date:	September 2000

Publication history

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Chapter 1

Getting started

In this chapter

Overview

Introduction

The *Nortel Networks Symposium Call Center Server Software Installation and Upgrade Guide* provides step-by-step instructions for all of the procedures you must perform to complete an installation of, or perform an upgrade on, the Symposium Call Center Server client and server applications.

This guide also provides procedures for the following software maintenance activities:

- installing software Performance Enhancement Packages (PEPs)
- uninstalling the software
- reinstalling the software
- migrating to a different platform

This chapter introduces the Symposium Call Center Server and describes how the call center components interact with each other. This chapter also provides an overview of procedures you can follow for installing and upgrading your Nortel Networks Symposium Call Center Server.

Before you begin

To ensure that you have all of the information you need to complete the procedures in this guide, before you begin the installation, complete the checklists and worksheets in Chapter 2, "Worksheets and checklists."

Check for any Installation Addendums

Before performing an installation, upgrade, or conversion, check for any Installation Addendums on your regional Symposium Call Center Server technical web site. North American customers refer to the web site at www.nortel-sccs.com. European customers refer to the Symposium Call Center Server area on the web site at www.nortelnetworks.com/partnercentre.

Who should read this guide

This guide is intended for Nortel Networks installers and distributors who are responsible for installing or upgrading the Symposium Call Center Server.

Assumptions

This guide assumes the following:

- You are preparing to install a new Symposium Call Center Server, or you are planning to upgrade or make changes to an existing installation.

- Your hardware platform is installed and operational. If the platform has been installed but is not operational, refer to the *Meridian Application Server Installation and Maintenance Guide* for your hardware platform to troubleshoot your system.

- The switch is correctly installed, operational, and configured for use with Symposium Call Center Server.

- All client PCs are operational and running one of the following versions of Windows:

    - Microsoft Windows 95, with the Service Pack supplied by Microsoft

    - Microsoft Windows 95 version 4.00.950B or higher (OSR2)

    - Microsoft Windows 98

    - Windows NT 4.0 Workstation with Service Pack 3 or higher

- All client PCs are using Microsoft TCP/IP.

- The client local area network (CLAN) and the embedded local area network (ELAN) are installed and operational.

Access rights

This guide assumes that you have the privileges and access rights required to perform the procedures in this guide. For more information, refer to the *Network Administrator's Guide*.

Optional features

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

Related documents

Hardware platform installation

The following documents contain procedures for installing the Symposium Call Center Server hardware and software:

If you need information about	refer to
■ installation of the 701t	*701t Hardware Installation Guide*
■ installation of the 702t	*702 Installation and Maintenance Guide*
■ installation of the 1001t	*1001t Installation Guide*
■ installation of the 1003t	*1003t Installation and Maintenance Guide*

Hardware platform maintenance

The following documents contain procedures for installing the Symposium Call Center Server hardware and software:

If you need information about	refer to
■ maintenance of the 701t	*701t Maintenance and Diagnostics Guide*
■ maintenance of the 702t	*702 Installation and Maintenance Guide*
■ maintenance of the 1001t	*1001t Maintenance Guide*
■ maintenance of the 1003t	*1003t Installation and Maintenance Guide*

Software upgrade from Release 1.0 or Release 1.1

If you need information about	refer to
■ upgrading from Symposium Call Center Server Release 1.0 to Release 1.5	*Nortel Networks Symposium Call Center Server Upgrade Instructions from Release 1.0 to Release 1.5*, which accompanies the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0

About the Symposium Call Center Server

What is the Symposium Call Center Server?

The Symposium Call Center Server provides a call center solution for varied and changing business requirements by offering a suite of applications that includes

- call processing
- agent handling
- management and reporting
- networking (for Meridian 1 systems only)
- third-party application interfaces

The Symposium Call Center Server uses a client/server architecture, which distributes call routing and management capabilities among processors to make the best use of system resources.

The components of the Symposium Call Center Server

The Symposium Call Center Server uses a client/server architecture, with functionality distributed among various components. The major components of the Symposium Call Center Server include the following:

- **The server PC**—Responsible for functions such as the logic for call processing, call treatment, call handling, call presentation, and the accumulation of data into historical and real-time databases. This PC runs under Microsoft Windows NT Server 4.0.
- **The client PCs**—A graphical user interface to the server. Client PCs run the Symposium Call Center Server client application. They are used to administer the server and to monitor call center performance. You connect client PCs to the customer LAN (CLAN).
- **The switch**—Provides telephony services and voice network connectivity.
- **Front-end IVR system**—(Optional) Provides voice processing capabilities.
- **Third-party applications**—(Optional) Use information from the server to provide information on screens or to produce customized reports.

Installation steps overview and timing

Introduction

This section provides an overview of the procedures that you must follow, in the order shown, to complete the server and client installations. Each chapter also provides a detailed checklist of the steps to complete in that chapter.

Timing

The server and client installation takes approximately 4 hours and 30 minutes to complete for one server and one client. This does not include the time required for preinstallation planning, switch configuration, or post-installation setup and configuration, such as adding agents or configuring agent to skillset assignments.

Installation steps overview

Steps		✔
1	Ensure that the switch has been properly configured. Refer to your switch documentation for instructions.	
2	Complete the worksheets in Chapter 2, "Worksheets and checklists."	
3	Configure Windows NT. Follow the instructions in Chapter 3, "Configuring Windows NT 4.0 server." ***Time to complete:*** approximately 30 minutes	
4	Configure pcAnywhere 9.2 on the server. Follow the instructions in "Configuring pcAnywhere" on page 84. ***Time to complete:*** approximately 10 minutes	
5	Install the server software. Follow the instructions in Chapter 5, "Installing the server software." ***Time to complete:*** approximately three hours	
6	Install the client software. Follow the instructions in Chapter 6, "Installing the client software." ***Time to complete:*** approximately 30 minutes	
7	Add an SMI system. Follow the instructions in Chapter 7, "Adding a System Management Interface system." ***Time to complete:*** approximately 10 minutes	
8	Return to the server computer to complete the server installation. Follow the instructions in "Installing the server software" on page 106. ***Time to complete:*** approximately 10 minutes	
9	Install any PEPs from the PEP CD (see "Installing PEPs and Service Update packs" on page 130).	
10	Create a Platform Recovery disk (see "To create a Platform Recovery disk" on page 124).	
11	Create a database backup (see the *Administrator's Guide*.)	

Steps	✔
12 Optionally, install the Symposium Call Center Server client on additional PCs as required (see Chapter 6, "Installing the client software").	

Chapter 2

Worksheets and checklists

In this chapter

Overview

Information and worksheet

A foldout worksheet is attached inside the front cover. Make photocopies of this worksheet and use it to record information required for the software installation.

Use the tables in this chapter to supplement the attached worksheet. These tables provide some additional details and tips, such as computer name and switch name restrictions. Review the tables before filling out the worksheet.

If you prefer to use the tables to gather information, make photocopies of these tables. The tables in this chapter organize the planning information according to when it is needed during the software installation.

Requirements

Review the sections "Customer-supplied equipment and data checklist" on page 20 and "Installation software checklist" on page 23 to ensure that you have everything you need to begin the software installation.

Where to get the information

Sources of information for the worksheets include the customer's LAN, network, or system administrator, and the Symposium Call Center Server administrator.

Installing a network of servers (for Meridian 1 only)

If you are installing a network of servers, ensure that you plan the server installation information for all servers. Refer to the *Symposium Call Center Server Network Control Center Administrator's Guide* for networking requirements and planning information.

Switch information

Introduction

Use the table appropriate to your switch type (Meridian 1 or DMS/MSL-100).

Restrictions for switch names

The following restrictions apply to switch names:

- Valid characters for switch names are A–Z, a–z, 0–9, _ (underscore), and . (period).
- Switch names must begin with an alphabetic character and cannot contain spaces.
- The last character must not be an underscore or a period.
- Switch names must not exceed 80 characters in length.

Meridian 1 switch information

During software installation, you need the information specified in the following table:

Item	Fill in the required information
Switch name	
Switch customer number	
Switch ELAN primary IP address (for example, 255.255.255.255)	
Switch ELAN secondary IP address (for example, 255.155.155.237)	

Notes:

- If you enter an incorrect value during installation, you can use the Feature Report utility (see "Feature Report: Switch Information" on page 272) to correct the value after installation.

- Switches with two processors require two IP addresses. Use the switch primary address for the primary CPU (core 0), and use the secondary address for the redundant CPU (core 1). For smaller switches, such as an Option 11C, you need only the primary address.

DMS/MSL-100 switch information

During software installation, you need the information specified in the following table:

Item	Fill in the required information
Switch name	
Switch customer number	
Switch IP address (for example, 255.255.255.255)	
IP addresses for routers on the ICM connection between the switch and ELAN **Note**: Record additional IP addresses on the back of the network planner worksheet.	
Network node ID	
Service ID	
Application ID	
Service version	
Business group	
Link set name	
Password	
Remote host IP address (optional)	

Notes:

- If you enter an incorrect value during installation, you can use the Feature Report utility (see "Feature Report: Switch Information" on page 272) to correct the value after installation.

- If an IP addressing scheme has not yet been established for the ICM connection, see your network administrator.

Windows NT configuration information

Introduction

Complete the following table to record general Windows NT information. Complete the table on the next page to record IP addresses. The customer must provide unique and usable IP addresses.

General information

Required setup data	Fill in the required information
New password for Administrator account (You are instructed to provide a new password.)	For security reasons, do not record the password here. See "Changing the Administrator password" on page 31 for password guidelines.
Computer name ■ no spaces; 6 to 15 characters in length ■ letters, numbers, hyphen, and dash are allowed ■ must be unique on the network	
DNS Host Name (must be exactly the same as the Computer name, including uppercase and lowercase)	
Workgroup name	
Type of modem installed in the server	
Modem phone number for the switch (for dial-up connections only)	

ELAN and CLAN IP addresses and names

CLAN and ELAN IP addresses must be unique. Contact the customer's LAN administrator for IP addresses, subnet masks, and gateways.

Name	IP address	Subnet mask	Gateway, description, equipment name, or comments
ELAN server			
ELAN router/ gateway (optional WAN connection)	N/A		
CLAN server			
CLAN router/ gateway (if used)			
RAS 1 (minimum 2 RAS addresses)			
RAS 2 (if applicable)			

Note: The NCC is not connected to the ELAN. However, the NCC is provided with standard hardware that includes an ELAN network card. To enable proper functionality, enter any IP address for the ELAN server on the NCC.

Server and client software installation information

Required setup data	Fill in the required information
Customer name	
Company name	
Keycode and serial number. This can be on a disk; if so, indicate "on disk." For DMS/MSL-100, the serial number is contained in the dongle.	
Switch information (See "Switch information" on page 13.)	
ELAN and CLAN IP addresses **Notes:** ELAN and CLAN addresses must be unique. The NCC is not connected to the ELAN. However, the NCC is provided with standard hardware that includes an ELAN network card. To ensure proper functionality, configure the ELAN network interface card with an IP address that is not used in the network.	

Required setup data	Fill in the required information
Site name. This name can consist of up to 21 characters, except the \ (backslash) character. In a multi-site network, the site name for each server must be unique. The application uses this name to identify the server in reports. **Note**: For M1 switches with the option Network Skill-based Routing feature, the NCC site name is automatically propagated to servers.	
New password for NGenDesign account (This is a user account for Nortel Networks support.)	For security reasons, do not record the password here. See "Changing the Administrator password" on page 31 for password guidelines.
New password for NGenDist account (This is a user account for distributors to provide support.)	For security reasons, do not record the password here. See "Changing the Administrator password" on page 31 for password guidelines.
Modem phone number for the server (for dial-up connections from the client PC)	

Customer-supplied equipment and data checklist

Introduction

Use this checklist to ensure that you have the required equipment and information to be supplied by the customer.

Description	✔

Client PC hardware
 	
Each client PC running the Symposium Call Center Server client application has the following:
 	
■ Intel Pentium 90 MHz (or faster) CPU
■ RAM
  ■ at least 32 Mbytes for Windows 95/98
  ■ at least 40 Mbytes for Windows NT
■ at least 1 Gbyte of hard disk space free
■ 1.44 Mbyte floppy drive
■ VGA color monitor
■ keyboard
■ Microsoft-compatible mouse
■ Network interface card (Token Ring or Ethernet)—up to two cards are supported
■ CLAN connection running Microsoft TCP/IP
■ 4-speed or higher CD-ROM
■ (optional) parallel printer port
■ (optional) serial port (16550 UART)	

Description	✔
Client PC software PCs up and running with one of the following installed: ■ Windows 95 with the required Microsoft Service Pack ■ Windows 95 version 4.00.950B or higher (OSR2) ■ Windows 98 ■ Windows NT 4.0 Workstation (Service Pack 3 or greater)	
Ethernet connections ready at the switch (cable and transceiver/Multistation Access Unit)	
Customer-supplied hub for the ELAN	
Customer-supplied UPS for the server	
Jacks and cable ready to connect the server to the CLAN	
(Optional) cable ready to connect the ELAN to the customer WAN	
Modem, power cable, and serial cable	
A list of unique names and IP addresses for all equipment on both the CLAN and ELAN (See "Switch information" on page 13 and "Windows NT configuration information" on page 16.)	
Use the Capacity Assessment Tool to analyze customer LAN bandwidth. Existing average bandwidth utilization = _____%	

Note: This worksheet indicates the minimum required hardware for the client. If you are generating large reports on the client PC, a faster processor and increased memory improve performance.

Hardware upgrades

If you are upgrading Symposium Call Center Server software, make sure your server PC has at least 256 Mbytes of memory. This is the minimum memory requirement for operating Symposium Call Center Server Release 3.0. For more information on hardware and software requirements, refer to the *Planning and Engineering Guide.*

Note: If you are using the Standard version of the 701t or 702t platform, you must upgrade the server hardware to the Enhanced version prior to upgrade. Symposium Call Center Server Release 3.0 does not support the Standard version.

Installation software checklist

Qty	Description	✔
1	Nortel Networks Symposium Call Center Server Release 3.0 Operating System CD-ROM Version 2.0 **Note:** If you are using a different version of the CD, refer to your Release Notes or Documentation Addendum.	
1	Nortel Networks Symposium Call Center Server Release 3.0 Server Application CD-ROM	
1	Nortel Networks Symposium Call Center Server Release 3.0 Client Application CD-ROM	
	Nortel Networks Symposium Call Center Server Supplementary CD-ROM (optional). If supplied with this installation, this CD contains product enhancement files.	
1	Documentation CD. This CD contains all Symposium Call Center Server documents in PDF format.	
1	The emergency repair disk that holds the configuration data for Windows NT. The installer updates this disk during each stage of the Symposium Call Center Server installation on the server.	
1	Capacity Assessment Tool (CapTool) disks (3). This is the capacity planning software.	
1	Keycode data. This data governs what software features you install. This data is usually contained on a disk. However, if you do not have the disk but know your keycode data, you can enter the information manually during the installation.	

Maintenance and diagnostics items

Qty	Description	✔
1 set	Microsoft DOS 6.20 disks. You use these disks to reinstall the operating system in case of a hardware failure.	
1 set	Intel PCDIAGS disks. You use these disks for maintenance and diagnostics.	
1 set	Driver disks for LAN cards, SCU utility	
1 set	(Optional) RAID driver disk and configuration disk	

Chapter 3

Configuring Windows NT 4.0 server

In this chapter

Overview

Introduction

This chapter contains the procedures for configuring Windows NT. You must complete these steps before installing the Symposium Call Center Server software.

Checklist for configuring Windows NT

Step	✔
Ensure that you have completed the checklists and worksheets in Chapter 2, "Worksheets and checklists."	
Complete the tasks in "Preparing for installation" on page 28.	
Log on to Windows NT as Administrator. See page 30.	
Change the Administrator password. See page 31.	
Verify that Service Pack 3 is installed. See page 34.	
Apply the Microsoft hot fix. See page 37.	
Verify that Remote Access Service (RAS) and (optionally) SNMP are installed. See page 38.	
Verify that the RAS service is set to automatic. See page 40.	
Check the virtual memory settings. See page 40.	
Set the date, time, and time zone. See page 42.	
Change the computer and workgroup names. See page 44.	
Configure TCP/IP for the ELAN, CLAN, and RAS. See page 49.	
Configure the modem for RAS. See page 61.	
Format optional disk drives. See page 67.	
Update the emergency repair disk. See page 70.	
Test the network connection. See page 72.	

Preparing for installation

Items to verify

	✔
Verify all of the IP addresses and host names. All of the IP addresses and host names must be unique on the network. See "Windows NT configuration information" on page 16.	
Ensure that the Windows NT computer name and TCP/IP DNS host name that you intend to assign are identical, including uppercase and lowercase letters.	
Meridian 1 checks	
Ensure that the switch host name, IP name, and net mask are the same as those found with the STAT ELNK command in LD 137.	
Ensure that the switch serial number matches the one delivered with the Symposium Call Center Server keycode. The serial number must match exactly, including uppercase and lowercase letters.	
DMS/MSL-100 checks	
Ensure that the security keylock device (the "dongle") is attached to the server. **Note:** The dongle is not required for installation, but without it the server cannot communicate with the switch.	
Ensure that the dongle (security keylock device) serial number matches the one delivered with the Symposium Call Center Server keycodes. The serial number must match exactly, including uppercase and lowercase letters.	

Requirements

A mouse, monitor, and keyboard must be connected to the server.

Note: If reconfiguration is required at a later time, you can do the reconfiguration through a local or remote pcAnywhere session.

About server restarts

You might be asked several times during Windows NT configuration if you want to restart the server. You must restart the server to activate some Windows NT configuration changes. You need not restart the system each time you are prompted. You only need to restart it once, after all of the Windows NT configuration tasks are completed.

CAUTION

Risk of file corruption

Do not press the power button on the front of the server to shut down your system. If possible, perform the system shutdown described in "Restarting the server" on page 74.

Logging on to Windows NT as Administrator

To log on as Administrator

ATTENTION When logging on to Windows NT, ensure that the Caps Lock key is not locked. The password is case-sensitive.

1 Ensure that the server has started. The Windows NT Begin Logon dialog box appears.

2 Press Ctrl+Alt+Delete.

Result: The Logon Information dialog box appears.

3 Type **Administrator** as the user name.

4 Type **abc123** as the password.

5 Click OK.

What's next?

Continue with "Changing the Administrator password" on page 31.

Changing the Administrator password

Purpose

To ensure server security, change the default Administrator password as soon as possible.

Password recommendations

Nortel Networks recommends that your password meet the following requirements:

- The password should be six to ten characters long.
- The password should contain at least one number, and one symbol or punctuation character.
- The password should not contain common words or nouns.

Example
The following password example meets all of these recommendations: xyd45fst

Password security

Write down the new Administrator password that you create, and store it in a safe, secure place away from the server. Give the Administrator password only to those who need it.

To change the Administrator password

1 Log on to Windows NT as Administrator.

2 Press Ctrl+Alt+Delete.

Result: The Windows NT Security dialog box appears.

3 Click Change Password.

Result: The Change Password dialog box appears.

4 Enter the current password in the Old Password box.

5 Enter the new password in the New Password box and in the Confirm New Password box.

Note: Ensure that the password meets the recommendations described earlier in "Password recommendations" on page 31.

6 Click OK.

Result: A dialog box appears indicating that the password has been successfully changed.

7 Click OK.

Result: You return to the Windows NT Security dialog box.

8 Click Cancel to close the Windows NT Security dialog box.

9 Record the password and store it in a safe, secure place away from the server.

Configuring and verifying Windows NT settings

Introduction

All of the following procedures are required to configure Windows NT for Symposium Call Center Server. Follow the procedures in this section in the order in which they appear.

To verify the installation of Service Pack 3

1   Log on to Windows NT as Administrator.

2   Open the Control Panel (from the Windows Start menu, choose Settings → Control Panel).

> **Result:** The Control Panel appears.
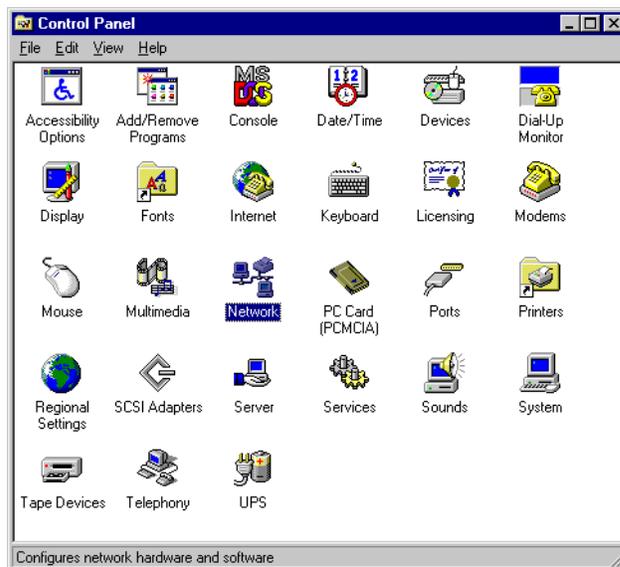
3   Choose Help → About Windows NT.

4   Verify that the Windows NT 4.0 version includes the phrase "Service Pack 3." If you do not see this phrase, continue with the following steps to install the service pack from the installation CD.

> **ATTENTION**   If you must install or reinstall any features on Windows NT (for example, if you must reinstall SNMP, reinstall RAS, or install a new network card), then you must reinstall Service Pack 3.

5   Insert the Symposium Call Center Server Operating System CD in the CD-ROM drive.

       Result: The Windows NT Setup Splash screen appears.

6   Click Close to close the screen.

7   From the Windows Start menu, choose Programs → Windows NT Explorer.

       Result: The Windows NT Explorer screen appears.

8   Click the plus sign (+) next to the CD-ROM drive to display its subdirectories.

9   Select the directory named sp3.

10   Locate the file Update.exe, and double-click to run it.

       Result: A welcome screen appears.

11   Click Next.

12   Click Yes to accept the license agreement.

13   Click Next to install the service pack.

14   Select Yes, I want to create an uninstall directory, and then click Next to continue.

15   Click Finish to finish installing the service pack.

       Result: The program examines the system, selects the files to copy, and then copies them. If messages appear, refer to the following notes:

       Notes:

- As the files are installed, the following message might appear: `The target file exists and is newer than the source. Overwrite the newer file?` Click No.

■ The following dialog box also might appear:

Click No.

16 When the following message appears, remove the CD from the CD-ROM drive and click OK:

To verify the Microsoft hot fix is installed

Hardware shipped from the factory should have the Microsoft hot fix applied. To confirm that the hot fix has been applied, follow this procedure.

1 Navigate to the directory D:\Hotfixes\Microsoft\q178741. If the directory does not exist, search for Hfx.exe on drive D on the server.

2 Run Hfx.exe.

Result: The Hotfix Manager window appears.

3 Check the list of hot fixes on the system in the List of currently installed window.

4 If the Microsoft Hotfix is in the list, click Done to close the window.

5 If Hotfix Q178741 is not installed, continue with "To apply the Microsoft hot fix" on page 37.

To apply the Microsoft hot fix

Note: Perform this procedure during a new server installation, after installation of Service Pack 3. If you reinstall Service Pack 3, you must perform this procedure again after the reinstallation.

1   Log on to the the server as Administrator.

2   Insert the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0 into the CD-ROM drive.

3   Make sure that hidden files are visible. To do so, follow these steps:

    a.   In Windows NT Explorer, choose View → Options.

    b.   Select Show all files.

    c.   Click Apply, and then click OK.

4   Copy the folder Hotfixes\Microsoft\q178741 on the CD to the root of drive D.

5   In Windows NT Explorer, click the D:\q178741 folder.

6   Double-click the file hfx.exe, located in this folder.

    Result: The Hotfix Manager window opens.

7   Click InstallNewFix.

    Result: The Install Path dialog box opens.

8   Make sure that the path specified is D:\q178741\hotfix.inf. If it is not correct, browse to this path.

9   Click OK.

    Result: The program installs the hot fix on the server. When the installation is complete, the program notifies you that Windows NT has been updated.

10   Click OK.

    Result: The system prompts you to restart. Do not click OK yet.

11   When the HotFix Manager appears, click Done.

12   Restore the settings for hidden files. To do so, follow these steps:

    a.   In Windows NT Explorer, choose View → Options.

    b.   Select Hide files of these types.

    c.   Click Apply, and then click OK.

13 Click OK to restart the server.

Result: The server restarts.

Note: If the server hangs during the restart, restart it manually.

To verify that RAS and SNMP are installed, and to install them if required

1 Log on to Windows NT as Administrator.

2 In the Control Panel window, double-click the Network icon.

Result: The Network property sheet opens.

3 Click the Services tab.

4 If you plan to use SNMP, verify that SNMP Service is in the list of services. If it is not present, follow these steps:

    a. Insert the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0 in the CD-ROM drive.

    b. Click Add.

    c. Select SNMP Service.

    d. Click OK.

Note: Be sure to configure SNMP to forward traps to an NMS. See the following procedure.

5 If Remote Access Service is not in the list of services, follow these steps:

    a. Insert the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0 in the CD-ROM drive.

    b. Click Add.

    c. Select Remote Access Service.

    d. Click OK.

Note: To configure RAS, follow the procedures in "To configure the Remote Access Service" on page 57 and "Configuring the modem for Remote Access Service" on page 61.

6 Install Service Pack 3 (beginning with step 7 on page 35).

7 Apply the Microsoft hot fix (see "To apply the Microsoft hot fix" on page 37).

To configure the Windows NT SNMP service to forward traps to an NMS (optional)

1   In the Control Panel window, double-click the Network icon.

Result: The Network property sheet opens.

2   Click the Services tab.

3   In the list of Network Services, select SNMP Service.

4   Click Properties.

Result: The SNMP Properties property sheet appears.

5   Click the Traps tab.
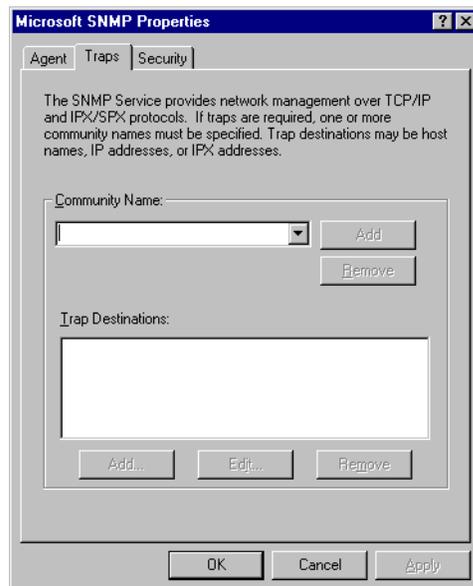
6   If no community name is defined, type **public** and click Add.

7   Add a trap IP destination by clicking Add and typing the IP address of the NMS.

8   Click OK.

Result: The SNMP Properties property sheet closes.

9   Click Close.

Result: The Network property sheet closes.

10 In the Control Panel window, double-click the Services icon.

Result: The Services dialog box appears.

11 Select the SNMP Trap Service.

12 Click Start.

Result: The SNMP Trap Service starts.

13 Click Close.

Note: You must also configure the NMS to receive and interpret traps.

To verify that the RAS service is set to automatic

This service must be set to automatic to support dial-in connections from the client PC or from support personnel.

1 In the Control Panel window, double-click Services.

2 Scroll to Remote Access Server.

3 If Remote Access Server is not set to automatic, then do the following:

    a. Select Remote Access Server.

    b. Click Startup.

    c. Select Automatic.

4 Click OK.

To verify the virtual memory settings and change them, if required

Follow this procedure to verify the virtual memory (that is, swapfile) settings. For efficient operation, Nortel Networks recommends that the server be configured for 268 Mbytes of virtual memory.

1 In the Control Panel window, double-click System.

2 Click the Performance tab.

3 In the Virtual Memory section, click Change.

The Virtual Memory dialog box opens.

4 Select drive D.

5   Under Paging File Size for Selected Drive, ensure that the values are

- 268 Mbytes for Initial Size

- 268 Mbytes for Maximum Size

6   If the values for Initial Size and Maximum Size are correct, then click Cancel to exit.

7   If you need to change the values for Initial Size and Maximum Size, then follow these steps:

    a.   Enter 268 for Initial Size, and 268 for Maximum Size.

    b.   Click Set, and then click OK.

       Result: You return to the System Properties property sheet.

    c.   Click OK.

    d.   Click No when prompted to restart the server. You can restart the server later.

    Note: Do not split virtual memory across multiple drives.

For more information on memory requirements, refer to the *Planning and Engineering Guide.*

To change the date, time, and time zone

Set the server date and time now to help with the analysis of system events that occur in Windows NT Event Viewer during installation.

Note: For the Meridian 1 switch, after the server is fully operational and connected to the switch, the switch controls the date and time.

1   In the Control Panel window, double-click the Date/Time icon.

Result: The Date/Time Properties property sheet appears.
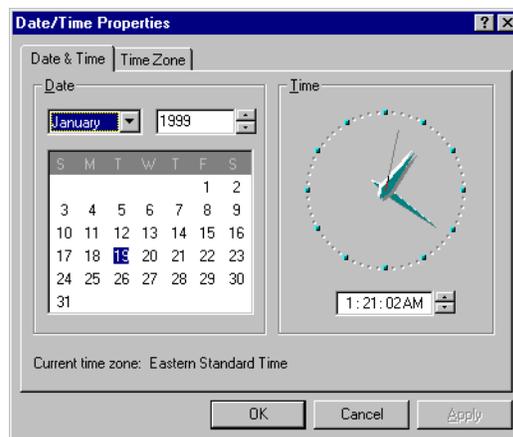
2   Click the Time Zone tab.

      Result: The Time Zone property page appears.
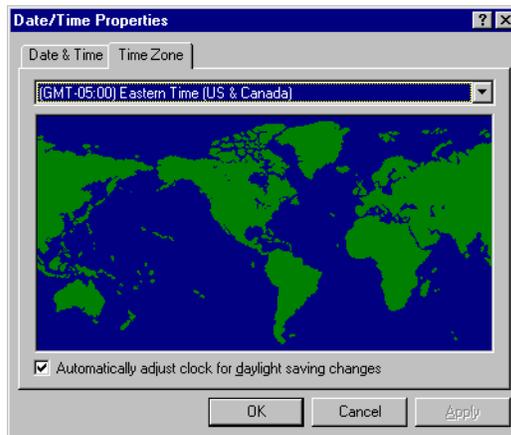
3   Select the appropriate time zone from the drop-down list box.

4   If you are using a Meridian 1 switch and you are configuring a Symposium Call Center Server, ensure that Automatically adjust clock for daylight saving changes is unchecked. If you are configuring the NCC, ensure that Automatically adjust clock for daylight saving changes is checked. If you are using a DMS switch, ensure that Automatically adjust clock for daylight saving changes is checked.

5   Click the Date & Time tab.

6   Select the current month, year, day, and time.

7   Click OK.

To change event viewer settings

Change the event viewer settings if the default value will not store enough information about system events within Symposium Call Center Server.

1   From the Windows Start menu, choose Programs → Administrative Tools (Common) → Event Viewer.

      Result: The event viewer window appears.

2   Choose Log → Log Settings.
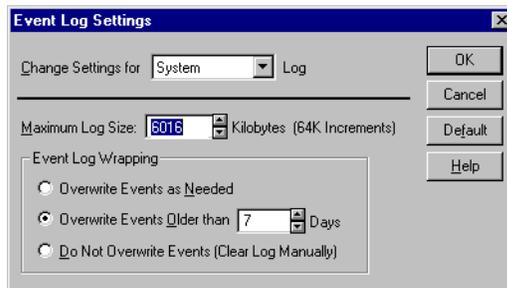
Result: The Event Log Settings dialog box appears.

3   Change the value in the Maximum Log Size box by entering a new value (in kilobytes), according to the following guidelines:

   ■   For a small call center with few agents, leave the value at default (512 kbytes)

   ■   For a medium-sized call center with a moderate number of agents, set the value at 6016 kbytes or more, depending on the number of days of event history to be kept (that is, the more days that event records are kept, the larger the log size must be).

   ■   For a large call center with many agents, set the value at 10 048 kbytes or greater, depending on the number of days of event history to be kept.

4   Click OK to close the window.

To change the computer and workgroup names

The computer name and workgroup name uniquely identify the server on your network.

CAUTION

Risk of database errors
To prevent database errors, make sure the computer's DNS host name matches the computer name. During this procedure, you are instructed to verify that the DNS host name matches the computer name.

ATTENTION   By default, a new server is installed with a dummy computer name that uniquely identifies it. (This name is called the Installed Computer Name.) When you configure the server, you assign it the correct name. Record the Installed Computer Name and provide a copy to the local system administrator. If you need to call your Nortel Networks Customer Support representative because of a problem with the server, you need the default computer name to identify the server.

1   In the Control Panel window, double-click Network.

Result: The Network property sheet appears.
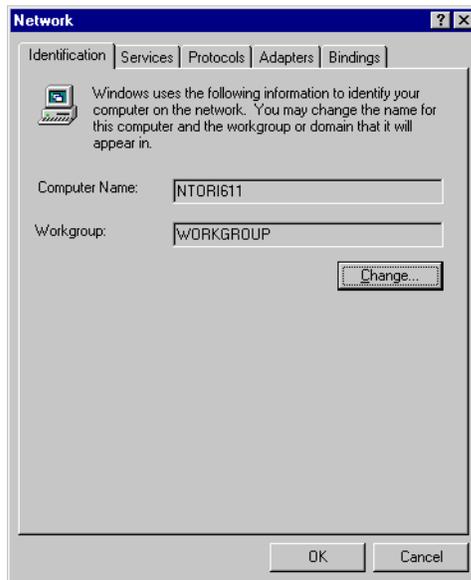
2   Record the default Computer Name and provide a copy to the system administrator.

3   Click Change.

    Result: The Identification Changes dialog box appears.
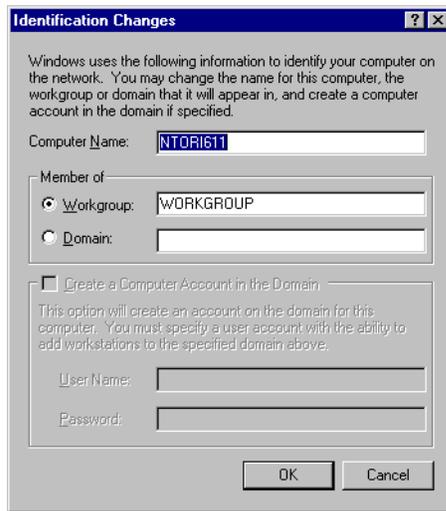
4   Enter the new computer name. The new computer name must be a single word without spaces, 6 to 15 characters long. Letters, numbers, a hyphen, and a dash are allowed.

5   Click OK.

    Result: A message appears, indicating that the name change was successful.

6   Click OK.

    Result: The Network property sheet appears.

7   Click Change.

8   You return to the Identification Changes dialog box.

9   Select the Workgroup option.

> **ATTENTION**   The server must be in a workgroup. It cannot be a member of a domain, or else the server software can fail to function.

10   Enter the workgroup name.

11   Click OK.

Result: A welcome message appears.

12   Click OK.

Result: The Network property sheet appears.

13   In the Network property sheet, click the Protocols tab.

Result: The Protocols property page appears.
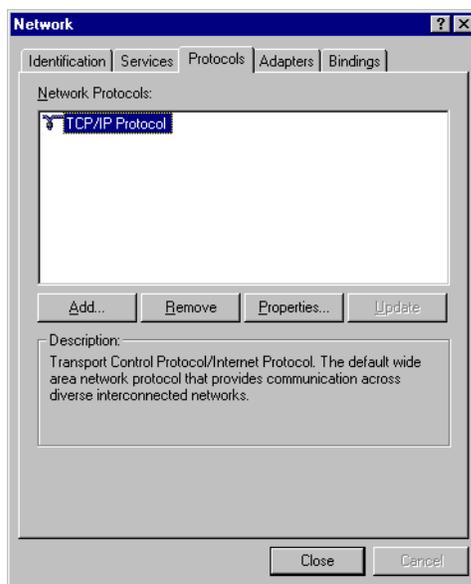
14   Select TCP/IP Protocol from the list of installed protocols.

15   Click Properties.

Result: The Microsoft TCP/IP Properties property sheet appears.

16   Click the DNS tab.

Result: A DNS property page appears, similar to the following example:
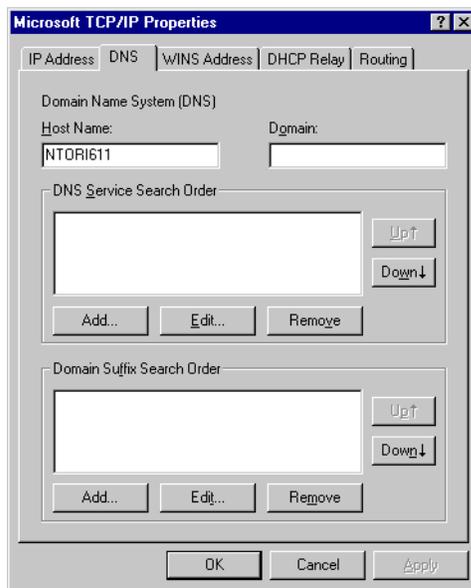
17   Change the DNS Host Name to match the Computer Name.

Note: The Host Name and Computer Name must match *exactly*, including case.

18   Click OK.

Result: The Network property sheet appears.

19   Click Close to complete the change.

Do not restart the server at this time as it will be restarted later.

Configuring TCP/IP for ELAN, CLAN, and Remote Access Service

Introduction

To enable communication with the server, you must configure TCP/IP for the

- ELAN network interface card (NIC) (see below)
- CLAN NIC (see page 52)
- Remote Access Service (RAS) (see page 57)

These procedures apply to initial installation only. If you are performing a system rebuild, these procedures do not apply.

To configure the ELAN NIC

1   Log on to Windows NT as Administrator.

2   Open the Control Panel (from the Windows Start menu, choose Settings →
         Control Panel).

3   In the Control Panel window, double-click Network.

4   In the Network property sheet, click the Protocols tab.

Result: The Protocols property page appears.
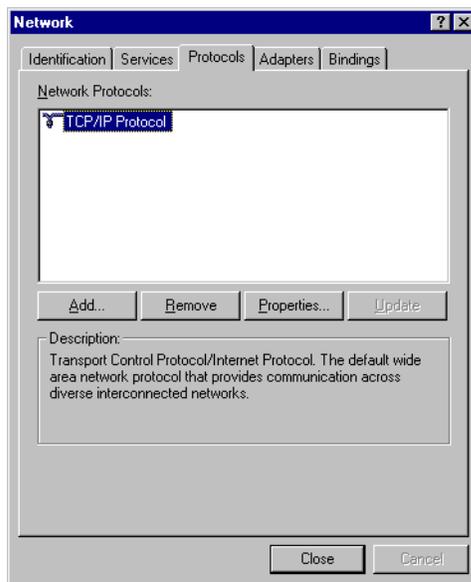
5   Select TCP/IP Protocol from the list of network protocols.

6   Click Properties.

Result: A Microsoft TCP/IP Properties property sheet appears, similar to the following example:
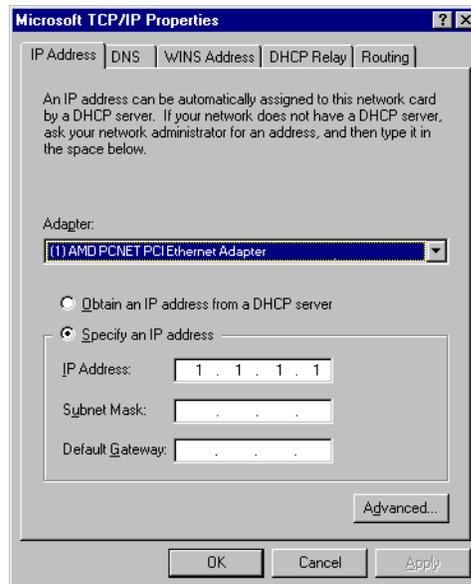
<table>
<tr><td>**ATTENTION**</td><td>The server must not be a DHCP client.</td></tr>
</table>

7   In the Adapter box, select the adapter in the drop-down list that has the placeholder IP address, 1.1.1.1. This adapter is the ELAN card.

Tip: Write down the Ethernet adapter name for the ELAN card and give this information to the local administrator for future reference. If you have to reinstall the ELAN card, you must know the name of the ELAN card.

8   Click Specify an IP address.

9   Enter the server's ELAN IP address in the IP Address box.

<table>
<tr><td>**ATTENTION**</td><td>Make sure that the ELAN IP address is unique and is not used by any other devices or locations on the LAN or WAN.</td></tr>
</table>

10   In the Subnet Mask box, enter the server's ELAN subnet mask.

11   Ensure that the Default Gateway box is blank.

12   Click OK.

Result: You return to the Network property sheet.

13   Continue with the following procedure.

To configure the CLAN NIC

1   On the Protocols property page of the Network property sheet, select TCP/IP Protocol.

2   Click Properties.

Result: The Microsoft TCP/IP Properties property sheet appears.

```
Microsoft TCP/IP Properties                              [?][X]

 IP Address | DNS | WINS Address | DHCP Relay | Routing |

  An IP address can be automatically assigned to this network card
  by a DHCP server.  If your network does not have a DHCP server,
  ask your network administrator for an address, and then type it in
  the space below.

  Adapter:
  [(1) AMD PCNET PCI Ethernet Adapter                        ▼]

     ○ Obtain an IP address from a DHCP server
     ⊙ Specify an IP address
        IP Address:      198 . 235 . 10 . 194
        Subnet Mask:     255 . 255 . 240 . 0
        Default Gateway:    .      .

                                              Advanced...

              OK          Cancel          Apply
```
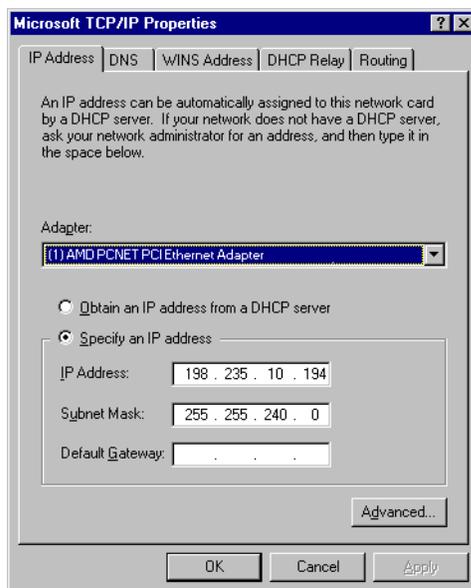
ATTENTION   The server must not be a DHCP client.

3   In the Adapter box, select the adapter in the drop-down list that has the placeholder IP address, 2.2.2.2. This adapter is the CLAN card.

Tip: Write down the Ethernet adapter name for the CLAN card and give this information to the local administrator for future reference. If you have to reinstall the CLAN card, you must know the name of the CLAN card.

4   Click Specify an IP address.

5   Enter the server's CLAN IP address in the IP Address box.

6   Enter the server's CLAN subnet mask in the Subnet Mask box.

7   Enter the gateway IP address in the Default Gateway box.

Note: To enter more IP addresses, subnet masks, and gateways, click Advanced.

8   Click OK.

Result: You return to the Network property sheet.

9   Continue with the following procedure.

To configure the server to support DHCP client PCs

If your client PCs use Dynamic Host Control Protocol (DHCP) to communicate with the server, you must select and configure the DNS and WINS options. To configure DNS and WINS, perform the following steps.

1 On the Protocols property page of the Network property sheet, select TCP/IP Protocol.

2 Click Properties.

Result: The Microsoft TCP/IP Properties property sheet appears.
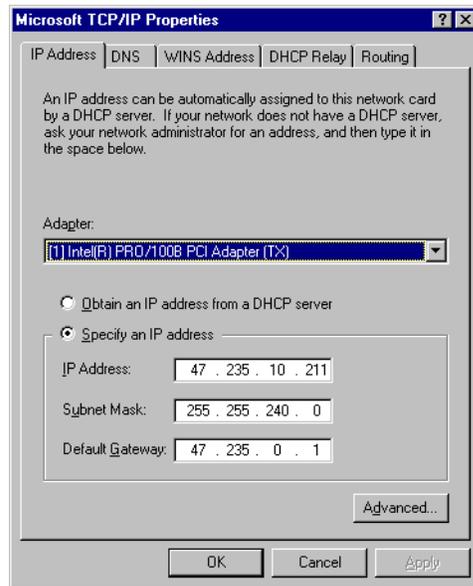
3   Click the DNS tab and ensure that the Host Name and Domain boxes show the computer's host name and domain name.
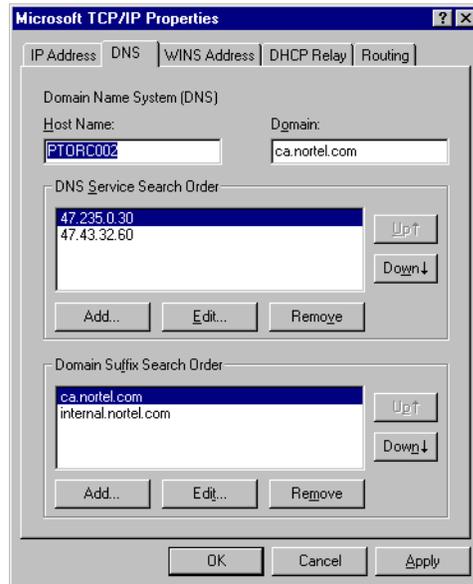
4   Click the WINS Address tab and ensure that the check boxes entitled
Enable DNS for Windows Resolution and Enable LMHOSTS Lookup are
checked.
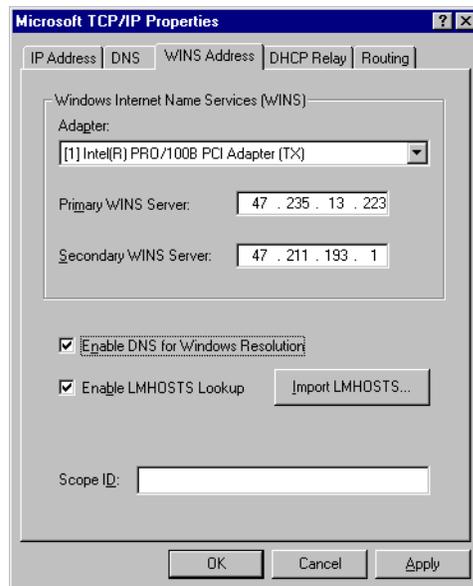
Result: When you configure DNS and WINS services, you enable the
server to communicate scheduled reports information with the client PCs.

If DNS or WINS is not configured, the server cannot determine the IP address of
the clients, and no scheduled report information is sent from the server back to
the client.

To configure the Remote Access Service

Note: The server Remote Access Service requires a pool of IP addresses to grant dial-in privileges to remote clients. To assign a pool, you specify a range of CLAN or ELAN IP addresses. This range must include at least two available IP addresses. Remote Access Service uses the first IP address. The remaining IP addresses are loaned to each dial-in client. Put careful thought into the range of IP addresses provided.

1   In the Network property sheet, click the Services tab.

   Result: The Services property page appears.
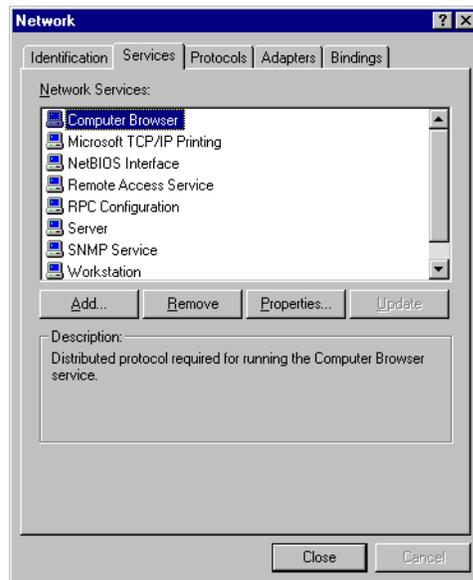
2   Select Remote Access Service, and then click Properties.

Result: The Remote Access Setup dialog box appears.
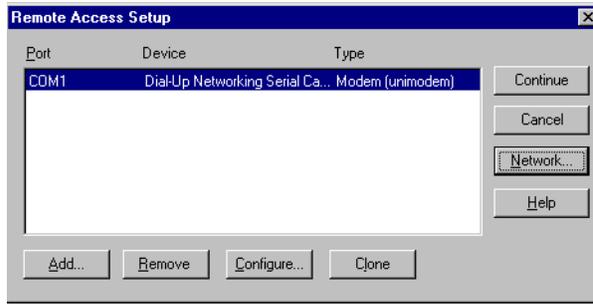
3   Click Network.

