



# ProFuel 2

## Fleet Fuel Management

*'Fleet Fuel Control  
Made Simple'*

*Engineered Solutions by:*

**computrol**  
FUEL SYSTEMS INC

Blank Back

# *ProFuel 2*

## **Fleet Fuel Management User Reference Manual**

### **Computrol Fuel Systems Inc.**

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# Table of Contents

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<b>INTRODUCTION .....</b>	<b>1</b>
<b>INSTALLING PROFUEL 2.....</b>	<b>3</b>
<b>PRODUCT LIST.....</b>	<b>5</b>
<b>ADDING PRODUCTS .....</b>	<b>5</b>
<b>EDITING PRODUCTS .....</b>	<b>6</b>
<b>DELETING PRODUCTS .....</b>	<b>7</b>
<b>PRODUCT GROUPS .....</b>	<b>8</b>
<b>MAKING CHANGES TO PRODUCT GROUPS.....</b>	<b>9</b>
<b>ADDING LOCATIONS.....</b>	<b>10</b>
<b>EDITING A LOCATION .....</b>	<b>10</b>
<b>LOCATION GROUPS.....</b>	<b>12</b>
<b>TANKS.....</b>	<b>13</b>
<b>RECORDING DELIVERIES .....</b>	<b>15</b>
<b>USERS DATABASE .....</b>	<b>16</b>
<b>ADDING CARDS / NUMBERS .....</b>	<b>17</b>
<b>INTRODUCTION .....</b>	<b>22</b>
<b>SETTING UP YOUR PUMP CONTROL UNITS.....</b>	<b>23</b>
<b>PCU LIST SCREEN.....</b>	<b>23</b>
<b>ADDING PCUS .....</b>	<b>23</b>
<b>TAB (2) DISPLAY PROMPTS.....</b>	<b>25</b>
<b>TAB (3) OUT GOING MESSAGES.....</b>	<b>26</b>
<b>TAB (4) ERROR MESSAGES .....</b>	<b>27</b>
<b>EXPLANATION OF PUMP TIME OUTS .....</b>	<b>30</b>
<b>TAB (5) SETTING UP FRONT INTERFACE BOARD .....</b>	<b>31</b>
<b>TAB (6) COMMUNICATIONS SETUP .....</b>	<b>32</b>
<b>TAB (7) TRANSACTION FORMAT SCREEN .....</b>	<b>33</b>
<b>TAB (8) RECEIPT FORMAT SCREEN .....</b>	<b>34</b>
<b>SENDING CARDS/NUMBERS TO PCU'S.....</b>	<b>35</b>
<b>TABLE 1 – MAIN COMMANDS .....</b>	<b>37</b>
<b>TABLE 2 – OPERATIONAL COMMANDS.....</b>	<b>37</b>

# Table of Contents

---

**POLLING TRANSACTIONS..... 38**

**SEMI-AUTOMATIC POLLING ..... 38**

**PROCESSING REJECTED TRANSACTIONS ..... 40**

**TAXES AND DISCOUNTS..... 45**

**SETUP FOR TAX AND DISCOUNTS..... 46**

## **Introduction**

Welcome to ProFuel 2, an enhanced version of Computrol's original ProFuel program first introduced in 2000. Profuel 2 has been carefully developed to provide network based management of Computrol's C6000; a new generation of pump site controller designed with the latest microprocessor technology. ProFuel 2 not only retains the best features of ProFuel but it also incorporates a number of features requested by our many clients engaged in fleet management and petroleum sales. ProFuel 2 operates efficiently under Windows XP, 2000, and 98SE

With easy to operate graphic screens and new automated functions, ProFuel 2 simplifies the task of daily fuel management and provides an expanded range of capabilities:

- Manage your vehicle fuels or fuel sales in a complete Windows environment on a standalone or network basis
- Track and report fuel movement by account, by vehicle, by employee, or by customer.
- Track and report pump activity and tank inventory changes by location, by product, and by cost
- Schedule automatic collection of pump transaction data on any day at any time, for any or all sites
- New!** • Manage any combination of Computrol C6000, C600, or Fleet 300 pump controllers (PCUs) with one program
- Quickly download customer, vehicle, and personnel authorizations from the ProFuel 2 dbase to any PCU in your System. Also downloadable are PINs, meter values, meter restrictions, and fuel limits
- New!** • Where C6000 PCUs are connected on an IP link, you can instantly download complete card or other authorization files in seconds. Also downloadable are the complete configurations of every C6000 pump controller
- New!** • Upload inventory data and tank status, in real time, from popular in-tank probe system.
- Universal Users' Screen allows you to control all individual fuel users, whether customers, vehicles or personnel.
- Universal Transaction Screen allows you to manually enter non-cardlock transactions and bulk fuel deliveries.
- Powerful and flexible Crystal Reports provides, on demand, a wide range of selectable reports on fuel usage and vehicle performance.
- All data is managed in Microsoft's powerful Access Database, which allows you to move key data to other applications including your accounting and fleet managements programs.

- ProFuel Plus, an optional version provides for the assignment of taxes and discounts to cardlock transaction generation of commercial invoices.

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## **Installing ProFuel 2**

### System Requirements

In order to run ProFuel you should have:

PC with Pentium 4 1.0 GHz or higher with Windows XP/NT/2000 Pro/98 SE (Internet Explorer 5.5 or higher)

256 MB of RAM; 512 MB recommended

Display with 1024 x 768 or better resolution

At least 100 MB of free hard disk space

Serial Port connection to your PCU via direct cable, modem or network

(Optional) Ethernet network connection to your PCU's via RJ45 network cable.

### Loading and Initialization

The following loading sequence is required:

Put the disk in the computer.

Go to the Windows 'START' menu and Click on 'Run ...'

Type in 'D:\setup' where 'D' is the letter of your CDROM

Click 'OK' and the ProFuel Setup utility will copy all necessary files to your computer and set up the program icon. The default installation directory is 'C:\Program Files\ProFuel\'.  
'

### Installing ProFuel on a Network

Should you wish to provide access to the ProFuel database from more than one workstation, current versions of ProFuel can be installed with the database on your Server. Daily operating functions are still run from any of the ProFuel workstations.

Each workstation running ProFuel requires a license from Computrol. Contact the factory or your dealer for details.

To install ProFuel on your principal workstation, simply load the CD as detailed on the previous page. The principal workstation is the computer which is connected to the Pump Control Units.

To install the ProFuel database on your Network Server, follow these steps:

Use *Windows Explorer* to locate the server directory you have chosen for the networked database.

In *Windows Explorer* use *Tools* then click on 'Map Network Drive' to map the selected directory as a drive. The automated designation, such as F:, K:, or Y: can be used

and will make all future references to the directory easier. If more than one workstation is running ProFuel/Plus, each work station must map the network drive with the same letter e.g. "E"

To locate the database path from ProFuel/ProFuel Plus.

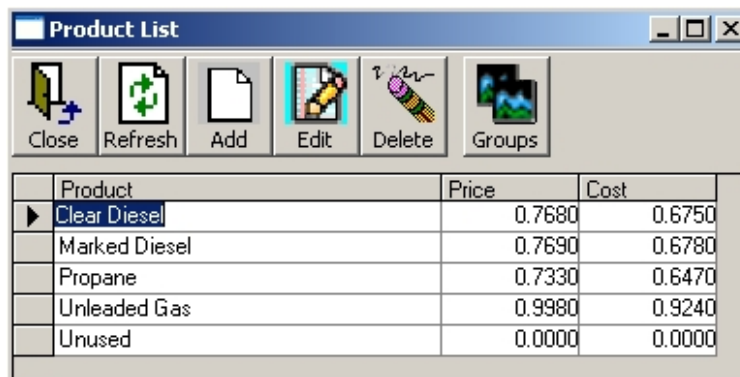
- Select "ProFuel – system settings" option
- Click "Connect" push button
- Select or enter a database name
- Click "Test Connection" to confirm selection
- Click OK to save the setting

## **Product List**

The Product List screen displays a menu of all Products you have entered into your database, as well as an immediate reference to the prices you are currently charging for these products. Products listed on this screen are used to create several other database files including Product Groups, Tanks, and Pumps.

