NOTICE

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Elite CallAnalyst User Guide

NEC.

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Introduction to Elite CallAnalyst

CallAnalyst is an easy to use, graphically oriented software package that allows you to monitor and analyze phone calls, understand phone usage and cut costs. CallAnalyst tracks both incoming and outgoing calls accurately as well as the date and time of each call. If you need to track the incoming phone call with name and/or telephone numbers, CallAnalyst requires Caller ID services from the local phone company.

CallAnalyst increases productivity, facilitates billing and helps detect toll fraud and phone abuse. It also has powerful tabular (text) and graphical report generating capabilities. Reports can be used to analyze your telephone as a critical business communication tool thereby improving its effectiveness and reducing your telephone related costs.

CallAnalyst keeps track of:

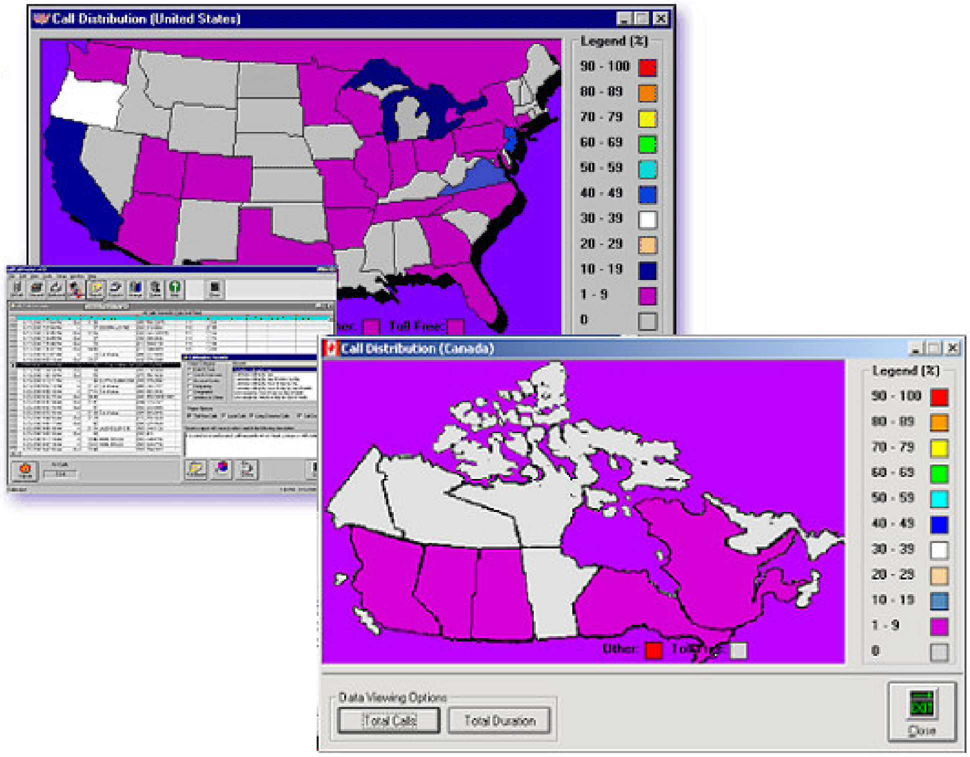
- The date and time calls were made or received.
- The duration of each call.
- Which extension made or received the call.
- The CID/ANI, DNIS of the caller.
- The trunk or line numbers which handled the call.
- Account codes and authorization codes used for the call.

Improve Business Productivity with CallAnalyst

As an example; a report can be generated showing calling patterns by volume or duration on a color coded map of the United States. This can help a Customer Support, Sales Order, or Telemarketing business become more focused, more productive and cost effective.

With CallAnalyst, you can:

- Track real-time phone usage for incoming and outgoing calls
- Monitor customer service metrics
- Measure telemarketing and inside sales productivity
- Provide billing reports for client lines



Included Reports:

- Date and time summaries.
- Most frequently called numbers.
- Department summaries.
- Extension and line summaries.
- Longest and most expensive calls.
- Longest and most expensive calls.
- And many more!

How SMDR/CDR information is sent to the computer

Upon the completion of an inbound or outbound call, your phone system sends SMDR data about the call (e.g. extension called, number dialed, date and time) . Once the phone system sends the SMDR data, it is usually erased from the phone system on the assumption that an external device has recorded the data. The Call Data Manager (CDM) records all SMDR data sent from the phone system to your PC via a serial cable. The CDM is included as part of the CallAnalyst installation.

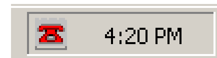
Most phone systems have a SMDR port that is of the serial port type much like the COM1, COM2, COM3 and COM4 ports on your PC. The SMDR port can be enabled or disabled by programming the phone system. For specific SMDR related questions and phone system programming, please consult your phone system manual.

Using Call Data Manager (CDM)

Call Data Manager (CDM) monitors your serial port for phone records and saves them into a database for CallAnalyst. CDM operates in the background so you don't need to run CallAnalyst to collect phone calls, only to analyze them.

CDM starts in an enabled mode which means that CDM will be ready to process calls each time CDM is started. You must disable CDM before configuring it.

The CDM icon (a green or red telephone) rests in your system tray (located in the lower right corner of your screen). The icon changes color depending on the state of the CDM:



CDM Modes:

- Green telephone icon indicates that the CDM is enabled.
- Red telephone icon indicates that the CDM is disabled.

Right Click on the CDM icon to show the CDM functions menu.

CDM Menu Functions:

- **Disable/Enable the CDM:** right-click on the CDM icon in the system tray and select **Disable CDM/Enable CDM** from the popup menu shown above.
- **Display last call data information:** right-click on the CDM icon in the system tray and select **Show CDM**. You can use the information in the resulting form for troubleshooting communication issues between CallAnalyst and your phone system.
- **To Start CDM:** If the icon does not appear in the system tray select Start|Program|NEC Callanalyst|CDM.
- **To stop CDM:** right-click on the CDM icon in the system tray and select **Close**. If the CDM is not running then CallAnalyst is unable to record call information into its database.
- **To configure the CDM:** right-click on the CDM icon in the system tray and select **Setup**. You must disable the CDM before configuring it.

Elite CallAnalyst Menu Icons

The following list describes the icons displayed at the top of the CallAnalyst Main Window:

CallAnalyst increases productivity, facilitates billing and helps detect toll fraud and phone abuse. It also has powerful tabular (text) and graphical report generating capabilities. Reports can be used to analyze your telephone as a critical business communication tool thereby improving its effectiveness and reducing your telephone related costs.

- All Calls: Displays the Call Record window which shows all call records sorted by date and time. This is the same as the View|All Calls menu item.
- Inbound: Displays the Call Record window which shows all incoming call records sorted by date and time. This is the same as the View|Inbound Calls menu item.
- Outbound: Displays the Call Record window which shows outgoing call records sorted by date and time. This is the same as the View|Outbound Calls menu item.
- Reports: Displays the Call Reports window which allows you to generate reports based on the type of report, the report dates, and many other criteria.
- Favorite: Its a dropdown list .On clicking any My favorite report in the drop down list it will run the respective my favorite report
- Favorite: Its a dropdown list .On clicking any My favorite report in the drop down list it will run the respective my favorite report
- Contacts: Displays the Contact window which allows you to assign phone numbers to a contact, report the calls made to/from a contact, or generate a billing report for a specific contact. This is the same as the Edit|Contacts menu item.
- Delete: Allows you to delete a set of call records. Your business may generate a large volume of call records and the delete function allows you to trim your call records database to a manageable size. This is the same as the Tools|Delete Call Records menu item.
- Arrange: Automatically arranges the open windows in CallAnalyst so that they are easily viewed and managed. This is the same as the Window|Arrange menu item.

Maintaining CallAnalyst Databases

NEC

CallAnalyst uses Microsoft Access databases to store contact information, phone numbers and call records. You should make regular backups of your database on a periodic basis by archiving your call records . When required, you can restore these archived files.

Fixing Corrupt Databases

If you exit Windows in a non-standard fashiom due to power faliure or do so during a database entry operation or if Windows becomes locked up, your CallAnalyst database could become corrupt. CallAnalyst includes built-in utility to Manually clean up the database in the event of corruption. You can use this utility by selecting the Start|Programs|NEC CallAnalyst|Tools| Database Tools menu item and followingthe instruction in the Wizard.

Automating Repair & Compact

If you exit Windows in a non-standard fashion due to power failure or do so during a database entry operation or if Windows becomes locked up, your CallAnalyst database could become corrupt. CallAnalyst includes built-in utility to schedule the clean up of the database in the event of corruption.You can use this utilities by selecting the Start|Programs|NEC CallAnalyst|Tools| Compact Automation Setup option.

Using Compact & Repair automation option, user can schedule database compression & repair.

Compact repair automation can be scheduled on Daily, Weekly, Monthly, One time only, When computer starts, When user logs in basis.

To schedule Compact repair automation, user has to provide login parameters.

After providing correct parameters, compact & repair automation will be successfully scheduled.

Note: For scheduling compact & repair automation, two or more automation profiles should not be scheduled at the same time.

Installing Elite CallAnalyst

To install the CallAnalyst system on your PC, follow these steps:

1. Browse the readme file
2. Connect your Phone system to your Computer
3. Install the CallAnalyst Software
4. Start CallAnalyst
5. Configure local area codes, if necessary
6. Configure the Secure Login, if desired

Readme File

Even though we make every effort to keep the documentation up to date, there might still be a few last-minute items which did not make it into the documentation at the time of release. We have created a Readme.txt file for such information, which you can view with Notepad or the word processing program of your preference.

You can quickly find this file by going to your Desktop and clicking
Start|Programs|NEC CallAnalyst |Elite CallAnalyst Readme.

Installing Elite CallAnalyst Software

The procedure described on this page is for new installations of CallAnalyst. If you are upgrading CallAnalyst from a previous version you should use the upgrade program that is available at our web site. Refer to this web site for instructions on installing the CallAnalyst update.

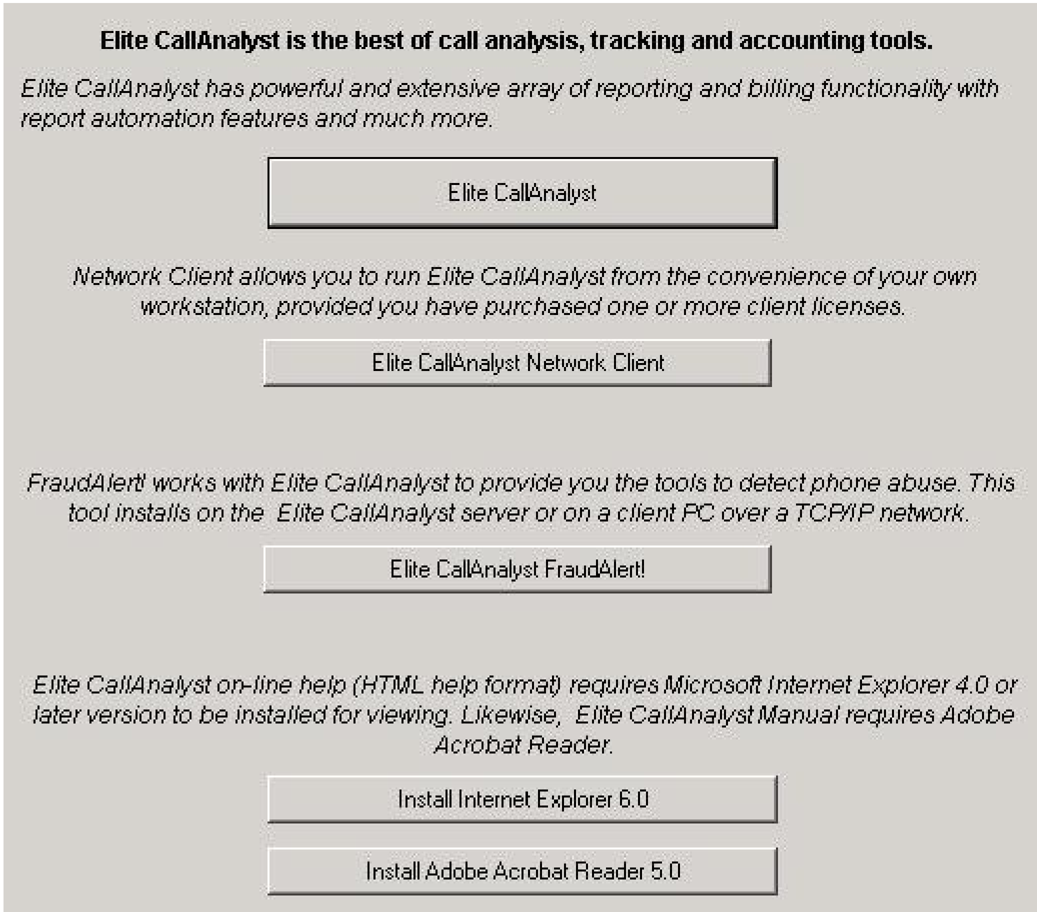
You have the choice of loading the following software modules:

CallAnalyst keeps track of:

- Server installation of CallAnalyst
- Network Client
- FraudAlert!

CallAnalyst Server Installation:

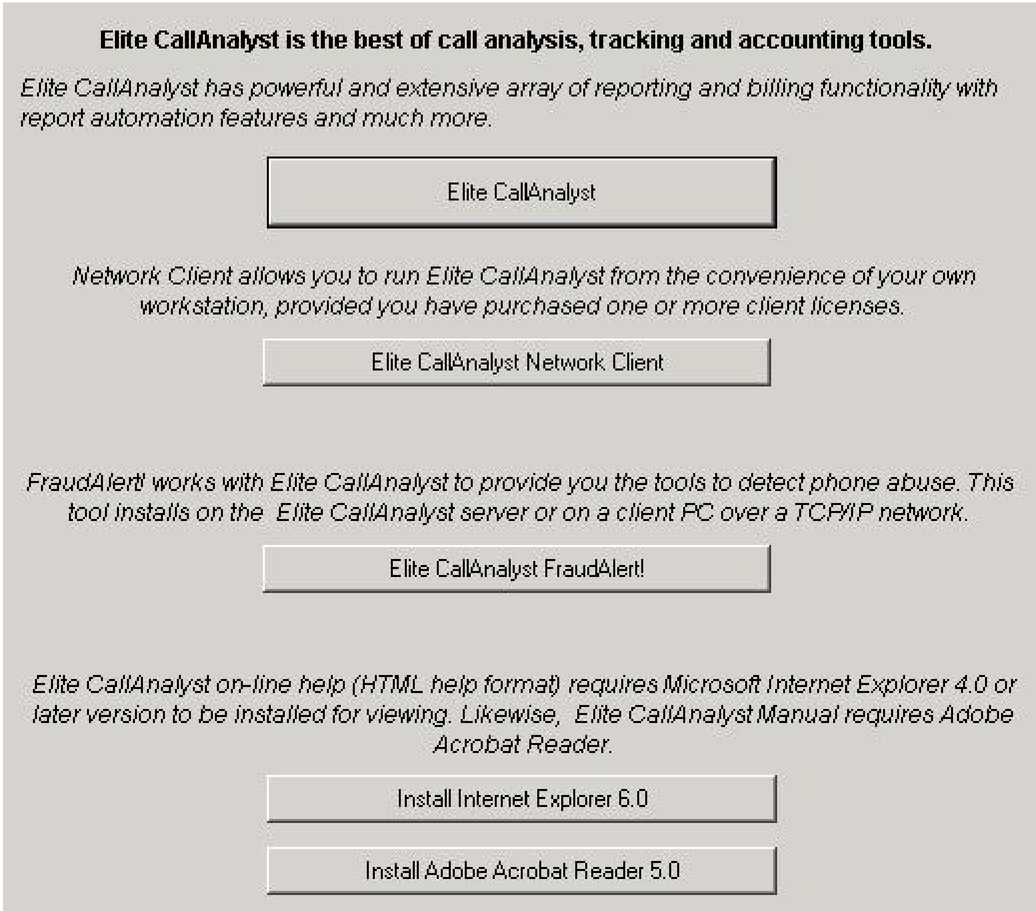
- Close all applications running on your system.
- Load the CallAnalyst CD ROM into Your CD-ROM drive.
- The Setup program will start automatically. If it does not start follow the next step, otherwise skip the next step.
- On the Windows Desktop, choose **Start|Run** run the *Setup* program by entering **F:\Setup.exe** (where F: is your CD-ROM drive).



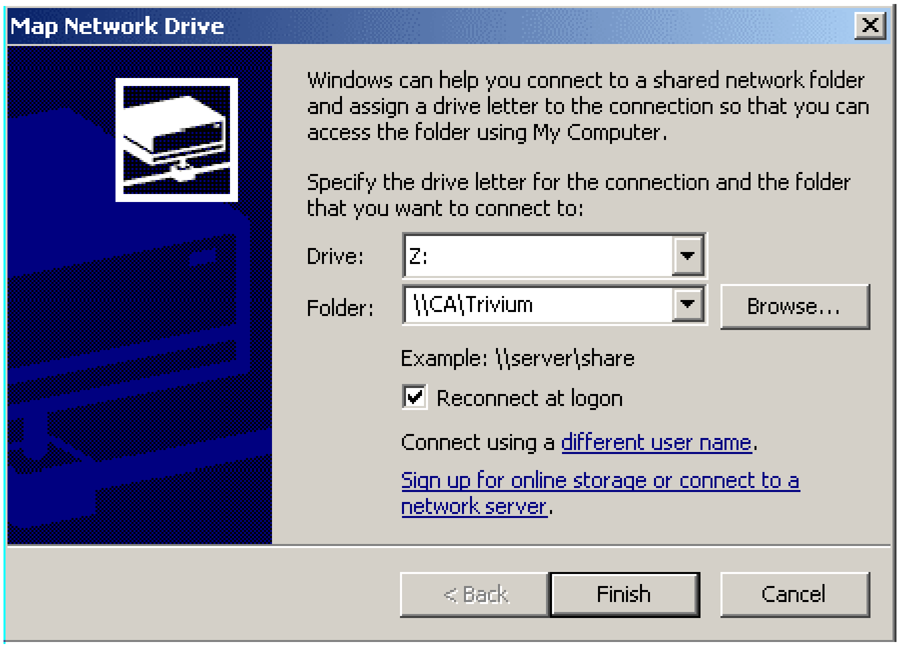
- Select CallAnalyst v 2.0.Follow the setup wizard to complete the software installation.
- After the installation is complete you may verify the connection between the phone system and Call Data Manager (CDM).
- During installation two programs will be installed on your hard drive. CallAnalyst provides you with reporting and analytical tools for your phone calls. Call Data Manager (CDM) monitors your serial port for phone records and saves them for CallAnalyst. CDM operates in the background. You don't need to keep CallAnalyst running just to collect phone calls, only to analyze them.

Network Client Installation:

- Close all applications running on your system.
- Load the CallAnalyst CD ROM into Your CD-ROM drive.
- The Setup program will start automatically. If it does not start follow the next step, otherwise skip the next step.
- On the Windows Desktop, choose **Start|Run**; run the *Setup* program by entering **F:\Setup.exe** (where F: is your CD-ROM drive).



- Select **Install Callanalyst Network Client**. Follow the setup wizard to complete the software installation.
- The Call Data Manager is not loaded on the local PC for a Network Client installation. The Network Client connects to a CallAnalyst server installation via a mapped network drive. The CallAnalyst Server installation will synchronize call records with the Network Client allowing you to remotely administer the Server.
- Map a network drive to the CallAnalyst installation folder (usually ,C:\Program Files \CallAnalyst) from the PC running the Network Client.



- You will be asked during the installation to select the mapped network drive of the CallAnalyst Server Installation.

- The 10 days Trial License comes with one Network Client license.If you need more Network Client then you will need to call your Dealer or NEC for additional Licenseing. The License is issued on the CallAnalyst Server installation.

  All License information is maintained on the server PC.

Installing CallAlert

- You can install FraudAlert! on any PC on the (LAN) network with TCP/IP enabled. FraudAlert! helps you monitor phone abuse. Call Data Manager (CDM) communicates with FraudAlert! and generates alarms when certain conditions are met. FraudAlert! can also be installed on the same PC as the CallAnalyst server.

Connect phone system to computer

Modern phone systems are capable of sending call records to your PC in many different formats. Most phone systems use a standard serial cable to connect a SMDR/SMDA port on your phone system to a serial port on your PC.

CallAnalyst is also capable of retrieving call data records from external databases, Web URL's and log files provided that your phone system supports these output methods. You will need to reference your phone systems documentation to determine the appropriate interface format.

The Call Data Manager (CDM) application is the communications program that CallAnalyst uses to read call data records that are retrieved using the serial port, external database, Web (URL) or log file formats.

For CallAnalyst to receive call information from your phone system on the serial port, you must connect a serial cable between the SMDR port on your phone system and a serial port on your PC. The Call Data Manager (CDM) is the communications program that CallAnalyst uses to read call information at the serial port on the PC.

The following steps must be taken in order for CDM to track your calls:

Program your phone system with following features:

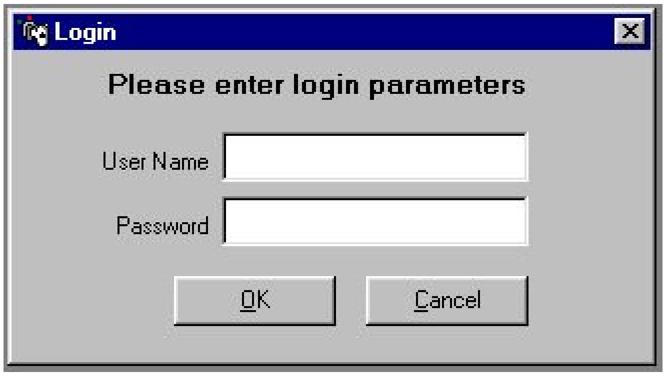
- Enable SMDR output.
- Enable Caller ID for incoming calls in the SMDR (if required).
- Configured the SDMR output to end each call record with a carriage return and line feed (this setting is usually the default on most phone systems).
- Disable the SMDR output for station-to-station calls (if required).
- Configure the phone switch to produce SMDR output for both inbound and outbound calls.

You're now ready to install the CallAnalyst software

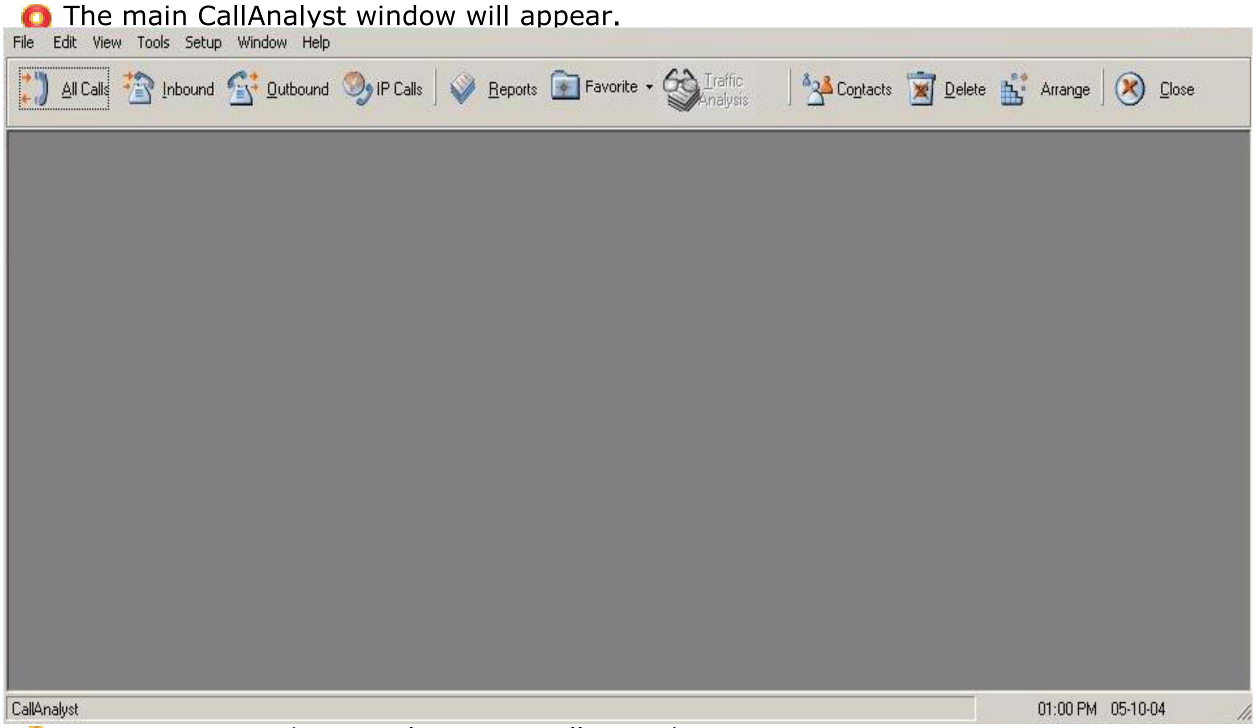
Starting Elite CallAnalyst

CallAnalyst generates reports based on the call records received from your phone system. You only need to run CallAnalyst when you want to create a report, edit contact information, or examine call records.

