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System Requirements

The Call Accounting computer should meet the minimum system requirements listed below. Because Windows 32-Bit 2000/2003/XP Server are all multitasking operating systems, other applications may be run on the computer while the call accounting software is operating. However, we recommend that a dedicated computer is used to prevent rogue applications from locking up the computer, preventing the call accounting application from operating properly as well as to prevent unauthorized or unaware users from shutting down the call accounting system.

System Requirements

- Windows 32-Bit 2000/2003/XP/ or Vista Server
- Minimum 512 MB RAM
- 1 GB available hard drive space
- 1 serial port (2 if interfacing to a hotel Property Management System)
- Mouse
- SVGA 16 Bit Monitor w/video card
- CD/DVD-ROM
- 1.44 MB disk drive (for creation of an Emergency Rescue Disk)
- Sound card w/ Speakers

Finding Help

Context-sensitive on-line help is provided by pressing the F1 key from any screen or by pressing the "Help" button found on the bottom of most screens. For example, when configuring taxes (Selected from the Charges menu), click the Help button for that screen and the Help screen will display information that refers specifically to the tax screen.

For information about the main screen, refer to the Feature Overview Section

If a question arises and there is a preference to call us, our Technical Support team is available to those sites with current Support Contracts.

Feature Overview

Status Indicators (Traffic Lights)

There are four status indicators near the bottom of the main screen. These traffic light indicators are designed to give an at-a-glance view of the call accounting system status. A green light indicates that the call accounting system is operating optimally, a yellow light indicates a potential problem, and a red light signals that there is a problem with the system that needs to be addressed immediately. To ensure that critical status indicators stand out, the colors red and yellow are seldom used elsewhere on the main call accounting screen.



PBX Indicator

If the PBX has not transmitted any call records over a recent, configurable time period this indicator first changes to yellow, followed by red, if the problem is not resolved. The time periods may be set to any extent of time using the <u>Alarms</u> screen.

Support Indicator

The Support Indicator reflects the expiration status of the support subscription. A unique support subscription code is required each calendar year in order to update the call accounting system with new rate tables, area codes and software upgrades. Green indicates a valid support subscription code, yellow indicates the subscription code will expire within 30 days and red indicates the code has already expired. If the Support Indicator is red, updating with new rate tables without obtaining a new support code will prevent calls from being correctly processed because the call accounting system will determine that the updates were obtained without a proper license.

PMS Indicator

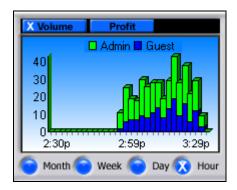
The PMS Indicator signals a warning when there is a problem with your Property Management System (PMS). If the PMS has not accepted a call record over a recent, configurable time period this indicator will first turn yellow, followed by red. The time periods may be set to any extent of time using the Alarms screen.

Note: If the software is being used in an office environment, the PMS Indicator is not necessary and will not appear.

Call Volume Graphs

The Call Volume Graph can be found in the lower left-hand corner of the main screen. Green graphing segments represent administration call volume and blue segments represent guest, or client, call volume. Simply click the *Volume* tab, if it is not already showing on the screen. The Call Graph may be used for several purposes:

- To determine if the call accounting system has been processing calls (if not, the call graph for the *Day* option will be flat).
- To determine peak call times by selecting Day and viewing the time(s) of day when call volume peaked.
- To review call activity to find trends for the week (select the Week option) for both administration and guest calls.
- To view call activity, peaks, and trends for the month when selecting the Month option.



Hour

This graph displays call volume during the past hour. The far left edge of the graph indicates call traffic one hour ago and the far right edge indicates current traffic.

Day

The Day Graph is similar to the Hour Graph and is useful for determining when the majority of calls are made during the current day.

Week

The Weekly Call Graph indicates the amount of calls that were made during the past seven days and compares/contrasts the call volume of various days of the week. The x-axis indicates the day of the week, while the y-axis shows call volume.

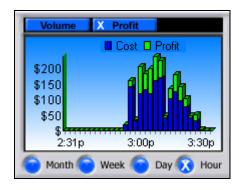
Month

This graph displays the call volume over the past 30 days. The x-axis indicates the date (for example, "16" means the 16th of the month), and the y-axis shows the call volume for that particular date.

Call Profit Graphs

The Profit Graph can be found in the lower left-hand corner of the main screen. Green graphing segments represent administration calls and blue segments show guest, or client, calls. Simply click the *Profit* tab, if it is not already showing on the screen. (If the *Profit* tab is not visible on your screen, enable it in the *Setup | Customize* menu by placing a checkmark in the *Show Profit Graph on Main Screen* option on the *Display* tab.) The Profit Graph may be used for several purposes:

- To gain an understanding of profit versus call volume.
- To determine if the call accounting system has been processing calls (if not, the profit graph for the *Day* option will be flat).
- To determine peak call times by selecting Day and viewing the time(s) of day when call volume peaked.
- To review call activity to find trends for the week (select the Week option) for both administration and guest calls.
- To view call activity, peaks, and trends for the month select the *Month* option.



Hour

This graph displays call profit, in two-minute intervals, during the past hour. The far left edge of the graph indicates call profit one hour ago and the far right edge indicates current profit volume.

Day

The Day Graph is similar to the Hour Graph and is useful for determining when the majority of profit is made during the current day.

Week

The Weekly Call Profit Graph indicates the amount of profit that was made during the past seven days and it compares/contrasts the call profit of various days of the week. The x-axis indicates the day of the week, while the y-axis shows call profit.

Month

This graph displays the call profit over the past 30 days. The x-axis indicates the date (for example, "16" means the 16th of the month), and the y-axis shows the call profit for that particular date.

Maps

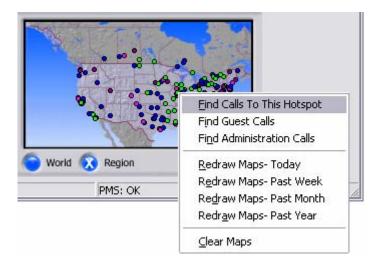
World, Regional and Local maps are displayed in the lower right-hand corner of the main screen. Click on either the **World**, **Region** or **Local** option, to display the preferred locality. If the **Local** option is not visible on your screen you may enable it in the **Setup | Maps & Country** menu by placing a checkmark in the **Enable Local Map** option.

The specific destination of all phone calls will appear as dots on each map. A variety of colors can be assigned to represent departmental phone call destinations. By default, administrative calls are green and guest/staff calls are blue. The color assignments may be changed by the user in the **Assign Departments** screen. These maps are useful for identifying administrative and guest/staff call destination clusters in order to negotiate lower phone rates to these areas as well as to monitor administrative phone usage. To erase all dots from both maps, right click on the map and select **Clear Maps** from the pop-up menu.

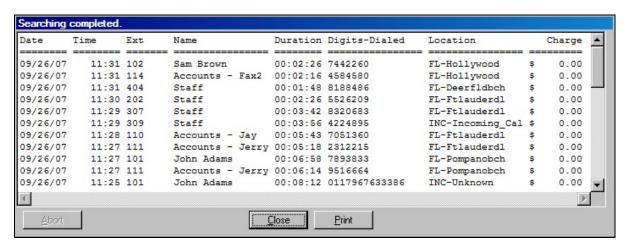


Map Hotspots

To identify extensions which dialed calls to a particular area on a map, click on a colored dot. A popup menu allows the user to view all calls, guest/staff calls, or administration calls to that area.

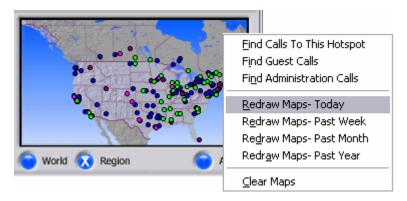


Once the user selects the type of calls to display, a screen will appear containing the details of each call to the area.



Redrawing maps

To redraw call locations on all maps, click on any section of a map. A popup menu will appear allowing the user to redraw calls from today, the past week, the past month or the past year.



Short-Cut Buttons

The Short-Cut Buttons across the top of the main screen simply allow one-click button access to frequently-used screens instead of going from one menu to the next to reach your desired screen. For example, to view Special Number Charges, you would first go to the *Charges* menu, then scroll down and select the *Special Number Charges* option. However, with the *Special* Number Charges short-cut button, click just once to reach the Special Number Charges screen.



To see what a certain Short-Cut Button does, just place the mouse cursor over a particular button and leave it there for a few seconds. A short description of the button will pop up below it. The buttons across the top from left to right are as follows:

- Select rate tables and set markups
- Set markups for special numbers such as toll free numbers, etc.
- Assign Extensions
- Assign Departments
- Display cost of call, or "what-if" charges
- Generate Reports
- Generate Graphical Reports
- Activate the Dataspy for viewing and troubleshooting PBX data
- Create a Rescue Disk

Passwords

The default password is "phone" or you may also click "2222" on the Pin Code keypad of the password box. The pin code method is often faster because the user's hand is not removed from the mouse. The password has a default grace period of ten minutes, so no matter how many screens are entered, the password will not have to be re-entered for the ten minute period.



Different passwords may be assigned to control access to reports and administrative functions. To remove the default passwords and enter your own passwords, please refer to the section in this guide labeled "Passwords" under the "Maintenance" section.

Cabling

Cabling is defined here as the process of physically connecting the PBX with the call accounting computer. To connect these systems, connect one cable between the PBX and the call accounting PC and another cable from the Property Management System (if applicable) to the call accounting PC. Either a null-modem converter (available at most electronics stores) may be used with a straight-through serial cable, or use a cross-over cable. Usually, cabling is already in place or will be installed by a technician, but for do-it-yourself users, these topics are discussed below.

Serial Cables

Serial cables are manufactured with one of two possible connector sizes: DB-25 or DB-9. The DB-25 connector has 25 pins and a DB-9 has 9 pins. DB-25 and DB-9 connectors do not use the same pin configurations to transmit data, as shown in the brief table below.

Signal Name	DB-9 Pin #	DB-25 Pin #
Transmit	3	2
Receive	2	3
Ground	5	7

If the computer in use has a different connector than what is required on the cable, a simple adapter or converter may be purchased from an electronics supply store. The converter is often called a "DB-25 to DB-9 adapter" and performs the necessary pin translations.

Serial cables are usually manufactured as "straight-through" cables meaning that each pin on one end of the cable is directly connected to the corresponding pin on the opposite end. These cables also contain a male connector on one end and a female connector on the opposite end.

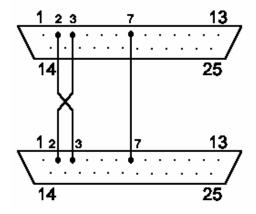
Null Modem Connectors

Computers with DB-25 connectors should transmit on pin 2 and receive on pin 3. A null modem cable is used to connect one computer's transmit pin to the other's receive pin and vice versa. The null modem also has male connectors at both ends to allow the cable to attach to each computer. A null modem is often used with a straight-through serial cable to connect two computers, instead of using a cross-over cable, which is usually custom built by a technician. Null modems also perform other features, but those features are not relevant here.

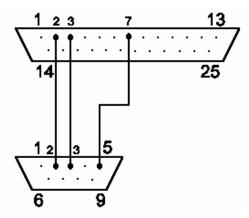
Cross-over cable

A cross-over cable simply has the transmit and receive wires crossed so that the transmit pin on one device is connected to the receive pin on the opposite device. The signal ground wire is not crossed and connects to the ground on the opposite device. If the wires were not crossed, neither device would be able to communicate with the other. The cross-over cable is usually custom built and has male connectors on each end. Note: a straight-through cable paired with a null modem connector performs the same function as a cross-over cable.

A diagram of a standard cross-over cable follows:



DB25 - DB25 Standard Cross-over Cable



DB25 - DB9 Standard Cross-over Cable

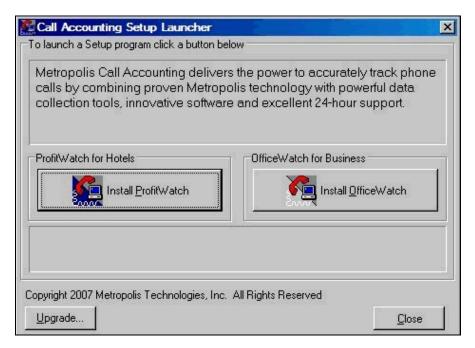
Software Installation

Installing the Software from a CD-ROM

Follow these steps to install the software onto the designated PC:

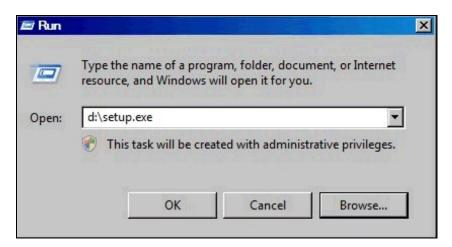
- 1. Close all of the applications currently running on the PC on which the software will be installed.
- 2. Insert the installation CD into the CD-ROM drive.

The "Setup Launcher" will appear, select the appropriate version.



Note: If the Auto-Start feature is not enabled on your CD-ROM drive, follow these steps:

- a. Click the Windows "Start" button on the task-bar and select the "Run" option.
- b. Type "d:\setup" and click the OK button, ('d' indicates the drive letter of the CD ROM drive.)



- 3. The installation program will ask configuration questions. We recommend choosing the default options.
- 4. After the installation program has finished, the user can begin to run, register, and configure the software.

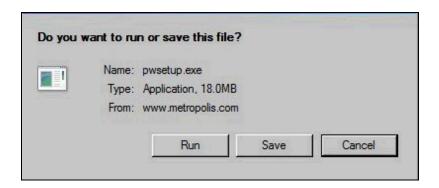
Installing the Software from the Internet

Follow these steps to install the software onto the designated PC using an Internet connection:

1. Download the call accounting setup file from http://www.metropolis.com/downloadpro.html (ProfitWatch) or http://www.metropolis.com/downloadoff.html (OfficeWatch).

When prompted by the browser, select Run to start downloading the executable.

2. Close all of the applications currently running on the PC on which the software will be installed.



The "Setup Launcher" will appear.

- 3. The installation program will ask configuration questions. We recommend choosing the default options.
- 4. After the installation program has finished, the user can begin to run, register, and configure the software.

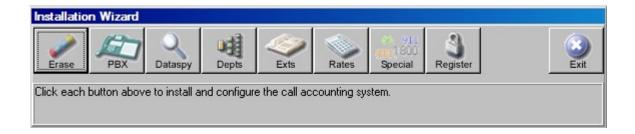
Installation Wizard

Loading the Wizard

The Installation Wizard will guide the user through the call accounting installation. Start the wizard by selecting **Setup | Installation Wizard**.



Once the Installation Wizard is active, simply click each button from left to right to configure the software. When finished, click the OK button to close the wizard.



The Installation Wizard provides a convenient method to enter all of the screens that must be configured for a successful installation. For further information on each screen, consult each screen's section of this guide.

Installation Wizard Options

Erase

The software normally ships with sample data. To prepare the call accounting software for actual data, it is wise to erase all existing sample data.

Note: This feature will erase any extensions you have configured in the system.

Dataspy

Click the Dataspy button to verify that the PBX is transmitting data to the call accounting computer and that the communications parameters are correct. For further information refer to the <u>Dataspy</u> section.

PBX

Select the PBX model. For further information refer to the Select PBX section.

Depts

Telephone extensions are usually assigned to departments, which may be configured here. For further information refer to the <u>Creating Departments</u> section.

Exts

Once some departments have been created, the user may assign extensions to them. Note: any extensions not assigned to a department will automatically be assigned to the Guest/Staff department. For further information refer to the <u>Configuring Extensions</u> section.

Rates

Click here to assign rate tariff tables and markups. For further information refer to the Rates section.

Special

Dialed numbers that do not conveniently match local, long distance or international dialing rules are referred to as Special Numbers. These include numbers such as toll-free numbers and operator assisted dialing. Click here to assign costs to these numbers. For further information refer to the Special Number Charges section.

Register

Click the Register button to properly license the software using the registration serial number received from the vendor. For further information refer to the Software Registration section.

Exit

When finished with the Installation Wizard, click the Exit button to return to the main screen.

Initial Setup

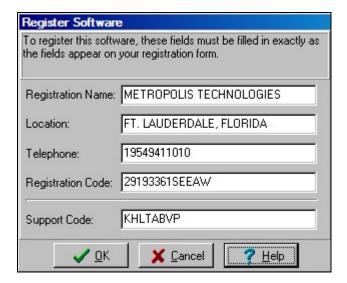
Before the call accounting system can begin to calculate charges for phone calls, the software must be configured to operate with the user's PBX. This initial setup process encompasses the minimum steps that are required to bring the call accounting system online. Once the initial setup is complete, the rates and extensions may then be configured. Installation consists of:

- Software Registration
- Communications Setup
- PBX Selection
- Country Selection (for installations outside of the USA)
- Regional map selection

Software Registration

Until properly registered, the software will only operate in an evaluation mode. Once registered, the software will always start up as a registered version.