Result: The Network Configuration dialog box appears.
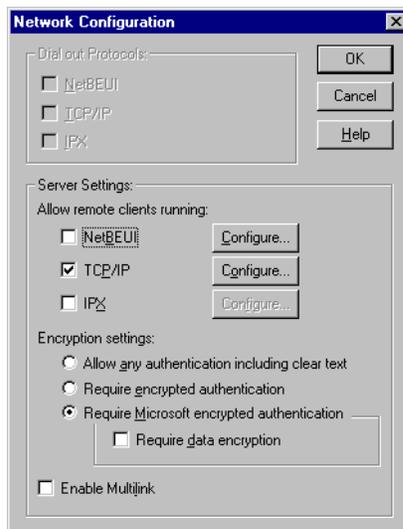
4   In the Server Settings section, select TCP/IP.

5   Click TCP/IP Configure.

Result: The RAS Server TCP/IP Configuration dialog box appears.
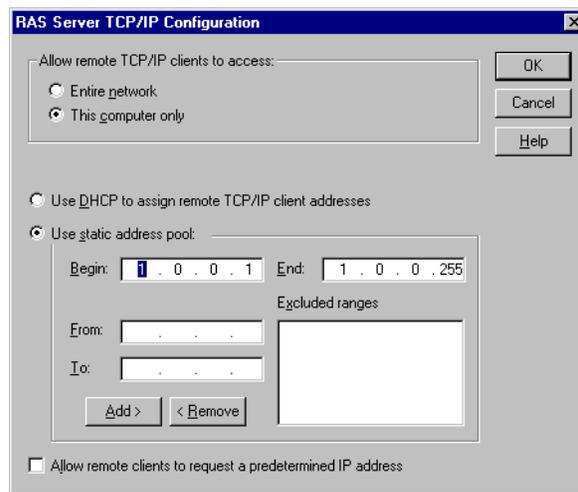
6   Click This computer only.

7   Click Use static address pool.

8   Enter the range of CLAN or ELAN IP addresses in the Begin and End boxes.

Note: Use the From and To boxes and the Add and Remove buttons to exclude one or more IP address ranges.

9   Ensure that the Allow remote clients to request a predetermined IP address check box is *not* checked.

10   Click OK to close the RAS Server TCP/IP Configuration dialog box.

Result: You return to the Network Configuration property sheet.

11   Click OK.

Result: You return to the Remote Access Setup dialog box.

12   Click Continue.

Result: You return to the Network property sheet.

13   Continue with the following procedure.

To save the network settings

1   In the Network property sheet, click OK.

      Result: You might be prompted with a warning indicating that at least one installed NIC contains an empty primary WINS address. Ignore this warning and click Yes. You are then asked if you want to restart your computer.

2   Click Yes to restart the server.

      Result: The server restarts.

Configuring the modem for Remote Access Service

Introduction

Follow this procedure to configure the modem for Remote Access Service (RAS) for remote support of the server.

To configure the modem

1   Log on to Windows NT as Administrator.

2   Open the Control Panel (from the Windows Start menu, choose Settings → Control Panel).

3   In the Control Panel window, double-click Modems.

   Result: The Modems Properties property sheet appears.
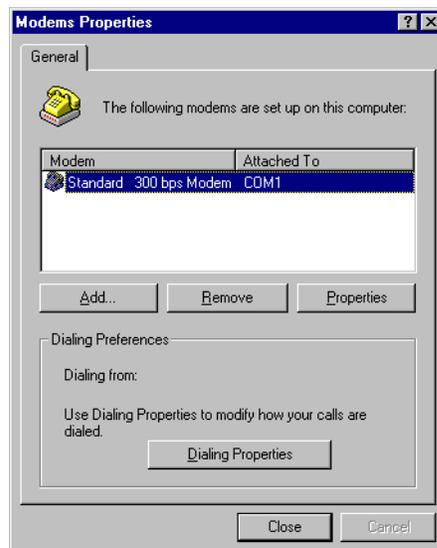
4   If a modem is listed and it matches the actual modem installed, then do the following:

   a.   Exit from the Modems control panel.

b. Go to "What's next?" on page 66.

5 If a modem is listed and it does not match the actual modem installed, then select it and click Remove.

Result: The system prompts you with a message similar to the following:
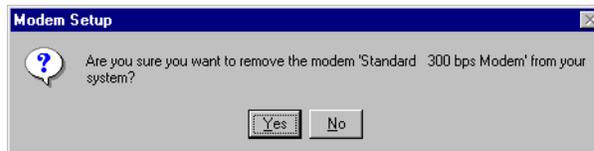
6 Click Yes.

7 Click Add to add the correct modem.

Result: The Install New Modem window appears.
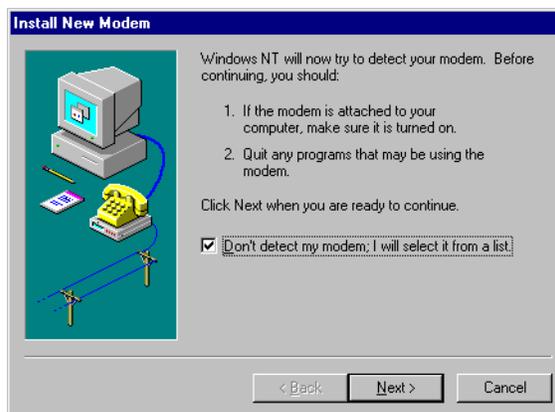
8 Check the Don't detect my modem; I will select it from a list box.

9   Click Next.

Result: The system prompts you to select your modem.
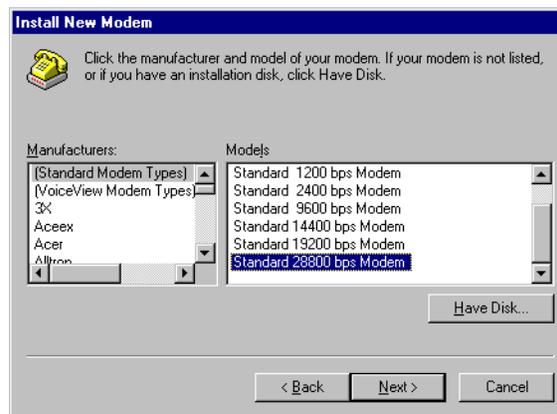
Note: If you are using an internal modem, insert the driver disk that came with the modem, and then click Have Disk to continue.

10   Select the type of modem installed on the server, and then click Next. If your modem is not listed, select the Standard 28800 bps Modem, and then click Next.

Result: The following dialog box appears:
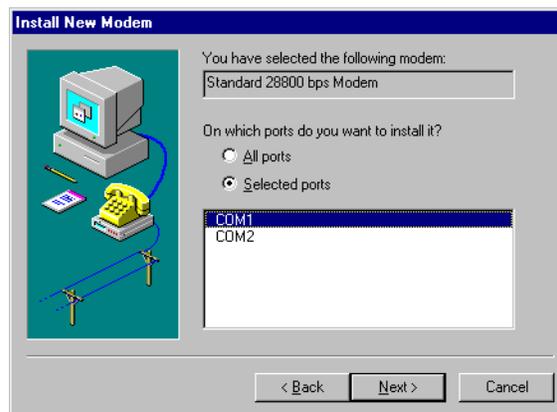
11 Click Selected ports, select COM1, and then click Next.

Result: The following dialog box appears.

12 Click Finish to complete installing the modem.

13 Click Close to close the Modems Properties property sheet.

Result: The system prompts you for changes to Dial-Up Networking because the modem has changed.
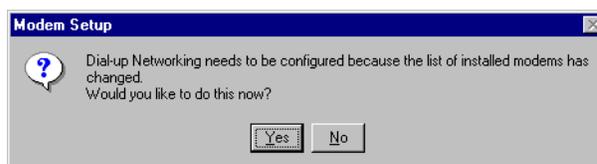
14 Click Yes to continue.

Result: The Remote Access Setup dialog box appears.
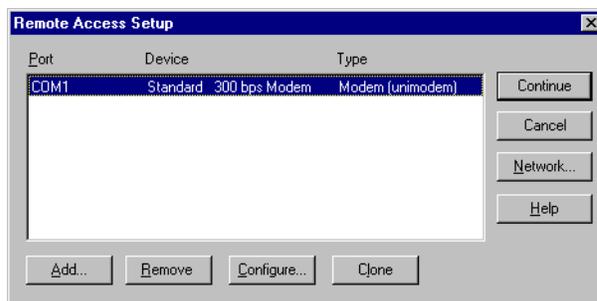
15   Select the old modem listed (usually on COM1).

16   Click Remove.

Result: The following window appears.

17   Click Yes to confirm that you want to remove the modem.

18   Click Add.

Result: The Add RAS Device dialog box appears.
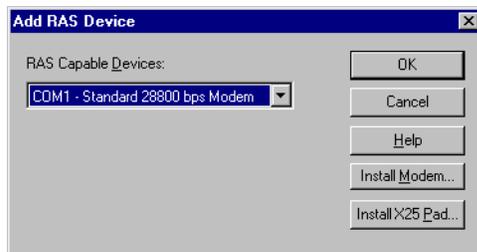
19   Select the installed modem from the drop-down list, and then click OK.

Result: The Remote Access Setup dialog box appears.
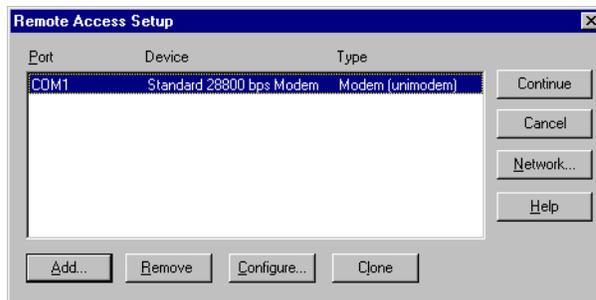
20   Click Continue to save the changes.

Result: The system prompts you to restart.

Network Settings Change

You must shut down and restart your computer before the new settings will take effect.

Do you want to restart your computer now?

Yes   No
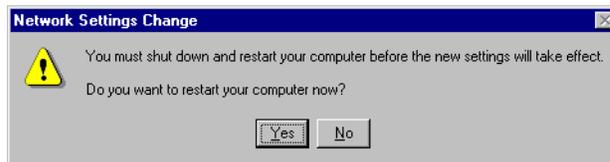
21   Click No. You can restart later.

What's next?

If your system has additional optional drives that were not formatted at the factory, see "Formatting optional drives" on page 67.

If your system does not have additional optional drives, continue with "Updating the emergency repair disk" on page 70.

Formatting optional drives

Introduction

Follow this procedure only if the server is equipped with optional multiple drives that have not been factory-formatted. Drives C and D, which are two partitions on a single drive, are formatted at the factory. For details about disk partitioning, refer to the maintenance guide for your hardware platform.

To format optional drives

Follow these procedures to format optional drives.

> **CAUTION**
>
> **Risk of data loss**
> Use only the Disk Administrator functions documented in this procedure.

> **CAUTION**
>
> **Risk of data loss**
> Drives C and D must be two partitions of the primary hard drive (drive 0). Drive C must be a DOS partition, and drive D must contain Windows NT. Usually, drive E is the CD-ROM drive.

1 Log on to Windows NT as Administrator.

2 From the Windows Start menu, choose Programs → Administrative Tools → Disk Administrator.

   Result: The Disk Administrator window appears. This window shows partition and formatting information for all installed drives. If drives are not partitioned, continue with the following steps.

3 Select the unpartitioned drive (for example, Disk 1).

4 Click the right mouse button, and choose Create Extended.

5 Enter the partition size (usually this is the default size).

   Note: For standard partition sizes for the supported platforms, see "Standard partition sizes" on page 68.

6 Click the newly created partition.

7 Click the right mouse button and choose Create a logical drive.

8 Enter the partition (logical drive) size, and click OK.

9 Choose File → Commit Changes Now.

10 Click Yes to confirm.

11 Choose Tools → Format, and format the drive as NTFS.

12 Repeat steps 3 to 11 for all remaining newly partitioned disks.

13 Exit from Disk Administrator by choosing Partition → Exit.

   Note: Extended partitions (logical drives) are light blue in the Disk Administrator. Primary partitions are dark blue.

   Continue with "Updating the emergency repair disk" on page 68 of the *Software Installation and Upgrade Guide.*

Standard partition sizes

The following table shows the standard partition sizes for the fixed disks on each platform:

Disk	Capacity	Partitions	
701t			
Disk 0	2 Gbytes	C: 102 Mbytes	D: 1945 Mbytes
Disk 1	4 Gbytes	F: 4087 Mbytes	
Disk 2	4 Gbytes	G: 4087 Mbytes	
702t (see Note)			
Disk 0	4 or 9 Gbytes	C: 102 Mbytes	D: 3993 Mbytes
Disk 1	4 or 9 Gbytes	F: 4087 or 4096 Mbytes	

Disk	Capacity	Partitions	
Disk 2	4 or 9 Gbytes	G: 4087 or 4096 Mbytes	
1001t			
Disk 0	2 Gbytes	C: 102 Mbytes	D: 1945 Mbytes
Disk 1	4 Gbytes	F: 4087 Mbytes	
Disk 2	4 Gbytes	G: 4087 Mbytes	
Disk 3	4 Gbytes	H: 4087 Mbytes	
Disk 4	4 Gbytes	I: 4087 Mbytes	
1003t			
Disk 0	9 Gbytes	C: 2048 Mbytes	D: 4096 Mbytes
Disk 1	9 Gbytes	F: 4096 Mbytes	G: 4096 Mbytes
Disk 2	9 Gbytes	H: 4096 Mbytes	I: 4096 Mbytes

Note: For the 702t platform, if disk 1 or 2 is 4 Gbytes, the partition size must be 4087 Mbytes. If the disk size is 9 Gbytes, the partition size must be 4096 Mbytes.

What's next?

Continue with "Updating the emergency repair disk" on page 70.

Updating the emergency repair disk

Introduction

You must restart the computer and update the emergency repair disk to record the latest configuration data for the server. Do this every time you change the server configuration (for example, if you change the computer name or IP address).

To update the emergency repair disk

1   Log on to Windows NT as Administrator.

2   From the Windows Start menu, choose Shutdown.

   Result: The Shut Down Windows dialog box appears.

3   Select Restart the computer, and then click Yes.

4   When the server restarts, press Ctrl+Alt+Delete to log on.

5   Log on to Windows NT as Administrator.

6   From the Windows Start menu, choose Programs → Command Prompt.

7   Insert the emergency repair disk in the floppy drive. If the disk is not available, insert a blank disk. The program formats it before copying the configuration files.

8   In the Command Prompt window, type **rdisk**, and then press Enter.

   Result: The Repair Disk Utility dialog box appears.

9   Do one of the following steps:

■   If you are updating an existing repair disk, click Update Repair Info.

■   If you have inserted a blank floppy disk, click Create Repair Disk.

10 Click Yes in response to the next two prompts.

11 At the prompt, `All data on floppy disk is erased,` click OK.

Result: You see messages indicating that the disk is being formatted and configuration files are being copied.

12 Close the command prompt window by clicking the Close box at the top right corner of the window.

13 Remove the emergency repair disk, label it, and store it in a safe place. You must update it again after installing the application software on the server.

Testing the network connection

Introduction

Follow the procedure in this section to ensure that the network is accessible to the server, and to ensure that traffic on the CLAN is isolated from the ELAN.

To test the ELAN and CLAN network connection

1   Log on to Windows NT as Administrator.

2   From the Windows Start menu, choose Programs → Command Prompt.

3   In the Command Prompt window, type **ping** followed by the ELAN IP address for the switch, and then press Enter.

   Example: ping 255.255.255.255

   Result: The display indicates whether the ping was successful.
   If a successful ping message is not received, then no connection has been made. If no connection has been made, follow the steps in "Troubleshooting network connection problems" on page 291.

4   If a CLAN card is installed on the server, type **ping** followed by the CLAN IP address of another PC on the CLAN, and then press Enter.

   Example: ping 255.255.255.255

   Result: The display indicates whether the ping was successful.
   If a successful ping message is not received, then no connection has been made. If no connection has been made, follow the steps in "Troubleshooting network connection problems" on page 291.

5   Type **exit** and press Enter to close the Command Prompt window.

To verify that the ELAN and CLAN are isolated from each other

Follow these steps at each server (including the NCC).

1   Ping a client PC on the CLAN.

2   Ping another machine on the ELAN (for example, the switch).

   Note: The NCC is not connected to a switch on the ELAN, so ping a test machine.

3   Disconnect the ELAN cable from the server.

4   Repeat steps 1 and 2.

   Result: Only the CLAN ping should be successful.

5   Reconnect the ELAN cable to the server, and disconnect the CLAN cable.

6   Repeat steps 1 and 2.

   Result: Only the ELAN ping should be successful.

7   Reconnect the CLAN cable to the server.

Restarting the server

Introduction

To put configuration changes into effect, you must restart the server. If you have followed the procedure in "Updating the emergency repair disk" on page 70, then you have already restarted the server and do not need to restart it again. If you have not updated the emergency repair disk, proceed to shut down and restart now.

To restart the server

1   Log on to Windows NT as Administrator.

2   From the Windows Start menu, choose Shut Down.

Result: The Shut Down Windows dialog box appears.

3   Select Restart the computer?, and then click Yes.

Result: The server restarts.

Chapter 4

Installing and configuring pcAnywhere

In this chapter

Overview

Introduction

With pcAnywhere, you can perform advanced administrative tasks on the server from a remote PC and control the server as though you were directly connected to the server.

Note: Remote access is required to allow your distributor or Nortel Networks Customer Support to log on to your server remotely to provide support.

Verifying the pcAnywhere settings

Introduction

Use this section if you have a new Symposium Call Center Server from the factory. In that case, pcAnywhere has already been installed for you at the factory. If you are reinstalling pcAnywhere, refer to "Installing pcAnywhere Version 9.2" on page 81.

One licensed copy of pcAnywhere Version 9.2 is provided for the server on the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0.

To verify pcAnywhere settings

1 Log on to Windows NT as Administrator.

2 From the Windows Start menu, choose Programs → Symantec pcAnywhere.

3 Ensure that Be a Host PC is selected.

4 Right-click the Network icon and select Properties.

Result: The NETWORK Properties dialog box appears.

5 In the Connection Info tab, ensure that only TCP/IP is checked.

6 Click Apply if you made any changes.

7 Click the Settings tab.

8   Ensure that the settings are as shown in the following example:
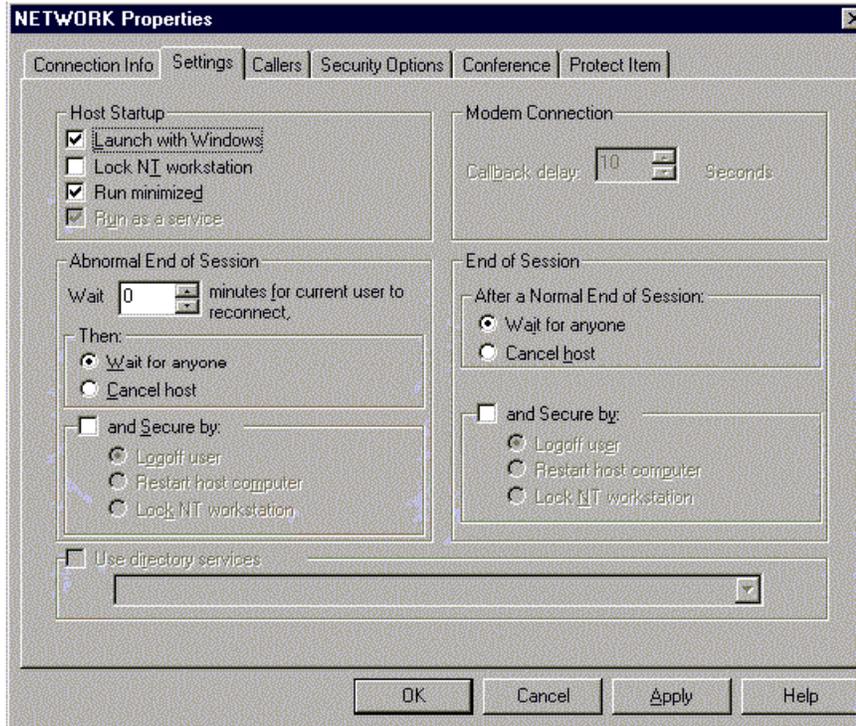
9   Click the Callers tab.

10   Ensure that Use pcAnywhere authentication with pcAnywhere privileges is selected.

11 Ensure that the NGenDesign icon and the NGenDist icon have been added. If they have not been added, follow steps 11 to 21 of "To configure pcAnywhere as a Host PC" on page 86.

Note: The factory-installed passwords for NGenDesign and NGenDist are ntdist and Nortel respectively.

⚠ **CAUTION**

Risk of security breach

To maintain security, it is important to change these passwords as soon as possible. Advise the support administrator that this must be done.

12 Click the Security Options tab.

13 Ensure that the settings are as shown in the following example:
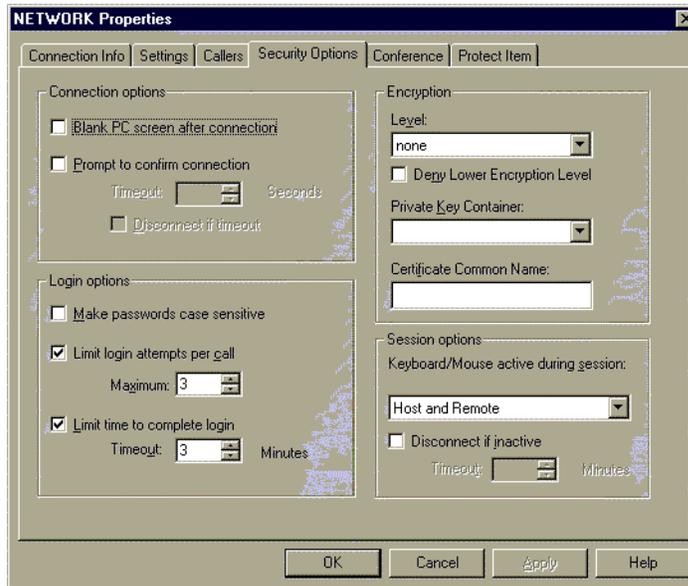
14 Click Apply if you made any changes.

15 Click the Conference tab.

16 Ensure that Enable conferencing and Obtain IP address automatically are selected.

17 Click Apply if you made any changes.

18   Click OK to exit the NETWORK Properties window.

What's next?

To continue with the installation, refer to Chapter 5, "Installing the server software."

Installing pcAnywhere Version 9.2

Introduction

One licensed copy of pcAnywhere Version 9.2 is provided for the server on the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0. pcAnywhere is installed at the factory, but you must verify its configuration.

Note: To install pcAnywhere Version 9.2 on the client PC, you must purchase a separate license for the client PC. For instructions on how to install and configure pcAnywhere on the client PC, refer to the *Administrator's Guide*.

CAUTION

Risk of system failure

If you are converting a Release 1.5 server, before you install pcAnywhere Version 9.2, make sure that the server PC is using the correct video driver (see "To change the video drivers" on page 217). Failure to do so can result in the appearance of a blue screen after pcAnywhere installation or after use of pcAnywhere for operations such as file transfer.

To install pcAnywhere Version 9.2

Note: PcAnywhere is installed in the factory. If pcAnywhere version 9.2 is already installed on your server PC, you can skip to "Configuring pcAnywhere" on page 84.

1 Log on to the server as Administrator.

Note: Before you proceed, shut down all SMon services by choosing Start → Programs → Symposium Call Center Server → Shutdown.

2 Insert the Symposium Call Center Server Release 3.0 Operating System CD into the CD-ROM drive.

3 In Windows NT Explorer, browse to E:\Third Party\Symantec\Installs\Pca9.2\Cd\Disk1 (where E: is your CD-ROM drive).

4   Double-click Setup.exe.

Result: The Symantec installation wizard window appears.

5   Click Next.

Result: The License agreement appears.

6   Select I accept the terms, and then click Next.

Result: The Customer Information window appears.

7   Enter your User Name and Organization, and then click Next.

Result: The Setup Type window appears.

8   Select Typical, and then click Next.

Result: The Ready to install the program window appears.

9   Click Install and wait until Setup wizard completes.

Result: The Support Solutions window appears.

10   Click Next.

Result: The Windows Solutions window appears.

11   Click Next.

Result: The How to reach Symantec Online Information window appears

12   Click Next.

Result: The Some Additional Options window appears.

13   Clear all check boxes, and then click Next.

Result: The Register Symantec pcAnywhere window appears.

14   Click Skip.

Result: The program prompts for confirmation.

15   Click Yes.

Result: The following message appears: `The Install Shield Set-up Wizard has successfully installed pcAnywhere.`

16   Click Finish.

Result: The system prompts you to restart the server PC.

17 If you are using a 1003t platform, do not restart the server PC, but continue with the following procedure, "To update the Windows registry (1003t platform)" on page 83.

18 If you are using a 1000t, 1001t, 701t, or 702t platform, remove the CD from the CD-ROM drive, and click Yes to restart the server.

   Result: The server PC restarts. The installation of pcAnywhere 9.2 software is completed.

   Note: If the server hangs, restart it manually.

To update the Windows registry (1003t platform)

To avoid problems during pcAnywhere operation on multi-processor systems, you must add an entry in the Windows registry.

1 Click No to restart the server PC later.

2 In the Windows NT Explorer, navigate to the folder Third Party\Symantec\Installs\MultiProc on the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0.

3 Double-click AddProcMask.reg.

   Result: A message informs you that the information in the file has been successfully entered into the registry.

4 OK and remove the CD from the CD-ROM drive.

5 From the Windows Start menu, choose Shutdown.

   Result: The Shut Down Windows dialog box appears.

6 Select Restart. Then click Yes.

   Result: The server PC restarts.

   Note: If the server hangs, restart it manually.

Configuring pcAnywhere

Introduction

Configuration of pcAnywhere sets up a secure caller account to access the server. You can add a caller account for each remote PC, including Nortel Networks. These caller accounts restrict usage of pcAnywhere to appropriate users.

This section describes how to configure pcAnywhere to accept remote connections. PcAnywhere might already be configured when you first receive your server. If so, then refer to "Verifying the pcAnywhere settings" on page 77.

Configuring the network settings and remote PC caller accounts

The procedure "To configure pcAnywhere as a Host PC" on page 86 defines the NGenDist and NGenDesign user accounts and passwords for remote users logging on to the server using pcAnywhere. This ensures that only authorized users can administer the server using pcAnywhere. The procedure also specifies how to set up the pcAnywhere network properties to enable these remote PC callers to access the server.

Password recommendations

Plan the passwords you want to use for NGenDist and NGenDesign (see "Password recommendations" on page 125). Use the same passwords for the pcAnywhere NGenDist and NGenDesign caller passwords that you plan to use for the Windows NT NGenDist and NGenDesign Windows NT accounts. This simplifies the remote logon process.

To maintain remote access security, change the passwords for the NGenDist and NGenDesign caller accounts regularly. Continue to match the pcAnywhere caller passwords for NGenDist and NGenDesign to the Windows NT user account passwords for NGenDist and NGenDesign.

To start pcAnywhere for the first time

1   Log on to Windows NT as Administrator.

2   From the Windows Start menu, choose Programs → Symantec pcAnywhere.

     Note: If you are asked if you want to register pcAnywhere, click Skip. Click Yes when you are asked to confirm.

     Result: The Smart Setup Wizard window appears, and you are prompted for the modem device.

3   Choose the entry that matches your modem (it should be a Sportster 28800-33600 External modem), and then click Next.

     Result: The system prompts you to select the network device.

4   Ensure that only TCP/IP is selected, and then click Next.

     Result: The system prompts you to select a port.

5   Ensure that select COM1 is selected, and then click Next.

6   Unselect Specify a login name and password, and then click Next.

7   Click Finish.

     Result: You are placed into the pcAnywhere main window.

To change WindowsNT users access rights for pcAnywhere files

Use this procedure if, during pcAnywhere configuration, you get a message that you do not have the right to modify that setting or to create a new caller.

1   Close pcAnywhere.

2   Go to %Systemroot%Profiles\All Users\Application Data\Symantec.

     Note: If your OS is upgraded from Windows NT 3.51 to Windows NT 4, %Systemroot% is the Winnt35 directory. If it is a fresh install of Windows NT 4, %Systemroot% is the Winnt directory.

3   Select the pcAnywhere directory.

4   Right-click the directory and, from the Properties menu, choose Security.

5   Click Permissions and, for Administrators, select Full Control for Type of Access.

6   Click OK to save changes.

7   Click OK to exit the Properties window.

To set the video mode

1   From the Tools menu, choose Application Options.

2   Click the Host Operation tab.

3   For Video mode, ensure that the selected option in the drop-down list is the default.

4   Click Apply to save changes.

5   Click OK to exit.

To configure pcAnywhere as a Host PC

1   Ensure that Be a Host PC is selected.

2   Right-click the Network icon and select Properties.

Result: The NETWORK Properties dialog box appears.

3   Ensure that the Connection Info tab is selected.

4   Ensure that only TCP/IP is checked, as in the following example:
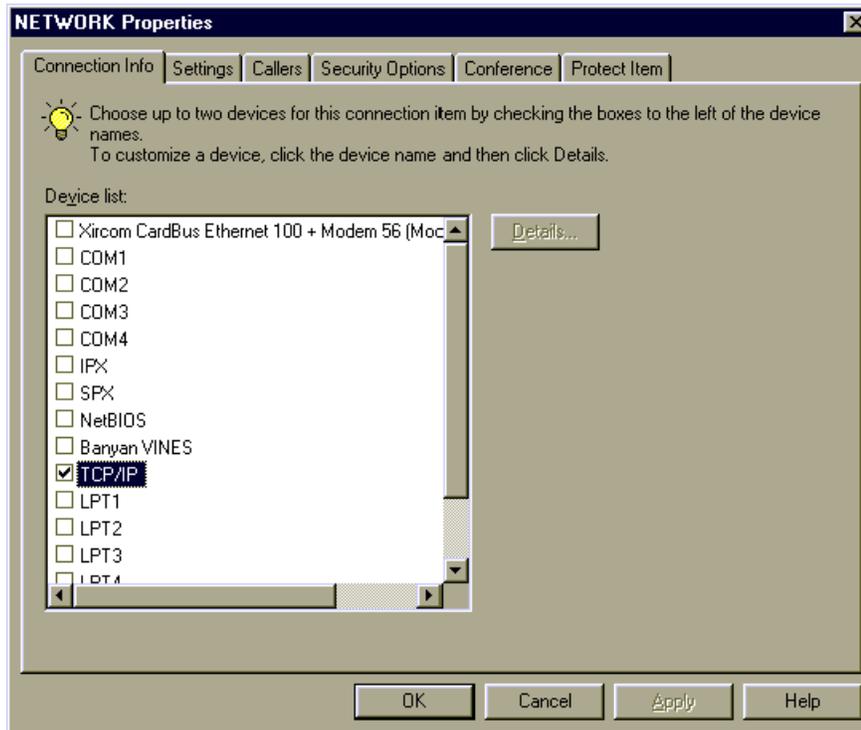
5   Click Apply if you made any changes.

6   Click the Settings tab.

7   Ensure that the settings are as shown in the following example:
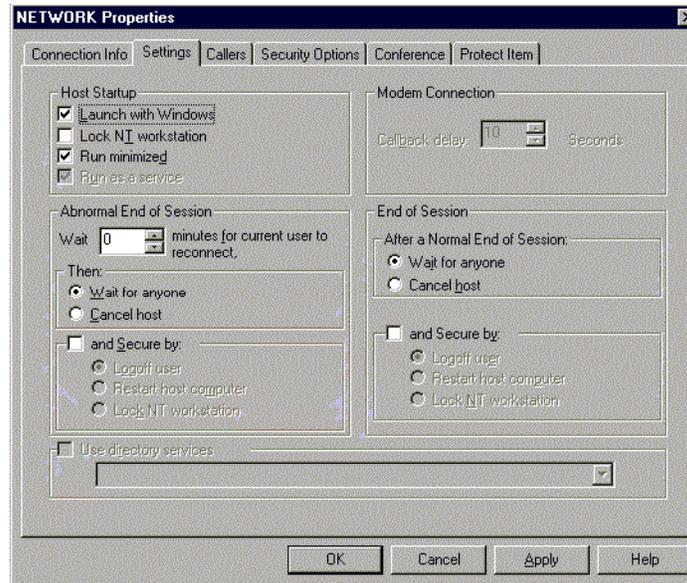
8   Click Apply to save changes.

9   Click the Callers tab.

10 Select Use pcAnywhere authentication with pcAnywhere privileges, as shown below:
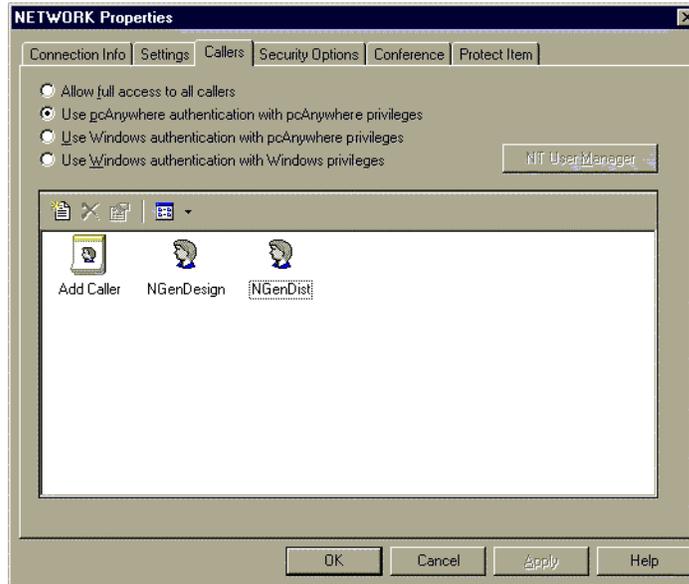
Note: If NGenDist and NGenDesign caller icons have already been created, then skip to step 17.

11 Double-click Add Caller.

Result: The New Caller Properties window appears.

12 Type **NGenDist** for the Caller Name, and then click Next.

13 For the password, type **ntdist**.

CAUTION

Risk of security breach

To maintain security, it is important that the support administrator change this password as soon as possible. Advise the support administrator that this must be done when pcAnywhere is first used.

14 Click Next.

15 Click Finish.

16   Repeat steps 11 to 15 for the NGenDesign account, using the NgenDesign as the Caller Name and Nortel as the password.

17   Right-click the NGenDesign caller icon and select Properties.

18   Click the Privileges tab.

19   Select Superuser, as shown in the following example:

20   Click Apply to save the changes.

21   Click OK to exit the Properties window.

Result: the NETWORK Properties dialog box appears.

22   Click the Security Options tab.

23 Ensure that the settings are as shown in the following example:
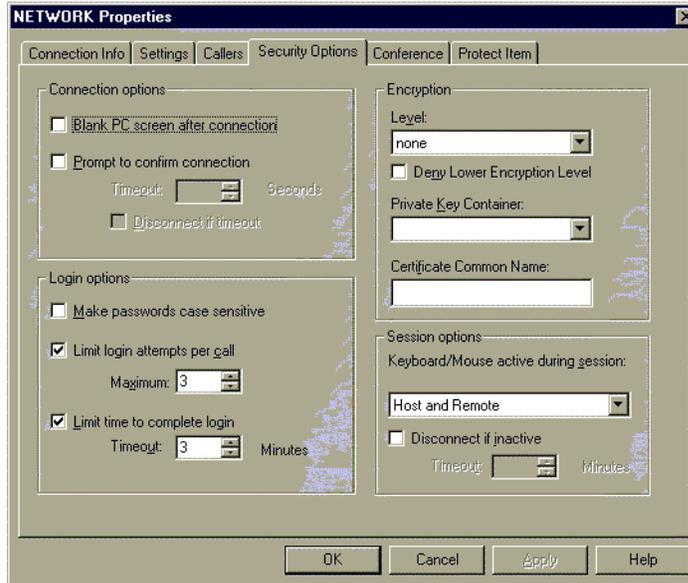
24 Click the Conference tab.

25 Ensure that the Enable conferencing and Obtain IP address automatically options are selected, as shown in the following example:
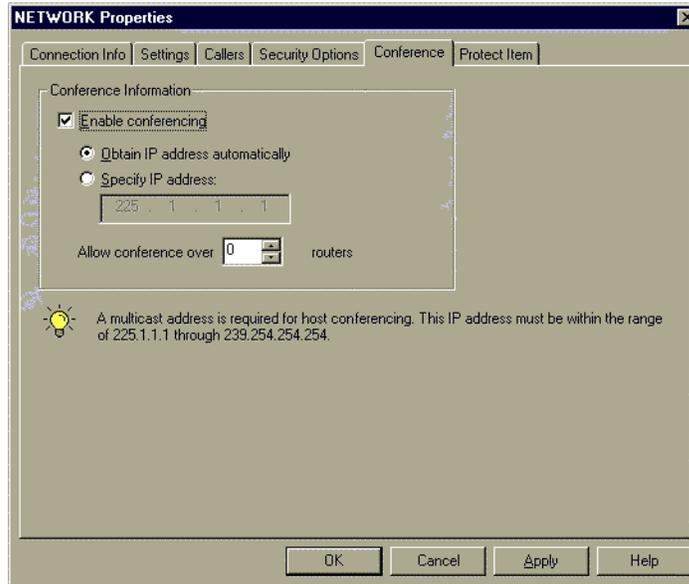
ATTENTION   Do not enter a password in the Protect Item tab. If this password is necessary, the system administrator should enter it. If the password is misplaced, pcAnywhere must be uninstalled and reinstalled to modify the network icon settings.

26 Click OK on the NETWORK Properties dialog box to apply all settings for the HOST PC.

What's Next?

To continue with the installation, refer to Chapter 5, "Installing the server software."

Changing pcAnywhere caller passwords

Introduction

During the installation and configuration of pcAnywhere, you specify logon passwords for the NGenDist and NGenDesign callers. To maintain system security, change these passwords periodically.

Note: To simplify the remote logon process, use the same passwords for the pcAnywhere NGenDist and NGenDesign caller passwords that you plan to use for the Windows NT NGenDist and NGenDesign accounts. Change the pcAnywhere caller passwords and the Windows NT user account passwords for NGenDist and NGenDesign at the same time.

To change passwords

1   Log on to Windows NT as Administrator.

2   From the Windows Start menu, choose Programs → Symantec pcAnywhere.

   Result: pcAnywhere starts.

3   Select Be a Host PC.

4   Click Network.

   Note: Do not double-click the icon or you begin a pcAnywhere session.

5   From the File menu, select Properties.

   Result: The NETWORK Properties dialog box appears.

6   Click the Callers tab.

7   Select Use pcAnywhere authentication with pcAnywhere privileges.

8   Right-click the NGenDist icon. Then select Properties.

9   Click the Identification tab.

10   In the Password box, type a new NGenDist password.

11   In the Confirm Password box, type the NGenDist password again.

12   Click Apply to save the changes.

13 Click OK.

14 Right-click the NGenDesign icon. Then select Properties.

15 Repeat steps 9 to 13 to assign a new password to NGenDesign.

16 Click OK to return to the main pcAnywhere window.

17 Exit pcAnywhere.

Establishing a pcAnywhere connection using dial-up

Introduction

This section describes how to establish a pcAnywhere connection with the server using a dial-up connection.

To create a server connection profile (for Windows 95 or 98 client PC)

1 From the Windows Start menu, choose Programs → Accessories → Dial-Up Networking or Programs → Accessories → Communication → Dial-Up Networking.

   Result: If no connections have been defined on this PC, the Make New Connection wizard appears.

   If one or more connections have been created on this PC, click the Make New Connection icon in the Dial-Up Networking window to display the wizard.

2 Enter a name for the connection and select a modem.

3 Click Next.

4 Enter the server telephone number, and then click Next.

5 Click Finish.

6 Continue with the following procedure.

To configure a connection profile

1 Right-click the server connection profile icon, and then select Properties.

2 Verify the information on the General property page, and correct it if necessary.

3 Click Configure.

   Result: The Modem Properties property sheet appears.

4 Update the property pages as required, and then click OK.

   Result: You return to the connection property sheet.

5 Click Server Types.

6 For Dial-Up Server, select PPP:Windows NT.

7 For the network protocols, select only TCP/IP and NETBEUI.

8 Click TCP/IP settings.

  Result: The TCP/IP Settings property sheet appears.

9 Select Specify an IP address, and enter the server IP address.

10 Select Use default gateway on remote network.

11 The remaining boxes are optional. Fill them in as required for the customer's network.

12 Click OK.

  Result: You return to the connection property sheet.

13 Click OK.

What's next?

To continue with the installation, refer to Chapter 5, "Installing the server software."

Uninstalling pcAnywhere 9.2

Introduction

Follow this procedure if you experience problems with pcAnywhere that require reinstallation of the software. For more information, refer to "Troubleshooting installation problems" on page 286.

To uninstall pcAnywhere 9.2

1   Check if there is a pcAnywhere Waiting icon on your desktop. If there is, double-click on it, and then click Cancel.

2   From the Windows Start menu, choose Settings → Control Panel.

3   Double-click Add/Remove Programs.

4   Select Symantec pcAnywhere, and then click Add/Remove.

     Result: The Symantec pcAnywhere Setup window appears.

5   Click Next.

     Result: The Program Maintenance Options window appears.

6   Select Remove, and then click Next.

     Result: The Remove the Program window appears.

7   Click Remove.

8   When the process completes, click Finish.

9   From the Windows Start menu, choose Shutdown.

     Result: The Shut Down Windows dialog box appears.

10   Select Restart, and then click Yes.

     Result: The server shuts down and then begins to start up.

     Note: If the system hangs, restart it manually.

Chapter 5

Installing the server software

In this chapter

Overview

Introduction

This chapter provides the procedures to install the Symposium Call Center Server application software on a PC. For Meridian 1 (M1) systems, the software can be Meridian Link stand-alone software or for installation on a Network Control Center server, depending on the keycode for this installation. Installation procedures are the same, except for the different keycodes supplied. The procedures in this chapter take approximately three hours to complete.

Before you begin

Complete the procedures in Chapter 3, "Configuring Windows NT 4.0 server," and in Chapter 4, "Installing and configuring pcAnywhere."

Requirements

To install the Symposium Call Center Server application software, you need the following items:

- Nortel Networks Symposium Call Center Server Release 3.0 Application CD
- the information completed in the worksheets in Chapter 2, "Worksheets and checklists"
- the emergency repair disk that was created in Chapter 3, "Configuring Windows NT 4.0 server"

Note: 256 Mbytes of RAM is the amount of memory required on the server PC. You must have exactly 256 Mbytes of RAM.

Methods of installation

Method	Requirements
Run the installation program from the Symposium Call Center Server. Use the CD-ROM drive that is part of the Symposium Call Center Server.	keyboard, mouse, and monitor attached to the server
Run the installation program from the Symposium Call Center Server. Use a remote CD-ROM drive that is accessible over the LAN. **Note:** This method is not recommended, as network traffic can interfere with proper installation.	keyboard, mouse, and monitor attached to the server
Use pcAnywhere on a remote PC to log on to the Symposium Call Center Server and run the installation program. This might be necessary if you do not have a keyboard and monitor connected to the server, or if the server is in a remote location. Use the CD-ROM drive on the Symposium Call Center Server, or use a CD-ROM drive on a remote PC that is accessible from the Symposium Call Center Server over the LAN.	pcAnywhere installed on both the Symposium Call Center Server and the remote PC
Run the installation program from a local or remote hard disk copy of the installation CDs.	a copy of the CDs on a local or remote hard disk (accessible over the LAN from the Symposium Call Center Server) The path name of the directory that contains the copy of the CDs cannot contain spaces.

ATTENTION Installation from a remote CD-ROM drive is supported only if the remote PC is running Windows NT 4.0 Server or Workstation. Installation from a remote CD-ROM drive mounted on a PC running Windows NT 3.51 will fail because Windows NT 3.51 does not support long file names.

Event log

The SysOps Event log (C:\sysops\sysops.log) tracks events associated with any install, reinstall, upgrade, or uninstallation operation. It also tracks any fatal errors that interrupt these operations.

Use any text editor (for example, Notepad) to view the SysOps Event log.

Checklist for installing the server software

Step	✔
Complete the worksheets in Chapter 2, "Worksheets and checklists."	
Obtain the current and default Administrator passwords.	
Configure Windows NT. See Chapter 3, "Configuring Windows NT 4.0 server."	
Establish a connection to the server by attaching a keyboard and monitor, or by using pcAnywhere. See page 101.	
Prepare for installation. See page 100.	
Install the DMI. See page 106.	
Install the MAS software. See page 109.	
Install the Symposium Call Center Server software on the server. See page 113.	
Install the Symposium Call Center Server software on the client PC. See Chapter 6, "Installing the client software."	
Add an SMI system to the client PC. See Chapter 7, "Adding a System Management Interface system."	
Finish the server software installation. See page 113.	
Install PEPs. See "Installing PEPs and Service Update packs" on page 130.	
Create a Platform Recovery disk. See page 124.	
Create a database backup. See the *Administrator's Guide.*	
Change the default NGenDist and NGenDesign passwords. See page 125.	
Complete the post-installation checklist. See page 129.	

Preparing for installation

Introduction

This section lists some things you must do to prepare for installation.

Before you begin

Check for any Installation Addendums

Before performing an installation, upgrade, or conversion, check for any Installation Addendums on your regional Symposium Call Center Server technical web site. North American customers refer to the web site at www.nortel-sccs.com. European customers refer to the Symposium Call Center Server area on the web site at www.nortelnetworks.com/partnercentre.

Be aware of the steps in the installation checklist

See "Checklist for installing the server software" on page 103.

Decide whether to configure the server while it is offline from the switch

At the end of the installation, the server goes into configuration mode. In configuration mode, the server is offline from the switch, so it does not process calls. This allows you to configure the server more efficiently.

For DMS/MSL-100 systems, ensure that the dongle is attached properly

The Symposium Call Center Server installation package includes a dongle. This device verifies that you have the software package that was purchased for this system. You can set up and test Symposium Call Center Server without the dongle. However, before you connect to the switch to go live, you must ensure that the dongle is attached to the parallel port on the back of the server. Without the dongle, the switch and the server cannot communicate.

Check the location of the mapped CD-ROM drive

If you are installing the software from a mapped CD-ROM drive, ensure that the drive is on a local network, not across a WAN or dial-up connection. After some restarts, you must remap the drive.

Note: This method is not recommended, as network traffic can interfere with proper installation.

Make sure that you have the keycode for an NCC server (M1 systems only)

If you are installing a Network Control Center (NCC) server with networking enabled, you must provide a unique keycode and serial number that identify the NCC.

Uninstall third-party software

Do not install third-party software on a Symposium Call Center Server. This can compromise system performance.

Things to remember

Bypass the fault printer warning if it appears

The server has an option to forward fault events to a designated printer. To use this option, you must install a generic text printer. You do not need this printer for the server installation, but a warning box appears if a generic text printer driver is not found. Click OK to bypass this warning and continue with the installation. You can set up printer drivers later.

Minimize the Explorer window

If you run setup.exe from a window (for example, Windows Explorer), the window can appear on top and hide the installation windows. If this happens, minimize the Explorer window or click on the main installation window to regain focus. To avoid this problem, the program instructs you to close all windows and run setup from the Run dialog box.

Installing the server software

Introduction

Installation of Symposium Call Center Server software on the server PC involves the following steps:

1. Install the Database Management Interface (DMI).

2. Install the MAS server software.

3. Install Symposium Call Center Server software.

4. Create a Platform Recovery disk.

After each step, you must restart the server PC to allow changes to take effect.

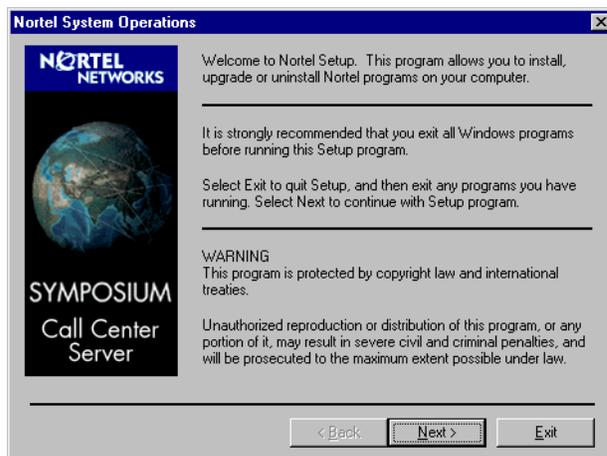| **ATTENTION**	During the installation, there are points where the setup program performs automatic installation steps between wizard setup windows. Do not close any windows that appear during these steps. Wait for the next wizard setup window before you use the mouse or keyboard.
	If you abort the installation, you must uninstall all components and then restart the installation.

