



Nortel Networks Call Center Reporting Set Up and Operation Guide

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Table of contents

How to use this guide.....	5
Introduction	5
How this guide is organized	5
Other documents	6
System Overview	7
Introduction	7
System software	7
PC requirements	8
Operating System Compatibility	9
Installing Nortel Networks Call Center Reporting.....	11
Introduction	11
Installation prerequisites	11
Installing Nortel Networks Call Center Reporting Master Client software	12
TCP/IP Protocol	12
Checking whether The Windows Networking Component Is Installed.....	12
Installing Nortel Networks Call Center Reporting Master Client from a Business Communications Manager 2.5.....	13
Installing Nortel Networks Call Center Reporting Master Client for a CallPilot 100/150 Installation	14
Master Client PC File Sharing	15
Installing Nortel Networks Call Center Reporting software onto additional PCs.....	17
Installing Nortel Networks Call Center Reporting Multiple Client from a Business Communications Manager 2.5.....	17
Installing Nortel Networks Call Center Reporting Multiple Client for a CallPilot 100/150 Installation	18
Applying Security to the Call Center Reporting Shared Folder	19
Troubleshooting Nortel Networks Call Center Reporting Installation	21
Troubleshooting Nortel Networks Call Center Reporting	22
Folders created on the Call Center Reporting Multiple Client PCs	25
Using Nortel Networks Call Center Reporting.....	27
Starting Nortel Networks Call Center Reporting	27
Entering Nortel Networks Call Center Reporting (Log In)	27
Exiting Nortel Networks Call Center Reporting Master Client (Log Out).....	28
Closing the RDB Server (on the Master Client PC).....	29
Call Center Reporting Main Window	29
<u>L</u> evel	29
<u>V</u> iew	30
<u>S</u> ystem (System Manager level only)	30
<u>M</u> anagement-Info.....	30
<u>W</u> indow	30

<u>H</u> elp.....	31
Configuring Nortel Networks Call Center Reporting	33
Introduction	33
Configure window tabs	34
Company	34
Skillsets.....	34
Lines	35
Agents.....	36
Stat Time Bin	37
Wallboard.....	37
Password	37
Wallboards	39
Introduction	39
Wallboard installation.....	39
Wallboard configuration	39
Wallboard Settings.....	40
Wallboard Parameters	41
Wallboard Messages, Alarms and Schedules	43
Wallboard Messages	43
Wallboard Alarms	45
Wallboard Schedules.....	46
Statistical Settings.....	49
Introduction	49
Statistical Set Up	49
Real Time tab	50
Traffic Analysis tab	50
Peak tab.....	50
Average tab	50
Real Time Information	51
Introduction	51
Real Time screens	51
System level	51
Skillset level.....	54
General Notes on the Real Time Displays	56
Management Reports	57
Introduction	57
General Notes on the Report Statistics	57
Accessing Current Reports.....	58
Accessing Historical Reports	58
Report Manager window.....	60
<u>F</u> ile	60
<u>V</u> iew	60
<u>R</u> eport	60
<u>W</u> indow	61

Help.....	61
Viewing Reports.....	61
Report Types	62
Answered Call.....	62
Abandoned Call Report	64
Incoming Call Report	64
Agent Activity Report	66
Average Time Report.....	67
System Capacity Report.....	68
Call Profile Report.....	71
Agent Profile Report	72
Summary Report.....	73
Printing reports.....	74
Abandoned Caller ID Report.....	75
Configuration Report.....	77
Print Schedule.....	78
How to Select and Import Nortel Networks Call Center Reporting Statistical Data into Microsoft Excel.....	81
Introduction	81
Location of the Statistical Database Files.....	81
Statistical Database File Naming Conventions.....	81
Looking at the Statistical Data with Microsoft Excel	82
Upgrading from version 2.5 GA to 2.5 Feature Pack 1	85
Introduction	85
Upgrade Process	85
1.0 Close Down Nortel Networks Call Center Reporting version 2.5 GA.....	86
2.0 Uninstall the Nortel Networks Call Center Reporting version 2.5 GA	86
3.0 Install Nortel Networks Call Center Reporting version 2.5 FP1	86
Glossary of Terms	87
Index	91

Introduction

This guide is designed to assist a System Manager in the installation, set up and operation of Nortel Networks Call Center Reporting.

	Nortel Networks Call Center Reporting is common to both the Business Communications Manager 2.5 and the CallPilot 100/150 Call Center systems. On these platforms the software is simply referred to as <i>Nortel Networks Call Center Reporting</i> , and this is how it is referenced within this document.
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Use this guide as an ongoing reference. This chapter tells you what to expect as you read this guide and how information in this guide is presented.

How this guide is organized

The *Nortel Networks Call Center Reporting Set Up and Operation Guide* is organized according to the following chapters:

How to use this guide — provides a brief overview identifying the organization of this guide.

System Overview — describes the overall functionality of Nortel Networks Call Center Reporting, provides a package checklist and explains the software involved.

Installing Nortel Networks Call Center Reporting — describes installation prerequisites and how to install the Nortel Networks Call Center Reporting Master Client and the Nortel Networks Call Center Reporting Multiple Client software. This chapter also provides diagnostic and recovery procedures for problems that might occur while setting up and operating Nortel Networks Call Center Reporting.

Using Nortel Networks Call Center Reporting — describes starting to use Nortel Networks Call Center Reporting, including Logging In and Out, and the use of the RDB Server. This chapter also explains the menu options that appear on the PC screen.

Configuring Nortel Networks Call Center Reporting — describes how to enter company details, how to view, upload and change Line, Skillset and Agent information, and how to assign Passwords for the Skillsets. This chapter also explains how to set the statistical time bins (for use in the management reports) and how to change your password.

Wallboards — describes how to configure Nortel Networks Call Center Reporting to drive Wallboard displays. This chapter also explains the use of Wallboard messages, Wallboard alarms and Wallboard schedules.

Statistical Settings — explains how to tailor the analysis of the management information to suit your requirements.

Real Time Information — describes how to access and view the Real Time management information provided by Nortel Networks Call Center Reporting.

Management Reports — describes how to access and view the Current and Historic management information collected by Nortel Networks Call Center Reporting.

Index — provides an alphabetical list of information topics contained in this guide and the page number of where the information is located.

Other documents

For more information about Business Communications Manager Call Center, refer to the following documents:

- *Call Center Set Up and Operation Guide*
- *Multimedia Call Center Set Up and Operation Guide*
- *Software Keycode Installation Guide*

For more information about CallPilot 100/150 Call Center, refer to the following documents:

- *CallPilot 150 Telephone Administration Guide*
- *Software Keycode Installation Guide*

System Overview

2

Introduction

Nortel Networks Call Center Reporting is a Windows® software application that provides Real Time statistics and comprehensive management information on the day-to-day performance of your Business Communications Manager 2.5 or CallPilot 100/150 Call Center system.

	Within this document the phrase ' <i>the Call Center platform</i> ' is used to refer to either the Business Communications Manager 2.5 or the CallPilot 100/150 hardware, and the phrase ' <i>the Call Center</i> ' is used to refer to the Call Center application running on that platform. The platforms are only referenced specifically by name in areas of this document describing the installation of the Call Center Reporting application software, on Pages 13, 14, 17 & 18.
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Nortel Networks Call Center Reporting helps you manage the peaks and troughs in call traffic. The following Real Time information is available:

- Call waiting times
- Queue length (that is, the length of the queue of calls waiting to be answered in your Skillset).
- Agent status

Nortel Networks Call Center Reporting:

- Provides a comprehensive range of management reports that has information critical for accurate business planning
- Has the ability to support multiple Wallboards which can be individually configured to display the information that the agents require

System software

The software that sends data to Nortel Networks Call Center Reporting is integral to the Call Center and the Call Center platform. The Nortel Networks Call Center Reporting software has two separate components: the user interface (known as the Graphical User Interface or GUI) and the RDB Server.

The user interface is used to configure Nortel Networks Call Center Reporting and to view the management information.

One PC on your network must be running the Nortel Networks Call Center Reporting Master Client software (known as the Master Client). This is the PC which communicates with the Call Center application. The Master Client PC gathers information (called event data) from the Call

Center platform and stores it on the hard disk of the Master Client PC. It is this stored information which provides the data for the reports.

The RDB Server is the program used to gather and store the event data sent from the Call Center platform. The RDB Server must be running whenever statistical data needs to be collected. **For this reason, it is recommended that the RDB Server is operational at all times.**

There can be only one PC on your network running the Master Client software. However, so that other users may view the Nortel Networks Call Center Reporting Real Time screens and access the reports, other PCs on your network may be loaded with the Nortel Networks Call Center Reporting Multiple Client software (known as Multiple Clients).

Multiple Client PCs communicate with the Master PC, they do not communicate with the Call Center platform directly. For Multiple Clients to operate correctly the RDB Server must be running on the Master Client PC. **For this reason it is recommended that the RDB Server is operational at all times.**

Both Master Client and Multiple Client PCs may be used to change the configuration of the Call Center Reporting software, to view and print reports and to display the Real Time screens.

	<p>DO NOT INSTALL BOTH SETS OF CLIENT SOFTWARE ON A SINGLE PC. ONE PC ON YOUR NETWORK SHOULD BE NOMINATED AS THE MASTER CLIENT PC. ANY OTHER PC WHICH WILL RUN THE CLIENT SOFTWARE MUST BE RUNNING THE MULTIPLE CLIENT SOFTWARE. NO PC MAY BE USED TO RUN BOTH TWO SETS OF SOFTWARE.</p> <p>IF YOU HAVE MULTIPLE BUSINESS COMMUNICATIONS MANAGER OR CALLPILOT INSTALLATIONS AT YOUR PREMISES CONNECTED TO A SINGLE NETWORK, THEN YOU CAN HAVE MORE THAN ONE MASTER CLIENT, BUT EACH MASTER CLIENT MUST BE DRIVEN BY A SINGLE BUSINESS COMMUNICATIONS MANAGER OR CALLPILOT.</p>
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PC requirements

The minimum requirements of the PC required to run Nortel Networks Call Center Reporting software (either as a Master Client or Multiple Client) depends upon whether or not the PC is dedicated to running Nortel Networks Call Center Reporting, or if it shares its resources with other applications.

See below for the minimum requirements for your circumstances.

Minimum PC specifications:

IBM™ Compatible PC

Microprocessor speed - 120MHz (dedicated PC), 166MHz (shared PC)
RAM - 16Mb (dedicated PC), 32Mb (shared PC)
Hard disk drive space for application - 10Mb
Hard disk drive space for data (per year) - 15Mb
Windows 95™ rev B (or later version) operating system
Network Interface Card
TCP/IP protocol
SVGA display
Mouse (or other Windows™ compatible Pointing Device)

Operating System Compatibility

Nortel Networks Call Center Reporting has been verified for correct operation on the following Operating Systems:

Operating System	Version
Windows 95	4.00.950 B
Windows 98	4.10.2222 A
Windows Millennium Edition	4.9.3000
Windows NT	4.00.1381
Windows 2000	5.00.2195
Windows XP Professional	Version 2002

Introduction

This chapter describes installation prerequisites, how to install the Nortel Networks Call Center Reporting Master and Multiple Client software, troubleshooting tips and the folders created on the Nortel Networks Call Center Reporting Master and Multiple Client PCs.

Installation prerequisites

Before you install Nortel Networks Call Center Reporting Master Client software, you must:

1. Be familiar with the Call Center and the Windows TM operating system used by your PC.
2. Ensure that the Call Center is installed and configured.
3. Ensure that the Call Center platform is connected to, and is operational on, the Network to which the Nortel Networks Call Center Reporting Master Client PC is connected.
4. The Master Client Address has been set in the Call Center Platform, and the Call Center Reporting Software Authorization Code has been entered. (The Master Client Address is found in CallPilot Manager under Call Center, General Properties.)

The Master Client Address is the address where the real time data stream for Call Center Reporting purposes is delivered. You must enter either the host name or the IP address of the computer that is running the Call Center Reporting Master Client.

The Master Client Address appears only if you use Call Center Professional on a Business Communications Manager 2.5 system, or if you have purchased and enabled the Call Center Reporting Software Authorization Code. Contact your service representative if you are interested in the Call Center Reporting Software Authorization Code.

Now you are ready to install the Nortel Networks Call Center Reporting Master Client software from the Call Center platform.



For Windows 2000 and Windows NT PCs, you **must** have Administrator's rights for the installation to be successful. If you do not have Administrator's rights for the PC on which you wish to install Nortel Networks Call Center Reporting, contact your network or PC Administrator, and request that they install the software for you.

Installing Nortel Networks Call Center Reporting Master Client software

Nortel Networks Call Center Reporting Master Client software automatically creates a folder called **\Program Files\Nortel Networks\Call Center Reporting** on the installation drive of the Master Client PC. This folder contains the application files used by Nortel Networks Call Center Reporting Master Client. It also contains the Call Center Reporting configuration database.

Another folder is created on the hard disk drive of the Master Client PC, inside the folder mentioned above. The second folder is called **\Program Files\Nortel Networks\Call Center Reporting\Stats**, and contains the stored statistical data. This folder is not created on the Multiple Client PCs.

Do not rename, move or delete these folders (although you may need to change the Network Share Name of the **\Program Files\Nortel Networks\Call Center Reporting** folder: see page 16).

Note: Before Nortel Networks Call Center Reporting will operate correctly, you must enable the Call Center Reporting Software Keycode. For Software Keycode information, refer to the *Software Keycode Installation Guide*.

TCP/IP Protocol

The Call Center platform and Nortel Networks Call Center Reporting use the industry standard TCP/IP protocol for communication between the Call Center and the Nortel Networks Call Center Reporting Master Client PC, and also for communication between the Master Client PC and the Multiple Client PC(s). This means the Windows Network component is required for all Nortel Networks Call Center Reporting Client PCs, both for the Master Client and for the Multiple Clients.

The Nortel Networks Call Center Reporting installation process does not install the Windows Network component. For instructions on installing the Windows Networking component, refer to your network or Windows documentation.

Checking whether The Windows Networking Component Is Installed

To check that the Windows Network component is set up properly on a PC in order for it to operate as a Nortel Networks Call Center Reporting Master or Multiple Client PC, the following steps must be performed:

Note: If your company has a network administrator, check with your administrator before changing any network configuration parameters.

1. Start the Windows system on the PC that will have the Nortel Networks Call Center Reporting Client application installed.

2. On the Windows taskbar, click **Start**, point to **Settings** and then click **Control Panel**. The **Control Panel** window appears.

(If you are using the Windows 2000 operating system, double click instead on **Networking and Dial-up Connections**. The **Networking and Dial-up Connections** window appears)

3. Double click on the **Network**  icon . The **Network** window appears with the **Configuration** tab displayed.

(If you are using Windows 2000 operating system, double click instead on the **Local Area Connection** icon  and then click on the **Properties** button.)

4. Check that TCP/IP appears on the list of installed network components. If TCP/IP is not on the list, click **Add** to install this protocol using the Windows installation instructions, or refer to your network administrator.

Installing Nortel Networks Call Center Reporting Master Client from a Business Communications Manager 2.5

1. Exit any Windows programs that are running.
2. Start your internet Browser (such as Internet Explorer or Netscape), and use it to connect to Port 6800 on the Business Communications Manager. Do this by entering into the browser Address Bar the IP Address of the Business Communications Manager and the Port number, in the following format: <http://10.10.10.1:6800>. (Remember to substitute the IP Address of *your* Business Communications Manager for the 10.10.10.1 shown in the example above.)
3. **Nortel Networks Unified Manager** page will appear in the browser.
4. Click on the **Install Clients** link.
5. The **Install Clients** page will appear in the browser.
6. Click on the **Call Center Reporting Master Client** link. Information on the Call Center Software application will appear in the browser window. (You may need to scroll down through the page to see the buttons which install the Call Center Reporting Master Client.)
7. Click on the **Install Call Center Reporting Master Client** button.
8. A dialog will appear from which you can select to either **Run this program from its current location** or **Save this program to disk**. The default option is **Save this program to disk**. Click on **OK**.
9. Several progress bars appear as the installation routine prepares itself. Presently the **Nortel Networks Call Center Reporting Master** language selection dialog appears. Select the language you wish to install, and then click **OK**.

10. The **Nortel Networks Connects** Splash Screen and the Nortel Networks Call Center Reporting Welcome screens appear.
11. The **Choose Destination Location** window appears.
12. Click **Next** to accept the default location. To change the folder location, click **Browse**, choose another folder location and then click **Next**.

As installation proceeds, a number of status dialog boxes appear, indicating the progress of the installation. The **Setup Complete** window appears.

In order for Multiple Client PCs to have access to the Master Client PC, the network must be set up correctly and the Multiple Client PCs must be able to see and access the **Call Center Reporting** and **Stats** folders on the Master Client PC. There are certain settings on the Master Client PC that need to be correctly set. See the Section titled **Master Client PC File Sharing** on Page 14.

Installing Nortel Networks Call Center Reporting Master Client for a CallPilot 100/150 Installation

1. Exit any Windows programs that are running.
2. Insert the *CallPilot 100/150 Documentation and Client Software* CD into the CD drive of the PC.
3. On the taskbar, click the **Start** button, then click **Run....**
4. In the **Run** dialog box click on **Browse...** and select the CD Rom on your PC, and navigate to the **Optional Software** folder. Double-click on the **Optional Software** folder, and then double-click on the **Call Center Reporting Master** folder.
5. Click on the **Setup.exe** file, and then click **Open**. The **Browse** window closes.
6. Click on **OK** in the **Run** dialog.
7. The **Nortel Networks Connects** Splash Screen and the Nortel Networks Call Center Reporting Welcome screens appear.
8. The **Choose Destination Location** window appears.
9. Click **Next** to accept the default location. To change the folder location, click **Browse**, choose another folder location and then click **Next**.

As installation proceeds, a number of status dialog boxes appear, indicating the progress of the installation. The **Setup Complete** window appears.

In order for Multiple Client PCs to have access to the Master Client PC, the network must be set up correctly and the Multiple Client PCs must be able to see and access the **Call Center Reporting** and **Stats** folders on the Master Client PC. There are certain settings on the Master Client PC that need to be correctly set. See the Section titled **Master Client PC File Sharing** below.