CallAnalyst keeps track of:

- You can run CallAnalyst by selecting Start|Programs|NEC CallAnalyst|Elite CallAnalyst
- A login screen will appear if you have enabled the login parameters.
- 

- The main CallAnalyst window will appear.



- You are now ready to analyze your call records.

Configuring the Call Data Manager (CDM)

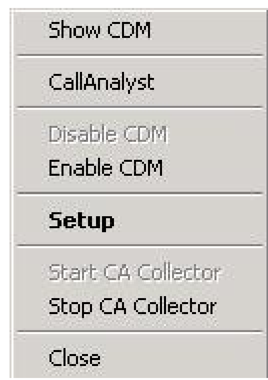
The Call Data Manager (CDM)captures call information from your phone system. Start CDM by selecting Start|Programs|NEC CallAnalyst|Call Data Manager (CDM).

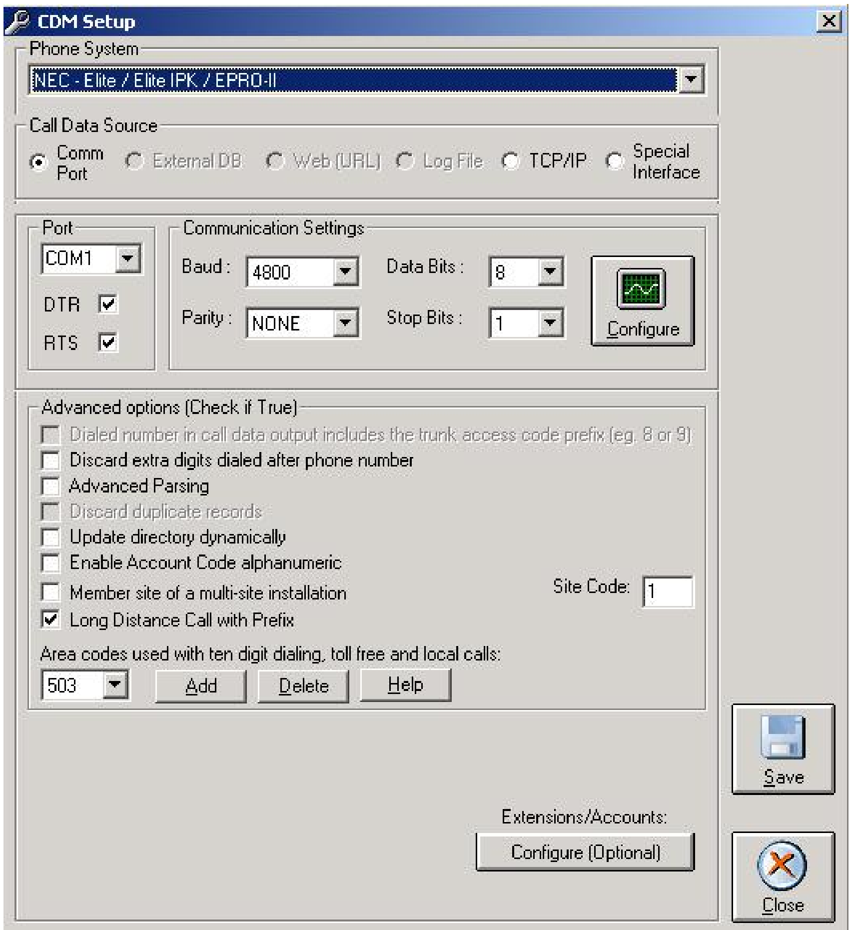
To set up CDM:

Verify that the CDM is started and disabled. If this condition is met, a telephone icon should appear in your system tray

(lower right corner of the screen).If there is no telephone icon in your system tray, start CDM by selecting Start|Programs|NEC CallAnalyst|CDM. If the telephone icon is green, disable CDM by right-clicking on the CDM icon in the system tray and selecting Disable CDM item .

Display the CDM setup form by right-clicking on the CDM icon in the system tray and selecting the Setup menu item.



- 

- Select the make and model of your phone system (**Not** the model of phone handset that you are using) from the drop-down list.
- **Phone System:** Specify the COM port on your PC that is connected to the phone system via a serial cable. (Usually this is COM1, but often it is COM2, and very rarely 3 or 4.).
- **Communication settings:** This information is documented in your phone system manual or can be configured by programming the phone system. Even if you know the COM port settings it is recommended that you click **Configure** to enter a COM port test window and confirm that the COM port is functioning properly.
- **DTR:** While importing call data record through COM port, by checking DTR radio button (which finds whether receiver's terminal is ready for receiving call data records), you can ensure that data sent is arriving at destination.
- **RTS:** While importing call data records through COM port , by checking this radio button(which causes the sender to request receiver before sending call data records), you can ensure safe arrival and receipt of call data record at receiver end.

<u>Advanced Options:</u>

- **Dialed number in call data output includes the trunk access code prefix:** Specify whether you need to dial a digit (e.g. 8 or 9) to access a trunk line. You need to check this box only if your phone system prefixes this access digit to the phone number in the data output by the phone system. (91800XXXXXXX).

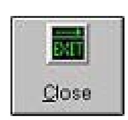
- **Discard extra digits dialed after phone number:** Specify whether you want to be shown any extra digits dialed after the phone number. For instance, digits dialed to access a phone card or for automated phone systems (DTMF digits).
- **Advanced Parsing:** Specify if you would like to see advanced caller ID information (CLID). This setting will also enable the legs of a call to be combined into one call record on certain advanced phone systems.
- **Discard Duplicate Records**: Specify whether you want to parse same call data records only once. If checked it ensures that duplicate records will not be parsed by Call Analyst.
- **Update Directory Dynamically:** Specify whether you want to update data in Call Analyst database in case of a new (that is for first time) extension, line or phone number is parsed by Call Data Manager (CDM).
- **Long Distance Call with Prefix:** Specify whether the SMDR generated by the switch contains prefix 1, for long distance calls. If checked it ensures that prefix (1) for call records will not be parsed in the Phone number field of CallAnalyst.

Advanced Options: Multi-site reporting:

- **Member of a multi-site installation**: Select if this installation of CallAnalyst will be used as part of a multi-site installation.
- **Site Code**: If this installation of CallAnalyst will be used as a remote server in a multi-site installation then a Site Code must be set. The site code will be prefixed to all call records from the remote server so that they may be differentiated from call records from other remote servers. Each site must have a unique code as the various installations have no knowledge of each other. It is imperative that the call accounting administrator assigns a unique code for each site.

Advanced Options:

- **Area codes used with ten digit dialing, toll free and local calls:** This box must contain all area codes considered to be local or toll free for billing purposes. In some areas, local calls require that the local area code be dialed before the seven digit phone number (10 digit dialing) even though it is a local call (toll free). In such cases, the local area code must be included so CDM will not interpret the 10 digit phone number as a long distance call.
- **Extensions/Accounts/lines: Configure:** This is an optional configuration that allows user to manage extensions, account codes and lines (trunks) and to arrange them in groups. Also, in situations where a Centrex access code is dialed (appears in the call record as a prefix to the dialed number) you must specify the length of the CTX access code for each phone line (trunk).
- Save the updated CDM configuration by clicking on the **Save** button. Exit the CDM setup dialog by clicking on the **Close** button.



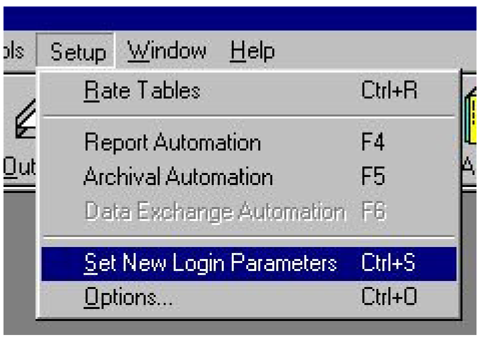
- Enable CDM by right-clicking on the CDM icon in the system tray and selecting **Enable CDM.** Enabling the CDM will cause the telephone icon in the system tray to turn green.

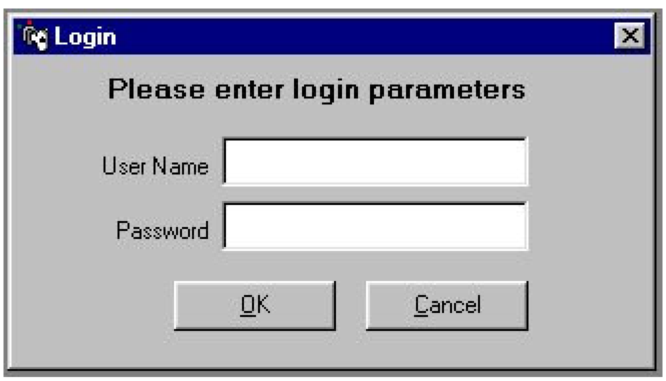
- CallAnalyst is now ready to receive call information from your telephone system!

Configure the Login Parameters

CallAnalyst allows you to restrict access to the program by using a simple login name and password (case sensitive).

To Configure the login parameters:

- The default User Name is admin and Password is ca.
- To configure this feature click **Setup|Set New Login Parameters** from the main CallAnalyst window.
- 

- This will open the login configuration screen.
- 

  Enter a **User Name** and **Password**.
- To restore unrestricted access open the login configuration screen. Leave both the **User Name** and **Password** fields blank and click **OK**.

Acquiring Elite CallAnalyst License

To use the Elite CallAnalyst application the product has to be registered. Once the installation is complete, click on Programs -> NEC -> Elite CallAnalyst. The registration screen will appear. The user interface to register the product is shown below.

Figure 1: Registration Screen

The user can register the product in two ways.

- Auto-Register
- Manual Register.

Auto Register

The user needs to enter the Associate Number, serial number and stock number and click on the Auto-Register button showed in figure 1. It will automatically register the product with the NEC web-licensing Server and notify the user with appropriate status message.

Manual Register

The user needs to enter the Associate Number, serial number and stock number and click on Manual Register button showed in figure 1. A screen popup with a generated key will appear.

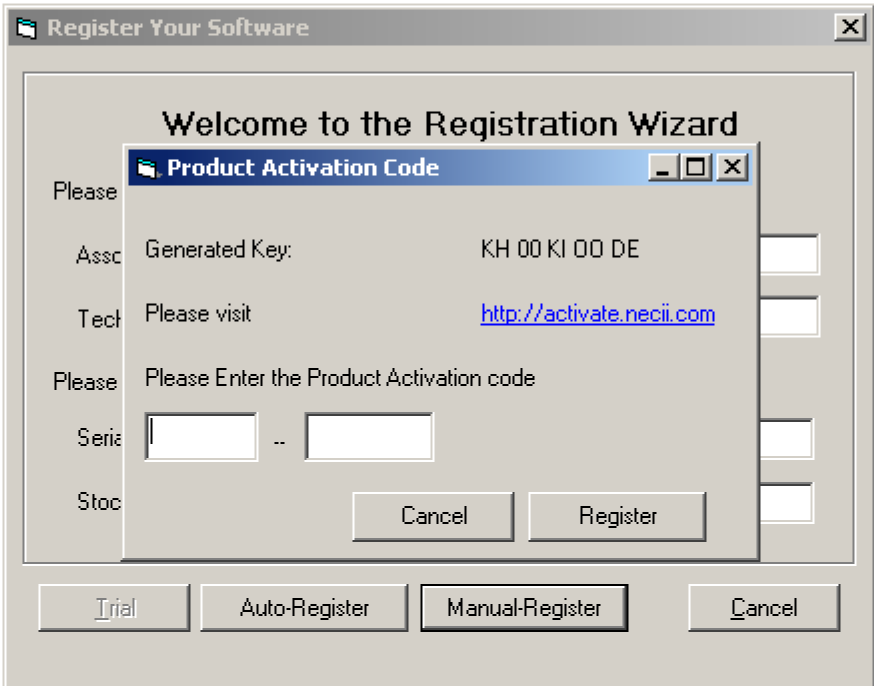


Figure 2: Manual Registration Screen

The user has to copy the Generated key and navigate to the NEC web-licensing server (http://activate.necii.com) and enter the Associate Number, serial number, stock number and the Generated key information and click on 'Activate' button showed in Figure 3 to get the Activation code.

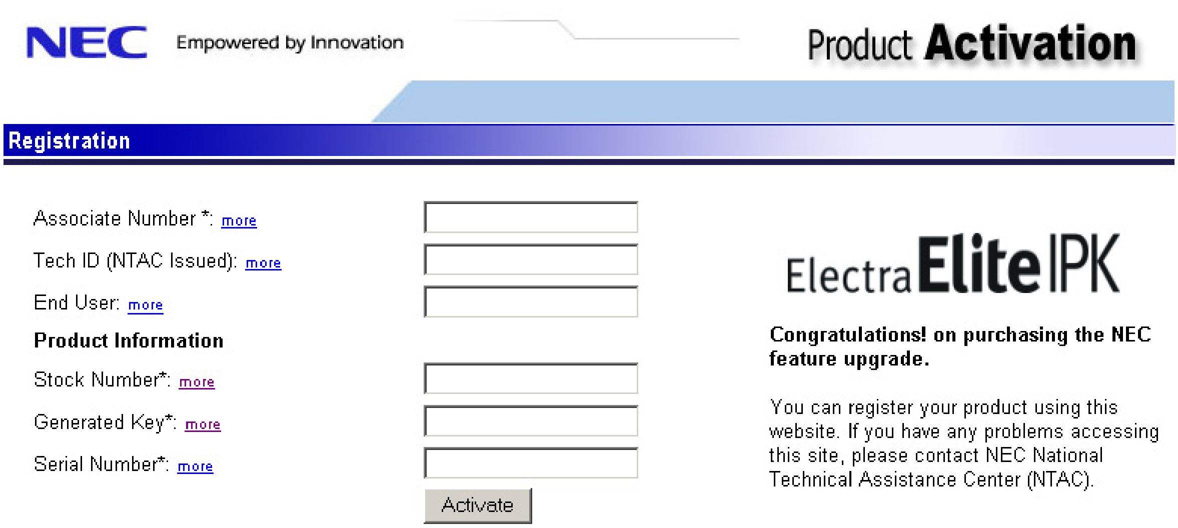


Figure 3: NEC Web-license Server

Enter the Activation code generated by the NEC web-licensing tool in the manual Registration screen (Figure 2) and click on Register to activate your product.

Upgrade/Additional License

Once the product has been registered, it will allow the user to run the application. At a later time, the user can upgrade the license or purchase additional license by pressing an <Enter> key in the following figure 4, to invoke the registration screen.

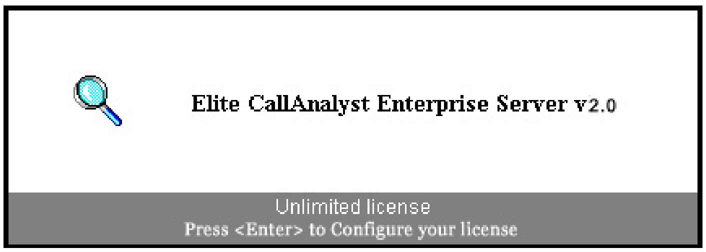


Figure 4: Invoking Upgrade License Screen

Generating Reports

Call reporting is the basic activity performed by CallAnalyst. You can generate reports to analyze call information in useful and interesting ways. You can create most report in a graphical or textual format. By default, the report is displayed on the screen to preview. You can then print or export it.

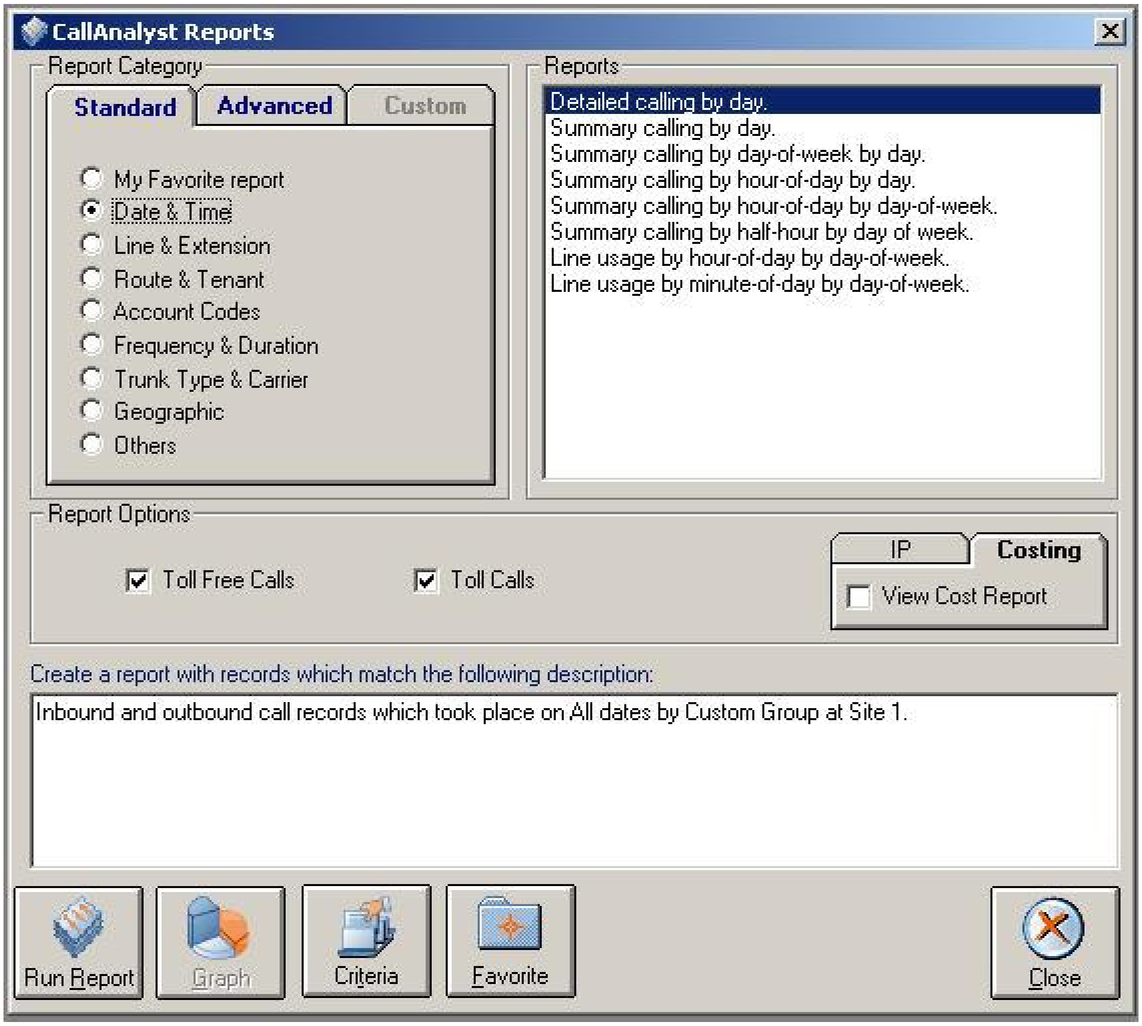
The majority of reports in CallAnalyst are self-explanatory, however a few require some explanation both for their composition as well as usage.

You can also specify a date/time for CallAnalyst to automatically generate reports using a set of call information that you define. CallAnalyst can email, print, or save the automatically generated reports to a file. You can even inform CallAnalyst to generate the report when you are away from your computer.

To generate a report, follow these steps:

- Click on the **Reports** button in the main CallAnalyst window.
- 

- This displays the following Report window:



- Select the type of report that you want to generate from the Report Category list in the top-left side of the CallAnalyst Reports window. CallAnalyst has a set of reports for each report category.
- Select the report that you want to generate from the list of reports available in the top-right side of the CallAnalyst Reports window.
- Select the types of calls that you want to include in the report:
- *Toll-free calls* include calls to your local area code as well as those area codes (such as *800*) which are defined during installation. (To see if you have these configured correctly, see the section on CDM setup.)
- Toll Calls include domestic calls outside of your area code in the report
- Choose between **Call Costing** and **IP**; that is, the report can include call costing (based on the Rate Table), unless it includes voice over IP calls.
- Specify which call records will be used in the report by clicking on the Criteria button. By default, CallAnalyst generates reports that include all call records. By clicking on the Criteria button and using the *Call Selector* form, you can limit the amount of call record information that CallAnalyst uses in the report.
- Generate the report. Most reports support text and graphic formats. If a format is not supported for a specific report, then the button will be disabled (button name will be grayed out).

- To generate a text report, click on the Run Report button.
- To generate a graphic report, click on the Graph button.
- The report is displayed on the screen to preview. You can then print or export it.
- CallAnalyst can also generate call history and billing reports for a specific contact.

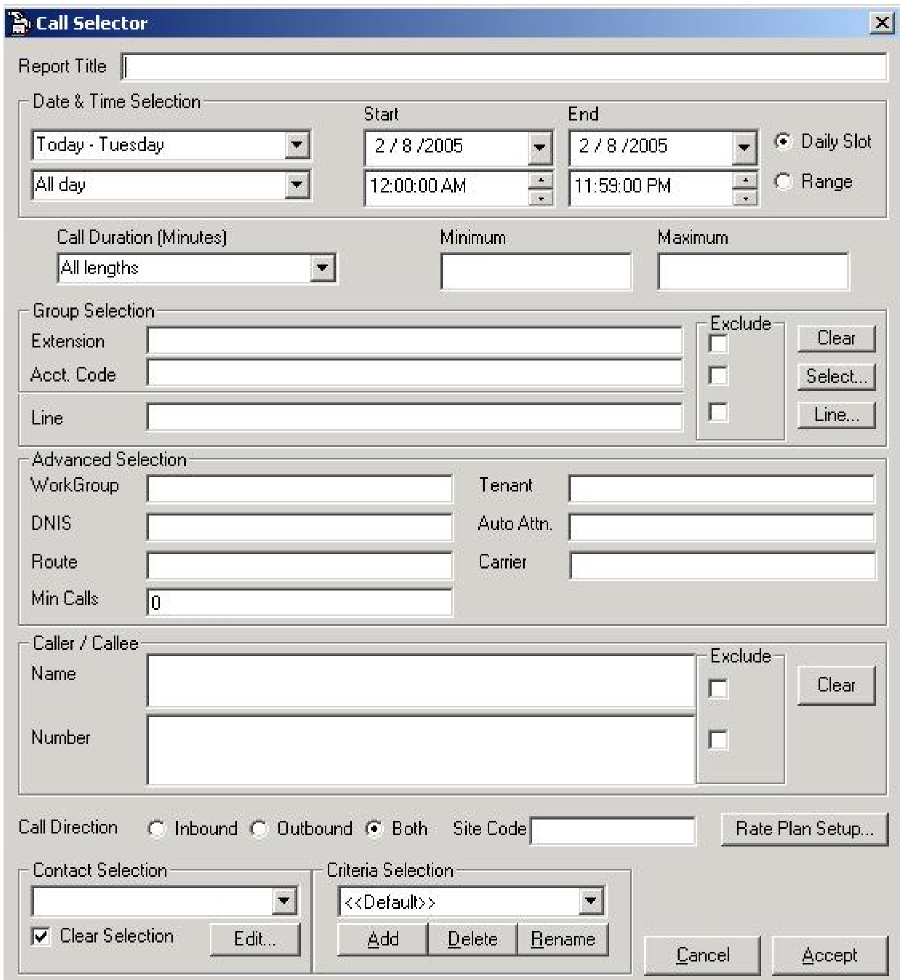
Setting Report Criteria

CallAnalyst allows you to view your call information in many different angles, applying various different criteria. To view or drill down on specific call information, you can use the Call Selector. Remember that you do not have to enter values for every field in this form. Every value in one of the fields in the Call Selector, potentially limits to or excludes (depending on your choice) the call records that match the value.

Since you may need to generate numerous reports using a particular call selection criteria, CallAnalyst allows you to save the values in this form using a Criteria Setting. You can add, remove, or rename criteria settings at the bottom of the form.

- The following procedure assumes that you have already displayed the Call Selector form from within the Report or Call Record windows. Typically, displaying the Call Selector form is done by clicking on the **Criteria** button.
- 

- When you have finished specifying your call selection criteria, you can have CallAnalyst use the information by clicking on the Apply button on the bottom of the form.