To install DMI

1 Insert the Server CD or, if you are installing from a remote CD or a network share drive, map the Server CD to a drive letter on the server.

2 Log on to Windows NT as Administrator.

3 Exit all applications, including screen savers, and close all windows.

4 On the Windows Start menu, click Run.

5 Click Browse, select Setup.exe from the root directory on the CD, and click Open.

6   Click OK to run.

Result: The program displays the message `Setup determines that DMI is not installed on your system. Do you want Setup to install DMI?`
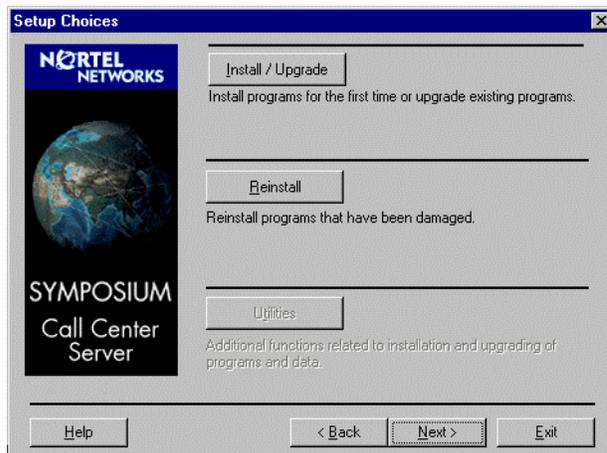
7   Click Yes to install the DMI. (If you click No, the installation stops.)

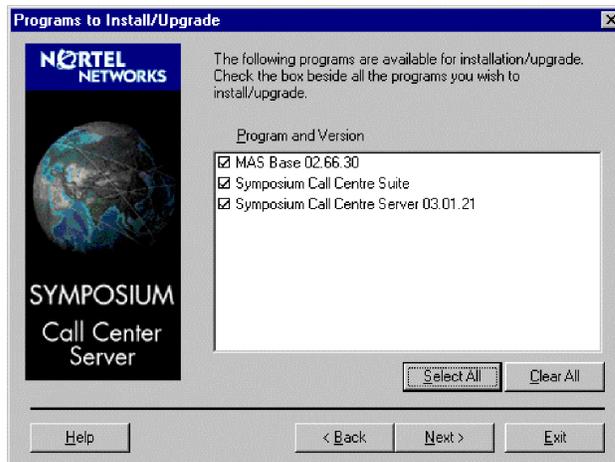**Result:** The DMI installs and the Nortel System Operations welcome dialog box appears.

8   Click Next.

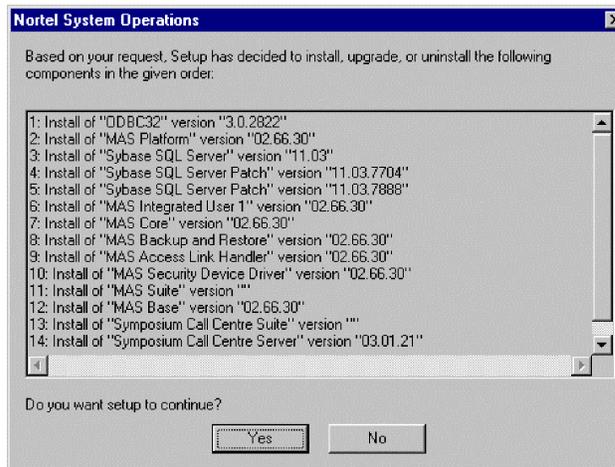**Result:** The Setup Choices dialog box appears.

9   Click Install/Upgrade.

   Result: The Programs to Install/Upgrade dialog box appears.

10   Click Select All, and then click Next.

   Result: A list of components to install or upgrade appears in a Nortel
   System Operations dialog box.

11   Click Yes and follow screen instructions.

12 If a warning message appears because a text printer is not found, then click OK to bypass the warning. For details, see "Bypass the fault printer warning if it appears" on page 105.

13 If a warning message appears because drive D has less than 512 Mbytes free, click Yes to continue.

Result: Setup copies files to the server, and then the User Information dialog box appears.
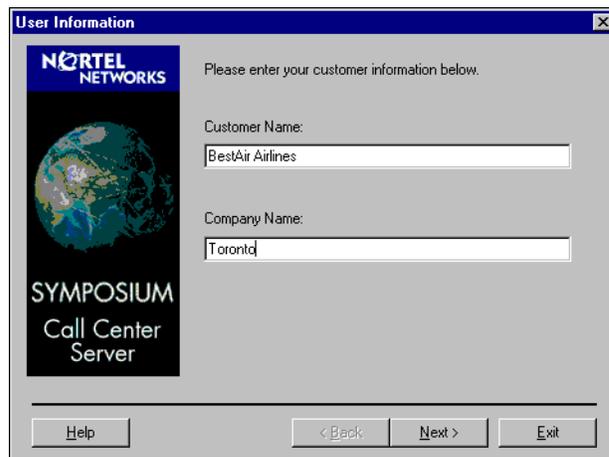
14 Enter the customer and company names as recorded in worksheets from Chapter 2, and then click Next.

Result: The program installs the software and displays the message
```
Setup is about to reboot the system. Please continue
installation after reboot.
```
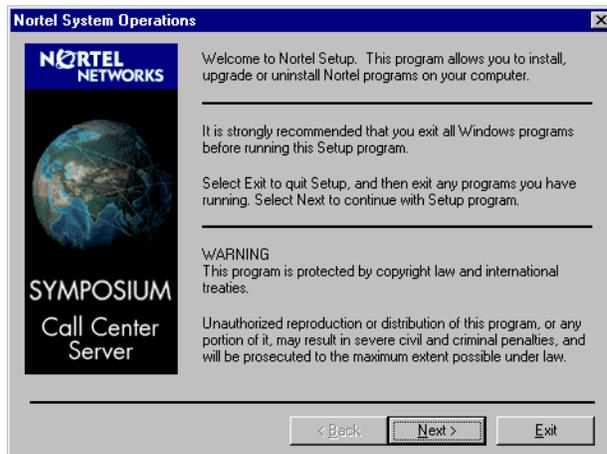
15 Click OK.

Result: The system restarts and logs on again automatically.

To install the MAS server software

1 Exit all applications, including screen savers, and close all windows.

2 On the Windows Start menu, click Run.

3 Click Browse, select Setup.exe from the root directory on the CD, and click Open.

4   Click OK to run.

Result: The Nortel System Operations welcome dialog box appears.

5   Click Next.

Result: The Setup Choices dialog box appears.

6   Click Install/Upgrade.

   Result: Setup examines the system, and the Programs to Install/Upgrade dialog box appears.

7   Click Select All, and then click Next.

   Result: The Nortel System Operations dialog box appears and lists all components in the order in which they will be installed.

8   Click Yes.

Notes:

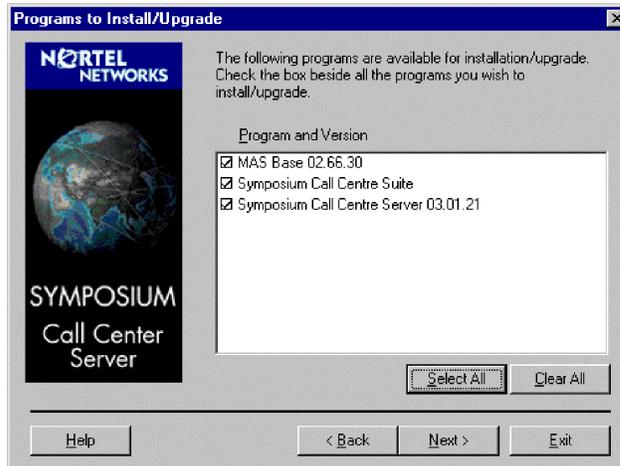■   If a warning message appears because a text printer is not found, then click OK to bypass the warning. For details, see "Bypass the fault printer warning if it appears" on page 105.

■   If the following message appears, then click Yes to continue:

```
Setup has found out that this drive "C:\" has less
than 64 Mbytes of free space. Do you still want to
continue?"
```

Result: Setup copies files to the server, and then the User Information dialog box appears.

9 Ensure that the customer and company names are correct, and then click Next.

Result: The MAS server software installs and the Validation dialog box appears. This process takes approximately 30 minutes.

10 Click Next.

Result: The program prompts you to restart.
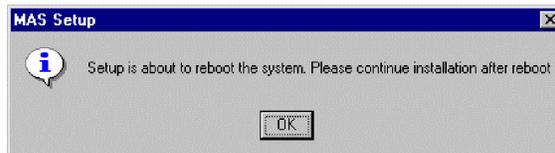
11 Click OK to restart.

To install Symposium Call Center Server software

1 Log on to Windows NT with the username **NGenSys** and the password _ _**ngen!**

Note: If you do not log on using the NGenSys password, the install program in the following procedure prompts you to log on again using NGenSys.

2 Exit all applications, including screen savers, and close all windows.

3 From the Windows Start menu, choose Run.

4   Click Browse, select Setup.exe from the root directory on the CD, and click Open.

5   Click OK to run.

Result: The Nortel System Operations welcome dialog box appears.
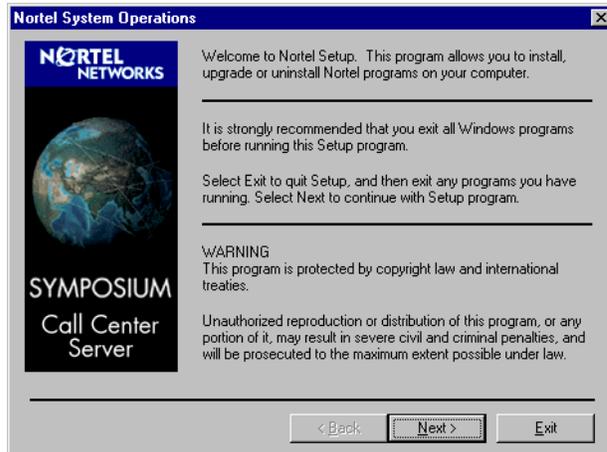
6   Click Next.
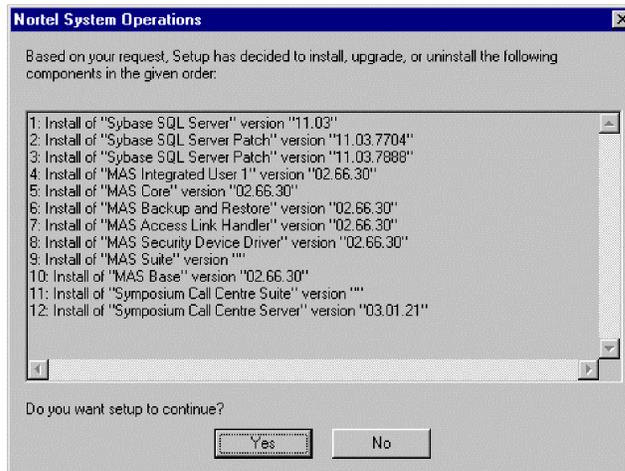
Result: The Setup Choices dialog box appears.
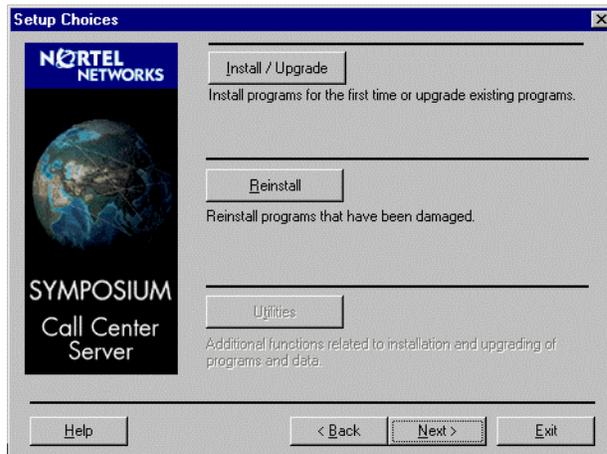
7   Click Install/Upgrade.

Result: Setup examines the system, and the Programs to Install/Upgrade dialog box appears.
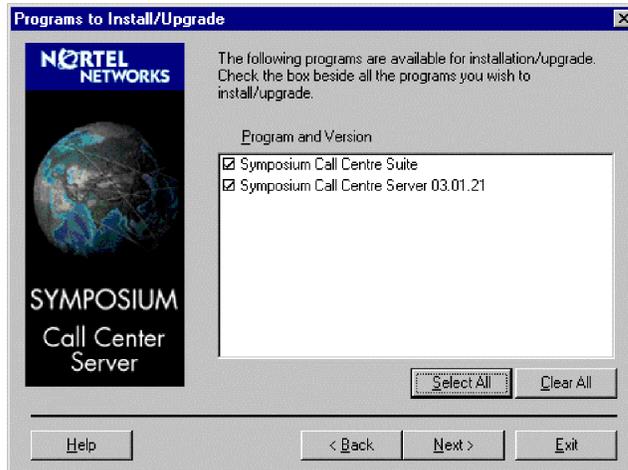
8   Click Select All, and then click Next.

Result: The Nortel System Operations dialog box appears and lists all components in the order in which they will be installed.
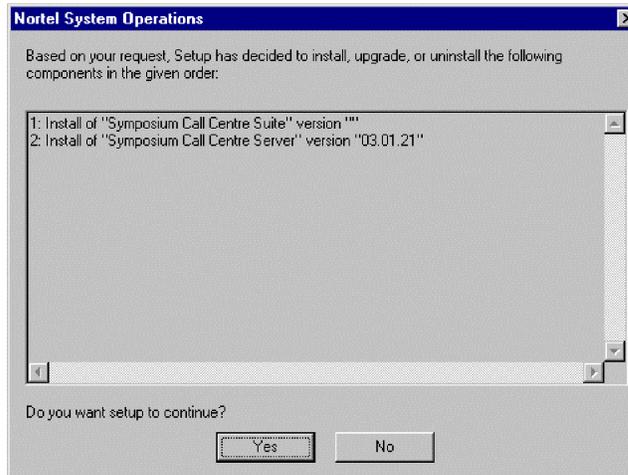
9   Click Yes.

    Result: The Keycode Dialog box appears.
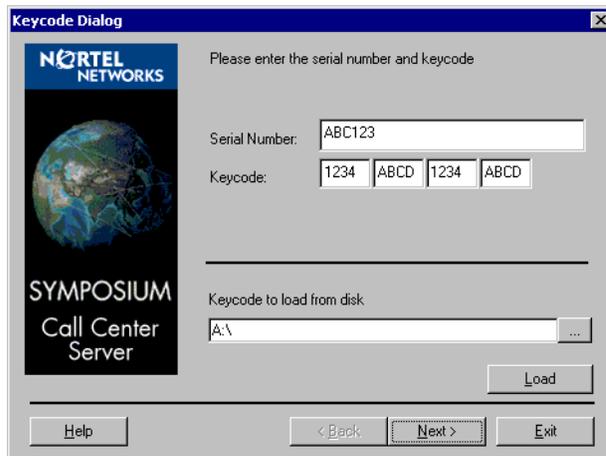
10   For DMS switch systems only, ensure that the Symposium Call Center Server has a dongle that matches the serial number before connecting to the switch.

    Note: The dongle is not necessary for installing or testing.

11   Enter your keycode in one of the following ways:

- If you have a disk that contains your keycode information, follow these steps:

    a. Insert the keycode disk into the floppy drive.

    b. Click the (...) button to open a browse dialog box.

    c. Locate and select the file that contains the keycode information and click Load.

    Result: The keycode and serial numbers are entered into the Keycode Dialog box.

- If your keycode information is stored on a hard disk, follow these steps:

    a. Click the (...) button to open a browse dialog box.

    b. Locate and select the file that contains the keycode information and click Load.

    Result: The keycode and serial number are entered into the Keycode Dialog box.

■ Type your serial and keycode numbers in the appropriate boxes.

Note: The NCC keycode, if entered, must match the switch serial number.

12 Click Next.

Result: The Verify Keycode Information dialog box appears.

13 Check that all keycode information is correct. If it is not correct, then click Back to change it. Otherwise, click Next.

Result: Based on the system type that you are installing, one of the following switch information dialog boxes appears.

Note: If you are installing a Network Control Center (NCC) server, a switch information dialog box does not appear.

M1 Switch Options dialog box

DMS Switch Configuration dialog box

Note: The MSL Switch Configuration dialog box is the same as the DMS Switch Configuration dialog box, except for the switch information.

14 Enter the appropriate information for your switch. Refer to the information you entered in Chapter 2, "Worksheets and checklists."

Note: The following restrictions apply to switch names:

■ Valid characters for switch names are A–Z, a–z, 0–9, _ (underscore) and . (period).

■ Switch names must begin with an alphabetic character, and cannot contain spaces.

■ The last character must not be an underscore or a period.

■ Switch names must not exceed 80 characters in length.

Tip: If you are unsure of the correct information or if you make a mistake, you can change the switch information after you finish the installation (see "Feature Report: Switch Information" on page 272).

15 Click Next.

Result: The ELAN dialog box appears.

16 Enter the ELAN TCP/IP address for the server in one of the following ways:

- If the address appears in the dialog box, select it and click Next.

- If the ELAN TCP/IP address does not appear in the dialog box, select Other, enter the correct IP address in the dialog box that appears, and then click Next.

■ Although the NCC is not connected to the ELAN, the dialog box is still presented when you install the NCC. Choose an IP address that is not your CLAN IP address and proceed.

Result: The CLAN dialog box appears.

17 Enter the CLAN TCP/IP address for the server in one of the following ways:

■ If the address appears in the dialog box, select it and click Next.

■   If the CLAN TCP/IP address does not appear in the dialog box, select
    Other, enter the correct IP address in the dialog box that appears, and
    then click Next.

Result: The Site Name dialog box appears.
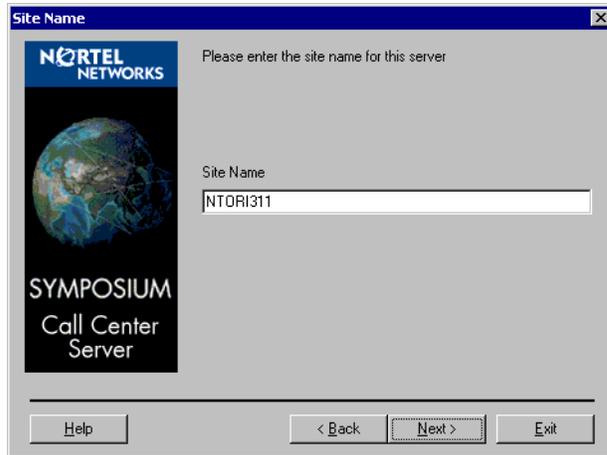
18   Enter a site name for the server. Refer to the information you entered in
         Chapter 2, "Worksheets and checklists."

Tip: The site name must be unique and can consist of any combination of
up to 21 characters. Do not use the \ (backslash) character.

19 Click Next.

Result: The Verify Setup Information dialog box appears, similar to the following example:
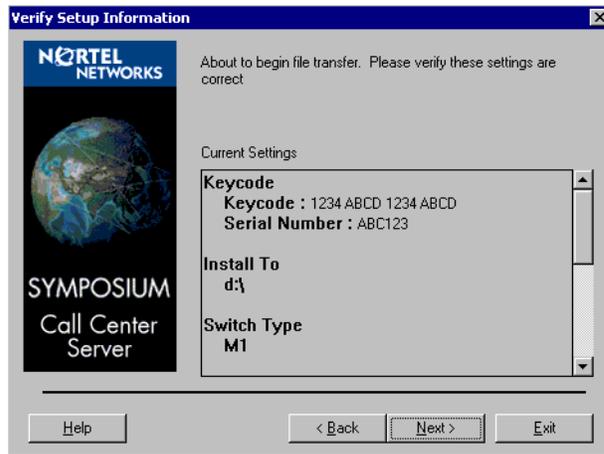
20 Examine the list of current settings. If they are incorrect, click Back, make the necessary corrections, and then click Next.

21 Click Next.

Result: The program begins copying files to the hard disk drive and a progress bar appears.

Note: Initialization of the database files can take from one to three hours.

When this step is completed, the Enter Configuration Mode message appears.
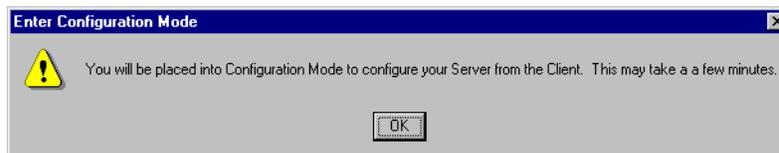
22 Click OK.

Result: The setup program validates scripts and puts the server into configuration mode.

```
Configuration Mode                                                    [X]
 /!\   You are now in Configuration Mode.  Click 'OK' when you have completed configuration of
       the Server.

                              [ OK ]
```

ATTENTION Do not click OK at this time.

Note: Configuration Mode shuts down certain services that take the server offline from the switch. This enables you to configure the server before allowing outside calls to access the server. If this is not required for your installation, click OK to continue the server installation.

23 Go to a client PC and perform the following procedures:

   a. Install the Symposium Call Center Server client software on a client PC (see Chapter 6, "Installing the client software").

   b. Add an SMI system (see Chapter 7, "Adding a System Management Interface system").

   c. Configure the server from the client while the server is still in Configuration Mode.

Note: Nortel Networks recommends that you configure the server while it is offline from the switch. If you do not want to configure the server while it is offline, you can configure it after you finish the server software installation.

24 Return to the server PC and click OK.

Result: The Reboot dialog box appears.

25 Select Reboot now, and then click Next.

26 After the server restarts, press Ctrl+Alt+Delete to log on.

27 Log on as **NGenSys**.

Result: The SMonW window appears and Symposium Call Center Server services begin the startup process. The services take approximately 15 to 20 minutes to start up. For more information about the services and their statuses, see "Troubleshooting problems with Symposium Call Center Server services" on page 295.

The server software is now completely installed.

Checking for PEPs

Extract and install the latest available software PEPs now. For more information, see "Installing PEPs and Service Update packs" on page 130.

To create a Platform Recovery disk

1 Insert a disk into the floppy drive.

2 From the Windows Start menu, choose Programs → Symposium Call Center Server → Migration.

3 Select Dump system information to floppy disk, and then click Continue.

Result: The program prompts you to insert a disk.

4 Click OK.

Result: The program saves the configuration to the disk and displays messages telling you that the save is complete.

5 Click OK in response to these messages.

Result: The program prompts you to remove the disk.

6 Click OK.

7 Label the disk with "Platform Recovery Disk" and the current date, and store it in a safe place.

Backing up the server

Create full, database, and (if applicable) RAID backups of the server. For detailed instructions, refer to the backup procedure in the *Administrator's Guide*.

What's next?

Continue with "Changing the NGenDist and NGenDesign passwords" on page 125.

Changing the NGenDist and NGenDesign passwords

Introduction

NGenDist and NGenDesign are Windows NT remote access accounts that enable the distributor or Nortel Networks Customer Support to remotely log on to the server if requested by the customer. These accounts are created during the server software installation. To ensure server security, change the NGenDist and NGenDesign passwords.

To assign new passwords, you do not need to know the default passwords for NGenDist and NGenDesign.

Password recommendations

When you change passwords, Nortel Networks recommends that they meet the following requirements:

- Each password should be six to ten characters long.
- Each password should contain at least one number.
- Each password should not contain common words or nouns.

Example
The following password example meets all of these recommendations:
xyd45fst

Password security

Write down the new passwords you create, and store them in a safe, secure place away from the server. Give the passwords only to those who need them.

To change the NGenDist and NGenDesign passwords

Note: You are not required to change the NGenSys password. If you change the NGenSys password, you must apply the same password change to the MAS Backup/Restore service (see the following procedure on page 127).

1   Log on to Windows NT as NGenSys.

2   From the Windows Start menu, choose Programs → Administrative Tools (Common) → User Manager for Domains.

     Result: The User Manager window displays a list of available user accounts, including NGenDist and NGenDesign.

3   Double-click the NGenDist icon.

     Result: The User Properties property page appears.

4   In the Password box, type the new password. Ensure that you use a password that contains a combination of numbers and letters (see "Password recommendations" on page 125).

5   In the Confirm Password box, type the same password entered in the Password box.

6   Click OK to close the User Properties property page.

7   Repeat steps 3 to 6 for NGenDesign.

8   Select Exit to save changes.

9   Record these passwords and store them in a safe, secure place away from the server.

To change the NGenSys password for MAS Backup/Restore service

Note: Complete this procedure only if you change the Windows NT user account password for NGenSys.

1   From the Windows Start menu, choose Settings → Control Panel.

2   Double-click Services.

Result: The Services dialog box appears.
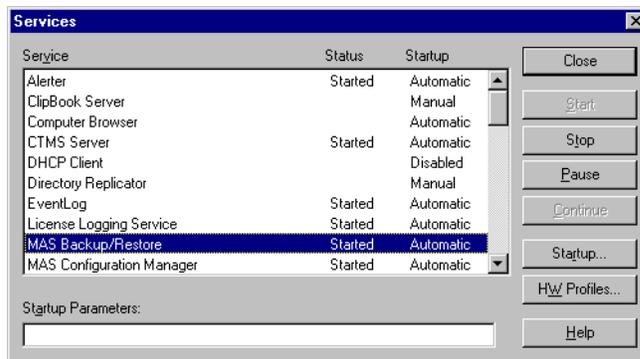
3   Scroll to MAS Backup/Restore service, and then select it.

4   Click Startup.

Result: The Service dialog box appears.
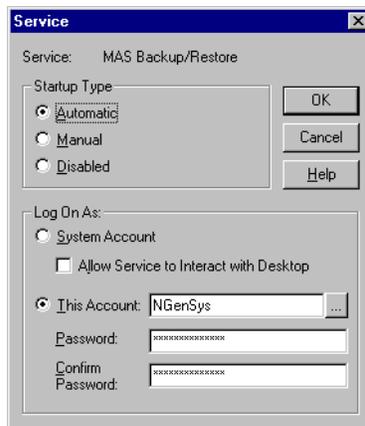
5   In the Log On As section, fill in the Password and Confirm Password boxes with the current NGenSys password. Use the same password that you

assigned to NGenSys in "To change the NGenDist and NGenDesign passwords" on page 126.

What's next?

Continue with "Post-installation checklist" on page 129.

Post-installation checklist

To verify the success of the installation

On the server PC

1 Log on to Windows NT as NGenSys.

2 Check that all Symposium Call Center services are running. Restore the SMonW window from the TaskBar and check that all services are in the UP state.

Note: It can take 15 minutes or more for the system to come up and for all of the services to start. If all services do not start, check that the PC is connected to the switch. Perform a security check to verify that the proper switch ID is assigned to Symposium services coming online.

3 If you are connecting to a DMS/MSL-100 switch, make sure that the correct dongle is attached to the parallel port on the server.

4 Check the Windows NT Event Viewer again to be sure that no errors occurred during the restart.

On the client PC

After a successful installation, log on from a client PC and verify that the historical statistics match the installed disk space and customer requirements.

To update the emergency repair disk

After you make changes to the server, update the emergency repair disk to record the latest configuration data. Follow the instructions in "Updating the emergency repair disk" on page 70.

Installing PEPs and Service Update packs

Introduction

Product Enhancement Packages (PEPs) are small software updates that are installed on the Symposium Call Center Server or client. PEPs contain product enhancements and bug fixes, and are required to ensure smooth operation of your system.

PEPs and Service Updates are available on the PEP CD shipped with your software and from your Nortel Networks Customer Support representative.

Periodically, individual PEPs are consolidated into Service Update packs or "super PEPs." Service Update packs are installed in the same way as PEPs, although they can take longer to download because they are larger. There are normally two service update packs—one for the client and one for the server.

When you install the software (or upgrade to a new version), you should install the latest service update pack on the server and on the client. If no service update pack is available, check with your Nortel Networks Customer Support representative.

To install PEPs or Service Update packs on the server or client PC

Notes:

- If your server is a RAID system, you can split the RAID drives before installing the PEPs or Service Update packs. After installing the PEPs or Service Update packs, allow the server to run in split mode until you are confident that the procedure was successful. Then rebuild the RAID drives.

- If you are performing a conversion or upgrade and you have already split the RAID drives, do not rebuild the RAID drives until the conversion or upgrade process is finished.

1   Log on to Windows NT as NGenSys.

2   Shut down all applications, including screen savers.

3   Insert the PEP CD into the CD-ROM drive, or download the PEP or Service Update electronically.

4   Locate the PEP directory on the CD.

Example: For the PEP named NS030121G001S, the path might be
E:\03.01.21\PEPs\NS030121G001S, where

Code	Meaning
NS	Nortel Networks Symposium Call Center Server
030121	Build number of Symposium Call Center Server software
G	General Release (Other options include SU=Service Update, L=Limited, and R=Restricted.)
001	the PEP number
S	a server PC PEP (Other options include C=Client.)

5   Check the readme file in the PEP directory for any special instructions or
dependencies before installing the PEP.

6   Double-click the file runme.exe, and then follow the screen instructions.

Result: The PEP installer wizard verifies that the PEP can be installed
successfully. The PEP installer then shuts down and restarts the server. For
PEPs installed on the client PC, the PEP installer checks that no
Symposium Call Center Server services are currently running. This
process takes several minutes. The client PC is not shut down. The PEP is
installed on the PC and all updated files are backed up.

Note: If the PEP installer detects that the PEP cannot be installed
successfully, contact your Nortel Networks Customer Support
representative for assistance.

Uninstalling PEPs

To uninstall PEPs from the server or client

1 Log on to Windows NT as NGenSys.

2 Start the DMI View utility by choosing, from the Windows Start menu, Programs → Symposium Call Center Server → DMI View.

Result: The DMI Viewer window appears.
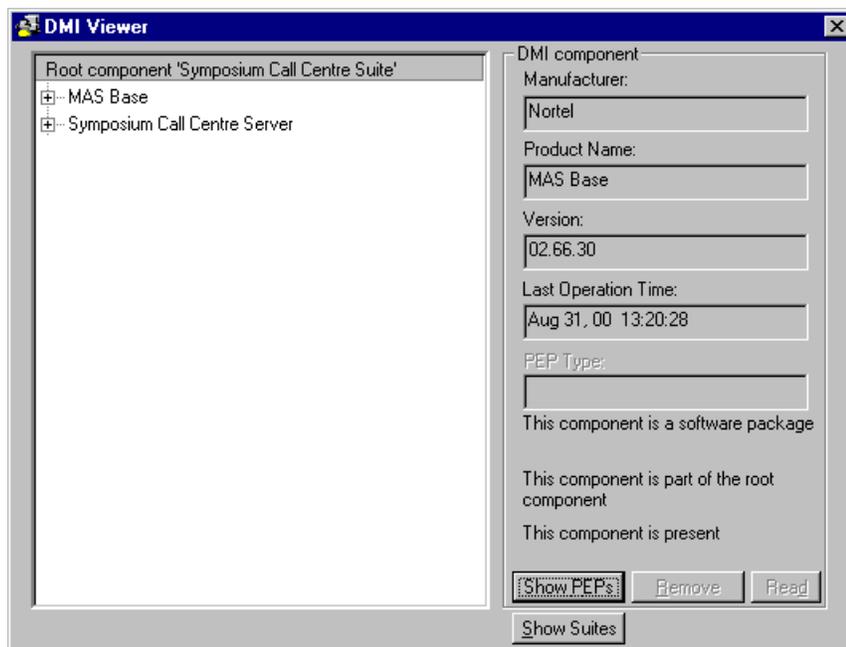
3 Click Show PEPs.

4 Select the PEP you want to uninstall.

5 Click Remove.

Result: The utility removes the PEP and prompts you to restart.

6 Click OK to restart the server PC.

Uninstalling server software

Introduction

Uninstall the server software when you want to use the server PC for another purpose. If you must do a fresh install of the current server software, then uninstall the server software first.

| ATTENTION | Do not uninstall the server software before a software upgrade. |

Checklist for uninstalling server software

Steps	✔
Obtain the current password for the NGenSys account.	
Establish a connection to the server by attaching a keyboard and monitor, or by using pcAnywhere. See page 101.	
Uninstall the server software. See page 133.	
Uninstall the Desktop Management Interface (DMI). See page 134.	

To uninstall server software

1   Log on to Windows NT as NGenSys.

2   From the Windows Start menu, choose Programs → Symposium Call Center Server → uninstall.

Result: Setup examines the system, and the Uninstall Programs dialog box appears. This dialog box lists all programs available to be uninstalled.

Note: The list contains all Performance Enhancement Packages (PEPs) installed on the server. Ensure that all PEPs are selected for uninstallation.

3   Click Select All, and then click Next.

Result: The Nortel System Operations dialog box appears and lists all of the components in the order in which they will be uninstalled.

4   Click Yes.

Result: A confirmation prompt appears.

5   Click Yes.

Result: A summary of the uninstall appears.

6   Click OK.

Result: The system prompts you to restart.

7   If the uninstall has completed successfully, click No (do not restart the server at this time). You can now uninstall DMI. Continue with the following procedure, "To uninstall the DMI."

Note: If you encounter a problem during the uninstall, do not uninstall the DMI. The DMI is not automatically uninstalled during the uninstallation process because all logs, which can be used by Customer Technical Support to troubleshoot problems, are deleted when the DMI is uninstalled.

To uninstall the DMI

1   From the Windows Start menu, choose Programs → Symposium Call Center Server → uninstall.

Result: The following prompt appears:
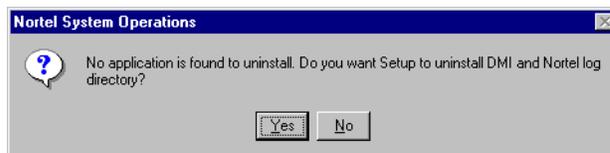
2   Click Yes.

Result: A summary of the uninstall appears.

3   Click OK.

Result: The setup program prompts you to restart.

4   Click OK to restart.

Result: The server software is now completely uninstalled.

ATTENTION   Make sure that all the Nortel Networks folders and subfolders in each of the local drives are removed. Remove them manually if they still exist.

Chapter 6

Installing the client software

In this chapter

Checklist for installing Symposium Call Center Server client software

Step	✔
Obtain the user ID and password that you need to log on to the client PC. On a Windows NT client PC, you need an account that has local administrative privileges.	
Review the requirements in the checklist on page 20.	
Review the limitations on page 139.	
Uninstall the Software Development Kit (SDK) if it is installed. See page 141.	
Ensure that the temp directory has enough space. See page 143.	
Check the "Things to remember" section on page 145.	
If you are installing across a network, create a virtual CD. See page 157.	
Install the Symposium Call Center Server client software. ■ If you are installing from a CD, see page 145. ■ If you are installing across a network, see page 160.	
Install PEPs if a PEP CD was provided.	

Note: If Sybase Open Client is installed on the client PC, you must uninstall it before installing the client.

Limitations

Number of clients

The Server keycode determines the number of clients that can simultaneously connect to the server. The number of installed clients can exceed the number of licensed clients, although only the licensed number can connect to the server at any one time.

Coexistence with MAT

Supported combinations

The Symposium Call Center Server client application, Release 4.0, can reside on the same PC as MAT 6.53.

If you install the Symposium Call Center Server client on the same PC as MAT, be sure to install it in a different directory than MAT. For example, if you installed MAT in C:\Nortel, do not install any of the client components in C:\Nortel or any subdirectory of C:\Nortel.

Notes:

- If you have installed the client in the same directory as MAT, you must uninstall the client, reinstall MAT, and install the client in a different directory.
- When you uninstall MAT, the installation program replaces ODBC files with an older version and removes required registry entries. Before uninstalling MAT, install Service Update pack SU05C to ensure that the registry is cleaned up properly. Then uninstall MAT, and reinstall the client.

Unsupported combinations

The Symposium Call Center Server client application cannot reside on the same PC as

- earlier versions of MAT
- earlier versions of the Symposium Call Center Server client application
- Symposium Express Call Center client application

Note: If you must use the same PC for more than one of these applications, you can use a third-party application to partition the PC hard disk and install multiple copies of Microsoft Windows. Install a separate application on each partition. When you want to use an application, start with the appropriate partition.

Coexistence with Sybase Open Client

The Symposium Call Center Server client application uses its own version of the Sybase Open Client software. It cannot be installed on a PC that already contains Sybase (this is a Sybase limitation). Thus, any Sybase-based applications (such as SQL Server 7) are incompatible with the Symposium Call Center Server client and cannot coexist on the same PC.

Uninstalling the Software Development Kit

Introduction

Before you install client software, you must ensure that a Software Development Kit (SDK) is not installed on the Symposium client PC. SDK and the Symposium Call Center Server client PC are not compatible. Use the procedures in this section to check whether the SDK is installed, and then to uninstall it if it is present.

To uninstall SDK

1   Ensure that all applications on the client PC are closed.

2   From the Windows Start menu, choose Settings → Control Panel.

3   Double-click Add/Remove Programs.

4   Scroll through the list, looking for Symposium Call Center Runtime. If this program appears in the list, continue with the following steps to uninstall it.

5   Click Add/Remove.

Result: A WARNING dialog box appears.

6   Click Yes.

Result: The system prompts, `Uninstall Finished. Please reboot your system.`

7   Click OK.

8   On the Windows Start menu, click Shut Down.

Result: The Shut Down Windows dialog box appears.

9   Select Restart the computer?, and then click Yes.

10 The server restarts.

Checking the temp directory size

Purpose

Use this procedure to ensure that you have at least 50 Mbytes of free space on the hard drive containing your Windows Temp directory. (This directory is usually located on drive C.) The client software requires 50 Mbytes of free space.

If you have insufficient space, you can delete files from your Windows Temp directory.

To check the amount of free space in the temp directory

1   Log on to the client PC.

2   From the Windows Start menu, choose Programs → Command Prompt.

3   At the prompt, type **dir**.

Result: The contents of the current directory appear, along with a summary of free disk space.

4   Check the amount of free disk space that appears on the last line:

- If the free disk space summary shows more than 50 Mbytes, then you can proceed with installing the client software.

- If the free disk space summary shows less than 50 Mbytes of free disk space, then remove unnecessary data or programs from the PC until you have at least 50 Mbytes of free disk space.

To delete temporary files

You should delete temporary files on a regular basis. This avoids potential disk space problems caused by the accumulation of large temporary files created from generating reports and from other client activities. To delete temporary files, follow these steps.

1   From Windows Explorer, navigate to your system's temporary directory.

Note: The usual path to this directory is C:\Windows\Temp.

2   Select and then delete all files in the temporary directory.

3   From Windows Explorer, navigate to the Recycle Bin and choose File →
Empty Recycle Bin.

Installing the client from the distribution CD

Introduction

Follow the procedure in this section to install the Symposium Call Center Server client software from the distribution CD. To install from a virtual CD, see "Installing the client over the network" on page 156.

Timing

The procedures in this chapter take approximately one hour to complete.

Before you begin

- If the Software Development Kit (SDK) is installed on the client PC, uninstall it by following the instructions in "Uninstalling the Software Development Kit" on page 141.

- If Sybase Open Client is installed on the client PC, you must uninstall it before installing the client software.

Things to remember

Follow the steps in the installation checklist
See "Checklist for installing Symposium Call Center Server client software" on page 138.

Update DLL files
During the installation, you might see dialog boxes that offer to update system DLL files with newer versions. Write down the names of these DLL files. If the files being installed are newer than the existing versions, click Yes. If they are older, click No. Provide the system administrator with the list of replaced DLLs.

Install the Desktop Management Interface

If you are prompted to install the Desktop Management Interface (DMI), click Yes to install it. The DMI is part of the client software. If the DMI is already installed, you are not asked to install it again.

Install Acrobat Reader 3.0 with search plug-in

The procedure for installing the client includes steps to install Acrobat Reader 3.0. This Acrobat Reader 3.0 version includes the search plug-in. The search plug-in provides the capability to search for keywords across the suite of online reference guides.

If you follow the steps in this installation procedure, the installation program automatically installs Acrobat Reader 3.0.

If Acrobat Reader 3.0 or higher is already installed on the client PC, and you already have the search plug-in (Asrch32.api) installed, you need not replace it.

Uninstall client software to change the switch type

The Symposium Call Center Server client PC can connect to only one switch type. To change to another switch type, you must completely uninstall the client system software, and then reinstall it with the correct switch type.

To start the client installation

ATTENTION   During the installation, there are points where the setup program performs automatic installation steps between wizard setup dialog boxes. Do not close any windows that appear during these steps. Wait for the next wizard setup dialog box before you use the mouse or keyboard.

During the installation, there are points where the setup program performs automatic installation steps between wizard setup dialog boxes. Do not close any windows that appear during these steps. Wait for the next wizard setup dialog box before you use the mouse or keyboard.

If you abort the installation at any time, you must uninstall all of the components before you reinstall.

1   Log on to the client PC.

Note: If the client PC is running Windows NT Workstation, log on as Administrator. You must be logged on with administrative privileges to install, upgrade, or convert Symposium Call Center Server software.

2   Exit all applications, including screen savers, and close all windows.

3   Insert the Client installation CD or, if you are installing from a remote
       CD-ROM, map the client installation CD to a drive letter on the client PC.

4   Click Browse, and then select Setup.exe from the root directory on the CD.

5   Click OK to run.

       Result: The Select the Log Directory Location dialog box appears.
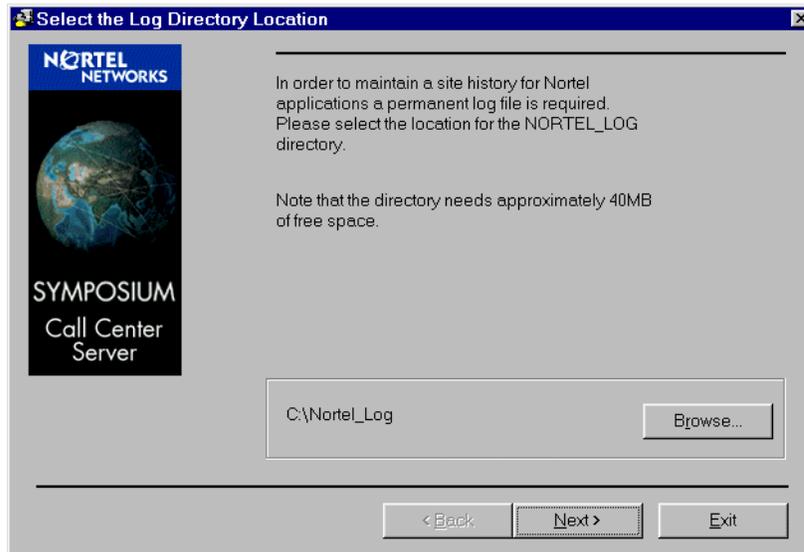
6   If you do not want to install in the default path C:\Nortel_Log, click Browse
       and select another drive.

7   Click Next.

       Result: If DMI is already installed on the system, the Nortel System
       Operations welcome dialog box appears. Skip to step 11. If DMI is not
       already installed on the system, the following dialog box appears:
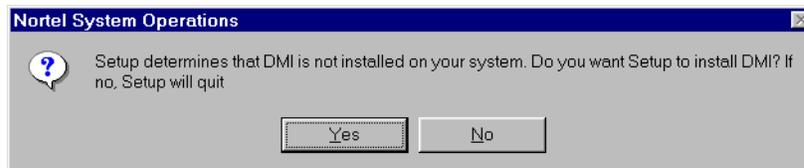
8   Click Yes to install the DMI.

Result: The DMI directory dialog box appears.

9   If you do not want to install in the default path, click Browse and select the new path.

10   Click Next.

Result: The DMI installs in approximately one minute, and then the Welcome dialog box appears.

ATTENTION	Do not use the keyboard or mouse while the DMI is being installed, as they can cause the installation to fail.

11   Click Next.

Result: The Setup Choices dialog box appears.

12 Click Install/Upgrade.

Result: Setup examines the system, and the Programs to Install/Upgrade dialog box appears.
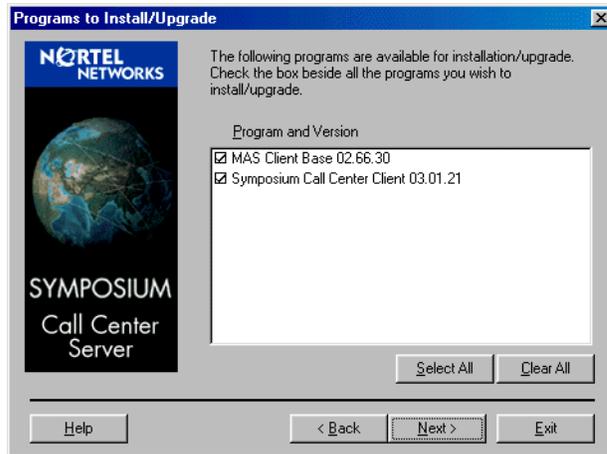
13 Click Select All, and then click Next.

Result: The Nortel System Operations dialog box appears and lists all of the components in the order in which they will be installed.
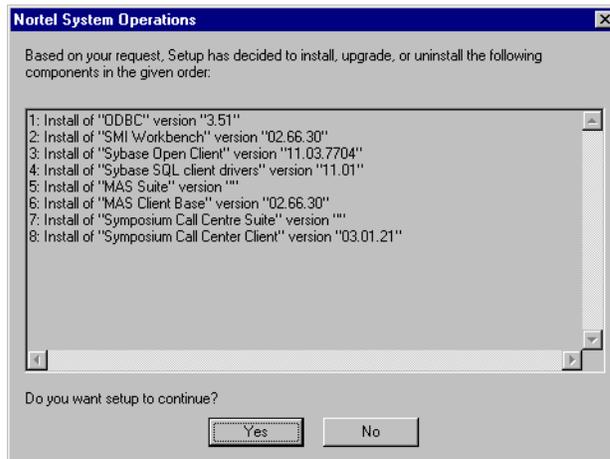
14 Click Yes.

Result: The SMI Workbench directory dialog box appears.

15 If you do not want to install the SMI Workbench in the default path, click Browse and type the new path.
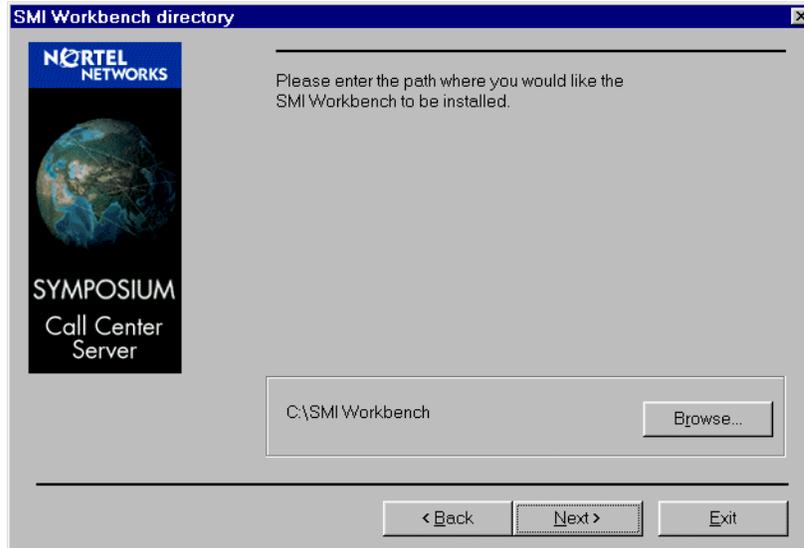
16 Click Next.

Result: The Sybase Open Client directory dialog box appears.
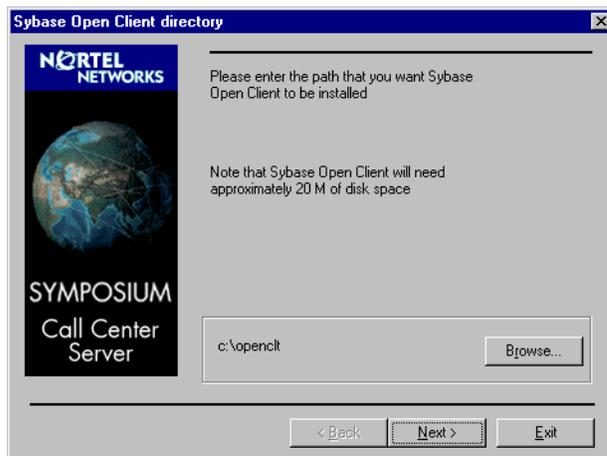
17 If you do not want to install the Sybase Open Client in the default path, click Browse and type the new path.

