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Nortel Networks Symposium Call Center Server

Platform Migration Guide

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Contents

Chapter 1

Getting started

In this chapter

Overview

Introduction

This guide provides the procedures you must perform to migrate the data on your Release 4.2 Symposium Call Center Server to another server platform that is also running Release 4.2 of Symposium Call Center Server.

ATTENTION

This guide makes reference to procedures that are detailed in the *Installation and Maintenance Guide* for Release 4.2. To perform some of the procedures in this guide, therefore, you must have a copy of the *Installation and Maintenance Guide* available.

This chapter introduces Symposium Call Center Server and describes how the call center components interact with one another.

Who should read this guide

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

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 *Administrator's Guide*.

Optional features

Some 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 Symposium Call Center Server software. Fields and commands for features that you did not purchase are not available.

About Symposium Call Center Server

What is Symposium Call Center Server?

Symposium Call Center Server provides a call center solution for varied and changing business requirements. It offers a suite of applications that includes

- call processing
- agent handling
- management and reporting
- networking (for Meridian 1/CSE 1000 systems only)
- third-party application interfaces

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 Symposium Call Center Server

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

- **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 2000 Server or Windows 2000 Advanced Server.
- **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 can connect client PCs to either the embedded LAN (ELAN) or customer LAN (CLAN). Nortel Networks recommends connecting to the ELAN as this is more predictable and less susceptible to fluctuations resulting from data bursts in CLAN traffic.

Note: Symposium Call Center Web Client provides an additional means to configure the server and monitor call center performance through a web-based interface; however, you cannot perform certain administrative functions using Web Client, such as backing up and restoring the server, using the Voice Prompt Editor, and viewing the Event Browser. Therefore, you need at least one client PC installed with the Symposium Call Center Server Client application.

- **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 ("screen pops"), or to produce customized reports.

Switches supported by Symposium Call Center Server

Symposium Call Center Server supports the following switches:

- Meridian 1 (M1) nodal and networking
- Succession Communication Server for Enterprise 1000 (CSE 1000) nodal and networking
- Digital Multiplex Switch (DMS)
- Meridian Stored Logic 100 switch (MSL-100)

Notes:

- In all instances in this guide, the M1 switch refers to both the Meridian 1 switch and the Meridian 1 Internet Enabled switch, unless otherwise noted.
- The current release of the CSE 1000 switch only supports networking over ISDN trunks.

Related documents

Introduction

This section lists the documents in which you can find additional information about Symposium Call Center Server.

If you need more information about	Refer to
installing and configuring the Windows 2000 operating system, backing up and restoring your database, migrating your server to another platform, and installing Product Enhancement Packages (PEPs) and Service Update packs	*Symposium Call Center Server Installation and Maintenance Guide for Release 4.2*
the Meridian 1 switch	*Symposium Call Center Server, M1/CSE 1000, and Voice Processing Guide*
detailed historical reports	*Symposium Call Center Server Historical Reporting and Data Dictionary*
scripting	*Symposium Call Center Server Scripting Guide*
administering the Network Control Center server	*Symposium Call Center Server Network Control Center Administrator's Guide*
planning and engineering guidelines	*Symposium Call Center Server Planning and Engineering Guide*

Chapter 2

Platform migration

In this chapter

Using this chapter

Introduction

This chapter explains how to perform a platform migration on a Release 4.2 Symposium Call Center Server. This involves moving your setup configuration, call center configuration, and call statistics from one hardware platform to another. The procedures in this chapter also apply to servers in a networking environment and Network Control Center servers.

CAUTION

Risk of migration failure. Use the Migration checklist!

To complete a migration correctly, you must follow the Migration checklist that is included in this chapter (see "Migration checklist" on page 17). It provides an overview of each step that you must perform and the order in which you must perform the steps.

Important: Make a photocopy of the checklist and review it thoroughly before you start. During the migration procedure, check off each item in the checklist as you complete it to ensure you stay on track.

You must also have a copy of the Release 4.2 *Installation and Maintenance Guide* to perform a platform migration. Specific procedures from the *Installation and Maintenance Guide* are referenced from this chapter.

Migration checklist

Introduction

Use the following checklist to ensure that you perform all the required steps for migration. Make a photocopy of the checklist and keep it with you while you work.

The checklist is broken into several parts; each part corresponds to a different section in this chapter:

1. Preparing for migration (perform these steps in advance of the migration date)
2. Collecting information from the original server
3. Preparing the new server or reconfiguring the existing server
4. Completing the migration

How to use the checklist

Here are some important points to keep in mind when using this checklist:

- The checklist contains each main step you must perform to prepare for and complete a migration. The order in which you complete certain steps is critical, so do not change the order of the steps unless the instructions in this chapter provide you with that option.
- Each step in the checklist provides a page reference to the procedure you need to complete that step. Most of these procedures are in this chapter, and they appear in chronological order according to the checklist. However, certain procedures are in the Release 4.2 *Installation and Maintenance Guide*, so ensure you have that guide available during migration.

Important: When you complete a procedure that is documented in the *Installation and Maintenance Guide*, return to the checklist to check off the procedure and determine the next step in the migration process. Do not continue in the referenced chapter of the *Installation and Maintenance Guide*.

Step	✔
Preparing for migration **Note:** Perform these steps in advance of the scheduled conversion date.	
Step 1. Read the "Overview of migration" See "Overview of migration" starting on page 22 of this chapter.	
Step 2. Check for Installation Addenda. For instructions, see page 28.	
Step 3. Make sure you have the required Windows 2000 knowledge and documentation. For instructions, see page 29.	
Step 4. Gather the materials required for migration. For instructions, see page 29.	
Step 5. Investigate and resolve any tape drive compatibility issues. For instructions, see page 32.	
Collecting information from the original server	
Step 6. Install the latest Service Update pack and any required PEPs on the original server. **Note:** If you are converting within the same server and your server is equipped with RAID drives, then you have the option of splitting the RAID drives before installing the latest Service Update pack or PEP (instead of splitting the drives in Step 12 when you are configuring the operating system and drives on the server). If you choose to split the RAID drives now, then you must continue from Step 6 onward after you are finished. For instructions, see page 35.	

Step	✔
Step 7. Create a Platform Recovery Disk on the original server. For instructions, see page 38.	
Step 8. Check the disk partition configuration on the original server. For instructions, see page 43.	
Step 9. Check the Windows 2000 version on the original server. For instructions, see page 46.	
Step 10. Check the RAM size on the original server. For instructions, see page 47.	
Step 11. Check the Symposium Call Center Server software version on the original server. For instructions, see page 48.	
Preparing the new server **ATTENTION** If you are converting a Network Control Center (NCC) server, Nortel Networks recommends that you write down the IP addresses of all the sites in the network before proceeding with the following conversion steps. After you finish the conversion process on the NCC, this list of IP addresses enables you to re-add the network sites more efficiently. On the original NCC, open the Nbconfig utility and use the Site table tab to view and note the list of IP addresses.	
Step 12. Configure the operating system and drives on the new server. For instructions, see page 53.	
Completing the migration	
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Step	✔
Step 14. Install the Symposium Call Center Server software on the new server. For instructions, see page 57.	
Step 15. Apply the latest Install-time PEPs on the new server. For instructions, see page 58.	
Step 16. Import database information from the Platform Recovery Disk. For instructions, see page 59.	
Step 17. Install the Symposium Call Center Server database software on the new server. For instructions, see page 61. **Note:** If you are converting a non-English version of Symposium Call Center Server, install the appropriate language PEP before proceeding. For more information, see the *Installation and Maintenance Guide*.	
Step 18. Perform a database integrity check on the original server. For instructions, see page 62.	
Step 19. Back up the original server's database. For instructions, see page 65.	
Step 20. Restore the original server's database to the new server. For instructions, see page 69.	
Step 21. Perform a database integrity check on the new server. For instructions, see page 77.	
Step 22. Configure the new server's software and database. For instructions, see page 77.	
Step 23. Apply the latest Service Update pack and any required PEPs to the new server. For instructions, see page 84.	

Step	✔
Step 24. Install pcAnywhere on the new server. For instructions, see page 84.	
Step 25. Prepare the new server for full service. For instructions, see page 85.	

Overview of migration

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

- to recover data in the event of a hardware failure
- to change to a different server with increased capacity

To perform platform migration, you must back up the database information from the original server, prepare the new server so that it can operate in a manner similar to the original server, and restore the data to the new server.

This process allows you to remove a server from the network and quickly replace it with another server.

The platform migration procedure is also applicable to Network Control Center (NCC) server types.

Note: This guide covers platform migration procedures only for those servers that are already running Release 4.2 of Symposium Call Center Server software. If your server is running an earlier release of Symposium Call Center Server software, see the *Installation and Maintenance Guide.* It contains platform migration procedures that include converting to Release 4.2 from an earlier release.

Supported servers

Release 4.2 of Symposium Call Center Server supports only the Platform Vendor Independence (PVI) server platform. This can be any third-party server running the Windows 2000 Server or Windows 2000 Advanced Server operating system that meets Nortel Networks' minimum recommended hardware requirements. For information on requirements for Platform Vendor Independence, see the *Installation and Maintenance Guide* for this release.

Supported Nortel Networks-supplied platforms

The following Nortel Networks-supplied platforms are supported for use as Platform Vendor Independence servers in Release 4.2:

- 1003t server (MAS servers reconfigured as PVI servers)
- 702t server (not all models can be reconfigured as PVI servers)

High Availability

Symposium Call Center Server is also supported on any High Availability platform that has undergone compatibility testing with Symposium Call Center Server as part of Nortel Networks' Compatibility Test Program. (For more details on this compatibility test program, see www.nortelnetworks.com/prd/dpp/.)

Currently, Nortel Networks has successfully completed testing on some of the High Availability platforms offered by Stratus. Specific details of the High Availability platforms that are compatible with Symposium Call Center Server are available on request from Nortel Networks in a platform-specific product bulletin.

For more information on Stratus, go to www.stratus.com.

Unsupported platforms

You cannot migrate to a Meridian Application Server (MAS). This server platform, which was supported by earlier releases of Symposium Call Center Server, is not supported in Release 4.2.

The following Nortel Networks-supplied platforms are not supported for use as Platform Vendor Independence servers in Release 4.2:

- 701t server
- 702t server (MAS models)
- 1000t server
- 1001t server

Drive partition requirements on the new server

To perform a migration, the new Platform Vendor Independence server must have either the same number of database drive partitions as the original server, or a greater number. As well, the drive partitions must be the same size as or larger than those on the original server. For more information, see “Understanding disk partitioning requirements on the new server” on page 51.