Master Client PC File Sharing

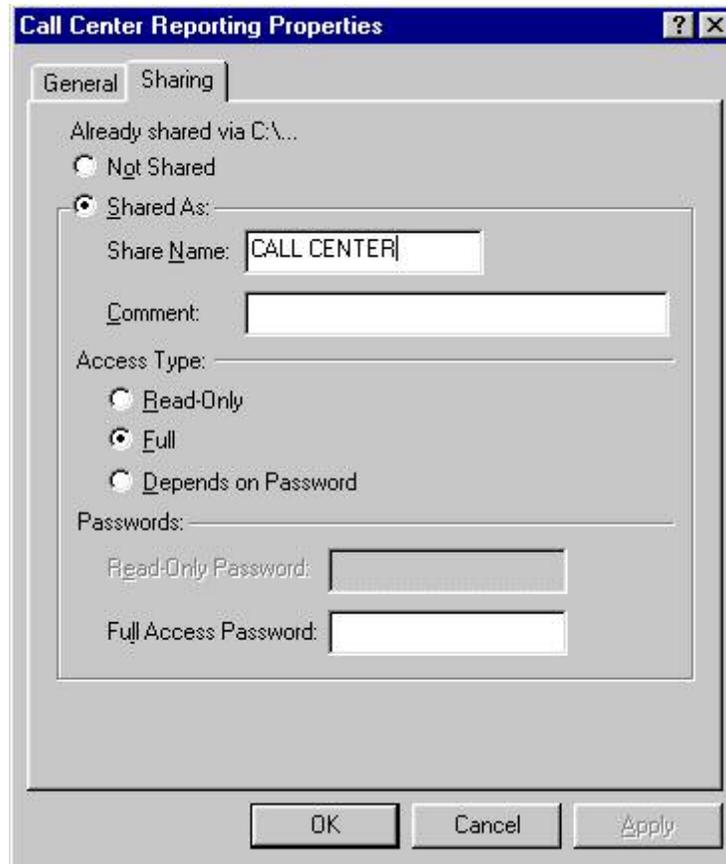
To set up the Master Client PC to allow file sharing:

1. Click on the **Start** button and then click **Settings**. Select **Control Panel** and then **Network** and highlight **Client for Microsoft Networks**.
2. Click on the button marked **File and Print Sharing**.



3. Click the option for File Sharing:
“I want to be able to give others access to my files.”
4. Click on the **OK** button, the computer will prompt you to restart your PC.
5. After the restart open the drive onto which you installed the Nortel Networks Call Center Reporting software (by default this is the C: Drive), using Windows Explorer.
6. Right click on the folder marked **Program Files\Nortel Networks\Call Center Reporting**. One of the drop down options is **Sharing**.

Click on this to show the following dialog:



Sharing the Call Center Reporting Folder

7. Click **Shared As**. Make sure that the name displayed is **Call Center** with a single space between the word **Call** and the word **Center** and that there are **no extra spaces** after the word **Center**.

	<p>Note that you are NOT changing the Folder Name, you are changing the Network Share Name. This is the name that the Multiple Client PCs will use to locate the Call Center Reporting folder on the Master PC, across the network. This DOES NOT rename the actual, physical, folder on the Master PC</p>
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8. Under Access Type click **Full**. Leave the Password box blank.
9. Repeat steps 6 to 8 for the second folder called **Program Files\Nortel Networks\Call Center Reporting\Stats**. This should be shared as 'Stats'.

Note: Windows NT Workstation and Windows 2000 users only need to follow steps 5 to 9 above, remembering to set the type of access required in step 8 by clicking on the **Permission** button. Set Permissions to Full.

Installing Nortel Networks Call Center Reporting software onto additional PCs

The Nortel Networks Call Center Reporting Multiple Client software can be loaded onto additional PCs so that multiple Supervisors/Managers can access the information stored on the Master Client PC.

This is known as having Multiple Clients. (Also, see the sections above titled TCP/IP Protocol, and Master Client PC File Sharing.)

Installing Nortel Networks Call Center Reporting Multiple Client from a Business Communications Manager 2.5

1. Exit any Windows programs that are running.
2. Start your internet Browser (such as Internet Explorer or Netscape), and use it to connect to Port 6800 on the Business Communications Manager. Do this by entering into the browser Address Bar the IP Address of the Business Communications Manager and the Port number, in the following format: <http://10.10.10.1:6800>. (Remember to substitute the IP Address of *your* Business Communications Manager for the 10.10.10.1 shown in the example above.)
3. **Nortel Networks Unified Manager** page will appear in the browser.
4. Click on the **Install Clients** link.
5. The **Install Clients** page will appear in the browser.
6. Click on the **Call Center Reporting Multiple Client** link. Information on the Call Center Software application will appear in the browser window. (You may need to scroll down through the page to see the buttons which install the Call Center Reporting Multiple Client.)
7. Click on the **Install Call Center Reporting Multiple Client** button.

	Make sure you have clicked on the Call Center Reporting Multiple Client button and NOT the Call Center Reporting Master Client button. There can only be one PC on your network configured as a Master Client.
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8. A dialog will appear from which you can select to either **Run this program from its current location** or **Save this program to disk**. The default option is **Save this program to disk**. Click on **OK**.

9. Several progress bars appear as the installation routine prepares itself. Presently the **Nortel Networks Call Center Reporting Client** language selection dialog appears. Select the language you wish to install, and then click **OK**.
10. Double-click on the **Setup.exe** file, select the language you wish to install, and then click **OK**.
11. The **Nortel Networks Connects** Splash Screen and the Nortel Networks Call Center Reporting Welcome screens appear.
12. The **Choose Destination Location** window appears.
13. Click **Next** to accept the default location. To change the folder location, click **Browse**, choose another folder location and then click **Next**.
14. As installation proceeds, a number of status dialog boxes appear, indicating the progress of the installation. The **Setup Complete** window appears.

Note: You will be asked for the Network Name of the Master Client PC during the installation of the Multiple Client software.

	<p>YOU MUST enter the Network Name of the Master Client PC – do not enter the IP Address of the Master Client PC. You must enter the Network Name of the Master Client PC for the Multiple Client software to operate correctly.</p> <p>Enter the Network Name of the Master Client without any backslashes \\. For example, if the Network name of the Master Client was \\MISMaster, enter it as MISMaster.</p>
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Installing Nortel Networks Call Center Reporting Multiple Client for a CallPilot 100/150 Installation

1. Exit any Windows programs that are running.
2. Insert the *CallPilot 100/150 Documentation and Client Software* CD into the CD drive of the PC.
3. On the taskbar, click the **Start** button, then click **Run....**
4. In the **Run** dialog box click on **Browse...** and select the CD Rom on your PC, and navigate to the **Optional Software** folder. Double-click on the **Optional Software** folder, and then double-click on the **Call Center Reporting Client** folder.

	Make sure you have clicked on the Call Center Reporting Client folder and NOT the Call Center Reporting Master folder. There can only be one PC on your network Configured as a Master Client.
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5. Click on the **Setup.exe** file, and then click **Open**. The **Browse** window closes.
6. Click on **OK** in the **Run** dialog.
7. The **Nortel Networks Connects** Splash Screen and the Nortel Networks Call Center Reporting Welcome screens appear.
8. The **Choose Destination Location** window appears.
9. Click **Next** to accept the default location. To change the folder location, click **Browse**, choose another folder location and then click **Next**.
10. As installation proceeds, a number of status dialog boxes appear, indicating the progress of the installation. The **Setup Complete** window appears.

Note: You will be asked for the Network Name of the Master Client PC during the installation of the Multiple Client software.

	YOU MUST enter the Network Name of the Master Client PC – do not enter the IP Address of the Master Client PC. You must enter the Network Name of the Master Client PC for the Multiple Client software to operate correctly.
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Applying Security to the Call Center Reporting Shared Folder

To prevent unauthorised access to the Call Center Reporting folder, you may specify which users can connect to the folder, and what control they have once they have connected. This is achieved by use of the Windows security features.

Whilst it is not a functional requirement that the Call Center Reporting folder be protected using any of the Windows security features, it is recommended that the shared folders are given some measure of protection.

This will prevent access to the Call Center Folder from unauthorised users. Also, some viruses are known to take advantage of un-protected shared folders as a means of gaining entry to networked PCs in order to infect them.

Your Network Administrator may advise you of which Windows features to use, but listed below are typical scenarios involving Windows 95/98 and Windows NT/Windows 2000.

The scenarios below assume you have accepted the default installation names and locations for Nortel Networks Call Center Reporting. If you changed the folder names or their locations, substitute the appropriate folder names in the following examples.



Windows NT Workstation cannot connect to a shared folder on an Windows 95 PC. If you have Windows NT Workstation PCs which are going to be running the Nortel Networks Call Center Reporting Client, the Nortel Networks Call Center Reporting Master PC should not be running Windows 95.

Applying Security to the Call Center Reporting Folder in Windows 95 and Windows 98

1. Using the Windows Explorer, browse to the **Program Files\Nortel Networks** folder.
2. Right-Click on the **Call Center Reporting** folder. The **Call Center Reporting Properties** window appears.
3. Ensure the **Full** option is checked in the **Access Type** list.
4. In the **Full Access Password** field, enter a password, and then click on the **Apply** button. You will be asked to re-enter the password to verify it. Re-enter the password and click **OK**. The confirmation window closes.
5. Click **OK** to close the **Call Center Reporting Properties** window.

Applying Security to the Call Center Reporting Folder in Windows NT and Windows 2000

1. Using the Windows Explorer, browse to the **Program Files\Nortel Networks** folder.
2. Right-Click on the **Call Center Reporting** folder. The **Call Center Reporting Properties** window appears.
3. Select the **Security** tab.
4. Click on the **Permissions** button.
5. If there is an entry for **Everyone**, remove it. Click the **Add** button. Select from the list of users and PCs those users and PCs you wish to allow to connect to the **Call Center Reporting** folder. (In Windows NT you must click the **See Users** button in order to have the users displayed in the list.) When you have selected the users or specified the PCs you wish to allow to connect to the **Call Center Reporting** shared folder, click on **OK**.
6. In the **Call Center Reporting Properties** window, click on the **Permissions** button. Allocate **Full Control** as the **Type of access** for your selected users/PCs.

Connecting to a Protected Shared Folder from a Client PC

You must now set up the PC(s) on which the Nortel Networks Call Center Reporting Client application will be running.

1. Using Windows Explorer, browse to the **Call Center Reporting** folder on the **Nortel Networks Call Center Reporting Master PC**.
2. Try to access this folder and you will be prompted for the **Full Access** password for the shared folder. Supply the password. (In Windows 95 and Windows 98, ensure the **Save this password in your password list** check box is checked, and click **OK**. In Windows NT and Windows 2000, you must also supply the User Name you wish to connect as.)
3. Right-click the folder name in the Windows Explorer tree, and select the **Map Network Drive** option.
4. Select the drive letter you wish to map the **Call Center Reporting** shared folder to (it is recommended that you accepting the default value). In Windows 95 and Windows 98 ensure the **Reconnect at logon** checkbox is checked, and click **OK**.
5. Whenever a new logon session is started the user is automatically connected to the Call Center Reporting shared folder, and the Nortel Networks Call Center Reporting Client can then be started as usual.



If the **Full Access** password was saved in your password list by Windows, you will not need to supply a password. If it was not, you will be prompted for the **Full Access** password of the **Call Center Reporting** folder once at the start of each logon session.

Troubleshooting Nortel Networks Call Center Reporting Installation

Nortel Networks Call Center Reporting will detect whether the Windows OLE component is correctly installed on the target PC.

If the OLE component is not present on the target PC (or if the OLE registry key has been removed or altered) you will see the following message displayed, with an OK button:

An error occurred during the move data process: -119.

Click on the OK button. You will then see the following message displayed, with an OK button:

Installation of Call Center Reporting has been cancelled.

Click on OK to acknowledge the message.

Contact your System Administrator to allow them to rectify the situation (by restoring a backup of your PC, or re-installing the OLE/DCOM component onto your PC, for example.)

Troubleshooting Nortel Networks Call Center Reporting

If the Master Client (including the RDB Server) is closed down and then restarted, Nortel Networks Call Center Reporting will restart with no knowledge of any Agents who are still Logged In to the Call Center, nor will it have any knowledge of any Calls which are already in progress.

The system will log Agents back in automatically if they are available to answer calls. If they are not available to answer calls they will be logged back in automatically when they become available to answer calls.

Calls that were in progress when Nortel Networks Call Center Reporting was re-started will not be recorded in the statistics. All new calls which arrive into the system once Nortel Networks Call Center Reporting has been re-started will be recorded in the statistics.

The same situation will occur if the Call Center is closed down and restarted, and Agents Log In to the Call Center before the Master Client software has been restarted.

The following procedures explain how to recover from data loss between the Call Center and the Master Client PC. For each situation, perform the steps in order.

Starting or Restarting the Call Center and Nortel Networks Call Center Reporting Master Client

When starting the system for the first time, or intentionally restarting the system after a controlled power down:

1. Start the Call Center platform.
2. Start the Nortel Networks Call Center Reporting Master Client.

Note: If agents are allowed to log in before step 2 is completed, their activities before the Nortel Networks Call Center Reporting has re-started will not be recorded.

To recover from an unintentional close-down of the RDB Server:

1. Shut down Nortel Networks Call Center Reporting Master Client.
2. Ensure that the Call Center is still running.
3. Restart Nortel Networks Call Center Reporting Master Client.
4. Agents who are not currently logged into the system may now log in.

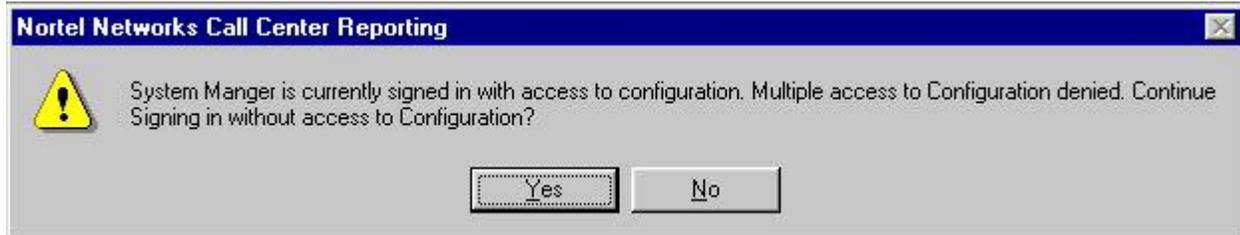
Note: If agents are allowed to log in before step 3 is completed, or if there are agents who were logged into the Call Center before the RDB Server was closed down, their activities before the Nortel Networks Call Center Reporting has re-started will not be recorded.

Starting or Restarting the Call Center and Nortel Networks Call Center Reporting Multiple Client

If you have Logged In to Nortel Networks Call Center Reporting on a Multiple Client PC and the Call Center platform has been restarted, you will have to Log Out and Exit from the Nortel

Nortel Networks Call Center Reporting, and re-start Nortel Networks Call Center Reporting once the Call Center platform has been re-started.

If you had selected the Access to Configuration option before the Master Client PC was re-set, you might see the following dialog box when you try to Log In again with the Access to Configuration option selected.



Nortel Networks Call Center Reporting Access to Configuration Denied dialog box

Check that no other users have Logged In with the Access to Configuration option selected.

If there are no other users Logged In with the Access to Configuration option selected the restriction placed on the Access to Configuration option will time-out after 15 minutes. Wait for 15 minutes and then re-try.

Run Time Error 3043 When using Windows 2000 or Windows NT

If you see the following error message when you try to start Nortel Networks Call Center Reporting:



Run Time Error 3043 Dialog Box

Check that the TMP environment variable is set to point to a valid temporary folder (usually called TEMP), and that the disk on which the folder resides is not full.

In Windows NT the environment variables can be accessed as follows:

1. Click **Start**
2. Point To **Settings**
3. Click **Control Panel**
4. Click **System**
5. Select the **Environment** Tab

In Windows 2000 the environment variables can be accessed as follows

1. Click **Start**
2. Point to **Settings**
3. Click **Control Panel**
4. Click **System**
5. Select the **Advanced** Tab
6. Click the **Environment Variables** button

Statistical Calendar showing in a different Language than the rest of Call Center Reporting

If you see the calendar within Call Center Reporting in a different language to the rest of Call Center Reporting (for example, you might have selected German at installation time, and the calendar is showing in English), this section will help you to correct the problem.

The calendar is a Microsoft supplied component, held in a file called `MSCAL.OCX`. It is available in various languages. If Call Center Reporting has been installed once in a given language, subsequent installs of other languages might not overwrite this file with the version required for your language.

To install a different language on top of a previous language version of Call Center Reporting, it might be necessary to delete or (rename to something like `OLDMSCAL.OCX`) the previous `MSCAL.OCX` file from the `Windows\System32` (or `WINNT\System32`) folder, before performing the installation.

Also note that Microsoft Office loads a version of the `MSCAL.OCX` file into `\Program Files\Microsoft Office\Office`. If you have Office in one language and Call Center Reporting in another, Windows will use the Office version of the `MSCAL.OCX` in favour of the Call Center Reporting supplied one.

Windows Socket Upgrade for Windows 95 PCs

If you are using a PC running Windows 95 (version B or later) and you have difficulties connecting to the Call Center Platform or see sporadic or slow updates to the Nortel Networks Call Center Reporting Real Time screens, you may require an upgrade for the Windows Sockets components for your PC.

Download the `W95ws2Setup.exe` file from the following Microsoft World Wide Web site:
http://www.microsoft.com/windows95/downloads/contents/wuadmintools/s_wunetworkingtools/w95sockets2/default.asp.

Graphical Real Time colours not displaying in their default colours

The Real Time screens use the following colours to represent the various Line and Agent states:

Agent or Line State	Colour
Incoming	Green
Outgoing	Yellow

Not Ready	Grey
Available	Blue
Alarm	Red
Waiting	Light Blue

On a very few PCs the default colours do not appear as listed above. To obtain the default colours as listed above, switch to a higher or lower colour mode setting. (Right click on the PC desktop, and select **Properties** from the pop-up menu. Select the **Settings** tab, and adjust your colour settings to suit.)

Folders created on the Call Center Reporting Multiple Client PCs

Unless you choose to select a different installation destination during the installation of the Nortel Networks Call Center Reporting Master and Multiple Client software, a folder will be automatically created on the installation drive of the PC called **\Program Files\Nortel Networks\Call Center Reporting**. This folder will contain the application files used by Nortel Networks Call Center Reporting.

If you do choose an alternative destination during the installation process, your folder will have the name you selected.

Do not rename, move or delete this folder.

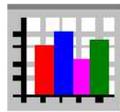
Note: There is no folder called **\Program Files\Nortel Networks\Call Center Reporting\Stats** on the PCs used to run Nortel Networks Call Center Reporting Multiple Clients.

These PCs refer to the data in the **\Program Files\Nortel Networks\Call Center Reporting\Stats** folder on the Master Client PC in order to display statistical information.

Starting Nortel Networks Call Center Reporting

1. To start the Nortel Networks Call Center Reporting Master Client, double-click on the Call Center Reporting icon on the desktop of the Master Client PC.