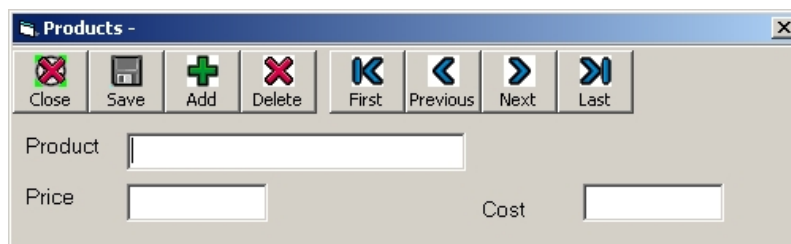


To access the Product List Screen, simply click the **Products** button which appears at the top of the main ProFuel menu. This List screen is for reference purposes only. To Add, Change, or Delete Products and Prices, you must use the toolbar buttons **Add, Edit, or Delete** to step down to the individual Product Screen for each product.



## **Adding Products**

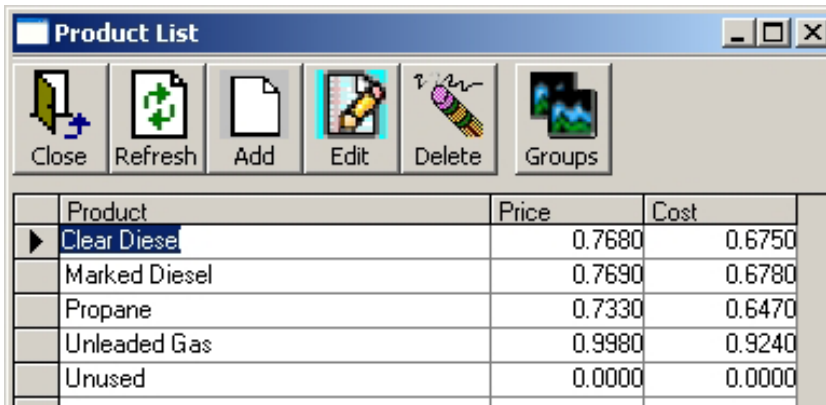
To **Add** a new product, select the toolbar button **Add**, and a blank Product Screen will appear as shown below. You can then enter a product name up to 20 characters.



Prices must be entered in pennies. Eg. .95 for 95 cents, and 1.04 for one dollar and four cents. When you have completed the entry, click **Save**

## Editing Products

To **Edit** a product, you must first highlight the product, and then click the **Edit** toolbar button.



The Product Screen for the highlighted product will then appear as follows:



You can now make changes to the Product Name or the Product Price. Click **Save** to retain changes. These changes will be immediately reflected on the Product List Screen. Clicking the **Close** button will also retain changes

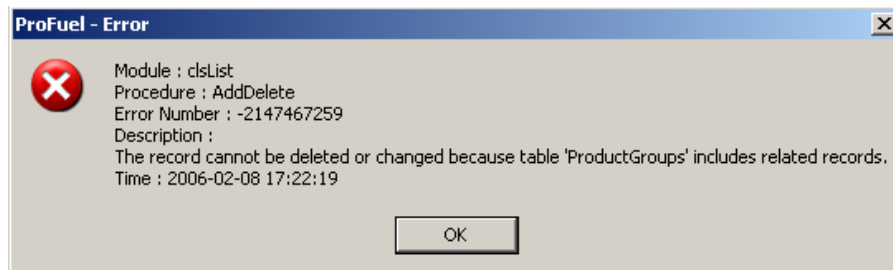
## **Deleting Products**

Deleting products is slightly more complicated because of the inter relation of Products to other files. You will not be able to Delete a Product unless you have previously deleted it from your Product Groups and deleted any Tank records with the Product you wish to Delete.

To Delete a Product, highlight that Product on the Product List screen, then click Delete. A check message will then appear as follows:




If you have not previously unchecked the Product from the Product Groups or deleted the Tank records containing this product, the following Error Screen will appear:

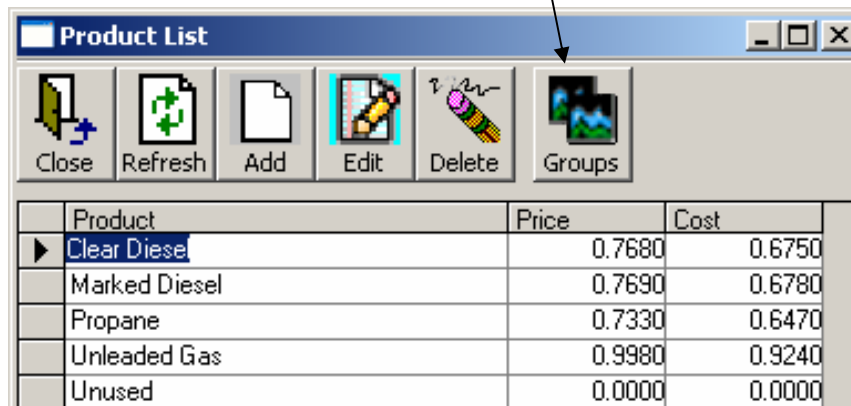


You must use the Product Groups button and remove the product from each group.

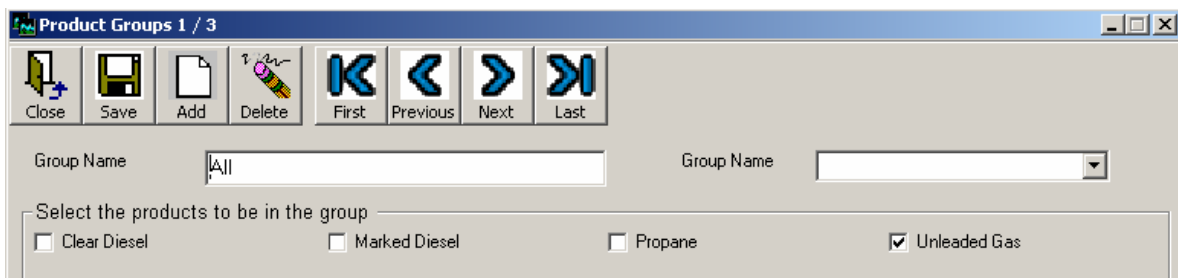
## Product Groups

Every User in your System, whether employee, customer, vehicle or unit; must be assigned a single Product Group comprised of the products for which that specific User is authorized. The Product Group Screen, is used to create an unlimited number of Product Groups. The Groups you create are referenced by the User Screen ( Page -.-) where they are displayed in a drop down table accessed In the Product Group field.

To access the Product Group Screens, simply click the  button which appears in the Product List toolbar as follows:



The first Product Group screen will then appear. Assign a Group Name and check off the boxes of the products you wish to be included in this Group.



## Making Changes to Product Groups


To change a Group Name or product assignments within an existing Group, simply check or uncheck the product boxes and click **Save** to retain changes.