Assumptions

The platform migration process is based on the following assumptions:

- The new Symposium Call Center Server platform will run the same version of the Windows 2000 operating system as the original server.
- The new Symposium Call Center Server platform will run the same software release as the original server. It will also have the same Service Update pack and Performance Enhancement Package (PEP) levels installed.
- The new platform will be installed with the exact same configuration and setup as the original platform, including the following elements:
  - computer name (see note below)
  - keycode (see note below)
  - M1/CSE 1000 serial number, or DMS/MSL dongle number
  - site name
  - network IP setup for both ELAN and CLAN (see note below)
  - switch name
  - switch IP address
  - voice connectivity
  - company name (see note below)
  - customer name (see note below)

  Note: The new server and original server do not necessarily have to have the same computer name, keycode, ELAN and CLAN IP addresses, company name, or customer name. For example, you may want to purchase a new keycode to upgrade features on the new server, or you may want to assign a different IP address to the CLAN. However, this

guide assumes that these configuration details are the same on both the original and new servers.

- All drives on the new platform must be partitioned to meet the requirements for a Platform Vendor Independence server, as documented in the *Installation and Maintenance Guide* for Release 4.2. The partitioned drive size on the new server should be approximately the same as or larger than the original server. (The new drive size can be slightly smaller than that on the original server.)
- The latest Service Update packs and Product Enhancement Packages (PEPs) for Release 4.2 of Symposium Call Center Server must be applied to both the original and new platforms. They may contain important enhancements related to platform migration.
- The database backup feature must be functioning on the original platform.
- To perform a platform migration, the installer must have advanced technical knowledge of
  - the Microsoft Windows 2000 operating system
  - hardware installation and maintenance for the hardware platforms involved
  - Symposium Call Center Server installation and maintenance

Performing a database integrity check ahead of time

Before you take a backup of the database on your original server, Nortel Networks highly recommends that you perform a database integrity check on the database. This check captures any problems with the integrity of the database before you take the backup. The utility required to perform this check is part of the Symposium Call Center Server software.

A database integrity check, however, can take from 30 minutes to 3 hours, and it requires you to bring down the services on the server for the duration of the check. Therefore, to reduce the amount of down-time for the server on a given day, you may want to perform the database integrity check ahead of time (for example, on the day before you back up the database). You should schedule the check as close as possible to the database backup time.

Note: If you are using Symposium Web Client, Nortel Networks recommends that you restart the Symposium Web Client application server after performing the database integrity check. Failure to do so may mean a failed connection with the application server.

For step-by-step procedures, see "To perform a database integrity check" on page 62.

Dealing with pegging data during platform migration

During the migration procedure, you must create a backup of your original server's database. You can do this while the call center is in full service. However, if the call center continues to respond to calls 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 you either

- take the original server out of service immediately after the database backup and keep it out of service during the entire migration procedure
- take the original server out of service after the migration is complete, back up the original database, and restore it on the new server before bringing the new server into service

Migrating servers in a networking environment

If you are performing conversions in a Symposium Call Center Server networking environment, perform the conversion on the Network Control Center (NCC) server first. Once this is complete, do the following:

- On the Network Control Center Release 4.2 server, add all of the sites in your multi-site call center using the Configuration (nbconfig) utility on the server. For more information, refer to the *Network Control Center Administrator's Guide* (see the section titled "Configuring the communications database").

Once you have completed the above step, you can then perform migrations on the remaining servers in the network. To ensure that your Release 4.2 servers can continue to route calls to other sites after migration, you must do the following:

- On the Network Control Center Server, use the Configuration (nbconfig) utility on the server to force synchronization of the Address Table with all of the sites in your multi-site call center. For more information, refer to the *Network Control Center Administrator's Guide*.

Preparing for migration

Introduction

There are a number of steps you can do ahead of time to plan and prepare for migration.

The following list summarizes the procedures you must complete in this section:

- Step 1. Read the “Overview of migration”
- Step 2. Check for Installation Addenda
- Step 3. Make sure you have the required Windows 2000 knowledge and documentation
- Step 4. Gather the materials required for migration
- Step 5. Investigate and resolve any tape drive compatibility issues

  Note: This step is applicable only if you are using a tape drive to back up and restore your database. If you are using a remote directory, then you do not need to perform this step.

Step 1. Read the “Overview of migration”

The section “Overview of migration” on page 22 contains information on a number of topics you need to understand before performing a migration. Be sure to read this section carefully.

Step 2. Check for Installation Addenda

Before performing a migration, check for Installation and Operations Addenda and updated customer documentation on the Nortel Networks web site (www.nortelnetworks.com), or the Partner Information Center web site. The addenda and documentation may contain important information regarding conversion or migration that is not in this guide.

Step 3. Make sure you have the required Windows 2000 knowledge and documentation

You must be prepared to install and configure the Windows 2000 operating system during migration. The Symposium Call Center Server documentation provides guidelines for this activity, but it does not provide step-by-step instructions. To ensure you are prepared, review the section on configuring the operating system in the Release 4.2 *Installation and Maintenance Guide*. Make sure you are able to perform the installation and configuration steps listed there, and make sure you have the relevant Microsoft documentation.

Step 4. Gather the materials required for migration

You must have the following materials available before starting the migration process:

Item	Purpose and details
a tape drive and associated driver software **Note:** These items are optional. If you are using a remote directory to back up and restore your database, you do not need them.	Use these items to back up the database on the original server and restore it on the new server. **CAUTION** **Risk of database restoration error** The database backup that you make on the original server must be compatible with the tape drive subsystem on the new server (driver software, tape drive, and tape media). Otherwise, you cannot restore your database. For more information, see “Step 5. Investigate and resolve any tape drive compatibility issues” on page 32.

Item	Purpose and details
Application Server Driver CD-ROM (NTRH8102) (for 1003t and 702t servers only), and HP NetServer Navigator CD-ROM (for 1003t servers only)	If you are using a 702t or 1003t server to run Release 4.2, you need the latest version (version 1.0 or higher) of the Application Server Driver CD-ROM (NTRH8102). This CD contains drivers for the Tandberg tape drive that are compatible with Windows 2000. For 702t servers, it also contains the version of the BIOS firmware that is compatible with Windows 2000. You can order this CD from Nortel Networks. In addition to this CD-ROM, for the 1003t server only, you need the latest version of the HP NetServer Navigator CD-ROM. **Note:** Any 702t servers marked "Windows 2000 Compatible, Nortel Networks" on the front panel have been shipped with the updated CD and the BIOS and Tandberg drivers already installed.
blank tapes or data cartridges **Note:** These items are optional. If you are using a remote directory to back up and restore your database, you do not need them.	During the platform migration, you need a blank tape to store the original server's database using the database backup procedure. The blank tape must be the correct type for the tape drive you are using on both servers; the tape capacity must be large enough to contain the database backup.
blank preformatted disk **Note:** This item is optional. If you are using a remote directory to store your Platform Recovery Disk, you do not need this item.	Use a blank preformatted disk to create a Platform Recovery Disk that contains the original server's setup record and database configuration.

Item	Purpose and details
Symposium Call Center Server software for Release 4.2	You must install the same Release 4.2 version of Symposium Call Center Server software on the new server. This requires the following installation disks: ■ Server Application CD-ROM containing the Symposium Call Center Server installation software and the Platform Compliance Check utility for PVI servers ■ Server Supplementary CD-ROM containing any additional software components required for Symposium Call Center Server to operate, such as Service Update packs and Performance Enhancement Packages (PEPs) ■ Platform Support CD-ROM containing Adobe Acrobat Reader ■ Release 10.5 pcAnywhere Host-Only CD (NTJK08AA)
Windows 2000 operating system	If your new server does not have the Windows 2000 Server or Advanced Server operating system installed, you need a copy of the software to do a fresh installation. Make sure you have the documentation provided by Microsoft available on site when you are configuring the operating system.

Step 5. Investigate and resolve any tape drive compatibility issues

Note: This section applies only if you are using a tape drive to back up and restore your database. If you are using a remote directory, you can skip this step.

When you perform a platform migration, you must create a database backup of your original server and restore it on the new server. If you choose to back up and restore your database using a tape drive, rather than a remote directory, be aware of potential compatibility problems. Before creating the backup, you must ensure that the tape drive and driver software on your new server can read the data on the backup tape from the original server. Otherwise, you cannot restore your database and the migration fails.

To determine whether you have compatibility problems, you must check the tape drive hardware and the driver software on both the original and new server. You may need to replace the tape drive, or upgrade the driver software, or both. Use the table below to understand the compatibility requirements and what your options are to achieve compatibility before you create the backup on the original server. Make sure you have resolved the compatibility issues before you start the migration procedures in this chapter.

Requirements for compatibility	Options for achieving compatibility
The driver software on the original server must be able to write a format that is readable by the driver software on the new server.	Check the drivers you plan to use on both the original and new servers and make sure they write a compatible format. **Note:** If there are incompatibilities, you may receive the following message when trying to restore the database on the new server: `Unable to retrieve backup name.`

Requirements for compatibility	Options for achieving compatibility
The tape drive hardware must be compatible with both the original server and the new server. In other words, the tape media you use to create the database backup on the original server must be readable in the new server's tape drive.	If your original server and new server do not have compatible tape drives and tape media, one option is to use the same physical tape drive hardware on both the original server and the new server to perform the backup and restore. For example, you can use the original server's tape drive on both the original server and the new server for the duration of the migration. 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 later on. For information on replacing a tape drive, refer to the maintenance guide for your hardware platform.
The driver software installed on the new server must be compatible with Windows 2000.	Make sure driver software that is compatible with Windows 2000 is ■ available for the tape drive(s) you are using to restore your database ■ installed on the new server

Collecting information from the original server

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.

The following is a summary of the procedures you must complete in this section:

- Step 6. Install the latest Service Update pack and any required PEPs on the original server
- Step 7. Create a Platform Recovery Disk on the original server
- Step 8. Check the disk partition configuration on the original server
- Step 9. Check the Windows 2000 version on the original server
- Step 10. Check the RAM size on the original server
- Step 11. Check the Symposium Call Center Server software version on the original server

ATTENTION

If you are migrating a Network Control Center (NCC) server, Nortel Networks recommends that you write down the IP addresses of all the sites in the network after finishing Step 11 and before proceeding with the remaining migration steps. After you finish the migration process on the NCC, this list of IP addresses enables you to re-add the network sites more efficiently. On the original NCC, open the Nbconfig utility and use the Site table tab to view and note the list of IP addresses.

Step 6. Install the latest Service Update pack and any required PEPs on the original server

Ensure that the latest Service Update packs and any required PEPs are applied to the original server. These may include enhancements that you need to perform platform migration procedures.

