Reporting for Contact Center Troubleshooting and Maintenance Guide

NORTEL

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How to Use this Guide   **1**

Introduction

This guide is designed to allow a Nortel Customer, a Nortel Partner, a Network Administrator, or Support Personnel to maintain and troubleshoot Nortel Reporting for Contact Center.

How this Guide is organized

The *Reporting for Contact Center Troubleshooting and Maintenance Guide* is organized into the following chapters:

How to Use this Guide
Provides a brief overview identifying the organization of this guide.

Introduction
Provides an overview of the *Reporting for Contact Center Troubleshooting and Maintenance Guide*. Information is also included on getting help from Nortel.

Flow Charts
Flow charts to aid the user in troubleshooting a problem encountered in Reporting for Contact Center.

Raising a Case: Information Gathering
Details the information from Reporting for Contact Center and the Contact Center to gather for Nortel Technical Support when troubleshooting a problem.

Web Host PC Troubleshooting
Typical problems and solutions for troubleshooting a Web Host PC, for example, backing up and restoring the MySQL database, using anti-virus software, and so on.

Client PC Troubleshooting
Typical problems and solutions for troubleshooting a Client PC.

BCM and CCRS Troubleshooting
Typical problems and solutions for troubleshooting the Business Communications Manager (BCM) and Contact Center Reporting Server (CCRS).

Glossary
Glossary of terms used in this guide.

References
Lists documents referenced in this guide.

Index
Provides a cross-reference of topics in this guide.

Introduction 2

The *Reporting for Contact Center Troubleshooting and Maintenance Guide* is to be used by Nortel customers and partners to troubleshoot any problems encountered in the Nortel Reporting for Contact Center client application reporting tool that is a component of the Contact Center.

About this Guide

Where a symptom indicates a problem with Reporting for Contact Center this guide, which is divided into appropriately named chapters, enables the user to quickly refer to a particular section. For instance, if the user sees an issue on the Web Host PC, the reader can go directly to the Web Host PC Troubleshooting chapter, and look up the relevant topic to troubleshoot.

Alternatively, the user can troubleshoot a problem encountered in Reporting for Contact Center by using flow charts. These are provided in the Flow Charts chapter, beginning on page 13. The flow charts cover several areas of Reporting for Contact Center from the installation and connection of Reporting for Contact Center to print schedules for reports.

If a problem can not be resolved in this guide, the user is advised to consult Nortel Technical Support – this will be referred to as *Nortel Support* in the rest of this document. The following section, How to get Help, provides information on how to get help from Nortel for either Reporting for Contact Center issues, or issues with the Contact Center.

How to get Help

This section explains how to get help for Nortel products and services.

Getting Help from the Nortel Web site

The best source of support for Nortel products is the Nortel Support Web site:

http://www.nortel.com/support

This site enables customers to:

- Download software and related tools

- Download technical documents, release notes, and product bulletins

- Sign up for automatic notification of new software and documentation

- Search the Support Web site and Nortel Knowledge Base

- Open and manage technical support cases

Getting Help over the phone from a Nortel Solutions Center

If you have a Nortel support contract and cannot find the information you require on the Nortel Support Web site, you can get help over the phone from a Nortel Solutions Center.

In North America, call 1-800-4NORTEL (1-800-466-7835).

Outside North America, go to the following Web site and look up the phone number that applies to your region:

http://www.nortel.com/callus

When you speak to the phone agent, you can reference an Express Routing Code (ERC) to route your call more quickly to the appropriate support specialist. To locate the ERC for your product or service, go to:

http://www.nortel.com/erc

Getting Help through a Nortel distributor or reseller

If you purchased a service contract for your Nortel product from a distributor or authorized reseller, you can contact the technical support staff for that distributor or reseller.

Flow Charts 3

Introduction

The flow charts enable the user to troubleshoot problems encountered in Reporting for Contact Center. There are seven flow charts covering areas from installation of Reporting for Contact Center to print schedules of reports. The user is advised to go to the relevant flow chart in the area of Reporting for Contact Center where a problem has arisen. The flow charts are as follows:

1. Installing Reporting for Contact Center

2. Contact Center Connection

3. Historical Reports

4. Real Time Screens

5. Software Wallboard

6. Hardware Wallboard

7. Print Schedules

Questions raised and action items to be performed in a flow chart are explained in additional help provided directly after the flow chart. A key to the flow charts is provided, see the following section Key to the flow charts, which explains what the different shapes and colors represent, as well as what some of the content mean.

Key to the flow charts

Diamonds
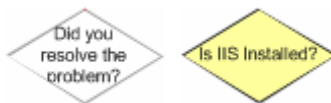
These shapes are questions; they have either a **Yes** or **No** answer. Depending on the answer you will be redirected to an additional step:

No is represented with a red arrow

Yes is represented with a blue arrow

The yellow background indicates that there is more help available in this document for that question; this will be displayed directly below the relevant flow chart, as in the following:

Q) Is IIS Installed?
[Answer will be displayed here]

Rectangles

These shapes are action items. You must perform the action detailed in this step. **Black** arrows direct you to the next step to take from here.

The yellow background indicates that there is more help available in this document for that action item; this will be displayed directly below the relevant flow chart, as follows:

From Add Remove Windows Components Install IIS
[Answer will be displayed here]

Rectangular action items with a green background indicate an important step in the flow chart. A rectangular action item with a blue background indicates that part of the flow chart is continued on another flow chart as specified in the step.

Ovals
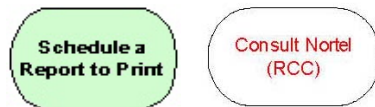
These oval shapes are either the start point of a flow chart which will also be colored green, or a terminating action in the flow chart. Terminating actions require you to consult further with Nortel regarding the current problem. For further help refer to the How to get Help section on page 11.

The terminating actions display either, **Consult Nortel (RCC)**, or **Consult Nortel (CC)** indicating whether the Reporting for Contact Center (RCC) component or the Contact Center (CC) requires the initial focus of consultation with Nortel Support.

If you suspect a problem with RCC, collect the RCC logs. If you suspect a problem with the BCM, collect the BCM logs. If you are unsure whether the problem originates on the BCM or the RCC, collect logs from both.

> **Note:** By default, Reporting for Contact Center logging is deactivated. This should be activated as early as possible and should be active while the error occurs to capture the problem.

Reporting for Contact Center logging is activated by the following:
1. Log on to Reporting for Contact Center as an Administrator on the Web Host PC.
2. From the navigation menu, select **Maintenance** and click **Logging**.
3. From the Logging Menu page click **Activate Logging**.
4. **Log file location** displays the location of the Reporting for Contact Center log files.

For the *ip***View** SoftBoard, logging is activated by echoing to the loop back IP address of 127.0.0.1. The log file is stored in the installation folder of the SoftBoard.

To retrieve logs of a hardware wallboard, set up an *ip***View** SoftBoard to echo to the hardware wallboard. Again, echo the SoftBoard to the loop back IP Address (127.0.0.1) to activate logging of the hardware wallboard. The wallboard log file can be retrieved from the installation folder of the SoftBoard.

Installing Reporting for Contact Center

Download RCC setup installation from the Administrator Applications page on the BCM

Did Setup Exe download from the CC? —No→ Consult Nortel (CC)

Yes

Is IIS Installed? —No→ From Add/Remove Windows Components install IIS

Yes

Run RCC Setup Installation

Did the setup complete 100%? —No→ Remove RCC, MySQL Server 4.1 and Java 1.5 from Add/Remove Programs and try again —Yes→ Did you resolve the problem? —No→ Consult Nortel (RCC)

Yes   Yes

Did the Web Host PC reboot? —No→ Restart the PC

Yes   Yes

Launch RCC

Is the RCC Login page displayed? —Yes→ Proceed to the CC Connection Flow Chart

No

Do you see "Page cannot be displayed" rather than an error message? —No→ Is the Operating System Windows 2003? —No→ Does the error message refer to MySQL? —Yes→ Does the error message mention "Access Denied" —No→ Is the MySQL4 service running?

Yes   Yes   No   Yes   No

Turn off Friendly HTTP Error Messages   Modify the settings in IIS   Is port 80 blocked?   Recreate the MySQL User   Restart MySQL4

Consult Nortel (RCC)

Does the MySQL4 service start?

No

Consult Nortel (RCC) —No→ Is the RCC Login page displayed? ←— Uninstall and re-install MySQL

Is IIS Installed?

Refer to the *Reporting for Contact Center Setup and Operations Guide* (NN40040-302) to check whether IIS is installed.

From Add/Remove Windows Components install IIS

Refer to the *Reporting for Contact Center Setup and Operations Guide* (NN40040-302) for instructions on installing IIS.

Remove RCC, MySQL Server 4.1 and Java 1.5 from Add/Remove Programs and try again

If the Reporting for Contact Center installation did not complete 100%, Reporting for Contact Center should be removed from the Web Host PC, then MySQL Server 4.1 and finally Java 1.5, as follows:
a. Click on **Start** > **Control Panel** > **Add/Remove Programs.**
b. Select **Reporting for Contact Center** and click the **Change/Remove** button to start the un-installation of Reporting for Contact Center.
c. Follow the on-screen instructions in InstallShield Wizard to remove the program.
d. Repeat steps b and c for MySQL Server 4.1 and J2SE Runtime Environment 5.0.

Install Reporting for Contact Center again.

Q) Do you see "Page cannot be displayed" rather than an error message?

If **Yes**, go to step Turn off Friendly HTTP Error Messages as follows, or return to the Installing Reporting for Contact Center flow chart.

Turn off Friendly HTTP Error Messages

To see HTTP 500 error messages, Friendly HTTP Error Messages must be disabled in Internet Explorer. See Page cannot be displayed message on page 86.

Modify the settings in IIS

Refer to the *Reporting for Contact Center Setup and Operations Guide* (NN40040-302) for instructions on IIS 6 configuration.

Q) Does the error message refer to MySQL?
For error messages related to MySQL, see Error message refers to MySQL on page 88.

Is Port 80 Blocked?
Refer to Port Numbers used by Reporting for Contact Center on page 53 for port numbers not to be blocked by a firewall.
> **Note:** Port 80 is a standard port for HTTP traffic. This port needs to be open for all Web sites on this Web Host PC.

Q) Does the error message mention "Access Denied"?

Go to step Recreate the MySQL User below.

Recreate the MySQL User

To recreate the MySQL User, see Error message mentions Access denied on page 89.

Q) Is the MySQL4 service running?

Refer to Restarting MySQL Service on page 69 on instructions of how to check if MySQL 4 service is running.

Restart MySQL4

Refer to Restarting MySQL Service on page 69 on how to restart MySQL 4 service.

Uninstall and re-install MySQL

Uninstall

See Uninstalling and re-installing MySQL on page 38 for instructions on removing MySQL Server 4.1 from the Web Host PC.

Install

To install MySQL Server 4.1 back on to the Web Host PC, refer to Uninstalling and re-installing MySQL on page 38.

Contact Center Connection
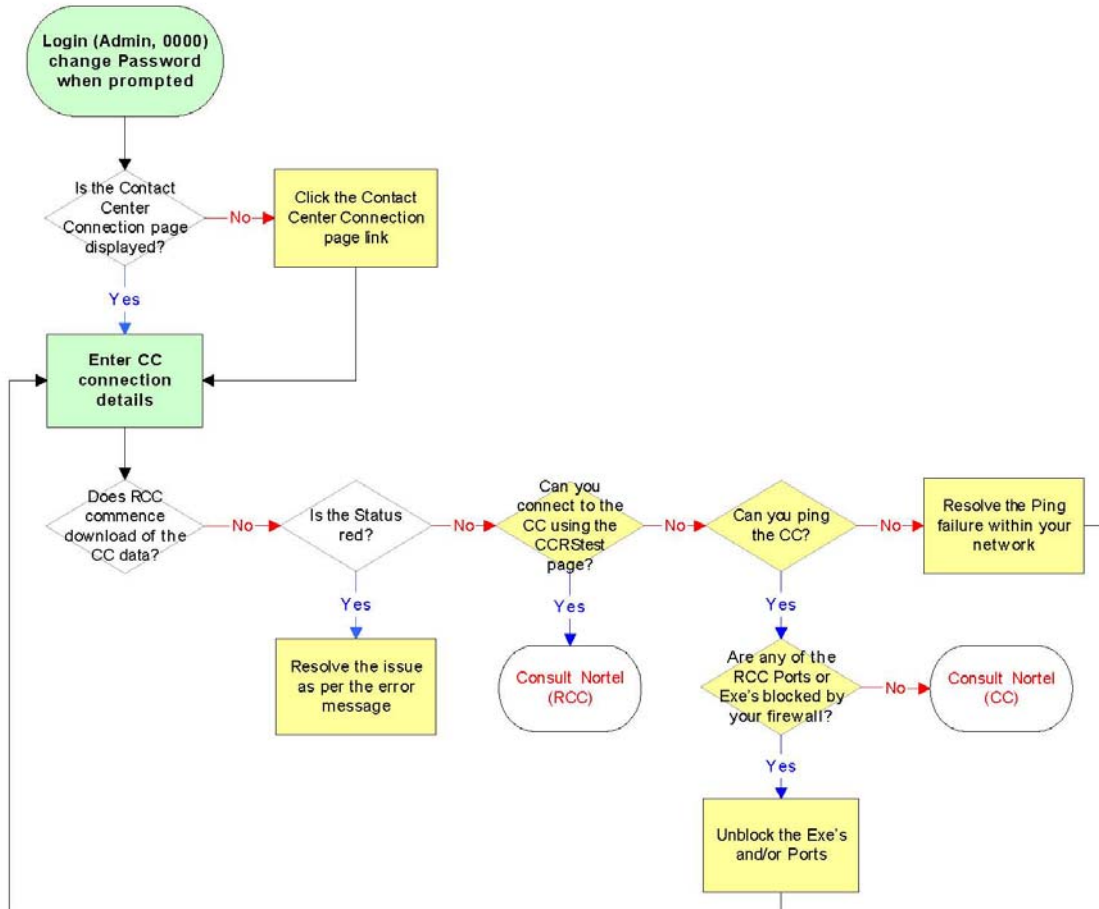
Click the Contact Center Connection page link

> See Contact Center Connection page item on page 86

Resolve the issue as per the error message

> Note: For more detailed instructions on troubleshooting the following error messages refer to Error in Download Contact Center data window on page 89.
>
> a) InvalidRequest - The request from the client application is not valid, restart the RCC Launcher.
>
> b) VMServiceNotRunning - The Voicemail service is not running on the Contact Center. Restart the Voicemail service on the Contact Center through the Element Manager.

    c) InvalidPassword - The password used by the client application is not valid. Enter the correct password, use the CCRS test page to check if you are not sure.

    d) NoKeyCode - The keycode used to turn on the CCRS data stream is not present. Enter the correct keycode.

    e) NoCCKeyCode - The keycode used to enable the Contact Center application is not present. Enter the correct keycode.

    f) CCRSDisabled - The CCRS data stream is disabled. Enable the CCRSAppServer in the Element Manager.

    g) ServerBusy - The server is too busy to handle the request (too many simultaneous users). Check that other Reporting for Contact Center clients are not communicating with the same Contact Center, restart the RCC Launcher.

    h) CannotConnectToCC - The CCRS cannot contact the Contact Center.

    i) CannotConnectToDB – The CCRS could not connect to the Contact Center database.

    j) CCRefusedConnection - Indicates that the Contact Center refused to register the AppServer.

    k) UnknownServerError – If none of the above, contact Nortel Support.

Q) Can you connect to the CC using the CCRStest page?

Refer to CCRS Test Page on page 118 for instructions on connecting to the Contact Center using the CCRS Test page.

Q) Can you ping the CC?

Note: Ensure that any active firewall is not blocking ping requests.
From the Web Host PC, at the command line type **ping xx.xx.xx.xx**, where xx.xx.xx.xx is the IP Address of LAN1 or LAN2 of the BCM.
For further information on pinging to the Contact Center, see Pinging the Contact Center on page 109.

Resolve the Ping failure within your network

To resolve the Ping failure, see Resolving pinging failure on your network on page 109.

Are any of the RCC Ports or Exe's blocked by your firewall?

Refer to Ports and .exe files used by Reporting for Contact Center on page 53 for Reporting for Contact Center port numbers and executable files.

Unblock the Exe's and/or Ports

Refer to Ports and .exe files used by Reporting for Contact Center on page 53 for Reporting for Contact Center port numbers and executable files.

Historical Reports
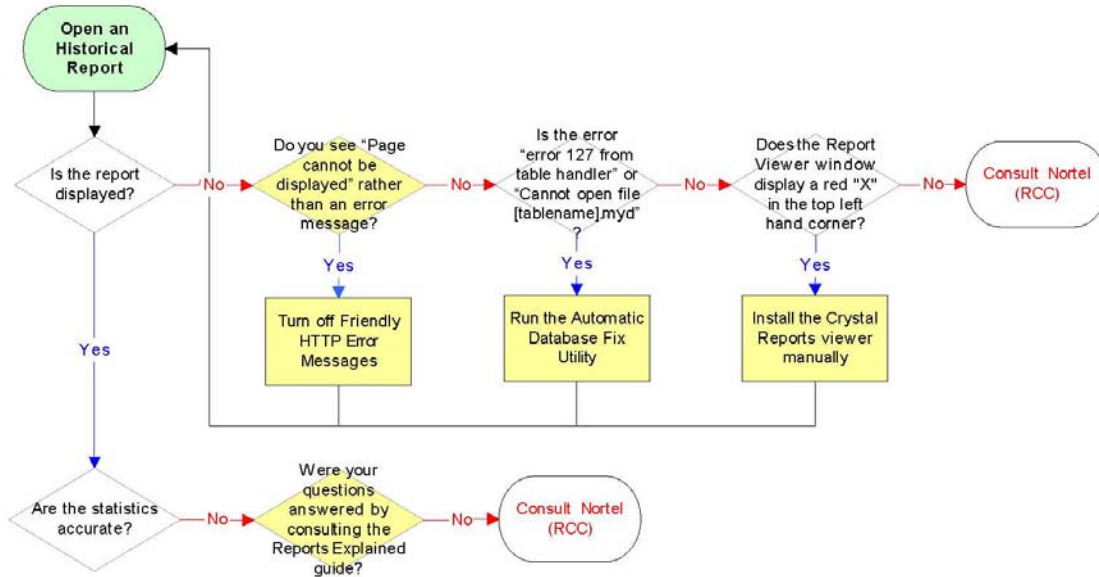
Q) Do you see "Page cannot be displayed" rather than an error message?

To see HTTP 500 error messages by disabling friendly HTTP error messages in Internet Explorer see Page cannot be displayed message on page 86.

Turn off Friendly HTTP Error Messages

To see HTTP 500 error messages, Friendly HTTP Error Messages must be disabled in Internet Explorer. See Page cannot be displayed message on page 86.

Run the Automatic Database Fix Utility

To execute the Automatic Database Fix Utility see Errors on Generating Reports on page 41.

Install the Crystal Reports viewer manually

To manually install Crystal Reports ActiveX Viewer see Manual Installation of ActiveX Viewer on page 97.

Q) Were your questions answered by consulting the Reports Explained guide?

Detailed information on the Reports within Reporting for Contact Center can be found in the *Reporting for Contact Center - Reports Explained* (NN40010-600) guide (installed along with this guide on the Web Host PC). This guide details how to use the report viewer, the terms used within Reporting for Contact Center reports, what statistics and formulas are used to calculate each field in the reports (where applicable) and frequently asked questions.

Real Time Screens

Open a Real Time screen

Is the Real Time screen displayed? —No→ Do you see "Page cannot be displayed" rather than an error message? —No→ Does the Real Time screen display a red "X" in the top left hand corner?

Yes → Turn off Friendly HTTP Error Messages

Yes → Install the Java Runtime manually

Yes ↓

Is the Connection Status green? —No→ Are the RCC Launcher and MySQL4 Services running? —Yes→ Is there a correct response from the CC using the CCRStest page? —Yes→ Consult Nortel (RCC)

No → Start the RCC Launcher and MySQL4 Services

No → Consult Nortel (CC)

Yes ↓

Do you see call statistics? —No→ Do you see a red status icon with an error message next to it? —No→ Is the Real Time port blocked? —No→ Consult Nortel (RCC)

Yes → Resolve the blocked port

Yes ↓

Resolve the issue as per the error message —→ Did you resolve the problem? —No→ Raise a Case (CC)

Yes →

Do the Real Time screens update every 1 or 3 seconds? —No→ Is your Wallboard Real Time refresh interval 1 second? —No→ Is RCC logging activated? —No→ Consult Nortel (RCC)

Yes → Increase your Wallboard and Real Time refresh rate to 3 seconds

Yes → Deactivate Logging (if Anti Virus is installed prevent scanning of log files)

Q) Do you see "Page cannot be displayed" rather than an error message?

To see HTTP 500 error messages by disabling friendly HTTP error messages in Internet Explorer see Page cannot be displayed message on page 86.

Turn off Friendly HTTP Error Messages

To see HTTP 500 error messages, Friendly HTTP Error Messages must be disabled in Internet Explorer. See Page cannot be displayed message on page 86.

Install the Java Runtime manually

To manually install Java Runtime Environment see Real Time screens are not displayed correctly on page 48.

Q) Are the RCC Launcher and MySQL4 Services running?

See Restarting RCC Launcher Service and Restarting MySQL Service.

Start the RCC Launcher and MySQL4 Services

See Restarting RCC Launcher Service and Restarting MySQL Service.

Q) Is there a correct response from the CC using the CCRStest page?
See CCRS Test Page.

Q) Do you see a red status icon with an error message next to it?

Should an error message be returned from the Contact Center it will be displayed directly below the Connection Status indicator with a red status icon next to it.

Q) Is the Real Time port blocked?
See Port Numbers used by Reporting for Contact Center.

Resolve the blocked port

See Ports and .exe files used by Reporting for Contact Center.

Resolve the issue as per the error message

Note: For more detailed instructions on troubleshooting the following error messages refer to Error messages in Real Time screens on page 70.

   a. Invalid Request - The request from the client application is not valid, restart the RCC Launcher.

b. Voicemail Service Not Running - The Voicemail service is not running on the Contact Center. Restart the Voicemail service on the Contact Center through the Element Manager.
c. Invalid Password - The password used by the client application is not valid. Enter the correct password, use the CCRS test page to check if you are not sure.
d. No Key Code - The keycode used to turn on the CCRS data stream is not present. Enter the correct keycode.
e. No Contact Center Key Code - The keycode used to enable the Contact Center application is not present. Enter the correct keycode.
f. CCRSNDP Disabled - The CCRS data stream is disabled. Enable the CCRSAppServer in the Element Manager.
g. Server Busy - The server is too busy to handle the request (too many simultaneous users). Check that other Reporting for Contact Center clients are not communicating with the same Contact Center, restart the RCC Launcher.
h. CDN Conflict – There is a Control Directory Number (CDN) conflict in the Skillset and CDN identified in the error message, this must be resolved in the CallPilot Manager interface.
i. Unknown Server Error – If none of the above, consult Nortel Support.

Increase your Wallboard and Real Time refresh rate to 3 seconds
a. Launch and log on to Reporting for Contact Center as an Administrator.
b. Click on the **Contact Center Connection** link.
c. Select 3 Seconds from the **Wallboard and Real Time Refresh Interval**.
d. Click **Submit**.

Deactivate Logging (if Anti Virus is installed, this will prevent slow down in the Real Time service when scanning of log files)
To deactivate the Nortel Reporting for Contact Center diagnostic logging (if it is activated) refer to the *Reporting for Contact Center Setup and Operations Guide* (NN40040-302).

Software Wallboard
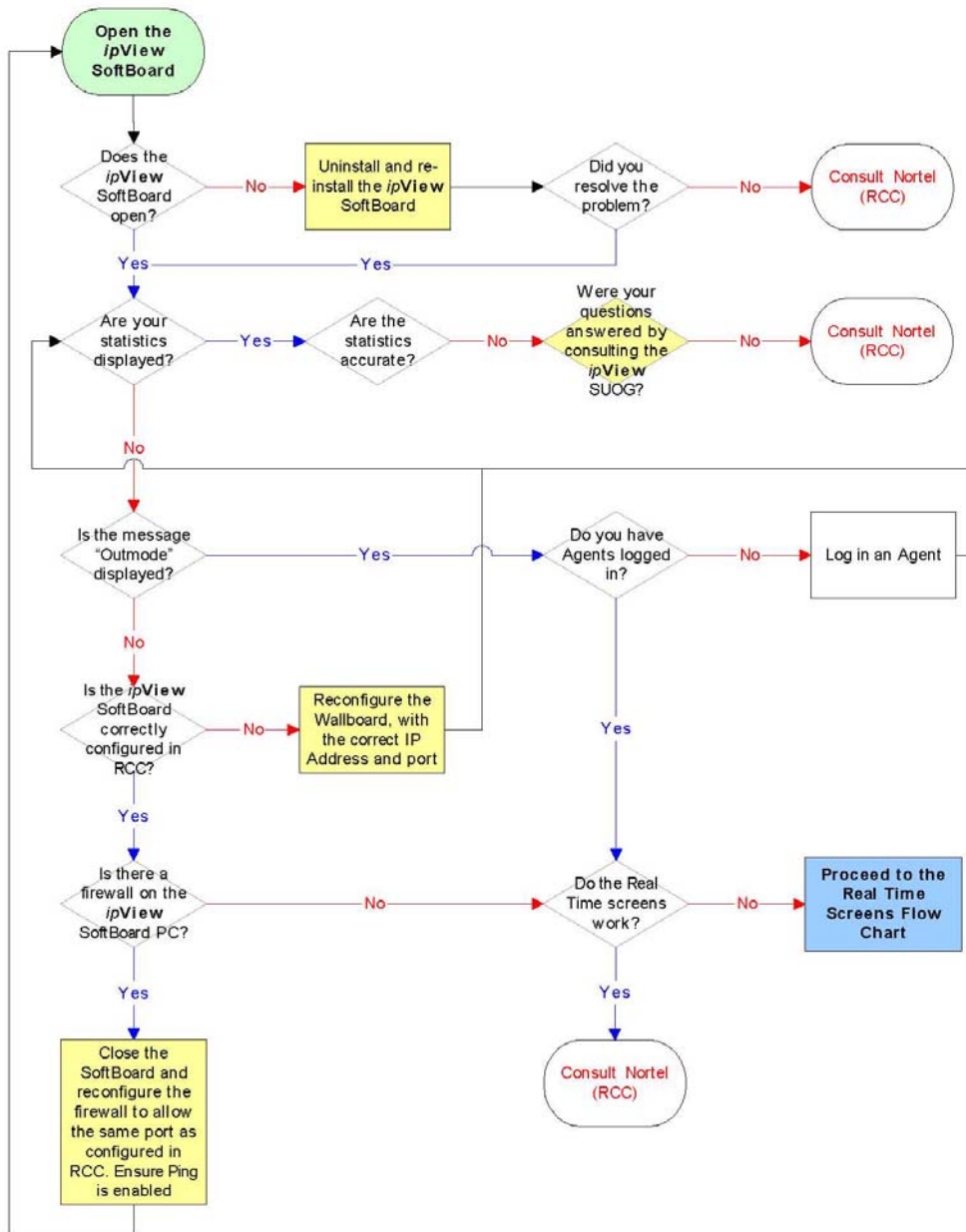
Uninstall and re-install the *ip*View SoftBoard

Refer to the *ipView Software Wallboard Setup and Operation Guide* (NN40010-500).

Reconfigure the Wallboard, with the correct IP Address and port.

Refer to the *ipView Software Wallboard Setup and Operation Guide* (NN40010-500).

Were your questions answered by consulting the *ip*View SUOG?

Detailed information on the *ip***View** SoftBoard can be found in the *ipView Software Wallboard Setup and Operation Guide* (NN40010-500).

Close the SoftBoard and reconfigure the firewall to allow the same port as configured in RCC.

Refer to Ports and .exe files used by Reporting for Contact Center on page 53 for Reporting for Contact Center port numbers and executable files.