- Specify a customized Title for the report you want to run.
- Specify the range of days containing call information that you want to use in the selection using the pulldown listboxes in the top section of the Call Selector window. You can specify this information using either the pre-defined date/time ranges (using the left-hand column) or custom dates/times (using the Start and End columns).
- Specify the time-of-day (start and end time) for which you want to run the report for. Also check the appropriate option for using daily time slots (calls that occurred between start time and end time every day for the selected dates) or range (calls that occurred between start date-time and end date-time).
- Specify the length of call. You can select from either a list of pre-defined durations (using the pulldown listbox called Call Duration (Minutes)) or you can specify minimum and maximum times in minutes.

- Specify extensions, account codes and/or lines to include in the selection criteria by clicking on the Select... button (displaying the Selector dialog box). Using the Selector dialog box, you can use one of the two methods to limit your criteria to a specific set of extensions, account codes or lines:

Include a single extension, account code or line in the criteria:

- Click on extension, account or line tab on the right side of the Selector dialog box (depending on which type of information you want to select)
- Add the item to the selection criteria by double-clicking on the extension, account code, or line. CallAnalyst will add the information to either the Extensions, Acct. Codes, or Lines fields in the Call Selector form.

Include a set of extensions, account codes, or lines associated with a department or group:

- Display all departments and groups by clicking on the Refresh View button on the bottom of the Selector dialog box.
- Add the extensions, account codes, and lines associated with a group or department by double-clicking on the group or department. CallAnalyst will add the information associated with the department or group to the Extensions, Account Codes, or Lines fields in the Call Selector form.
- Include an ad hoc group of extensions, account codes or lines -- simply type extensions, etc., into their respective fields, separated by commas.
- Similarly, specify Workgroup, DNIS, Route, Tenant, Auto Attendant, Carrier, Caller/ Callee name and number by typing into their respective fields.
- Specify (full or partial) phone numbers or line names. You can use the Line Name and Line Number fields to restrict the call records selection to area codes or a specific phone number. Do not use special formatting characters (like parenthesis or hyphens) in the phone number specified (e.g. 5034399338 - correct, (503) 439-9338 - incorrect).
  Wild cards: It is acceptable to use wild card characters in these fields. Use the asterisk (*) to represent any length string, e.g. *JON* would include both 'JONES MIKE' and 'SMITH JONATHAN'. Use the question mark (?) to represent as single character, e.g. 8??5551212 would include 8005551212 and 8775551212.
  Multiple entries: Multiple entries must be separated by a comma.
- Specify the name of contact. You use this pulldown list box to include a specific contact in your call selection criteria. If you do not want to do the contact selection, check the **Clear Selection** checkbox.
- Set a specific rate plan to include your calling costs (plus a optionally defined surcharge or percentage add to the report on either a per-call or per-report basis).

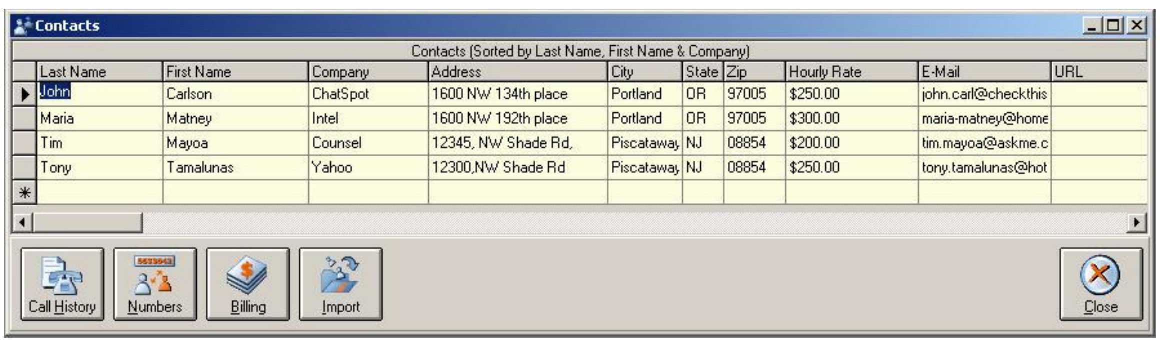
Generating Billing Reports

If you bill your clients based on time on the phone (e.g. attorneys) or if you need to justify time spent on the phone (e.g. telemarketers), CallAnalyst can easily generate reports showing the times that you have spent talking to a client.

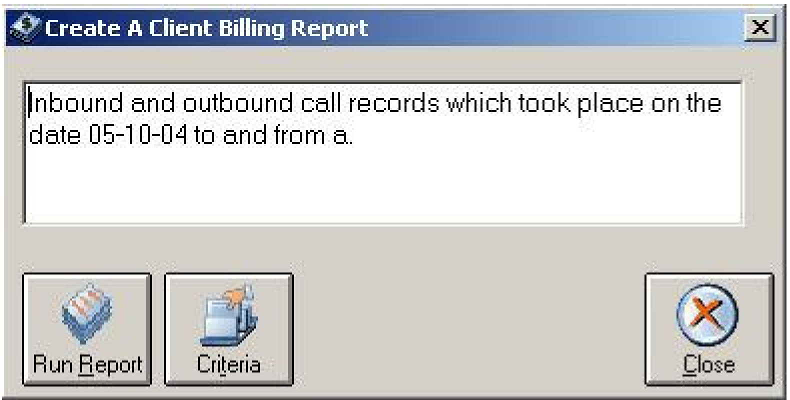
The billing report consolidates your client's phone lines (e.g. business numbers, home numbers, cell phone numbers) into one report. The key to creating a successful billing report is to associate phone numbers to your client or contact. This information allows CallAnalyst to create an association between those phone numbers and all the call data you have collected from your phone or phone system.

To create a billing report for a client or contact:

- Display the Contacts window by clicking on the **Contacts** button in the CallAnalyst window.
- 

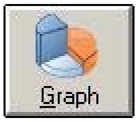
- This displays the Contacts window (similar to the window shown below).
- 

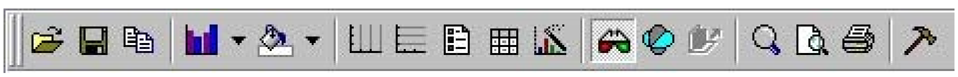
- Assign a billing rate to that client (under the billing rate column in the Contacts window) to have CallAnalyst automatically calculate a total cost or charge for your phone calls. This step is optional.
- Select the row containing the contact by clicking on the button in the leftmost column of the Contacts window. This should highlight the entire row containing the contact.
- Create a Billing Report by clicking on the Billing button in the Contact window. This displays a dialog box similar to the window shown below.

- 

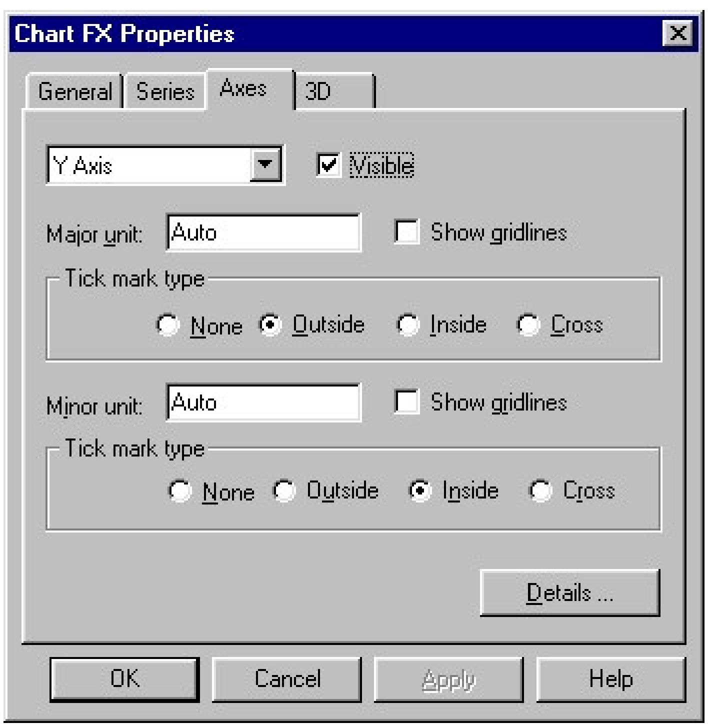
- Verify the call record selection (shown in the middle of the Create A Client Billing Report window) is correct. (If you need to modify the set of call records that will be used in the report, click on the Criteria button in the Create A Client Billing Report window)
- Generate the report by clicking on the Run Report button in the Create A Client Billing Report window.
- Once your billing report has been created you can treat it like any other report. You can print it, re-size it, save it to disk or email it to someone.

Generate Graphical Reports

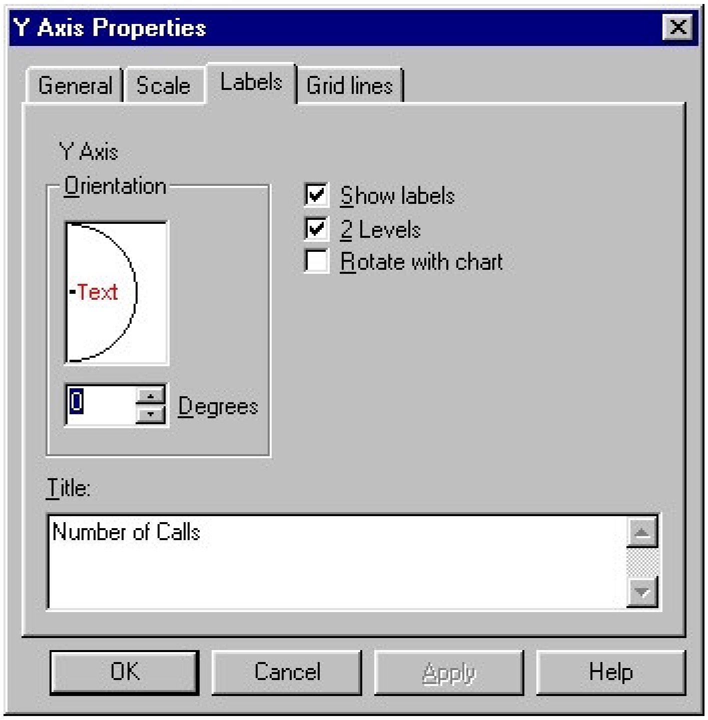
- Choosing a report which offers the Graph option will result in the **Graph** button becoming available for use (i.e. not grayed-out). Clicking this button will cause the graphical report window to come up, which provides a variety of configuration and manipulation features.
- 

- The button bar at the top of the graphical report offers a veritably infinite number of display options for your data. To determine the function of each button in the button bar, rest the mouse cursor over the button and CallAnalyst pops up an information box which describes the function of the button. The buttons as such are virtually self-explanatory and should be experimented with to discover their effects, especially since their variety and visual nature render a detailed explanation of little value.
- 

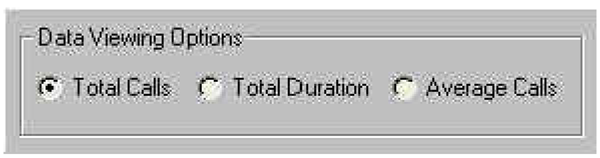
Axis Labeling

- In order to reach the axis properties, right click on the the graph to bring up the floating menu:
- 

- Selecting **Details** will bring up the Axis Properties window (below) associated with the axis selected in the Axes tab of the Properties window, as shown above.

- 

Saving Settings

- For each graph, and for each of the Data Viewing Options, there is a set of labels that can be saved with the Custom Label Options Feature for future use.
- 

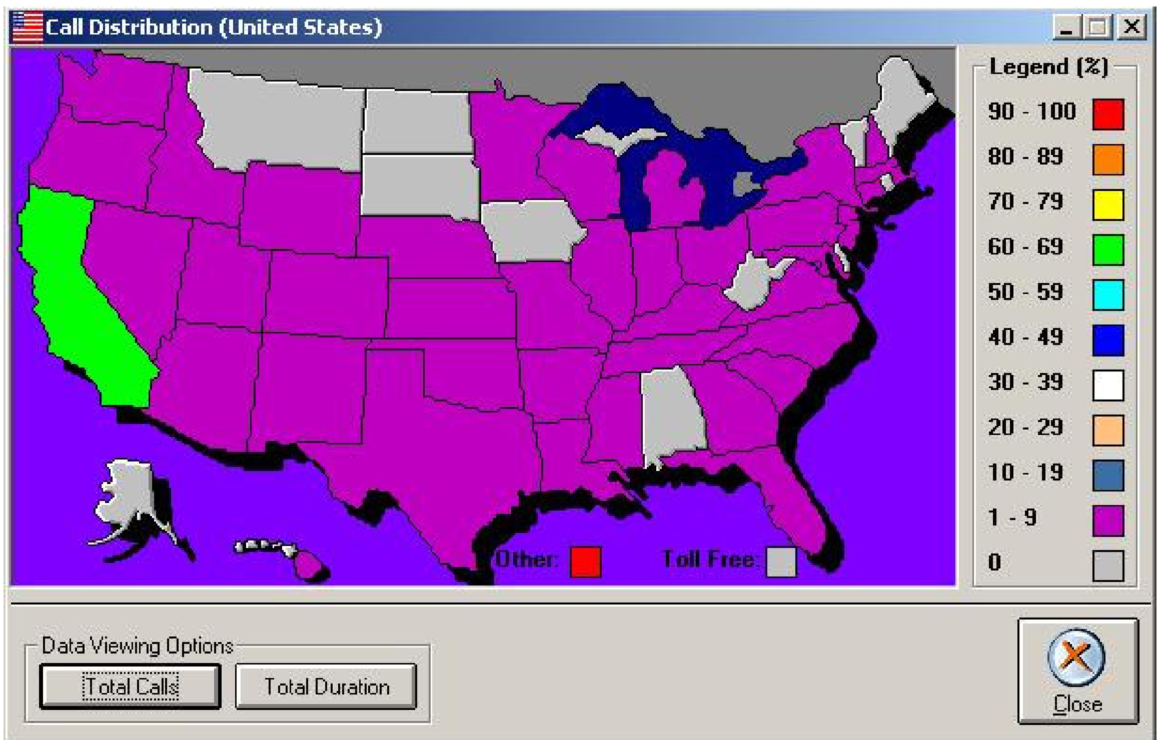
- 

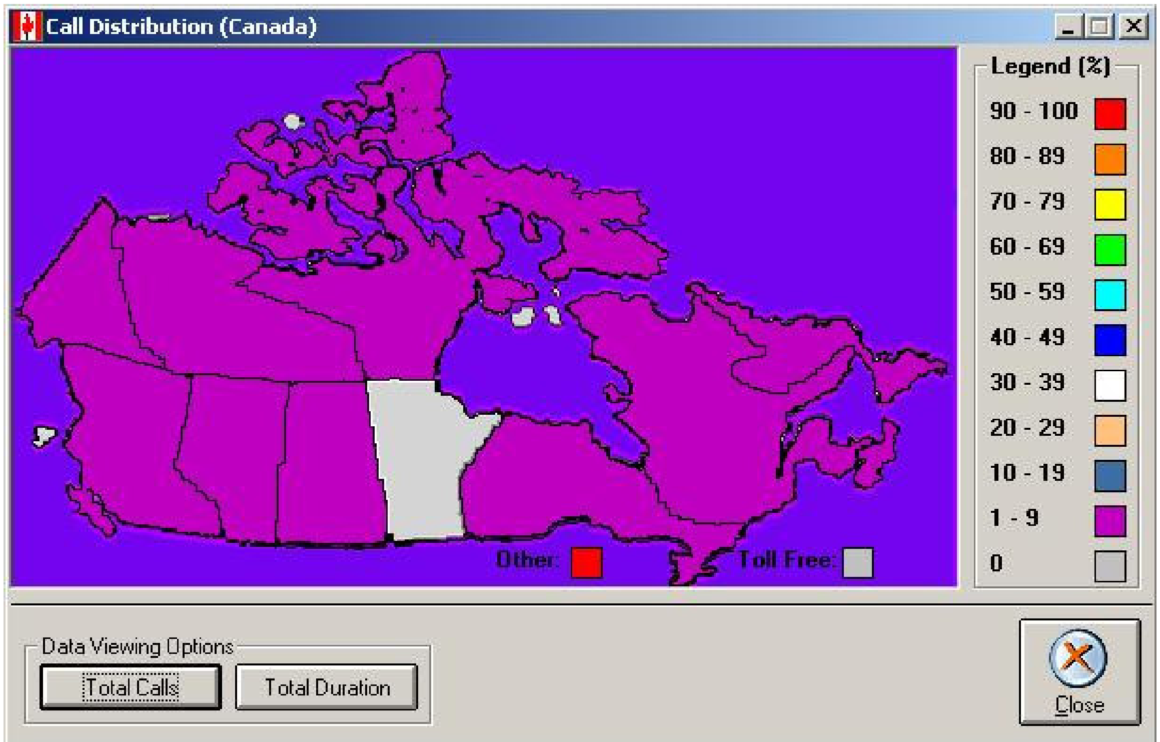
- When you generate a graphical report, sometimes there will be too many data points on the x-axis, rendering the graph overly congested. In this case, use the zoom feature to highlight a section of the graph; this will resize the graph.

Using Call Map Graphing

This report shows the call distribution map using color codes on a map of the United States or Canada. Calls to multiple area codes within a state are combined to form a single total for the whole state.

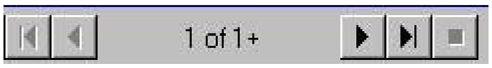
Click on **<Total Calls**> to color the map based on the number of calls for a particular state in relation to the total calls. Similarly, <**Total Duration**> will color the map based on the duration of calls for a particular state in relation to the total duration of calls made. This report is subject to the same criteria which are used on all other CallAnalyst reports.

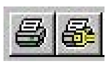


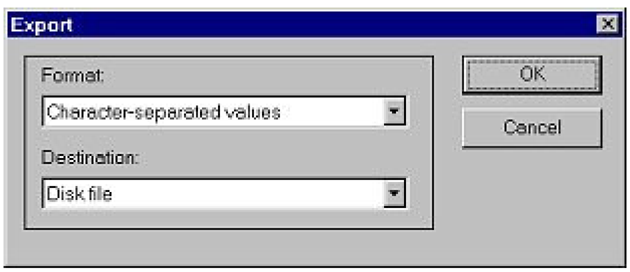

Call Distribution (Canada)
Legend (%)
90 - 100
80 - 89
70 - 79
60 - 69
50 - 59
40 - 49
30 - 39
20 - 29
10 - 19
1 - 9
0
Other:
Toll Free:
Data Viewing Options
Total Calls
Total Duration
Close

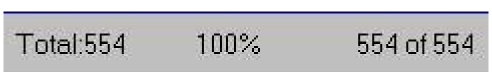
Using Tabular Report Button Bar

Each tabular report window has a button bar at the top of the report window that allows you to:

- Navigate between pages
- 

- Print the report
- 
- Zoom in/out of the current report page
- 

- Export the data into popular file formats.
- 
- This button displays the following dialog box that you can use to export or email the text in the report in a different format.
- 

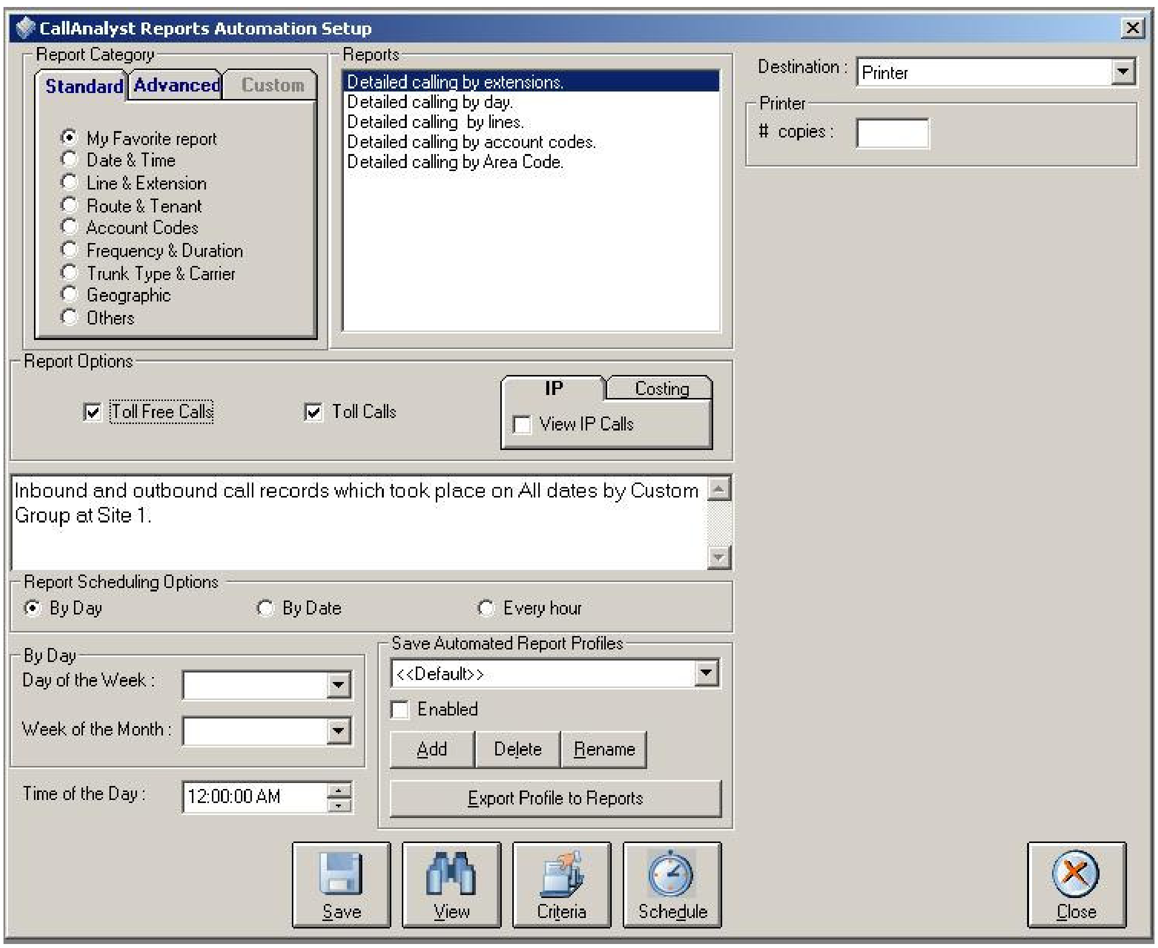
- Display number of call records included in the report and the percentage of all call records used in the report.
- 

Automating Report Generation

Typically, you may want to generate reports on a regular basis. You can setup CallAnalyst to automatically generate a series of reports at the times that you specify. Report automation gives you all of the powerful report capabilities within CallAnalyst with the convenience of automatically generating a report whenever you want (even when you are not there). You can also have the generated report forwarded to one or more people as an email attachment.

You can always generate reports within CallAnalyst whenever you need using the Report tool.

<u>To setup automatic report generation, follow these steps:</u>

- Select the **Setup|Report Automation** menu item in the main CallAnalyst window. This displays the CallAnalyst Reports Automation Setup window.
- Select the type of report that you want to generate from the Report Category list in the top-left side of the CallAnalyst Reports window. CallAnalyst has a set of reports for each report category.
- 

- Select the report that you want to generate from the list of reports available in the top-middle of the CallAnalyst Reports Automation Setup window (shown above).

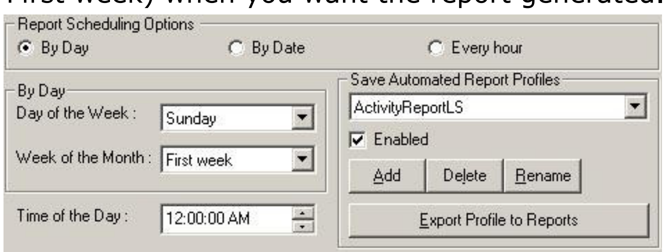
- Select the types of calls that you want to include in the report:

- **Toll-free calls:** include calls with area codes such as 800, 877, and 888.
- **Local Calls:** include calls within your area code in the report.
- **Long Distance Calls:** include call outside of your area code in the report.
- **Call Costing:** allows the usage of the rate table to determine the cost of the call and include this information in the report.