Use the procedure below to determine which Service Update packs and PEPs are already installed on the original server. Record each one in the "Service Update pack and PEP level worksheet" on page 49. Then go to the Meridian PEP Library web site to see if there are any additional Service Update packs or required PEPs for Release 4.2 of Symposium Call Center Server. If there are, install them on your original server and add them to the worksheet.

Note: The Meridian PEP Library web site is located at

- https://www21.nortelnetworks.com/MPL (Europe)
- https://www43.nortelnetworks.com/MPL (North American)

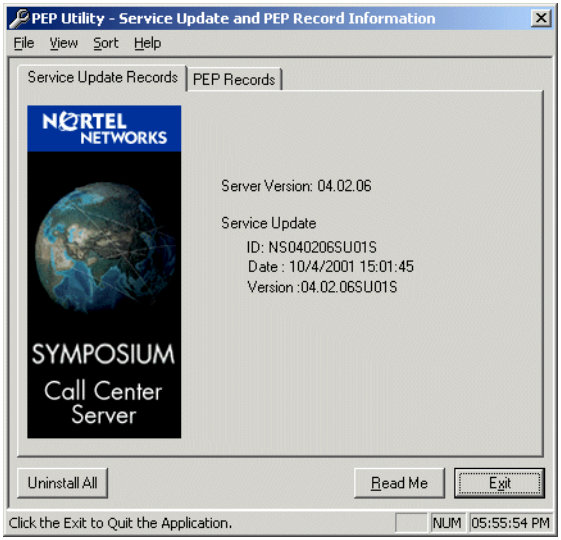
To register for either of these web sites, follow the instructions listed at http://nortelnetworks.com/register.

To check the Service Update pack and PEP levels on the original server

1 Log on to the original server as **NgenSys**.

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

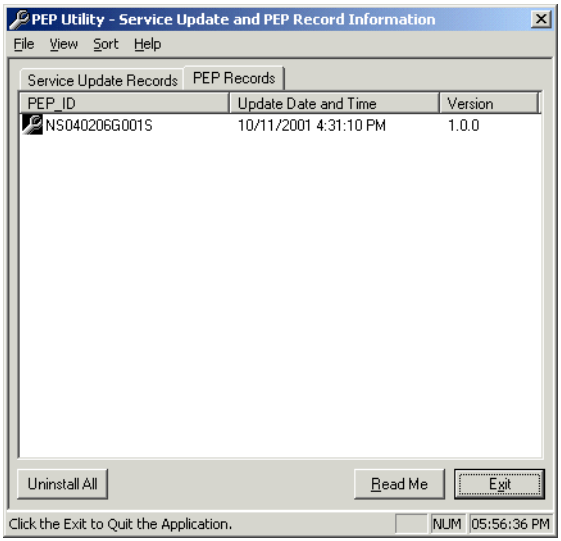
Result: The PEP Utility window appears with the Service Update Records tab displayed.



3 If there is a Service Update Record listed, record the ID, date, and version on the "Service Update pack and PEP level worksheet" on page 49.

4 Click the PEP Records tab.

Result: The PEP Records page appears.



5 Record the PEP ID, PEP Version, and Update Date and Time on the worksheet.

6 Click Exit.

7 Check the web site to see if there are any additional Service Update packs or required PEPs for Release 4.2 of Symposium Call Center Server. If there are, install them on your original server. For installation instructions for Service Update packs or PEPs, refer to the instructions in the *Installation and Maintenance Guide* for Release 4.2.

8 If you installed additional Service Update packs or PEPs, add them to the Service Update pack and PEP level worksheet.

Step 7. Create a Platform Recovery Disk on the original server

When you create a Platform Recovery Disk, the system saves both server and database configuration data into a series of text files.

You can create a Platform Recovery Disk on either a floppy disk or a remote directory on a network computer. Remember that if you decide to create a Platform Recovery Disk on a remote directory, you must establish a network connection from the new server to the remote directory to import the information later in this procedure.

Even if you have an existing Platform Recovery Disk available, make sure you create a new one after installing the latest PEPs and SUs described in Step 6.

Note: If you want to use a network computer, you must first map the directory on the network computer to a network drive on your server.

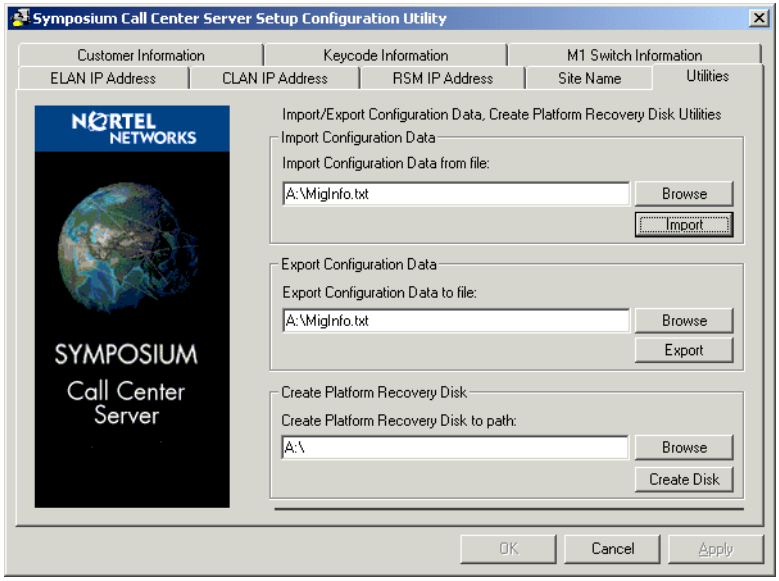
To create a Platform Recovery Disk

1 Log on to the server as **NGenSys** (for the original server) or **Administrator** (for the new server).

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

Result: The Symposium Call Center Server Setup Configuration Utility dialog box appears.

3 Click the Utilities tab to display the following:



4 In the Create Platform Recovery Disk section, do one of the following:

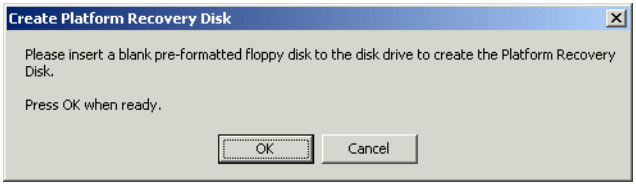
- If you want to create a Platform Recovery Disk on a floppy disk:

  a. Make sure the path shows A:\.

  b. Insert a blank floppy disk in drive A.

  c. Click Create Disk.

  Result: The following message appears:



  d. Click OK.

- If you want to create a Platform Recovery Disk in a directory on a network computer:

  a. Make sure you have mapped a network drive to the remote directory in which you want to save the Platform Recovery Disk.

Note: The name of the remote directory into which you save the Platform Recovery Disk must not contain any spaces. Spaces in the remote directory name cause errors.

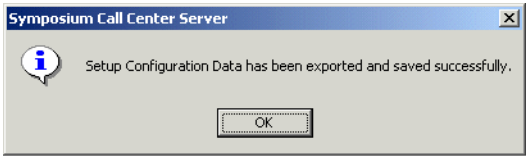
b. Click Browse and navigate to the mapped drive.

c. Select the directory, and then click OK.

Result: The drive you selected appears to the left of the Browse button.

d. Click Create Disk.

Result: The system exports files containing the server's setup record and database configuration to the disk or remote directory. When the process is complete, the following dialog box appears:



Note: The system also checks for database segmentation problems. If it finds any problems, it displays a message indicating the type of problem.

- If the system finds a database *data* segmentation overlapping problem, then it advises you to contact Nortel Networks customer support before proceeding with the migration procedure. After customer support fixes the problem, you must create a new Platform Recovery Disk before proceeding with the migration.
- If the system finds a database *log* segmentation overlapping problem, then you can still use the Platform Recovery Disk that you have just created. The system prompts you to shut down the Symposium Call Center Server services so it can fix the problem. Follow the on-screen prompt to shut down the services.

5 Click OK. If you used a floppy disk, remove it from the drive, and make sure it is labeled clearly.

6 Close the Symposium Call Center Server Setup Configuration Utility window.

Contents of the Platform Recovery Disk

The Platform Recovery Disk contains a number of support files including the file MigInfo.txt. This file contains the following information about the original server:

Meridian 1/CSE 1000 Symposium Call Center Server

- keycode
- Meridian 1/CSE 1000 serial number
- installed computer name
- current computer name
- site name
- Meridian 1/CSE 1000 Switch name
- Meridian 1/CSE 1000 Switch IP address
- Meridian 1/CSE 1000 Switch customer group number
- Meridian 1/CSE 1000 Switch type
- Server ELAN IP address
- Server CLAN IP address
- Server RSM IP address
- Server TCP/IP hostname
- Server TCP/IP protocol setup (that is, gateway, subnet mask, and so on)
- Voice Connectivity
- Server software version

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 RSM IP address
- Server TCP/IP hostname
- Server TCP/IP protocol setup (that is, gateway, subnet mask, and so on)
- Voice Connectivity
- Server software version

Network Control Center (NCC)

- current computer name
- installed computer name
- site name
- Server CLAN IP address
- Server TCP/IP hostname
- keycode
- Meridian 1/CSE 1000 serial number
- Server software version
- Server TCP/IP protocol setup (that is, gateway, subnet mask, and so on)

Step 8. Check the disk partition configuration on the original server

You must record the disk partition configuration of the original server so you can use it to determine how to partition your new server.

Once you have recorded this information, make sure that your new server has adequate drive space to create the partitions you need. For information on the requirements for partitioning drives, see "Understanding disk partitioning requirements on the new server" on page 51.

Partitioning 4 Gbyte and 9 Gbyte hard drives

When you partition a server with a 4 Gbyte hard drive for Platform Vendor Independence, less than 4096 Mbytes of drive space are available because of the header size used for the extended partition. In this case, the PVI Compliance Check utility that you run just before installing the Symposium Call Center Server software may indicate a non-compliant condition as it looks for a minimum drive space of 4096 Mbytes. If there are 4080 Mbytes or more of space available, you can safely ignore this warning. You may encounter the same problem if you partition a larger hard drive (for example, if you split a 9 Gbyte hard drive using two 4 Gbyte partitions). For additional Platform Vendor Independence partitioning details, see the *Installation and Maintenance Guide* for Release 4.2.