18 Click Next.

Result: The setup program checks to see if the required version of Adobe Acrobat Reader is installed. If it is not installed, the following dialog box appears. Continue with the following step. If it is installed, skip to step 21.
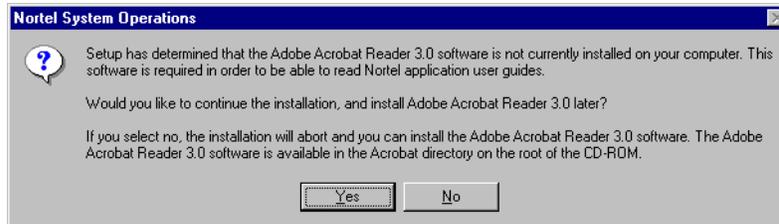
19 Click Yes and follow screen instructions until the installation wizard notifies you that Acrobat has been installed.

20 Click Yes to continue the installation.

Result: The User Information dialog box appears.
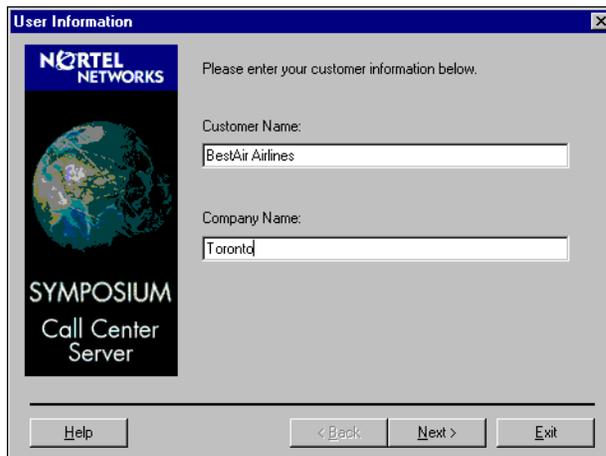
21 Enter the customer name and company name, and then click Next.

Result: The Symposium Call Center Server (client) directory dialog box appears, showing the default path C:\Nortel.

22 If you do not want to install the Symposium Call Center Server client in the default path, click Browse and type the new path.

23   Click Next.

Result: The Switch Type dialog box appears.
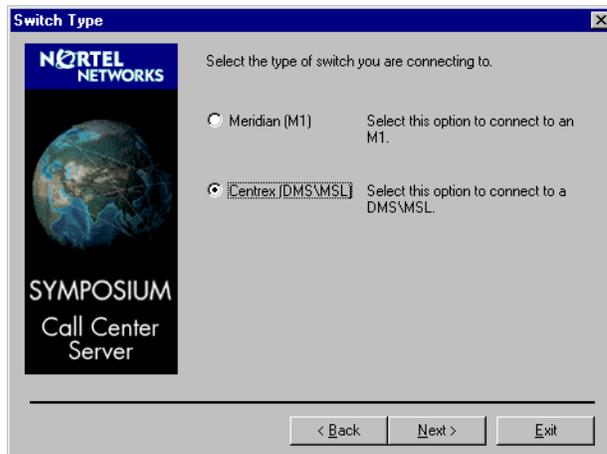
24   Select the switch type for this client PC to connect to, and then click Next.

Result:

- If you choose Centrex (DMS/MSL), or if you choose Meridian (M1) and network skill-based routing is not enabled, the Verification dialog box appears.

- If you choose Meridian (M1), and if the network skill-based routing is enabled, then the Networking NCC Reports dialog box appears. This dialog box gives you the option to add NCC reporting capabilities.
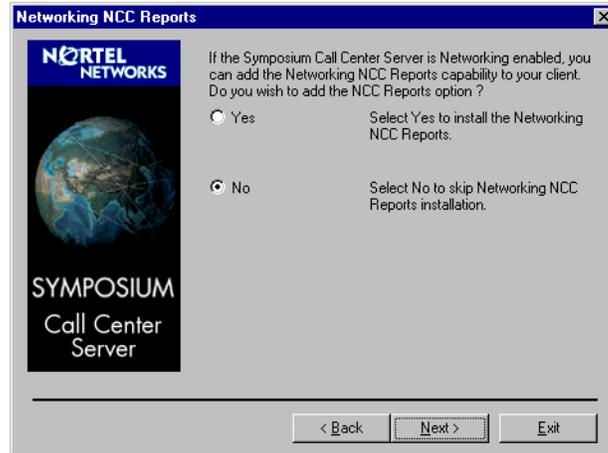
Choose Yes to install NCC Reports. Choose No, the default, to not install NCC Reports.

Result: The Verification dialog box appears.

Note: Installation of NCC Reports capabilities is available only from this dialog box. If you later elect to install NCC Reports, then you must choose the reinstall option as described in "To reinstall NCC Reports (Meridian 1 only)" on page 249.
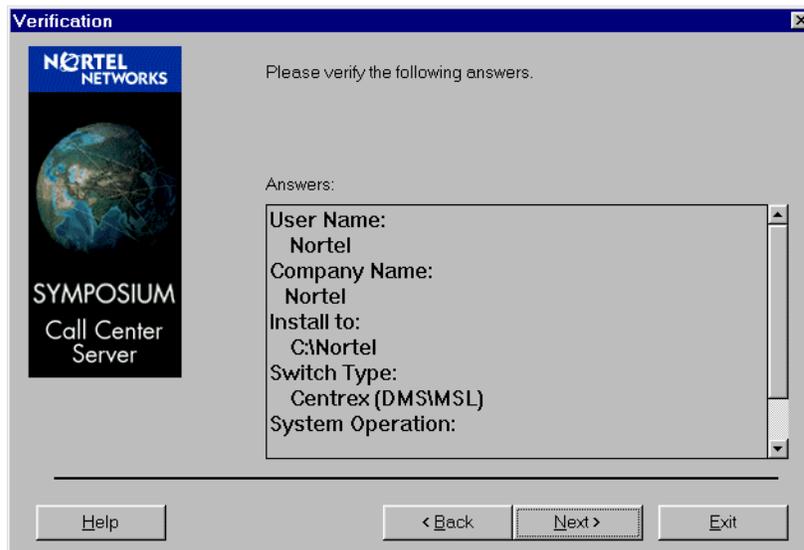
25 Verify that all of the options showing in the Verification dialog box are correct. If any errors appear, click Back, make the necessary corrections, and then click Next.

26 Click Next.

Result: Setup installs the listed components. This takes approximately 15 minutes. When the installation has completed, the Nortel System Operations validation summary appears.

ATTENTION   Do not use the keyboard or mouse during the installation process, as they can cause the installation to fail.
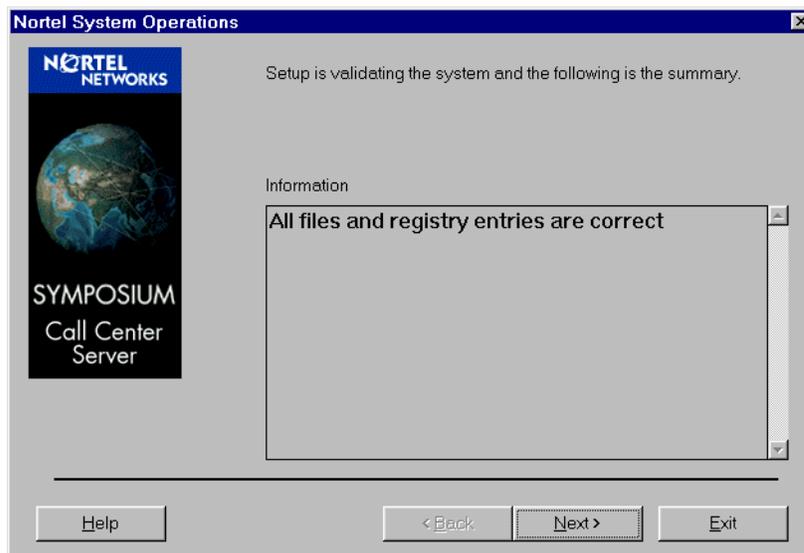
Notes:

■ The following error message can appear during the ODBC installation:

If this dialog box appears, click OK, and then rerun setup.exe.

■ If the message `Setup has encountered an error while installing ODBC` appears, contact your Nortel Networks Customer Support representative.

27 Click Next.

Result: The system asks if you want to read the readme file.

28 Choose whether you want to read the readme file. If you click Yes, then click File → Close when you are finished.

Result: The program prompts you to restart.

29 Click Yes to restart the computer.

Result: The computer restarts, and the client installation is complete. To access Symposium Call Center Server, from the Windows Start menu, choose Programs → SMI workbench.

What's next?

If you did not receive a PEP CD, then continue with Chapter 7, "Adding a System Management Interface system." If you received a PEP CD, then install the PEP as described in "Installing PEPs and Service Update packs" on page 130.

Installing the client over the network

Introduction

If you are installing client software on several clients, it might be easier to use one source PC to host the installation CD-ROM or virtual CD. You can then map a network drive for the source PC to allow each user to run the installation program from the mapped drive.

ATTENTION   To avoid installation errors caused by excessive network loading, do not perform the network installation during peak network traffic hours.

Virtual CD

A virtual CD is a complete copy of the Symposium Call Center Server client installation CD that resides on a shared directory on the network. This CD functions in the same way as a real CD inserted into the CD drive on a client PC. It allows you to install other client PCs without a physical CD. The virtual CD is useful if you are installing in networked sites (M1 only).

Requirements

You must meet the following requirements for this type of installation:

- You need a source PC running Windows NT 4.0, with the latest service pack installed, that has
  - minimum Pentium 90 CPU
  - minimum 32 Mbytes of RAM
  - minimum 250 Mbytes of continuous space available on its hard drive
- The source PC must be dedicated to this activity and not used for other tasks during the network installation.
- The source PC must have a working network connection and file-sharing capabilities under Microsoft Network.

- The customer LAN (CLAN) connecting the source and client PCs must be running Microsoft Network.

- The CLAN must be stable with a moderate traffic volume during the network installation process.

Before you begin

- If the Software Development Kit (SDK) is installed on the client PC, uninstall it following the instructions in "Uninstalling the Software Development Kit" on page 141.

- If Sybase Open Client is installed on the client PC, you must uninstall it before installing the client software.

To create a virtual CD

1   In Windows Explorer, select the drive on which you want to create the virtual CD (in this example, K).

2   Choose File → New → Folder, and create a new folder called CLT_VCD.

3   Insert the Nortel Networks Symposium Call Center Server Client Application CD in the CD-ROM drive (in this example, drive E).

4   Select the root directory of the CD, and then select all of the files in the CD.

5   Choose File → Copy, and copy the entire CD to the new folder (in this example, K:\CLT_VCD).

6   When the copy is complete, select the directory K:\CLT_VCD.

7 Choose File → Sharing.

Result: The Clt_vcd (Client Virtual CD) Properties property sheet appears.
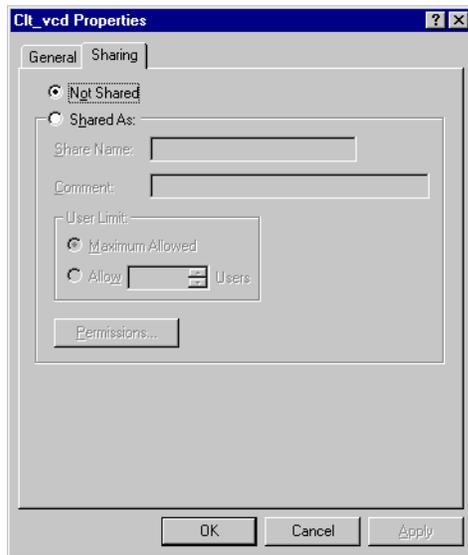
8 Click Shared As.

9 The Share Name and User Limit dialog boxes become active.

10 Change the Share Name from CLT_VCD to the version number of the software CLT (for example, 03.01.21CLTR).

11 For user limits, click Allow and allow no more than three users to connect at a time. You must limit the number of concurrent installation copies to ensure reasonable performance over the network.

12 To grant other users access to this directory, click Permissions.

Result: The Access Through Share Permissions dialog box appears.
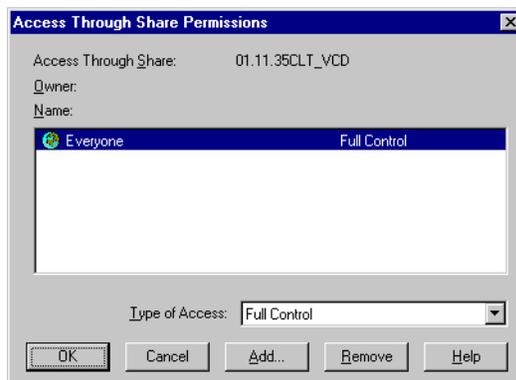
13 Click Remove to remove the Everyone group.

14 To add names to the list, click Add and select the groups or individual users to whom you want to grant access to the virtual CD.

15 To remove names from the list, click Remove.

16 From the Type of Access list, select Read.

CAUTION

Risk of data loss

If you share with Read/Write access, users can accidentally delete the virtual CD or corrupt it.

17 Click OK.

18 Click Yes in the Windows NT message dialog box, indicating that the share name is not accessible from some MS-DOS workstations.

19 Click OK.

To start installation from a virtual CD

ATTENTION   The network installation uses the same recovery process as a regular installation from a physical CD. If you see an error message, click Resume to continue the installation, or click Abort and reinstall the client application.

You must map a network drive to the server and virtual CD directory (as shown in the following procedure).

1   Log on to the client PC.

Note: If the client PC is running Windows NT Workstation, log on as Administrator. You must be logged on with administrative privileges to install, upgrade, or convert Symposium Call Center Server software.

2   In Windows Explorer, choose Tools → Map Network Drive.

3   For Path, type **\\<source PC computer name>\<Share Name of the virtual CD directory>**.

Example: \\TOR658\03.01.21CLTR

4   Click OK.

Result: The virtual CD directory is mapped as a network drive in the Windows Explorer.

5   Navigate to the virtual CD directory (in this example, \01.11.33CLTR), and double-click Setup.exe.

Result: The Network Installation dialog box appears.

6   Click Continue.

Result: The Welcome page appears.

7   Go to "Installing the client from the distribution CD" on page 145, and follow the steps for a regular client installation.

8   When you finish the client installation, choose Tools → Disconnect Network Drive to disconnect the virtual CD drive.

Result: This step allows another client PC to connect for a network installation.

Uninstalling the client software

Introduction

Uninstall the client software when you want to use the client PC for another purpose. If you must reinstall the client software, uninstall the client software first.

| **ATTENTION** | Do not uninstall the client software before upgrading software. |

Uninstallation checklist

Steps	✔
Obtain the user ID and password required to log on to the client. On a Windows NT client PC, you need an account that has local administrative privileges.	
Uninstall the client software. See page 162.	
Uninstall the DMI. See page 164.	

Things to remember

Uninstall PEPs

During the uninstallation, Performance Enhancement Packages (PEPs) are listed as components to uninstall in the Uninstall Programs dialog box. Ensure that all of the items in the dialog box are selected so that the PEPs are uninstalled.

To uninstall the client software

1   Log on to the client PC.

Note: If the client PC is running Windows NT Workstation, log on as Administrator. You must be logged on with administrative privileges to install, upgrade, or convert Symposium Call Center Server software.

2   Based on your release of Symposium Call Center Server client, do one of the following:

■   From the Windows Start menu, choose Programs → Symposium Call Center Server → Uninstall.

■   Open the Windows Control Panel (from the Windows Start menu, choose Settings → Control Panel), and double-click Add/Remove Programs. Select Symposium Call Center Server client, and click Remove.

Result: Setup examines the system, and the Uninstall Programs dialog box appears.
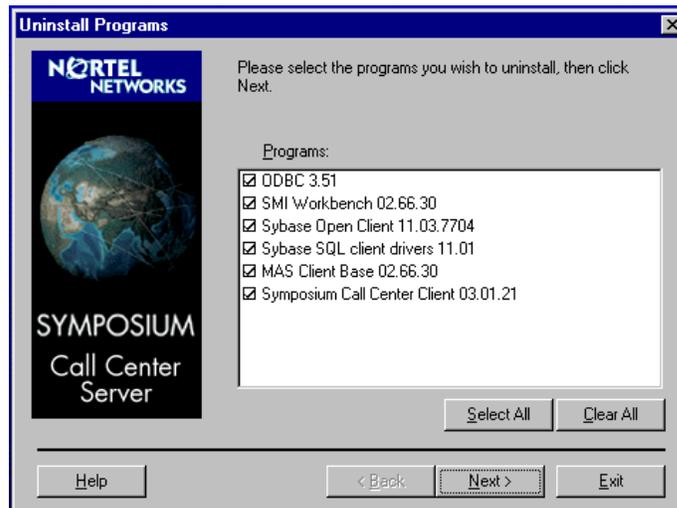
3   Click Select All, and then click Next.

Result: The Nortel System Operations dialog box appears and lists all of the components in the order in which they will be uninstalled.
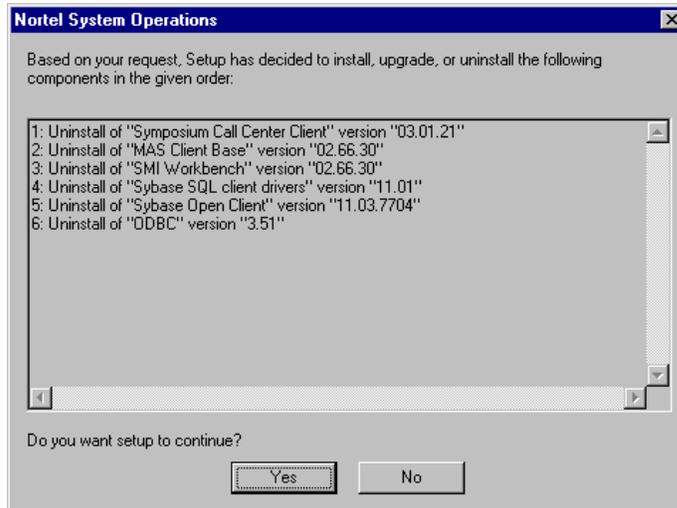
4   Click Yes.

Result: A confirmation dialog box appears.
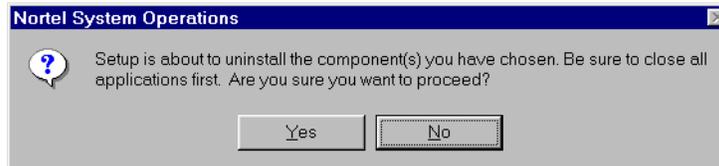
5   Click Yes.

Note: If any window obscures the uninstallation summary, minimize the window.

6   Click OK.

Result: The system asks if you want to uninstall DMI and the Nortel Log directory.
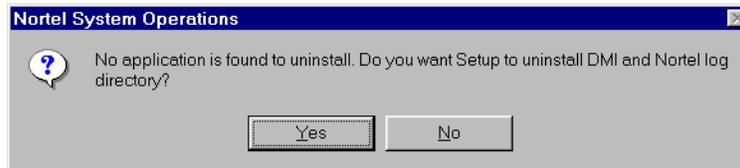
7   Click Yes.

Result: An uninstall summary dialog box appears.

8   Click OK twice to exit and restart.

Result: The system restarts and the client uninstallation is complete.

Note: If an error message regarding the uninstalling of all Symposium Call Center Server features appears, click OK.

To uninstall NCC reports (Meridian 1 only)

If you chose to install Networking NCC Reports during client installation, you can remove the NCC report templates. To remove NCC report templates, follow these steps.

1   Log on to the client PC.

Note: If the client PC is running Windows NT Workstation, log on as Administrator. You must be logged on with administrative privileges to install, upgrade, or convert Symposium Call Center Server software.

2   Close down all applications, including screen savers.

3   From the Windows Start menu, choose Programs → Symposium Call Center Server → NCC reports removal.

Result: NCC reports are uninstalled and you are advised that NCC reports removal has been successful.

Note: NCC report templates can also be uninstalled during a regular uninstall, as described in "To uninstall the client software" on page 162.

Installing the Software Development Kit

Restrictions

The Software Development Kit (SDK) is not compatible with the Symposium Call Center Server client software. Do not install the SDK on the Symposium client PC.

To install the SDK

1   Log on to the client PC.

   Note: If the client PC is running Windows NT Workstation, log on as Administrator. You must be logged on with administrative privileges to install, upgrade, or convert the SDK software.

2   Exit all applications, including screen savers, and close all windows.

3   Insert the Client installation CD or, if you are installing from a remote CD-ROM, map the client installation CD to a drive letter on the client PC.

4   Click Browse, and then select Setup.exe from the iccmsdk folder on the CD.

   Result: The Setup window opens.

CAUTION

Risk of malfunction
If you try to install the SDK software on an operating system other than Windows 9x or Windows NT, such as Windows 3.1, then a warning message appears and you cannot proceed.

5   In the Install Path box, type the full path to the location in which you want to install the SDK.

6   Select the components you want to install.

7   Choose the SDK options to install. You can select either ANSI_MBCS or UNICODE formats.

> **CAUTION**
> _____
> **Risk of malfunction**
> If you select the UNICODE format to install on a Windows 95/98 computer, then you cannot execute your application correctly because the UNICODE format is only supported in the Windows NT environment.

8   Click Install to start the installation.

Result: The setup program displays the confirmation screen to confirm the options you have selected.

Note: If the target directory does not exist, then the setup program displays the Create Path dialog box to ask if you want to create the folder automatically.

9   After the installation is complete, exit the setup program and reboot the system to allow the new environment to take effect.

10   If the README file is installed, read it to obtain new information and new program developments.

Chapter 7

Adding a System Management Interface system

In this chapter

Adding an SMI system

Introduction

Use the SMI Workbench to add an SMI system for each server to which you want to connect from the client PC. When you double-click that system, the SMI Workbench initiates a connection to the server. When the connection is established, the SMI window opens. The SMI window contains programs for administering and monitoring the 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 information about using a dial-up connection, refer to the *Administrator's Guide*.

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

To add an SMI system

1   From the Windows Start menu, click Programs → SMI Workbench.
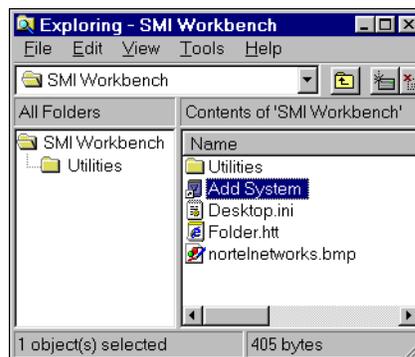
2   Double-click Add System.

Result: The Add SMI System dialog box appears.
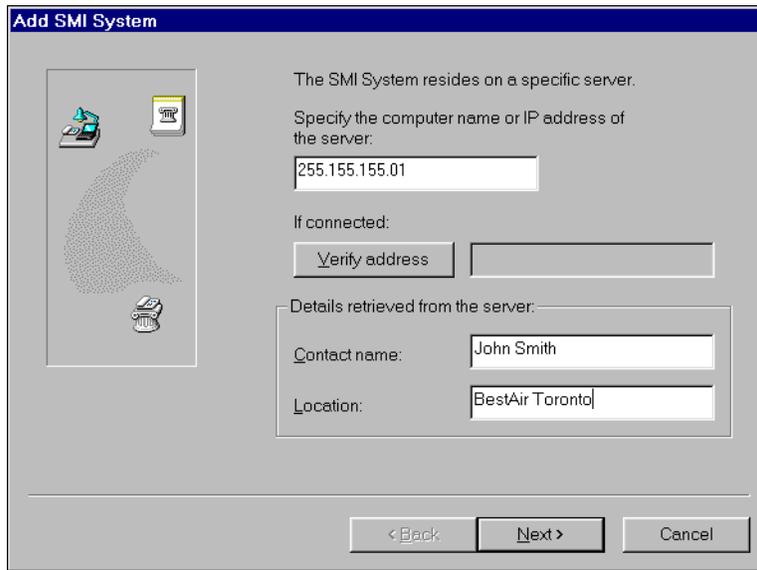
3   Enter the computer name or CLAN IP address of the server you want to access.

Note: If you are using a dial-up connection to the server, then enter the CLAN IP address and not the computer name.

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

5   Click Next.

Result: The Add SMI System window appears.
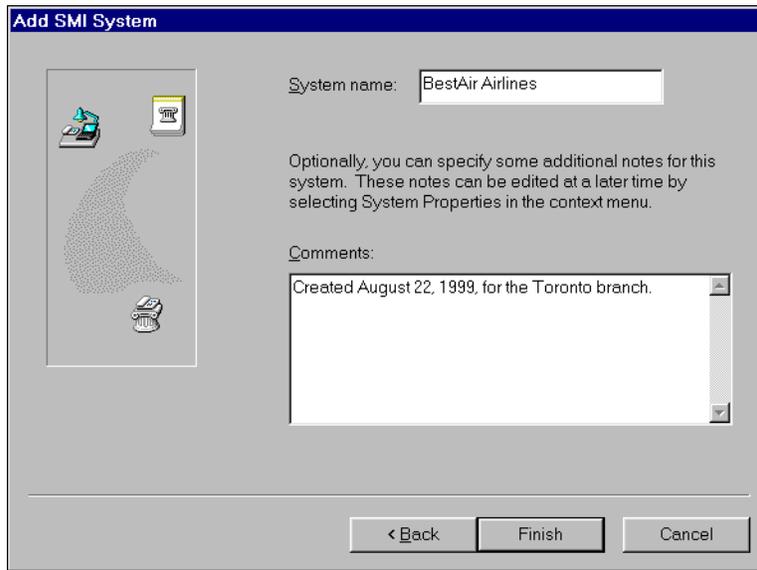
6   Optionally, enter notes or comments that describe this SMI system.

7   Click Finish.

Result: An SMI system is added to the SMI Workbench folder.

Grouping SMI systems by site (Meridian 1 only)

Group SMI systems by site if the client PC is administering servers that are located in different locations.

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

What's next?

Continue with "Testing the client-server connection" on page 171.

Testing the client-server connection

Introduction

If you can log on to the server, then the connection between the server and client is configured correctly.

To log on to the server for the first time

1 Log on to the client PC.

Note: If the client PC is running Windows NT Workstation, log on as Administrator. Only the Administrator can accept the End-User License Agreement that appears when you connect to the server for the first time.

2 Double-click the icon for the Symposium Call Center Server to which you want to connect.

Result: The Symposium Login dialog box appears.

3 In the User ID box, type **sysadmin**. Use only lowercase letters.

4 In the Password box, type **nortel**. Use only lowercase letters.

Result: The End User Licence Agreement screen appears.

5 Click Accept.

Result: The system prompts you to change the password.

6 Follow the instructions to change the sysadmin password.

Result: The SMI window appears. If this window does not appear, see Appendix A, "Troubleshooting."

7 If you plan to configure the server at this time, then do this now using the programs in the SMI window. Refer to the *Administrator's Guide*.

Chapter 8

Converting and reinstalling server software

In this chapter

Converting from Release 1.1 or Release 1.5 to Release 3.0

Introduction

This section describes the process of converting from Symposium Call Center Server software Release 1.1 or Release 1.5 to Release 3.0. Conversion from Release 1.0 to Release 3.0 is possible only after you first upgrade to Release 1.5. For more information, refer to *Symposium Call Center Server Upgrade Instructions from Release 1.0 to Release 1.5.*

Notes:

- In Release 3.0, a number of standard reports no longer exist. User-defined reports based on these reports are not available after the conversion. You must create new user-defined reports based on the new templates. To find out which new template contains the information you need, refer to the *Historical Reporting and Data Dictionary.*

- In Release 3.0, the database structure has changed. You must update user-created reports that include fields that have been deleted from the database. For instructions, refer to the *Historical Reporting and Data Dictionary.*

CAUTION

Risk of data loss

Make sure you complete all steps in the specified order in the Before you begin and Conversion checklists.

Effect of conversion on agent filtering

The format of the agent name has changed in the Release 3.0 database to allow sorting on agent last name. As a result of this change, any agent filtering setup for user-defined reports is lost during the conversion. To make it easier to restore filtering after the conversion, print all user-defined reports containing agents prior to conversion (see the Before you begin checklist).

Default access classes

Symposium Call Center Server requires that the three default access classes (adminGroup, Call Center Admin, and Supervisor) be defined. Before beginning the conversion, you must apply PEP SU09 or greater on the client and server to

- prevent these classes from being deleted
- re-add them if they have been deleted
- restore their names, if they have been renamed

Note: If any of these access classes do not exist or if they have different names, the conversion fails.

Script syntax changes

Script syntax rules have changed in Release 3.0. For example, in Release 1.5, it was not necessary to close comments, but in Release 3.0, you must close all comments. Also, Release 3.0 does not support the use of the Assigned/Assigned To commands with a call variable of type Set. For more information about syntax rules, see the *Scripting Guide*.

If you are converting from Symposium Call Center Server Release 1.5, you can use the TFE Syntax Checker Utility to check your Release 1.5 scripts. The utility determines whether your scripts adhere to the syntax rules used in Release 4.0. To ensure the functionality of this, make sure you install PEP SU09S.

If you are converting from Release 1.1, make sure you install PEP SU12S and all up to PEP 154S.

ATTENTION	If you do not check your script syntax before converting your system, and if the syntax of one or more of your scripts does not adhere to the new rules, the TFE service will not come up after conversion. If this happens, you must view the scripts, find the syntax errors, correct them, and validate and activate the scripts. TFE only comes up when all scripts comply with the new rules.

Requirements

Requirements	✔
Nortel Networks Symposium Call Center Server Release 1.5 Operating System CD	
Nortel Networks Symposium Call Center Server Release 3.0 Operating System CD Version 2.0, three Windows NT 4.0 Setup Boot disks, and the Certificate of Authenticity containing the Product ID **Note:** If you are using a different version of the CD, refer to your *Distributor Technical Reference* or *Documentation Addendum*.	
Nortel Networks Symposium Call Center Server Release 3.0 Application CD	
If you are using the 1003t platform, you need the HP NetServer Navigator CD that accompanied the server.	
All server driver disks for Windows NT 3.51 and Windows NT 4.0, as described in the maintenance guide for your hardware platform **Note:** If you are using the 1003t platform, you must generate the driver disks. These disks are used during the upgrade of Windows NT. For detailed instructions, refer to your regional Symposium Call Center Server technical web site.	
Three blank disks—one for a Release 1.5 Platform Recovery disk, one for an emergency repair disk, and one for a Release 4.0 Platform Recovery disk	

Requirements	✔
Make sure that you have the following documents available: ■ Installation Addendums and Readme files from your regional Symposium Call Center Server technical web site. North American customers refer to the web site at www.nortel-sccs.com. European customers refer to the Symposium Call Center Server area on the web site at www.nortelnetworks.com/partnercentre. ■ maintenance guide for your hardware platform ■ Release 1.5 *Backup and Restore Instructions* or Release 1.0 *System Administration Guide* ■ Release 3.0 *Administrator's Guide* ■ *Distributor Technical Reference* or *Documentation Addendum* ■ Chapter 4, "Installing and configuring pcAnywhere," in this guide	
Keycode and serial number from the Release 1.1 or Release 1.5 software	
Keycode and serial number from the Release 3.0 software	
At least 256 Mbytes of free disk space on drive D of the server PC	

Before you begin

To make sure that the server is set up and ready for the conversion, perform these steps at least three days before beginning the conversion.

Notes:

■ Some of these steps are required as a result of changes to hardware requirements in Release 3.0.

■ If you want to perform a server conversion from Release 1.1 or 1.5 to Release 3.0 and perform a platform migration, you must perform the conversion and migration separately.

- If you want to migrate from, for example, a 2-Gbyte first physical drive server to a 4-Gbyte first drive server, perform the conversion on the original server first and then migrate to the new server. This ensures that there is more free disk space on the new server. In this case, the swap file on the new server remains on drive D.

- If you want to migrate from, for example, a 4-Gbyte first physical drive server to another 4-Gbyte first drive server, perform the platform migration to the new server first, and then perform the conversion. (Since the new server is usually faster, the conversion process finishes sooner on the new server.) This is a key element since there is usually a limited amount of downtime available to complete this task.

Step	✔
If you are using the Standard version of the 701t or 702t platform, install the Upgrade Hardware Kit prior to upgrade. **Note:** Symposium Call Center Server Release 3.0 does not support the Standard version.	
Make sure that your server is equipped with at least 256 Mbytes of memory. See page 187. For more information on memory requirements, refer to the *Planning and Engineering Guide*. For installation instructions, refer to the maintenance guide for your hardware platform.	
Make sure you have a current database (or optionally, full) backup of the server. See page 189. **Time to complete:** approximately 30–90 minutes (depending on the size of your database)	
If you have a RAID system, perform a consistency check of your RAID drives. For more information, see the Release 3.0 *Administrator's Guide*. (Optional) On a RAID system, if extra RAID drives are available, you might want to create a RAID backup. This can take several hours to complete. For more information, refer to the *Administrator's Guide.* **Note:** You can perform the consistency check during the conversion when you split the RAID drives, but the check is time-consuming. To save time during the conversion, perform the consistency check in advance.	
Obtain the latest Installation Addendums from your regional Symposium Call Center Server technical web site. North American customers refer to the web site at www.nortel-sccs.com. European customers refer to the Symposium Call Center Server area on the web site at www.nortelnetworks.com/partnercentre.	

Step	✔
If you are using the 1003t platform, create a driver disk. For more information, see your regional Symposium Call Center Server technical web site. **Note:** Drivers for the 1003t platform are distributed on the HP NetServer Navigator CD-ROM.	
Create a Platform Recovery disk on your Release 1.5 server. See page 188. **Note:** This procedure requires that the appropriate PEPs be installed on the Release 1.1 or 1.5 server. To determine which PEPs you require, refer to your regional Symposium Call Center Server technical web site. **Time to complete:** approximately 3 minutes	
At each client PC, delete selection criteria from all user-defined reports containing agents. See page 184. **Note:** After the conversion is complete, follow the procedure "To restore report selection criteria" on page 239.	
Apply the following PEP on the server. (For detailed instructions, see the Release 1.1 or Release 1.5 customer documentation.) ■ SU09S (if you are converting from Release 1.5) ■ SU12S and all PEPS up to 154S (if you are converting from Release 1.1)	
Check your script syntax to make sure it adheres to new syntax rules. Use the TFE Script Checker utility (see page 184).	

Conversion checklist

The following table summarizes all steps involved in converting from Symposium Call Center Server Release 1.1 or Release 1.5 to Release 3.0. This process takes from four to six hours to complete, depending on the size of your system. You must complete all of the following steps:

Step	✔
Record your administrator logon password. **Note:** During the upgrade of Windows NT, all user profiles are removed. You must log on to the system as "Administrator" before and after you apply the Service Pack 3 in the Windows NT upgrade.	
Make sure that the folder D:\Temp exists. If it does not exist, create it using the Windows NT Explorer.	
Split the RAID drives. See page 189. **Time to complete:** approximately 20 minutes	
Move the swap file (if it is on drive D). See page 189. **Time to complete:** approximately 20 minutes	
Uninstall pcAnywhere. The Windows NT upgrade causes a "`missing DISPLAY_DRIVER.dll`" problem with pcAnywhere. To avoid this problem, you must uninstall pcAnywhere. See page 192. **Time to complete:** approximately 15 minutes	
Make sure that the video adapter installed on the server PC is a VGA-compatible Display Adapter. See page 193. **CAUTION** **Risk of system failure** Before you proceed with the OS upgrade, make sure that the video adapter used by your system is a VGA-compatible Display Adapter. Failure to do so can result in the appearance of a blue screen, with the message `The required system file display_driver.dll is bad or missing` appearing during the OS upgrade.	

Step	✔
Delete unnecessary files (such as trace and log files) from drives C and D. Make sure that at least 256 Mbytes are available on drive D. See page 194.	
Perform the preconversion. See page 194. **Time to complete:** approximately 60 minutes	
Upgrade the Windows NT operating system. See page 196. **Time to complete:** approximately 60 minutes	
Apply Windows NT Service Pack 3. See page 199. **Time to complete:** approximately 10 minutes	
Remove Microsoft Internet Information Server. See page 201. **Time to complete:** approximately 2 minutes	
Apply the Microsoft hot fix. See page 201. **Time to complete:** approximately 15 minutes	
Install the DMI. See page 202. **Time to complete:** approximately 20 minutes	
Install the MAS server software. See page 205. **Time to complete:** approximately 55 minutes	
Run the Symposium Call Center Server software conversion. See page 209. **Time to complete:** approximately 60 minutes	

Step	✔
Change the video driver. See page 217. **Time to complete:** approximately 4 minutes **CAUTION** **Risk of system failure** Before you install pcAnywhere Version 9.2, make sure that the proper video driver for your platform is installed. Failure to do so can result in the appearance of a blue screen after pcAnywhere installation or after use of pcAnywhere for operations such as file transfer.	
Install and configure pcAnywhere Version 9.2 on the server (see Chapter 4, "Installing and configuring pcAnywhere"). **Time to complete:** approximately 15 minutes	
Create a database backup. Refer to the backup procedures in the *Administrator's Guide*.	
Create an emergency repair disk. See page 219. **Time to complete:** approximately 3 minutes	
Create a Platform Recovery disk. See page 220. **Time to complete:** approximately 3 minutes	
Ensure that all Symposium Call Center Server services are started. See page 220.	
Continue with the client conversion if required. See "Converting the client from Release 1.1 or Release 1.5 to Release 3.0" on page 234.	
Rebuild the RAID drives when you are confident of system operation. Refer to the *Administrator's Guide*.	

To delete selection criteria from reports

To avoid problems resulting from the database changes, follow these steps for each user-defined report containing agents.

ATTENTION This procedure must be done prior to conversion. However, deleting selection criteria from reports affects the content of the reports generated. If selection criteria in reports is necessary, follow this procedure directly before performing the conversion.

1 Select the report, choose File → Run Now, and print the report. (For detailed instructions, see the *Supervisor's Guide*.) This step provides you with a hard-copy record of the filtering setup for the report.

2 On the Reports window, select the user defined report and choose File → Properties.

3 Click the Selection Criteria tab.

4 Select each agent in the Selected box, and click the right arrow to remove the agent from the box. Repeat this step until all agents have been removed from the box.

5 Click Save.

To use the TFE Script Checker utility

1 Make sure that the TFE Syntax Checker Utility has been properly installed by following these steps:

    a. Double-click Program Manager.

    b. Double-click Main.

    c. Double-click Command Prompt.

    d. If you are in drive D, type **cd** and press Enter until you are in the D:\> directory. If you are in another drive, type **D:** to go to the D:\> directory.

    e. Type **cd Nortel\iccm\bin** and press Enter.

    f. Type **dir SyntaxChecker.exe** and press Enter.

    Result: The SyntaxChecker.exe file is listed.

2   If you do not know the ELAN IP address of the server PC, type **ipconfig** and press Enter.

        Result: The program displays the ELAN IP address.

3   Type the following command, and press Enter:

        SyntaxChecker -h *nn.nn.nn.nn* -p

        where *nn.nn.nn.nn* is the ELAN IP Address of the server.

        Note: This command compiles all validated and active scripts in the system, and outputs the results to a log file. To also compile edited scripts, use the -e parameter (for example, SyntaxChecker -h *nn.nn.nn.nn* -p -e).

        Result: The utility compiles each script, and indicates whether it compiled successfully (OK) or whether it contained one or more errors.

4   Use a text editor, such as Notepad, to view the results in the log file, syntax.log.

5   Log on to a client PC, and edit any scripts containing errors. If the error is an incomplete comment, close the comment by inserting */ at the end. If the error is a call variable of type Set that is assigned a value with either the Assigned or Assigned To commands, use the procedure "To correct call variables of type Set" on page 185 below.

6   When you are finished revising the scripts, validate and activate them.

7   Repeat steps 3 to 6 until no more errors are detected.

To correct call variables of type Set

1   Choose Call Flow Administration → Script Variables.

        Result: The list of variables appears.

2   Click Groups.

        Result: The call variables appear at the beginning of the list.

3   Double-click the call variable reported by the TFE Syntax Checker utility to view its properties. The General property page shows you the active scripts that reference this variable. Click the Attributes tab to see the call variable type.

4   For each call variable of type Set used in an Assigned or Assigned To command, you can choose one of the following options:

        ■   Create a new call variable of type Item, and replace the Set variable with your new variable in the scripts.

Example: You have one of the following entries in your script:

- ```
  ASSIGN Sales_sk TO My_Skillsets
  QUEUE TO SKILLSET My_Skillsets
  ```

- ```
  My_Skillsets ASSIGNED Sales_sk
  QUEUE TO SKILLSET My_Skillsets
  ```

where My_Skillsets is a call variable of type Set and initialized to Help_sk, Services_sk, and so on. You can replace them with

```
ASSIGN Sales_sk TO My_Skillset
QUEUE TO SKILLSET My_Skillset
```

where My_Skillset is a call variable of type Item and initialized to Help_sk.

Note: This change causes calls to be queued to only one skillset, Sales_sk. Since a system has a limit of 20 call variables, you might need to delete some variables before creating new variables.

To use this method, follow these steps:

a. Comment out the line with the Set call variable in your script.

b. Reactivate the script.

c. Either delete the Set variable or, if it is used in other statements in the script, change it to a global variable.

d. Create the new Item variable.

e. Replace the Set variable in the script with the Item variable.

f. Remove the comments.

g. Reactivate the script.

- Delete the Assigned/Assigned To statement from the scripts. The preceding examples can be revised as follows:

```
/*ASSIGN Sales_sk TO My_Skillsets*/
QUEUE TO SKILLSET My_Skillsets
```

where My_Skillsets is a call variable of type SET and initialized to Help_sk, Services_sk, and so on.

Note: If you choose this option, calls are queued to all the skillsets to which the call variable of type Set has been initialized.

5 Validate and activate the edited scripts.
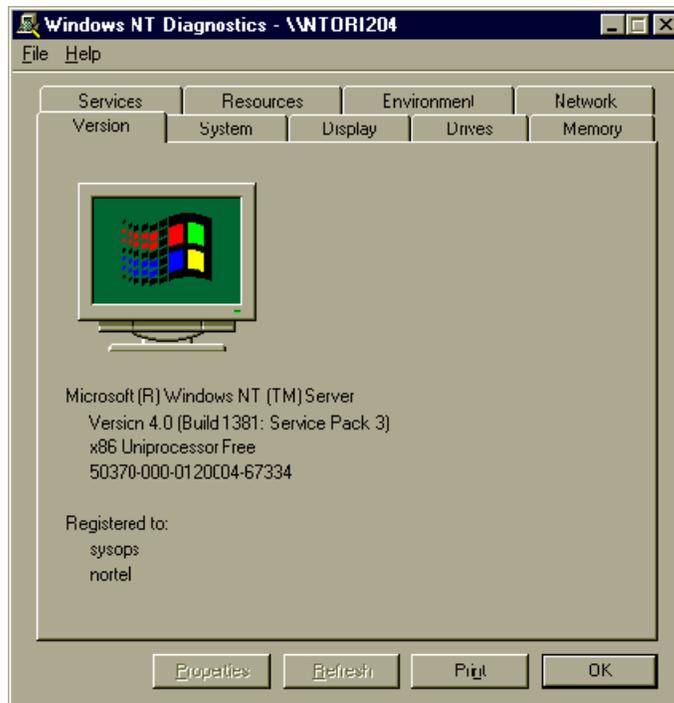
6   Repeat step 3 on page 185 to recheck the scripts.

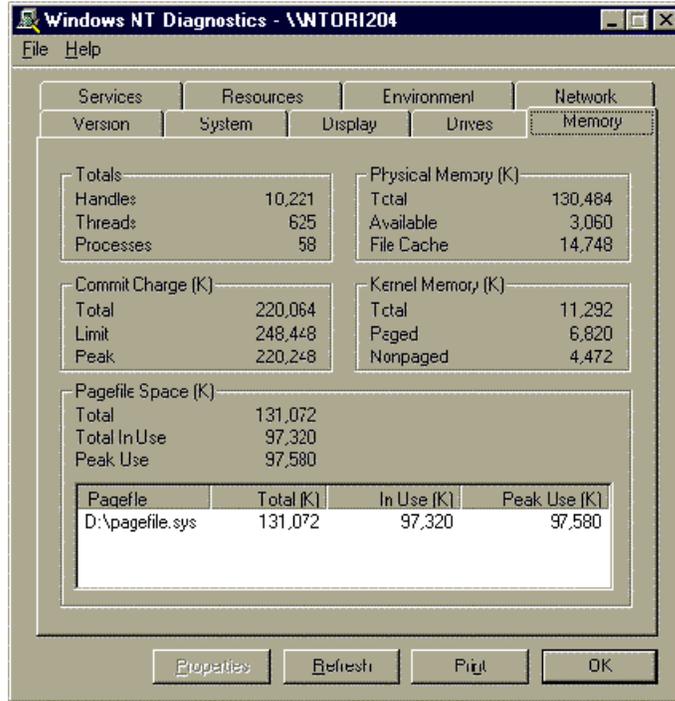## To check available memory

1   In the Program Manager window, double-click Control Panel.

2   In the Control Panel window, double-click Administrative Tools.

3   In the Administrative Tools window, double-click Windows NT Diagnostics.

Result: The Windows NT Diagnostics window appears.

4   Click the Memory tab.

   Result: The Memory dialog box appears.

5   Make sure that total physical memory is greater than 256 000 kbytes.

6   Click OK to close the Memory dialog box.

7   Choose File → Exit to close the Windows NT Diagnostics window.

To create a Platform Recovery disk on the Release 1.5 server

1   Insert a disk into the floppy drive.

2   Open the SysOps Utilities program folder and double-click Migration.

3   Select Dump system information to floppy disk, and then click Continue.

   Result: The program prompts you to insert a disk.

   Note: This process automatically checks the export database.

4   Click OK.

Result: The program saves the configuration to the disk and displays messages telling you that the save is complete.

5   Click OK in response to these messages.

Result: The program prompts you to remove the disk.

6   Click OK.

7   For reference during the conversion, print the file Miginfo.txt, located on the disk.

8   Label the disk with "Platform Recovery Disk Release 1.x" and the current date, and store it in a safe place.

Making sure you have a current database backup

Before you continue, make sure you have a current database backup of the server. For more information, refer to the Release 1.5 *Backup and Restore Instructions* or Release 1.0 *System Administration Guide*.

Splitting the RAID drives

When you split the RAID drives, you break the mirrored image of the primary hard drives and disable their redundant hard drives. Any software activity that is performed on the system affects only the primary set of hard drives. The disabled drives continue to have the current system configuration, and you can use them to rebuild the RAID hard drives if a problem occurs during conversion.

For more information, refer to the backup procedures in the *Administrator's Guide*.

Note: If extra RAID drives are available, you can also create a RAID backup before continuing with the conversion. If you create a RAID backup, you might want to do this before the conversion since a RAID backup can take several hours to complete.
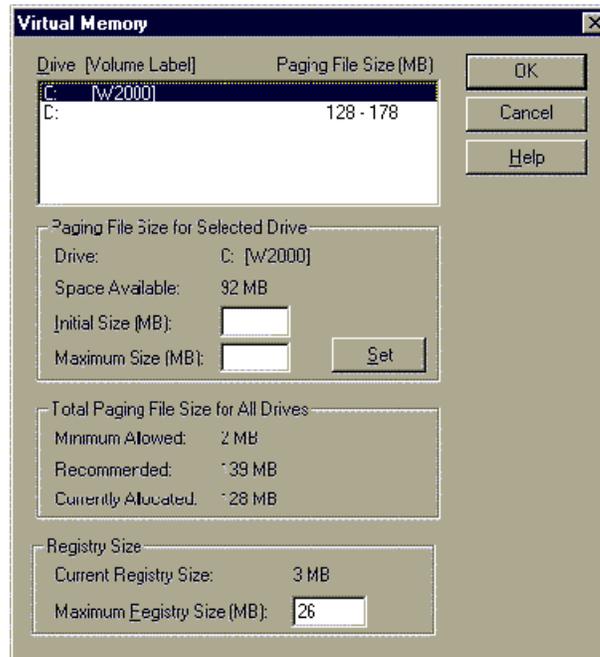
To move the swap file

Note: Perform this procedure if your swap file is on drive D.

Time to complete: approximately 20 minutes

1   Log on to Windows NT as Administrator.

2   From the Windows Start Menu, choose Settings → Control Panel.

3   In the Control Panel window, double-click System.

4   Click the Performance tab, and then click Change to change the virtual memory.

Result: The Virtual Memory dialog box appears.

Notes:

■   The drive specified in the Paging File Size for Selected Drive box is the drive on which the swap (paging) file resides.

■   If the specified drive is not drive D, you do not need to move the swap file. Click Cancel to close the Virtual Memory window and click Cancel to close the System Properties window.

■   If the specified drive is drive D, click Cancel to close the Virtual Memory window, and continue with the following steps.

■   The drives displayed on this dialog box vary depending on the hardware platform.