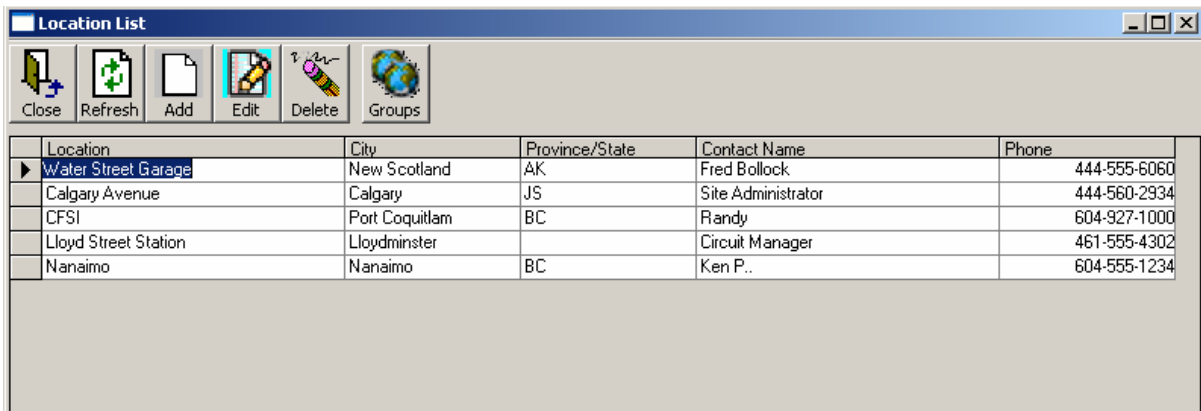
Note that any changes or additions to Product Group Names will be shown in the drop down box used when entering data on the USER Screen in which vehicles, employees and customer are authorized.

### Location List

The Location List screen displays a menu of all Locations you have entered into your database. A unique Location Name must be assigned to every Pump Control Unit in your fuelling network. Locations listed on the screen are used to create several other database files including Location Groups, Tanks, and Pumps.



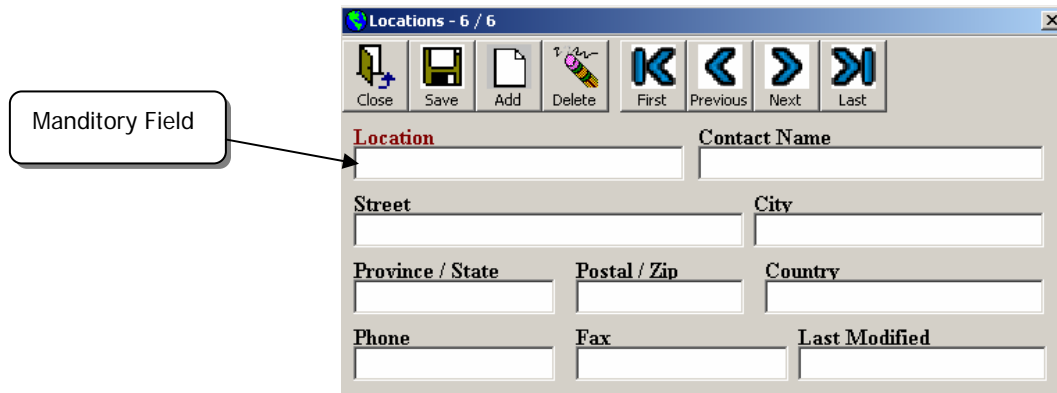
To access the Location List screen simply check the  button which appears at the top of the main ProFuel menu. This List is for reference purposes only. To Add, Change, or Delete Locations you must use the toolbar buttons to step down to the individual Locations Screen for each site.



Location	City	Province/State	Contact Name	Phone
Water Street Garage	New Scotland	AK	Fred Bollock	444-555-6060
Calgary Avenue	Calgary	JS	Site Administrator	444-560-2934
CFSI	Port Coquitlam	BC	Randy	604-927-1000
Lloyd Street Station	Lloydminster		Circuit Manager	461-555-4302
Nanaimo	Nanaimo	BC	Ken P..	604-555-1234

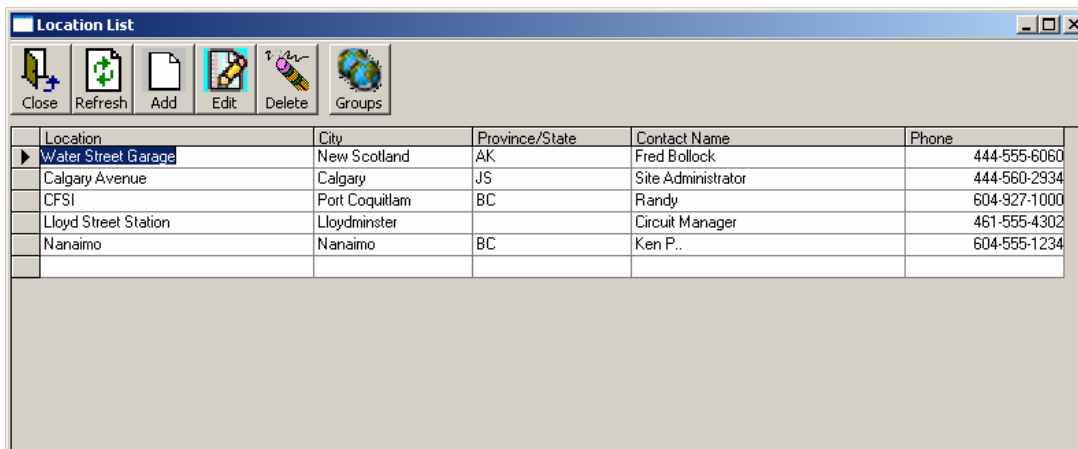
## Adding Locations

To Add a new location, select the toolbar button Add, and a blank screen will appear as follows. You can now enter a Location Name up to 20 characters. The Location Name shown in red is mandatory.

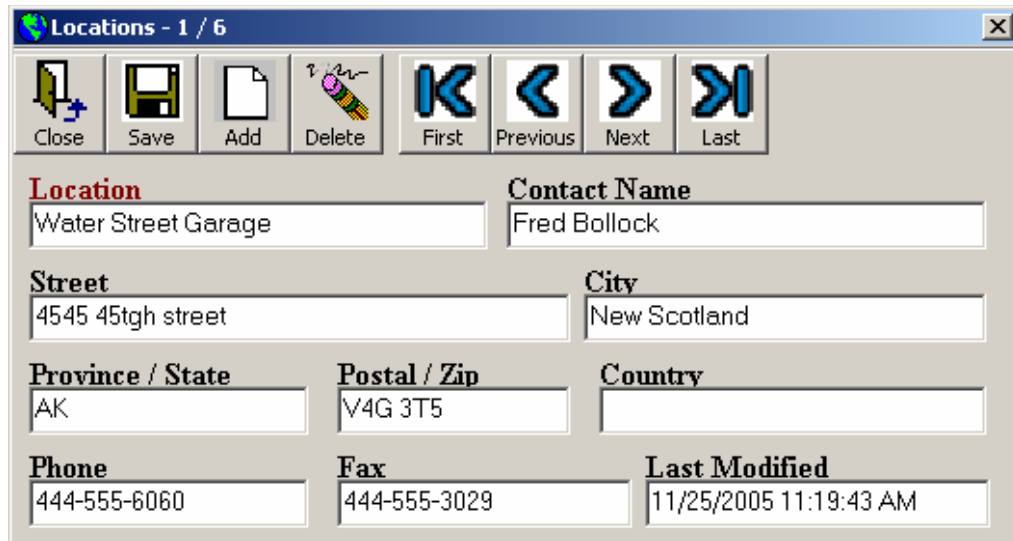


## Editing a Location

To Edit a Location, you must first highlight the Location on the Location List and then click the appropriate toolbar button, Edit



The Location Screen for the highlighted Location will then appear as follows



The screenshot shows a window titled "Locations - 1 / 6" with a toolbar containing icons for Close, Save, Add, Delete, First, Previous, Next, and Last. Below the toolbar is a form with the following fields:

<b>Location</b>	<b>Contact Name</b>	
Water Street Garage	Fred Bollock	
<b>Street</b>	<b>City</b>	
4545 45tgh street	New Scotland	
<b>Province / State</b>	<b>Postal / Zip</b>	<b>Country</b>
AK	V4G 3T5	
<b>Phone</b>	<b>Fax</b>	<b>Last Modified</b>
444-555-6060	444-555-3029	11/25/2005 11:19:43 AM

You can now make changes to the Location data. Click **Save** to retain changes. These changes will be immediately reflected in the Location List Screen

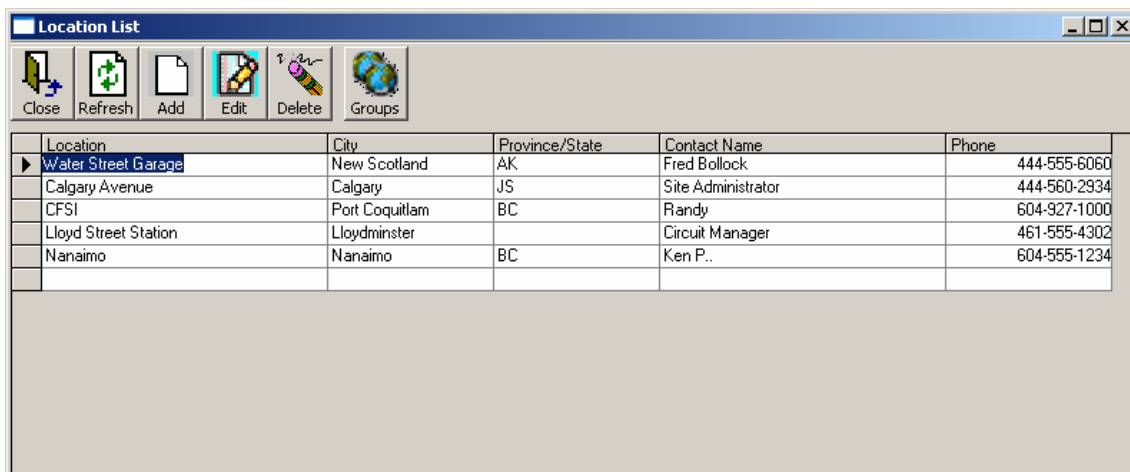
## Location Groups

Every User in your System, whether employee, customer, vehicle or unit must be assigned a Location Group comprised of the locations for which that User is authorized. The Location Group screen is used to create any number of Location Groups. These Groups are referenced by the User Screen ( see Page ) where they are displayed in a drop down table

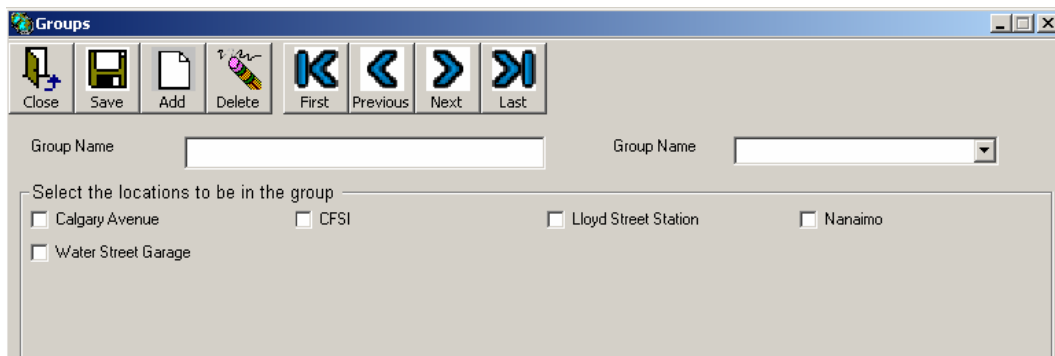
To access the Location Group Screen simply click the



button on the Location List toolbar as follows:



The first Location group screen will appear. Assign a Group Name and check off the locations to be included in the Group.

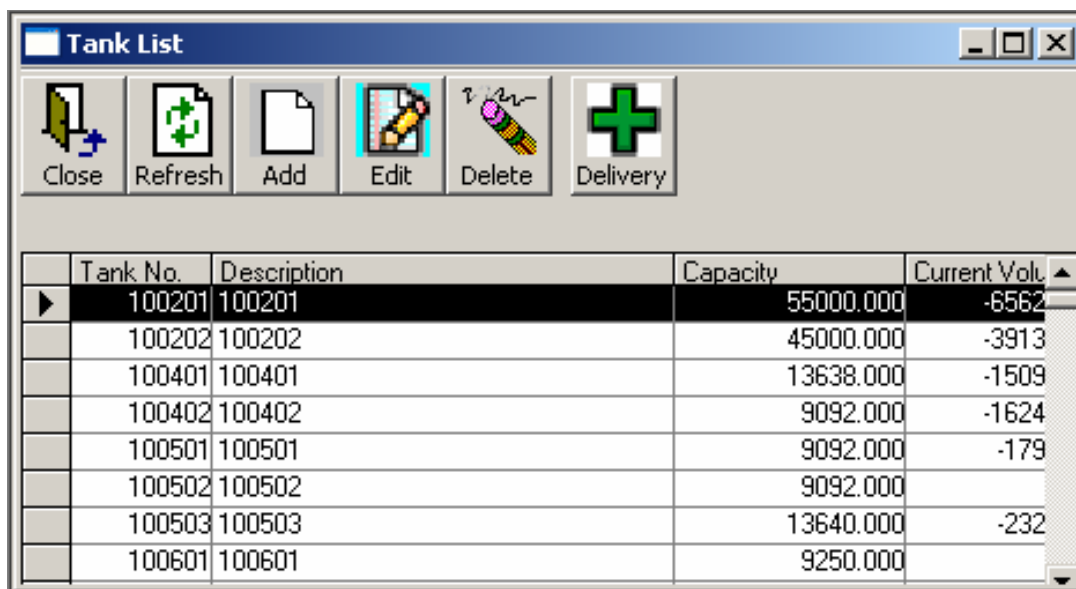


To change a Group Name or location assignments within the Group, simply check/uncheck the location boxes and **Save**

## Tanks

All fuel storage tanks which supply product to your PCU controlled pumps, must be entered in the ProFuel database. Tank files are linked to the appropriate Pump Files in order to accurately track inventory changes. Tank files must be created before your PCU files can be set up.

Upon clicking the Tanks button,  the Tank List screen will appear.




The screenshot shows a window titled "Tank List" with a toolbar containing icons for Close, Refresh, Add, Edit, Delete, and Delivery. Below the toolbar is a table with the following data:

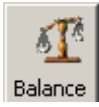
Tank No.	Description	Capacity	Current Vol.
100201	100201	55000.000	-6562
100202	100202	45000.000	-3913
100401	100401	13638.000	-1509
100402	100402	9092.000	-1624
100501	100501	9092.000	-179
100502	100502	9092.000	
100503	100503	13640.000	-232
100601	100601	9250.000	

To add each Tank record, click Add and the following Tank Screen will appear.