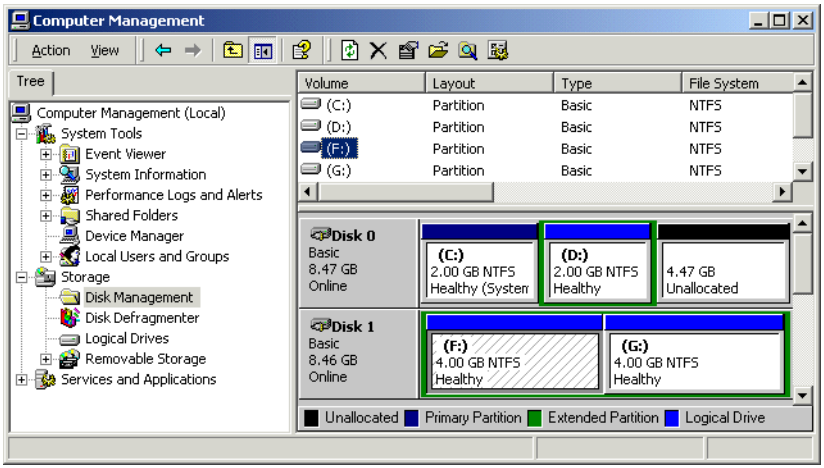
To check the disk partition configuration on the original server

1 From the Windows Start menu, choose Programs → Administrative Tools → Computer Management.

Result: The Computer Management window appears.

2 In the left pane, click Disk Management.

Result: The disk configuration appears in the right panel.



3 Record the following information on the “Disk partition configuration worksheet” on page 50:

- the displayed disk number
- the logical disk drive letter assignments
- the size of each partitioned disk

4 Close the Computer Management window.

5 Ensure that the new server has enough disk space to create the required partitions, as described in “Understanding disk partitioning requirements on the new server” on page 51.

The following table presents an example only of disk partition information and how it appears in the worksheet:

Disk number	Disk drive letter assignment	Disk partition size
Disk 0	C	2 Gbytes NTFS
Disk 0	D	2 Gbytes NTFS
CD-ROM 0	E	n/a
Disk 1	F	4 Gbytes NTFS
Disk 1	G	4 Gbytes NTFS

Step 9. Check the Windows 2000 version on the original server

Before you install the new server with Symposium Call Center Server software, the new platform must be installed with the same version of the Windows 2000 operating system as the original server. If needed, repartition all drives and reinstall the operating system again on the new server. See the maintenance guide for your hardware platform.

Notes:

- Symposium Call Center Server Release 4.2 software requires Windows 2000 Server or Windows 2000 Advanced Server. Other versions of Windows 2000, such as Windows 2000 Professional and Windows 2000 Datacenter, are not supported.
- Symposium Call Center Server requires, at a minimum, Windows 2000 Service Pack 2.
- Nortel Networks normally supports the currently available Service Pack. To find out which Service Packs have been verified for use with Symposium Call Center Server, contact your Nortel Networks customer service representative.

To check the Windows 2000 version on the original server

1 Open Windows Explorer.

2 In the Explorer window, choose Help → About Windows.

Result: The About Windows dialog box appears.

3 Record the Windows 2000 version and Service Pack version on the “Windows 2000 version worksheet” on page 50.

4 Click OK to close the window.

Step 10. Check the RAM size on the original server

The total physical RAM of the new server must meet the requirements for a Release 4.2 PVI server, and it must be at least as large as the RAM 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 50.

3. Close the System Properties property sheet and any other open windows.

Step 11. Check the Symposium Call Center Server software version on the original server

The new server must have the same software release version as the original server.

To check the Symposium Call Center Server software version on the original server

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

Result: The System tab appears.

2 Record the Symposium Call Center Server version on the "Symposium Call Center Server software version worksheet" on page 50.

3 Ensure that you obtain the correct version of the software CDs for installation on the new server.

ATTENTION

If you are converting a Network Control Center (NCC) server, Nortel Networks recommends that you write down the IP addresses of all the sites in the network before proceeding with the remaining conversion steps. After you finish the conversion process on the NCC, this list of IP addresses enables you to re-add the network sites more efficiently. On the original NCC, open the Nbconfig utility and use the Site table tab to view and note the list of IP addresses.

Worksheets for collecting original server information

Introduction

Make photocopies of these worksheet pages, and use them to record original server information for migration.

Service Update pack and PEP level worksheet

Item	Fill in the required information
Service Update ID	
Service Update date	
Service Update version	
PEP ID	
PEP Version	
PEP Update Date and Time	
PEP ID	
PEP Version	
PEP Update Date and Time	
PEP ID	
PEP Version	
PEP Update Date and Time	

Disk partition configuration worksheet

Disk number	Disk drive letter assignment	Disk partition size

Windows 2000 version worksheet

Item	Fill in the required information
Windows 2000 version	
Service Pack version	

RAM size worksheet

Item	Fill in the required information
RAM size	

Symposium Call Center Server software version worksheet

Item	Fill in the required information
Symposium Call Center Server version	

Preparing the new server

Introduction

This section explains how to prepare the base configuration of your new server before you install Release 4.2 of Symposium Call Center Server and restore your database. The base configuration includes the operating system configuration and disk partitioning.

You must complete the following procedure in this section:

- Step 12. Configure the operating system and drives on the new server

Understanding disk partitioning requirements on the new server

The following list outlines the requirements for the disk partitions on your new server:

- The new server must have the same or a greater number of drive partitions that contain the database device files as the original server.

  Note: The database files begin on drive F and can expand into additional drives (G, H, I, and so on).
- The drive partitions must be the same size as or larger than those on the original server.
- The disk partition configuration must meet the requirements for a Release 4.2 PVI server, including the minimum size requirements. For details, see the *Installation and Maintenance Guide* for Release 4.2.

Use the following example and the “Disk partition configuration worksheet” on page 50 to help you understand how your new server’s disks should be partitioned.

Disk partitioning example

The new PVI server should have at least as many partitions as the original server. For example, if the original PVI server has partitions C, D, F, and G, then the new PVI server must have at least partitions C, D, F, and G. You can use additional new database partitions.

Original Platform Vendor Independence drives and partitions	New Platform Vendor Independence drives and partitions
C (operating system and pcAnywhere)	C (operating system and pcAnywhere)
D (Symposium Call Center Server)	D (Symposium Call Center Server)
F (database)	F (database)
G (database)	G (database)

Step 12. Configure the operating system and drives on the new server

Complete the following steps to ensure that your new server is correctly configured before proceeding with the migration. This process involves installing the same version of the Windows 2000 operating system and the same Windows 2000 Service Pack as are installed on the original server. It also involves partitioning the disks on the new server.

Notes:

- Symposium Call Center Server Release 4.2 software requires Windows 2000 Server or Windows 2000 Advanced Server. Other versions of Windows 2000, such as Windows 2000 Professional and Windows 2000 Datacenter, are not supported.
- Symposium Call Center Server requires, at a minimum, Windows 2000 Service Pack 2.
- Nortel Networks normally supports the currently available Service Pack. To find out which Service Packs have been verified for use with Symposium Call Center Server, contact your Nortel Networks customer service representative.

To configure the operating system and drives on the new server

1. Review the list of requirements for a Release 4.2 PVI server, and ensure that the new server can meet each requirement. For more information, see the *Installation and Maintenance Guide* for Release 4.2.
2. If you are using a tape drive rather than a network computer to back up and restore your database, make sure the new platform is equipped with a tape drive and driver software that is compatible with that of the original server.

If it is not compatible, then remove the tape drive and install a compatible drive and its driver software on the new platform.

CAUTION

Risk of database restoration failure

The database backup you make on the original server must be compatible with the tape drive subsystem on the new server (driver software, tape drive, and tape media). Otherwise, you cannot restore your database. For more information, see “Step 5. Investigate and resolve any tape drive compatibility issues” on page 32.

If you are moving the original platform’s tape drive to the new platform, ensure that the database backup of the original platform is complete before you remove the drive.

3 Ensure that the new platform is disconnected from the network of the original platform (both ELAN and CLAN). The new platform should remain disconnected until the migration procedure is completed.

Note: If your database backup is on a remote directory, you need a temporary network connection to restore the database to the new server. To understand options for this network connection, see “Remote directory considerations” on page 66. Nortel Networks recommends that you test your network connection before you prepare your new server for full service. To avoid network conflict, after you ensure that the new server is disconnected from the original server’s network (both CLAN and ELAN), test the network drivers and TCP/IP stack. For more information, see the tip on checking your TCP/IP stack in the “Troubleshooting and support” chapter of the *Installation and Maintenance Guide* for Release 4.2.

4 Ensure that drive C on the new server is installed with the same version of the Windows 2000 operating system and service packs as the original server. Refer to your entries on the “Windows 2000 version worksheet” on page 50. Ensure that the operating system is configured correctly for Symposium Call Center Server. For configuration requirements, see the *Installation and Maintenance Guide* for Release 4.2. Use the Windows 2000 setup utility to

- delete all existing partitions on the primary drives without altering the disabled drives (if there are any existing partitions on your new server)

- create a new drive C partition on which to install the Windows 2000 operating system
- configure the LAN network cards with the same network IP configuration (for example, IP address, subnet mask, default gateway, and so on) as on the original server. Refer to the TCP/IP parameter information in the MigInfo.txt file on the Platform Recovery Disk.

  Note: It is important that you disconnect the new platform 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. On the new server, you can use a different computer name and different IP addresses than on the original server. However, Nortel Networks recommends that you use the original server's computer name and IP addresses (CLAN and ELAN) on your new server. Refer to the information in the MigInfo.txt file on the Platform Recovery Disk.
- Make sure that the new computer has at least as much RAM as the original computer. Check that the Virtual Memory allocation (swap file) on the new server is RAM size times 1.5. Set both the initial and maximum size to this value. Refer to your entries in the "RAM size worksheet" on page 50.

5 Ensure that all remaining disks are installed and partitioned properly depending on the server type. Refer to the information you entered in the "Disk partition configuration worksheet" on page 50, and the examples in "Understanding disk partitioning requirements on the new server" on page 51. Correct any non-compliant disk partitioning configuration on the new server by repartitioning the disk drive, reassigning drive letters, or replacing the server with a new platform that meets the requirements.

Note: If you have RAID on your new server, follow the guidelines supplied with your system to ensure the RAID is configured correctly and that any required administration utilities are installed. The RAID software is platform-specific and is installed differently for each platform.

6 Restart the new server to activate all the changes.

Note: It is normal for the Windows operating system to disable the network card if it is disconnected from the network. Ignore this warning and continue with the migration procedure.

Completing the migration

Introduction

When the base configuration of your new server is complete, you can perform all the steps to complete the migration to the new server.