Hardware Wallboard
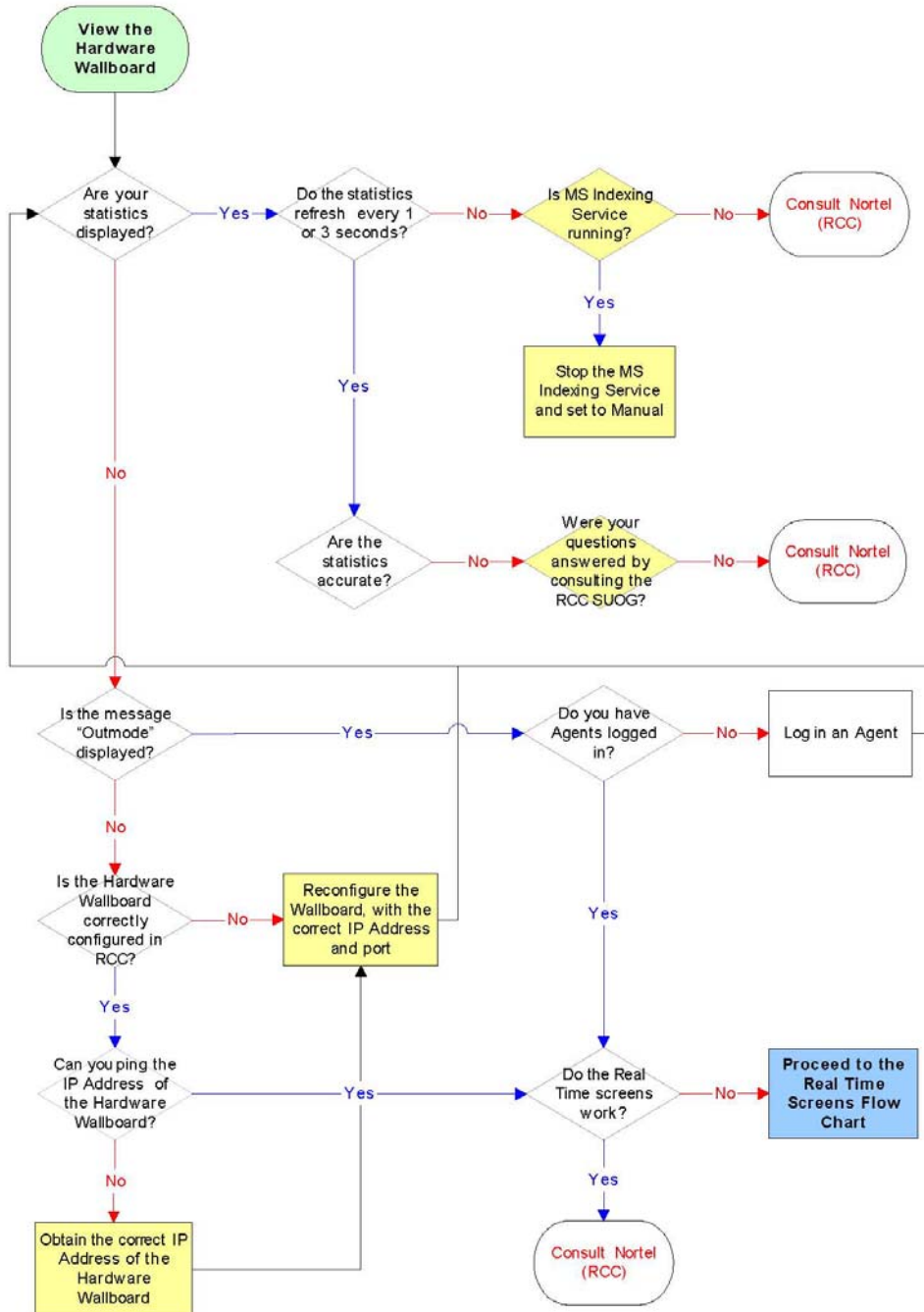
Is MS Indexing Service running?

On the Web Host PC, or the PC that the hardware wallboard is directly connected to, check by one of the following options:

Option 1

1. Open the Windows Task Manager by pressing **Ctrl**+**Alt**+**Delete**.

2. Click **Task Manager**.

3. Click the **Processes** tab.

4. Search for the process **cidaemon.exe**. If this is running, MS Indexing Service will be running on the PC.

Option 2

1. From the Start menu, click on **Settings > Control Panel > Administrative Tools > Services.**

2. Locate the service **Indexing Service**.

3. If the Status is set to **Started**, MS Indexing Service will be running on the PC.

Stop the MS Indexing Service and set to Manual

Refer to Pause in parameter count on the Hardware Wallboard on page 78.

Reconfigure the Wallboard, with the correct IP Address and port

Refer to the *ipView Software Wallboard Setup and Operation Guide* (NN40010-500).

Were your questions answered by consulting the RCC SUOG?

Detailed information on the configuration and the statistics displayed on the hardware wallboard can be found in the *Reporting for Contact Center Setup and Operations Guide* (installed along with this guide on the Web Host PC).

Obtain the correct IP Address of the Hardware Wallboard

Refer to IP Address of the Hardware Wallboard on page 78 for instructions on obtaining the IP Address of the hardware wallboard.

Print Schedules

Flow chart:

- **Schedule a Report to Print** →
- **Did your reports print?**
  - Yes → **Are the statistics accurate?**
    - No → **Were your questions answered by consulting the Reports Explained guide?**
      - No → **Consult Nortel (RCC)**
  - No → **Is there a firewall on the Web Host PC?**
    - Yes → **Check that printCaller.exe is not being blocked by your firewall**
    - No → **Was the report a Daily Schedule?**
      - Yes → **Check that the report was configured to print on the correct day**
      - No → **Can you print a standard document using the same printer?**
        - Yes → **Is PrintCaller running?**
          - Yes → **Consult Nortel (RCC)**
          - No → **Launch PrintCaller**
        - No → **Resolve the issue with your printer, you may need to consult your network administrator**

Check that printCaller.exe is not being blocked by your firewall

Refer to the .exe files used by Reporting for Contact Center section on page 53.

Q) Were your questions answered by consulting the Reports Explained guide?

Detailed information on the Reports within Reporting for Contact Center can be found in the *Reporting for Contact Center – Reports Explained* (NN40010-600) guide (installed along with this guide on the Web Host PC). This guide details how to use the report viewer, the terms used within Reporting for Contact Center reports, what statistics and formulas are used to calculate each field in the reports (where applicable) and frequently asked questions.

Check that the report was configured to print on the correct day

Refer to the Check the print schedule section on page 85.

Can you print a standard document using the same printer?

Refer to the Check the printer section on page 85.

Q) Is PrintCaller running?

Refer to the PrintCaller application section on page 85.

Launch PrintCaller

Refer to the sub-section Launching PrintCaller on page 85.

Raising a Case: Information Gathering   **5**

This section details what to check for and the information to collate when problems arise in Reporting for Contact Center.

The following would be asked by, and should be provided to Nortel Support personnel when troubleshooting Reporting for Contact Center (try to complete as many questions as possible):

1. Is this a new installation? Yes / No

   If **Yes**, the following should be determined:

   - What was the previous software running on the equipment?

   - Was the issue present on that software or did the issue start after upgrade?

2. Detail a description of the issue:

   - What was the time and date of the first occurrence of the issue?

   - What is the frequency of the issue?

   - Were there any changes to the configuration or system before the issue occurred?

   - Is the issue reproducible? Yes / No

3. What are the steps or conditions to reproduce the issue?

4. If the issue is not reproducible, what were the exact actions taken before the issue occurred?

5. The name, version, as well as the Service Pack and any hot fixes, and language of the Operating System of the PC running Reporting for Contact Center? Also, whether the Operating System is an Original Equipment Model (OEM), or a Microsoft build?

6. Version of Reporting for Contact Center, and the language(s) of installation and logon User?

7. Version of VoiceMail (CallPilot)?

8. Version of Core (Telephony Version)?

9. Number of Agents?

10. Number of Skillsets?

11. Number of IP Wallboards?

12. Issues related to the reports, such as inaccuracies:

    - Is the issue related to one report, some reports, or all of the reports?

    - Provide a copy of the report(s) exported to PDF format:
      This can be done from the report viewer in Reporting for Contact Center.

      Hint: The Agent Audit report (note: the recommended report period is less than 24 hours) is a good test for checking issues with Reporting for Contact Center.

    - Provide a detailed description of what the issue is with the report(s).

- Provide the date and time of the issue with the report. For example, the exact date and time when the report gave inaccurate, or did not give any data.

- Detail how you expect the report(s) to appear.

13. Issues related to Reporting for Contact Center functionality, that is, it does not work as expected:

    - Provide a detailed description of what the issue is.

    - Capture screen shots of any errors.

    - Detail how you expect Reporting for Contact Center to work.

14. Issues relating to SoftBoards:

    In addition to the Reporting for Contact Center logging, see step 16, include the logging for the problematic SoftBoard by echoing it to 127.0.0.1 for at least an hour and collecting the .log file in the install location of the SoftBoard.

15. The Archlog of the Contact Center should be attached to the Customer Service Request (CSR), with details regarding the time and date of the problem and log stamping.

    BCM logs are stamped by pressing **Feature 9*9** from a display telephone – this displays a stamp number which should be provided to Nortel for locating the exact point a problem occurred in the logs. Refer to the *BCM 4.0 Administration Guide* (N0060598) and *BCM50 Administration Guide* (N0016868 01), for instructions on retrieving log files from the Contact Center.

    Note: Before retrieving logs, ensure that the Web Host PC system time is synchronized with that of the Contact Center.

16. Copy of Reporting for Contact Center logs:

    - The log file location is specified by the Administrator in Reporting for Contact Center. Click **Admin** > **Maintenance** > **Logging**. The path is given under **Log files location**.

    - Note that if the logging is deactivated:

        a. You must activate the logs. This is done by the following:

            i.   Logon to Reporting for Contact Center.

            ii. From the navigation menu select **Maintenance > Logging** to open the Logging Menu page.

            iii. Click on **Activate Logging**.

        b. Leave the Reporting for Contact Center Web Host PC running for a minimum of 1 hour (or the report period defined in Reporting for Contact Center in the **Contact Center Connection Page** > **Make historical data requests every**, which ever is sooner).
        If the PC is not running for this amount of time you will not collect all the relevant log files.

17. Copy of the Reporting for Contact Center database for MySQL 4:

a. From the Start menu, click on **Settings** > **Control Panel** > **Administrative Tools** > **Services.**

b. Click on **RCC Launcher**. Click the **Extended** tab and click on **Stop** to stop the RCC Launcher Server.

c. Click on **MySQL4** service, and click on **Stop** from the Extended window to stop the MySQL Server 4 service.

d. Browse to the \Program Files\MySQL\MySQL Server 4.1\data folder.

e. Right-click on the CCRDB folder and drag to a new location outside of the MySQL folder, and drop the folder.

f. Select **Copy Here** from the popup menu. This provides a backup of the current database in the new location.

g. Restart the MySQL4 service.

h. Restart the RCC Launcher service.
    Note: The CCRDB folder in the location **\Program Files\Nortel\Reporting For Contact Center** on the target hard drive installation location is a blank copy of the database.

    Note: Do not send this database to Nortel Support.

18. To provide Nortel Support remote access to the user's PC to resolve the issue, the user should test the following site: http://nortelsupport.webex.com. This Web site is used for real-time Nortel Customer Support sessions, called Remote Support, allowing full control of the RCC Web Host PC's desktop.

    If the user does not have Internet access, attempt to resolve this, with the customer's network team. Providing you can access this link, a Nortel engineer will provide a session number. You will need to 'join a session' and complete the details.

    For high security sites, please be aware that joining a support session includes a "two way handshake". You can join a session; however, you still need to accept the Nortel engineer to join. Ideally discuss this with the Nortel engineer, when joining the session. You will also need to allow FTP, should the Nortel engineer wish to FTP files either from or to the RCC Web Host PC.

    Where access to http://nortelsupport.webex.com is not available, this may delay problem resolution.

Web Host PC Troubleshooting   6

This section provides information and details possible problems that occur on the Web Host PC and how to resolve those issues. The Web Host PC is defined as the PC where Reporting for Contact Center was installed.

This section is further divided into the following subsections:

- MySQL
- Internet Information Services
- Java Runtime Environment
- Firewalls
- Anti Virus
- Proxy Server
- Historical Reports
- Wallboards
- Printing reports
- Miscellaneous

MySQL

MySQL overview and installation

The historical report information is stored in a standard MySQL database on the Web Host PC. If Users have reporting requirements that are not available through Nortel Reporting for Contact Center, they can analyze the data using third-party reporting packages.

Reporting for Contact Center installs MySQL Server 4.1 which maintains the MySQL database. For instructions on installing MySQL Server 4.1 see *Reporting for Contact Center Setup and Operations Guide* (NN40040-302).

MySQL version compatibility

MySQL Servers and Clients 4.1.14 is used for administrating and maintaining historical data for Reporting for Contact Center from BCM 4.0 and BCM50 2.0.

The user does not need to uninstall this version of MySQL Servers and Clients after upgrading a previous version of Reporting for Contact Center. If required, the Reporting for Contact Center database will be modified during the installation of Reporting for Contact Center. There is no loss of statistical data, but new data, tables, columns, and indexes will be added to it, where necessary.

Uninstalling and re-installing MySQL

The MySQL Server will need to be removed and re-installed when required, for instance, if installation of Reporting for Contact Center did not complete 100%, see the Installing Reporting for Contact Center flow chart on page 16. To remove MySQL Server from the Web Host PC, perform the following:

1. Click on **Start > Settings > Control Panel > Add or Remove Programs > MySQL Server 4.1**.
2. Click the **Remove** install button.

Perform the following steps to install MySQL Server 4.1 on the Web Host PC:

1. Open Windows Explorer and navigate to the Reporting for Contact Center installation folder (typically this is C:\Program Files\Nortel\Reporting for Contact Center).
2. Double-click the **MySQLInstall** folder.
3. Double-click on **mysql-essential-4.1.14-win32.**
4. Click **Next.**
5. Ensure that **Typical** is selected as the setup type and click **Next**.

6. Click **Install**.

7. After the install has completed select **Skip Sign Up** and click **Next**.

8. Ensure the **Configure the MySQL Server Now** check box is selected.

9. Select the **Standard Configuration** option and click **Next**.

10. Change the Service Name to **MySQL4** and select the **Launch the MySQL Server automatically** check box. Click **Next**.

11. Clear the **Modify Security Settings** check box, and click **Next**.

12. Click **Execute**.

The mysqldump utility

mysqldump is a utility included in the MySQL\MySQL Server 4.1\bin folder of the MySQL installation on the Web Host PC. This can be used to create a file which contains all of the SQL statements required to re-create the Reporting for Contact Center statistical and configuration database. It can also be used to restore the backed up data.

Backing up the MySQL database

The Contact Center does not retain all call records – typically, at maximum capacity only 8 hours worth of data is retained on the Contact Center.

!	To retain all call records it is highly recommended to backup the Reporting for Contact Center database on a frequent basis. It is important that you first consult the customer's support personnel about the organization's backup and restore policies and procedures before attempting to backup and before restoring the MySQL database on the Web Host PC.

You can use mysqldump to create a backup of your database, as given in the following paragraph, or use Microsoft Windows Backup Utility. Alternatively, any other third party backup utility can be used to backup the database.

Note: The following mysqldump syntax should all be typed on one line, and should be entered in a Command Prompt window, from the Program Files\MySQL\MySQL Server 4.1\bin folder.

```
mysqldump --port=3309 --add-drop-table CCRDB > CCRDBbackup.sql
```

CCRDBbackup.sql is the file to which the backup should be written. This can be named to any other name of your choice. Substitute the name you wish to use for CCRDBbackup.sql in the above command.

Restoring from a Backup

To restore the contents of a backup to the Reporting for Contact Center statistical and configuration database use the following command. Note that the following should all be typed on one line, and should be entered in a Command Prompt window, from the Program Files\MySQL\MySQL Server 4.1\bin folder:

!	You should be certain that you wish to restore the backup before you enter this command.

```
mysql --port=3309 CCRDB < CCRDBbackup.sql
```

Note: The restore command uses the word **mysql** but the backup command uses the word **mysqldump**.

Note: There are two hyphens in front of the **port**, and **add-drop-tables** options.

Note: Substitute the name of the backup file you wish to restore from for the **CCRDBbackup.sql** in the example restore command.

Note: Alternatively, Microsoft Windows provides a tool for backing up and restoring your files and folders on the Web Host PC. This can be scheduled to back up and restore the MySQL database.

To use the Windows Backup Utility click on **Start > All Programs > Accessories > System Tools > Backup.** The Backup or Restore Wizard dialog box will open up. Follow the instructions to go through the Wizard. For scheduled jobs click on the **Advanced** button from the Completing the Backup or Restore Wizard window.

Defaulting (replacing) the MySQL database

!	You must only default the Reporting for Contact Center MySQL database (that is, replace the database with a blank one) if you are sure you do not require any data from this database, or you have been advised to do so by Nortel Support. Note: Once the database has been defaulted, downloading Contact Center data will only install, typically, up to 8 hours worth of call data from the Contact Center.

To default the database for BCM 4.0 and BCM50 2.0 perform the following:

1. Stop RCCLauncher service.

2. Stop the MySQL4 service.

3. Open Windows Explorer and locate the MySQL database folder, **CCRDB**. The path to the MySQL database is C:\Program Files\MySQL\MySQL Server 4.1\data.

4. Right-click on the CCRDB folder and select **Rename**. Rename the CCRDB folder to **CCRDB_backup**. This is the current live Reporting for Contact Center database.

5. To copy over a blank database locate the Reporting for Contact Center installation folder using Windows Explorer. Typically the path is C:\ Program Files\Nortel\Reporting for Contact Center. Right-click on the **CCRDB** folder and select **Copy**.

6. In Windows Explorer enter the path to the MySQL database again which is C:\Program Files\MySQL\MySQL Server 4.1\data.

7. Right-click in the windows area and select **Paste**. This will copy over the blank MySQL database folder, **CCRDB**.

> Note: If you see two MySQL services and two MySQL directories, you have upgraded Reporting for Contact Center, in which case take care not to default the MySQL4 database with the MySQL blank database.

8. Start the MySQL service.

9. Start the RCCLauncher service.

As the MySQL database has been defaulted, the user can now commence with downloading data from the Contact Center by logging in to Reporting for Contact Center, opening up the Contact Center Connection page, see Contact Center Connection page item on page 86, and populating the fields before clicking **Submit**.

Database Corruption

Errors on Generating Reports

If a User is encountering problems generating reports on their PC with a "page cannot be displayed" message, or some other error message, there may be a database table corruption issue. In this case the System Administrator can execute the Automatic Fix Utility for Reporting for Contact Center Database program from the Web Host PC to check for, and repair corrupt tables within the MySQL database.

Follow the steps in this section to execute the Automatic Fix Utility for Reporting for Contact Center Database on the Web Host PC.

1. In the browser Address bar enter the location: http://localhost/rcc/dbfixutil/

2. The Check Tables page appears. See Figure 1: Check Tables page.
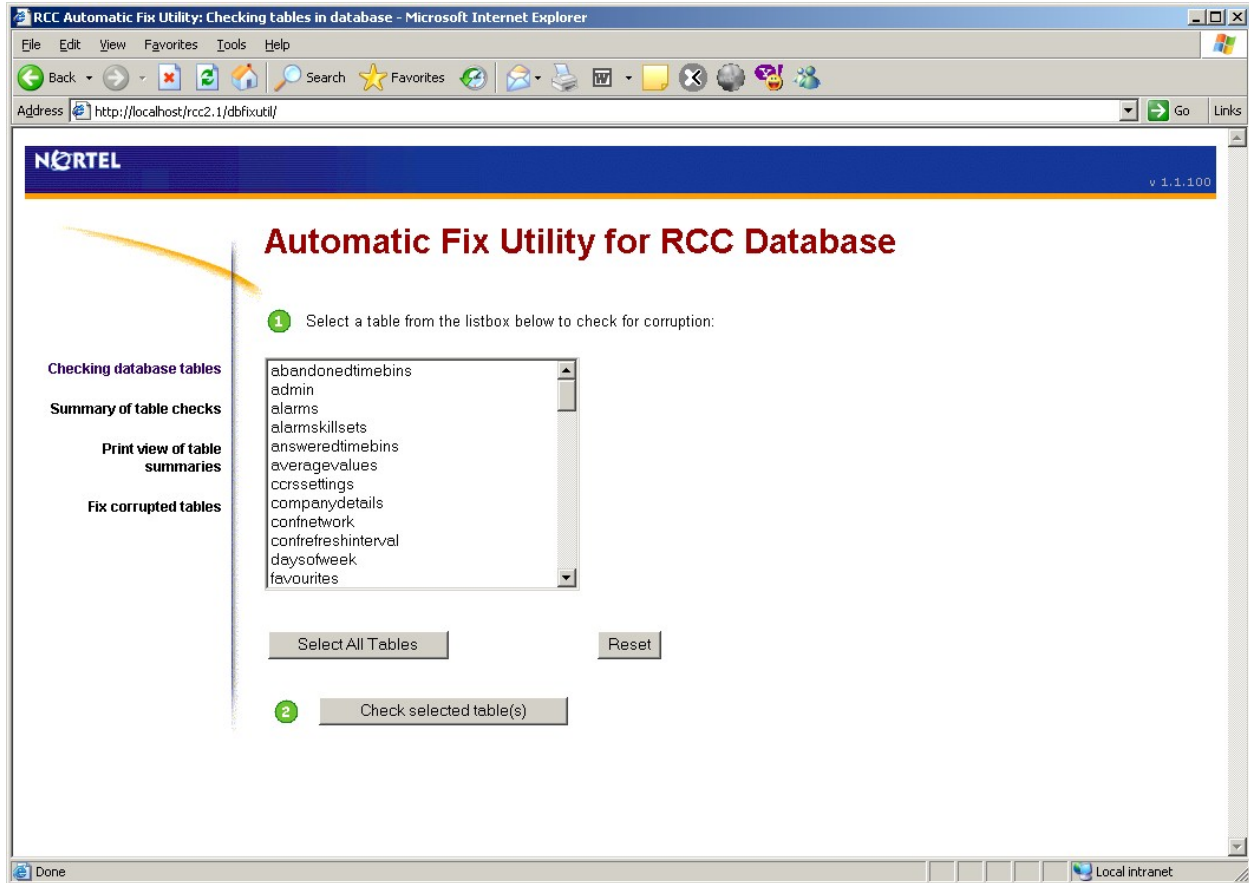
Figure 1: Check Tables page

3. Select one or more Reporting for Contact Center database tables from the list box that you would like to check for corruption, or click on the **Select All Tables** button to select all of the tables in the database.

4. Click the **Check selected table(s)** button.

5. The Table Summaries page appears; see Figure 2: Table Summaries page. This page provides a summary of all the tables that had been selected to be checked for corruption. Any corrupted tables will have the word "Corrupt" displayed in red font within the table summary and also be displayed in a list box of corrupt tables at the bottom of the page, as shown in Figure 2: Table Summaries page.

Figure 2: Table Summaries page

To view a printer-friendly version of the status of checked database tables, click on the **Printer Friendly Version** link below the Table Status display, or click the **Print view of table summaries** link from the left menu.

6. You can select one or more Reporting for Contact Center database tables from the list box of corrupted tables to repair, or click on the **Select All Corrupt Tables** button to select all the tables listed.

7. Click the **Fix Selected Tables(s)** button**.**

8. The Repaired Tables page opens, as shown in Figure 3: Repaired Tables page.
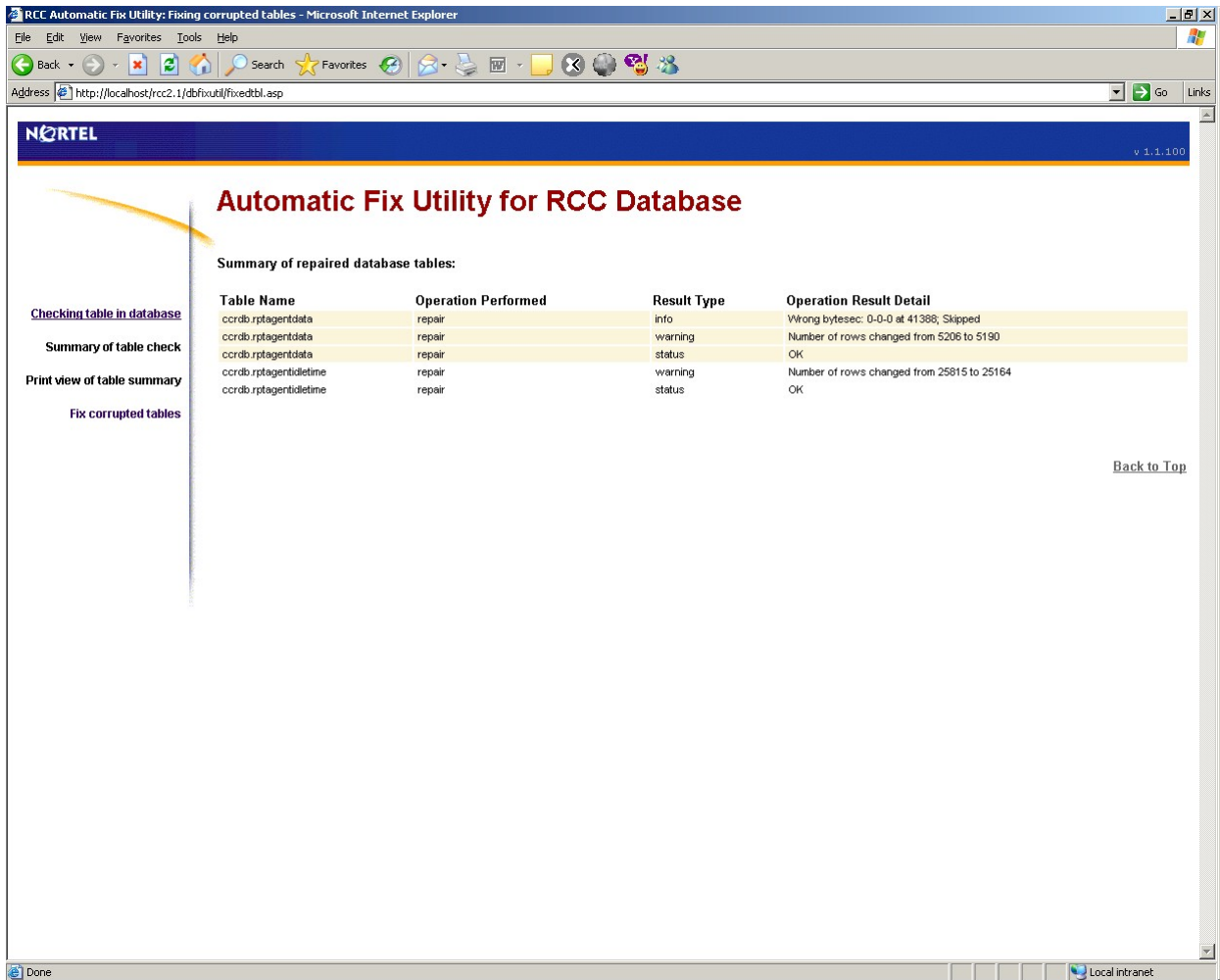
Figure 3: Repaired Tables page

The Repaired Tables page details the repairs performed on all of the selected corrupted tables.

9. The Automatic Fix Utility for Reporting for Contact Center Database window can be closed and the User can log back into Reporting for Contact Center to generate reports without errors.

Internet Information Services

IIS overview and installation

Microsoft Internet Information Services (IIS) is a set of Internet-based services for servers using Microsoft Windows. IIS provides Web application infrastructure for Reporting for Contact Center. Ensure that the full suite of Microsoft Internet Information Services is installed and operational on the Web Host PC, and that the Default Web Site is enabled. To install Microsoft Internet Information Services and check the default Web site, see *Reporting for Contact Center Setup and Operations Guide* (NN40040-302).

