

ProNet

Payphone Management System software for Windows™

User's Guide

6/15/01



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Administration

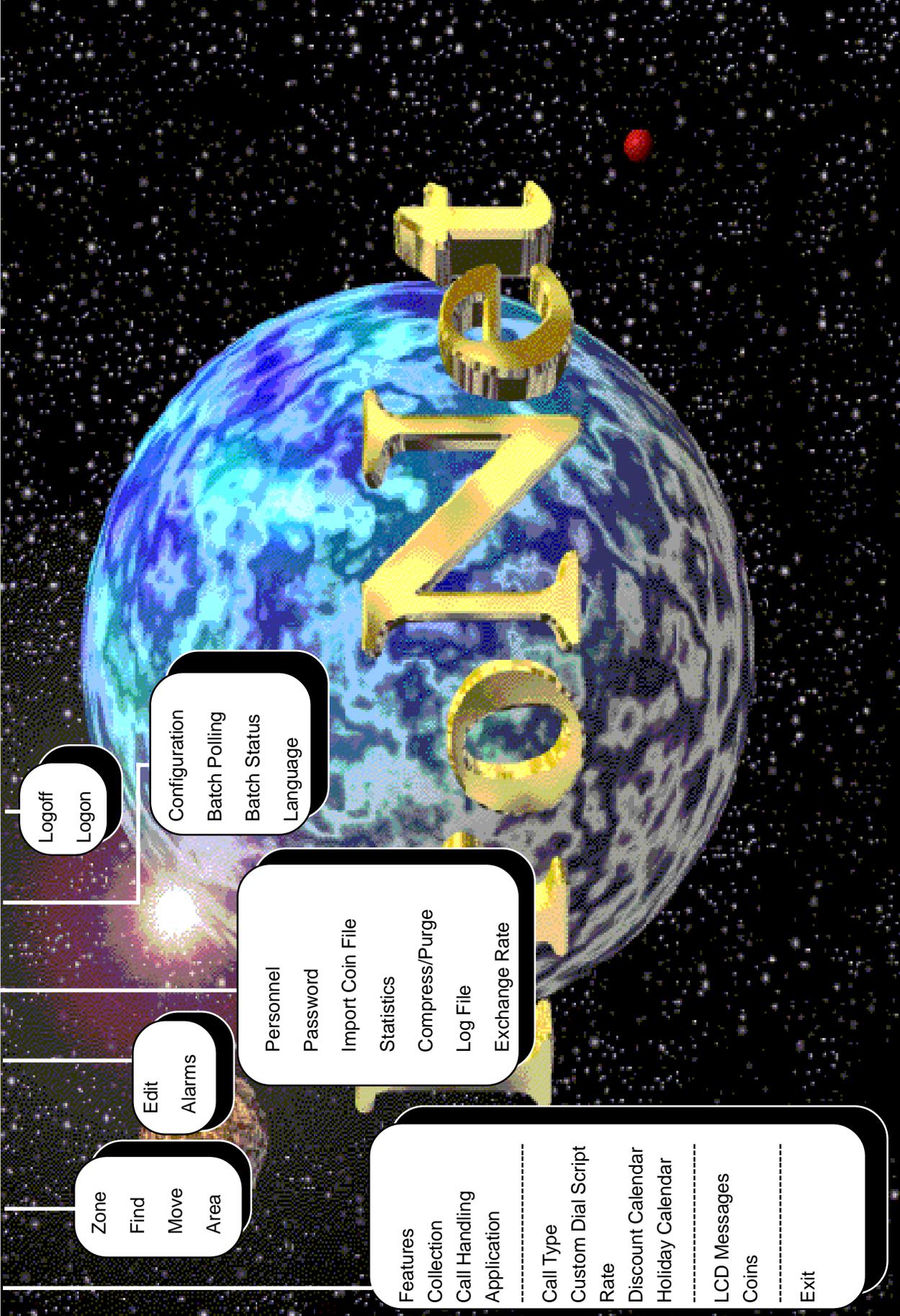
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Exchange Rate

Features
Collection
Call Handling
Application

Call Type
Custom Dial Script
Rate
Discount Calendar
Holiday Calendar

LCD Messages
Coins

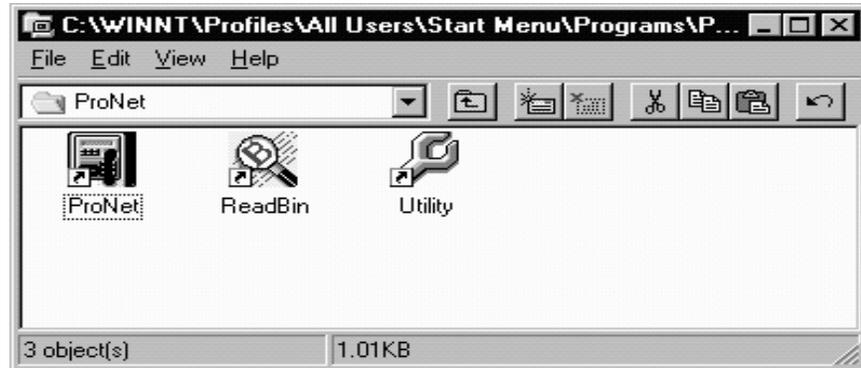
Exit

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Payphone Group Creation

After you reboot your computer, please note that there is a new Program Group titled Pronet in Windows, similar to the one showed below.

To have additional information about this group, please proceed to Appendix A at the end of the manual.



Once the software is installed, the following preliminary steps are required before ProNet program may be used to manage payphone sites.

- Gather the information on payphone parameters
- Logging on to ProNet Program
- Changing the initial logon password (refer to "Administration", "Password Assignment")
- Verifying the port and modem setup
- Copying and Importing the Coin file
- Creating the Features, Collection, and Call Handling files
- Copying and Converting the Application File
- Creating zone records
- Creating phone records

Login

Logging on to ProNet

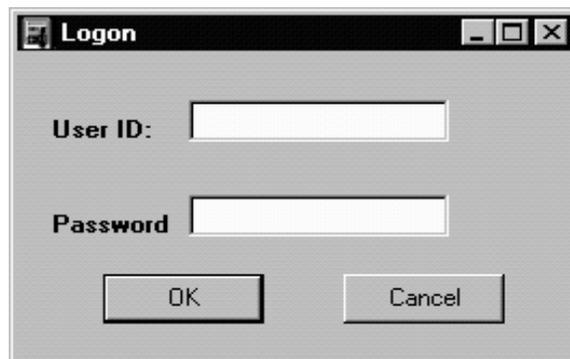
Starting ProNet

To start the program, double click on ProNet icon in the appropriate Program Manager work group in Windows™.

Logging on to ProNet program

Logging on to ProNet program

Immediately following the installation of ProNet software, the user is prompted to enter a user ID and password to gain access to the system. A default user name and password are provided for logging on to the system for the first time. After access to the system is granted, the default password must be changed. Use the following information to log on to the system for the first time.



The password has three levels. The user with the highest level (Administrator) can define the level of the other user's passwords in the Administration option of the Main Menu.

The user ID can be up to 24 alphanumeric characters long, and the password can be up to eight alphanumeric characters long. Lower case and/or upper case letters will represent different entries. The default initial password is **1** and it will allow the system to open to the highest privilege level.

- a. In the field labeled "*User ID (Name)*" type "**1**" and then press [TAB].
- b. In the field labeled "*Password*" type "**1**" and then press [TAB].
- c. Press [ENTER].

The Main Menu screen is now displayed.

This completes the steps necessary to log in to ProNet. Proceed to the sections titled "*Main Menu*", "*Toolbars*"

WARNING!!!

**DO NOT FORGET
YOUR PASSWORD.**

If the system administrator password is forgotten, the program must be reinstalled, and all passwords (user permissions) must be rebuilt and the database will be erased. Contact Protel International Technical Support for instructions on database restoration.

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Initial Setup

Main Menu

Toolbars

This is the Main Menu window. All the features in the program can be accessed through the menu options at the top of the screen.



Toolbar Conventions

Different sections of the program are presented with toolbars or push-buttons that can be activated with the mouse to perform a specific action (like save, exit, open, etc.) This actions can also be performed through menu selections

The functions performed by the toolbars are as follows:

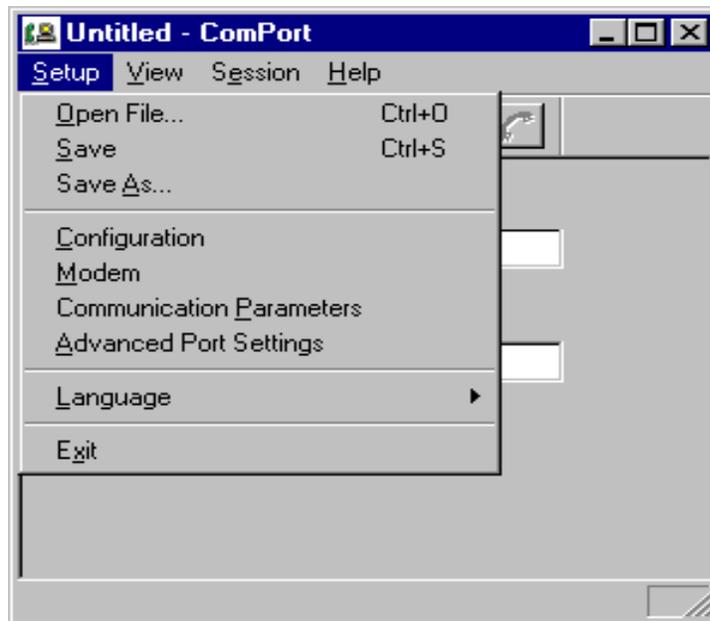
	FIRST RECORD		EDIT RECORD
	PRIOR RECORD		POST EDIT (SAVE)
	NEXT RECORD		CANCEL EDIT
	LAST RECORD		PRINT
	INSERT RECORD		SAVE AS
	DELETE RECORD		EXECUTE

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ComPort



MENU DEFINITIONS

Setup

Open file: The most common use for this option is to open the ComPort folder. However, this option also allows the ProNet operator, to open Binary, CDR, logger, and system folder.

Save: This option is used for saving files and “ComPort” settings once they have been properly configured.

Save As: This option can be used to rename the “ComPort”.

Configuration: Allows the ProNet operator to configure the “ComPort” settings, and select or change the modem assigned to this particular “ComPort”.

Modem: This option allows modem settings to be configured individually. This particularly affects, “Port Status”, “Cellular Options” and “Modem Commands”.

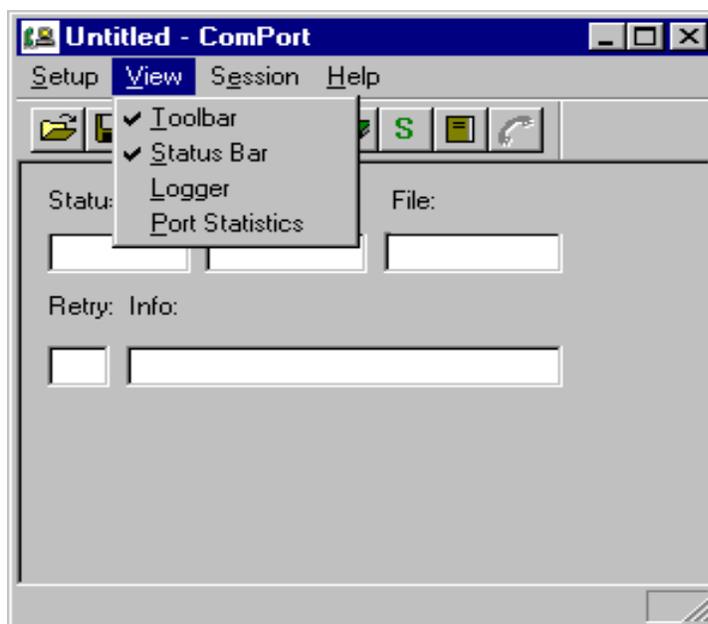
Communication Parameters: Allows variable configurations of “Time-outs”, “Frame Size” and delays to customize each modem. This can allow different modems to perform different tasks.

Advanced Settings: This option is used by Protel’s Technical Support personnel only and must not be modified.

Language: This option is for future use. It will allow the ProNet operator to select from six (6) different languages, English, Spanish, German, Chinese, Polish, and Thai

Exit: This option will close the application.

ComPort



View

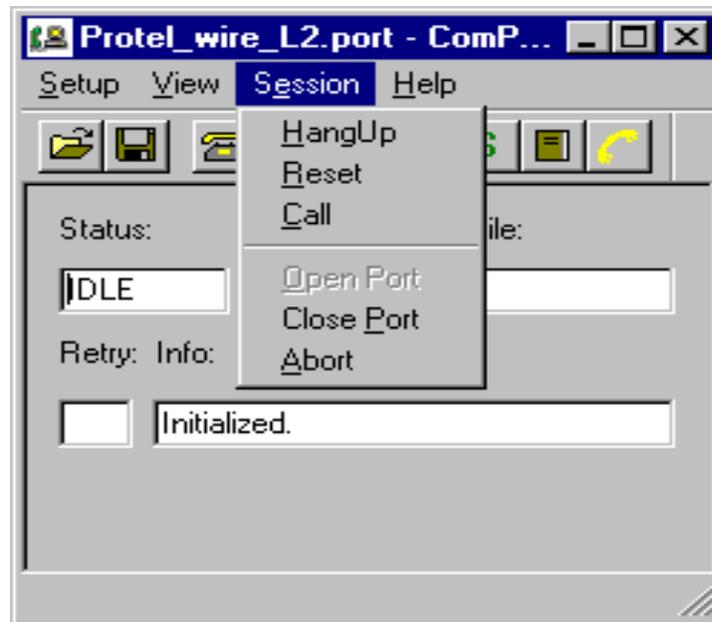
Tool Bar: This option allows the ProNet operator to view the “Tool bar” icons.

Status Bar: This option allows the ProNet operator to view the “Status Bar”. The “Status Bar” is located at the bottom of the “ComPort” screen, and allows the ProNet operator to view the availability of the “ComPort” in question.

Logger: This option allows the ProNet operator to view the “Logger File”. This file can be used to troubleshoot missed or failed communication problems.

Port Statistics: This option allows the ProNet operator to view the “Port Statistics” screen. “Port Statistics” is a running counter of communication attempts, successful as opposed to failures. This screen can be useful in verifying failed communications.

ComPort



Session

Hang up: This option is used to cancel communication by the ProNet operator.

Reset: This option is used to reinitialize the modem associated with the port it is assigned to.

Call: This option will allow an instant call to the payphone.

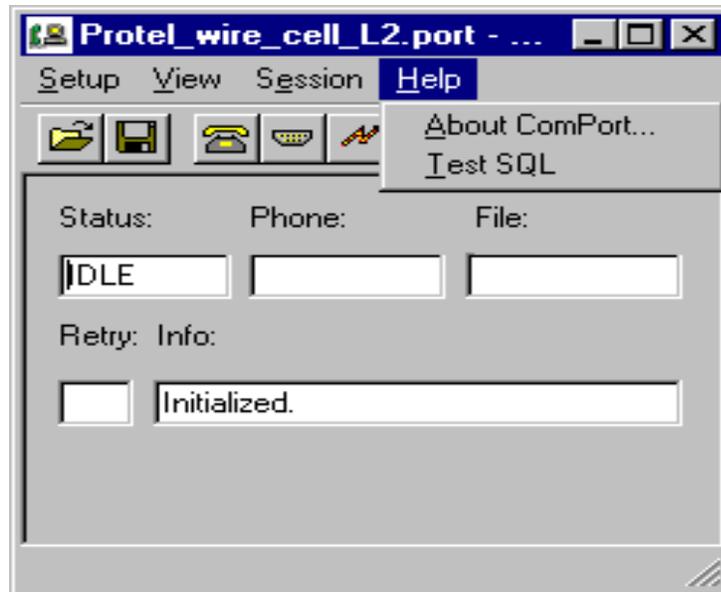
Open Port: This option will initialize the modem. When creating a new "ComPort", this option will initialize the port for the first time.

Close Port: This option can be used to manually close the "ComPort".

Initial Setup

Comport

ComPort



Help

About ComPort: This option is used to verify the version of the “ComPort” software being used.

Test SQL: This option is used to verify that the “ComPort” can connect to the database.

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Initial Setup

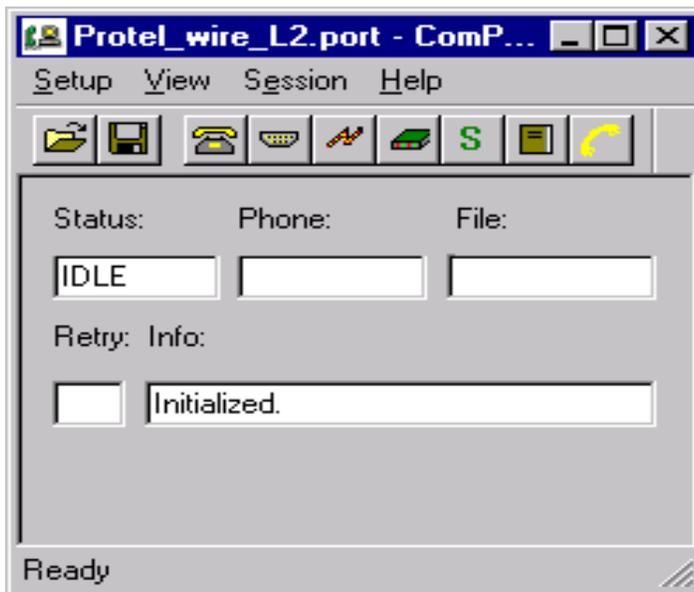
Comport

ComPort

TOOL BAR DEFINITIONS



Open: The most common use for this option is to open the ComPort folder. However, this option also allows the ProNet operator to view Binary, CDR, logger, and system folders.



Save: Used for saving files and “comport” settings once they have properly configured.



Hang-up: Allows the ProNet operator to manually terminate data communication.



Communication Parameters: Allows variable configurations of “Time-outs”, “Frame Size” and delays to customize each modem. This can allow different modems to perform different tasks.



Configuration: Allows the ProNet operator to configure the “ComPort” settings.



Modem: Allows each modem to be configured individually.



Statistics: Allows the ProNet operator to view the “Port Statistics” screen. “Port Statistics” is a running counter of communication attempts, successful as opposed to failures. This screen can be useful in verifying failed communications.



Logger: Allows the ProNet operator to view the “Logger” file.



Call: Allows the operator to call a payphone immediately. When this button is clicked, a screen similar to the one below pops up.

Initial Setup

Comport

ComPort

ComPort

Status: Displays the status of the modem connected to this ComPort, idle, calling etc.

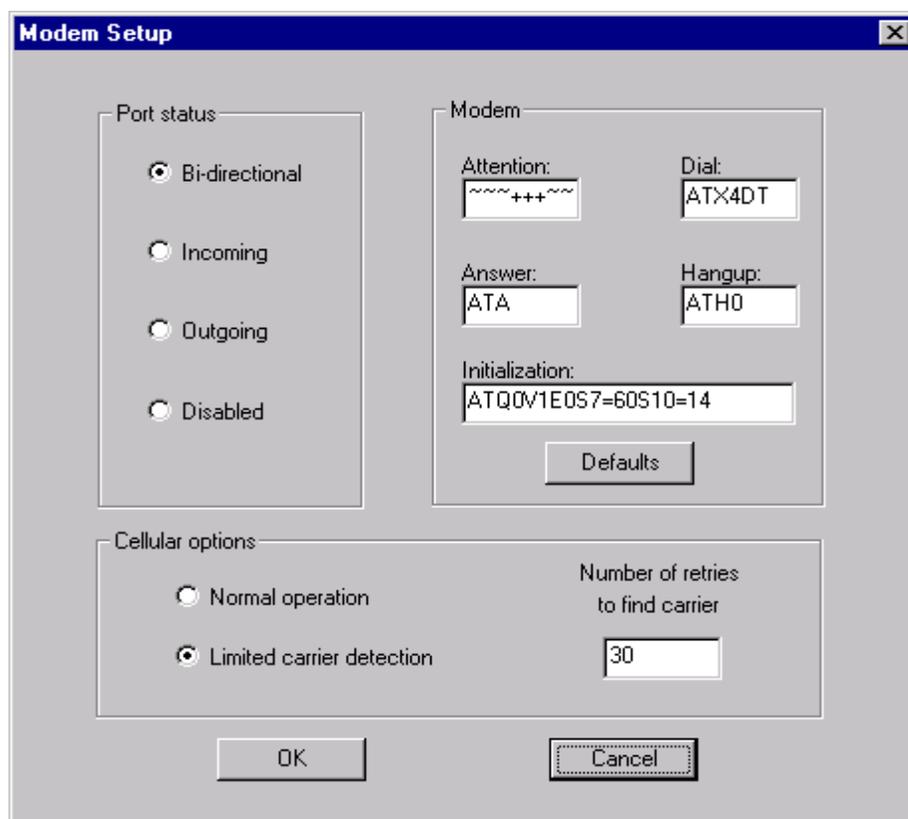
Phone: Displays the phone number of the payphone in communication in real time.

File: Displays the actual file being sent to the phone in real time.

Retry: Displays the number of attempts that have been made to successfully communicate. The amount of retries is set in the “Communication Parameters” screen.

Info: Displays messages in real time (not shown), under the info field, another field will display the progress of communication expressed in percentage blocks.

NOTE: If the “Ready” message does not appear at the bottom of the “ComPort” screen, the modem is not properly initialized.



Modem Setup

Bidirectional: Sets communication in both directions, between the management system and the payphone.

Incoming: This option sets the modem to receive calls only.

NOTE: “ComPorts” programmed with this setting will be excluded from being used in the “Batch Polling”.

Outgoing: This option sets the modem for outgoing calls only. Payphones calling in will not be able to communicate with the management system. Provides communication from the management system to the payphone. It does not, however, allow communication from the payphone to the management system.

Disabled: This option will disable the modem and will not initialize.

Initial Setup

Comport

ComPort

Cellular options

Normal operation: Determines that the modem will require carrier signal to maintain communication between the payphone and the management system.

Limited carrier detection: In this mode, ProNet will try for a predetermined amount of times, to reestablish carrier. If carrier is not reestablished in this amount of retries, the communication will be terminated.

The screenshot shows a dialog box titled "Communication Parameters" with the following settings:

- MS device: 1
- Timeouts (in ms):
 - Receive: 600
 - Ack-Nak: 4000
- Frame Size:
 - Fixed 256
 - Fixed 512
 - Fixed 1024
 - Variable [256 -- 512]
 - Variable [256 -- 1024]
- HangUp delay [ms]: 500
- Line Delay (ms): 0
- Answer delay [ms]: 1500
- Retries: 3
- Call connect delay [s]: 45
- Toggle DTR on HangUp

Buttons at the bottom: OK, Default, Cancel.

Communication parameters

MS device: The value in this field is reserved for Protel's use only and must not be changed. If changed, failures in communication will occur.

Receive: This field displays how long ProNet will wait to receive a data packet from the payphone. If the data packet is not received within the specified amount of time, ProNet will time out and terminate the data call. Legal limits are from 300 to 1000.

Ack-Nak: This field displays how long ProNet will wait to receive the acknowledgment that the data packet was properly transferred. If the data is not received in the specified amount of time, ProNet will time out and terminate the data call. Legal limits are from 3000 to 10000. For cellular applications 10000 is recommended.

Frame size: This option determines the size of the data packet to be sent. There are three fixed options and two variable options. The variable types start in their largest state. As interruptions and noise are detected, the frame size will automatically drop down to the lowest size. For cellular applications fixed 256 is optimum.

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Initial Setup

Comport

ComPort

HangUp delay: This field displays the time ComPort waits before sending the HangUp command after a communications session.

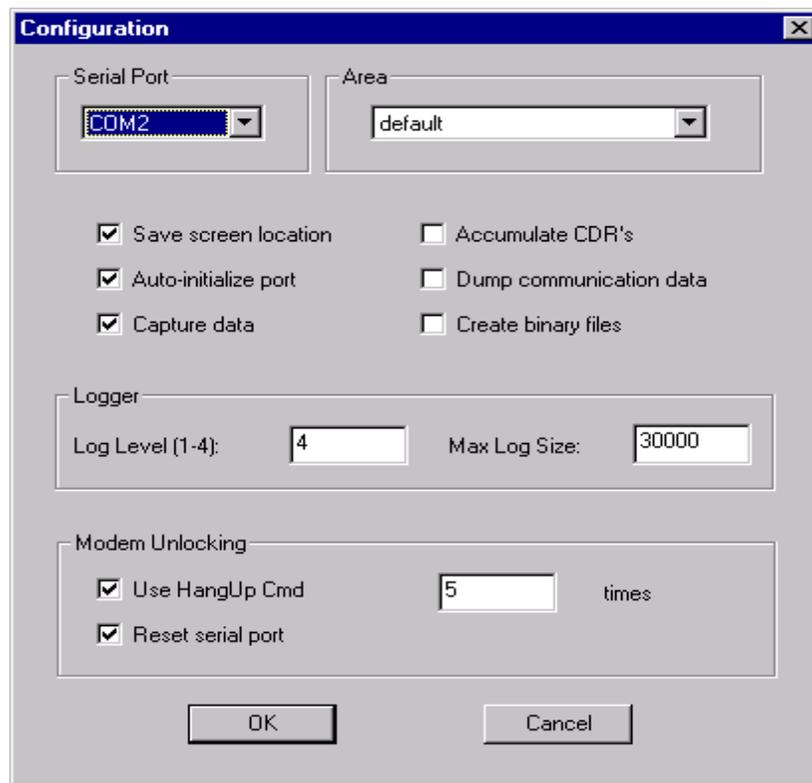
Answer delay: This field displays the time ComPort waits before sending the ATA command.

Call Connect delay: This field displays the time ComPort will wait for the Connect command from the modem. If this time is too long, the modem can be quite noisy in false calls.

Line delay: This field displays how much time ProNet will wait in between data packets. Legal limits are from 0 to 255.

Retries: This field displays how many attempts to receive or send a data packet before dropping the communication. Legal limits are from 0 to 100.

Toggle DTR on HangUp: Selecting this option, the modem will temporarily disconnect the DTR so it can, effectively execute the HangUp command.



Configuration

Serial Port: This field displays the name or number of the serial port presently being monitored.

Area: This field displays the area assigned to the selected ComPort if needed, otherwise leave in **default**. The Area name is created in the “**Network, Area**” screen in ProNet.

Save screen location: This option, when selected, will allow the “Configuration” screen to appear in the same size and location every time this screen is opened.

Auto-initialize port: This option, when selected, will automatically initialize the comport as the window is opened.

Capture data: This option, when selected, will enable the Serial Monitor to verify data flowing through the serial port and should only be selected when instructed by Protel’s Technical Support.

ComPort

Accumulate CDR's: This option, when selected, will store CDR in binary format in the ComPort\Bin folder. This is helpful if CDR files in the database become corrupted.

Dump communications data: This option, when selected, will store a detail of all communication events between the payphone and the MS. The information will specify, among other things, if the call was a Service Call (call from ProNet to the payphone) or a Regular Call (call from the payphone to ProNet). The file will be stored in the ComPort folder as a "*.dmp" file.

Create binary files: This option, when selected, will create the binary files for your configuration files and store them in the ComPort\Bin folder once the communications session ends. This is useful when the binary files need to be read using the **Readbin** utility.