The following is a summary of the procedures you must complete in this section:

- Step 13. Perform a platform compliance check on the new server
- Step 14. Install the Symposium Call Center Server software on the new server
- Step 15. Apply the latest Install-time PEPs on the new server
- Step 16. Import database information from the Platform Recovery Disk
- Step 17. Install the Symposium Call Center Server database software on the new server

  Note: If you are converting a non-English version of Symposium Call Center Server, install the appropriate language PEP before proceeding. For more information, see the *Installation and Maintenance Guide*.
- Step 18. Perform a database integrity check on the original server
- Step 19. Back up the original server's database
- Step 20. Restore the original server's database to the new server
- Step 21. Perform a database integrity check on the new server
- Step 22. Configure the new server's software and database
- Step 23. Apply the latest Service Update pack and any required PEPs to the new server
- Step 24. Install pcAnywhere on the new server
- Step 25. Prepare the new server for full service

Step 13. Perform a platform compliance check on the new server

Before installing the Symposium Call Center Server software, you must ensure that your server meets the requirements for a Platform Vendor Independence (PVI) server, as defined in the *Installation and Maintenance Guide* for Release 4.2.

The Server Application CD includes a program you can run to check your server's basic compliance and identify any problems.

For detailed steps for performing a platform compliance check, see the *Installation and Maintenance Guide* for Release 4.2 in the following location:

Chapter:	Chapter 3, "Installing the server software"
Procedure:	"Performing a platform compliance check on your server" **Note:** Complete *only* this procedure and then return to the Migration checklist in this guide to understand the next step. Do *not* continue to the next procedure in the *Installation and Maintenance Guide*.

Step 14. Install the Symposium Call Center Server software on the new server

This procedure installs all Symposium Call Center Server features and components on the server.

For detailed steps, see the *Installation and Maintenance Guide* for Release 4.2 in the following location:

Chapter:	Chapter 3, "Installing the server software"
Procedure:	"Installing the product software (phase 1)" **Note:** Complete *only* this procedure and then return to the Migration checklist in this guide to understand the next step. Do *not* continue to the next procedure in the *Installation and Maintenance Guide*.

Step 15. Apply the latest Install-time PEPs on the new server

Apply the latest Install-time PEP. Install-time PEPs update the server software to take care of any known issues with the installation or configuration before you continue through the next steps.

The latest Install-time PEP is available on the Supplementary CD-ROM and from the Meridian PEP Library web site.

You can distinguish Install-time PEPs from General PEPs by the PEP ID as follows:

- For Install-time PEPs, the ninth character is a U (for example, NI040206U007S).
- For General PEPs, the ninth character is a G (for example, NS040206G004S).

For information on installing PEPs, see the *Installation and Maintenance Guide* for Release 4.2.

Step 16. Import database information from the Platform Recovery Disk

Once the server software is installed, you must import the data from the Platform Recovery Disk that you created from the original server. You can import your Platform Recovery Disk either from a floppy disk or from a remote directory on a network computer.

Note: If you are importing this information from a remote directory, you must establish a network connection from your new server to the remote computer.

To import data from the Platform Recovery Disk

1 Log on to the server as **Administrator** or **NGenSys**.

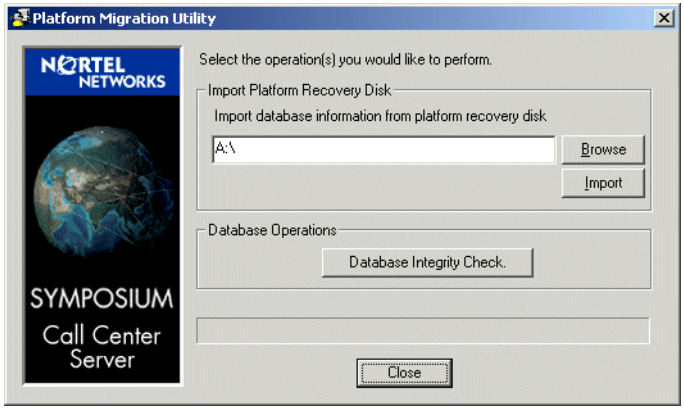
2 Do one of the following:

a. If your Platform Recovery Disk is on a floppy disk, insert it into drive A.

b. If your Platform Recovery Disk is in a directory on a remote computer, map a network drive to that directory.

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

Result: The Platform Migration Utility window appears.



4 In the section Import database information from platform recovery disk section, do one of the following:

- If your Platform Recovery Disk is on a floppy disk:

a. Make sure the drive shown is A:\.

b. Insert the floppy disk into the drive.

- If your Platform Recovery Disk is on a remote directory:

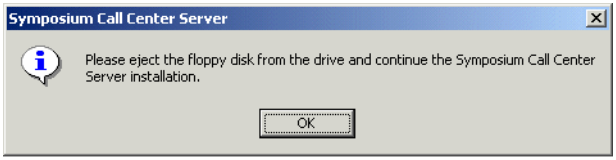
  a. Click Browse and navigate to the mapped drive for the remote directory.

  b. Click the drive, and then click OK.

  c. Make sure the mapped drive appears in the Platform Migration Utility window.

5 Click Import.

Result: The system imports the files from your Platform Recovery Disk. A DOS window appears during the import with the text `Importing database information.` When the import is done, the DOS window displays the following confirmation message:



6 Click OK.

7 Close the Platform Migration Utility window.

8 If you used a floppy disk, remove it from the drive.

Step 17. Install the Symposium Call Center Server database software on the new server

Before you can restore the database on the new server, you must first install and initialize the database software.

For detailed steps, see the *Installation and Maintenance Guide* for Release 4.2 in the following location:

Chapter:	Chapter 3, “Installing the server software”
Procedure:	“Installing the product database (phase 2)” located in Section B, “Installing and configuring the server software and database,” subsection: “Installing the server software” **Note:** Complete *only* this procedure, and then return to the Migration checklist in this guide to understand the next step. Do *not* continue to the next procedure in the *Installation and Maintenance Guide*.

Note: If you are converting a non-English version of Symposium Call Center Server, install the appropriate language PEP before proceeding.

Step 18. Perform a database integrity check on the original server

ATTENTION

Before performing the database integrity check, make sure there are no active Symposium Call Center Server client connections to the server on which you are performing the check. If client PCs connect to the server while the check is running, errors may result and you may need to perform the check again.

To ensure the integrity of the databases on the original server, Nortel Networks recommends that you perform a database integrity check before creating a backup of your database. This step is highly recommended to capture any database consistency problems that may halt migration.

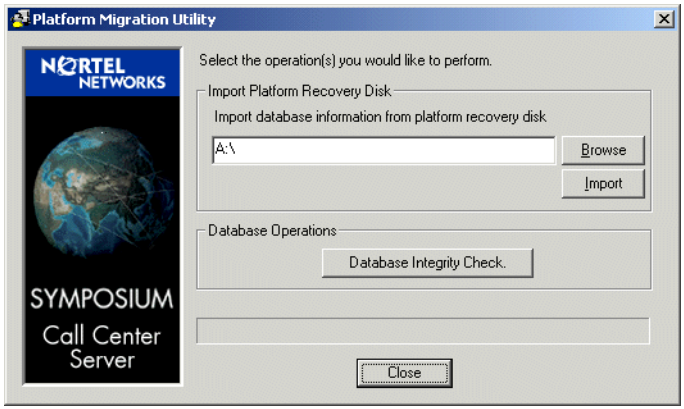
Remember that a database integrity check can take from 30 minutes to 3 hours, and it requires you to bring the services down on the original server during the duration of the check. You can perform the check ahead of time, but make it as close as possible to the time of the database backup.

To perform a database integrity check

1 Log on to the server as **NGenSys**.

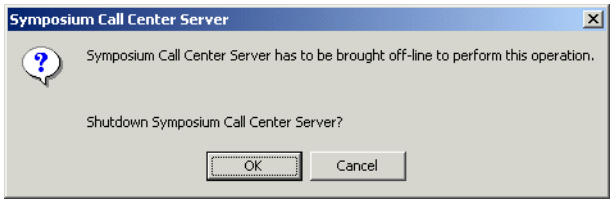
2 From the Windows Start menu, choose Programs → Symposium Call Center Server → Migration.

Result: The Platform Migration Utility dialog box appears.



3 Click Database Integrity Check.

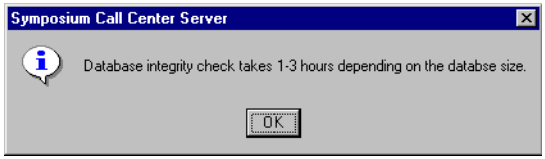
Result: The following dialog box appears:



4 Click OK.

Result: The system displays messages as it checks the status of each service running on the server.

5 Wait until the following dialog box appears:



6 Click OK to start the database integrity check.

Result: A DOS window appears on the screen. Do not close this window. The database integrity check takes from 1 to 3 hours to complete. You may not see any activity on the screen, but you should notice continuous disk activity.

7 Wait until the following dialog box appears:

8 Click OK.

9 Click Close to close the Platform Migration Utility dialog box.

10 Check the database check log (C:\DbChk.log) for database errors. To do this, use a text editor (such as Notepad).

When checking the log file, search for key words such as ERROR or MSG. 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 may seem to be functioning normally.

11 Restart the server, and then log on as **NGenSys**.

Note: If you are using Symposium Web Client, Nortel Networks recommends that you restart the Symposium Web Client Application Server at this time. Failure to do so may mean a failed connection with the Application Server.

Step 19. Back up the original server's database

You must take a backup of the database of the original server so that you can restore it on the new server.

The original server remains online while the database is backed up. However, you should consider the following information before you proceed with the backup:

- An online backup adds an additional load to the server and reduces overall call center performance. Nortel Networks recommends that you perform backups during non-peak traffic hours. Do not change any call center configuration or user setup information during the database backup operation.
- If your server continues to receive calls after the backup, some call statistics and data pegging will be missing from the backup. If it is important that all call statistic and data pegging be migrated to the new server, take the original server offline immediately following the database backup. Ensure that the original server 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.

Options for database backup and restore

You can back up and restore your database using either a tape or a remote directory on a network computer. For detailed information about either option, see the "Backing up data" chapter in the *Installation and Maintenance Guide* for Release 4.2.