IIS version compatibility

The following table, Table 1: IIS version compatibility with Microsoft Windows Operating Systems, is a list of different versions of IIS and the Microsoft Windows Operating System compatibility:

Operating System	IIS Version
Windows NT 4.0	IIS 4.0
Windows 2000	IIS 5.0
Windows XP Professional	IIS 5.1
Windows Server 2003 and Windows XP Professional	IIS 6.0

Table 1: IIS version compatibility with Microsoft Windows Operating Systems

Recreating Virtual Directories

Reporting for Contact Center uses virtual folders which are created during an installation of Reporting for Contact Center on the Web Host PC. These are:

- rcc

- javadist

- viewer9

Virtual folders not created in Internet Information Services

If these virtual folders are inadvertently removed or altered, or if they are not created during the installation of Reporting for Contact Center, you will see a red "X" in the top left hand corner of the Real Time screens, or the Report Viewer window, or an error page in your Internet Explorer browser window, as shown in Figure 4: Page cannot be found error message.
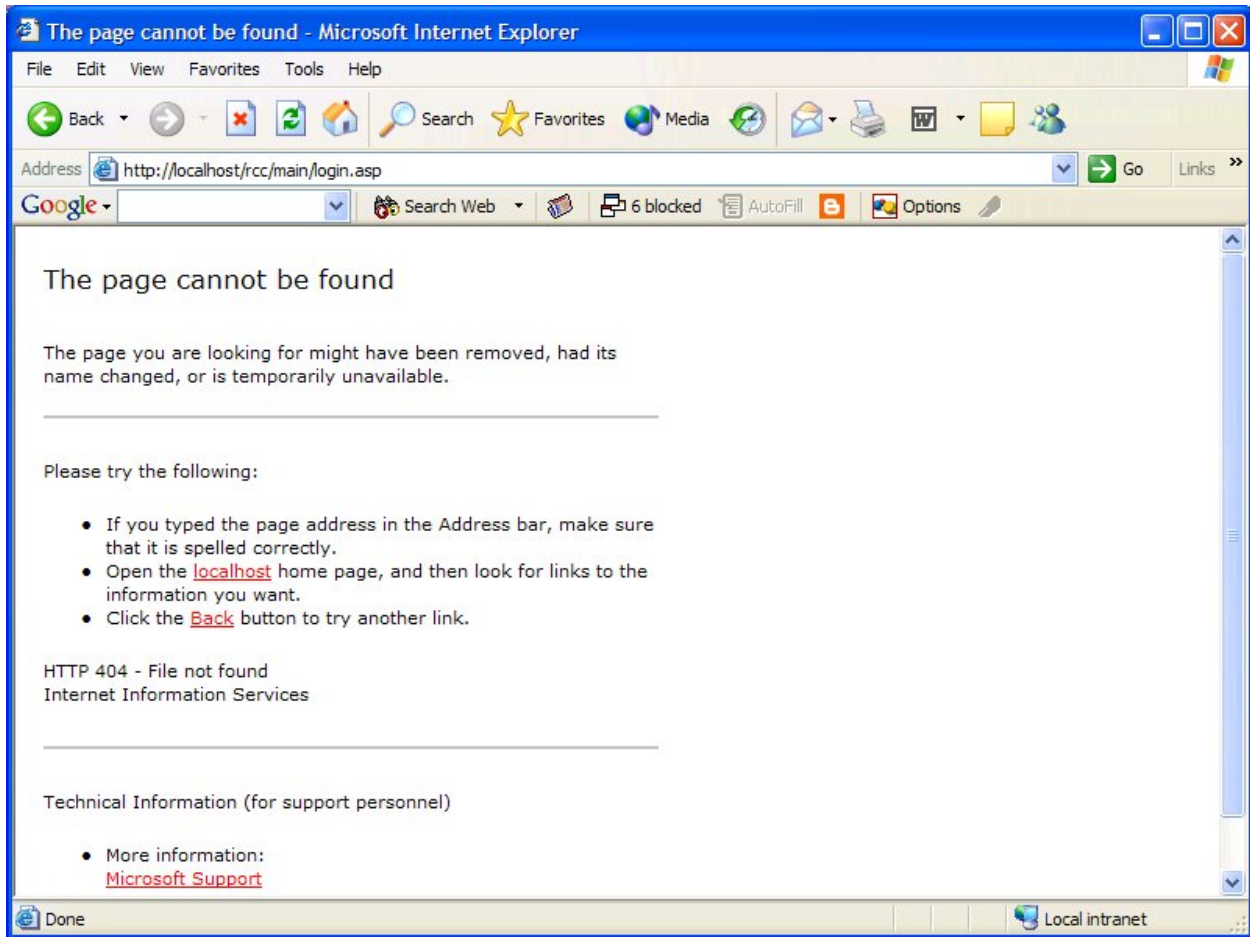
Figure 4: Page cannot be found error message

To recreate the virtual folders for Reporting for Contact Center perform the following:

1. Click **Start** > **Run** and enter the pathway to the **Create.bat** file in the RunOnce folder. The RunOnce folder is in the Reporting for Contact Center folder. If you installed Reporting for Contact Center in the default location the path to this file will be **\Program Files\Nortel\Reporting for Contact Center\RunOnce\Create.bat** on the drive on which you installed Reporting for Contact Center.

2. When you have located this file, double-click on it to launch it. You will see a Command Prompt window (DOS Window) open and then close.

3. Try accessing the http://localhost/rcc/main/login.asp page once more.

Restarting the IIS Service

Perform the following to restart the IIS service:
1. Click on **Start > Settings > Control Panel > Administrative Tools > Services**.

2. From the Extended window pane select **IIS Admin** (or **IIS Admin Service**).
3. Click on **Start** to the left of the **Extended** window, or right-click on **IIS Admin** and select **Start** to restart the IIS Service.
4. Ensure that the World Wide Web Publishing service is also running by repeating steps 1 to 3, replacing **IIS Admin** service with **World Wide Web Publishing Service**.
5. Close all windows.

Java Runtime Environment

Java overview and installation

PCs (known as Client PCs) that have network access to the Web Host PC can access Reporting for Contact Center through Web pages in Internet Explorer browser sessions. Multiple users can, therefore, use Nortel Reporting for Contact Center without having any software other than Internet Explorer installed on their PCs.

> **Note**: The Java Runtime Environment (JRE) if required and the Crystal Reports ActiveX Report Viewer are automatically downloaded to the Client PC the first time they are required.

Java version compatibility

Only one JRE version can live during a browser's session. In other words, once a version of the JRE is loaded in a browser's process, you cannot switch to run an applet in a different version of the JRE. You can only switch to a different JRE version at the start of the browser process.

It is essential that you have Java 2 Runtime Environment SE v. 1.5.0 installed on your PC for correct operation of Reporting for Contact Center. See the following section Real Time screens are not displayed correctly (page 48).

> **Note**: At the date of release of this guide Java 2 Runtime Environment SE v. 1.5.0_[release version] was the latest JRE version available on the market. Any future JRE version higher than this, for example, JRE 1.6.0_[release version] will be backward compatible with Reporting for Contact Center.

Real Time screens are not displayed correctly

If you have multiple versions of JRE installed on your PC and the Real Time screens are not being displayed correctly check that Internet Explorer is using JRE version 1.5.0 for applets, or higher, by the following:

1. Click **Start**, then right-click the **Internet Explorer** icon, and select **Internet Properties**. See Figure 5: Internet Properties Dialog Box.

Figure 5: Internet Properties Dialog Box

Note: If you do not see the dialog box shown in Figure 36, you have clicked a shortcut to Internet Explorer. You **must** click the Internet Explorer icon in the Start menu.

2. Click on the **Advanced** tab and scroll down to Java (Sun) and select the **Use JRE 1.5.0_[version] for <applet>** check box. See Figure 6: Use JRE 1.5.0 Option under Advanced Tab in Internet Properties Dialog Box. Click **Apply** and click **OK** to close the Internet Properties dialog box.
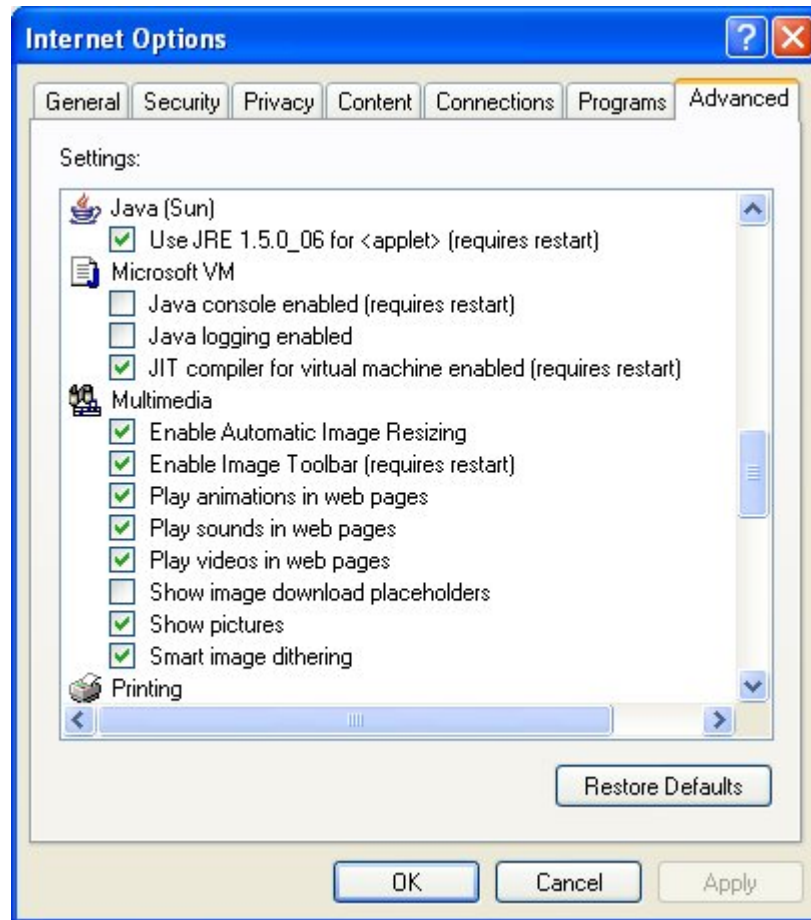
Figure 6: Use JRE 1.5.0 Option under Advanced Tab in Internet Properties Dialog Box

If the **Use JRE 1.5.0_[version] for <applet>** option is not available, JRE version 1.5.0 must be installed. Go to step 6.

3. If the Real Time screens are still being displayed incorrectly, uninstall JRE version 1.5.0 by selecting from the Window taskbar **Start** > **Settings** and then click **Control Panel**. The **Control Panel** window appears.

4. Double-click the **Add or Remove Programs** icon. The Add or Remove Programs dialog box appears.

5. Under J2SE Runtime Environment 5.0 click **Remove**. Click **Yes** to confirm uninstalling the program.

6. Re-install Java Runtime Environment 1.5.0 on the Web Host PC by opening C:\Program Files\Nortel\Reporting for Contact Center\Javadist. Double-click on the file **j2re-1_5_0_03-windows-i586-p.exe** to install the Java Runtime Environment.

When JRE 1.5.0 is installed on the PC you should be able to view Real Time screens correctly.

Java Cache

Real Time screens <u>are</u> displayed but no data is seen (clearing the Java Cache)

If you can launch the Real Time screens, but once loaded you see no data and the connection status is red you may need to clear the Java Cache. This is most prevalent when having performed an upgrade, if you have not performed an upgrade, that is, it is a fresh install this will not be applicable.

To clear your Java Cache open up the Control Panel and double-click on the Java icon.
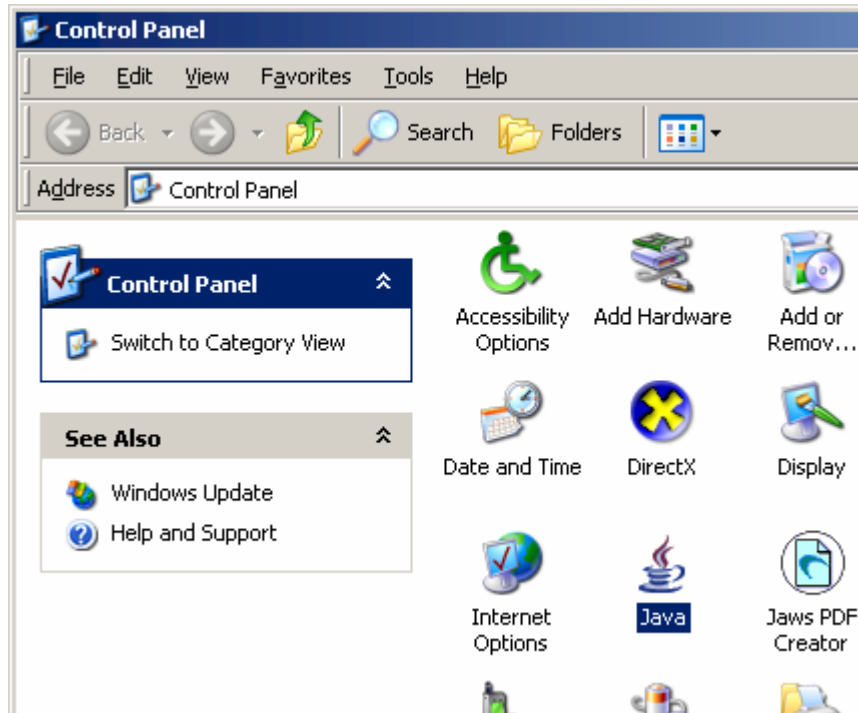
Figure 7: Clearing the Java Cache (Control Panel)

This will open the Java Control Panel and by default you will be on the General table, click the Delete Files button.
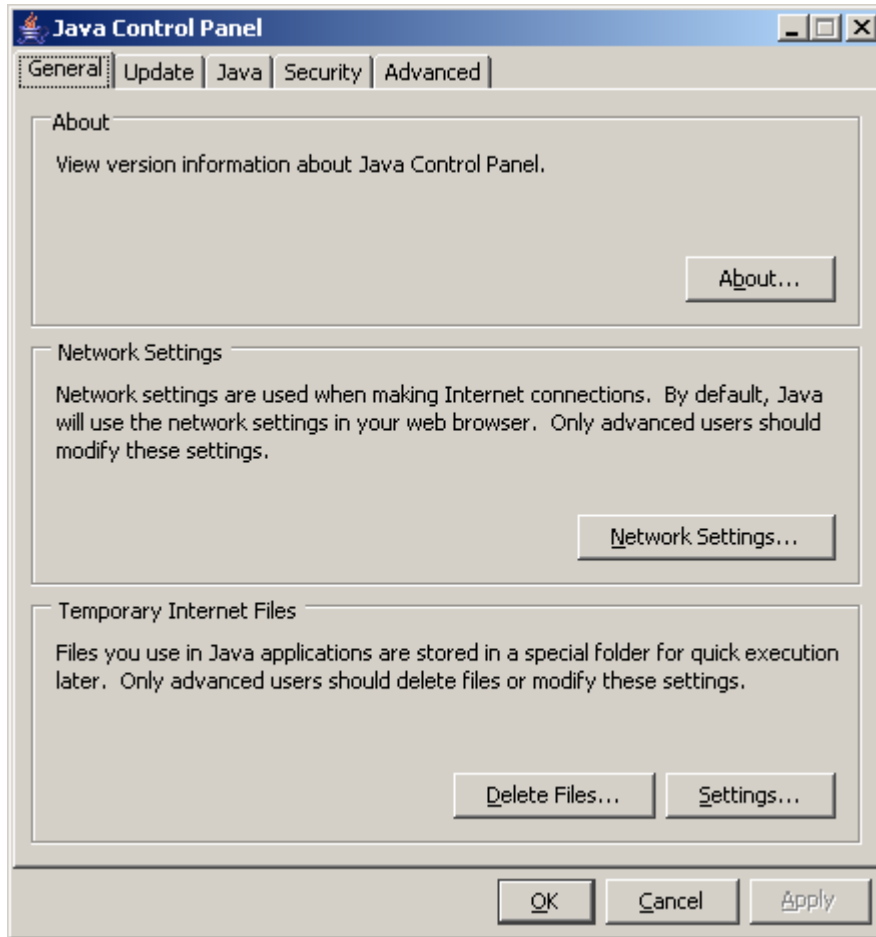
Figure 8: Clearing the Java Cache (Java Control Panel)

You will receive a prompt confirming your actions, click **OK**.
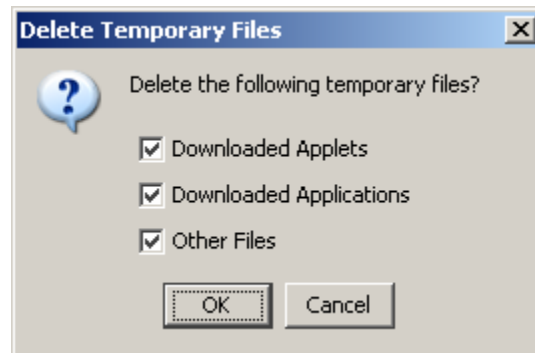
Figure 9: Clearing the Java Cache (Prompt)

Firewalls

Ports and .exe files used by Reporting for Contact Center

Port Numbers used by Reporting for Contact Center

The following is a list of all the port numbers used by Reporting for Contact Center on the Web Host PC:

- Port 80 – this is the standard port used by the Web Server (the Web Host PC) for Internet Information Services.

- Port 8088 – used for the Reporting Server in the Business Communications Manager (BCM).

- Port 3306 – used for MySQL Server 3.23.53 (this will be present if Reporting for Contact Center was installed as an upgrade to a previous version of Reporting for Call Center from BCM 3.6 or BCM 3.7 to RCC 2.3.209b and above).(This should not have to be configured in your firewall)

- Port 3309 – used for MySQL Server 4.1.14. (This should not have to be configured in your firewall)

- Port 3500 – default value used by *ip***View** SoftBoard to listen for incoming data and to echo to other wallboards, note this value is configurable when setting up a wallboard this should be noted.

- Port 6010 – used by the Reporting for Contact Center Real Time (RCCRT) Server.

- Port 6011 – used by the Reporting for Contact Center Reporting (RCCRPT) Server.

.exe files used by Reporting for Contact Center

The following files are used by Reporting for Contact Center. Ensure that these files are not being blocked by your Personal Firewall:

- inetinfo.exe

- java.exe

- mysqld-nt.exe

- printCaller.exe

- rcclauncher.exe

- wallboarddriver.exe

Common Firewall Configuration

If any Internet security software is installed on your PC and a firewall is enabled, the user may encounter problems with the Contact Center connection whereby data can not be downloaded from the Contact Center to the database on the Web Host PC.

There are numerous firewall software packages available on the market. Only a selected few are mentioned here. It is essential that the user checks that files listed under the section .exe files used by Reporting for Contact Center (page 53), are not being blocked by your personal firewall.

Alternatively, third-party firewall logging can be enabled if the user is unsure whether or not it is blocking a port or application.

For further information about third-party software firewall settings, the user can refer to their firewall documentation, or consult their support personnel who manage the third-party firewall.

Uninstalling other firewalls

If the user encounters one or more of the following problems with their PC, more than one firewall may be installed on that PC:

- 'Blue screen' fatal errors, system freezing or sudden system reboots.

- Every access request is allowed for every application. Nothing is blocked.

- All application and system activities are blocked and the user is unable to connect to any site.

- The computer is unable to boot up.

These problems do not relate to a specific firewall but are common to all firewall software. It is important that only one firewall is installed on any one PC.

Windows Firewall

If the Web Host PC is a Windows XP Service Pack 2 operating system, the incoming firewall alerts the user if it does not detect an active personal firewall program. The user can also perform the following steps on the Web Host PC to manually check that Windows Firewall is turned on:

1. Click on the Start menu, then **Settings > Control Panel > Windows Firewall.**

2. Under the General tab, view the **On (recommended)** option, see Figure 10: Windows Firewall turned on dialog box. If this is selected the Web Host PC is protected by Windows Firewall, otherwise **Off (not recommended)** option will be selected.
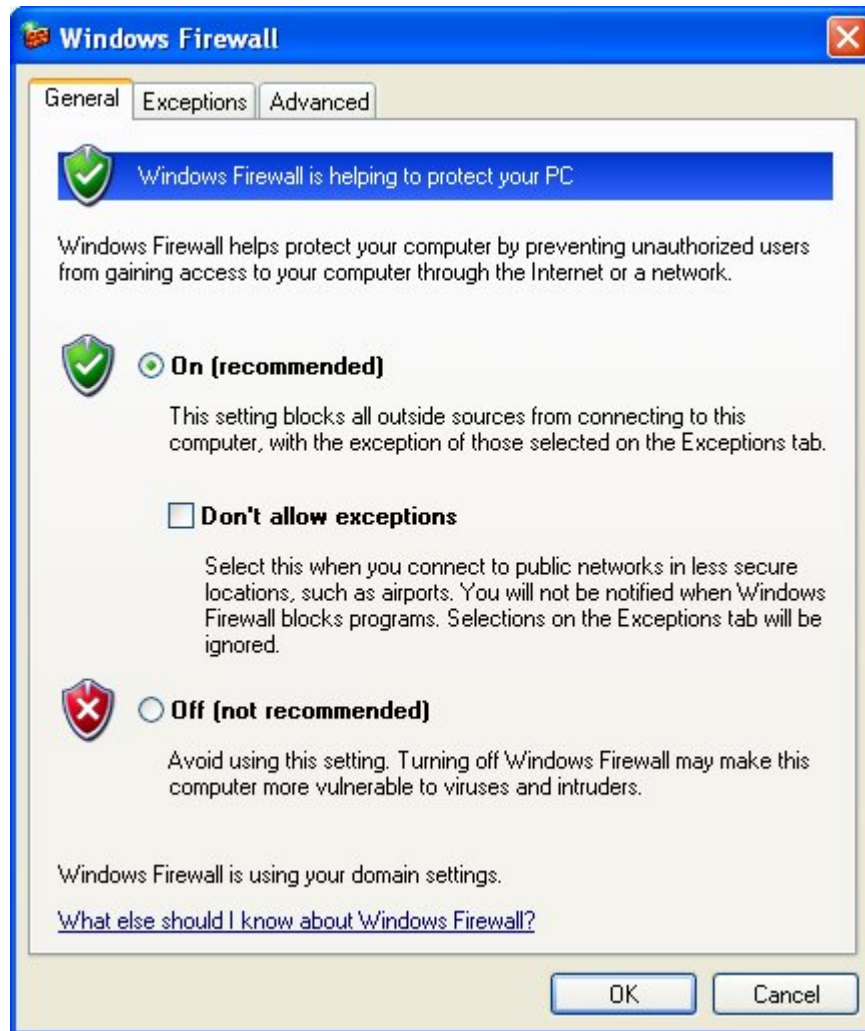
Figure 10: Windows Firewall turned on dialog box

To use Windows Firewall as the firewall option of choice on the Web Host PC, ensuring no other firewall software is enabled, perform the following:

1. From the Start menu, click on **Settings > Control Panel > Windows Firewall.**

2. Under the General tab, select the **On (recommended)** option to protect the Web Host PC with Windows Firewall.

3. To open ports through the firewall that are to be used by Reporting for Contact Center, click on the Exceptions tab and click **Add Port**. This will open the Add a Port window, see Figure 11: Add a Port window.
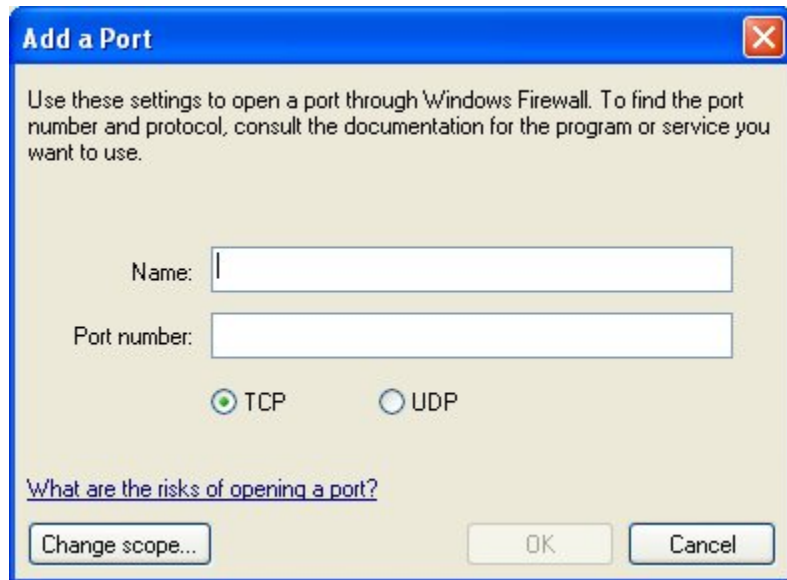
Figure 11: Add a Port window

4. Enter the name, port number and select the correct protocol for the port to be unblocked by Windows Firewall, as shown in Table 2: Windows Firewall port entries for Reporting for Contact Center. Click **OK** for each port entry, and repeat step 3.

Name	Port number	Protocol option
RCCRT	6010	TCP
RCCRPT	6011	TCP
Wallboard	3500	TCP

Table 2: Windows Firewall port entries for Reporting for Contact Center

5. Click **OK** to close the Exceptions window.

The PC will now be protected by Windows Firewall, allowing the Contact Center and wallboard to communicate with Reporting for Contact Center on the Web Host PC.

Norton Internet Security and Personal Firewall

If Norton Internet Security is installed on your PC and the Personal Firewall is enabled, the .exe files used by Reporting for Contact Center, see .exe files used by Reporting for Contact Center, may be blocked. This will prevent data to be downloaded from the Contact Center to the Web Host PC. Perform the following to allow data download from the Contact Center:

1. Open Norton Internet Security.

2. In the Personal Firewall settings page, **Block All (recommended)** or **Custom** will have been selected. Select **Permit All**.

The data download from the Contact Center should continue as normal.

Zone Alarm and Sophos

Zone Alarm and Sophos are names of companies that produce firewall software packages, as well as anti-virus software. Refer to Common Firewall Configuration on page 54 for advice on using these, as well as other third-party firewall software packages available on the market.

Anti Virus

Anti-Virus Software Slowing Down the File System

Some Anti-Virus software packages can significantly slow down the file system of the Web Host PC. This causes problems in the Real Time screens processing all of the XML data they receive from the Contact Center in time to refresh the Real Time data in a timely fashion.

Norton AntiVirus is one anti-virus package known to cause this symptom.

Norton AntiVirus software can enable the File System Realtime Protection on your computer that constantly monitors your computer activity for viruses. Disabling the File System Realtime Protection option in Norton AntiVirus will no longer restrict the operation of the Real Time screens. To do this, perform the following:

1. Right-click on the Norton AntiVirus icon in the system tray.

2. If there is a check mark next to **Enable File System Realtime Protection**, select the check mark to clear this option.

Alternatively, you can try deactivating the Nortel Reporting for Contact Center diagnostic logging (if it is activated), see *Reporting for Contact Center Setup and Operations Guide* (NN40040-302).

Anti-Virus packages vary in their implementations and in the granularity with which you can adjust their operational parameters. Typically the settings that you can adjust that make the Real Time Screens appear sluggish and slow to update are the real time file scanning settings.

> **Note**: 'real time' in this context means that the Anti-Virus software scans the files on your computer constantly – it does not refer to the Reporting for Contact Center Real Time screens. It is just a coincidence that both applications have features that have the words 'real time' in their title.

- Some Anti-Virus packages allow you to specify files with certain extensions which are to be ignored during virus scans. If this is possible with your Anti-Virus software, instruct it to ignore files with .log extensions.

- Some Anti-Virus packages allow you to specify locations on your hard disk which are to be ignored during virus scans. If this is possible with your Anti-Virus software, instruct it to ignore the location of the Reporting for Contact Center log files. By default this is \Program Files\Nortel\Reporting for Contact Center\Logs.

- Some Anti-Virus packages allow you to disable or fine tune the real time scanning action of files, and to isolate which types of file modification will trigger a re-scan (create a file, modify a file, write to a file, and so on).

Cannot Access the Login Page

This problem has been seen when the Web Host PC has Norton Anti-Virus running.

One setting of Norton Anti-Virus (Script Blocking) prevents Nortel Reporting for Contact Center from running normal operations.

This option should be disabled in the anti-virus configuration screen on the Web Host PC only, see Turning off script blocking in Norton Anti-Virus 2001 (page 59) and Turning off script blocking in Norton Anti-Virus 2002 or 2003 (page 59).