Log Level (1-4): Defines the amount of data desired, concerning the communication events related to configuration files transmission and related errors. The minimum level is one (1), which will provide only enough information to determine that a communication attempt was either successful or unsuccessful. Level (2) will provide slightly more information, such as a reason for the failure. The maximum entry for this field is four (4). This will give the maximum amount of information concerning a communication attempt. Level three (3) will also display the files sent and the actual error that was associated with a failed communication attempt. This information is available in the **Logger** folder.

NOTE: Level three (3) will also cause the logger file to grow much faster than level one or level two (2). This is due to the fact that more data is being queried and stored.

Max Log Size: This field will limit the size of the logger file to the value specified. The legal entries are from 1KB (1000) to 200KBytes (200000). When the specified value has been reached, ProNet will automatically save the existing file under another name and create a new logger file.

NOTE: Each "ComPort" will have its own logger file.

Modem unlocking

Use HangUp Cmd/Times: These options will determine how many times ComPort will try to release the modem by sending the HangUp command.

Reset serial port: This option indicates that the serial port will be reset automatically once it has been released.

Initial Setup

ComPort

ComPort

Last reset date:	01/05/01 14:06:00		
Sent bytes:	17388	Locked port:	0
Received bytes:	2583	Reset port:	1
Transmission retries:	2	HangUp command:	1
Carrier detect retries:	0		
Calls			
Answers:	0	Total:	4
Initiating:	4	Success:	4
Online time: days - hours - minutes	0	0	30

Port Statistics

This screen is designed as a running counter to allow the ProNet operator to diagnose ComPort errors, by comparing the amount of attempts made to communicate, to the unsuccessful data transmissions.

Last reset date: This field displays the date in which the last reset was affected in the “Port Statistics” screen.

Sent Bytes: This field displays the amount of data bytes sent after the last reset.

Received bytes: This field displays the amount of data bytes received after the last reset.

Transmission retries: This field displays the amount of times transmission retries that have occurred since the last reset.

Carrier detect retries: This field displays the amount of carrier detect retries that have occurred since the last reset.

Locked port: This field displays how many times the modems have locked up since the last reset.

Reset port: This field displays how many times the serial port has been reset.

HangUp Command: This field displays how many times data calls were terminated by the ProNet operator.

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ComPort

Calls

Answers: This field displays, how many times ProNet has answered calls from payphones, calling into the management system.

Initiating: This field displays how many times the payphones answer calls initiated by ProNet.

Total: This field displays the sum of the “Answers” and “Initiating” fields. This data can be useful in determining if there is a communication problem between ProNet and the payphones.

Success: This field displays how many calls from “Total” field were successful. If there is a large difference between “Total” and “Success”, there could be a communication problem during download.

Online time: days–hours–minutes: This field displays actual “running” time since last reset.

Creating the phone management files

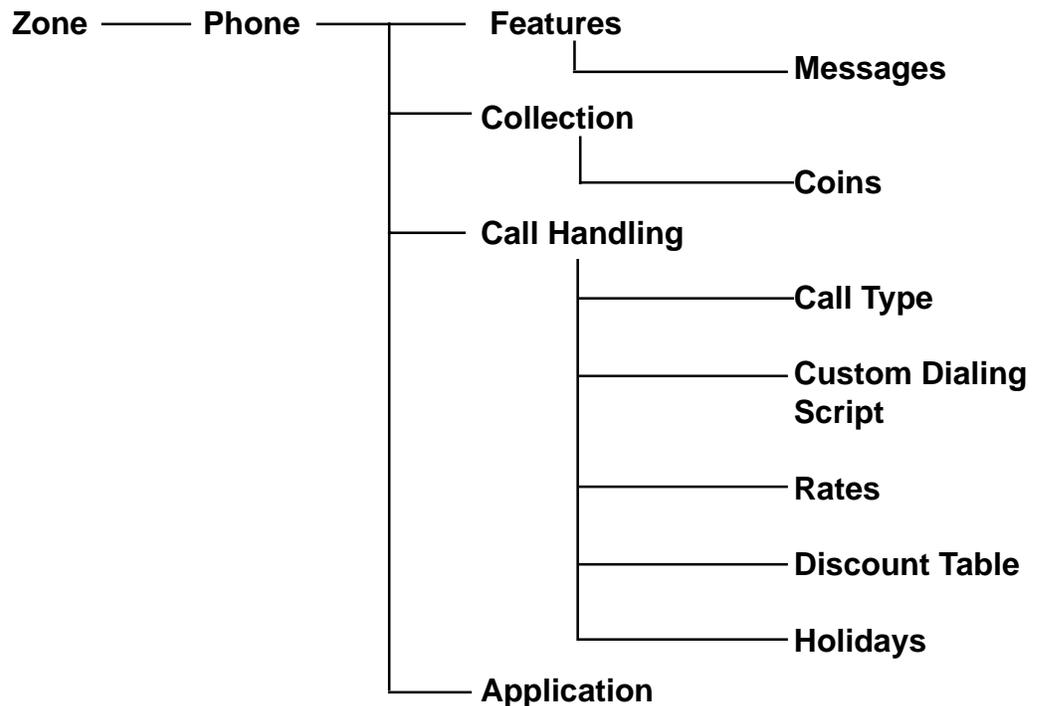
The next step is to create/modify the payphone operating parameters. Information such as dialing patterns, rate codes, central office options, and payment methods are selected via the [FILES] menu option.

There are four files that need to be downloaded to the paystation to make it fully operational:

- Features File, which defines the payphone's operating parameters.
- Collection File, which determines the accepted forms of payment.
- Call Handling File, which assigns the appropriate rate and routing information to the number dialed.
- Application File, which contains firmware programming information.

WARNING!
**DO NOT EDIT OR
MODIFY ANY
DEFAULT FILES**

Configuration Structure



Configuration

Features File

WARNING: ProNet has default files for Features, Collection, Call Handling and LCD Messages files. **Do not modify the original default files**, because they contain the standard parameter definitions for each file. Use the **SAVE AS** command to rename these files to your own customized file names and then modify the parameters as desired for your specific needs.

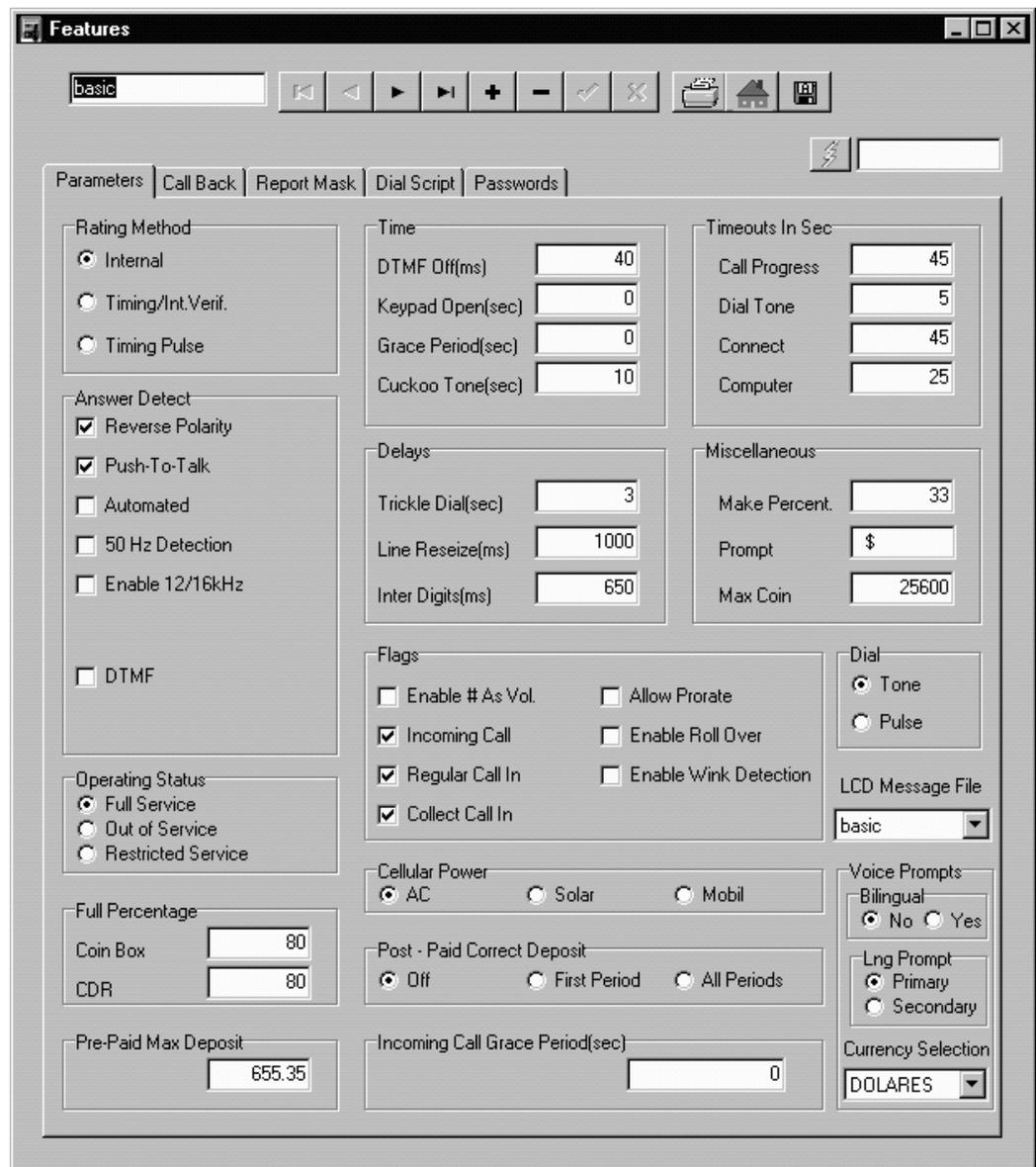
NOTE: When creating a new file, press the insert record  button.

Features File

Creating or editing the Features File

Beginning from the Main Menu screen, select the following options: *Files, Features*.

WARNING!
**DO NOT EDIT OR
MODIFY ANY
DEFAULT FILES**



Features

basic

Parameters | Call Back | Report Mask | Dial Script | Passwords

Rating Method

- Internal
- Timing/Int.Verif.
- Timing Pulse

Answer Detect

- Reverse Polarity
- Push-To-Talk
- Automated
- 50 Hz Detection
- Enable 12/16kHz
- DTMF

Operating Status

- Full Service
- Out of Service
- Restricted Service

Full Percentage

Coin Box: 80

CDR: 80

Pre-Paid Max Deposit: 655.35

Time

DTMF Off(ms): 40

Keypad Open(sec): 0

Grace Period(sec): 0

Cuckoo Tone(sec): 10

Timeouts In Sec

Call Progress: 45

Dial Tone: 5

Connect: 45

Computer: 25

Delays

Trickle Dial(sec): 3

Line Reseize(ms): 1000

Inter Digits(ms): 650

Miscellaneous

Make Percent: 33

Prompt: \$

Max Coin: 25600

Flags

- Enable # As Vol.
- Allow Prorate
- Incoming Call
- Enable Roll Over
- Regular Call In
- Enable Wink Detection
- Collect Call In

Dial

- Tone
- Pulse

LCD Message File

basic

Cellular Power

- AC
- Solar
- Mobil

Post - Paid Correct Deposit

- Off
- First Period
- All Periods

Incoming Call Grace Period(sec): 0

Voice Prompts

Bilingual

- No
- Yes

Lng Prompt

- Primary
- Secondary

Currency Selection

DOLARES

ProNet

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Defining the parameters

Defining the Parameters

The next step required for setting up the program is to define the parameters for the payphone's Features File. You can assign the same parameters to a number of payphones.

- a. Select a file by using the edit button at the top of screen to edit an existing Features File or continue to the next step.

Rating Method

- b. Select the appropriate *Rating Method* by clicking on the radio buttons. The rating method is a specific system used for rating calls.
 - *Internal Tariff:* Real time calculation of the call is performed by the payphone's software. Timing begins upon receipt of answer detection signal using the rate tables, dial patterns, time of day and discount tables to determine the cost per time period of the user's destination number.
 - *Timing Pulse:* Calculation of the call cost is performed by charging the user a rate for each meter pulse received from the exchange. The rate charged is contained as an amount per pulse as defined by the rate and dialing pattern tables associated with the user's destination number.
 - *Timing Pulse/Int. Verif.:* Calculation of the call cost is performed by charging the user a rate for each meter pulse received from the exchange. The rate charged is contained as an amount per pulse as defined by the rate and dialing pattern tables associated with the user's destination number. Additionally, algorithms are used to convert to internal tariff if the timing pulses fail to arrive after the second meter pulse.
- c. *Answer Detect:* This refers to the specific method used for answer detection (reverse polarity, 50 HZ detection, Manual or "Push-to-Talk", 12 kHz / 16 kHz, Automated or DTMF). Click on the check box corresponding to the ones provided by your central office. The **Automated Answer Detect** function provides a software method of determining when the called party has answered. It is designed for the U.S.A.. network and will not operate properly in other countries. It is supplied for testing and demonstration purposes only.

NOTE: DTMF Type 0 uses Tones A & C. Type 1 uses Tones C and C.

Operating Status

- d. *Full Service:* The payphone will operate with all features turned ON.
- e. *Out of Service:* If this option is selected, the payphone will operate in the "Out of Service" mode. If a user tries to use the payphone while operating in this condition, dial tone will not be present and the LCD (if present) will indicate an "Out of Service" message.
- f. *Restricted Service:* Free calls only.

Full Percentage

- g. **Coin box:** Enter a two digit value in increments of 10 for the percentage full of the coin box volume. When this volume is reached it will be included in the database for reporting purposes according to the options defined in the report mask window. The range for this field is 10 to 90.
- h. **CDR:** Enter a two digit value in increments of 10 for the percentage full of the Call Detail Records. When this value is reached it will be included in the database for reporting purposes according to the options defined in the report mask window. The range for this field is 10 to 90.

Time

- i. **DTMF Off (ms):** This is the time between each DTMF pulse when the payphone is dialing the destination number. The range for this field is 0 to 2000.
- j. **Keypad Open (sec):** Enter the amount of time in seconds that the keypad shall remain open (operational) after an answer is detected. It is useful when accessing voice mail systems or PBXs. The range for this field is 0 to 255. (0=always open)
- k. **Grace Period (sec):** Enter the amount of time in seconds before the call billing starts and after an answer is detected. The range for this field is 0 to 255.
- l. **Cuckoo Tone Duration (sec):** Enter the amount of time in seconds to specify the duration of the Cuckoo Tone. This tone identifies the unit as a pay telephone and will be emitted during the specified time. The range for this field is 0 to 255. The Cuckoo Tone cycle is 2.6 seconds long. **NOTE:** Associated only with patterns defined in Call Handling, Customer Special

Delays

- m. **Trickle Dial (sec):** If the Trickle Dial option is used in the Dialing Script, the number being dialed is sent digit by digit at the specified interval (sec) until the user finishes dialing the number and paying appropriate rate; then, the payphone sends the remaining digits as specified in DTMF off. This is done to keep the Central Office from generating a call progress inactivity flag. Enter the amount of time(in seconds) between each digit being sent during the trickle dialing stage. The range for this field is 0 to 255.
- n. **Line Reseize (ms):** Enter the amount of time, in milliseconds, that the payphone will drop the line before reseizing it after disconnection, such as new call button, remote disconnect, internal hang-ups and hookswitch flash operation. The range for this field is 20 to 4000.
- o. **InterDigit (ms):** Enter the amount of time in milliseconds used by the payphone between each digit during pulse dialing. The standard is 650 milliseconds. The range for this field is 100 to 2000.

Defining the parameters (continuation)

Time outs in seconds

- p. **Call Progress:** Enter the amount of time in seconds that the payphone will wait before disconnecting the call when no activity is detected from the user. The range for this field is 5 to 255.
- q. **Dial Tone:** Enter the amount of time in seconds before the payphone hangs up if no dial tone is detected from the Central Office when attempting to dial out the first digit to the line. The range for this field is 1 to 255. This applies only for Dial Script options W and X.
- r. **Connect:** After dialing out to the destination party, the payphone will hang up if answer is not detected for this duration. Enter the amount of time, in seconds, before the payphone hangs up. The range for this field is 10 to 255.
- s. **Computer:** After dialing out to ProNet, the payphone will hang up if carrier is not detected for this duration. Specify the amount of time, in seconds, that the payphone will wait before timing out if it does not detect an ACK from the computer. The range for this field is 0 to 255.

NOTE: ProNet is preset to answer on the first incoming ring signal.

Miscellaneous

- t. **Make Percentage:** Enter the percentage amount. In pulse dialing, Make Percentage is the ratio between the high level of the pulse (on value) against the full period (on + off value). In the US it is 33 (Check with your C.O.s). The range for this field is 0 to 100.
- u. **Prompt:** This is a three character field for the symbol of the specific country's monetary unit.
- v. **Max Coin:** This is the maximum volume of coins allowed in the coin box. The units for the volume represent a relation to the size and shape of the coins accepted by the payphone and do not represent any actual cubic measurement. The appropriate value to enter will be defined for each country. (Please contact Protel - International Customer Service.) The range for this field is 0 to 65535.

Flags

For the following parameters place a check mark to accept or activate the option:

- w. **Enable # As Volume Button:** If this option is selected, the payphone will allow the user to press the “#” key to adjust the volume level of the receiver in 3 steps. To be used with phones without the optional user console.
- x. **Incoming Call:** Check here if you want the payphone to receive calls. This will activate the piezo ringer.
- y. **Regular Call In:** Check here if you want the payphone to call ProNet at the schedule times (see Features File, Call Back)
- z. **Collect Call In:** If this option is selected, the payphone will immediately call the computer to report when a payphone service person collects the coin box. The details of the coin collection are shown in the coin collection report as generated by the operator.

Defining the parameters (continuation)

- aa. **Allow Prorate:** If this option is selected, the payphone will allow extra calling time based on the amount deposited over the required rate. If this option is not selected, and the remaining credit is less than the required rate for the next period, the call will be terminated.
- bb. **Enable Roll Over:** If the buffer for the CDR (Call Detail Records) is full, checking this will enable new data to be written over the oldest data. (This feature is only used if the payphone is unable to communicate with ProNet.)
- cc. **Enable Wink Detection:** Reserved for future use.

Dial

- dd. **Tone:** If this option is selected, the payphone will output digits on to the phone line in DTMF.
- ee. **Pulse:** If this option is selected, the payphone will output digits on to the phone line in pulse format.

LCD Message File

- ff. **LCD Message File:** For payphones with the optional LCD, please select the file containing the messages to be displayed on the Liquid Crystal Display. This file is defined in the screen **Files, LCD Messages** from the Main Menu. (See section titled “Configuration”, “LCD Messages”) **NOTE: For payphones without the optional LCD, please leave this option blank.**

Voice Prompts

- gg. **Bilingual:** This option will enable the payphone to prompt messages both in English and Spanish if needed. Select **NO** or **YES**. (for selected countries only.)
- hh. **Lng Prompt:** This section will determine in which language, English or Spanish, the voice prompts will be heard first. If the payphone is installed in Latin America, then, by default, the primary language will be Spanish. It will be vice-versa, if it's installed in non-Spanish speaking countries.
- ii. **Currency Selection:** In this option the payphone will provide voice prompts for the selected currency (for selected models only.)

Deposits

- jj. **Pre-paid Max Deposit:** Specify here the maximum amount of money that the payphone will accept (enter 1 as 1.00) as a prepayment before the user dials the destination number. If a single coin denomination exceeds the specified amount, this coin will be accepted if it is the first coin deposited. Any amount exceeding the Pre-paid Max. Deposit will be rejected. If the dial pattern requires an amount larger than the Pre-paid Maximum Deposit, the payphone will request the additional amount.
- kk. **Post-paid Correct Deposit:**

- **Off.** When this option is selected, the payphone will accept any amount of money to be deposited after the user has dialed the destination number.

Defining the parameters (continuation)

- **First Period.** If this option is selected, the payphone will not accept deposits greater than the cost of the number dialed by the user during the first rating period.
- **All Periods.** If this option is selected, the payphone will not accept deposits greater than the cost of the number dialed by the user during any rating period.

Cellular

ll. **Power:**

- **AC.** Select this option if the cellular interface obtains its power from the AC source.
- **Solar.** Select this option if the cellular interface obtains its power from a solar panel source.
- **Mobil.** Select this option if the cellular interface obtains its power from the vehicle 12 V DC supply.

mm. Incoming call grace period: This feature is used for charging incoming calls on cellular phones. The range for this field is 0-30 seconds, in steps of 5 seconds.

If “5 to 30” is entered in this field, the payphone will answer the incoming call, the transmitter will open and the parties will be able to talk for that specified time. During this period the payphone user will be prompted to deposit the required payment in order to continue the call. If no payment is deposited within this period, the payphone will terminate the call.

If “0” is entered in this field, the payphone will not answer the incoming call until the payment is deposited. During this period (normally 60 seconds) the payphone user will be prompted to deposit the required payment. If no payment is deposited within this period, the payphone will not answer the incoming call and calling party will not be billed for the call.

NOTE: Grace period time will be deducted from the initial time period once money is deposited and call is connected.

nn. Select **Post Edit** to save your changes.

oo. Select **Exit** to return to the Main Menu.

This completes the steps necessary to configure or to edit the parameters. Proceed to the sections titled “*Configuration*”, “*Selecting the call back options.*”

Selecting the call back options

Selecting the call back options

The next step required for setting up the program is to select the call back options for the payphone's Features Files. You can assign the same option to a number of payphones.

- Beginning from the Main Menu screen, select the following options: *Files, Features*.
- Select a file by using the edit button at the top of screen to edit an existing Features File or continue to the next step.
- Select Call Back tab.

The screenshot shows the 'Features' configuration window with the 'Call Back' tab selected. The window title is 'Features' and the current file is 'basic'. The 'Call Back' tab is active, showing the following settings:

- Day Of Week:** All days (Sunday through Saturday) are checked.
- Strategy:** Times: 3, At Interval (Mins): 5, Then: 60, Repeat: 5.
- Routing:** Nine route input fields (Route 0 through Route 8) are present, all currently empty.
- Incoming Call Answer Strategy:** Polling Period: Start Time: 23, Number of Rings: 1; Incoming - Call Period: Start Time: 2, Number of Rings: 1.
- Call Back:** Number: 108, Dial Script: Edit button, and an empty input field.

- Day of week:** Select the days when the payphone will call to report to ProNet. These report days are for regular call in. In the event of an alarm condition, the payphone is capable of calling ProNet at any time. (Ref: Report Mask)

Selecting the call back options (continuation)

- e. **Strategy:** This section explains the specific procedure used by the payphone to call ProNet:
- **Times:** Enter how many times the payphone should attempt to call ProNet.
 - **At Interval (Mins) :** Enter how much time (in minutes) there should be between each call back attempt.
 - **Then After (Mins):** If after completing the selected number of call back attempts the payphone is still unable to communicate with ProNet, then enter how many minutes the payphone will wait before starting a new call back cycle.
 - **Repeat:** Enter how many times the cycle will be repeated.
- f. **Routing:** Enter the phone numbers or authorization codes for the re-routing routines. These routines must be defined in the Custom Dialing Script section and will be used by the payphone when defined in specific pattern at the Call Handling file. The maximum number of digits allowed for these fields is 12. If necessary you can combine two route numbers (i.e.: R1R2) to dial more than 12 digits
- **Route 0:** Specify the number that the payphone will dial to access the Credit Card Validation center.

NOTE: this option requires a customized application file based on your country's specifications for credit card validations.

- **Routes 1 through 8:** Specify the phone and/or authorization numbers that the payphone should use during the re-routing routines.

Incoming Call Answer Strategy

- g. **Polling Period:** The period of the day that the payphone expects to receive a call from ProNet in order to upload the CDR and if necessary, to download an update of the Feature, Collection, Call Handling, or Firmware application files. This time is called the Primary Poll Time and the remainder of the day is called the Secondary Poll Time. The primary poll time and the secondary poll time do not overlap and they should add to 24 hours.
- **Start Time:** Specify the time of day that the payphone should answer an incoming call after it rings for the number of times specified in the field labeled. "Number of Rings".
 - **Number of Rings:** Specify the number of rings that must occur before the payphone will answer an incoming call during the primary polling window.
- h. **Incoming Call Period:** The period of the day when the payphone is available to receive incoming calls, if it has been programmed in the features of the unit, starting at the time specified in the "Start Time" field. The payphone will ring for the amount of times

Selecting the call back options (continuation)

specified to give the user the opportunity to answer the call. Thereafter, the modem will answer.

- **Start Time:** Specify the time of day that the payphone should answer an incoming call after it rings for the number of times specified in the field labeled “Number of Rings”.
- **Number of Rings.** Specify the number of rings that must occur before the payphone will answer an incoming call during the secondary polling window. The secondary polling window begins at the time specified in the field labeled “Start Time”, and ends at the time specified in the field labeled “Start Time” from the previous section (h).

Call Back

- Number:** Enter the phone number that the payphone needs to dial in order to reach the computer running ProNet.
- Dial Script:** By clicking the **Edit** button, you can customize the dial script that will be used by the payphone to call the Management System. Refer to the section “*Configuring the custom dial script*” later in this manual.

j. Select **Post Edit** to save your changes.

k. Select **Exit** to return to the Main Menu.

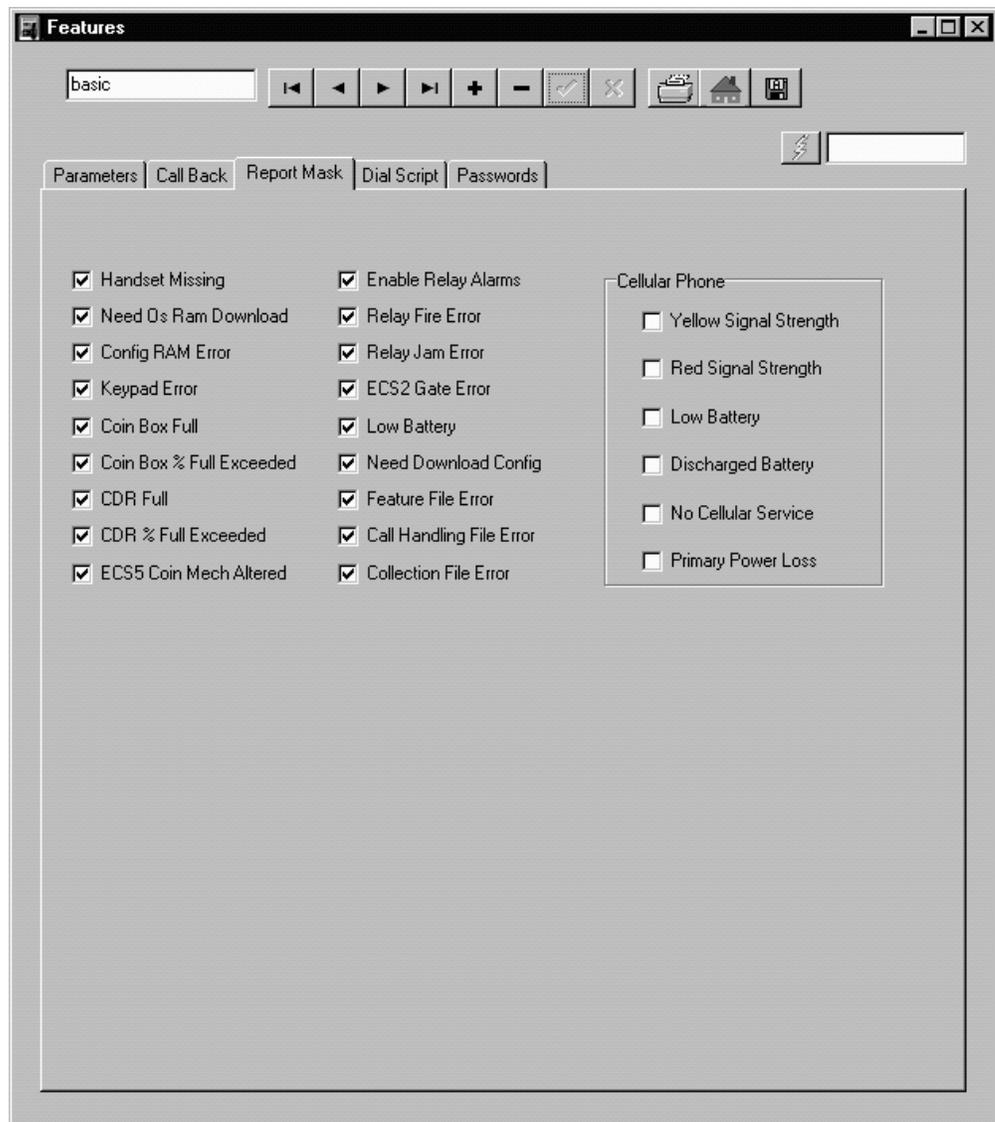
This completes the steps necessary to select the Call Back Options. Proceed to the sections titled “*Configuration*”, “*Selecting the report mask.*”

Selecting the report mask

Selecting the report mask

The next step required for setting up ProNet is to select the Report Mask for the payphone's Features File. If a payphone condition is selected (has a check mark) it will be treated as an alarm and the payphone will call ProNet immediately at the time that alarm rises or takes place. If an alarm condition is not selected, it will be treated as a warning and will be included in the regular report at polling time, the payphone will not call when the alarm is produced.