Consider the following information before you choose your backup option:

Remote directory considerations	To restore the database from a remote directory to the new server, you must establish a network connection between the new server and the network computer containing the remote directory. Since both the original server and the new server have the same TCP/IP configuration, you cannot have both servers connected to the network at the same time. This can cause a duplicate IP error to occur and stop the original server from normal operation. To avoid this, you have the following options for obtaining a network connection on the new server to restore the database: ■ You can bring down the services on the original server and then disconnect the ELAN and CLAN from the network. Then connect the ELAN and CLAN on the new server to the network. This means that the original server is out of service for the remainder of the migration. ■ To keep both the original and new server online, you can temporarily change the computer name, and the IP configuration for the ELAN or CLAN on the new server so that you can temporarily connect to the network. This way, the original server can remain online and operational during the database restore. When the restore is complete, disconnect the new server from the network, and change the computer name and IP configuration for the CLAN and ELAN back to the correct settings.
Tape drive considerations	If you are backing up your database to a tape, the database backup that you make on the original server must be compatible with the tape drive subsystem on the new server (driver software, tape drive, and tape media). Otherwise, you cannot restore your database. For more information, see “Step 5. Investigate and resolve any tape drive compatibility issues” on page 32.

Decide whether to back up and restore your database using tape or a remote directory. Then follow the relevant procedure below.

Notes:

- To help calculate the speed of database backups before a conversion (to tape or a remote directory), it is a good idea to perform a trial run of the

backup at least several days before the conversion. Keep in mind that the time required to do a database backup can vary between the trial run and the actual backup day due to several factors.

- For a listing of the variables that can affect the speed of your backup and restore, see "Variables affecting backup and restore speed" in Chapter 14 of the *Nortel Networks Symposium Call Center Server Installation and Maintenance Guide* for Release 4.2.
- To calculate the speed for database backups to tape (based on your configuration), see the formula listed in the section "Online Database Backup Speed Elapsed Time" in Chapter 14 of the *Nortel Networks Symposium Call Center Server Planning and Engineering Guide* for Release 4.2.
- To see sample time measurements for tape backup and restore, see "Benchmark statistics for tape backup and restore" in the *Nortel Networks Symposium Call Center Server Installation and Maintenance Guide* for Release 4.2.
- To calculate the capacity requirements for tape or remote directory backups, you can use the DBSpace utility, or you can create a custom report and use it to extract information from the SCCSDBSpace database view. For details, see "Calculating the capacity requirements for database backups" in Chapter 14 of the *Nortel Networks Symposium Call Center Server Installation and Maintenance Guide* for Release 4.2.

To back up the database to tape

1. Make sure the services on the server are up.

   Note: A database backup uses the HDM service. If this service is down, the database backup cannot start.

2. Insert a blank tape into the original server's tape drive.
3. From a Client PC, log on to the original server as a Symposium Call Center Server administrator.
4. Schedule a database backup on the original server. Refer to the *Installation and Maintenance Guide* for Release 4.2.
5. Once the database backup is complete on the original server, remove the backup tape and save it for the restore of the original server's database on the new server.

6 Check if any events were recorded in the event log on the client PC from which you scheduled the backup. If there are any errors, check the database backup log files on the original server. These files are located at the following paths: C:\Winnt\System32\backup.log and D:\Sybase\ASE-12_0\install\backup.log.

To back up the database to a remote directory

ATTENTION

Before backing up your database to a remote directory, check your remote folder configuration by following the guidelines listed in the section "Testing the remote directory backup and restore configuration" in Chapter 14 of the *Installation and Maintenance Guide* for Release 4.2.

1 Make sure that the original server is connected to the network.

2 Make sure that the remote directory backup option is set up properly on your original server. This involves configuring both the original server and the network computer containing the remote directory to establish a connection between these two computers. For detailed procedures, see the following procedure in the *Installation and Maintenance Guide* for Release 4.2:

Chapter:	Chapter 14, "Backing up data"
Section:	Section A: "Setting up backup options," subsection: "Setting up remote directory backups"

3 Schedule a database backup on the original server. For detailed procedures, see the following procedure in the *Installation and Maintenance Guide* for Release 4.2:

Chapter:	Chapter 14, "Backing up data"
Section:	Section B: "Scheduling backups"

4 If your Platform Recovery Disk was created *before* you set up your remote directory backup, create a new one now. This ensures that information on your remote directory settings is included in the Platform Recovery Disk so it can be restored to your computer. For instructions, see "To create a Platform Recovery Disk" on page 38.

Step 20. Restore the original server's database to the new server

Once you have taken a backup of the original server's database, you must restore it to the new server. You can restore the database either from a tape or from a remote directory, depending on which of these options you used to create the database.

Note: Normally, a database restore takes at least 1 to 3 hours, depending on the speed of your server and the amount of data in the database. The restore can take longer if you store your call-by-call records for longer than the recommended interval.

Choose one of the following procedures:

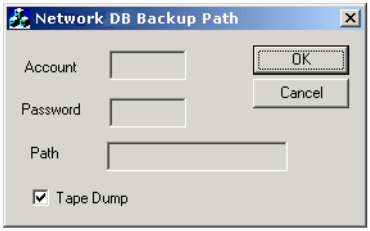
- "To restore the database from a tape backup" below
- "Restoring the database from a remote directory backup" on page 71

To restore the database from a tape backup

1. Make sure that you are logged on to the new server as **NGenSys**.
2. Make sure that the server is set to restore the database from a tape by doing the following:

   a. From the Windows Start menu, choose Programs → Symposium Call Center Server → Network DB Backup Path.

   Result: The Network DB Backup Path dialog box appears.



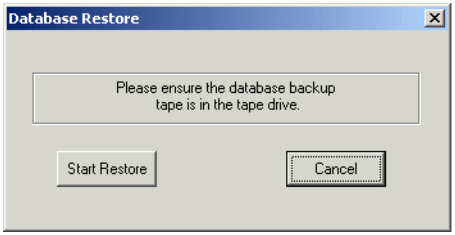
   b. Make sure Tape Dump is checked, and then click OK.

   Note: If this dialog box does not have Tape Dump checked and there are values in the Account and Path boxes, then the server is configured for remote directory backup. Click Tape Dump to change the configuration. If you want to reset the remote directory backup on the server *after* you have

restored from tape, you must reenter the Account, Password, and Path information later.

3 On the new server, from the Windows Start menu, choose Programs → Symposium Call Center Server → Database Restore.

Result: The Database Restore dialog box appears.

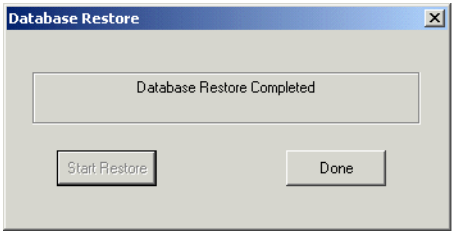


4 Insert the tape containing the database backup.

5 When the tape in the drive stops moving, click Start Restore to begin the database restore process.

Result: The system first shuts down the Symposium Call Center Server services that you have installed. Then the database restore process begins. This can take at least 1 to 3 hours, depending on the amount of data. During this time, the Database Restore window remains visible and displays numerous status messages about the progress of the restore.

6 Wait until the following message appears:



Note: A log file is created with the following path name after the database restore is completed:
D:\Nortel\data\backup\RestoreLogs\restore.log

7 Click Done.

Result: The following dialog box appears:

8 Eject the backup tape from the tape drive.

9 Click OK to exit the Database Restore utility. You must wait for the Database Restore window to disappear. It may seem like there is no activity, but the system must complete its processes and close this window. This can take up to 2 minutes to complete. *Do not* restart the system.

10 Continue to the next procedure according to the Migration checklist.

Restoring the database from a remote directory backup

ATTENTION

Before restoring your database from a remote directory, check your remote folder configuration by following the guidelines listed in the section "Testing the remote directory backup and restore configuration," located in Chapter 14 of the *Installation and Maintenance Guide* for Release 4.2, Section A: "Setting up backup options," subsection: "Setting up remote directory backups."

There are a series of procedures you must complete to restore your database from the remote directory you created on the network computer. These are included in the following subsections:

To establish a network connection from the new server to the network computer

Use one of the options in "Remote directory considerations" on page 66 to establish a network connection between your new server and the network computer.

Preparing the Symposium Call Center Server to restore the database from a remote directory

On your new server, you must create a local Windows user account that is identical to the one you created on the network computer. You then add the account to the policy "Log on as a service." To complete preparation of the server, you enter the account information and the path of the remote directory in Symposium Call Center Server and turn off the tape backup option. Detailed steps are provided below.

Note: Make sure you have the completed worksheet titled "Worksheet for setting up a remote directory backup" available before you continue. You completed this worksheet when you set up the remote directory backup, as per the instructions in the *Installation and Maintenance Guide* for Release 4.2. This worksheet contains information about the remote directory that you need during setup of the database restore.

To set up the local Windows user account on the new server

1 Log on to the new server as **NGenSys**.

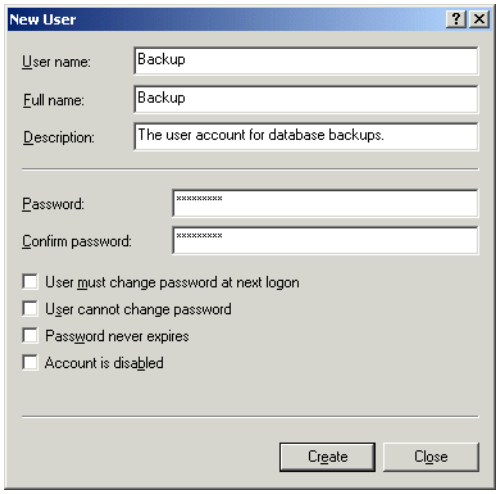
2 From the Start menu, choose Programs → Administrative Tools → Computer Management.

Result: The Computer Management dialog box appears.

3 In the left panel, navigate to Local Users and Groups → Users.

4 Right-click the Users folder, and then select New User.

Result: The New User dialog box appears.



5 In the User name box, type the User Name you recorded in the worksheet titled “Worksheet for setting up a remote directory backup.” This must be the same user name you assigned to the account on the network computer.

6 In the Password box, type the password you recorded in the worksheet. This must be the same password you assigned to the account on the network computer.

7 In the Confirm password box, type the password again.

8 Uncheck the check box for User must change password at next logon.

Note: If you do not remove this check mark, the restore may fail because the server in Symposium Call Center Server may not be able to access the network computer.

9 Click Create.

10 Click Close.

11 In the left panel of the Computer Management window, click the Users folder to display its contents in the right panel.

12 In the right panel, right-click the new user you just created, and then select Properties.

Result: The Properties dialog box for the user appears.

13 Click the Member Of tab.

14 Click Add.

Result: The Select Groups dialog box appears.

15 In the Name column, click Administrators, and then click Add.

Result: The group appears in the bottom list box.