Note: At the same time, the RDB Server will automatically open and start to collect data from the Call Center. When the RDB Server is operational an icon in the form of a bar graph will be shown on the Windows taskbar on the Master Client PC Desktop.



RDB Server taskbar icon

Note: The first time Nortel Networks Call Center Reporting is started on the Master Client it will create Configuration Database, which is required for the RDBServer to operate correctly. Because of this, ensure that the first time you start Nortel Networks Call Center Reporting on the Master Client you start it by double-clicking on the Call Center Reporting icon on the desktop of the Master Client PC.

2. To start a Nortel Networks Call Center Reporting Multiple Client, double-click on the Call Center Reporting Client icon on the desktop of the Multiple Client PC.

Remember, for the Multiple Client(s) to operate correctly, the RDB Server on the Master Client must already be running.

Entering Nortel Networks Call Center Reporting (Log In)

Before you can access the configuration or management information you have to Log In to the system. For security, this process requires a User ID and a Password.

1. From the menu bar select **L**evel and then click **Log-In...**, or
2. Click the **Log In** icon on the toolbar.
3. You must now enter a User ID number and Password. The ID number entered indicates which Skillsets you wish to view or administer.

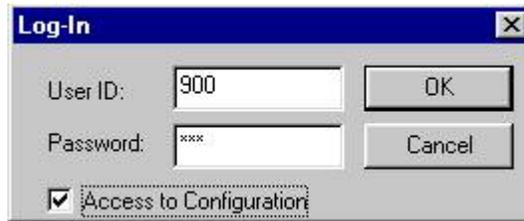
To be able to access all of the Skillsets you must enter the System Manager User ID and Password. The User ID for the System Manager is 900. To restrict your

activities to only one Skillset enter a Skillset level (also called Supervisor level) User ID and Password. The Supervisor User Ids are 901 for Skillset One, 902 for Skillset Two and so on, up to 950 for Skillset Fifty.

Note: The User IDs are pre-set at 900, 901, 902 ... 950. and cannot be altered. The Passwords also default to 900, 901, 902 ... 950, but the Passwords may be changed in the configuration.

With the default User IDs and Passwords, you would enter User ID 900, Password 900 to gain access to the system as the System Manager; you would enter User ID 901, Password 901 to gain access as the Supervisor of Skillset One and you would enter User ID 914, Password 914 to gain access as the Supervisor of Skillset Fourteen.

4. If you wish to make changes to the Configuration, click the **Access to Configuration** box. This will enable you to change the Configuration settings for the Call Center Reporting software. If you are Logging In as the System Manager (900) you will be able to change all of the Configuration settings. If you are Logging In at Skillset Level (901 ... 950), you will only be able to change some settings directly related to that particular Skillset.



Nortel Networks Call Center Reporting Log-In dialog box

5. Click **OK**.

Note: With the **Access to Configuration** option enabled Nortel Networks Call Center Reporting monitors the PC for user activity on the keyboard or the mouse. As a security precaution, after a period of 15 minutes with no activity the user is automatically logged out.

Exiting Nortel Networks Call Center Reporting Master Client (Log Out)

To Log Out and leave the user interface screen open:

1. Select **L**evel and then click **L**og-**O**ut.

To Log Out and close the user interface:

1. Select **L**evel and click **L**og-**O**ut & **E**xit....

2. You will be prompted for the System Manager User ID and Password. If you do not enter these correctly the Master Client software will not close down.

Note: The RDB Server will remain operational even though the user interface is now closed.

Closing the RDB Server (on the Master Client PC)

1. Double click the **RDB Server** icon on the Windows taskbar. This will open the **Report Database Server** window.
2. Click **Exit**.
3. You will be prompted for the System Manager User ID and Password. If you do not enter these correctly the RDB Server will not close down.

Note: It is recommended that the RDB Server is always operational so that statistical data from the Call Center is continuously collected.

Call Center Reporting Main Window

The Main window opens after Log In. The features of Nortel Networks Call Center Reporting are accessed from this window.

The menu options which are available depend on the whether you Logged In to the System Manager level (900) or to a Skillset level (901 ... 950). Also, whether the System Manager selected the **Access to Configuration** option will affect the options which are available.

The level you have Logged In to is displayed in the title bar of the Main window. This reads System Manager if you have signed in as the System Manager. If you have Logged In at Skillset level, the name of the Skillset is shown. (If the Skillset has not been given a name in the Configuration settings, then the word Skill and the Skillset number will be shown, for example, Skill08).

If you have Logged In as System Manager, and then used the **Sign-Through...** option to sign through to a Skillset, for example Skillset 1, and Skillset 1 has been named Support, the title bar would read: Nortel Networks Call Center Reporting – Manager – Support.

By looking at the title bar of the Main Window you will always be able to tell to which level you have Logged In to or signed through to.

The following menu options are available to select:

Level

Log-In... - allows you to access configuration and management information.

Sign Through - (System Manager level only) allows you to access each of the Skillsets without having to Log Out from System Manager level and then Log In again using the Skillset level ID and Password. The Sign Through dialog appears which displays all of the 50 Skillsets. You can sign through to a Skillset by double clicking directly on the name of the Skillset, or by highlighting the Skillset you wish to sign through to, and then clicking the OK button.

Print - allows you to print management reports.

Log-Out - allows you to exit without closing the user interface.

Log Out & Exit... - allows you to exit and close the user interface.

View

Toolbar - displays the Toolbar when selected. The toolbar consists of various shortcut icons. When the mouse pointer is positioned over an icon, a description of the icon function is displayed.

Status Bar - displays the Status Bar when selected. The status bar appears at the base of the main window and offers a description of either a shortcut icon under the mouse pointer, or an option selected from the main menu.

System (System Manager level only)

Configure - opens the main configuration window (if the **Access to Configuration** option was checked during the Log In process).

Nortel Networks Call Center Reporting Status - opens a window that shows the Nortel Networks Call Center Reporting status and any diagnostic messages from the RDB Server. The Data Log can be closed and a new one started from this window, when advised to do so by your distributor. You can only do this if you have signed in with access to the Configuration.

Management-Info

Statistical Set up – allows you to specify settings which affect the display or reporting of information

Real Time – displays the Real Time screens to allow you to monitor the activity within, and performance of, your Call Center

Current Reports – display or print reports relating to the current hour or the current day

Historical Reports... - display or print reports relating to information gathered and stored before the current day

Abandoned Caller ID Report... - display or print the Abandoned Caller ID report (Skillset level only (901 ... 950))

Print Schedule... - set up automatic print schedules to have selected reports printed automatically at designated times.

Configuration Report – display or print the Configuration settings for your entire System (900) or a single Skillset (901 ... 950)

Window

Selecting **Window** provides a drop down menu with options to change the appearance of the windows or to close active windows.

Help

Help Topics - opens the on-line help

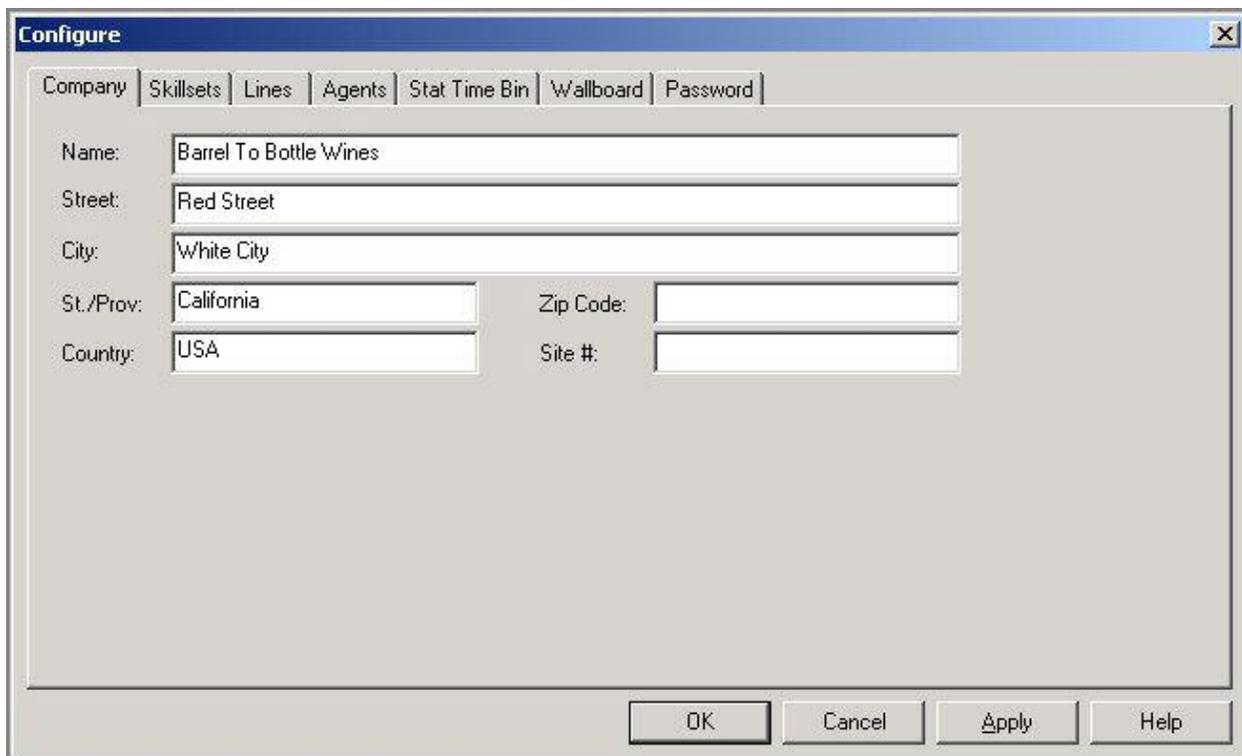
About Nortel Networks Call Center Reporting... - displays the software version number and copyright information.

Introduction

Nortel Networks Call Center Reporting gathers data on events that occur within your Call Center system. For meaningful and accurate information to be collated, Nortel Networks Call Center Reporting must be suitably configured.

The configuration options can be accessed from the System Manager menu by selecting **S**ystem and then **C**onfigure....

The Configure window consists of a set of named tabs which can be selected to enter, view or change the configuration. The Skillset information, Line information and Agent information is transferred to Nortel Networks Call Center Reporting from the Call Center platform, when you request to Upload these sets of information. You do not manually enter these sets of information. This is discussed below in the Skillsets, Lines and Agents sections.



The screenshot shows a 'Configure' dialog box with a blue title bar and a close button (X) in the top right corner. Below the title bar is a tabbed interface with the following tabs: 'Company', 'Skillsets', 'Lines', 'Agents', 'Stat Time Bin', 'Wallboard', and 'Password'. The 'Company' tab is currently selected. The main area contains several text input fields:

- Name: Barrel To Bottle Wines
- Street: Red Street
- City: White City
- St./Prov: California
- Country: USA
- Zip Code: (empty)
- Site #: (empty)

At the bottom of the dialog box are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

Configure window

Configure window tabs

Company

Use this tab to enter details of your company. Your **Company Name** will be included in any printed reports.

Skillsets

Select this tab to upload the Skillset information, and to change the default Passwords for access to the Skillset Level (the Supervisor Password). If no information is uploaded from the Call Center, the Skillset names will default to Skill01, Skill02 and so on to Skill50, and the Passwords will default to 901, 902 ... 950.

Skillset names are truncated to 7 characters when they are Uploaded from the Call Center, so, for ease of identification, they should be entered into the Call Center in a fashion which makes their first 7 characters unique.

Uploading the Skillset information from the Call Center platform

1. Click the **Skillsets** tab.
2. Click the **Upload** button.
3. The Config Update dialog appears, and the Skillset configuration information is transferred from the Call Center platform to the Nortel Networks Call Center Reporting application, and added to the configuration database of the Master Client PC. The name of the Skillset currently being added to the configuration database is displayed as a means of tracking the upload progress (see page 36).
4. The transfer of information to the Nortel Networks Call Center Reporting is practically instantaneous. The progress indicator is actually showing the information being written to the configuration database. During this period the Nortel Networks Call Center Reporting application is operating as normal; it is still tracking Agent and Line activity and recording these activities into the statistical database, and doing so using the newly transferred information.
5. When the upload is completed, the word Finished appears in the Config Update dialog, and the OK button becomes available (non-greyed out). (See page 58.)
6. Click **OK**.

Setting the Password for Logging In to a Skillset in Call Center Reporting (Supervisor Password)

1. Click the **Skillsets** tab.
2. Click the Skillset for which you wish to set the Password.
3. Click **Password**. The **Skillset Password** window will open.

4. Enter the new password in the **New Password** field. The Password must be a 3 digit number between 100 and 999.
5. You must re-enter the Password in the **Confirm Password** field.
6. Click **OK**.

Lines

Select this tab to upload or view the details of your Call Center lines.

Note: Nortel Networks Call Center Reporting only gathers data from the Call Center system. The configuration does not affect the operation of the Call Center system. Line details changed at this point are for reporting purposes only.

Uploading the Line information from the Call Center platform

1. Click the **Lines** tab.
2. Click the **Upload** button.
3. The Config Update dialog appears, and the Line configuration information is transferred from the Call Center platform to the Nortel Networks Call Center Reporting application, and added to the configuration database of the Master Client PC. The name of the line currently being added to the configuration database is displayed as a means of tracking the upload progress (the Config Update dialog is shown on page 36).
4. The transfer of information to the Nortel Networks Call Center Reporting is practically instantaneous. The progress indicator is actually showing the information being written into the configuration database. During this period the Nortel Networks Call Center Reporting application is operating as normal; it is still tracking Agent and Line activity and recording these activities into the statistical database, and doing so using the newly transferred information.
5. When the upload is completed, the word Finished appears in the Config Update dialog, and the OK button becomes available (non-greyed out). (See page 58.)
6. Click **OK**.

Note: Target Lines which are programmed into the Call Center do not need to be transferred to Nortel Networks Call Center Reporting. If you perform an Upload action when you have some Target Lines programmed into the Call Center, you will see that only the non-Target Lines are transferred to Nortel Networks Call Center Reporting. This is normal.

Agents

Select this tab to upload or view the details of your agents.

Note: In order that Nortel Networks Call Center Reporting truly reflects the activity or status of the Agents it is important that the Agent configuration correctly reflects the programming of your Call Center system. Nortel Networks Call Center Reporting only gathers data from the Call Center system. The configuration does not affect the operation of the Call Center system.

Agent names are truncated to 7 characters when they are Uploaded from the Call Center, so, for ease of identification, they should be entered into the Call Center in a fashion which makes their first 7 characters unique.

Uploading the Agent information from the Call Center platform

1. Click the **Agents** tab.
2. Click the **Upload** button.
3. The Config Update dialog appears, and the Agent configuration information is transferred from the Call Center platform to the Nortel Networks Call Center Reporting application, and added to the configuration database of the Master Client PC. The name of the agent currently being added to the configuration database is displayed.



Nortel Networks Call Center Reporting Config Upload Window

4. The transfer of information to the Nortel Networks Call Center Reporting is practically instantaneous. The progress indicator is actually showing the information being written into the configuration database. During this period the Nortel Networks Call Center Reporting application is operating as normal; it is still tracking Agent and Line activity and recording these activities into the statistical database, and doing so using the newly transferred information.
5. When the upload is completed, the word Finished appears in the Config Update dialog, and the OK button becomes available (non-greyed out, see Page 58).



Nortel Networks Call Center Reporting Config Upload Window – Transfer Completed

6. Click **OK**.

Stat Time Bin

Select this tab to configure the time thresholds used in the statistical analysis of Answered and Abandoned Calls. Nortel Networks Call Center Reporting will provide statistical reports on the percentage of incoming calls answered and abandoned within each of your chosen Stat Time Bins.

Note that the Time Bins do not show the duration of the calls, they show (Answered report) the duration of queuing time before they were answered and (Abandoned Report) the amount of queuing time before they abandoned from the Skillset call queue and gave up waiting.

Also note that changing the Stat Time bins will affect all Answered and Abandoned call data which is gathered from that point in time, but it does not re-format existing reports. This allows you to change the Stat Time bins to cater for differing needs which may arise, without affecting your previously gathered statistics.

The valid values that you can enter into the Time Bins are from 00:00 to 59:59, and the values must be progressively higher, so Time Bin 2 is greater than Time Bin 1, Time Bin 3 is higher than Time Bin 2 and so on.

Wallboard

Select this tab to configure Wallboard(s). Wallboard configuration is covered in detail in Chapter 6 of this guide.

Password

Allows the System Manager Log In password to be changed from the default value of 900. The password must be a three-digit number between 100 and 999.

Note: If the password is changed from the default value and then forgotten, Nortel Networks Call Center Reporting Master Client must be un-installed and all files removed from the

\Program Files\Nortel Networks\Call Center Reporting folder, and the Nortel Networks Call Center Reporting software re-installed to allow you to Log In. This would reset the password back to the default value of 900. This will remove all of the configuration from the Master Client. The Skillset, Line and Agent details will need to be Uploaded again, and the other details of the configuration (such as Stat Time bins will need to be re-entered.



You do not need to remove the **stats** folder from the **\Program Files\Nortel Networks\Call Center Reporting** folder. If you do this, you will remove all of your stored reports from the system.

Wallboards

6

Introduction

With the addition of Nortel Networks Call Center Reporting your Call Center system is further enhanced by the facility to tailor Wallboards to your requirements.

You may assign multiple Wallboards to display information relating to any of the Skillsets or totals for the whole Call Center system. Nortel Networks Call Center Reporting will directly address a maximum of 16 Wallboards. However, if any of the Wallboards are the *ipView* Software Wallboard, these can be configured to re-transmit their received data (called ‘echoing’) to other Wallboards, which can be a mixture of *ipView* Software Wallboards or hardware Wallboards. Similarly, any of these other *ipView* Software Wallboards may be configured to echo to other Wallboards. In this way any number of IP Wallboards may be driven from a single Nortel Networks Call Center Reporting application.

Different parameters can be displayed on each Wallboard. Wallboards can also be configured to display text messages and alarm conditions.

Wallboard installation

The Wallboard(s) must be physically connected to the local area network on which your Nortel Networks Call Center Reporting Master Client is running. Refer to installation documentation supplied with your Wallboard.

Note: The IP Address you set on a new Wallboard must correspond to the IP Address that you configure in Nortel Networks Call Center Reporting.