5 On the System dialog box, click Recovery.

6 Ensure the Write debugging info to: check box is unchecked.

7 Click OK.

8 On the System dialog box, click Virtual Memory.

9 In the Virtual Memory dialog box, select drive F or the first available drive after drive D.

10 Ensure that the selected drive has at least 288 Mbytes of available disk space. If not, repeat step 9 to select the next available drive.

Notes:

- If none of the drives have sufficient space, contact your Nortel Networks Customer Support representative.

- Use the selected drive only to store the database and the swap file. Do not store trace logs or other data on this drive.

11 Enter 268 for Initial (MB) Size and 268 for Maximum Size (MB).

12 Click Set.

13 Select drive D.

14 Enter 0 for Initial Size (MB) and 0 for Maximum Size (MB).

15 Click Set.

Note: If you see the following message, click OK:

```
If the pagefile on volume D has an initial size of less
than 268 MB, then the system is unable to create a
debugging information file if a STOP error occurs.
```

16 Click OK to apply the changes.

17 Click OK to close the System Properties window.

Result: The program prompts you to restart.

18 Click Don't Restart Now (you restart the server later), and continue with the following procedure, "To uninstall pcAnywhere 8.0" on page 192.

Note: When you install the PEPs after the upgrade, you install a PEP that ensures that alarms for the drive to which you moved the swap file do not sound unless free space falls below a predetermined level.

To uninstall pcAnywhere 8.0

The Windows NT upgrade causes a `missing DISPLAY_DRIVER.dll` problem with pcAnywhere. To avoid this problem, you must uninstall pcAnywhere.

Time to complete: approximately 15 minutes

1   Log on to Windows NT as Administrator (or as another user with administrator access).

2   Double-click the pcAnywhere icon, and then select Cancel to cancel the waiting host.

3   From the Program Manager, click pcAnywhere.

4   Click Remove pcAnywhere.

5   When the message `pcAnywhere will be removed from the following directory` appears, click Yes to continue.

6   Follow screen instructions to uninstall pcAnywhere.

7   If the message `The system indicates that the following shared file is no longer used by any programs` appears, respond in one of the following ways:

   ■   For files in \Program Files\Common Files\Symantec\Shared\ folder, click Yes.

   ■   For files in the WINNT35\System32 folder, click No.

   Result: pcAnywhere is now removed.

8   When the message `Uninstall completed. Some elements could not be removed.` appears, click OK.

9   When the message `pcAnywhere has been uninstalled from your computer. Do you wish to reboot now?` appears, select Yes to restart the server.

To check your video adapter

CAUTION

Risk of system failure

Before you proceed with the OS upgrade, make sure that the video adapter used by your system is a VGA-compatible Display Adapter. Failure to do so can result in the appearance of a blue screen, with the message `The required system file display_driver.dll is bad or missing` appearing during the OS upgrade.

Note: The VGA-compatible Display Adapter driver is available on the Symposium Call Center Server Operating System CD for Release 1.5.

1   Log on to Windows NT as Administrator.

2   In the Program Manager window, double-click Control Panel.

3   Double-click Display.

4   In the Display Settings dialog box, click Change Display Type.

5   In the Display Type dialog box, check the Adapter Type.

Note: If your video adapter is not VGA-Compatible Display Adapter, follow these steps:

a.   In the Adapter Type box, click Change.

b.   Select VGA-Compatible Display Adapter, and then click OK.

Result: A message appears: `This operation will change your system configuration. Do you want to proceed anyway?`

c.   Click Yes.

Note: If the message `The driver(s) for this display are already on the system` appears, click New to continue.

Result: A message appears: `Insert the CD you want to copy files from.`

      d. Insert the Symposium Call Center Server Release 1.5 Operating System CD and browse to the \I386 directory.

      Result: The program copies the driver to your system. A message appears, notifying you that the drivers have been updated.

6 Click OK to exit the control panel.

7 When prompted, click OK to restart the server PC.

    Result: After restart, the system prompts you to change the display resolution.

8 Click OK.

9 Repeat steps 1 to 4 to view the Display Type window.

    Result: The adapter type listed should be VGA-Compatible Display Adapter.

10 Click Cancel twice to exit from the control panel.

To make sure sufficient disk space is available

1 Log on to Windows NT with the username **NGenSys** and the password _ _**ngen!**

2 In the Program Manager window, double-click Main.

3 In the Main window, double-click File Manager.

4 Select drive D.

5 Check the status bar at the bottom of the File Manager window to find out how much disk space is free.

    Drive D must have at least 256 Mbytes available. If it does not, delete unnecessary files, such as trace and log files.

To perform the preconversion

1 Ensure that the server is fully functional and that all services are up and running, and then exit SMonW.

2 Open the SysOps Utilities folder, and double-click SysOps Check.

3 Follow the on-screen instructions.

    Note: If the utility reports any errors (such as a site name that contains spaces), correct them before continuing.

4   Insert the Symposium Call Center Server Release 3.0 Server Application
         CD into the CD-ROM drive, or map a connection to the related virtual CD.

5   In the Program Manager window, double-click Main.

6   In the Main window, double-click File Manager.

7   Click the CD-ROM drive icon (drive E).

8   Double-click setup.exe.

         Result: The Conversion window appears.

9   Click Begin Conversion.

ATTENTION	If Dr. Watson displays Error code 87 during preconversion, click OK and ignore these error messages. They do not impact the preconversion.

Result: A window appears to remind you that no other applications can be
running.

10   Close any active applications running on the server, including screen
         savers, and then click Yes to begin the conversion.

CAUTION

Risk of data loss

Although the message displayed by the program
indicates that the conversion can take 45 minutes to an
hour, it can actually take much longer—up to 3 hours. Do
not stop the conversion manually. If you stop the
conversion, restore Symposium Call Center Server
Release 1.1 or 1.5 and begin the conversion again. For
more information on restoring, refer to the Release 1.5
Backup and Restore Guide or Release 1.0 *System
Administration Guide*.

Result: The following message appears: `Pre-Conversion will take
at least 45 minutes to 1 hour to complete. Please wait
while Pre-Conversion is running. Do you wish to
continue?`

11   Click OK.

Result: The preconversion begins, and a progress bar appears. The preconversion process takes at least 45 minutes to complete. DOS windows appear during the process, and text scrolls within the windows. Some windows might remain unchanged for long periods.

12   When the message `PreConversion Complete` appears, click OK.

To upgrade from Windows NT 3.51 to Windows NT 4.0

Note: You can get a list of compatible drivers from your regional Symposium Call Center Server technical web site.

1   Insert the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0 into the CD-ROM drive and the WinNT 4.0 OS Setup Boot Disk #1 into drive A.

2   In the Program Manager window, choose File → Shutdown → Shutdown & Restart.

3   After the server restarts, follow the on-screen instructions.

4   When the message `Please insert the disk labeled Windows NT Server Setup Disk #2 into Drive A:` appears, insert the Windows NT Server Setup Disk #2 into drive A, and then press Enter.

5   When the message `Welcome to Setup. The Setup program…` appears, press Enter to set up Windows NT.

6   When the message `Setup automatically detects floppy disk controllers and standard ESDI/IDE hard disks without user intervention` appears, type **S** to skip the mass storage device detection.

7   To install the IDE CD-ROM driver, follow these steps:

a.   Type **S** to specify additional SCSI adapters, CD-ROM drivers, or special disk controllers.

Result: A list of controllers appears. Use the up and down arrow keys to view the complete list.

b.   Scroll through the list of controllers, select IDE CD-ROM (ATAPI 1.2)/ PCI IDE Controller, and press Enter.

    c. When the message `Please insert the disk labeled Windows NT Server Setup Disk #3 into Drive A:…` appears, insert the Windows NT Server Disk #3 into drive A, and then press Enter.

8 To install other drivers, such as RAID or SCSI drivers, follow these steps:

    a. Type **S** to select additional SCSI adapters, CD-ROM drivers, or special disk controllers.

       Result: A list of controllers appears. Use the scroll bars to view the complete list.

    b. Select Other (Requires disk provided by a hardware manufacturer), and then press Enter.

    c. Insert the disk containing the device drivers, and then press Enter.

       Example: For a non-1003t RAID system, you insert disk number NTRH8036.

       Note: Make sure you choose the correct drivers for your hardware platform.

    d. Select the mass storage device that you want, and then press Enter.

       Example: For a non-1003t RAID system, select Mylex DAC 960.

9 If necessary, repeat step 8 to install additional SCSI drivers.

10 When the message `Setup has recognized the following mass storage devices in your computer:` appears, press Enter to continue setup.

11 When the message `Please insert the disk labeled Windows NT Server Setup Disk #3 into Drive A:` appears, insert the Windows NT Server Disk #3 into drive A, and then press Enter.

    Note: If the setup program detects that one or more of the hard disks in the system has more than 1024 cylinders, a warning message appears. Press Enter to continue.

12 When the message `Windows NT Licensing Agreement` appears, press the Page Down key and read the entire agreement. Then, to accept the agreement, press F8 to continue the setup.

13 When the message `Setup has found Windows NT on your hard disk in the directory shown below...` appears, press Enter to upgrade Windows NT in the specified directory.

    Note: Some WINNT35 directories might use a different drive letter.

14 When the message `Setup will now examine your hard disk(s) for corruption` appears, press Enter to allow Setup to perform an exhaustive secondary examination of your hard disks.

Result: Setup copies files to your hard disk.

15 When prompted, insert the disk from step 8c into drive A, and then press Enter.

16 If the message `Setup has determined that the following file did not originate from Microsoft:…` appears, press ESC after each message to keep the original third-party file.

17 When the message `This portion of Setup has completed successfully. If there is a floppy disk inserted in drive A:, remove it` appears, remove the disk from drive A and the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0 from the CD-ROM drive.

18 Press Enter to restart the server. When your computer restarts, Setup continues.

> **ATTENTION** If you did not uninstall pcAnywhere, an error message appears: `Missing DISPLAY_DRIVER.DLL`. If this happens, restore Symposium Call Center Server Release 1.1 or 1.5, uninstall pcAnywhere, and begin the conversion process again. For information on restoring Release 1.5, refer to the Symposium Call Center Server 1.5 *Backup and Restore Guide*.

19 Insert the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0 into the CD-ROM drive again, and continue the setup after restart by following the screen instructions.

20 When the message `Welcome to the Windows NT Setup Wizard, which will guide you through the rest of Setup. To continue, click Next` appears, click Next.

21 At the prompt `Please locate your 20 digit 'Product ID'`, type in the Windows NT 4.0 OS Product ID, located on the Certificate of Authenticity, and click Next.

22 When the message `Setup can create an emergency repair disk` appears, select No, do not create an emergency repair disk, and then click Next.

23 When the message `Windows NT comes with a variety of optional components, including games, disk tools, and other accessories` appears, select Install the most common components (recommended), and then click Next.

24 When the message `Setup is now ready to guide you through installation of Windows NT Networking` appears, click Next to continue.

25 When the message `Windows NT will now upgrade your network components` appears, click Next to continue.

Notes:

- If the message `The following non-Microsoft networking component is installed on this computer` appears, click OK. The specified component might be a 3COM or Intel component.

- If you see an application error message, record the message and click OK to continue.

26 When the message `Setup is almost finished. After you answer a few more questions…` appears, click Finish to complete the setup.

Result: Completion of setup takes from 5 to 10 minutes.

Note: If messages regarding unsupported components appear, then click OK to continue.

27 When the message `Windows NT has been successfully upgraded to version 4.00…` appears, remove the CD from the CD-ROM, and then click Restart Computer to restart the server.

Note: If the message `missing config.exe` appears, then click Cancel to continue.

To apply Windows NT Service Pack 3

1 Log on to Windows NT as Administrator.

2 Insert the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0 into the CD-ROM drive.

3 If the Windows NT Setup splash screen appears, click Close to close the screen.

4   From the Start menu, choose Programs → Windows NT Explorer.

          Result: The Windows NT Explorer screen appears.

5   Click the plus sign (+) next to the CD-ROM drive to display its
          subdirectories.

6   Select the directory containing the Service Pack.

7   Run update.exe and follow the screen instructions.

8   When the message `Welcome to Service Pack Setup` appears, click
          Next to install the Service Pack on your computer.

9   When the message `Please read the following license`
          `agreement` appears, click Yes to accept all of the terms of the License
          Agreement.

10   When the message `Please select the type of installation`
          `desired` appears, select Install the Service Pack, and then click Next to
          continue.

11   When the message `You can choose to create an 'Uninstall'`
          `directory for the Service Pack` appears, select No, I do not want
          to create an Uninstall directory, and then click Next.

12   When the message `The Setup program for the Service Pack is`
          `ready to complete` appears, click Finish to finish the setup.

          Note: Application of the Service Pack takes about five minutes.

13   If the message `The target file exists and is newer than the`
          `source. Overwrite the newer file?` appears, click No to retain the
          newer file.

14   If a message appears indicating a file has been identified as an OEM
          installed, click No to retain the file.

15   When the message `Windows NT 4.0 has been updated. Remove`
          `any floppy disks` appears, remove the CD from the CD-ROM drive.

          Result: The system prompts you to restart.

16   Click OK to restart the server.

To remove Microsoft Internet Information Server

1   If Microsoft Internet Information Server (MIIS) is installed automatically during the operating system conversion, go to Start → Programs → Microsoft Internet Server (Common), and then choose Internet Information Server Setup to remove MIIS.

2   When the MIIS welcome dialog box appears, click OK.

3   When the MIIS Installation Maintenance program appears, click Remove All to remove previously installed components.

4   When the message `Are you sure that you want to remove all the MIIS components` appears, click Yes to continue.

5   When the message `Microsoft FTP Publishing Service is running. Do you want to stop the service?` appears, click Yes.

6   When the message `Microsoft Internet Information Server 3.0 setup has updated successfully` appears, click OK to complete the removal of MIIS.

To apply the hot fix

Note: Perform this procedure after installation of Service Pack 3. If you reinstall Service Pack 3, you must perform this procedure again after the reinstallation.

1   Log on to the server as Administrator.

2   Insert the Symposium Call Center Server Release 3.0 Operating System CD Version 2.0 into the CD-ROM drive.

3   Make sure that hidden files are visible. To do so, follow these steps:

    a.   In Windows NT Explorer, choose View → Options.

    b.   Select Show all files.

    c.   Click Apply, and then click OK.

4   Copy the folder Hotfixes\Microsoft\q178741 on the CD to the root of drive D.

5   In Windows NT Explorer, click on the D:\q178741 folder.

6   Double-click the file hfx.exe, located in this folder.

    Result: The Hotfix Manager window opens.

7 Click InstallNewFix.

Result: The Install Path dialog box opens.

8 Make sure that the path specified is D:\q178741\hotfix.inf. If it is not correct, browse to this path.

9 Click OK.

Result: The program installs the hot fix on the server. When the installation is complete, the program notifies you that Windows NT has been updated.

10 Click OK.

Result: The system prompts you to restart. Do not click OK yet.

11 When the HotFix Manager appears, click Done.

12 Restore the settings for hidden files. To do so, follow these steps:

    a. In Windows NT Explorer, choose View → Options.

    b. Select Hide files of these types.

    c. Click Apply, and then click OK.

13 Remove the CD from the CD-ROM drive.

14 Click OK to restart the server.

Result: The server restarts.

Note: If the server hangs during the restart, restart it manually.

To install the DMI

1 Log on to Windows NT as Administrator.

2 Insert the Symposium Call Center Server Application CD into the CD-ROM drive or map a connection to a virtual CD.

3 Exit all applications, including screen savers, and close all windows.

4 From the Windows Start menu, choose Run.

5 Click Browse, select Setup.exe from the root directory on the CD, and then click OK.

Note: The Welcome screen can take several minutes to appear.

6   Click OK to run.

Result: The program displays the message `Setup determines that DMI is not installed on your system. Do you want Setup to install DMI?`

7   Click Yes to install the DMI. (If you click No, the installation stops.)

Result: The DMI installs and the Nortel System Operations welcome dialog box appears.

8   Click Next.

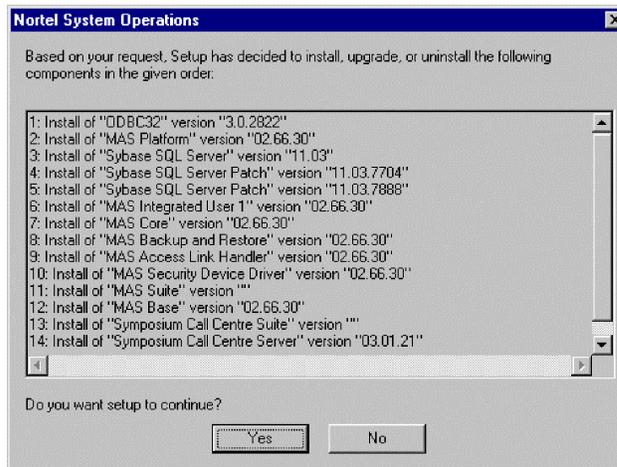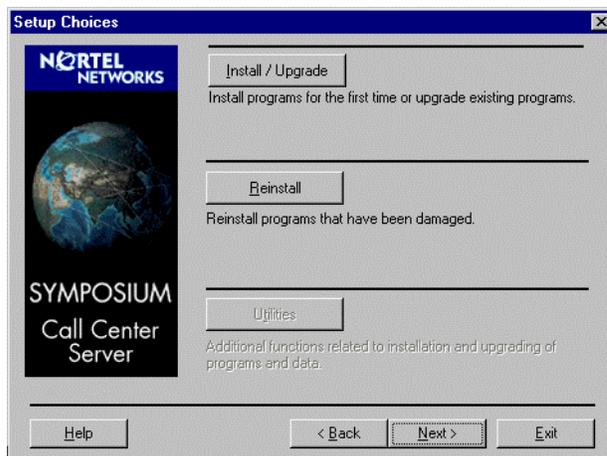**Result:** The Setup Choices dialog box appears.

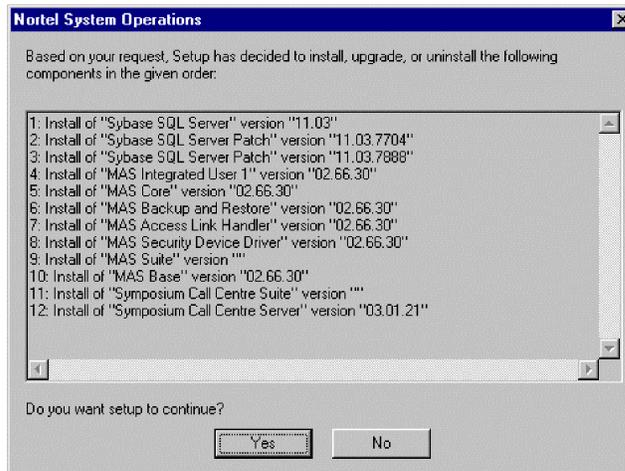**9**   Click Install/Upgrade.

    Result: The Programs to Install/Upgrade dialog box appears.

10   Click Select All, and then click Next.

    Result: A list of components to install or upgrade appears in a Nortel System Operations dialog box.

11   Click Yes and follow screen instructions.

12   If a warning message appears because a text printer is not found, then click OK to bypass the warning.

13   If a warning message appears because drive D has less than 512 Mbytes free, click Yes to continue.

Result: Setup copies files to the server, and then the User Information dialog box appears.
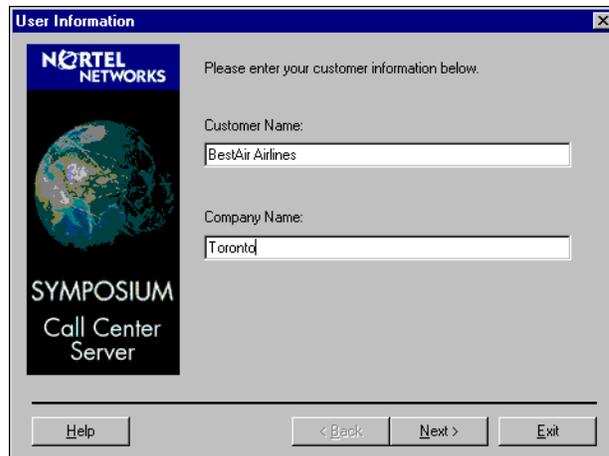
14   Make sure that the customer and company names are correct, and then click Next.

Result: The program installs the software and displays the message
```
Setup is about to reboot the system. Please continue
installation after reboot.
```

15   Click OK.

Result: The system restarts and logs on again automatically.

To install the MAS server software

1   Exit all applications, including screen savers, and close all windows.

2   From the Windows Start menu, choose Run.

3   Click Browse, and then select Setup.exe from the root directory on the CD.

4   Click OK to run.

Result: The Nortel System Operations welcome dialog box appears.
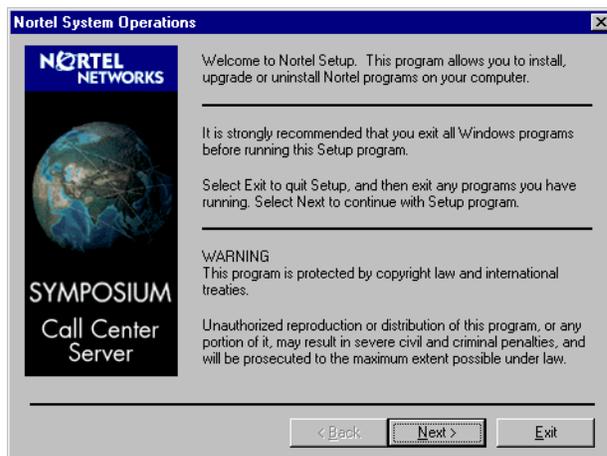
5   Click Next.

Result: The Setup Choices dialog box appears.

6   Click Install/Upgrade.

Result: Setup examines the system, and the Programs to Install/Upgrade dialog box appears.
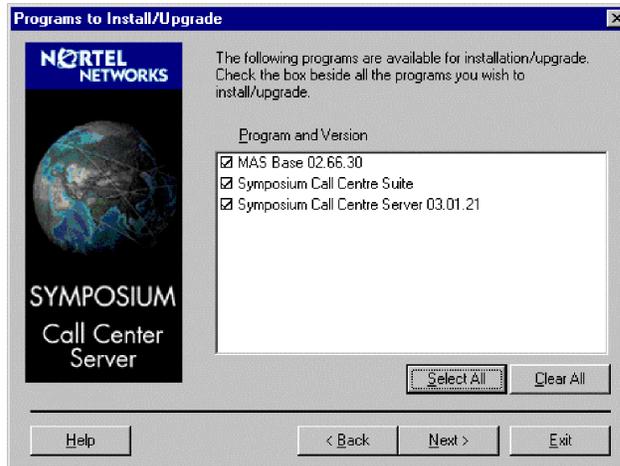
7   Click Select All, and then click Next.

Result: The Nortel System Operations dialog box appears and lists all components in the order in which they will be installed.
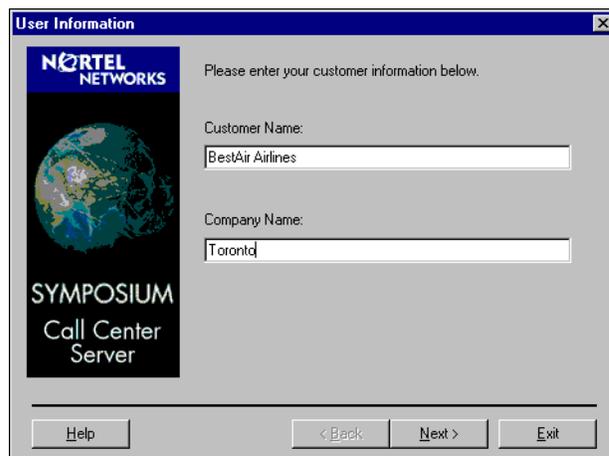
8   Click Yes.

Notes:

■   If a warning message appears because a text printer is not found, then click OK to bypass the warning.

■   If the following message appears, then click Yes to continue:

```
Setup has found out that this drive "C:\" has less
than 64 Mbytes of free space. Do you still want to
continue?"
```

Result: Setup copies files to the server, and then the User Information dialog box appears.
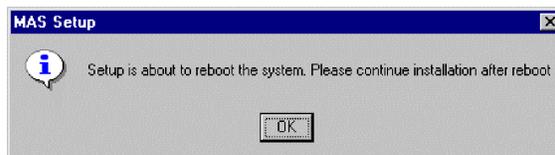
9   Enter the customer and company names, and then click Next.

     Result: The MAS server software installs and the Validation dialog box appears. This process takes approximately 15 minutes.

10 Click Next.

     Result: The program prompts you to restart.

11 Click OK to restart.

To convert the Symposium Call Center Server software

1   Log on to Windows NT with the username **NGenSys** and the password _ _**ngen!**

     Note: If you do not log on using the NGenSys password, the install program in the following procedure, "To change the video drivers" on page 217, prompts you to log on again using NGenSys.

2   Insert the Symposium Call Center Server Application CD into the CD-ROM drive or map a connection to a virtual CD.

Note: If you must free up disk space, then delete temporary files and empty the recycle bin. You can also delete old PEPs or temporarily move unneeded data.

3   From the Windows Start menu, choose Run.

4   Click Browse, select Setup.exe from the root directory on the CD, and click Open.

5   Click OK to run.

Note: The system might warn you that it has less than 512 Mbytes of free disk space on drive D. Ensure that you have at least 256 Mbytes of free disk space. If you do, click OK to continue.

Result: The Nortel System Operations welcome dialog box appears. Based on your server's performance, it can take several minutes for the welcome dialog box to appear.
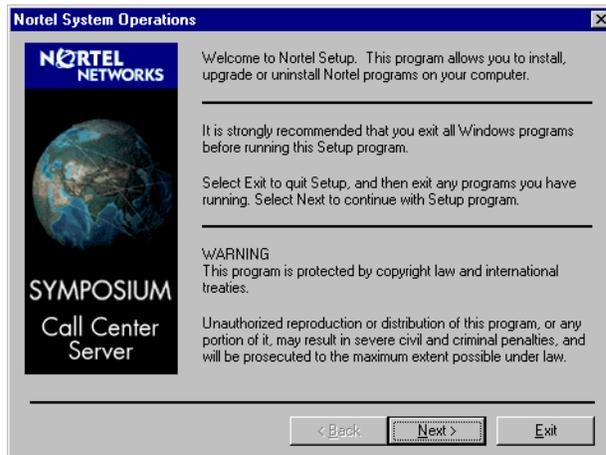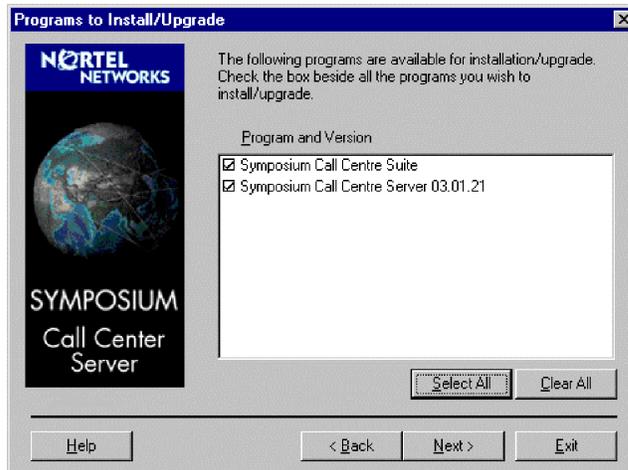
6   Click Next.
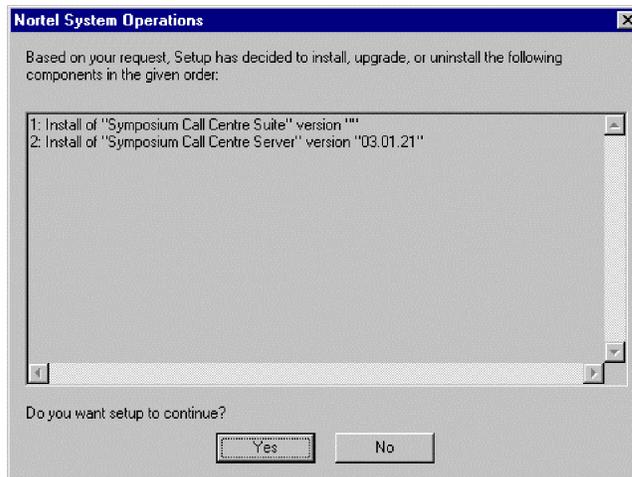
Result: The Setup Choices dialog box appears.
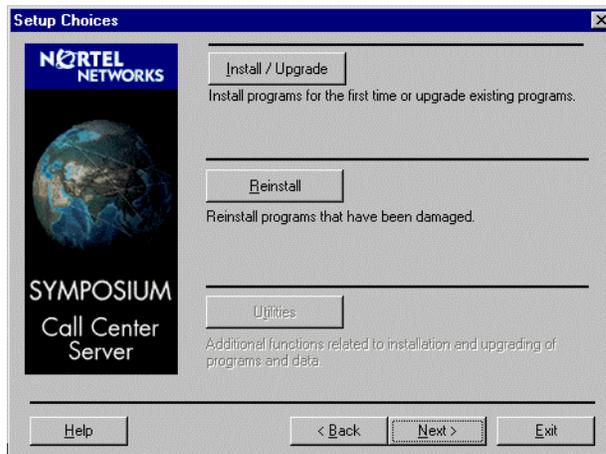
7   Click Install/Upgrade.

Result: The Programs to Install/Upgrade dialog box appears.

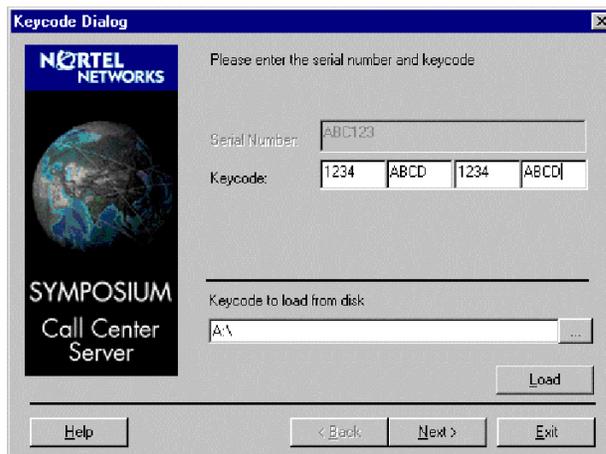**8**   Click Select All, and then click Next.

Result: A list of components to install or upgrade appears in a Nortel System Operations dialog box.

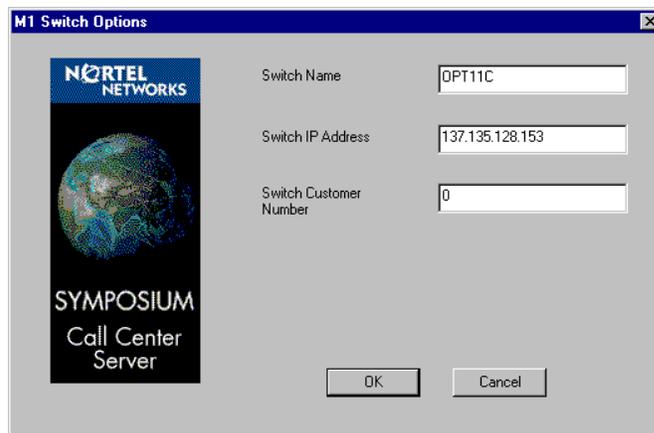

9   Click Yes and follow screen instructions.

Result: The Keycode Dialog box appears.

10 Enter the keycode for Release 3.0 in one of the following ways:

- If you have a disk that contains your keycode information, follow these steps:

  a. Insert the keycode disk into the floppy drive.

  b. Click the (...) button to open a browse dialog box.

  c. Locate and select the file that contains the keycode information and click Load.

    Result: The keycode and serial numbers are entered into the Keycode Dialog box.

- If your keycode information is stored on a hard disk, follow these steps:

  a. Click the (...) button to open a browse dialog box.

  b. Locate and select the file that contains the keycode information and click Load.

    Result: The keycode and serial number are entered into the Keycode Dialog box.

- Type your keycode in the appropriate boxes.

11 Click Next.

Result: The Keycode Verification window appears.

12 Click Next.

Result: The M1 Switch Options dialog box appears.

13 Enter the appropriate information for your switch. Refer to the information you entered in Chapter 2, "Worksheets and checklists," and to the following restrictions that apply to switch names:

- Valid characters for switch names are A–Z, a–z, 0–9, _ (underscore) and . (period).

- Switch names must begin with an alphabetic character, and they cannot contain spaces.

- The last character must not be an underscore or a period.

- Switch names must not exceed 80 characters in length.

Tip: If you are unsure of the correct information or if you make a mistake, you can change the switch information after you finish the installation (see "Feature Report: Switch Information" on page 272).

14 Click OK.

Result: The ELAN dialog box appears.
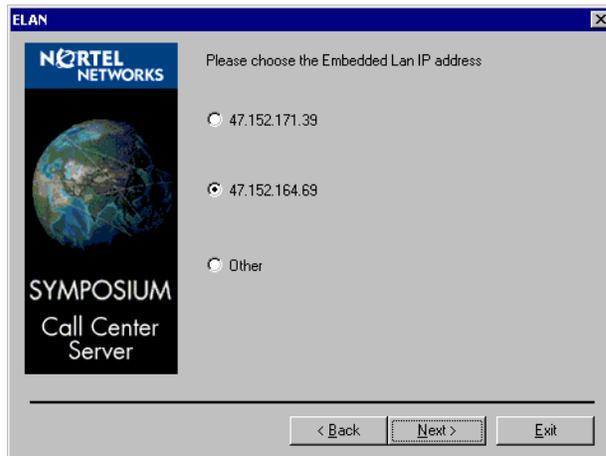
15 Enter the ELAN TCP/IP address for the server in one of the following ways:

- If the address appears in the dialog box, select it and click Next.

■ If the ELAN TCP/IP address does not appear in the dialog box, select Other, enter the correct IP address in the dialog box that appears, and then click Next.
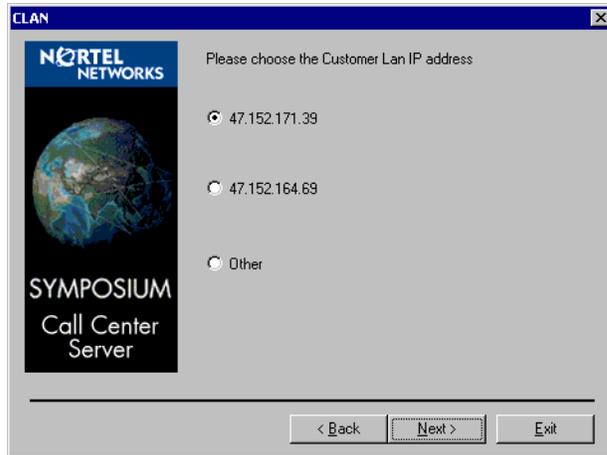
Result: The CLAN dialog box appears.

16 Enter the CLAN TCP/IP address for the server in one of the following ways:

■ If the address appears in the dialog box, select it and click Next.

■ If the CLAN TCP/IP address does not appear in the dialog box, select Other, enter the correct IP address in the dialog box that appears, and then click Next.
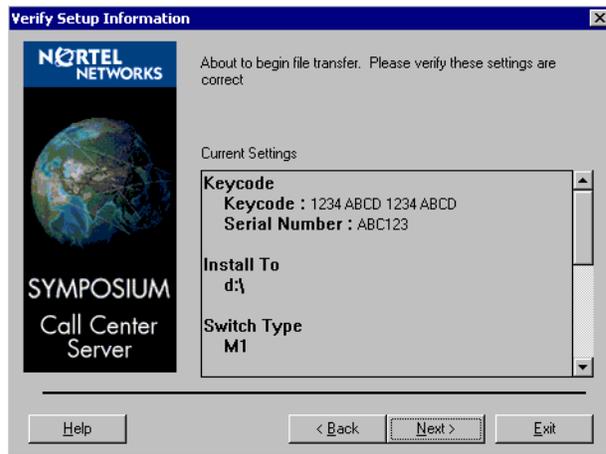
Result: The Verify Setup Information dialog box appears, similar to the following example:

17 Examine the list of current settings. If they are incorrect, click Back, make the necessary corrections, and click Next.

18 Click Next.

Result: The program begins to copy files to the hard drive and a progress bar appears. The program automatically fills dialog boxes. The keyboard and mouse are disabled during this portion of the setup.

When this step is completed, the Enter Configuration Mode message appears.
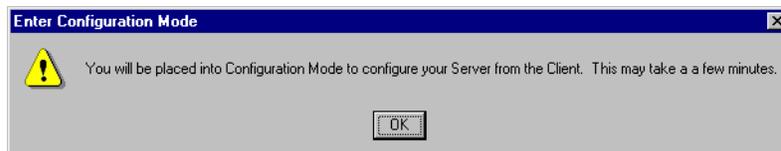
19 Click OK.

> **Result:** The setup program validates scripts and puts the server into configuration mode.

20 Click OK to finish the upgrade.

> **Result:** The Reboot dialog box appears.

21 Select Reboot now, and then click Next.

22 Log on to the server from the client PC, and check the status of all scripts.

To change the video drivers

Note: The video driver for the 1003t platform is on the HP NetServer Navigator CD. Video drivers for other platforms are on the Symposium Call Center Server Release 3 Operating System CD. For more information about your video driver, check your regional Symposium Call Center Server technical web site.

1 Log on to Windows NT as NGenSys.

2 Open the Control Panel (from the Windows Start menu, choose Settings → Control Panel).

3 Double-click Display.

4 Click the Settings tab.

5 Click Display Type.

> **Result:** The Display Type window opens.

6 If you are using a 1003t platform, follow these steps. If you are using a 701t, 702t, 1000t, or 1001t platform, go to step 7.

> **a.** In the Adapter Type group box, click Change.
>
> > **Result:** The Change Display dialog box appears.
>
> **b.** Insert the HP NetServer Navigator CD.
>
> > **Result:** The HP NetServer Diskette Library opens.

c. Click Exit.

d. In the Change Display dialog box, click Have Disk.

   Result: The Install from Disk dialog box appears.

e. Browse to E:\periph\cl54x2\nt40\video (where E: is your CD-ROM drive).

f. Click OK.

   Result: A dialog box displaying available drivers appears.

g. Select the Cirrus Logic driver, and then click OK.

   Note: If the message `You are about to install a third-party driver`, appears, click Yes to continue.

   Result: The driver is copied to your system. A message appears, notifying you that the driver has been installed.

7 If you are using a 701t, 702t, 1000t, or 1001t platform, follow these steps. If you are using a 1003t platform, go to step 8.

a. Insert the Symposium Call Center Server Release 3.0 Operating CD, Version 2.0.

b. In the Display Type dialog box, click Detect.

   Result: A warning message appears.

c. Click Yes to proceed with detection.

   Result: The driver is copied to your system. A message appears, notifying you that the driver has been installed.

8 Click OK.

9 Click Close to close the Display Type dialog box.

10 Click Close to close the Display Properties dialog box.

   Result: The system prompts you to restart the server PC.

11 Click Yes.

12 If your platform is not a 1003t, the system displays a message that the system found the Cirrus Compatible Display Adapter on your machine. Click OK.

13 When the system prompts you to change the display resolution, click OK.

14   Repeat steps 2 to 5 to view the Display Type window.

Result: For the 1003t platform, the adapter type listed should be Cirrus Logic CL-GD5446 Graphics Adapter 1.41. For all other platforms, it should be a Cirrus-compatible display adapter.

15   Click Cancel twice to exit from the control panel.

Installing and configuring pcAnywhere Version 9.2

CAUTION

Risk of system failure

Make sure that before you reinstall pcAnywhere, the proper video driver for your platform is installed (see the preceding procedure). Failure to do so can result in the appearance of a blue screen after pcAnywhere Version 9.2 installation, or after use of pcAnywhere for operations such as file transfer.

Install and configure the pcAnywhere software, following the instructions in Chapter 4, "Installing and configuring pcAnywhere."

Checking for PEPs

Extract and install the latest available software PEPs now. For more information, see "Installing PEPs and Service Update packs" on page 130.

Backing up the server

Create a database backup (refer to the backup procedures in the *Administrator's Guide*).

To create an emergency repair disk

1   Log on to Windows NT as Administrator, using password **abc123**.

2   From the Windows Start menu, choose Run.

3   Type **rdisk /s**, and then click OK.

4   When prompted, insert a blank floppy disk into drive A to create the emergency repair disk and follow screen instructions. For more information on updating the emergency repair disk, see "Updating the emergency repair disk" on page 70.

To create a Platform Recovery disk

1   Insert a disk into the floppy drive.

2   From the Windows Start menu, choose Programs → Symposium Call Center Server → Migration.

3   Select Dump system information to floppy disk, and then click Continue.

   Result: The program prompts you to insert a disk.

4   Click OK.

   Result: The program saves the configuration to the disk and displays messages telling you that the save is complete.

5   Click OK in response to these messages.

   Result: The program prompts you to remove the disk.

6   Click OK.

7   Label the disk with "Platform Recovery Disk" and the current date, and store it in a safe place.

Ensuring that Symposium Call Center Server services are started

If you can see the SMonW window, check that all of the services are started. If this window is not open, or if some services are not started, then run the Startup utility (from the Windows Start menu, choose Programs → Symposium Call Center Server → Startup).

Upgrading the client PC

Go to "Upgrading client software" on page 240, and begin the client PC upgrade.

Rebuilding the RAID drives

If you have split the RAID drives, rebuild the RAID drives when you are confident of the conversion and server operation. For more information, see the *Administrator's Guide.*

If you must restore the Release 1.1 or Release 1.5 server

You can restore your Release 1.1 or 1.5 system in one of the following ways:

- For non-RAID systems, use the platform recovery disk and database restore. Refer to the Release 1.5 *Backup and Restore Instructions* or Release 1.0 *System Administration Guide*.

- For RAID systems, follow the procedure for recovering an entire RAID system in the restore procedures of the *Administrator's Guide*.

Reinstalling server software

When to use

Use this procedure

- to add additional features with a new keycode for the same server version

- to reinstall the same server software version (for example, when the Symposium Call Center Server application is damaged)

You can only do a reinstallation on a server that has already been installed properly. For example, if you have a working server that suddenly has problems in the application software, you can try to reinstall the application software.

Note: You cannot downgrade features (that is, remove features or reduce the number of purchased agents) with this procedure.

If you encounter a problem during a new installation, you must uninstall and then do the installation again.

The reinstallation does not repair data files or the database. If the hard drive or database has become corrupted or has failed, refer to the *Administrator's Guide* for recovery procedures.

Before you begin

Before reinstalling software, create a database backup of the server. See the *Administrator's Guide.*

To create a Platform Recovery disk

1   Insert a disk into the floppy drive.

2   From the Windows Start menu, choose Programs → Symposium Call Center Server → Migration.

3   Select Dump system information to floppy disk, and then click Continue.

     Result: The program prompts you to insert a disk.

4   Click OK.

   Result: The program saves the configuration to the disk and displays messages telling you that the save is complete.

5   Click OK in response to these messages.

   Result: The program prompts you to remove the disk.

6   Click OK.

7   Label the disk with "Platform Recovery Disk" and the current date, and store it in a safe place.

To reinstall server software

ATTENTION	During the reinstallation, there are points where the setup program performs automatic installation steps in between wizard setup windows. Do not close any windows that appear during these steps. Wait for the next wizard setup window before you use the mouse or keyboard.

1   Insert the upgrade CD or, if you are installing from a remote CD-ROM or a network share, map the upgrade CD to a drive letter on the server.

2   Exit all applications, including screen savers, and close all windows.

3   From the Windows Start menu, choose Run.

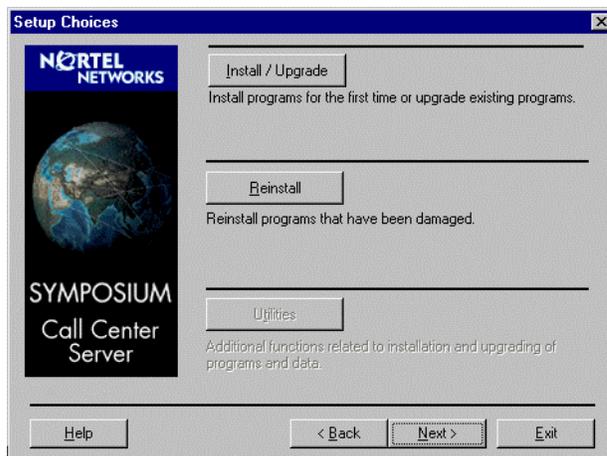**4**   Click Browse, and then select Setup.exe from the root directory on the CD.

5   Click OK to run.

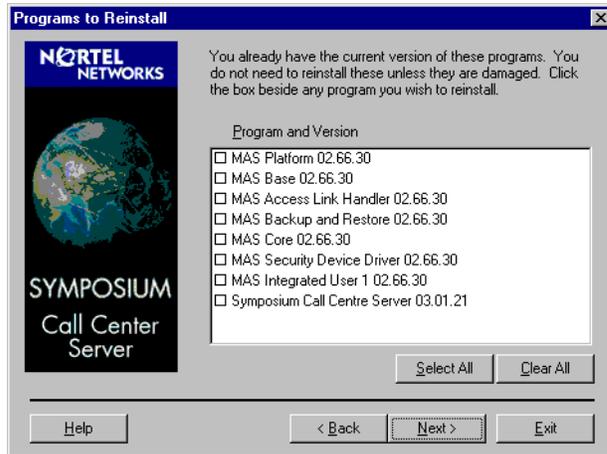**Result:** The Nortel System Operations welcome dialog box appears.
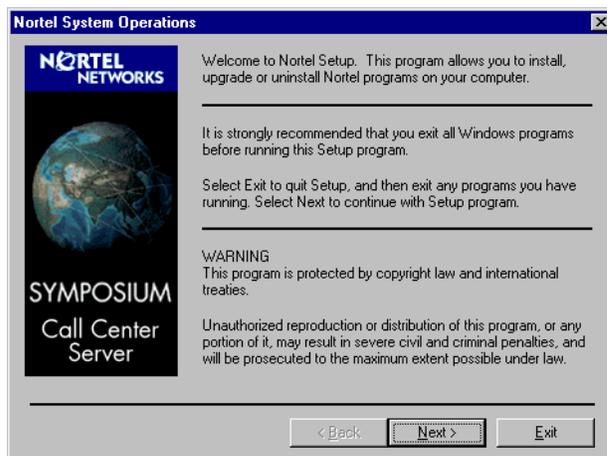
6   Click Next.

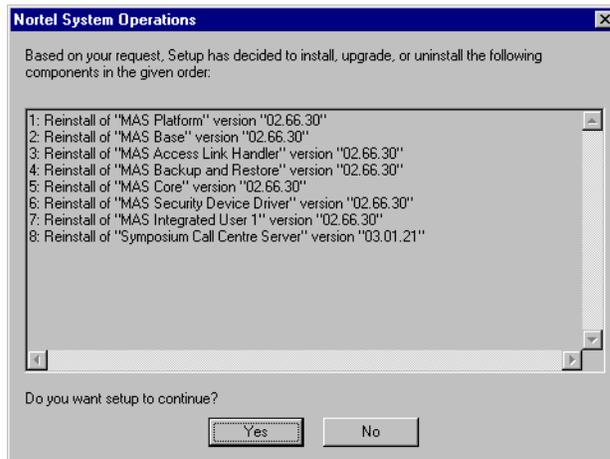**Result:** The Setup Choices dialog box appears.

7   Click Reinstall.

Result: Setup examines the system, and the Programs to Reinstall dialog box appears.

8   Click Select All, and then click Next.

Result: The Nortel System Operations dialog box appears and lists all components in the order in which they will be reinstalled.

9   Click Yes.

Notes:

■ If a warning message appears because a text printer is not found, then click OK to bypass the warning. For details, see "Bypass the fault printer warning if it appears" on page 105.

■ If the following message appears, then click Yes to continue:

```
Setup has found out that this drive "C:\" has less
than 64 Mbytes of free space. Do you still want to
continue?"
```
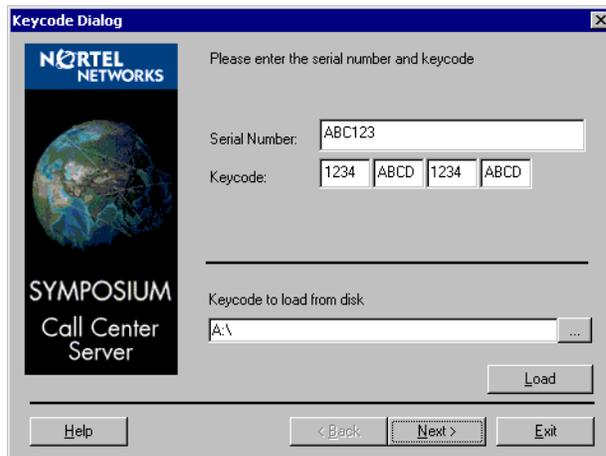
Result: Setup copies files to the server, and then the User Information dialog box appears.