16 Click OK.

17 When the Member Of tab reappears, click Apply, and then click Close.

18 Close all windows that remain open.

To set up the local security settings

1 On the new Symposium Call Center Server, select Start → Programs → Administrative Tools → Local Security Policy.

Result: The Local Security Settings dialog box appears.

2 In the left panel, navigate to Local Policies → User Rights Assignment. Click User Rights Assignment to view its contents in the right panel.

3 From the right panel, double-click Log on as a service.

Result: The Local Security Policy Setting dialog box appears.

4 Click Add.

Result: The Select Users or Groups dialog box appears.

5 In the Name column, select the user account you just created, and then click Add.

Result: The account appears in the bottom list box.

6 Click OK.

7 Click OK to close the Local Security Policy Setting dialog box.

8 Close the Local Security Settings dialog box.

To restore the database from the remote directory

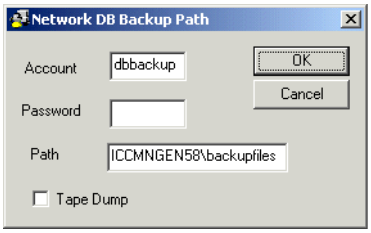
1 Log on to the server as **NGenSys**.

2 Check to ensure that your remote directory settings are correct on your new server. Your remote directory setup from your original server is included in your Platform Recovery Disk and was applied to the new server when you

imported the data in an earlier procedure. To check that the import was successful, do the following:

a. From the Windows Start menu, choose Programs → Symposium Call Center Server → Network DB Backup Path.

Result: The Network DB Backup Path dialog box appears, containing your remote directory setup information (the information in the boxes below is for example only).



b. Ensure that Tape Dump is unchecked, and check that the boxes in the dialog box are correct for the directory on the network computer containing the database backup files.

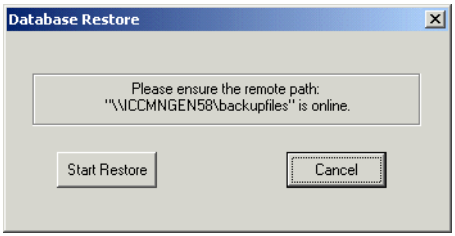
Note: For security reasons, you cannot see the password.

c. Click Cancel to close the window.

3 On the new server, establish a network connection to the network computer containing the database backup files in the remote directory. To understand the options for establishing a network connection from the new server, see “Remote directory considerations” on page 66.

4 On the new server, from the Windows Start menu, choose Programs → Symposium Call Center Server → Database Restore.

Result: The Database Restore dialog box appears, showing the path for the remote directory containing the database files.

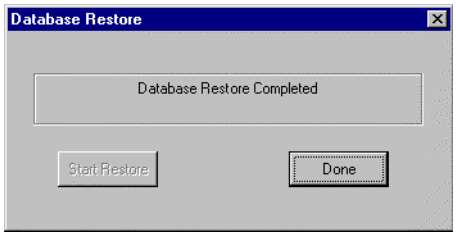


5 Check that the path is correct.

6 Click Start Restore to begin the database restore process.

Result: The system first shuts down the Symposium Call Center Server services that you have installed. Then the database restore process begins. This can take at least 1 to 3 hours, depending on the amount of data and the CPU speed of the server. During this time, the Database Restore window remains in view and displays numerous status messages about the progress of the restore.

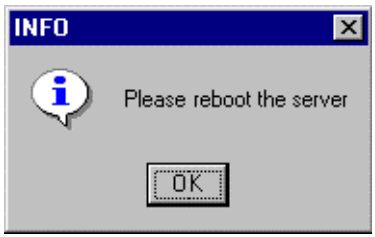
7 Wait until the following dialog box appears, indicating that the restore is complete:



Note: A log file with the following path name is created after the database restore is completed:
D:\Nortel\data\backup\RestoreLogs\restore.log

8 Click Done.

Result: The following dialog box appears:



9 Click OK to exit the Database Restore utility. You must wait for the Database Restore window to disappear. It may seem like there is no activity, but the system must complete its processes and close this window. This can take up to 2 minutes to complete.

10 *Do not* restart the server. Continue to the next procedure according to the Migration checklist.

Step 21. Perform a database integrity check on the new server

To ensure the integrity of the databases after you restore them to the new server, Nortel Networks recommends that you perform a database integrity check. This step is highly recommended to capture any database consistency problems. Remember that a database integrity check can take from 30 minutes to 3 hours.

Follow the procedures in "To perform a database integrity check" on page 62.

Step 22. Configure the new server's software and database

Once you have restored the original server's database on the new server, you must configure the new server's software and database. You can do this using one of two methods:

- If you want to enter the configuration details manually, use the following procedure in the *Installation and Maintenance Guide* for Release 4.2:

Chapter:	Chapter 3, "Installing the server software"
Procedure:	"Configuring the server and database (phase 3)" **Note:** Complete *only* this procedure and then return to the Migration checklist in this guide to understand the next step. Do *not* continue to the next procedure in the *Installation and Maintenance Guide*.

- If you want to import the data using the Platform Recovery Disk from your original server, follow the instructions below. This method involves using a command in the command line to import the data from the MigInfo.txt file directly into the Server Setup Configuration utility. You can then check the data to ensure it is correct.
- You can import configuration data from a Platform Recovery Disk that is either on floppy disk or in a remote directory on a network computer. If you want to use a remote directory, you must establish a network connection to the network computer. Then map a network drive to the remote directory before you start the procedure below.

Note: Before you configure your new server in the following procedure, Nortel Networks recommends that you install a stand-alone PEP that addresses the Microsoft Media Sensing feature. If you disconnect the CLAN cable on the new server from the network, all Symposium Call Center Server services may be shut down immediately, causing your Symposium Call Center Server installation to fail. This event occurs because the Windows 2000 Network Media Sensing feature temporarily removes all network binding of a network card if the physical connection of this network card to the network is removed (similar to a NIC hardware indicator). You can avoid this problem by installing a stand-alone PEP that disables the Media Sensing feature (PEP number NS040206G004S).

To configure the new server's software and database by importing configuration data from the Platform Recovery Disk

1 Log on to the server as **Administrator**.

2 Do one of the following:

- If your Platform Recovery Disk is on a floppy disk, insert it into the floppy drive.
- If your Platform Recovery Disk is in a remote directory, map a network drive to the remote directory.

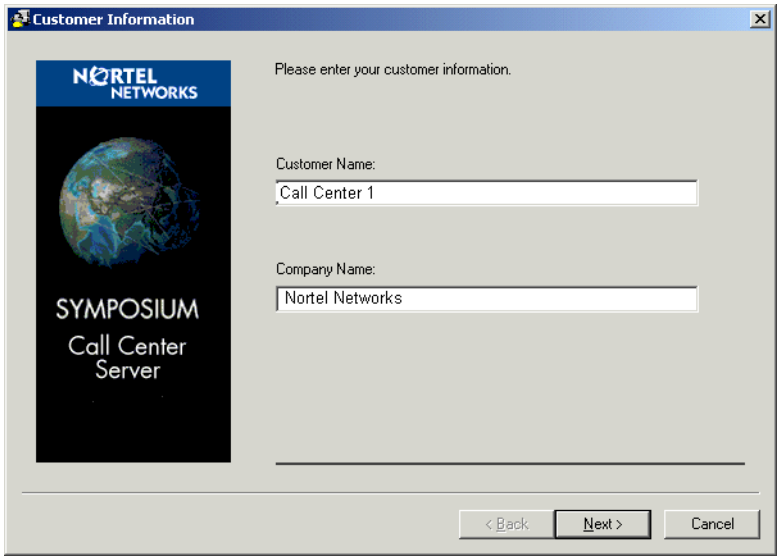
3 From the Start menu, choose Run.

4 Do one of the following:

- If your Platform Recovery Disk is on a floppy disk, type **d:\nortel\iccm\bin\svrconfig.exe -i -w a:\MigInfo.txt**.
- If your Platform Recovery Disk is in a remote directory, type **d:\nortel\iccm\bin\svrconfig.exe -i -w *x*:\MigInfo.txt,** where *x* is the letter of the mapped remote directory.

5 Click OK.

Result: The Customer Information window appears.



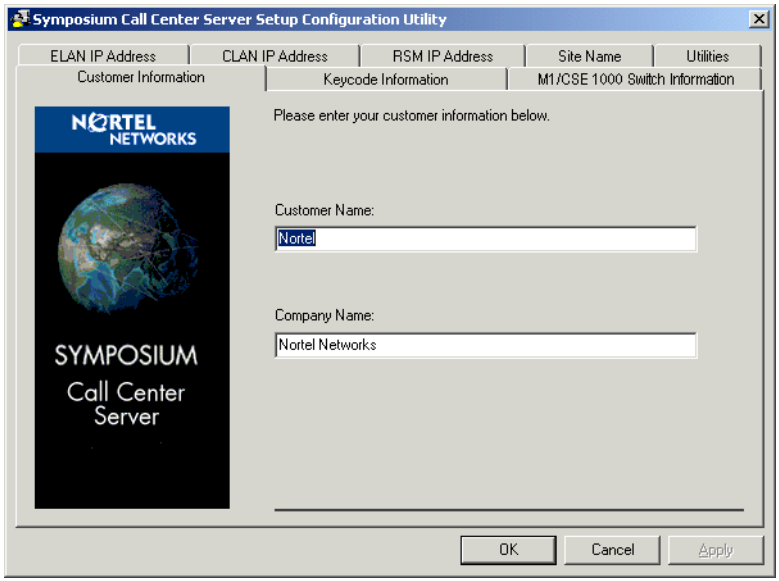
This is the first of several windows in the Setup Configuration Utility in which you enter your server configuration. However, because you have imported your Platform Recovery Disk, each window in this utility is already filled with the server's configuration data, as in the example above.

6 Check the information in the Customer Information window, and then click Next to move to the next window.

7 Check the information in each subsequent window, and then click Next to move through the configuration utility.

8 When you reach the Site Name window, check the data, and then click Finish.

Result: The Symposium Call Center Server Setup Configuration Utility window appears. Each tab represents a window that you just viewed.



9 When you are satisfied with the configuration details, click OK.

Result: A window appears, asking you to verify your keycode information.

10 Check that the listed features match the product you purchased, and then do one of the following:

- If the information is not correct, you may have entered the keycode and serial/dongle number incorrectly.

  a. At the prompt, click No.

  b. Click the Keycode Information tab and make any necessary changes to your entries.

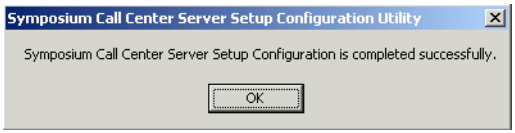
  c. Click OK, and then repeat step 10.