Turning off script blocking in Norton Anti-Virus 2001

To disable Norton Anti-Virus 2001 Script Blocking:

1. Start Norton Anti-Virus.

2. Click **Options**. If a menu appears when you click **Options**, then click Norton Anti-Virus. The Options for Norton Anti-Virus dialog box appears.
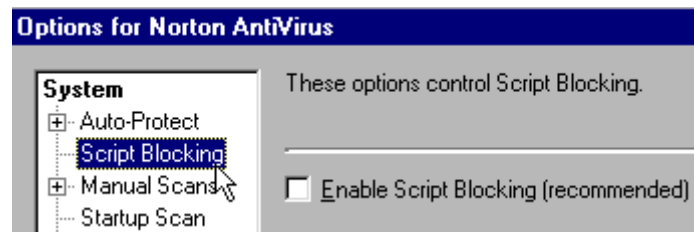
Figure 12: Norton Anti-Virus Options Screen

3. Click **Script Blocking**.

4. Clear **Enable Script Blocking (recommended)**.

5. Click **OK**.

    Note: Script Blocking is a feature of Norton Anti-Virus 2001 that was added as a part of a program update. If Script Blocking does not appear in Options, then the program update is not installed. To install the Norton Anti-Virus program update, execute Live Update, and download all program updates. Restart the computer when prompted. Execute Live Update until you are told that there are no more updates available.

Turning off script blocking in Norton Anti-Virus 2002 or 2003

To disable Norton Anti-Virus Script Blocking:

1. Start Norton Anti-Virus.

2. Click **Options**. If a menu appears when you click **Options**, then click Norton Anti-Virus. The Norton Anti-Virus Options dialog box appears.
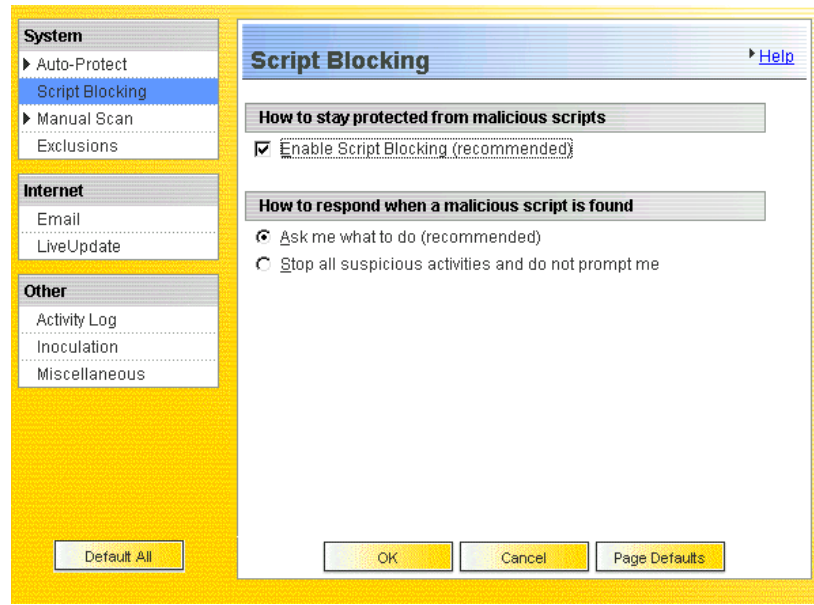
Figure 13: Norton Anti-Virus Options Dialog

3. Click Script Blocking.

4. Clear the **Enable Script Blocking (recommended)** check box.

5. Click **OK**.

Restart the computer if prompted to do so.

Blank dialog boxes

McAfee 8.0i Anti-Virus software

If McAfee Viruscan Enterprise 8.0i is installed on your PC the user may see blank dialog boxes in Reporting for Contact Center.

If this happens please install the latest patches available from the McAfee Web site:

http://www.mcafee.com/

Proxy Server

A proxy server is a server that sits between the Reporting for Contact Center Web browser and the Contact Center. All requests from Reporting for Contact Center to the Contact Center will be intercepted by the proxy server. If the proxy server can not fulfill the requests, the requests are not forwarded to the Contact Center and an error message is returned to the web browser.

Proxy settings for BCM 4.0

If a proxy server is enabled on a Web Host PC, ensure that the proxy server is not used when downloading call data from the Contact Center, see Disabling Proxy server. On a Client PC, the proxy server can be disabled or have an exception created for the Web Host PC IP Address to allow communication with the Web Host PC. See also, URL not allowed to be proxied error message on page 63.

Proxy settings for BCM50 2.0

Ensure that a proxy server is not used on the Web Host PC to communicate with a separate PC hosting the Contact Center Reporting Server (the CCRS PC), otherwise call data cannot be downloaded from the Contact Center to the Web Host PC. See the following section, Disabling Proxy server. Similarly, a Client PC using a proxy server will not be able to communicate with the Web Host PC if the proxy server is active and the Web Host PC IP Address is not allowed as an exception in the proxy settings, see URL not allowed to be proxied error message.

Disabling Proxy server

Ensure any proxy server is disabled on the Web Host PC before downloading data from the Contact Center as follows:

1. On the **Tools** menu in Internet Explorer, click **Internet Options**, click the **Connections** tab, and then click **LAN Settings**. See Figure 14: Selecting LAN Settings from Connections window.

   The Local Area Network (LAN) Settings window will be displayed.

Figure 14: Selecting LAN Settings from Connections window

2. Under **Proxy server**, ensure the **Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections)** check box is cleared, as shown in Figure 15: Disabling proxy server in LAN Settings.

Figure 15: Disabling proxy server in LAN Settings

3. Click **OK** to close the **LAN Settings** dialog box.

4. Click **OK** again to close the **Internet Options** dialog box.

URL not allowed to be proxied error message

If a Client PC cannot access Reporting for Contact Center from an Internet Explorer browser window and gets a "This URL is not allowed to be proxied" error message, as in Figure 16: Proxy server denying access to RCC, the Proxy Server settings have to be modified.
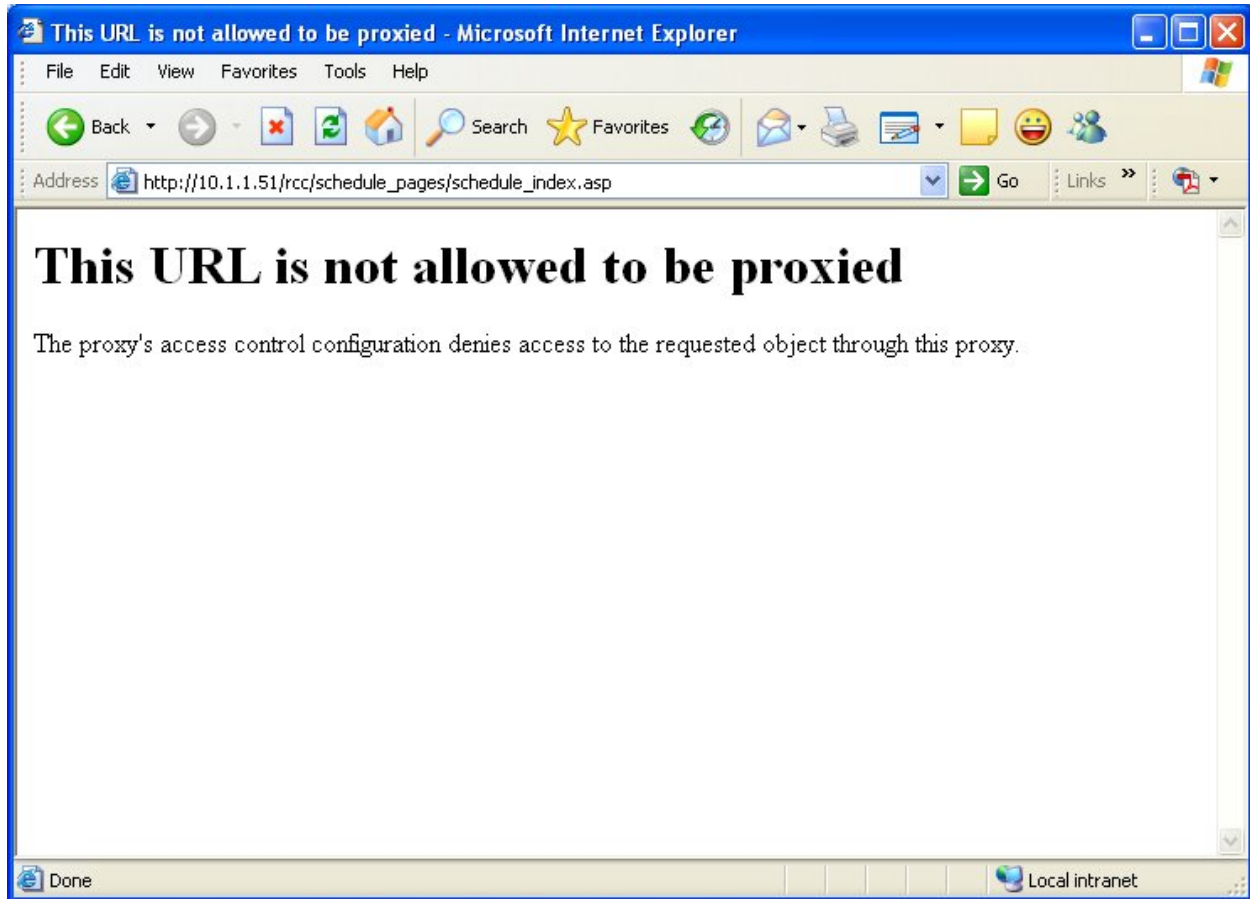
Figure 16: Proxy server denying access to RCC

For the Client PC to be able to access the Web Host PC, the User can do one of the following on the Client PC. Either:

1. Disable the proxy server, see Disabling the proxy server on a Client PC; or

2. If the Proxy server has to be active, allow the IP Address of the Web Host PC as an exception in the proxy server settings. See Allowing exceptions on the proxy server.

Disabling the proxy server on a Client PC

Follow steps 1 to 4 under Disabling Proxy server on page 61 for the Client PC.

Allowing exceptions on the proxy server

Allow the IP Address of the Web Host PC as an exception in the proxy server settings, as follows:

> a. On the **Tools** menu in Internet Explorer, click **Internet Options**, click the **Connections** tab, and then click **LAN Settings**. See Figure 17: Selecting LAN Settings from Connections window.
>
> The Local Area Network (LAN) Settings window will be displayed.

Figure 17: Selecting LAN Settings from Connections window

b. Under **Proxy server**, the **Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections)** check box will be selected, as shown in Figure 18: Proxy server enabled in the LAN Settings window. Click **Advanced**.

The Proxy Settings window will open.
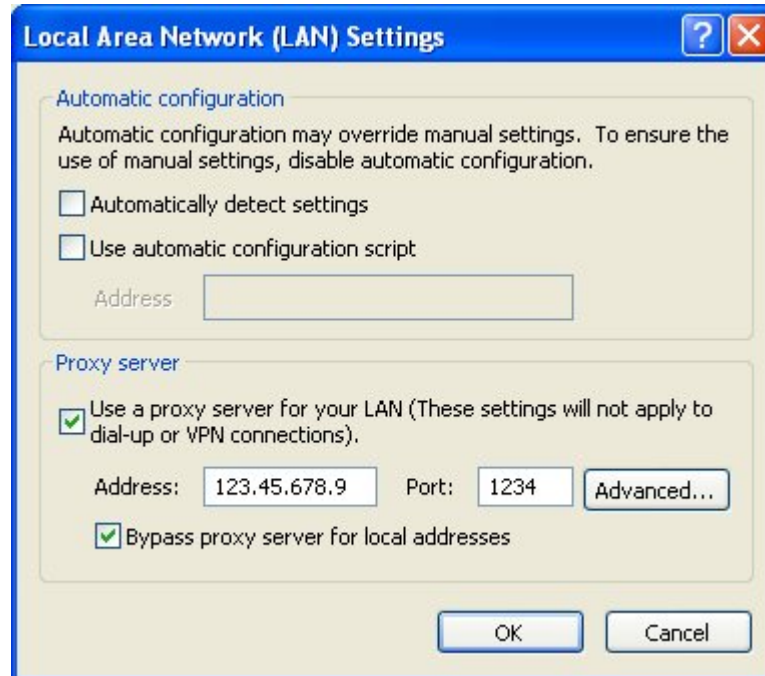
Figure 18: Proxy server enabled in the LAN Settings window

    c.   Under **Exceptions**, enter the IP Address of the Web Host PC to by-pass the proxy
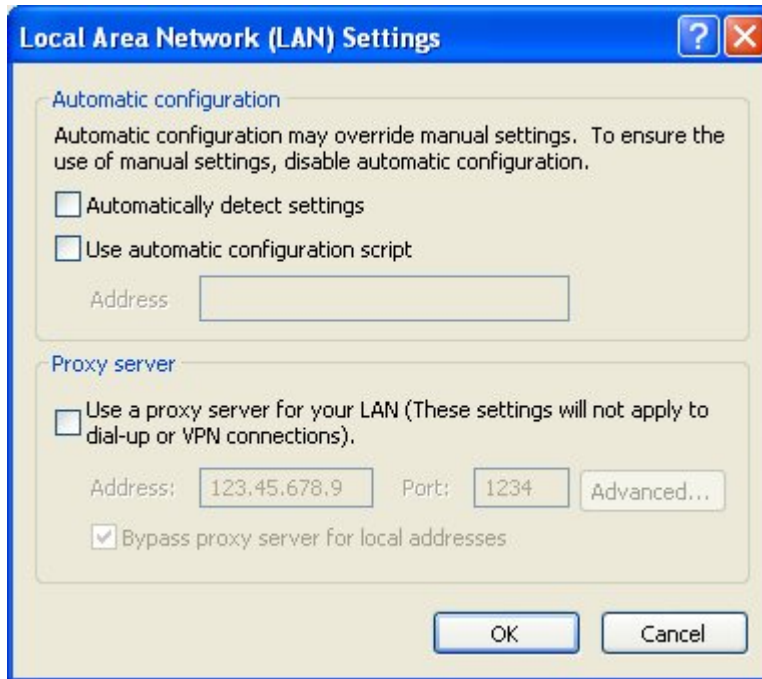   server. Click **OK**.
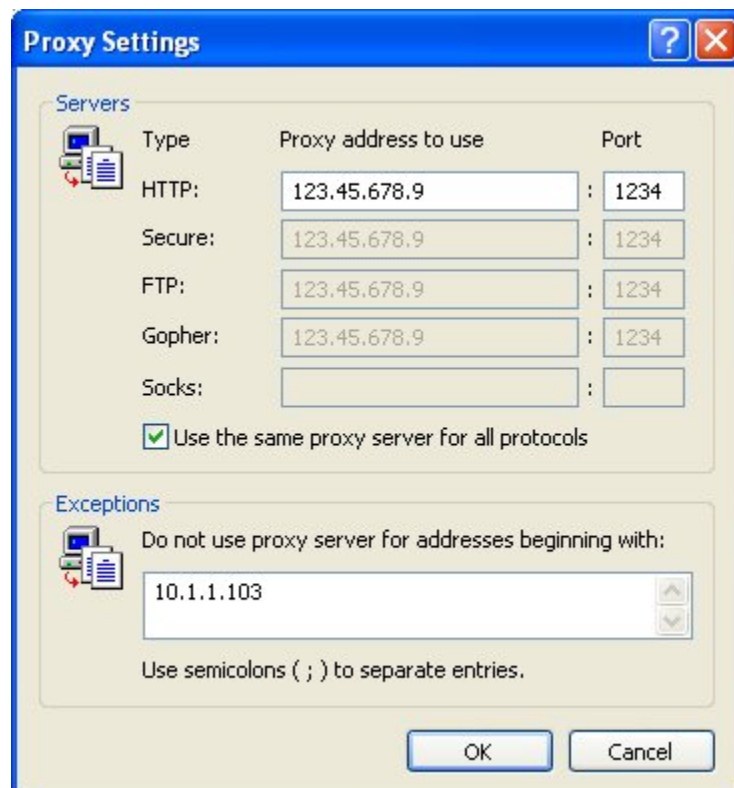
Figure 19: Allowing an IP Address exception in Proxy Settings

d. Click **OK** to close the **LAN Settings** dialog box.

e. Click **OK** again to close the **Internet Options** dialog box.

Historical Reports

Detailed information on the Reports within Reporting for Contact Center can be found in the *Reporting for Contact Center – Reports Explained* (NN40010-600) guide (installed along with this guide on the Web Host PC). This guide details how to use the report viewer, the terms used within Reporting for Contact Center reports, what statistics and formulas are used to calculate each field in the reports (where applicable) and frequently asked questions.

Error on page in Report Viewer

If the Report Viewer window displays the message "Error on Page" in the status bar to the bottom left of the window, the browser window may be caching an older version of Reporting for Contact Center. In this case press **Ctrl**+**F5** to refresh the page with the current version of Reporting for Contact Center.

Other error messages

If a User is encountering problems generating reports on their PC with a "The page cannot be displayed" message, or any other error message, refer to Errors on Generating Reports on page 41 for repairing any MySQL database corruption.

Real Time screens

Connection Status not green

If the Real Time screen is displayed but the Connection Status indicator on the bottom left of the screen is not green then the RCC Launcher or MySQL Service may not be running.

Restarting RCC Launcher Service

To check that the RCC Launcher application is running perform the following:

1. Open the Windows Task Manager by pressing **Ctrl**+**Alt**+**Delete**.
2. Click **Task Manager**.
3. Click the **Processes** tab.
4. Search for the item **RCCLauncher.exe**.

If it does not appear in that list then RCC Launcher is not running.

To start RCC Launcher, perform the following:

1. From the Start menu, click on **Settings > Control Panel > Administrative Tools > Services.**
2. Click on the **Extended** tab and click on **RCC Launcher**.
3. From the left of the Extended window click on **Start** to restart the RCC Launcher Server, or right-click on **RCC Launcher** and select **Start**.
4. Close the Services, Administrative Tools and Control Panel windows.

Restarting MySQL Service

To check that the MySQL Service is running perform the following:

1. Open the Windows Task Manager by pressing **Ctrl**+**Alt**+**Delete**.
2. Click **Task Manager**.
3. Click the **Processes** tab.
4. Search for the item **mysqld-nt.exe**.

If it does not appear in that list then the MySQL Service is not running.

To start the MySQL Server 4 Service, perform the following:

1. From the Start menu, click on **Settings > Control Panel > Administrative Tools > Services.**
2. Click on the **Extended** tab and click on **MySQL4**.
3. From the left of the Extended window click on **Start** to restart the MySQL Server service, or right-click on **MySQL4** and select **Start**.

4. Close the Services, Administrative Tools and Control Panel windows.

Connection Status is red with error message

If there are problems with the Contact Center in the display on the Real Time screens the connection status indicator will be red in color. An error message will also be displayed directly below the connection status indicator describing the error returned from the Contact Center.

Error messages in Real Time screens

The following table, see Table 3: Issues causing the error messages seen in the Real Time screens, lists all the possible error messages that can be displayed in the Real Time screens when the status indicator is red. This table also describes how the user is to resolve these issues.

Error message	Description of the issue
Invalid Request	The request from the client application is not valid, restart the RCC Launcher
Voicemail Service Not Running	The Voicemail service is not running on the Contact Center. Restart the Voicemail service on the Contact Center through the Element Manager
Invalid Password	The password used by the client application is not valid. Enter the correct password, use the CCRS test page to check if you are not sure
No Key Code	The keycode used to turn on the CCRS data stream is not present. Enter the correct keycode
No Contact Center Key Code	The keycode used to enable the Contact Center application is not present. Enter the correct keycode
CCRSNDP Disabled	The CCRS data stream is disabled. Enable the CCRSAppServer in the Element Manager
Server Busy	The server is too busy to handle the request (too many simultaneous users). Check that other Reporting for Contact Center clients are not communicating with the same Contact Center, restart the RCC Launcher
CDN Conflict	There is a CDN conflict in the Skillset and CDN identified in the error message, this must be resolved in the CallPilot Manager interface
Unknown Server Error	If none of the above, contact Nortel Support

Table 3: Issues causing the error messages seen in the Real Time screens

To resolve the error messages seen in the Real Time screens, perform the following troubleshooting steps against the error message displayed:

Invalid Request

1. Log on to the Web Host PC as an Administrator.

2. Click on **Start** > **Settings** > **Control Panel** > **Administrative Tools** > **Services.**

3. Select **RCC Launcher** Service. Right-click and select **Stop**.

4. Wait 10-15 seconds.

5. Select **RCC Launcher** Service again, right-click and select **Start**.

Voicemail Service Not Running

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.

2. To connect to the BCM system, under **Element Navigation Panel** expand **Network Elements** and select the system to connect to. Enter the User ID and Password and click **Connect**.

3. From the Task Navigation Panel select the **Administration** tab.

4. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM are displayed.

5. Locate and verify that the following services are flagged with the Startup as **Enabled** and Status as **Running**:

   - voicemail

   For a BCM 4.0 system only, the following service should also be verified:

   - CCRSAppServer

6. If any of these services are not running, select the service and click **Start**. Click **Yes** in the warning message box to confirm start-up of the service.

7. Wait 30-60 seconds for the service to start.

If the service does not start, contact Nortel Support.

Invalid Password

Verify the CCRS Password and that the XML data stream from the Contact Center is enabled by the following:

1. Open CallPilot Manager by entering the following location in the browser Address bar: http://[BCM IP Address]/callpilotmanager

2. Enter the User ID and Password and click **Submit**.

3. From the navigation menu on the left, click **Contact Center**.

4. Select **General Properties** to open the Contact Center Properties page.

5. Delete any password in the **CC Reporting Server Password** field, and re-enter the Contact Center Reporting Server Password.

6. Confirm the password in the **Confirm Password** field.

7. Ensure the **Enable CC Reporting Data Stream** check box is selected.

8. Click **Submit** to accept the changes.

From Reporting for Contact Center, attempt a connection to the Contact Center, by the following:

1. Open the Contact Center Connection page as described in Contact Center Connection page item on page 86.

2. Enter the details into the Contact Center Connection page including the newly confirmed CCRS password and click **Submit**.

The Download Data window should display call data downloading from the Contact Center.

Another method for confirming the CCRS password and to verify that XML data is being received from the Contact Center, execute the CCRS Test page, as follows:

1. See CCRS Test Page on page 110 for instructions on how to execute the CCRS Test page.

2. Ensure the CCRS password is the same as that configured in CallPilot Manager.

Once the CCRS Test page is submitted, XML data should be returned and not display an InvalidPassword XML error page, as shown in Figure 50: InvalidPassword XML error in CCRS Test page.

No Key Code

Perform the following steps to check that the keycode for the CCRS data stream is active:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.

2. To connect to the BCM, under **Element Navigation Panel** expand **Network Elements** and select the BCM.

3. Enter the logon User ID and Password for an administrator and click **Connect**.

4. From the Task Navigation Panel select the **Configuration** tab.

5. Expand the **System** folder and click **Keycodes**. A list of all the keycodes on the BCM are displayed, as well as those that have not been activated.

6. Verify that the following Keycodes are flagged as **ACTIVE**:

    -   ICC

    -   ICC Skillset (at least one)

- ICC Reporting

If the keycodes listed in step 6 are not active and the user requires them on the BCM system, contact your distributor who can verify whether or not the system needs the keycodes. This will be done through the Nortel Keycode Retrieval System (KRS).

No Contact Center Key Code

Perform the following steps to check that the Contact Center application keycode is enabled:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.

2. To connect to the BCM, under **Element Navigation Panel** expand **Network Elements** and select the BCM.

3. Enter the logon User ID and Password for an administrator and click **Connect**.

4. From the Task Navigation Panel select the **Configuration** tab.

5. Expand the **System** folder and click **Keycodes**. A list of all the keycodes on the BCM are displayed, as well as those that have not been activated.

6. Verify that the following Keycodes are flagged as **ACTIVE**:

   - ICC

   - ICC Skillset (at least one)

   - ICC Reporting

If the keycodes listed in step 6 are not active and the user requires them on the BCM system, contact your distributor who can verify whether or not the system needs the keycodes. This will be done through the Nortel Keycode Retrieval System (KRS).

CCRSNDP Disabled

Perform the following task:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.

2. To connect to the BCM, under **Element Navigation Panel** expand **Network Elements** and select the system to connect to. Enter the User ID and Password and click **Connect**.

3. From the Task Navigation Panel select the **Administration** tab.

4. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM is displayed.

5. Locate and verify that the following services are flagged with the Startup as **Enabled** and Status as **Running**:

   - voicemail

For a BCM 4.0 system only, the following service should also be verified:

- CCRSAppServer

6. If any of these services are not running, select the service and click **Start**. Click **Yes** in the warning message box to confirm start-up of the service.

7. Wait 30-60 seconds for the service to start.

If the service does not start, contact Nortel Support.

Server Busy

The user should contact their network administrator or support technician to diagnose if multiple PCs are connecting to the same Contact Center.

Restart RCC Launcher as described in Invalid Password on page 71.

CDN Conflict

The Real Time screen will display an error message generated in Reporting for Contact Center, detailing the Skillset that has a conflicting CDN. The message displayed will be:

There is a CDN conflict with the ***** skillset using CDN #####

The ***** syntax denotes the Skillset name, and ##### denotes the CDN number.

Contact your network administrator to resolve the conflicting device[§] that has caused the CDN conflict, as per one of the following:

- A newly added telephone set or device, or other Nortel peripheral attachment, is physically residing on the port that is logically assigned to the Contact Center; or

- A Voice-over IP (VoIP) telephone set has been manually, or automatically, assigned a Contact Center CDN.

On determining which device is conflicting with this CDN, whether it is a physical device or an IP set de-register, disconnect it from the BCM.

Once the conflict has been resolved the Skillset must be re-enabled, as follows:

1. Open CallPilot Manager by entering the following location in the browser Address bar: http://[BCM IP Address]/callpilotmanager

2. Enter the User ID and Password and click **Submit**.

3. From the navigation menu on the left, click **Contact Center**.

4. Select **Skillset List** to open the Skillset List page.

5. Click **Enable** on the disabled Skillset experiencing the CDN conflict.

Note: A banner would display which Skillset/CDN is experiencing conflict from the Call Pilot Manager interface.

§ This can be an Analog Station Module, MTT logger, or any other Nortel or Norstar device.

Unknown Server Error

Contact your distributor for first level support.

If you are a distributor, contact Nortel Solutions Center, see Getting Help over the phone from a Nortel Solutions Center on page 12. If you prefer to raise a case directly through the Nortel Web site, refer to the section Getting Help from the Nortel Web site on page 11.

Slow Updates on Real Time Screen

The Real Time screens should be updated approximately every 1 or 3 seconds depending on your Contact Center configuration in the Contact Center Connection page of Reporting for Contact Center.

To increase the Real Time and Wallboard refresh rate to 3 seconds perform the following:

1. Launch and logon to Reporting for Contact Center as an Administrator.
2. From the navigation menu on the left, click on the **Contact Center Connection** item.
3. From the **Wallboard and Real Time Refresh Interval** drop down box select **3** seconds.
4. Click **Submit**.

If the Real Time screens still seem to be slow or sluggish, the following section, Web Host PC Requires a Host File entry, should be checked.

Web Host PC Requires a Host File entry
Check with your Network Administrator to add an entry in the Web Host PC Host file. This is a Windows system file and is usually located in the \Windows\System32\drivers\etc folder on the Web Host PC (this may be called the \Windows\System32\drivers\etc folder).

You must enter the IP Address and the network name (machine name) of the Business Communications Manager to this file. Separate the two items by using the Tab key.

An example Host file is shown in Figure 20: Example Host File.

```
# Copyright I 1993-1999 Microsoft Corp.
#
# This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
#      102.54.94.97      rhino.acme.com           # source server
#       38.25.63.10     x.acme.com                # x client host

127.0.0.1          Localhost
10.1.1.105         BCMMachineName
```

Figure 20: Example Host File

Real Time screens are not displayed

If Real Time screens are not displayed after making Skillset and Real Time screen selections from the Real Time page, pop-up blocking may be enabled on the PC. Disable pop-up blockers.

If Norton Internet Security is installed on your PC and the Real Time screens are not being displayed, ad blocking may be enabled. See the following section Ad Blocking in Norton Internet Security to disable ad blocking.

Ad Blocking in Norton Internet Security

To disable Ad Blocking in Norton Internet Security perform the following:

1. Open the Norton Internet Security application.
2. Open the Status and Settings page from the menu to the left of the page.
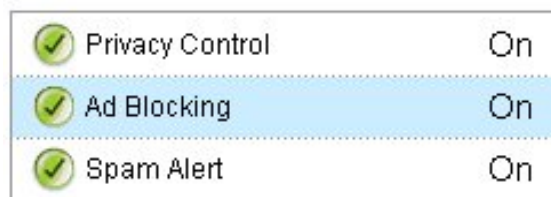3. Click the **Ad Blocking** option. See Figure 21: Ad Blocking option in Norton Internet Security.