10 Enter the customer and company names, and then click Next.

Result: The Keycode Dialog dialog box appears.

11 Enter the keycode for Release 3.0 in one of the following ways:

- If you have a disk that contains your keycode information, follow these steps:

  a. Insert the keycode disk into the floppy drive.

  b. Click the (...) button to open a browse dialog box.

  c. Locate and select the file that contains the keycode information, and then click Load.

  Result: The keycode and serial numbers are entered into the Keycode Dialog box.

- If your keycode information is stored on a hard disk, follow these steps:

  a. Click the (...) button to open a browse dialog box.

  b. Locate and select the file that contains the keycode information, and then click Load.

  Result: The keycode and serial number are entered into the Keycode Dialog box.

- Type your serial and keycode numbers in the appropriate boxes.

12 Click Next.

Result: The Keycode Verification window appears.

13   Click Next.

Result: Based on the system type that you are installing, one of the following dialog boxes appears:

M1 Switch Options dialog box

DMS Switch Configuration dialog box

Note: The MSL Switch Configuration dialog box is the same as the DMS Switch Configuration dialog box, except for the switch information.

14 Enter the appropriate information for your switch. Refer to the information you entered in Chapter 2, "Worksheets and checklists," and to the following restrictions that apply to switch names:

- Valid characters for switch names are A–Z, a–z, 0–9, _ (underscore) and . (period).

- Switch names must begin with an alphabetic character, and they cannot contain spaces.

- The last character must not be an underscore or a period.

- Switch names must not exceed 80 characters in length.

Tip: If you are unsure of the correct information or if you make a mistake, you can change the switch information after you finish the installation (see "Feature Report: Switch Information" on page 272).

15 Click Next.

Result: The ELAN dialog box appears.

16 Enter the ELAN TCP/IP address for the server in one of the following ways:

- If the address appears in the dialog box, select it and click Next.

- If the ELAN TCP/IP address does not appear in the dialog box, select Other, enter the correct IP address in the dialog box that appears, and then click Next.

■ Although the NCC is not connected to the ELAN, the dialog box is still presented when you install the NCC. Choose an IP address that is not your CLAN IP address and proceed.

Result: The CLAN dialog box appears.

17 Enter the CLAN TCP/IP address for the server in one of the following ways:

■ If the address appears in the dialog box, select it and click Next.

■ If the CLAN TCP/IP address does not appear in the dialog box, select
Other, enter the correct IP address in the dialog box that appears, and
then click Next.

Result: The Verify Setup Information dialog box appears, similar to the
following example:

18 Examine the list of current settings. If they are incorrect, click Back, make
the necessary corrections, and then click Next.

19 Click Next.

Result: The program begins to copy files to the hard drive and a progress
bar appears. The program automatically fills dialog boxes. The keyboard
and mouse are disabled during this portion of the setup.

When this step is completed, the Enter Configuration Mode message
appears.
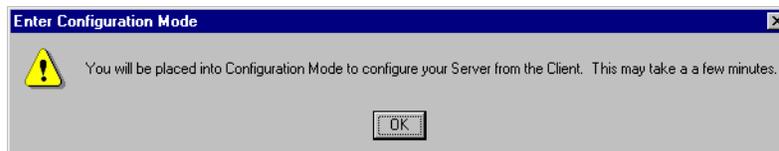
20   Click OK.

Result: The setup program validates scripts and puts the server into configuration mode.
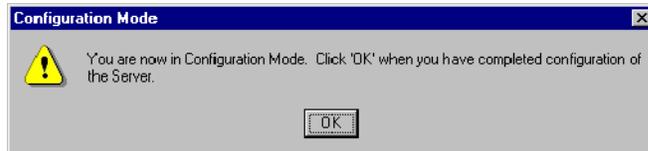
21   If any configuration must be done offline from the switch, do it now. Otherwise, click OK to finish the upgrade.

Result: The Reboot dialog box appears.

22   Select Reboot now, and then click Next.

23   Log on to the server from the client PC, and check the status of all scripts.

Reapplying PEPs

Reapply any software PEPs now. For more information, see "Installing PEPs and Service Update packs" on page 130.

Backing up the server

Create a Platform Recovery disk (see page 222), and a database backup of the server (refer to the *Administrator's Guide*).

Chapter 9

Converting, upgrading, and reinstalling client software

In this chapter

Converting the client from Release 1.1 or Release 1.5 to Release 3.0

Introduction

Follow these procedures to convert Symposium Call Center Server client software from Release 1.1 or Release 1.5 to Release 3.0. The conversion is a two-step process. In the first step, you complete the preconversion process. In the second step, you upgrade the Symposium Call Center Server client software. Both procedures are performed using only one CD.

Note: Release 1.1 conversion is supported only on Windows 95 and Windows 98. Release 1.5 conversion is supported on Windows 95, Windows 98, and Windows NT 4.0 Workstation.

Upgrading from Release 1.0

To upgrade from Symposium Call Center Server Release 1.0 to Release 3.0, you must first upgrade to Release 1.5. To upgrade to Release 1.5, refer to the document *Symposium Call Center Server Upgrade Instructions from Release 1.0 to Release 1.5* that accompanies the Upgrade CD.

Default access classes

Symposium Call Center Server requires that the three default access classes (adminGroup, Call Center Admin, and Supervisor) be defined. Before beginning the conversion, you must apply PEPs on the client and server to

- prevent these classes from being deleted
- re-add them if they have been deleted
- restore their names, if they have been renamed

Note: If any of these access classes do not exist or if they have different names, the conversion fails.

Conversion checklist

Step	✔
Apply the following PEPs on the client (for detailed instructions, see the "Installing PEPs and Service Update packs" on page 130): ■ for Release 1.1, Client PEP SU12C ■ for Release 1.5, Client PEP SU09C.	
Perform the client preconversion (see below).	
Upgrade the client software (see page 236).	
Install PEPs (see "Installing PEPs and Service Update packs" on page 130).	
Add an SMI system (see page Chapter 7, "Adding a System Management Interface system").	
Restore report selection criteria (see page 239).	

To perform the client preconversion process

1 Log on to the client PC.

Note: If the client PC is running Windows NT Workstation, log on as Administrator. You must be logged on with administrative privileges to install, upgrade, or convert Symposium Call Center Server software.

2 Exit all applications and close all windows.

3 Insert the Symposium Call Center Server Client Application Release 3.0 CD into the CD-ROM drive. If you are installing from a remote CD-ROM or a network share, then map the Symposium Call Center Server Client CD to a drive letter on the client PC.

4 From the Windows Start menu, choose Run.

5 In the Open box, type **E:\Setup.exe**, where E is the drive letter of your CD-ROM drive, and then click OK.

6 When the Please close any running applications dialog box appears, click Start to launch the preconversion utility on the Client CD.

Note: The preconversion process takes about 15 minutes to run.

7   When the message `Pre-conversion has completed successfully` appears, click OK.

        Result: The preconversion process is complete.

To upgrade the Symposium Call Center Server client software

1   When the message `Setup determines that DMI is not installed` appears, click Yes.

        Result: The Select the Log Directory Location window appears.
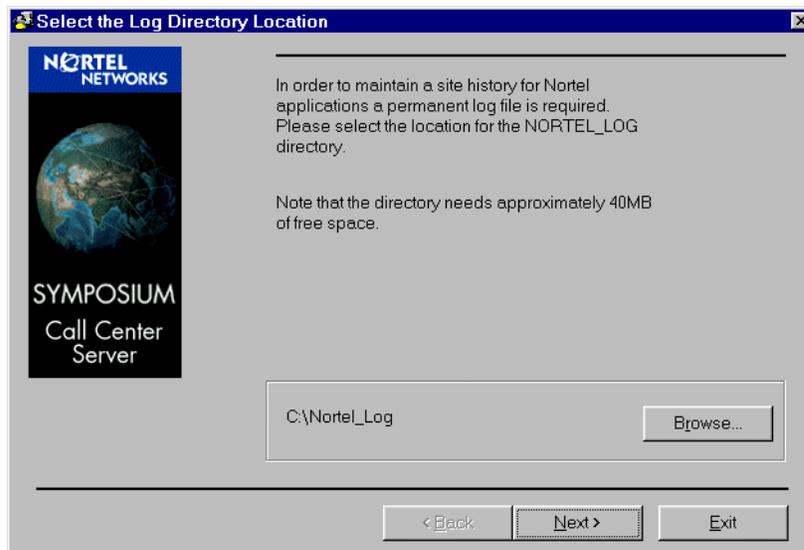
2   If you do not want to install in the default path C:\Nortel_Log, click Browse and enter the new path.

3   Click Next.

        Result: DMI installs in the specified location and the Welcome window appears.

        Note: Installation of the DMI takes approximately one minute.

4   Click Next.

        Result: The Setup Choices window appears.

5   Click Install/Upgrade, and then click Next.

        Result: The Programs to Install/Upgrade dialog box appears.

6   Select all programs listed, and then click Next.

Result: The Nortel System Operations dialog box appears and lists all components in the order in which they will be installed.

Note: At the message `Setup has determined that the SMI Workbench cannot integrate with the version of MAT on your system. Would you like to continue with the installation,` click Yes to continue.

7   Click Yes.

Result: The SMI Workbench window appears.

8   If you do not want to install the SMI Workbench in the default path, click Browse and type the new path.

9   Click Next.

Result: The setup program checks whether the required version of Adobe Acrobat Reader is installed. If Acrobat Reader is not installed, then follow the instructions on page 246 to install Acrobat Reader.

10   Click Yes.

Result: The Symposium Call Center Server (client) directory window appears.
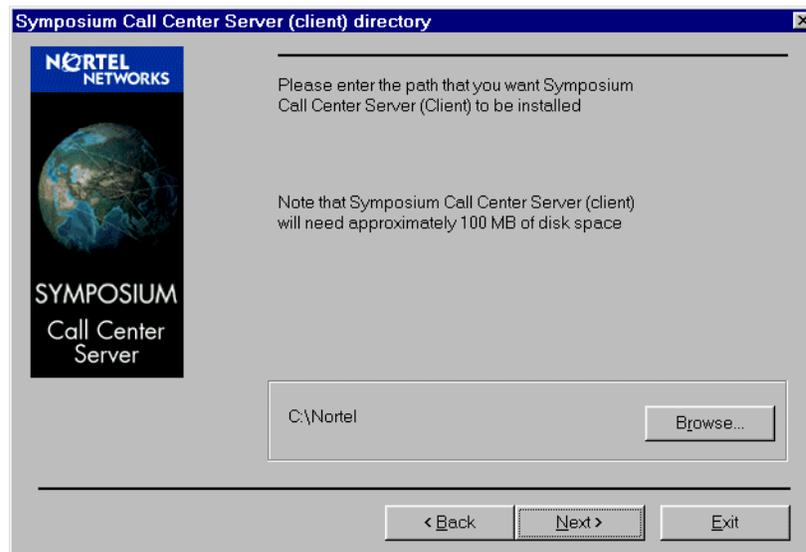
11   If you do not want to install the client software in the default path, click Browse and enter the new path.

12   Click Next.

Note: The client conversion process takes about 15 minutes to complete.

Result: The Verification dialog box appears.
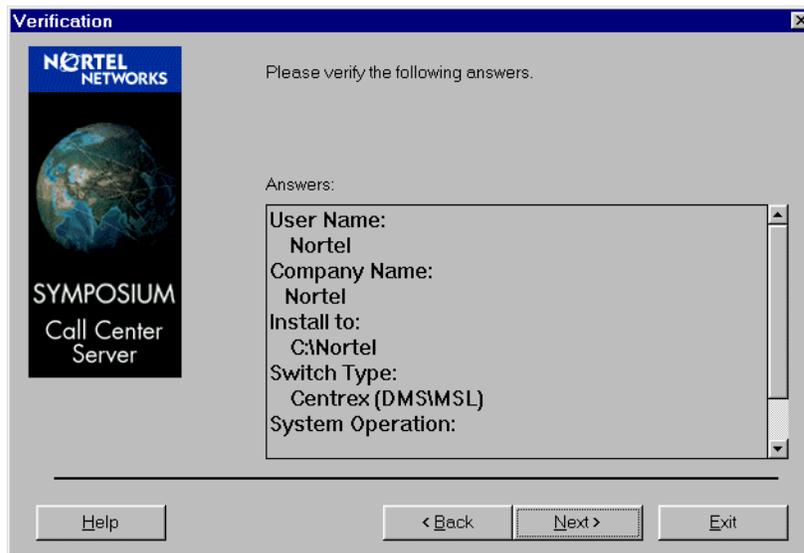
Note: The information shown in the Verification dialog box varies depending on the system type.

13   Review the information listed. To continue, click Next. To make changes, click Back.

Note: If the message `Cannot find msrd2x32.dll` appears, you can ignore it. This file is automatically copied over from the Client CD if it is not already there.

14   Click Next.

Result: You are asked if you want to read the readme file.

15   Choose whether you want to read the readme file. If you choose to view the readme file, close it when you are finished.

16   Click Yes to restart the computer.

Result: The computer restarts, and the client upgrade is complete.

Installing PEPs

If you received a PEP CD, you should install the PEPs now. For instructions, refer to "Installing PEPs and Service Update packs" on page 130.

Adding an SMI system

If you do not have a PEP CD, or after you install the PEPs, you must add an SMI system. See Chapter 7, "Adding a System Management Interface system."

ATTENTION	When you log on to the server for the first time, you must log on as sysadmin. The application prompts you to change your password. After the sysadmin user changes his or her password, other desktop users can log on. The system also prompts them to change their passwords.

To restore report selection criteria

After you complete the conversion, log on to each client PC, and restore the selection criteria for the reports containing agents, using the printed reports as a reference.

1   Select the report, and choose File → Properties.

2   Click the Selection Criteria tab.

3   Use the hard-copy report as a reference to select each required agent in the Available box, and click the left arrow to move the agent to the Selected list. Repeat this step until all required agents have been selected.

4   Click Save.

Upgrading client software

Introduction

Follow this procedure only to upgrade the client from Symposium Call Center Server Release 3.0 to a newer version of Symposium Call Center Server Release 3.0.

Note: You cannot upgrade from Symposium Call Center Server Release 1.1 or 1.5 to Symposium Call Center Server Release 3.0. To upgrade from Release 1.1 or 1.5, you must perform a conversion to Release 3.0 (see "Converting the client from Release 1.1 or Release 1.5 to Release 3.0" on page 234). To upgrade from Release 1.0, you must first upgrade to Release 1.5, and then perform a conversion to Release 3.0.

To reinstall the current version of the client software, see "Reinstalling client software" on page 248.

Checklist for client software upgrade

Steps	✔
Obtain the user ID and password that you need to log on to the client. On a Windows NT client PC, you need an account that has local administrative privileges.	
Check the "Before you begin" section on page 241.	
Upgrade the client software. See page 242.	
Upgrade the Symposium Call Center Server client software. See page 236.	
Install PEPs (see "Installing PEPs and Service Update packs" on page 130).	

ATTENTION   You cannot downgrade to a previous version of the Symposium Call Center Server client software.

Before you begin

Follow the steps in the upgrade checklist
See the preceding checklist for a client software upgrade.

Update DLLs
During the upgrade, you might see dialog boxes that offer to update system DLL files with newer versions. Write down the names of these DLL files. If the files being installed are newer than the existing versions, click Yes. If they are older, click No. Provide the system administrator with the list of replaced DLLs.

Select all PEPs to uninstall
During the upgrade, Performance Enhancement Packages (PEPs) are listed as components to uninstall in the Programs to Install/Upgrade window. PEPs must be uninstalled as part of the upgrade. Ensure that all items in the window are selected so that the PEPs are uninstalled.

Check whether you have Acrobat Reader 3.0 with search plug-in

When client software is first installed, the installation procedure instructs you to install Acrobat Reader 3.0 from the Client CD. The Acrobat Reader 3.0 version on the Client CD includes the search plug-in. This is an enhancement to Acrobat Reader, which provides the capability to search for keywords across the suite of online documentation. If Acrobat Reader 3.0 is not already installed on the client PC, then the upgrade program notifies you.

The client upgrade program does not automatically install Acrobat Reader 3.0. However, a copy of this software is available on the client CD in the Acrobat folder. During the upgrade, you are asked if you want to install Acrobat Reader from the client CD.

You should, therefore, check to see if Acrobat Reader 3.0 or higher is already installed on the client PC. If it is installed and you do not want to replace it with the version on the client CD, make sure that you also have the search plug-in (Asrch32.api) installed.

To upgrade the client software

ATTENTION   During the upgrade installation, there are points where the setup program performs automatic installation steps in between wizard setup windows. Do not close any windows that appear during these steps. Wait for the next wizard setup window before you use the mouse or keyboard.

1   Exit all applications and close all windows.

2   Insert the upgrade Client CD or, if you are upgrading from a remote CD-ROM or a network share, map the upgrade Client CD to a drive letter on the client PC.

3   From the Windows Start menu, choose Run.

4   Click Browse, and then select Setup.exe from the root directory on the CD.

5 Click OK to run.

Result: The Nortel System Operations welcome dialog box appears.
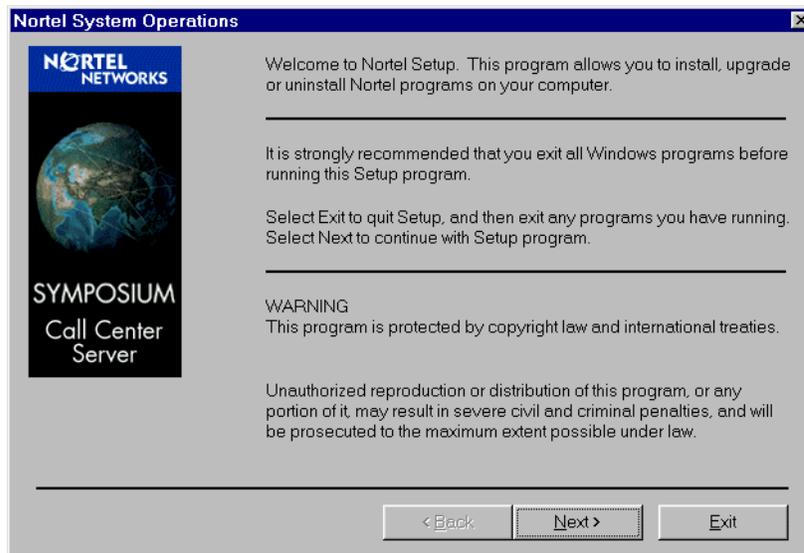
6 Click Next.

Result: The Setup Choices dialog box appears.
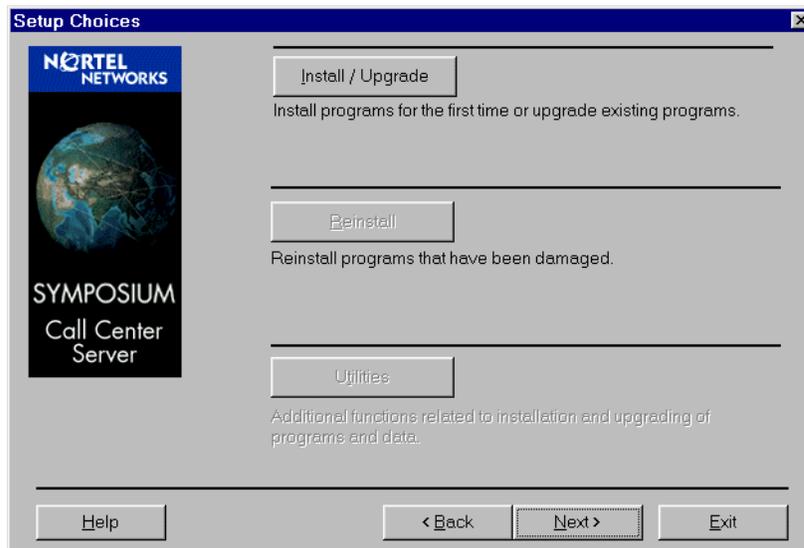
7   Click Install/Upgrade.

Result: Setup examines the system, and the Programs to Install/Upgrade dialog box appears.
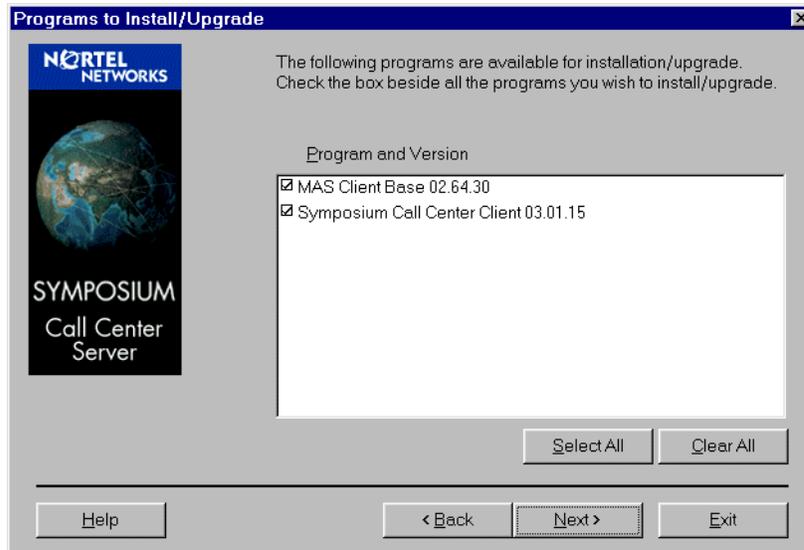
Note: If Performance Enhancement Packages (PEPs) have been installed, they are listed in this window as components to uninstall. PEPs must be uninstalled as part of the upgrade. Ensure that all items in the window are selected, including PEPs.

8   Click Select All, and then click Next.

Result: The Nortel System Operations dialog box appears and lists all components in the order in which they will be installed.
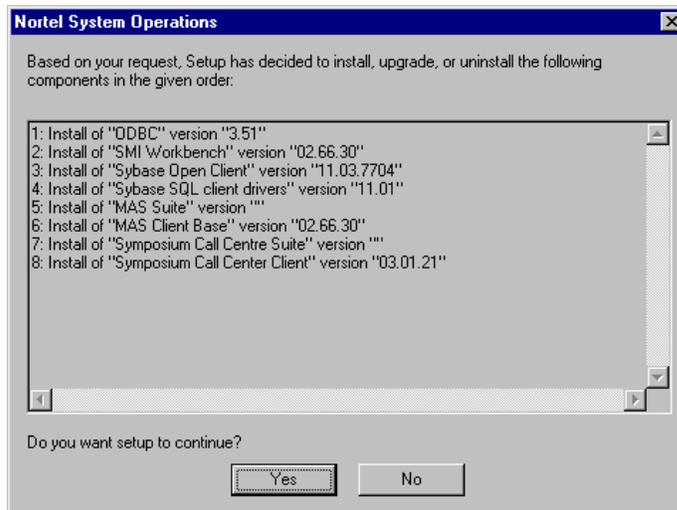
Note: Information on screens varies depending on the components that are being upgraded and the client PC configuration.

9   Click Yes.

Result: Setup copies files to the client, and the SMI Workbench directory dialog box appears.
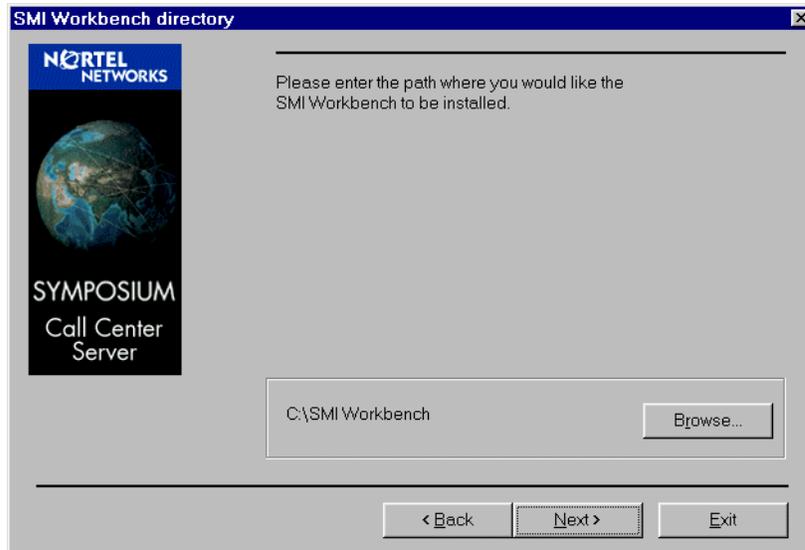
10   If you do not want to install the SMI Workbench in the default location, click Browse and type the path to the new location.

11   Click Next.

Result: The setup program checks to see whether the required version of Adobe Acrobat Reader is installed. If it is not installed, the following dialog box appears. Continue with the following step. If it is installed, Setup copies the Symposium Call Center Server client software to the client PC. Skip to step 13.

12   If Acrobat is not installed, click No and then complete the following steps:

a. Insert the Client CD and locate the Adobe directory.

b. Click the file setup.exe.

c. Follow screen instructions to install Acrobat Reader.

d. Begin the installation again.

13 If the message msrd2X32.dll appears, click OK. This message is for informational purposes only and the file is copied automatically to the client PC if it is not found.

Note: If information messages appear while installing on a Windows NT workstation environment, click OK and proceed with the installation.

14 When all files have been copied, click Next.

Result: The validation summary dialog box appears.
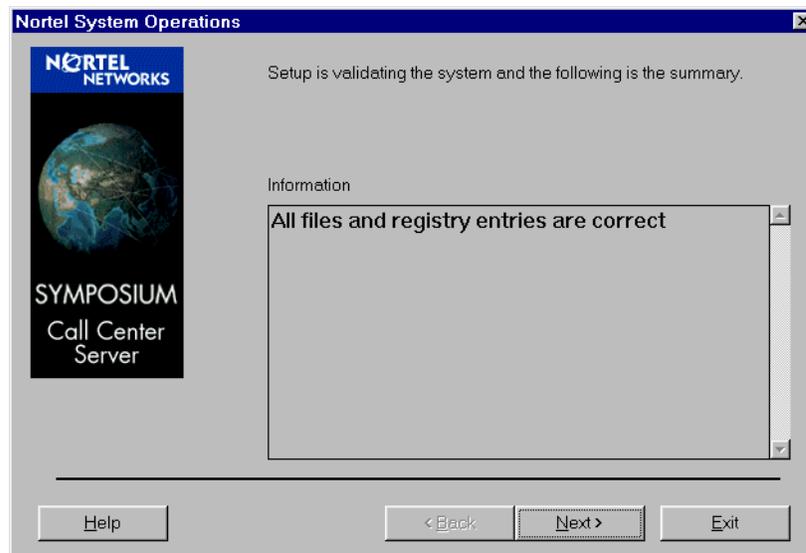
15 Click Next if the summary is correct. If the summary is incorrect, click Back and make the necessary corrections before proceeding.

Result: The message `Would you like to view the Readme file?` appears.

16 Click Yes to read the file and No to ignore the message.

17 Click OK to restart the system.

Result: The upgrade to the client PC is complete.

Reinstalling client software

When to use

Use this procedure

- to reinstall the Symposium Call Center Server client application when it is damaged
- to add features (such as the NCC Reports option)

Note: You cannot change the switch type by reinstalling the software. You must uninstall the client and perform a fresh install.

You can only reinstall on a client that has already been installed properly. For example, if you have a working client that suddenly has problems in the application software, you can try to reinstall the application software.

If you encounter a problem during a new installation, then you must uninstall and do the installation again.

The reinstallation does not repair data files.

To reinstall client software

Follow the instructions for a client installation on page 145. However, instead of clicking Install/Upgrade in step 10 on page 149, click Reinstall. See also "Checklist for client software upgrade" on page 241.

To reinstall NCC Reports (Meridian 1 only)

If the NCC Reports option was selected during installation, then NCC Reports appears as a component to be reinstalled. During the reinstallation, all NCC report templates are copied to the client PC.

To reinstall NCC Reports during a software upgrade or conversion, follow the instructions for a client upgrade, as described in "Checklist for client software upgrade" on page 241. However, click Reinstall in the Setup Choices window. Then, from the Setup Choices window, select the NCC Reports option.

Note: The only way to add NCC Reports functionality during an upgrade or conversion is to use the Reinstall option. You cannot use reinstallation to remove previously installed NCC Reports.

Chapter 10

Using server utilities

In this chapter

Overview

Introduction

Symposium Call Center Server utilities are automatically installed when you install the Symposium Call Center Server. These utilities allow you to perform system operations not available within Symposium Call Center Server.

You can access the server utilities from the Windows Start menu by choosing Programs → Symposium Call Center Server.

Utility name and function overview

Utility name	Function
Computer Name Sync	Updates the computer name in the Symposium Call Center Server database.
Configuration (Nbconfig Configuration Tool)	Enables you to add and modify site information for a Symposium Call Center Server network.
Database Restore	Restores the database from a backup tape.
DMI View	Shows the software suites that are managed by the Database Management Interface (DMI) and related information. Also allows you to view and remove Product Enhancement Packages (PEPs) installed on the system.
Feature Report	Enables you to view and modify switch parameters. It also enables you to view other system information and a list of installed features.
Migration	Allows you to obtain system information in preparation for migrating to another hardware platform.
Registry Maintenance	Performs a registry comparison. This utility enables you to check for any corruption or change in the registry.

Utility name	Function
Shutdown/Startup (separate utilities)	Shuts down and starts up certain Symposium Call Center Server services. This is required for some maintenance and troubleshooting activities.
System information	Shows particulars about the Symposium Call Center Server System, such as names, IP addresses, and system numbers.
Uninstall	Lets you uninstall the Symposium Call Center Server application.

Computer Name Sync

Introduction

If you change the computer name after installing the Symposium Call Center Server, use this utility to synchronize the Symposium Call Center Server name and the current computer name.

Notes:

■   This utility also updates the DNS Host Name to match the new computer name.

■   This utility does not change the database's name. Make sure you keep a record of the original name, in case you need to do a full system recovery.

Computer name restrictions

The new computer name must be a single word without spaces, 6 to 15 characters long. Letters, numbers, a hyphen, and a dash are allowed.

To change the computer name

1   First change the new computer name in Windows NT by choosing, from the Windows Start menu, Control Panel → Networks.

2   Restart the server.

3   From the Windows Start menu, choose Programs → Symposium Call Center Server → Shutdown.

4   From the Windows Start menu, choose Programs → Symposium Call
          Center Server → Computer Name Sync.

          Result: The Synchronise Computer Name dialog box appears.
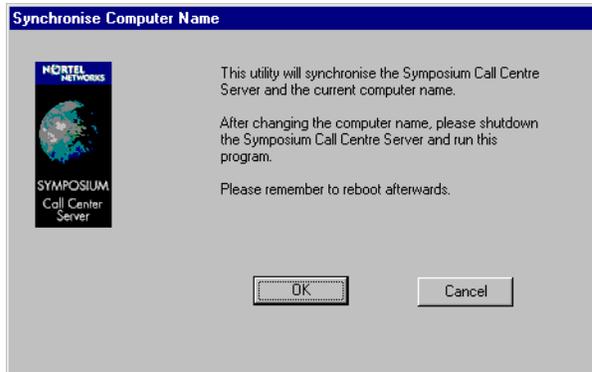
5   Click OK.

6   When this utility finishes, restart the server.

Configuration overview

Introduction

Use this utility to display and change configuration information. You can also make changes to the IP addresses of the CLAN and ELAN adapter cards if you made an error during installation.

Note: To change an IP address, you must start the Configuration utility with the admin access level. For more information on changing IP addresses, refer to "Changing the server IP address or site name" on page 258.

Access levels

Two access levels are available in the Configuration utility: regular and admin. In the regular access level, all information is read-only. In the admin access level, you can make changes.

Modes

Two modes are recognized within the Configuration utility: server mode and NCC mode. The configuration utility runs in server mode at each Symposium Call Center server and in NCC mode at the NCC.

In NCC mode, you cannot add another NCC, enter a CLAN IP address that maps to a duplicate site name, or enter a Name Service IP address other than from the CLAN. In addition, if the new site cannot be connected, the Configuration utility allows you to remove the site.

Note: In NCC mode, you do not need to shut down services to add or delete sites.

To start Nbconfig with the regular access level

From the Windows Start menu, choose Programs → Symposium Call Center Server → Configuration.

Result: The Nbconfig window appears showing three tabs:

- Local Machine Settings

- Address Table

- Site Table

To start Nbconfig with the admin access level

1   From the Windows Start menu, choose Run.

2   Type **nbconfig -admin,** and then click OK.

Result: The Nbconfig window appears.

Configuration: Local Machine Settings

Introduction

The Local Machine Settings tab displays Local site name and network card IP addresses.
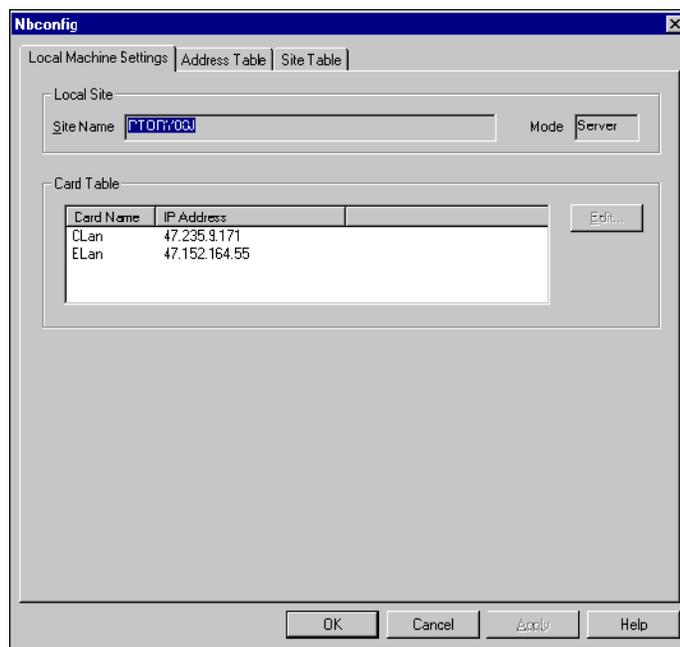
For more information on Nbconfig for the NCC, refer to the *Network Control Center Administrator's Guide*.

Changing the server IP address or site name

To change the IP addresses on the Symposium Call Center Server, you must make this change in the following places:

- Change the IP addresses in the Network control panel.
- Change the IP addresses in the Configuration utility (NBCOM).

■ If the Symposium Call Center Server is in a network with an NCC, then updates are required in the configuration utility at the NCC.

At installation time, the IP addresses are defined in the Network control panel and then again during the server software installation. All IP addresses must be unique. No further action is required unless you need to change the IP addresses after installation.

To change the CLAN or ELAN IP address

1 Log on to Windows NT as NGenSys.

2 Close the SMonW window.

3 Shut down all Symposium Call Center Server services (from the Windows Start menu, choose Programs → Symposium Call Center Server → Shutdown).

4 Change the CLAN or ELAN IP address using the Network control panel. When the program prompts you to restart the server, click No.

5 Change the CLAN or ELAN IP address using the Configuration utility (Nbconfig) as follows:

a. From the Windows Start menu, choose Run.

b. Type **nbconfig -admin**.

Result: The Edit button on the Local Machine Settings tab is enabled.

c. Select the network card for which you want to change the IP address.

d. Click Edit.

Result: The Network Card IP Address window appears to allow you to select another CLAN or ELAN IP address from the drop-down list.

e. Make the changes and click OK.

6 Run nicomsetup.

a. From the Windows Start menu, choose Programs → Command Prompt.

b. Change to the drive on which the Symposium Call Center Server is installed. For example, type **D:** and press Enter.

c. Type **CD\Nortel\ICCM\bin** and press Enter.

d. Type **nicomsetup** and press Enter.

Result: The IP address change is completed.

7 Restart the server by choosing, from the Windows Start menu, Shutdown.

8 If the server is in a networking environment (Meridian 1 only), continue as follows:

a. At the NCC, log on as NGenSys.

b. From the Windows Start menu, choose Run.

c. Type **nbconfig -admin**.

d. Click the Site Table tab.

e. Select the server for which you changed the IP address, and click Remove.

f. Click Add and add the server.

g. Click Verify.

h. Click Apply to start synchronization.

i. From the Symposium Call Center Server Client, choose the site name that has been changed and open the properties for the site.

j. Do not delete the old IP address and add the new one.

9 If you are changing the IP address of the NCC (Meridian 1 only), continue as follows:

a. At the NCC, log on as NGenSys.

b. From the Windows Start menu, choose Run.

c. Type **nbconfig -admin**.

d. Click the Site Table tab.

e. Click Add and add all servers.

f. Click Verify.

g. Click Apply to start synchronization.

To change the server site name

1   Log on to Windows NT as Administrator.

2   Close the SMonW window.

3   Shut down all Symposium Call Center Server services (from the Windows Start menu, choose Programs → Symposium Call Center Server → Shutdown).

4   Run nicomsetup.

    a.   From the Windows Start menu, choose Programs → Command Prompt.

    b.   Change to the drive on which the Symposium Call Center Server is installed. For example, type **D:** and press Enter.

    c.   Type **CD\Nortel\ICCM\bin** and press Enter.

    d.   Type **nicomsetup** and press Enter.

5   Change the server site name using the Configuration utility (Nbconfig) as follows:

    a.   From the Windows Start menu, choose Run.

    b.   Type **nbconfig -admin**.

          Result: The Edit button on the Local Machine Settings tab is enabled.

    c.   Make the desired changes, and click OK.

6   If you are changing the site name of a server in a networking environment (Meridian 1 only), continue with the following:

    a.   Perform a stand-alone site name change on the server.

    b.   At the NCC, log on as Administrator, and from the Windows Start menu, choose Run.

    c.   Type **nbconfig -admin**.

    d.   Click the Site Table tab.

    e.   Select the server for which you changed the site name, and click Remove.

    f.   Click Add and add the server.

    g.   Click Verify.

    h.   Click Apply to start synchronization.

i. From the Symposium Call Center Server Client, choose the site name that has been changed and open the properties for the site.

j. Modify the site name from the old site name to the new site name and save the changes. Do not delete the old site and add the new site.

7 If you are changing the site name of the NCC (Meridian 1 only), continue with the following:

a. Perform a stand-alone site name change on the NCC.

b. At the NCC, log on as Administrator, and from the Windows Start menu, choose Run.

c. Type **nbconfig -admin**.

d. Click the Site Table tab.

e. Click Add and add all servers.

f. Click Verify.

g. Click Apply to start synchronization.

Configuration: Address Table

Introduction

The Address Table tab lists computer name, IP Address, and Port information of all servers in the network, including the NCC. In regular Server mode, all information is read-only. You can modify information from the Address Table by entering the admin access level.
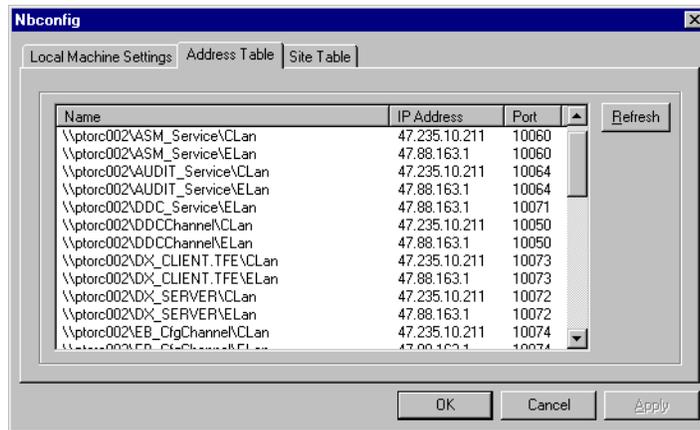
## To edit, add, or remove address information

1   Log on to Windows NT as Administrator.

2   Shut down all Symposium Call Center Server services (from the Windows Start menu, choose Programs → Symposium Call Center Server → Shutdown).

   Result: All services are shut down.

3   From the Windows Start menu, choose Run and type **nbconfig -admin.**

4   Click the Address Table tab.

Result: The Nbconfig window now shows Edit, Add, and Remove buttons.
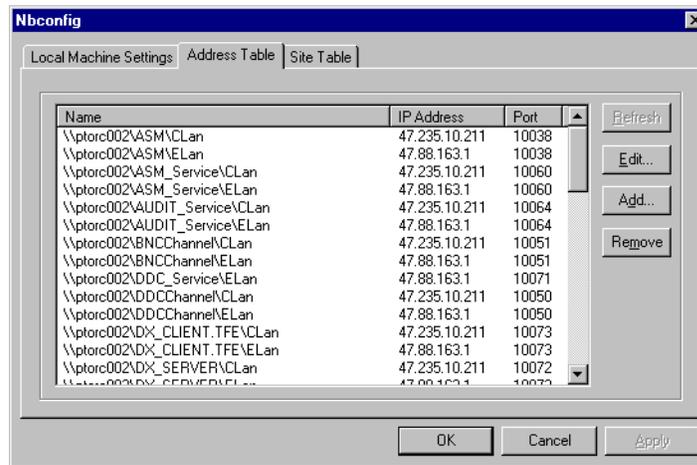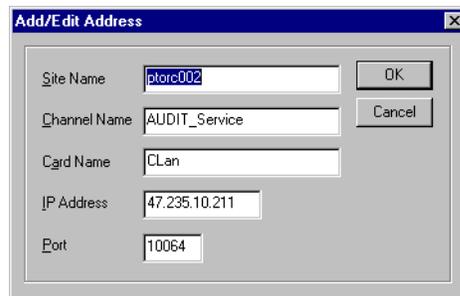

5   To remove a server, select it and click Remove.

6   To add a server, click Add.

Result: The Add/Edit Address window appears. The boxes in this window are blank. Continue with step 8.

7   To change a server, select it and click Edit.

Result: The Add/Edit Address window appears.

8   Enter the desired information and click OK.

To run the nicomsetup utility

Run the nicomsetup utility after a site name change to clear information from the Address Table and Site Table window.

1   From the Windows Start menu, choose Programs → Command Prompt.

2   Change directories to Nortel\ICCM\bin.

   a.   Type **CD**, and then press Enter.

   b.   Type **CD\Nortel\ICCM\bin**, and then press Enter.

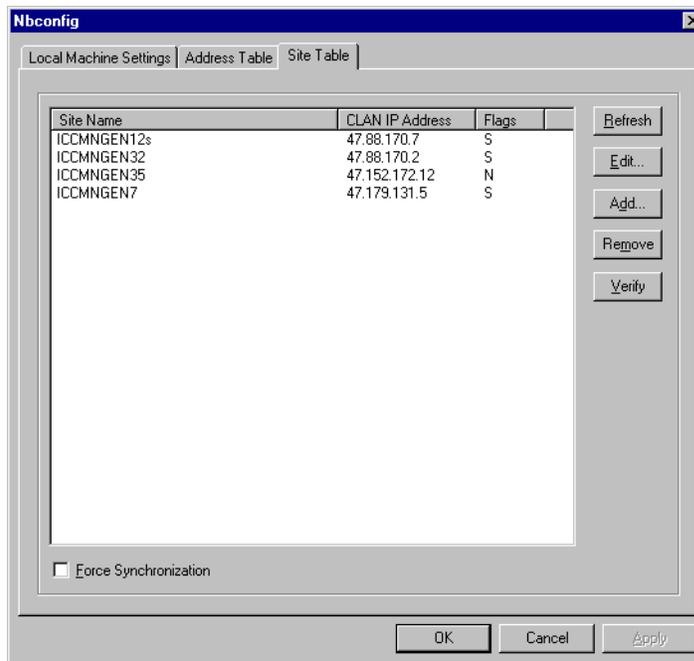3   Type **nicomsetup**, and then press Enter.

   Result: All information is removed from the Address Table window and from the Site Table window.

For more information on adding site names in a network, refer to the *Network Control Center Administrator's Guide*.

Configuration: Site Table

Introduction

The Site Table tab lists information about Site Names, IP Addresses, and flags. In Server mode, this information is for reference only and cannot be edited. In NCC mode, you can add sites.

```
┌─ Nbconfig ──────────────────────────────────────────────────── ×─┐
│                                                                   │
│ ┌ Local Machine Settings │ Address Table │ Site Table ┐           │
│ │                                                                 │
│ │  ┌──────────────────────────────────────────────┐ ┌─────────┐  │
│ │  │ Site Name          CLAN IP Address  Flags    │ │ Refresh │  │
│ │  │ ICCMNGEN12s        47.88.170.7      S         │ └─────────┘  │
│ │  │ ICCMNGEN32         47.88.170.2      S         │ ┌─────────┐  │
│ │  │ ICCMNGEN35         47.152.172.12    N         │ │  Edit…  │  │
│ │  │ ICCMNGEN7          47.179.131.5     S         │ └─────────┘  │
│ │  │                                               │ ┌─────────┐  │
│ │  │                                               │ │  Add…   │  │
│ │  │                                               │ └─────────┘  │
│ │  │                                               │ ┌─────────┐  │
│ │  │                                               │ │ Remove  │  │
│ │  │                                               │ └─────────┘  │
│ │  │                                               │ ┌─────────┐  │
│ │  │                                               │ │ Verify  │  │
│ │  │                                               │ └─────────┘  │
│ │  │                                               │              │
│ │  │                                               │              │
│ │  │                                               │              │
│ │  │                                               │              │
│ │  └──────────────────────────────────────────────┘              │
│ │  ☐ Force Synchronization                                        │
│ │                                                                 │
│              ┌────────┐  ┌────────┐  ┌────────┐                   │
│              │   OK   │  │ Cancel │  │ Apply  │                   │
│              └────────┘  └────────┘  └────────┘                   │
└───────────────────────────────────────────────────────────────────┘
```

To add a site (NCC mode only)

1 From the Windows Start menu, choose Run and type **nbconfig -admin.**

2 Click the Site Table tab.

3 Click Add, and then enter the CLAN IP address of the site you want to add.

For more information on adding site names in a network, refer to the *Network Control Center Administrator's Guide.*

Database Restore

Introduction

Use this utility to restore a corrupted database. This utility restores the backed-up version of the database created using the backup utility with the database option. For more information about backing up and restoring, refer to the *Administrator's Guide*.

To access the Database Restore utility

From the Windows Start Menu, choose Programs → Symposium Call Center Server → Database Restore.

Result: The Database Restore dialog box appears.

With the backup tape, click Start Restore to restore the database.

Checking the restore status

The Database Restore utility creates a log file, named Restore.log, in the path D:\Nortel\data\backup\RestoreLogs. Use a text editor, like Notepad, to open the log file and check the status of the restore.

DMI View

Introduction

Use this utility to show the software suites that are managed by the Database Management Interface (DMI) and related information. Use this utility also to view and remove Product Enhancement Packages (PEPs) installed on the system.

To access the DMI View utility

From the Windows Start menu, choose Programs → Symposium Call Center Server → DMI View.

Result: The DMI Viewer window appears.
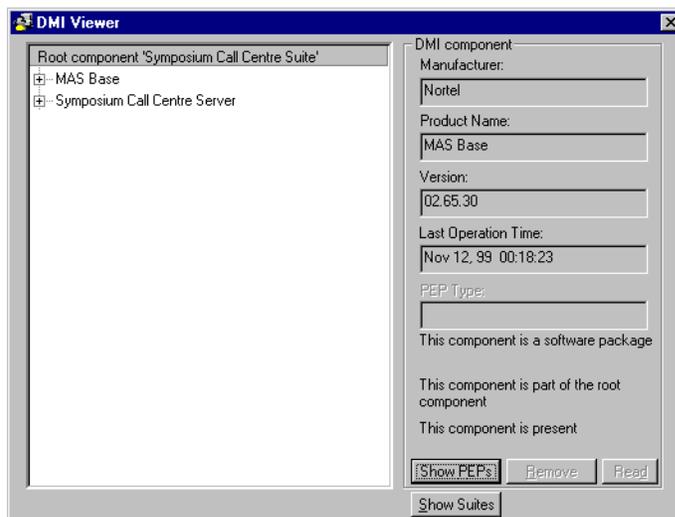
To view all installed PEPs, click Show PEPs.

Feature Report overview

Introduction

Use this utility to display system information and a list of installed features. The following illustration shows the Feature Report tabs:
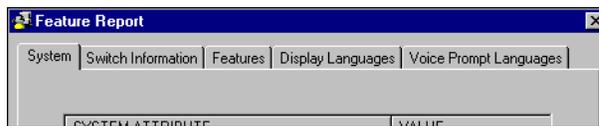
Modifiable information

Only the Switch Information tab contains information that you can modify. All other tabs contain read-only information.