- If the information is correct, click Yes to continue.

Result: The Server Configuration Utility configures your server, using the data you entered. It displays a status of each stage that the configuration passes through.

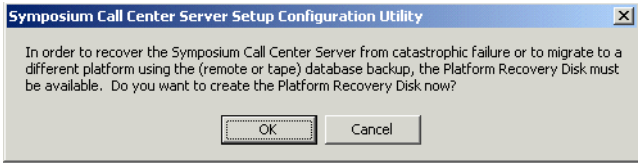
Note: This process can take 20 to 30 minutes to complete, depending on your server's CPU and database size. Do not close any windows during the configuration.

11 Wait until you see the following message:



12 Click OK.

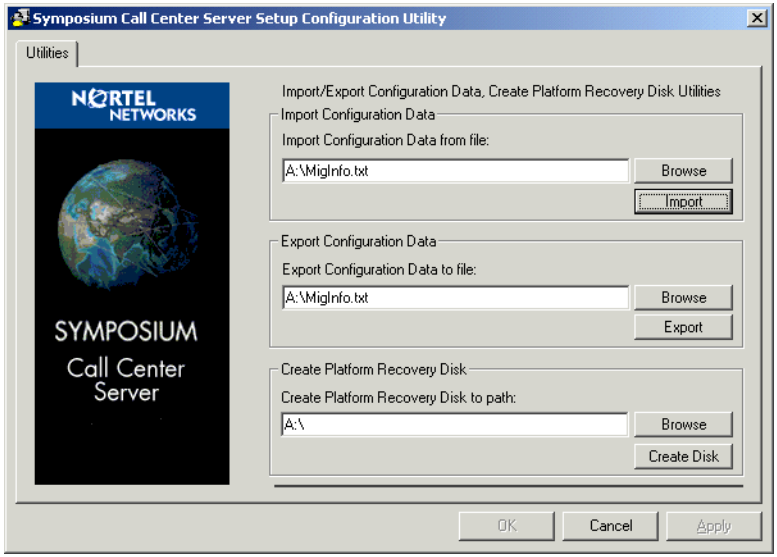
Result: The following message appears:



13 Click OK.

Note: If you click Cancel, remember to use the Server Setup Configuration utility to create a Platform Recovery Disk when the installation is complete. Skip to the Result in step 18.

Result: The Utilities tab appears.



14 In the Create Platform Recovery Disk section, do one of the following:

- To save the Platform Recovery Disk to a floppy disk:

  a. Insert a blank floppy disk in drive A.

  b. Click Create Disk.

  Result: The following message appears:

  c. Click OK.

- To save the Platform Recovery Disk to a remote directory:

  a. Make sure you have mapped a network drive to the remote directory in which you want to save the Platform Recovery Disk.

  b. Click Browse and navigate to the mapped drive.

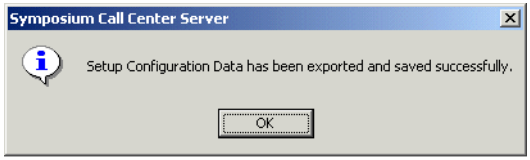
  c. Click the directory, and then click OK.

  Result: The drive you selected appears to the left of the Browse button.

  d. Click Create Disk.

Result: The system creates the Platform Recovery Disk.

15 Wait until the following message appears:

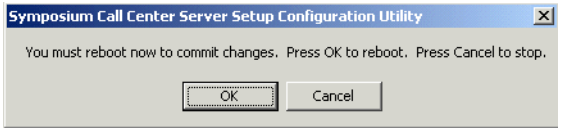


16 Click OK.

17 If you used a floppy disk, remove it from the drive. Make sure the Platform Recovery Disk is labeled appropriately and stored in a safe place.

18 Click OK to close the Symposium Call Center Server Setup Configuration Utility dialog box.

Result: The following message appears:



19 Click OK.

Result: The server automatically restarts.

20 Log on as **NGenSys**.

Note: It may take several minutes for the desktop to appear.

Result: The MAS Trace Window appears. The server and database configuration is complete, and the Symposium Call Center Server software is ready for use.

Step 23. Apply the latest Service Update pack and any required PEPs to the new server

You must install the new server with the same or greater Release 4.2 Service Update packs and PEPs that were installed on the original server. Use the "Service Update pack and PEP level worksheet" on page 49 to determine which Service Update packs and PEPs you need.

For information on installing Service Update packs or PEPs, see the *Installation and Maintenance Guide* for Release 4.2.

Step 24. Install pcAnywhere on the new server

Install and configure pcAnywhere on the new server. For detailed procedures, see the *Installation and Maintenance Guide* for Release 4.2.

Step 25. Prepare the new server for full service

Perform the following steps to complete the platform migration:

1. If the tape drive on the new server is not the tape drive you want to use from this point forward, remove it and replace it with the appropriate drive and its associated 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. For a new High Availability platform, insert the serial dongle into the Master port of the serial port splitter.
4. Connect the new server to the network. Restart the server to begin using the Release 4.2 Symposium Call Center Server software.
5. Verify the proper operation of the Symposium Call Center Server software on the new server.
6. If you did not create a Platform Recovery Disk during configuration of the new server, create one now. Without this disk, the server cannot be restored if there is a system failure. See “To create a Platform Recovery Disk” on page 38.
7. If your server is a Network Control Center server, or a server that is in a networking environment, follow the steps in “Migrating servers in a networking environment” on page 26.
8. Back up the new server’s database. For detailed procedures, see the *Installation and Maintenance Guide* for Release 4.2.

   Note: Nortel Networks recommends that you perform a database backup on the new server before putting the server into full service.
9. Determine whether you need to perform database expansion to increase the amount of available space on your new server for database use. Database expansion is not automatic when performing platform migration. If you have either additional partitions or larger partitions on your new server, you must use the Database Expansion utility to expand the

database into this extra space. For more information, see the *Installation and Maintenance Guide* for Release 4.2.

ATTENTION

If you expand your database, then you must create a new Platform Recovery Disk afterward. For details, see “Create a Platform Recovery Disk on the original server” on page 38.

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 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 Symposium Call Center Server. Resources must be configured with matching values on both the switch and Symposium Call Center Server.

activated script
A script that is processing calls or is ready to process calls. 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 setting up and maintaining Symposium Call Center Server.

agent
A user who is responsible for handling customer calls.

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

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

agent to supervisor assignment

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

application

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

application program interface

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

associated supervisor

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

Automatic call distribution

A means of automatically distributing an organization's incoming calls among a number of answering positions (ACD agents). Automatic call distribution is useful in operations where callers want a service rather than a specific person. Calls are serviced in the order they arrive and are distributed so that the workload at each answering position is approximately equal.

Automatic call distribution call

A call to an ACD-DN. ACD calls are distributed to agents in an ACD group based on the ACD routing table on the switch. *See also* Automatic call distribution directory number.

Automatic call distribution directory number

A primary or supplementary DN associated with an ACD group. Calls made to an automatic call distribution directory number are distributed to agents belonging to the group, based on the ACD routing table on the switch.

Automatic call distribution group

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

Automatic call distribution routing table

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

Automatic call distribution subgroup

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

C

call age

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

call 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 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, script variable.

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

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.

CSE 1000 switch
Succession Communication Server for Enterprise 1000 switch

Customer local area network
The LAN to which your corporate services and resources connect. The server in 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 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.

Digital Multiplex Switch
A Nortel Networks switch for the central office market.

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

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

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

DMS
See Digital Multiplex Switch.

DN
See directory number.

DN call
See directory number call.

DNIS
See Dialed Number Identification Service.

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

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

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

E

ELAN
See embedded local area network.

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

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

event

1. An occurrence or action on 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 below 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. You can only change the value of a global variable in the Script Variable Properties sheet. You cannot change it in a script. *See also* call variable, variable.

I

ICM

See Intelligent Call Manager.

Incalls key

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

Intelligent Call Manager

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

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 to 255. For example, 1.160.10.240 could be an IP address.

intrinsic

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

IP address

See Internet Protocol address.

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, and relational expression.

M

M1
Meridian 1 switch

M1 IE
Meridian 1 Internet Enabled switch

Management Information Base
A data structure that describes the collection of all possible objects in a network. Each managed node maintains one or more variables (objects) that describe its state. Symposium Call Center Server Management Information Bases (MIBs) contribute to the overall network MIB by

- identifying Nortel Networks/Meridian/Symposium Call Center Server nodes within the network
- identifying significant events (SNMP traps), such as alarms reporting
- specifying formats of alarms

Master script
The first script executed when a call arrives at 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, and 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.

MIB
See Management Information Base.

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

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

primary script
A script that is executed or referenced by the Master script. A primary script can route calls to skillsets, or it can transfer routing control to a secondary script. *See also* Master script, 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. Symposium Call Center Server is used to configure the operations of the call center. *See also* client.

service

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

Service Control Manager

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

service level

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

service level threshold

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

Simple Network Management Protocol

A systematic way of monitoring and managing a computer network. The SNMP model consists of four components:

- managed nodes, which are any device, such as hosts, routers, and printers, capable of communicating status to the outside world via an SNMP management process called an SNMP Agent
- management stations, which are computers running special network management software that interact with the Agents for status
- management information, which is conveyed through exact specifications and format of status specified by the MIB
- Management Protocol or SNMP, which sends messages called protocol data units (PDUs)

site
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, and traffic intrinsic.

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

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 and 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 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 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 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 also Wide area network.

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

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

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NORTEL NETWORKS™

Reader Response Form

Nortel Networks Symposium Call Center Server
Product release 4.2
Platform Migration Guide

Tell us about yourself:

Name: _____

Company: _____

Address: _____

_____

Occupation: _____ **Phone:** _____

1. What is your level of experience with this product?

   ☐ New user ☐ Intermediate ☐ Experienced ☐ Programmer

2. How do you use this book?

   ☐ Learning ☐ Procedural ☐ Reference ☐ Problem solving

3. Did this book meet your needs?

   ☐ Yes ☐ No

   If you answered No to this question, please answer the following questions.

4. What chapters, sections, or procedures did you find hard to understand?

   _____

   _____

   _____

5. What information (if any) was missing from this book?

   _____

   _____

   _____

6. How could we improve this book?

   _____

   _____

   _____

Please return your comments by fax to 353-91-756050, or mail your comments to Nortel Networks, Mervue Business Park, Galway, Ireland.

NORTEL NETWORKS™

Reader Response Form

Reader Response Form

Nortel Networks Symposium Call Center Server

Platform Migration Guide

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