Figure 21: Ad Blocking option in Norton Internet Security

This opens the Ad Blocking window.

4. Clear the **Turn on Popup Window Blocking** check box, see Figure 22: Ad Blocking Window in Norton Internet Security.

> This will disable any window blocking by Norton Internet Security and prevent Real Time screens being blocked in Reporting for Contact Center.

Figure 22: Ad Blocking Window in Norton Internet Security

5. Click **OK** to close the Ad Blocking window.
6. Close Norton Internet Security.

The Real Time screens should now open up on clicking the **Submit** button on the Real Time page.

Wallboards

*ip*View SoftBoard and Wallboard Summaries

Wallboard Summaries are sent to the wallboards on the hour, according to the time of the Web Host PC clock. The regular hourly and daily statistics that are sent to the wallboard are governed by the Contact Center platform clock. The hourly statistics are reset to 0 on the hour, according to the clock in the Contact Center platform.

If the clock in the Web Host PC is set to a different time than the clock in the Contact Center platform, the hourly Summaries will not be synchronized with the hourly reset of the regular statistics. To ensure that the wallboard summaries are in time with the hourly resets of the regular wallboard statistics, ensure that your PC and Contact Center platform times are the same.

IP Address of the Hardware Wallboard

To obtain the correct IP Address of the Hardware Wallboard perform the following:

1. Disconnect the Wallboard from its power supply.
2. Reconnect the power supply. The IP Address will be displayed shortly.

Pause in parameter count on the Hardware Wallboard

If the wallboard parameters do not refresh every 1 or 3 seconds but display a pause in the count, for instance in the QT time, the Microsoft Indexing Service may be running on the Web Host PC, or the Client PC that the hardware wallboard is directly connected to.

The Microsoft Indexing Service helps to create fast searches of files on your PC. But this can also take up a lot of processor usage on your PC. This will in turn slow down other processes running on your PC including the wallboarddriver.exe process that updates the parameters to the wallboard. To prevent this from happening, stop the Indexing Service and set it to start up manually as follows:

1. From the Start menu, click on **Settings > Control Panel > Administrative Tools > Services.**
2. Click on the **Extended** tab and locate **Indexing Service**.
3. Right-click on **Indexing Service** and select **Stop**.

Once Indexing Service has stopped running on your PC, check that the startup type is set to **Manual**. If this is not set to **Manual**, go to step 4.

1. Right-click on **Indexing Service** and select **Properties** to open the Properties window.

2. In the General tab, see Figure 23: Indexing Service Properties General window, from **Startup type** select **Manual**.
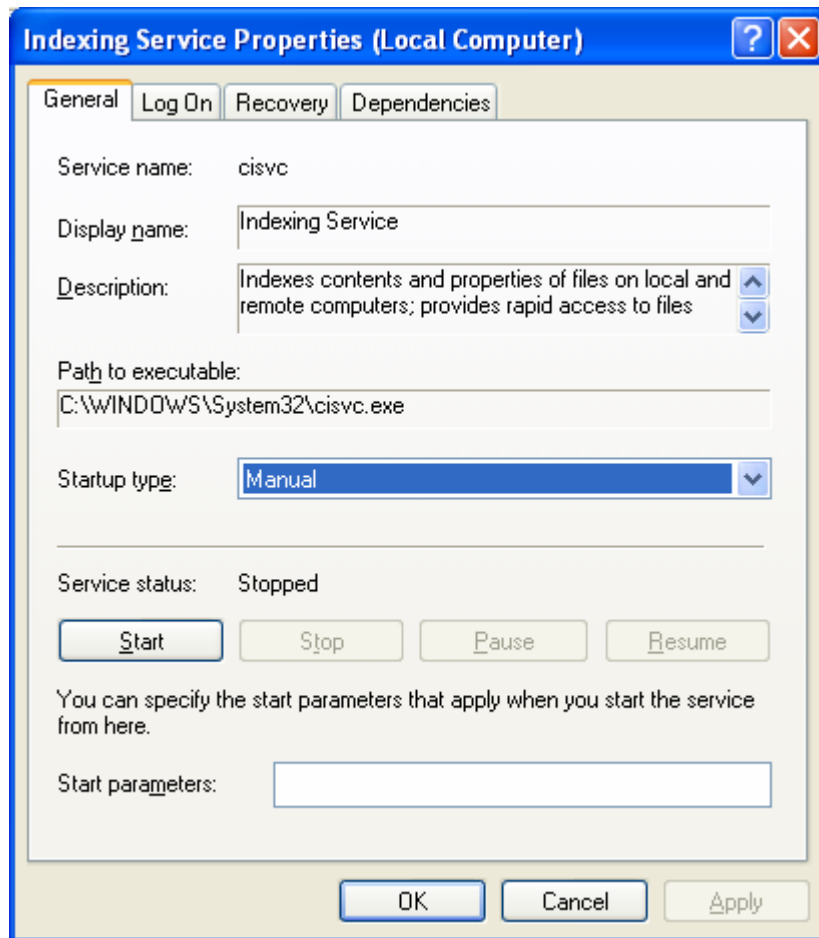

Figure 23: Indexing Service Properties General window

3. Click **OK** to close the General window.

Close the Services, Administrative Tools and Control Panel windows.

Further problems with the ipView SoftBoard or Hardboard

Detailed information on the operation of *ip***View** SoftBoard or Hardboards can be found in the *ipView Software Wallboard Setup and Operations Guide* (NN40010-500). This is installed along with Reporting for Contact Center on the Web Host PC.

Printing reports

Accessing networked printers from the Web Host PC

In order for the Web Host PC to contact and utilize network printers, you must have a User logged on to Windows on the Web Host PC.

This means that if you wish to perform Scheduled Prints out of hours, you must have a User logged on to the Web Host PC.

Print Schedules require Windows logon

If you want to perform Scheduled Print reports you must have a User logged on to the Web Host PC at all times. This is due to the way in which Windows handles Networked shared printers. A work around for this is to create a scheduled task in Windows and then specify a user name and password for that task, as follows:

1. From the Start menu click **Programs** > **Accessories** > **System Tools** > **Scheduled Tasks**. The Scheduled Tasks window will open, see Figure 24: Scheduled Tasks window.
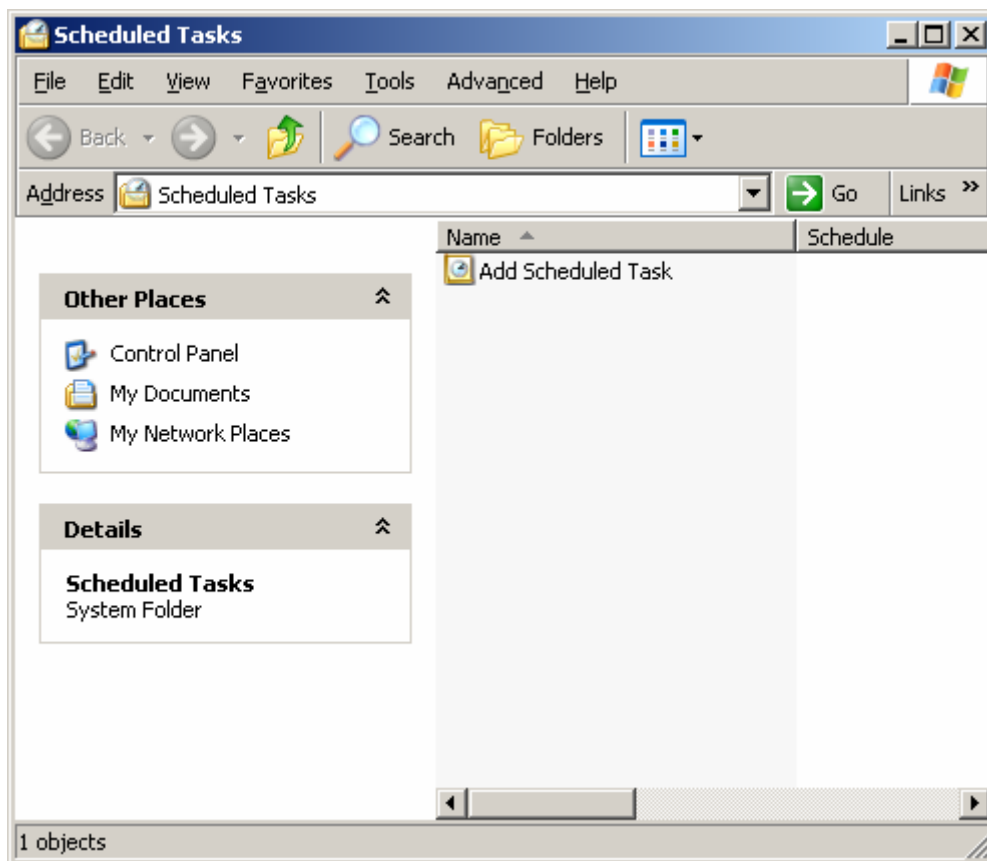

Figure 24: Scheduled Tasks window

2. Double-click on the **Add Scheduled Task** item. The Scheduled Task Wizard will open, as shown in Figure 25: Scheduled Task Wizard.
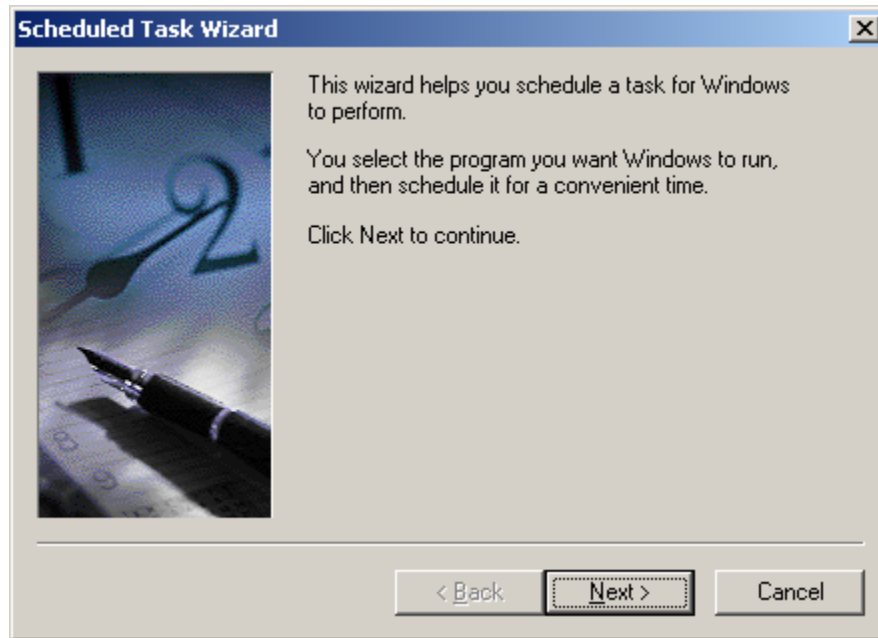

Figure 25: Scheduled Task Wizard

3. Click **Next**. This will list programs for Windows to run the Scheduled Task Wizard, see Figure 26: Schedule Task Wizard Windows programs.
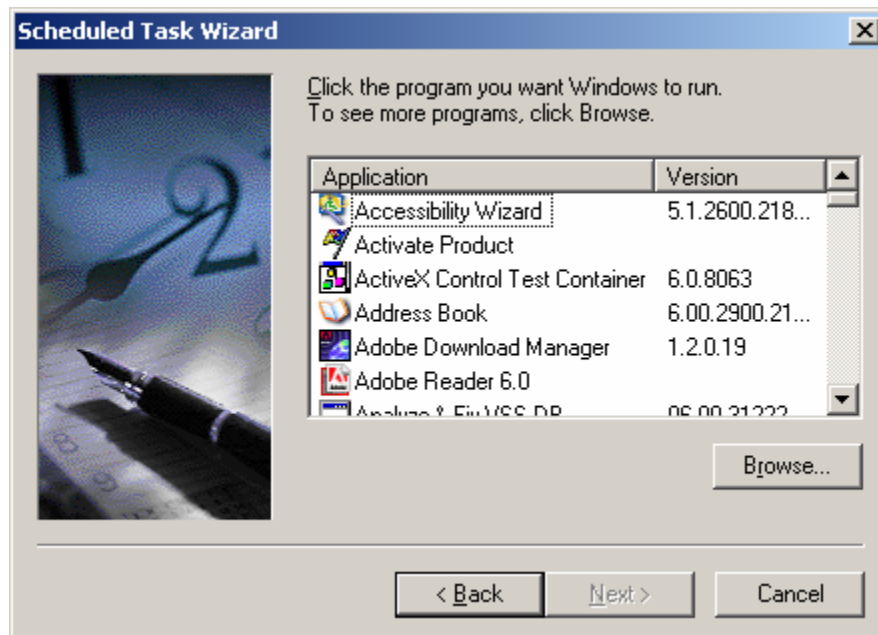

Figure 26: Schedule Task Wizard Windows programs

4. Click **Browse** and navigate to the install folder of Reporting for Contact Center (this is typically C:\Program Files\Nortel\Reporting for Contact Center).

5. Double-click **PrintCaller**.

6. Select the **printCaller.exe** program and click **Open**. This will open the Scheduled Task Wizard for printCaller, see Figure 27: Schedule Task Wizard for printCaller.

Figure 27: Schedule Task Wizard for printCaller

7. Select the **When my computer starts** option, as shown in Figure 27: Schedule Task Wizard for printCaller.

8. Click **Next**. The Scheduled Task Wizard password confirmation window will open as shown in Figure 28: Schedule Task Wizard password confirmation window.

Figure 28: Schedule Task Wizard password confirmation window

9. Enter your Windows user name into the user name field. If you are on a domain enter that before in the user name in the following way [domain\user], if you are unsure if you are on a domain or what your domain is, consult your network administrator. Typically your domain is shown on the logon screen of Windows. Click **Next**.
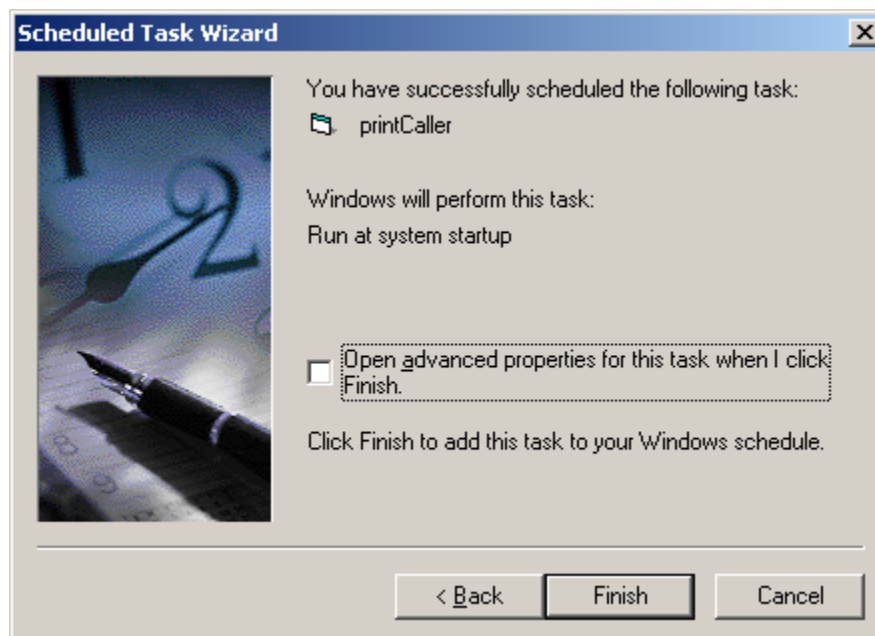

Figure 29: Successful Windows schedule of printCaller

10. Click **Finish** to schedule printCaller to execute on Windows startup. See Figure 29: Successful Windows schedule of printCaller.

11. Reboot your PC. PrintCaller will now automatically launch each time your PC starts and you do not need to log on to the PC. However, if you do intend to log on to that PC you should disable the schedule.

To disable the PrintCaller Windows task schedule, perform the following steps:

1. From the Start menu click **Programs** > **Accessories** > **System Tools** > **Scheduled Tasks**. The Scheduled Tasks window will open, see Figure 24: Scheduled Tasks window.

2. Right-click on the PrintCaller task, this may be named **printCaller**. Select **Properties**.

3. From the printCaller Task window, see Figure 30: Disabling a Schedule Task, clear the **Enabled (scheduled task runs at specified time)** check box.
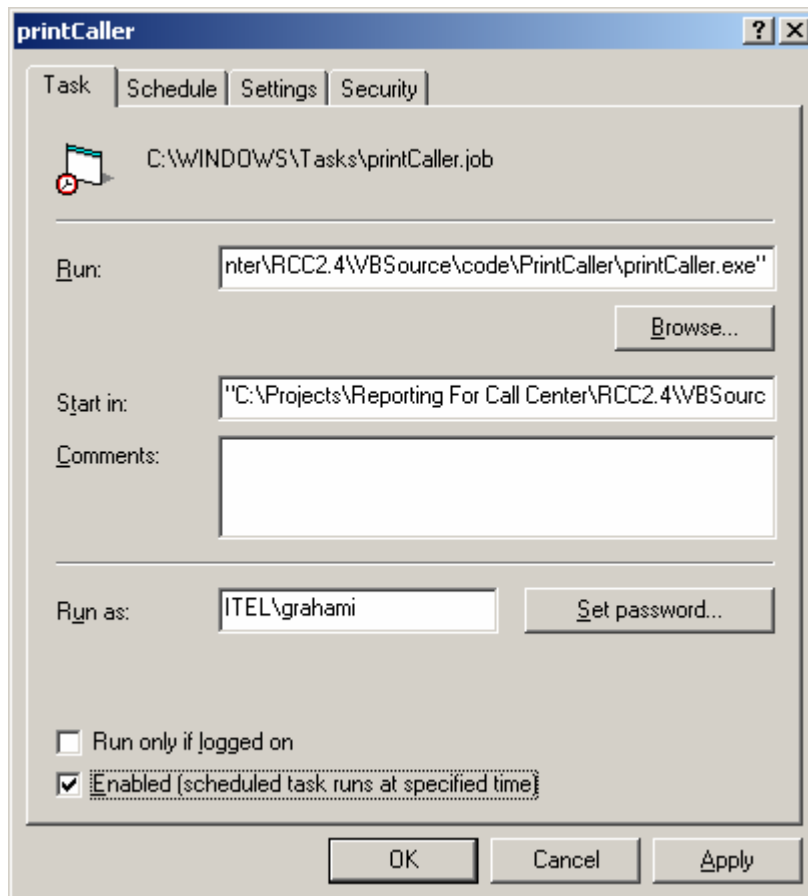

Figure 30: Disabling a Schedule Task

4. Click **OK**. The scheduled task will be disabled. Close the Scheduled Tasks window.

Reports are not printing

Check the printer

Using the same printer as selected in your print schedule, attempt to print a document, this can be anything and if you do not have a document available create one in Notepad. If the document fails to print, consult your network administrator.

Check the print schedule

Check that the report was configured to print on the correct day. Daily Reports print the day after the day which is being reported. That is, if you select a Daily Report Schedule for Monday, it prints on Tuesday. This ensures that the report day has completely elapsed when the reports are generated.

PrintCaller application

For print schedules to print, the PrintCaller application must be running, for this to occur a user must be logged on to a PC. Logging a user on the PC will automatically launch printCaller.exe. However to check if it is running perform the following:

1. Open the Windows **Task Manager** by pressing **Ctrl**+**Alt**+**Delete** on the keyboard.
2. Click **Task Manager**.
3. Click the **Processes** tab.
4. Search for the item **printCaller.exe**.
5. If it does not appear in that list then PrintCaller is not running.

Launching PrintCaller

To launch PrintCaller either:

Log out and log back in a Windows User,

or:

1. Click **Start > All Programs > Start Up.**
2. Select **printCaller** (sometimes on rare occasions it appears as **NewShortCut1**).

Miscellaneous

Contact Center Connection page item

To open the Contact Center Connection page perform the following:

1. Log on to Reporting for Contact Center.
2. From the navigation menu on the left panel click **Contact Center Connection**.

The Contact Center Connection page will be displayed in the browser window.

Page cannot be displayed message

If Internet Explorer 5.*x*, or Internet Explorer 6.*x* browser is being used to access Reporting for Contact Center Web pages and the message "Page cannot be displayed" is displayed in the browser window, friendly HTTP error messages may be enabled.

Internet Explorer friendly HTTP error messages mask the actual text of an HTTP 500 message that is sent to the browser. To disable friendly HTTP error messages, perform the following:

1. Click **Start**, then right-click the **Internet Explorer** icon, and select **Internet Properties**. See Figure 31: Internet Properties Dialog Box.

Figure 31: Internet Properties Dialog Box

Note: If you do not see the dialog box shown in Figure 31: Internet Properties Dialog Box, you have clicked a shortcut to Internet Explorer. You **must** click the Internet Explorer icon in the Start menu.

2. Click on the **Advanced** tab and under the Browsing section clear the **Show friendly HTTP error messages** check box. See Figure 32: Advanced window in Internet Properties.
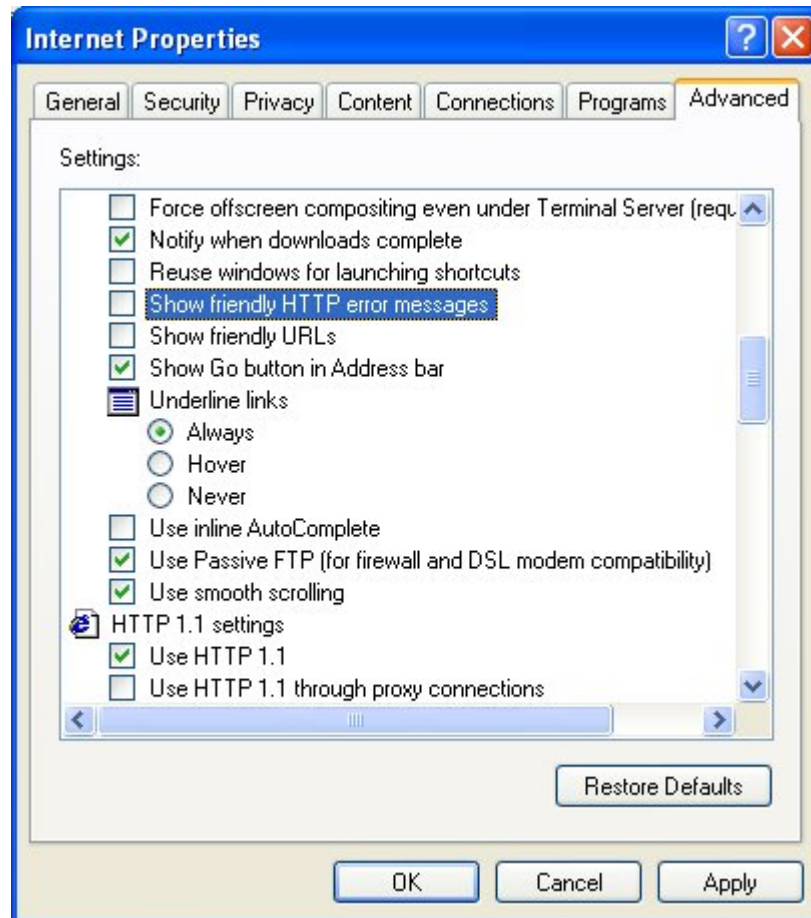
Figure 32: Advanced window in Internet Properties

3. Click **Apply** to accept the changes.

4. Click **OK** in the Internet Properties dialog box to close the dialog box.

Open a browser window to view Reporting for Contact Center.

Error messages

Error message refers to MySQL

There can be many different types of error messages related to MySQL but they will all contain a reference, for example:

```
Microsoft OLE DB Provider for ODBC Drivers (0x80040E37)
[MySQL][ODBC 3.51 Driver][mysqld-4.1.15-nt]Can't open file: 'rptcalldatassinfo.MYI' (errno: 145)
```

The user must provide this information to Nortel Support when troubleshooting Reporting for Contact Center. In the preceding example the RCC database has become corrupted.

Error message mentions Access denied

If the user encounters an error message in the Reporting for Contact Center Internet Explorer browser window that displays the following "Access denied" message, the MySQL User will have to be recreated:

```
Error Type:
Microsoft OLE DB Provider for ODBC Drivers (0x80004005)
[MySQL][ODBC 3.51 Driver]Access denied for user 'rccuser'@'localhost' (using password: YES)
```

A MySQL User enables Reporting for Contact Center access to the MySQL database. To recreate a MySQL User perform the following:

1. Open Windows Explorer and navigate to the Reporting for Contact Center installation folder (typically this is C:\Program Files\Nortel\Reporting for Contact Center).

2. Double-click the **RunOnce** folder.

3. Double-click the **AddMySQLUser.bat** file.

A new MySQL User will be created again.

Error in Download Contact Center data window

The following table, see Table 4: Issues causing the error messages in the Download Contact Center data window, lists the error messages displayed in the Download Contact Center data window when the status indicator is red. This table also describes how the user is to resolve the issue.

Error message	Description of the issue
InvalidRequest	The request from the client application is not valid, restart the RCC Launcher
VMServiceNotRunning	The Voicemail service is not running on the Contact Center. Restart the Voicemail service on the Contact Center through the Element Manager
InvalidPassword	The password used by the client application is not valid. Enter the correct password, use the CCRS test page to check if you are not sure
NoKeyCode	The keycode used to turn on the CCRS data stream is not present. Enter the correct keycode
NoCCKeyCode	The keycode used to enable the Contact Center application is not present. Enter the correct keycode
CCRSDisabled	The CCRS data stream is disabled. Enable the CCRSAppServer in Element Manager
ServerBusy	The server is too busy to handle the request (too many simultaneous users). Check that other Reporting for Contact Center clients are not communicating with the same Contact Center, restart the RCC Launcher
CannotConnectToCC	The CCRS cannot contact the Contact Center
CannotConnectToDB	Could not connect to the database
CCRefusedConnection	Indicates that the Contact Center refused to register the AppServer
HistoricalReqOver3Hours	The request from the client application is not valid (exceeds three hours), restart the RCC Launcher
UnknownServerError	If none of the above, contact Nortel Support

Table 4: Issues causing the error messages in the Download Contact Center data window

To resolve the error messages seen in the Download Contact Center data window, perform the following troubleshooting steps against the error message displayed:

InvalidRequest

1. Log on to the Web Host PC as an Administrator.

2. Click on **Start** > **Settings** > **Control Panel** > **Administrative Tools** > **Services.**

3. Select **RCC Launcher** Service. Right-click and select **Stop**.

4. Wait 10-15 seconds.

5. Select **RCC Launcher** Service again, right-click and select **Start**.

VMServiceNotRunning

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.

2. To connect to the BCM system, under **Element Navigation Panel** expand **Network Elements** and select the system to connect to. Enter the User ID and Password and click **Connect**.

3. From the Task Navigation Panel select the **Administration** tab.

4. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM are displayed.

5. Locate and verify that the following services are flagged with the Startup as **Enabled** and Status as **Running**:

    - voicemail

    For a BCM 4.0 system only, the following service should also be verified:

    - CCRSAppServer

6. If any of these services are not running, select the service and click **Start**. Click **Yes** in the warning message box to confirm start-up of the service.

7. Wait 30-60 seconds for the service to start.

If the service does not start, contact Nortel Support.

InvalidPassword

Verify the CCRS Password and that the XML data stream from the Contact Center is enabled by the following:

1. Open CallPilot Manager by entering the following location in the browser Address bar: http://[BCM IP Address]/callpilotmanager

2. Enter the User ID and Password and click **Submit**.

3. From the navigation menu on the left, click **Contact Center**.

4. Select **General Properties** to open the Contact Center Properties page.

5. Delete any password in the **CC Reporting Server Password** field, and re-enter the Contact Center Reporting Server Password.

6. Confirm the password in the **Confirm Password** field.

7. Ensure the **Enable CC Reporting Data Stream** check box is selected.

8. Click **Submit** to accept the changes.

From Reporting for Contact Center, attempt a connection to the Contact Center, by the following:

1. Open the Contact Center Connection page as described in Contact Center Connection page item on page 86.

2. Enter the details into the Contact Center Connection page including the newly confirmed CCRS password and click **Submit**.

The Download Data window should display call data downloading from the Contact Center.