- Determine the set of call record information to use in the report. By default, CallAnalyst generates reports that include all call records. A description of which Call Records will be used in the report is displayed in the middle of the CallAnalyst Reports Automation Setup window. For example:

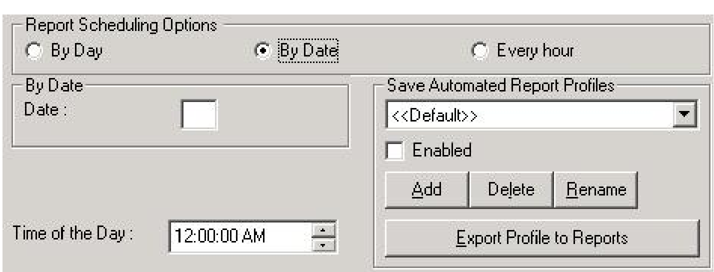
- If the text in this window (like the one shown above) does not describe the set of call records that you want to use in your report, click on the **Criteria** button to change the types of call information that CallAnalyst uses in the report.

- Specify the date/time to generate the report. You can specify how often you want to generate this particular report. This time period can be anywhere from once-a-month to daily. You may specify the By Day or By Date scheduling options.
- **By Day:** Specify the day of the week (e.g. Sunday) and the week of the month (e.g. First week) when you want the report generated.

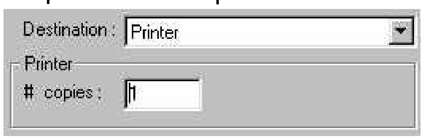


- **By Date:** Specify the exact date (e.g. Enter 15 for the 1st of the month) when you want the report generated.

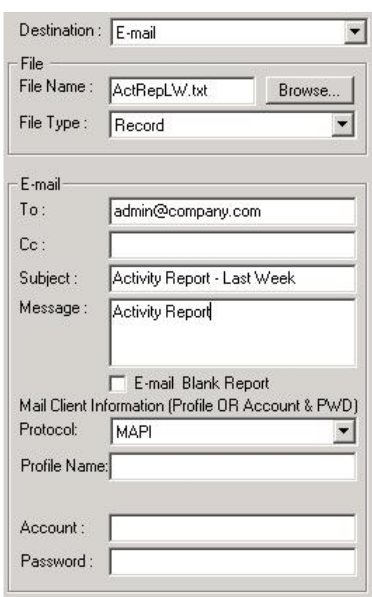
So here the report will be fired on the 15th of every month

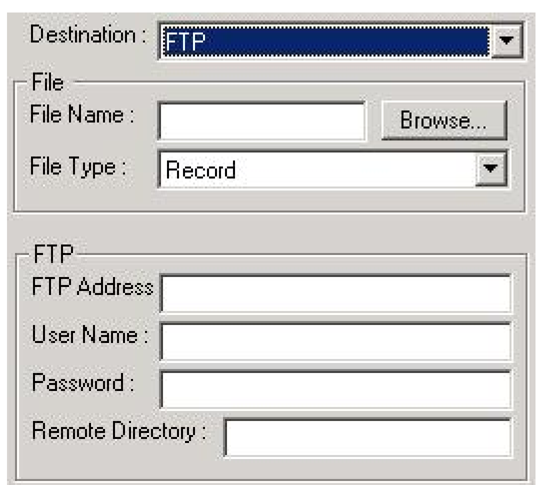


- **Every Hour:** Fires hourly reports based on the criteria. Note that if there are no records for the criteria, then the print will be fired with no data.
- Note that for running any report, the "Enabled" checkbox has to be checked for the report to run.
- 

- Specify where to send the generated report. By using the Print Destination list box, you can save the generated report to any of the following locations:
- **Printer:** Print the report by specifying Printer in the Print Destination list box. If you select this option, CallAnalyst provides a field to define the number of copies that your default printer should print (in a Client-Server installation, the default printer that is configured on the server). You can specify the default printer using the File|Printer Setup... menu item in the CallAnalyst main window.
- 

- **File:** Save the report to a file by specifying File in the Print Destination list box. If you select this option, CallAnalyst provides two fields to specify the filename of the report and the format (File Type) of the report.
- 

- **Email:** Send the report as an email attachment by specifying Email in the Print Destination list box. If you specify this option, CallAnalyst provides the following fields for you to specify the format (File Type) of the report and a list of email addresses of people who should receive the report. You can even include a short message that will be included in each email. If you wish to send to multiple addresses they should be separated by commas. You also need to specify the profile to be used for email or the Account name and password.
- 

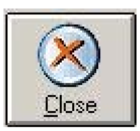


- FTP: Select this option to upload the report to a FTP site. Select the file name and format. Specify the ftp address, user name, password, and the directory where the generated report is to be uploaded.
- Save the report setup. After you filled out this form, you can save this information and have CallAnalyst generate the report by clicking on the **Save** button in the CallAnalyst Reports Automation Setup window.

- 

- CallAnalyst saves the information in this window (to automatically generate the report) to the automation profile name. You can add, delete or rename the automation profile for later use.
- The scheduler must be running on the main CallAnalyst installation in order to perform automated report generation. You can start the scheduler by clicking on the **Schedule** button in the Report Automation window. Scheduling is not available on the client side. The Scheduler runs on the server.
- 

- When you save the report automation setup, CallAnalyst schedules the report automation. You can view the list of completed tasks by right-clicking on the clock icon in the system tray (lower right corner of your screen) and selecting the Show Scheduler popup menu item. This list includes the Profile name, type of profile, i.e. report, database archival, E-mail, FTP, etc. and the time when it was completed. (only on server installations)
- 

- If you make changes to an existing profile or add a new profile after the Scheduler has been started, you must click Save and Close in order for the Scheduler to perform jobs as per your new profile. If no e-mail profile is configured at the time the Scheduler is started and later you configure an e-mail profile you must close and restart the scheduler to be able to send e-mail. The scheduler will ask for a mail sign-on only when it detects that an e-mail profile is configured.
- A MAPI-compliant email program such as Microsoft Outlook must be installed if you want to send email using CallAnalyst.
- Exit the CallAnalyst Reports Automation Setup tool by clicking on the Close button in the CallAnalyst Reports Automation Setup window.
- 

Selected Reports - Standard

This section explains the details on only select reports. The remaining reports are considered to be self explanatory.

Report Category: Date & Time

Category gives you reports that help you analyze the call activity by day, day-of-week, hour-of-day. Also allows you to monitor the trunk usage and activity helping you manage the phone system and perform load balancing. Call costing is available.

Report Category: Line & Extension

Category gives you reports that help you analyze calling pattern by Extension & Line groups by day of week and hour of days. Call costing is available.
Sample topics are:

- Reports on Call Distribution by Extension
- Summary Calling by Day by Extensions
- Graph: Summary Calling by Extensions by Day of Week
- Graph: Summary Calling by Extensions by Hour of Day
- Graph: Summary Calling by Hour of Day by Extensions

Report Category: Route & Tenant

Category gives you reports that help you analyze calling pattern by Routes & Tenants. These reports help to analyze phone activity by a tenant in a multi-tenant installation. Call costing is available.
Sample topics are:

- Graph: Summary Calling by Routes
- Summary Calling by Routes
- Summary Calling by Tenant
- Graph: Summary Calling by Routes by Day of Week
- Summary Calling by First Agent
- Summary Calling by Second Agent
- Graph: Summary Calling by Routes by Hour of Day

Report Category: Account Codes

Category gives you reports that help you analyze calls that were made using account codes. These are very useful in assigning costs based on projects or clients. Call costing is available. Also available are reports on tenant or authorization/forced account codes used.

Report Category: Frequency & Duration

Category gives you reports that help you identify most frequently called numbers, most expensive calls, long or short calls and ring-time before calls were picked up or answered. Call costing is available on selected reports. Sample topics are:

- Summary of Short Calls by Lines
- Longest calls by number

Report Category: Trunk Type & Carrier

Sample topics are:

- Detailed Calling by Trunk Types by Time of Day
- Graph Summary Calling by Trunk Types
- Summary of Calls by Carrier by Day
- Busy Trunk Summary by Trunk by Day of Week
- Graph: Summary Calling by Trunk Type by Day of Week
- Graph: Summary Calling by Trunk Type by Hour of Day

Report Category: Geographic

Category gives you reports that help you identify your main area of calling in your telemarketing campaigns and have the call distribution plotted on the map for visuals and presentations. It also helps you cost and analyze your international calling patterns and cost associated with it. Call costing is available for most reports.
Sample topics are:

- Detailed calling by area codes
- United states calling distribution
- Detailed calling by country codes and also calls grouped by extensions.

Report Category: Others

Sample topics are:

- Contact List
- Rate Plans by Zone

Call Distribution by Extension (Report Category: Line & Extension)

This shows the percentages of total calls that were made by each extension. This report will help determine which representatives make the most outbound calls during the day. Breaking this down by percentage of total calls for which each representative is responsible will help in comparing the workload for similar agents.

Summary Calling by Day by Extensions (Report Category: Line & Extension)

This gives the summary of total calls made on each particular day in a range of days, breaking it down by specific groups or extensions. The report determines whether calls increase during the weekdays or on Saturdays. You could also determine which are the busiest days for your organization.

Graph: Summary Calling by Extensions by Day of Week (Report Category: Line & Extension)

This gives an overview of which days each extension is most active.

Graph: Summary Calling by Extensions by Hour of Day (Report Category: Line & Extension)

This gives an overview of which times of the day each extension is most active.

Graph: Summary Calling by Hour of Day by Extensions (Report Category: Line & Extension)

This breaks down the day into hours and shows the total number of calls each extension has made over all the days in the criteria for each hour. Note that this graph becomes unwieldy if anything larger than a workgroup is used; i.e. keep the number of extensions to a reasonable level.

Graph: Summary Calling by Routes (Report Category: Route & Tenant)

This is a graphical form of the standard Calling by Routes report. This can be used to give a visual interpretation of the amount of calls utilizing specific routes.

Summary Calling by Routes (Report Category: Route & Tenant)

This tracks the total number of calls made through defined routes. This report can be used to determine how many total calls are being routed through a group of lines set aside for a specific purpose.

Summary Calling by Tenant (not available in NEC Elite CallAnalyst)

This is useful in cases where lines on a phone switch are leased out to tenants. This report, then, would be used to determine how much phone traffic each customer (tenant) represents. If, for example, a trunk were leased between two businesses, this report would show how much traffic each customer generates.

Graph: Summary Calling by Routes by Day of Week (Report Category: Route & Tenant)

A graphical form of the Summary Calling by Routes by Day of Week report. This can be used to give a visual interpretation of the amount of calls utilizing specific groups of lines.

Summary Calling by First Agent (not available in NEC Elite CallAnalyst)

This tracks the first tenant to handle incoming calls. This report can be useful to determine which tenants initially takes calls before transferring them to another group.

Summary Calling by Second Agent (not available in NEC Elite CallAnalyst)

This is used if a tenant needs a breakdown of total calls sent to them as a second party. This report will help determine if the phone system is routing calls effectively or adjustments need to be made for more efficient call trafficking.

Graph: Summary Calling by Routes by Hour of Day (Report Category: Route & Tenant)

This breaks down the day into hours and shows the total number of calls that occurred on each route over all the days in the criteria for each hour.

Summary of Short Calls by Lines (Report Category: Frequency & Duration)

This helps to determine how many calls were abandoned when received from the phone system. When running the report the user is prompted for the cutoff time in seconds and this time is used to detail how many calls were abandoned. This is useful in determining if the routing of calls needs to be adjusted to avoid abandoned calls. Note that in the Criteria window, the **duration fields are in minutes**. E.g. if the maximum duration desired is six seconds, then 0.1 should be entered into the Maximum field.

Call Ring Duration by Day (not available in NEC Elite CallAnalyst)

This shows how many times the phone rang before an agent picked up the line. This report will help determine if callers are handled in a timely fashion. In addition, this report can show call traffic incorrectly sent to vacant extensions.

Detailed Calling by Trunk Types by Time of Day (Report Category: Trunk Type & Carrier)

This breaks down trunk time usage in 15 minute increments starting at 8 A.M., and gives daily totals of the phone usage time on that trunk. If, for example, a company were to lease time on trunks, this report would indicate the necessity for additional trunks during certain hours of the day.

Monitoring trunk activity is useful in determining a company's trunk line usage and which trunks are used the most. The report '**Graph Summary Calling by Trunk Types' (Report Category:**

Trunk Type & Carrier) gives a graphical representation of the different trunk types and the amount of calls each trunk takes.

Summary of Calls by Carrier by Day (Report Category: Trunk Type & Carrier)

This shows which long distance carrier is used and for how much time. This report helps to see if the carrier is being used for the times of day it was intended. This report also shows which days a carrier was used in comparison with a second carrier.

Busy Trunk Summary by Trunk by Day of Week (Report Category: (not available in NEC Elite CallAnalyst)

This report can help determine a company's hardware needs by examining call volume at particular times of day.

Graph: Summary Calling by Trunk Type by Day of Week (Report Category: Trunk Type & Carrier)

This gives an overview of which days each trunk type is most active.

Graph: Summary Calling by Trunk Type by Hour of Day (Report Category: Trunk Type & Carrier)

This breaks down the day into hours and shows the total number of calls made on each trunk type over all the days in the criteria for each hour. The need may arise to export a list of Contacts from CallAnalyst. The '**Contact List**' report (Category: Others) generates a report of all contacts, thus providing an easy way to access them for export to other applications, for example.

Rate Plan By Zone (Report Category: Others)

This provides the rates charged for each zones under the various rate plans. Although this information is available within the program under rate plan setup.

Selected Reports - Advanced

NEC

Report Category: Auto Attendant & Voice Mail

- Summary calling by auto-attendant by day (not available in Elite CallAnalyst)
- Summary of first party voice mail spill-over by WG (not available in Elite CallAnalyst)
- Summary of second party voice mail spill-over by WG (not available in Elite CallAnalyst)

Report Category: ANI & DNIS

- Detailed call view by DNIS (not available in Elite CallAnalyst)
- Summary call view by DNIS by day (not available in Elite CallAnalyst)
- Summary call view by ANI by day
- Detailed call view by first party workgroup by DNIS (not available in Elite CallAnalyst)
- Detailed call view by second party workgroup by DNIS (not available in Elite CallAnalyst)

Report Category: Agent & WorkGroup

- Summary of first agent workgroup call pattern (not available in Elite CallAnalyst)
- Summary of second agent workgroup call pattern (not available in Elite CallAnaylst)
- Detailed workgroup call view by first agent (not available in Elite CallAnalyst)
- Detailed workgroup call view by second agent (not available in Elite CallAnalyat)
- Service pattern by workgroup by hour-of-day (not available in Elite CallAnayst)
- Summary of first agent call view by workgroup (not available in Elite CallAnalyst)
- Summary of second agent call view by workgroup (not available in Elite CallAnalyst)
- Summary of agent sign on/off pattern by hour-of-day (not available in Elite CallAnalyst)
- Agent view - sign on/off by workgroup by day (not available in Elite CallAnalyst)
- Workgroup view - sign on/off by agent by day (not available in Elite CallAnalyst)
- Summary of agent activity by day (not available in Elite CallAnalyst)
- Graph: Summary of agent activity by day (not available in Elite CallAnalyst)
- Graph: Summary of queued calls by hour-of-day by day of week (not in Elite CallAnalyst)
- Graph: Summary of scores by agent by workgroup (not available in Elite CallAnalyst)
- Graph: Summary of service level by workgroup by hour-of-day (not in Elite CallAnalyst)

Report Category: Call Party

- Detailed calling by first call-party extensions
- Detailed calling by second call-party extensions
- Summary calling by first call-party extensions
- Summary calling by second call-party extensions
- Detailed calling by remote call-party

Report Category: Web Calls

- Summary of WEB calls by hour-of-day (not available in Elite CallAnalyst)

Report Category: Contact

- Time billing by contact
- Time billing for all contacts
- Detailed calling by contacts
- Detailed calling cost by contacts by country code
- Summary calling by contacts
- Detailed calling by company
- Detailed calling cost by company by country code
- Summary calling by company

Summary Calling By Auto Attendant by Day (Report Category: Auto Attendant & Voice Mail) (not available in Elite CallAnalyst)

This gives the summary of total calls received by specific auto attendants and reports how many were passed on to voice mail or other extensions. The report also details how many callers left recordings with voice mail and how many disconnected from the auto attendant as well as how many agents or workgroups transferred calls. This can be useful in determining the effectiveness of auto attendant and voice mail solutions being used.

Summary of first/second party voice mail spill-over by WG (Report Category: Auto Attendant & Voice Mail) (not available in Elite CallAnalyst)

This indicates trends in the flow of phone traffic from voice mail and the like to work groups and other such destinations.

Detailed Call View by DNIS (Report Category: ANI & DNIS) (not available)

This details calls made using **DNIS**. It also shows how many calls were transferred and handled as well as how many calls were placed in a waiting queue and how many exited that queue. For example an office may have several 800 numbers each to handle calls for sales of a specific product; with this report it can be seen how many calls each number is generating as well as how many were transferred and how many were handled by that number.

Summary Call View by DNIS by Day (Report Category: ANI & DNIS) (not available)

This gives the total number of calls by day using **DNIS**. This report gives an overall view of the traffic each number gets per day as well as the callers identification.

Summary Call View by ANI by Day (Report Category: ANI & DNIS)

This gives the total number of calls made using **ANI**. This report shows the total number of calls received on a daily basis by ANI numbers as well as the total duration of those calls.

Detailed Call View by First Party Workgroup by DNIS (not available)

This shows which workgroups initially handled calls by various **DNIS** numbers. With this report it can be seen how many calls to each number a certain workgroup handled as well as how many were placed into a waiting queue, how many disconnected and how many were transferred.

Detailed Call View by Second Party Workgroup by DNIS (not available)

This shows which workgroups handled calls by various **DNIS** numbers as a second party. With this report it can be seen how many calls to each number a certain workgroup had transferred to them as well as how many were placed into a waiting queue, how many disconnected and how many were transferred to a third party.

Summary of first agent workgroup call pattern (Report Category: Agent & WorkGroup) (not available in Elite CallAnalyst)

Reports on workgroups activity and is designed to analyze a call center's call patterns specifically dealing with first line call response. It breaks down the calls by how a call is handled once it enters a call center queue by how long a call was in the queue, total calls and out of which how many went into the queue and how many were handled (talked to an agent), how many of those calls were transferred to another party (internal transfer or external), how many people exited (was queued and did not talk to an agent) the queue or got disconnected (abandoned the call from the Queue), total call time, how much time the agent spent talking and how long an agent was in wrap up mode. All this is designed to help better handle call volume for call centers and the like.

Summary of second agent workgroup call pattern (Report Category: Agent & WorkGroup) (not available in Elite CallAnalyst)

As with the previous report, only showing parties receiving transfers from first parties.

Detailed workgroup call view by first/second agent (Report Category: Agent & WorkGroup) (not available in Elite CallAnalyst)

This shows the activity of a workgroup by agents, showing number of calls handled, transferred, ring no answer, in, out and averages of talk time, outbound time, queue time and agent wrap up time etc. along with scores.

Service pattern by workgroup by hour-of-day (Report Category: Agent & WorkGroup) (not available in Elite CallAnalyst)

This gives Service Level (percentage of calls exiting the queue that fall under the acceptable threshold time), total calls in queue, number of agents signed on, maximum wait time, and average speed of answer. You have to specify two parameters when you run the report: 1) Threshold time used for measuring the service level of the 2) workgroup entered.

Summary of agent sign on/off pattern by hour-of-day (Report Category: Agent & WorkGroup) (not available in Elite CallAnalyst)

This gives you the pattern of total number of agent sign-on's and sign-off's that happened by a quarter hourly breakdown for a specified workgroup.

Workgroup view - sign on/off by agent by day (Report Category: Agent & WorkGroup) (not available in Elite CallAnalyst)

This enables a workgroup-wise view of when agents login and logout along with reason codes during the day. Grouped by Workgroup.

Graph: Summary Service Level by Workgroup by Hour of Day (Report Category: Agent & WorkGroup) (not available in Elite CallAnalyst)

This shows the Service Level (percentage of calls exiting the queue that fall under the acceptable threshold time) of each workgroup over each hour and averages it over the total number of days in the criteria set.

Summary of first/second agent call view by workgroup (Report Category: Agent & WorkGroup) (not available in Elite CallAnalyst)

This provides similar information as the Detailed workgroup call view by first/second agent, only this report has an agent centric view broken down by Workgroups to which they belong.

Agent view - sign on/off by workgroup by day (Report Category: Agent & WorkGroup) (not available in Elite CallAnalyst)

This enables an agent-wise view of when agents login and logout along with reason codes during the day. Grouped by Agents.

Summary of Agent Activity by Day (not available in Elite CallAnalyst)

This represents the number of calls taken by the agent on a daily basis and the average time between calls.

Graph: Summary of Agent Activity by Day (not available in Elite CallAnalyst)

This gives an overview by day averaged over the total number of days in the criteria set.

Graph: Summary of Scores by Agent by Workgroup (Report Category: Agent & WorkGroup) (not available in Elite CallAnalyst)

This shows the efficiency (score) of each agent in each workgroup at a glance. The score takes into consideration a prescribed value of a call and divides that by the call duration to determine efficiency.

Graph: Summary of Queued Calls by Hour of Day by Day of Week (Report Category: Agent & WorkGroup) (not available in Elite CallAnalyst)

This sums all the queued calls for each hour of each day over the period specified.

Detailed Calling by First Call-Party Extensions (Report Category: Local & Remote Call Party)

This gives a detailed breakdown of calls that came to a party directly. This report is useful in determining how often a call goes directly to a particular agent and whether proper call trafficking took place.

Detailed Calling by Second Call-Party Extensions (Report Category: Local & Remote Call Party

This gives a detailed breakdown of calls that came to a party transferred from another agent or first party.

Summary Calling by First Call-Party Extensions (Report Category: Local & Remote Call Party)

This gives a summary breakdown of calls that came to a party directly.

Summary Calling by Second Call-Party Extensions (Report Category: Local & Remote Call Party)

This gives a summary breakdown of calls that came to a party transferred from another agent or first party.

Detailed Calling by Remote Call Party

This gives a breakdown of calls that came in outside the system and releases the Caller ID information as well as the exact extension of the caller giving a more precise view of call activity.

VOIP/WEB Call Summary by Time-of-day (not available in Elite CallAnalyst)

This summarizes voice over internet and other internet traffic to indicate times of highest volume during a workday.

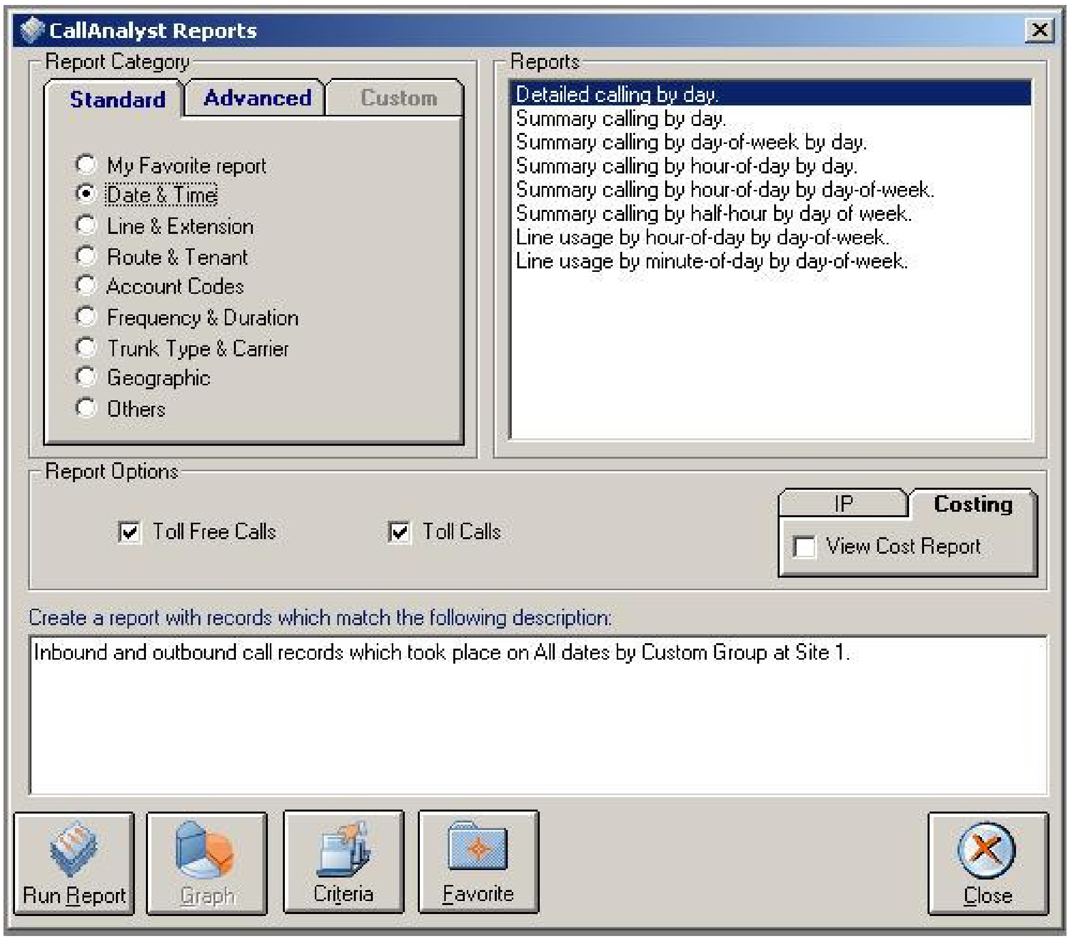
Report Category: Contact

These reports enable you to do time billing for contacts as well as to analyze and bill call expense based on contacts and companies.