To access the Feature Report utility

From the Windows Start menu, choose Programs → Symposium Call Center Server → Feature Report.

Result: The Feature Report window appears. See the following pages for a description and example of the Feature Report tabs.

Feature Report: System

Introduction

The System tab lists information entered at installation, including computer name, IP addresses, and site name. You cannot edit any of the items showing in this window, as it contains read-only information.
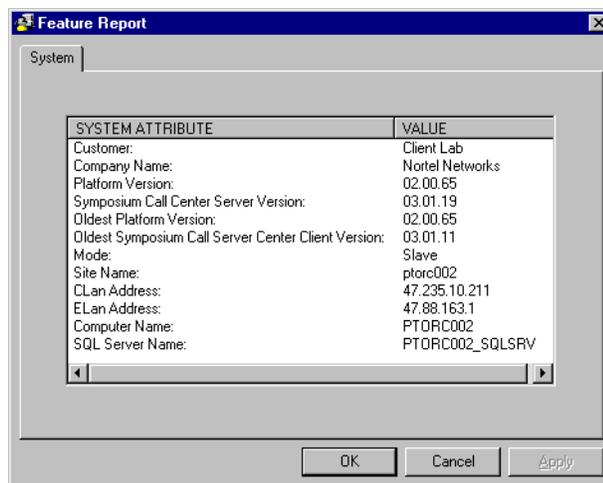
Note: In a networked environment, the NCC site name and IP address are automatically updated after the server is added to the list of sites on the NCC.
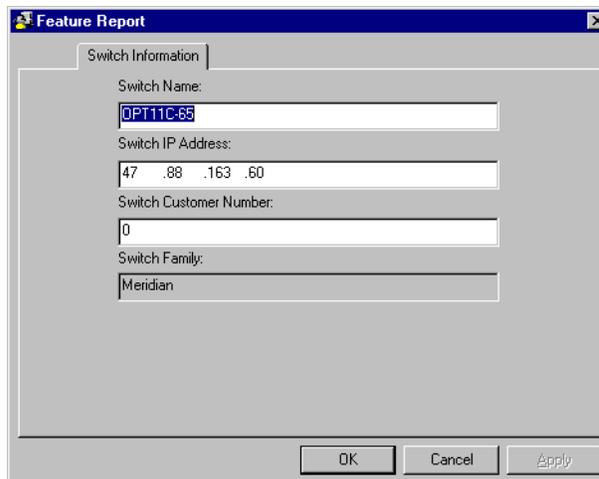
Feature Report: Switch Information

Introduction

The Switch Information tab lists switch information and parameters. This information is initially provided during server software installation, but you can modify it after installation through the Feature Report utility - Switch Information tab.

To view or change switch information

1 From the Windows Start menu, choose Programs → Symposium Call Center Server → Feature Report.

2 Select the Switch Information tab.

Result: The Switch Information tab appears. The following example is for a server connected to a Meridian 1 switch. For servers connected to an M1 switch, the Switch Information tab shows different information.

3 Modify any switch information, if required.

4   For DMS/MSL-100 systems, click Edit DMS Switch Parameters. For
         Meridian 1 systems, there is no additional switch parameters screen.

         Result: The DMS Parameter dialog box appears.
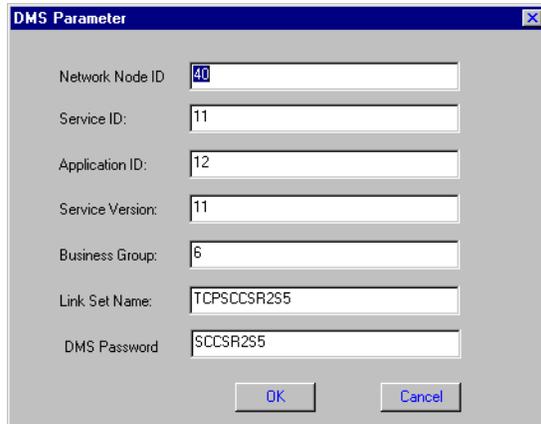
5   Modify switch parameters, if required.

6   To save changes, click OK.

         Result: The Switch Information tab appears.

7   To save changes, click OK.

         Result: You are prompted to restart to save changes.

8   Restart the server.

         Result: The switch information is now updated on the server.

Feature Report: Features

Introduction

The Features tab lists product features, and specifies which features are installed on the server. The features that are installed depend on what features were purchased and the keycode entered during server installation.
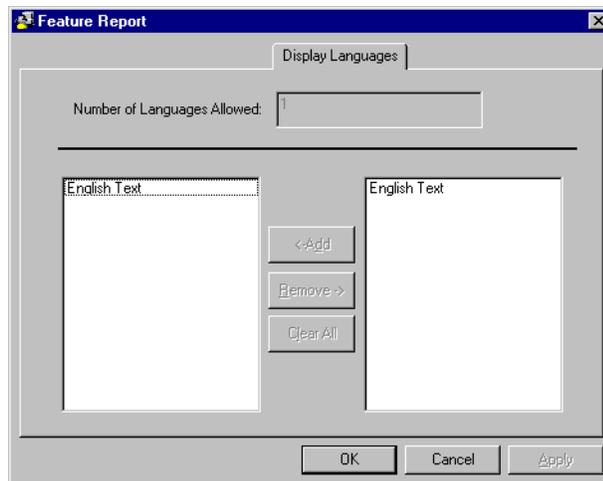
This tab contains read-only information.

Note: The value YES indicates that a feature is installed. The value NO indicates that the feature is not installed.

# Feature Report: Display Languages

Introduction

The Display Languages tab lists the languages that are installed for information that appears on the screen. This tab contains read-only information. The Add, Remove, and Clear All buttons are not selectable.

Feature Report: Voice Prompt Languages

Introduction

The Voice Prompt Languages tab lists the languages that are installed for voice prompts. This tab contains read-only information. The Add, Remove, and Clear All buttons are not selectable.
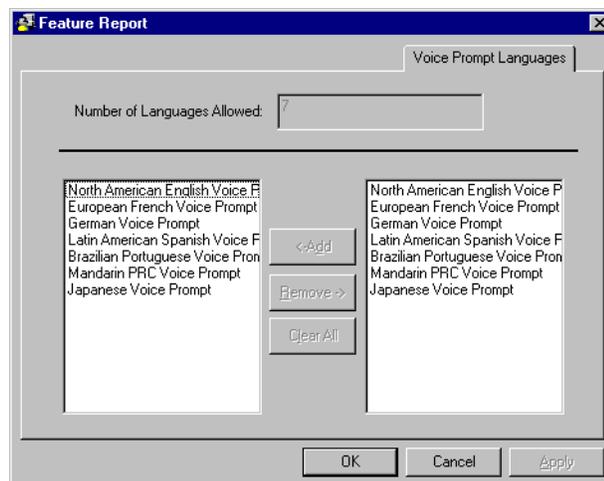
Migration

Introduction

Use this utility

- to obtain system information in preparation for migrating to another hardware platform

- after installation, upgrade, conversion, or changes to the server configuration, to create a Platform Recovery disk

To access the Migration utility

From the Windows Start menu, choose Programs → Symposium Call Center Server → Migration.

Result: The Platform Migration Utility dialog box appears, providing operations that you can perform.
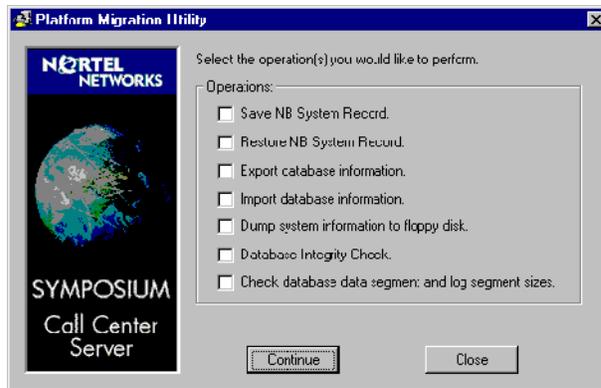
To use this utility, check one of the following options, and then click Continue.

Registry Maintenance

Introduction

Use this utility to perform a registry comparison between two remote machines, a remote and a local machine, or two subkeys on the local machine. This utility also has backup and restore capabilities.

The comparison picks up any difference between the two registry entries, such as values with the same name but different data, and values or subkeys that exist on one registry but not on the other. Filtering options are available.

To access the Registry Maintenance utility

From the Windows Start menu, choose Programs → Symposium Call Center Server → Registry Maintenance.

Result: A blank white screen with a menu bar appears. For example, when you choose Registry Compare, the following screen appears inside the Registry window.
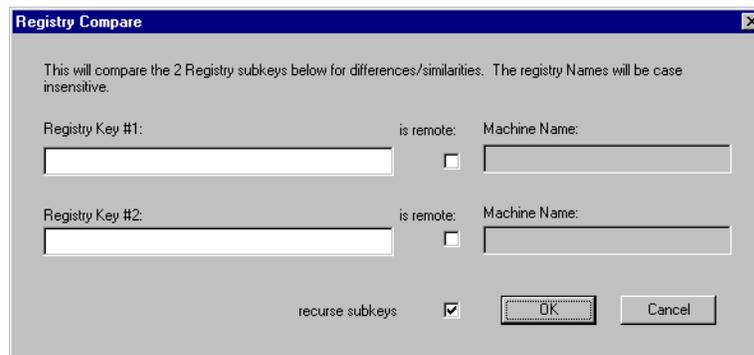
Filtering options

Registry Compare
This option, as shown in the illustration, compares two registry subkeys for similarities and differences.

Registry Error Detection

This option compares the structure of the registry with the structure in an input file. Any differences between the two are noted, including different data and missing/extra keys/values. The input file is editable, and you can customize it to have a set or range of accepted values for certain keys instead of a fixed value.

Registry Dump

This option recursively dumps the structure of the registry starting from a given subkey. This option is an easy method for generating an initial input file for the detection option.

Shutdown

Introduction

Use this utility to shut down Symposium Call Center Server services. This might be required prior to performing some maintenance activities.

This utility informs you about the state of each service and describes each action taken by the utility. At the end, the utility provides general information on whether the system is completely shut down and provides appropriate messages if there are services that cannot be shut down for some reason. The utility also reports any errors encountered during execution of the shutdown.

To access the Shutdown utility

1   From the Windows Start menu, choose Programs → Symposium Call Center Server → Shutdown.

Result: The Symposium Call Center Server Shutdown dialog box appears.

2   Click OK.

Result: The Summary dialog box appears. It shows any services that are still running. You can click Recheck to refresh the service statuses.

3   If any services are still running, use the control panel services icon to manually shut down the listed services and click Refresh to update the summary window.

4   Click Accept to exit the utility.

Startup

Introduction

Use this utility to start up the Symposium Call Center Server services after they have been stopped by the Shutdown utility.

To access the Startup utility

From the Windows Start menu, choose Programs → Symposium Call Center Server → Startup.

**Result:** The Symposium Call Center Server Startup dialog box appears.

System Information

Introduction

Use this utility to view particulars about the Symposium Call Center Server System, such as names, IP addresses, and system numbers.

To access the System Information utility

From the Windows Start menu, choose Programs → Symposium Call Center Server → System Information.

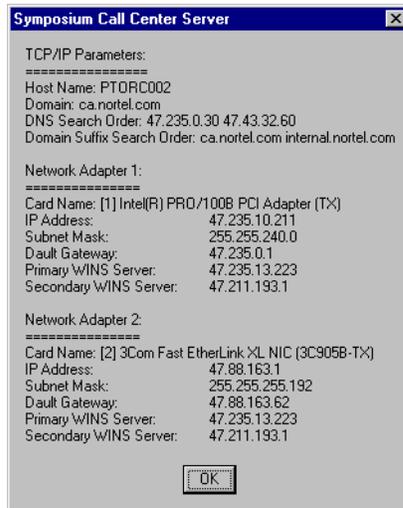**Result:** The Symposium Call Center Server information window appears.
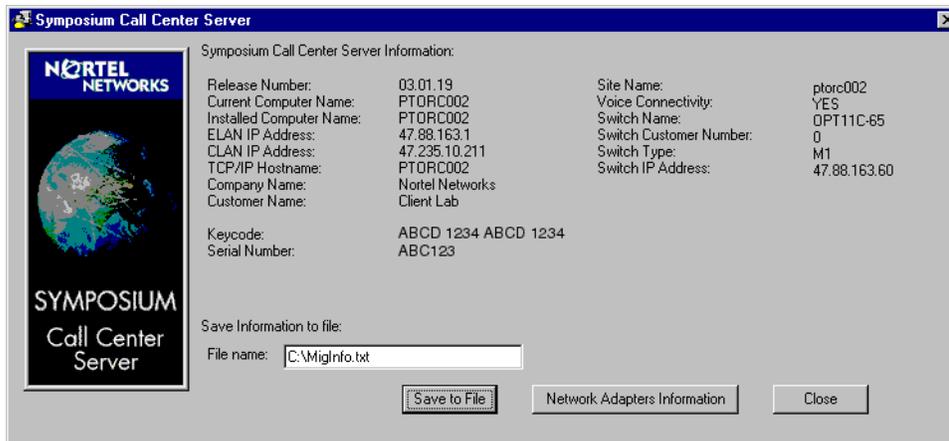
To use the System Information utility

Use this utility to view system information at a glance. You can also keep system information in a file on the computer or on a security floppy disk. To save a file, enter a path in the File name dialog box, such as C:\Mgtinfo.txt or A\:Mgtinfo.txt, and then click Save to File. A copy of all displayed information is saved in the file you just created.

To obtain Network Adapters Information

You can also obtain detailed information about network addresses by clicking Network Adapters Information. When you press this button, the following window appears:

```
Symposium Call Center Server                          [X]

TCP/IP Parameters:
================
Host Name: PTORC002
Domain: ca.nortel.com
DNS Search Order: 47.235.0.30 47.43.32.60
Domain Suffix Search Order: ca.nortel.com internal.nortel.com

Network Adapter 1:
================
Card Name: [1] Intel(R) PRO/100B PCI Adapter (TX)
IP Address:              47.235.10.211
Subnet Mask:            255.255.240.0
Dault Gateway:          47.235.0.1
Primary WINS Server:    47.235.13.223
Secondary WINS Server:  47.211.193.1

Network Adapter 2:
================
Card Name: [2] 3Com Fast EtherLink XL NIC (3C905B-TX)
IP Address:              47.88.163.1
Subnet Mask:            255.255.255.192
Dault Gateway:          47.88.163.62
Primary WINS Server:    47.235.13.223
Secondary WINS Server:  47.211.193.1

                    [  OK  ]
```

After viewing the information on this screen, click OK to return to the System Information Utility main window.
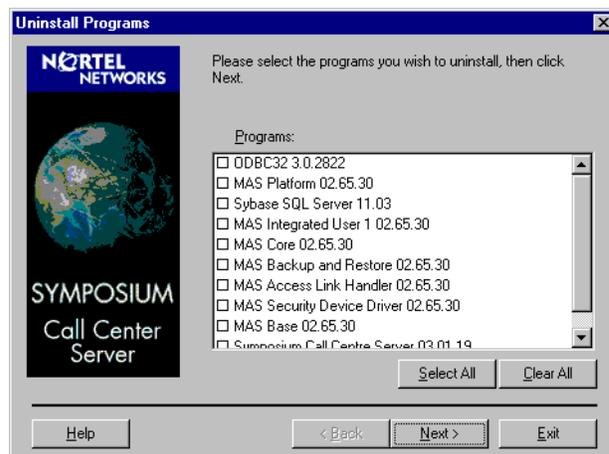
Uninstall

Introduction

Use this utility to uninstall the Symposium Call Center Server application. From the Uninstall main window, select the items you want to uninstall, and then click Next to start the uninstall wizard.

To use the Uninstall utility

1   From the Windows Start menu, choose Programs → Symposium Call Center Server → Uninstall.

Result: The Uninstall Programs window appears.

2   Click the items you want to uninstall, or click Select All.

3   Click Next and follow screen instructions from the uninstall wizard.

For more information on installing and uninstalling Symposium Call Center Server software, refer to "Installing the server software" on page 106 and "Installing the client from the distribution CD" on page 145.

Appendix A

Troubleshooting

In this appendix

Troubleshooting installation problems

Introduction

To perform troubleshooting for the software installation, refer to the following chart. See "Other documents" on page 300 for more information and extended system-level troubleshooting.

When a system error occurs

For all errors, record the error messages, the system configuration, and actions taken before and after the error occurred. If the problem persists, contact your Nortel Networks Customer Support representative.

Troubleshooting chart for server installation problems

Symptom	Probable cause	Action
Error messages from the database setup during server installation.	Files copied incorrectly; other programs running on the server during installation.	■ Uninstall, and then reinstall the software. ■ Close any other programs running on the server (for example, Control Panel) before reinstalling.
Error messages at the end of the server software installation.	Files copied incorrectly.	Uninstall and then reinstall the software.
Blue screen appears during restart after pcAnywhere Version 9.2 installation.	Incompatible video driver.	1 Press Reset to restart. 2 When prompted, select Windows NT VGA. 3 When the `Last known configuration` message appears, press Reset again. 4 Repeat steps 2 and 3 one more time. 5 When prompted, select Windows NT VGA. 6 Allow the server to start with the Last known good configuration. (After three failed restart attempts, pcAnywhere switches to Fault Tolerant start mode.) 7 If you see the message `A video compatibility problem caused pcAnywhere to switch to the "Compatibility" video mode`, click OK. 8 Uninstall pcAnywhere (see "Uninstalling pcAnywhere 9.2" on page 97).

Symptom	Probable cause	Action
		9 Change the video driver (see "To change the video drivers" on page 217).
		10 Install pcAnywhere Version 9.2 (see "To install pcAnywhere Version 9.2" on page 81).
		11 If the problem is not resolved, contact your Nortel Networks Customer Support representative.
The following message appears when you try to configure pcAnywhere settings: `You do not have rights to modify this file.`	This problem appears only on NTFS if access rights for Windows NT Users to pcAnywhere files are not set properly.	1 Close pcAnywhere.
		2 Go to %Systemroot%Profiles\All Users\Application Data\Symantec.
		Note: If your OS is upgraded to WindowsNT 4, %Systemroot% is the Winnt35 directory. Otherwise, %Systemroot% is the Winnt directory.
		3 Select the pcAnywhere directory.
		4 Right-click the directory and, from the Properties menu, select Security.
		5 Click Permissions and, for Administrators, select Full Control for Type of Access.
		6 Click OK to save changes.
		7 Click OK to exit the Properties window.

Symptom	Probable cause	Action
Server fails to initialize with the switch.	■ Incorrect switch parameters were entered during server installation.	Verify and change switch parameters defined on the server. See "Feature Report: Switch Information" on page 272.
	■ For a DMS/MSL-100 switch, the dongle is not attached to the parallel port on the server.	Connect the correct dongle to the port. Ensure the dongle ID matches the serial number entered during installation.

Troubleshooting chart for client installation problems

Symptom	Probable cause	Action
Error messages at the end of the client software installation.	Files copied incorrectly.	Uninstall and then reinstall the software.
Client upgrade resets halfway through the setup.	This error occurs if, during the client upgrade, you choose to upgrade common Microsoft DLLs.	Reinstall the software. When you are informed of a newer or read-only version of a common Microsoft DLL, click No. Do not upgrade the file, as this causes the upgrade to fail.

Symptom	Probable cause	Action
Client software fails to start.	Possible client path overflow problem. The maximum length of the path is a function of the environment size, which depends on other parameters. To detect this problem, compare the path in the autoexec.bat file with the path shown by executing the command "path" at the command prompt.	1 Try reducing the length of the directory path for installing the client application software, or uninstall another software application from the client PC. 2 Uninstall the Symposium Call Center Server client application, restart the client PC, and reinstall the Symposium Call Center Server client application.
Error message: Setup is not able to determine whether DMI service is running.	You are not logged on to the client PC as Administrator.	Log on to the client PC as Administrator, and start the installation again.

Further troubleshooting

For detailed maintenance and diagnostics procedures, refer to one of the following guides:

■ *Meridian Application Server Installation and Maintenance Guide* for your server hardware platform

■ *Administrator's Guide*

Troubleshooting network connection problems

Introduction

If the test described in "To test the ELAN and CLAN network connection" on page 72 fails, then follow these steps to verify that the server ELAN (and CLAN card, if present) are configured and identified correctly.

Note: If you want to verify that the 1.1.1.1 placeholder address has been assigned to the ELAN card and that the 2.2.2.2 placeholder address has been assigned to the CLAN card, you can perform these steps before you configure the ELAN and CLAN cards.

Requirements

You require the following items:

- a laptop or PC that is near the server and can be connected directly to the server. In this procedure, the laptop or PC is referred to as the client PC.
- a direct connect (crossover) network cable that allows two PCs to be directly connected without a hub in between them

To resolve the failed ping

1   Plug the crossover network cable into the network card in the client PC.

2   Plug the other end into the ELAN card in the server.

3   If you must restore the IP address information of the client PC after this procedure, then record the TCP/IP IP address, subnet mask, and gateway of the client PC.

4   Configure the client PC with an IP address that is part of the same subnet as the IP address assigned to the ELAN card.

   Example: If the server ELAN card has the IP address 1.1.1.1, then assign the laptop or PC an IP address of 1.1.1.2.

5 Set the client PC to have a subnet mask of 255.0.0.0. Leave the gateway blank.

6 Open an MS-DOS prompt window on the client PC and try to ping the server ELAN card. For example, if the server ELAN card has the IP address 1.1.1.1, then type **ping 1.1.1.1**, and then press Enter.

If the ping test succeeds, then you know that you have correctly identified the ELAN card in the network control panel.

The other network card, if present, must be the CLAN card.

7 From the server, repeat the steps described in "To test the ELAN and CLAN network connection" on page 72. If the sanity test fails again, then verify that the network is set up correctly.

Note: In a system recovery situation that requires a Windows NT reinstallation, remove the CLAN card before installing Windows NT. When you install Windows NT, configure the only network card remaining—the ELAN card—in the server.

Troubleshooting the client-server connection

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 "Changing the server IP address or site name" on page 258. 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   Check that all network cables are securely attached to the client PC and server.

2   Make sure that the SMI system is configured properly. Select the system in the SMI Workbench, and choose File → System Properties. The IP address and name should match the CLAN IP address and site name, respectively, specified on the worksheet in "Server and client software installation information" on page 18.

3   From the client, try to ping the server's CLAN IP address. If you are using a dial-up connection, then 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 pinging 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). For instructions on creating a dial-up connection profile, refer to the *Nortel Networks Symposium Call Center Server Software Administrator's Guide*.

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 an SMI system" on page 168.

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 "Configuring TCP/IP for ELAN, CLAN, and Remote Access Service" on page 49.

Note: If you must change the server's CLAN or ELAN IP address, see "Changing the server IP address or site name" on page 258.

(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 "Configuring TCP/IP for ELAN, CLAN, and Remote Access Service" on page 49.

3   Check that Remote Access Service is started. See "To verify that the RAS service is set to automatic" on page 40.

Troubleshooting problems with Symposium Call Center Server services

The System Monitor window

The System Monitor Window (SMonW) displays automatically on the server PC as the software loads. This window shows the status of services. Some services take a few minutes to become active. When all services are running properly on the Symposium Call Center Server, the SMonW window shows the status of server services as UP.
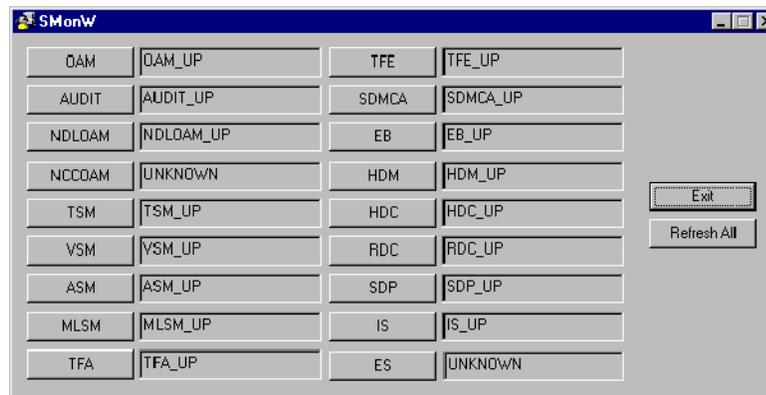
ATTENTION	Only one SMonW window should ever be open at any given time. More than one open SMonW window causes services to shut down.

If a service has to be reactivated or refreshed, then click Refresh All. To refresh individual services, click the appropriate button.

Symposium Call Center Server services

All of the Symposium Call Center Server functions are Windows NT services. Each service, as described in the following table, is started automatically by the Services manager when the server starts up. If networking is enabled, then the NDLOAM appears in the UP state. NCCOAM appears in the UP state only if your server is configured as an NCC.

Server service	Shown as	Purpose
Operations, Administration and Management	OAM	System operation, administration, and management
Auditing	AUDIT	Monitor function that manages all services
Network services (M1 only)	NDLOAM	Nodal system operation, administration, and management
Network services (M1 only)	NCCOAM	Network Control Center system operation, administration, and management
Telephony Service Manager	TSM	Telephony interface between switch and server
Voice Services Manager	VSM	Interface to Meridian Mail via ACCESS VOICE processing interface
Agent Skillset Manager	ASM	Agent and skillset handling
Meridian Link Services Manager	MLSM	Allows third-party applications to interface with Symposium Call Center Server
Task Flow Access	TFA	Allows third-party access via scripting commands (Data Exchange server)
Task Flow Executor	TFE	Executes all scripts and handles all calls
Statistical Data Manager Configuration	SDMCA	Manages all of the other statistical collection services
Historical Data Manager	HDM	Manages all of the historical data collected by HDC
Historical Data Collection	HDC	Collects all of the historical data

Server service	Shown as	Purpose
Real Time Data Collector	RDC	Collects and generates real-time statistics for displays
Statistical Data Propagator	SDP	Distributes incoming statistical data to the appropriate service
Intrinsic Services	IS	Manages skillset intrinsic data
Event Server	ES	Manages events

TFE does not come up after an upgrade or conversion

If the Task Flow Executor (TFE) does not appear in the UP state after an upgrade, then you must validate all scripts to correct the problem. For more information on validating scripts, refer to the *Scripting Guide* for your switch type.

TSM does not come up on my NCC server

This is normal. The Network Control Center, if present, performs only network administrative functions and does not perform any call processing. The telephony services manager (TSM), therefore, is not required. The only services that should be up are

- OAM
- AUDIT
- NCCOAM
- HDM

Other services do not come up

This problem can occur if you have more than one System Monitor Window open.

Troubleshooting other problems

Swap file usage exceeds 80%, or system is low on virtual memory

If the server has insufficient swap file space, a warning message appears, notifying you that it is low on virtual memory. You can also check swap file usage in the Performance Monitor. Swap file usage should not be consistently greater than 80%.

On a 1003t platform

If you have a 1003t platform, you can increase swap file space to 368 Mbytes. To do so, follow these steps:

1   Log on to Windows NT as Administrator.

2   In the Control Panel window, double-click System.

3   Click the Performance tab.

4   In the Virtual Memory section, click Change.

    The Virtual Memory dialog box opens.

5   Select the drive containing your swap file.

6   If the swap file is located on drive D, ensure that the drive has at least 578 Mbytes of free disk space. (This ensures that at least 200 Mbytes of free disk space remains after you increase the swap file size.) If it does, continue with the following step.

    If drive D does not contain 578 Mbytes of free space, select a different drive. Continue selecting drives until you find one with at least 378 Mbytes of free disk space. If you find a suitable drive, continue with the next step. (If you cannot find a drive with enough space, contact Nortel Networks Customer Support.)

7   Under Paging File Size for Selected Drive, enter 368 for Initial Size, and 368 for Maximum Size.

8   Click Set, and then click OK.

    Result: You return to the System Properties property sheet.

9   Click OK.

10 Click Yes when prompted to restart the PC.

On any other platform

If you have another platform, contact your Nortel Networks Customer Service representative.

Other documents

Introduction

For additional information related to Symposium Call Center Server, refer to
"Related documents" on page 4.

For Windows information, refer to the following table:

Document name	Document number	Purpose
Windows 95 Documentation Set	Produced by and available from your local Microsoft distributor	• Windows 95 operating system troubleshooting
Windows 98 Documentation Set	Produced by and available from your local Microsoft distributor	• Windows 98 operating system troubleshooting
Windows NT Server Documentation Set	Produced by and available from your local Microsoft distributor	• Windows NT operating system troubleshooting

Appendix B

Migrating to another platform

In this section

Migration procedure overview

Introduction

Platform or server migration is a process whereby the data residing on a server's hard disk is copied onto a second server. The primary reasons to perform a platform migration are

- a hardware failure

- to change to a different server with increased capacity

This process allows you to remove a server from the network and immediately replace it with another server.

If you want to perform a server conversion from Release 1.x to Release 3.0 and perform a platform migration, you must perform the conversion and migration separately.

Example

- If you want to migrate from a 2-Gbyte first-physical-drive server to a 4-Gbyte first-physical-drive server, perform the conversion on the original server first and then migrate to the new server. This ensures that there is more free disk space on the new server. In this case, the swap file on the new server remains on drive D.

- If you want to migrate from a 4-Gbyte first-physical-drive server to another 4-Gbyte first-physical-drive server, perform the platform migration to the new server first, and then perform the conversion. Since the new server is usually faster, the conversion process finishes sooner on the new server. This is a key point since there is usually a limited amount of downtime available to complete this task. As part of the conversion process, the swap file is moved off of drive D.

Supported platforms

The platform migration procedure applies to the supported platforms running as Symposium Call Center Server Release 3.0 (M1, DMS/MSL), listed in the following table:

Original platform	New platform
1000t	1000t
1000t	701t
1000t	702t
1000t	1001t
1000t	1003t
701t	701t
701t	702t
701t	1001t
701t	1003t
702t	702t
702t	1003t
1001t	1001t
1001t	1003t
1003t	1003t

Note: For Symposium Call Center Server Release 3.0 (Network Control Center servers), the platform migration procedure only applies to the last three supported platform pairs.

Before you begin

To ensure that you have all the information you need to complete the Platform Migration procedures, do the following before you begin platform migration:

- Follow the steps in the Migration checklist.
- Follow the instructions in the "Preparing for migration" and "Collecting original server information" sections, and complete the worksheets in the "Worksheets for collecting original server information" section.

Check for Installation Addendum

When performing a platform migration, check the Installation Addendum on your regional Symposium Call Center Server technical web site. North American customers refer to the web site at www.nortel-sccs.com. European customers refer to the Symposium Call Center Server area on the web site at www.nortelnetworks.com/nic.

Migration checklist

The following major steps are required to perform the platform migration:

Description	✔
Prepare the materials for migration. See "Preparing for migration" on page 307.	
Use the migration utility to collect the original server's setup record and database configuration to a Platform Recovery Disk. See "Collecting information from the Migration Utility" on page 310.	
Record the Windows NT version. See "Checking the Windows NT version" on page 315.	
Record the disk partition configuration. See "Checking the disk partition configuration" on page 313.	
Record the RAM size. See "Checking RAM size" on page 317.	

Description	✔
Record the location and size of the swap file. See "Checking the swap file location" on page 319.	
Record the Symposium Call Center Server software version. See "Checking the Symposium Call Center Server software version" on page 321.	
Record the PEP level applied. See "Checking the PEP level applied" on page 323.	
Configure the new server in exactly the same way as the original server. See "To configure the new server" on page 330. **ATTENTION** Keep the swap file of the new server on drive D and ensure that the size is 268 Mbytes before the Symposium Call Center Server software is installed. See "To configure the new server" on page 330.	
Prepare the new server using the Platform Recovery Disk. This places the original server's setup record and database configuration on the new server. See "To install the Symposium Call Center Server software" on page 334.	
Install the same version of the Symposium Call Center Server software on the new server as on the original server. **ATTENTION** The configuration parameters must match on both servers. See "To install the Symposium Call Center Server software" on page 334.	
Update the new server to the same PEP level as the original server. See "To install the Symposium Call Center Server software" on page 334. **Note:** PEPs are available on your regional Symposium Call Center Server PEP web site. (North American customers refer to the web site at www.nortel-sccs.com. European customers refer to the Symposium Call Center Server area on the web site at www21.nortelnetworks.com/TSC_EUROPE.)	

Description	✔
Perform a database backup on the original server. Keep the original server offline before the database backup and until all data has been successfully migrated to the new platform. See "Backing up the original platform database" on page 348.	
Save the NBSystemRecord table from the new server database to an NBSystemRecord backup disk. See "To restore the original platform database to the new platform" on page 349. **Note:** The NBSystemRecord table contains hardware-specific information for the new server and must be restored after the original server database is migrated to the new server.	
Restore the database backup from the original server to the new server. See "To restore the original platform database to the new platform" on page 349.	
Restore the NBSystemRecord table from the NBSystemRecord disk to the new server. See "To restore the original platform database to the new platform" on page 349.	
Verify the integrity of the database. See "To restore the original platform database to the new platform" on page 349.	
Complete the migration. See "To complete the migration" on page 357.	

Preparing for migration

Introduction

You need to have the following materials available before starting the migration process:

- blank tapes or data cartridges
- two blank preformatted disks
- Symposium Call Center Server software
- the latest available PEP that includes the Platform Migration Support Utilities, and Backup and Restore Utilities
- a tape drive and associated driver software. The tape drive installed on the new server must be compatible with the tape drive on the original server running Symposium Call Center Server.

Required materials

Blank tapes/data cartridges

During the platform migration, you need blank tapes to store the original server's database using the database backup procedure. The blank tape must be the correct type for the tape drive on the original server, and the tape capacity must be large enough to contain the database backup.

Blank disks

You need two blank preformatted disks to

- create a Platform Recovery Disk that contains the original server's setup record and database configuration
- store the new server's NBSystemRecord table

Symposium Call Center Server software

Platform migration requires that the new server be installed with the same version of the Symposium Call Center Server software that is installed on the original server. You need the following installation disks:

- Nortel Networks Symposium Call Center Server Release 3.0 Operating System CD Version 2.0, and three Windows NT 4.0 Setup start disks

- Nortel Networks Symposium Call Center Server Application CD

- Nortel Networks Symposium Call Center Server Supplementary CD (optional). If supplied with the installation, this CD contains product enhancement packages (PEPs).

Platform migration support utilities and backup and restore utilities

Ensure that the latest platform migration support utilities, and backup and restore PEP levels are applied to both the original and new servers. PEPs are available on your regional Symposium Call Center Server PEP web site. North American customers refer to the web site at www.nortel-sccs.com. European customers refer to the Symposium Call Center Server area on the web site at www21.nortelnetworks.com/TSC_EUROPE.

Tape drive and associated drive software

If the new server is equipped with a tape drive that is incompatible with that of the original server, remove the new server's tape drive and install a compatible tape drive and driver software.

Notes:

- The tape drive replacement is temporary and required for the migration procedure only. Save the new server's tape drive and its driver software disks for reinstallation into the new server.

- If you are borrowing the tape drive from the original server, you should replace the tape drive on the new server after the original server database has been backed up.

You might also need adapters to connect the tape drives. For information on replacing a tape drive, refer to the maintenance guide for your hardware platform.

Collecting original server information

Introduction

The new server must use the same base configuration information as the original server. This section shows you how to obtain the required information from the original server before starting the platform migration process.

You can divide the information gathering into eight parts:

1. collecting information from the Migration Utility

2. checking the disk partition configuration

3. checking the Windows NT version

4. checking the computer name

5. checking the RAM size

6. checking the swap file location and size

7. checking the Symposium Call Center Server software version

8. checking the PEP level applied

Before you begin

Perform the following tasks before you begin to collect information from the original server:

■ Check the Installation Addendum for Migration on your regional Symposium Call Center Server technical web site.

■ Ensure that the latest available PEPs are applied to the original server. The PEPs include the Platform Migration Utilities, and the Backup and Restore Utilities.

Collecting information from the Migration Utility

You can gather some of the required information using the Migration Utility as shown in this section. The information might also have been gathered during the installation of the original server, as shown in Chapter 2, "Worksheets and checklists."

To collect information from the Migration Utility

To gather the original server's setup record and database configuration to a disk, follow these steps:

1 Log on to the original server as NGenSys.

2 From the Windows Start menu, choose Programs → Symposium Call Center Server → Migration.

Result: The Platform Migration Utility dialog box appears.
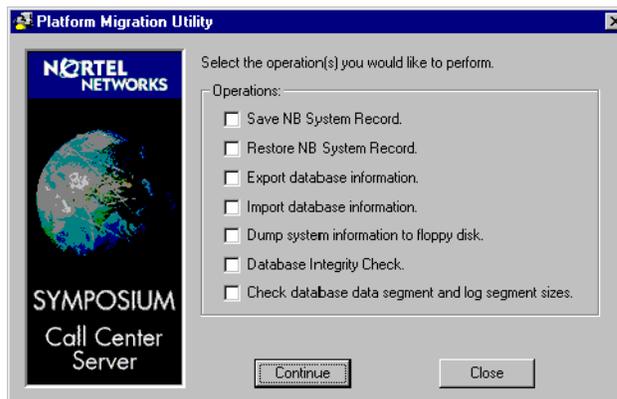
3 Select the Export database information function. The Dump system information to floppy disk function is automatically selected. Click Continue.

Result: The following dialog box appears:
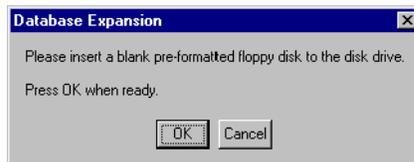
4   Insert a blank preformatted disk into drive A, and then click OK.

Result: Files containing the original server's setup record and database configuration are exported to the disk. The following dialog box appears:

5   Click OK.

Result: The following dialog box appears:

6   Click OK.

Result: The following dialog box appears:

7   Remove the disk from drive A, label it "Platform Recovery Disk," and click OK to exit the migration utility.

8   Keep the Platform Recovery Disk in a safe place.

Platform Recovery Disk

The Platform Recovery Disk contains the file MigInfo.txt, which includes the following information about the original server:

M1 Symposium Call Center Server

■   keycode

■   M1 serial number

- installed computer name
- current computer name
- site name
- M1 Switch name
- M1 Switch IP address
- M1 Switch customer group number
- M1 Switch type
- Server ELAN IP address
- Server CLAN IP address
- Server TCP/IP hostname
- Server TCP/IP protocol setup (that is, gateway, subnet mask, and so on)
- Voice Connectivity

DMS/MSL Symposium Call Center Server

- keycode
- Nortel Networks software feature key serial number
- installed computer name
- current computer name
- site name
- DMS/MSL Switch name
- DMS/MSL Switch IP address
- DMS/MSL Network Node
- DMS/MSL Application ID
- DMS/MSL Service ID
- DMS/MSL Service Version
- DMS/MSL Business Group
- DMS/MSL Linkset Name
- DMS/MSL Password
- Server ELAN IP address
- Server CLAN IP address
- Server TCP/IP hostname

- Server TCP/IP protocol setup (that is, gateway, subnet mask, and so on)
- Voice Connectivity

NCC Symposium Call Center Server

- keycode
- M1 serial number
- installed computer name
- current computer name
- site name
- Server ELAN IP address
- Server CLAN IP address
- Server TCP/IP hostname
- Server TCP/IP protocol setup (that is, gateway, subnet mask, and so on)

Note: The Platform Recovery Disk contains important information for system recovery and platform migration if needed in the future.

Checking the disk partition configuration

The new server must have the same or a greater number of logical disk drive partitions as the original server. If the original server has four logical disk drive partitions (for example C, D, F, and G), then the new server must have at least four or more disk drive partitions, C, D, F, G, and optionally, H and I.

The logical disk drive letter assignment of all partitioned disks on the new server must match those on the original server. Any additional partitioned disk drive on the new server must be assigned to the next higher logical drive letter. For example, if the original server has C, D, F, and G assigned to the four partitioned drives, then the new server must also have C, D, F, and G assigned to the first four partitioned drives. You should also assign H and I to additional disk partitions on the new server, if needed.

ATTENTION   By default, a new server is preinstalled with drive E as the CD-ROM drive. However, in some cases, the original server might have a drive letter other than E assigned to the CD-ROM drive. For example, if the original server has C, D, E, and F drive letters assigned to the first four partitioned drives, and G assigned as the CD-ROM drive, then the new server must also have C, D, E, and F drive letters assigned to the first four partitioned drives, and G assigned as the CD-ROM drive. If needed, you can change the drive letter assignment on the new server to match the assignment on the original server. See "Changing the drive letter assignment on the new server" on page 331.

Each disk partition size on the new server must be as large as or larger than the corresponding drive on the original server.

To check the disk partition configuration on the original server

1   From the Windows Start menu, choose Programs → Administrative Tools → Disk Administrator.

2   Record the following items on the "Disk partition configuration worksheet" on page 325:

   ■ displayed disk number

   ■ logical disk drive letter assignments

   ■ size of each partitioned disk

3   Ensure that the new server has the same disk partition configuration as the original server.

The following presents an example only of disk partition configuration:

Disk number	Disk drive letter assignment	Disk partition size
Disk 0	C	102 Mbytes FAT
Disk 0	D	2047 Mbytes NTFS
CD-ROM 0	E	539 Mbytes CDFS
Disk 1	F	4095 Mbytes NFTS

Note: You must correct any noncompliant disk partition configuration on the new server, either by repartitioning the disk drive, reassigning drive letters, or replacing the server with a new platform that meets the requirements. See the maintenance guide for your hardware platform.

Checking the Windows NT version

Before you install the new server with Symposium Call Center Server software, make sure the new platform is installed with the same version of the Windows NT operating system as the original server. If needed, repartition all drives and reinstall the operating system again in the new server. See the maintenance guide for your hardware platform.

To check the Windows NT version on the original server

1   Right-click the Windows Start menu and choose Explore.

2   On the Exploring window, choose Help → About Windows NT.

   Result: The About Windows NT dialog box appears.

3   Record the Windows NT version and Service Pack version on the "Windows NT version worksheet" on page 326.

4   Click OK.

Checking the computer name

By default, a new server is installed with a dummy computer name. When you prepare the new server for platform migration, you must change the dummy computer name to the Installed Computer Name of the original server. (The installed computer name might not be the same as the current computer name of the original server.) The procedure for checking the installed computer name varies depending on the PEP level running on the server. Use the appropriate procedure for your system (see below).

Notes:

■   After you complete the platform migration, change the computer name to match the current computer name of the original server. For more information, refer to "Computer Name Sync" on page 254.

■   The computer name is case-sensitive. Ensure that the computer name used on the new platform is exactly the same as the name on the old platform.

To check the installed computer name on a server running SU04S or greater

1   On the original server, insert the Platform Recovery Disk into the floppy drive A.

2   From the Windows Start menu, choose Run.

3   Type **notepad A:\MigInfo.txt**, and then click OK to open the MigInfo.txt file.

4   Record the Installed Computer Name and Current Computer Name on the "Computer name worksheet" on page 326.

To check the installed computer name on a server running a lower PEP level

1   From the Windows Start menu, choose Programs → Symposium Call Center Server → Feature Report.

2   Click the System tab.

3   Record the SQL Server Name and the Computer Name.

   Notes:

   ■   The first part of the SQL Server name is the installed computer name. For example, if the SQL Server Name is SCCS3_SQLSRV, then the installed computer name is SCCS3.

   ■   The Computer Name displayed is the Current Computer Name. For example, if the Computer Name displayed is SCCSREL3, then the Current Computer Name is SCCSREL3.

4   Record the Installed Computer Name and Current Computer Name on the "Computer name worksheet" on page 326.

Checking RAM size

The total physical RAM of the new server should be the same as on the original server.

To check the RAM size on the original server

1   From the Windows Start menu, choose Settings → Control Panel, and then double-click the System icon.

   Result: The System Properties property sheet appears, with the General tab displayed.

2   Record the RAM size on the "RAM size worksheet" on page 326.
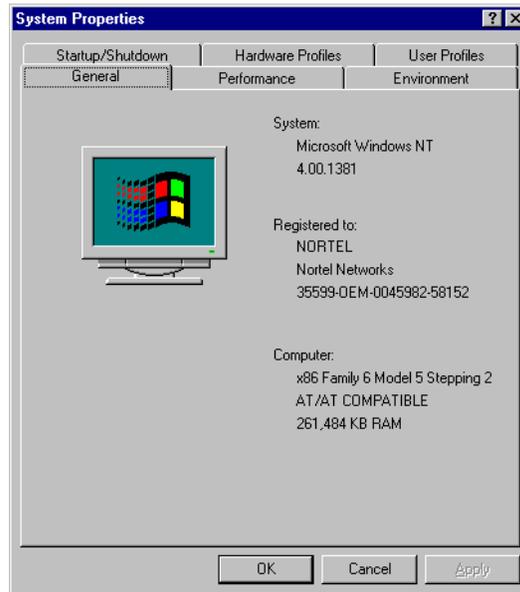
Checking the swap file location

The new server must have the same swap file location and size as the original server.

To check the swap file location and size on the original server

1   From the Windows Start menu, choose Settings → Control Panel, and then double-click the System icon.

   Result: The System Properties property sheet appears.
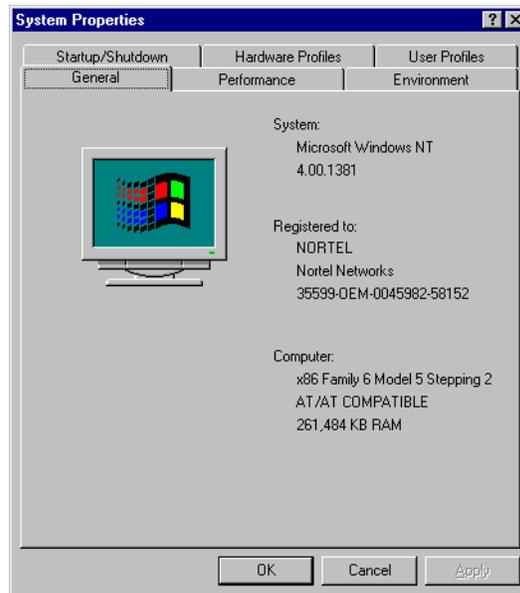
2   Click the Performance tab.

Result: The Performance property page appears.
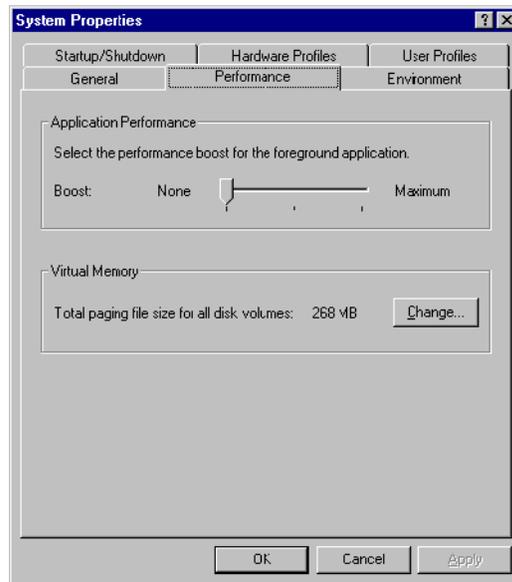
3   Click Change in the Virtual Memory section.

Result: The Virtual Memory dialog box appears.
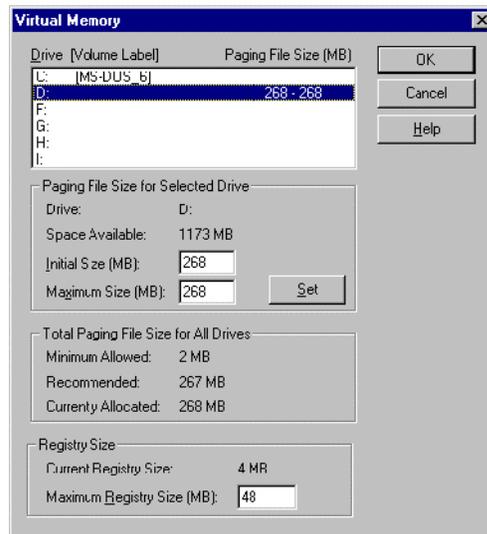
4   Record the disk location and size of the swap file or paging size (for
          example, drive D, 268 Mbytes) on the "Swap file location worksheet" on
          page 326.

5   Click Cancel to exit the Virtual Memory dialog box.

6   Click Cancel to exit the System Properties property sheet.

7   Close the Control Panel window.

Checking the Symposium Call Center Server software version

The new server must have the same software release version as the original
platform.

To check the Symposium Call Center Server software version on the original server

1   On the original server, from the Windows Start menu, choose Programs →
          Symposium → Symposium Call Center Server → Feature Report.