Another method for confirming the CCRS password and to verify that XML data is being received from the Contact Center, execute the CCRS Test page, as follows:

1. See CCRS Test Page on page 110 for instructions on how to execute the CCRS Test page.

2. Ensure the CCRS password is the same as that configured in CallPilot Manager.

Once the CCRS Test page is submitted, XML data should be returned and not display an InvalidPassword XML error page, as shown in Figure 50: InvalidPassword XML error in CCRS Test page.

NoKeyCode

Perform the following steps to check that the keycode for the CCRS data stream is active:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.

2. To connect to the BCM, under **Element Navigation Panel** expand **Network Elements** and select the BCM.

3. Enter the logon User ID and Password for an administrator and click **Connect**.

4. From the Task Navigation Panel select the **Configuration** tab.

5. Expand the **System** folder and click **Keycodes**. A list of all the keycodes on the BCM are displayed, as well as those that have not been activated.

6. Verify that the following Keycodes are flagged as **ACTIVE**:

   - ICC

   - ICC Skillset (at least one)

   - ICC Reporting

If the keycodes listed in step 6 are not active and the user requires them on the BCM system, contact your distributor who can verify whether or not the system needs the keycodes. This will be done through the Nortel Keycode Retrieval System (KRS).

NoCCKeyCode

Perform the following steps to check that the Contact Center application keycode is enabled:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.

2. To connect to the BCM, under **Element Navigation Panel** expand **Network Elements** and select the BCM.

3. Enter the logon User ID and Password for an administrator and click **Connect**.

4. From the Task Navigation Panel select the **Configuration** tab.

5. Expand the **System** folder and click **Keycodes**. A list of all the keycodes on the BCM are displayed, as well as those that have not been activated.

6. Verify that the following Keycodes are flagged as **ACTIVE**:

   - ICC

   - ICC Skillset (at least one)

   - ICC Reporting

If the keycodes listed in step 6 are not active and the user requires them on the BCM system, contact your distributor who can verify whether or not the system needs the keycodes. This will be done through the Nortel Keycode Retrieval System (KRS).

CCRSDisabled

Perform the following steps:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.

2. To connect to the BCM system, under **Element Navigation Panel** expand **Network Elements** and select the system to connect to. Enter the User ID and Password and click **Connect**.

3. From the Task Navigation Panel select the **Administration** tab.

4. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM is displayed.

5. Locate and verify that the following services are flagged with the Startup as **Enabled** and Status as **Running**:

   a. voicemail

   b. For a BCM 4.0 system only, the following service should also be verified:

   c. CCRSAppServer

6. If any of these services are not running, select the service and click **Start**. Click **Yes** in the warning message box to confirm start-up of the service.

7. Wait 30-60 seconds for the service to start.

If the service does not start, contact Nortel Support.

ServerBusy

The user should contact their network administrator or support technician to diagnose if multiple PCs are connecting to the same Contact Center.

Restart RCC Launcher as described in InvalidRequest on page 90.

CannotConnectToCC

The Contact Center Reporting Server can not connect to the Contact Center. This can be due to either one of the following reasons:

1. The Contact Center is disabled. The Voicemail and CCRSAppServer (on BCM 4.0 only) Services have to be started.

2. There are multiple PCs attempting to access the Contact Center.

1. The Contact Center is disabled. Perform the following steps to start the Voicemail and CCRSAppServer (on BCM 4.0 only) Services:

   a. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.

   b. To connect to the BCM system, under **Element Navigation Panel** expand **Network Elements** and select the system to connect to. Enter the User ID and Password and click **Connect**.

   c. From the Task Navigation Panel select the **Administration** tab.

   d. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM is displayed.

   e. Locate and verify that the following services are flagged with the Startup as **Enabled** and Status as **Running**:

   f. voicemail

   g. For a BCM 4.0 system only, the following service should also be verified:

   h. CCRSAppServer

   i. If any of these services are not running, select the service and click **Start**. Click **Yes** in the warning message box to confirm start-up of the service.

   j. Wait 30-60 seconds for the service to start.

   If the service does not start, contact Nortel Support.

2. There are multiple PCs attempting to access the Contact Center. Refer to the ServerBusy section on page 94 for resolving multiple PCs accessing the Contact Center.

CannotConnectToDB

This XML error is the result of the Database Service being stopped on the Contact Center server side. Perform the following procedures for either a BCM 4.0 or a BCM50 2.0 system.

Starting the database service on a BCM 4.0 system:

1. Open Element Manager by clicking on **Start** > **Programs** > **Nortel** > **BCM** > **BCM Element Manager**.

2. From **Element Navigation Panel** expand **Network Elements** and select your BCM system to connect to. Enter the User ID and Password and click **Connect**.

3. From the Task Navigation Panel select the **Administration** tab.

4. Expand the **General** folder and click **Service Manager**. A list of all the services on the BCM is displayed.

5. Locate **postgres** service and ensure it is set to **Enabled** and **Running**.

6. If not, select **postgres** service and click **Stop**. In the confirmation message box, click **Yes** to stop the Postgres service.

7. Wait 30-60 seconds.

8. Select **postgres** from the list of services and click **Start**. Click **Yes** in the warning message box to confirm restarting the service.

9. Wait 30-60 seconds for Postgres service to restart.

Starting the database service on a BCM50 2.0 system:

1. Log on to the PC hosting the Contact Center Reporting Server (CCRS, also known as the Application Server, or AppServer) as an Administrator.

2. Click on **Start** > **Settings** > **Control Panel** > **Administrative Tools** > **Services.**

3. Locate **MSSQL$NN_CCRS** Service. Ensure the service is set to **Started** and **Automatic** startup.

4. If the service is not running, select **MSSQL$NN_CCRS** Service, right-click and select **Start.**

5. If the service startup type is not set to **Automatic**, right-click on the service and select **Properties** to open the MSSQL$NN_CCRS Properties window. On the **General** tab change **Startup type:** to **Automatic**. Click **Apply** and click **OK**.

CCRefusedConnection

Contact your network administrator or support technician to diagnose if multiple PCs are connecting to the same Contact Center, as the Contact Center refused to register CCRS.

HistoricalReqOver3Hours

Either Reporting for Contact Center, or the CCRS Test page has made a request of over 3 hours of historical data from the Contact Center. The server or services have not failed; this is merely an invalid query for BCM 4.0 and BCM50 2.0 systems. For the CCRS Test page adjust your query to be a maximum of 3 hours, see step 6 in CCRS Test Page on page 110.

Restart RCC Launcher on the Web Host PC, as described in InvalidRequest on page 90.

UnknownServerError

Contact your distributor for first level support.

If you are a distributor, contact Nortel Solutions Center, see Getting Help over the phone from a Nortel Solutions Center on page 12. If you prefer to raise a case directly through the Nortel Web site, refer to the section Getting Help from the Nortel Web site on page 11.

Client PC Troubleshooting 7

This section deals with problems that occur on a client PC and how to resolve those issues. A client PC is defined as a PC connecting to the Web Host PC in an attempt to access the Reporting for Contact Center application.

Real Time Viewer

Real Time Screens and Java Runtime Environment on Client PCs

A Java Runtime Environment should be automatically installed onto a Client PC, from the Web Host PC, the first time that the Real Time screens are viewed on the Client PC.

> **Note**: It is recommended that the first time the User on a Client PC views a Real Time screen, especially if the User is not sure whether or not Java Runtime is installed on their PC, only one Real Time screen should be launched. This is to prevent multiple instances of Java Runtime installations taking place on the Client PC for each Real Time screen launched.

If the Java Runtime is not launched automatically, you will not be able to view the Real Time screens.

To overcome this you can start the installation process manually.

On the Web Host PC in C:\Program Files\Nortel\Reporting for Contact Center\Javadist there is a file called j2re-1_5_0_03-windows-i586-p.exe.

This file should be copied to the Client PC and executed there. This will install the Java Runtime Environment.

Report Viewer

Crystal Reports ActiveX Report Viewer

The first time that reports are viewed on a Client PC an ActiveX Viewer is installed onto the Client PC from the Web Host PC.

> **Note**: It is recommended that the first time reports are viewed on a Client PC, only one report is generated. This is to prevent multiple ActiveX Viewer installations taking place on the Client PC, especially if the User is not sure whether or not ActiveX Viewer is installed on their PC.

Manual Installation of ActiveX Viewer

If ActiveX Viewer does not automatically install on the Client PC, you will not be able to view reports (you will see the Report Viewer window with a red X in the top left corner).

If you see this in the Report window start the installation process manually as follows:

1. On the Web Host PC in \Program Files\Common Files\Crystal Decisions\2.0\crystalreportviewers\ActiveXViewer\en locate the file npviewer.exe.

Copy npviewer.exe to the Client PC.

2. To install the ActiveX Viewer, double-click on the npviewer.exe file on the Client PC. Click **Next** in the Welcome window, see Figure 33: Crystal Report ActiveX Viewer Welcome Window.

Figure 33: Crystal Report ActiveX Viewer Welcome Window

3. A message box will be displayed asking to continue the installation on the Internet Explorer browser, see Figure 34: Crystal Report ActiveX Viewer Continue Installation Message Box. Click **Yes** to continue.
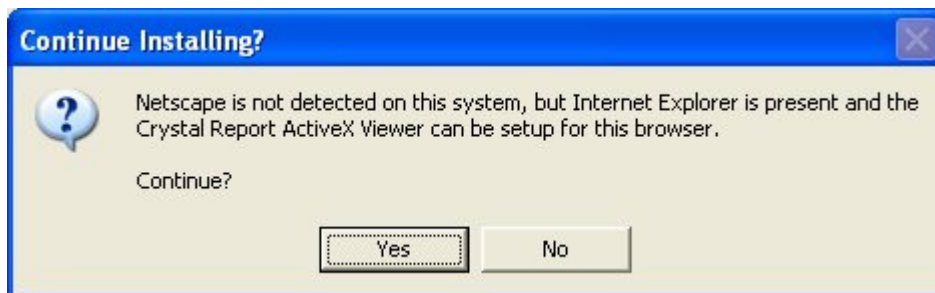

Figure 34: Crystal Report ActiveX Viewer Continue Installation Message Box

4. Once Crystal Report ActiveX Viewer is installed a Setup Complete window is displayed, see Figure 35: Crystal Report ActiveX Viewer Setup Complete Window.
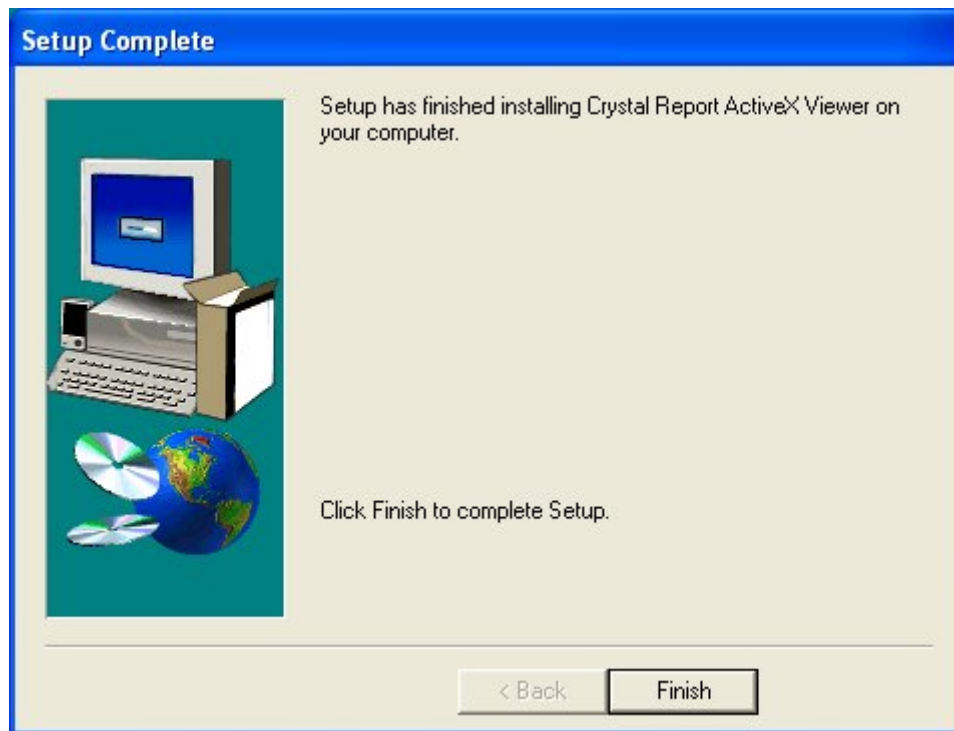
Figure 35: Crystal Report ActiveX Viewer Setup Complete Window

   5.   Click **Finish** to complete the setup.

ActiveX Viewer should now be installed on the Client PC.

ActiveX Viewer download blocked

If Microsoft Windows blocks the download of the ActiveX Viewer program, npviewer.exe, with
the message, "Windows has blocked this software because it cannot verify the publisher",
perform the following:

   1.   Click **Start**, then right-click the **Internet Explorer** icon, and select **Internet Properties**.
        See Figure 36: Internet Properties Dialog Box.

Figure 36: Internet Properties Dialog Box

Note: If you do not see the dialog box shown in Figure 36, you have clicked a shortcut to Internet Explorer. You **must** click the Internet Explorer icon in the Start menu.

2. Click on the **Security** tab and select **Trusted sites** from the Web content zones in the top pane, see Figure 37: Security Tab in Internet Properties Dialog Box.
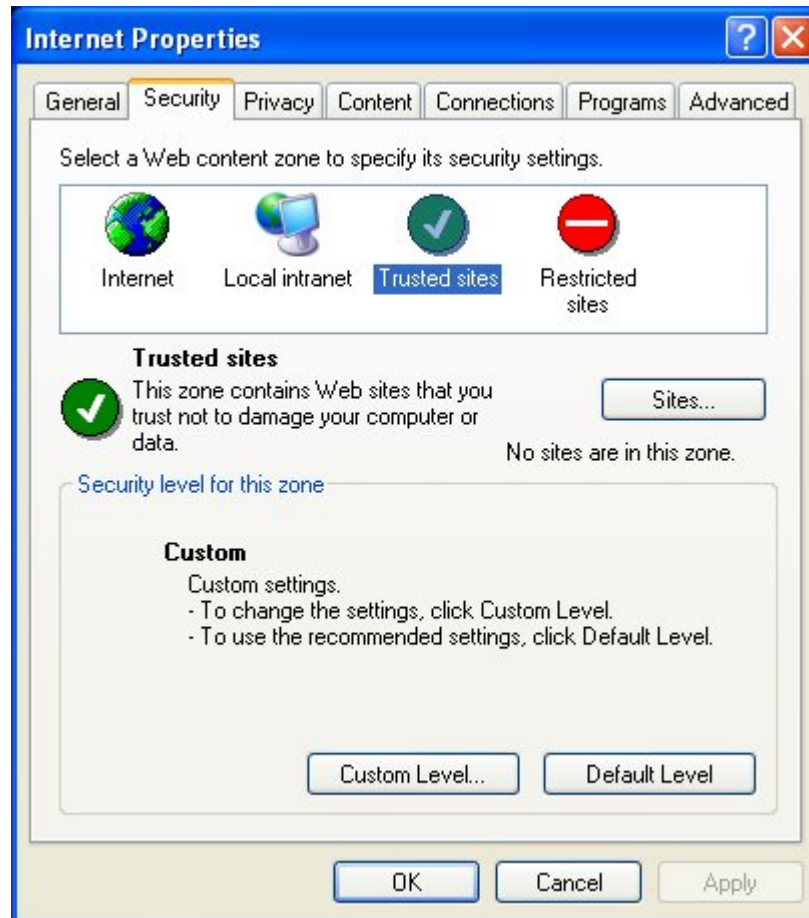
Figure 37: Security Tab in Internet Properties Dialog Box

3. Click **Sites** to open the trusted sites dialog box, see Figure 38: Trusted sites Dialog Box.
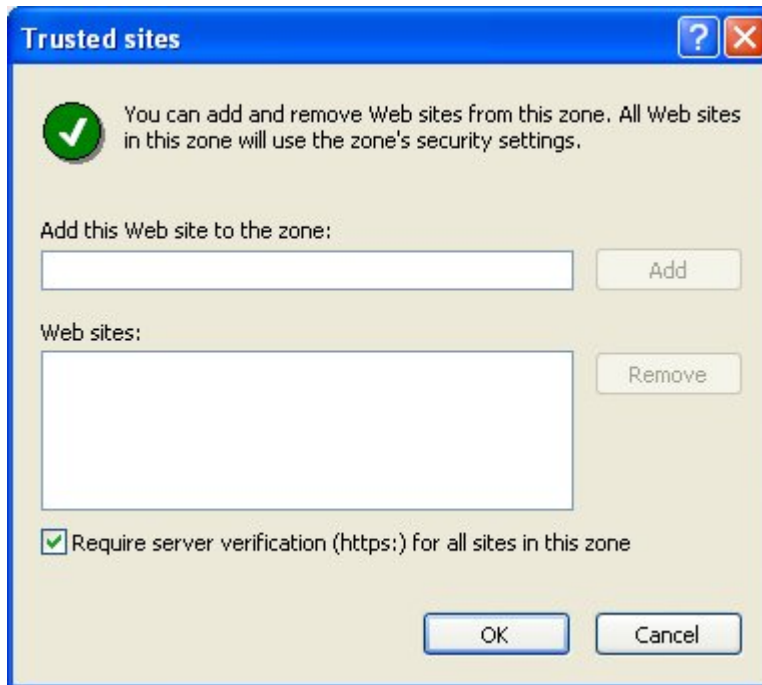
Figure 38: Trusted sites Dialog Box

4. Clear the **Require server verification (https:) for all sites in this zone** check box and enter the IP Address of your Web Host PC. An example is shown in Figure 39: Entering IP Address of Trusted site. Replace the IP Address 10.1.1.55, with that of your Web Host PC.
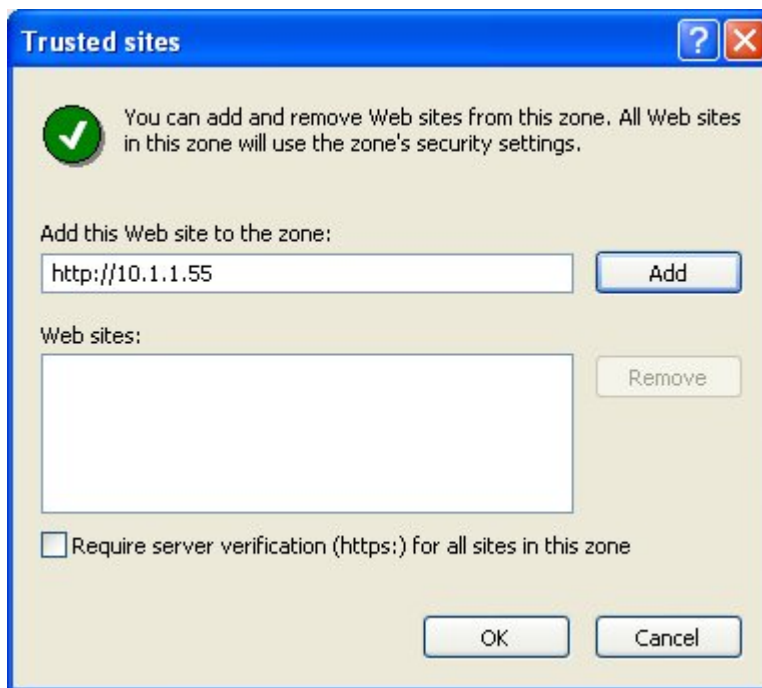
Figure 39: Entering IP Address of Trusted site

5. Click **Add** to add the Web Host PC as a trusted site for the download of the ActiveX Viewer program.

6. Click **OK** to close the trusted site dialog box.

7. Click **OK** in the Internet Properties dialog box to close the dialog box.

Microsoft Windows can now allow the download of the ActiveX Viewer onto the Client PC.

Conflict of applications using Crystal Reports

If the User sees an error message in Report Viewer on attempting to generate a report, see Figure 40: Page Cannot Be Displayed Error Message in Report Viewer, there may be a Crystal Reports confliction between Reporting for Contact Center and that used by any other application using Crystal Reports.
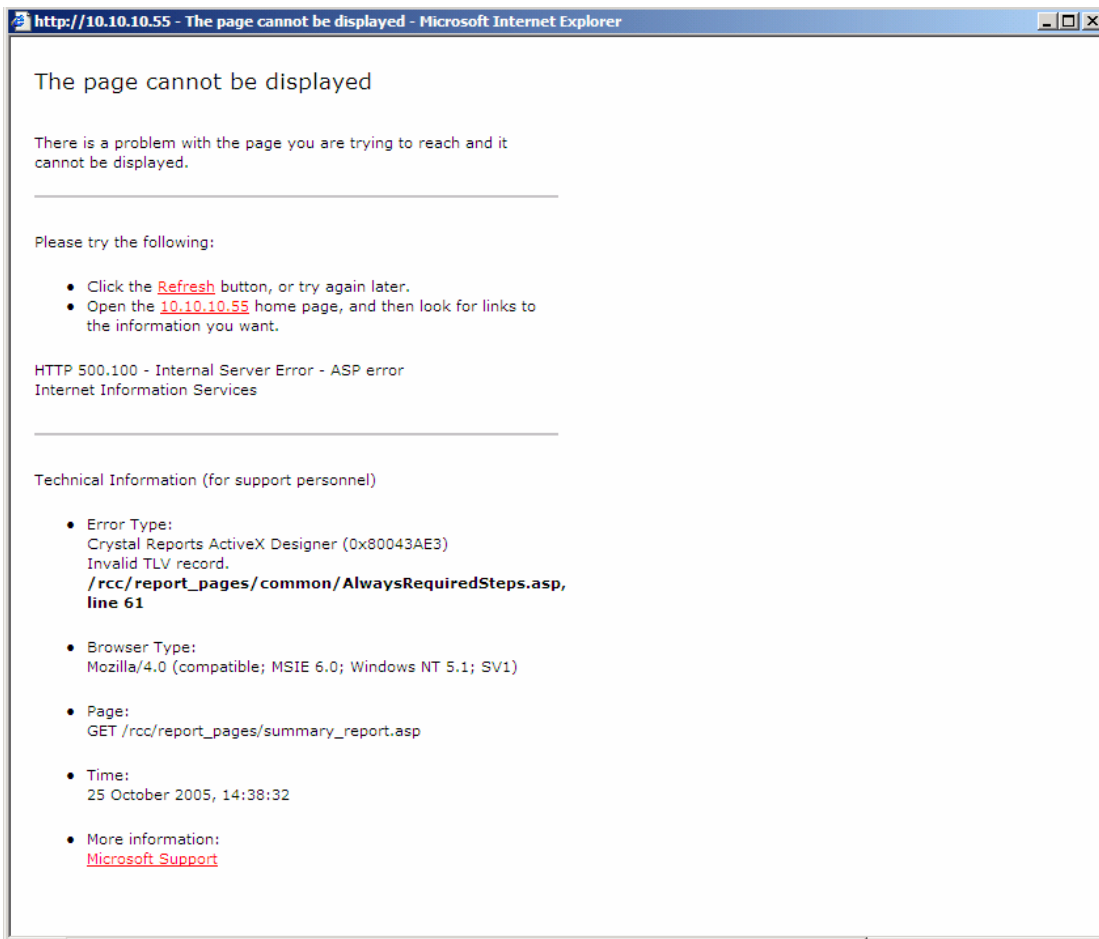
Figure 40: Page Cannot Be Displayed Error Message in Report Viewer

To be able to view the reports, Reporting for Contact Center should be uninstalled and re-installed back on to the Web Host PC, as described in the *Reporting for Contact Center Setup and Operations Guide* (NN40040-302) in a section about upgrading a previous version of Reporting for Contact Center.

Internet Explorer issues

Internet Explorer Cache

Deleting temporary Internet files

After an upgrade of Nortel Reporting for Contact Center, Internet Explorer may be caching old versions of the Nortel Reporting for Contact Center Web pages. The temporary Internet files on your computer will have to be deleted by the following:

1. Click **Start**, then right-click the **Internet Explorer** icon, and select **Internet Properties**. See Figure 41: Internet Properties Dialog Box.
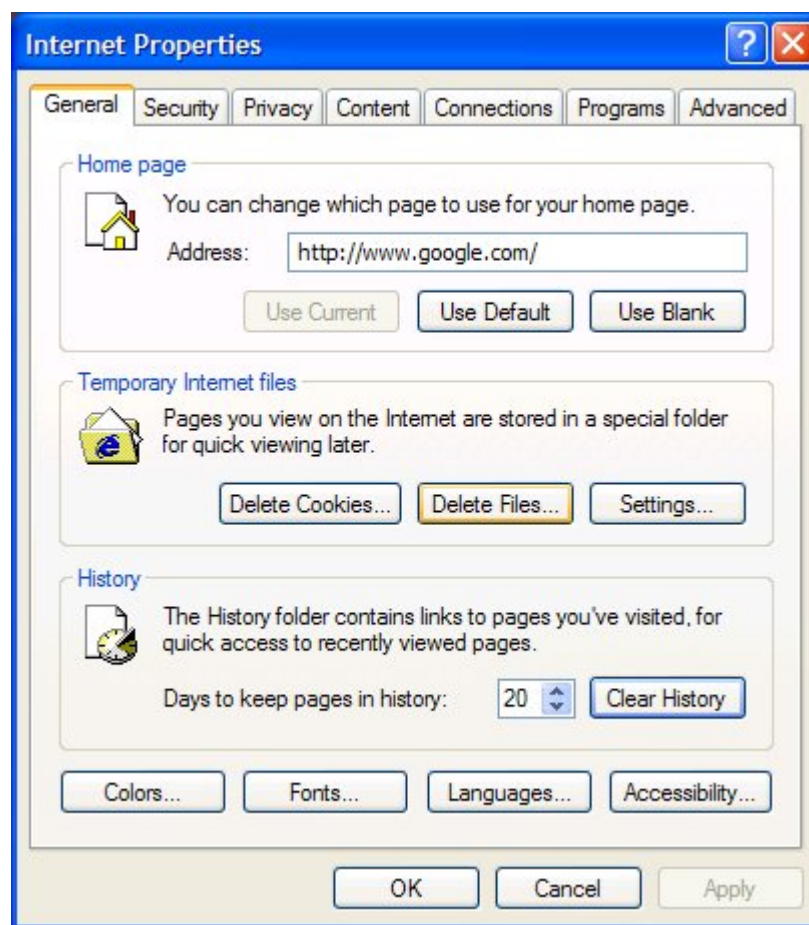

Figure 41: Internet Properties Dialog Box

Note: If you do not see the dialog box shown in Figure 41, you have clicked a shortcut to Internet Explorer. You **must** click the Internet Explorer icon in the Start menu.

2. When you see the window shown in Figure 41, click **Delete Files**. The **Delete Files** dialog shown in Figure 42: Delete Files Dialog appears.
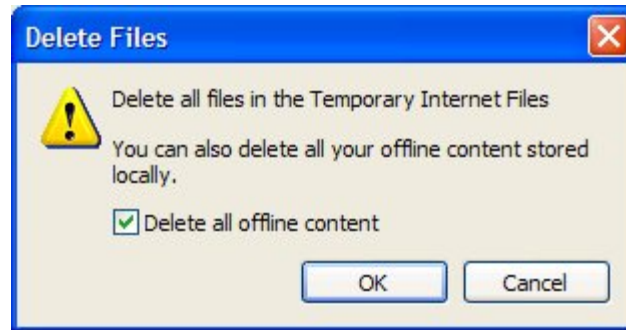
Figure 42: Delete Files Dialog

3. Select **Delete all offline content**, and then click **OK**.

4. Click **OK** to close the **Internet Properties** window.

The user can proceed with the installation of Nortel Reporting for Contact Center, as described in the *Reporting for Contact Center Setup and Operations Guide* (NN40040-302).

Launching Reporting for Contact Center from a Shortcut

If an Internet Explorer shortcut has been created to launch the Reporting for Contact Center Login page, you must ensure that Reporting for Contact Center is launched in a new window. If this is not done so, and only one Internet Explorer window is left open at the time of launching Reporting for Contact Center from the shortcut, Reporting for Contact Center will open in that window, even if it is a fixed sized window such as a Reporting for Contact Center Real Time screen.

Follow these steps to launch a Reporting for Contact Center shortcut in a new window:

1. Click **Start**, then right-click the **Internet Explorer** icon, and select **Internet Properties**. See Figure 36: Internet Properties Dialog Box.