My Favorite Reports

Users normally tend to access only a few reports in their day-to-day operations. These frequently used reports can be saved in the My Favorite report section, helping them to access these reports without configuring them again.

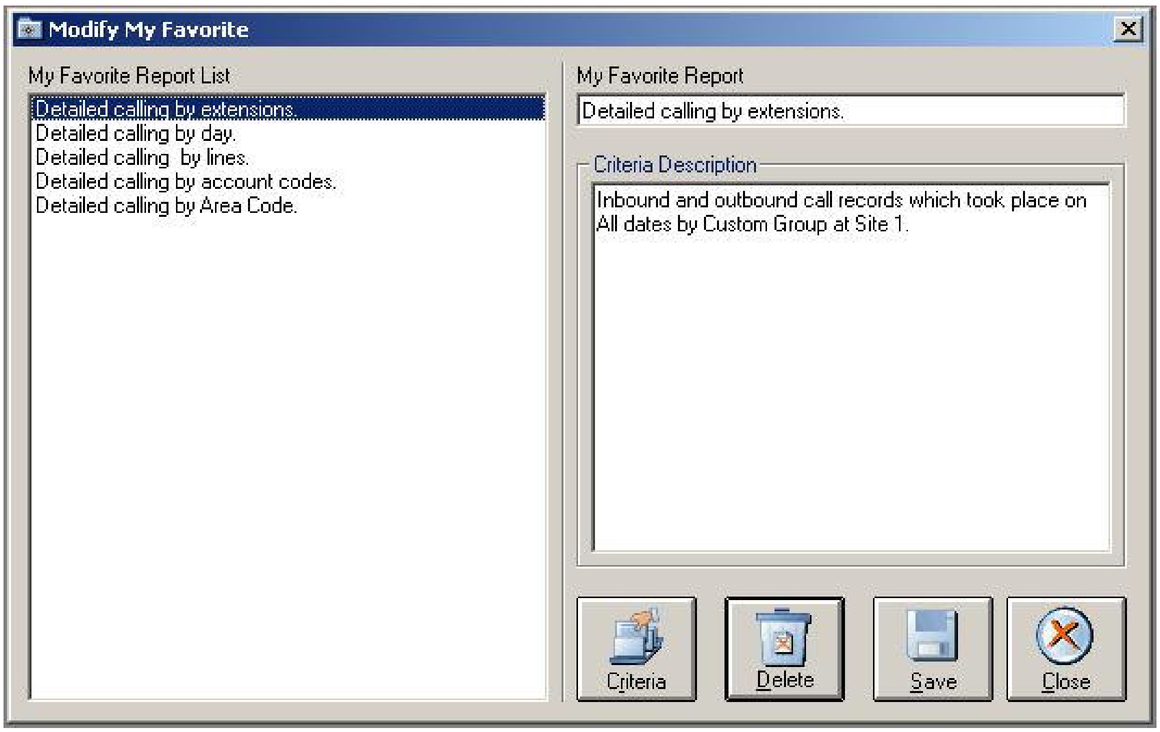
To Add a Report in My Favorite Report List:

- Configure the report to be added, with the desired criteria. Click on Favorite button to add it to My Favorite reports
- 

- A popup window appears. Enter the name by which you want this report is to be referred. By default Favorite Report's name is the same as that of the Report you want to add. Press OK button to add the report to Favorite Reports.

Modify My Favorite

<u>To Modify My Favorite:</u>

- **Goto EDIT/Modify My Favorite** Or use shortcut CTRL+M this will open the below window
- 

- My Favorite Report List in the left hand sideshows all configured Favorite Reports.
- To change the My favorite report name enter the new name in the right hand side under My Favorite Report (Top Right Side) and click on Save.

- To change the criteria of a particular report, select the appropriate report in the left hand side and click on the **Criteria** button. The call selector screen opens. Make the required changes and click on **Accept**
- Press Save button to **save** the changes
- To delete a report, select report from the left hand side and click on **Delete** button

Managing Call Records

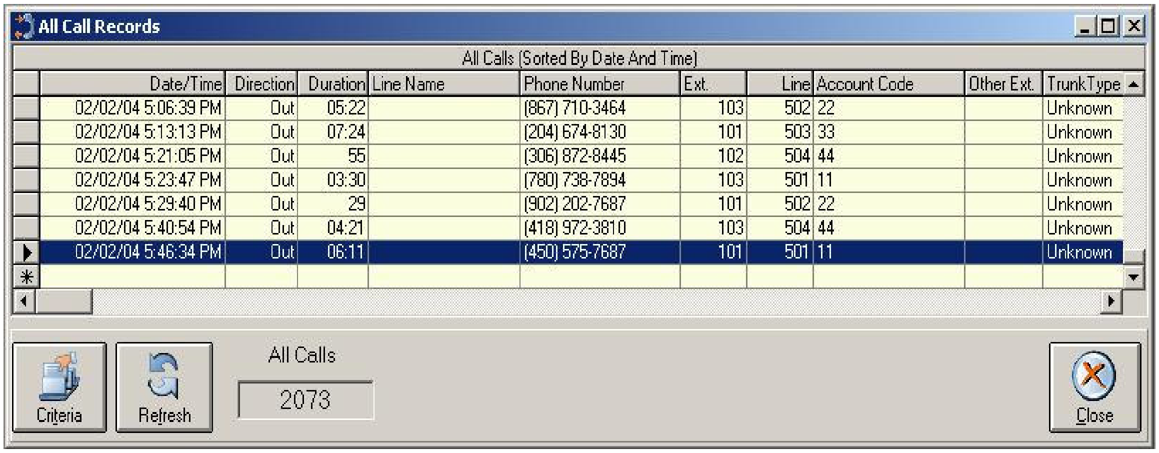
All call information collected by CallAnalyst is stored within the CallAnalyst database as a set of call records. The following list describes various tasks that you can perform to manage your collection of call information that will be used by CallAnalyst:

- Displaying Call Records
- Sorting Call Records
- Searching/Replacing within Call Records
- Editing Call Records
- Deleting Call Records
- Importing Call Records
- Archiving Call Records
- Restoring Call Records
- Automating Call Record Archival
- Retrieving Call Information from Remote Locations

Hint: Clicking on **Refresh** will update the display you are currently viewing to the most recent information from your phone system. Depending on your phone system you must be running the phone system interface software to capture the phone records.

Displaying Call Records

When you display a Call Record window, CallAnalyst creates a spreadsheet on call record information similar to the following window:



<u>The following list describes each of the columns in the Call Record window:</u>

- Date/Time: Displays the date and time when the call was made. CallAnalyst displays this information in reports.
- Direction: Specifies whether the call was incoming or outgoing.
- Duration: Displays the length of the call in minutes.
- Line Name: Displays the name whom the call was placed to/from depending on the type of call.

  For Inbound calls: If while configuring the CDM, Memory Mode is enabled then CallAnalyst displays the Line Name using Caller ID information of the call (if your phone system supports Caller ID). Due to restrictions in the Caller ID system, some inbound calls may be displayed in the Line Name column as Out of area or Private. If Memory Mode is not enabled, CallAnalyst searches the Contact list for a matching number (and associated name). It displays this name as the Line Name. If the phone number is not found in the contact database, then CallAnalyst uses the Caller ID information for the Line Name.

  For Outbound calls: Displays a blank field unless you associated the outbound phone number with a specific contact. It picks up the name information from the contact record.
- Phone Number: Displays the phone number of the connected call.
- Ext: Displays the extension that received or made the call.
- Line: Displays the outside line number that was used for the call.
- Account Code: Displays the account code that was assigned to the call. This could be the optional account code used.
- Other Ext: The extension to which a call is transferred from the current record.
- Trunk Type: A label defined on the switch to identify the type of trunk (T1, etc.), if available, associated with the Line specified in a call record.

- Route: Displays the route number of the line that was used for the call.
- Tenant/Auth.: If you share your phone system and the phone system supports the feature of tenancy then that information is displayed here. Also, forced account codes or authorization codes are logged in this field.
- WorkGroup: The work group of the party that originated or received the call first. Work group is an entity that represents a group of agents (extensions) that possibly has its own call queuing.
- Site Code: The site code or node ID configured for the installation
- DNIS: This is the number that the caller dialed to reach the callee.
- Auto Attendant: This is the auto attendant on which the incoming call landed
- Carrier: This is the special code used for special trunk access possibly for different carriers (1010333,...)
- Call Status: This displays the exit status of the call like, exit from WG Queue, Auto Attendant, Voice Mail etc
- Comments: Displays comments that you may enter about each phone call.

Sorting Call Records

You can change the ordering of the displayed call records by clicking on the header of the column. For example, to sort by call duration, click on the Duration header in the Call Records window.

Search and Replace Operation within Call Records

You can use CallAnalyst to search your currently stored call information. The following procedures assume that you have already displayed a Call Record Window (typically, by clicking on the All Calls, Inbound or Outbound icons in the CallAnalyst window).

To search for a particular name or number:

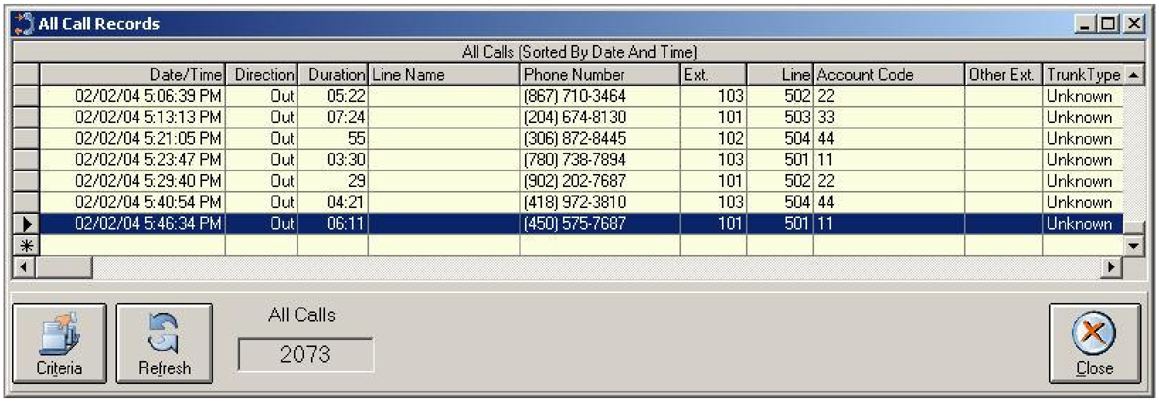
- Put the cursor in the name or number column (depending on what you are searching for) of the Call Records window.
- Select Edit|Find item from the pull down menu in the CallAnalyst window.
- Enter the name that you want to find and click the OK button.
- Note: This search will find any partial matches to the name or number you entered, i.e. searching for John will return records with "John" and "Johnson". The Find and Find Next menu items search for a name or number in the active Call Records window. Search for the next item which matches your search specification by selecting the Edit|Find Next menu item from the CallAnalyst window.

To replace a name or number:

- Place your cursor in the Line Name or Phone Number column.
- Select Edit|Replace pull down menu item from the CallAnalyst window.
- CallAnalyst will prompt you for a name/number to search and a name or number to use as the replacement.
- Click Apply to execute the replace operation. CallAnalyst reports any records, which match your replacement specification and make the replacement in the information in the CallAnalyst database.

Editing Call Records

CallAnalyst allows you to directly edit any information in the Call Record window that you can display by clicking on the All Calls, Inbound or Outbound icons in the main CallAnalyst window. An example Call Record window is shown below:



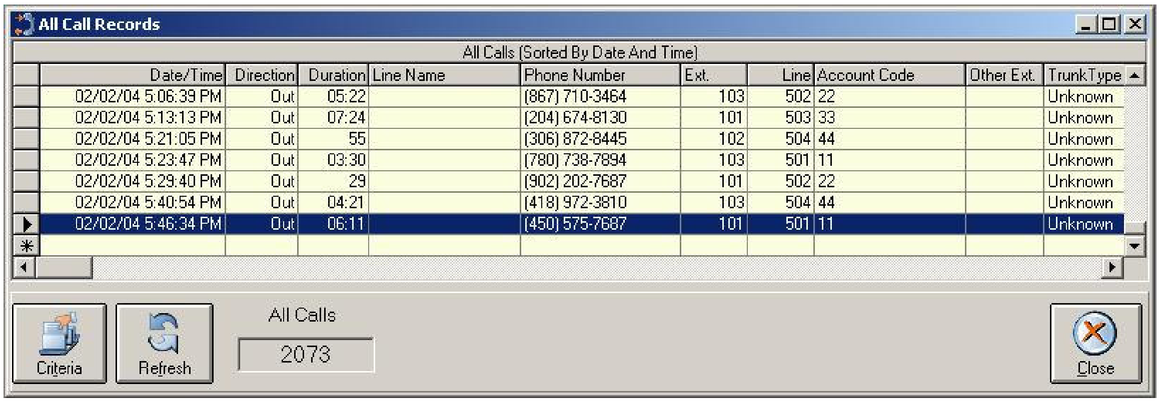
Date/Time	Direction	Duration	Line Name	Phone Number	Ext.	Line	Account Code	Other Ext.	Trunk Type
02/02/04 5:06:39 PM	Out	05:22		(867) 710-3464	103	502	22		Unknown
02/02/04 5:13:13 PM	Out	07:24		(204) 674-8130	101	503	33		Unknown
02/02/04 5:21:05 PM	Out	55		(306) 872-8445	102	504	44		Unknown
02/02/04 5:23:47 PM	Out	03:30		(780) 738-7894	103	501	11		Unknown
02/02/04 5:29:40 PM	Out	29		(902) 202-7687	101	502	22		Unknown
02/02/04 5:40:54 PM	Out	04:21		(418) 972-3810	103	504	44		Unknown
02/02/04 5:46:34 PM	Out	06:11		(450) 575-7687	101	501	11		Unknown

- You can place your cursor in any particular cell in the table and change the Line Name, Phone Number, Extension and Line number of each individual call. If you desire, you can even give a comment to each call.
- Other editing features include search/replace, replacing names and numbers, assigning names to particular phone numbers and assigning numbers to particular names.

Deleting Call Records

You should periodically delete call records that you will not need in your database. This simple maintenance of the database helps conserve disk space and optimizes reporting performance. The following sections describe how to delete individual and sets of call records from your database.

To delete an individual call record:

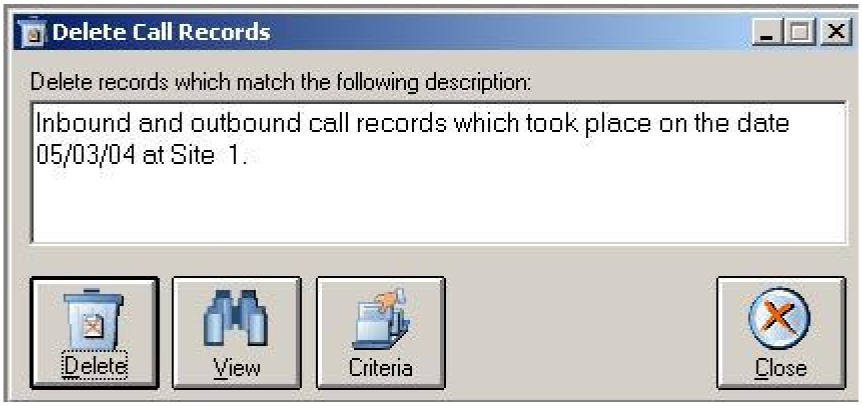
- Display the Call Record window by clicking on either the All Calls, Inbound or Outbound icons in the main CallAnalyst window. You should see a Call Record window similar to the following figure:
- 

- Select the call record by clicking on the button to the left of the row containing the call to be deleted in the Call Record window. After you select the call record, CallAnalyst should highlight the entire row in the Call Record window. To select multiple call records, select the call records pressing the Control key.
- Press the Delete key on your keyboard. In the resulting dialog box (shown below), click Yes to delete the selected call record.
- 

- **Note:** Do not click the Delete button at the top of the CallAnalyst main window.

To delete a set of call records:

- Select the Tools|Delete Call Records menu item from the main CallAnalyst window. Alternatively, click the Delete button at the top of the main CallAnalyst window. CallAnalyst displays the Delete Call Records window.

- 

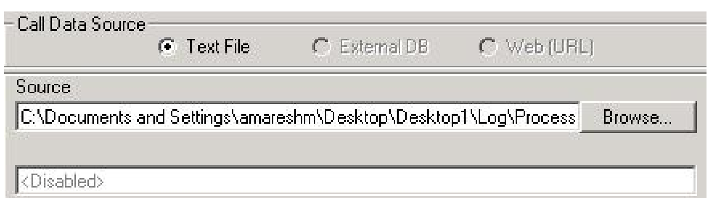
- If the description in the center of the window does not specify the exact set of call records that you want to delete, you may change the selection criteria by clicking the Criteria button.
- You may optionally view the set of call records to be deleted by clicking on the View button.
- Delete the specified set of call records by clicking the Delete button.
- Exit the Delete Call Records tool by clicking on the Close button.
- 

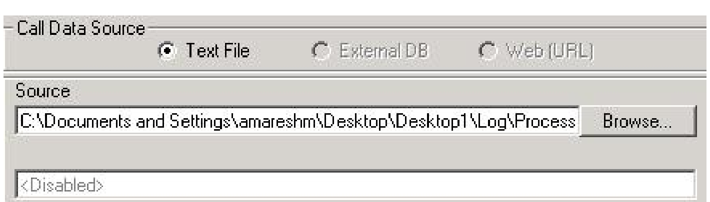
Importing Call Records

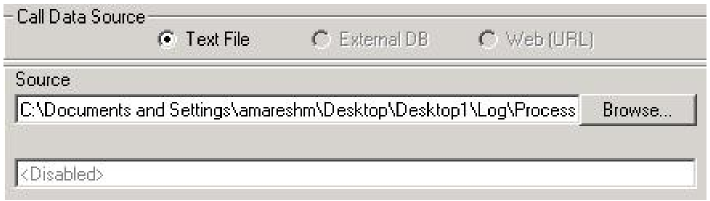
CallAnalyst can import call information from a Text file, External DB or Web (URL). If you are using a data logging device or similar memory device for storing call records, these methods of call logging allows you to use another program to capture the call information before analysis, or you can collect a set of call data from one or many locations for later analysis.

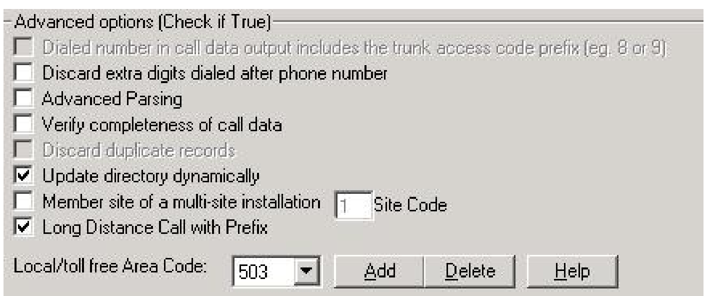
To import call records, follow these steps:

- Select the Tools|Import Call Records menu item from the CallAnalyst window. This displays the Import Call Records window.
- Specify the type of **Phone System** that the call record data belong to. Since each phone system saves the call information in a different format, CallAnalyst must know the type of phone system which generated the call data (The technical term for the call information sent from the phone system is called SMDR/CDR/MDR data).
- 

- Specify the File Name containing the raw call information from the phone system.
- 

- To import call records from an **External DB**, follow these steps: Specify DSN that you want to access. You must have a DSN configured for your External DB on the CallAnalyst PC. This can be done in Windows control panel under ODBC Data Sources.
- 

- To import call records using Web (URL) option follow these steps: Specify the source URL for retrieving call records from the phone system. Also specify the destination file to which the downloaded information has to be written to. After the download is complete follow step 3 to import data from that text file.
- 

- Note: With Call Data Manager (CDM) all the above process can be automated and be configured to run every specified interval.
- Specify whether you have to dial a digit (e.g. 8 or 9) to access a trunk line using the **Phone system uses a number to access an outside line (e.g. 8 or 9)** check box. You need to check this box only if your phone system does output this access code along with the phone number in the call record (like, 91800XXXXXXX).
- 

- ·Specify whether you want to discard the digits dialed after the phone number (e.g. numbers dialed for automated phone systems (DTMF digits)) using the **Discard extra digits dialed after phone number** check box.
- Specify if you would like to see advanced caller ID information (CLID) by checking **Advance Parsing**. This setting will also enable the legs of a call to be combined into one call record on certain advanced phone systems.
- Specify whether CallAnalyst should verify call data records for completeness using the **Verify completeness of call data** check box. CallAnalyst would not import incomplete or erroneous calls.
- Specify whether you want to parse same call data records only once by checking **Discard duplicate records**. If checked it ensures that duplicate records will not be parsed by Call Analyst.
- Specify whether you want to update data in Call Analyst database in case of a new (that is for first time) extension, line or phone number is parsed by checking **Update directory dynamically**.
- Specify whether this site is configured as a Member site of a multi-site installation and you want to consolidate data from all participating sites using CallAnalyst Multi-Site reporter.

- Specify whether the SMDR, generated by the switch, contains prefix 1 by checking **Long Distance Call with Prefix**. If checked it ensures that prefix (1) for call records will not be parsed in the Phone number field of CallAnalyst
- Add the local and toll free area codes in your area in the Local/Toll Free Area codes list. One example is, in some areas, local calls also require that an area code be dialed before a seven-digit phone number even though it is toll free. You would enter that area code in this list along with your local area code, 800, 888,..

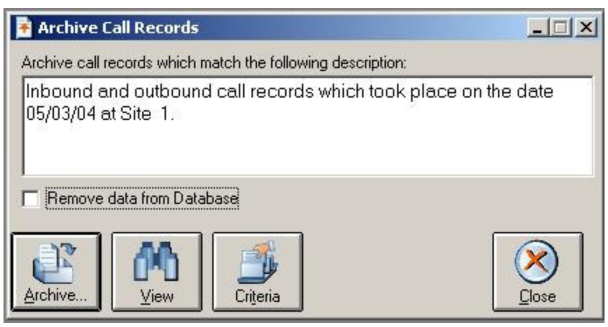
- Start the importing process of the raw call information by clicking on the **Import** button in the Import Call Records window.
- 

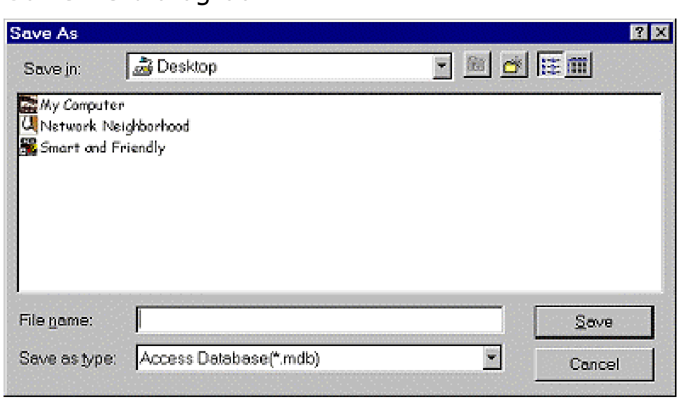
- Once the importing is complete, close the Import Call Record form by clicking on the **Close** button in the Import Call Records window.
- 

Archiving Call Records

CallAnalyst allows you to remove call records from the call record database and save it into an archive database for safe keeping. You can later restore these call records using the Restore tool. You can also set up CallAnalyst to automatically archive your call records on a regular basis.

