



> ACTIVITY REPORTER

Client Version

Installation / Startup Guide



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Change History

May 2007

1. New release for GA.

How to Use this Guide

Introduction

This guide is designed to allow an Administrator or User to set up and operate Activity Reporter for BCM50.

How this guide is organized

The *Activity Reporter Startup Guide* is organized as follows:

How to Use this Document	Provides a brief overview identifying the organization of this guide.
Introduction	Provides an overview of the conceptual organization of the Activity Reporter product.
Installation	Describes the minimum specification for the Personal Computer (PC) required that hosts the Nortel Activity Reporter software. It also describes how to install Nortel Activity Reporter.
Starting/Configuring Activity Reporter	Describes how to install and configure the Nortel Activity Reporter software.
Modifying Numbering Plan Information	Describes how to modify the Activity Reporter Numbering Plan to ensure the software operates correctly in your environment.
Using Activity Reporter	Describes how to launch and login to the Activity Reporter software. For information on how to use the software's features and generate reports consult the Activity Reporter User's Guide.
References	Lists documents referenced in this guide.

Introduction

The BCM Activity Reporter is a browser based reporting tool for Nortel BCM telephony metrics. It provides customers with a simple and easy way to examine the performance of their Nortel Business Communications Manager (BCM).

Activity Reporter provides reporting on the following telephony metrics:

- Telephone Call Activity
- Custom Call Routing Activity
- Voice Mailbox Activity
- Hunt Groups Activity

Activity Reporter enhances the functionality provided by the on-box Activity Reporter Basic application. Whereas the Activity Reporter Basic solution provides users with reporting information for the previous four days of activity, Activity Reporter can maintain and report on BCM telephony metrics for extended periods of activity (e.g. 1 week, 1 month, 1 year, etc.). The duration of the reporting period is limited only by the host computer disk space.

The BCM Activity Reporter is downloadable from your BCM and can be installed on a customer provided desktop computer.

Web-Based User Interface

All the administrative and user interactions with Activity Reporter are conducted through a series of Web pages that are accessed through Internet Explorer browser sessions.

The Web pages are hosted on a designated PC, referred to as the Activity Reporter Web Server, on which the Activity Reporter software is installed. The Activity Reporter Web Server communicates directly with the BCM to retrieve the historical telephony metrics (for the reports).

Other workstations that have network access to the Web Server PC can access these Web pages. Multiple users can, therefore, use Activity Reporter without having any software other than Internet Explorer installed on their PCs.

Language Support

The Activity Reporter can display its Web user interface pages in one of the following 8 languages: English, Canadian French, Latin American Spanish, Spanish, Dutch, French, German, and Italian.

Administrators and Users

Access to the software, like the BCM, is restricted to verified Activity Reporter user accounts. These accounts are managed by the application, not the BCM (i.e. accounts are created within the Activity Reporter software by the software administrator and not through the BCM element manager).

There are two types of Activity Reporter authorizations -- Administrators and Users. In addition to having access to all the features of Activity Reporter, Administrators can specify and change configuration settings within the software.

For security purposes and to maintain system stability, only operators with Administrator capabilities can change the system configuration settings.

While Users cannot modify the core settings of Activity Reporter, they can specify and change some personal preferences and basic reporting parameters.

Historical Database

Historical BCM telephone metrics information is stored in a standard SQLite database. If operators have reporting requirements that are not available through Activity Reporter, they can analyze the data using third-party reporting packages.

System Software

Activity Reporter operates on the BCM50 platforms. The BCM50 must be configured to permit retrieval of CDR, CCR, Hunt Group and Voice Mail telephony metrics via its CDR Pull feature. Additionally an Activity Reporter key code and BCM account with either CDR or administrative privileges is also required. Please consult your BCM documentation for instructions on how to configure its CDR feature, create a BCM account, and obtain an Activity Reporter key code.

The Activity Reporter Web Server PC communicates directly with the BCM via an IP connection to retrieve telephony metrics.

Users on other PCs do not need to connect to the BCM as they do not perform the telephony metrics data collection. Only the Activity Reporter Web Server PC needs to communicate with the BCM.



One PC on your network should be designated as the Activity Reporter Web Server. Install the Activity Reporter application software onto the designated PC only.

All other network PCs from which Users access the Activity Reporter user interface must be equipped with Internet Explorer. No other software is required on these PCs.

PC Requirements

The Activity Reporter Web Server computer must be connected to your BCM via either a direct connection or your corporate network.

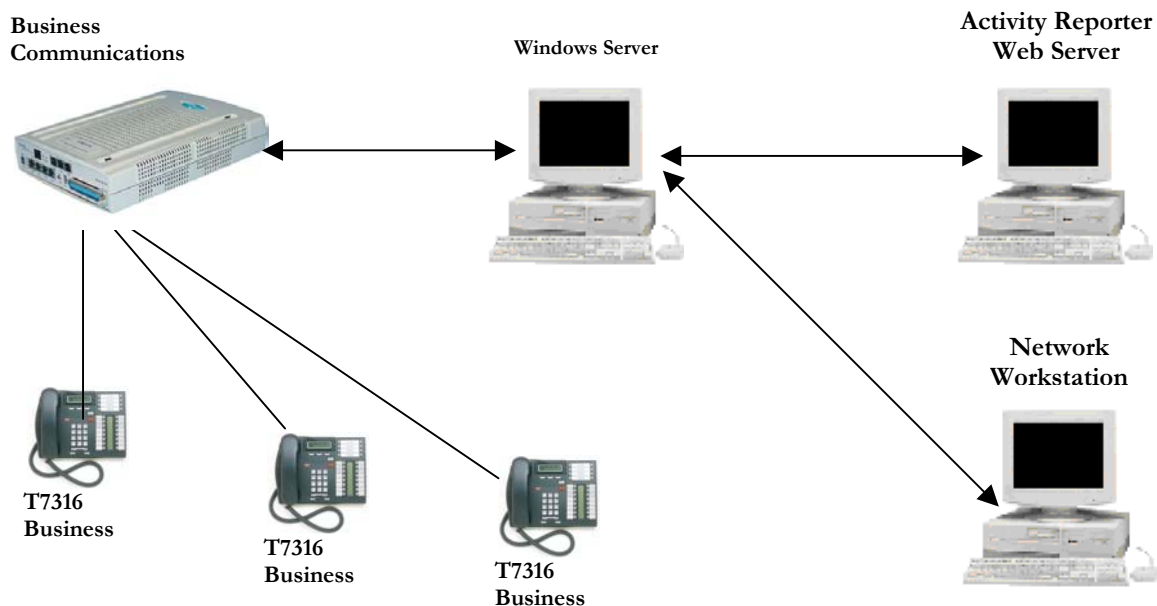
Activity Reporter can operate on both stand-alone computers and network environments. The minimum recommended requirements for the PC designated as the Activity Reporter Web Server are as follows:

Web Server Recommended Minimum PC Specification

- **Computer** Pentium III or greater
- **Memory** 512 MB
- **Disk Space** 100 MB or greater (depending on call volumes)
- **Network** Connectivity to a BCM50 with a valid Activity Reporter key code
- **Operating System** Windows XP Professional (SP2 or greater)
Windows 2000 Professional (SP4 or greater)
Windows 2003 Server
Windows Vista
- **Browser** Internet Explorer 6.x (or later)

BCM Connectivity

The following configuration diagram illustrates a typical Activity Reporter implementation.



Notes:

Both the BCM and the workstation hosting Activity Reporter must be connected to the same LAN/WAN. The lines between BCM and the workstation are provided to illustrate the presence of a network connection.

Activity Reporter is a multi-user application; however the Activity Reporter software must only be installed on one computer (Activity Reporter Web Server). As shown in the diagram above, additional users can access Activity Reporter reports from any other personal computer on your LAN/WAN using Internet Explorer. For details on multi-user access, see Using Activity Reporter on Additional Computers in the Activity Reporter User Guide.



Warning: Activity Reporter does not utilize the Secure Socket Layer (SSL) protocol when transmitting data (i.e. web pages) between the Activity Web Server and browsers operating on other computers.

Activity Reporter Keycode Requirements

Activity Reporter can only retrieve data from one BCM. To generate Activity Reporter reports you must enable the Activity Reporter Keycode on the BCM. Contact your vendor if you want to purchase Activity Reporter. For information on enabling a keycode refer to the *Keycode Installation Guide*.

Installation

Introduction

This chapter describes the installation prerequisites and the procedure for installing the Activity Reporter software on the Windows Personal Computer that is designated as the Activity Reporter Web Server PC. The Web Server PC communicates with the Nortel BCM via an IP connection. The Web Server PC also stores the telephony metrics data in an SQL database.

Users of other network PCs can use Internet Explorer to access the Activity Reporter web site on the Web Server PC. From the web site, users can access the software features and can generate telephony metrics reports.

Upgrading a Previous Version of Activity Reporter

This is the initial version of Activity Reporter. As such, upgrading from a previous version is not required.

Installation Prerequisites

Before you install the Activity Reporter software you must:

- Ensure the computer where the software is to be installed can connect to your BCM via Internet Explorer
- Ensure the CDR Pull Feature on your BCM has been activated
- Ensure the Include Metrics File option on the Element Manager's Call Detail Recording - Data Transfer tab has been checked

Verifying Activity Reporter Web Server can connect to the BCM

Follow the steps in this section to verify the Activity Reporter Web Server can connect to the BCM.

1. Start Internet Explorer and connect to the Business Communications Manager. In the browser Address Bar, enter the IP Address of the Business Communications Manager in the following format: <https://10.10.10.1/>

Remember to substitute the IP Address of *your* Business Communications Manager for the 10.10.10.1 shown in the example.

2. The BCM Authentication dialog should now be visible on your screen.

You do not need to login at this point, as this is simply a test for connectivity between your computer and the BCM.



Figure 1: BCM Internet Explore Login Dialog Box

Please note the appearance of this dialog may vary depending on the version of Internet Explorer you are using. You have now successfully connected to your BCM via Internet Explorer.

Please note if the above dialog does not appear then your BCM is not accessible from the Activity Reporter Web Server computer. Please contact your network administrator for assistance.

Activating the BCM CDR Pull Feature

Follow the steps in this section to activate the BCM CDR Pull Feature.

1. Launch the Nortel Business Element Manager application. Please note the Nortel Business Element Manager application can be downloaded from the BCM. For information on how to download this application please consult the BCM on-line documentation.
2. The Nortel Business Element Manager main window should now be visible on your screen.

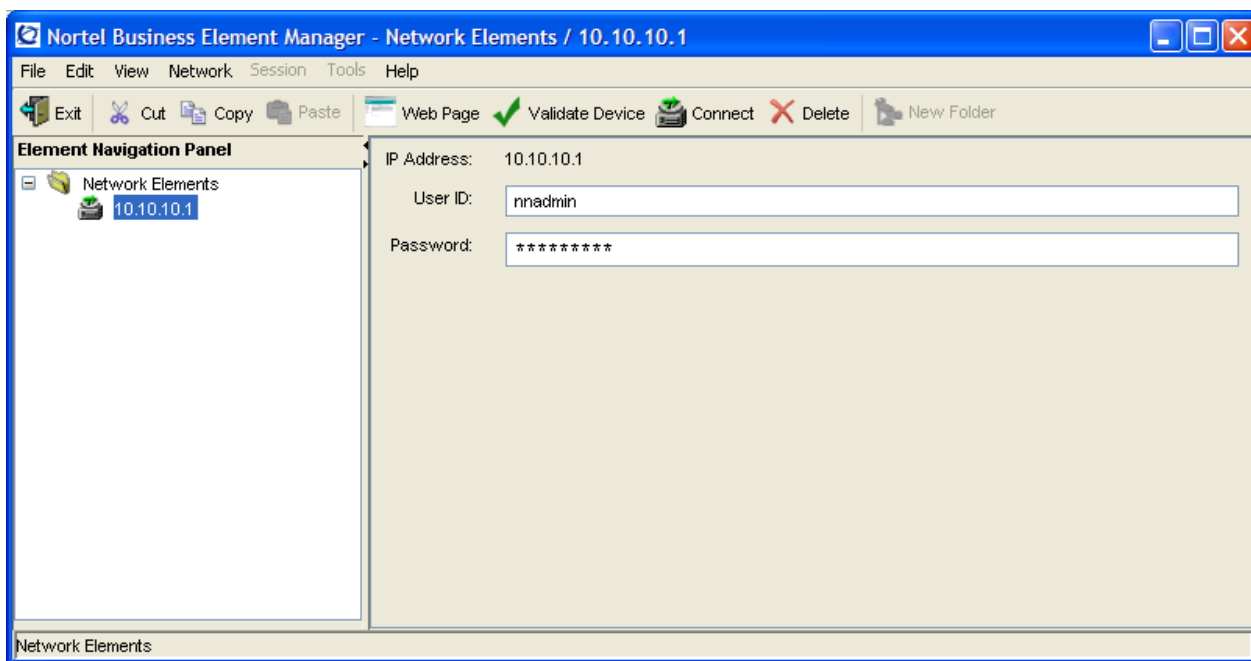


Figure 2: Element Manager Login Screen

Remember to substitute the IP Address of *your* Business Communications Manager for the 10.10.10.1 shown in the example.

Enter the username **nnadmin** (or other BCM User ID with BCM Administrator privileges) and password in the BCM Login window and then press the Connect button. If you are using nnadmin, consult your network administrator for the password, as this would have been changed from the default password of **PlsChgMe!** on the first installation of Nortel Element Manager.

3. Click and expand the **Telephony** folder on the **Configuration** tab.

- Now click the Telephony folder's **Call Detail Recording** item. The Call Detail Recording configuration settings should now be visible.