2   Choose the System tab.

3   Record the Platform Version and Symposium Call Center Server Version on the "Symposium Call Center Server software version worksheet" on page 327.

4   Ensure that you obtain the correct version of the software CDs for installation on the new server.
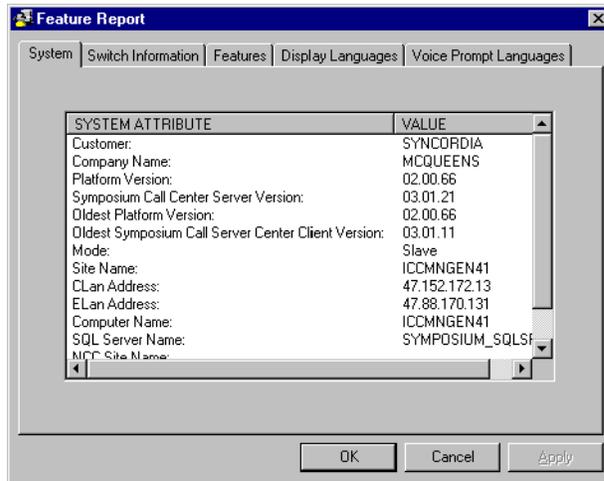
Checking the PEP level applied

The new server must be installed with the same PEP level as the original server.

To check the PEP levels on the original server

1   On the original server, from the Windows Start menu, choose Programs →
Symposium → Symposium Call Center Server → DMI_View.

Result: The DMI Viewer appears.
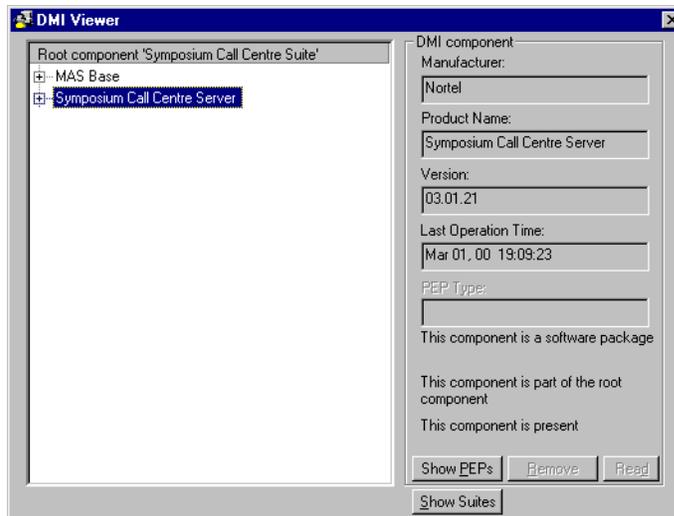
2   Click Show PEPs.

Result: The List of all PEPs appears.
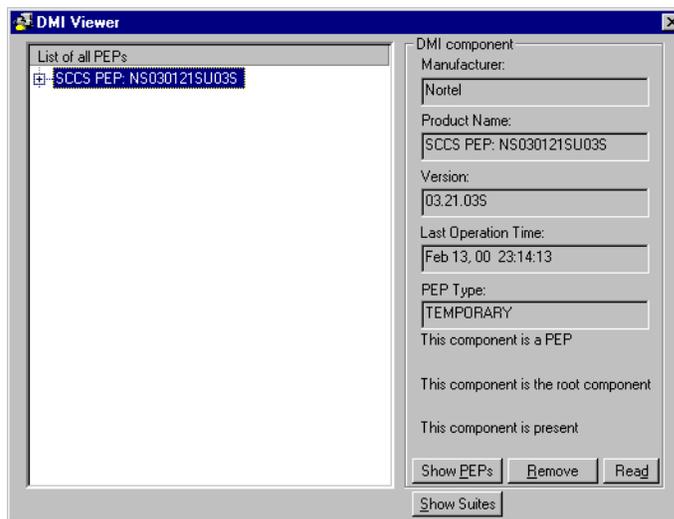
3   Click each displayed PEP on the list of PEPs. Record the PEP Product Name, PEP Version, and PEP Type in the DMI Component area for each PEP on the "PEP level worksheet" on page 327.

Worksheets for collecting original server information

Introduction

Make photocopies of these worksheet pages and use them to record original server information for platform migration.

Disk partition configuration worksheet

Disk number	Disk drive letter assignment	Disk partition size

Windows NT version worksheet

Item	Fill in the required information
Windows NT version	
Service Pack version	

Computer name worksheet

Item	Fill in the required information
Installed Computer Name (that is, the Original Computer Name)	
Current Computer Name	

RAM size worksheet

Item	Fill in the required information
RAM size	

Swap file location worksheet

Item	Fill in the required information
Swap file logical disk location	
Swap file or paging size	

Symposium Call Center Server software version worksheet

Item	Fill in the required information
Platform Version	
Symposium Call Center Server Version	

PEP level worksheet

Item	Fill in the required information
PEP Product Name	
PEP Version	
PEP Type	
PEP Product Name	
PEP Version	
PEP Type	
PEP Product Name	
PEP Version	
PEP Type	
PEP Product Name	
PEP Version	
PEP Type	
PEP Product Name	
PEP Version	
PEP Type	

Item	Fill in the required information
PEP Product Name	
PEP Version	
PEP Type	

Platform migration procedure

Introduction

This platform migration procedure applies to all supported migration paths. The procedure enables the original server to continue functioning until the new server is ready to be put into service.

You can divide the platform migration procedure into six parts:

1. configuring the new server

2. installing the Symposium Call Center Server software

3. adjusting the swap file, if necessary

4. backing up the old platform database

5. restoring the old platform database to the new platform

6. completing the migration

If the call center continues to respond to calls using Symposium Call Center Server after the database backup, then some call pegging data will be missing between the database backup of the original server and the restored database of the new server. If you must transfer pegging data to the new server, Nortel Networks recommends that

- the original server be taken out of service before the database backup and remain out of service during the entire migration procedure

- the customer collects all of the needed call statistic and pegging data from the original server's database before the server is taken out of service

To configure the new server

1   If the new platform is equipped with a tape drive that is incompatible with the tape drive on the original server, then remove the tape drive and install a compatible drive and its driver software on the new platform. See the maintenance guide for your hardware platform.

Note: If you are moving the original tape drive to the new platform, ensure that the database backup of the original platform is complete before you remove the drive. See "Backing up the original platform database" on page 348.

2   Ensure that the new platform is disconnected from the network of the original platform (both ELAN and CLAN). The new platform should remain disconnected from the network until the migration procedure is completed.

3   Ensure that the new platform is installed with the correct version of operating system (NT 4.0 with Service Pack 3), and all disks are installed and partitioned as on the original server.

4   Ensure that the computer name on the new server is the same as the Installed Computer Name for the original server. See "Checking the computer name" on page 316. If you need to change the computer name of the new server, see Chapter 3, "Configuring Windows NT 4.0 server."

Notes:

■   The computer name is case-sensitive. Ensure that the computer name used on the new platform is exactly the same as the name used on the old platform.

■   If the computer name on the original server was changed after the Symposium Call Center Server software was installed, use the Installed Computer Name for this step. After you complete the platform migration, change the computer name to match the Current Computer Name of the original server. For more information, refer to "Computer Name Sync" on page 254.

5   Ensure that the TCP/IP and RAS settings are configured as on the original server. Compare to the TCP/IP parameter information in the MigInfo.txt file of the Platform Recovery Disk. For detailed instructions, refer to the following sections:

■   "Configuring the modem for Remote Access Service" on page 61

- "Configuring TCP/IP for ELAN, CLAN, and Remote Access Service" on page 49

Note: It is important that the new platform be disconnected from the network of the original platform (both ELAN and CLAN) before making the IP configuration change; otherwise, a duplicate IP error can occur and stop the original platform from normal operation.

6   Check and verify that the new server's disk configuration matches that of the original server. (See "Checking the disk partition configuration" on page 313.) To reassign drive letters on the new server, see "Changing the drive letter assignment on the new server" below.

7   Make sure the Virtual Memory allocation (swap file) on the new server is set to drive D and 268 Mbytes.

8   Restart the new server to activate all the changes (computer name, network IP configuration, and so on).

Note: It is normal for the Windows NT operating system to disable the network card if it is disconnected from the network. Ignore this warning and continue with the migration procedure.

Changing the drive letter assignment on the new server

Use this procedure if the drive letter assignment on the new server does not match that of the original server.

To check the drive letter assignment

1   On the new server, from the Windows Start menu, choose Programs → Administrative Tools → Disk Administrator.

2   If the disk administrator has never been run before, it needs to update the system configuration. Click OK to let it do so.

3   For any new disks in the system, the Disk Administrator warns you that there is no signature on the disk. Click OK to allow the signature to be written to disk. You must repeat this step for each new disk in the system.

4   Check whether the hard drives on the new server have the same drive letter assignments as the original server.

5   If the drive letter assignments match, exit the Disk Administrator by selecting Partition → Exit from the Disk Administrator window.

6 If the drive letter assignments do *not* match, use the following procedure to reassign the drive letters on the new server to the drive letter assignments of the original server.

To change the drive letter assignment

Note: Disk Administrator will not let you reassign a hard drive to a drive letter that is currently in use by another drive. You must first assign each hard drive to a temporary drive letter and restart the server. Then you can reset the drive letters to the correct order.

1 Assign the CD-ROM drive to the last available drive letter as follows:

   a. From the Disk Administrator window, select Tools → Assign CD-ROM Drive Letters.

   b. In the CD-ROM Drive Letters dialog box, change the drive letter to the last available letter, and then click Change.

   c. In the confirmation dialog box, confirm that the drive letter should be changed immediately by clicking Yes.

2 For each hard drive partition (excluding the C partition), follow these steps to change the drive letter to the last available drive letter:

   a. Start with the second partition on drive 0 and click the partition to select it.

   b. From the Disk Administrator window, select Tools → Drive Letter.

   c. In the Assign Drive Letter dialog box, change the drive letter to the last available drive letter, and then click OK.

   d. The Disk Administrator warns you that the drive cannot be locked for exclusive use (so the drive letter cannot be changed immediately). Click OK to continue.

   e. In the confirmation dialog box, click Yes to change the drive letter when the system is next restarted.

   f. Repeat this step for each remaining hard drive partition in the system.

Note: When you change the drive letters on the remaining partitions, the system informs you that the drive letters can be changed immediately (click Yes to do so). This is because the partitions are not the primary partition (the one with the operating system installed on it).

3   From the Disk Administrator window, select Partition → Commit Changes Now to save the drive letter assignment.

   Result: A message appears, warning you that you should update the emergency repair disk.

4   Click OK to continue.

5   The system alerts you that the server must now be restarted to allow the drive letters to be changed. Click OK to shut down and restart the server.

6   After the server restarts, log on to Windows NT as the Administrator.

7   After you log on, a message appears in the System dialog box. Click Cancel to exit.

8   Assign the CD-ROM drive to the correct drive letter:

   a.   From the Disk Administrator window, select Tools → Assign CD-ROM Drive Letters.

   b.   In the CD-ROM Drive Letters dialog box, change the drive letter to the correct letter, and then click Change.

   c.   In the confirmation dialog box, confirm that the drive letter should be changed immediately by clicking Yes.

9   For each hard drive partition (excluding the C partition), change the drive letter to the correct drive letter:

   a.   Start with the extended partition on drive 0, and click the partition to select it.

   b.   From the Disk Administrator window, select Tools → Drive Letter.

   c.   In the Assign Drive Letter dialog box, change the drive letter to the correct drive letter, and then click OK.

   d.   The Disk Administrator warns you that the drive cannot be locked for exclusive use (so the drive letter cannot be changed immediately). Click OK to continue.

   e.   In the confirmation dialog box, click Yes to change the drive letter when the system is next restarted.

   f.   Repeat this step for each remaining hard drive partition in the system.

   Note: When you change the drive letters on the remaining partitions, the system informs you that the drive letters can be changed immediately (click Yes to do so). This is because the partitions are not the primary partition (the one with the operating system installed on it).

---

10 From the Disk Administrator window, select Partition → Commit Changes Now to save the drive letter assignment.

Result: A message appears, warning you that you should update the emergency repair disk.

11 Click OK to continue.

Result: The system alerts you that the server must now be restarted to allow the drive letters to be changed.

12 Click OK to shut down and restart the server.

13 After the server restarts, log on to Windows NT as Administrator.

14 Ensure the new server has the same logical disk drive letter assignment as the original server.

To install the Symposium Call Center Server software

You must install the new server with the same Symposium Call Center Server software version and the same PEP level as the original server.

1 Log on to the new server as the administrator.

2 Insert the Platform Recovery Disk from the original server into drive A of the new server.

3 Open a Command window.

4 Type **A:**, and then press Enter.

5   Type **sysrecres.exe**, and then press Enter.

Result: After several minutes, the Platform Migration Utility dialog box appears.
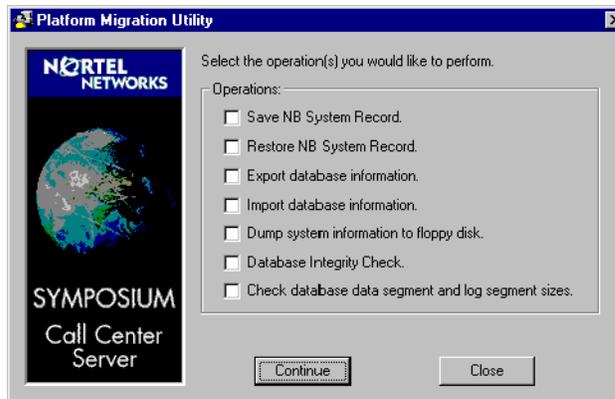
6   Select Import database information from the selection dialog box. Click Continue.

Result: The following dialog box appears:
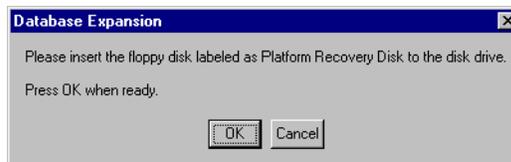
7   Make sure the Platform Recovery Disk is in drive A, and then click OK to continue.

Result: The database information is imported to the new server.

IF	THEN
you see the message `Please eject the floppy disk from the drives and start the Symposium Call Center Server installation`	proceed with steps 8 to 19.

IF	THEN
you see the message `This platform cannot support platform migration. There is not enough disk space`	click OK, and proceed with steps 8 and 9, and then follow the procedure "To adjust the swap file" on page 340. You are asked to perform steps 1 to 19 in this procedure ("To install the Symposium Call Center Server software") after you complete the procedure "To adjust the swap file" on page 340.

8   Remove the disk from drive A and click OK.

Result: The sysrecres.exe utility is terminated.

CAUTION

Risk of database restoration error
Import the original platform database configuration before installing the Symposium Call Center Server software.

9   Close the command prompt window.

ATTENTION   If you saw the message in step 7, `This platform cannot support platform migration. There is not enough disk space`, follow the procedure "To adjust the swap file" on page 340 now. You are asked to perform steps 1 to 19 after you complete the procedure "To adjust the swap file" on page 340.

10   Install the DMI (see "To install DMI" on page 106).

Note: During the entire installation process, you must use the same setup data you collected from the original server. See the MigInfo.txt file on the Platform Recovery disk for server details.

11   Install the MAS server software (see "To install the MAS server software" on page 109).

Note: If the original server is a Release 3.0 server that was converted from Release 1.x, and if the Installed Computer Name of the original server is

less than six characters, continue with the following step after the MAS server software installation. Otherwise, skip to step 13.

12 If the original server is a Release 3.0 server that was converted from Release 1.x, and if the Installed Computer Name of the original server is less than six characters, then, after the MAS server software installation, change the computer name by following these steps:

a. In the Control Panel window, double-click Network.

Result: The Network property sheet appears.
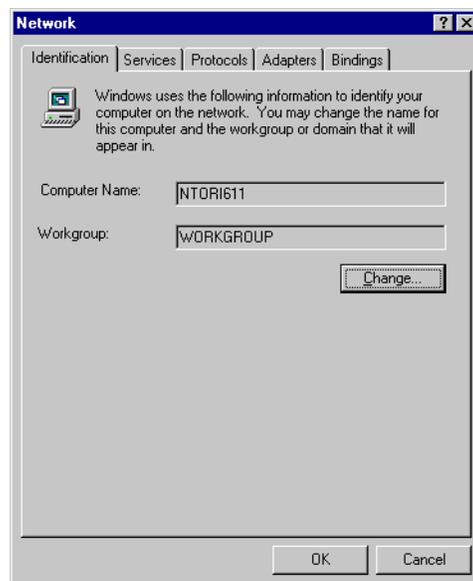
b. Record the displayed Computer Name and provide a copy to the system administrator.

c. Click Change.

Result: The Identification Changes dialog box appears.
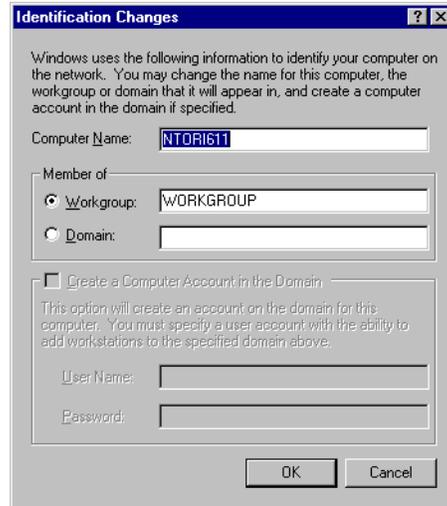
d. Enter the new computer name (that is, the Current Computer Name of the original server). The computer name must be a single word without spaces, 6 to 15 characters long. Letters, numbers, a hyphen, and a dash are allowed.

e. Click OK.

   Result: A message appears, indicating that the name change was successful.

f. Click OK.

g. The Network property sheet appears.

h. Click OK.

   Result: The system prompts you to restart.

i. Click OK to restart the PC.

Note: If a Dr. Watson error for bcksrvr.exe appears after you restart the PC, click OK to ignore it. This error occurs because the sql.ini file is not up-to-date. This file is updated during the Symposium Call Center Server installation, and you do not see the error after the installation is completed.

13 Install the Symposium Call Center Server software (see "To install Symposium Call Center Server software" on page 113).

IF	THEN
you see the message `The database will take between 1 to 3 hours to create...`	the platform migration is proceeding and should complete successfully. At this point, to save time, you can perform the database backup on the original server. See "Backing up the original platform database" on page 348.
you see the message `This platform cannot support platform migration. There is not enough disk space`	click OK. If the following two error messages appear, click OK to abort the migration procedure. Then, check whether the swap file on drive D is reduced to 32 Mbytes. If it is not reduced to 32 Mbytes, go to the procedure "To adjust the swap file" on page 340 now. If it is reduced to 32 Mbytes already, contact your Nortel Networks Customer Support representative.

Error

An ERROR occured while executing.
Please check the D:\Nortel\iccm\dbinst\sysmig.txt logfile for details

OK

Symposium Call Centre Server

Could not create the database

OK
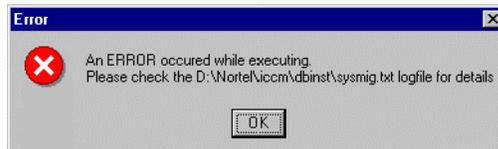
Notes:

■ It is very important that you install the new server with the same Symposium Call Center Server software version as the original server.

- You do not need to configure the new server in Configuration Mode during installation of the Symposium Call Center Server software.

- If the server is a DMS/MSL server type, you do not need to connect the feature key adapter (dongle) to the LPT1 parallel port of the new server during Symposium Call Center Server installation.

14   After installation of the Symposium Call Center Server software, restart the new server.

15   At the new server, log on to Windows NT as NGenSys.

16   If you reduced the swap file to 32 Mbytes and the swap file was on drive D on the original server, follow the procedure "To move the swap file from drive D for Windows NT 4.0" on page 345. This moves the swap file to the next available drive, as drive D would not have sufficient free drive space if the swap file was extended to the required 268 Mbytes.

17   If the swap file on the original server was on a drive other than D and the new server has the same sized drive D partition as the original server, follow the procedure "To move the swap file from drive D for Windows NT 4.0" on page 345. This moves the swap file to the same drive as the original server. To determine the swap file location, see "Checking the swap file location" on page 319. If the new server has a larger sized D partition than the original server, do not move the swap file from drive D.

18   Apply the same Performance Enhancement Packages (PEP) level to the new server as in the original server.

   Note: It is very important that the new server be installed with the platform migration support PEP and the minimum backup and restore PEP level for the corresponding version. PEPs are available on your regional Symposium Call Center Server PEP web site.

19   With the Symposium Call Center Server software successfully installed, follow these procedures: "To back up the database of the original server" on page 348, "To restore the original platform database to the new platform" on page 349, and "To complete the migration" on page 357.

To adjust the swap file

If the physical disk space on drive D cannot accommodate the old database size, an error message appears stating `This platform cannot support platform migration. There is not enough disk space.`

- If this message appears when the database information is being imported to the new server (steps 1 to 7 in "To install the Symposium Call Center

Server software" section), skip the first nine steps and perform steps 10 and 11 as follows.

■ If this message appears during installation of the Symposium Call Center Server software (step 13 in "To install the Symposium Call Center Server software" on page 334), proceed with steps 1 to 11 as follows.

1 Click OK to abort the migration procedure.

2 Check the log file D:\Nortel\iccm\dbinst\sysmig.txt to determine how much more space is required.

3 If the log file indicates that the required disk space is greater than 268 Mbytes, then the new server does not have sufficient disk space on drive D. For assistance, contact your Nortel Networks Customer Support representative.

4 If the required disk space is less than 268 Mbytes, clean up the Symposium Call Center Server installation by running uninstall. From the Windows Start menu, choose Programs → Symposium Call Center Server → Uninstall.

5 Click Select All to uninstall all the components for both MAS and Symposium Call Center Server.

6 Follow the on-screen instructions to complete the uninstall process. See "Uninstalling server software" on page 133.

7 When prompted to restart the system, click No.

8 Run uninstall one more time to remove DMI. From the Windows Start menu, choose Programs → Symposium Call Center Server → Uninstall. Follow the on-screen instructions.

9 When prompted to restart the system, click OK.

10 Once the system has restarted, reduce the swap file size on drive D, setting both minimum and maximum values to 32 Mbytes using the procedure "To reduce the swap file size on drive D" on page 342.

11 Perform steps 1 to 19 in the procedure "To install the Symposium Call Center Server software" on page 334. If you do not see the message `The database will take between 1 to 3 hours to create...`, contact your Nortel Networks Customer Support representative.

To reduce the swap file size on drive D

Use this procedure only if instructed from the procedure "To adjust the swap file" on page 340.

1   From the Windows Start menu, choose Settings → Control Panel, and then double-click the System icon.

   Result: The System Properties property sheet appears.
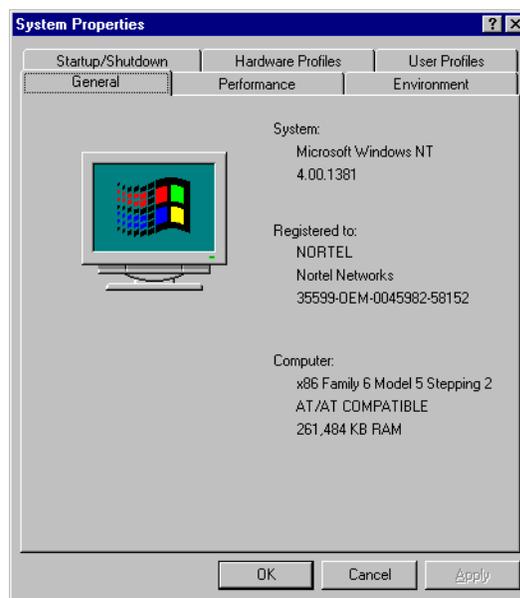
2   Click the Performance tab.

Result: The Performance property page appears.
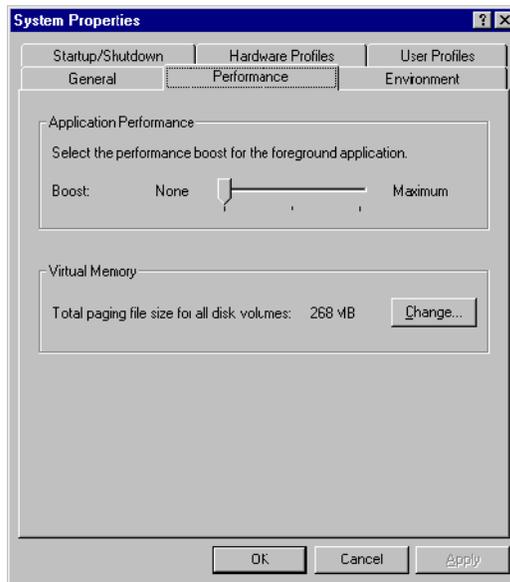
3   Click Change in the Virtual Memory section.

Result: The Virtual Memory dialog box appears.
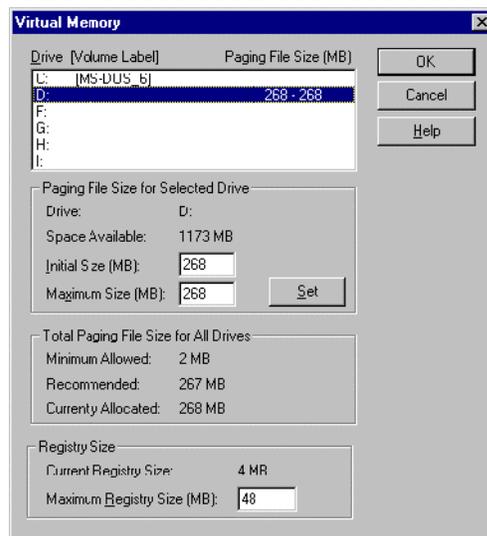
4   Highlight drive D.

5   Type **32** for both Initial Size (MB) and Maximum Size (MB).

6   Click Set and accept any warnings presented.

7   On the Virtual Memory dialog box, click OK.

8   On the System Properties property sheet, click Close.

9   Restart the server when prompted.

To move the swap file from drive D for Windows NT 4.0

Use this procedure only if instructed in "To adjust the swap file" on page 340, or "To install the Symposium Call Center Server software" on page 334.

1   From the Windows Start menu, choose Settings → Control Panel, and then double-click the System icon.

Result: The System Properties property sheet appears.
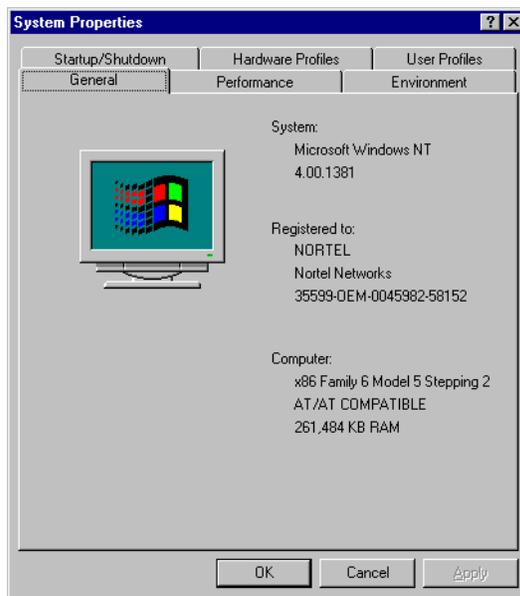
2   Click the Performance tab.

Result: The Performance property page appears.
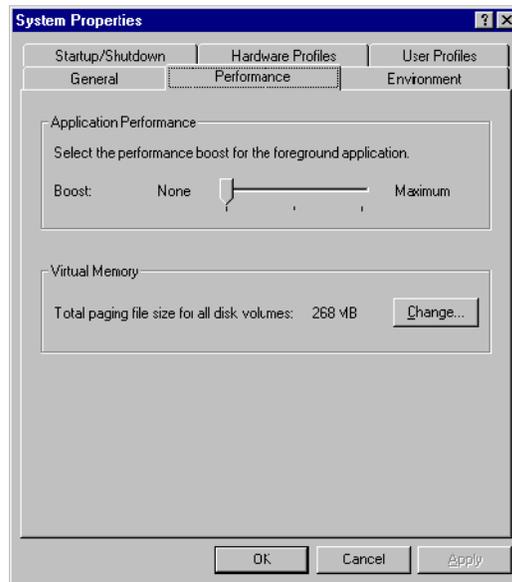
3   Click Change in the Virtual Memory section.

Result: The Virtual Memory dialog box appears.
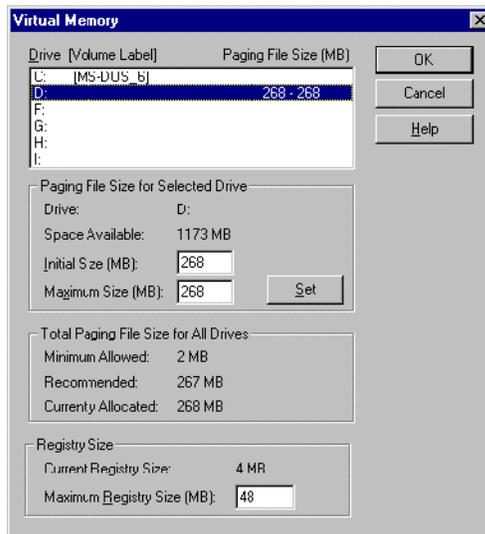
4   Highlight drive F, or the first drive letter that appears after drive D.

5   Ensure that there are at least 288 Mbytes of available space.

6   If there is not enough available space, select the next available drive and repeat steps 4 and 5. If you check all drives and none have 288 Mbytes of available space, contact your Nortel Networks Customer Support representative for assistance.

7   Highlight drive D to display the existing swap file Initial Size (MB) and Maximum Size (MB).

8   Type **0** for both Initial Size (MB) and Maximum Size (MB).

9   Click Set and accept any warnings presented.

10   Select the drive identified in steps 4 through 6.

11   Type **268** for both Initial Size (MB) and Maximum Size (MB), and click Set.

12   Click OK to apply the changes.

13   Click Close in the System Properties property sheet.

Result: The system indicates that a restart is required.

14   Click Yes to restart the system now.

Backing up the original platform database

The migration process involves backing up the entire database of the original server. You can perform this process in parallel with the steps of configuring the new server and installing the Symposium Call Center Server software, or ahead of time.

Note: The migration process allows the original server to remain online and in active service while the database is backed up and restored to the new server. This causes some call statistics and data pegging to be missing from the backup tape.

ATTENTION	If it is important that all call statistic and data pegging be migrated to the new server, take the original server offline before the database backup, and ensure that it remains offline until all data has been successfully migrated to the new server. You must collect all call statistics and data pegging before the original server is removed from service.

Note: Although the database backup is an online process, it adds an additional load to the server and reduces overall call center performance. Nortel Networks recommends that you perform this procedure during non-peak traffic hours. Do not change any call center configuration or user setup information during the database backup operation.

To back up the database of the original server

1   Insert a blank tape into the original platform tape drive.

2   From a client PC, log on to the original platform as a Symposium Call Center Server administrator.

3   Schedule a partial database backup (database only) on the original platform. See the *Administrator's Guide*.

4   Once the database backup is complete on the original platform, remove the backup tape. Save this backup tape for the restore of the original platform database on the new server.

To restore the original platform database to the new platform

The final part of the migration procedure involves restoring the original server database backup to the newly installed server. The new server must have been installed with the same Symposium Call Center Server software version as the original server. The new server does not need to be connected to the network or to the M1 or DMS switch.

1 If SuperPEP SU04S or greater is installed on the server, shut down the Symposium Call Center Server services by following these steps:

Note: Do not attempt to shut down services while the services are being started up.

a. Open a Command window (from the Windows Start menu, choose Programs → Command Prompt).

b. In the Command window, type **D:**, and then press Enter.

c. Type **cd \nortel\iccm\bin**, and then press Enter.

d. Type **iccmsd –a –h1**, and then press Enter.

Result: The Symposium Call Center Server services shut down.

e. Verify that all services are shut down, and then, on the service status summary dialog box, click Accept.

2 From the Windows Start menu, choose Programs → Symposium Call Center Server → Migration.

Result: The Platform Migration Utility dialog box appears.
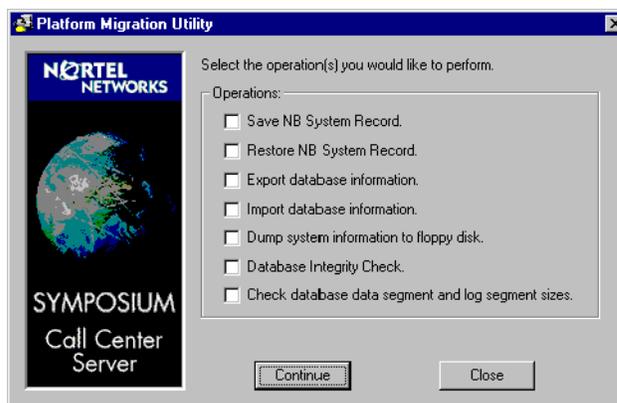
3   Save the NBSystemRecord by following these steps:

   a.   Choose the Save NB System Record option. Click Continue.

   Result: The following dialog box appears:

   b.   Click OK to shut down the Symposium Call Center Server.

   Result: When the Symposium Call Center Server shuts down, the following dialog box appears:
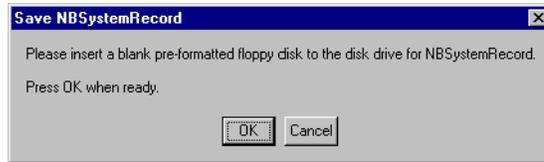
   c.   Insert a blank preformatted disk into the floppy disk drive, and click OK to continue after the disk is inserted.

   Result: The following dialog box appears:

   d.   Eject the disk and label it as instructed. Click OK to terminate the utility (the utility closes automatically after you click OK). Set aside the NBSystemRecord backup disk for step 10.

4   Insert the database backup tape from the original platform into the tape drive of the new platform.

> **ATTENTION**   The new platform must have a tape drive and driver software compatible with the original platform. The new platform must be installed with the minimal backup and restore PEP level before you can proceed to the next step. The computer name of the new server must be the same as that of the original server.

5   On the new server, from the Windows Start menu, choose Programs → Symposium Call Center Server → Database Restore to migrate the original platform database to the new platform.

Result: The Database Restore dialog box appears.
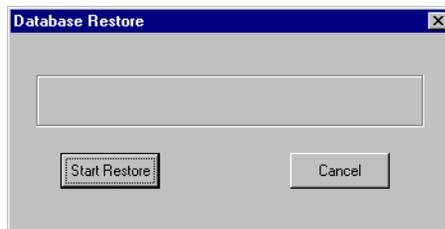
6   Click Start Restore to begin the database restore process.

Result: The message `Please ensure the database backup tape is in the tape drive` appears.

7   Click OK to continue.

Result: The database takes one to three hours to restore, depending on the amount of data. The following dialog box appears:
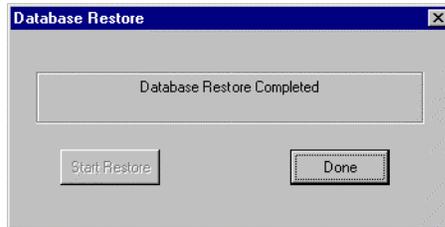
Note: A log file is created with the following pathname after the database restore is completed:
D:\Nortel\data\backup\RestoreLogs\restore.log

8   Click Done.

Result: The following dialog box appears:

9   Eject the backup tape from the tape drive, and then click OK to exit the Database Restore utility. *Do not* restart the server.

10   Restore the NBSystemRecord by following these steps:

a.   From the Windows Start menu, choose Programs → Symposium Call Center Server → Migration.

Result: The Platform Migration Utility dialog box appears.
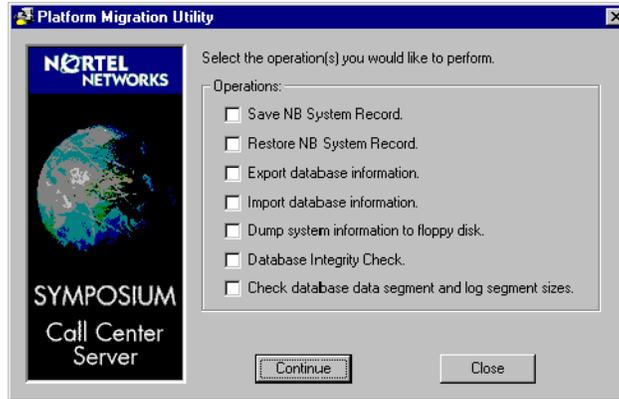
b. Select the Restore NB System Record option. Click Continue.

Result: The following dialog box appears:
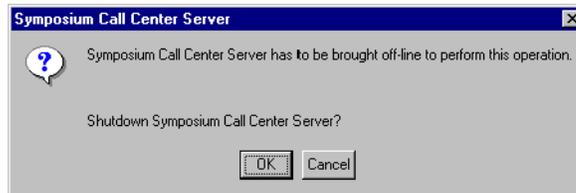
c. Click OK to shut down the Symposium Call Center Server.

Result: When the Symposium Call Center Server shuts down, the following dialog box appears:
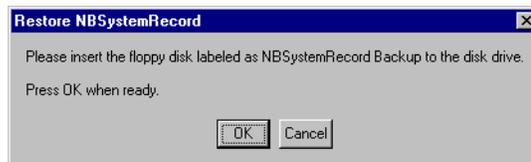
d. Insert the NBSystemRecord Backup disk created in step 3 into the drive, and click OK to continue.

Note: It takes some time for the database server to recover from the database restore and can take several minutes for the SQL database server to start up properly. The utility waits until the SQL server is started before restoring the NBSystemRecord table. Wait until the following dialog box appears:

Symposium Call Center Server

NBSystem Record has been restored successfully.
Please eject the floppy disk from the disk drive.

[OK]

e. Eject the NBSystemRecord Backup disk from the drive, and then click
OK to continue.

Result: The selection dialog box appears.

Platform Migration Utility

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Select the operation(s) you would like to perform.

Operations:

- ☐ Save NB System Record.
- ☑ Restore NB System Record.
- ☐ Export database information.
- ☐ Import database information.
- ☐ Dump system information to floppy disk.
- ☐ Database Integrity Check.
- ☐ Check database data segment and log segment sizes.

SYMPOSIUM
Call Center
Server

[Continue]   [Close]

11 Perform the database integrity check by following these steps:

a. Select the Database Integrity Check option. Click Continue.

Result: The following dialog box appears:

Symposium Call Center Server

Symposium Call Center Server has to be brought off-line to perform this operation.

Shutdown Symposium Call Center Server?

[OK] [Cancel]

b. Click OK.

Result: The following dialog box appears:

Symposium Call Center Server

(i) Database integrity check takes 1-3 hours depending on the databse size.

[OK]
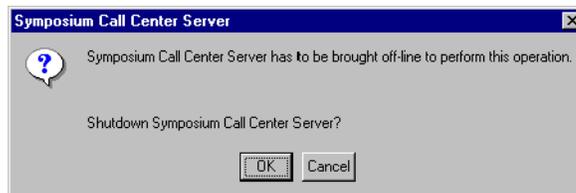
c. Click OK to start the database integrity check.

Note: The database integrity check takes a while to complete, and you might not see any activity on the screen, but you should notice continuous disk activity. Wait until the following dialog box appears:

Symposium Call Center Server

(i) Database integrity check completed successfully. Please see C:\DbChk.log for integrity check result.

[OK]

d. Click OK to terminate the utility (the utility closes automatically when you click OK).

e. Check the database check log (C:\DbChk.log) for database errors.

Note: Contact your Nortel Networks Customer Support representative for any detected database error. *Do not* put the server into service with any detected database errors, even though it might seem to be functioning normally. When checking the log file, search for key words such as ERROR or MSG.

12 Remove the latest Super PEP by following these steps:

a. Start the DMI View utility by choosing, from the Windows Start menu, Programs → Symposium Call Center Server → DMI View.

Result: The DMI Viewer window appears.

b. Click Show PEPs.

c. Select the PEP you want to uninstall.

d. Click Remove.

Result: The Service Status Log appears.

e. Click Accept.

Result: The Nortel System Operation window appears.

    f. Click OK.

       Result: The following message appears: `Setup reboots system after uninstall.`

    g. Click OK.

       Result: The system restarts.

13 Log on to Windows NT as NGenSys.

14 Reinstall the latest Super PEP and any dependent PEPs by following these steps:

    a. Shut down all applications, including screen savers.

    b. Insert the PEP CD into the CD-ROM drive or download the PEP or Service Update electronically.

    c. Locate the PEP directory on the CD.

       Example: For the PEP named NS030121G001S, the path might be E:\03.01.21\PEPs\NS030121G001S, where

Code	Meaning
NS	Nortel Networks Symposium Call Center Server
030121	Build number of Symposium Call Center Server software
G	General Release (Other options include SU=Service Update, L=Limited, and R=Restricted.)
001	the PEP number
S	a server PC PEP (Other options include C=Client.)

    d. Check the readme file in the PEP directory for any special instructions or dependencies before installing the PEP.

    e. Double-click the file runme.exe, and then follow the screen instructions.

    Result: The PEP installer wizard verifies that the PEP can be installed successfully. The PEP installer then shuts down and restarts the server. For PEPs installed on the client PC, the PEP installer checks that no Symposium Call Center Server services are currently running. This process takes several minutes. The client PC is not shut down. The PEP is installed on the PC and all updated files are backed up.

    Note: If the PEP installer detects that the PEP cannot be installed successfully, contact your Nortel Networks Customer Support representative for assistance.

To complete the migration

1 If the tape drive on the new server is not the original tape drive, remove it and replace it with the original drive, including the proper driver software.

2 Shut down the call center operation and services on the original server. Disconnect the original server from the network.

3 If the server is a DMS/MSL server type, disconnect the Nortel Networks software feature key adapter (dongle) from the LPT1 parallel port of the original platform and move it to the new platform.

4 Connect the new server to the network. Restart the server to full service.

5 Verify the proper operation of the Symposium Call Center Server software on the new server.

6 Back up the new server's database. (See the *Administrator's Guide*.)

7 Create a platform recovery disk for the new server. (See "To collect information from the Migration Utility" on page 310.)

Note: Nortel Networks recommends that you perform a full backup on the new server before putting the server into full service.

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.

ACCESS link

A communication channel between the Symposium Call Center Server and Meridian Mail.

ACCESS voice port

A Meridian Mail voice port that is controlled by the ACCESS link.

ACD call

See Automatic call distribution call.

ACD-DN

See Automatic call distribution directory number.

ACD group

See Automatic call distribution group.

ACD routing table

See Automatic call distribution routing table.

ACD subgroup

See Automatic call distribution subgroup.

acquired resource

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

activated script

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

activity code

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

administrator

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

agent

A user who is responsible for handling customer calls.

agent login ID

A unique identification number assigned to a particular agent. The agent uses this number when logging 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.

application

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

application program interface

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

associated supervisor

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

Automatic call distribution call

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

Automatic call distribution directory number

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

Automatic call distribution group

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

Automatic call distribution routing table

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

Automatic call distribution subgroup

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

C

call age

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

call destination

The site to which an outgoing network call is sent. *See also* call source.

call intrinsic

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

call presentation class

A collection of preferences that determines how calls are presented to an agent. A call presentation class specifies whether a break time between calls is allowed, whether an agent can put DN calls on hold for incoming ACD calls, and whether an agent phoneset displays that the agent is reserved for a network call.

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 source

The site from which an incoming network call originates. *See also* call destination.

call treatment

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

call variable

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

Calling Line Identification

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

CDN

See controlled directory number.

CLAN

See Customer local area network.

CLID

See Calling Line Identification.

client

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

command

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

controlled directory number

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

Customer local area network

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

D

DBMS

Database Management System

deactivated script

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

default activity code

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

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.

destination site

The site to which an outgoing network call is sent. *See also* source site.

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.

directory number

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

directory number call

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

display threshold

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

DMS

Digital Multiplex Switch

DN

See directory number.

DN call

See directory number call.

DNIS

See Dialed Number Identification Service.

dongle

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

dynamic host configuration protocol

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

dynamic link library

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

E

ELAN

See embedded local area network.

embedded local area network

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

Emergency key

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

event

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

expression

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

F

filter timer

The length of time after the system unsuccessfully attempts to route calls to a destination site, before that site is filtered out of a routing table.

first-level threshold

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

G

global settings

Settings that apply to all skillsets or IVR ACD-DNs that are configured on your system.

global variable

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

I

ICM

See Intelligent Call Manager.

Incalls key

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

Intelligent Call Manager

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

Interactive voice response

An application that allows telephone callers to interact with a host computer using prerecorded messages and prompts.

Interactive voice response ACD-DN

A directory number that routes a caller to a specific IVR application. An IVR ACD-DN must be acquired for non-integrated IVR systems.

Interactive voice response event

A voice port logon or logoff. An IVR event is pegged in the database when a call acquires or de-acquires a voice port.

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.
For customers using NSBR, site IP addresses must be unique and correct. The
format of an IP address is a 32-bit numeric address written as four values
separated by periods. Each value can be 0–255. For example, 1.160.10.240 can
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.

IVR

See Interactive voice response.

IVR ACD-DN

See Interactive voice response ACD-DN.

IVR event

See Interactive voice response event.

IVR port

See voice port.

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.

local call

A call that originates at the local site. *See also* network call.

local skillset

A skillset that can be used at the local site only. *See also* network skillset, skillset.

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

M1

Meridian 1 switch

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* network script, 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.

Meridian Link Services

A communications facility that provides an interface between the switch and a third-party host application.

Meridian Mail

A Nortel Networks product that provides voice messaging and other voice and fax services.

Meridian MAX

A Nortel Networks product that provides call processing based on ACD routing.

MLS

See Meridian Link Services.

MM

See Meridian Mail.

music route

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

N

NACD call

A call that arrives at the server from a network ACD-DN.

NCC

See Network Control Center.

network call

A call that originates at another site in the network. *See also* local call.

Network Control Center

The server on a Symposium Call Center Server system where NSBR is configured and where communication between servers is managed.

network script

The script that is executed to handle error conditions for Symposium Call Center Server calls forwarded from one site to another, for customers using NSBR. The network script is a system-defined script provided with Symposium Call Center Server, but it can be customized by an authorized user. It can be deactivated but not deleted. *See also* master script, primary script, script, secondary script.

Network Skill-Based Routing

An optional feature with Symposium Call Center Server that provides skill-based routing to multiple networked sites.

network skillset

A skillset that is common to every site on the network. Network skillsets must be created at the Network Control Center (NCC).

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.

NSBR

See Network Skill-Based Routing.

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* local skillset, network skillset, skillset.

P

PBX

See private branch exchange.

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.

personal directory number

A DN on which an agent can be reached directly, usually for private calls.

phoneset

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

phoneset display

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

Position ID

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

primary ACD-DN

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

primary script

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

private branch exchange

A telephone switch, typically used by a business to service its internal telephone needs. A PBX usually offers more advanced features than are generally available on the public network.

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.

round robin routing table

A routing table that queues the first call to the first three sites in the routing table, then the second three sites, then the third three sites, and so on, until an agent is reserved at one of the sites. *See also* sequential routing table.

route

A group of trunks. Each trunk carries either incoming or outgoing calls to the switch. *See also* music route, RAN route.

routing table

A table that defines how calls are routed to the sites on the network. *See also* round robin routing table, sequential routing table.

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, network 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, network, 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, network script, primary script, script.

sequential routing table

A routing table method that always queues a call to the first three active sites in the routing table. *See also* round robin routing table.

server

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

service

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

Service Control Manager

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

service level

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

service level threshold

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

Simple Network Management Protocol

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

site

1. A system using Symposium Call Center Server that can be accessed using SMI. 2. A system using Symposium Call Center Server and participating in Network Skill-Based Routing.

skillset

A group of capabilities or knowledge required to answer a specific type of call. *See also* local skillset, network skillset.

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.

source site

The site from which an incoming network call originates. *See also* destination site.

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 scripts

The Master_Script and the Network_Script (if NSBR is enabled).These scripts This script can be customized or deactivated by a user, but cannot be deleted. These scripts are This script is the first scripts executed for every local or network call arriving at the call center.

T   target site

See destination site.

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.

trunk

A communications link between a PBX and the public central office, or between PBXs. Various trunk types provide services such as Direct Inward Dialing (DID trunks), ISDN, and Central Office connectivity.

U

user-created script

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

user-defined script

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

utility

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

V   validation

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

variable

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

voice port

A connection from a telephony port on the switch to a port on the IVR system.

W   WAN

See Wide area network.

Wide area network

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

workload scenarios

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

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Reader Response Form

Nortel Networks Symposium Call Center Server
Product release 3.0
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P0910112

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