Wallboard configuration

To add a Wallboard or change the settings of an existing Wallboard:

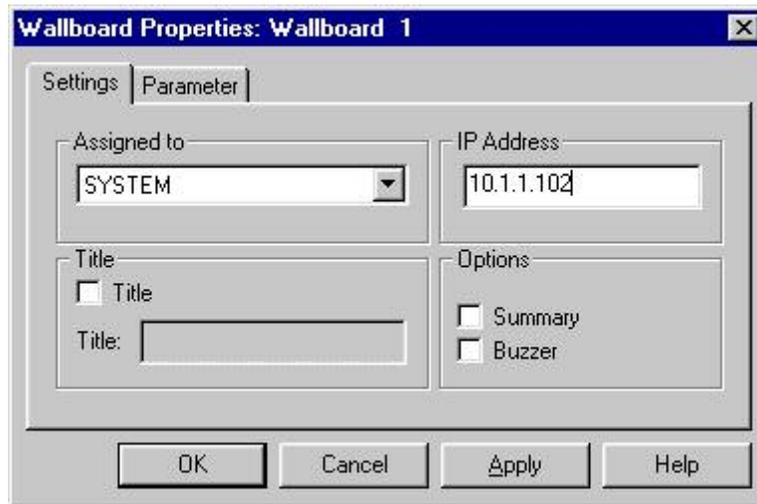
1. From the System Manager Main window, click **S**ystem.
2. From the drop down menu select **C**onfigure.
3. Click the **W**allboard tab.

Note: The window displays each of the possible 16 Wallboards together with their current settings. If a particular Wallboard is not assigned, it will be listed as **Not Used**.

4. Click and highlight the Wallboard number required.

5. Select **Properties**.
6. A window will open with two tabs labelled **Settings** and **Parameters**.

Wallboard Settings



The Wallboard Settings window

In **Settings**, you select whether the Wallboard will be assigned to a Skillset or to the System, the IP Address of the Wallboard, whether a Title will be displayed and whether a Summary and Buzzer will be required.

An explanation of each of the **Settings** is as follows:

Wallboard Assignment

From the drop down menu, select which option the Wallboard is to be assigned. The options are **System**, **Skill01**, **Skill02... Skill50** or **Not Used**. If you have given your Skillsets other names, these will be displayed in the drop down menu.

IP Address

The Wallboard will have been assigned an IP Address when it was installed. Enter the IP Address for the Wallboard into this field. The IP Address of each Wallboard must be unique. You must specify the IP address of the Wallboard, not the network machine name.

Note that the MIS expects the IP Address of the Wallboard to remain constant. If it is altered then the MIS Wallboard configuration should be amended to match. This will not happen without manual intervention on a physical Wallboard. However, if the Wallboard is an *ipView* SoftBoard running on a PC that uses DHCP to obtain its IP Address, then the IP Address of the PC could be subject to change. DHCP-enabled PCs usually receive the same IP Address each time they re-boot.

However, if the PC has been turned off for a period in excess of the IP Address lease time for your network and the IP Address has been allocated to another PC, then it will receive a new IP Address.

	If the IP Address of a physical Wallboard or an ipView SoftBoard software wallboard changes, the MIS Config must be updated to reflect the new IP Address of the Wallboard device.
---	--

Wallboard Title

A Wallboard Title is a line of fixed text on the top line of the Wallboard. It is typically used to indicate the Skillset (or System) to which a Wallboard has been assigned. A Title can be up to 16 characters long.

Wallboard Buzzer

The Wallboard Buzzer option ensures that whenever a Message, Alarm, Schedule or Summary is sent to the Wallboard, a buzzer will sound and prompt the agents to view the information being displayed.

Wallboard Summary

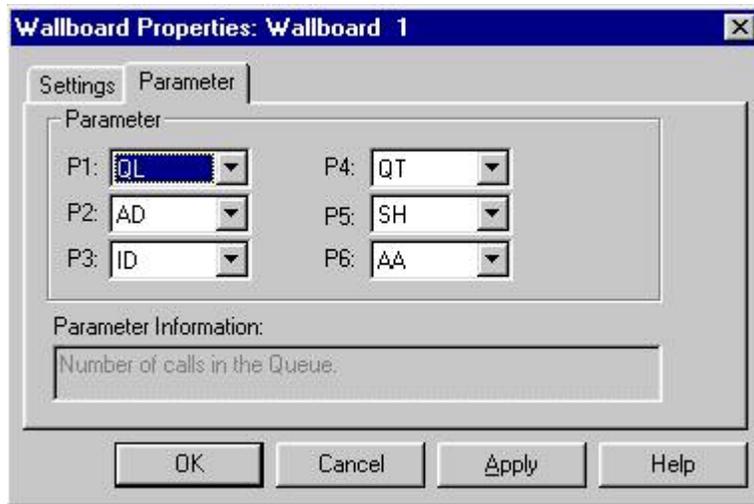
The Wallboard Summary option will automatically display information on the performance of your call center. Information is displayed on the hour, for the previous hour and for the day so far.

The Parameters displayed during a summary are:

Abbreviation	Description
IH	Total number of I ncoming calls for the H our
ID	Total number of I ncoming calls for the D ay
OH	Total number of O utgoing Calls for the H our
OD	Total number of O utgoing Calls for the D ay
AH	Total number of A bandoned Calls for the H our
AD	Total number of A bandoned Calls for the D ay
SH	Grade of S ervice for the H our
SD	Grade of S ervice for the D ay

Wallboard Parameters

To select which parameters to display on a Wallboard, click the **Parameter** tab.



The Wallboard Parameter window

The available Parameters are:

Abbreviation	Description
ID	Number of I ncoming calls received in the current D ay
IH	Number of I ncoming calls received in the current H our
AD	Number of A bandoned calls in the current D ay
AH	Number of A bandoned calls in the current H our
OD	Number of O utgoing calls made in the current D ay
OH	Number of O utgoing calls made in the current H our
SD	Grade of S ervice offered in the current D ay (%)
SH	Grade of S ervice offered in the current H our (%)
AO	Number of A gents on O utgoing calls
AI	Number of A gents on I ncoming calls
AA	Number of A gents A vailable to receive calls
AN	Number of A gents in the N ot Ready state
AL	Number of A gents L ogged in
QL	Current Q ueue L ength - number of calls in the call queue for this Skillset
QT	Current Q ueue T ime for the longest waiting call in the call queue for this Skillset (secs.)

To change the Parameters to be displayed, click the drop down menu arrows and highlight your new selection.

If the Wallboard Title option is selected the Parameters on the top line are replaced with the fixed text chosen for the title of the Wallboard.

Once a Wallboard has been allocated to either a Skillset or the System, and is configured with the required Parameters, the Wallboard will immediately begin to function and display the required information.

Wallboard Messages, Alarms and Schedules

Wallboard Messages

Text Messages can be sent to your agents via the Wallboards. Messages can contain words as well as numerical information (Parameter values), and can be up to 70 characters long. When Messages are displayed they scroll from right to left until the entire Message has passed over the Wallboard at least three times. An audible Buzzer accompanies Wallboard Messages if this option is configured in the Wallboard Settings tab.

The maximum number of Messages that can be created is 32. The Messages are stored in a library, accessible from either the System or Skillset level. They can be manually sent to the Wallboard(s), scheduled to be sent on a particular day and time, (Wallboard Schedule), or used in conjunction with any alarm status (Wallboard Alarm).

Creating a Wallboard Message

1. From the System Manager Main window, click **Management-Info**.
2. From the drop down menu select **Wallboard**. The **Message** tab shows any Messages that have been previously created.
3. Click **New**.
4. Type in the text of your Message (up to the maximum of 70 characters) in the space provided.
5. Click **OK** to save the Message.

Note: The Real Time numerical value of any of the Parameters can be incorporated into a Message by inserting the two-letter abbreviation for the Parameter into the Message text. The Parameter must be in capitals and in brackets, e.g. (QL) would insert the current value of the Queue Length parameter.

Example: “There are (AN) agents not ready ”

If there are five agents not ready when the Message is sent to the Wallboard, the format of the Message will be:

 “There are 5 agents not ready ”

Note: It is advisable to put spaces in at the end of the Message so that the last word is separated from the first word when the Message repeats.

Editing a Wallboard Message

1. From the **Message** tab, click and highlight the Message to edit.
2. Click **Properties** and edit the text as required.
3. Click **OK** to save the changes.

Deleting a Wallboard Message

1. From the **Message** tab, click and highlight the Message to delete.
2. Click **Remove**.
3. Click **Yes** when prompted.

Sending Wallboard Messages

A Message can be sent manually to a Wallboard at any time.

1. From the **Message** tab, click and highlight the Message you want to send.
2. Click **S**end.

Note: If the Message is sent from the System level, then after clicking **S**end, a dialog box will open with the option to send the Message to either the **System Wallboard** only, or to **All Wallboards**. Click the option required.

3. Click **O**K to sent the Message.

Wallboard Alarms

A Wallboard Alarm can be set up so that when a specific Parameter reaches a critical threshold either a Message is sent to the Wallboard or, if no Message is required, the alarmed Parameter on the Wallboard will flash. Wallboard Alarms can be used to alert your staff of a critical condition such as too many calls in the Skillset call queue or too many Agents in the not ready state. An audible Buzzer accompanies Wallboard Alarms if this option is configured in the Wallboard Settings tab.

!	<p>If the alarm condition is still true following an alarm from Norstar Call Center Reporting being sent to the wallboards, a new alarm is sent. If you have configured the alarm to send a scrolling message then you will not be able to see the actual parameter values on the wallboard as these are cleared before the message is scrolled. Repeated alarm messages will obscure the parameter values for the duration of their scrolling. If this is happening on your site and you do not wish it happen then you can configure static alarms. These are 'blinking' alarms without messages. Remember: <i>if the alarm sends a wallboard message</i>, once the configured alarm threshold has been met, the wallboard will not display stats until the alarm condition is no longer met and the alarm message disappears.</p>
---	--

Creating a Wallboard Alarm

1. From the main menu, click **M**anagement-Info.
2. From the drop down menu select **W**allboard. The Wallboard window will open.
3. Click the **A**larm tab. This will show any Alarms that have been previously created.
4. Click **N**ew.
5. From the drop down menu option titled **P**arameter, select the Parameter that you want to use as the alarm trigger.

6. From the drop down menu option titled **Function**, choose whether the alarm is to be triggered when the Parameter value is less than or equal to (\leq), equal to ($=$), or greater than or equal to (\geq) the value entered in the **Threshold** box.
7. In the **Threshold** box, enter the numerical value that will be used to trigger the alarm.

Note: The system knows whether the number entered in the Threshold box relates to a number, time (in seconds) or a percentage, depending upon the chosen parameter.

8. From the drop down menu option titled **Message**, select the message to be displayed when the Alarm is triggered.

Note: If you select **No Message**, then if the Parameter is being displayed on the Wallboard when an alarm condition is triggered, the numerical value will flash.

9. Click **OK** to save the Alarm and close the window.

Editing a Wallboard Alarm

1. From the **Alarm** tab, click and highlight the Alarm to edit.
2. Click **Properties** and edit the Alarm as required.
3. Click **OK** to save the changes.

Deleting a Wallboard Alarm

1. From the **Alarm** tab, click and highlight the Alarm to be deleted.
2. Click **Remove**.
3. Click **Yes** when prompted.

Wallboard Schedules

A Wallboard Schedule specifies a time and day(s) when a Wallboard Message is automatically displayed on the Wallboard. Examples would be to schedule a Message to display as a weekly reminder of a fire alarm test, or to remind your agents to log-in at the start of the working day. An audible Buzzer accompanies Wallboard Schedules if this option is configured in the Wallboard Settings tab.

Creating a Wallboard Schedule

1. From the main menu, click **Management-Info**.
2. From the drop down menu select **Wallboard**. The **Schedule** tab shows any Schedules that have been previously created.

3. Click **New**.
4. From the drop down menu option titled **Day**, select the day(s) you want to display a Message.
5. In the field titled **Time**, enter the time of day you want the message to be sent, using 24-hour format.
6. From the drop down menu option titled **Message**, select the Message you want to send.
7. Click **OK** to save the Schedule.

Editing a Wallboard Schedule

1. From the **Schedule** tab, click and highlight the Schedule to be edited.
2. Click **Properties** and edit Schedule as required.
3. Click **OK** to save the changes.

Deleting a Wallboard Schedule

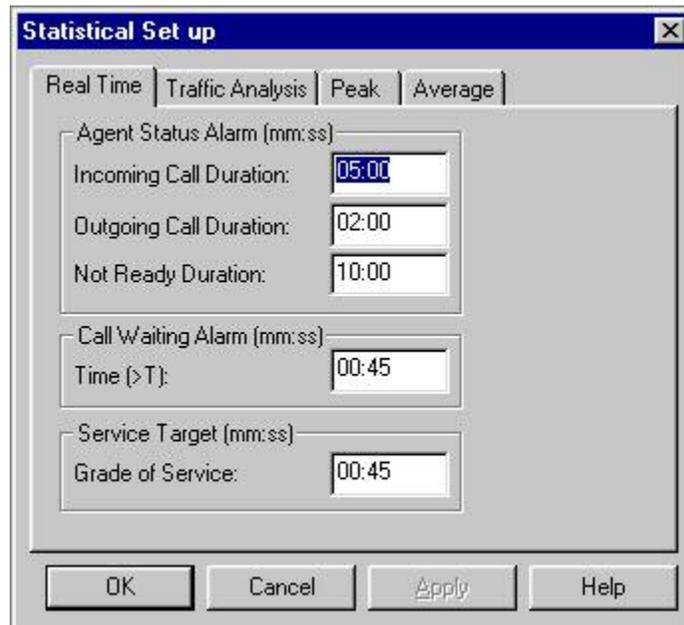
1. From the **Schedule** tab, click and highlight the Schedule to be deleted.
2. Click **Remove**.
3. Click **Yes** when prompted.

Introduction

The presentation of information in the Real Time screens, and the analysis of data collected by Nortel Networks Call Center Reporting for the management reports, can be tailored at both System Manager and Skillset Supervisor levels to suit your requirements.

Statistical Set Up

1. From the main menu, click **Management-Info**.
2. Select **Statistical Set Up**.



The Statistical Set Up window (Skillset level)

Note: The **Call Waiting Alarm** threshold setting and the **Service Target** threshold settings in the **Real Time** tab are only applicable at Skillset level. They do not appear at the System level.

3. Enter the setting required in each of the tabs and click **OK**.

The options available in Statistical Set Up are explained in detail overleaf:

Real Time tab

Agent Status Alarm

The times input into the first three boxes are used to alert a System manager when an agent has been on an activity longer than required. The alarm condition is shown on the Real Time screens by changing the color of the agent in that state to red, after the time duration is exceeded.

Use the tab key to move between each of the three boxes to enter the alarm times for Incoming Calls, Outgoing Calls and Not Ready. Enter the times in the format: mm:ss.

Call Waiting Alarm

If any incoming call is held in the Skillset call queue longer than this alarm time, Time (>T), then the waiting call will appear in red on the Real Time screens. This setting is also shown in the management reports produced by Nortel Networks Call Center Reporting. It is good working practice for the time entered here to be the same as the Primary Alert in the Call Center programming. This ensures that when an alarm condition exists in the Call Center, that alarm condition is also reported by Nortel Networks Call Center Reporting.

Service Target

This time is used to calculate the Grade of Service figure. It is good working practice for the time entered here to be the same as the Secondary Alert in the Call Center programming. The Grade of Service figure is displayed in the Real Time screens, and is shown in many of the management reports.

The Grade of Service figure is shown as a percentage of calls answered within the target time, and quantifies the level of service offered to incoming callers.

Traffic Analysis tab

This option allows for the information in the Call Profile Report and Summary Report to be displayed in increments of either ½ hour or one hour time periods.

Peak tab

This option allows for the statistical peaks, recorded in the Summary Report to be automatically reset. The option can be disabled or reset on either a weekly, monthly or yearly basis. Monthly peaks will be reset on the last day of the month. Yearly peaks will be reset at midnight on the last day of the selected month.

Average tab

This option enables the statistical averages, recorded in the Summary Reports to be automatically reset. The option can be disabled or reset on either a weekly, monthly or yearly basis.

Introduction

Nortel Networks Call Center Reporting provides comprehensive Real Time management information that is constantly updated approximately every 3 seconds.

	Dynamic factors such as network traffic which are beyond the control of Nortel Networks Call Center Reporting may affect the frequency of the Real Time screen updates. This does not affect the running of your system, nor does it affect the statistical information which is being gathered. Nortel Networks Call Center Reporting will automatically re-synchronise the Real Time screens once the networks conditions permit.
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The Real Time screens reflect the current status of the agents and the Call Center lines. This dynamic feedback empowers a System manager to more effectively manage the performance of the call center. Real Time Information can be viewed at either System Level or at Skillset Level.

System Level - shows the real time status and performance of lines and agents across all Skillsets of the Call Center system.

Skillset Level - shows the real time status and performance of lines and agents in a single Skillset.

Note that Agent times are displayed in one of two formats, depending on the duration of the time being displayed. If the duration is less than 59 minutes and 59 seconds, the time will displayed as minutes and seconds with the minutes and seconds separated by a 'm' (for minutes). 10 minutes and 30 seconds would be displayed therefore as 10m30. If the duration is greater than 59 minutes and 59 seconds, the time will displayed as hours and minutes with the hours and minutes separated by an 'h' (for hours). A time of 1 hour and 25 minutes would be displayed therefore as 01h25.

Real Time screens

System level

From the System Manager menu, click **Management-Info**, then select the **Real Time** option.

Selecting the **Real Time** option opens four windows (only two of which can be seen immediately). The first two windows display information in a graphical format. A color-coded key explains the different states. To view the information in a numerical format, minimise or close the two graphical windows.