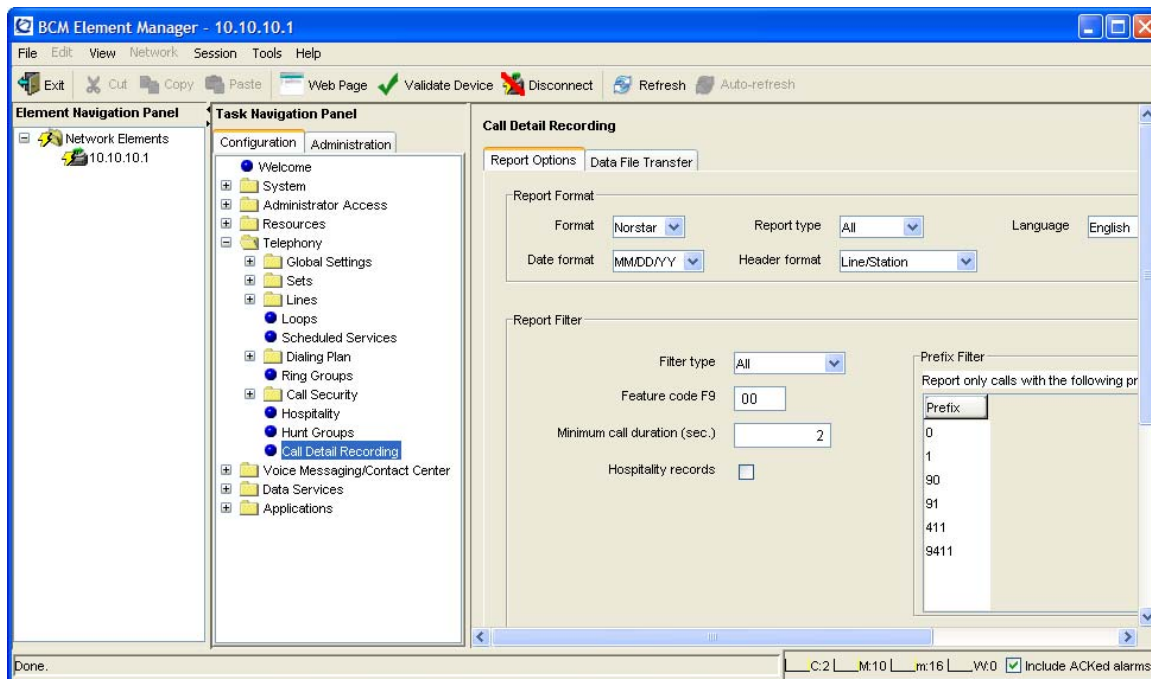


Figure 3: BCM Call Detail Recording Report Options

- Click the Call Detail Recording's **Data File Transfer** tab and then change the **Transfer Type** drop down list to **Pull**. An example of this configuration is shown below.

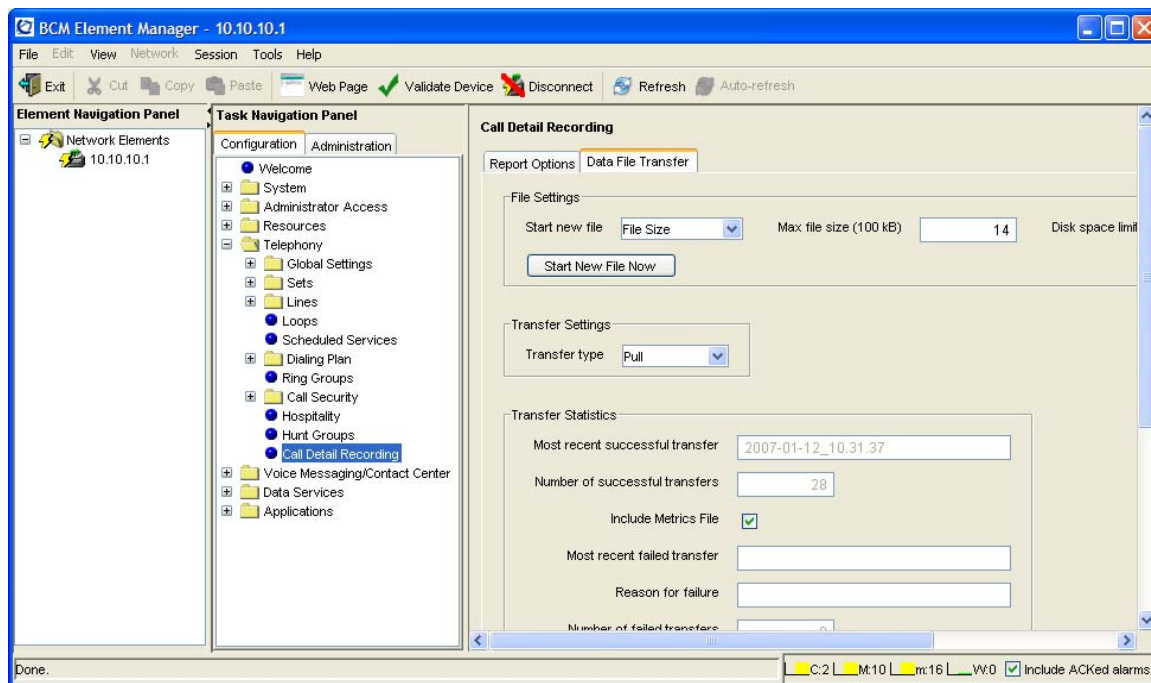


Figure 4: BCM Call Detail Recording Data File Transfer Options

Please note to capture and report on Custom Call Routing (CCR), Hunt Group and Voice Mail metrics the **Include Metrics File** option located in the **Transfer Statistics** settings box must also be checked.

You have now successfully configured your BCM CDR Pull feature. Exit the Element Manager software.

Installing Activity Reporter

Before attempting to install the software please refer to the Activity Reporter [PC Requirements](#) section of this guide to make sure that your environment meets the minimum hardware specifications.



You **must** have Administrator rights for the installation to be successful. If you do not have Administrator rights for the PC on which you wish to install Activity Reporter, the installation is halted and you are requested to log out and log back in with Administrator rights.

The Activity Reporter Web Server PC IP address can be either static or dynamically assigned by the corporate LAN (i.e. utilize DHCP).

Follow the steps in this section to perform an Activity Reporter installation.

3. Close any Windows programs that are open.
4. Start Internet Explorer and connect to the Business Communications Manager. In the browser Address Bar, enter the IP Address of the Business Communications Manager in the following format: <https://10.10.10.1/>

Remember to substitute the IP Address of *your* Business Communications Manager for the 10.10.10.1 shown in the example.

Enter the username **nnadmin** and password in the BCM Login window. Consult your network administrator for the password, as this would have been changed from the default password of **PlsChgMe!** on the first installation of Nortel Element Manager. The Welcome to BCM page appears.

5. Click **Business Management**.
The Business Management page appears.
6. From the Reporter Applications list, click **Activity Reporter**. Information about the Activity Reporter application appears. See Figure 5: Download of Activity Reporter Software.



Figure 5: Download of Activity Reporter Software

7. Click **Download Activity Reporter** on the right side of the window. The **File Download** dialog box appears.
8. Select either **Run** to run this program from its current location, or **Save** to save this program to disk.

If you select **Save**, the Activity Reporter executable file is downloaded to your PC, go to the location where you downloaded the file. Double-click the file to run it.

9. Once the files are downloaded and the installation program is executed the Choose Language dialog box will be displayed. Use this dialog to select the default language for your installation of Activity Reporter.

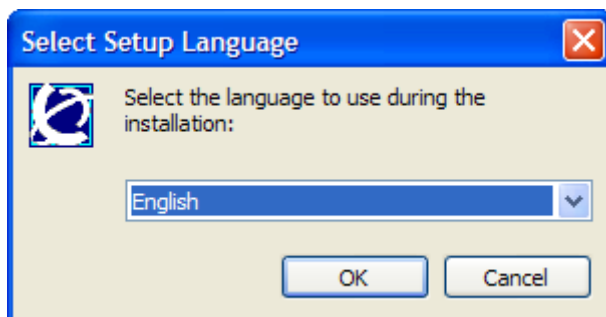


Figure 6: Language Selection Dialog

Note: Each User of Activity Reporter will utilize the selected language setting.

This dialog box allows you to define the language for the Activity Reporter user interface. Click on the down arrow to the right of the dropdown box to display a list of languages. When you have selected your language, click **OK**. To stop the installation, click **Cancel**.

10. The following Welcome window should now appear on your screen.



Figure 7: Installation Wizard Start Dialog Box

Press the **Next** button to proceed with the installation or the **Cancel** button to abort the installation.

11. The Installation program will now display the License Agreement dialog box.

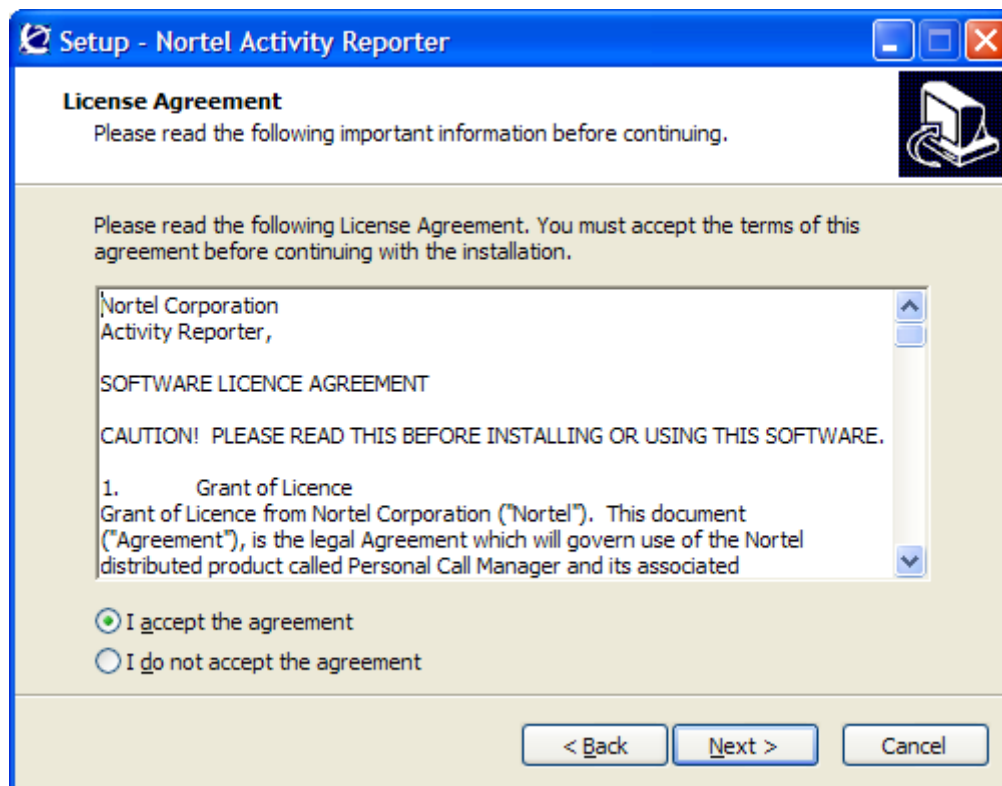


Figure 8: License Agreement Dialog Box

Please carefully read the license agreement before proceeding. To proceed with the installation select the **I accept the agreement** option and then press the **Next** button. To cancel the installation, press the **Cancel** button. To return to the Welcome dialog box, click **Back**.

12. The Installation program will now display the **Information** dialog box. This dialog box displays additional information about Activity Reporter application. Please carefully read any information that is presented before proceeding.

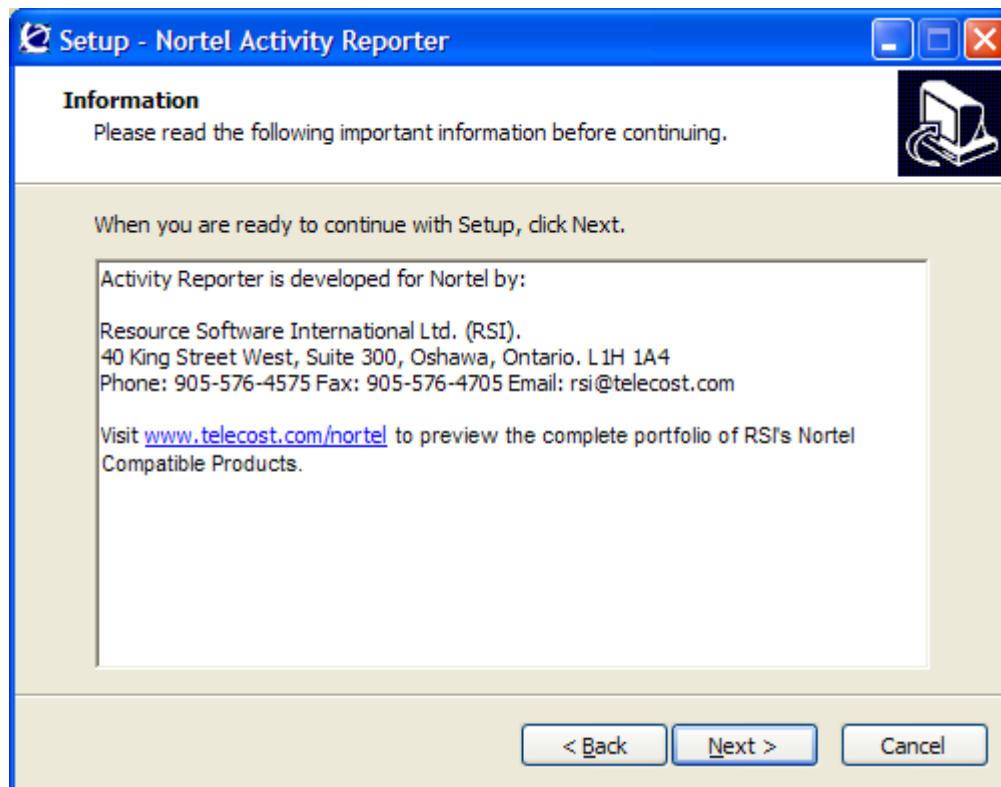


Figure 9: Installation Information Dialog Box

Press the **Next** button to proceed with the installation or the **Cancel** button to abort the installation.