- a. Beginning from the Main Menu screen, select the following options: *Files, Features*.
- b. Select a file by using the edit button at the top of screen to edit an existing Features File or continue to the next step if creating a new file.



Selecting the report mask (continuation)

- c. Click on the check boxes for the conditions you want reported as alarms.
- **Handset Missing.** This flag indicates that improper resistance of the handset receiver was detected by the phone. The handset may be missing or the handset wiring may be incorrect or defective.
 - **Need OS RAM Download.** This flag indicates that the Operating System (Application File) is either missing or corrupt.
 - **Config RAM Error.** This flag indicates that there is an error in RAM where the configuration files (Features, Collection, and Call Handling files) are stored.
 - **Keypad Error.** This flag indicates that one or more keys are stuck.
 - **Coin Box Full.** This flag indicates that the volume of coins in the coin box has reached 100 percent. The coin box must be collected immediately. Payphone stops taking coins, when this flag is set and will go into card only mode if available.
 - **Coin Box % Full Exceeded.** This flag indicates that the coin box is at the percentage level defined in the Features/Parameters screen. The coin box should be collected soon. Payphone still takes coins.
 - **CDR Full.** This flag indicates that the maximum number of call detail records (CDR) that can be stored by the payphone has been reached. These CDR records are transferred to the computer when the payphone calls to report the alarm. No further action is necessary. If the maximum CDR level is reached, and the payphone cannot communicate with the M.S. and Roll Over is not selected, all CDR past this point will be lost.
 - **CDR % Full Exceeded.** This flag indicates that the number of call detail records (CDR) stored in the payphone reached the percentage level defined in the Features/Parameters screen. These CDR records are transferred to the computer when the payphone calls to report the alarm.
 - **CDR Flush Error.** This flag indicates that there was an error while the CDR's stored in RAM were being erased, after the payphone reported to the computer.
 - **Enable Relay Alarms.** This flag indicates that the "Relay Fire Error" and "Relay Jam Error" alarms will be available for selection.
 - **Relay Fire Error.** This flag indicates that the coin relay, or associated circuitry, is not firing properly.
 - **Relay Jam Error.** This flag indicates that the relay hopper assembly has been fired, but had not returned to the idle position.
 - **ECS2 Gate Error.** Indicates that an error was detected with the operation of the collect/refund gate of the Electronic Coin Scanner II. This may be caused by a jam or failure in the coin gate circuit.
 - **Low Battery.** This flag indicates that the battery or the relay fire circuitry is not working properly. **NOTE:** If this alarm occurs repeatedly with a specific payphone, send a technician to check the line current, replace the Ni-Cad battery or the chassis if necessary.

Selecting the report mask (continuation)

- ***Need Download Config.*** This flag indicates that one or more of the configuration files (Features, Collection, and Call Handling) are missing. The computer should send a new set of configuration files to the payphone.
- ***Feature File Error.*** This flag indicates that the Feature File stored in the payphone may be corrupt. The computer should send a new Feature File to the payphone.
- ***Call Handling File Error.*** This flag indicates that the Call Handling file stored in the payphone may be corrupt. The computer should send a new call handling file to the payphone.
- ***Collection File Error.*** This flag indicates that the Collection File stored in the payphone may be corrupt. The computer should send a new Collection File to the payphone.

Cellular Phone

- ***Yellow Signal Strength.*** This flag indicates that the signal strength recognized by the cellular transceiver is at a minimum acceptable level. Measured strength would fall between 40 to 60 units. If a directional antenna is being used, a change as to the direction in which it is pointing or raising the antenna to clear the line of sight may be necessary.
- ***Red Signal Strength.*** This flag indicates that the signal strength recognized by the cellular transceiver is below the minimum acceptable level. Measured strength would fall below 20 units. This signal strength may cause problems in connection to the cellular network. This indication may mean that the antenna is missing, or the cable is damaged.
- ***Low Battery.*** This flag indicates that the backup battery voltage has reached a defined threshold in which only minimal operational time is left for the phone. The phone will monitor the voltage on the battery to determine when it has been charged sufficiently.
- ***Discharged Battery.*** This flag indicates that the backup battery voltage has reached a defined threshold in which the phone will no longer be operational until the battery has been recharged to a sufficient level.
- ***No Cellular Service.*** This flag is reserved for future use.

Selecting the report mask (continuation)

- **Primary Power Loss:** If this flag is selected, the phone will monitor the alternating current powering the cellular transceiver and the payphone. If a loss of power should occur, the payphone will go into a low power mode. This effectively turns off the transceiver until AC power is returned. This flag will be set if the power loss is recognized continuously for a period of 60 seconds or more. This flag automatically resets upon detection of the return of alternating current.

d. Select **Post Edit** to save your changes.

e. Select **Exit** to return to the Main Menu.

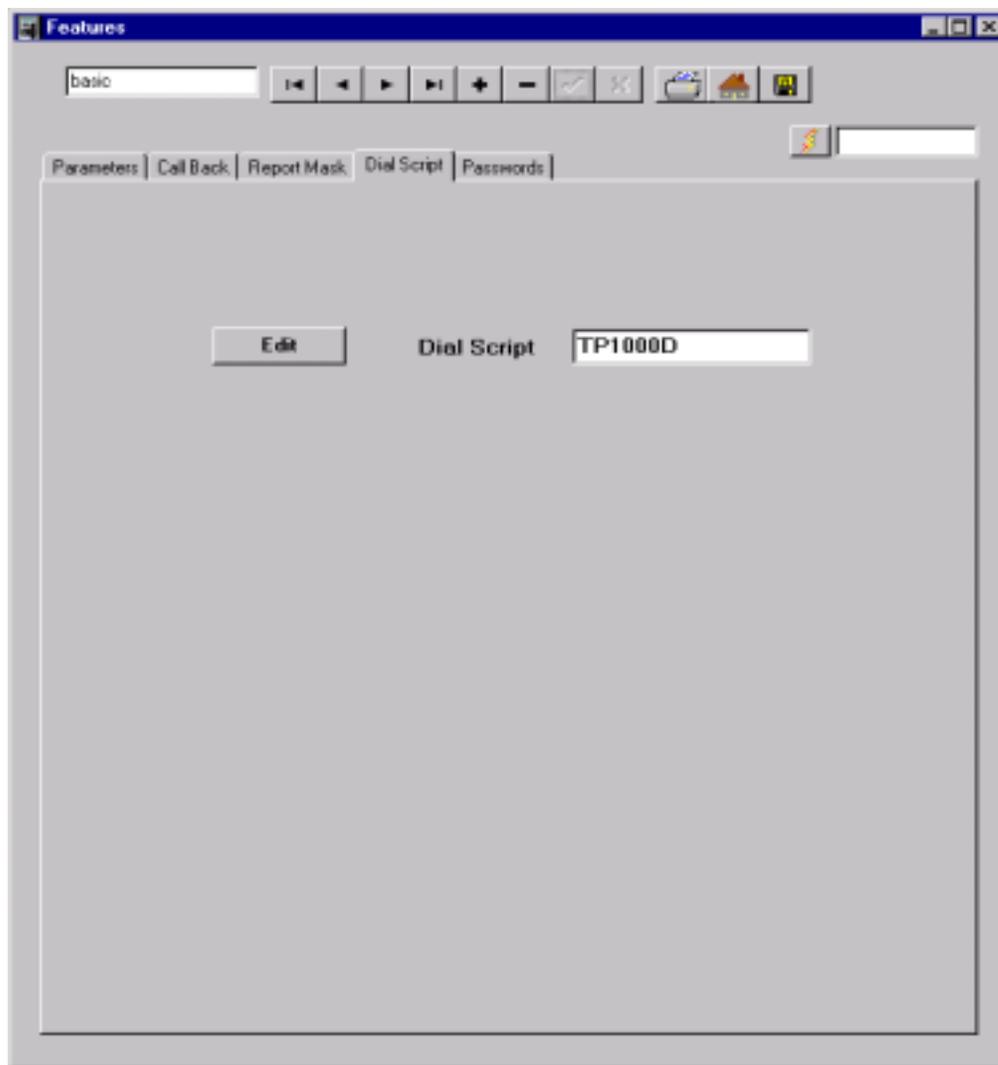
This completes the steps necessary to select the Report Mask options. Proceed to the sections titled “*Configuration*”, “*Configuring the default dialing script.*”

Configuring the default dialing script

Configuring the default dialing script

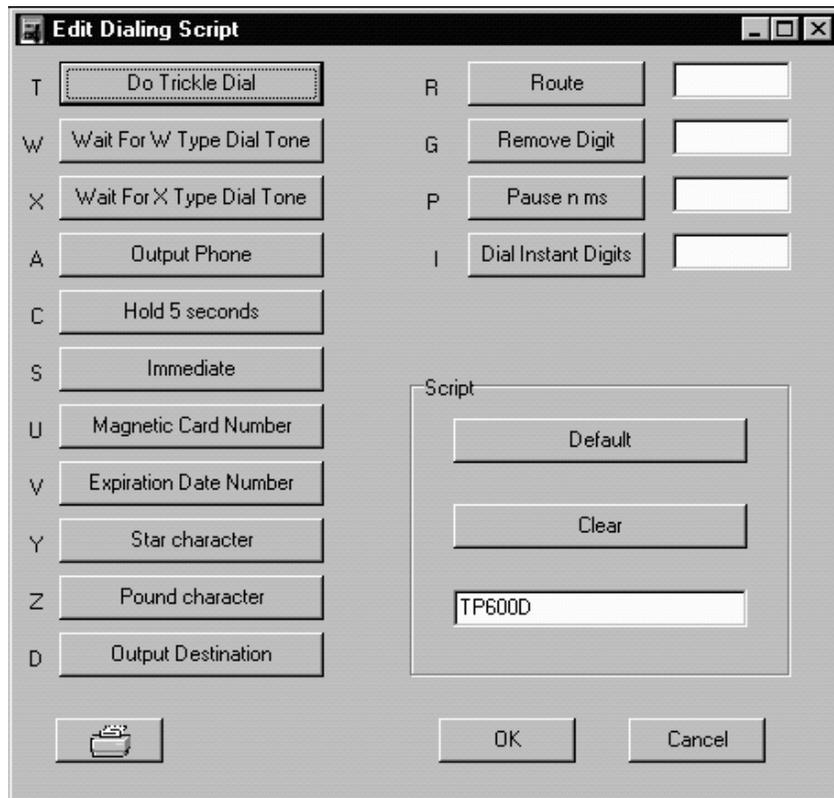
The next step required for setting up the program is to configure the default dialing script for the payphone. The dialing script contains the commands that instruct the paystation on actions to be taken every time a number is dialed on to the line. This is the Dialing Script that will be used by the payphone for all calls except in those cases when a Custom Dialing Script has been defined for a particular pattern in the Call Handling File and Dialing Script File.

- a. Beginning from the Main Menu screen, select the following options: *File, Features*.
- b. Select the **Dial Script** tab. (The default is set to **TP600D**)
- c. Select a file by using the edit button at the top of screen, to edit an existing Features File or continue to the next step.



- d. Press the [Edit] button to open the "Edit Dialing Script" screen.

Configuring the default dialing script (continuation)



- e. **Do Trickle Dial:** Clicking this push-button generates the command that instructs the payphone to gradually pulse out each digit being dialed, at programmed Trickle Dial Delay (in *Features/Parameters* section), from the moment the destination's phone number is entered. Then, after the user pays for the call or the payphone determines that the call is toll free, the remaining digits in the destination's phone number will be sent at normal speed. This is done in some systems to avoid an inactivity time out condition.
- f. **Wait For W Type Dial Tone:** Clicking this push-button generates the command that instructs the payphone to wait until a dial tone type "W" is detected before continuing with the dialing script. The frequency of the W-type dial tone is specified on the "Passwords" screen.
- g. **Wait For X Type Dial Tone:** Clicking this push-button generates the command that instructs the payphone to wait until a dial tone type "X" is detected before continuing with the dialing script. The frequency of the X-type dial tone is specified on the "Passwords" screen.
- h. **Output Phone:** This option sends the number of the pay phone to the line. The phone number assigned to the line the pay phone is connected to is commonly used as an account number by operator service or long distance services.
- i. **Hold 5 seconds:** Inserts a 5 second pause between one command and the next.
- j. **Immediate:** This option starts the dialing script scenario and executes all selected options immediately as the phone identifies this pattern as a custom dialing script.

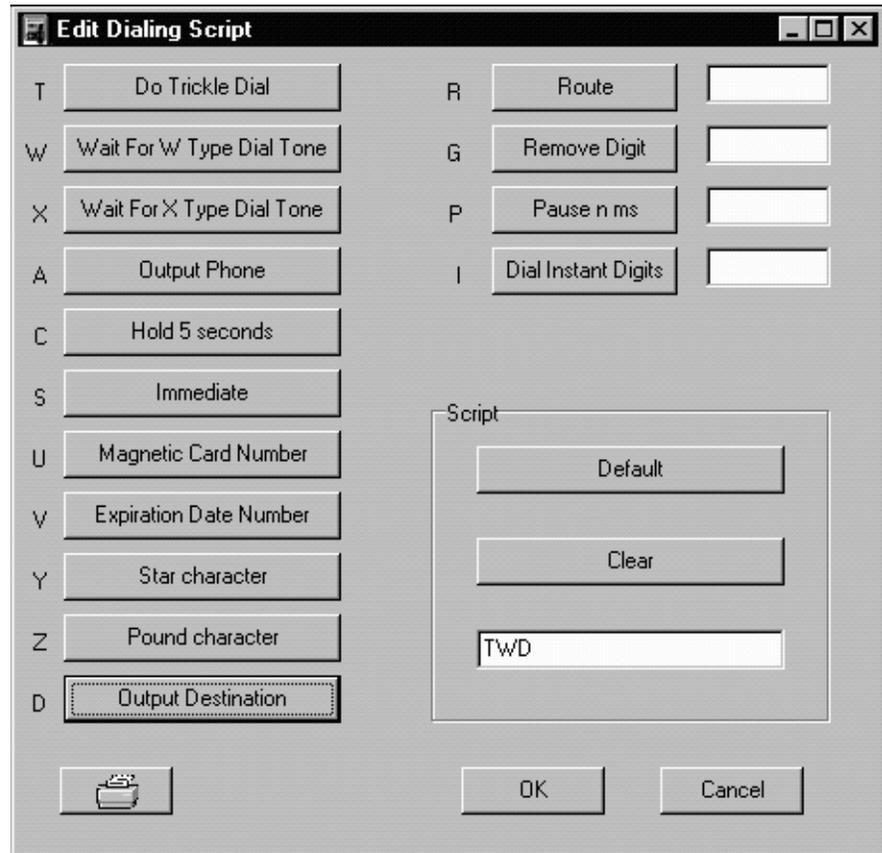
Configuring the default dialing script (continuation)

- k. **Magnetic Card Number:** By selecting this option, the number of the credit card, as entered by the user, is sent out to the authorization / validation center.
- l. **Expiration Date:** By selecting this option, the expiration date of the card, is sent to the authorization / validation center.
- m. **Star (*) character:** By selecting this option, an asterisk is inserted as a separator between commands. This is according to the format required by the authorization / validation center.
- n. **Pound (#) character:** By selecting this option, a pound character is inserted as a separator between commands. This is according to the format required by the authorization / validation center.
- o. **Output Destination:** This option generates the command that instructs the payphone to dial out the digits actually dialed by the user.
- p. **Route:** This feature allows the call to be re-directed to an intermediate processing facility such as an operator service provider, or long distance carrier. This facility will then forward the call to the user's destination number as dialed. *See examples at the section titled "Configuration", "Custom Dialing Script"*
- q. **Remove Digits:** This option allows the removal of unneeded digits.

NOTE: This command "G" must follow "D", output destination.
- r. **Pause n ms:** Adds a pause to the script. Enter the pause duration in milliseconds in the field on the right. The range for this field is 0 to 9999.
- s. **Dial Instant Digits:** This is the dial parameter string. Enter the digits that should be added to the destination's phone number in the field on the right up to a maximum of 12 digits.
- t. **Default:** Click here to use the standard series of commands defined as the Default Dialing Script.
- u. **Clear:** Click here to remove the dialing script.
- v. Select **Post Edit** to save your changes.
- w. Select **Exit** to return to the Main Menu.

Dial Script Examples

Dialing Script: TWD

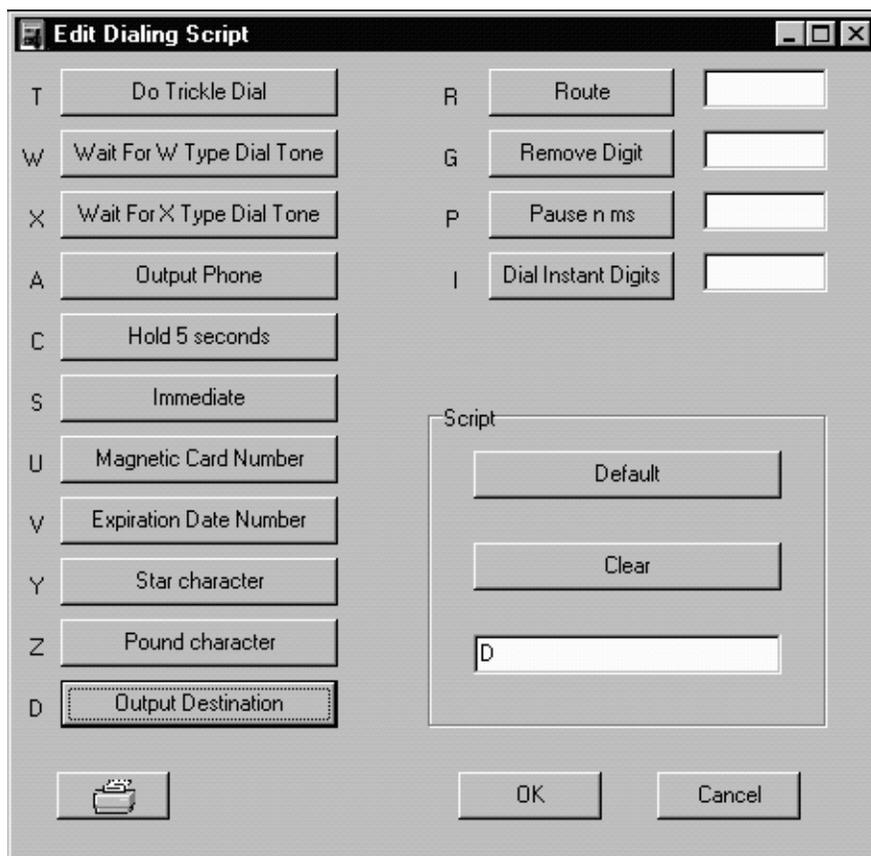


When central office (inactivity) time out is set to short intervals, trickle dial should be selected to maintain the line availability to the user

- T** instructs the payphone to send digits to the line using the delay timer in the features parameters screen in order to maintain the line. (use the trickle dial field in features, parameters to specify amount of time)
- W** instructs the payphone to wait for dial tone frequency or frequencies as specified in the passwords section of the features file.
- D** instructs the payphone to dial the destination number as entered by the user. The number is dialed after the coins to cover the base rate have been deposited.

Dial Script Examples- continuation

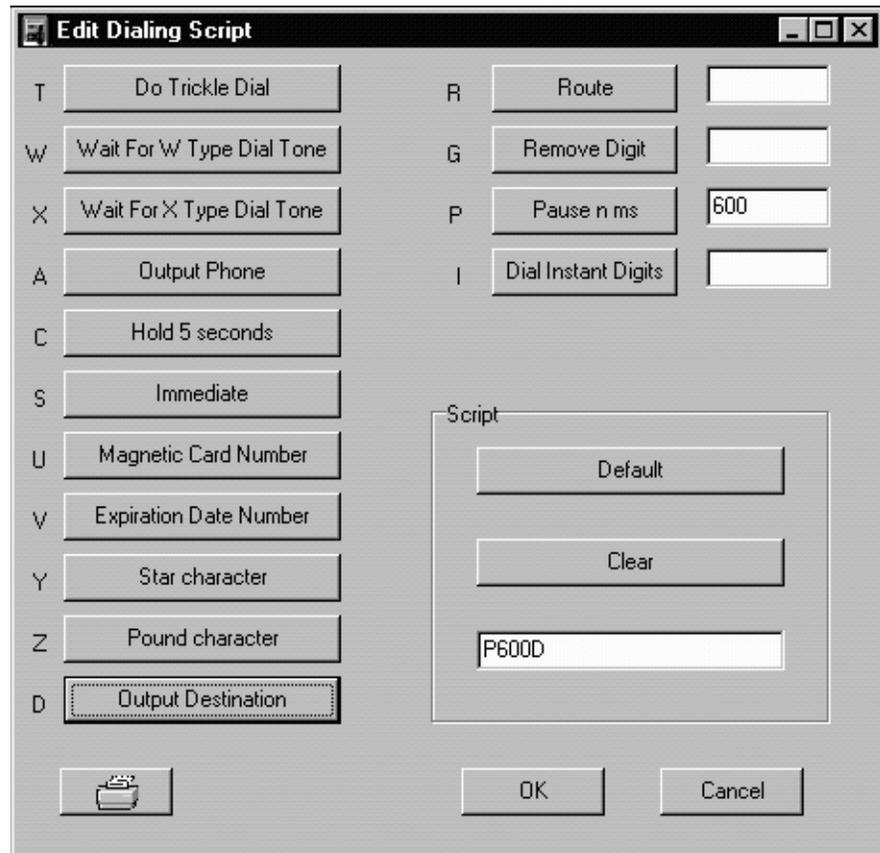
Dialing Script: **D**



- D** sends the digits directly to the line as dialed by the user, but will do so only after the base rate has been deposited. This dialing script should only be used with cellular applications.

Dial Script Examples- continuation

Dialing Script: **P600D**



- P** instructs the payphone to pause before sending the digits to the line (600 milliseconds is the amount of time the payphone will pause. (valid range is from 0-9999))
- D** instructs the payphone to dial the destination number as entered by the user, only after the base rate has been deposited.

Dial Script Examples- continuation

Dialing Script: **TP600D**

The screenshot shows the 'Edit Dialing Script' dialog box. It features a grid of buttons for various dialing actions. The 'D' button, 'Output Destination', is highlighted with a dashed border. The 'P' button, 'Pause n ms', has a text field next to it containing the value '600'. The 'Script' section contains a text field with the text 'TP600D'. The dialog also includes 'OK' and 'Cancel' buttons at the bottom right, and a printer icon at the bottom left.

- T** instructs the payphone to send digits to the line using the trickle dial delay timer in the features, parameters screen to specify the amount of time between digits. This will allow the payphone to maintain the line for an extended period of time.
- P** instructs the payphone to pause before sending the digits to the line. (600) milliseconds is the amount of time the payphone will pause. (valid range is from 0-9999)
- D** instructs the payphone to dial the destination number as entered by the user, only after the base rate has been deposited.

Configuring the dial tone definitions

Configuring the dial tone definitions

The next step for setting up the program is to configure the dial tone definitions for the payphone. This is where the frequency pairs for Dial Tone “X” and “W” will be defined. This selection is necessary only if you’re using dialing scripts TWD or TXD or any custom dialing script that uses W or X on its pattern.

- a. Beginning from the Main Menu screen, select the following options: *File, Features*.
- b. Select a file by using the edit button at the top of screen to edit an existing Features File or continue to the next step.

This section determines the specific dial tone frequencies the pay phone will require to be present before sending digits to the line if (W) or (X) are included in the dialing script. Dial tone often consists of two different frequencies being generated in tandem to Contact the phone company from which you receive service to obtain information pertaining to the dial tone frequency.

The screenshot shows a window titled "Features" with a toolbar at the top containing navigation and editing icons. Below the toolbar is a text field containing "basic" and a currency symbol icon. The window has several tabs: "Parameters", "Call Back", "Report Mask", "Dial Script", and "Passwords". The "Parameters" tab is active, showing two sections: "Frequency Pair For Dialtone W" and "Frequency Pair For Dialtone X". Each section has two input fields for "Frequency 1" and "Frequency 2", both containing the value "440" and "350" respectively. To the right, the "Passwords" tab is visible, showing four empty input fields for "Password 1" through "Password 4".

Dial Tone Type W comes predefined in ProNet as 440 + 350 Hz (US standard).

- c. Frequency Pair for Dial Tone Type W.
 - Frequency 1. Specify the first frequency of the W- type dial tone pair.
 - Frequency 2. Specify the second frequency of the W- type dial tone pair. Enter “0” if the Dial Tone is not modulated by a second frequency.

- d. Frequency Pair for Dial Tone Type X.
 - Frequency 1. Specify the first frequency of the X- type dial tone pair.
 - Frequency 2. Specify the second frequency of the X- type dial tone pair. Enter “0” if the Dial Tone is not modulated by a second frequency.
- e. PASSWORDS. Password 1-4 are reserved for future use.
- f. Select *Post Edit* to save your changes.
- g. Select *Exit* to return to the Main Menu.