To archive your call records:

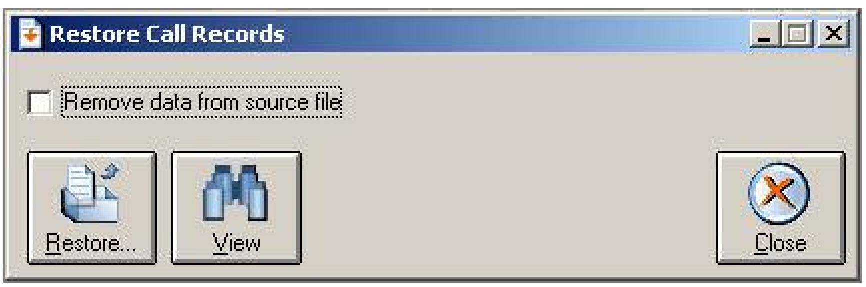
- Display the Archive Call Records window by clicking **Tools|Archive Call Records** from the main CallAnalyst window. This displays the following window.
- 

- If the criteria description in the center of the window does not specify the set of call records that you want to archive you may change the selection criteria by clicking the Criteria button.
- By clicking on the view button, you can view the call records to be archived corresponding to the selected criteria.
- Start the archiving process by clicking the **Archive** button. This displays the **Save As** dialog box.
- 

- In the Save As dialog box, enter a filename to archive the call records and click the **OK** button.
- Exit the Archive Call Records tool by clicking on the **Close** button.
- 

Restoring Call Records

To restore previously archived call information follow these steps:

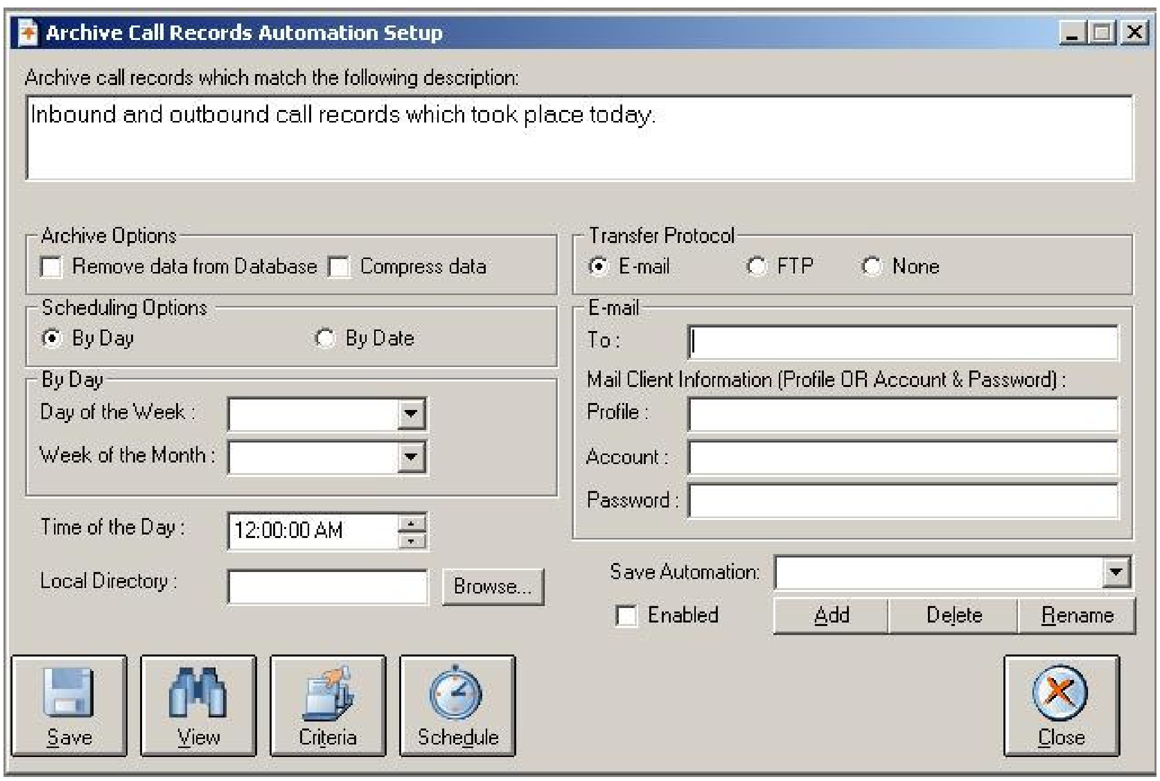
- Display the Restore Call Records window by selecting the Tools|Restore Call Records menu item from the CallAnalyst main window. This displays the following window.
- 

- You may optionally view the set of call records to be restored by clicking on the View button. This prompts you for a Filename and then displays the call information in a Call Record Window.
- Restore the specified call records by clicking on the Restore button in the Restore Call Records window. If you did not specify the Filename to restore in the previous step, you will be prompted for the Filename to restore.
- Exit the Restore Call Records tool by clicking on the Close button in the Restore Call Records window.
- 

Automating Call Record Archival

CallAnalyst allows you to automate the Archive process, generating the archive file at pre-determined intervals.

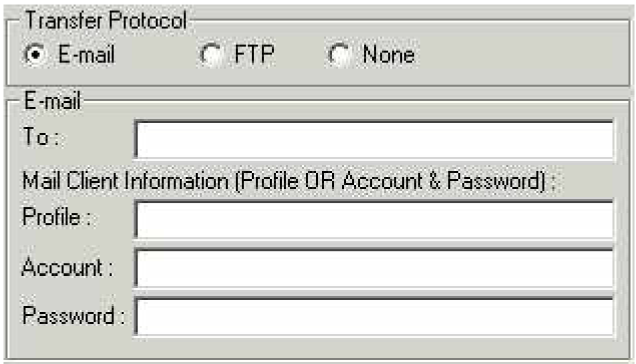
To setup automatic archival of your call records, follow these steps:

- Display the Archive Call Records Automation Setup window by selecting the **Setup|Archival Automation** menu item from the main CallAnalyst window.
- 

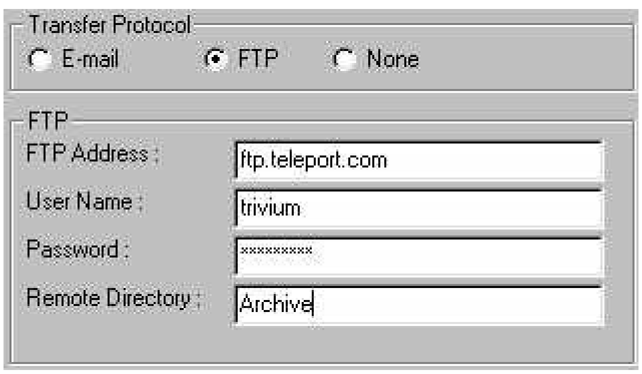
- If the description at the top of the window does not specify the exact set of call records that you want to archive, you may change the selection criteria by clicking the **Criteria** button.
- Specify the following archive Options:
- If you want to remove the call records that are included in the archive from the call record

database after the archival process is completed, select the **Remove Data from Database** checkbox.

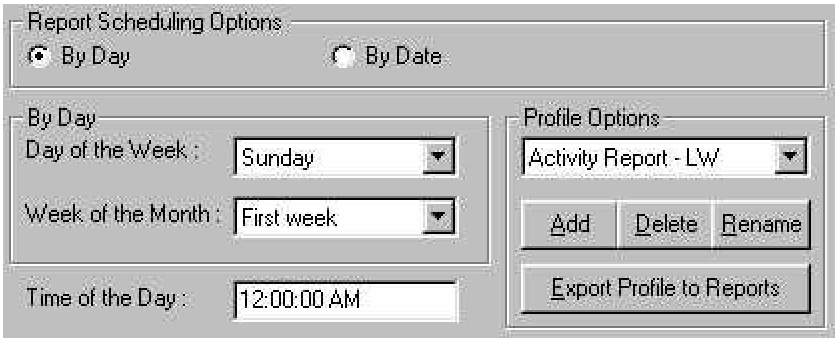
- If you want to compress (zip) the archived file prior to sending it via email or FTP, click on the **Compress Data** checkbox.
- Select one of the following methods that you want to use to send the archive file:
- **Email:** CallAnalyst sends the archived file to specified email address as an attachment. You need to specify the profile to be used of r email or the Account name and password.



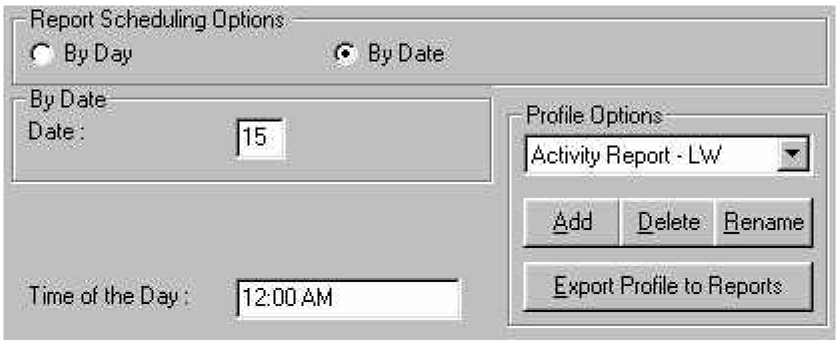
- **FTP:** CallAnalyst sends the archived file to the specified FTP site. If you select this option, you must provide the name of the FTP server, a login name and password, and the directory to store the archived file. Please ensure that you have all permissions for that directory.



- **None:** CallAnalyst only archives the file into the specified directory.
- Specify when and where you want to archive the call records. Using the following fields, you can inform CallAnalyst to archive your call records anywhere from once-a-month to daily. You must also specify the directory (Local Directory) in which the archived file should be created. **Note**: If you use the Browse tool to find the local directory, double click on **any** file in the directory of choice. This file will not be overwritten; this is just a peculiarity with the Browse tool.
- View the set of call records to be archived by clicking on the **View** button in the **Archive Call Records** window. This step is optional.
- Specify the date/time to generate the report. You can specify how often you want to generate this particular report. This time period can be anywhere from once-a-month to daily. You may specify the **By Day** or **By Date** scheduling options.
- **By Day :** Here you specify the day of the week (e.g. Sunday) and the week of the month (e.g. 1st week) when you want the report generated.



- **By Date:** Here you specify the exact date (e.g. 15th of every month) when you want the report generated.



- Save this information for automatically archiving your call records by clicking on the **Save** button in the **Archive Call Records Automation** Setup window.
- **NOTE:** CallAnalyst saves the information in this window (to automatically archive your call records) to an *automation profile* name. You can add, delete or rename the automation profile for later use.
- · Exit the **Archive Call Records Automation** tool by clicking on the **Close** button in the **Archive Call Records Automation** window.

Note: The scheduler must be running in order to perform automated call information archival. You can start the scheduler by clicking on the **Schedule** button in the *Archive Call Records Automation* window. The Schedule button is only available on server installations of CallAnalyst. The Scheduler will only run on the server. When you save the archive setup, CallAnalyst schedules the call record archival. You can view the list of completed tasks by right clicking on the *clock* icon in the system tray (lower right corner of your screen) and selecting the **Show Scheduler** popup menu item. This list includes the Profile name, type of profile, i.e. report, database archival, E-mail, FTP, etc. and the time when it was completed (only on server installations).

- If you make changes to an existing profile or add a new profile after the Scheduler has been started, you must click Save and Close in order for the Scheduler to perform jobs as per your new profile. If no e-mail profile is configured at the time the Scheduler is started and later you configure an e-mail profile you must close and restart the scheduler to be able to send e-mail. The scheduler will ask for a mail sign-on only when it detects that an e-mail profile is configured. A MAPI-compliant email program such as Microsoft Outlook must be installed if you want to send email-using CallAnalyst.

Retrieve Call Information from Remote Locations

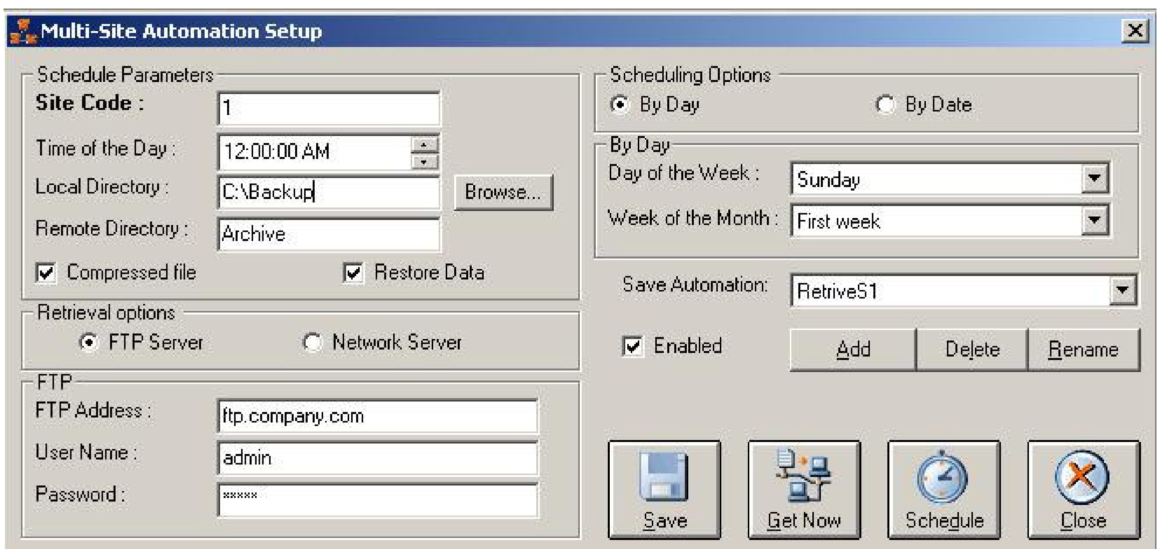
With the Multi-site Reporter installation of CallAnalyst, you can record call data at one or more remote locations and then use CallAnalyst to retrieve the data to a central location for analysis, such as generating reports.

The explanation of this procedure uses two terms that must be clarified: the remote computer is the computer at the remote site that is collecting call information; the local computer is the computer that you will use to analyze the call information using CallAnalyst.

Prior to analyzing the call information at these sites, you must first get the call information from the remote site to the local computer using either an FTP node or your company's internal computer network. The first step in this process is archiving at the remote site the data to be retrieved, which can also be automated.

The second step of the process is retrieving the data, which can either be done manually, or automated. In either case, the following section explains the steps involved in the process.

Retrieving call data from a remote site:

- Display the Remote Client Automation Setup window by selecting the Setup|Remote Automation menu item in the main CallAnalyst window. You will be creating a profile (i.e. filling out one of these windows) for each remote location where you are scheduling an archive process. Note: CallAnalyst expects to find the archived file at the remote location by the name the remote installation assigns to it. It is imperative that the archived file not be tampered with.
- 

- First determine if you are going to perform a similar retrieval in the future (whether automated or not). If so, then create a new profile in Automation Sets by clicking <Add>, and give it a name. After you fill in the rest of the form and save the profile, you will be able to find this profile the next time you need to access it by selecting it in the pull-down list (where you see Retrieve S1 above in the illustration). On the other hand, if this is a one-time retrieval, then saving the profile is not necessary, but follow steps 3 and 4 to complete the form.

Schedule Parameters:

- Site Code: Enter the code number from the CDM setup of the location from which to retrieve the archived
- Time of the Day: (Only for Scheduled Archiving) The time at which the transfer will occur. Remember that for automated retrieval, CallAnalyst looks at the remote site for a file produced on the previous day.
- Local Directory: The directory on the local computer where the retrieved file will be stored.
- Remote Directory: The directory on the remote computer where the archived data will be found. If "Network Server" is chosen in Retrieval Options, the "Browse" feature is available, providing a fool-proof way to select the directory. If "FTP Server" is selected, then it is up to the call accounting administrator to properly identify the target directory.
- Compressed file: It is essential that this match the corresponding setting in the archiving process on the remote computer. Note: This option is only available with automated archival.
- Restore Data: This option instructs the scheduler to restore the call records into the local database for Muti-Site reporting after retrieval is complete.

Retrieval Options:

- Specify how you want to retrieve the call information. CallAnalyst provides the following two options to accomplish this task: FTP Server: For archival of call data at a location on a network to which the local computer is only occasionally connected. This requires you to specify the FTP address, User Name, and Password (as shown above) necessary to log on to the FTP server.
- Network Server: For archival of call data at a location on a network to which the local computer is permanently connected.

Scheduling Options:

- Specify when you want to retrieve the information from the remote computer. By Day: For use with daily or weekly retrieval, for which the date is inconsequential. Fill in the "Day of the Week" and "Week of the Month" as appropriate.
- By Date: For use with retrieval on a given date of each month, such as the 1st, in which case you would enter "1" in the "Date" field.
- If you want to save this profile for future use, click on the Save button. If you do not click the Save icon, CallAnalyst will not retrieve the call information at the time/date specified You can save the information in this window without scheduling CallAnalyst to automatically retrieve your call records using the automation profiles. You can delete or rename the automation profile at a later time
- 

- To start the automation, start the scheduler by clicking on the Schedule button. (The Schedule button is only available on server/remote client installations of CallAnalyst.)

- 

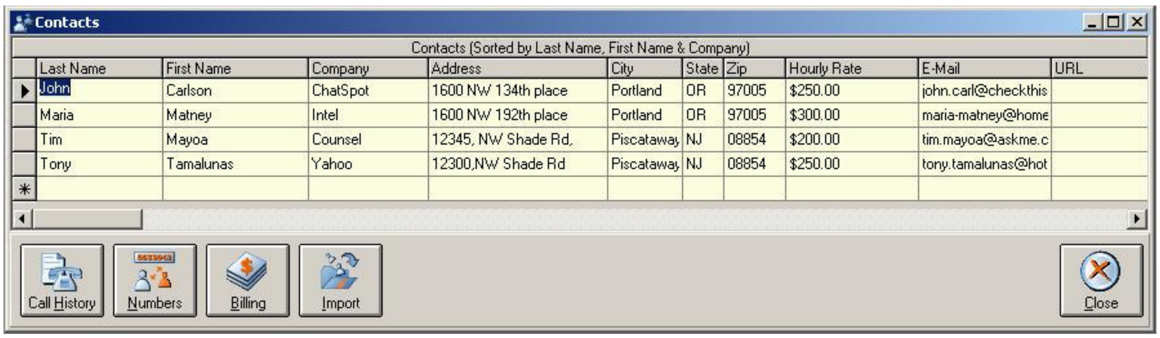
- Exit the Remote Client Automation Setup tool by clicking on the Close button in the Remote Client Automation Setup window.
- 

- ***Notes:***
  When you save the remote automation setup, CallAnalyst schedules the call record retrieval. You can view the list of completed tasks by right-clicking on the *clock* icon in the system tray (lower right corner of your screen) and selecting the Show Scheduler popup menu item. This list includes the Profile name, type of profile, i.e. report, database archival, E-mail, FTP, etc. and the time when it was completed (only on server installations).
  If you make changes to an existing profile or add a new profile after the Scheduler has been started, you must click Save and Close in order for the Scheduler to perform jobs as per your new profile.
  If no e-mail profile is configured at the time the Scheduler is started and later you configure an e-mail profile, you must close and restart the scheduler to be able to send e-mail. The scheduler will ask for a mail sign-on only when it detects that an e-mail profile is configured.
  A **MAPI-compliant** email program such as Microsoft Outlook must be installed if you want to send email using CallAnalyst.

Adding Contacts

To add a contact, follow these steps:

- Display the Contacts window by clicking on the **Contacts** button in the main CallAnalyst window.
- 

- This displays the Contacts window (similar to the window shown below).
- 

- Place your cursor in the column corresponding to the last row of the contact list next to the *****. Once you start typing, CallAnalyst adds a new row with a pencil icon in the leftmost column. CallAnalyst saves the information as you type. (You needn't explicitly *save* the information; a contact has been created.)
- Also you can import contact information from files with comma separated values generated using other contact managers like Outlook, Palm Pilot etc. Click on 'Import' button to verify the list of file sources.

Associating phone numbers with a Contact:

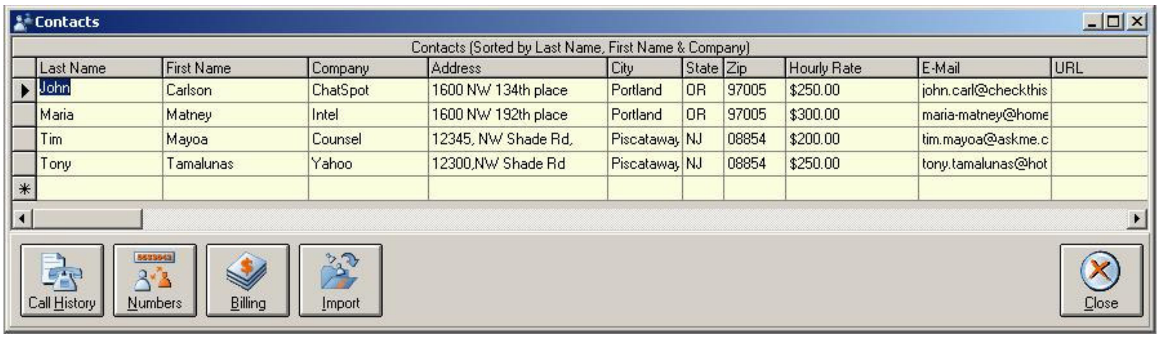
- Select the contact you want to associate a number to by clicking on their respective rows.
- Click on the 'Numbers' button. Refer to the section that explains 'Assigning Phone Numbers to a Contact'.

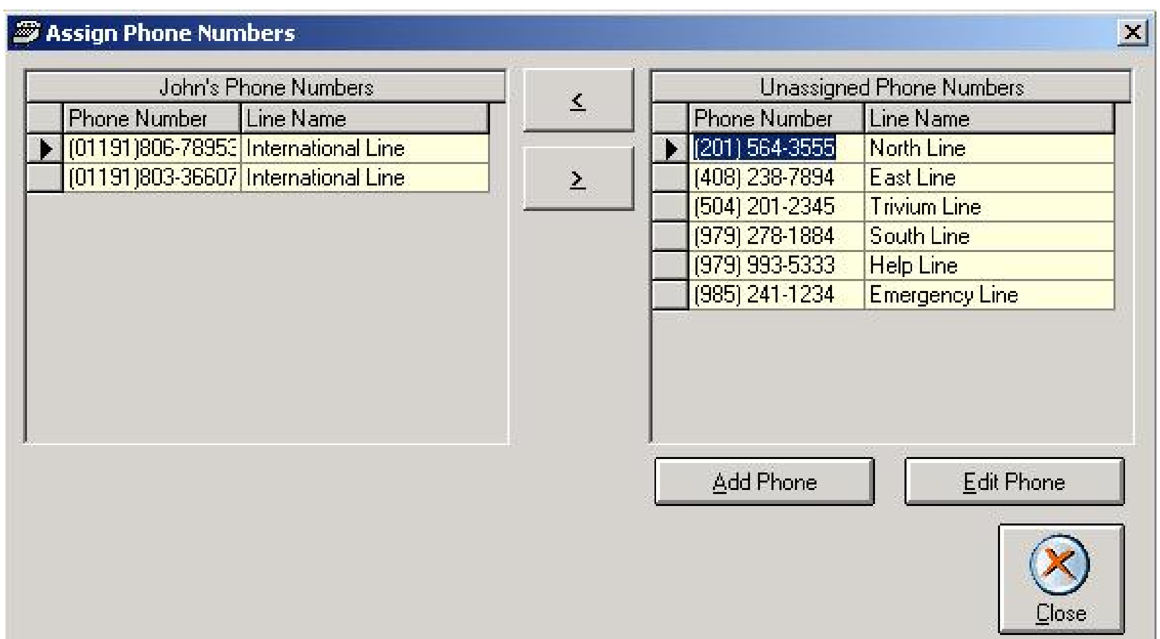
Assigning Phone Numbers to Contacts

NEC

To assign one or more phone numbers to a contact, follow these steps:

- Display the Contacts window by clicking on the Contacts button in the main CallAnalyst window.
- 

- This displays the Contacts window (similar to the window shown below).
- 

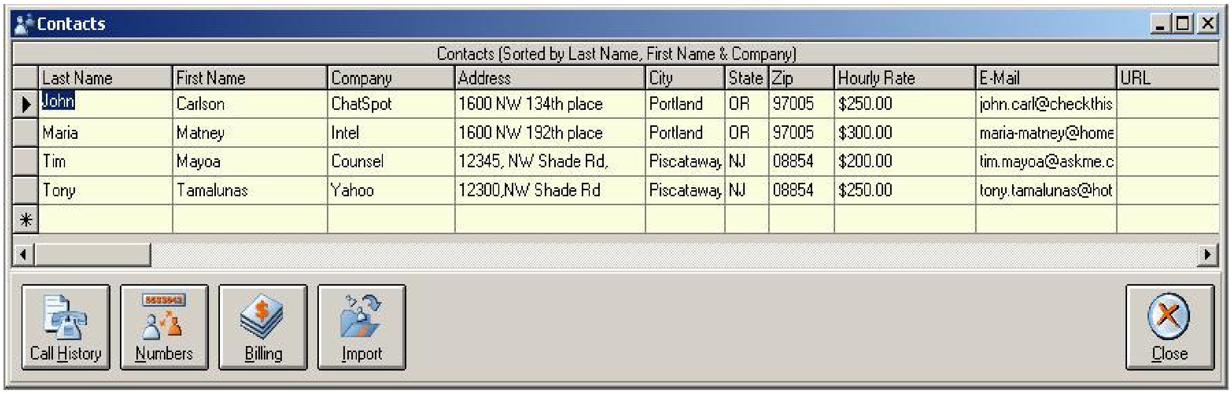
- Select the row containing the contact by clicking on the button in the leftmost column of the Contacts List. This should highlight the entire row containing the contact.
- Display the Assign Phone Numbers dialog box (as shown below) by clicking on the Numbers icon. The right side lists phone numbers from the call records that have not been associated with a contact yet. The left side lists the phone numbers (if any) associated with this contact.
- 

- Add an unassigned number to the current contact:
- Select the unassigned number from the right side list by clicking on the leftmost column. This should highlight the entire row.