   Note: If you do not see the dialog box shown in Figure 36, you have clicked a shortcut to Internet Explorer. You **must** click the Internet Explorer icon in the Start menu.

2. Click on the **Advanced** tab and scroll down to the setting, **Reuse windows for launching shortcuts**, see Figure 43: Advanced Tab Settings in Internet Properties dialog box. Make sure that the checkbox is cleared.
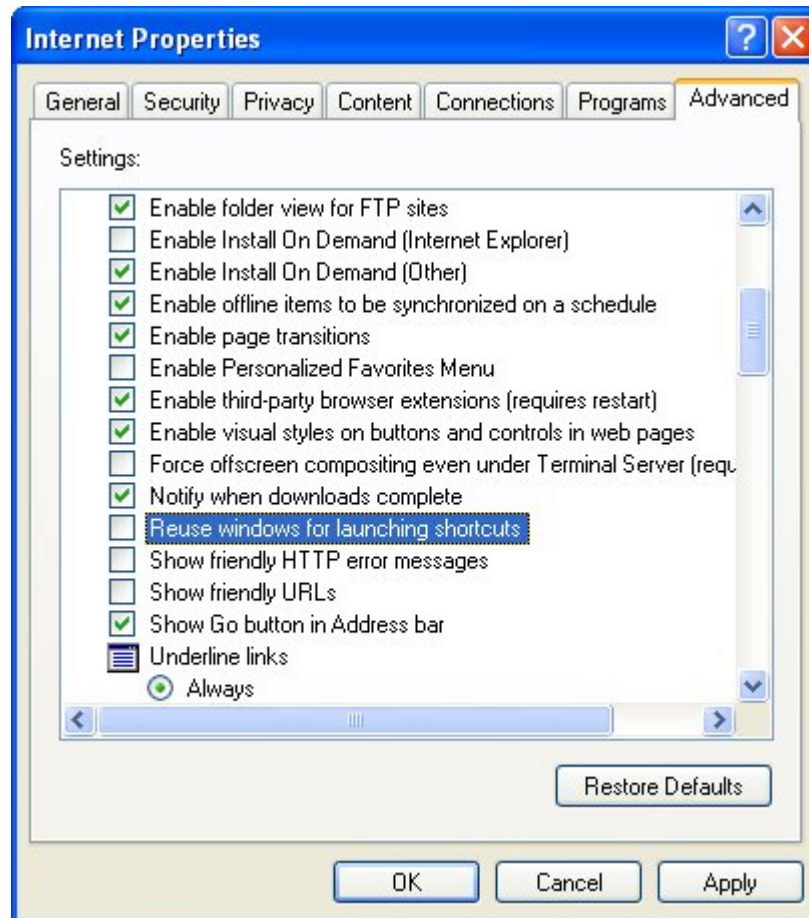
Figure 43: Advanced Tab Settings in Internet Properties dialog box

    3. Click **OK** to close the Internet Properties dialog box.

Error on Closing Group of Internet Explorer Windows

If similar taskbar buttons are grouped together on the Windows taskbar, the User may encounter problems when closing multiple instances of Internet Explorer programs simultaneously, including Reporting for Contact Center, using the Close Group option.

Note: To check that the Windows taskbar groups similar windows together, right-click on the taskbar and select **Properties**. The Taskbar and Start Menu Properties dialog box will open, see Figure 44: Taskbar Properties Dialog Box. Under Taskbar appearance, **Group similar taskbar buttons** will be checked.

Figure 44: Taskbar Properties Dialog Box

If the Reporting for Contact Center window and other Reports are grouped together in an Internet Explorer taskbar button, right-clicking the **Internet Explorer** taskbar button and selecting **Close Group**, as shown in Figure 45: Selecting Close Group option from Internet Explorer Programs taskbar button, may cause an Internet Explorer problem.
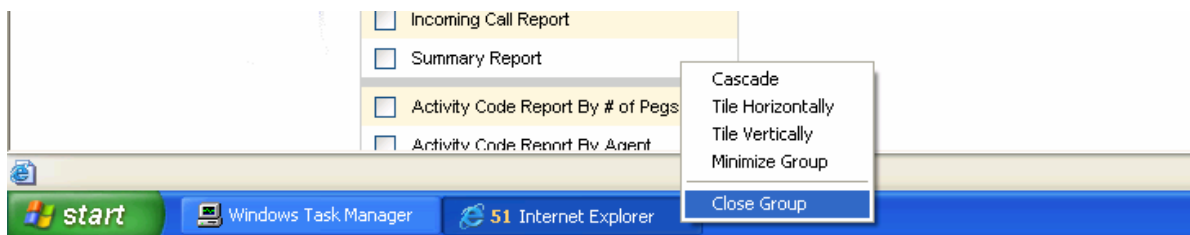

Figure 45: Selecting Close Group option from Internet Explorer Programs taskbar button

If Internet Explorer encounters problems an error message will be shown, as in Figure 46: Internet Explorer Close Group Error.

Figure 46: Internet Explorer Close Group Error

Click **Send Error Report** to close down all remaining open Internet Explorer windows. This will close Reporting for Contact Center and any Report Viewer windows that were open.

BCM and CCRS Troubleshooting   **8**

This section details how to troubleshoot problems that occur on the Business Communications Manager or with the Contact Center Reporting Server. A BCM will either be version 3.6, 3.7 or 4.0; the Contact Center Reporting Server is specific to BCM50 2.0.

Pinging the Contact Center

To test that the Contact Center is accessible from the Web Host PC over the network, ping to the Contact Center by the following:

1. Open a Command Prompt window by clicking **Start** > **Run**, type **cmd** and press **Enter**.

2. Type **Ping [BCM IP Address or Host Name]**.

3. Press **Enter**.

A successful ping will show statistics of request packets sent to the target host and packets received, as shown in Figure 47: Successful ping request to Web Host PC.

Figure 47: Successful ping request to Web Host PC

If the user does not receive request packets back from the Contact Center there is pinging failure, see the section Resolving pinging failure on your network, page 109.

Resolving pinging failure on your network

If there is pinging failure to the Contact Center, an error message will be seen in the Command Prompt window after attempting to ping to the Contact Center. The user should resolve this with the network administrator.

The error messages shown on attempting to ping the Contact Center can be one of the following:

- **Request timed out** - The IP address is valid, but there is no reply from it. The most likely cause is a network firewall or a third party software firewall program on the Web Host PC is blocking the ping request.

- **Unknown host <name>** or **Ping request could not find host <name>** - The computer name does not exist on the local area network. Ensure that the NetBIOS over TCP/IP is enabled.

- **Destination host unreachable** – The IP address is not on a local area network, and the default gateway can not access it. Either there is no default gateway set up, the address is wrong, or it is not functioning.

Checking XML from the Contact Center

A User may be required to retrieve XML data from the Contact Center for verification purposes, such as for:

- Connection to the Contact Center;

- Acceptance of the CCRS password by the Contact Center;

- Response from the Contact Center;

- Immediate view of any Contact Center errors, such as InvalidPassword, see Contact Center errors on page 113; or

- Incomplete or invalid XML. See Incomplete XML for symptoms of incomplete or invalid XML data from the Contact Center.

CCRS Test Page

To retrieve XML data from the Contact Center the User must execute the CCRS Test page, as follows:

1. In the browser Address bar enter the location: http://localhost/rcc/ccrstest.htm from the Web Host PC, or: http://[Web Host IP Address]/rcc/ccrstest.htm from a Client PC.

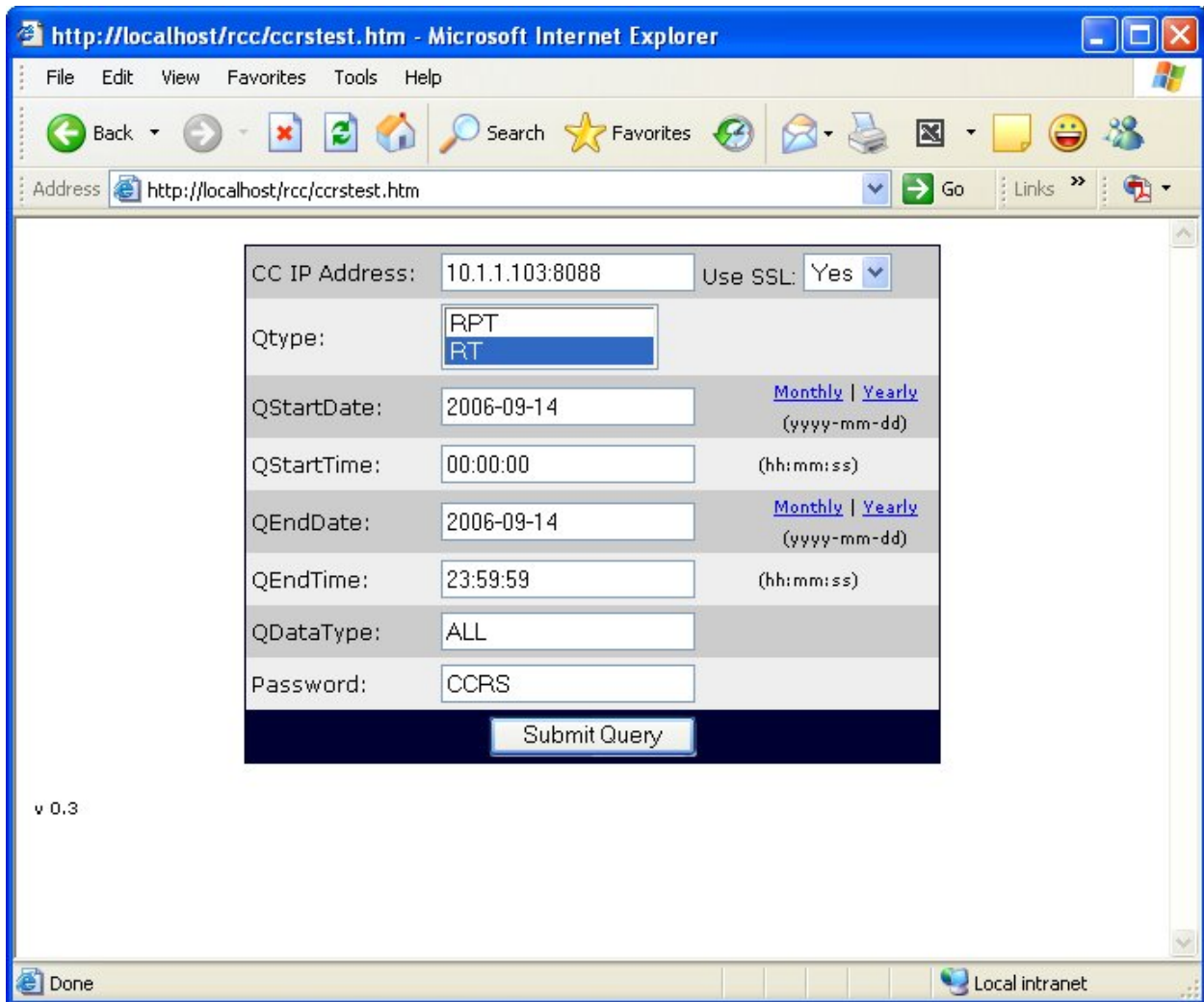2. The CCRS Test page opens up, see Figure 48: CCRS Test page.

Figure 48: CCRS Test page

3. For BCM 4.0: ensure that the port number to the Contact Center Reporting Server in the Contact Center is entered after the IP Address of the BCM 4.0 in the **CC IP Address** field, in the format [IP Address]:8088.

    For BCM50 2.0: in the **CC IP Address** field, ensure that the IP Address of the PC with the Contact Center Reporting Server installed is entered with port number **8088** following it. The format should be [IP Address]:8088.

4. Select **Yes** in the SSL field for a secure connection to the Contact Center.

5. To get Historical XML data from the Contact Center, select **RPT** from the Qtype field. To get Real Time data, select **RT** in the Qtype field.

6. Leave the date and time fields blank if requesting Real Time XML data from the Contact Center. If requesting Historical XML data, specify dates and times, making sure that the times entered are equal to or less than 3 hours. This is because the Contact Center returns XML data requests in no more than 3 hourly packets of data. An example of acceptable

date and time values is given in Table 5: A sample of acceptable date and times for requesting historical XML data as follows:

QStartDate	QStartTime	QEndDate	QEndTime
2006-09-14	12:00:00	2006-09-14	15:00:00

Table 5: A sample of acceptable date and times for requesting historical XML data

7.   Enter the CCRS password in the **CCRS** field.

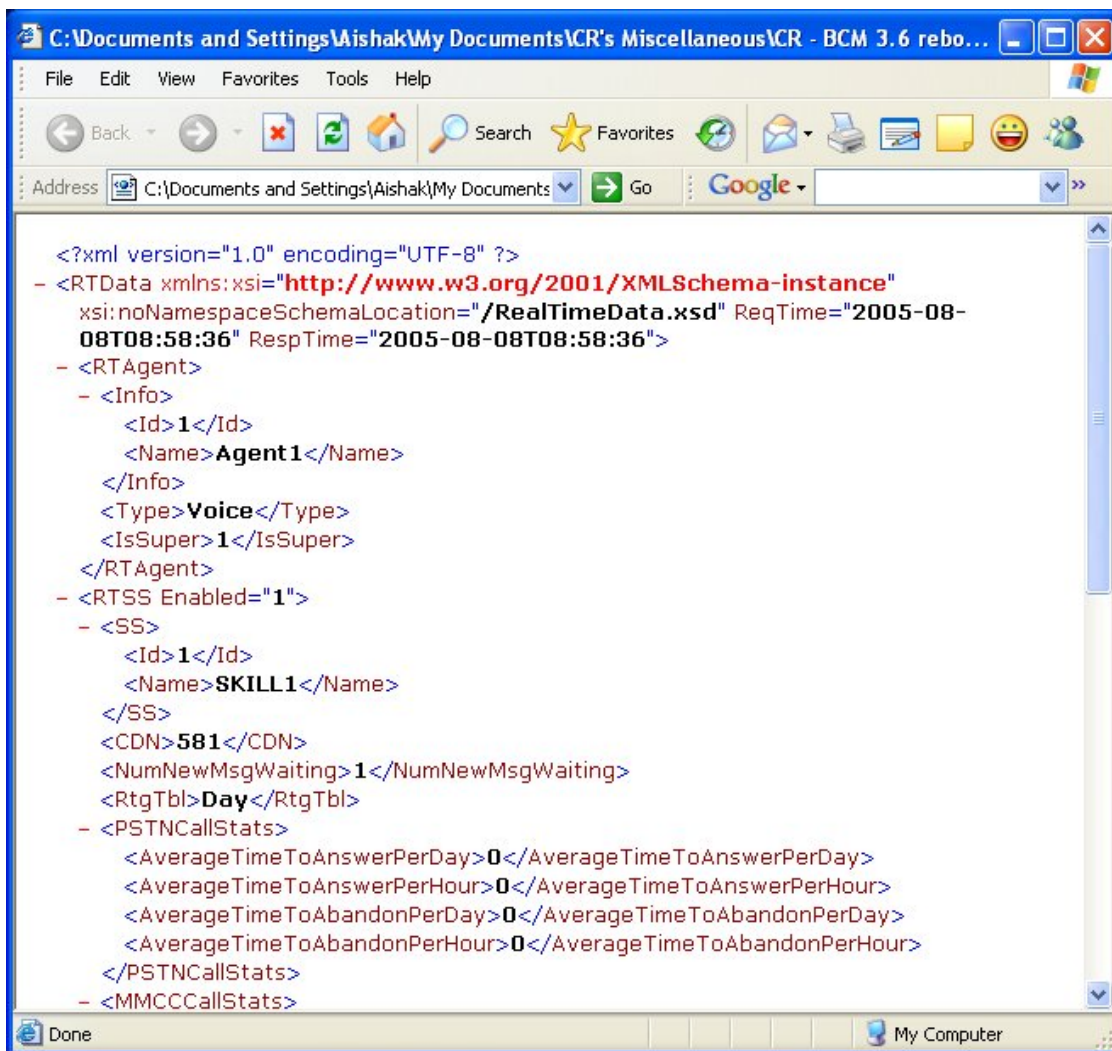8.   Click **Submit Query** to get XML data from the BCM. See Figure 49: XML data from the BCM.

Figure 49: XML data from the BCM

Contact Center errors

On executing the CCRS Test page (see CCRS Test Page on page 118 for instructions on executing the CCRS Test page) certain error conditions in the Contact Center may return a special message through the XML rather than in the Historical or Real Time data. If this occurs, a screen similar to Figure 50: InvalidPassword XML error in CCRS Test page will be seen as follows:
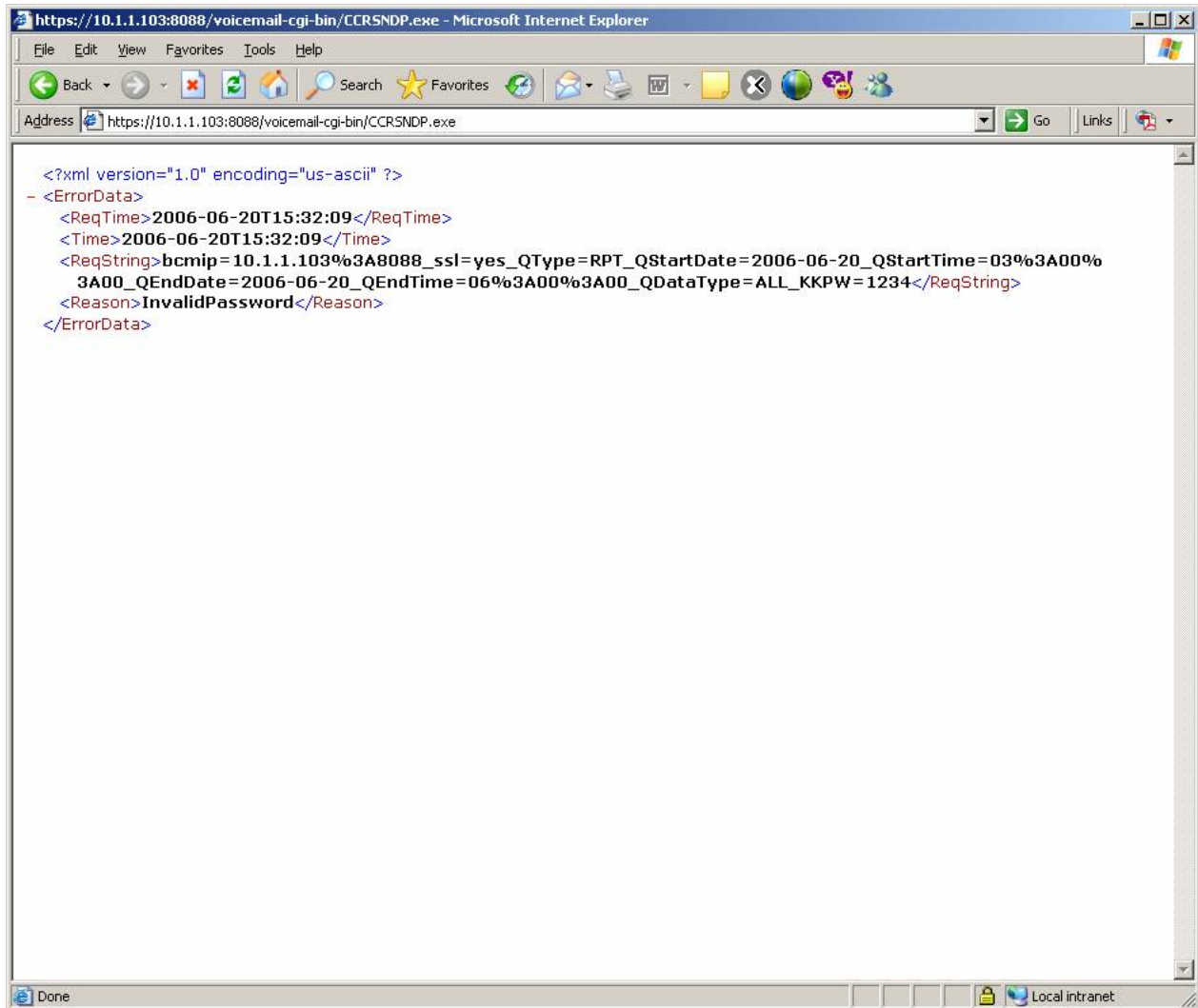

Figure 50: InvalidPassword XML error in CCRS Test page

The XML elements that appear in an XML error in the CCRS Test page are as follows:

- **ReqTime** is a standard field displaying the time that the request was sent to the Contact Center;

- **Time** is the current time in the Contact Center;

- **ReqString** is the information sent to the Contact Center by the CCRS Test page;

- **Reason** is the reason why the XML error occurred. In the XML error example in Figure 50: InvalidPassword XML error in CCRS Test page, the reason given is **InvalidPassword** indicating that the password used in the CCRS Test page is incorrect. A full list of the XML errors that can be displayed are as follows:

    o **InvalidRequest** – The request from the client application is not valid.

    o **VMServiceNotRunning** – The Voicemail service is not running on the BCM or Call Pilot.

    o **InvalidPassword** – The password used by the client application is not valid.

    o **NoKeyCode** – The keycode used to turn on the CCRS data stream is not present.

    o **NoCCKeyCode** – The keycode used to enable the Contact Center application is not present.

    o **CCRSDisabled** – The CCRS data stream is disabled.

    o **ServerBusy** – The server is too busy to handle the request (too many simultaneous users).

    o **CDNConflict** – There is a CDN conflict in the Skillset and CDN identified in the error message.

    o **CannotConnectToCC** – The CCRS cannot contact the Contact Center.

    o **CannotConnectToDB** – Could not connect to the database in the Contact Center.

    o **CCRefusedConnection** – Indicates that the Contact Center refused to register the AppServer.

    o **HistoricalReqOver3Hours** – The request from the client application is not valid (exceeds three hours).

    o **UnknownServerError** – None of the above.

Incomplete XML

The symptoms of incomplete XML are as follows:

- Reporting for Contact Center does not update historical data;

- An error message appears in Reporting for Contact Center if incomplete XML data is received by the Reporting for Contact Center Reporting Service, as shown in Figure 51: Incomplete XML data error message.

    Perform the following steps to bypass incomplete XML from the Contact Center:

    Note: The Reporting Service gets XML from the Contact Center on initial download of data from the Contact Center and then every 15 minutes by default.
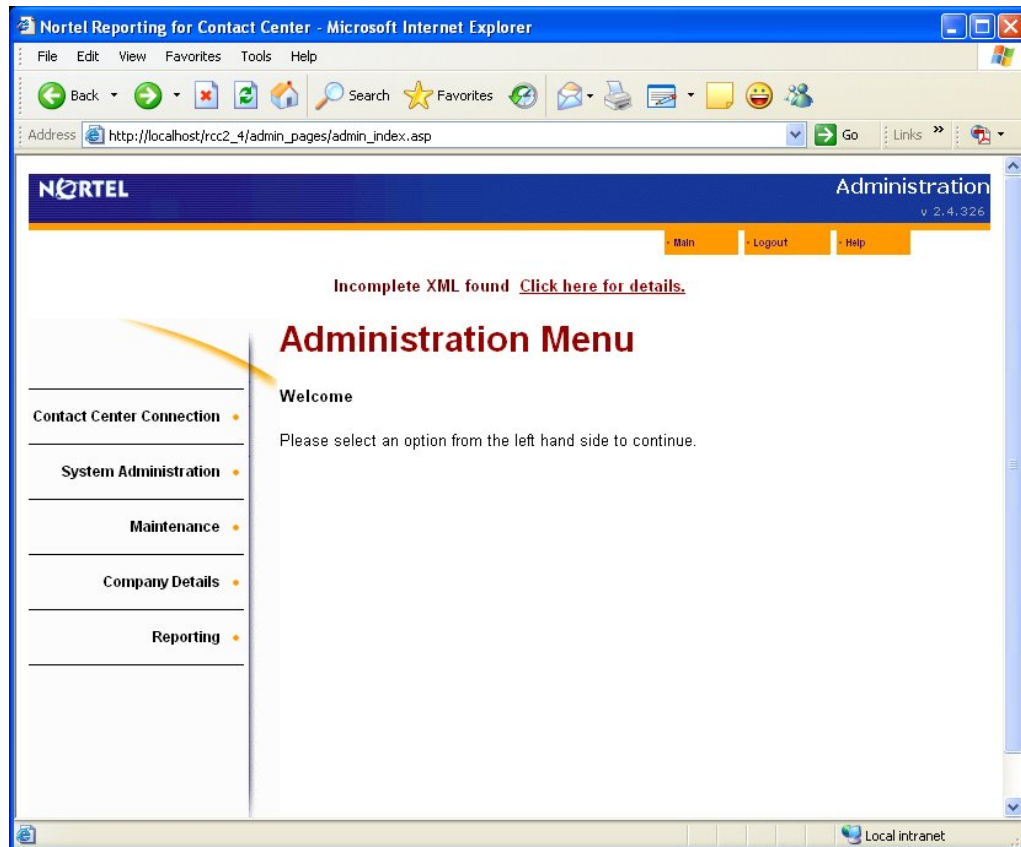
Figure 51: Incomplete XML data error message

1. Click the **Click here for details** link to view information about the incomplete XML data.

    Note: Only the Administrator can see the link **Click here for details**.

2. The Warning Incomplete Data Detected page appears, see Figure 52: Warning Incomplete Data detected page. Here the Administrator can see when the incomplete XML data occurred.
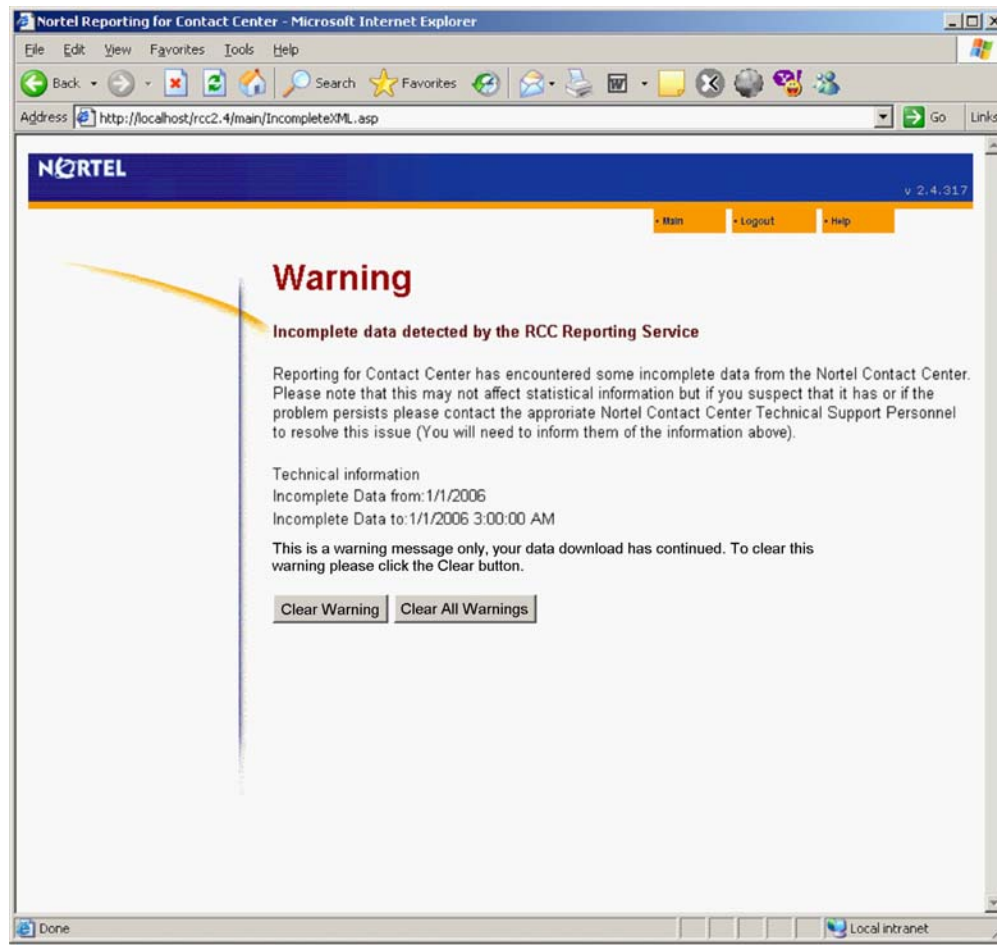
Figure 52: Warning Incomplete Data detected page

3. The Administrator can click **Clear Warning** to clear the warning message and process XML data from the Contact Center but bypassing the incomplete XML. Clicking **Clear All Warnings** will bypass any further warnings of incomplete XML data from an initial download from the Contact Center.