This completes the steps necessary to build or to edit the Features File. Proceed to the section titled “*Coin Table File*”

Coin Table File

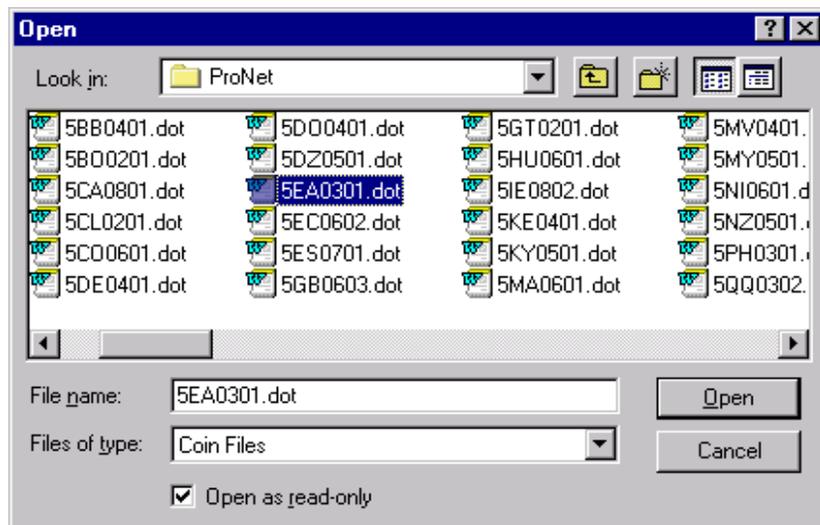
Importing the Coin Table file

In order for the paystation to identify the coins and/or tokens being used in a particular location, a Coin Table file must be imported into ProNet. The Coin table file is provided by Protel and it is specifically designed for a particular country and paystation model. The steps to import a Coin Table are as follows:

- a. Copy the coin file from the application disk provided to C:\PROGRAM FILES\PRONET\SYSTEM subdirectory. Use Windows' File Manager or the MS-DOS "COPY" command.
- b. To import a coin file into the computer, from the *Main Menu*, go to the section *Admin., Import Coin File*. A screen similar to this one will be displayed.



- c. Select the [Import Coin File] button. A screen similar to this one will be displayed.



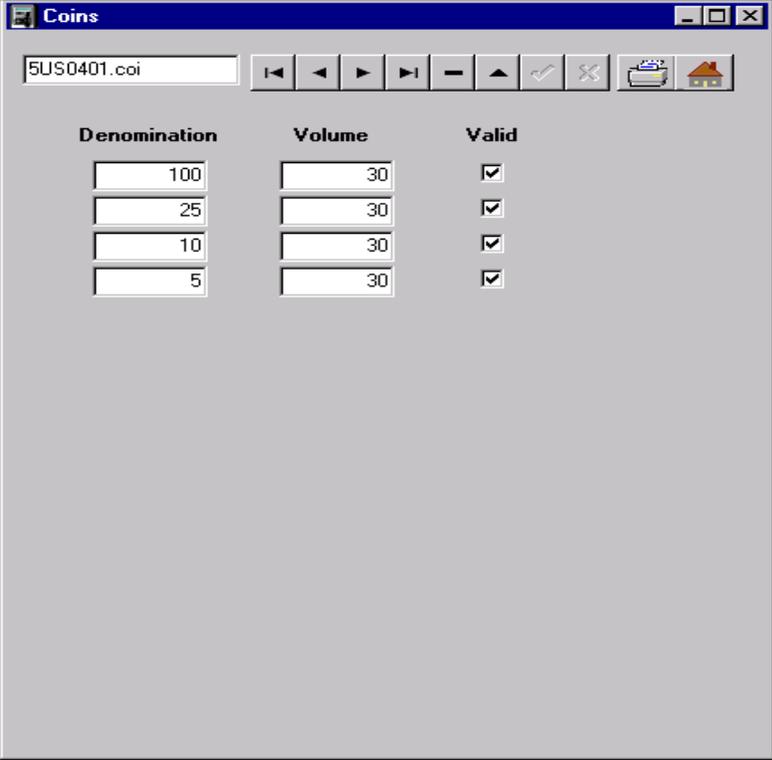
- d. Browse and select the desired coin file and select [OPEN] to convert it to the binary format.
- e. Wait until a message "Done" is displayed at the bottom of the Import window.
- f. *Exit* to return to the Main Menu.

This completes the steps necessary to import a coin file. Proceed to the sections titled "*Configuration*", "*Verifying an Imported Coin Table*"

Verifying an Imported Coin Table

Once a coin table is imported, it can be verified or edited depending on the customer specifications.

- a. Beginning from the Main Menu screen, select the following options: *Files, Coins*.
- b. Select a coin using the edit buttons. A screen similar to this one will be displayed.



The screenshot shows a window titled "Coins" with a file name "5US0401.coi". Below the file name is a toolbar with navigation and control icons. The main area contains a table with three columns: Denomination, Volume, and Valid. The table has four rows of data.

Denomination	Volume	Valid
100	30	<input checked="" type="checkbox"/>
25	30	<input checked="" type="checkbox"/>
10	30	<input checked="" type="checkbox"/>
5	30	<input checked="" type="checkbox"/>

- c. If necessary you can disable a coin denomination, simply remove the respective check mark ✓ on the column Valid.
- d. If your coin file is Training compatible, you can also disable the Train for a particular coin denomination, by removing the respective check mark ✓ on the column Train.

Training: The method of training consists of use of a dynamic coin file that adapts itself to the coin mech being used by the payphone. This is used to increase the selectivity of the Electronic Coin Scanner (ECSII)/ECSII option board assembly to ensure that only the valid coins will be accepted and all others rejected. Trained coin files are usually created when there are two coins that will require a tight separation and a regular coin file might not be enough. Being a dynamic file, every time coins are deposited the coin table is updated. That also creates the necessity to reset this file every time the Electronic Coin Scanner (ECSII)/ECSII option board is modified/replaced.

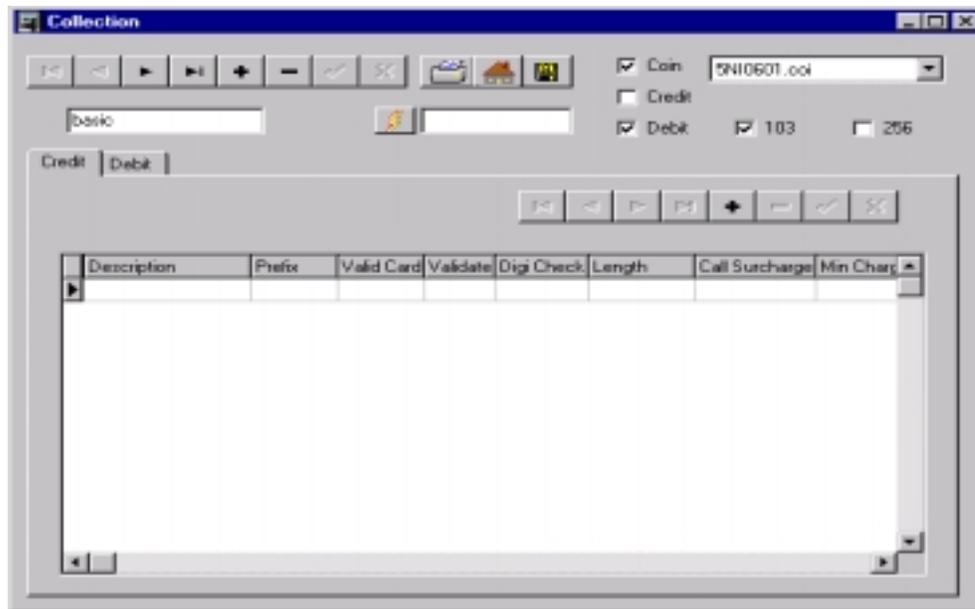
- e. Select *Post Edit* to save your changes.
- f. Select *Exit* to return to the Main Menu.

Proceed to the section titled “*Configuration*”, “*Collection File*”

Collection File

Creating or editing the Collection File

- a. Beginning from the Main Menu screen, select the following options: *Files, Collection*.
- b. Now you will see the screen below, which is itself composed of two additional screens:
 - Credit (default)
 - Debit



Collection Method

Selecting a collection method

- a. Select the collection methods by placing a check mark ✓ that apply to the payphone group being used. These methods are:
 - Coin (Token)
 - Credit (Credit Card)
 - Debit, either the GPM 103 or GPM 256 types

NOTE

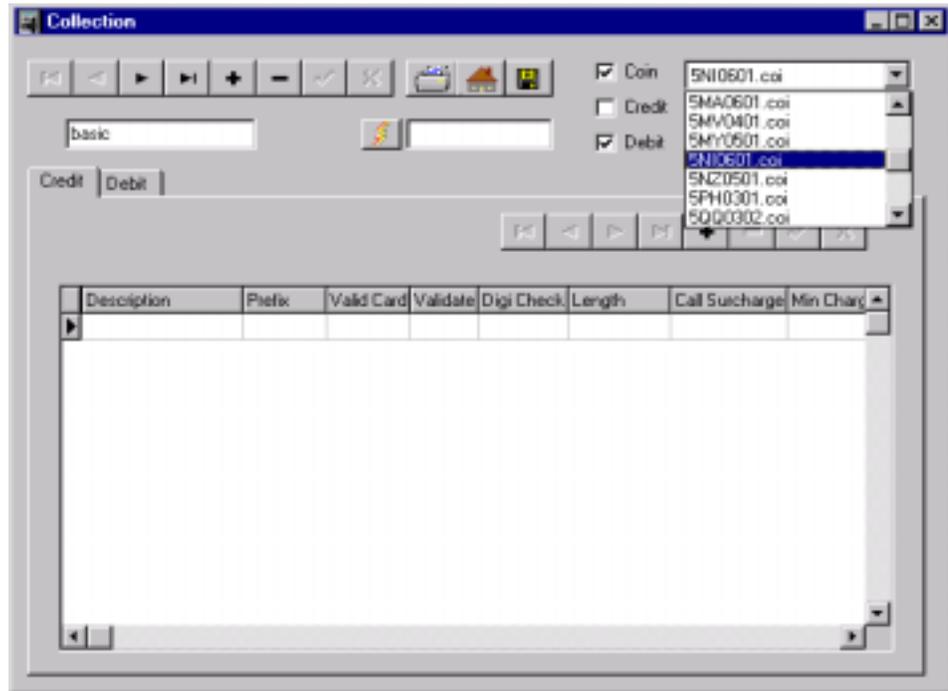
The same payphone may use multiple collection methods, depending on the type of phones and your requirements.

Proceed to the section titled “*Configuration*”, “*Coin/Token Definition*”

Coin/Token definition

Defining the Coin/Token being used

- a. At the screen, you have selected coin/token method, now use the drop down arrow to select the appropriate coin file to be used. A screen similar to this will be displayed.



NOTE: If no coin file is available, there was no coin file imported or the file was corrupted during importation.

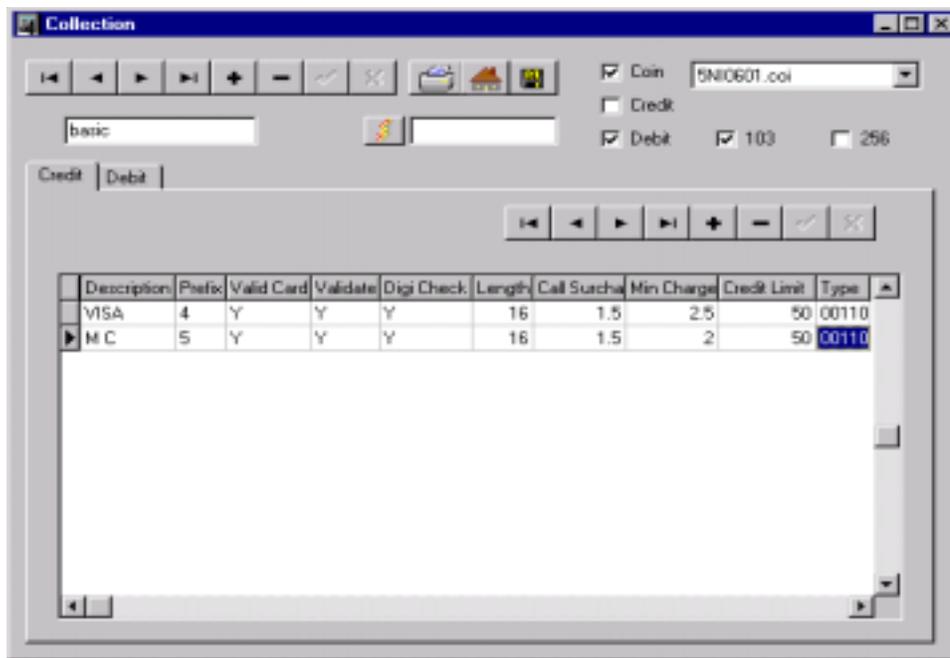
- b. Select *Post Edit* to save your changes.
- c. If this is the only collection method to be used, select *Exit* to return to Main Menu. Otherwise proceed to the section titled “*Configuration*”, “*Credit Card Definition*”

Credit Card definition

Defining the credit cards being used

The next step required for setting up ProNet is to define the Credit Cards being used for the payphone's Collection Files.

- a. Select the credit tab. (A screen similar to this one is displayed for editing.) Select a file to edit an existing Collection File or continue to the next step.



Adding a Credit Card definition

- a. To add a new Credit Card definition, press the Insert Record  button. (These squares are selection areas. Double-click on them to select rows.) All this information will be provided by the credit card validation center.
 - **Description:** Is this a Visa, Master Card, etc.? Enter the card's name.
 - **Prefix:** Enter the first four digits of the card accounts that will be accepted.
 - **Valid Card:** Is this card valid? Enter "Y" for Yes or "N" for No.
 - **Validate:** Should the phone call a validation center to verify the credit card? Enter "Y" for Yes or "N" for No.
 - **Digi Check:** Should the phone perform a modulo-10 check to verify the credit card number? Enter "Y" for Yes or "N" for No.

Credit Card definition (continuation)

- **Length:** Enter the number of digits in the credit card account number.
 - **Charge 1-3:**
 - 1: Call Surcharge- this field is used to specify the amount to be charged by pay phone provider in addition to the call charge.
 - 2: Minimum Charge- this field is used to specify the minimum amount that will be charged to the credit card account used in making a call.
 - 3: Credit Limit- this field is used to specify the maximum amount that can be charged to a specific account per phone call.
 - **Call Type:** Reserved for future use.
- b. Select **Save as**  to save your changes. You will be prompted to name the Collection File.
- c. **Exit** to return to the Main Menu or proceed to the section titled “Configuration”, “Debit Card Definition”

Editing a Credit Card definition

- a. To edit a Credit Card definition click on the square, and modify the data in that row. Enter the new information.
- b. Select **Post Edit**  to save your changes.
- c. Select **Exit**  to return to the Main Menu.

Deleting a Credit Card definition

- a. To delete a credit card definition click on the square on the left side window of the row you wish to edit.
- b. Select **Post Edit**  to save your changes.
- c. Select **Exit**  to return to the Main Menu.

NOTE

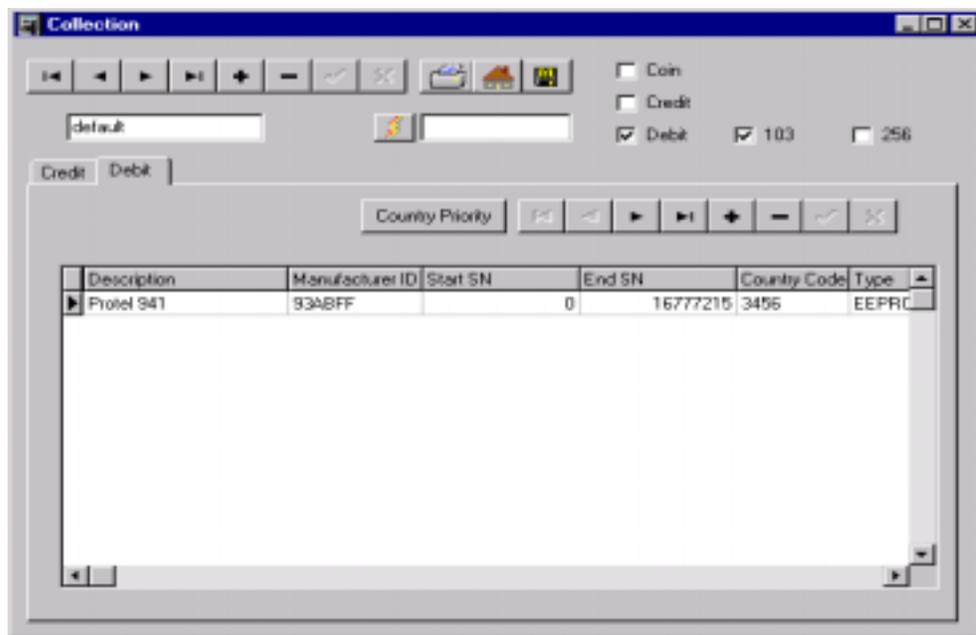
A confirmation window will prompt if you want to delete record. Press [OK] to delete or [CANCEL] if you do not.

Debit card definition

Defining the Debit Cards being used

The next step required for setting up ProNet is to define the debit cards being used for the payphone's Collection Files.

- a. Select the **Debit Tab**. (A screen similar to this one is displayed for editing.) Select a file by using the edit buttons on top of screen to edit an existing Collection File or continue to the next step if creating a new file.



Adding a debit card definition

- a. To add a new debit card definition press the **Insert Record**  button. All this information will be provided by the debit card manufacturer or by Protel Technical Support.
 - **Description:** Enter the card's name of manufacturer.
 - **Manufacturer ID:** Enter the manufacturer's ID code in hexadecimal numbers.
 - **Starting SN:** Please specify the initial value, in decimal, for the Serial Number range that the phone will accept for a given (specific) lot of debit cards. The maximum possible range for this lot will be 0 through 16777215
 - **Ending SN:** Please specify the final value, in decimal, for the Serial Number range that the phone will accept for a given (specific) lot of debit cards. The maximum possible range for this lot will be 0 through 16777215
 - **Country Code:** Enter the country code in hexadecimal numbers.
 - **Type:** Enter the EEPROM type number. (For example: EEPROM 103 or EEPROM 256.)

Debit card definition (continuation)

- **Total Counter:** Please enter the number of counters used in this card. Each counter is a binary memory location used to store the card's information. Only used for EEPROM 103.
- **MSB Counter:** Most Significant Counter. Please enter the number for the main counter in this card. Only used for EEPROM 103.
- **Protel:** Enter "Y" if this is a Protel's debit card, enter "N" if it is not.
- **Valid:** Enter "Y" if this is a valid debit card, enter "N" if it is not.
- **Unit Value:** Please enter the monetary value assigned to each unit in the card, in cents.

b. Select **Post Edit** to save your changes.

c. Select **Exit** to return to the Main Menu.

Editing a Debit Card definition

a. To edit a Credit Card definition click on the square, and modify the data in that row. Enter the new information.

b. Select **Post Edit** to save your changes.

c. Select **Exit** to return to the Main Menu.

Deleting a Debit Card definition

a. To delete a debit card definition click on the square on the left side window of the row you wish to edit.

b. Select the **Minus button** located slightly above the description column.

The selected debit card definition will disappear.

c. Select **Post Edit** to save your changes.

d. Select **Exit** to return to the Main Menu.

NOTE

A confirmation window will prompt if you want to delete record. Press [OK] to delete or [CANCEL] if you do not.

Debit card definition (continuation)

Debit Card definition example:

a) Validating a debit card range:

The ProNet Administrator receives a lot of debit cards to be enabled to use in the payphones. The lot of debit cards (Card A) is divided into two groups, 0 to 9999 and 25000 to 16777215. Then, for Card type A, two ranges of debit cards have been created, one going from Serial Number 0 through 9999 and the other one from Serial Number 25000 through 16777215. See lines 1 and 2 below.

Note that debit cards corresponding to Serial Numbers 10000 through 24999 have not been defined, therefore the payphones will not recognize these cards as valid. (Invalid by omission)

A whole lot of new debit cards (Card B) containing all possible Serial Numbers is later received. A new line in the Debit Card screen is defined for Serial Numbers 0 through 16777215 as valid for this type of cards. See line 3 below.

Descriptio	Manufact	Start SN	End SN	Country Cod	Type	Total	M	S	B	Protel	Valid	Unit	Val
New 941	102BFF	0	16777215	3456	EEPROM 10	4		3	Y	Y	Y	25	
White 103	102BFF	0	16777215	5052	EEPROM 10	4		3	Y	Y	Y	25	
Protel 941	93ABFF	0	16777215	3456	EEPROM 10	4		3	Y	Y	Y	25	

b) Invalidating a debit card range:

Afterwards, a lot of 150 debit cards type B has been stolen. This lot must be invalidated. A fourth line in the Debit Card screen is defined to invalidate Serial Numbers 551-700 for Card B by setting “N” in the column *Valid*. (Invalid by blocking) See line 4.

Note: The ProNet Administrator can have all ranges of debit cards to be used, predefined and entered on the Collection file, but set as invalid (“N”) When the cards start being distributed on the market, the ProNet Administrator only has to change the *Valid* field to “Y” and perform a Batch Polling to download this new information to all payphones.

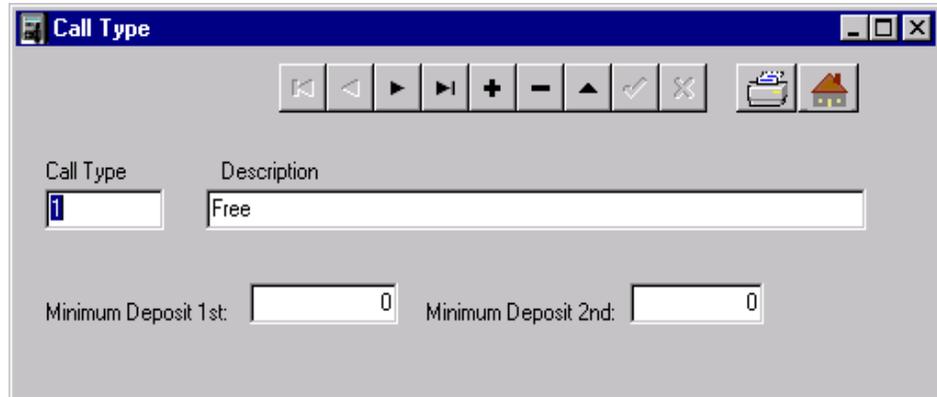
This completes the steps necessary to build or to edit the Collection File. Proceed to the sections titled “*Configuration*”, “*Call Type*.”

Call Type description

Defining the Call Type descriptions

The next step required for setting up ProNet is to define the call type descriptions. This window allows the system operator to assign descriptions to each call type.

- a. Beginning from the Main Menu screen, select the following options: *Files, Call Type*. A screen similar to this one is displayed for editing.



WARNING!
Call Type 1 is to be used only for free calls.

- b. Select the *Insert Record*  button. Enter a number between 1 and 127 for the call type.
- c. Enter a description for the Call Type, if desired. (Emergency call, customer service, etc.)
 - **Min Deposit 1st:** When using Timing Pulse as Rating Method, please define the minimum deposit required for the first period. The amount required should be at least sufficient for 60 seconds of talk time.
 - **Min Deposit 2nd:** When using Timing Pulse as Rating Method, please define the minimum deposit required for the additional periods.

NOTE: In order to set up the minimum deposits, it is necessary to know (from the C.O.) the unit value of the pulse and for each Call Type the number of pulses per minute.

EXAMPLE: The charge for local calls is 10 cents per impulse, impulses come every 20 seconds. Use 90 cents as the minimum deposit to give the user 3 minutes of talk time. This keeps the user from starting a call using 10 cents, only to be disconnected 20 seconds later. Secondary period works in the same manner for sequential periods.

- d. Select *Post Edit*  to save your changes.
- e. Select *Exit*  to return to the Main Menu.

Editing a Call Type definition

- a. To edit a Call Type definition, first find the file you wish to edit.
- b. Select *Post Edit* to save your changes.
- c. Select *Exit* to return to the Main Menu.

Deleting a Call Type definition

- a. To delete a Call Type definition, find the file you wish to delete.
- b. Select *Delete Record* to erase record and save your changes.
- c. Select *Post Edit* to save your changes.
- d. Select *Exit* to return to the Main Menu.

This completes the steps necessary to define the Call Type description. Proceed to the sections titled “*Configuration*”, “*Custom Dialing Script*.”

NOTE: Call Type 1 is reserved for free calls only, and should not be assigned to any pattern that is not intended to be used as a free call.

Configuring the Custom Dialing Script

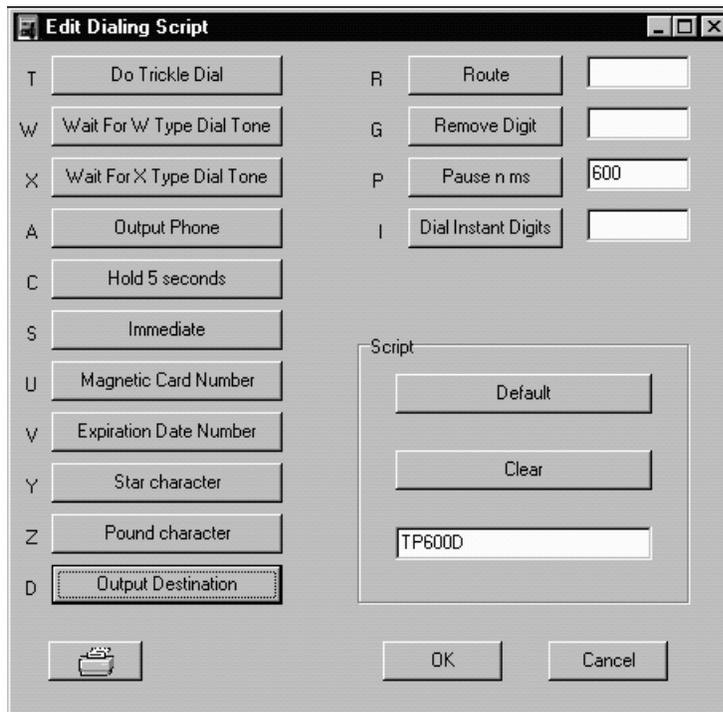
Configuring the custom dialing script

The next step required for setting up ProNet is to configure the optional Custom Dialing Script files for the payphone. The Custom Dialing Script is used when the number entered by the user needs to be modified in order to achieve specific functions such as re-route, removing or adding digits, magnetic card sequencing, special pauses, etc. This Custom Dialing Script, when selected in Call Handling, will override the original Dial Script defined in the Features File for the patterns to which it is assigned.

- a. Beginning from the Main Menu screen, select the following options: *Files, Custom Dialing Script.*



- b. A screen similar to this one is displayed for editing. Select a file to edit an existing Custom Dialing Script File or continue to the next step if creating a new file.
- c. Select **Insert Record**  and type in a new file name.
- d. Click [EDIT SCRIPT] to display the following screen.



Custom Dialing Script (continuation)

- e. **Do Trickle Dial:** Clicking this push-button generates the command that instructs the payphone to gradually pulse out each digit being dialed, at programmed Trickle Dial Delay (in *Features/Parameters* section), from the moment the destination's phone number is entered. Then, after the user pays for the call or the payphone determines that the call is toll free, the remaining digits in the destination's phone number will be sent at normal speed. This is done in some systems to avoid an inactivity time out condition.
- f. **Wait For W Type Dial Tone:** Clicking this push-button generates the command that instructs the payphone to wait until a dial tone type "W" is detected before continuing with the dialing script. The frequency of the W-type dial tone is specified on the "Passwords" screen.
- g. **Wait For X Type Dial Tone:** Clicking this push-button generates the command that instructs the payphone to wait until a dial tone type "X" is detected before continuing with the dialing script. The frequency of the X-type dial tone is specified on the "Passwords" screen.
- h. **Output Phone:** This option sends the number of the pay phone to the line. The phone number assigned to the line the pay phone is connected to is commonly used as an account number by operator service or long distance services.
- i. **Hold 5 seconds:** Inserts a 5 second pause between one command and the next.
- j. **Immediate:** This option starts the dialing script scenario and executes all selected options immediately as the phone identifies this pattern as a custom dialing script.
- k. **Magnetic Card Number:** By selecting this option, the number of the credit card, as entered by the user, is sent out to the authorization / validation center.
- l. **Expiration Date:** By selecting this option, the expiration date of the card, is sent to the authorization / validation center.
- m. **Star (*) character:** By selecting this option, an asterisk is inserted as a separator between commands. This is according to the format required by the authorization / validation center.
- n. **Pound character:** By selecting this option, a pound character is inserted as a separator between commands. This is according to the format required by the authorization / validation center.
- o. **Output Destination:** This option generates the command that instructs the payphone to dial out the digits actually dialed by the user.
- p. **Route:** This feature allows the call to be re-directed to an intermediate processing facility such as an operator service provider, or long distance carrier. This facility will then forward the call to the user's destination number as dialed. *See examples at the section titled "Configuration", "Custom Dialing Script"*
- q. **Remove Digits:** This option allows the removal of unneeded digits.