13. The installation program will now display the **Specify Destination Location** dialog box. Use this dialog box to specify where you would like Activity Reporter application to be installed. Nortel recommends you install the software in the location specified in the dialog box (c:\Program Files\Nortel\Activity Reporter)

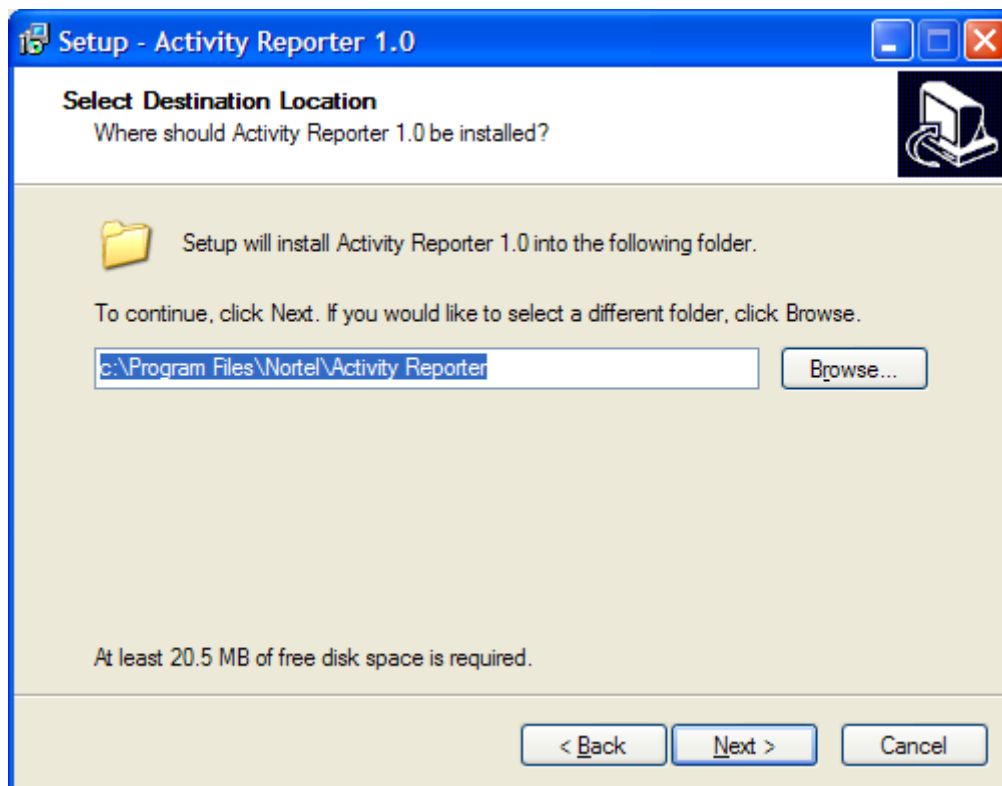


Figure 10: Choose Destination Location Dialog Box

Use the Browse button to select an alternative installation destination. Once the desired destination has been selected press the **Next** button to continue or the **Cancel** button to abort the installation.

14. The installation program will now prompt you to specify where you would like the Activity Reporter start menu short-cuts to be installed. Nortel recommends you install the short-cuts in the location specified in the dialog box (Nortel\Activity Reporter).

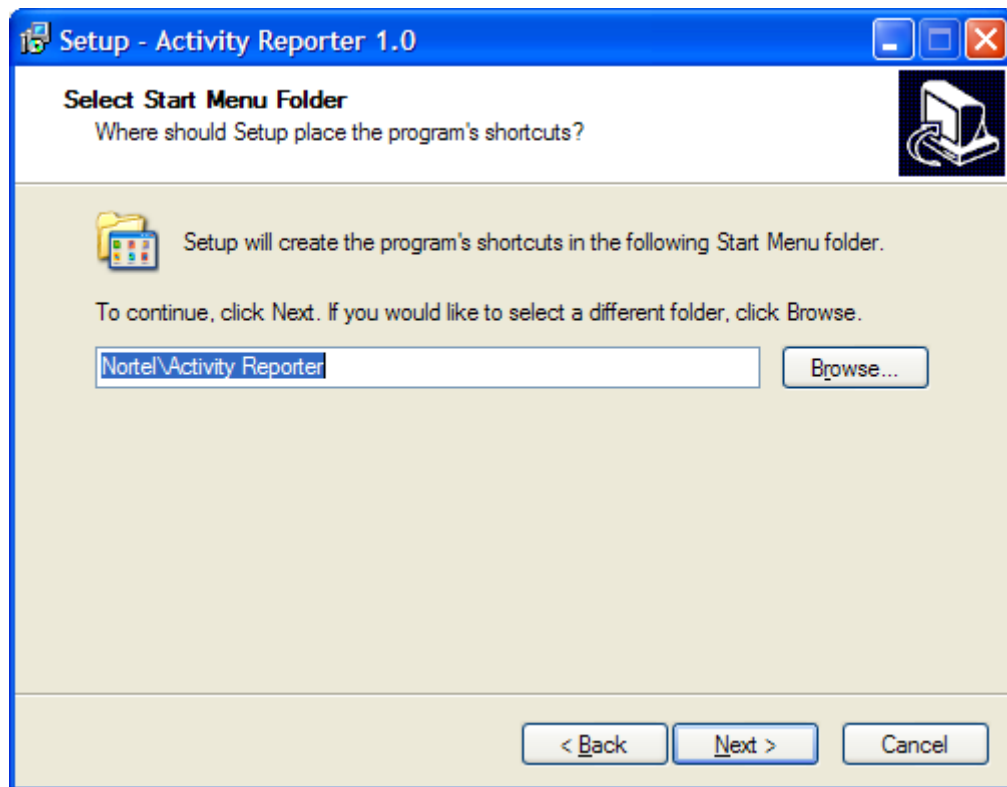


Figure 11: Select Start Menu Folder Dialog Box

To change the short-cut location press the **Browse** button. Once the desired location has been selected press the **Next** button to continue or the **Cancel** button to abort the installation.

15. Next the Installation program will present the **Select Additional Tasks** dialog box.

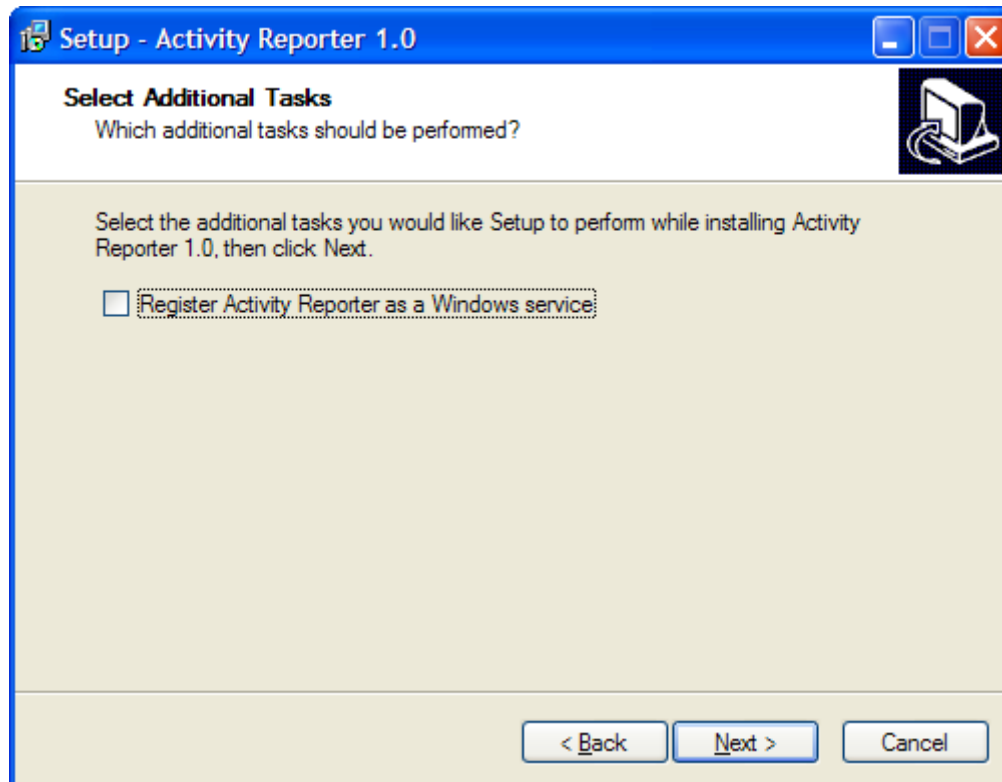


Figure 12: Select Additional Tasks Dialog Box

Checking the **Register Activity Reporter as a Windows service** option will configure the Activity Reporter Web server to automatically start each time the computer is booted. Additionally, users will be able access the software from their desktop even if the Activity Reporter Web Server computer is not logged in.

Press the **Next** button to proceed with the installation or the **Cancel** button to abort the installation.

16. The **Ready to Install** dialog box should now be visible on your screen.

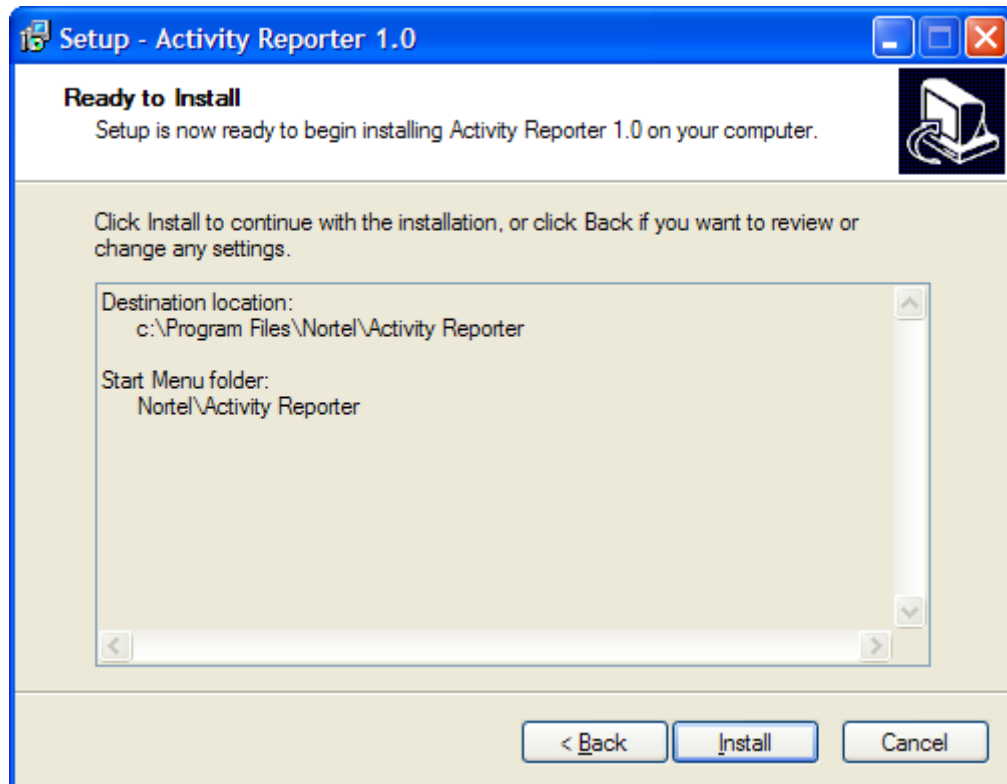


Figure 13: Ready to Install Dialog Box

Verify the installation settings you have chosen are correct (i.e. Destination Location and Start Menu folder). Press the **Back** button to modify your settings, press the **Install** button to install the software or press **Cancel** button to abort the installation.

17. After Pressing the **Install** button the following dialog box highlighting the progress of the installation will be presented.

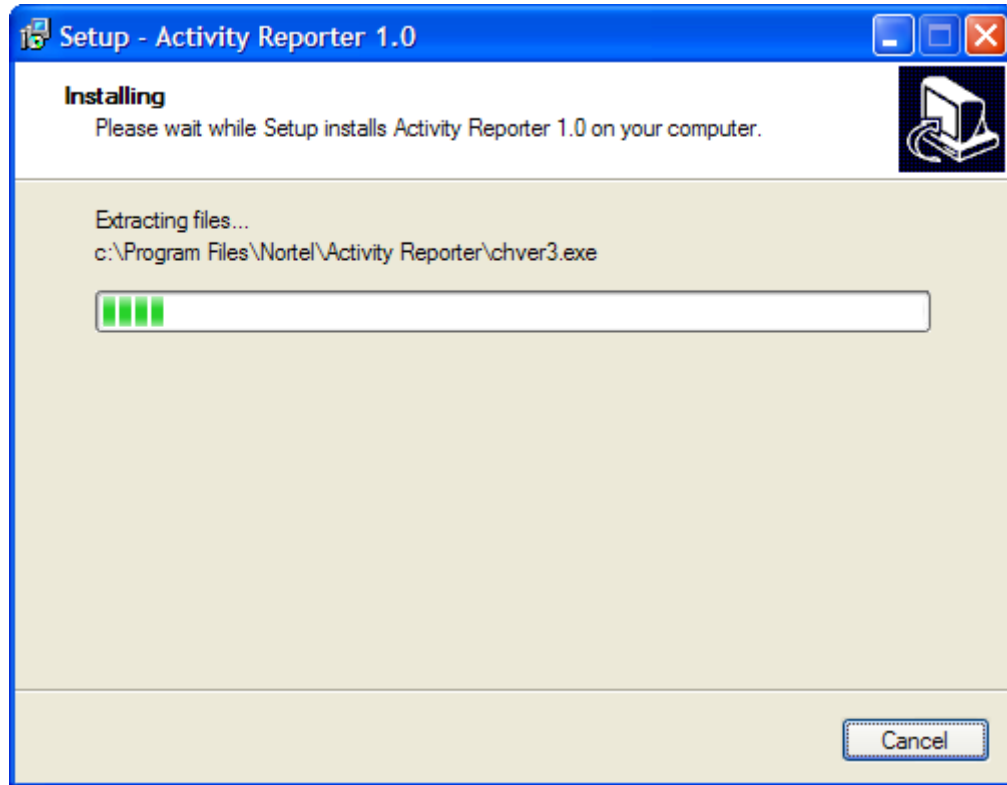


Figure 14: Installation Status Dialog Box

The installation process may take from a few moments to several minutes depending on the speed of your computer. If you encounter installation errors please ensure you have enough disk space and/or computer rights to install this application. You can abort the installation at anytime by pressing the **Cancel** button.

18. Once the installation has successfully completed the following confirmation screen will be displayed.



Figure 15: Installation Complete Dialog Box

Press the Finish button to complete the installation. Please note, some operating systems may display an additional screen prompting you to restart your computer.

Once the installation program is complete you are ready to launch the Activity Reporter software.

Starting/Configuring Activity Reporter

Activity Reporter is primarily used to track and report on an organization's telephone activities. However before you can use the software you must configure it with your BCM system information. Activity Reporter must be installed prior to configuration (see [Installing Activity Reporter](#)). This chapter provides details on how to launch and configure Activity Reporter.