To register the software, select the *Register Software...* option from the *Help* menu.



Registration Name

The name of your hotel or office center.

Location

The location (city,state) of your hotel or office center.

Telephone

The telephone number exactly the way you would dial it.

Registration Code

The registration code must be entered exactly as it appears on your registration sheet. If the code or any other data on this screen is not entered accurately, the registration box on the main screen will turn red and calls will not be processed.

Support Code

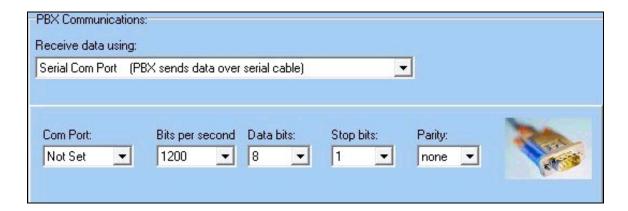
A valid support code is required to update your software or rate tables and receive technical support from our 24/7 technical support staff.

*Please note that all five fields must be entered exactly as they appear on the registration sheet you received from the manufacturer.

Communications Setup

To configure the communications parameters required by the PBX, select the **PBX...**option from the **Setup** menu. The PBX Communications section is on the right side of the screen, PBX Model Selection screen is on the left. We will focus now on the Communications section.

PBX Communications



Enter the appropriate values to enable communications with the PBX and optional Property Management System.

Note: If you are uncertain of the correct PBX values, contact your PBX technician.

Receive From

Enter the desired communications option, either Com Port (Serial RS-232) or I.P Port (TCP/IP).

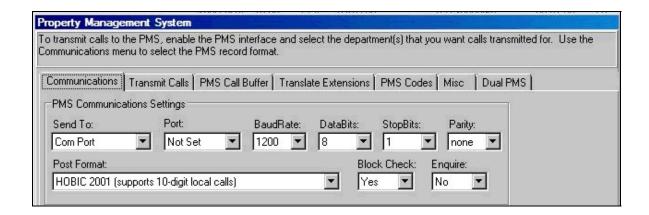
Port

Enter the PC serial port number. Enter "Not Set" if no port is to be used.

Baud Rate, Data Bits, Stop Bits, Parity

Enter the values that describe the communications data protocol. The most common combinations are: 1200,8,1,None and 1200,7,2,Even.

Property Management System (PMS) Settings (Optional)



Send To

Enter the desired communications option, either Com Port (Serial RS-232), I.P Port (TCP/IP), File – Accumulate, or File – call by call.

PMS Port

Enter the PC serial port number. Enter "Not Set" if no port is to be used.

Post Format

The posting format determines the format of the charge record to be transmitted to the PMS. The most commonly accepted format is HOBIC 2001.

Example HOBIC format:

<STX>123W HTL 12/25 302 10:23 0003 \$008.33 520-779-4321 <ETX><BCC>

Block Check Character (BCC)

The BCC is a "logical exclusive OR" of all of the characters in the posting record. The BCC is appended to the record and serves as a check-sum for the transmitted data. If the PMS determines the BCC doesn't correspond to the received data, it requests that the call accounting system retransmit the packet.

Note: The PMS must be configured to expect a BCC character for this method to function correctly.

Enquire Mode

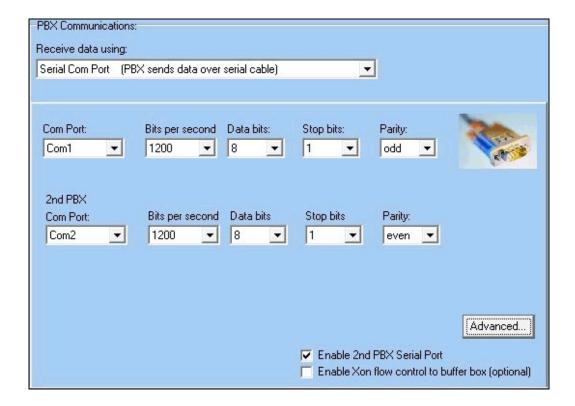
If the Property Management System expects notification of a pending call record it will most likely require the use of the Enquire option. When activated, the call accounting system will send an ENQuire (Hex 05) character and wait for a response before transmitting any call records to the PMS.

Advanced Communications Options

Multiple PBX Connections

The call accounting system has the ability to process information from two PBXs simultaneously as long as the 2nd PBX has the same SMDR data format as the primary PBX.

To enable the 2nd serial port, simply select this option from the *Advanced* button in the lower right hand corner of the PBX Communications Setup screen. When this option is selected a second set of configuration settings will appear immediately below the primary PBX.



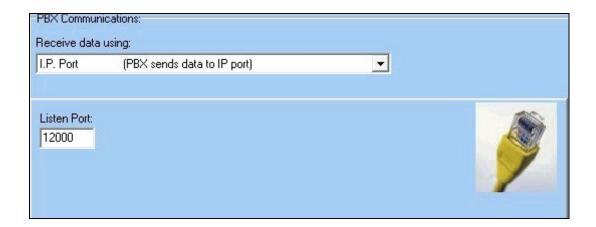
Xon/Xoff Flow Control

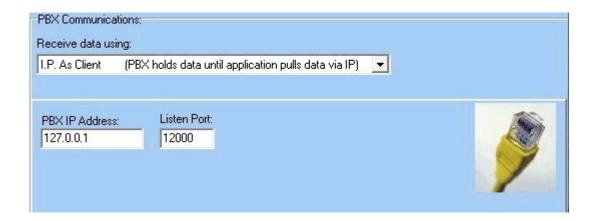
The call accounting system has the ability to reduce buffer overflows using software flow control (also known and Xon/Xoff protocol). To enable Xon/Xoff flow control select this option from the **Advanced** menu in the upper left-hand corner of the Communications Setup screen.

Note: DO NOT activate this option unless you are certain that the PBX supports software flow control or you are instructed to do so by your PBX vendor.

TCP/IP Connections

To receive PBX data or to send data to the PMS using a TCP/IP port, select the "I.P Port" option in the "Receive From" or "Send To" option lists. The new fields required for I.P processing will replace the standard RS-232 (V.24) portion of the PBX Communications Setup screen.



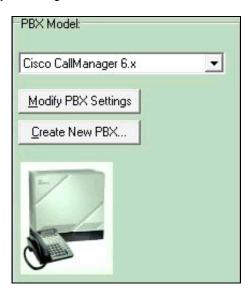


Note 1: When accepting calls from a PBX over a TCP/IP link, the Call Accounting software acts as a server, so the PBX must be able to open a TCP/IP socket using the IP Address of the Call Accounting PC and the Port specified above.

Note 2: When sending call records to the PMS, the call accounting system acts as a client and will connect to the PMS on the specified IP Address and port combination. If the PMS does not allow a persistent connection, change the *PMS Interface uses a persistent I.P connection* option on the *Misc.* tab of the **Property Management System** screen.

PBX Selection

To configure the Call Accounting software to operate with your particular PBX, choose the **PBX...** option from the **Setup** menu and go to the PBX Model section on the left side of the screen. Select your PBX from the list provided. If your PBX is not listed, click the <u>Create New PBX...</u> button to enter the information necessary to configure the PBX.



You may need to make adjustments to the PBX SMDR formats if your PBX SMDR format does not exactly match the pre-defined PBX formats that ship with the software. Click the <u>Modify PBX</u> <u>Settings...</u> button and enter the information necessary to make the changes.

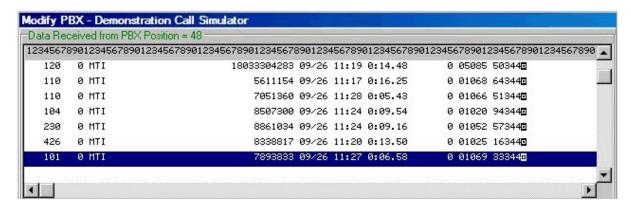
PBX Modifications

Due to the different options available in each PBX, occasionally the PBX data format does not match the pre-configured PBX format. If this is the case, phone records will not be properly processed and may not even appear on the main screen.

You may manually adjust the PBX format to resolve this problem. Click the *Modify PBX...* button on the *Select PBX...* screen. The *Modify PBX...* screen enables you to change all configuration options for virtually any PBX. In addition, several features on this screen will assist the user in correctly adjusting to the PBX format.

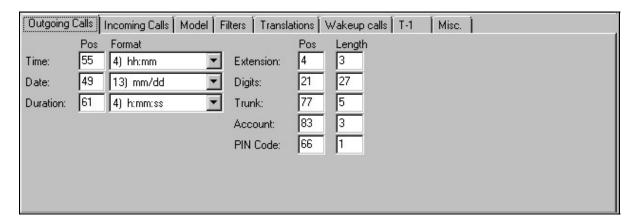
Live PBX Data

This portion of the screen displays the PBX data after it is received by the call accounting system. It is useful when determining the starting position and lengths of the SMDR fields. To determine the starting position of each field in the PBX record, place your cursor over the data to update the "Data Received from PBX Position = xx" text at the top of the data (highlighted in green for easy identification).



Outgoing Calls Format (required)

Select the *Outgoing Calls* tab, this tab is the most important area of this screen and specifies where each field occurs in each PBX call record.



The Time, Date and Duration field formats must be selected from the drop-down list and the remaining fields require that the length of the field be entered.

Required fields: Time, Date, Duration, Extension and Digits.

Optional fields: Trunk, Account, and PIN Code.

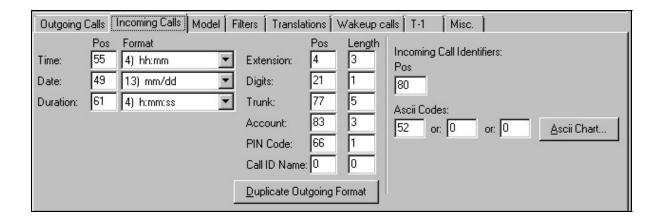
Incoming Calls Format (optional)

Although many call accounting sites decide not to process incoming call records, the feature is included and allows for a per-minute rate charge for each incoming call or it can simply monitor the incoming call flow.

To process incoming calls, you must specify the ASCII value of a character that appears at some permanent position in every call record. To view the ASCII values for any character, click on the *ASCII Chart...* button. For example, if the letter I appears in position 1 of each incoming call record, you would enter 1 for the position and ASCII value 73 which represents the letter I.

If all other values for incoming calls appear in the same positions as the records for outgoing calls, you may click the *Duplicate Outgoing Format* button to copy the values specified on the *Outgoing Calls* tab into the *Incoming Calls* tab.

Note: It is important to select *Process Incoming Calls* on the *Processing* tab of the *Customize* screen which is accessible from the *Setup* menu. If this option is not set, incoming calls will be ignored regardless of the configuration specified on the *Incoming Calls* tab.

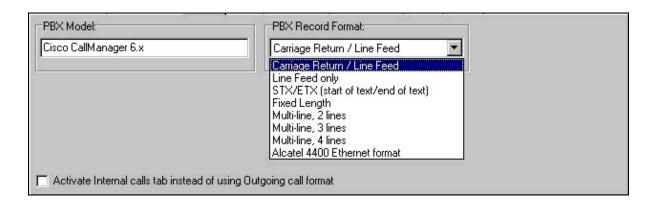


PBX Model

This is the name of your particular PBX. The user may name or change the name of their PBX and the new name will appear in subsequent sessions. The exact name is not important, but meaningful names are helpful.

PBX Record Format

The Record Format describes the layout of each SMDR record received from the PBX. Most PBXs terminate each call record with a Carriage Return / Line Feed pair (sometimes referred to as CR/LF). However, some PBXs only use a Line Feed character. Occasionally, a PBX, such as the NEC 2400, uses a "start of text" (STX) character to denote the start of a new call record and an "end of text" (ETX) character to denote the end of each call record. Again, the most common format is the Carriage Return / Line Feed option.

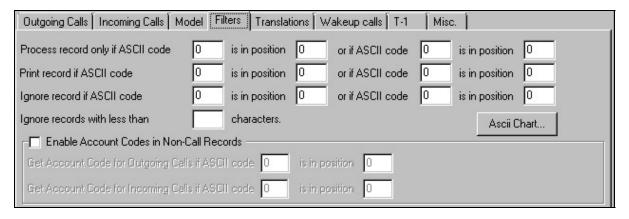


Filters

To filter out unwanted PBX records, a section is provided to set filtering conditions. The *Process call record only if ASCII character # xxx is in position xxx* will discard calls unless the specified ASCII character is in that particular position.

Conversely, PBX call records may be discarded if a particular character is in a particular position as set in the fields: *Ignore call if ASCII character # xxx is in position xxx*. To view the ASCII character table, select the *ASCII Chart...* button. There is also the option to ignore any records unless they are at least a minimum length.

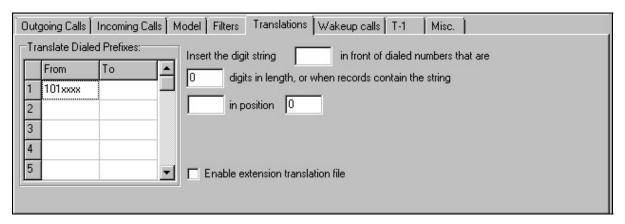
If your PBX SMDR port transmits records that should not be processed as phone calls, but rather diverted to a printer, you may use this screen to define the printed records. This feature is often used to pass wakeup call information to a printer where it can be recorded and acted upon at a later time. To define these records, determine what makes the record unique by specifying where a unique character exists in the record, and the ASCII value of that character. Any SMDR record that contains that character at the exact position will be diverted to the printer and will *not* be processed by the call accounting system.



Translations

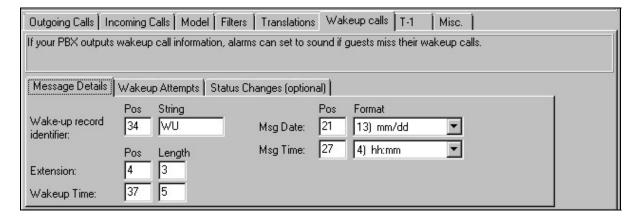
Some dialed numbers must be either translated to other numbers or stripped out completely. The translate screen allows you to specify dialed number prefixes to translate. To translate a prefix, enter the prefix to translate in the "From" editing box and enter the digits to translate it to in the "To" editing box. If you wish to simply strip the digits, leave the "To" box blank.

Finally, the user can specify that all calls with a certain number of digits have a series of digits inserted before them. One use for this is when the PBX doesn't include the leading 1 character on some long distance calls, in which case it would read "Inser the digit string 1 in front of dialed number that are 10 digits in length."



Wake-up calls

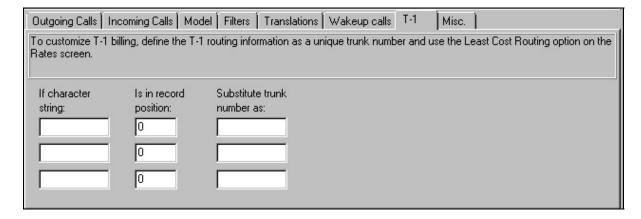
If your PBX model sends wake-up call information to the call accounting system, you may use this screen to identify wake-up call records. Please refer to the <u>Wake-up Call Notification</u> section.



T-1

Normally, call pricing is based on the digits that were dialed. This pricing method may be overridden by using this screen to create phantom trunks and then using the <u>Least Cost Routing</u> (LCR) screen to assign per-minute charges to the phantom trunks. The LCR screen is accessed from the **Advanced** menu on the **Rates** screen.

To create a phantom trunk, identify a unique character string which consistently appears at the same position in the SMDR/CDR record and assign a phantom trunk number to it. Anytime the unique character string appears in the SMDR/CDR record, the phantom trunk number will replace the actual trunk number contained the SMDR/CDR record.



Miscellaneous PBX Options

Often PBX systems will transmit secondary call records to record Account/Authorization code data. In these situations it may be possible to capture this additional data by appending it to the preceding call record. You should only use the option on the *Misc* tab under direction from your PBX vendor or a Metropolis Technologies support consultant.

Internal Calls Format (optional)

Although many call accounting sites decide not to process internal call records, the feature is included to monitor the internal call flow. To process internal calls, check the *Activate Internal calls tab instead of using Outgoing call format* box found on the *Model* tab. An additional tab will appear, labeled *Internal Calls*.