NOTE: This command "G" must follow "D", output destination.

- r. **Pause n ms:** Adds a pause to the script. Enter the pause duration in milliseconds in the field on the right. The range for this field is 0 to 9999.

Configuration

Custom Dialing Script (continuation)

Custom Dialing Script (continuation)

- s. **Dial Instant Digits:** This is the dial parameter string. Enter the digits that should be added to the destination's phone number in the field on the right up to a maximum of 12 digits.
- t. **Default:** Click here to use the standard series of commands defined as the Default Dialing Script.
- u. **Clear:** Click here to remove the dialing script.
- v. Select **Post Edit** to save your changes.
- w. Select **Exit** to return to the Main Menu.

Custom Dialing Script Examples

Example 1: For long distance calls, these will be forwarded to a carrier that provides access at a better rate. The access number is 1 800 925 8882, then a second dial tone will prompt the payphone to automatically dial an access number 1234567890 and then a third dial tone will prompt it to dial the destination number. Using Reroutes as R1=1 800 925 8882 and R2=1234567890 (defined at Features Callback screen)

Custom Dialing Script: **TWR1WR2WD**

Number dialed by user: 1 305 699 8877
Number dialed by phone: 1 800 925 8882 1234567890 1 305 699 8877
R1 R2 D

Example 2: Same example as above, but instead of 2nd and 3rd dial tones, carrier prompts with Bong tones. Let's assume that the Bong tone interval is 3 seconds on the first bong and 0.5 seconds on the second one.

Custom Dialing Script: **TWR1P3000R2P500D**

Number dialed by user: 1 305 699 8877
Number dialed by phone: 1 800 925 8882 1234567890 1 305 699 8877
R1 R2 D

Example 3: Same as first example, but instead of providing an access number, we must send the payphone number (777-3055) that is generating the call.

Custom Dialing Script: **TWR1AWD**

Number dialed by user: 1 305 699 8877
Number dialed by phone: 1 800 925 8882 7773055 1 305 699 8877
R1 A D

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Example 4: International calls dialed without a particular carrier will go through a carrier specified by the payphone operator. User dials a 011+ number and phone will add the 10299 to it as carrier.

Custom Dialing Script: **TP1000I10299D**

Number dialed by user: 01155192521090

Number dialed by phone: 10299 01155192521090

I D

Example 5: International calls are dialed using a particular carrier 10777, that no longer exists. In order to not lose the call, we accept the dialing pattern 10777, but remove the first 5 digits from the number.

Custom Dialing Script: **TP1000DG5**

Number dialed by user: 10777 01155192521090

Number dialed by phone: 01155192521090

Example 6: We could also add a carrier specified by the payphone operator (ex- 10299).

Custom Dialing Script: **TP1000I10299DG5**

Number dialed by user: 10777 01155192521090

Number dialed by phone: 10299 01155192521090

I D

This completes the steps necessary to select the Default Dialing Script. Proceed to the sections titled "*Configuration*", "*Rate Files*"

Defining the Rate Files

Defining the Rate Files

The next step required for setting up ProNet is to configure the Rate Files. Here we define the basic rates that the paystation will charge for calls to different numbers, including reduced rates for holidays and/or weekends. The Rate Files will be used in the Call Handling File.

- a. Beginning from the Main Menu screen, select the following options: *Files, Rate*.
- b. A screen similar to this one is displayed for editing. Select a file to edit an existing Rate File or continue to the next step if creating a new one.

	RATE	PERIOD	FOREIGN AMOUNT
Initial	0.25	60	
Secondary	0.25	60	

Use foreign amount to calculate rates

- c. Select **Insert Record**  and type in a new file name.
- d. Enter the information required as follows:
 - **Initial Rate:** The initial rate being charged during the initial period. (For example type "0.1" for ten cents charged for the initial period.
 - **Initial Period:** The initial period is defined in seconds.
 - **Secondary Rate:** The secondary rate is the rate being charged per secondary period.
 - **Secondary Period:** The secondary period is defined in seconds. If a Secondary Period in a rate table is set to zero, the call will be terminated after the Initial Period expires. This feature can be used to limit a call duration to the initial period only.

In the example shown in the picture above, the call will be charged 25 cents for the first 60 seconds and 25 cents for each additional 60 seconds.

- e. Select *Post Edit*  button, to save your changes.
- f. Select *Exit*  to return to the Main Menu.

Remember: When creating the Rate tables, it might be necessary to create reduced and super-reduced rates to be used in conjunction with the already created Discount Time tables. It will be necessary to define if the discount given will be charging less money for the same period or charging the same amount, and allowing the user to talk longer. This decision is normally made by the Payphone Company's Marketing Department, or operator of the payphone, and must be known in advance to avoid changes during the process.

NOTE: There are several different rates that must be created to have a Call Handling file. Use mnemonics as much as possible to name the rate file. That will be very useful when creating the patterns.

These are some examples of how rates can be used when creating the Call Handling patterns.

Local Calls: We have the base rate (Rate 0) as defined before, 10 cents for the initial period of 3 minutes and 10 cents for every additional period of 3 minutes.

In this example we extended the talk period, instead of reducing the rate. Therefore, we will have two other rates, Local 1 (Rate 1) for the first level of discount, with 10 cents for the initial period of 4 minutes and 10 cents for every additional period of 4 minutes. This will be the reduced rate.

Rate File Examples

	RATE	PERIOD	FOREIGN AMOUNT
Initial	0.1	240	0
Secondary	0.1	240	0

Use foreign amount to calculate rates

The second level of discount is Local2 (Rate 2); 10 cents for the initial period of 5 minutes and 10 cents for every additional period of 5 minutes. This will be the super-reduced rate.

	RATE	PERIOD	FOREIGN AMOUNT
Initial	0.1	300	0
Secondary	0.1	300	0

Use foreign amount to calculate rates

Configuration

Rate Files (continuation)

Rate File Examples

In this case, the user will always deposit the same amount to place a local call, but depending on the time of day and the Discount Time file being used, he might have 3,4 or 5 minutes of talk time.

International Calls: Another approach is to reduce the price of the call, maintaining the same talk time.

In this case the international base rate (Rate 0) is \$3 for 1 minute and \$2.50 for each additional minute.

	RATE	PERIOD	FOREIGN AMOUNT
Initial	3	60	0
Secondary	2.5	60	0

Use foreign amount to calculate rates

The first level of discount (Rate 1) is \$2.50 for 1 minute and \$2 for each additional minute.

	RATE	PERIOD	FOREIGN AMOUNT
Initial	2.5	60	0
Secondary	2	60	0

Use foreign amount to calculate rates

Configuration

Rate Files (continuation)

Rate File Examples

The second level of discount (Rate 2) is \$2 for 1 minute and \$1.75 for each additional minute.

The screenshot shows a window titled "Rate" with a toolbar at the top. Below the toolbar, there are three columns: "RATE", "PERIOD", and "FOREIGN AMOUNT". Under the "Initial" section, the "RATE" field contains "2", the "PERIOD" field contains "60", and the "FOREIGN AMOUNT" field contains "0". Under the "Secondary" section, the "RATE" field contains "1.75", the "PERIOD" field contains "60", and the "FOREIGN AMOUNT" field contains "0". At the bottom of the window, there is a checkbox labeled "Use foreign amount to calculate rates" which is currently unchecked.

Please proceed to the section titled *“Configuration”, “Discount Time”*

Defining the Discount Times

Discounts work in conjunction with the Call Handling pattern selected, discount file used and Rates 0, 1 and 2, for each individual calling pattern.

Defining the Discount Times

The next step required for setting up ProNet is to define the Discount Times files. The Discount times files will be used in the Call Handling File.

- a. Beginning from the Main Menu screen, select the following options: *Files, Discount Calendar*.
- b. A screen similar to this one is displayed for editing. Select a file to edit an existing Discount times file or continue to the next step if creating a new file.

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Holiday																								
Sunday																								
Monday																								
Tuesday																								
Wednesday																								
Thursday																								
Friday																								
Saturday																								

NOTE: The Discount Table uses Level 0 as default (rate without discounts) and is associated to Rate 0 in the Call Handling screen. If the table is blank, then Rate 0 will be used at all times.

- c. Select **Insert Record Button** and type in a new file name.
- d. Enter the information required as follows:
 - Click on the button labeled “Level 1” to apply the first level of discount (reduced rates)- Rate 1 in the Call Handling screen.
 - Next click on the boxes representing the hours of each day when this reduced rate will be applied.
 - Repeat the previous steps to “Level 2” to apply the second level of discount (super-reduced rates)- Rate 2 in the Call Handling screen.
 - The Holidays are considered a special case and therefore will override the predetermined rate for that day of the week. To define which days of the year are holidays, please refer to the Holidays list elsewhere in this manual.

e. Select **Post Edit** to save your changes.

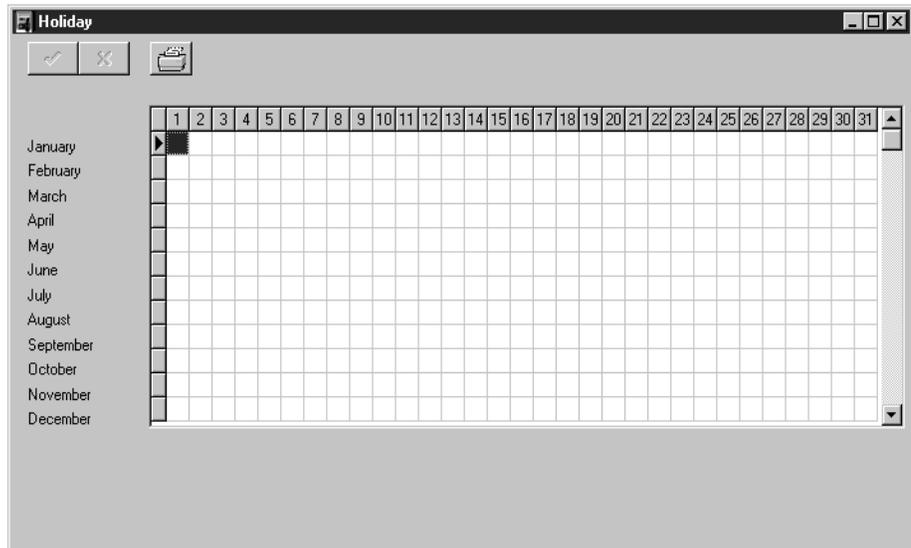
f. Select **Exit** to return to the Main Menu.

Defining The Holiday List

Defining The Holiday List

The next step required for setting up ProNet is to define the Holiday List. The Holiday List determines which days of the year are to be considered as holidays and the same information will be used by all discount tables.

- a. Beginning from the Main Menu screen, select the following options: **Files, Holiday Calendar.**
- b. A screen similar to this one is displayed for editing. There is only one Holiday list, so any changes to this window will affect all Discount Times files and Call Handling files.



- c. Enter the information required as follows:
 - For each of the months (rows) select a day of the month (column).
 - Click in the desired day and month to define that date as a holiday.
 - Repeat for the remaining holidays.
- d. Select **Post Edit** to save your changes.
- e. Select **Exit** to return to the Main Menu.

Creating the call handling file

Creating the call handling file

The **Call Handling** file defines how the payphone will manage calls to phone numbers starting with predetermined number sequences or patterns. A pattern such as “1800” can determine all phone numbers starting with “1-800”, for example. In order to create the Call Handling file it is necessary to have created the Call Type, Custom Dialing Script, Rate, Discount, and Holiday files. The procedure to create the Call Handling file is as follows:

- Beginning from the Main Menu screen, select the following options: **Files, Call Handling**. A screen similar to this one is displayed for editing.
- Select a file to edit an existing Call Handling file or continue to the next step if creating a new file.
- Select the **Insert Record**  button and type in a new file name.

WARNING!

DO NOT EDIT OR MODIFY ANY DEFAULT FILES

Editing the patterns

- In the field labeled “Pattern,” please enter a new pattern or select a pattern by using the buttons on the right or by entering a pattern in the field below and press the “go to”  button.
 - Pattern:** This refers to the different sequence of digits you may encounter (1800, 1900, 911, etc.) Please enter the desired pattern. If you wish you can use the letter “S” for the * (star) symbol and “P” for the # (pound) symbol. A pattern can consist of 1 to 12 digits.
- If desired, a pattern can be defined as a **SpeedDial** number. Type in the Speed Dial field the full number you want the payphone to pulse out when the selected pattern is dialed. Leaving this field empty automatically disables speed dialing for the selected pattern.

Editing the patterns (continuation)

- f. **Min. Digits:** Please enter the minimum number of digits required for the selected pattern. This field can be from 1 to 15 digits.
- g. **Max. Digits:** Please enter the maximum number of digits required for the selected pattern. This field can be from 1 to 15 digits.
- h. Use the drop down arrows to select the “Call Type”, “Custom Dial Script” (optional), “Discount”, and “Rate” files that will be used when a phone number that begins with the selected pattern is dialed. Click on the “View” icon  to see (not edit) the screens corresponding to the fields on the left.

- **Call Type:** Select a Call Type. Click on the “View” icon to review.

If a dialing pattern is selected with “Call Type 1”, (free call) the phone will take in consideration all rates associated with this dialing pattern to initiate the call, display the message free call but will, at the end of the call, refund all moneys deposited.

For dialing patterns selected with “Call Type 1” and “No Answer Detect” the phone will, in addition to the above, ignore all answer supervision/metering pulses supplied by the C.O. and, at the end of the call, refund any moneys deposited.

- **Custom Dial Script:** This selection is optional. Select a Custom Dialing Script if the dialing pattern requires a dialing script different than the default. Click on the “View” icon to review.
 - **Discount:** Select a Discount file. Click on the “View” icon to review.
 - **Rate 0, Rate 1, Rate 2:** Select a Rate Table to be assigned to the discount levels 0, 1, and 2. Click on the “View” icon to review.
- i. **Customer Special:** This section selects special features for the call handling of the selected pattern.
- **Blocked Call:** Check to block all calls going to the selected pattern.
 - **No Answer Detection:** Check here if you do not want the payphone to wait for answer detection and open the mike immediately (reverse polarity, 50 Hz pulse, etc.) Normally used with free, emergency, or 800 numbers.

Dialing patterns selected with “No Answer Detect” will open *transmit* upon dialing the last digit to the line.

If a charge is associated to the dialing pattern selected with “No Answer Detect” and “Call Type” is different than 1 the phone will request the proper deposit to continue. Although *transmit* is open from the beginning of the call, the phone will charge according to rates selected in rate tables and minimum deposit table. If no answer supervision/metering pulses are provided by the C.O. the phone will refund all moneys at the end of the call. If answer supervision/metering pulses are provided the phone will collect moneys accordingly.

- **Cuckoo Tone:** Check here if you want the payphone to emit a Cuckoo tone when dialing the selected pattern, as predetermined in Features, Parameters, for the duration of the Cuckoo tone.
- **Do not log to CDR:** Check here if you do not want the paystation to store transactions to this pattern in the call detail records.

j. Select **Post Edit** to save your changes.

k. Select **Exit** to return to the Main Menu.

**Editing the
patterns
(continuation)**

Call Handling File examples

Local Call- This is an example of a local call pattern

The screenshot shows the 'Call Handling' configuration window. The title bar reads 'Call Handling'. The main window has a toolbar with navigation and action icons. Below the toolbar, there is a text field containing 'basic'. The 'Pattern' section has a text field with '2' and a 'Speed Dial' button. To the right, there are three input fields: 'Speed Dial' (empty), 'Min Digits' (6), and 'Max Digits' (7). The 'Customer Special' section contains four checkboxes: 'Blocked Call' (unchecked), 'No Answer Detection' (unchecked), 'Cuckoo Tone' (unchecked), and 'Do not log to CDR' (checked). The 'Call Type' dropdown is set to '2'. Below it are three dropdowns for 'Custom Dial Script', 'Discount' (set to 'default'), and 'Rate' (set to 'local'). Each dropdown has a 'View' button to its right. At the bottom, there is a 'Global Edit' button.

In this case, dialed numbers starting with the number 2, which are 6 to 7 digits long will use the Protel.dsc Discount Time, they will have 3 different rates associated with them, answer detect must be provided, the Cuckoo tone is disabled and the CDR is enabled.

Long Distance Call- This is an example of a long distance call pattern within a country

The screenshot shows the 'Call Handling' configuration window. The title bar reads 'Call Handling'. The main window has a toolbar with navigation and action icons. Below the toolbar, there is a text field containing 'basic'. The 'Pattern' section has a text field with '0' and a 'Speed Dial' button. To the right, there are three input fields: 'Speed Dial' (empty), 'Min Digits' (8), and 'Max Digits' (11). The 'Customer Special' section contains four checkboxes: 'Blocked Call' (unchecked), 'No Answer Detection' (unchecked), 'Cuckoo Tone' (unchecked), and 'Do not log to CDR' (checked). The 'Call Type' dropdown is set to '3'. Below it are three dropdowns for 'Custom Dial Script', 'Discount' (set to 'default'), and 'Rate' (set to 'intra'). Each dropdown has a 'View' button to its right. At the bottom, there is a 'Global Edit' button.

In this case, dialed numbers starting with the number 0, which are 8 to 11 digits long will use the Protel.dsc Discount Time, they will have 3 different rates associated with them, answer detect must be provided, the Cuckoo tone is disabled and the CDR is enabled.

International Call- This is an example of an international call pattern

The screenshot shows the 'Call Handling' configuration window. The title bar reads 'Call Handling'. Below the title bar is a search field containing 'basic' and a set of navigation buttons. The main area is divided into several sections:

- Pattern:** A text box contains '0055'.
- Speed Dial:** A text box is empty.
- Min Digits:** A text box contains '13'.
- Max Digits:** A text box contains '20'.
- Customer Special:** A group box containing four checkboxes: 'Blocked Call' (unchecked), 'No Answer Detection' (unchecked), 'Cuckoo Tone' (unchecked), and 'Do not log to CDR' (checked).
- Call Type:** A dropdown menu set to '4'.
- Custom Dial Script:** A dropdown menu set to 'default'.
- Discount:** A dropdown menu set to 'default'.
- Rate 0:** A dropdown menu set to 'intl'.
- Rate 1:** A dropdown menu set to 'intl1'.
- Rate 2:** A dropdown menu set to 'intl2'.

Each dropdown menu has a 'View' button to its right. At the bottom center is a 'Global Edit' button.

In this case, dialed numbers starting with 0055, which are 12 to 15 digits long will use the default.dsc Discount Time, they will have 3 different rates associated with them, answer detect must be provided, the Cuckoo tone is disabled and the CDR is enabled.

Speed Dial Call- This is an example of a speed dial pattern

The screenshot shows the 'Call Handling' configuration window. The title bar reads 'Call Handling'. Below the title bar is a search field containing 'basic' and a set of navigation buttons. The main area is divided into several sections:

- Pattern:** A text box contains '*0'.
- Speed Dial:** A text box contains '2210001'.
- Min Digits:** A text box contains '2'.
- Max Digits:** A text box contains '2'.
- Customer Special:** A group box containing four checkboxes: 'Blocked Call' (unchecked), 'No Answer Detection' (checked), 'Cuckoo Tone' (unchecked), and 'Do not log to CDR' (checked).
- Call Type:** A dropdown menu set to '1'.
- Custom Dial Script:** A dropdown menu set to 'default'.
- Discount:** A dropdown menu set to 'default'.
- Rate 0:** A dropdown menu set to 'free'.
- Rate 1:** A dropdown menu set to 'free'.
- Rate 2:** A dropdown menu set to 'int_gen'.

Each dropdown menu has a 'View' button to its right. At the bottom center is a 'Global Edit' button.

In this case, dialed numbers as *0, which are 2 digits long will use the default.dsc Discount Time, they have a singular free rate associated with them, answer detection is not necessary, the Cuckoo tone is disabled and the CDR is enabled. They payphone will dial out the speed dial number defined 221 0001.

Re-route Call- This is an example of a call that will be re-routed

The screenshot shows the 'Call Handling' configuration window. The 'Pattern' field contains '00505'. The 'Customer Special' section has 'No Answer Detection' checked, while 'Blocked Call', 'Cuckoo Tone', and 'Do not log to CDR' are unchecked. The 'Call Type' is set to '4'. The 'Custom Dial Script' is 'special.dia'. The 'Discount' is 'default'. The 'Rate 0' is 'intl', 'Rate 1' is 'intl1', and 'Rate 2' is 'intl2'. The 'Min Digits' is '12' and 'Max Digits' is '15'. There are navigation buttons at the top and a 'Global Edit' button at the bottom.

In this case, dialed numbers starting with 00505, which are 12 to 15 digits long will use the Protel.dsc Discount Time, the special.dia Custom Dial script, they will have 3 different rates associated with them, answer detect must be provided, the Cuckoo tone is disabled and the CDR is enabled.

Operator Call- This is an example of an operator call dial pattern

The screenshot shows the 'Call Handling' configuration window. The 'Pattern' field contains '00'. The 'Customer Special' section has 'No Answer Detection' and 'Cuckoo Tone' checked, while 'Blocked Call' and 'Do not log to CDR' are unchecked. The 'Call Type' is set to '6'. The 'Custom Dial Script' is empty. The 'Discount' is 'default'. The 'Rate 0', 'Rate 1', and 'Rate 2' are all set to 'free'. The 'Min Digits' is '4' and 'Max Digits' is '6'. There are navigation buttons at the top and a 'Global Edit' button at the bottom.

In this case, dialed numbers with 00, which are 2 to 4 digits long will use the default.dsc Discount Time, they have a singular free rate associated with them, the Cuckoo tone is enabled to advise the operator that it is a payphone generating the call and the CDR is enabled.

NOTE: For operator calls, since we have other patterns with 00, it is necessary to extend the Max. Digits to 4 instead of 2 to give the phone time to differentiate operator calls from international calls. This will also be applicable for operator call using 0 (Min=1 Max=3)

Emergency Call- This is an example of an emergency call

The screenshot shows the 'Call Handling' configuration window. The 'Pattern' field contains '911'. The 'Speed Dial' field is empty, 'Min Digits' is '3', and 'Max Digits' is '3'. Under 'Customer Special', the checkboxes for 'Blocked Call', 'No Answer Detection', and 'Cuckoo Tone' are unchecked, while 'Do not log to CDR' is checked. The 'Call Type' is set to '1', 'Custom Dial Script' is 'default', 'Discount' is 'default', and 'Rate 0', 'Rate 1', and 'Rate 2' are all set to 'free'. Each rate field has a 'View' button to its right. A 'Global Edit' button is located at the bottom.

In this case, dialed numbers as 911, which are 3 digits long will use the default.dsc Discount Time, they will have a single free rate associated with them, Answer Detect is not necessary, the Cuckoo tone is disabled and the CDR is enabled.

Customer Service- This is an example of a customer service pattern

The screenshot shows the 'Call Handling' configuration window. The 'Pattern' field contains '3331111'. The 'Speed Dial' field is empty, 'Min Digits' is '7', and 'Max Digits' is '7'. Under 'Customer Special', the checkboxes for 'Blocked Call', 'No Answer Detection', and 'Cuckoo Tone' are unchecked, while 'Do not log to CDR' is checked. The 'Call Type' is set to '7', 'Custom Dial Script' is 'default', 'Discount' is 'default', and 'Rate 0', 'Rate 1', and 'Rate 2' are all set to 'freedpt'. Each rate field has a 'View' button to its right. A 'Global Edit' button is located at the bottom.

In this case, dialed numbers as 3331111, which are 7 digits long will use the default.dsc Discount Time, they will have a singular free rate associated with them (but requiring a deposit), answer detection must be provided, the Cuckoo tone disabled and the CDR is disabled.

NOTE: This call requires a deposit, but as a Type 1 call (free call) the money deposited will be refunded at the end of the call.

Free Call- This is an example of a free 1800 call pattern

The screenshot shows the 'Call Handling' configuration window. The 'Pattern' field contains '1800'. The 'Speed Dial' field is empty, 'Min Digits' is '11', and 'Max Digits' is '11'. Under 'Customer Special', the following options are checked: 'Blocked Call', 'No Answer Detection', 'Cuckoo Tone', and 'Do not log to CDR'. The 'Call Type' is set to '1'. The 'Discount' is 'default'. The 'Rate 0', 'Rate 1', and 'Rate 2' are all set to 'free'. There are 'View' buttons next to 'Call Type', 'Custom Dial Script', 'Discount', and each of the 'Rate' fields. A 'Global Edit' button is at the bottom.

In this case, dialed numbers starting with 1800, which are 11 digits long will use the default.dsc Discount Time, they will have a single free rate associated with them, answer detect is not necessary, the Cuckoo tone is disabled and the CDR is enabled.

Blocked Call- This is an example of a blocked call pattern

The screenshot shows the 'Call Handling' configuration window. The 'Pattern' field contains '1976559999'. The 'Speed Dial' field is empty, 'Min Digits' is '11', and 'Max Digits' is '11'. Under 'Customer Special', the following options are checked: 'Blocked Call', 'No Answer Detection', 'Cuckoo Tone', and 'Do not log to CDR'. The 'Call Type' is set to '4'. The 'Discount' is 'default'. The 'Rate 0', 'Rate 1', and 'Rate 2' are all set to 'intl'. There are 'View' buttons next to 'Call Type', 'Custom Dial Script', 'Discount', and each of the 'Rate' fields. A 'Global Edit' button is at the bottom.

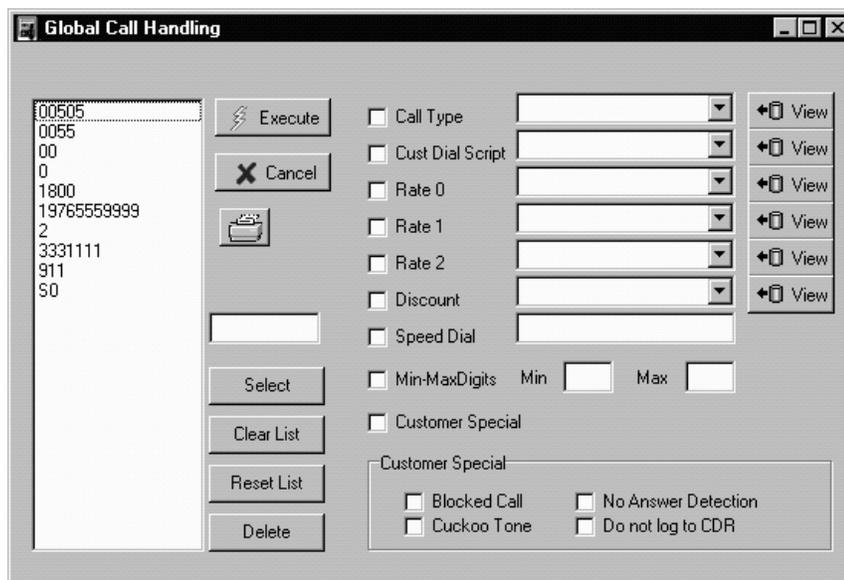
In this case, dialed numbers as 1800 6669999, which are 11 digits long will be blocked and the phone will terminate the call as soon as this pattern is detected. This feature can be used when the regular 1 800 group is enabled, but there are some calls that will be billed to the phone number's account and they need to be blocked. Some examples are, stock market status information, bank account information, weather information, etc.