Manufactured Capacity

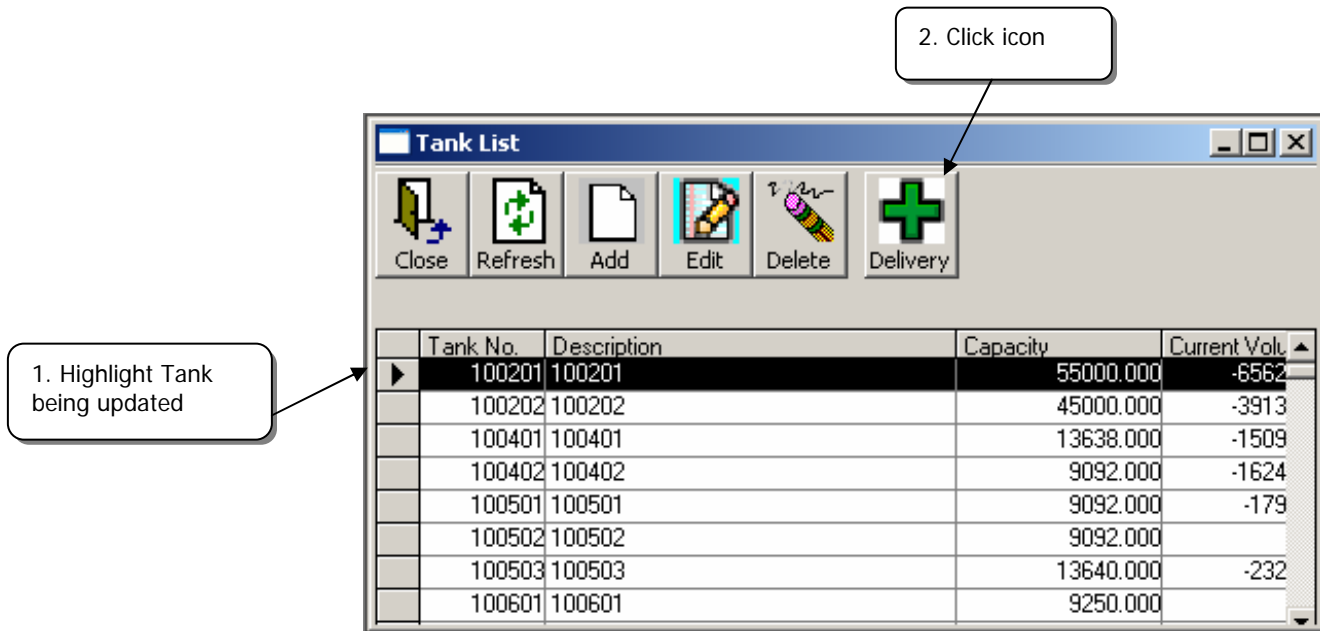
Enter appropriate data and click, 

Note that the Tank Record Screen is used to adjust the ProFuels tank balances to match actual tank inventories. In order to do so,

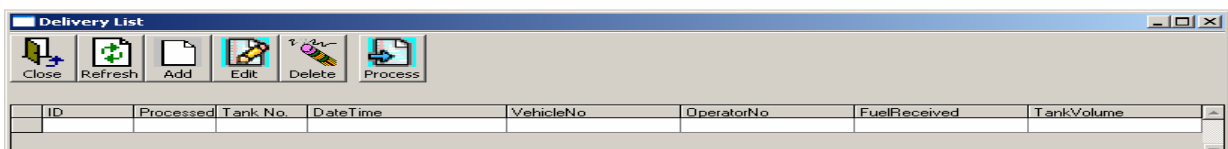
1. Obtain Manual or Electronic DIP reading which must be accompanied by precise date and time taken.
2. Click on appropriate Tank Record, then click on  A Tank Update Screen will then appear.

## Recording Deliveries

To enter bulk deliveries to your tanks, go to the Tank List Screen.




Delivery List Screen will now appear.



## Users Database

The ProFuel system restricts access to your pumps so that only valid employees or customers may put fuel into valid vehicles or equipment. Additional optional restrictions limit the type and quantity of fuel that may be obtained at each fill and also require that the drivers enter certain meter values that fall within a range of 'reasonability'. Other options allow you to assign a selectable PIN number to a customer card or to an employee or vehicle code; while employees, customers and vehicles can be restricted to certain locations only.



To Access the USERS screen, click the  button on the main menu. Cards or keypad numbers for employees, customers, vehicles, and units are managed by use of the USERS screens. When you click you will see the Card List Screen which displays all cards or keypad numbers in your database listed in numerical order along with current information. While this is primarily a reference screen, it is possible to Delete cards or numbers from the database by using the **Delete** button on this screen.

Number	Vehicle	Description	Enabled	ReaderType	TransactionLimit	Odometer	Hours	DateLastUpdated
	Yes	Mulavey Transport	Yes	Keypad Only	0	100	10	12/15/2005 3:50:49 PM
4	Yes	Mike Moerkoert	Yes	Card Only	0	100	10	11/29/2005 2:55:25 PM
5	Yes	Nathan Bradley Taxi	Yes	Card Only	0	0	0	11/29/2005 2:55:25 PM
6	Yes	M & M Stucco Ltd.	No	Card Only	0	100	10	6/5/2005 12:25:16 PM
7	Yes	L & H Trucking/Clarence	No	Card Only	0	100	10	6/5/2005 12:25:16 PM
8	Yes	South Okanagan Survey Services	No	Card Only	0	100	10	10/21/2005 5:12:52 PM
9	Yes	Freeport Freewheelers	Yes	Card Only	0	0	0	11/29/2005 2:55:25 PM
10	Yes	Cost Counters Express	Yes	Card Only	100	0	0	11/29/2005 2:55:25 PM
10	No	Cost Counter Express Lost	Yes	Card Only	0	0	0	11/8/2005 5:08:30 PM
11	Yes	Ron McDowell/card 1	No	Card Only	0	100	10	6/5/2005 12:25:16 PM
12	Yes	Carol/Work	Yes	Card Only	0	100	10	11/29/2005 2:55:25 PM
13	Yes	Spruce Valley #13	Yes	Card Only	0	100	10	11/29/2005 2:55:25 PM
14	Yes	Kevin	No	Card Only	0	100	10	6/5/2005 12:25:16 PM
15	Yes	Caroling Trucks	Yes	Card Only	0	0	0	11/29/2005 2:55:25 PM
16	Yes	Spruce Valley #16	Yes	Card Only	0	100	10	11/29/2005 2:55:25 PM
17	Yes	Spruce Valley/Renee	Yes	Card Only	0	100	10	11/29/2005 2:55:25 PM
18	No	Spruce Valley #18	Yes	Card Only	0	100	10	11/29/2005 2:55:25 PM
22	Yes	Spruce Valley #22	Yes	Card Only	0	100	10	11/29/2005 2:55:25 PM
24	Yes	Spruce Valley #24	Yes	Card Only	0	100	10	11/29/2005 2:55:25 PM
25	No	Spruce Valley/Darcy	Yes	Card Only	0	100	10	11/29/2005 2:55:25 PM
26	Yes	Spruce Valley/Darren	No	Card Only	0	100	10	6/5/2005 12:25:16 PM

## **Adding Cards / Numbers**

To Add a new card or number, simply click the **Add** button on the Card List Screen and a blank Vehicle/Operator Screen will appear. Note that an Operator denotes a person that is an employee or a customer.

The new Computrol ProFuel System incorporates a wide range of features and restrictions that are entirely programmable by the System Owner. Accordingly, before you can complete the data entry for any card or number, you must first have completed the following Screens:

- Products and Product Groups
- Locations and Location Groups
- PCU Message Directory
- Cardholder Message Groups
- Account Numbers

To **Add** a new Card or Number, click the **Add** button on the Card List Toolbar and a blank Vehicle/Operator Screen will now appear. All field names printed in Red are mandatory.