Enter the fields in the same manner as you did on the "Outgoing Call Format" tab. To process internal calls, you must specify the ASCII value of a character that appears at some permanent position in every call record. To view the ASCII values for any character, click on the ASCII Chart... button. For example, if the letter I appears in position 1 of each record, you would enter 1 for the position and ASCII value 73 which represents the letter I.

Creating a New PBX Format

To create a new PBX format, click the *Create New PBX...* button on the *PBX Setup* screen. The subsequent screen is identical to the *Modify PBX* screen, except that a name for the new PBX must be entered.

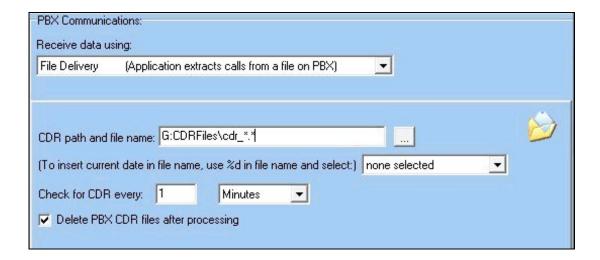


File Delivery

With the development of new PBX technology additional options for SMDR delivery are now available. In addition to the ability to accept SMDR information from PBX's over TCP/IP connections the call accounting system can also process SMDR using File Delivery.

If your PBX system generates SMDR data as a raw text file (for example, Cisco's Call Manager) you can configure the call accounting system to process this file (or files) using the *File Delivery...* option from the *PBX Communications...*menu.

Note: If you choose not to delete the remote file after processing and the PBX does not overwrite the file, you will have duplicate records in your database.



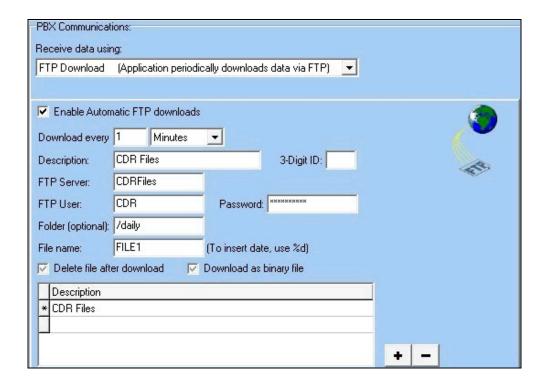
FTP Download

If your PBX system stores SMDR data as a text file on an FTP Server (for example, 3Com) you can configure the call accounting system to process this file (or files) using the *FTP Download...* option from the *File* menu.

Click the *Enable FTP Automatic FTP downloads* checkbox to edit the FTP Server, User and Password options. It is important to ensure that the FTP User has sufficient permissions on the FTP server to allow the file download to be successful.

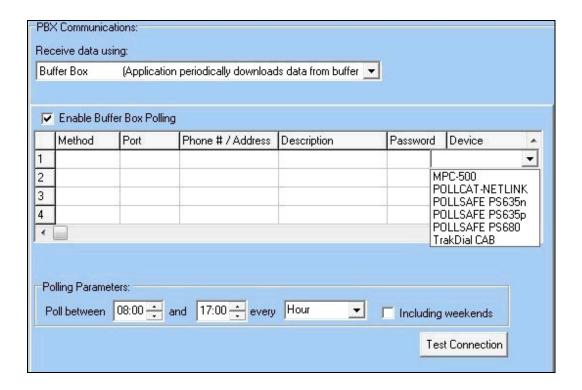
Enter the optional Folder name if the location of the SMDR file is different than the root directory for the specified FTP User. Enter the File Name of the SMDR file. Specify the type of file (Text or Binary) by selecting the correct radio button. If you are unsure of the file type, please check with your PBX vendor.

Note: If the FTP User does not have sufficient permissions on the FTP Sever, or you choose not to delete the remote file after processing you will have duplicate records in your database.



Buffer Box Polling

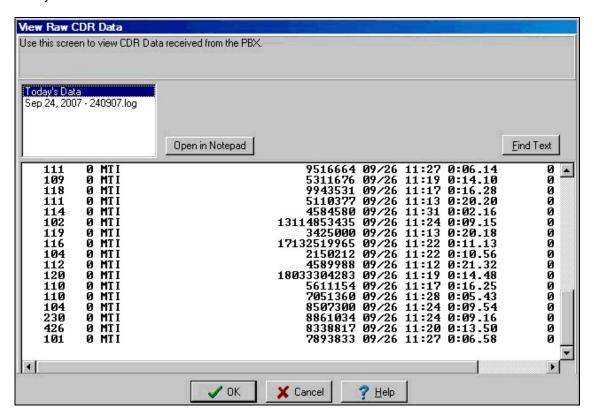
If your PBX system stores SMDR data in a remote buffer box you can configure the call accounting system to process the data stored in the buffer box using the **Buffer Box...** option from the **File** menu.



To verify the settings, select the desired Buffer Box configuration and click the *Test Connection* button. A Windows notepad window will display the results of the test.

Displaying PBX Data

To determine if the PBX has successfully transmitted any data to the call accounting system, or to determine if the communications settings are correct, select the *Display PBX Data...* option on the *Setup* menu. This option displays the following dialog, allowing the user to select which day's SMDR data they wish to view.

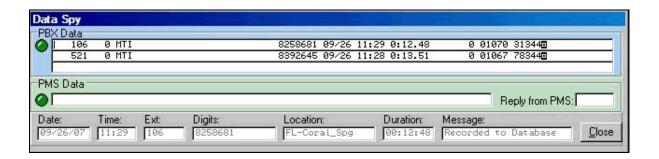


If you wish to find a specific call record, you can use the **Find Text** button to enter a search string to locate in the selected log file.

Data Spy

Found under the **Setup** menu, the **Data Spy** displays data as it is received from the PBX (displayed in the light blue portion of the screen). The Data Spy may also be used to verify that data fields are being correctly extracted from the PBX data stream. When all fields are properly configured, the Data Spy will display valid data in all fields on the Data Spy screen.

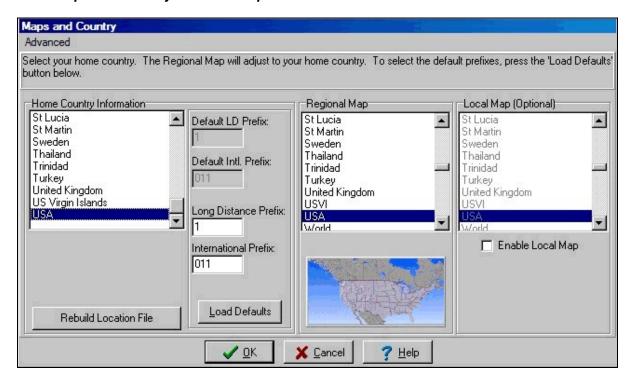
The Data Spy also displays, in the light green portion of the screen, any data that is being transmitted to the optional Property Management System (PMS) as well as any data being returned from the PMS. Most Property Management Systems will transmit an acknowledgment (ACK) character for each phone record successfully transmitted to the PMS interface. This character will appear similar to a spade found in a deck of playing cards .



At the bottom of the screen are Processed Data fields. This feature is useful to determine if the PBX data-stream matches the configured PBX settings.

Maps and Country Selection

To configure maps and ensure that long distance and international calls will be correctly charged, select *Maps and Country* from the *Setup* menu.



Select your country from the Home Country Information list and click the *Load Defaults* button. Click the OK button and your call accounting application will automatically extract the necessary country information and rate tariff tables. Click the *Rebuild Location File* button to update your location tables.

To plot calls on an additional map or to plot calls on a more localized map, check the *Enable Local Map* option.

Custom Map

To use a map not on this list, select the *Custom* selection, create your own map as a bitmap graphics file 225 pixels by 125 pixels and name the file mcustom.bmp.

Configuring Rates and Charges

Once the software is installed and is correctly processing PBX call records, rates and charges can be configured. The following screens aid to properly configure rates:

- Rates Rate table selection, markups and surcharges
- Special Number Charges Toll free calls, 411, etc.
- Grace Periods Allow for PBX call-setup times
- Tax Calculation Set tax rates
- Advanced Options Fine tune charging details

Rates

To select tariff rate tables and set markups for phone calls, select the *Rates* option from the *Charges* menu. Alternatively, click on the *Rates* short-cut button above the main call grid (it has a picture of a calculator on it).

All phone calls fall into two charging categories: Non-marked up calls and marked-up calls. Non-marked up calls reflect the actual price charged to you by your phone company and are often referred to as Administrative calls. Marked-up calls reflect a profit and are often based on higher-priced tariff rate tables and may have an additional percentage markup and/or surcharge. Marked-up calls are often referred to as guest/staff calls.

Classes of Calls

The terms **Local**, **Local Toll**, **In-State**, **Long Distance**, and **International** refer to the classes of calls that may be dialed, each of which may use different rate tables. Definitions of each call class are outlined below:

Local Calls are generally 7 digits in length, but may be distance-sensitive, as opposed to area-code sensitive. Calls to a location up to, perhaps, 12 miles from the calling party location may be billed at a fixed local rate, while calls outside this range may be billed at Local Toll rates.

Note: The *Charges | Regional Settings* menu may be used to set this mileage or to create a list of area codes/exchanges which will always be recognized as Local calls..

Local Toll Calls are calls to locations that are beyond a defined range, such as 12 miles, but still within the LATA (Local Access Transport Area or Service Area). These are considered Local Toll calls and are billed by the minute based on the distance to the called party.

Note: The *Charges | Regional Settings* menu may be used to create a list of area codes which will always be recognized as Local Toll calls.

In-State (In-Province) Calls are calls outside the LATA, but within the home state or province of the caller.

Long Distance Calls are calls that are not In-State or Local Toll and are area-code sensitive. They are also distance sensitive and are billed by the minute based on the distance to the called party.

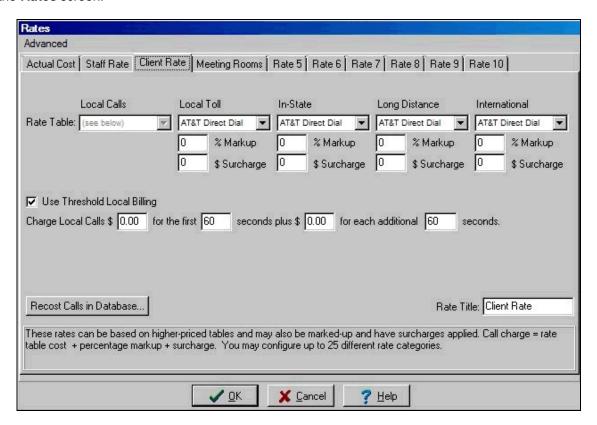
International Calls are calls that are made to another country.

Administration (Actual Cost) Calculation

Because administration extensions are not marked up, the only cost configuration required is the selection of rate tables. Select the appropriate rate tables from the drop-down lists.

Guest/Staff Cost Calculation

Configuring guest/staff charges involves selecting rate tables, setting a percentage markup (if desired) and setting a surcharge amount (if desired). To set guest/staff rates, select the *Guest* tab on the *Rates* screen.



Select the appropriate rate table to be used for each call class (i.e. Local Toll, In-State, Long-Distance, and International).

Enter the markup percentage you would like to apply to each call class.

Enter the desired surcharge amount to be applied to each call class.

Charge Calculation Example

A call that originally costs \$10.00 based on the administration rate with a 40% markup and a \$2.00 surcharge will be billed \$16.00. (\$10.00 + \$4.00(markup) + \$2.00(surcharge) = \$16.00)

Other Rate table options (Meeting Rooms, VIP etc.)

These additional rates (up to 25 separate tables) may be assigned to areas such as meeting rooms and conference halls. The rates may also be renamed to more meaningful names, such as "Loyalty Club" or "VIP Rate."

To specify a new name for any of the rate tabs, simply type in the new name in the *Rate Title* field found on the lower right side of the each Rate tab.

To configure these additional rates (if they are being used), follow the same procedure described in the Guest Cost Calculation section.

Timed Local Call Billing (Threshold Billing)

To charge for a timed local call, enter the initial cost for the initial time period, followed by the additional cost for each additional time period. For example, to allow free local calls which are 10 minutes (600 seconds) or less but charge \$0.10 for each minute thereafter, enter \$0.00 for the initial cost and 600 for the initial time period followed by \$0.10 for the additional cost and 60 for the additional time period.

Note: To charge toll-free calls in similar manner, refer to the Special Number Charges section.

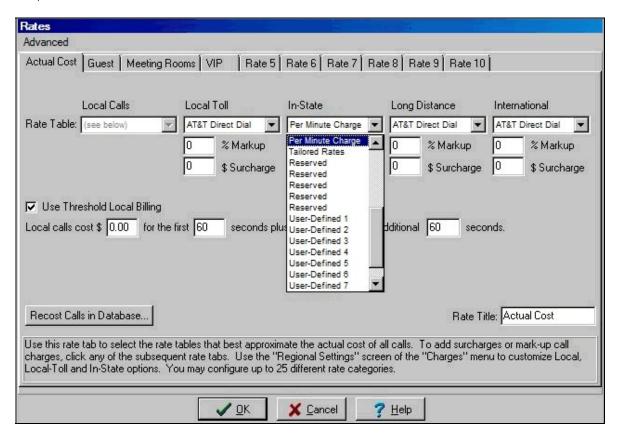
Charging Incoming Calls

If you have activated the *Process Incoming Calls* option found on the *Processing* tab of the *Customize* screen, this option will be available for configuration. In the field *Charge in-coming calls* choose and enter the amount to charge for each call. For example, to charge incoming calls at ten cents per minute, enter 0.10 in the fields on the screen.



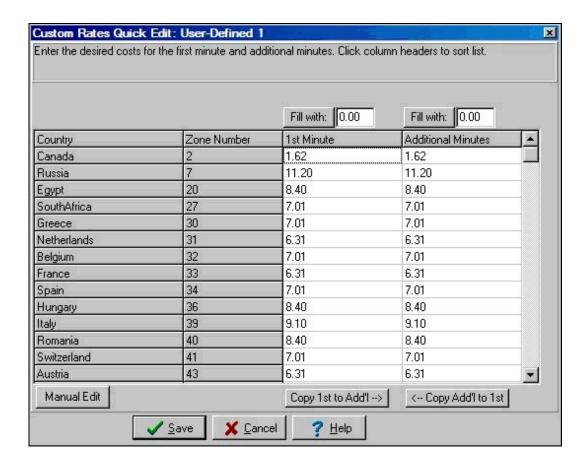
Flat Rates and User-Defined Rate Tables

If you wish to charge a flat-rate for all calls within the selected call class, for example, if all In-State calls are charged at \$0.03 per minute, select the "Per Minute Charge" rate table and enter the 0.03 in the "\$ Per Minute" field.

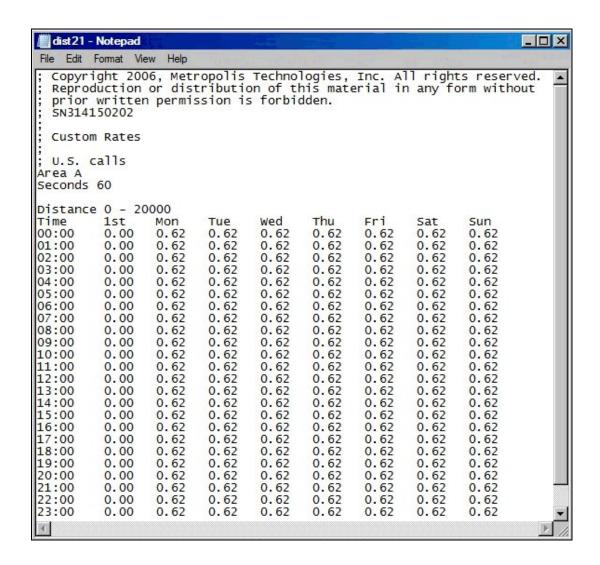


Selecting any of the nine (9) "User-Defined" rate tables from the drop-down list will activate the *edit* button positioned just above the drop-down list.

Click the *edit* button to edit a custom rate table. For example, you wish to enter user-defined rates for international calls.



For more precise control of charges throughout a 24 hour period, click the *Manual Edit* button on the *Quick Edit* screen and edit the Windows Notepad file which appears. Make sure to save changes to the text file upon completion.



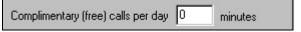
Least Cost Routing

To access the Least Cost Routing screen select the *Least Cost Routing* option from the *Advanced* menu on the *Rates* screen. Normally, all call costs are based on the pattern of digits dialed. In some cases, such as for T-1 traffic, it is useful to calculate administration call costs by associating rate tables with outgoing trunk numbers.