- Move the selected unassigned number to the contact list by clicking on the < arrow button.
- You may remove an assigned number to the contact by selecting the number on the left side by clicking on the > arrow button.
- You can also manually add phone numbers to the Contact's phone number list (left side) by placing your cursor in the phone number column on the row next to the *. Once you start typing, CallAnalyst adds a new row with a pencil icon in the leftmost column. CallAnalyst saves the information as you type (you do not need to explicitly save the information.

Viewing Call History of Contacts

- Display the Contacts window by clicking on the Contacts button in the main CallAnalyst window.
- 

- This will display the Contacts window (similar to the window shown below).
- 

- Select the row containing the contact by clicking on the button in the leftmost column of the Contacts List. This should highlight the entire row containing the contact.

  Display the Call History report by clicking on the Call History button
- 

Viewing Contacts

In CallAnalyst, a contact can be an individual, group or company associated with one or more phone numbers. One of the keys to generating accurate reports is associating one or more phone numbers to a contact. After a few calls, you will start to build a group of phone numbers to a single contact. For example, you can associate (503) 442-7777 and (503) 442-7778 to a single contact name.

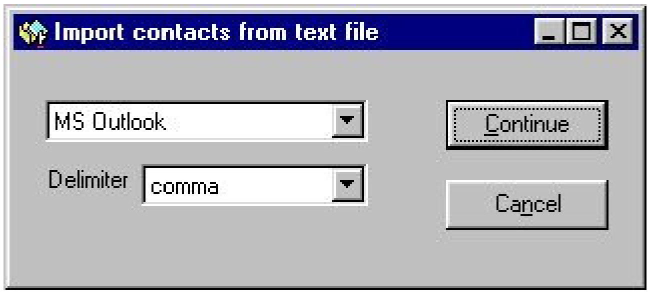
To display the list of contacts in CallAnalyst:

- Click the **Edit|Contacts** menu item from the main CallAnalyst window or click on the **Contact** button in the main CallAnalyst screen.
- 

Importing Contacts from Text Files

CallAnalyst supports the importing of text files exported from contact management software, such as Microsoft Outlook.

To use this feature:

- In the Tools menu of the main CallAnalyst window, choose Options. In the **Other Interfaces** tab, choose **None**.
- Open the Contacts Page by selecting the **Contacts** button.
- When the Contacts Page comes up, select the **Import** button.
- 

- A box will emerge as shown at the right. Select the source of the text file, such as "MS Outlook," as well as the delimiter (character separating the fields in the text file.
- Then select the file to import from the ensuing Browse box

Configuring Elite CallAnalyst to Manage Tasks

As CallAnalyst collects call information from your phone system, it creates a list of extensions, lines, and account codes that were used in inbound and outbound calls. Instead of having to specify each extension, account code, and/or line whenever you generate a report, you can collect the extension, line, and account code data into groups and departments. During report generation, you only need to specify the group or department in the selection criteria.

Using CallAnalyst to manage your tasks:

- Associating Phone Numbers and Names
- Creating Groups and Departments
- Managing Extensions
- Managing Lines
- Managing Account Codes
- Configure Rate Tables

Associating Phone Numbers and Names

Within the Call Records window, you use CallAnalyst to assign a name to a phone number and vice versa. This technique may be useful to quickly assign Line Names to sets of phone numbers.

To assign a name to a phone number in your database:

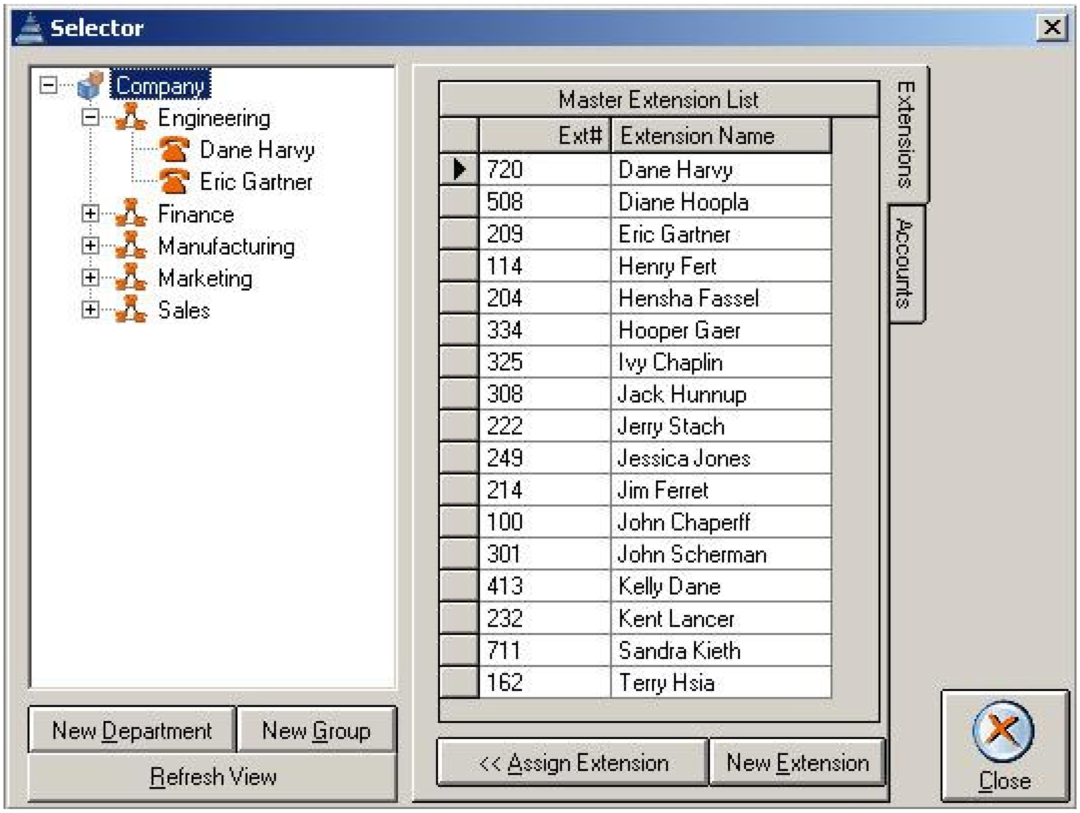
- Display the Call Records window by clicking on either the All Calls, Inbound or Outbound buttons.
- Place the cursor to select a phone number from the Phone Number column in the Call Record window. This step is optional.
- Select the Edit|Assign Name To Number menu item from the CallAnalyst main window.
- Enter a number or accept the default.
- Enter a name that you wish to place in all the name fields for this phone number.

To assign a phone number to a name in your database:

- Display the Call Records window by clicking on either the All Calls, Inbound or Outbound buttons.
- Place the cursor to select the name from the Line Name column in the Call Record window. This step is optional.

Manage Groups and Departments

Groups allow you to quickly specify a set of extensions/account codes that you can use to generate reports. A department contains a set of groups. Depending on the number of extensions that your company has, a department may be your entire company or you may define several departments containing numerous groups.

- You can manage group and department information for CallAnalyst using the Selector dialog box. Select the **Edit|Department/Group** menu item in the main CallAnalyst window.
- 

<u>To specify a new department, follow these steps:</u>

- Click on the **New Department** button on the bottom left side of the Selector dialog box. This step displays the New Department dialog box.
- Specify the department name in the New Department dialog box and click the **OK** button. This step creates a new department on the left hand side of the Selector dialog box. You can now add a group within that department.

<u>To specify a new group, follow these steps:</u>

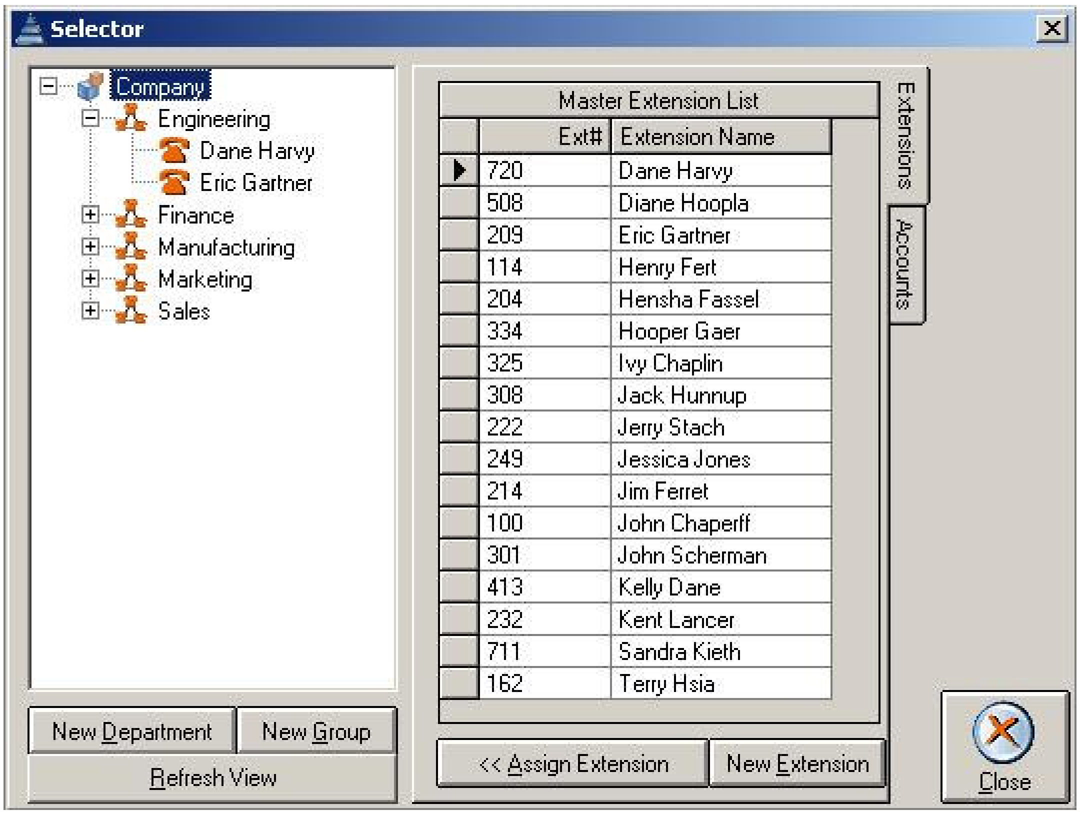
- Click on the **New Group** button on the bottom left side of the Selector dialog box. This step displays the New Group dialog box.

- Specify the group name in the New Group dialog box and click the **OK** button. This step creates a new group on the left hand side of the Selector dialog box. You can now add extensions, account codes, and lines within the group.
- While creating department, group, extension and Line Names do not use apostrophe in the names.
- Confirm the final selection by clicking **Select** on the pop up menu when you right click on the interested group/department. The other actions available on this pop up menu are: **New Group**, **New Department**, **Expand Departments**, **Expand All**, **Select and Delete Item**.

Managing Extensions

After you setup CallAnalyst to collect call information from your phone system, you will want to specify a set of extensions. You can use this list of extensions to generate accurate reports for a select set of extensions.

To add a new extension, follow these steps:

- Display the Selector dialog box by selecting the **Edit|Department/Groups** menu item from the main CallAnalyst window.
- 

- If you do not see the Master Extension List on the right side, select the **Extensions** tab on the rightmost corner of the the Selector dialog box. This displays the Selector dialog box shown above.
- Click on the **New Extension** button in the bottom right corner of the the Selector dialog box.
- Enter the Extension Name and Extension Number and click OK.

To delete an extension from the Master Extension List, follow these steps:

- Display the Selector dialog box by selecting the **Edit|Department/Groups** menu item from the main CallAnalyst window.
- If you do not see the Master Extension List on the right side, select the **Extensions** tab on the rightmost corner of the the Selector dialog box. This

displays the Selector dialog box shown above.

- Select one or more extensions from the right hand side of the Selector dialog box by clicking on the **gray button** on the left side of the Extension Number field. This should highlight the entire row.
- Remove the highlighted extension from the Master Extension List by pressing the Delete key and clicking **Yes** in the Delete Extension prompt box.

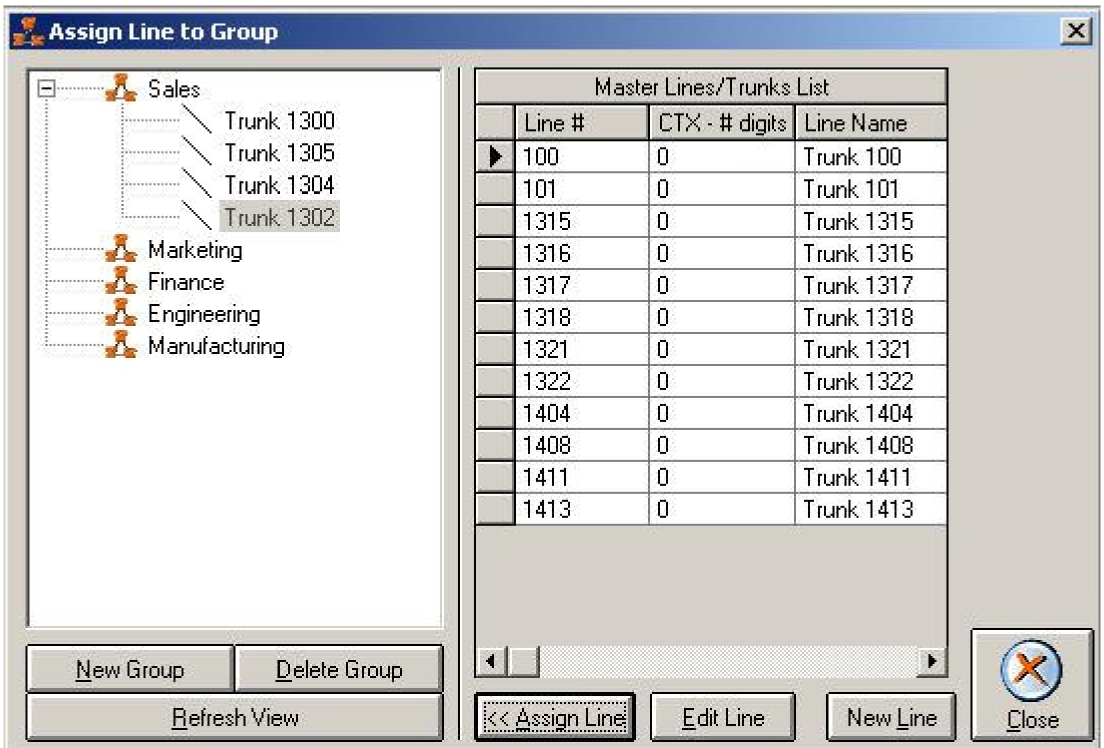
To assign an extension to a group, follow these steps:

- Display the Selector dialog box by selecting the **Edit|Department/Groups** menu item from the main CallAnalyst window.
- If you do not see the Master Extension List on the right side, select the **Extensions** tab on the rightmost corner of the the Selector dialog box. This displays the Selector dialog box shown above.
- Select a group from the left hand side of the Selector dialog box. If no groups are defined in the left hand side of the Selector dialog box, then you must first define a department and a group. You can only assign extensions to groups; not departments.
- Select one or more extensions from the right hand side of the Selector dialog box by clicking on the button on the left side of the Extension Number field. This should highlight the entire row.
- Click on the **Assign Extension** button on the bottom right side of the Selector dialog box. You should see the extensions listed under the group name on the left side of the Selector dialog box.
- You can directly edit either the Extension name or number fields by clicking on the field that you want to edit in the Master Extension List of the Selector dialog box and type your changes. CallAnalyst automatically saves these changes as you type.

Managing Lines

Lines are the phone lines coming from your local CO to your phone system. When you make or receive a call, your phone system informs CallAnalyst which phone line was used. Within CallAnalyst, you edit line names and their associated phone numbers to help generate specific reports. For example, if your fax machine has a separate line, you can exclude your fax line from the reports or generate a separate report for just the fax line. You can also make separate groups for your lines if you have different lines for different departments or for different long distance carriers.

To add a new line, follow these steps:

- Display the Selector dialog box by selecting the **Edit|Assign Lines To Groups** menu item from the main CallAnalyst window.
- 

- If you do not see the Master Lines/Trunks List on the right side, select the **Lines** tab on the rightmost corner of the the Selector dialog box. This displays the Selector dialog box shown above.
- Click on the **New Line** button in the bottom right corner of the the Selector dialog box.
- Enter the Line Name, Phone Number, Line/Trunk Number and CTX Code Length and click OK. 'CTX Code Length' is the number of digits dialed to access a Centrex line for each Line/Trunk. Each Trunk/line will have a fixed number of access digits. This value can be left zero if no access digits are used on a given Trunk/Line.

To delete a line from the Master Line/Trunk List, follow these steps:

- Display the Selector dialog box by selecting the **Edit|Assign Lines To Groups** menu item from the main CallAnalyst window.
- If you do not see the Master Lines/Trunks List on the right side, select the **Lines** tab on the rightmost corner of the Selector dialog box. This displays the Selector dialog box shown above.
- Select one or more lines from the right hand side of the Selector dialog box by clicking on the **grey button** on the left side of the Line # field. This should highlight the entire row.
- Remove the highlighted line from the Master Lines/Trunks List by pressing the Delete key and clicking **Yes** in the Delete Lines prompt box.

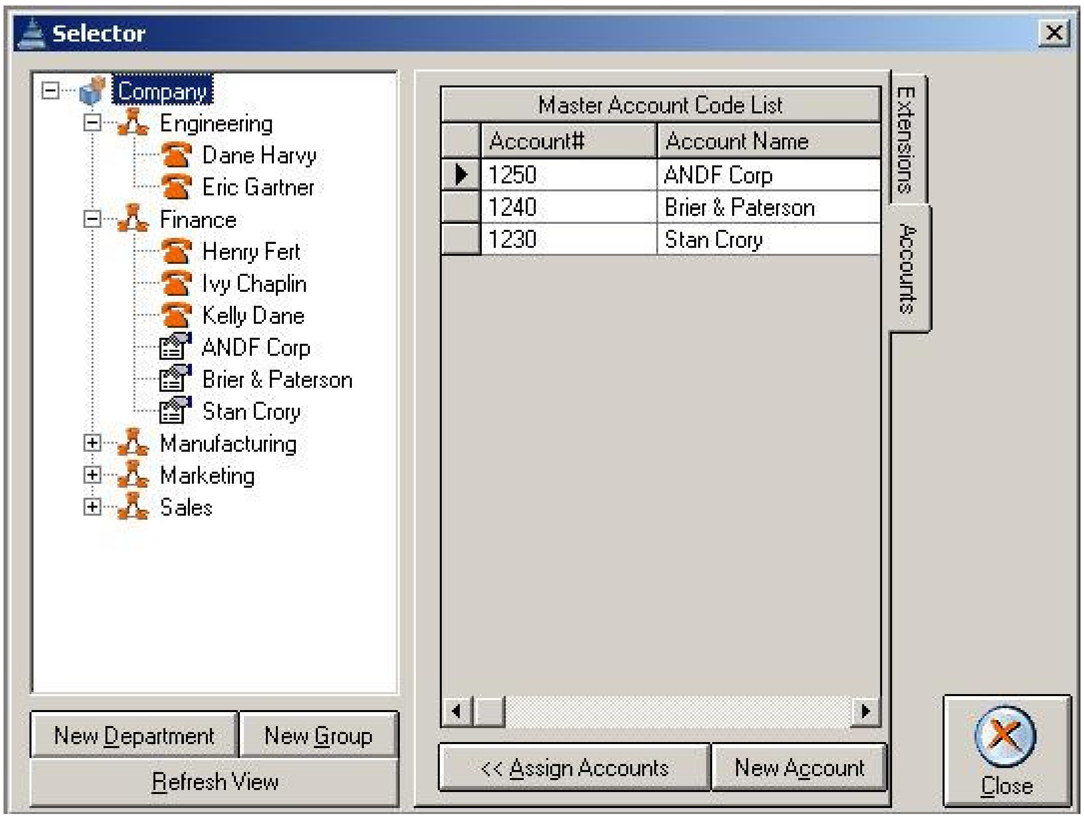
To assign a line to a group, follow these steps:

- Display the Selector dialog box by selecting the **Edit|Assign Lines To Groups** menu item from the main CallAnalyst window.
- If you do not see the Master Lines/Trunks List on the right side, select the **Lines** tab on the rightmost corner of the Selector dialog box. This displays the Selector dialog box shown above.
- Select a group from the left hand side of the Selector dialog box. If no groups are defined in the left hand side of the Selector dialog box, then you must first define a department and a group. You can only assign lines to groups, not departments.
- Select one or more lines from the right hand side of the Selector dialog box by clicking on the **gray button** on the left side of the Line# field. This should highlight the entire row.
- Click on the **Assign Line** button on the bottom right side of the Selector dialog box. You should see the lines listed under the group name on the left side of the Selector dialog box.
- You can directly edit either the Line Name, Phone Number and Line/Trunk Number fields by clicking on the field that you want to edit in the Master Lines/Trunks List of the Selector dialog box and type your changes. CallAnalyst automatically saves these changes as you type.

Managing Account Codes

Account codes are defined in your phone system. CallAnalyst receives the account code information from the phone system. You may include them in your analysis by assigning them to the proper groups and departments. This also refers to the optional account codes used.

To add a new account code, follow these steps:

- Display the Selector dialog box by selecting the **Edit|Department/Groups** menu item from the main CallAnalyst window.
- 

- If you do not see the Master Account Code List on the right side, select the **Accounts** tab on the rightmost corner of the Selector dialog box. This displays the Selector dialog box shown above.
- Click on the **New Account** button in the bottom right corner of the Selector dialog box.
- Enter the Account Name and Account Number and click **OK**.

To delete an account code from the Master Account Code List, follow these steps:

- Display the Selector dialog box by selecting the **Edit|Department/Groups** menu item from the main CallAnalyst window

- If you do not see the Master Account Code List on the right side, select the **Accounts** tab on the rightmost corner of the Selector dialog box. This displays the Selector dialog box shown above.
- Select one or more account codes from the right hand side of the Selector dialog box by clicking on the **grey button** on the left side of the Account # field. This should highlight the entire row.
- Remove the highlighted account code from the Master Account Code List by pressing the Delete key and clicking Yes in the Delete Accounts prompt box.

To assign an account code to a group, follow these steps:

- Display the Selector dialog box by selecting the **Edit|Department/Groups** menu item from the main CallAnalyst window.
- If you do not see the Master Account Code List on the right side, select the **Accounts** tab on the rightmost corner of the Selector dialog box. This displays the Selector dialog box shown above.
- Select a group from the left hand side of the Selector dialog box. If no groups are defined in the left hand side of the Selector dialog box, then you must first define a department and a group. You can only assign account codes to groups; not departments.
- Select one or more account codes from the right hand side of the Selector dialog box by clicking on the **gray button** on the left side of the Account# field. This should highlight the entire row.
- Click on the **Assign Account** button on the bottom right side of the Selector dialog box. You should see the account codes listed under the group name on the left side of the Selector dialog box.
- You can directly edit either the Account Number or Account Name fields by clicking on the field that you want to edit in the Master Account Code List of the Selector dialog box and type your changes. CallAnalyst automatically saves these changes as you type.