Note: An incomplete XML message serves as a warning only. Normally, incomplete XML warnings can be bypassed but further action is required if this occurs many times during the initial download, or repeatedly within a week.

If this is a re-occurring problem contact your distributor for first level support. If you are a distributor, contact Nortel Support. See Getting Help over the phone from a Nortel Solutions Center on page 12.

Invalid XML

An error message appears in Reporting for Contact Center if invalid XML data is received by the Reporting for Contact Center Reporting Service, as shown in Figure 53: Invalid XML data error message.

Perform the following steps to bypass invalid XML from the Contact Center:

Note: The Reporting Service gets XML from the Contact Center on initial download of data from the Contact Center and then every 15 minutes.
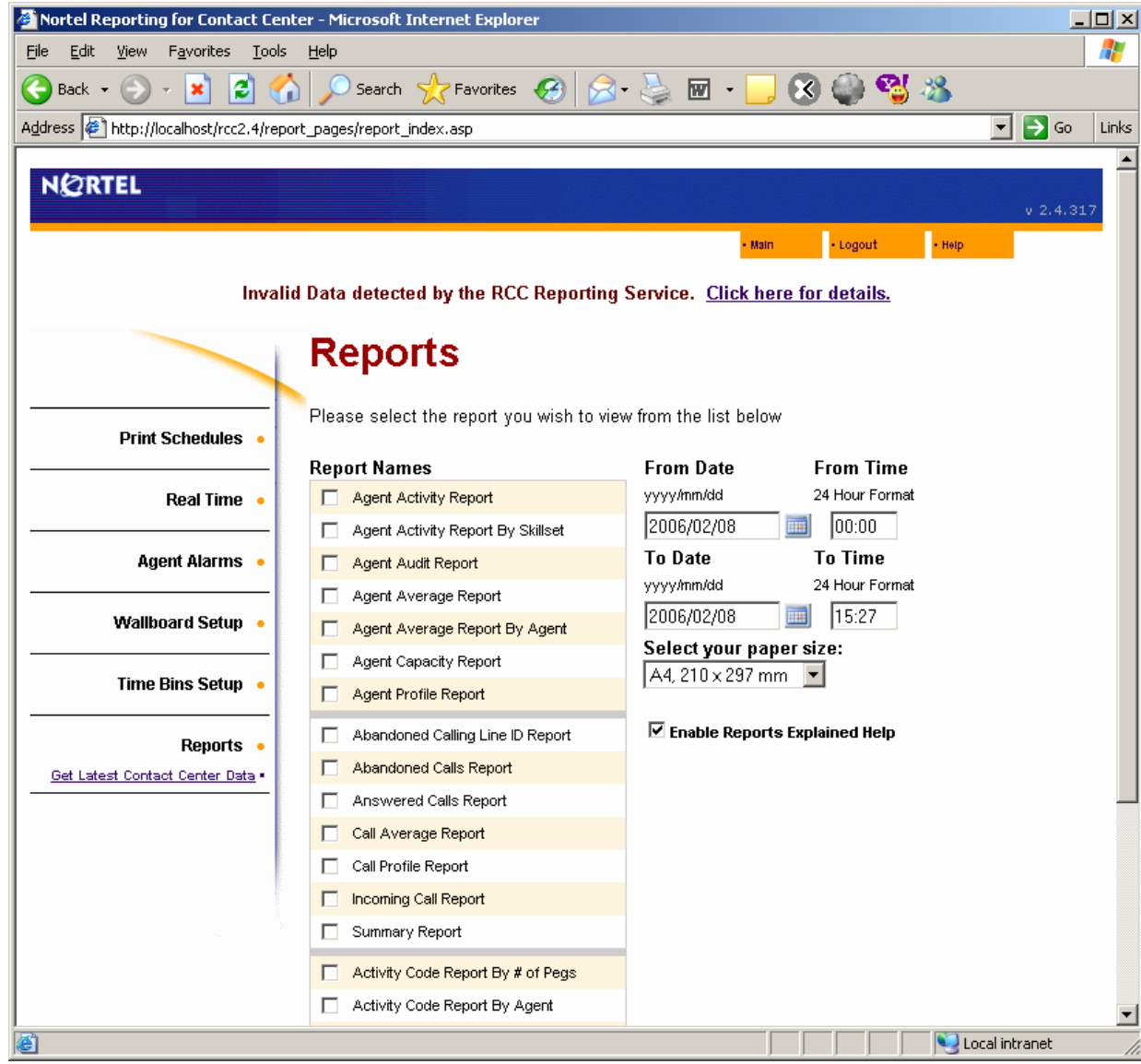

Figure 53: Invalid XML data error message

1. Click the **Click here for details** link to view information about the invalid XML data.

Note: Only the Administrator can see the link **Click here for details**.

2. The ERROR! Invalid Data Detected page appears, see Figure 54: ERROR! Invalid Data Detected page. Here the Administrator can see when the invalid chunk of XML data occurred.
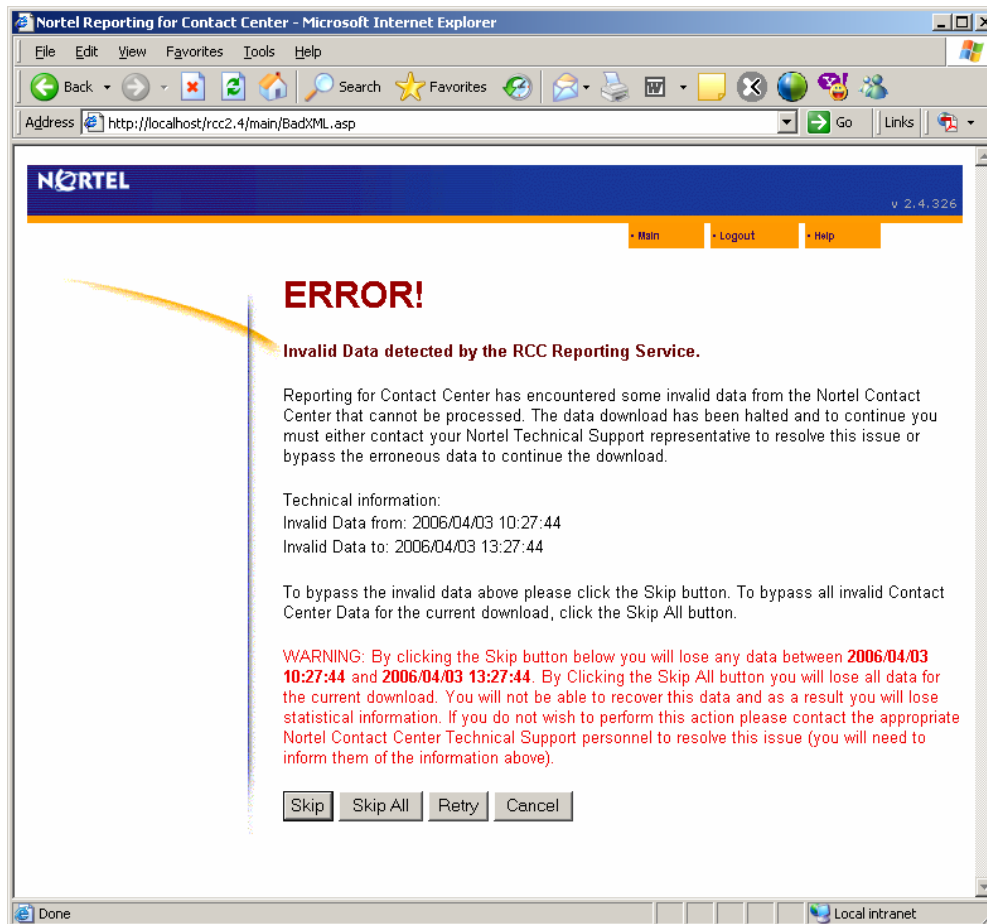
Figure 54: ERROR! Invalid Data Detected page

3. The Administrator can click **Skip** to process XML data from the Contact Center but bypassing the erroneous invalid chunk of XML. Clicking **Skip All** will bypass all invalid XML data from an initial download from the Contact Center. **Retry** will retry the same request again and **Cancel** will not process any XML and return the Administrator back to their previous page.

Incompatible XML

The voice mail version on CC is strongly linked to the RCC version. XML incompatibility occurs when the Reporting for Contact Center client application has a different schema version to that of the XML schema in the Contact Center (that is, incompatible version between the RCC receiving XML and the BCM sending XML). If this occurs, an incompatible XML schema message will be displayed on the Reporting for Contact Center browser interface, as shown in Figure 55: Incompatible schema version between RCC and XML.
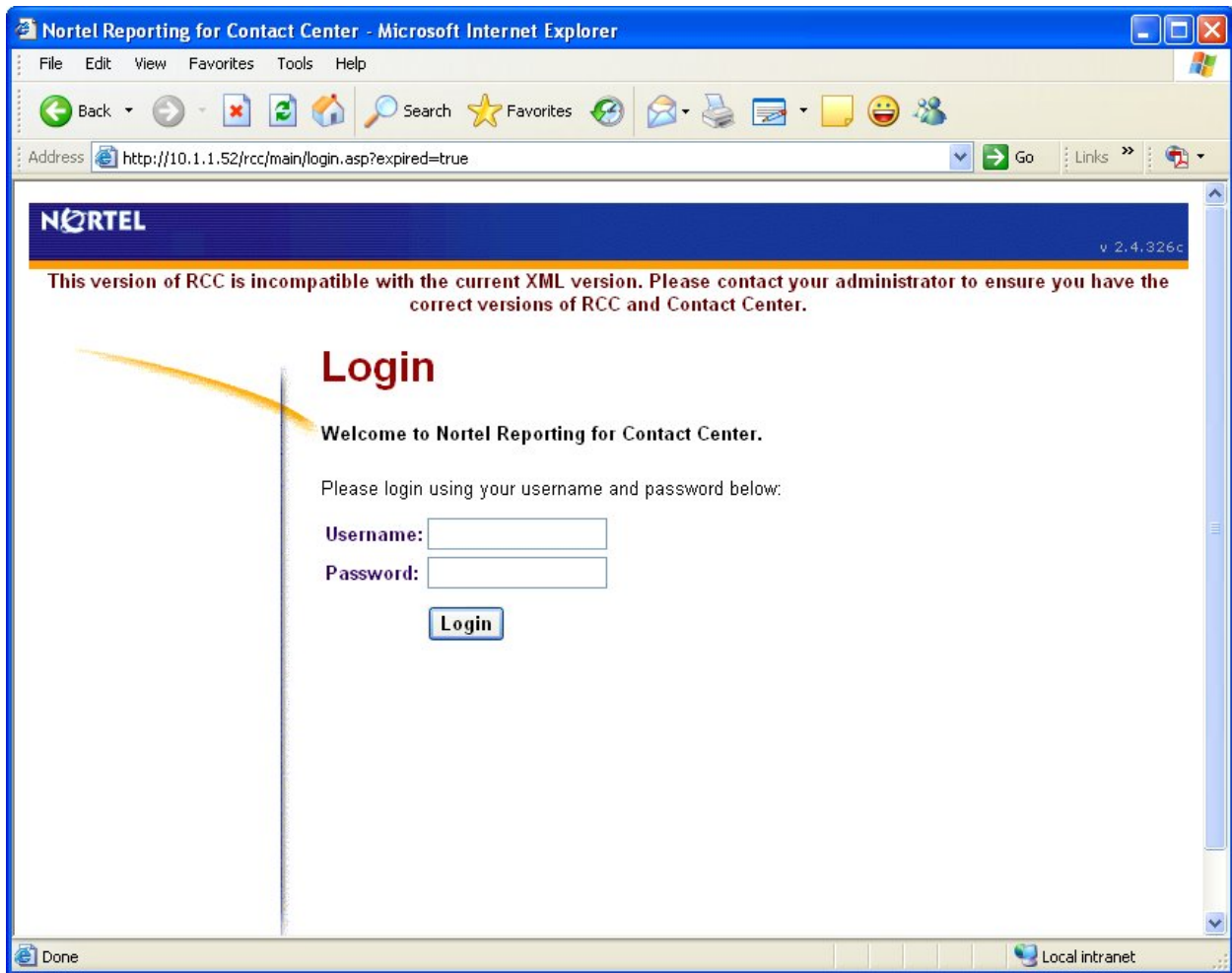
Figure 55: Incompatible schema version between RCC and XML error message

After a BCM upgrade, the Reporting for Contact Center client application version downloadable from the BCM will be compatible with the XML schema version on the Contact Center.

Once a new patch is available for download, the user must ensure that the version of Reporting for Contact Center is compatible with the schema version of the Contact Center. See the following section Voicemail patch and RCC.

Voicemail patch and RCC

When applying a voice mail patch, consider the RCC and voice mail in terms of schema. Refer to the release notes for both the voice mail patch and the RCC patch. The RCC patch release notes will include a voice mail patch dependency, and the voice mail patch release notes will include an RCC patch dependency.

For example, BCM370.125-RCC includes the following dependency:

- Voicemail v.37.01.04.22

BCM370.119-VM includes the following dependency:

- Required patches - BCM_370.125_RCC.61.209

You can safely apply both, and install this version of RCC, without an XML incompatibility problem.

Refer to Upgrade and Patch procedure for the BCM and Reporting for Contact Center on page 120, prior to making changes.

Upgrade and Patch procedure for the BCM and Reporting for Contact Center

!	Do not to use Reporting for Contact Center on a Web Host PC to avoid problems during an upgrade of the BCM, or when applying a voicemail patch or service update. Refer to the accompanying documentation on the correct procedure to be performed.

Before upgrading BCM (for example, from BCM 3.7 to BCM 4.0), just prior to the upgrade, uninstall RCC and re-boot the Web Host PC.

Voicemail Patch procedure

Before applying a voicemail patch, check the Release Notes for dependencies if you also need to install a later version of RCC. Uninstall RCC first, and then apply the voicemail patch.

Alternatively, if RCC does not need to be upgraded, however a voice mail patch does need to be applied, stop the RCCLauncher service on the RCC Web Host PC. Apply the voice mail patch.

For additional instructions on upgrading from BCM 3.6 or 3.7 to BCM 4.0, refer to the *Upgrade Guide* (N0060597). Further instructions on installing RCC after an upgrade are available in the *Reporting for Contact Center Setup and Operations Guide* (NN40040-302).

Installing CCRS

If you cannot establish a connection to the BCM50 2.0 system through the **Test Config** button in the Contact Center Reporting Server Configuration Utility on the CCRS PC (this can be accessed by clicking on **Start** > **All Programs** > **Nortel** > **Contact Center Reporting Server Config** – for further details refer to the *Reporting for Contact Center Setup and Operations Guide* (NN40040-302)) check the following:

- The Contact Center Reporting Server service should be stopped before testing the configuration of CCRS. This is done automatically during installations and upgrades.

- Contact Center Address – Ensure you are pointed to the appropriate BCM50 2.0 unit specified in the **Contact Center Address** field.

- Connection conflicts – Ensure you are the only CCRS AppServer PC trying to connect to the BCM50 2.0.

- Blocked Ports:
    - Ensure you have PC firewalls that allow the HTTP Listen Port of 8088, see Port Numbers used by Reporting for Contact Center.
    - Ensure that your network is not blocking traffic to the selected ports.

- Proper Ports – Ensure you have the proper ports configured
    - HTTP Listen Port 8088 (default - change if another service uses 8088)
    - Control Port 2222 (default - should not change)
    - Real-time Port 2223 (default- should not change)
    - Historical Port 2224 (default - should not change)

!	Ensure that RCC connects to the CCRS AppServer machine IP Address and not to the BCM50 2.0 IP Address.

Glossary 9

ActiveX Viewer ....   The technology used in Nortel Reporting for Contact Center to view the reports through a Web browser. ActiveX refers to a Microsoft technology, Viewer refers collectively to the report viewer where the report is displayed.

Ad Blocking...............   Software that eliminates advertising and other annoyances from Web pages. It detects banner ads by size (typically 60 pixels high) and by the URLs of major advertising sites where the images come from. Such utilities may also be able to eliminate cookies, referrers and animated GIF, which are time consuming to download.

Administrator ....   A Nortel Reporting for Contact Center User who has been awarded Administration rights. These Users can configure core elements of Nortel Reporting for Contact Center that regular Users can not. They can perform such actions as connecting the Web Host PC to the Contact Center, creating other Users, allocating Skillsets to Users, and administer the logging functionality of Reporting for Contact Center on the Web Host PC.

Agent..........................   Agents are people who handle calls in the Contact Center.

Anti Virus...................   Antivirus software identifies, thwarts, and eliminates computer viruses and other malicious software. Some antivirus software can reduce system performance. It may be necessary to disable virus protection when installing or updating software like the Reporting for Contact Center application to prevent improper installation or any installation.

Backup ....   Additional resources or duplicate copies of data on different storage media for emergency purposes.

BCM..........................   The Business Communications Manager (BCM), a converged voice and data solution, providing a choice of IP-enabled or pure-IP strategy. The applications in this system include telephony, unified messaging, multimedia call center, interactive voice response, IP routing and data services such as firewall and wireless.

Cache..........................   Pronounced "cash". A cache is used to speed up data transfer and may be either temporary or permanent. Memory and disk caches are in every computer to speed up instruction execution and data retrieval and updating. These temporary caches serve as staging areas, and their contents are constantly changing.

Browser caches and Internet caches store copies of Web pages retrieved

	by the user for some period of time in order to speed up retrieval the next time the same page is requested.
CC	Abbreviation for Contact Center.
CCRDB	Reference term for the Nortel Reporting for Contact Center Database.
CCRS	Contact Center Reporting Server, also known as the Application Server, or AppServer. This is the mechanism in the Contact Center that provides Nortel Reporting for Contact Center with the data and statistics that make up the reporting.
CCRS Test	Contact Center Reporting Server Test often referred to as the CCRS Test page is used to check the XML from the Contact Center.
CDN	Control Directory Number, a virtual directory often associated with a Skillset to act as a controller for incoming calls.
Client PC....................	A PC that has network access to the Web Host PC and so can access the Nortel Reporting for Contact Center Web pages through the Web Host PC. Multiple users can, therefore, use Nortel Reporting for Contact Center without having any software other than Internet Explorer installed on their PCs. (The Java Runtime Environment, if required, and the Crystal Reports ActiveX Viewer are automatically downloaded to the client the first time they are required.)
Create.bat	A Windows batch file. When executed, the batch file creates the required virtual directories of Nortel Reporting for Contact Center within IIS.
Database Corruption ..	An error within the data of the MySQL CCRDB database that manifests in numerous forms from incorrect data to a complete halt of operation.
dbfixutil......................	A utility within Nortel Reporting for Contact Center designed to repair database corruptions.
Firewall	A piece of hardware and/or software functioning in a networked environment to prevent forbidden communication in line with a security policy. Firewalls control traffic between different zones of trust, for example, between the Internet (with a zone of no trust) and an internal network (a zone with high trust).
Hard Wallboard..........	A stand-alone Contact Center wallboard that does not require installation on a PC.

Historical Reports ...... Collective name for the Reporting in Nortel Reporting for Contact
Center based on data that is collected from the Contact Center and stored
in the local CCRDB database.

HTTP.......................... HTTP is a request/response protocol between clients and servers. The
originating client, such as a Web browser, spider, or other end-user tool,
is referred to as the user agent. The destination server, which stores or
creates resources such as HTML files and images, is called the origin
server.

IIS.............................. Microsoft **I**nternet **I**nformation **S**ervices (sometimes, erroneously called
Server or *System*), is a set of Internet-based services for servers using
Microsoft Windows. The servers currently include FTP, SMTP, NNTP
and HTTP/HTTPS although HTTP is the only service used by Nortel
Reporting for Contact Center.

Internet Explorer .... Commonly called "IE". This is a Web browser that comes with
Microsoft Windows. All the administrative and user interactions with
Nortel Reporting for Contact Center are conducted through a series of
Web pages that are accessed through Internet Explorer browser sessions.

IP Address.................. (**I**nternet **P**rotocol address) The address of a device attached to an IP
network (TCP/IP network). Every client, server and network device
must have a unique IP address for each network connection (network
interface). Every IP packet contains a source IP address and a
destination IP address.

Java Runtime
Environment............... The Java Runtime Environment, or JRE, is a software bundle from Sun
Microsystems that allows a computer system to run a java application.
This bundle includes a Java Virtual Machine, and a set of standard class
libraries.

Logs or Logging......... Text files stored on the Web host PC that collect debug information and
XML from the Contact Center.

MySQL or MySQL4.. MySQL is a multithreaded, multi-user, SQL Database Management
System (DBMS).

mysqldump utility ...... The **mysqldump** client is a backup program. It can be used to dump a
database or a collection of databases for backup or for transferring the
data to another SQL server (not necessarily a MySQL server). The dump
contains SQL statements to create the table or populate it, or both.

Offline content .... Offline content are complete Web pages that have been stored on a
computer for browsing when the user is not connected to the Internet.

PC............................... A personal computer (PC) is usually a microcomputer whose price, size, and capabilities make it suitable for personal usage.

PDF .... **P**ortable **D**ocument **F**ormat file. The file format in Adobe's Acrobat document exchange technology. Acrobat/PDF has become the *de facto* standard for document publishing. On the Web, there are countless brochures, data sheets, white papers and technical manuals in the PDF format.

PING .... **P**acket **In**ternet **G**roper. An Internet utility used to determine whether a particular IP address is reachable online by sending out a packet and waiting for a response. Ping is used to test and debug a network as well as see if a user or server is online.

Popup Window
Blocking..................... A utility that prevents Web site popups from being displayed. The challenge with this software is to distinguish a valid popup from an advertisement. There are an enormous number of Web pages that launch legitimate browser windows to display additional information, and a popup is a small browser window.

Port Numbers .... A Software Port (usually just called a *port*) is a virtual data connection that can be used by programs to exchange data directly, instead of going through a file or other temporary storage location. The most common of these are TCP and UDP ports which are used to exchange data between computers on the Internet.

PrintCaller.................. An application service within Nortel Reporting for Contact Center whose primary purpose is to control and send to the printer, at the correct time, any scheduled Historical reports.

Proxy Server............... Also called a *proxy*. As the word implies, the proxy server "acts on behalf of" a client and server. This computer system or router breaks the connection between sender and receiver. Functioning as a relay between client and server, proxy servers are used to help prevent an attacker from invading the private network. Proxies are one of several tools used to build a firewall.

Raise a Case .... The process of raising a problem or question with Nortel Technical Support. A case is raised with Nortel in line with the user's normal support processes, that is, raising a case using the Internet, or contacting Nortel Contact Center to raise a case on the user's behalf.

RCC............................ Abbreviation for Nortel Reporting for Contact Center.

Real Time Screen....... Information is available that displays the current states of Skillset Calls and Agents. This information is refreshed approximately every 3 seconds. These displays are called the Real Time Screens. Information can also be displayed on hardware and software TCP/IP enabled wallboards, to provide Real Time information to the Contact Center Agents.

Remote Support .... This is a component of Webex Support Center. This provides a rich and dynamic environment for conducting real-time customer support sessions over the Web. Nortel Support can view, remotely control, and annotate a customer's applications or entire desktop to analyze and solve problems, thereby enhancing the effectiveness of traditional telephone-based customer support. For example, a customer can be shown how to use an application, or they can troubleshoot it directly on the customer's computer. Files can be transferred to and from a customer's computer to analyze them or to install updates or patches.

Report Viewer............ See *ActiveX Viewer* in this Glossary.

RPT .... Abbreviation for Report and typically refers to the Historical Report XML stream from the Contact Center.

RT .... **R**eal **T**ime; this refers to the Real Time XML stream from the Contact Center.

Script Blocking .... Typically refers to anti virus packages that block certain scripting functions, for example, blocking file access.

Services..................... Administrative tools as part of a management console that run in the background. These service applications are programs, routines, or processes that perform specific system functions to support other programs, particularly at a low (close to the hardware) level. Service applications provide features such as client/server applications, Web servers, database servers and other server-based applications to users, both locally and across the network. Some examples of services are the MySQL4 service, voicemail service, and World Wide Web Publishing service.

Skillset........................ Groups of Agents who perform a particular function, for instance, a contact center department, like human resources. Contact Center Skillsets answer and distribute calls to Agents as they become available. Other functionality include, holding calls for different contact center departments, such as sales and technical support.

Software Wallboard ... The full name is *ip***View** Software Wallboard, also referred to as *ip***View** SoftBoard. A Windows software application that provides a software-

based, IP-enabled wallboard on the PC desktop of Contact Center Agents. Audible alerts and histograms can be displayed to graphically show changes in Contact Center parameters. The *ip*__View__ SoftBoard is completely compatible with the *ip*__View__ Hardware Wallboard and can be configured within the Nortel Reporting for Contact Center application.

Sophos........................ A company that produces a range of security software including Sophos Client Firewall and Sophos Anti-Virus, which are aimed primarily at corporate environments. It is available for the latest versions of Microsoft Windows XP/2000. Sophos Client Firewall is a location-aware centrally managed firewall providing added protection from viruses and worms. The Client Firewall is tightly integrated with Sophos Anti-Virus. It stops known and unknown threats by closing all inactive ports (stopping many internet worms). The Client Firewall isolates infected computers from the rest of the network.

Statistics .... Data that is displayed in the Real Time screens or in the historical Reports of Reporting for Contact Center.

SUOG......................... Set Up and Operation Guide. This is a generic name for, and also forms part of the title of any document that provides the setting up, installation and operation of a Contact Center application or platform, such as the *Contact Center Set Up and Operation Guide*.

Task Manager............. A program that is part of the Operating System which provides information about the processes and programs (tasks) running on a computer, as well as the general status of the computer. It can also be used to terminate processes and programs, as well as change the processes' priority.

TCP/IP........................ Transmission Control Protocol/Internet Protocol: a protocol developed by the US Department of Defense for communications between computers. It has become the *de facto* standard for data transmission over networks, including the Internet. 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.

Trusted sites .... A security setting for a Web content zone containing Web sites that the user trusts not to damage their computer or data. An example of this is downloading the ActiveX Viewer from the Web Host PC to a client PC. The user will add the IP Address of the Web Host PC as a trusted site for the download of the ActiveX Viewer program.

URL............................ __U__niform __R__esource __L__ocator, the address that defines the route to a file on an Internet server (Web server, FTP server, mail server, and so on). URLs are typed into a Web browser to access Web pages and files, and

URLs are embedded within the pages themselves as hypertext links. The URL contains the protocol prefix, port number, domain name, subdirectory names and file name. If a port number is not stated in the address, port 80 is used as the default for HTTP traffic. An example URL is http://www.nortel.com/servsup/kb/

User .... A User is a person who has been allocated a Username and Password to allow them to use Nortel Reporting for Contact Center. Users can configure some elements of their usage of Nortel Reporting for Contact Center, but they do not have the same scope for configuration as an Administrator.

Virtual Directory .... A directory defined by name only in Internet Service Manager. All references to the virtual directory are redirected to the real directory, including Users accessing Reporting for Contact Center.

Wallboard .... A Nortel Reporting for Contact Center TCP/IP enabled hardware device that is used to display Real Time Contact Center statistics and messages to Agents and other contact center staff.

Web Host .... A designated PC on which Nortel Reporting for Contact Center software is installed. The Web Host PC communicates directly with the Contact Center to retrieve Real Time updates (for the Real Time screens and wallboards) and Historical information (for the reports).

XML .... E**x**tensible **M**arkup **L**anguage; defines all data content from the Contact Center.

References 10

1   *Reporting for Contact Center Setup and Operations Guide* (NN40040-302), Document Version 05.01, September 2006
2   *Reporting for Contact Center – Reports Explained* (NN40010-600), Document Version 03.01, September 2006
3   *Contact Center Set Up and Operation Guide* (NN40040-301), Document Version 01.01, September 2006
4   *ipView Software Wallboard Setup and Operation Guide* (NN40010-500), Document Version 03.01, September 2006
5   *Keycode Installation Guide* (NN40010-301), Document Version 02.01, September 2006
6   *Upgrade Guide* (N0060597), Document Version 01, June 2006

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