Starting Activity Reporter

To start Activity Reporter use the following steps

1. Press the Windows Start button.
2. Select the Programs menu item.
3. Select the Nortel menu item.
4. Select the Activity Reporter menu item.
5. Click the Run Activity Reporter icon.

If your Activity Reporter Web Server computer is utilizing Windows Firewall the following dialog box may be displayed the first time you launch the software.



Figure 16: Windows Security Alert Dialog Box

If the above window is displayed please press the **Unblock** button. If the Unblock button is not pressed then the application will not be accessible to other computers on your network.

If you are using a Personal Firewall from another software vendor, consult the vendor's configuration handbook for details on how to provide Activity Reporter network access. The Activity Reporter executable (Bill.exe) must have rules that permit other computers on your network to access and execute it.

Activity Reporter will now launch and the **Login Validation** screen will be displayed.

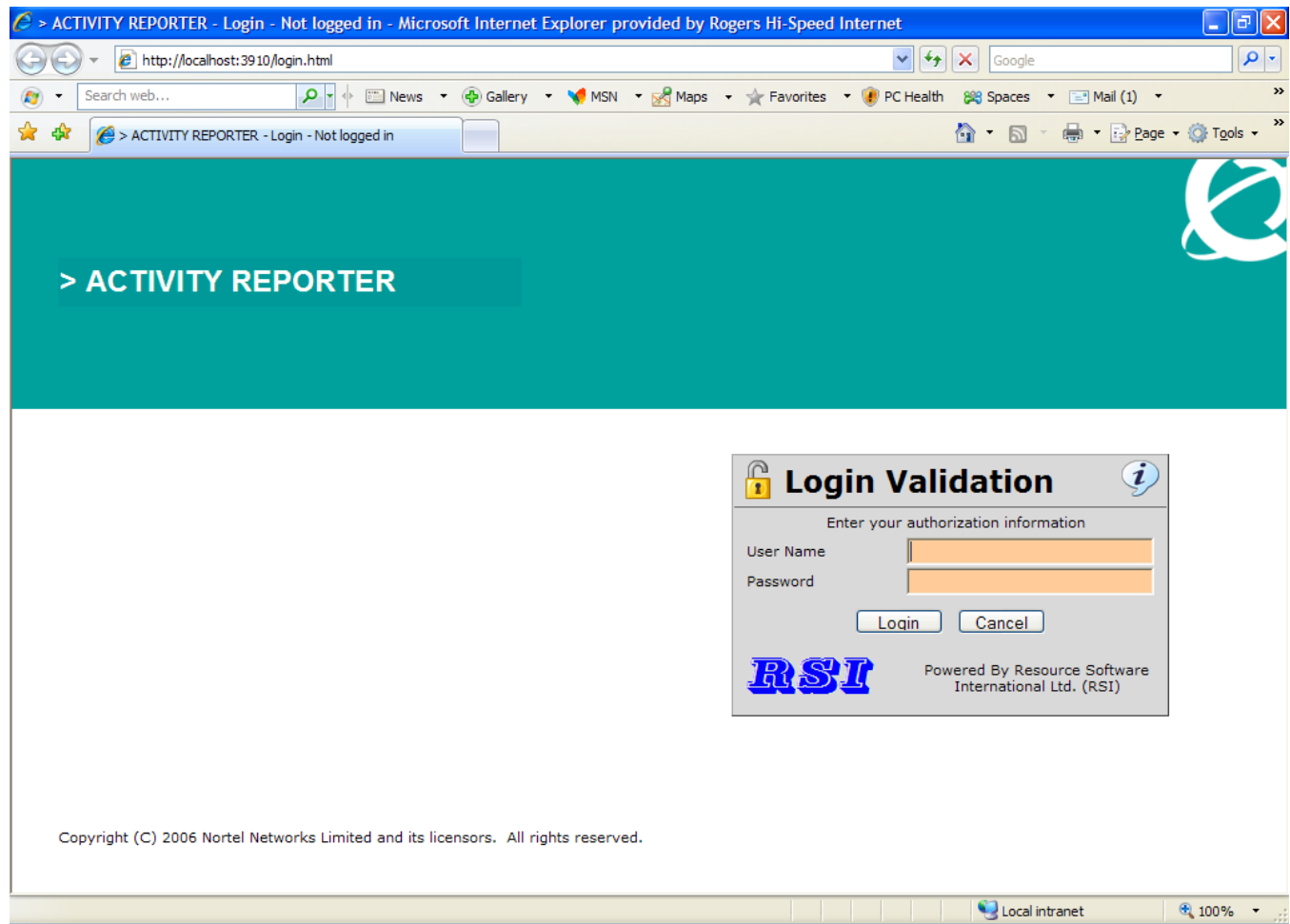


Figure 17: Login Page

Enter a valid **User Name** and **Password** into the corresponding boxes and press the **Login** button. If this is your first time logging in please use the following user name and password.

User Name: nnadmin
Password: PlsChgMe!

After successfully logging into Activity Reporter its main window should be visible within your browser.



Figure 18: Home Page

You have now successfully launched and logged into the Activity Reporter application.

Configuring Activity Reporter

Activity Reporter requires minimal configuration before it can collect BCM telephony metrics (CDR, CCR, Hunt Group and Voice Mail data). The configuration process involves identifying the BCM IP Address and Account information. Use the following steps to configure Activity Reporter.

1. Launch and log into Activity Reporter using an Activity Reporter account with administrator privileges (e.g. user name nnadmin, password PlsChgMe!).
2. Select the **Connectivity** item from the **Configure** menu. The Connectivity Settings configuration page should now be visible within your browser.

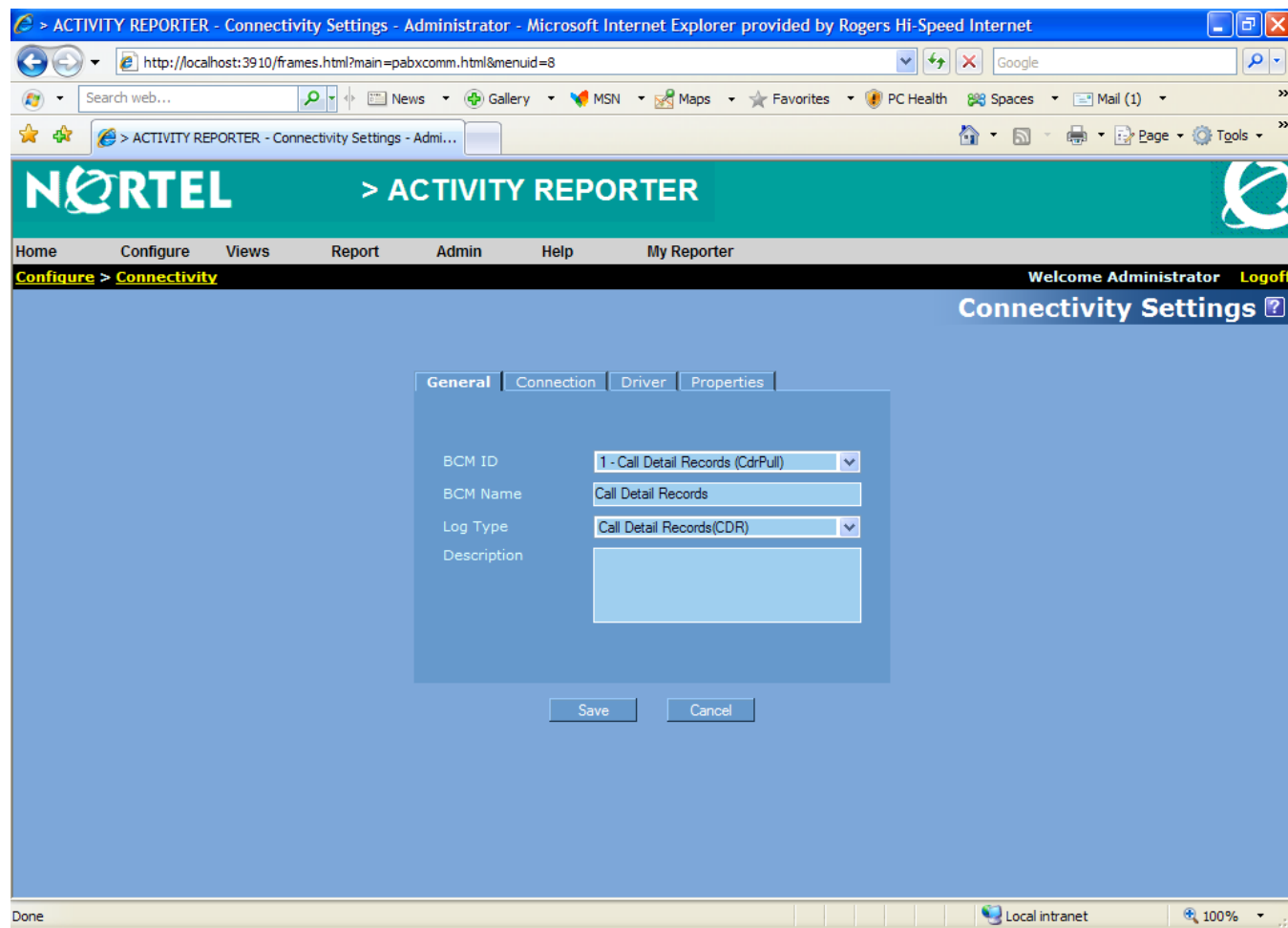
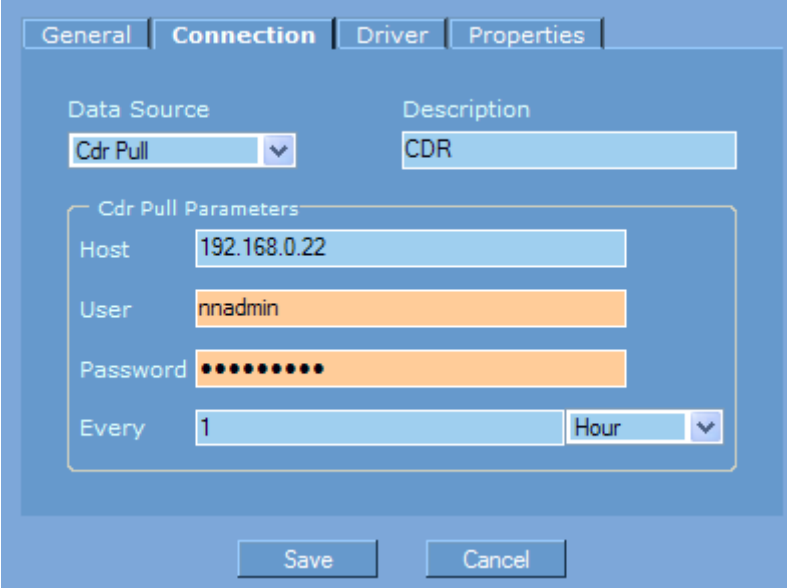


Figure 19: Connectivity Settings Page

Click the General tab and set the **BCM ID** to **1 – Call Detail Records (CdrPull)**. Note this item is selected by default (pictured above).

3. Next, click the **Connection** tab to configure the communications settings utilized by the software to retrieve the telephony metrics from your BCM.



The screenshot shows a configuration window with four tabs: General, Connection, Driver, and Properties. The 'Connection' tab is active. It contains a 'Data Source' dropdown menu set to 'Cdr Pull' and a 'Description' text field containing 'CDR'. Below these is a section titled 'Cdr Pull Parameters' which includes four fields: 'Host' with the value '192.168.0.22', 'User' with the value 'nnadmin', 'Password' which is masked with dots, and 'Every' with the value '1' and a unit dropdown set to 'Hour'. At the bottom of the window are 'Save' and 'Cancel' buttons.

Figure 20: CDR Connection Settings

Set the **Data Source** drop down list box and **Description** box to **CDR Pull** (default value) and **CDR** respectively. Use the Cdr Pull Parameters option to identify the BCM IP Address and BCM Account being utilized to retrieve telephony metrics.

Set the Host box to either the IP Address or Name of the BCM you wish to retrieve data from. Enter the BCM account information into the **User** and **Password** boxes. Please note the BCM account specified must have either CDR or Administrator privileges. For security reasons we recommend an account with only CDR privileges be utilized. For information on how to create a BCM account or set its privileges please consult the BCM on-line documentation.

Set the **Every** box to determine the frequency of data collection. Please note BCM CDR data is generated real-time, hunt group data is generated hourly, CCR and mailbox data is generated daily. As such, recommended values are either every 1 hour or every 1 day.

4. Next, click the Drivers tab and verify the current Driver Name is “Nortel BCM AR”.

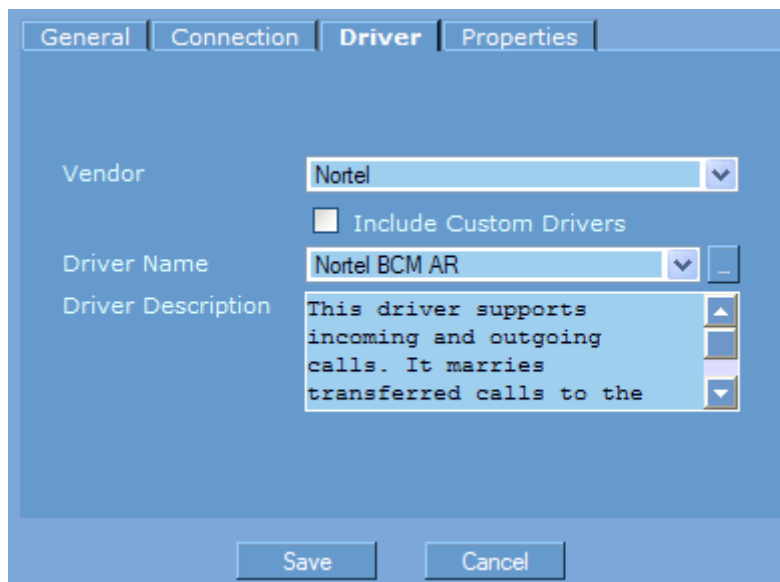


Figure 21: CDR Driver Settings

The Nortel BCM AR driver supports all BCM CDR formats (e.g. Norstar, SL1), CDR date formats, CDR Header formats and CDR language settings (e.g. English, French, Danish, Swedish, Dutch, Spanish, German, Italian, Norwegian and Portuguese). Please note the BCM's current CDR setting can be viewed and/or modified by utilizing the BCM Element Manager. Nortel recommends you set your BCM CDR format to Norstar. The Norstar format provides additional information, such as Ring Time, which is not available in the SL1 format. Additionally call durations reported in the SL1 format are rounded to the nearest minute for transferred calls, whereas the Norstar format reports the actual call duration. For information on how to modify the BCM CDR settings please consult the BCM on-line documentation.