Complimentary Calls

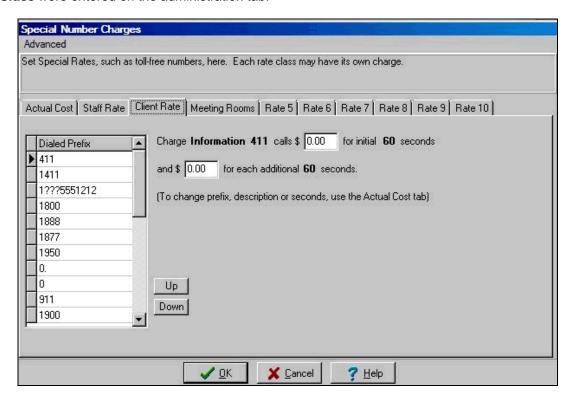
To access the Complimentary Calls feature, simply select the Complimentary Calls Option which is underneath the Least Cost Routing option from the *Advanced* menu on the *Rates* screen. You can enable the feature for Local, Local Toll, In-State, Long Distance and International calls.



Special Number Charges

To access the Special Number Charges screen, select the **Special Numbers** option from the **Charges** menu. This screen allows the user to define and configure custom charges for calls such as toll free numbers, 411 information numbers, and other calls that do not conveniently correspond to Local, Local Toll, In-State, Long-Distance, or International calls.

Note: Click the additional tabs to enter the rate to charge for calls made by extensions assigned to that rate category. In this screen, only the cost fields are required because the *Prefix*, *Description* and *Class* were entered on the administration tab.



Prefix

The beginning digits of the number dialed. Question marks ("?") may be used as wildcard characters. For example 1???5551212 will match 16195551212, 16205551212, etc.

Description

The description will be used as the Location of the call in reports and on the main call screen.

Class

The class determines how the call will be classified in reports. LOC = Local call, LD = Long Distance call and INT = International call. Entering EMG for the class will cause any calls matching the prefix digits to be treated as emergency calls and appropriate alarms will sound.

Cost

The cost of a call matching the dialed prefix.

Initial Seconds

The amount of time, in seconds, to which the initial cost will be applied.

Additional Seconds

The time period above and beyond the initial seconds that the additional cost will be applied.

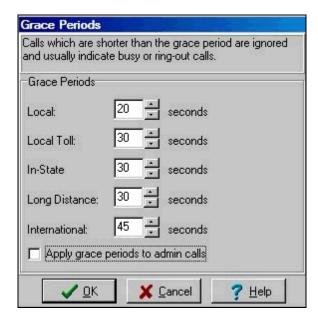
Grace Periods

To configure grace periods for Local, Local Toll, In-State, Long-Distance, and International calls, select the *Grace Periods* option from the *Charges* menu.

The majority of PBXs cannot detect whether or not a dialed call was answered or if it simply rang and rang for a long period. To compensate for this, grace periods are used so that calls that ring out (are not answered) or are busy do not get charged if their duration is less than a preset period. Typically, Long Distance and International calls are given longer grace periods.

Typical grace periods are 20, 30 and 45 seconds for Local, Long Distance and International calls, respectively. Grace Periods apply to both administration and guest calls.

Note: Certain PBXs provide "Answer Detection", which means the reported call duration was calculated from the time the call was answered, not from when the receiver was taken off the hook. For these PBXs, enter 0 (zero) for all Grace Periods. If you are unsure whether your PBX supports Answer Detection, contact your PBX vendor.

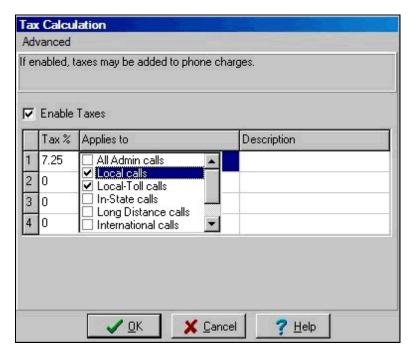


Tax Calculation

To add taxes to guest and/or administrative phone charges, select the *Taxes* option from the *Charges* menu.

The tax is calculated by simply multiplying the charge by the tax rate. The total charge of a call equals the charge of the call plus the sum of all taxes. For example, a call charge of \$1.00 with a tax of 9% and a tax of 10% results in a total charge of \$1.19.

After specifying the tax amount (as a percentage) you must assign the tax to the various call classes which that tax applies.



Enter the appropriate text to describe the various taxes in the *Description* field opposite each respective tax level.

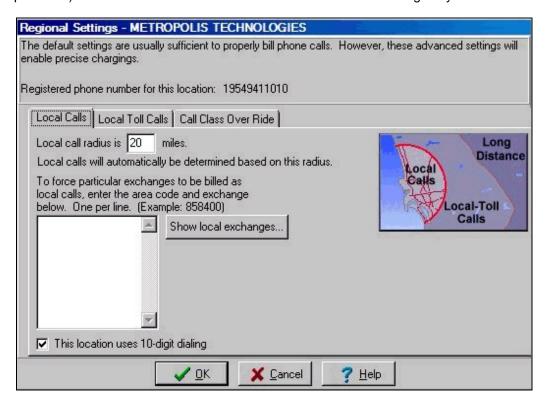
Note: Changes to the Tax settings can be applied to all calls in the database. Select the *Update Database History* option found in the *Advanced* menu on this screen.

Regional Settings

The **Regional Settings** option under the **Charges** menu allows for the fine tuning of the parameters which determine the class of a call (i.e. Local and/or Local-Toll).

Local Call Options

The geographic area served by your local telephone company is called a LATA (Local Access Transport Area). Local calls are those calls that are within a certain mileage in your LATA.



Local Call Radius

Calls within this mileage will be billed as local calls. The call accounting application will automatically calculate the mileage for every phone call and bill calls within this mileage at the local call rate. Calls outside of this mileage will be billed as local-toll, in-state or long distance calls.

Local Call Prefixes

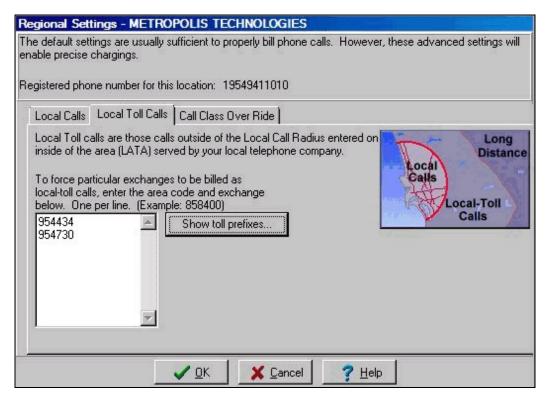
To force certain prefixes that have a mileage greater than the "Local Call Radius" to be billed as local calls, enter the prefixes in the "Local Call Prefixes" box. If needed, you may also enter area codes in front of the prefix, such as 1212488.

10-Digit Dialing

In some localities it is possible to dial just the area code and phone number without the use of a Long Distance Prefix. In these areas you may be required to indicate this special dialing option by placing a checkmark in the *This Location uses 10-Digit dialing* checkbox.

Local Toll calls Options

The geographic area served by your local telephone company is called a LATA (Local Access Transport Area). Local calls are those calls that are within a certain mileage in your LATA. Calls that are outside of the local call range but that are within the same LATA are called intra-LATA, or Local-Toll calls. Sometimes the mileage boundary between local calls and local toll calls is not well defined and this screen allows you to force certain calls that lie within the mileage boundary to be billed as local toll calls.



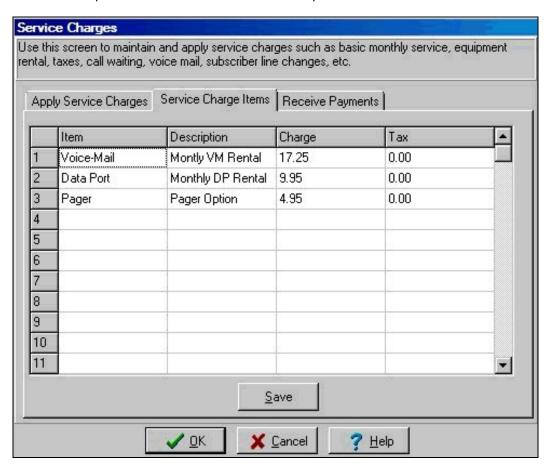
Local Toll Prefixes

To force certain prefixes that have a mileage less than the <u>Local Call Radius</u> to be billed as local-toll calls, enter the prefixes in the "Local Toll Prefixes" box. If needed, you may also enter area codes in front of the prefix, such as 1212488.

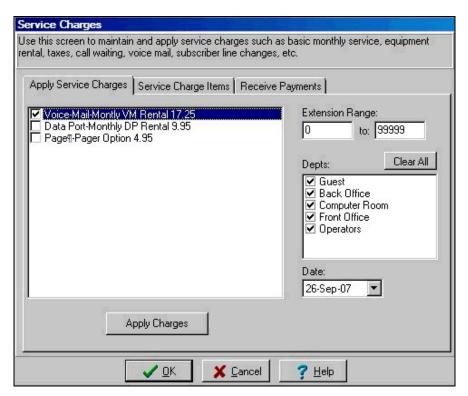
Service Charges

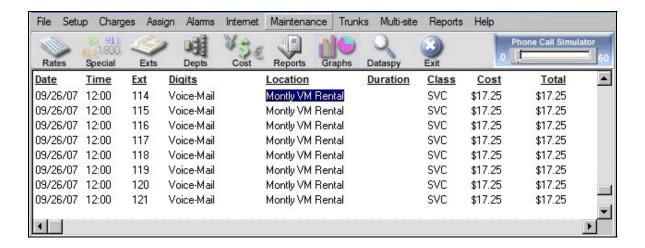
In addition to normal call costs, it is often necessary to include charges for additional services such as voicemail, phone rental etc. Using the **Service Charges** option from the **Charges** menu it is possible to configure these extra items.

To add, change or delete Service Charge items click the **Service Charge Items** tab. Add each additional item on a separate line and click **Save** when complete.



To apply service charges, select the *Apply Service Charges* tab. Check the boxes next to charges which are to be applied and specify the extension range and departments to which the charges will be added. Click the *Apply* button and the charges will be added to the database and will appear in the call grid of the main screen.





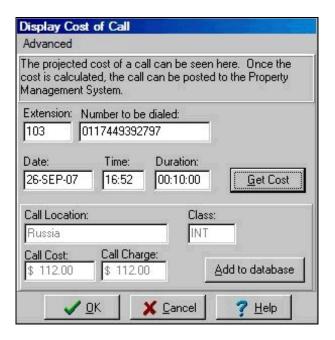
Note: The charges will only be applied to extensions which have been entered on the Extensions screen and are within in the range specified. If an extension does not exist in the Extensions database or has been assigned to a Department other than the Departments selected, the charge will not be applied.

Determining the Cost of a Call

To determine the cost of a call or to calculate the projected call charge (for guest calls), select **Display Cost of Call** from the **Charges** menu. Once the cost is calculated, the call may be added to the main database and also posted to the Property Management System.

Enter the extension number of the call, the number to be dialed and the duration of the call. Once this information has been entered correctly, click the *Get Cost* button.

The Call Location, Distance, Call Cost and Call Charge are displayed at the bottom of the screen. To process the call as an actual dialed call, click on the *Add to database* button.



Note 1: Although, the current date and time are automatically entered in the Date/Time fields it is also possible to update these fields to more accurately reflect the proposed call.

Note 2: If the Display Cost of Call screen is left unattended for longer than five minutes it will automatically closed and return the user to the main call screen.

Department and Extension Configuration

Once rates have been configured, the user may create departments and assign rate categories to the departments. When departments are created, the user may then assign extensions to them. It is not necessary to enter and assign all possible extensions because any extension not explicitly entered will be charged and assigned to the guest/default department. The options for maintaining extensions are:

- Creating Divisions Assign division levels within your organization
- Creating Departments Assign rate categories to departments
- Assigning Extensions Assign names and departments to extensions
- Creating Account Codes Assign account codes to departments
- Creating Authorization Codes Assign authorization codes to extensions

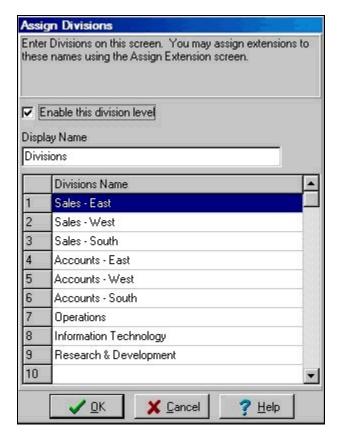
Division Levels

If the user's location has duplicate departments, the user may wish to assign further distinction between the departments, categorizing them using additional division levels. For example, *Divisions* and *Organizations*.

Divisions

To configure divisions, select the *Divisions* option from the *Divisions* submenu on the *Assign* menu. In this screen, create new divisions within the organization.

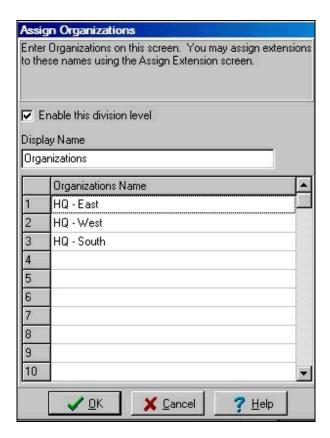
Each division level can be uniquely named, simply edit the Display Name field.



Organizations

To configure organizations, select the *Organizations* option from the *Divisions* submenu on the *Assign* menu. In this screen, create new organizations.

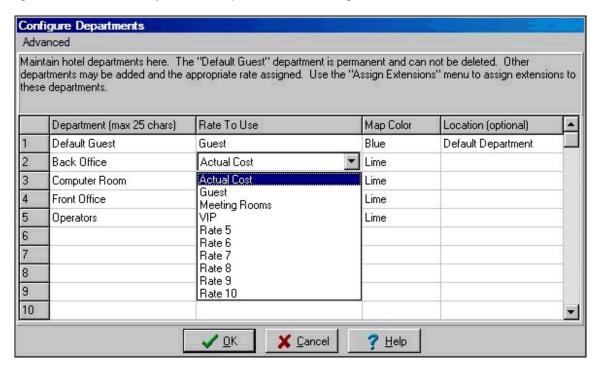
Each division level can be uniquely named, simply edit the Display Name field.



Note: Divisions and Organizations are available only with Enterprise versions of the software and will not appear on the menus of stand-alone systems.

Creating Departments

Departments are used to cluster extensions for easier rate assignments and for grouping extensions in reports. A virtually unlimited number of departments are allowed. To configure department assignments, select the **Departments** option from the **Assign** menu.



To create a new department, double-click on a column in the *Department* field and enter a brief title for the department. To assign a rate category to the department, click on the field labeled *Rate to Use* and select the appropriate rate from the list.

Restoring Departments

From time—to-time changes made to the Departments configuration may need to be un-done due to incorrect assignments. Using the **Restore Departments** option from the **Advanced** menu allows you to revert to the department configuration from Last Week or Last Month.

Importing Department Names

To speed data entry of department names, you may import an ASCII file containing a list of Department names. To import departments, select the *Import...* option from the *Advanced* menu.

Exporting Department Names

Department names can be exported to an ASCII file containing a list of Department names. To export departments, select the *Export...* option from the *Advanced* menu.

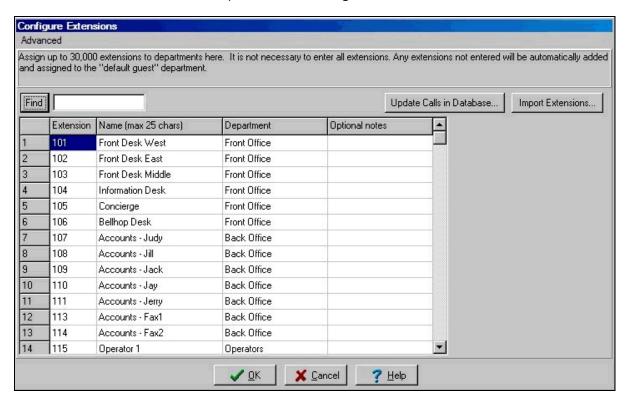
Sorting Department Names

To sort the Department names, simply click the header of the column you wish to sort.

Note: If the location requires more departments than available on this screen, it is possible to increase the default by editing the Windows Registry, using regedit.exe. Enter the desired number of departments in the MaxDepts field found under the HKEY_LOCAL_MACHINE\Software\Metropolis registry entry. Please consult and IT Professional or a Metropolis Support Technician.