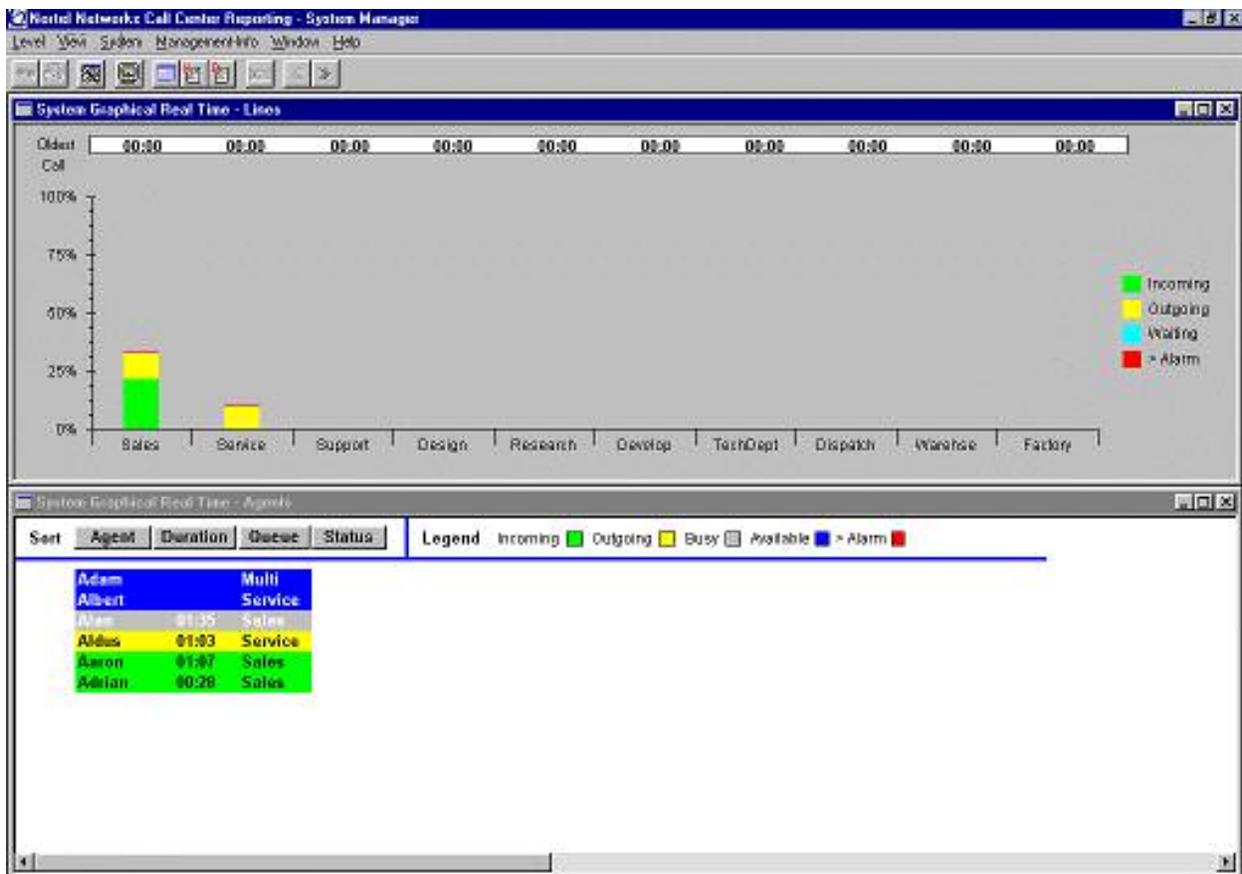
System Graphical Real Time - Lines - provides a view of the status of all of the lines in each of 10 Skillsets. The longest waiting call duration in each Skillset call queue is also shown (Oldest Call).

The 10 Skillsets which are displayed can be any of the following 5 groups of Skillsets: 1 – 10, 11 – 20, 21 – 30, 31 – 40, 41 – 50. Use the **Next Ten Skillsets** and the **Previous Ten Skillsets** options on the **Management Info** menu to change which group of 10 Skillsets is displayed.

System Graphical Real Time - Agents – provides a tabular view of the status of all of the Agents, in all of the Skillsets. The Agents can be sorted by Agent name, Status duration, Skillset name or current Status. (Nothing is displayed below the Status button, it is purely used for sorting.)

System Numerical Real Time - Lines - provides a numerical representation of the line related information.

System Numerical Real Time - Agents - provides a numerical representation of the agent related information and the service level currently being offered by each Skillset.

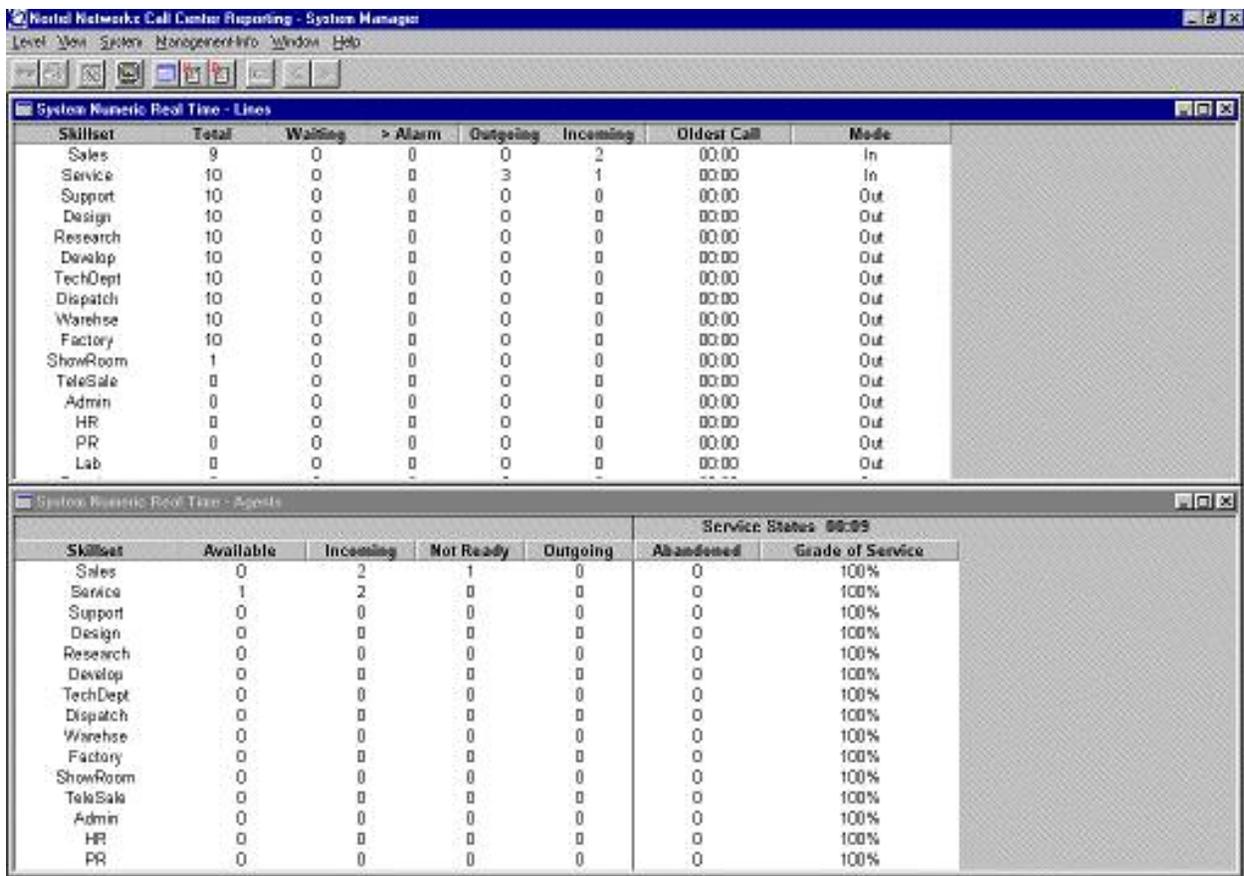


System level – Graphical Real Time Screen

The information displayed in the graphical windows includes:

System Graphical Real Time – Lines
Waiting Time of the Oldest Call
Number of lines with incoming calls
Number of lines with outgoing calls
Number of lines with calls waiting
Number of lines with calls waiting > alarm
Number of lines available for calls

System Graphical Real Time - Agents
Names of all agents logged in
Status of all agents logged in
Status duration of all agents logged in
Skillset name to which each agent belongs



System level – Numerical Real Time Screen

The information displayed in the numerical windows includes:

System Numerical Real Time - Lines
Skillset name
Total number of available lines

Number of calls waiting
Number of calls waiting > alarm
Number of outgoing calls in progress
Number of incoming calls in progress
Queue time for the oldest waiting call
The mode of operation (In or Out)

System Numerical Real Time – Agents
Skillset name
Number of agents currently available
Number of agents on incoming calls
Number of agents in the not ready state
Number of agents on outgoing calls
Number of abandoned calls (15 min period)
Grade of Service offered (15 min period)

Skillset level

If you have Logged In at Skillset Level (901 ... 950) or have used the **Signed-Through** option from the System Manager level to a Skillset level, you can display the Skillset level Real Time screens as follows. From the Main window menu, click **Management-Info**, then select **Real Time**.

Selecting the **Real Time** opens three Windows.

Skillset Real Time - Chart - provides a pie chart view of the current status of lines and agents in the Skillset.

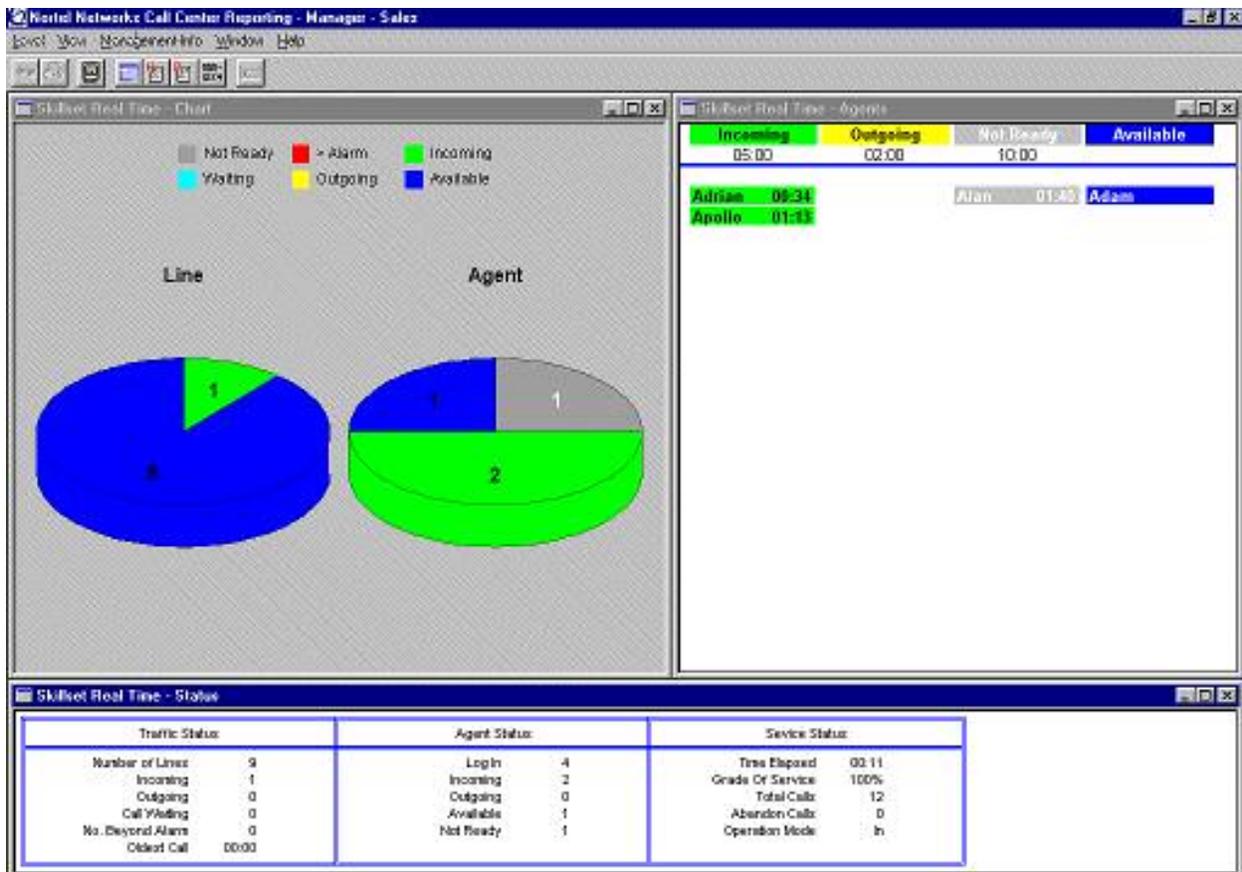
Above the pie charts is a legend explaining what the colours shown on the pie charts represent. Note that the **Waiting** (light blue) and **> Alarm** (Red) colours are used to represent calls that are waiting, and those that have waited in excess of the Alarm Threshold. These colours will only appear in the Line pie chart, and will not appear in the Agent pie chart.

Agents that have remained within the Not Ready, Incoming or Outgoing states in excess of the Real Time thresholds will be shown in red in the Skillset Real Time – Agents window.

Skillset Real Time - Agents - provides a graphical status of all agents in the Skillset with the current duration.

Note that agents remain in the Incoming State (green) until their Break Time (Post Call Completion) has expired.

Skillset Real Time - Status - provides numerical information on the status of the traffic on the lines, agent activity and level of service being offered.



Skillset level - Real Time Screen

The information displayed in the **Skillset Real Time - Chart** window includes:

Skillset Real Time - Chart
Number of lines on incoming calls
Number of lines on outgoing calls
Number of lines with calls waiting
Number of lines with calls waiting > alarm
Number of lines available for calls
Number of agents on incoming calls
Number of agents on outgoing calls
Number of agents in the not ready state
Number of agents available to take calls

The information displayed in the **Skillset Real Time - Agents** window includes:

Skillset Real Time - Agents
Names of all agents on incoming calls and the duration (minutes and seconds)
Names of all agents on outgoing calls and the duration (minutes and seconds)
Names of all agents who are in the not ready state with the duration (minutes and seconds)
Names of all agents who are available to take calls

The **Skillset Real Time - Status** window shows three boxes containing the following information:

Traffic Status
Total number of lines allocated to the Skillset.
Number of incoming calls currently being received on these lines
Number of outgoing calls being made on these lines
Number of incoming calls waiting to be answered.
Number of calls waiting > alarm time threshold.
Waiting time of the oldest call in the Skillset call queue (minutes and seconds).

Agent Status
Number of agents logged in to the Skillset
Number of agents currently on incoming calls
Number of agents currently on outgoing calls
Number of agents currently available to take calls
Number of agents who have made themselves enter the not ready state

Service Status
Time elapsed during the current 15 minute analysis period
Grade of Service currently being offered to callers in this Skillset
Number of incoming calls received in this 15 minute analysis period
Number of calls that have abandoned in this 15 minute analysis period
The mode of operation of the Skillset (In or Out)

General Notes on the Real Time Displays

At System Manager level, if an Agent is signed into more than one Skillset, the Skillset Name will be displayed as 'Multi', indicating that the Agent is signed into *Multiple Skillsets*.

At both System Manager and Skillset level, Agents remain in the Incoming State (showing as green) until their Break Time (Post Call Completion) has expired.

At both System Manager and Skillset level, Agents that have not been Uploaded from the Call Center, but who are currently logged in and active in the Call Center will be displayed as Agtxxx where xxx represents their Agent ID. This can happen if you have added Agents to the Call Center and have not subsequently Uploaded the Agent, as Nortel Networks Call Center Reporting will not know the name of the Agent.

The Agent is tracked correctly on the Real Time screens and in the reports, but they are identified as 'Agtxxx' as described above.

Agent and Skillset names are truncated to 7 characters when they are Uploaded from the Call Center, so, for ease of identification, they should be entered into the Call Center in a fashion which makes their first 7 characters unique.

Introduction

Nortel Networks Call Center Reporting automatically collects and collates statistical data from the Call Center. From this data, Nortel Networks Call Center Reporting produces a comprehensive range of management reports to help you manage the performance of your call center.

The reports are updated and stored on the hard disk of your PC and can be viewed on the screen or printed as a hard copy. The information can be accessed from the two operational levels:

- **System level** - these reports provide information on the performance of the complete Call Center system. The reports show the totals for each Skillset.
- **Skillset level** - these reports provide information on the performance of individual Skillsets. The reports show the details for each individual line and individual agent in the Skillset.

The operational level of the reports which you can see or print is dictated by the level into which you have Logged In.

If you Logged In as the System Manager (900) then you will be able to access reports at the System level, and, by using the Sign-Through option you will be able to access reports at the Skillset level too. If you Logged In (or Signed Through to) to a Skillset Level (901 ... 950) you will be able to access reports at the Skillset level only, and only for the Skillset you are in.

The ability to select either the current day's information (Current Reports) or a period of time now passed (Historic Reports) can further define the reports. In fact, any individual hour, day, week or month can be viewed using Nortel Networks Call Center Reporting.

General Notes on the Report Statistics

If an Agent is signed into the Call Center for a period which passes over midnight, his total sign in duration and available time will appear in the reports for the day in which he signed in. His activity breakdown (Incoming, Outgoing, Not Ready, etc) will appear in the reports throughout his signed-in period.

Each time an Agent seizes a Line, Call Center Reporting will consider this as an Outgoing Call, whether the call is successful or not.

For accuracy, the Line Stats and the Agent Stats are tracked separately. So if An Agent transfers a call to another Agent who then completes the call, the reports will show that the line was

occupied on one call, and each Agent has a call allocated to them (of shorter duration than the duration allocated to the Line).

If an Agent transfers a call back into the Skillset this will count as a new call for the Skillset.

!	Please note, the Line stats and the Agents are likely to be different.
----------	--

For example, if you have 3 incoming calls to a given skillset and 2 of these are answered by the Agents in that skillset but the third overflows to another skillset and is answered by an Agent in the other skillset, your Line stats will show 3 answered calls but your Agent stats for that skillset will show 2 answered calls.

Likewise, the Line stats will include any outgoing call made on the Call Center Lines, whether made by an Agent or *by a non-Agent*. You may therefore see that there have been more Outgoing calls on your Lines than have been made by your Agents. The difference is the number of calls made on your Call Center Lines by non-Agents.

Also, if the Agents make outgoing calls on Lines which are *not* Call Center Lines, you may see that your Agents have made more outgoing calls than your Call Center lines have carried. The difference is the number of calls made by your Agents on non-Call Center Lines.

Accessing Current Reports

Current Reports provide you with data for either the current hour or the current day to date. They may be viewed on screen, and printed if required.

To access a Current Report:

1. Click **Management-Info** from the Main window.
2. Select **Current Reports**.
3. Click **Hourly...** or **Daily...** as required.

The Report Manager window will now open and the title bar will reflect your selection. Refer to the section on Report Manager later in this chapter for details on how to view individual reports.

Accessing Historical Reports

Historical Reports allow you to specify a period to report on which may be outside of the current day. The time period required is selected from a calendar. Note that if you use the Calendar to select today's date, then the Daily and Hourly reports that you will be able to generate are the same as those you can access from the Current Reports menu options or tool bar icons. If you

wish to view reports for today, you will find it more convenient to use the Current Reports options.

Information from the Daily reports is rolled forwards into the Weekly and Monthly reports on the passing of midnight. If you look at a Weekly or Monthly report for a Week or Month that has not expired yet, it will be current up to midnight of the previous day.

To access a Historical Report:

1. Click **Management-Info** from the Main window.
2. Click **Historical Reports...** The **Historical Report** calendar window will open with the current month displayed.



The Calendar window

3. Select the month required from the drop down menu.
4. Select the year required from the drop down menu.
5. Select the time period from the following list of options:
 - To view reports for an individual hour, click the day required and then click the **Hourly** button. You will be presented with a list of hours for which there is data. Click your selection, and then click **OK**.