5. Next, click the **Properties** tab and view/modify any of the additional configuration.

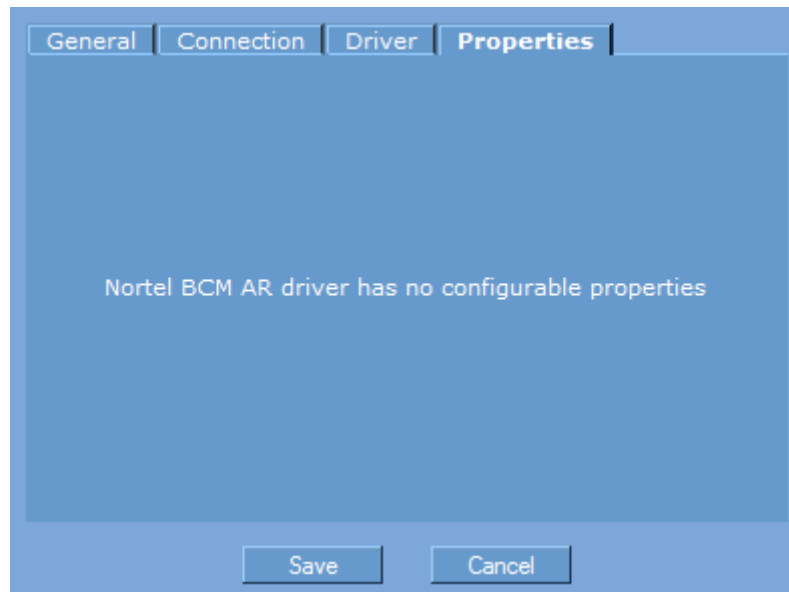
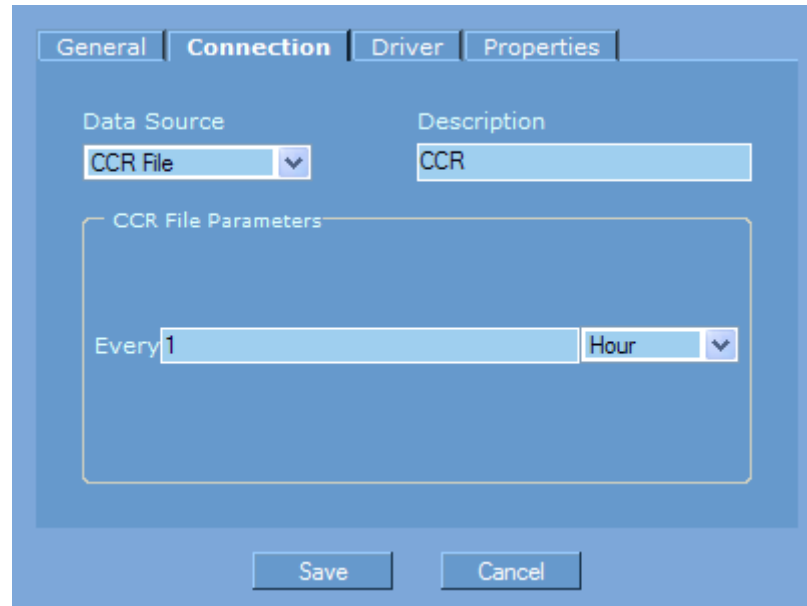


Figure 22: CDR Properties

Please note the Nortel BCM AR driver properties screen has no configurable properties.

6. Press the **Save** button to store your configuration settings. You have now successfully configured Activity Reporter software for integration with your telephone system. Activity Reporter is now ready to receive CDR data.

7. Click the General tab and then verify the Custom Call Routing, Hunt Groups and Voice Mail data collection settings. Please note these values are configured by default. An example of the CCR connection tab is displayed below.

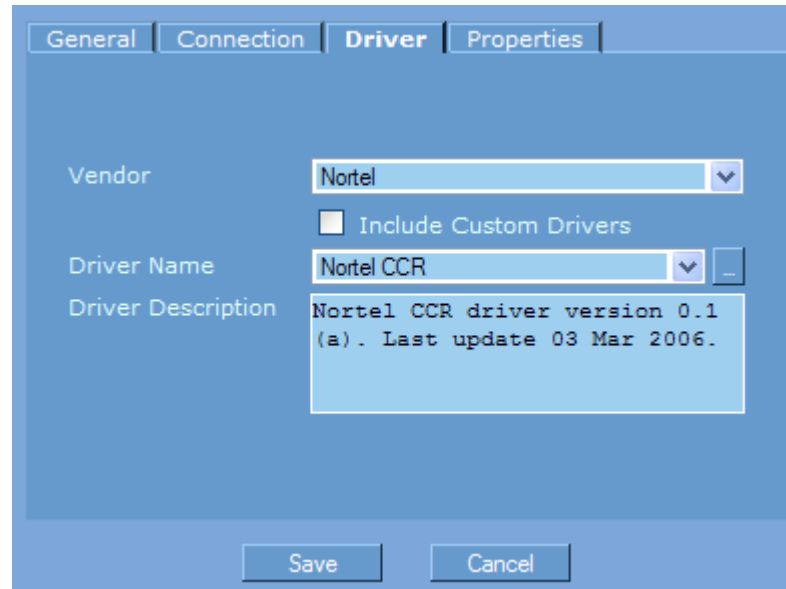


The screenshot shows a dialog box titled "CCR Connection Settings" with four tabs: "General", "Connection", "Driver", and "Properties". The "Connection" tab is selected. Inside the dialog, there are two main sections. The first section has two labels: "Data Source" and "Description". Below "Data Source" is a dropdown menu with "CCR File" selected. Below "Description" is a text box containing "CCR". The second section is titled "CCR File Parameters" and contains a label "Every" followed by a text box with the value "1" and a dropdown menu with "Hour" selected. At the bottom of the dialog are two buttons: "Save" and "Cancel".

Figure 23: CCR Connection Settings

Set the **Data Source** and **Description** options to **CCR File** and **CCR** respectively. The **Every** option should match the settings utilized on the CDR collection screen (recommended value is every 1 hour or 1 day).

Next, click the Driver tab and verify the **Driver Name** is set to **Nortel CCR**. An example of the CCR Driver tab is shown below.



The screenshot shows a dialog box with four tabs: General, Connection, Driver, and Properties. The 'Driver' tab is active. It contains the following fields:

- Vendor:** A dropdown menu with 'Nortel' selected.
- Include Custom Drivers:** An unchecked checkbox.
- Driver Name:** A dropdown menu with 'Nortel CCR' selected.
- Driver Description:** A text box containing the text: 'Nortel CCR driver version 0.1 (a). Last update 03 Mar 2006.'

At the bottom of the dialog are 'Save' and 'Cancel' buttons.

Figure 24: CCR Driver Settings

Please note the BCM generates CCR data in a single format. The CCR data format is not affected by any BCM CDR configuration settings. The CCR Properties screen has no options. Configuration of the Hunt Group and Voice Mail settings is similar to those shown above.

You have now successfully configured Activity Reporter BCM connectivity settings.

Identifying Your Location

Activity Reporter can be deployed in any country. The software contains dialling plan information for most countries in the world. Use the Activity Reporter **Numbering Plan** tool to identify the country where the BCM it is connected to is located. Access the **Numbering Plan** tool by selecting the **Database Settings > Numbering Plan** item from the **Configure** menu. The following screen should now be visible.



Figure 25: North American Numbering Plan Page

By default Activity Reporter assumes your BCM is located in the United States. If this is correct then your configuration is complete (please skip ahead to [Modifying Numbering Plan Information](#)). Use the following steps to select a different region.

1. Press the **Template** item located on the bottom of the screen. The Default Tariff Plan Wizard dialog should now be visible.

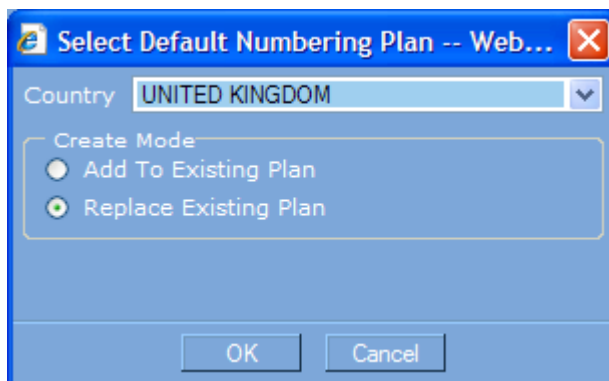


Figure 26: Select Numbering Plan Country Dialog

Click the **Country** drop down list to select the country where your telephone system is located. Next, set the Create Mode option to **Replace Existing Plan**.

2. Press the OK button. The United States region information will be replaced with the newly selected country (e.g. United Kingdom).



Figure 27: International Number Plan Page

3. The software is now configured for deployment in the selected country (e.g. United Kingdom).

Please note you will need to customize the Numbering Plan settings if access codes precede the digits dialled on your CDR records. For example, if you examine the CDR data generated by the BCM and the DIGITS DIALED are preceded by additional digits (e.g. 9) then the Numbering Plan information will need to be modified. For more details on how to customize the numbering plan information please see the [Modifying Numbering Plan Information](#) section of this guide.

Modifying Numbering Plan Information

Activity Reporter can be deployed in any country in the world. The software supports any numbering plan and can report on calling activity for both North American and International deployments. Use Activity Reporter's dynamic **Numbering Plan** tool to configure the software for your location (see [Identifying Your Location](#)).

You will need to customize the Numbering Plan settings if access codes precede the digits dialed on your CDR records. For example, if you examine the CDR data generated by the BCM and the DIGITS DIALED are preceded by additional digits (e.g. 9) then the Numbering Plan information will need to be modified. An example of CDR data with an access code of 9 is shown below.

```
----- 05/17/07 09:15:01 LINE = 0021 STN = 517
        BC = SPEECH
        PRI SERVICE      PUBLIC
00:00:00 OUTGOING CALL
        DIGITS DIALED    912125551212
00:01:05 CALL RELEASED
```

If your digits dialed are not preceded by access codes then your Numbering Plan configuration does not need to be modified. Please proceed to the [Using Activity Reporter](#) section of this guide.

Access the **Numbering Plan** tool by selecting the **Database Settings > Numbering Plan** item from the **Configure** menu. The following screen should now be visible.



Figure 28: Default Numbering Plan Page

Use the above screen to identify the region where you are located. By default Activity Reporter assumes your telephone system is located in the United States. For information on how to select a different country please see [Identifying Your Location](#).

Numbering plans can vary from country to country. Two distinct numbering plans are utilized in most countries of the world. They are as follows:

- a. **North American Numbering Plan (NANP)** – utilized by Canada, US and Caribbean countries. Long distance calls within or between these countries are placed by dialling a 1 + telephone number. Long distance calls to regions outside of these countries are placed by dialling 011+Country Code + City Code + Telephone Number. Local calls are made by dialling the telephone number only (i.e. no country code or city code).
- b. **International Numbering Plans** – utilized by all international countries except Canada, US and Caribbean countries. Long distance calls within a country are placed by dialling 0 + City Code +Telephone number. Long distance calls to another country are placed by dialling 00 + Country Code + City Code + Telephone number. Local calls are made by dialling the telephone number only (i.e. no country code or city code).

Follow the steps in either the [Modifying a NANP Numbering Plan](#) or [Modifying an International Numbering Plan](#) section of this guide to configure Activity Reporter for the country where your BCM is deployed.

North American (NANP) Numbering Plans

The North American Numbering Plan is applicable to Canada, the United States of America (USA) and Caribbean countries. If your software is being deployed in any other country then refer to the [Modifying an International Numbering](#) section of this guide. You will only need to modify the NANP Numbering Plan settings if access codes precede the digits dialled on your CDR records.

Use the following steps to modify an NANP numbering plan. Please note the following examples assume the software is located in the USA. The same steps can be utilized for software deployed in Canada or the Caribbean.

1. Access the **Numbering Plan** tool by selecting the **Database Settings > Numbering Plan** item from the **Configure** menu. The following screen should now be visible.



Figure 29: NANP Numbering Plan Page

2. Next, to modify your Numbering Plan click the (+) sign to the left of the country name where your software is deployed.



Figure 30: NANP Number Plan Number Length Settings

The option **Number Length between 1 and 40** should now be visible below the (+) sign you clicked in the previous step. Additionally the (+) sign will have changed to a (-) sign. Clicking the (-) sign will change it back to a (+) sign and hide the new option.

3. Click and expand (+) sign located to the left of the text **Number Length between 1 and 40**.



Figure 31: NANP Numbering Plan Access Codes/Number Prefixes

Three new options, **Access Code 011***, **Number Prefix *** and **Number/Prefix 1*** should now be visible on your screen.

- Click on the line **Access Code 011***. You should now be able to edit this line. An example of this window is pictured below.

The screenshot shows the Nortel Activity Reporter web interface. The top navigation bar includes links for Home, Configure, Views, Report, Admin, Help, and My Reporter. The current page is 'Configure > Database Settings > Numbering Plan'. A search bar is present with the text 'Search >>'. Below the search bar, a table lists numbering plans. The first record is 'UNITED STATES OF AMERICA Dialing' with a type of 'Numbering plan' and a description of 'Default numbering plan for UNITED STATES OF AMERICA'. A modal dialog box is open for editing the 'Access Code' field. The dialog has a table with columns 'Access Code', 'Number/Prefix', and 'Type'. The 'Access Code' field contains '011*', the 'Number/Prefix' field contains '*', and the 'Type' field contains 'IDD Calls'. The 'Number/Prefix' field is highlighted. The 'Save' button is visible at the bottom of the dialog.

Figure 32: Editing NANP Numbering Plan Access Code

If an access code (i.e. additional digits) for international calls (IDD) precedes the digits dialled in your CDR data then the 011* text must be modified. For example if the digits dialled for international calls are preceded by an access code of 9, then change this text to 9011*. If the digits dialled are preceded by an access code of 8, then change this text to 8011*. If the digits dialled are NOT preceded by any access code then this value should not be changed.