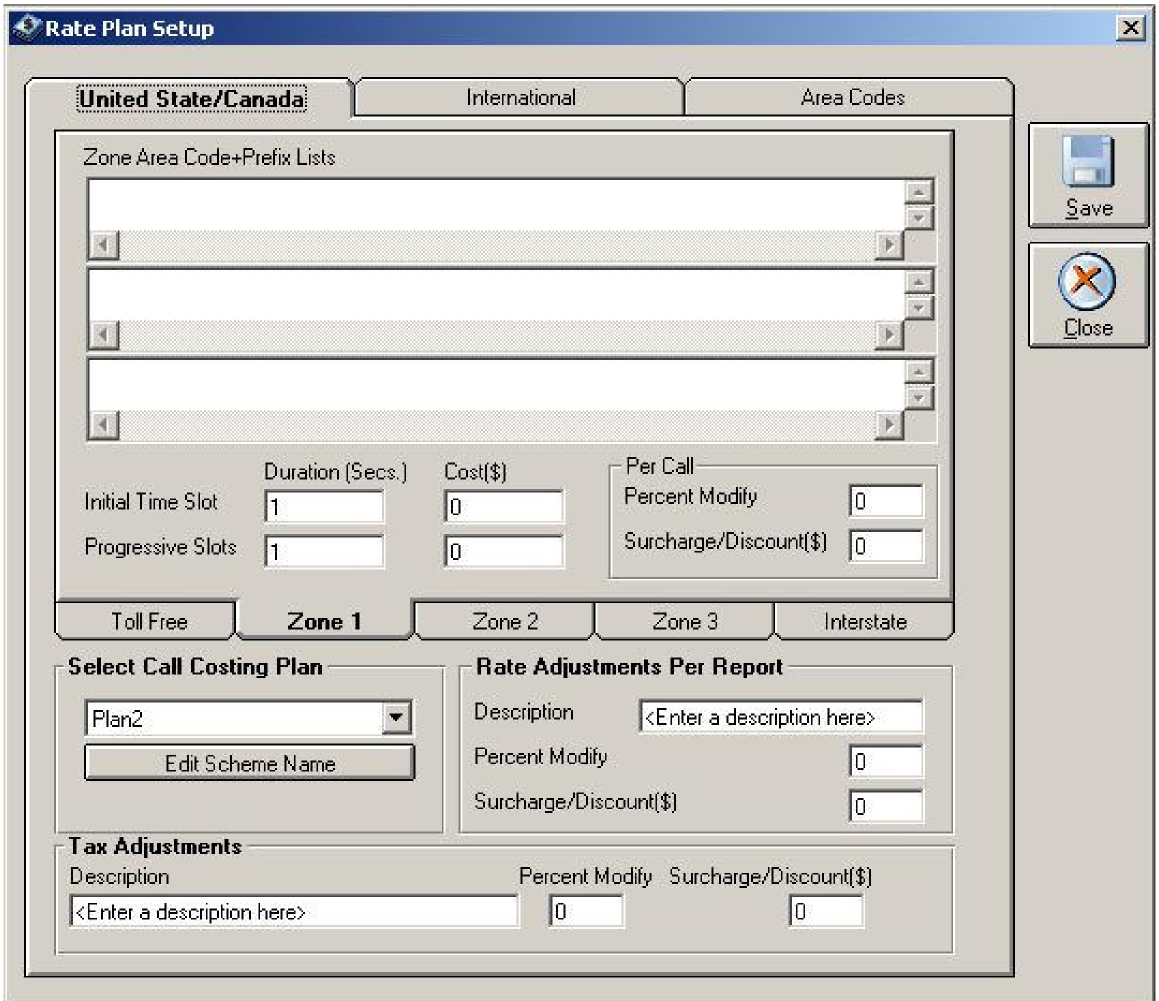
Specifying Rate Plans

CallAnalyst allows you to calculate the cost associated with phone calls. The costing technique allows you to use prefix based (zonal) billing combined with variable time costing, if required. It allows you to generate reports using different rate plans and enables you to easily compare costs.

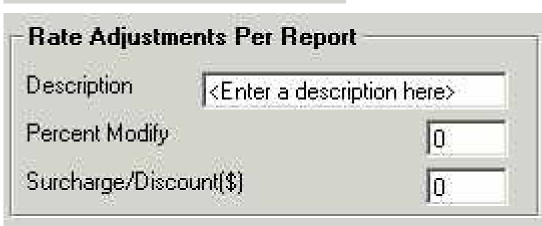
To configure the rate plans for use in call costing reports :

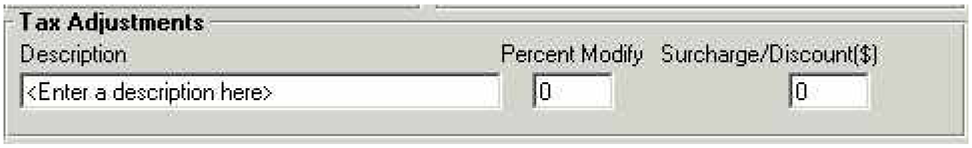
- Display the Rate Plan Setup window by selecting the **Setup|Rate Plans** menu item from the main CallAnalyst window. Rate Plan Setup window has sections under United States, International and Domestic Area Codes and has options to configure up to 3 different rate plans.
- Specify the name of each plan. Using the following list box, you can select the name of one of the three available plans and then edit the name of the plan by clicking on the **Edit Scheme Name** button.
- 

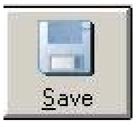
- **United States section:** Specific rate information can be set for Area codes within this section. In addition to a call cost, you can also add a specified surcharge or percentage modification for the cost onto each call or each report or both. For example, hotels typically add a per-call surcharge for all outgoing calls.
- There are five different categories under this section. Toll Free, Zone 1, Zone 2, Zone3, and Interstate.
- **Toll Free category:** Set rate for Toll Free calls including local calls. Most of the time, toll free calls have no charge but this tab gives you the freedom to charge for toll free calls if you need to. Add these area codes to the list separated by comma. The Initial time slot and Progressive time slot fields allow you to set different rates (variable time billing) for initial duration of a call and for the time periods thereafter. For instance, if you wanted to set a rate for a dollar for the first minute and ten cents for each additional minute then in the Initial time slot field set the duration for 60 and the Cost for $1.00 and in the Progressive slots field set the duration for 60 and the Cost for $.10.
- **Zone 1, Zone 2, Zone 3 categories:** The different zones allow for prefix based (zonal) billing. Some area codes charge different rates for different prefixes within an Area code. To accommodate for this CallAnalyst provides up to 3 different Zones based on prefixes. To set a rate for a prefix, select a zone and place the area code and the respective prefix (NPANXX) in any one of the Zone Area Code + Prefix List fields. Multiple combinations of area codes and prefixes can be included, each being separated by a comma.
- **Interstate category:** All Area codes not specified in the Toll Free and Zone categories are considered to be in the interstate category and costing is calculated based on the rates specified in that section.

- **Domestic Area Code section:** Gives you the list of the Area codes in the United States and location information. If Area Codes information is changed or new area codes are added, you can add new area codes and edit the current ones from this tab.
- 

- Specify any rate adjustments. In addition to the basic phone charges, you can also add a specified fee or percentage rate onto either each call by zone or each report. For example, hotels typically add a per-call surcharge for all outgoing calls. If you want to specify a single surcharge or percentage on an entire report, CallAnalyst requests a one line description that will appear in the report.
- 

- 

- Specify any tax adjustment. Like the rate adjustment, CallAnalyst can add a tax adjust the total on the report by surcharge or percentage. CallAnalyst shows this amount as a tax and requests a one-line description to include in the report.
- 

- Save the rate plans by clicking on the Save button in the Rate Plan Setup window.
- 

- Exit the Rate Plan Setup window by clicking on the Close button in the Rate Plan Setup window.
- 

Configuring Local and Toll Free Area Codes

Determining the Area Codes that are configured as Toll-Free

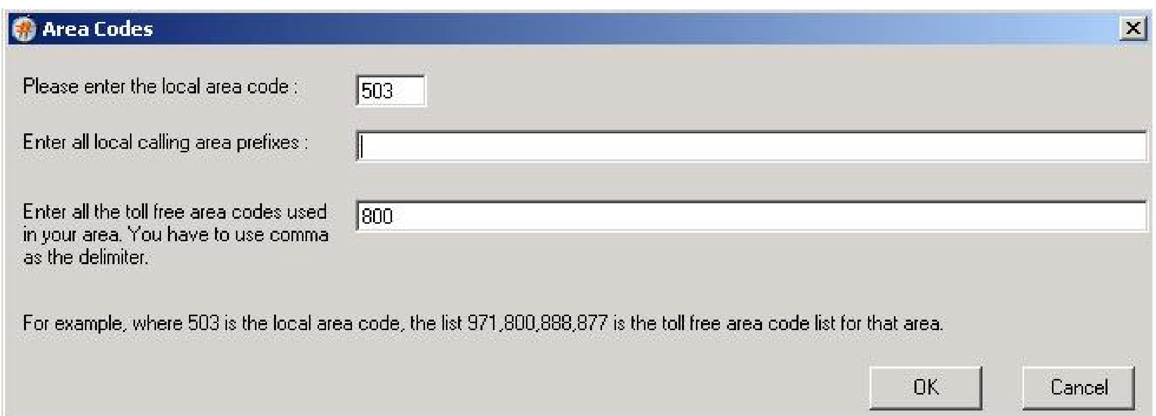
The installation prompts for the local area code, as well as other area codes that are toll-free such as overlaid area codes and 800-type numbers. Following are the descriptions of each filed:

Local Area Code: You should write local area code of your place in this frame.

Local Calling Prefixes: If all prefixes under the local area code need to be configured as local then you need not write anything in this frame. If certain prefixes are local and others are long in the Local Area Code, you need to write all local prefixes in this frame.

Toll Free Area Codes: You should write all toll free area codes which you want to configure in this frame.

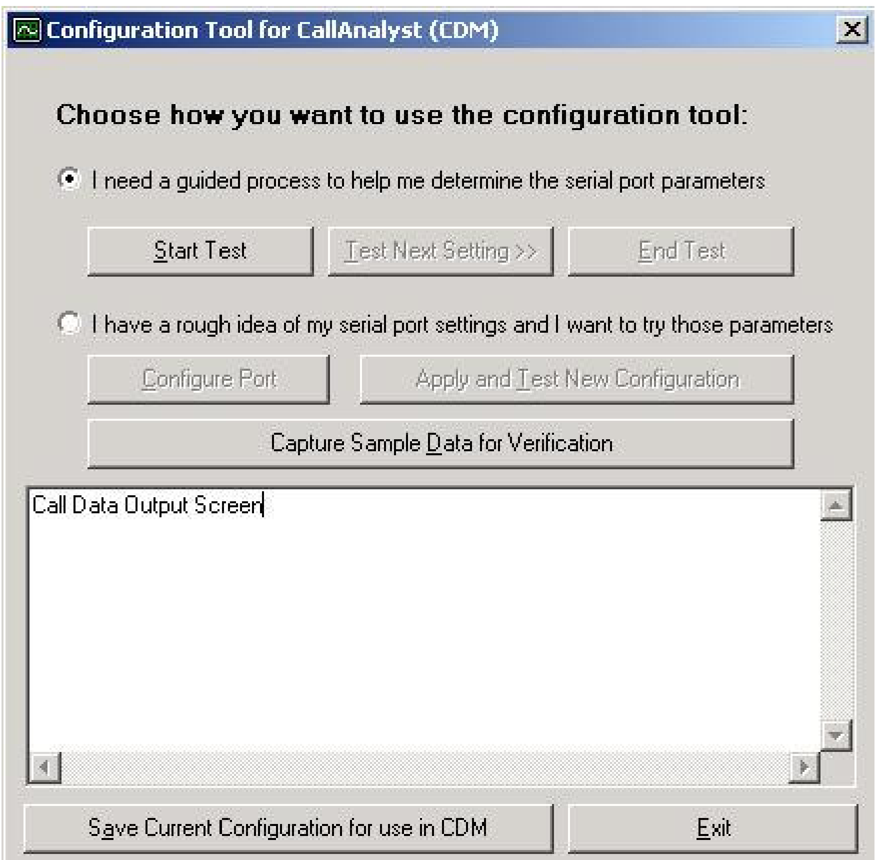
CallAnalyst offers a tool to check these area codes and amend the list. To use it, select **Start** on your Windows taskbar, and choose **Programs | CallAnalyst | Tools**.   There you will find an entry called **Edit Area Code Info**, which brings up the following window:



Configuring and Testing the Serial Port (COM1, COM2,...)

CallAnalyst provides this tool to ensure that data is being received from your phone system via the selected COM port on your PC. Using CallAnalyst with your phone system requires that the COM port settings on the phone system match the COM port settings on you PC. You can choose either the guided process if you do not know the COM port settings for your phone system or you may manually test the COM port settings.

If your PC COM port is properly configured and the phone system is configured to generate call records then the following tests will show some kind of ASCII output. Either recognizable call records (if the port settings are correct) or gibberish (random ASCII characters, if the port settings are incorrect). If no output appears during the testing then refer to the Troubleshooting section.



Guided Process:

- Begin by clicking **Start Test**. This will start the test with the most common COM port settings. Follow the directions that appear in the Call Data Output Screen. You will be instructed to make a test phone call on your phone system to see if the COM port settings are correct. If they are, you will see lines of alphanumeric characters that **clearly** (i.e. no gibberish characters, *&%#@) represent call records. You are now ready to save the parameters and continue the CDM setup. If you do not have clear call records then go to the next step.

- Click **Try Next Setting** to set the COM port to the next setting and again follow the directions that appear. Continue to repeat this step until clear call records are shown in the test window or until it is determined that some other factor is inhibiting transmission of the data (such as an improper wiring between the phone system and PC or incorrect phone system output settings).
- When you are able to see call records, you are done! Click **Save Parameters**, and then **Exit**.

Manual Testing:

- Click **Configure Port** to set the COM port settings as desired.
- Select **Apply And Test New Configuration** and follow the directions that appear in the Call Data Output Screen. You will be instructed to make a test phone call on your phone system to see if the COM port settings are correct. If they are, you will see lines of alphanumeric characters that **clearly** (i.e. no gibberish characters, *&%#@) represent call records. You are now ready to save the parameters and continue the CDM setup. If you do not have clear call records then try using the guided process.
- Click **Capture Sample Data For Verification** and the data sent from COMM port will be shown in this screen. You Can verify correctness and completeness of data by viewing it.
- When you are able to see call records, you are done! Click **Save Parameters**, and then **Exit**.

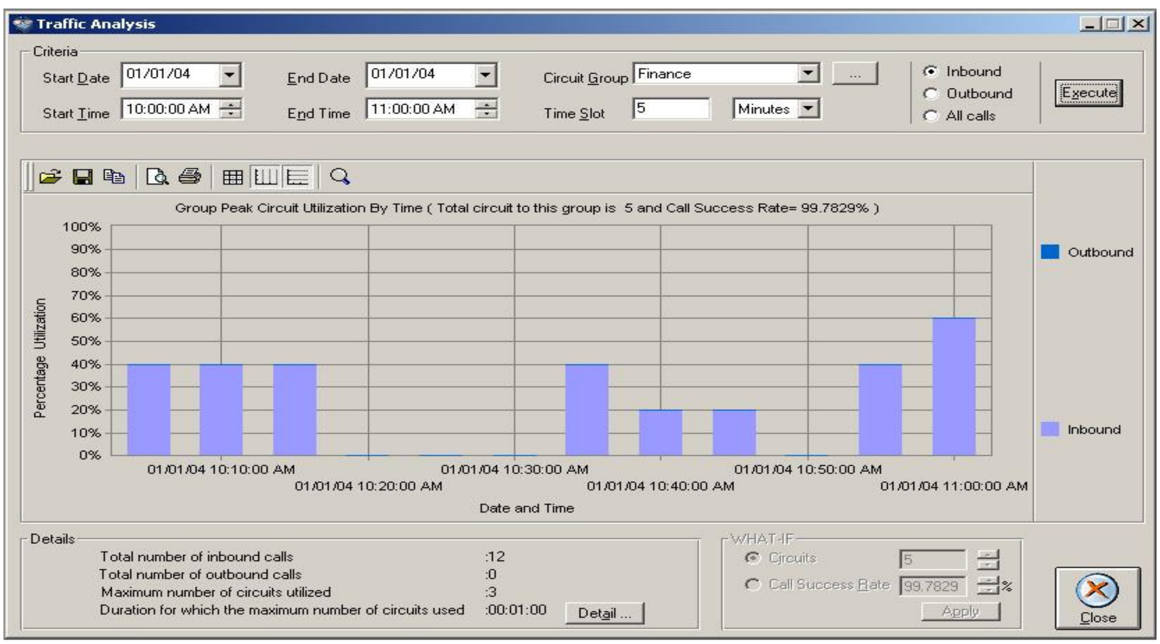
Note: This module is currently not available in Elite CallAnalyst

Traffic Analysis provides a user-friendly tool that helps to optimize the telecom resource utilization and maximize the ROI (Return on Investment) tied to such resources.
Traffic Analysis analyses historical call data over periods, presents the analysis results to the user in a bar chart and provides further details so that the user can understand how best can he deploy new resources, re-deploy existing resources or otherwise reconfigure the system to maximize the ROI - as defined by the user. It graphically depicts usage of trunk groups for specified time period and gives detail of calls when trunk usage was maximum.

Refer following sections to analyze the call data.

Setting criteria for Traffic Analysis
Details Section
What- If Analysis.

To display Traffic Analysis main window in CallAnalyst:
Click the Tools|Traffic Analysis menu item from the main CallAnalyst window or click on the Traffic Analysis button in the main CallAnalyst screen



Setting Criteria for Traffic Analysis

Traffic can be analyzed using various date intervals and time slots. Appropriate criteria have to be set in the following window

Start Date/Time

Start date and time from where call data will be analyzed. The following issues needs to be considered while setting the start date.

- Start date should not be less than a day compared to the date of the first call in the database.
- Start Date/time should be always greater than the End Date/time
- Difference between start date and end date should be less than on equal to 2 months

End Date/Time

The end date and time till where call data will be analyzed. The following issues needs to be considered while setting the end date.

- End date should not be greater than a day compared to date of the last call in the database
- Start Date/time should be always greater than the End Date/time.
- Difference between start date and end date should be less than on equal to 2 months

Trunk Group: Select the trunk group for which the call data has to be analyzed.

Time Slot: Is the interval of time for which the call data will be plotted in the call distribution chart. Users can specify the time interval based on the level of detail to which the data needs to be analyzed. Time slot can be set in

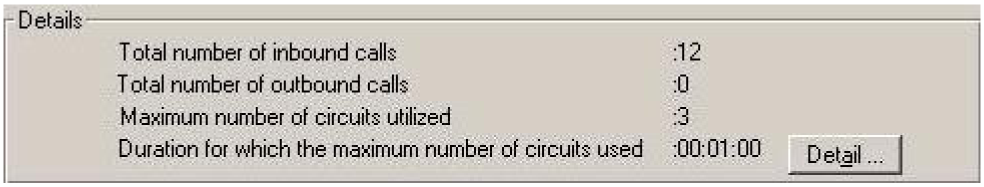
- In minutes (multiple of 5 minutes)
- In hours (1-23)
- In days (1-n)

By default this value is set to 1 hour.

Inbound/Outbound: Here user can select the direction of the calls that needs to be analyzed - Inbound, Outbound or both.

Details Section

The section provides specific details of the data being represented in the call distribution chart



Total number of inbound calls: Displays the total number of inbound calls during the period of analysis

Maximum number of circuits utilized: Displays the maximum number of circuits utilized during the period of analysis

Duration for which maximum number of circuits used: Shows the total duration during which the maximum circuits are utilized.

Detail: Shows the various times slots at which the circuit utilization is at the maximum

What-If Section

Traffic Analysis computes the Call Success Rate for the given number of circuits in the selected period of time. Lesser value for Call Success Rate can indicate that some of the calls get missed. A higher value can indicate that existing circuits are underutilized. What-If analysis uses the Erlang B model to calculate the corresponding Circuits or the Call Success Rate when one of the them is changed.

This section would be enabled on choosing minimum of 5 days data for analysis with All Calls being checked. It will be enabled after the call distribution is plotted on clicking the Execute button. While doing What-If analysis only one parameter among Circuits or the Call Success Rate can be changed.

Check on the radio button to select the parameter to be changed. After setting a value for say circuits click on Apply. The corresponding value for Call Success Rate will be displayed. The call distribution will also vary to display the new pattern of calls.

Glossary

ANI: Automatic Number Identification service is a service that provides the BN or billing number of a party that calls. This information can identify the caller and all pertinent information associated with them.

CallerID: Information about the caller which is transmitted between the first and the second ring from the phone company. Standard Caller ID sends the caller's number only while enhanced Caller ID sends both the caller's number and name.

DNIS: Dialed Number Identification Service is a service that identifies which number was dialed by the caller for an incoming call. This is useful in a setup where there are several numbers to handle calls for specific products or services.

DISA: Direct Inward Station Access is the feature where the caller can call in to his/her voice mail and check messages or access their extension to make outbound calls elsewhere.

Out of Area: If a phone call was made from an area where CallerID service is not supported but you have subscribed to the CallerID service, then the information CallAnalyst gets and records as, is **Out of Area**. Sometimes **Out of Area** calls are transmitted with the phone number only. In those cases the name field will be blank.

Private: If the caller has requested his phone company not to send CallerID information when they make calls, CallAnalyst displays either **Private** or **Blocked** in the Line Name of the call record. You can still assign these numbers to a contact.

SMDR: Station Message Detail Reporting, or the information about a phone call (e.g. extension called, number dialed, date and time of call) that is generated by a phone system. Your phone system usually sends the SMDR data at the completion of an inbound or outbound call.

CDR: Call Detail Recording

MDR: Message Detail Recording

Troubleshooting - SMDR/CDR Capture

NEC

I'm not getting any call information in CDM/CallAnalyst

Physical connection to COM port Make sure the PC running CallAnlayst has a good serial cable connection to the **SMDR port** of your phone system. If you are unsure that the correct COM port is selected, go to the CDM (Call Data Manager) Setup window and try another port.

CDM inactive or not running -Your system tray should show the Active CDM icon (a green telephone, as shown), which indicates that CDM is up, and running. If the icon does not appear, launch CDM by clicking Start|Programs|TriVium|CDM. If the icon

appears, but is red instead of green, right-click on the icon and choose "Enable CDM."

Port settings Verify that you have selected the correct COM port settings (baud rate, data bits, etc.) in CDM setup.

If you are using non-comm port data sources, then make sure the source specified is active and valid and can be reached by Call Data Manager. DSN can be tested from ODBC settings and URL can be tested by copying and pasting the URL information in your browser.

Device conflict - With the following items, keep in mind that even though you might have four serial ports on your computer, standard PCs only allow you to share two interrupts between the four ports. To avoid an interrupt conflict you must either reassign an interrupt on your hardware or share an interrupt with the call accounting hardware (phone system).

Modem - While it's acceptable to have your modem and call data record input share the same COM port, you will encounter difficulties if you attempt to use the modem while collecting call data, and vice versa.

Mouse - Occasionally a mouse will occupy a COM port, although there is usually a dedicated port with a dedicated interrupt for mice. The mouse port will usually be labeled with a cartoon of a mouse, whereas the COM port will usually be labeled with a series of dashes (- - -) or binary digits (10101). If you suspect a conflict, click **Start|Settings|Control Panel**, and choose System. In the "Device Manager" tab, inspect the Mouse and Ports items for a conflict.

I'm getting call information in CDM/CallAnalyst, but the local calls have the format (000) 0nn-nnnn Incorrect CDM Setup - more

I'm not getting incoming Caller ID information

No Caller ID service from the phone company - Verify with your local phone company that your service is activated.

No Caller ID information from the phone system - Some phone systems require special configuration to output this information. With regard to the name of the caller, some phone systems send only the Caller ID number, even though the LCD display on the telephone set also shows the name.

Outgoing calls don't display a phone number for local calls - Chances are that you have not correctly set up the local area code and the toll free area codes for your region. Close CallAnalyst and CDM first. Go to start menu->programs->CallAnalyst->Tools->Edit Area Code Info. This program allows you to configure the local and toll free area codes. Then go into CDM Setup and ensure that the correct area code (and **only** the correct ones -- no blank lines) appear in the drop-down box that contains the area code.

Contacting NEC

For support please contact your Elite CallAnalyst dealer or NEC Unified Solutions.

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