- To view reports for a whole day, click the day required and then click the **Daily** button.
- To view reports for a whole week, click on any day in that week and then click the **Weekly** button.
- To view reports for a whole month, click on any day in that month and then click the **Monthly** button.

Note: These buttons will only be highlighted and available for selection if statistical data is stored for that time period.

After selecting the required time period, the Report Manager window will open and the title bar will reflect your selection. Refer to the next section on Report Manager for details on how to view individual reports.

Report Manager window

The Report Manager window allows different management reports, in different formats, to be selected and viewed on the screen. Reports can also be printed from this window. The Report Manager menu bar offers the following options:

File

Print... - allows you to print management reports.

Close - closes the Report Manager window.

View

Graph - allows you to view and open report in a graphical format (if available).

Numeric - allows you to view and open report in a numerical format.

Report

This option displays a list of the reports available to view. This list will depend on whether or not you selected to view information for a Skillset or the System. The full list is as follows:

- **Answered Call**
- **Abandoned Call**
- **Incoming Call**
- **Agent Activity**
- **Average Time**
- **System Capacity**
- **Call Profile**
- **Agent Profile**
- **Summary**

Window

Selecting **Window** provides a drop down menu with options to change the appearance of the windows or to close active windows.

Help

Help Topics - opens the on-line help

About Nortel Networks Call Center Reporting... - Shows version and copyright information.

Beneath the Report Manager main menu bar is a row of icons, which are shortcuts to the various options. When the mouse pointer is positioned over the top of an icon, a tool tip will appear.

Viewing Reports

Reports are viewed from the Report Manager window.



The Report Manager window

The available reports are shown when the **Report** option is selected. To view the required report, click the title of the report required.

By default all reports open in numerical format. Some reports are also available in a graphical format, and this can be selected by clicking **V**iew and then **G**raph.

Selecting **N**umeric from the **V**iew menu option changes the report back to a numerical format again.

Note: The Answered Call, Abandoned Call, Incoming Call, Call Profile and Summary reports can all be viewed in both numerical and graphical formats.

Reports viewed at a System level will show information summarising the totals for each Skillset. Reports viewed from a Skillset level provide more detailed information, showing individual lines and individual agents.

If a report contains information relating to both lines and agents, two windows will be displayed split equally across the screen. Some reports may contain more information than can be displayed on the screen at one time. In this case click inside the report window to activate the scroll bar. The scroll bar appears on the right-hand side of the window.

Report Types

Answered Call

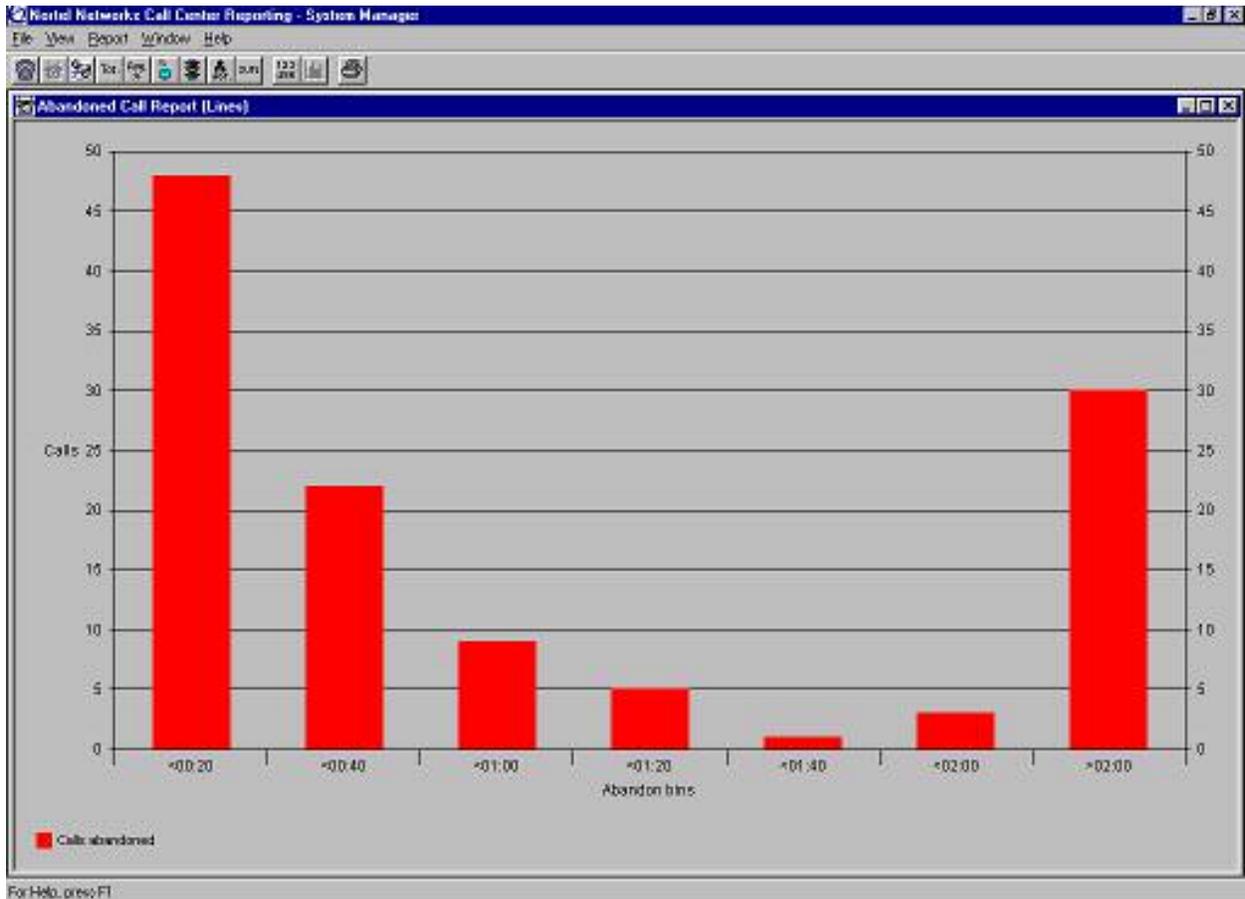
The **Answered Call** Report shows the total number of calls that were answered, and the percentage of calls that were answered in the time frames configured in the Answer Time Bins. The report shows both line and agent information.

For Help, press F1

Answered Call Report – Numerical View (System level)

Abandoned Call Report

The **Abandoned Call** Report shows the total number of calls that had abandoned, and the percentage of calls that had abandoned in the time frames configured in the Abandon Time Bins. Only line information is shown, as these calls had abandoned prior to being answered by agents.

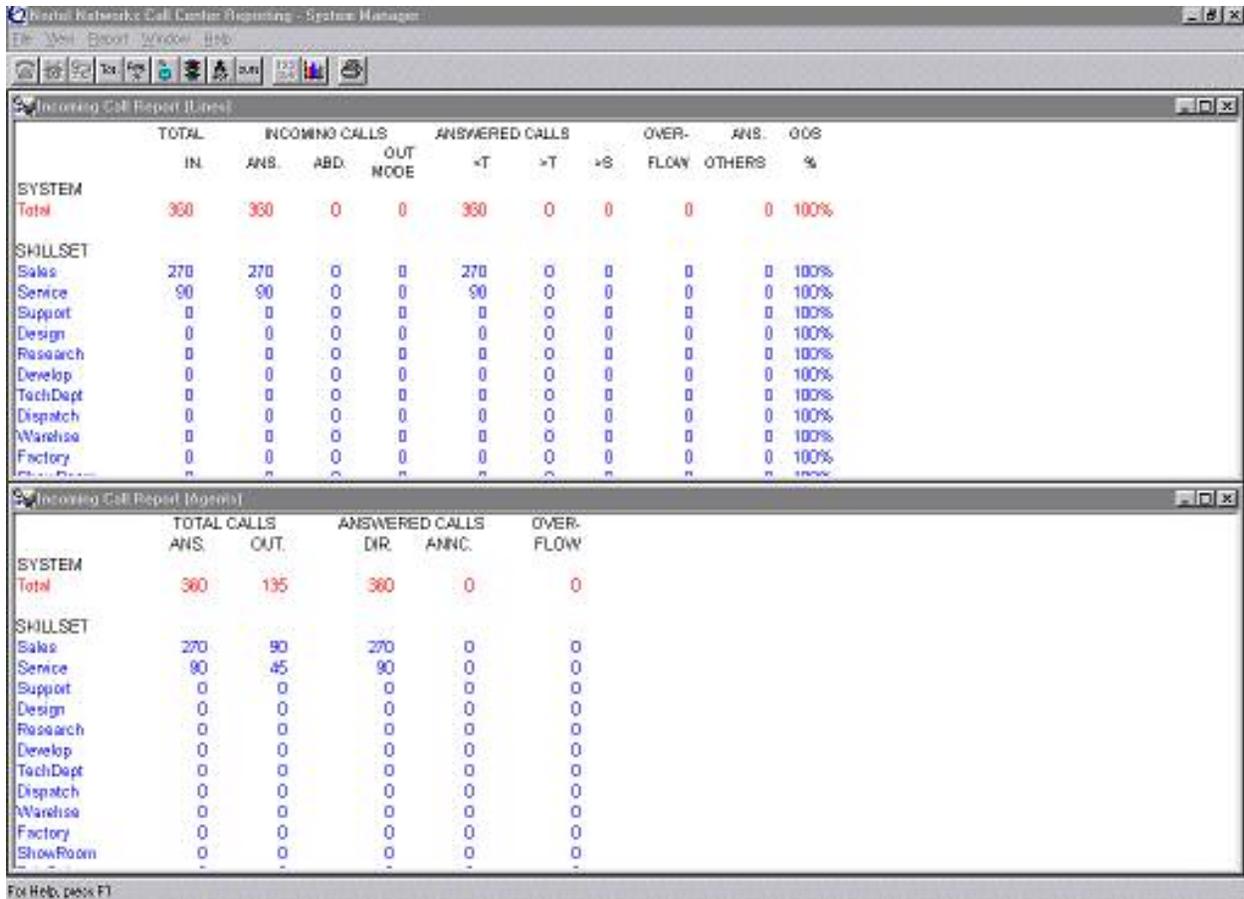


Abandoned Call Report – Graphical View

Incoming Call Report

The **Incoming Call** Report shows how your call center handles incoming calls.

It shows the calls answered before the Alarm Threshold (<T) , after the Alarm Threshold (>T) (but before the Service Level Threshold), after the Service Level threshold (>S) and any calls that abandoned. The report shows both line and agent information.



Incoming Call Report – Numerical View (System level)

The line information includes:

Title	Description
TOTAL IN	Total number of incoming Call Center calls.
INCOMING CALLS - ANS.	Number of incoming calls answered.
INCOMING CALLS - ABD.	Number of incoming calls that abandon.
INCOMING CALLS - OUT	Number of incoming calls received during the “out” mode of operation.
ANSWERED CALLS - <T	The number of incoming calls answered before the configured Call Waiting Alarm (Primary Alert) time has elapsed.
ANSWERED CALLS - >T	The number of incoming calls answered after the configured Call Waiting Alarm (Primary Alert) time has elapsed, but before the Service Target (Secondary Alert) has been reached.
>S	The number of incoming calls answered after the configured Service Target (Secondary Alert) time has elapsed.
OVERFLOW	Number of incoming calls that overflow to another Skillset.
ANS. - OTHERS	Number of incoming calls answered by non-Call Center extensions.
G.O.S.	The Grade of Service being offered to incoming callers.

The agent information includes:

Title	Description
TOTAL CALLS - ANS	Total number of incoming calls answered by agents.
TOTAL CALLS - OUT.	Total number of outgoing calls made by agents.
ANSWERED CALLS - <T	Number of incoming calls answered by agents before the configured Call Waiting Alarm (Primary Alert) time has elapsed
ANSWERED CALLS - >T	Number of incoming calls answered by agents after the configured Call Waiting Alarm (Primary Alert) time has elapsed
OVER-FLOW	Number of incoming calls answered by agents that overflowed in from other Skillsets.

Agent Activity Report

The **Agent Activity** Report shows the total amount of time that agents spend logged in to the Call Center, and the proportion of that time spent on activities such as incoming calls, outgoing calls and in the Not Ready state. The agent window is the only window displayed, as there is no line information associated with this report. When viewed from a Skillset level, individual agent details are displayed. Skillset totals are available from the System level.

SKILLSET	LOG IN TIME	INCOMING TIME	OUTGOING TIME	BREAK TIME	NOT RDY TIME	AVAILABLE TIME
Service	10:10:59	1:25:26	1:15:08	0:13:34	0:00:00	7:15:51
Adam	3:24:08	0:00:00	0:00:00	0:00:00	0:00:00	3:24:08
Albert	3:23:27	1:26:36	0:00:00	0:13:34	0:00:00	1:43:27
Aldus	3:23:24	0:00:00	1:15:08	0:00:00	0:00:00	2:08:16

For Help, press F1

Agent Activity Report – Numerical View (Skillset level)

The agent information includes:

Title	Description
LOG IN TIME	Time spent logged in to the Call Center.
INCOMING TIME	Time spent on incoming calls.
OUTGOING TIME	Time spent on outgoing calls.
BREAK TIME	Time spent in post call break time.
NOT RDY	Time spent in the not ready state.
AVAILABLE TIME	Time spent available to make or receive calls.

Average Time Report

The **Average Time** Report displays the average time a caller waits prior to either being answered by an agent, or abandoning due to no answer. When viewed at System level the averages for all Skillsets can be compared. When viewed at Skillset level this report shows the average incoming and outgoing call duration of each agent relative to the average of all agents.

The screenshot shows two reports: 'Average Time Report (Lines)' and 'Average Time Report (Agents)'. The 'Average Time Report (Lines)' report displays data for various skillsets, including Service, Line005, Line007, Line008, Line009, and NON_ACD. The 'Average Time Report (Agents)' report displays data for agents Adam, Albert, and Aldus.

SKILLSET	WAITING TIME		INCOMING CALL TIME		ABANDONED CALL TIME	
	CALLS	AVERAGE	CALLS	AVERAGE	CALLS	AVERAGE
Service	90	0:00:08	90	0:00:57	0	0:00:00
Line005	90	0:00:08	90	0:00:57	0	0:00:00
Line007	0	0:00:00	0	0:00:00	0	0:00:00
Line008	0	0:00:00	0	0:00:00	0	0:00:00
Line009	0	0:00:00	0	0:00:00	0	0:00:00
NON_ACD	0	0:00:00	0	0:00:00	0	0:00:00

SKILLSET	INCOMING CALL TIME		OUTGOING CALL TIME		BREAK TIME	
	CALLS	AVERAGE	CALLS	AVERAGE	CALLS	AVERAGE
Service	90	0:00:57	45	0:01:40	90	0:00:09
Adam	0	0:00:00	0	0:00:00	0	0:00:00
Albert	90	0:00:57	0	0:00:00	90	0:00:09
Aldus	0	0:00:00	45	0:01:40	0	0:00:00

Average Time Report – Numerical (Skillset level)

The line information includes:

Title	Description
WAITING TIME -CALLS	Number of incoming calls answered.
WAITING TIME – AVERAGE	Average waiting time prior to being answered.
INCOMING CALL TIME – CALLS	Number of incoming calls answered.
INCOMING CALL TIME – AVERAGE	Average duration of an incoming call.
ABANDONED CALL TIME – CALLS	Number of incoming calls that abandon.
ABANDONED CALL TIME – AVERAGE	Average time a caller waits before abandoning.

The agent information includes:

Title	Description
INCOMING CALL TIME – CALLS	Number of incoming calls answered by agents.
INCOMING CALL TIME – AVERAGE	Average duration of an agent incoming call.
OUTGOING CALL TIME – CALLS	Number of outgoing calls made by agents.
OUTGOING CALL TIME – AVERAGE	Average call duration time of an agent outgoing call.
BREAK TIME – CALLS	The number of times an Agent was placed in Break Time.
BREAK TIME – AVERAGE	Average duration of each post-call break time.

System Capacity Report

The **System Capacity** Report shows how often, and for how long, the call center was working at its maximum capacity. The line information shows the number of occasions when all lines were busy, together with the total amount of time for which this condition prevailed. (Note that this only includes Lines which are uploaded from the Call Center, therefore Target Lines are not added to these totals.)

The agent information shows the number of times that there were no agents available and the total amount of time for these periods.

Note that the System Capacity entries represent the cumulative amount of time for those periods in which all Lines were in use or all active Agents were unavailable, across all Skillsets. This is not the same as summing all of the Skillset values. The System Capacity figure in the report represents those times when portions of the individual Skillset maximum capacity periods overlapped with those from all other skillsets. For example, the following section from a report shows two skillsets and a System Capacity:

```
System Capacity
Entire System      2          00:35

Skillset
Sales              3          01:25
Support           4          02:15
```

This shows that on 3 three occasions all Lines in Sales were in use, and the total time for these three periods adds up to 1:25. Likewise, Support had all of their Lines busy for 4 periods

totalling 2:15. The Entire System shows that for two occasions which total 35 seconds, all of the Lines in Sales and Support were in use at the same time.

The screenshot shows two windows from the 'Nortel Networks Call Center Reporting - System Manager' application. The left window, titled 'System Capacity Report (Lines)', displays a table with columns 'SYSTEM', 'NUMBER', and 'TOTAL TIME'. The 'ALL LINES BUSY' section shows a total of 0 instances and 0:00:00 time. The 'SKILLSET' section lists various roles like Sales, Service, Support, etc., all with 0 instances and 0:00:00 time. The right window, titled 'System Capacity Report (Agents)', displays a similar table. The 'NO AGENTS AVAILABLE' section shows a total of 202 instances and 1:17:58 time. The 'SKILLSET' section shows Sales with 202 instances and 1:21:04 time, and Service with 112 instances and 1:30:40 time. Other skillsets have 0 instances and 0:00:00 time.

System Capacity Report – Numerical View (System Level)

The line information includes:

Title	Description
ALL LINES BUSY - NUMBER	Number of instances when all lines were in use on calls.
ALL LINES BUSY - TOTAL TIME	Total time that all lines were in use.

The agent information includes:

Title	Description
NO AGENTS AVAILABLE - NUMBER	Number of instances when there were no agents available to receive calls.
NO AGENTS AVAILAB - TOTAL TIME	Total time when there were no agents available to receive calls.

Call Profile Report

The **Call Profile** Report tracks the key performance statistics of your call center over a period of time. Peaks and troughs in traffic levels and service offered can be easily identified. Depending upon the time period selected for the report, and any Traffic Analysis settings, information will be shown either for every half-hour, hour or day. The information is shown for lines only.