The screenshot shows a software window titled "Vehicle/Operator - 9 / 6228" with a toolbar containing icons for Close, Save, Add, Delete, and navigation (First, Previous, Next, Last). The main form is divided into several sections:

- Card / Number Section:** Includes radio buttons for "Vehicle" (selected) and "Operator", an "Enabled" checkbox, and fields for "Reader Type" (Card Only), "Number" (46), "OEM" (8), and "F/C" (123). Below these are fields for "Account Number" (CS), "Location Group" (All), and "Product Group" (UNLEADED). Further down are "Message Group" (Vehicle\_Odo), "PIN" (0), "Group", and "Unit" (BLAW0509).
- Description and Fuel Limit:** A "Description" field contains "95 FORD ECONOL VAN". The "Fuel Limit" section has a checked "Transaction" checkbox with a value of 150, and an unchecked "Polling" checkbox with a value of 0. An "Out Going" field and a "Status" dropdown (set to None) are also present.
- Vehicle Section:** Contains radio buttons for "Odometer" (selected), "Hours", and "Both". The "Odometer" section has fields for "Start" (9565), "Current" (207920), "Variance - High" (2000), and "Low" (0). The "Hours" section has a "Number of Digits on Hours meter" dropdown set to 4, with "High" and "Low" fields set to 0. The "Both" section has a checkbox for "Stop on Invalid Odometer/Hours after three attempts" (unchecked) and three "Misc" fields (Misc 1, Misc 2, Misc 3) with "High" and "Low" values set to 0.
- Date Section:** A table-like structure with columns: "Date Issued" (11/16/1994), "Last Updated" (12/05/2005 2:10:58 PM), "Last Modified" (05/09/2006 1:43:26 PM), and "Last Used" (11/29/2005 1:52:00 PM).

Callout boxes provide the following instructions:

- "Check Enabled Box for active Cards/Numbers" points to the "Enabled" checkbox.
- "Coil Card Series Proximity Install Code Touch Card Facility Code" points to the "OEM" and "F/C" fields.
- "Click appropriate button to define card or number as an operator/customer or to be used for a vehicle/unit." points to the "Vehicle" and "Operator" radio buttons.
- "Check with Computrol" points to the "Add" button in the toolbar.
- "Upper Screen section applies To both Operators and Vehicles" points to the "Card / Number" section.
- "Lower Screen section applies To Vehicles/Units only" points to the "Vehicle" section.

#### CARD/NUMBER

The C6000 is designed so that it will accept any card or keypad input up to 19 digits. For maximum flexibility, the C6000 will accept cards from any series or range. In order to do so, the Card Series or Facility Code now becomes part of the card number.

**Coil Cards:** Three digit Card Series Codes from 200 to 218 now become a prefix to the coil card numbers. Eg card 45602 from Series 203 will be entered as 20345602. Thus, cards from different Series can be managed by the C6000

**Mag Stripe Cards:** The entire card number embossed on the front of the card can now be entered and downloaded to the C6000. Some mag stripe cards include a hidden prefix on the magnetic stripe that is not shown on the embossing. To determine the hidden digits, simply insert the card into the mag reader on the C6000 and the entire electronic number will appear.

**Proximity Card and Tags:** most proximity tokens are codes with a hidden Installation Code up to 3 digits. If you do not know your Installation Code, swipe the card or tag and the entire number will appear in an invalid transaction record. Most proximity cards and tags utilize a 26 or 34 bit format that uses 10 digits. Therefore the card or tag number to be entered will be similar to 8000450023

#### READER TYPE

The drop down arrow in this field allows you to instruct the C6000 unit as to how the Operator/Customer/Vehicle Number is to be recognized. Is it to be represented by a card, or from the keypad? Alternately, do you wish that should a card prove faulty, that the customer can enter the card number from the keypad? Select One

#### ACCOUNT NUMBER

Every Card or Number must be assigned to an Account. Use the drop down arrow in the Account Number field to select the appropriate Account. The Account Numbers displayed are taken from the Accounts database ( See page )

#### LOCATION GROUP

Every Card or Number must be assigned a Location Group which determines at which sites the employee/customer/vehicle will be authorized to fuel. Use the drop down arrow in the Location Group field to select the appropriate Group. The Location Groups displayed are taken from the Location Groups database ( See page )

#### PRODUCT GROUP

Every Card or Number must be assigned a Product Group which determines what products the employee/customer/vehicle/unit is authorized to dispense. Use the drop down arrow in the Product Group file to select the appropriate Group of Products. The Product Groups displayed are taken from the Product Group database ( See page )

#### MESSAGE GROUP

The Card or Number must be assigned a Message Group which consists of a sequence of instructions displayed by the C6000 in order to permit fuelling. Use the drop down arrow in the Message Group file to select the appropriate Group ( message sequence). Message Groups displayed are taken from the Message Group database, which is set up by way of the Message Group List ( See page )

#### PIN

The PIN Number, comprised of any numeric value up to 9999, is check number applied to the Card or Number shown in the Number field. Typically, it is a security measure for customer cards, however it can serve the same purpose for employee cards. Some fleet managers use the vehicle ID number as the PIN on the vehicle card to ensure the correct card is being used.

#### GROUP

This optional field may be used to describe a group of staff or vehicles which are not necessarily covered by an Account. For example this field can be used to show the Vehicle's Class or Department. Similarly, an Operators Department could be shown here. This field is not currently used by the ProFuel database to make fuelling decisions or to create reports.

#### UNIT

This field is used to log the actual fleet or asset ID of the vehicle or equipment. This field is used by ProFuel to create usage and performance reports based on the fleet or asset ID rather than a card number. While card or keypad fuel security codes are strictly numeric. This UNIT field can be alphanumeric up to 20 characters.

#### DESCRIPTION

This field is used to identify the cardholder or keypad user in a clear textual manner. This description can be up to 20 alphanumeric characters. It is generally printed as header on a number of ProFuel Reports. This Description is also reflected in the Card List Screen where it can be used to quickly locate a card or keypad code.

MISCELLANEOUS

This is an optional field which can be used for any purpose such as VIN Code or License Number. This field is not used by the ProFuel database for fuelling authorization or reporting purposes.

FUEL LIMIT

**Transaction**

This field is used to assign a volume limit per fill. It is programmable and can be any value. Generally it is based on the capacity of the vehicle fuel tank. It is only activated if the check box is clicked.

**Polling**

This field denotes a 'volume credit limit' which is reset each time the PCU is polled. If, for example, the value of 1000 is entered, and polling is only done weekly; then this vehicle can accumulate up to 1000 litres/gallons regardless of how many times it fuels during the week. This Limit is only activated if the check box is clicked

OUT GOING

This field is used to compose a message to be sent to the employee/customer at time of fuelling. The message can be up to 40 alphanumeric characters and will be shown immediately after the card or keypad code is entered. This message will appear for this card or code only.

STATUS

This field is used to select how many times the OUTGOING MESSAGE ( See above) will be shown to the card or code holder. The drop down arrow provides choices of None, Once, or Forever. Note that a Message can be stored or use when required by clicking None

## **Introduction**

While previous Computrol Pump Control Units ( PCUs) were programmed ( configured) by way of a manual question and answer session, the new C6000 model is designed to be instantly programmed by the upload of key files created in either the basic ProFuel Communications Program or the complete ProFuel 2 Management Program. This new configuration design offers the System Owner several distinct advantages:

You can select or change the fuel authorization sequence required at each PCU. For example, you can decide whether the initial input is via a security card or from the keypad. Do you wish this first entry to represent an employee, a customer, or an equipment asset ? For each employee or customer, you can also selectively assign a programmable PIN number. If a card or keypad number is entered to identify a vehicle, you may wish to request that a valid odometer or hourmeter reading be entered for that asset. Further, you may require that drivers enter data representing other information such as Work Orders or Trip Numbers. Up to three miscellaneous fields are available for your definition.

Not only can you decide on what entries are required before fuel can be accessed, but you can also program the text of the instruction messages to be displayed to the employees or customers. For example, do you wish to greet the cardholders with the message "ENTER CARD" or "ENTER EMPLOYEE NUMBER" ? If you are a fuel dealer, you may wish to show " WELCOME TO CENTRAL FUELS – PLEASE INSERT YOUR CARD" .

In conjunction with choosing the text of the instructions to be displayed, you can also set up a different sequence of instruction messages for different groups of employees, customers, or cardholders.