Configuring Extensions

Once departments have been created, the user may assign extensions to them. To assign extensions, select the *Extensions* option from the *Assign* menu.



To create extensions, click in an empty cell in the column labeled *Extension* and enter the desired extension number. Enter a descriptive name for that extension (up to 25 characters) and click on the Department column to choose a department to assign to that extension.

Note 1: If the user has activated division levels, additional columns will be present in the extensions screen.

Note 2: It is not necessary to enter all extensions. Any extensions not entered here will be charged as if the extension has been assigned to the default/guest or default/staff department.

Sorting Extensions

To sort the Extensions, simply click the header of the column you wish to sort by.

Finding Extensions

To find a specific Extension, enter either the extension, the name (or partial name) into the find field and click the **Find** button. If the first match is not the correct one, click **Find** again to continue the search.

Importing Extensions

To speed data entry of extensions, the user may import an ASCII file containing a list of extension numbers and names. Select the *Import Extensions...* option from the *Advanced* menu.

Note 1: If you want the Call Accounting system to automatically assign Department Names to extensions you must use a Comma Separated file format and include the Department Name in the records.

Note 2: If the location requires more extensions than available on this screen, it is possible to increase the default by editing the Windows Registry, using regedit.exe. Enter the desired number of extensions in the MaxExts field found under the HKEY_LOCAL_MACHINE\Software\Metropolis registry entry. Please consult and IT Professional or a Metropolis Support Technician.

Updating Calls in Database

If existing extensions have had their departments changed, select the *Update Database History* option on the *Advanced* menu to ensure that all call records in the main database are updated.

Advanced Options

Listed below are the features available for the Advanced maintenance of the Extensions database.



Exporting Extensions

Extension names can be exported to a format similar to the above Import example. To export extension names, select the *Export Extensions...* option from the *Advanced* menu.

Restoring Extensions

From time—to-time changes made to the Extensions configuration may need to be un-done due to incorrect assignments. Using the **Restore Extensions** option from the **Advanced** menu allows you to revert to the extension configuration from Last Week or Last Month.

Deleting All Extensions

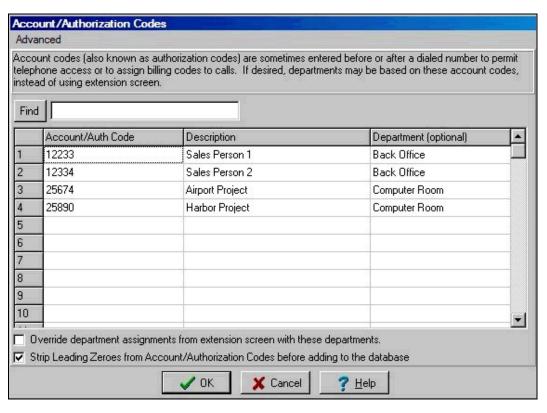
From time to time it may be desirable to clear all extensions and import a fresh list from a third party application. Select the *Delete All Extensions* option on the *Advanced* menu to remove all extensions.

Account/Authorization Codes

Account/Authorization Codes are sometimes used to improve internal accounting. These codes are sometimes entered before or after a dialed number to permit telephone access or to assign billing codes to calls.

Note: Departments may be assigned to Account/Authorization codes instead of using the extensions screen. This will cause extensions whose call records do not contain an account/authorization code to be processed as a default guest or default staff extension. If this is not your intention, do not check the *Override department assignments from extension screen with these departments* checkbox.

Account/Authorization Codes are sometimes entered when dialing a phone number and are used to group phone calls which will be billed back to a customer. To add or modify account codes, select **Account Codes** or **Authorization Codes** from the **Assign** menu.



To add or modify an account/authorization code, double-click on one of the Account/Auth Code fields and enter the appropriate code. The Description field will be used on Account/Authorization Code reports.

Leading Zeroes in Account/Authorization Codes

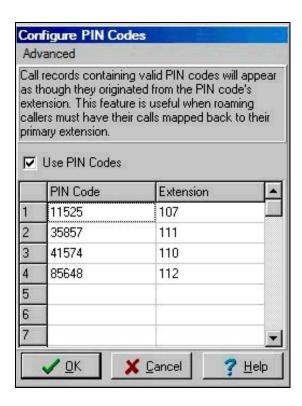
The call accounting system will automatically strip leading zeroes from any Account/Authorization codes. If you wish to retain the leading zeroes, remove the check mark from the *Strip Leading Zeroes from Account/Authorization Codes before adding to the database* checkbox.

Note: If you decide to strip leading zeroes, from Account/Authorization codes, the call accounting system will recognize "012345" and "12345" as two separate, and unique, codes. If this is not your intention, you should configure the call accounting system to always strip the leading zeroes.

PIN Codes

The PIN Codes screen will allow the user to assign PIN codes to extensions. If a call record contains a PIN code, the extension number that corresponds to that particular PIN code will be substituted as the originating extension. This feature is useful when roaming callers must have their calls mapped back to their primary extension.

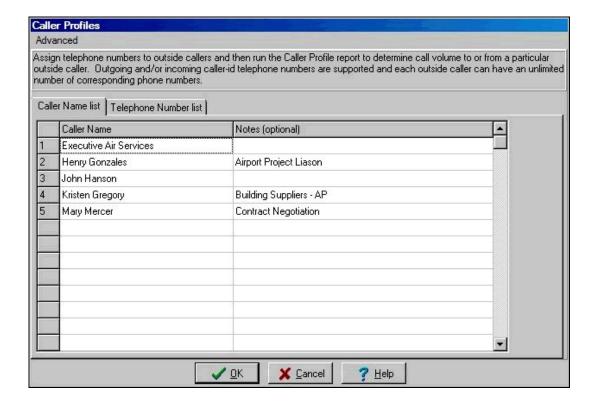
To access this screen, click on the Assign menu and select PIN Codes....



Caller Profiles

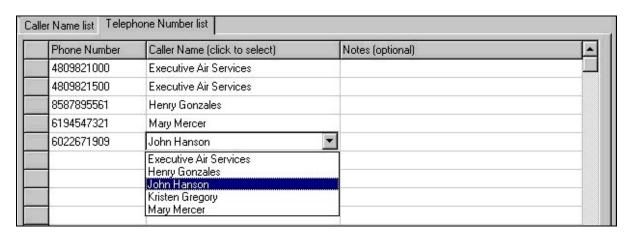
Caller Profiles allows the user to assign telephone numbers to outside callers. Recording the outside caller information allows the user to generate a Caller Profile Report to determine call volume to or from a particular outside caller. Outgoing and/or incoming caller-id telephone numbers are supported and each outside caller can have an unlimited number of corresponding phone numbers. For example, a company name may be entered as the Caller Name, and all numbers within that company can be assigned to that profile. To access this screen, click on the **Assign** menu and select **Caller Profiles...**

Caller Name List



Click on the *Caller Name list* tab to enter the names of outside callers that you wish to track. An optional notes field is provided.

Telephone Number List



After entering the names of outside callers, click on the *Telephone Number list* tab to assign telephone numbers to your outside callers. Clicking on *Caller Name* column will display a picklist of the caller names entered on the previous screen.

Alarms

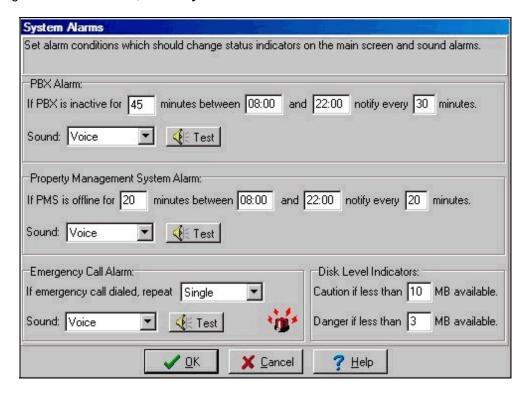
A multitude of alarms alert users to any call accounting system anomalies.

The options for sounding alarms are:

- System Alarms Audible PBX, PMS and Emergency call alarms
 Text Messenging Notification Digital pager dialing for system alarms
- Email Notification Automatic emailing of alarm messages
- **Toll Fraud** Automatic notification of toll fraud conditions
- Missed Wake-up Calls -Sound alarms for guests who do not respond to wake-up calls (ProfitWatch only)

System Alarms

To configure alarms to sound, select **System Alarms...** from the **Alarms** menu.



The software has the ability to sound alarms when system irregularities occur, such as when the PBX has gone offline or when a 911 call is placed.

Because the call accounting system cannot poll the PBX to determine if the connection is valid, it assumes the PBX is offline if a preset period of time has passed during which no phone call data has been received. Because phone traffic is often nonexistent at night, the alarm can be configured to only activate during daylight hours.

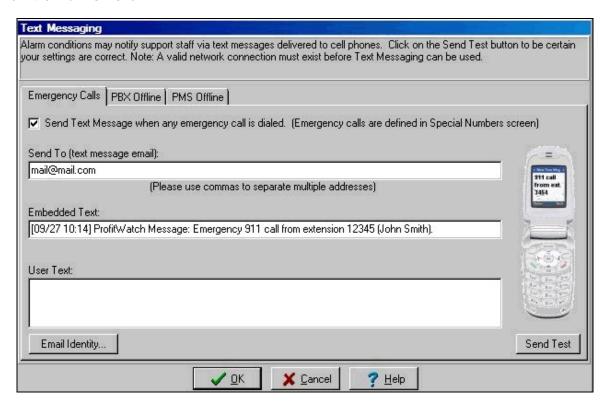
When a property management system is interfaced, similar alarms may be set.

The *Test* buttons on the Alarms screen is useful for testing and setting the speaker volume.

Note: If the call accounting computer is located in a remote area of the building, the multimedia speakers should be plugged in to an extension cable and placed in a more populated area, such as near the reception desk.

Text Messaging Alarm Notification

To configure alarms to dial a pager during system anomalies, select **Text Message Notification...** from the **Alarms** menu.



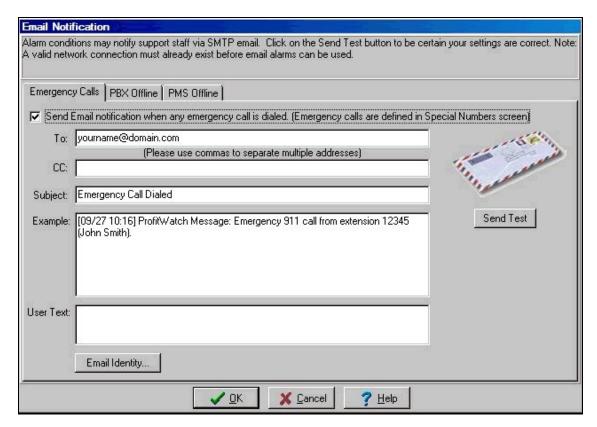
To use the paging feature, the PC must have a functioning modem. When the texting feature is enabled, the call accounting system will text the mobile phone and transmit the text corresponding to the system anomaly, such as a PBX alarm, PMS alarm or Emergency call alarm.

Once the call accounting system texts the mobile phone, it pauses for the configured delay period, in seconds, and then transmits the corresponding text message.

To test the text message configuration, click the **Send Test** button. If the system is properly configured, the call accounting system will send out the text message, causing the target mobile phone to sound and display the corresponding emergency message.

Email Alarm Notification

To configure alarms to send an email message during system anomalies, select *Email Notification...* from the *Alarms* menu.



To use the email feature, the PC must have an existing connection to an email server. When the email feature is enabled, the call accounting system will send an email corresponding to the system anomaly, such as a PBX alarm, PMS alarm or emergency call alarm.

To enable each email alarm, the user must place a checkmark in the checkbox corresponding to the feature to activate. Once enabled, any time a system alarm occurs, a SMTP email message will be transmitted. Each email alarm contains the following fields:

To: The primary recipient of the email alarm message.

CC: Carbon copy for secondary recipients.

Subject: The text to appear in the subject line of the email message.

UserText: The body of the email message.

Send Test Button

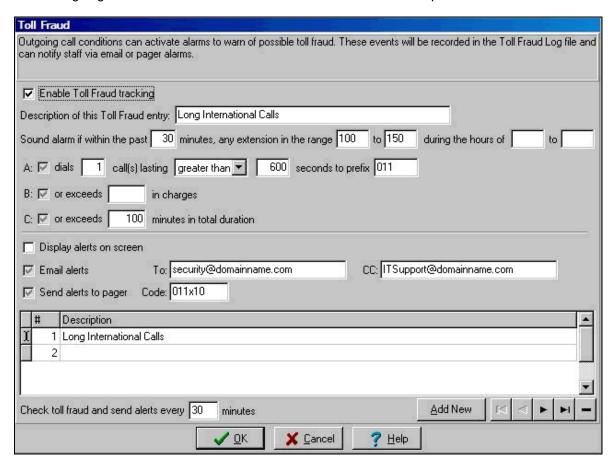
To test if your email parameters are correct, click the **Send Test** button and an email message for that alarm will be immediately transmitted.

Email Identity Button

Before email can be successfully transmitted, the email service descriptors must be configured (refer to the *Email Identity...* option).

Toll Fraud

Toll Fraud is a useful tool that can be customized to meet a user's needs in closely monitoring specific phone call activity. Select *Toll Fraud...* from the *Alarms* menu to bring up the Toll Fraud screen. Outgoing call conditions can be set to activate alarms to warn of possible toll fraud.

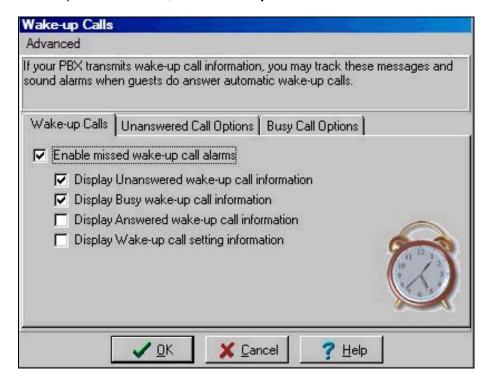


To activate Toll Fraud, check the *Enable Toll Fraud tracking* checkbox. Type in a description for your Toll Fraud entry and customize the fields. See the example above.

Toll Fraud can be activated according to dialing prefix, charges, and duration and can be emailed or texted to a user's mobile phone. An unlimited number of Toll Fraud entries may be entered by clicking the **Add New** button.

Wake-up Call Notification

If your PBX model sends wake-up call information to the call accounting system, you may use this screen to configure alarms if guests do not respond to automatic wake-up calls placed by the PBX. To configure wake-up call information, select *Wake-up Calls...* from the *Alarms* menu.



It is important that the PBX template is properly configured (refer to the <u>PBX Modification</u> section) before using any wake-up call alarms. To enable wake-up alarms, place a checkmark in the *Enable missed wake-up call alarms* option.

Select the alarm conditions you wish to be notified about from the list on the Wake-up Calls tab.

Display Answered wake-up call information

By placing a checkmark in this option, automatic wake-up calls placed by the PBX and answered by the extension are displayed in the floating pop-up box.

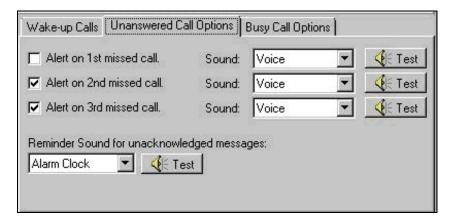


Display Wake-up call setting information

Placing a checkmark in this option instructs the call accounting system to display all status change messages relating to wake-up calls in the floating pop-up box.

Unanswered wake-up call options

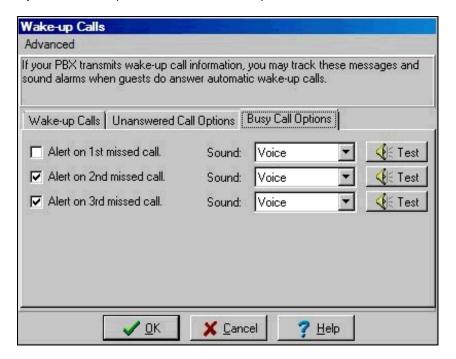
Placing checkmarks in the Alert boxes instructs the call accounting system to sound alarms for any or all of the three PBX wake-up call attempts. Quite often, the first wake-up call attempt goes unanswered so many users prefer to ignore any messages regarding the first wake-up call attempt.



The Reminder sound is an audible noise that sounds every 60 seconds when a wake-up call alert condition is displayed on the main screen, but has not been acknowledged by the user.