SYSTEM	TOTAL CALLS		INCOMING CALLS		AVERAGE TIME		GOS %
	IN	OUT	ANS.	ABD.	WAITING	ABD.	
Total	360	135	360	0	0:00:13	0:00:00	100%
HOURS							
17	99	22	99	0	0:00:13	0:00:00	100%
18	100	38	100	0	0:00:13	0:00:00	100%
19	99	35	99	0	0:00:13	0:00:00	100%
20	100	38	100	0	0:00:13	0:00:00	100%
21	2	1	2	0	0:00:19	0:00:00	100%

For Help, press F1

Call Profile Report – Numerical View

The line information contained within the Numerical Call Profile Report includes:

Title	Description
TOTAL CALLS - IN	Total number of incoming calls received.
TOTAL CALLS - OUT	Total number of outgoing calls made.
INCOMING CALLS - ANS.	Total number of incoming calls answered.
INCOMING CALLS - ABD.	Total number of incoming calls abandoning.
AVERAGE TIME - WAITING	Average time a caller waited before being answered.
AVERAGE TIME -ABD.	Average time a caller waited before abandoning.
GOS %	The Grade of Service figure - the percentage of calls answered within your service target time.

Agent Profile Report

The **Agent Profile Report** is only available from the System level. It provides detailed information on the activity of each individual agent. Use the **Agent Profile Report Range** options to specify which agents are required. Agent ID or Agent Name can be used to sort the information.

AGENT	LOG IN TIME	AVAIL TIME	NOT RDY TIME	INCOMING TALK CALLS	INCOMING TALK TIME	OUTGOING TALK CALLS	OUTGOING TALK TIME	BREAK TIME
Adam	3:24:10	1:30:44	0:00:00	50	1:39:09	0	0:00:00	0:14:17
TIME INTERVAL								
Wed Aug 16, 2000								
17:24 - 17:33	0:09:16	0:04:14	0:00:00	4	0:04:25	0	0:00:00	0:00:37
17:34 - 17:43	0:09:17	0:04:15	0:00:00	4	0:04:24	0	0:00:00	0:00:38
17:43 - 17:53	0:09:20	0:04:16	0:00:00	4	0:04:26	0	0:00:00	0:00:36
17:53 - 18:02	0:09:16	0:04:14	0:00:00	4	0:04:24	0	0:00:00	0:00:38
18:03 - 18:12	0:09:16	0:04:14	0:00:00	4	0:04:24	0	0:00:00	0:00:38
18:12 - 18:21	0:09:16	0:04:14	0:00:00	4	0:04:24	0	0:00:00	0:00:38
18:22 - 18:31	0:09:16	0:04:14	0:00:00	4	0:04:24	0	0:00:00	0:00:38
18:31 - 18:41	0:09:17	0:04:15	0:00:00	4	0:04:24	0	0:00:00	0:00:38
18:41 - 18:50	0:09:16	0:04:14	0:00:00	4	0:04:24	0	0:00:00	0:00:38
18:51 - 19:00	0:09:17	0:04:14	0:00:00	4	0:04:25	0	0:00:00	0:00:38
19:00 - 19:09	0:09:16	0:04:14	0:00:00	4	0:04:24	0	0:00:00	0:00:38
19:10 - 19:19	0:09:18	0:04:14	0:00:00	4	0:04:26	0	0:00:00	0:00:38
19:19 - 19:29	0:09:16	0:04:14	0:00:00	4	0:04:24	0	0:00:00	0:00:38
19:29 - 19:38	0:09:16	0:04:14	0:00:00	4	0:04:24	0	0:00:00	0:00:38
19:39 - 19:48	0:09:17	0:04:15	0:00:00	4	0:04:24	0	0:00:00	0:00:38
19:48 - 19:57	0:09:17	0:04:14	0:00:00	4	0:04:24	0	0:00:00	0:00:39
19:58 - 20:07	0:09:18	0:04:15	0:00:00	4	0:04:24	0	0:00:00	0:00:39
20:07 - 20:17	0:09:19	0:04:14	0:00:00	4	0:04:26	0	0:00:00	0:00:39
20:17 - 20:26	0:09:16	0:04:14	0:00:00	4	0:04:24	0	0:00:00	0:00:38
20:27 - 20:36	0:09:16	0:04:14	0:00:00	4	0:04:24	0	0:00:00	0:00:38
20:36 - 20:46	0:09:17	0:04:14	0:00:00	4	0:04:25	0	0:00:00	0:00:38
20:46 - 20:56	0:09:17	0:04:15	0:00:00	4	0:04:24	0	0:00:00	0:00:38
20:56 -			0:00:00	2	0:02:12	0	0:00:00	0:00:19

Agent Profile Report

The agent information includes:

Title	Description
TIME INTERVAL	Actual times for agent log in and log out.
LOG IN TIME	Total time the agent was logged in.
AVAILABLE TIME	Time the agent spent available.
NOT RDY	Time the agent spent in the not ready state.
INCOMING TALK – CALLS	Number of incoming calls the agent answered.
INCOMING TALK – TIME	Time the agent spent on incoming calls.
OUTGOING TALK – CALLS	Number of outgoing calls made by the agent.
OUTGOING TALK – TIME	Time the agent spent on outgoing calls.
BREAK TIME	Time the agent spent in post-call break time

Summary Report

The objective of the **Summary** report is to provide, on a single page, a complete summary of the Call Center activity and performance during the defined period. The period covered by the report can be daily, weekly or monthly.

Note that this report only looks at the Call Center Lines. (See the description on Page 58 of the possible differences between Agent and Line stats).

The report highlights key statistics such as abandoned calls, Grade of Service and call waiting times. The Last, Peak and Average performance figures are shown for comparison.

The Last figures are the figures of a single previous period. For example, if the Summary Report is a daily Summary report looking at a Tuesday, the Last figures will be for the previous Tuesday.

The Average figures are the averages of all previous periods, excluding the period of the current report. For example, if the Summary Report is a daily Summary report looking at a Tuesday, the Average figures will be for all previous Tuesdays, excluding the current Tuesday on which the report was viewed.

The Peak figures are the figures for the previous period which had the highest number of Incoming Calls.

For example, if the Summary Report is a daily Summary report looking at a Tuesday, the Peak figures will be for the Tuesday which had the highest recorded count of Incoming Calls.

(The other figures in the Peak Column are the other statistics for that particular period, they are not necessarily 'peak' values in themselves.)

The Exchange Line Utilisation figure represents the amount of time that the Lines were in use, either incoming or outgoing, and both by Call Center Agents and non-Call Center users.

(Note that this only includes Lines which are Configured within Call Center Reporting – Target Lines etc are not added to these totals.)

Summary Report

Day: Monday

		03/25/02	Day of Week		
			Last	Average	Peak
Totals	Total Incoming Calls	164	0	0	0
	Total Answered Calls	164	0	0	0
	Total Abandoned Calls	0	0	0	0
	Total Out Mode Calls	0	0	0	0
	Total Overflowed Calls	0	0	0	0

		03/25/02	Day of Week		
			Last	Average	Peak
Averages	Average Time to Answer	00:01	00:00	00:00	00:00
	Average Time to Abandon	00:00	00:00	00:00	00:00
	Average Incoming Call Duration	00:05	00:00	00:00	00:00
	Average Outgoing Call Duration	00:06	00:00	00:00	00:00
	Average Grade of Service	100%	0%	0%	0%

Numerical Summary

Time	In	Ans.	Abd.	Ovf.	Out Md.	Outgoing	GOS	Ex. Ut.
Hours	Call	Call	Call	Call	Call	Call	%	Time
0	0	0	0	0	0	0	100	00:00
1	0	0	0	0	0	0	100	00:00
2	0	0	0	0	0	0	100	00:00
3	0	0	0	0	0	0	100	00:00

For Help, press F1

Summary Report – Numerical View

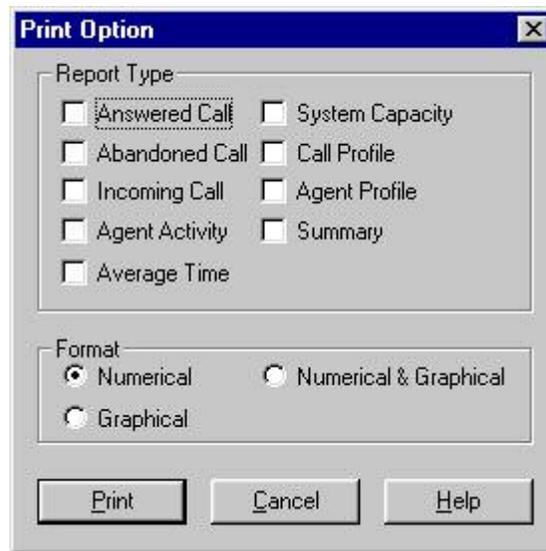
Printing reports

Reports may be printed on demand from the Report Manager window.

Printouts can also be scheduled to print at certain time on chosen day, every week or month using the **Print Schedule** option. Print scheduling is described in detail later in this chapter.

To print a report from the Report Manager window:

1. Click **F**ile from the menu bar.
2. Select **P**rint.... This will open the **Print Option** window.



The Print Option window

3. Click the **Report Type(s)** to be printed.
4. Click the **Format** required.
5. Click **Print**.

Note: If a **Graphical** format is chosen for any reports that are only available in a numerical format, the report will not print.

Abandoned Caller ID Report

The Abandoned Caller ID Report provides a detailed record of all abandoned calls. The system stores Abandoned Caller ID information for seven days, (this includes the current day). The most current information automatically replaces the oldest information. This report is only available for individual Skillsets, not for the System level.

To view the Abandoned Caller ID Report:

1. From the System Manager Main window, click **Management-Info**.
2. Click on **Abandoned Caller ID Report...**
3. Select the day required.
4. Click **Open**.

DATE	TIME	CALLER ID	LINE NAME	TIME WAITED
2000.08.03	14:43:30	441244123495	Line01	00:00:11
2000.08.03	14:43:31	001140923432	Line03	00:00:10
2000.08.03	14:43:40	441244887654	Line04	00:00:20
2000.08.03	14:43:45	441244246810	Line05	00:00:25
2000.08.03	14:44:11	001413666595	Line01	00:00:41
2000.08.03	14:44:30	01244808080	Line02	00:00:48

The Abandoned Caller ID Report

The information displayed includes:

Title	Description
DATE	Date the call arrived.
TIME	Time the call arrived.
CALLER ID	Telephone number of the caller who abandoned.
LINE NAME	Line name the caller was attempting to contact.
TIME WAITED	Time the caller waited prior to abandoning.

To print the Abandoned Caller ID Report:

1. With the report open on the screen, click **L**evel.
2. Click **P**rint....

The report will now be printed.

Printouts can also be scheduled to print automatically at time intervals from every 30 minutes to once every 24 hours. Refer to the **Print Schedule** option, which is described in detail later in this chapter.

Configuration Report

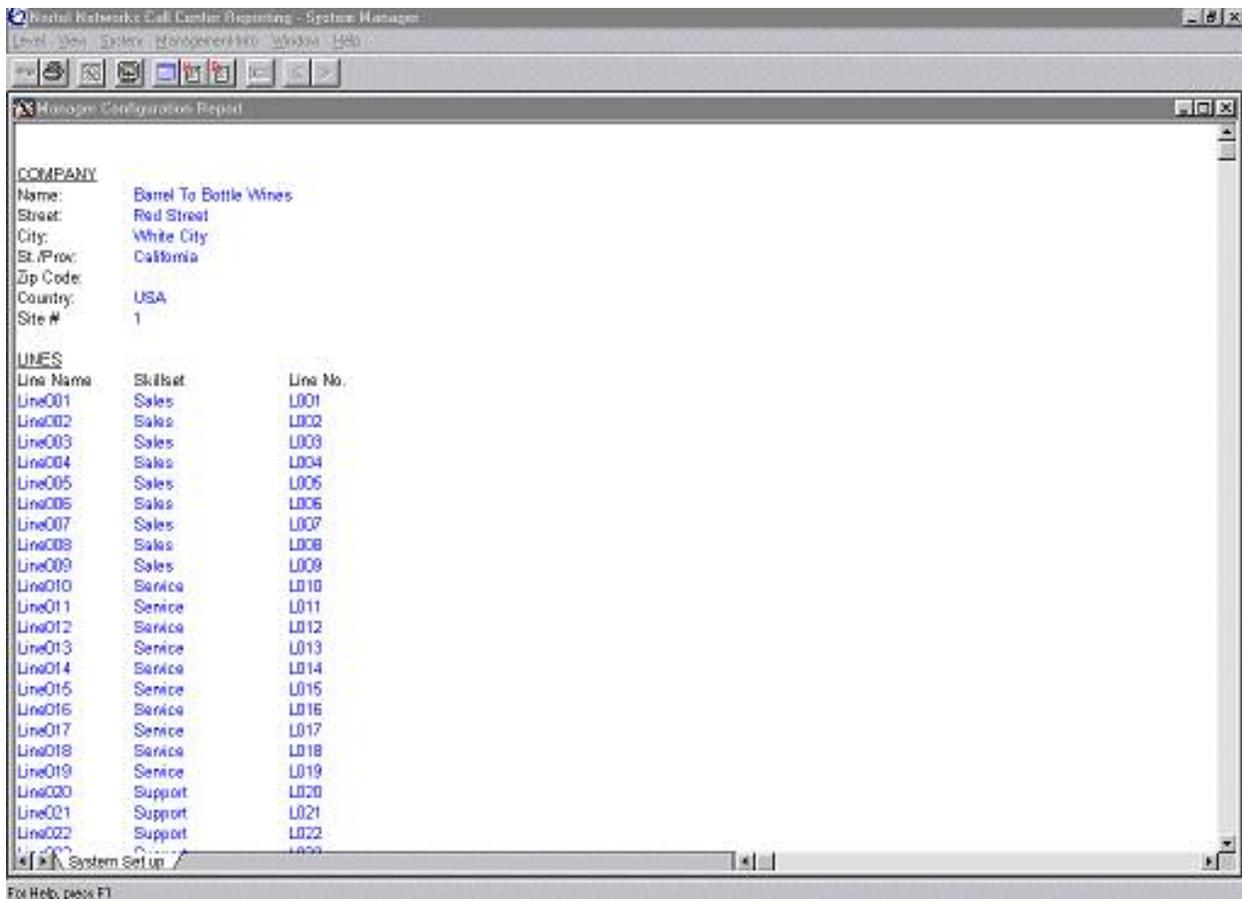
This report will display all the configuration settings of your Nortel Networks Call Center Reporting system (at System Manager level, 900) or the configuration settings for your Skillset (at Skillset level, 901 ... 950).

To view the System Manager Configuration Report:

1. Click **Management-Info** from the System Manager Main window.
2. Click **C**onfiguration Report.

To view the Skillset Supervisors Configuration Report:

1. Sign In or Sign Through to the Skillset of interest.
2. Click **Management-Info** from the menu bar.
3. Click **C**onfiguration Report.



The Configuration Report

To print the Configuration Report:

1. Click **L**evel from the System Manager Main window.
2. Click **P**rint....

Note: The Configuration Report is only available for printing while the report is open on the screen.

Print Schedule

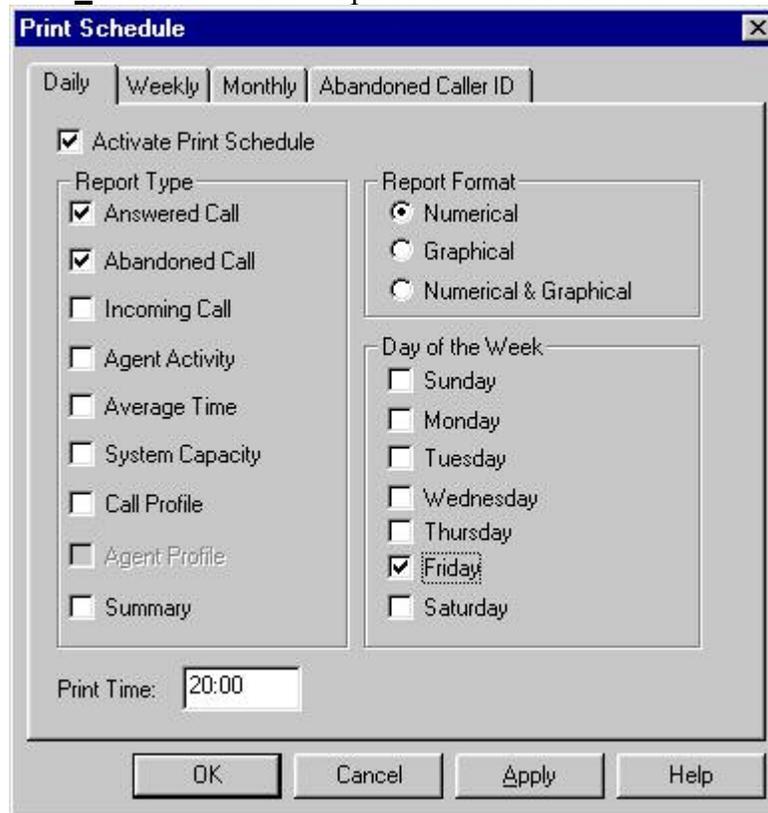
Management reports can be scheduled to print out automatically at a set time. For example, reports can be printed at night when the call center is closed, or once a month for the previous month.

The Abandoned Caller ID Report can be scheduled to print more frequently due to the significance of the information.

Scheduled printing is set up from the System Manager Main window.

To schedule a print run:

1. Click **Management-Info** on the menu.
2. Click **Print Schedule**. This will open the Print Schedule window.



Print Schedule window

3. Click **Activate Print Schedule** on the **Daily**, **Weekly** and **Monthly** tabs as required.
4. Click the **Report Type** to be printed in this schedule.
5. Click the **Report Format** required.

Note: If the **Graphical** option is chosen then those reports that are only available in a numerical format will appear greyed out, and will not be printed.

6. Click the day and/or time as required.

Note: For Daily and Weekly schedules, a day and time must be entered. For Monthly schedules, a time must be entered, as the day will automatically be set to the first day of the following month.

7. Click the **Abandoned Caller ID** tab and select a time **Interval** for printing the Abandoned Caller ID report. Note that the Abandoned Caller ID report is only available at Skillset level (901 .. 950)
8. Click **OK** to save the Print Schedule.

Note that Monthly Schedules will print on the 1st of the month. So if you set a monthly schedule in the middle of April, they will print for the first time on the 1st of May.

Also, note that the Day of the Week field indicates which day's stats you wish to have printed, but the actual printout will occur on the following day. For example, if you select Monday, the printout will occur on Tuesday. This is to ensure that the selected day has completely elapsed and that the printed reports show the correct and complete totals for the selected day(s).

How to Select and Import Nortel Networks Call Center Reporting Statistical Data into Microsoft Excel

Introduction

The statistical information gathered and recorded by the Nortel Networks Call Center Reporting application is stored in Microsoft Access databases. This information can be queried and analysed using Microsoft Excel.