You can now program all the pump characteristics for all your C6000 fuel sites. You can define pump names, pulser ratios and time limits.

For an orderly upgrade of your fuel site network, ProFuel 2 will also concurrently download cards and upload transactions from older cardlock models including the C600 and Fleet 300. (These older units must be manually configured)

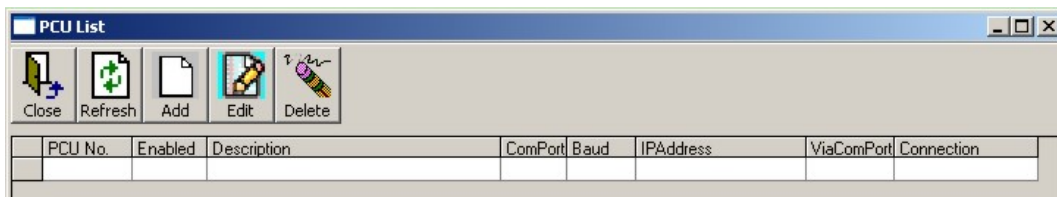
You can define the communications mode at each site and the parameters of each C6000 or Fleet 300. You can define each connections as serial or IP. Baud rates, modem numbers and communications port settings can all be instantly downloaded.

All settings for your C6000 Pump control Units are now securely backed up in the ProFuel database and are available for instant download.

## Setting Up Your Pump Control Units

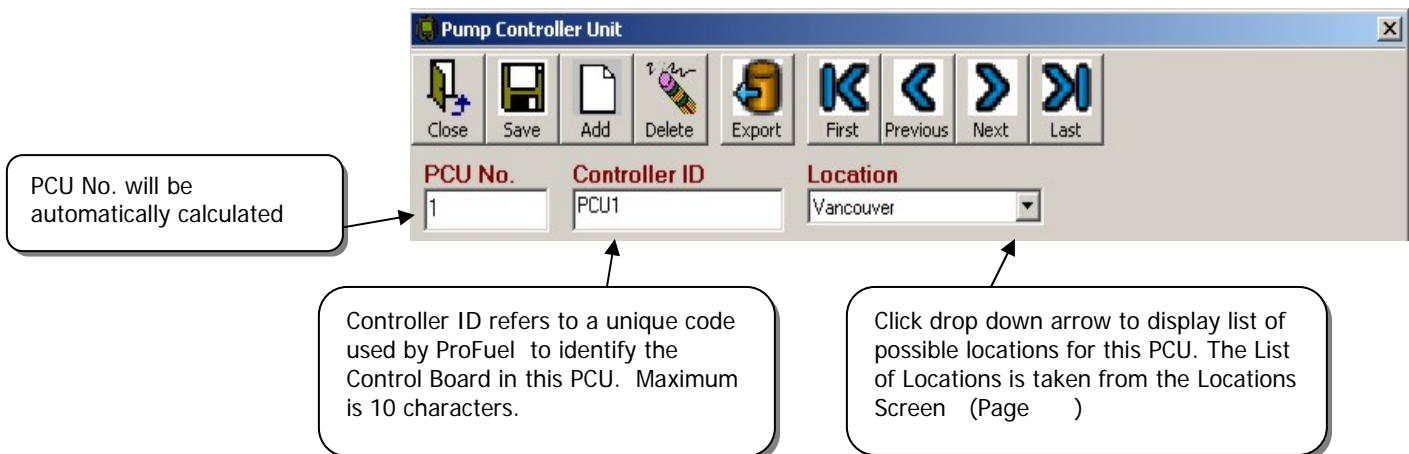
To make additions or changes to your PCU data base, click on the  icon on the Main Menu Screen. The PCU List Screen will then be displayed showing all PCUs entered into your System. This Screen for reference purposes only.

## PCU List Screen



## Adding PCUs

To Add a PCU, click the tool bar button **Add** and the following Pump Control Screen will appear. All field names printed in Red are mandatory and must be completed in order to proceed to the programming tabs.



## Tab (1) System

When you have completed the three basic mandatory fields, you can proceed to SYSTEM Tab (1)

Consult your I.T. staff or call Computrol to complete Network Setting shown below.

**DHCP:** means a dynamic IP address is assigned by your server for each session

**BootP:** as above, but generally used by Linux O/S

**IP Address:** use this tab when assigning a fixed IP for this PCU.

When this tab is clicked, the following boxes will appear.

IP Address

IP Net Mask

IP Broadcast

IP Gateway

IP Server

**Audit Trail On**

Remote Channel

Main Channel or Console

**Set PCU Password**

See Next Page

## Tab (2) Display Prompts

This screen is used to create and sequence the display instructions you wish your employees or customers to follow in order to obtain fuel

If this PCU is fitted with an optional receipt ticket printer, use this box to select if the ticket will be printed every time, or on request only. If no printer installed, set to 'No'

Check this box if customers are required to pre-select volume to be pumped

		Order
<input type="checkbox"/> Preselected Volume		
<input checked="" type="checkbox"/> Vehicle	Vehicle	1
<input checked="" type="checkbox"/> Operator	Enter Employee #	4
<input type="checkbox"/> PIN	PIN	0
<input checked="" type="checkbox"/> Odometer	Enter Accurate Odometer	2
<input checked="" type="checkbox"/> Hours	Enter Accurate Hours	3
<input type="checkbox"/> Misc1	Misc1	0
<input type="checkbox"/> Misc2	Misc2	0
<input type="checkbox"/> Misc3	Misc3	0
Receipt	Receipt	
Pump	Select Pump	
Preselected	Preselected	
Last	Last	

You **must** select either a Vehicle message or an Operator message as your first choice; that is #1 in the order column.

When creating and sequencing instruction messages you must deal with either all vehicle or all operator messages first. You cannot intersperse vehicle and operator instructions.

The PCU display will accept 20 characters per line only, including spaces. If you insert the two characters '\n' (backslash, lowercase n) immediately after the message line, then you can add up to 20 more characters to the lower line of the PCU display.

### Tab (3) Out Going Messages

System (1)	Display Prompts (2)	Out Going Messages (3)
		Out Going
Message 1		PM Level 1 Now Due
Message 2		Check Oil and Coolant
Message 3		Call Credit Dept\n1-888-777-6921
Message 4		Licence Expired
Message 5		Message 5
Message 6		Message 6
Message 7		Message 7
Message 8		Message 8
Message 9		Message 9
Message 10		Message 10
Message 11		Message 11
Message 12		Message 12
Message 13		Message 13
Message 14		Message 14
Message 15		Message 15
Message 16		Message 16

This screen can be used to create up to 16 programmable messages to be sent to employees or customers. When one or more messages have been created you will be able to view all and selected one by double clicking on the Out Going box in each USER record.