5. Press the **Save** button to record your changes. If the access code added in the previous step was 9 then the Numbering Plan information should now look as follows:

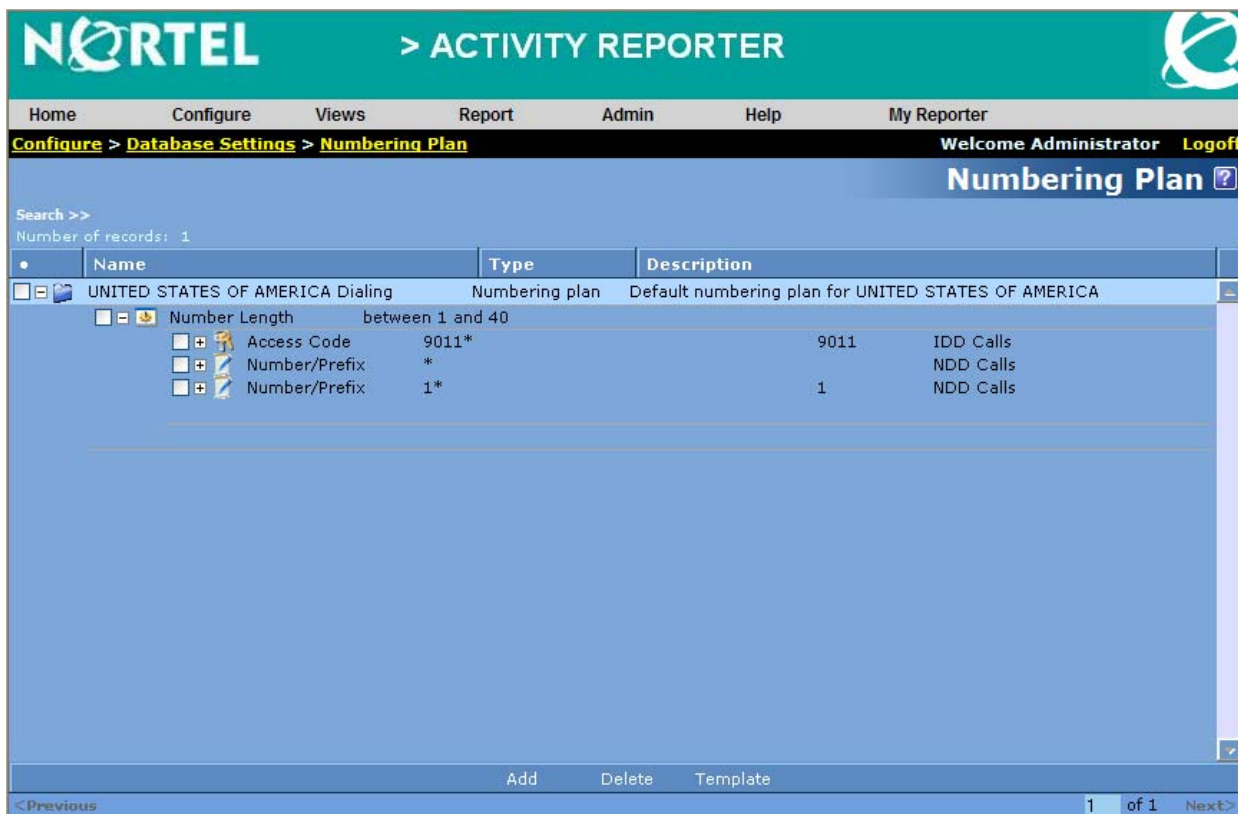
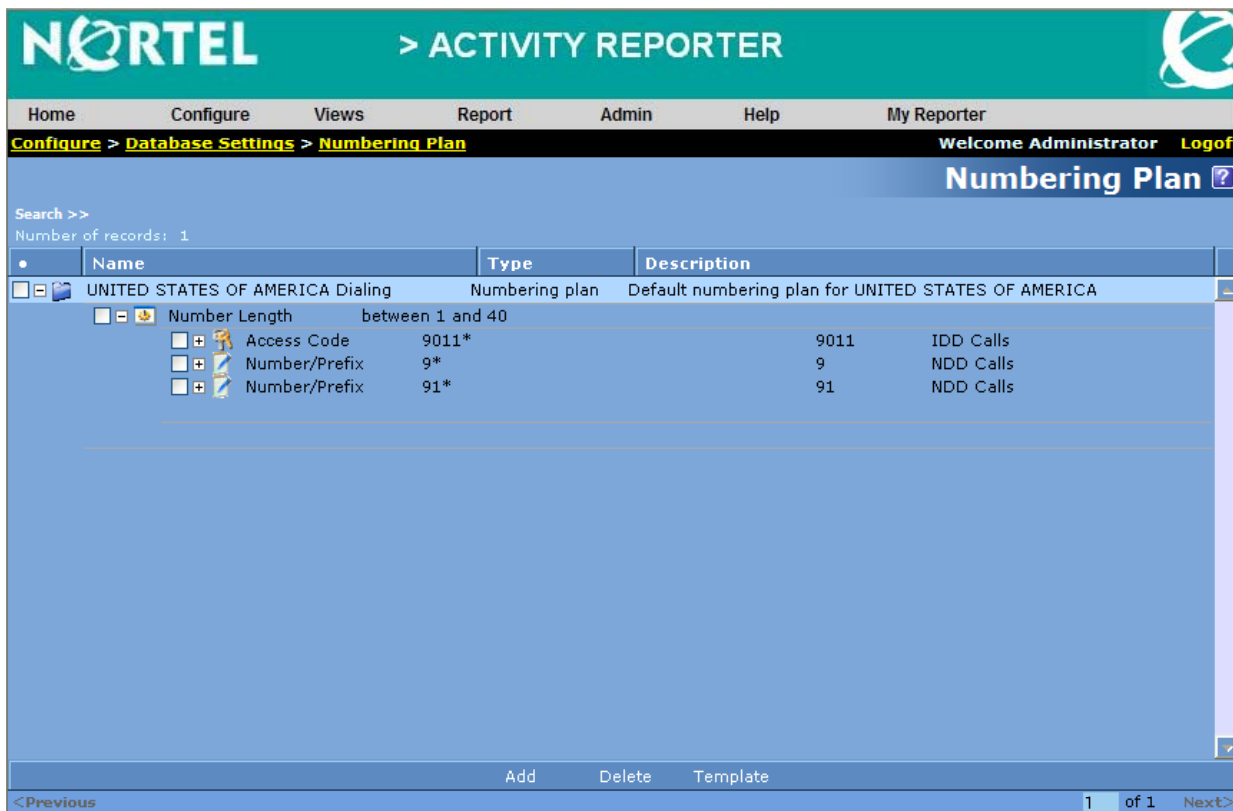


Figure 33: Modified NANP Numbering Plan Access Code

- Repeat steps 4 and 5 to add an access code to the Numbering Plan lines containing the text **"Number/Prefix **"** (i.e. local calls) and **"Number Prefix 1**"** (i.e. North American long distance calls). If the access code added in the previous step was 9 then the Numbering Plan information should now look as follows:



Name	Type	Description
UNITED STATES OF AMERICA Dialing	Numbering plan	Default numbering plan for UNITED STATES OF AMERICA
Number Length between 1 and 40		
Access Code	9011*	IDD Calls
Number/Prefix	9*	NDD Calls
Number/Prefix	91*	NDD Calls

Figure 34: Modified NANP Number Plan Access Codes/Number Prefixes

You have now successfully modified your NANP Numbering Plan. Please note the NANP Numbering Plan changes introduced above will be applied to only newly captured CDR data. Use the Activity Reporter Database Re-Parser tool (see [Reparsing Previously Captured Data](#)) to apply your changes to previously captured CDR data.

International Numbering Plans

The International Numbering Plan is applicable to all countries except Canada, the United States of America (USA) and the Caribbean. If your software is being deployed in these North American countries then refer to the [Modifying an NANP Numbering Plan](#) section of this guide. You will only need to modify the International Numbering Plan settings if access codes precede the digits dialled on your CDR records.

The following example assumes your software is located in the United Kingdom. The same steps can be utilized for software deployed in any country (except the USA, Canada or the Caribbean). Use the following steps to modify an International numbering plan.

1. Access the **Numbering Plan** tool by selecting the **Database Settings > Numbering Plan** item from the **Configure** menu. The following screen should now be visible.

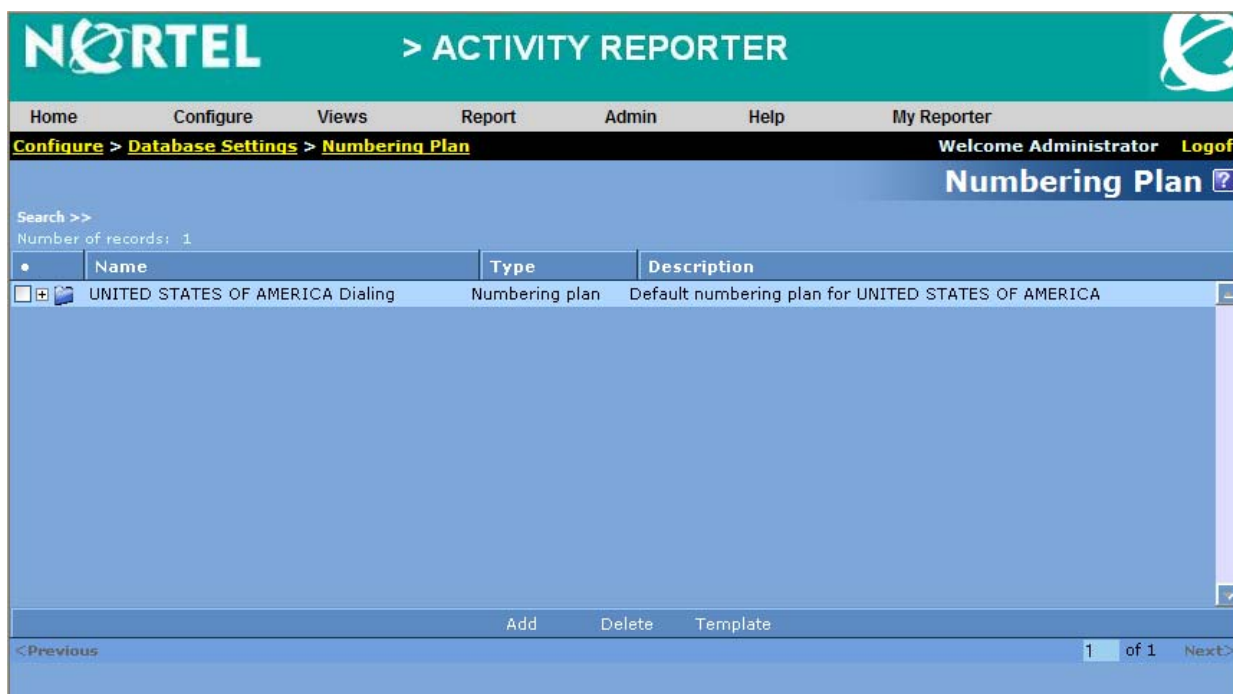


Figure 35: International Numbering Plan Page

- Next, to modify your Numbering Plan click the (+) sign to the left of the country name where your software is deployed.



Figure 36: International Numbering Plan Number Length Settings

The option **Number Length between 1 and 40** should now be visible below the (+) sign you clicked in the previous step. Additionally the (+) sign will have changed to a (-) sign. Clicking the (-) sign will change it back to a (+) sign and hide the new option.

3. Click and expand (+) sign located to the left of the text **Number Length between 1 and 40**.

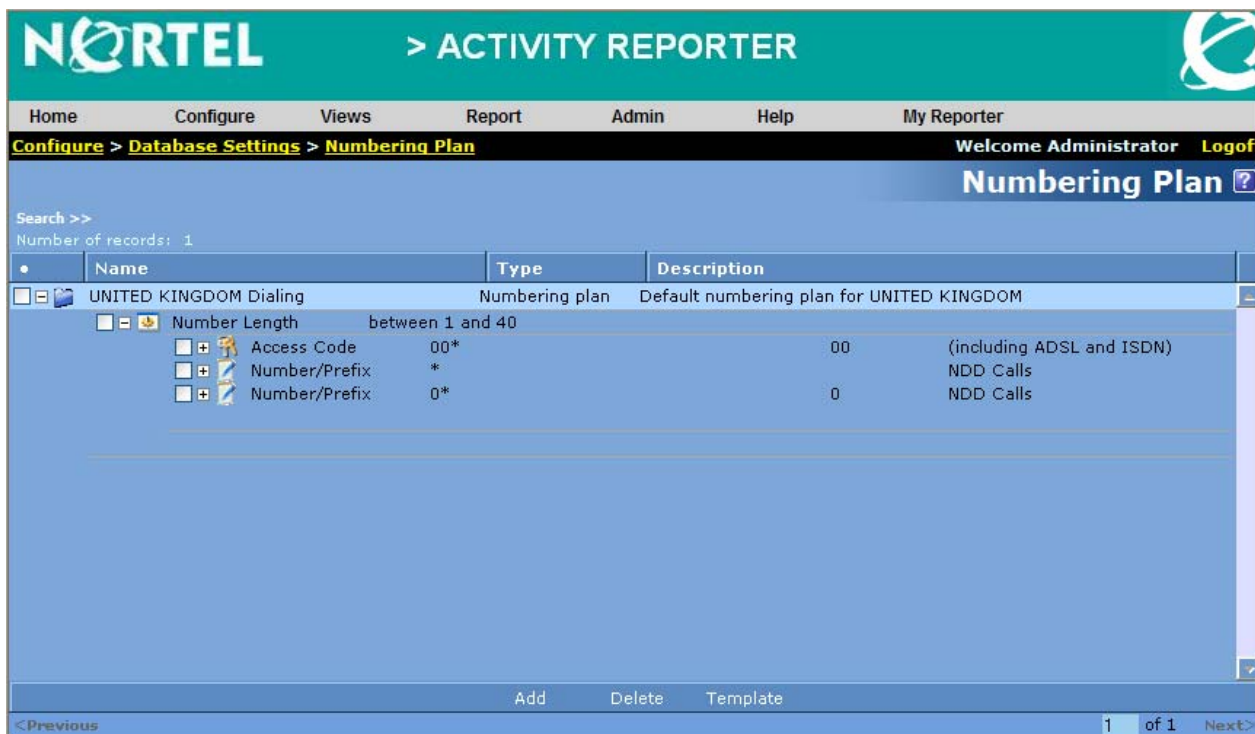


Figure 37: International Numbering Plan Access Codes/Number Prefixes

Three new options, **Access Code 00***, **Number Prefix *** and **Number/Prefix 0*** should now be visible on your screen.