	<p>It is vitally important that the statistical database files are not edited, renamed or altered in anyway.</p> <p>They can be <i>examined</i> using the Microsoft Excel and Access applications, BUT NO CHANGES SHOULD BE SAVED BACK TO THE STATISTICAL DATABASE FILES, OTHERWISE THE CALL CENTER REPORTING REPORTS WILL BE COMPROMISED.</p>
---	---

Location of the Statistical Database Files

If you accepted the defaults during the installation of the Call Center Reporting the statistical database files will be located at **c:\Program Files\Nortel Networks\Call Center Reporting\stats**, on the Master PC. That is, the PC which is running the Master client, and on which the RDBServer is operating. If you only have one PC running Call Center Reporting, that PC is the Master PC.

Within the **stats** folder there will be folders named (for example) 2000, 2001 and so on. Within these folders will be folders for each of the months in those years, in which the Call Center Reporting application was operating. These monthly folders are called 01, 02, 03 ... 12. Also in this folder are the weekly statistical database files.

Within the monthly folders are the daily, hourly and monthly statistical database files.

Statistical Database File Naming Conventions

All statistical database files have the .MDB extension.

The file names are made up out of digits representing Monthly, Daily, Weekly and Hourly values.

File names all start with a letter: either M, H, D or W indicating that the file contains either Monthly, Daily, Hourly or Weekly data.

For example:

M0301.mdb	The monthly statistical database file for the 3 rd month of 2001.
D0301.mdb	The daily statistical database file for the 3 rd month of 2001.
H0301.mdb	The hourly statistical database file for the 3 rd month of 2001.
W090301.mdb	The weekly statistical database file for Week 9, which fell in the 3 rd month of 2001.

Looking at the Statistical Data with Microsoft Excel

Described below are the steps required to select Call Center Reporting data using Excel 2000 (part of the Microsoft 2000 family).

1. Open Microsoft Excel
2. Select the title bar option **Data**
3. From the drop-down menu select **Get External Data**
4. From the drop-down menu select **New Database Query...**
5. The **Microsoft Query** dialog appears. The Database tab offers different types of database that Microsoft Query can work with. Double-click on **MS Access Database**.
6. The **Select Database** dialog appears. Browse to the location of the statistical database file you wish to work with, highlight it and then click **OK**.
7. The **Choose Columns** dialog will appear. You will be presented with a list of the tables within the database. Double click on a table to see the columns within that table. Highlight a column and click the > button to move the column into the 'Columns in Your Query' list. When you have selected the columns you wish to work with, click on **Next**.
8. You will be presented with the **Filter Data** dialog. You can click on the column names and specify filter criteria for them. If you wish to work with all of the rows in the table, do not specify any criteria. When you are ready, click on **Next**.
9. You will then be presented with the **Sort Order** dialog. You can select a column names and have the data ordered in either ascending or descending order, according to the values in the various rows in that column. You may specify up to three levels of sort criteria. If you do not want the data sorted, do not specify any sort criteria. When you are ready, click on **Next**.
10. The **Finish** dialog appears. Ensure that the Return Data to Microsoft Excel radio button is checked, and then click Next. Excel then allows you to choose the location of the data within the current sheet, or to create a new sheet.

The selected Call Center Reporting data should now be visible in your spreadsheet.

Note: Although Microsoft Query is included with Microsoft Office, it is not installed as a standard part of Microsoft Excel. If you are prompted that **Microsoft Query is not installed, do you wish to install it now?** you must obtain the Microsoft Office CDs and install Microsoft Query, as guided by the on-screen prompts.

Upgrading from version 2.5 GA to 2.5 Feature Pack 1

Introduction

These instructions outline the procedure required to successfully upgrade from version 2.5 GA of Nortel Networks Call Center Reporting to version 2.5 Feature Pack 1 (known as FP1).

- These instructions cover both the Nortel Networks Call Center Reporting Master Client (commonly known as the ‘Master’) and Nortel Networks Call Center Reporting Multiple Client (commonly known as the ‘Client’).
- These instructions apply to Nortel Networks Call Center Reporting whether used in conjunction with the CallPilot 100/150 platform or the Business Communications Manager platform.

When it is uninstalled Nortel Networks Call Center Reporting purposely leaves some files behind. These files contain the statistical data which has been gathered by the system as it has been used, and the configuration data files, which contain the settings and preferences that have been supplied by the user and which are used to determine the behaviour of the application.

These files are left on the hard disk to make it easy to uninstall and re-install the same version of Nortel Networks Call Center Reporting. (You may wish to do this if some application files have been deleted in error, or if a patch version is being installed). The statistical files can either be removed, or they can remain. Note that only the Master PC will contain statistical files. Client PCs do not collect statistical data.

Upgrade Process

In broad terms the upgrade process is:

1. Close down Nortel Networks Call Center Reporting MIS and the RDBServer.
2. Uninstall the Nortel Networks Call Center Reporting version 2.5 GA.
3. Install Nortel Networks Call Center Reporting version 2.5 FP1.



Make sure that the Nortel Networks Call Center Reporting application (and, on the Master PC, the RDBServer) have been closed down before you start the upgrade process.

1.0 Close Down Nortel Networks Call Center Reporting version 2.5 GA

1. Click on the Exit option in the File menu of the GUI, and then provide the System Manager ID and Password, and click the OK button.
2. Double click on the RDBServer icon in the tooltray. Click on the Exit button and then provide the System Manager ID and Password, and click the OK button, then click on the OK button in the verification dialog.

2.0 Uninstall the Nortel Networks Call Center Reporting version 2.5 GA

1. From the Start menu highlight Settings and click on Control Panel.
2. Double-click on Add/Remove Programs.
3. From the list of installed applications, select Call Center Reporting.
4. Click the Add/Remove button (in Windows 2000 this is labelled Change/Remove).
5. Click the Yes button on the confirmation dialog.

3.0 Install Nortel Networks Call Center Reporting version 2.5 FP1

Install the Nortel Networks Call Center Reporting Master Client or Nortel Networks Call Center Reporting Multiple Client in the usual fashion, according to the *Nortel Networks Call Center Reporting Set Up and Operating Guide*.

- For a Business Communications Manager installation the software is loaded from the Web Install Page, as described in the SUOG.
- For a CallPilot 100/150 installation the software is loaded from the *CallPilot 100/150 Documentation and Client Software* CD, as described in the SUOG.

Glossary of Terms

Abandon Time Bins	A series of six time steps used in the statistical analysis of Abandoned Calls. Nortel Networks Call Center Reporting will provide statistical reports on the percentage of incoming calls abandoned within each of the periods specified in the chosen Abandoned Time Bins. A seventh period is also used in the reports, which gathers information on all calls which abandoned <i>after</i> the period specified by the sixth Abandoned Time Bin.
Agent Status	The 'state' of an Agent who is logged into the Call Center. The states in which an Agent is displayed in the Real Time screens are: Available which is shown in blue; on an Incoming Call (including Break Time) which is shown in Green; on an Outgoing Call which is shown in Yellow; Not Ready (including being on an internal call) which is shown in Grey. Note that such actions as making an Outgoing Call whilst already in the Incoming or Not Ready states will not change the displayed state of the Agent: they will still be displayed as Incoming or Not Ready, respectively.
Alarm Threshold	Alarms may be set to trigger an alert on the wallboards, to inform your Agents of some event or circumstance. The value which a parameter must reach, match or exceed to trigger an Alarm is the Alarm Threshold.
Answered Time Bins	<p>A series of six time steps used in the statistical analysis of Answered Calls. Nortel Networks Call Center Reporting will provide statistical reports on the percentage of incoming calls answered within each of the periods specified in the chosen Answered Time Bins.</p> <p>A seventh period is also used in the reports, which gathers information on all calls which were answered <i>after</i> the period specified by the sixth Answered Time Bin.</p>
Available State	<p>For a Line: The Line is not in use.</p> <p>For an Agent: The Agent is ready to take Incoming Calls.</p> <p>The Available State is shown as Blue in the Real Time Screens.</p>
Break Time	The period allocated to Agents in-between receiving Incoming Calls (also called Wrap Up and Post Call Completion).
Call Center platform	The Call Center product which handles the call distribution and Agents handling for your Call Center. The unit to which Nortel

Networks Call Center Reporting is connected and receives the Real Time data from.

The supported Call Center platforms are: the Business Communications Manager 2.5 and the CallPilot 100/150.

Call Queue

When there are no Agents Available in a Skillset to receive Incoming Calls the Call Center platform will hold these Incoming Calls in a queue. As Agents become available the queued calls will be distributed. Each Skillset has a Call Queue.

Exchange Line Utilization

The amount of time that the Lines which have been Uploaded from the Call Center have been in use on Incoming or Outgoing calls, either by Agents or by non-Agents.

Grade of Service

The Grade of Service is a figure which is used to represent the level of service provided to incoming callers, based upon Call Center response times.

It is available within the Hourly, Daily, Weekly and Monthly reports, and is expressed as a percentage. It is calculated as follows:

Answered = Total Number of Calls Answered
Abandoned = Calls which Abandoned
Service = Calls answered after the Service Threshold

$$G \text{ of } S\% = \frac{\text{Answered} - \text{Service}}{\text{Answered} + \text{Abandoned}} \times 100$$

Incoming State

For a Line: The Line has an Incoming Call on it which has been answered.

For an Agent: The Agent is engaged on an Incoming Call, or is still in the Break Time from their previously handled Incoming Call.

The Incoming State is shown as Green in the Real Time Screens. If an Agent has been on an Incoming Call in excess of the Incoming Call Duration Threshold he is displayed in Red.

Master directory

Installation directory of the Nortel Networks Business Communications Manager 2.5 or CallPilot 100/150 Call Center Reporting Master Client.

Not Ready State

For Agents only: Either the Agent has entered the Not Ready state to indicate they are not Available to take calls or the Call Center has placed them in the Not Ready state because a call was unanswered at their handset or the Agent is active on an internal call.

	<p>The Not Ready State is shown as Grey in the Real Time Screens. If an Agent has been Not Ready in excess of the Not Ready Duration Threshold he is displayed in Red.</p>
Outgoing State	<p>For a Line: The Line is in use on an Outgoing Call. For an Agent: The Agent is engaged on an Outgoing Call.</p> <p>The Outgoing State is shown as Yellow in the Real Time Screens. If an Agent has been on an Outgoing Call in excess of the Outgoing Call Duration Threshold he is displayed in Red.</p>
RDBServer	<p>The module within the Nortel Networks Call Center Reporting application which communicates to the Call Platform and writes Call Center statistics to the reports databases.</p>
Real Time	<p>Information is available at System Manager level and at Skillset Level that displays the current states of the System or Skillset Lines and Agents. This information is refreshed approximately every 3 seconds. These displays are called the Real Time Screens.</p> <p>Additionally, information can be displayed on hardware and software TCP/IP enabled wallboards, to provide Real Time information to the Call Center Agents.</p>
Stat Time Bins	<p>A collective term for the Abandoned Time Bins and the Answered Time Bins.</p>
TCP/IP	<p>Transmission Control Protocol/Internet Protocol: A protocol developed by the US Department of Defense for communications between computers. It has become the <i>de facto</i> standard for data transmission over networks, including the Internet.</p> <p>TCP and IP are transport and address protocols; TCP is used to establish a connection for data transmission, and IP defines the method for sending the data in packets.</p>
Title	<p>A string of text displayed on the top line of a wallboard. This restricts the wallboard to being able to display 3 parameters only.</p>
Upload	<p>The Skillset, Agent and Line information is not manually entered in the Nortel Networks Call Center Reporting configuration, it is Uploaded from the Call Center.</p>
Waiting State	<p>For Line only: The Line has a call queuing on it that cannot be distributed to the Agents in the Skillset.</p>

The Waiting State is shown as Blue in the Real Time Screens, or as Red if the queued call has been waiting in excess of the Call Waiting Alarm Threshold.

Wallboard

A device which is used to display information to the Call Center Agents (also called Reader Boards). Nortel Networks Call Center Reporting drives TCP/IP enabled hardware **WallBoards** and **SoftBoards** from the *ipView* range of wallboards.

Index

A

Abandon Time Bins, 64
 Abandoned Call Report, 64
 Abandoned Caller ID Report, 75
 Abandoned calls, 37, 41, 43, 54, 73, 75, 87
 Accessing Current Reports, 58
 Adding a Wallboard, 39
 Adding lines, 34, 35, 36
 Agent Activity Report, 66
 Agent Profile Report, 72
 Agent Status, 7, 50, 56
 Agents, 7, 22, 36, 41, 43, 44, 45, 46, 50, 51, 53, 54, 55, 64, 66, 68, 70, 72
 Alarm conditions, 39
 Alarm Threshold, 46
 Answer Time Bins, 62
 Answered Call Report, 62, 63
 Assigning Wallboard, 40
 Average tab, 50
 Average Time Report, 67

B

Break Time, 54, 56, 67, 68, 72
 Business Communications Manager Call Center, 5, 6, 7, 12, 88
 Buzzer, 40, 41, 43, 45, 46

C

Calendar, 24, 58, 59
 Call Center performance, 41, 51, 57, 71, 73
 Call Center platform, 7, 8, 11, 12, 22, 23, 33, 34, 35, 36
 Call Center, the, 7, 11, 27, 29, 35, 39, 50, 57, 66
 Call Profile Report, 50, 71
 Call queue, 7, 37, 43, 45, 50, 52
 Call Waiting Alarm, 50
 CallPilot 10/150, 5, 6, 7, 14, 18, 85, 86
 Changing configuration, 28, 33
 Changing Wallboard Schedule, 47
 Changing Wallboard settings, 39
 Closing the RDB Server, 29

Closing the user interface, 30
 Configuration of lines, 35, 36
 Configuration Report, 77
 Configuration window, 30
 Connecting Wallboard, 39
 Creating Wallboard alarm, 45
 Creating Wallboard message, 44
 Creating Wallboard Schedule, 46
 Critical threshold, 45
 Current Reports, 58

D

Daily reports, 60
 Default Log In password, 37
 Deleting Wallboard Alarm, 46
 Deleting Wallboard messages, 44
 Deleting Wallboard schedule, 47
 DHCP, 40
 Documentation, 6, 39

E

Editing Wallboard alarm, 46
 Editing Wallboard messages, 44
 Editing Wallboard Schedule, 47
 Erasing Wallboard messages, 44
 Exiting, 28, 30

F

Feature card, 7
 Feature Pack 1, 85
 File sharing, 15
 Folders on PC, 12, 14, 15, 16
 Forgotten password, 37

G

Grade of Service, 41, 43, 50, 54, 56, 65, 73
 Graphical format, 51, 60, 62, 75

H

Hardware, 5
 Help Topics, 31, 61
 Historical reports, 58

Hourly reports, 59
How this guide is organized, 5
How to use this guide, 5

I

Icon, 27, 29, 30, 61
Incoming Call Report, 64
Installation, 5, 25
Installation prerequisites, 11
Installing Wallboard, 39

K

Key performance statistics, 71
Keycode, 12

L

Line configuration, 35, 36
Line information, 65
List of reports, 60
Logging in, 27, 29
Logging out, 28, 30

M

Management reports, 7, 30, 50, 57, 60, 78
Maximum capacity, 68
Microsoft Access, 81, 82
Microsoft Excel, 81, 82
Microsoft Office, 83
Microsoft Query, 82
Minimum PC specification, 8
Monthly reports, 60
Multiple Client software, 13, 14, 17, 18
Multiple Wallboards, 7, 39

N

Naming Skillsets, 34
Next Ten Skillsets, 52
Nortel Networks Call Center Reporting, 5,
6, 7, 8, 11, 12, 13, 14, 17, 18, 21, 22, 23,
25, 27, 28, 29, 30, 31, 33, 35, 36, 37, 39,
49, 50, 51, 57, 61, 77, 85, 87
Not Ready, 43, 45, 50, 54, 55, 56, 66, 67, 72
Numerical format, 51, 60, 62, 75, 79

O

On-line help, 61
Operating System Compatibility, 9
Other documents, 6, 39

P

Password, 16, 27, 37
Password resetting, 38
PC requirements, 8
PC specification, 8
Peak tab, 50
Previous Ten Skillsets, 52
Primary Alert, 50
Print, 30
Print Schedule, 74, 78
Printing reports, 60, 74, 75, 76
Problem solving, 22

R

RDB Server, 7, 8, 22, 27, 29, 30
Real Time, 7, 44, 49, 50, 51, 53, 54
Reference material, 6
Removing Wallboard Alarm, 46
Removing Wallboard messages, 44
Removing Wallboard Schedule, 47
Report Manager window, 58, 60, 61, 74
Reports, 7, 30, 34, 37, 49, 50, 57, 58, 60, 61,
62, 79, 87
Resetting password, 38
Restarting, 22

S

Schedule for printing, 78
Sending Wallboard messages, 45
Service Status, 56
Service Target, 50
Setting up statistics, 49
Sharing files, 15
Shortcuts to options, 61
Skillset, 34, 39, 51, 53, 55, 57, 62, 66, 67
Skillset Level, 43, 49, 51, 54, 55, 57, 62, 66,
67
Skillset names, 34
Software, 7
Software version, 31, 61

Solving problems, 22
Starting, 22, 27
Stat Time Bin, 37, 87
Statistical averages, 50
Statistical peaks, 50
Statistical set up, 49
Statistics, 7, 8, 12, 29, 37, 49, 50, 57, 60, 71, 73, 87
Status Bar, 30
Summary Report, 50, 62, 73, 74
System Capacity Report, 68
System Level, 45, 49, 51, 52, 53, 57, 65, 66, 67, 70, 72, 75
System Manager window, 39, 44, 58, 59, 75, 77, 78

T

TCP/IP protocol, 9, 12
Text messages, 39, 43
Threshold, 37, 45, 46, 56
Title of Wallboard, 41
Toolbar, 30
Traffic Analysis tab, 50
Traffic Status, 56
Troubleshooting, 22

U

Upgrading, 85
User ID, 27
User interface, 7, 28, 30

V

Viewing Reports, 61

W

Wallboard, 7, 37, 39, 40, 43, 44, 45, 46, 47
Wallboard alarm, 43, 45
Wallboard buzzer, 40, 41, 43, 45, 46
Wallboard display, 39
Wallboard IP Address, 39, 40
Wallboard messages, 43
Wallboard parameters, 39, 41
Wallboard schedule, 43, 46, 47
Wallboard Summary, 41
Wallboard Title, 41
Weekly reports, 60
Windows 2000, 11, 13, 16, 19
Windows 95, 9, 19, 20, 21, 24
Windows 98, 20, 21
Windows NT, 11, 16, 19, 21