Busy wake-up call options

Select the **Busy Call Options** tab to configure the notification options when the PBX determines that the line is busy when it attempts an automatic wake-up call.



Internet Email Identity

Before system email can be successfully transmitted, the email service descriptors must be correctly entered into the *Email Identity* screen. To open this screen, select the *Email Identity...* option found on the *Internet* menu.



Outgoing Mail (SMTP) Server

Type the name of your SMTP server, or verify that it is correct.

Outgoing Mail Server Username

Enter your login name as provided by your system administrator or Internet service provider.

Your Email Address

Enter the email address to appear on the "from" section of the email message.

Your Name

Enter the name to appear on the "from" section of the email message.

Send Test

For instant verification that your settings are correct, click the **Send Test** button to immediately send a test email to the email address that appears next to the button.

Load Windows Settings

Use this button to load the default windows settings for the internet identity.

Note: This button will only be visible when the email identity has not been previously configured.

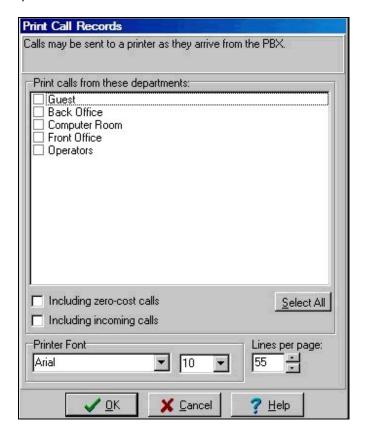
Customizing

After the call accounting system has been configured to process phone records and assign costs to the phone calls, the user may decide to customize the system to better suit their needs.

- Printing Calls Send calls to a printer as they arrive
- Editing Call Data Modify data in the call grid
- Delete Call Data Delete data in the call grid
- Processing options Include processing of Incoming, Internal and/or Free calls
- Database Fields Select the fields you want to see on the main screen
- Rounding Round duration and/or charges.
- Display Show buttons and/or menus.
- **Miscellaneous** Configure animated status display, backup directory, search increments and other miscellaneous customization options.

Printing Call Records

To print calls as they arrive from the PBX, select the *Print Call Records* from the *File* menu. Place checkmarks in the boxes for the departments the user wants printed. The user may also select the printing font and font size on this screen, as well as whether or not to include zero-cost and/or incoming calls in the print outs.



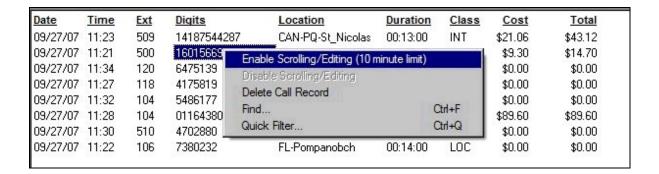
Call Data Options

Editing Call Data

The user may edit existing call data on the main screen by right-clicking on the data-grid. A menu pictured below will appear. Selecting the *Enable Scrolling/Editing (10 minute limit)* will allow the user to scroll through the data and change any values in the grid.

Note: The grid color will change to red as a reminder that the user is in *Scrolling/Editing* mode.

You may return to view-only mode by selecting *Disable Scrolling/Editing* from the pop-up menu. Alternatively, the display will return to the normal view-only mode and the color will return to black after 10 minutes in *Scrolling/Edit* mode.

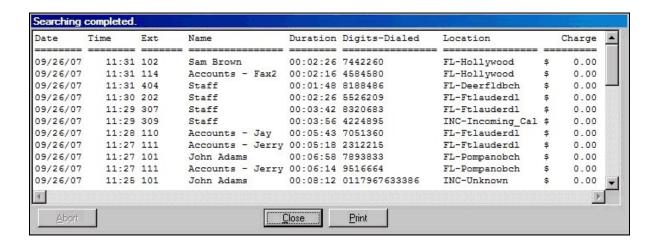


Deleting a Call Record

To delete a call record, select the call to delete, right-click on the data-grid, and select **Delete Call Record**. A prompt will ask to confirm the delete. To delete calls for a given day or range of dates refer to the <u>Purging Call Data</u> section of the Maintenance chapter.

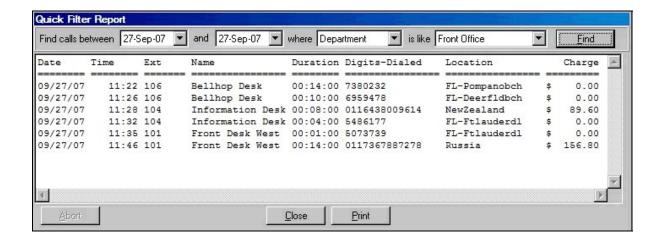
Finding a Call Record

The pop-up menu on the main call grid also provides an option to locate a specific call record using a standard *Find* dialog. To locate a call record, right-click on the data-grid and select *Find...* or simply use the short-cut keys Ctrl+F. Enter the Text you wish to find and the system will search backwards through the call database and generate a list of all matching records.

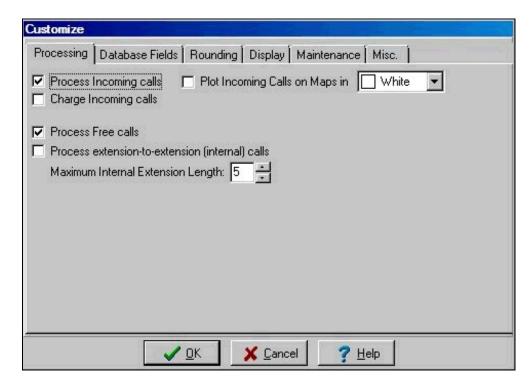


Quick Filter Option

The pop-up menu on the main call grid also provides an option to display only call records which match a specific set of criteria. To filter the displayed call records, right-click on the data-grid and select **Quick Filter** or simply use the short-cut keys Ctrl+Q. Specify the filter criteria and click the **Filter** button.



Customized Data Processing



Process Incoming Calls

Incoming calls may be processed and charged a per minute rate. However, enabling this feature will dramatically increase the size of the phone call database. To properly process incoming calls, the PBX template must be properly configured (refer to the <u>Modifying the PBX</u> section in the Installation chapter).

The user may also specify the color in which incoming calls will be displayed on the maps on the main screen and indicate whether Incoming calls should be charged or not. Place checkmarks in the *Plot Incoming Calls* and/or *Charge Incoming Calls* checkboxes.

Process Free Calls

Ignoring calls that have a zero total charge amount is an option.

Process extension-to-extension (internal) Calls

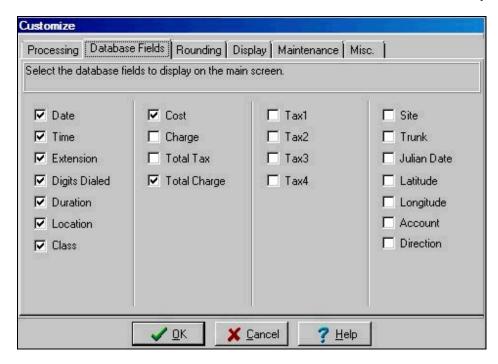
Internal calls, or extension-to-extension calls, may be processed and stored in the database. Most users prefer not to store internal calls because they dramatically increase the size of the database and slow report generation speeds.

Maximum Internal Extension Length

Calls with more digits than the limit set here will be processed as a local, long distance or international call.

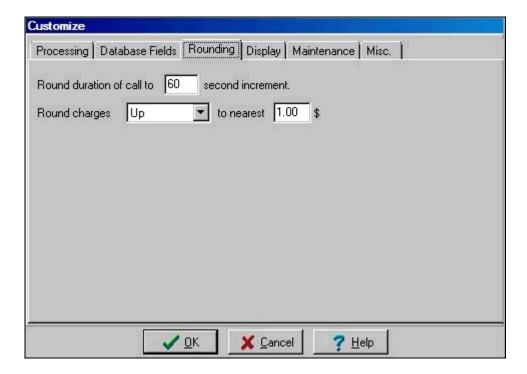
Customizing the Database Fields

The user may choose the fields to view in the call processing section of the main screen. To access this screen, select the *Database Fields* tab on the *Customize* screen found on the *Setup* menu.



Place a checkmark in the box next to each field to view on the call processing screen. (Click the checkbox to add or remove checkmarks.)

Rounding



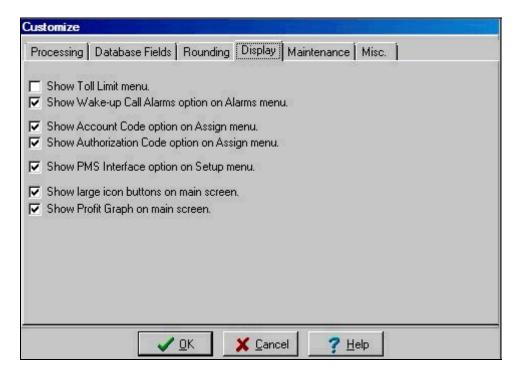
Duration Rounding

The duration of each call may be rounded up to the next timely increment. The default for rounding is usually 60 seconds, but any rounding amount may be entered. The duration shown on the main screen will reflect the rounding increment you choose. Please note that if you select a rounding increment of one second, the charge of the phone call will be also be calculated to the nearest second, rather than to the nearest minute, resulting in lower overall revenues.

Rounding Charges

All total charge amounts may be rounded to the nearest currency increment, if desired.

Customizing the Display



Show large icon buttons on main screen

To view the large icon buttons near the top of the screen, click the Show Buttons option.

Show Profit Graph on main screen

To view the real-time graph displaying cost and profit for all phone calls, place a checkmark in the option *Show Profit Graph on main screen*. This graph is continuously updated and reflects the actual cost of all phone calls as well as the profit generated from all phone calls.

Show Toll Limit menu

Most users prefer not to use the call accounting toll limit feature. To prevent the Toll Limit menu from appearing, uncheck the "Show Toll Limit menu on main screen" option. For further information, refer the Guest Check-in section in the Hotel Operations chapter.

Show Internet menu

The Internet menu contains features such as the automatic email of executive summary reports. The option to hide this feature is provided in order to simplify the look and feel of the software.

Show Wake-up call alarms option on Alarms menu

In hotel environments, the call accounting software may be configured to sound alarms if guest miss PBX-generated wake-up calls. The option to hide this feature is provided in order to simplify the look and feel of the software.

Show email notification option on Alarms menu

Email messages can be automatically generated and sent when system alarms sound. The option to hide this feature is provided in order to simplify the look and feel of the software.

Show pager notification option on Alarms menu

The software can automatically dial a numeric pager when system alarms sound. The option to hide this feature is provided in order to simplify the look and feel of the software.

Show account code option on Assign menu

Some PBX systems require the user to enter an account code prior to connecting a phone call. The option to hide this feature is provided in order to simplify the look and feel of the software.

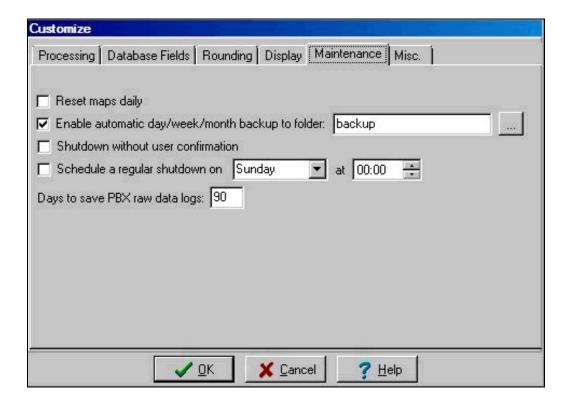
Show authorization code option on Assign menu

Some PBX systems allow a user to enter an authorization code prior to connecting a phone call in order to bill the call back to the user's home-extension. The option to hide this feature is provided in order to simplify the look and feel of the software.

Show PMS Interface option on Setup menu

In hotel environments, the call accounting software may be configured to automatically transmit guest calls to a Property Management System. The option to hide this feature is provided in order to simplify the look and feel of the software.

Maintenance Options



Reset Maps Daily

Select this option if you wish the system to begin each day with fresh maps on the main screen. All previous hotspot data will be erased from the maps and new calls will appear as they are generated.

Automatic Backup

To ensure that your system is backed-up on a regular basis, select this option and specify the location to which the backup information should be saved.

Shutdown without user confirmation

Select this option to disable the "Stop Call Accounting System" prompt when exiting the application.

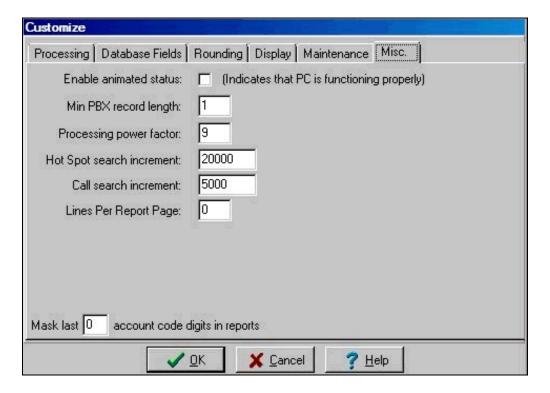
Schedule a regular shutdown

Select this option to automatically terminate the application at a specified time each week. This is useful for locations which perform periodic maintenance and re-boot the PC.

Days to save raw PBX data

With this option, the user may choose how many days of PBX data (SMDR output) should be saved in order to aid in fault-diagnosing by PBX technicians. Enter the number of days to save PBX data. The call accounting system does not use this data, but it is saved as a courtesy to your PBX technician to aid in diagnosing any trunk problems or SMDR problems.

Miscellaneous Customization Options



Animated Status Indicator

To ensure that your PC is not in a "frozen" state, place a checkmark in the *Enable animated status* option. A small dot tracing the skyline image on the main screen will serve as an indicator that the PC is functioning properly.

Minimum PBX record length

To ignore short PBX records, enter the minimum length of a valid record here.

Processing power factor

When operating the call accounting application on a fast CPU, you may increase this number to increase the pace of the call processor. This is usually only helpful if you are processing calls out of a data file instead of from a direct PBX connection. The default value is 1. Setting this value too high can decrease the responsiveness of the software to other actions, such as clicking on menus or finding hotspot calls.

Hot Spot search increment

When searching the main database for hot spot calls, the call accounting application will pause after this increment amount and query the user whether to continue or not.

Call search increment

When searching the main database when the user right-clicks on the call grid, the call accounting application will pause after this increment amount and guery the user whether to continue or not.

Lines per Report Page

This option allows you to specify the number of lines per Report Page. Setting this option to a value other than zero (0), will force the report generator to build new headers after printing the number of lines specified, regardless of the actual length of the page.

Privacy Masking

The trailing digits of the dialed number may be replaced with an 'x' character to provide privacy and security. Enter the number of digits to mask in the space provided.

Database Utilities

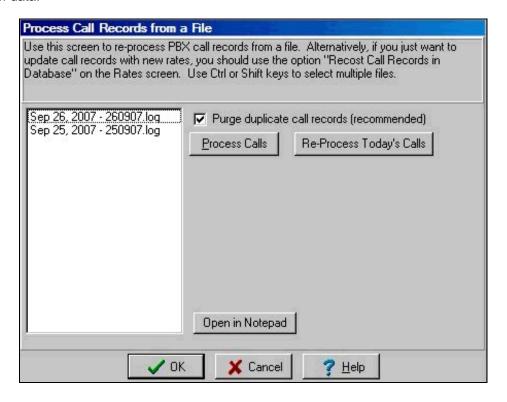
Several options are available to assist you in manipulating the phone call database. Among these options are:

- Process Calls From File Process calls out of an existing SMDR log file
- Export Calls to Text File Extract call records to an external ASCII text file
- Import Call Archive File Import archived call data back into the database
- Import Old Call Database Import call data from an old call database file

Processing Calls from a File

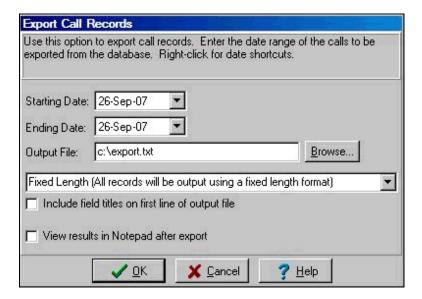
SMDR/CDR data is saved in log files for 90 days, and this feature may be used to reprocess calls from any of the previous days SMDR file. To reprocess calls from a previous day, select the *Reprocess CDR Backups* option found on the *File* menu.

Note: Multiple selections may be made from the call log list if you require processing of multiple days worth of data.