- Click on the line **Access Code 00***. You should now be able to edit this line. An example of this window is pictured below.

The screenshot shows the Nortel Activity Reporter web interface. The top navigation bar includes links for Home, Configure, Views, Report, Admin, Help, and My Reporter. The breadcrumb trail indicates the current location: Configure > Database Settings > Numbering Plan. The page title is 'Numbering Plan'. A search bar is present with the text 'Search >>'. Below the search bar, it says 'Number of records: 1'. A table lists the numbering plans, with one entry: 'UNITED KINGDOM Dialing' (Type: Numbering plan, Description: Default numbering plan for UNITED KINGDOM). Below the table, there is a form for editing the selected plan. The 'Number Length' is set to 'between 1 and 40'. The 'Access Code' field is set to '00*' and is highlighted. A dropdown menu is open for the 'Access Code' field, showing options: '(including ADSL and ISDN)', 'NDD Calls', and '0*'. The 'Number/Prefix' field is set to '0*'. The 'Save' and 'Cancel' buttons are visible at the bottom of the form. The bottom of the page shows navigation links: '<Previous', '1 of 1', and 'Next>'. There are also 'Add', 'Delete', and 'Template' buttons at the bottom of the table area.

Figure 38: Editing International Numbering Plan Access Codes

If an access code (i.e. additional digits) precedes the digits dialled for international calls (ADSL/ISDN) in your CDR data then the 00* text must be modified. For example if the digits dialled are preceded by an access code of 9, then change this text to 900*. If the digits dialled are preceded by an access code of 8, then change this text to 800*. If the digits dialled are NOT preceded by any access code then this value should not be changed.

5. Press the **Save** button to record your changes. If the access code added in the previous step was 9 then the Numbering Plan information should now look as follows:



The screenshot shows the Nortel Activity Reporter web interface. The top navigation bar includes links for Home, Configure, Views, Report, Admin, Help, and My Reporter. The breadcrumb trail indicates the current location: Configure > Database Settings > Numbering Plan. The page title is 'Numbering Plan'. A search bar is present with the text 'Search >>' and 'Number of records: 1'. The main content area displays a table with the following data:

Name	Type	Description
UNITED KINGDOM Dialing	Numbering plan	Default numbering plan for UNITED KINGDOM

Below the table, there are additional details for the selected record:

- Number Length: between 1 and 40
- Access Code: 900* (including ADSL and ISDN)
- Number/Prefix: * (NDD Calls)
- Number/Prefix: 0* (NDD Calls)

At the bottom of the page, there are buttons for 'Add', 'Delete', and 'Template', and a pagination control showing '1 of 1'.

Figure 39: Modified International Numbering Plan Access Codes

6. Repeat steps 4 and 5 to add an access code to the Numbering Plan lines containing the text **"Number/Prefix **"** (i.e. local calls) and **"Number Prefix 0**"** (national or long distance calls). If the access code added in the previous step was 9 then the Numbering Plan information should now look as follows:



Figure 40: Modified International Numbering Plan Access Codes/Number Prefixes

You have now successfully modified your International Numbering Plan. Please note the International Numbering plan changes introduced above will be applied to only newly captured CDR data. Use the Activity Reporter Database Re-Parser tool (see [Reparsing Previously Captured Data](#)) to apply your changes to previously captured CDR data.

Modifying Region Information

The Activity Reporter software Regions table contains telephone information for every country. For example, the regions table contains North American area codes and their corresponding location name, United Kingdom city codes and their corresponding city name, etc. The city/country name contained in this table will be displayed on Activity Reporter CDR reports. City/country names are available in English only. Users can access the Activity Reporter regions table to add, delete and/or modify telephone information. For example, use the regions table to add a new area code, country code, city code, or change the name associated with a number from English to French.

Use the following step to modify the regions table.

1. Access the **Regions** table by selecting the **Database Settings > Regions** item from the **Configure** menu. The following screen should now be visible.



Name	Code
AFGHANISTAN	+ 93
ALBANIA	+ 355
ALGERIA	+ 213
AMERICAN SAMOA	+ 684
ANDORRA	+ 376
ANGOLA	+ 244
ARGENTINA	+ 54
ARMENIA	+ 374
ARUBA	+ 297
ASCENSION	+ 247
AUSTRALIA	+ 61
AUSTRIA	+ 43
AZERBAIJAN	+ 994
Ambiguous Region	+

Figure 41 Regions Page

2. Use the scroll bars, <Previous, Next> or page numbers (located at the bottom of this window) to locate the country whose region information you wish to modify.

- Click and expand the leftmost plus (+) sign associated with the country you wish to modify. The following example depicts modifying Germany's region information.



Figure 42 Expanding Region Information

- Modify** a region name by clicking on it. For example, to change Germany from English to French click the text Germany, and replace it with Allemagne. Press the **Save** button to record your changes.
- Add** a region or city code to the Germany Region list by pressing the **Add** button located at the bottom of German's region/city code list. A blank entry will be added to the bottom of the list. Next, type the new region/city name into the **Name** box and then its corresponding region code into the Code box. Press the **Save** button to record your changes.
- Delete** a country, region or city code by clicking the check box located to the left of the desired name. Next, press the country's, region's or city's corresponding **Delete** button. A prompt confirming your deletion request will be displayed. Press the **OK** button to delete the selected entry or the **Cancel** button to abort your deletion request.

You have now successfully modified the Activity Reporter region table. Please note the region table changes introduced above will be applied to only newly captured CDR data. Use the Activity Reporter Database Re-Parser tool (see [Reparsing Previously Captured Data](#)) to apply your changes to previously captured CDR data.

Verifying Activity Reporter is Collecting Telephony Metrics

Activity Reporter contains a telephony metrics collection monitoring tool which lets you view the most recently captured telephony metrics. You can access this tool by clicking the **Views** menu item. Next click and expand the plus (+) sign located to the left of the **Live Data** item. The following window should now be visible within your browser.

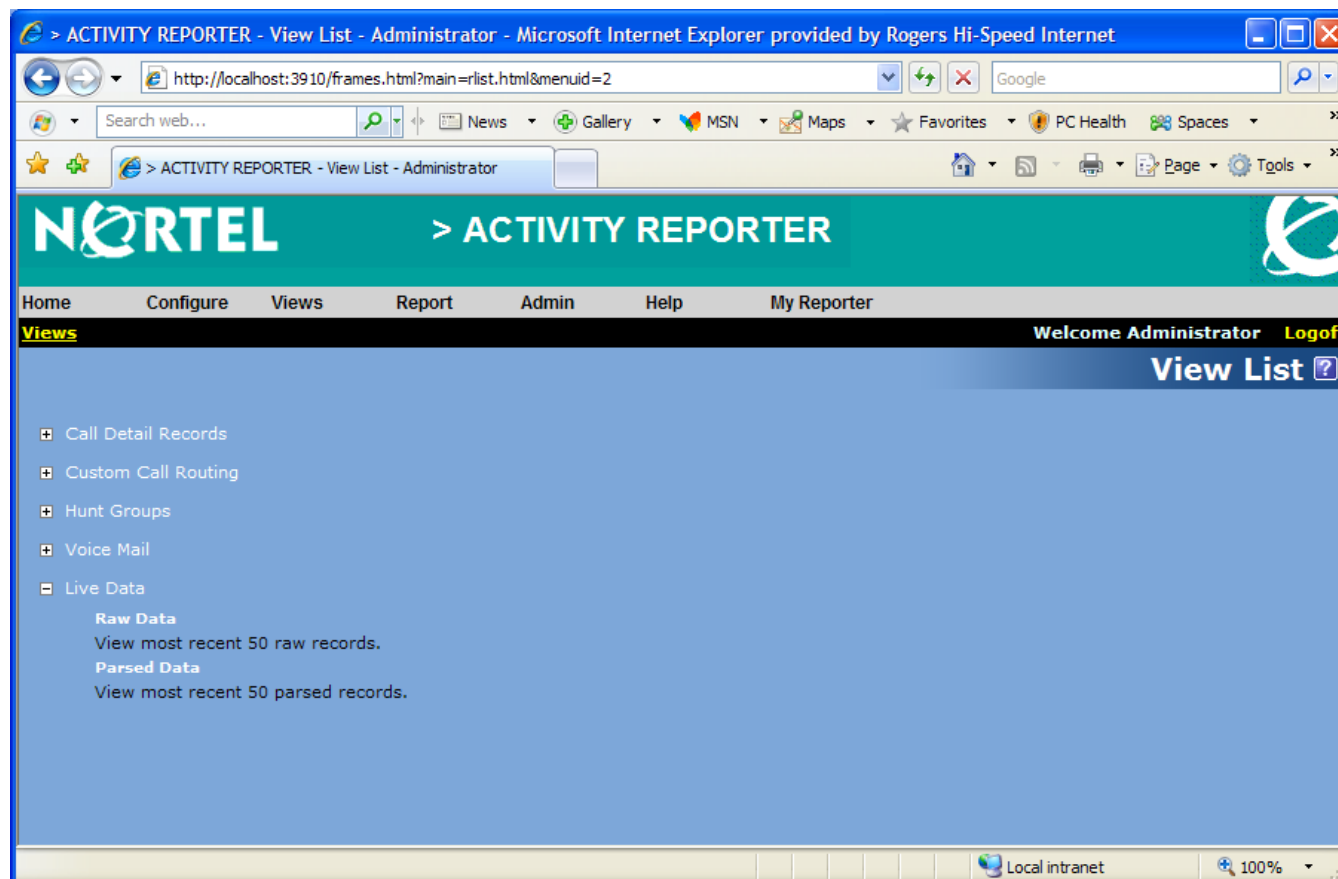


Figure 43: View Page - Live Data

Next, click the **Raw Data** option to view your recently collected data. Once selected the Activity Reporter Raw Data screen will be displayed within your browser.



You can test the Activity Reporter's data collection process by placing a test call (must be a call that generates a CDR call record – i.e. long distance or local). Once the test call has been completed (i.e. hung up) please perform the following steps.

1. Select the **Connectivity** item from the **Configure** menu.
2. Press the **Save** button on the Connectivity configuration window. Activity Reporter will now connect to the BCM and retrieve the new data. Please note this process can take several minutes to complete (depends on how much data has accumulated since the last time the software polled the BCM). Once the test call is completed (i.e. you hang up) the telephone record (CDR) will be displayed in this window.
3. Return to the Activity Reporter Live Data -> Raw View window by selecting it from the Views menu.

4. Examine the Raw Data view for the telephone number you dialed. If no data appears then you may have not waited long enough for the telephony metrics data collection process (performed in step 2) to be completed. Press the Internet Explorer's refresh button and then select the Raw Data view item again.

You have now tested telephony metrics collection from the BCM. If the call information does not appear in the Raw Data window then your communications settings are incorrect (select the **Connectivity** item from the **Configure** menu and verify the settings are correct – see [Starting/Configuring Activity Reporter](#)).

Reparsing Previously Captured Data

The Activity Reporter software retrieves BCM's telephony metrics (CDR, CCR, Hunt Group and Voice Mail data). The retrieved data is parsed by the Activity Reporter drivers (see [Configuring Activity Reporter](#)) and added to the corresponding database table. Location information (i.e. city/region name) is also added to the Call Detail Records (CDR) table during the Activity Report data parsing operation. The assigned location information is determined by the Activity Reporter Numbering Plan configuration. If incorrect parsed data appears on reports or within the database views then changes to your Activity Reporter configuration may be required. For example, if incorrect city or region names appear then changes to the Activity Reporter Numbering Plan configuration are required (see [Modifying Numbering Plan Information](#)). Changes to the Numbering Plan will only apply to newly captured BCM CDR data. Applying the changes to previously captured data requires the use of the Activity Reporter Database Re-Parser Utility.

Use the following steps to reparse previously captured data.

1. Launch and log into Activity Reporter using an Activity Reporter account with administrator privileges (e.g. user name nnadmin, password PlsChgMe!).
2. Access to the Re-Parser utility can only be obtained by entering one of the following URLs into your browser window.

- a. <http://<Activity Reporter Web Server>:<Port Number>/frames.html?main=reparse.html>

Please remember to substitute <Activity Reporter Web Server> with the Activity Reporter Web Server's computer name. Also remember to substitute <Port Number> with the port utilized by the Activity Reporter Web Server. For example, if the Activity Reporter Web Server's computer name is **Station30** and its utilizing port **1724** then you would enter the following address into your browser:

<http://station30:1724/frames.html?main=reparse.html>

If the Activity Reporter Web Server is utilizing port 80 then the port number can be omitted from the URL.

<http://station30/frames.html?main=reparse.html>

- b. <http://<Activity Reporter Web Server IP Address>:<Port Number>/frames.html?main=reparse.html>

Please remember to substitute <Activity Reporter Web Server IP Address > with the Activity Reporter Web Server's IP Address. Also remember to substitute <Port Number> with the port utilized by the Activity Reporter Web Server. For example, if the Activity Reporter Web Server IP Address is **192.168.0.253** and utilizes port **1724** then you would enter the following address:

<http://192.168.0.253:1724/frames.html?main=reparse.html>

If the Activity Reporter Web Server is utilizing port 80 then the port number can be omitted from the URL.

<http://192.168.0.253/frames.html?main=reparse.html>

Connecting to the Activity Reporter Web Server utilizing an IP Address will only be successful when the Web Server is utilizing a static IP address.

Please note only users with administrator privileges can access the Activity Reporter Database Re-Parser Utility.