Global editing of the call handling file

Sometimes it becomes necessary to apply the same change to a large number of patterns (when there is a rate change, for example.) This is accomplished using the Global Edit screen. The procedure for global editing of the Call Handling file is as follows:

- a. Beginning from the Main Menu screen, select the following options: **Files, Call Handling**. At the Call Handling screen open the desired Call Handling file and click on the [GLOBAL EDIT] button.
- b. A screen similar to this one is displayed for editing.

Editing the patterns (continuation)



- c. In the patterns window you will be able to select more than one pattern at the same time by clicking with your mouse pointer on the desired patterns, or you can point-click & drag to select more than one.
- d. To select a group of patterns by using a wild card (% only), first click on the “**Select**” option of the “**Mode**” section. Then, type the search string in the **Select** box (to select all patterns starting with 22 type “22%”, for example.) and then, click on the [SELECT] button.
 - **Select:** This option allows search strings using a wild card (% only) To be used in editing of vast amounts of patterns with minimal effort.
 - **Clear List:** This option will remove patterns from the “selected patterns” window.
 - **Reset:** This option will display all the patterns.
 - **Delete:** This option will delete selected patterns.

- f. Click on the  [EXECUTE] button to implement the change.
- g. *Exit* to return to the Main Menu.

Editing the LCD Messages

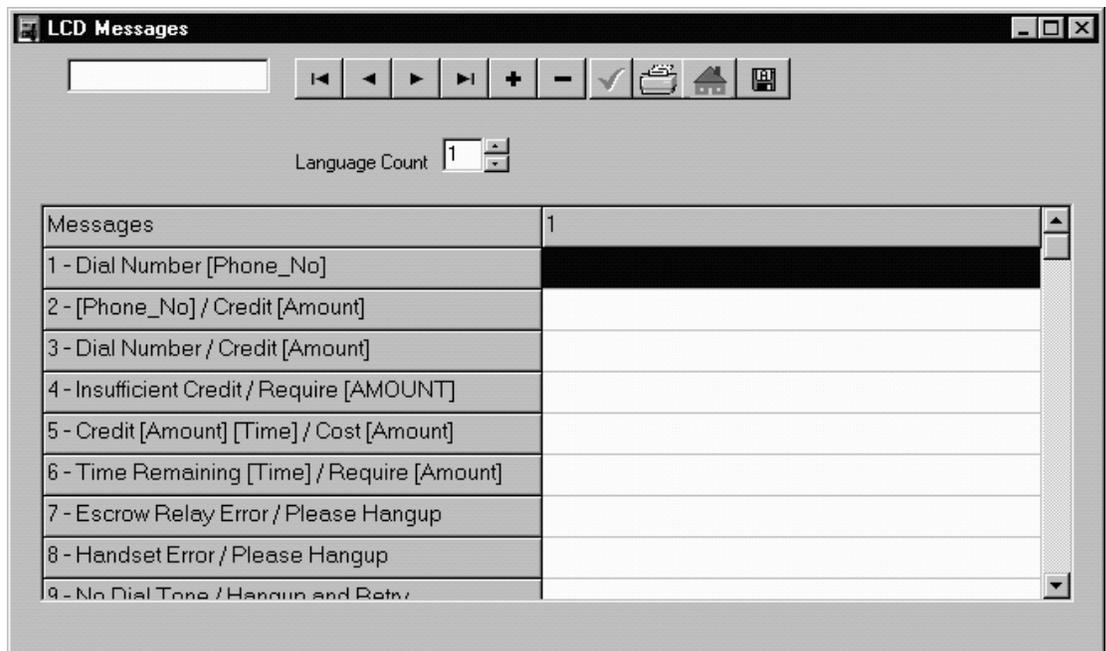
Editing the LCD Messages

The **LCD Messages** file defines the prompts that will be displayed on the payphone's LCD screen (if available). The list of messages that the payphone is capable of generating can not be changed. The only thing that can be changed is the wording of those messages on the LCD screen. This is useful in multiple language applications. The procedure to create the LCD Messages file is as follows:

- a. Beginning from the Main Menu screen, select the following options: **Files, LCD Messages**. A screen similar to this one is displayed for editing.
- b. Select a file to edit an existing LCD message file. Use the **Save As** command to have your own customized LCD message file.

THE FOLLOWING IS THE PROCEDURE FOR CHANGING THE DEFAULT MESSAGE FILE TO EDITABLE MESSAGE FILE

To change default message open and choose the default message, select the SAVE AS icon from toolbar, type in the desired filename and select . This is to insure that the default message is left in the original state to remain as a pattern.



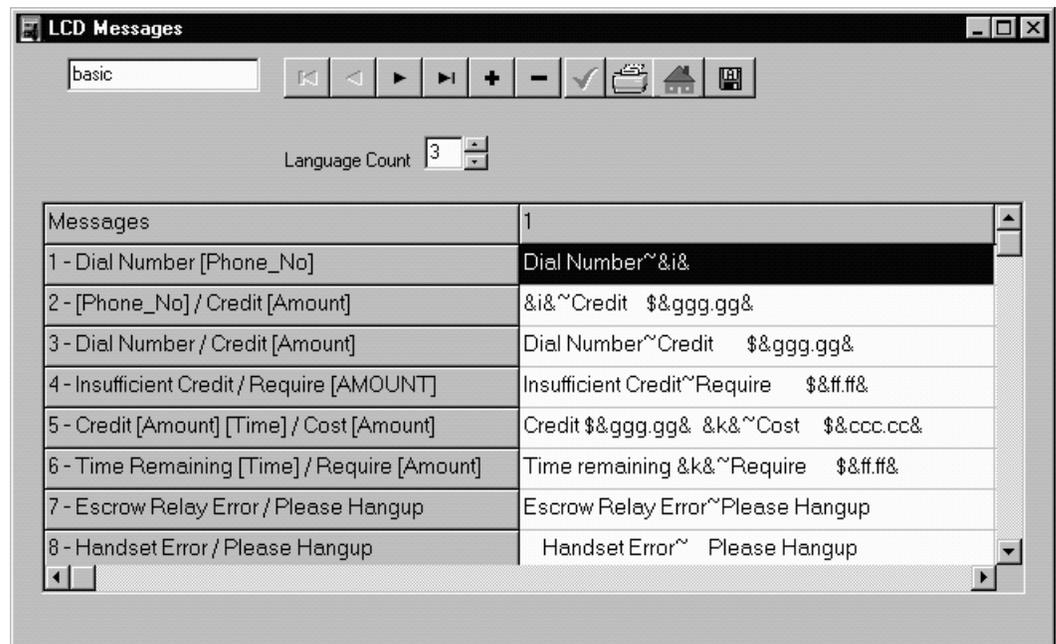
Editing the LCD Messages (continuation)

- c. In the “**Language Count**” (Language Count) box, select the number of languages that will be included in this LCD Message file.
- d. In the “**Message**” column you will see the paystation internal message list. In columns 1, 2, etc. (depending of the number of languages selected) you will see the displayed message list. Column 1 will be the default language.

Moving The Message Columns

After saving the message file, find the desired default language. The default language must be moved to column number one, this is done by moving the cursor to the top of the column. To move the column click and drag the column to the desired location. This is directly proportional to the order the messages will appear when seen by the user of the payphone. Column number one is always default (the first to appear in the LCD). When the [change language] button is pressed, the languages will toggle by the column number assigned to it in the message file.

- e. Select the message you desire to edit by clicking on the appropriate row and column of the table. An editing dialog box will appear. (See figure)
- f. Type the message in the chosen language (Only English ASCII characters allowed.) The editing dialog box will allow you to enter special functions like cost and credit amount,

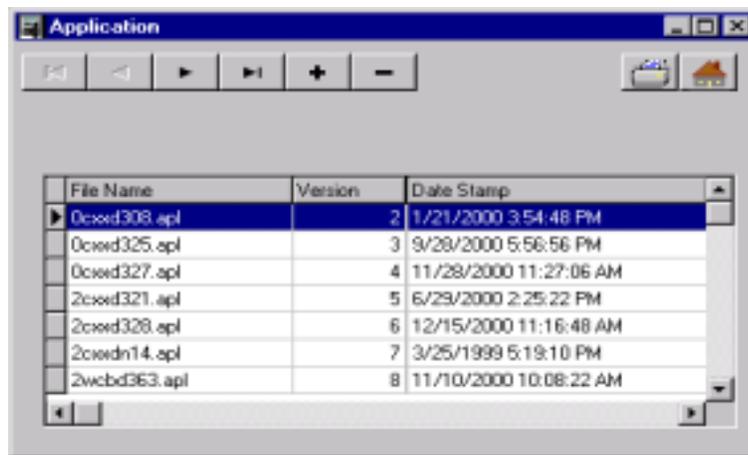


Application File

Adding the Application Files

The next step required for setting up ProNet is to import the Application File used by the phone. The Application File is provided by Protel and it is specifically designed for a particular country and paystation model. The Application File contains information on display prompts, voice prompts, the overall operating system, etc.

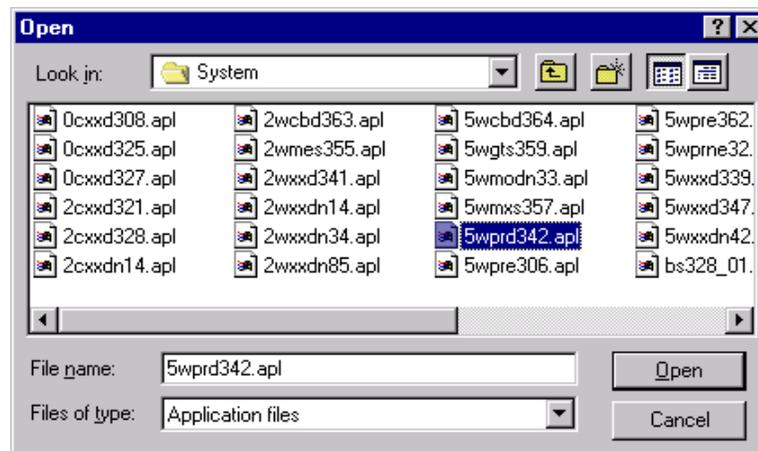
- a. Copy the Application File from the application disk provided to the C:\PROGRAM FILES\PROTEL\PRONET\SYSTEM subdirectory. Use Windows' File Manager or the MS-DOS "COPY" command.
- b. Then, beginning from ProNet Main Menu screen, select the following options: *Files, Application*. A screen similar to this one will be displayed.



- c. Select  to add a new Application File to the list. This converts the application files to the binary format, that is capable of being downloaded to the phones. The display shows a grid listing the file names, version numbers and date stamps for all converted application files. A screen similar to this one will be displayed.

WARNING!!!

If the Date Stamp is not present the Application File was not converted to binary format and it can not be used by ProNet



- d. Browse and select the desired application file and select [**OPEN**] to add it to the list, or double click it.
- e. Wait for the word “Done” at the bottom left of the screen confirming that the file was successfully imported.

Selected File. This is the name of the selected application file to be converted to a binary format. The following fields will be automatically filled with the appropriate information:

File Name. This is the name of the application file that has been converted to a binary format.

Version. This field indicates the version of the application file.

Date Stamp. This is the date that the file was created.

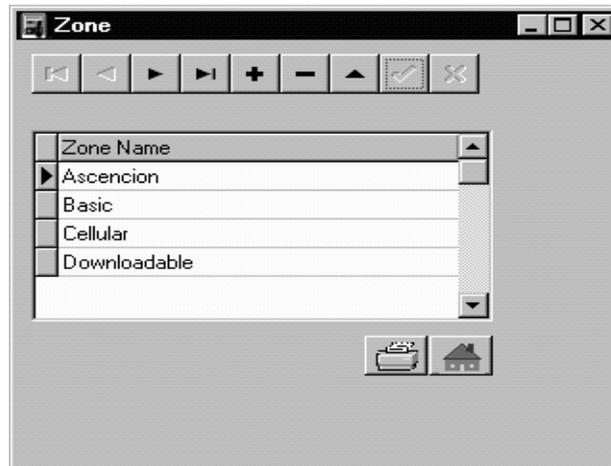
This completes the steps necessary to setup the Application File. Proceed to the sections titled “*Network*”, “*Zone*”.

Creating the Zones

Creating and deleting the Zones

The next step required for setting up ProNet is to create the zones. To ease the management of the phone network, the payphones in the system are grouped into zones.

- a. Beginning from the Main Menu screen, select the following options: *Network, Zone*.
- b. A screen similar to this one is displayed for editing.



NOTE

All payphones must belong to a zone, but the same payphone can not belong to two zones.

- c. Select and place cursor in the "Zone Name" field and enter the zone ID or name desired. The name of a zone can be up to 20 alphanumeric characters but it can not include any blank spaces.
- d. Select to save the Zone ID in the database, or press to cancel.
- e. Repeat A-D for additional Zones.
- f. Exit to return to the Main Menu.

Deleting zones

Deleting a Zone

- a. Click on the selection box at the left of the zone you wish to delete. Select to remove the Zone ID from the database. **This function must be a highest privilege operation!!** All telephones in that zone must be deleted first. (Refer to Main Menu option *Phone*)
- b. Select *Post Edit* to save your changes.
- c. Select *Exit* to return to the Main Menu.

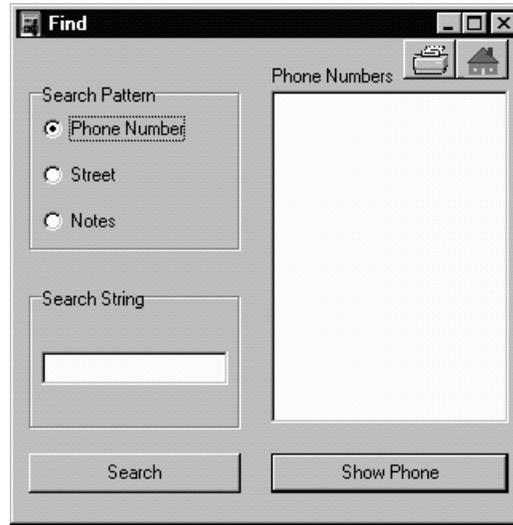
This completes the steps necessary to define the Zones. Proceed to the section titled "*Phone*", "*Edit*" to add phones to a zone.

Using the “Find” screen

Searching phone numbers

It is possible to search for specific phone accounts that are stored within ProNet with only partial information. Once the phone number is found that information can be used in the Phone screen.

- a. Beginning from the Main Menu screen, select the following options: *Network, Find*.
- b. A screen similar to this one is displayed for editing.



- c. Select the Search Pattern.
 - **Phone Number** Select this option to perform a search in the telephone numbers that are stored in ProNet’s phone account database.
 - **Street** Select this option to perform a search by the street identification information that is stored in ProNet’s phone account database.
 - **Notes** Select this option to perform a search by the notes information in the phone accounts that are located in a particular area.
- d. Define the **Search String**
 - This field is used to specify the search criteria. Three different type of searches may be performed, phone number search, street search or a notes search. Use the information below to determine valid entries for this field.

Conducting Searches

Searching using Phone Numbers

- a. Specify the digits of the telephone number(s) to be searched for. One or all of the digits in the desired phone number pattern may be entered. Wildcard % may also be used.
- b. Click on [SEARCH] or [ENTER] to execute.

Once the search is complete, a listing of the telephone numbers associated with the matched phone number criteria is displayed in the window labeled "Phone Numbers."

Searching using Street Information

- a. Specify any information in the street field of the phone account to be searched for. One or all of the digits in the desired ID number pattern may be entered. Wildcard % may also be used.
- b. Click on [SEARCH] or [ENTER] to execute.

Once the search is complete, a listing of the telephone numbers associated with the matched street information are displayed in the window right pane

Searching by Notes

- a. Specify the notes criteria to be searched for in the phone accounts database maintained by ProNet. One or all of the characters in the notes may be entered. Wildcard % may also be used.

NOTE: If wildcards are not used, all data entered must be exact.

- b. Click on [SEARCH] or [ENTER] to execute.

Once the search is complete, a listing of the telephone numbers associated with the matched locations are displayed in the window labeled "***Phone Numbers***"

- e. ***Phone Numbers***
 - This list box displays the search results. By double clicking on any of the phone numbers, the system will display the ***Phone, Edit*** screen corresponding to that phone number.

Using the “Move” screen

Moving phone numbers

This function is used to move phone accounts from one zone to another.

- a. Beginning from the Main Menu screen, select the following options: *Network, Move*.
- b. A screen similar to this one is displayed for editing.

The screenshot shows a window titled "Move" with a standard Windows-style title bar (minimize, maximize, close). Below the title bar are three buttons: "Execute" (with a lightning bolt icon), "Cancel" (with an 'X' icon), and a printer icon. The main area is divided into several sections. On the left, there are three search sections: "Destination Zone" with a dropdown menu; "Search By Zone" with a dropdown menu and a "Select Zone" button; and "Search By Phone" with a text input field and a "Search" button. On the right side, there is a large, empty rectangular area labeled "Phone Numbers". At the bottom right of this area is a "Clear" button.

- c. Specify how the computer should search for the phone numbers to be moved.
 - Search by phone number or by zone.
 - If searching by phone number, enter the phone number search criteria in the field labeled “Search by Phone.” (Wildcard % may also be used) and then click on the button labeled “Search”.
 - If searching by zone, specify the zone in the field labeled “Search by Zone” that contains the phone numbers to be moved.
- d. Specify the “Destination Zone”.
 - Specify the zone that the phone numbers will be moved to.
- e. In the window labeled “Phone Numbers” highlight the telephone numbers that you want to be moved to the destination zone.
- f. Click on the button labeled [EXECUTE] to perform the move function.

Using the “Move” screen (continuation)

Field definitions

- a. **Search By** This area is used to specify how the computer should search for the phone accounts that are to be moved from one zone to another.

Depending on the selection here, the computer will either search for specific phone numbers or provide a listing of all phone numbers within a specified zone. Once the search results are displayed, you may select the specific accounts to be moved by highlighting the phone numbers within the window labeled “Phone Numbers”.

- **Phone** Specify if the computer should search for a specific pattern of phone numbers. The phone number pattern is specified in the field labeled “Phone”.
 - **Zone** Specify if the computer should list (in the window labeled “Phone Numbers”) all of the phone numbers within a specified zone. The zone is specified in the field labeled “Zone - Source”
- b. **Zone**
- **Source** Specify the zone containing the phone numbers to be moved.
 - **Destination** Specify the zone that the phone numbers should be moved to.
- c. **Phone** Specify the search pattern to be used to locate phone numbers to be moved to the destination zone.
- **Search** This button is used to begin a search for phone numbers that match the pattern specified in the field labeled “Phone”. The search results are displayed in the window labeled “Phone Numbers.”
- d. **Phone Numbers** This window displays the search results. Once the search results are displayed, highlight the specific phone numbers that you want to be moved to the destination zone, and then press the button labeled “EXECUTE”.

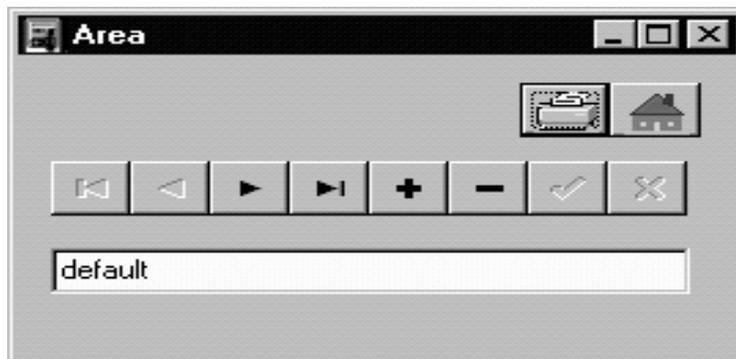
NOTE: The payphone must be called after moving it to another zone in order to update its status.

Creating an Area

Creating and deleting an Area

The next step required for setting up ProNet is to create an Area. To ease the management of the phone network, the payphones in the system can be segregated by areas.

- a. Beginning from the Main Menu screen, select the following options: *Network, Area*.
- b. A screen similar to this one is displayed for editing.



- c. Select and enter the description for an Area. The description can be up to 20 alphanumeric characters.
- d. Select to save the Area in the database, or press to cancel.
- e. Repeat A-D for additional Zones.
- f. Exit to return to the Main Menu.

Deleting an Area

- a. Click on the selection box at the left of the area you wish to delete. Select to remove the Area and its description from the database. **This function must be a highest privilege operation!!** All telephones in that area should be relocated first. (Refer to Main Menu option *Phone*)
- b. Select *Post Edit* to save your changes.
- c. Select *Exit* to return to the Main Menu.

This completes the steps necessary to define the Areas.

Adding payphones to a zone

Adding payphones to a zone

The next step required for setting up ProNet is to add the payphones to the zones. The characteristics that define a payphone can be divided into two groups: Characteristics that are more or less unique to each payphone, and characteristics that can be shared by a number of phones. The procedure to add payphones is as follows:

- a. Beginning from the Main Menu screen, select the following option: **Phone, Edit**.
- b. A screen similar to this one is displayed for editing.

The following characteristics are unique to each payphone:

- c. Select a zone to open the desired Zone. Press  to add a phone.
- d. **Phone**: Please enter the phone number for the new payphone or select an existing phone to edit.
- e. **Calling Number**: Please enter the complete number that ProNet must dial in order to reach the payphone. (It might include long distance access codes, PBX access numbers, etc.)
- f. **Previous Phone ID**: After communicating with the payphone, once the Phone ID field is changed, the previous Phone ID that was contained in the phone, will be placed in this field.
- g. **Phone ID**: Please enter a numerical serial or other type of identification number for the payphone.
- h. **Call Back Time**: Please enter the time of day (in a 24 hour format) that the payphone should start the attempts to call ProNet.

Adding payphones to a zone (continuation)

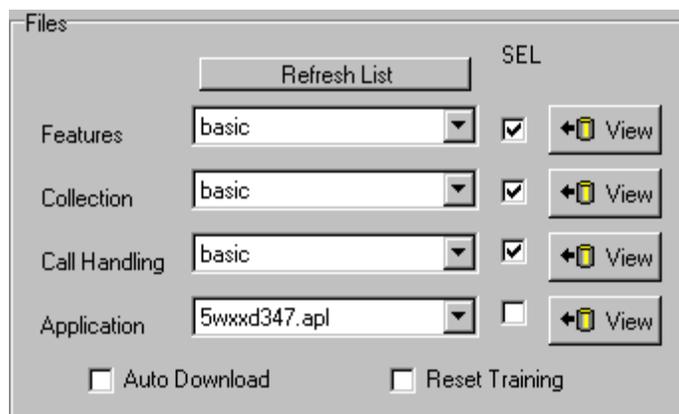
- i. **Time offset:** Please enter the time zone difference (if any) between the time zone where ProNet is located and the time zone where the payphone is installed.
- j. **Area:** Select from the pull-down menu, the Area (if necessary) this payphone will be assigned to.
- k. **Notes:** Please enter any additional information that may be useful. (Name of business where the payphone is located, directions to the location, a contact phone number, etc.).

The following characteristics can be shared by a number of payphones:

- l. **Call Handling File:** Use the drop down arrows to select the “Call Handling” file that will be used with this payphone. Click on the “View” icon  to see (not edit) the screens corresponding to the fields on the left.
- m. **Features File:** Use the drop down arrows to select the “Features” file that will be used with this payphone. Click on the “View” icon  to see (not edit) the screens corresponding to the fields on the left.
- n. **Collection File:** Use the drop down arrows to select the “Collection” file that will be used with this payphone. Click on the “View” icon  to see (not edit) the screens corresponding to the fields on the left. This area  refers to the type of payment that the payphone will accept.
- o. **Application File:** Select the firmware version being used by the selected payphone. The view function is disabled for this option.

The following two choices will define the download method:

- p. **Auto Download:** Click here to automatically download all the files that have been updated since the last download.
- q. **Selective Download:** If the auto download feature is not selected, it is possible to manually select only the files that you wish to update. Click on the check box next to the file you wish to download. The selected files will be downloaded to the payphone during the next communication session, whether the files were previously updated or not.



The screenshot shows a dialog box titled "Files" with a "Refresh List" button and a "SEL" column. It contains four rows of configuration options:

		SEL	
Features	basic	<input checked="" type="checkbox"/>	 View
Collection	basic	<input checked="" type="checkbox"/>	 View
Call Handling	basic	<input checked="" type="checkbox"/>	 View
Application	5wxxd347.apl	<input type="checkbox"/>	 View

At the bottom, there are two checkboxes: Auto Download and Reset Training.

Adding payphones to a zone (continuation)

- r. **Reset Training:** When selected, this will reset the coin table parameters to the original values defined by the Coin file sent by Protel.

This should be done only when the chassis, the coin option board or the ECSII is removed from the phone for repair or maintenance or the phone is moved from one location to another.

This feature is not available for all coin files, please contact Protel International Technical Support to verify if you have a trainable file.

Training: The method of training consists of use of a dynamic coin file that adapts itself to the coin mech being used by the payphone. This is used to increase the selectivity of the Electronic Coin Scanner (ECSII)/ECSII option board assembly to ensure that only the valid coins will be accepted and all others rejected. Trained coin files are usually created when there are two coins that will require a tight separation and a regular coin file might not be enough. Being a dynamic file, every time coins are deposited the coin table is updated. That also creates the necessity to reset this file every time the Electronic Coin Scanner (ECSII)/ECSII option board is modified/replaced.

- s. **Don't upload CDR data:** Select this option if you do not want to receive CDR data from the payphone during the communications process.

NOTE: this option should only be used temporarily, such as when you need to call a payphone from a remote ProNet to verify status, but do not want to upload the CDR data. This function should be manually deselected after the status poll.

- t. Select *Post Edit* to save your changes.
- u. Click on the **Instant Call** button to immediately poll the selected phone.
- v. Repeat steps "d" through "t" for the remaining payphones in the same zone.
- w. *Exit* to return to the Main Menu or go to step "c" to edit another zone.

Phone

Phone Status

Phone Status: Click here for a quick reference of the phone status, based on the last communication between the payphone and ProNet. A screen similar to the one below will appear.

The screenshot shows a 'Phone Status' window with the following fields and controls:

- PHONE: 200
- ZONE: basic
- Refresh button
- Last Communication Event: 2/9/2001 1:57:08 PM
- RAM Ver: 5K1RWFRDN25A0342
- Operation: Fully operational
- Current Value: 365
- ROM Ver: 211
- Percent Full: 25.93
- Device Type: 0
- Volume: 210
- Frame Ver: 0
- File Versions table:

File Versions	APP
Features: 50	1
Collection: 19	1
Call Handling: 159	1
Application: 75	
- Transaction: 0
- Bezel Software Ver: 000
- Checkboxes for errors: Handset Missing, OS RAM Error, Config RAM Error, Keypad Error, CoinBox 100% Full, CoinBox % Exceeded, Cdr Full, Cdr % Exceeded, Escrow Relay Jammed, Low Battery, ECS5 Coin Mech Altered, ECS2 Level Problem, ECS2 Gate Problem, Relay Fire Problem, Need Configuration Download, Feature file error, Call Handling file error, Collection file error, Signal strength of 5 or below, Signal strength of 2 or below, Cellular low battery, Bad battery, No cellular service, Primary power loss.