Export Call Records to a Text File

To generate reports not included with the software, you may export data for processing by other applications, such as spreadsheets and database programs. To export call data, select the *Export Calls to Text File* option on the *File* menu.



Enter the data range of calls to export and specify the *Output Filename*.

Select the export format from the drop-down list. The available formats are:

Fixed Length

Each exported field is a fixed length and all fields line up in columns.

Comma Delimited

Each field is a variable length and fields are separated by commas. (Example, field1, field2, field3,...)

Quote/Comma

The quote/comma format is similar to the comma delimited format except that each field is surrounded by double quotes and followed by a comma. (example, "field1", "field2", "field3",...)

PC Law

This format is used to generate an export file which can be imported directly into the PC Law time billing application.

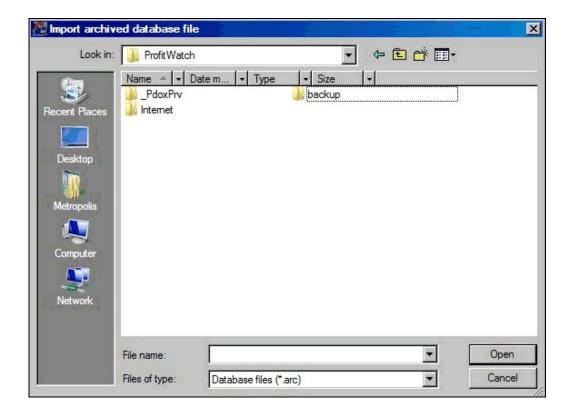
Custom Formats

Use the custom formats to specify which fields you wish to include in the exported data file.

Place a checkmark in the *Include field titles on first line of output file* checkbox to include a line at the top of the exported data file describing each exported field.

Import Call Archive File

To import call archive data, select the Import Call Archive File option on the File menu.



Maintenance

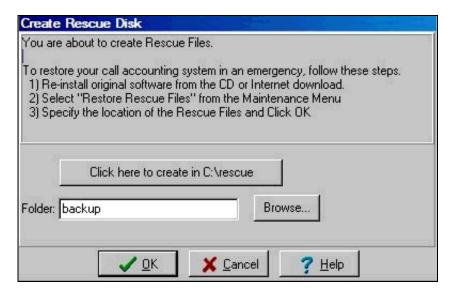
To keep the call accounting system running smoothly and efficiently, several maintenance screens are included to help the user maintain the system. The following screens are of assistance:

- **Creating emergency rescue files**
- Restoring rescue files
- Purging Call Data Purges old data to streamline reports
 Viewing the Event Log Views system events
 Passwords Controls access to features

Create Rescue files

The Rescue files contains backup copies of system files which can be used to reconstruct your call accounting system if the PC it is operating on experiences a catastrophic failure. By having a valid, up to date Rescue file, the call accounting system can be restored to its prior operating condition in a matter of minutes. Without a valid Rescue Disk, the process may take several hours.

To create Rescue Files, click the *Create Rescue Files* option from the *Maintenance* menu. If you would like to create a location for the Rescue Disk on the C: Drive, click the *Browse* button, specify the location of the Rescue files and then click *OK*.



Restore Rescue Files

The Rescue Files contains backup copies of system files which can be used to reconstruct your call accounting system if the PC it is operating on experiences a catastrophic failure. By having a valid, up to date Rescue File in the system, the call accounting system can be restored to its prior operating condition in a matter of minutes. Without a valid Rescue Disk, the process may take several hours.



Note: After the system has completed a successful restore of the emergency files, the call accounting application will be restarted to ensure that all the new settings are activated correctly.

Purging/Archiving Call Data

The user may choose to purge and/or archive call data from time to time to improve database performance or reporting speed. To access this option, select *Purge/Archive Call Data* under the *Maintenance* menu.



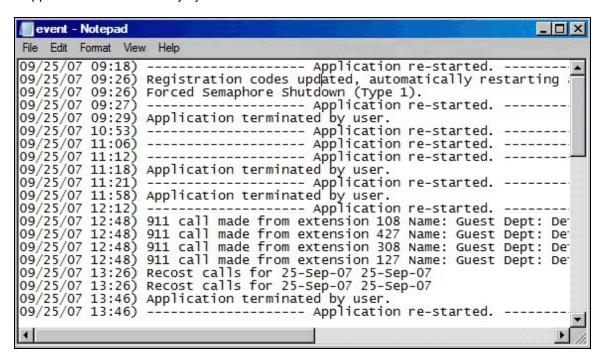
Select the date range of calls to be purged.

Choose whether to Purge Only, Archive Only, or Archive and Purge.

Viewing the Event Log

The Event Log contains a record of all system events. To access the Event Log, select *View Event Log* from the *Maintenance* menu. The Event Log is viewed using the Windows Notepad editor.

An entry is automatically added to the Event Log whenever the call accounting system is started or stopped as well as when any system alarms are activated.



Password Maintenance

Passwords are used to control access to reports and administrative functions and have a grace period to allow users to enter multiple screens in a given time period without having to re-enter a password. The default password is "phone" or you may optionally click "2222" on the Pin Code keypad of the password box. The pin code method is often faster because the user doesn't have to remove their hand from the mouse. The password has a default grace period of ten minutes.



To remove the default passwords and enter your own passwords, you must enter the **Passwords...** screen found in the **Maintenance** menu. You must successfully enter the administrative password to gain access to this screen. Once in the screen, the user may enter any combination of letters or characters to create custom passwords.

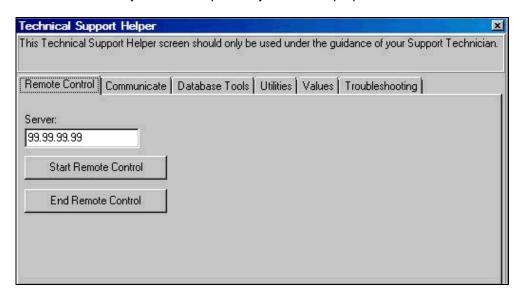
The Report password simply allows users to gain access to the reports generator. No other screens are accessible unless the user enters the Administration password. The Administration password allows access to all software options and features.

Technical Support Helper

The Technical Support Helper screen has been provided to simplify the ongoing maintenance and support of your call accounting system.

The Troubleshooting tab of the Technical Support Helper includes information about the current configuration of your call accounting system. If you do not see the text "System is optimally configured" you should follow the suggestions provided to correct your system.

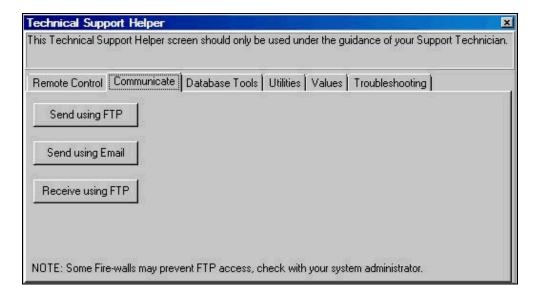
If you are experiencing difficulties with your call accounting system you can start a Remote Control session with your Metropolis Support technician to enable live software assistance. Select the Remote Control tab and your tech will provide you with the proper server address.



You can also upload Rescue Files via FTP to the technical support staff for review. Select the **Communicate** tab and click **Send Support Files**.

Note1: If your PC is not configured to support FTP you may select the Email option.

Note 2: You must configure the *Email Identity*, information before you can use this option.

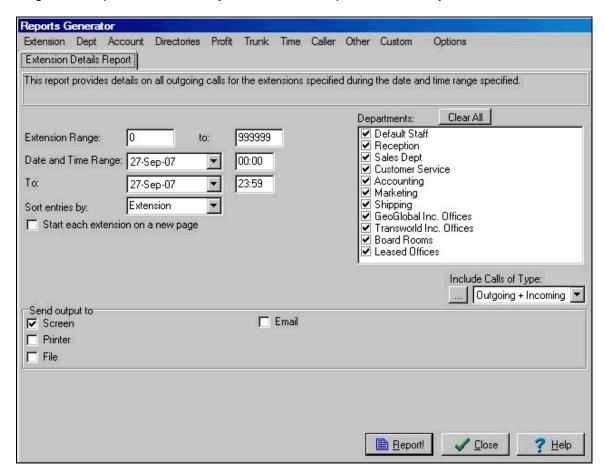


Note: The remaining tabs on the Technical Support Helper screen should only be used under direction from your local system administrator, IT Support person or a Metropolis Technologies support consultant.

Reports

Report Generator

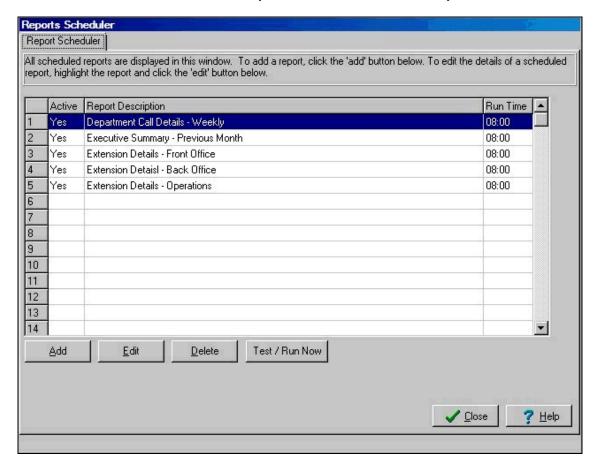
To generate reports, select the *Report Generator...* option from the *Reports* menu.



Reports are generated using the HTML language and are viewed with the computer's web/internet browser. Reports may also be directly directly, saved to a file or emailed to a list of users. When entering a list of users, be certain to separate the names with commas or semicolons.

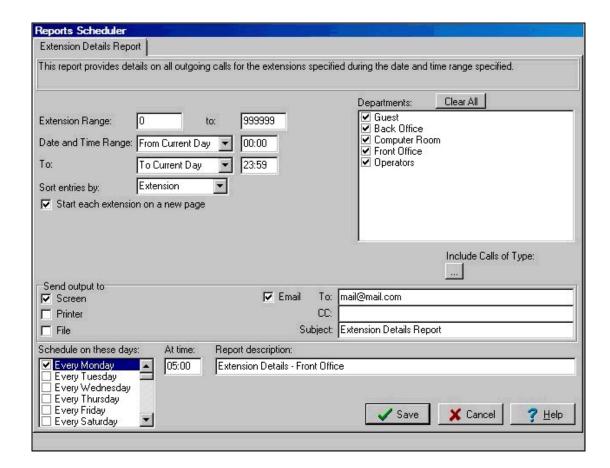
Report Scheduler

Using the Report Scheduler the user can specify reports to automatically print, be emailed, or saved to a folder. To run the scheduler, select *Reports Scheduler...* from the *Reports* menu.



To add a scheduled report, click the *Add* button and select the appropriate report from the pop-up report list menu.

To edit a scheduled report, select the appropriate report and click the *Edit* button.



Enter the appropriate values including the date and time the report should be generated.

When selecting the Email option, the following additional fields also apply:

To: The primary recipient of the emailed report.

CC: Carbon copy for secondary recipients of the emailed report. **Subject:** The text to appear in the subject line of the email message.

Schedule on these days

Place a checkmark next to the day of the week for which you would like the report to be emailed. You may select as many days per week as desired.

At time

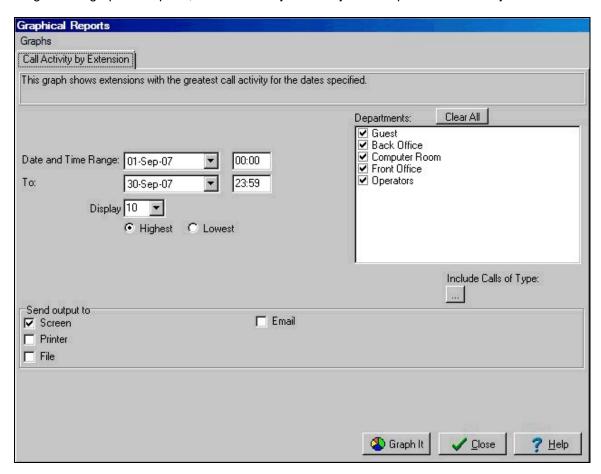
Enter the time of day when the report should be automatically generated and emailed. This time applies to each day of the week selected.

Report description

Enter the title which describes the scheduled report you are creating.

Graphical Reports

To generate graphical reports, select the *Graphical Reports...* option from the *Reports* menu.



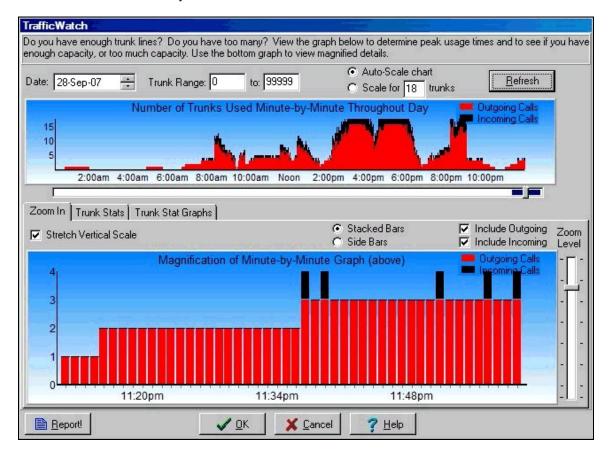
Note: It is also possible to add Graphical Reports to the report scheduler if necessary.

TrafficWatch

TrafficWatch, a unique trunk analysis utility allows users to efficiently monitor call traffic and analyze trunk usage. Interactive bar and line graphs present users with up to the minute information on the number of incoming and outgoing calls, and accurate trunk statistics are provided to help users decide upon the optimum allocation of resources and the most effective measures for saving money.

To view the TrafficWatch screen, select *TrafficWatch...* from the *Trunk* menu on the main screen.

Note: TrafficWatch is available only with Enterprise versions of the software and will not appear on the menus of stand-alone systems.

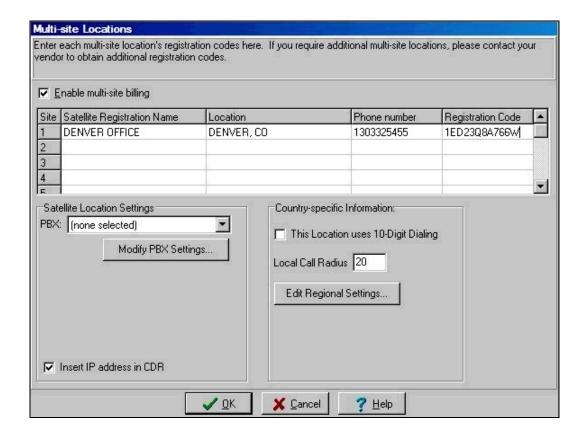


Multi-site

Multi-site is a unique version of the software, available with both ProfitWatch and OfficeWatch, which allows office or hotel environments with multiple locations to process their call data from a centralized location.

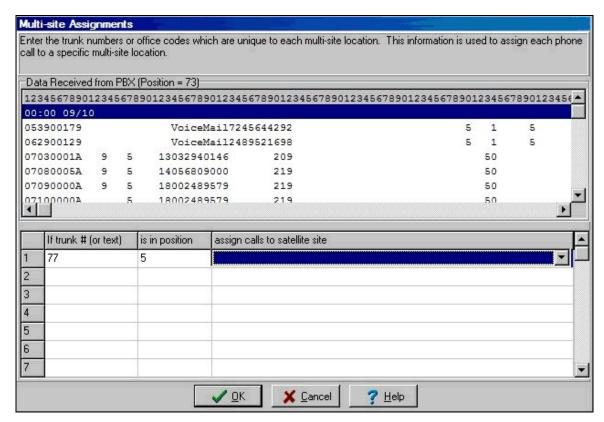
Multi-site Registration

Multi-site can process data from many different PBX's by enabling multi-site billing and entering each site's unique registration information. To view the Multi-site Locations screen and enter registration information, select *Site Registrations* from the *Multi-site* menu on the main screen.



Multi-site Configuration

After registering each site in the multi-site system, users configure the system to recognize data from the satellite locations so that all data will be processed according to the geographical location of the origination of the call. Each location is identified in the Multi-site Assignments screen by specifying unique characters within the PBX data for each satellite location. To enter information into the Multi-site Assignments screen, select **Site Assignments** from the **Multi-site** menu on the main screen.



Hotel Operation

Additional features are offered for use in a hotel environment. After processing call records from the PBX, calls may be forwarded on to the hotel Property Management System or Front Office Application.

Property Management System

To transmit or post calls to a Property Management System (PMS), select the *Transmit Calls to PMS...* option from the *Setup* menu.