3. After entering the URL address identified in step 2 the following window should appear within your browser.

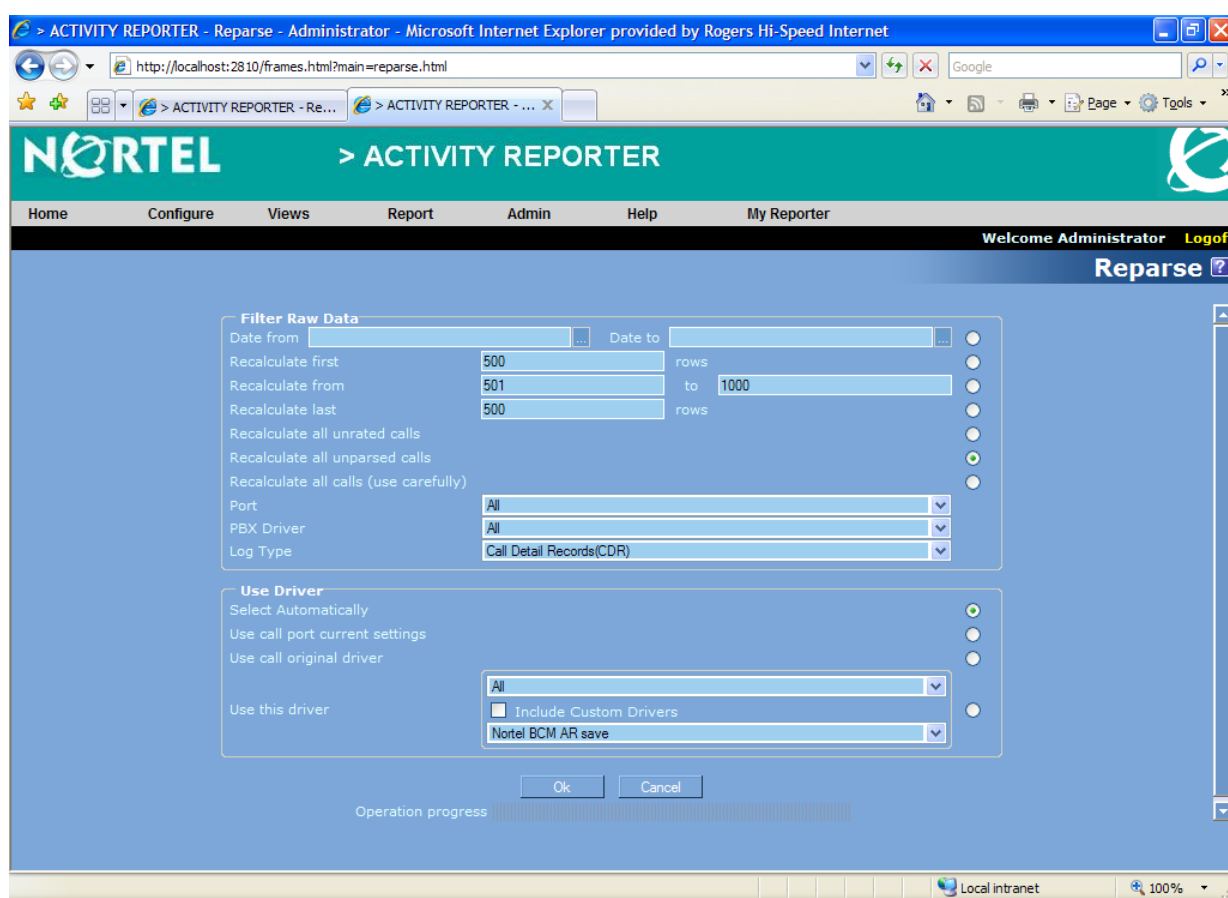


Figure 45: Activity Reporter Database Re-Parser Utility

4. Select the appropriate Filter Raw Data option to select the previously captured data to be reparsed.

Use the **Date from** and **Date to** options to select records to reparse by a date range. For example if the Date from option is set to January 1, 2008 and the Date to option is set to February 10, 2008 then only records between this date range will be reparsed.

Use the **Recalculate first X rows** option to reparse the first X rows of captured data.

Use the **Recalculate from X to Y** rows option to reparse records X to Y of captured data.

Use the **Recalculate last X rows** option to reparse the last X rows of captured data.

Use the **Recalculate all unparsed calls** option to reparse only records that were ignored when they were initially parsed. Please note previously unparsed records may have been ignored because they were invalid or did not contain any usable information. Use of this option when reparsing will typically result in no additional records being added to the database.

Use the **Recalculate all calls (use carefully)** option to reparse all previously captured BCM telephony metrics data.

The **Port**, **PBX Driver** and **Log Type** options can be used in conjunction with one of the above options to narrow the selection of which records will be reparsed. For example, setting the Port option to **CDRPull** or the PBX Driver option to **Nortel BCM AR1** or the Log Type option to Call Detail Records (CDR), instructs the software to reparse only CDR data. Setting these options to all instructs the software to reparse all telephony metrics (CDR, CCR, Hunt Groups and Voice Mail). Please note the reparsing tool is typically only utilized on CDR data. In most cases, this tool will have no effect on previously captured CCR, Hunt Group or Voice Mail data.

5. Press the **OK** button to start the reparse operation. Please note the amount of time required to complete this operation will vary depending on the number of records selected (the Operation progress status bar indicates the amount of time remaining).

You have now successfully reparsed previously captured data.

Using Activity Reporter

Now that you have installed Activity Reporter ([see Installing Activity Reporter](#)), successfully configured the software ([see Starting/Configuring Activity Reporter](#)), and verified it is retrieving telephony metrics from your BCM ([see Verifying Activity Reporter is Collecting Telephony Metrics](#)), you are now ready to begin using the software.

If you have just completed configuring Activity Reporter, the software should have automatically started. Otherwise, to start Activity Reporter use the following steps

1. Press the Windows Start button.
2. Select the Programs menu item.
3. Select the Nortel menu item.
4. Select the Activity Reporter menu item.
5. Click the Run Activity Reporter icon.

Activity Reporter login window should appear on your screen.

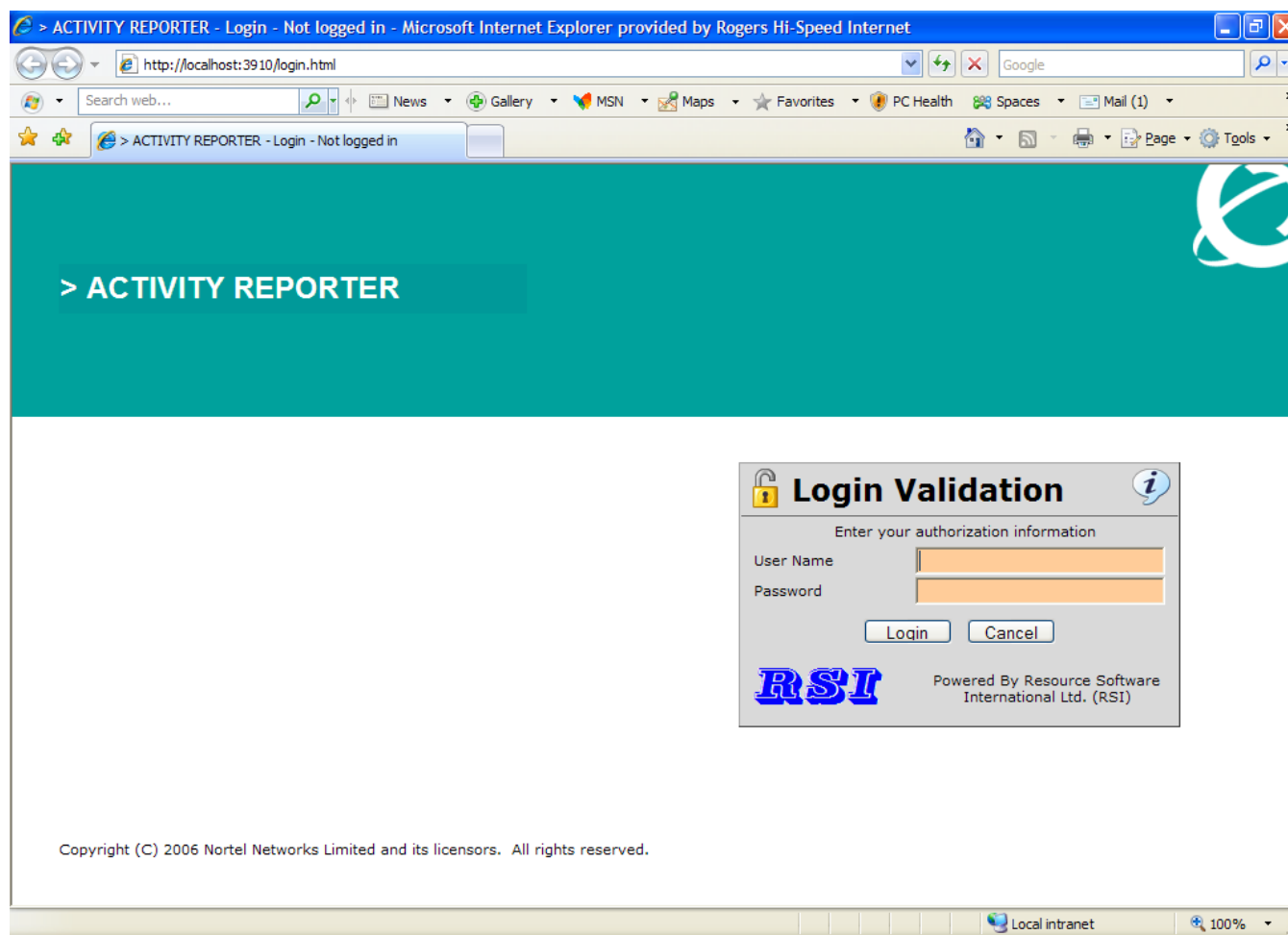


Figure 46: Login Page

Enter a valid **User Name** and **Password** into the corresponding boxes and press the **Login** button. The default user name and password are as follows:

User Name: nnadmin
Password: PlsChgMe!

Please take note of the **Information** icon located on the top right corner of the login box. These icons are visible throughout the software. Positioning your mouse over an information icon will display additional instructions on how to utilize the current page. For example on this page the information displayed when you place your mouse over this icon is the default User Name and Password.

* Please note, for security reasons we strongly recommend changing the password of the nnadmin account. Consult the Activity Reporter User Guide for details on how to change the password.

After successfully logging into Activity Reporter, its main window should be visible within your browser.

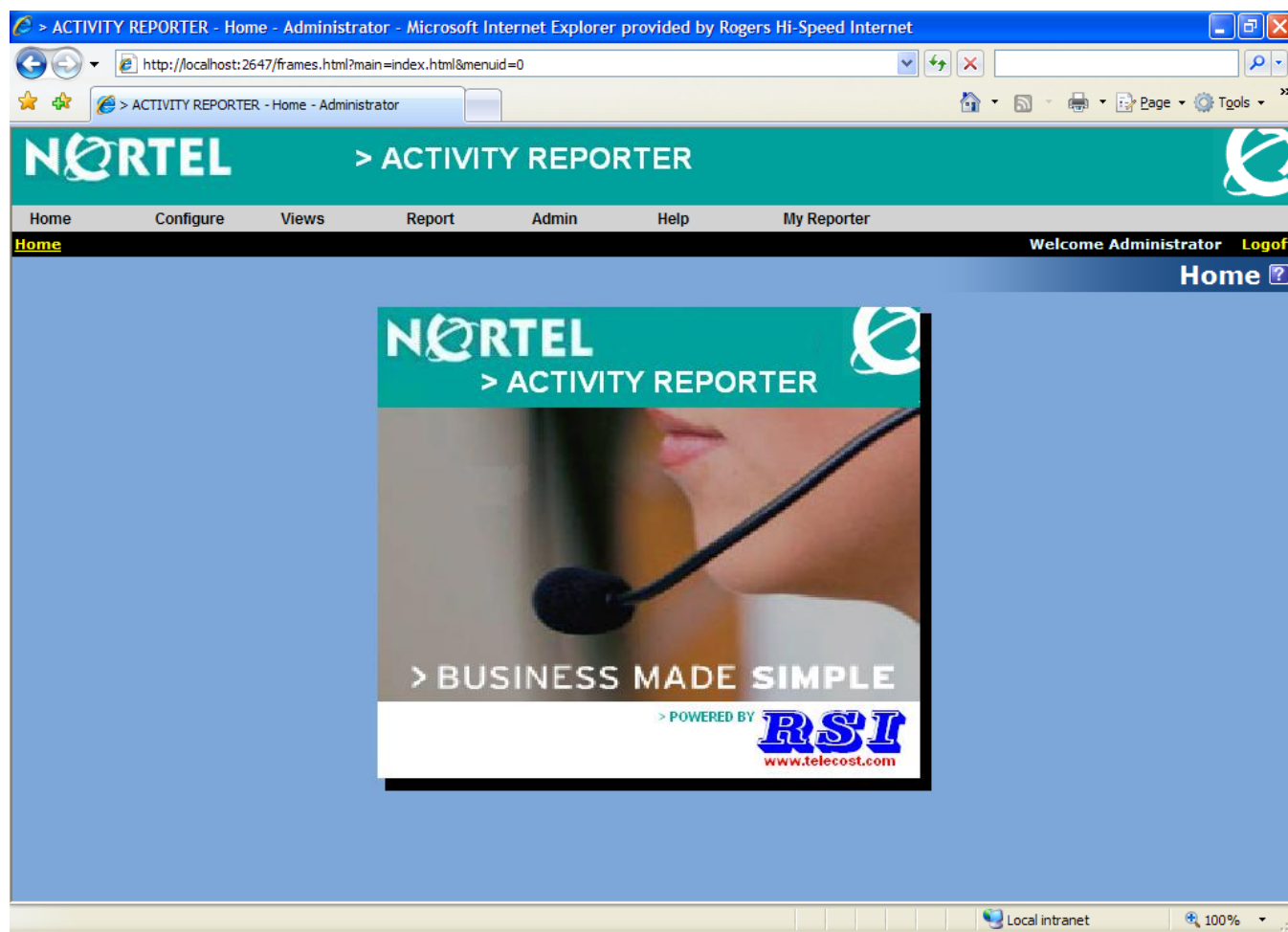


Figure 47: Home Page

The main software window contains two distinct sections. A menu bar located on the top of the screen below the Nortel logo and a workspace/desktop. Simply click on the appropriate menu item to access the software configuration, reporting and utility functions.

Note: Activity Reporter is completely browser based. When not in use, the Activity Reporter Web Server will continue to run in the host system tray. All call records will continue to be logged and processed.



You can re-launch Activity Reporter by either double clicking the Activity Report icon in the system tray or by right clicking the icon and selecting the **Open** menu item.

The list of menu items and activity reporter features available to you will vary depending on your account type (e.g. Administrator, User). For a complete description of how to use each of the Activity Reporter menu items and features available to you please consult the *Activity Reporter Users Guide*.

References

1. Software Keycode Installation Guide
2. Activity Reporter Users Guide