NOTE

The information displayed here will reflect the last time the phone and ProNet communicated. To verify the status, recall any phones that may have a problem before sending a technician to the field.

Phone: Indicates the phone number being viewed.

Zone: Indicates the zone the phone is assigned to.

Last Communication Event: Indicates the last time the phone and ProNet communicated successfully.

Current Value: Indicates the current value (\$ amount) in the coin box.

Percent Full: Indicates the current volume (% amount) of the coin box.

Volume: Indicates the absolute volume (based on 25600/51200) of the coin box.

ROM Ver: Indicates the ROM version installed at the payphone.

Device type: For future use.

File Versions: Indicates which file versions are being currently used.

Serial Numbers: For future use.

ProNet

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Phone

Phone Status

RAM Ver: Indicates the application file version currently being used.

Operation: Indicates the operation status (Full Service, Out of Service or Restricted Service).

Alarms: Indicates if any alarms are currently reported.

APP: Not implemented.

Frame version: Not implemented.

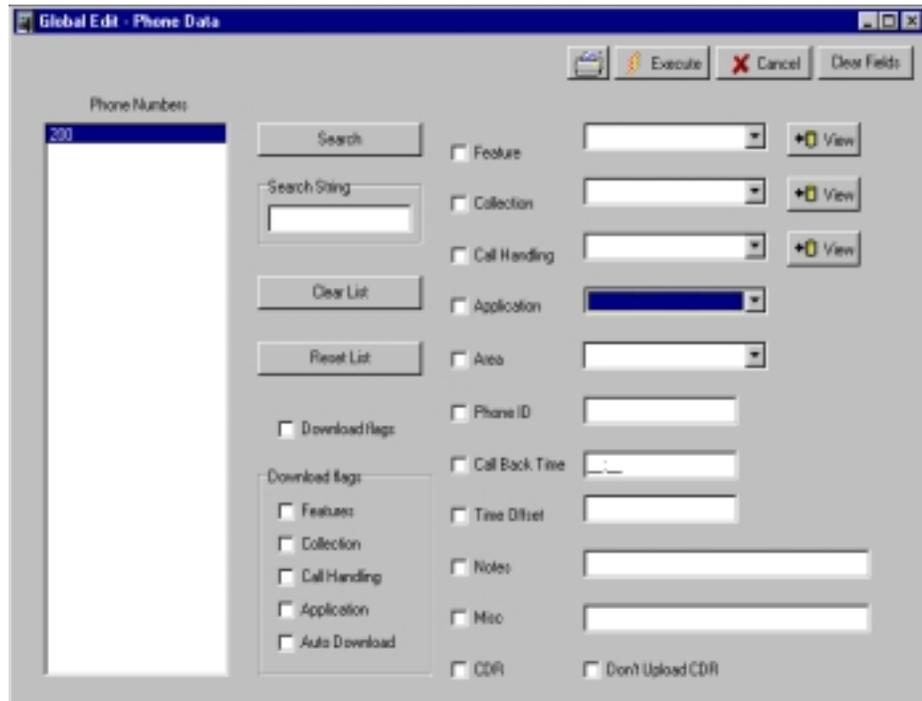
Transactions: Not implemented.

Bezel Software Ver: Indicates the bezel's firmware version.

Global editing of the payphone data

Sometimes it becomes necessary to apply the same change to a large number of payphones (when there is a configuration file change, for example.) This is accomplished using the *Global Edit* screen. The procedure for global editing of the payphone data is as follows:

- a. Beginning from the Main Menu screen, select the following option: **Phone, Edit..** At the Phone screen open the desired Zone and click on the [GLOBAL EDIT] button.
- b. A screen similar to this one is displayed for editing.



- c. In the Phones window you will be able to select more than one Phone at the same time by clicking with your mouse pointer.
- d. To select a group of Phones by using the wild card “%” Type the search string in the *select* box (to select all Phones starting with 22 type “22%”, for example.), and then, click on the [Search] button.
- e. Click on the “Replace” boxes for the features you would like to change and use the drop down arrows to choose the desired files.
- f. Click on the  [EXECUTE] button to implement the change or cancel to exit.

Deleting payphones from a zone

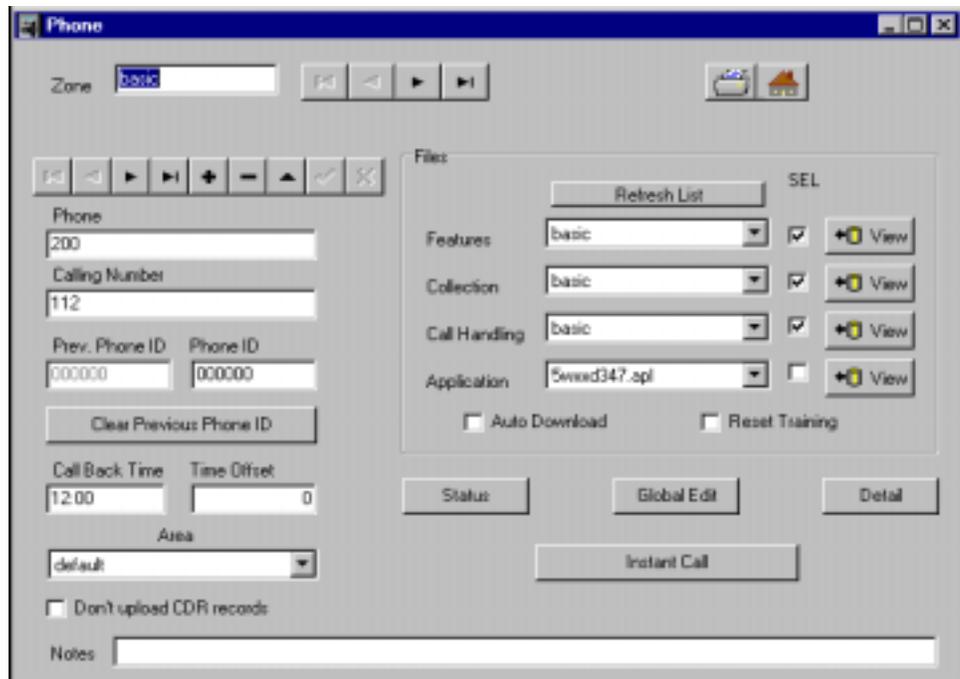
Deleting payphones from a zone

- a. Beginning from the Main Menu screen, select the following option: *Phone, Edit*.
- b. Select a Zone to open the desired Zone.
- c. *Phone*: Select the phone number for the payphone you wish to delete. You may also use the Network/Find to go directly to the phone number you wish to delete.
- d. Click on  to delete the selected payphone.
- e. Click on [OK] to confirm deletion.
- f. Select  to save your changes to the selected Zone.
- g. *Exit* to return to the Main Menu.

Instant Call

- a. Select *Phone, Edit* to open the phone screen.
- b. Select a zone.

Instant Call



The screenshot shows the 'Phone' application window. At the top, the 'Zone' is set to 'basic'. Below this, there are navigation buttons. The main area contains several input fields: 'Phone' (200), 'Calling Number' (112), 'Prev. Phone ID' (00000), and 'Phone ID' (00000). There are also fields for 'Call Back Time' (12:00) and 'Time Offset' (0). A dropdown menu for 'Area' is set to 'default'. On the right side, there is a 'Files' section with a 'Refresh List' button and a 'SEL' column. Below this are four rows of configuration options: 'Features' (basic), 'Collection' (basic), 'Call Handling' (basic), and 'Application' (5wxd347.spl). Each row has a 'View' button. At the bottom, there are buttons for 'Status', 'Global Edit', 'Detail', and 'Instant Call'. A checkbox for 'Don't upload CDR records' is unchecked. A 'Notes' field is at the very bottom.

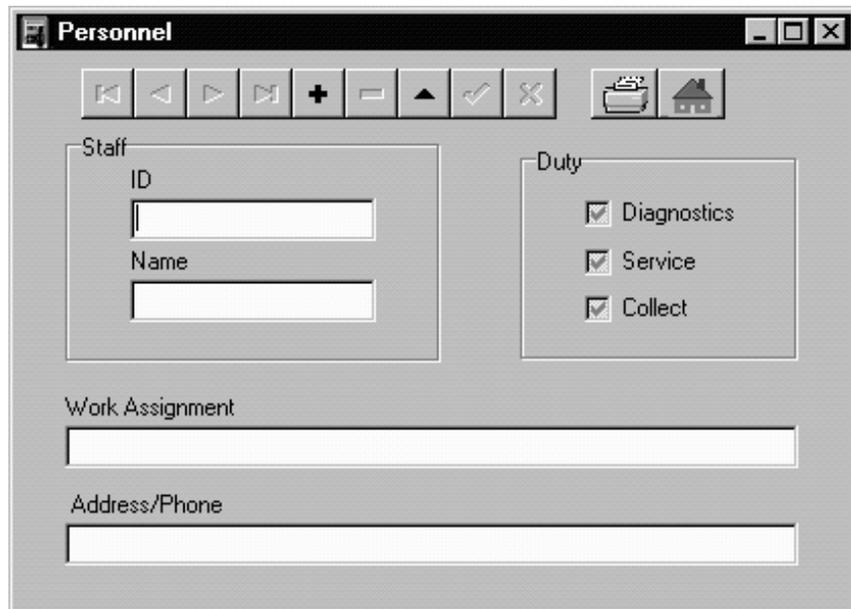
- e. Select the phone number you want to call and verify if all the information present is correct. If any changes need to be made, use the  button to save your changes, before attempting to call the phone.
- f. Click on the [**Instant Call**] button to initiate the communication.

Editing the personnel records

Personnel Assignment

Shown below are the steps necessary to configure the personnel database. Only employees with level one passwords have access to this feature.

- a. Beginning from the Main Menu screen, select the following option: *Admin., Personnel.*
- b. A screen similar to this one is displayed for editing. Press  to add a record.



The screenshot shows a software window titled "Personnel". At the top is a toolbar with icons for navigation (back, forward, home, etc.) and actions (add, delete, check, close, print, home). Below the toolbar, the window is divided into several sections:

- Staff:** Contains two input fields labeled "ID" and "Name".
- Duty:** Contains three checkboxes, all of which are checked: "Diagnostics", "Service", and "Collect".
- Work Assignment:** A single-line text input field.
- Address/Phone:** A single-line text input field.

- c. *Staff ID:* Please enter the employee's ID number.
- d. *Staff Name:* Please enter the employee's name.
- e. *Duty:* This section is used to select one of three job assignment types: Diagnostics, Service, or Collect.
- f. *Work Assignment:* Please enter a description of the type of job performed by the employee.
- g. *Address/Phone:* Please enter the employee's address and phone number.
- h. Select *Post Edit*  to save your changes.
- i. Select *Exit*  to return to the Main Menu.

Password Assignment

The Password section of ProNet allows the Administrator(s) to create and edit the access levels of all users. Only user(s) with the Administrator access level will be able to gain entry into this section of the program. Once inside, the Administrator can create, delete, or modify User IDs, as well as User Passwords. The Administrator can grant choose between several different options when assigning access levels to users. The Administrator can assign different levels of access for each section of ProNet, or can use the buttons at the top of the screen and select all of one type of access for use throughout ProNet.

Shown below are the steps necessary to assign passwords and privilege levels. Only employees with Administrator level passwords have access to this feature.

- a. Beginning from the Main Menu screen, select the following option: *Admin., Password*
- b. A screen similar to this one is displayed for editing. Press  to add a record.

	D	R	W	A		D	R	W	A
Feature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Collection	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Call Handling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Global Call Handling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Application	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discount	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Holiday	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dial Script	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phone Status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Global Phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Call Type	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Language	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Edit Language	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Zone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Find	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Move	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Logger	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Personnel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Export	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Import	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Statistics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Compress//Purge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Configuration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Credit card call type	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Passwords	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Edit dial script	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Batch Polling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Polling List	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Batch Status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- c. Enter the new user ID. The user ID can be any alphanumeric name up to 24 characters and press TAB.
- d. Enter the new password. The password can be any alphanumeric name up to 8 characters and press TAB.
- e. Assign the various access levels.

All Disabled: This option automatically selects the Disabled option for all areas of ProNet. If a section is marked as Disabled, the user will be unable to gain access to that screen.

All Read: This option automatically selects the Read option for all areas of ProNet. If a section is marked as Read, a user can view the screen, but will be unable to make modifications.

All Write: This option automatically selects the Write option for all areas of ProNet. If a section is marked as Write, a user can view the screen, as well as make modifications.

Administrator: This option automatically selects the Administrator option for all areas of ProNet. If a section is marked as Administrator, a user has full access to that aspect of the program.

Set password time-out: The amount of time (in minutes) of inactivity that ProNet will wait before logging off the user.

User: Enter the User ID that you wish to create/edit in this field.

Password: Enter the Password that you wish to associate with the User ID, in this field.

- f. Click on the “View” icon  to see the passwords.
- g. Select **Post Edit**  to save your changes.
- h. Select **Exit**  to return to the Main Menu.

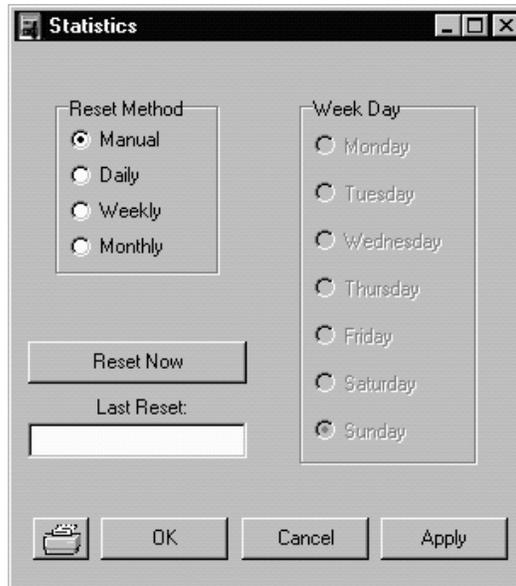
Resetting
Statistics

Resetting the statistics records

The following is the procedure to reset the statistics records:

NOTE: It is important that daily and monthly backups exist before resetting the statistics records.

- a. From the Main Menu, select *Admin, Statistics*. The *Phone Statistics* screen will be displayed:



- b. Select the *Statistics Reset Method*. By Selecting any of the three reset methods: *Daily*, *Weekly* or *Monthly*, the statistics are cleared automatically. Selecting the *Manual* reset method will allow the statistics records to accumulate until a manual reset is executed.
- c. In the *Weekday* window select the day when the automatic statistics reset is to be executed.
- d. Click on the [*Reset Now*] button to perform a manual reset at any time.
- e. The *Last Reset* window shows the date and time when the last statistics reset was performed.
- f. Select [OK] to save the changes and to exit the screen.

Compressing/ Purging Database Records

The following is the procedure to compress and purge the records from the database:

NOTE: It is important that daily and monthly backups exist before compressing or purging the database.

- a. From the Main Menu, select *Admin, Compress/Purge*. The *Compress/Purge* screen will be displayed:

The screenshot shows a Windows-style dialog box titled "Compress / Purge". It has a blue title bar with standard window controls (minimize, maximize, close). The dialog is divided into two main sections: "Bounds" and "Table".

The "Bounds" section contains two radio buttons: "Set bounds" (which is selected) and "All records". Below these is a "Range" section with a label "Format [MM/DD/YYYY]" and two date input fields for "Start date" and "End date". At the bottom of the "Bounds" section are three buttons: "Purge", "Compress", and "Cancel".

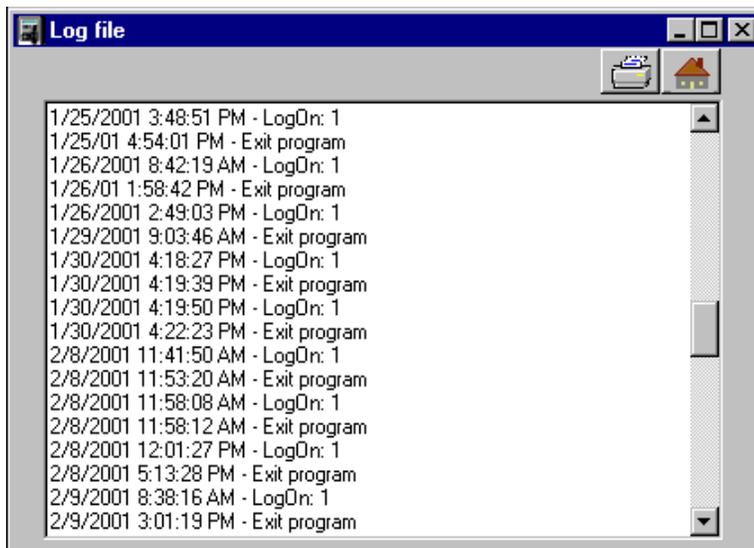
The "Table" section is a large vertical list box containing four checkboxes: "Diagnostics", "Coin Box", "Billable CDR", and "CDR". At the bottom of the "Table" section is a printer icon.

- b. From the *Bounds* section, select *Set Bounds* to specify the start and end date for Compression/Purge.
- c. Specify the *Start Date* for the range of records to be compressed or purged.
- d. Specify the *End Date* for the range of records to be compressed or purged.
- e. Select *All Records* if no bounds are to be specified.
- f. In the *Table* section, select one or all four of the records to be compressed/purged: *CDR, Diagnostics, Coin Box, and/or Billable CDR*.
- g. Select [*Purge*] to delete the records from the database.
- h. Select [*Compress*] to eliminate the line by line CDR and instead, have only total amounts for specific records.
- i. Select [*Cancel*] to terminate the operation.

Log File

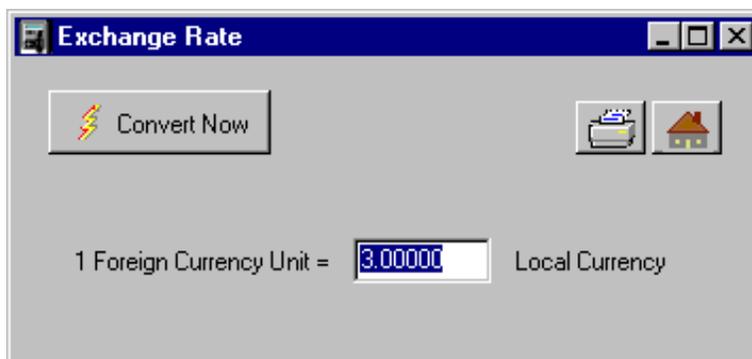
The purpose of the **Log File Screen** is to let the Administrator know which operator, possibly with less privileges, has logged into the system and at what time/date the login was done.

This should be a function of the Administrator, meaning that, during password assignment, this screen should be selected as **Disabled** in the **Password** screen.



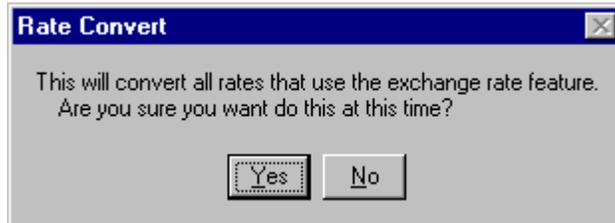
Exchange Rate

This screen will be used to define the exchange rate used between the local country and one foreign country. The purpose is to properly charge for calls to that foreign country. The **Rates** screen contains a check box that will enable/disable the use of this option.



On the screen above, you will enter the exchange rate from a specific country. For example, if the exchange rate between the U.S. and Mexico is \$9.70 Pesos to \$1.00 USD, Then you would enter in the available field **9.70**. The biggest number allowed in this field is **655.34**.

Next, click the **Convert Now**  button. A message will pop-up telling you that all rates will be converted. Click **Yes** if you want to proceed, or click **No** if you want to cancel the action.



Batch Polling

Creating a Batch Polling

Creating a Batch Polling File

The following is the procedure to program and run a batch polling file.

- a. Select **Options, Batch Polling** from the Main Menu.

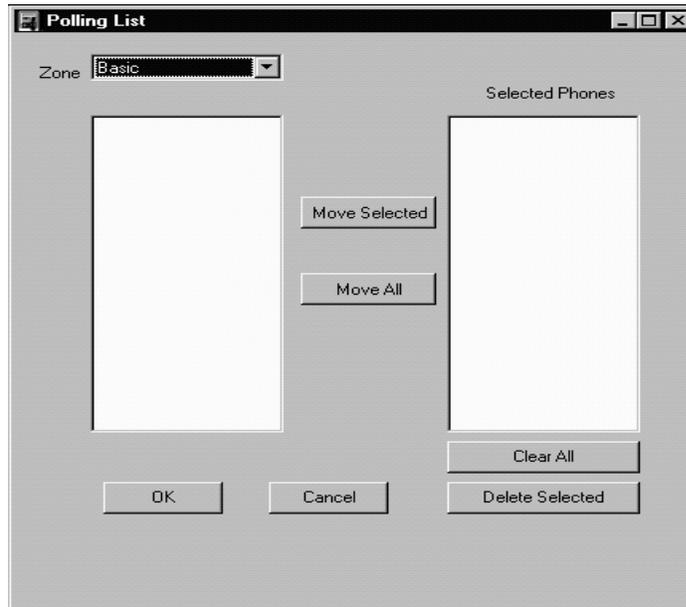
- b. Select a file to edit or execute. If creating a new file, press the **Add Record**  button and type a new file name.
- c. Select one of the following polling options:
 - i. **Daily**; this option executes the polling every day, seven days a week, at the selected time.
 - ii. **Weekly**; this option executes the polling on the selected day of the week at the selected time, every week.
 - iii. **One Time**; this option executes the polling one time only on the date and time selected.
- d. The date format is mm/dd/yyyy (month/date/year) while the Time format based on a 24 hour format. Example: 0001 = 12:01am, 0300 = 3:00am, 1355 = 1:55pm, 2300 = 11:00pm.
- e. In the **Retry** box, select the maximum amount of times the Management System will attempt to communicate with the payphones. In the event a payphone is being used and does not answer the MS, that phone number will go to the end of the polling list, where it will be called again at the next retry. This will repeat itself as many times as indicated in this option.

Batch Polling

Creating a Batch Polling (continuation)

Creating a Batch Polling File

- f. Select **Default** from the “Reset Coins” option if the polling is going to take the Reset Training option programmed in the Phone, Edit screen for each of the phones to be polled. The **Overwrite** option will ignore the programmed Reset Training status in the Phone, Edit screen, sending the Reset Training Status selected in the Batch Polling screen.
- g. The **Operational Mode** options determine which configuration files contained in the Phone, Edit screen, will be sent to the phones being polled.
 - i. Selecting **Auto** will send the files to the phone according to what has been programmed in the Phone, Edit screen
 - ii. Selecting **Selective** will send only the files that are enabled by checkmark next to each configuration file
- h. Select the **Select Phone** to open and display the polling list screen.



- i. From the drop down list in **Zone**, select a zone to display its phone list to select from.
- j. Select as many phones by highlighting the phone numbers and select **Move**. The phones to be polled are now in the “Selected Phone Numbers” panel on the right.
- k. By repeating the previous two steps, you can continue adding phones from as many zones as you like to the list of phones to be polled.
- l. To delete phones that you have already selected and do not want in your list of phones to be called, simply highlighting and selecting **Clear**.
- m. Select **OK** to return to the Batch Polling screen.

Batch Polling

Creating a Batch Polling (continuation)

The screenshot shows the 'Batch Polling' configuration window. At the top, there is a text field containing 'basic' and a set of navigation buttons (back, forward, home, etc.). Below this is a checked 'Enable' checkbox and an 'Execute Now' button. The 'Polling Mode' section has radio buttons for 'Daily', 'Weekly' (selected), and 'One Time'. The 'Polling Date and Time' section shows '16 : 40' in HH:MM (24 hours) format. The 'Reset Coin' section has radio buttons for 'Default' and 'Overwrite' (selected), and a 'Reset Training' checkbox. The 'Day Of Week' section has radio buttons for 'Monday', 'Tuesday' (selected), 'Wednesday', 'Thursday', 'Friday', 'Saturday', and 'Sunday'. The 'Operational Mode' section has a 'Default' checkbox and an 'Overwrite' section with radio buttons for 'Auto' and 'Selective' (selected). Below this are checkboxes for 'Application', 'Collection', 'Features', and 'Call Handling'. At the bottom, there is a 'Last Run' text field and a 'Retry' field with the value '3'.

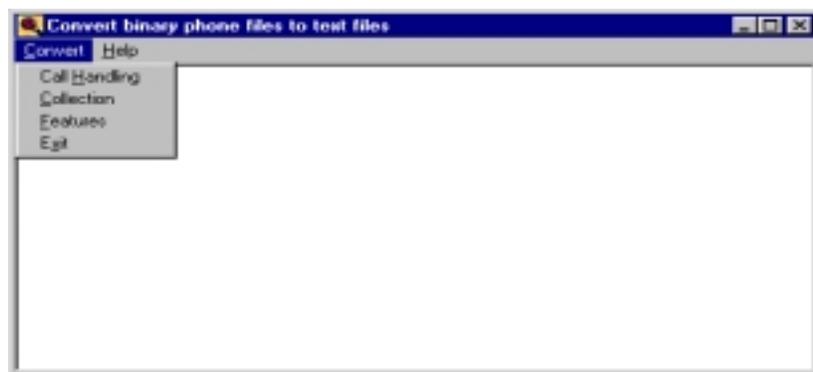
- n. Place a check mark in the **Enable Polling** box.
- o. Select **Post Edit** to save your changes.
- p. By selecting **Execute Now**, you can start the polling immediately from the file you just created or any other file.
- q. Close the window to exit.

The **ProNet Manager** group contains Utility, ProNet, and Readbin icons, as seen below:



Please find below a brief description for each of the icons in the ProNet Manager group:

- **Utility:** this program is used for creating tables in the database only (one time use).
- **Read Binary:** this feature allows ProNet Administrator to read and verify the contents of a binary file. The binary files are the actual files that are downloaded to the payphone. They will be created when the “**Create Binary files**” option is selected in the **ComPort, Configuration** screen. In order to read a binary file, double click on the Read Binary icon and a screen similar to this one will appear:



- Select Convert and a drop down box will appear, allowing you to select the Configuration file to be read.
- Select the appropriate configuration file and a screen similar to this one will appear:



- c. Browse the binary subdirectory and double click on the selected file. Notepad will then open the selected file and you will be able to visualize its contents.
- d. Select *File, Exit* to close Notepad.
- e. Select *File, Close* to close the *Read Binary* application.

ProNet v3 Maintenance Guidelines

OBJECTIVE

This document provides guidelines recommended for periodical maintenance of ProNet, Protel's Payphone Management System (PMS). Protel recommends the execution of these procedures on daily, monthly and yearly basis and at certain one-time tasks as described below. By following these procedures you will maximize the use and the effectiveness of the ProNet system. You will also prevent data loss of more than 1 day in case of a hard-drive failure.

STRUCTURE

- I. DAILY PROCEDURES
- II. MONTHLY PROCEDURES
- III. YEARLY PROCEDURES
- IV. GENERAL MAINTENANCE RECOMMENDATIONS

GENERAL OVERVIEW

Protel recommends daily backups of the database to ensure data loss is kept to a minimum if a fatal problem occurs with the ProNet system.