The most common transmission method is via RS-232 serial cables. However, other methods, such as I.P. (Internet Protocol) or file-based postings are available. For more information on posting methods, please refer to the <u>Communications</u> section.

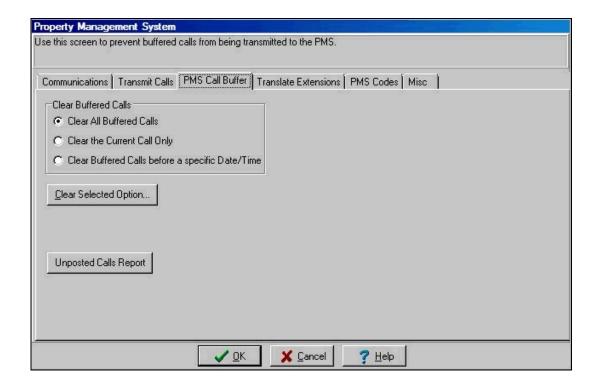
PMS Call Buffer

If the PMS link has been offline for several hours, it may be useful to clear the PMS call buffer to prevent calls that have been placed by guests that have checked out from posting to the PMS when the link is restored.

By default, all buffered calls will be cleared, but the user has the option of clearing only the current call, or retaining recent calls.

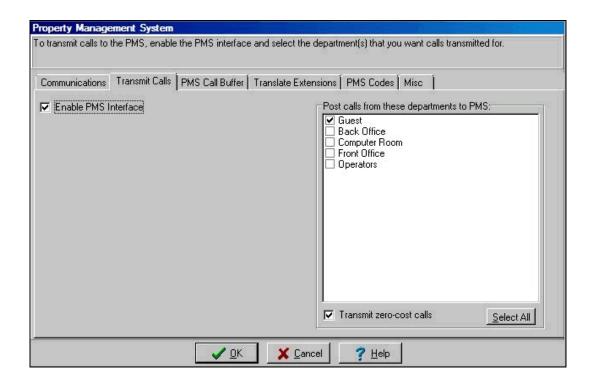
To retain recent calls, select the *Clear Buffered Calls before a specific Date/Time* option and enter the appropriate date and time.

To clear buffered calls, click the Clear buffered calls... button.



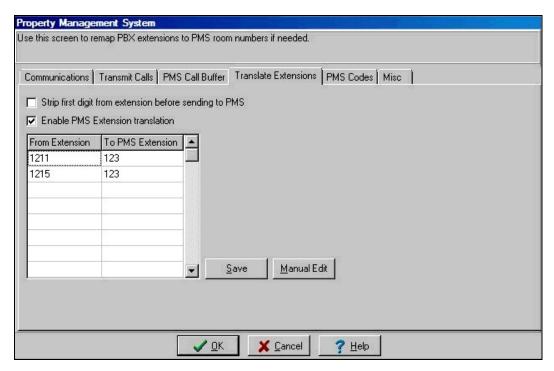
Transmit Calls

Specify the departments that calls should be posted for by clicking the checkbox for the desired departments. To prevent calls that have a zero cost from posting, remove the checkmark from the *Transmit zero-cost calls* checkbox.



Translate Extensions

It is possible to transmit calls made from multiple extensions to the same PMS folio. This can be accomplished by removing the leading digit from the guest extension number checking the *Strip first digit from extension before sending to PMS* option. For example, if room 123 has extensions 6123 and 7123, using this option will force calls made from either extension to be sent to the PMS as if they were placed by extension 123.

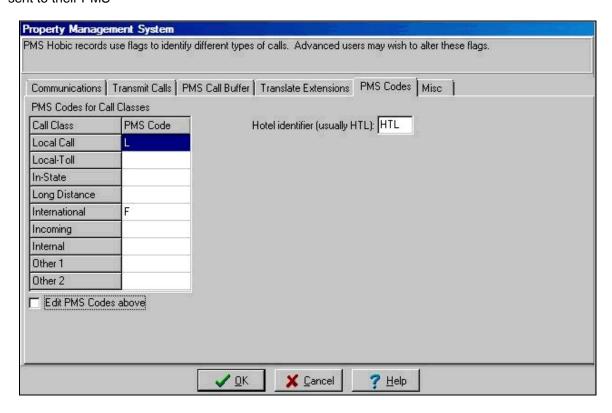


For additional flexibility, users may enable and create a PMS extension translation file. In the event that guest rooms are wired with dual telephone extensions, the user may wish to force the call accounting system to transmit calls made from either extension to the same PMS folio. Checking the *Enable PMS Extension translation* checkbox, the user can force any extension to be transmitted to the PMS as any other extension using this format:

From Extension	To PMS Extension	
123	700	(i.e. extension 123 will be sent as extension 700)
124	700	(i.e. extension 124 will be sent as extension 700)

PMS Codes

PMS Hobic records use flags to identify different types of calls. For example, L may stand for Local calls and F for International. Advanced users may use this screen to alter the flags in the call records sent to their PMS



Miscellaneous PMS Functions

From the *Misc* tab of the *Property Management System* screen, you may also choose to have calls that are rejected by the PMS routed automatically to a printer for examination and/or set the number of seconds that the call accounting system should wait for a reply from the PMS before retransmitting its message.

Toll Limit Options

To configure toll limit options, select *Toll Limit Options* from the *Toll Limits* menu. Placing a checkmark in the *Enable Toll Limits* box will instruct the call accounting system to check if a particular extension is checked in and if that extension is over its set toll limit. This extra processing will slightly slow the speed of the call accounting system, so it is recommended that the user only place a checkmark in this box if certain they want to check toll limits.



Enable Toll Limits

Placing a checkmark next to this option starts toll limit checks on each dialed call. If this option is not enabled, no checking will take place regardless of other settings.

Default Toll Limit

Enter the credit limit amount that will appear on the extension *Check In/Out* screen. The amount entered here can be over-ridden upon extension check in.

Alarm Sound

Select the type of alarm to sound when a guest exceeds their preset toll limit. Possible alarms are: PC Beep; Siren; Buzzer, Voice and None. The voice option generates a spoken alarm similar to: "Alert! Credit limit exceeded by extension 123." Click on the Test button to hear each alarm sound.

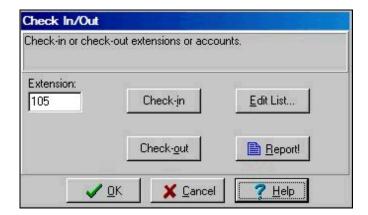
Enable Phone Restriction

If this option is checked and a guest exceeds their credit limit, a message will be sent to the PBX barring the guest phone from placing any external phone calls.

Check In/Out Extension

Selecting the *Check In/Out...* from the *Toll-Limits* menu enables the user to check in an extension, optionally reset the extension toll limit amount, and check out the extension.

Enter the extension to be checked in and enter the toll limit amount (if toll limits are enabled). The toll limit amount shown is the same amount as entered in the *Toll Limit Options* screen, but this amount may be changed to any amount. Click the *Check-in* button.



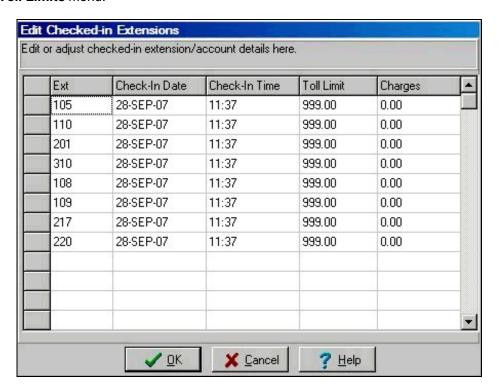
Note: Once an extension is checked in, it may not be checked in again until it is properly checked out using the *Check Out* screen.

Selecting the *Report* button will generate a report of all phone calls made from a particular extension from the check in time until the current time.

Enter the extension to be checked out and, if desired, click the Report button. Once the report is generated, click the *Check-out* button to check the extension out. If the user doesn't generate the report prior to clicking the OK button, the report will have to be generated from the *Reports* menu.

Edit Checked In Extensions

Once extensions are checked in, its details may be altered by selecting the *Edit Check-ins* option on the *Toll Limits* menu.



From this screen, the check in date, time and toll limit amount may be modified.

Client/Server Operation (Enterprise Version)

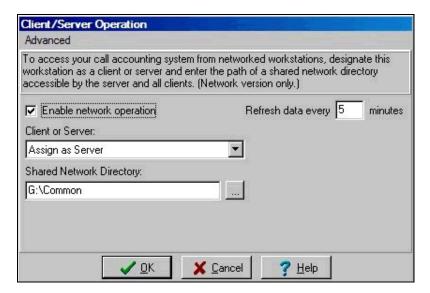
Enterprise versions of the software include the functionality to monitor and remotely configure the call accounting system as well as generate reports from any client workstation on the LAN/WAN.

When discussing Enterprise versions, the computer that processes the phone call records is referred to as the server and workstations on the LAN/WAN are referred to as clients. To the user, there are no discernable differences on the screen of the Enterprise server versus a standalone, non-Enterprise version. All communications with clients take place in the background on the server.

LAN/WAN clients use the same software as the server (refer to the Installation section), but are simply assigned as clients with very minimal configuring (refer to the Client Settings section).

Server Settings

To configure the call accounting server to communicate with the remote clients, select the *Client/Server Operation* option on the *File* menu.



Enable network operation

Placing a checkmark in this option enables communication between the call accounting server and remote clients. If this option is not enabled, the remote clients will not be able to request reports.

Client or Server

Designate the server PC to be a call accounting server. One PC should be designated as a server and all other workstations on the LAN/WAN should be assigned as clients. There is no limit to the number of remote clients assigned to the server.

Shared Network Directory

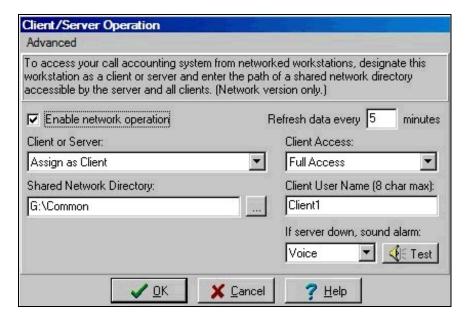
A directory that can be accessed by the call accounting server computer as well as the remote clients must be specified. The filename for this directory should not exceed eight alpha or numerical characters and should not contain spaces. An example shared directory name might be "pwshare." This directory serves as a temporary holding area for reports and report requests.

Refresh Interval

Enter the frequency with which the call accounting server PC should send updates to the clients. On a rather fast PC and network, the user may set this amount to as low as 1 minute.

Client Settings

After installing the call accounting software on a remote client, select the *Client/Server Operation* option on the *File* menu.



Enable network operation

Placing a checkmark in this option enables communication between the call accounting server and remote clients. If this option is not enabled, the remote clients will not be able to request reports.

Client or Server

Designate the workstation to be a client. One PC should be designated as a server and all other workstations on the LAN/WAN should be assigned as clients. There is no limit to the number of remote clients assigned to the server.

Shared Network Directory

A directory that can be accessed by the call accounting server computer as well as the remote clients must be specified. This directory serves as a temporary holding area for reports and report requests.

Refresh Interval

Enter the frequency the call accounting client should retrieve updates to the server. On a rather fast PC and network, the user may set this amount to as low as 1 minute.

Client Access

Workstations may be designated as full-access or report-only clients. Full-access clients have abilities to remotely configure the call accounting server. Report-only clients do not have the ability to modify server settings. All clients sound alarms when any alarm sounds on the server.

Client Name

Each client must have a unique name which is 8 characters for less. If two clients share the same name, there is the possibility that one client will receive the other client's reports.

Alarm Sound

Audio alarms can be set to sound if the client is unable to communicate with the server. The alarm will sound once per minute.

Advanced Topics

Data-Flow

Data received from the PBX is immediately written to the file named "receive.in." Receive.in is then immediately appended to the end of raw.dat. The file "rawptr.dat" simply contains a pointer, or value, denoting how many bytes of raw.dat has been processed thus far. If two 80-character call records arrive from the PBX in quick succession, rawptr.dat will lag behind the size of raw.dat by a value of 160, for a brief moment in time until the call accounting system processes both call records. Under normal operating conditions, the value in rawptr.dat quickly catches up to the size in bytes of raw.dat. When rawptr.dat precisely matches the size of raw.dat, no records need to be processed and the system enters a sleep state.

Records that are processed from raw.dat are parsed and stored in the master database named "watch.db." If watch.db is deleted, it will be recreated the next time the software is loaded.

If calls are to be transmitted to a Property Management System (PMS), each call is briefly stored in the file name "transmit.out." A variable named LastPostRec is stored in the Windows registry and serves as a marker of how far through watch.db calls have been posted to the PMS. Once a record is transmitted to the PMS and the PMS sends an acknowledgement to the call accounting computer, transmit.out is deleted. If there exists another call record in watch.db that needs to be transmitted, transmit.out is recreated once again for that call record. The contents of transmit.out are transmitted to the PMS.

System Registry

The system registry is used to store configuration data for the call accounting system. All registry variables are accessible and may be modified using the registry editor regedit.exe. To edit the registry, run regedit.exe and expand the HKEY_LOCAL_MACHINE branch. Then expand the SOFTWARE branch, followed by the METROPOLIS branch. The user will now be able to access individual system variables used to configure the call accounting software. Note: When changing any of these system variables, be certain to close the call accounting application first, as the registry is rewritten with each closure of the call accounting system.

Registry Permissions

It is not necessary to run the Call Accounting application as a user with Administrator rights under Windows NT, 2000 2003 Server or XP. The application does update the registry settings on the PC so the user must have permission to make changes to the Registry. Refer to the Metropolis On-line documentation (http://metropolis.com/docs/RegPrmsn.pdf) for detailed instructions.

Frequently Asked Questions

Why is the PBX traffic light yellow or red?

If no calls have been received from the PBX recently, the traffic light will first change to yellow and, if after an additional period of time, calls still have not been received, the traffic light will turn red. The time periods are user definable and are usually 30 minutes. The call accounting system has no method by which it can query the PBX to determine if the PBX is functioning properly, so it assumes that if a preset period of time has passed with no phone traffic, the PBX must not be functioning properly. Audible alarms will sound when the PBX status changes to the yellow or red condition. Because phone traffic is minimal at night, these alarms are usually only activated during the daytime. (refer to the <u>Traffic Lights</u> section in the Feature Overview at the beginning of this manual.)

The PBX traffic light is yellow or red. What should I do?

First, make a test phone call. If any data is received from the PBX, the traffic light will turn green. If this solution doesn't work, check the communications port connections on the back of the call accounting PC and make sure they are tightly connected. If this still does not solve the problem, reboot the call accounting computer.

Why is the PMS traffic light yellow or red?

Similar to PBX traffic lights, the PMS traffic lights signal that the Property Management System (PMS) is not receiving data from the call accounting system. During night audit periods, the PMS Interface is usually offline, so the call accounting system may be configured to only generate alarms during non-night audit hours.

The PMS traffic light is yellow or red. What should I do?

The most common error resulting in a PMS alarm is that the PMS Interface Controller has stopped working. Rebooting the Interface Controller usually fixes the error.

A Customer is disputing that they made a phone call.

First create a report for that customer's particular extension and for the day in question. If the call contains unusual digits, the call may be billed incorrectly. If the call appears normal and you would like to verify that the customer actually dialed it, use the "View PBX Data" option on the "Setup" menu and search for the call record in the PBX data. Once you locate the call, it is easy to verify the duration and digits dialed for the call. The PBX data shown is the actual data sent by the PBX and is not modified by the call accounting system.

Staff members seem to making personal long distance calls. Can I verify this?

Create a "Dialed Number" report for the extension in question. Inspect the call graphs and world/regional maps for green bars or dots which indicate administrative phone usage. If a suspicious dot appears on any map, click on the dot for a mini-report detailing which extensions dialed phone calls to that area.

I want to charge guests a per minute rate for local or toll-free calls.

Refer to "Timed local call billing (Threshold Billing)" in the Rates section of the Configuring Rates & Charges chapter.

Do I have to enter every single extension for the call accounting to work?

No. Any extension not explicitly entered as an administration extension will automatically be billed at guest rates. This means that if you do not enter any extensions at all, all calls will be processed as if dialed by guest extensions. However, it is recommended that you enter administration extensions in order to gain better control over phone expenses and for more accurate profit/loss reports.

What is the default password and pin code?

The default password is phone, and the default pin code is 2222. These may be changed in the Password screen found in the Maintenance menu.

I have forgotten my password. What do I do now?

Call for technical support. Our technical support team will issue you a 1-day password which you can use to gain access to the password maintenance screen where you can either view or change your password.

Notes