If your IS department perform backups of your company's vital information on a regular basis, they can assist you with a strategy that conforms to your company's requirements. If the ProNet database is attached to a company network, then your IS department may handle the database backups for you.

A common policy is to keep a copy of the backups stored at a remote location. This ensures the database can be restored in the unlikely occurrence of a disaster (fire, flood, etc.) at your building. Again, your IS department can advise you of your company policy.

I. DAILY PROCEDURES

1. Nighttime Batch Polling.

Program the batch polling to include all the payphones existing in the database, or program the batch polling by zones and run during low-traffic hours. At the end of the workday, ensure ProNet has the desired batch polling selections enabled. For this operation, ProNet must be on, even if it is not logged on. Comport will remain open and initialized for communication with the payphone.

2. Daily Backup.

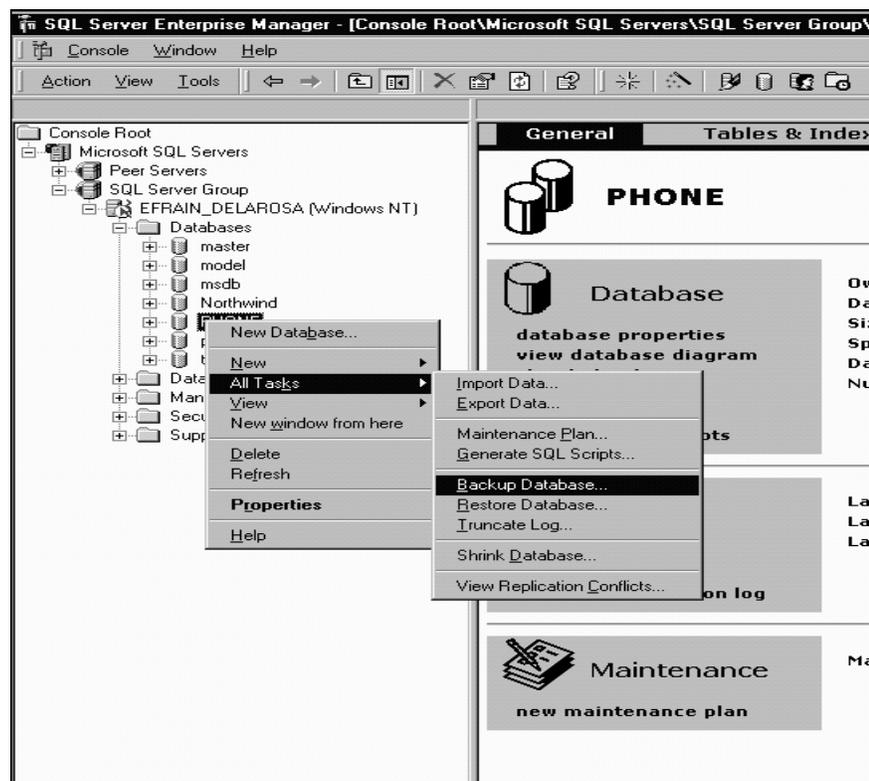
Important Note: It is recommended to use magnetic tape media as a primary device for this purpose. If not available, then the hard disk will be used as a last resort. However the proper procedure is using a tape backup device.

The system gathers data from the payphones during communication, either polling, or call in by the payphone. Thus, it is best to backup the database early in the morning, even before running reports. During payphone installation periods, it is recommended to perform a second daily backup at the end of the day. Compress your backup whenever possible. You can use Winzip, which can be obtained through the Internet. In order to provide you with adequate technical support, we may ask you to send us a copy of your database. Having a zipped format will ease the transfer of your backup via E-mail or modem.

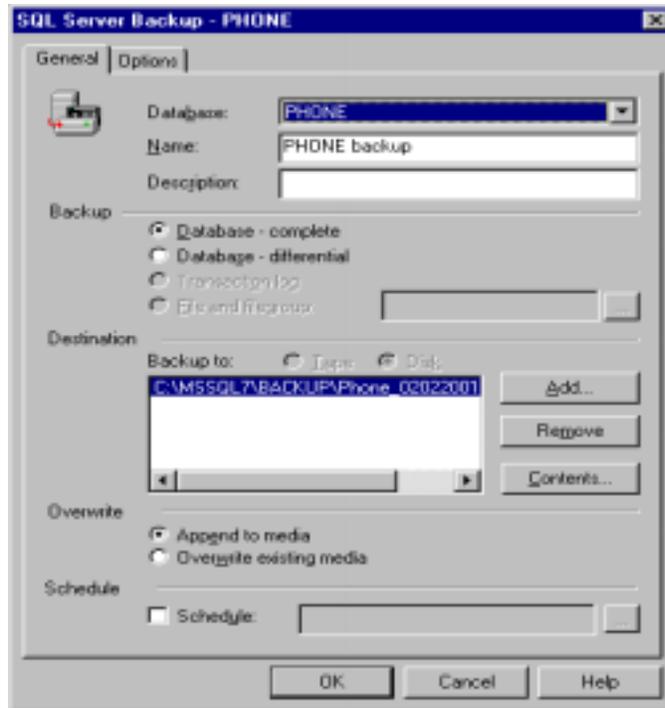
Have at least two backup tape cartridges available, which you will alternate for your daily backups. This way you will have at least the backup for the last two days. If there is enough free space in your backup unit for more than one backup, use up all the space before overwriting the previous backup. In some cases, you may need to access backup files for the previous 2 or 3 days.

To create a database backup

- i. Open MSSQL 7.0 Enterprise Manager.
- ii. Expand a server group; then expand a server.
- iii. Expand Databases, right-click the database, point to **All Tasks**, and then click **Backup Database...**

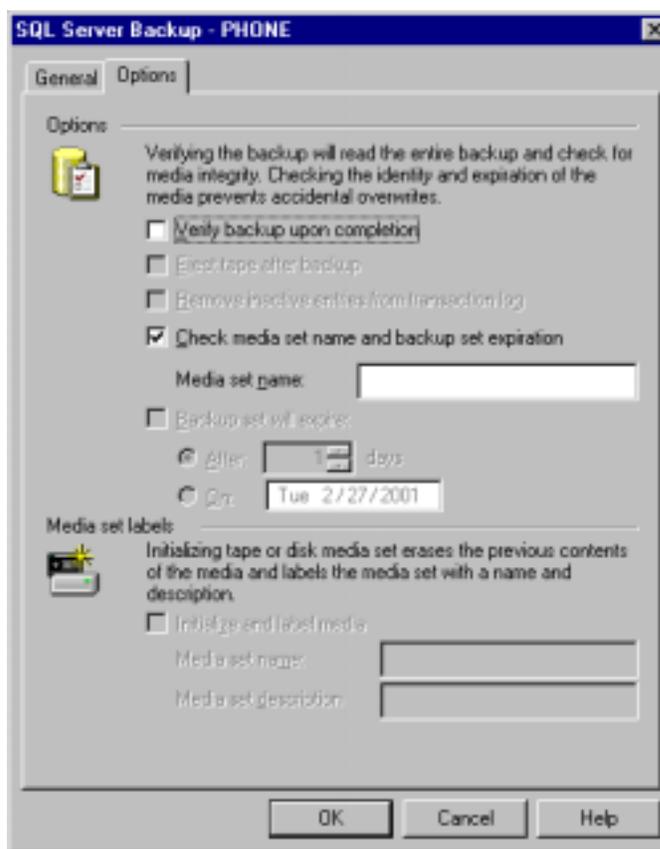


- iv. On the **General** tab, in **Name**, enter the backup set name.



- v. *Optionally, in **Description**, enter a description of the backup set, such as a date / time.*
- vi. Under **Backup**, select **Database – complete** (Default).
- vii. Under **Destination**, click **Add...** to add an existing or create a new backup device, click **Remove** to remove a backup device from the list of backup devices or simply select the destination from the list.
- viii. In the **SQL Server Backup** dialog box, under **Overwrite**, select:
- **Append to media** to append the backup to any existing backup on the backup device.
 - **Overwrite existing media** to overwrite any existing backup on the backup device.
- ix. *Optionally, select **Schedule** to schedule the backup operation for later or periodic execution.*

- x. Optionally, click the **Options** tab and select from these backup options:
- **Verify backup upon completion** causes the backup to be verified when process has completed (Recommended).
 - **Eject tape after backup** causes the tape to be ejected when the backup operation has completed. Available only with tape devices that support this feature.
 - **Check media set name and backup set expiration** causes the backup media to be checked to prevent accidental overwrites. In **Media set name**, enter the name of the media that should be used for the backup operation. Leave blank when only specifying the backup set expiration.



- xi. If this is the first use of the backup media, or you want to change an existing media label, under **Media set labels**, select **Initialize and label media**, and enter the media set name and media set description. The media can only be initialized and labeled when overwriting the media.
- xii. Once this procedure is completed, make sure that a backup of the **master**, **model**, **msdb** databases is made as well. By doing so you will prevent losing all the database's passwords and automated jobs.

3. Report Analysis

In order to dispatch the technicians with the maintenance activities for the day, it is necessary to run the Diagnostics reports from Impromptu and create the Trouble-tickets. Additionally, refer to the document "Reports 5.0 Description" to find out about the various reports available and how to run them.

4. Daytime Batch Polling.

Review the results of the nighttime polling to identify payphones that have not communicated with the **MS** for, at least, the last three days. Call these payphones either by Instant Call or by running a one-time batch polling including these payphones. Request that the technicians visit the payphones that fail to communicate with the **MS** after the daytime batch polling.

II. MONTHLY PROCEDURES

1. Monthly Backup

At the beginning of each month, in addition to the daily backup, perform a monthly backup and label it accordingly. This file should be stored in a backup storage unit specifically designated for monthly backups. Make sure that this backup is done **before** purging and/or compressing the database. It is recommended to keep this file for future reference for at least one year. This process should be done on the 3rd or 4th day of the month to ensure that all payphones have reported to the **MS**, thus ensuring that the backup will include all Call Detail Records (**CDR**) for the previous month.

2. Purge and Compress

It is important to Purge and/or Compress ProNet's database every month with the purpose of limiting its growth. This ensures a faster and more efficient database performance.

Once you have performed the monthly database backup, proceed to purge/compress the database. It is recommended to compress the **CDR** and Coinbox tables and purge the Diagnostics table as described below. The Compress process eliminates all detailed information regarding Coin box collections and **CDR** from the database, returning instead only summarized data for the compressed period:

- i. Compressing Coin box table: The total amount for all coin box collections by payphone is provided, freeing up the space used by the details of each coin box collection, which are cleared.
- ii. Compressing **CDR** table: A summary of all calls made by payphone, by type of call and by type of deposit is provided. The details of each call are cleared, freeing up the most of the database space.

However, you may choose to purge the three tables, which will clear all the detail records generated by the payphones, without returning any summary. Although the Compress and Purge functions delete all detailed data, the database will not decrease its size. However, with normal accumulation of data during the following month (provided that additional payphones **are not** added to the system) the database size will remain more or less constant.

Important Note:

The Compress process requires a minimum hard disk free space of at least twice the size of the database itself. Also, note that the Compress process could take up to a few hours depending on the size of your database and the overall performance of your computer.

Purge/Compress Procedure:

- i. From the main menu in ProNet, select **Admin**, then **Compress/Purge**.
- ii. To purge the Diagnostics table, from the Compress/Purge window, select **Set bounds**, then enter the **Start date** and **End date** corresponding to the month to be **purged**. **Use the date format mm/dd/yyyy.**
- iii. From the **Compress/Purge** window, select the table **Diagnostics** table. Then execute the **Purge** by clicking on the **Purge** button. At the end of the process you will get a message confirming the end of the execution.
- iv. To **Compress** the **CDR** and **Coin box** tables, from the **Compress/Purge** window, select **Set bounds**, then enter the **Start date** and **End date** corresponding to the month to be **compressed**.
- v. From the **Compress/Purge** window, select both the **CDR** and **Coin Box** tables. Then execute the compression by clicking on the **Compress** button. At the end of the process you will get a message confirming the end of the execution. It is essential to do this process every month, always setting the boundaries (**Start and End dates**) so that ProNet keeps summarized records, month by month, of the information generated by the payphones during each period.
- vi. Once all this is done, perform a second daily backup.

3. Clear Logger Folder

The **Logger Folder** contains files that store information pertaining to communication events between payphones and MS. ProNet automatically backs up these files when they reach the size programmed in ComPort's configuration screen, and creates a new log file. These backup files are accumulative and are not part of the database. As it was mentioned before, it is recommended to delete files older than one month because they utilize a considerable amount of hard disk space. This is, of course, taking in account how big they were programmed. During the end of the month procedure is a good time to delete these files:

- i. Open up Windows Explorer and select the folder **Program Files\Protel\Comport\Logger**.

- ii. From this folder select all the files named with the format **COMx_MonDa_yyyy_hh_mm.log**, and delete them or move them to a backup storage unit. This naming convention is a date stamp format to identify the closed log files.
- iii. The files remaining in the folder should be all the ***.comlog** files. The number of files is relational to the amount of ports assigned to the payphones.

4. Delete unused files.

Deleting unused or unwanted configuration files will help maintain an orderly system. This also frees up additional disk space for database growth.

III. YEARLY PROCEDURES

1. Yearly Purge of Database.

As you compress the **CDR** and Coin box collection records month by month, the information is stored in the database. This contributes to an increase in the database size over time. At the end of the fiscal year the database will contain an accumulation of summarized data for each month. The end of the year is a good time to backup this data for future reference and purge it. After performing the backup for the 12th month, which should be labeled “**Backup for the year xxxx**”, proceed to purge all tables: **CDR**, Coinbox collection and Diagnostics according to Purge procedure described above. Perform a second backup at the end of this process.

IV. ADDITIONAL MAINTENANCE RECOMMENDATIONS

1. Weekly Statistics reset.

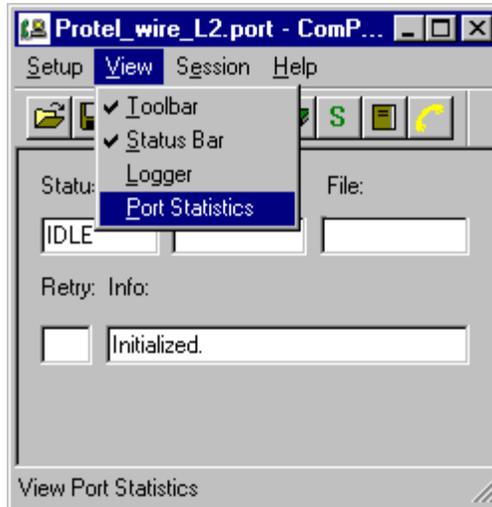
The Statistics are counters that keep a record of the number of events per payphone such as: number of times the payphone was taken off-hook, deposited coins, card insertions, processed calls, etc. ProNet offers several reset options for the Statistics records: manual, or automatic: daily, weekly or monthly. If you are not doing automatic reset it is recommended to do it manually every week:

- i. Select **Admin.** and **Statistics** from ProNet’s main menu
- ii. Select the Manual Reset Method and next click the button Reset Now. ProNet will display the Last Reset date. The Statistics report will show 0 for all statistics counters.

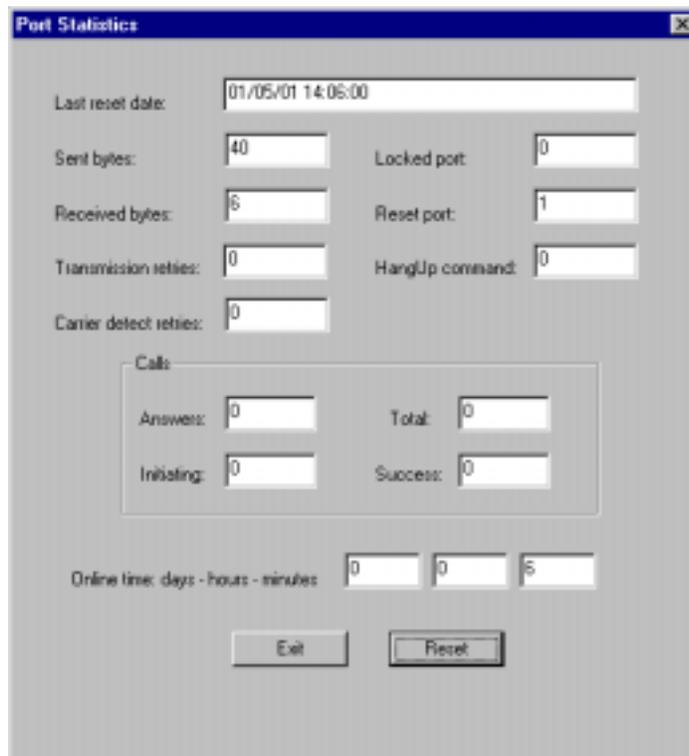
2. Weekly Communications port Statistics reset.

The Communication port Statistics are counters that keep record of all events related to communications such as: sent bytes, received bytes, transmission retries, locked ports,

etc. It also records the number of calls initiated, answered and, out of all those calls,



how many were successfully completed. Additionally, it records the time the port has been online. It is recommended that these statistics be cleared on a weekly basis to maintain the information up to date. To reset the port statistics:

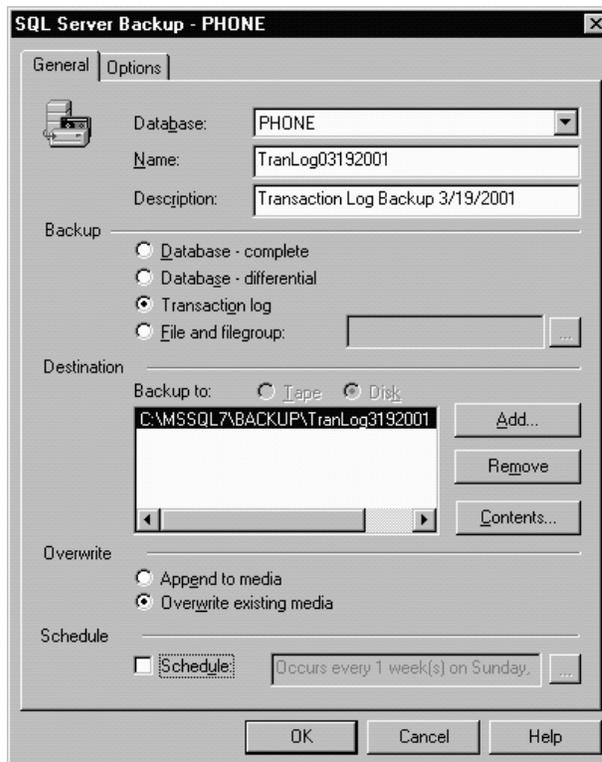


- i. From ComPort main menu, select **View** and then **Port Statistics**.
- ii. Clicking the **Reset** button will clear all values stored and closes the window.

3. Transaction Log backup

The transaction log records the start of each transaction. It records the changes to the data made during each transaction. The log grows continuously as logged operations occur in the database. Because of this, a backup of the Transaction Log is necessary in order to maintain as much free space as possible, leaving this free space for database growth without compromising it. The best way to backup the Transaction Log is by creating a **Database Maintenance Plan**. The following steps will guide you on how to create it.

- i. Open MSSQL 7.0 Enterprise Manager.
- ii. Expand a server group; then expand a server.
- iii. Expand Databases and then right-click Phone... point to **All Tasks** and click over **Backup Database...**
- iv. On the General tab, in **Name** enter the backup set name.
- v. Optionally, in **Description**, enter a description of the backup set, such as a date/time.



- vi. Under **Backup**, select **Transaction Log**.
- vii. Under **Destination**, click **Add...** to add an existing or create a new backup device, click **Remove** to remove a backup device from the list or simply select the destination from the list.

viii. Under **Overwrite**, select:

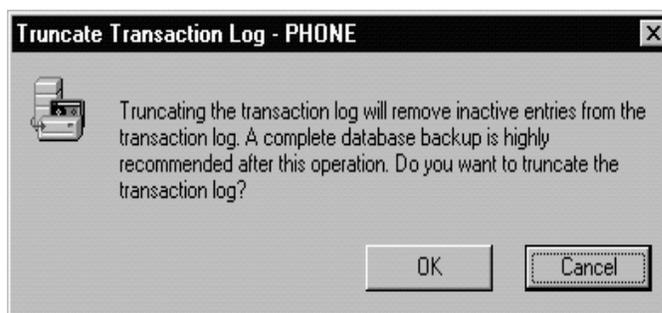
Append to media to append the backup to any existing backup on the backup device.

Overwrite to existing media to overwrite any existing backup on the backup device.

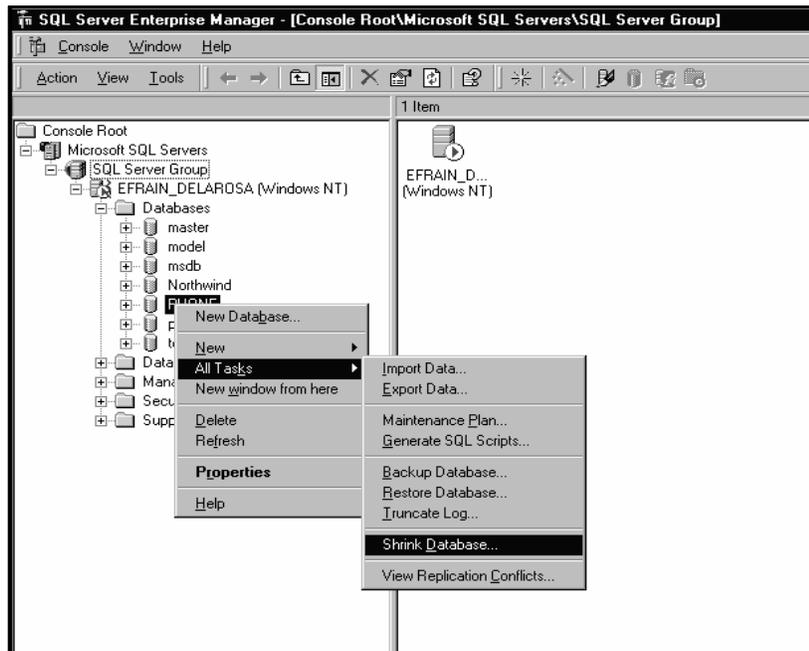
4. Truncating the Transaction Log and Shrinking the database

Along with backing up the Transaction Log, truncating the log is what, effectively, will free up space in your hard drive. Truncating the log is the process of deleting old transaction records that are no longer useful. Once the Transaction Log has been truncated, the next step should be to Shrink the database. This will also free up space that was taken by blank pages created by SQL. The following steps will guide you through the process of truncating the log and shrinking the database respectively.

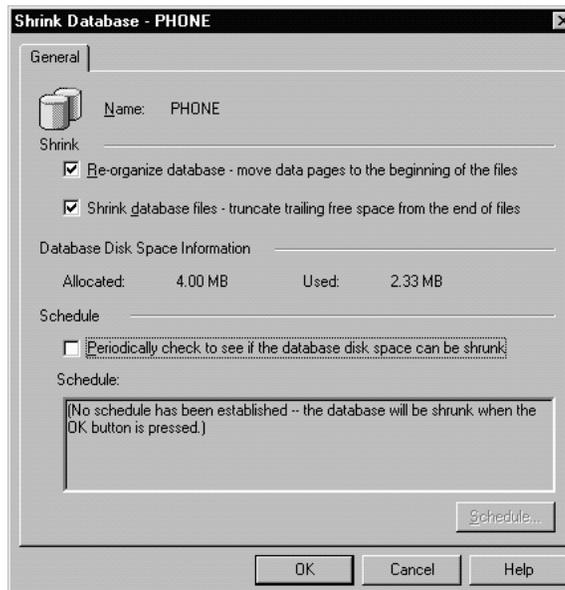
- i. Open MSSQL 7.0 Enterprise Manager.
- ii. Expand a server group, then expand the server.
- iii. Expand **Databases**, right click over the database PHONE and select **All Tasks** and then click **Truncate Log...**
- vi. A message box will pop-up letting you know that all inactive entries will be deleted and that a complete backup is recommended once this operation is done. Click **OK** to proceed.



- v. Depending on the size of your database, this operation could take a while. The application will prompt you when it's finished. Do not close **Enterprise Manager**.
- vi. Before doing a complete backup, shrinking the database is recommended. This process will free up some more unused space in the hard drive. Right click over the database, select **All Tasks...** and then click over **Shrink Database...**



- vii. SQL 7.0 has the ability to periodically check if the database needs to be shrunken. In this next screen, you will have the option of allowing SQL 7.0 to verify if the database needs to be shrunken or not, or if you want to perform this operation manually. If you select the **Periodically check to see...** option, then you need to execute the steps that follows, otherwise skip to step **xii**.
- viii. In the **Shrink** section, leave the two options selected unchanged. In the **Disk Space**



Information, you will find how much space your database has allocated for and how much off that space is unused. In the **Schedule** section is where you will select the **Periodically check to see...** option to set up the schedule for automatic check-up and database shrinking. It is recommended that a once-a-month schedule is set, being this date towards the middle of the month to allow enough time for you to run your monthly reports and backup procedures. Click **Schedule...**

- ix. In the **Edit Schedule** screen, select **Recurring** and click **Change...**
- x. In this next screen, in the **Occurs** section select **Monthly**. In the **Monthly** section type 15 in the **Day** field. All other options remain in default. Click **OK**.
- xi. Click **OK** in this screen. Click **OK** in the **Edit Schedule** screen. Click **OK** in the **Shrink Database** screen. A message will pop-up telling you that the ‘...shrink database command was formatted for a later time.’ Click **OK**.
- xii. From step **vii**, if the periodic check was not selected, in the **Shrink Database** screen click **OK** and the operation will execute immediately. It might take a while, depending on the size of your database. Once is done, a message will pop-up letting you know that the operation was completed and also how much space has been allocated for you data-base.



- xiii. Once these procedures have been executed, proceed to do a complete database backup.

5. Creating Backup Devices

When creating scheduled backups, you must select a backup device for the data being saved. There are two devices that can be created: a hard drive and a tape drive. Below are the steps to create each one of them.

- i. To create a **named disk backup device**
 - Expand a server group; then expand a server.
 - Expand Management, right-click Backup, and then click **New Backup Device...** (Fig. 6)
 - In **Name**, enter the name for the named backup device.
 - Select **File name**. You can either:
 - Enter the name of the physical file used by the disk backup device.
 - Or
 - Click (...) to display the **Backup Device Location** dialog box, then select the physical file on the local computer used by the disk backup device.



- ii. To create a **named tape backup device**
 - Expand a server group; then expand a server.
 - Expand Management, right-click Backup, and then click **New Backup Device...** (Fig. 7)
 - In **Name**, enter the name for the named backup device.
 - Select **Tape drive name**; then click the physical tape device to use as the tape backup device.



6. As payphone network expands, reorganize zones

As your payphone network expands, make use of the ProNet's ability to group phones into zones. By doing this as the payphones are installed the zones will be kept neatly organized and grouped. You can choose to group your phones in zones by geographical area, by phone number, by type of phones, etc. Use the option *Network, Move* to move payphones from zone to zone.

7. Make use of *Notes* field and the *Detail* screen

In order to make the most efficient use of the MS, Protel recommends the use of the *Notes* field and the *Detail* screen in the *Phone, Edit* screen. These areas should be used to annotate the detailed location of each payphone and useful information such as the installation date, payphone model, serial numbers, etc.