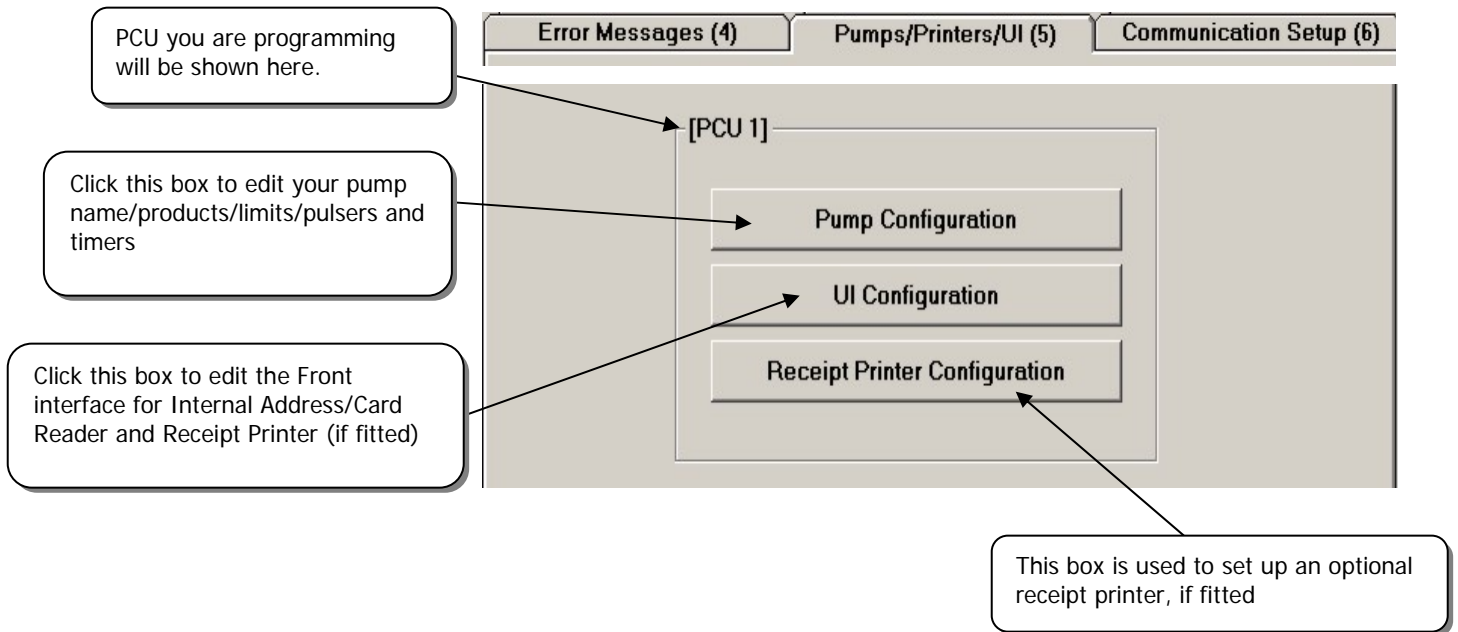
Display on PCU will show up to 20 characters on top line and 20 characters on bottom line.


## Tab (4) Error Messages

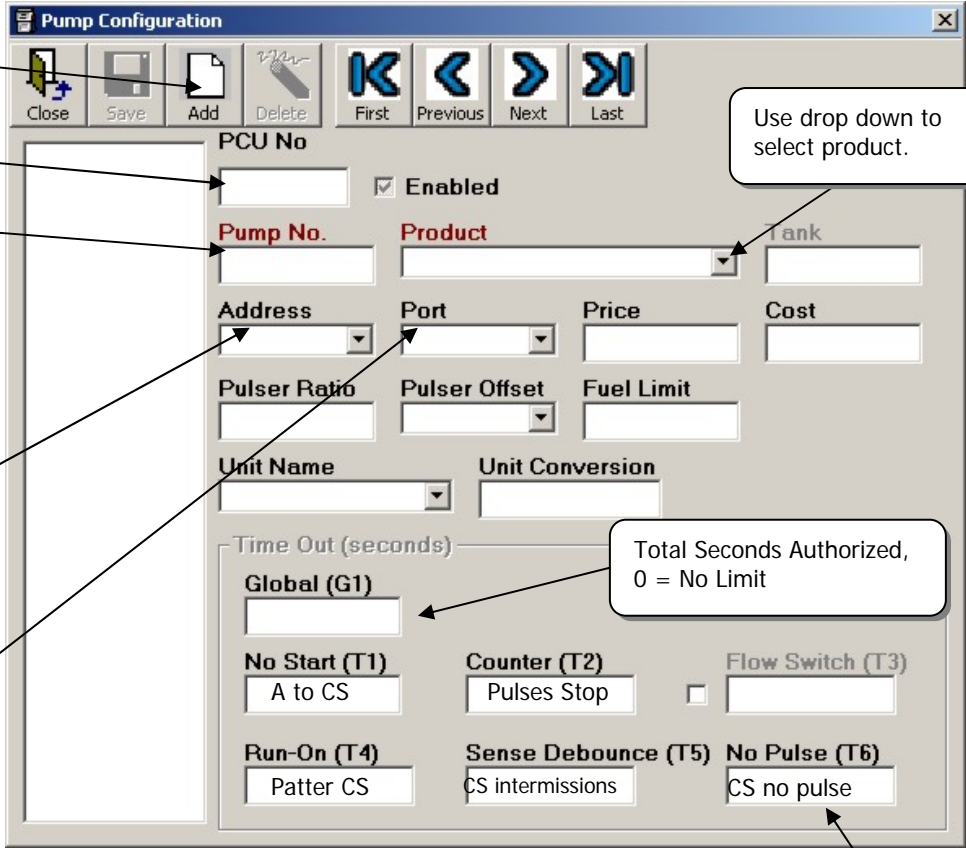
Error Messages (4)	Pumps/Printers/UI (5)	Communication Setup (6)
Vehicle	Invalid Vehicle Card	
Operator	Invalid Customer Card	
PIN	Invalid PIN - Try Again	
High Odometer	# Too High - Try Again	
Low Odometer	# Too Low - Try Again	
High Hours	# Too High - Try Again	
Low Hours	# Too Low - Try Again	
Receipt	Must Be Yes (#) or No (*)	
Pump In Use	Pump In Use	
Pump Disabled	Pump Disabled	

This screen is used to create a directory of messages which inform an employee, customer or driver when an entry error has occurred.

## **Tab (5) Setting Up Pumps**



Click  to access the following screen



Click Add to begin

PCU you are programming will be shown here.

Enter Pump #

Address of this Pump Control Board. Factory assignments are as follows.

Address	Pump Nos
5	1,2
6	3,4
7	5,6
8	7,8

Port means Side 1 or Side 2 of this board

Use drop down to select product.

Total Seconds Authorized, 0 = No Limit

Pump Handle on no pulse

See next page for explanation of Time Outs G1 through T6

## **Explanation of Pump Time Outs**

**Global (G1)** Total time, in seconds, that this pump is permitted to run. Timer starts with Computrol authorization relay and terminates at (x) seconds or when pump switch is turned off, whichever occurs first.

**No Start (T1)** Time, in seconds, that cardholder has to start the pump motor. Timer starts with activation of Computrol authorization relay and terminates when current sense is received from the pump handle or on/off switch.

**Counter (T2)** Once product starts flowing, T2 dictates how long fuelling can be interrupted for any reason. If suspension of delivery exceeds T2, transaction will be terminated.

### **Flow Switch (T3)**

**Run-On (T4)** Time, in seconds, that pulses will be counted following turn off of pump handle or on/off switch. Then timer may be used where a slow close valve is employed.

### **Sense Debounce (T5)**

Time, in seconds, allowed for temporary loss of current sense, possibly caused by a worn relay. If loss of current sense exceeds T5, transaction will be terminated.

### **No Pulse (T6)**

Once fuelling is authorized, and pump handle turned on, T6 dictates how many seconds permitted until delivery begins (pulses start). Timer T2 will then take over.

### Tab (5) Setting Up Front Interface Board

Every C600 System incorporates one or more UI (Front Interface) boards each of which controls a card reader, VF display, keypad and optional receipt printer.

Click this box to edit the Front Interface for Internal Address/Card Reader and Receipt Printer (if fitted)

PCU you are programming will be shown here

Enter unique number from 1 to 8, here

Select type of card reader controlled by this UI Board

If an optional receipt printer is installed, enter unique number here

The screenshot shows a software window titled "UI Configuration - 1 / 1". It contains the following fields and controls:

- PCU No:** A text box containing the number "1".
- Enabled:** A checked checkbox.
- UI Number:** A text box containing "1-8".
- Address:** A dropdown menu showing "1".
- Name:** A text box containing "UI".
- Card Reader:** A dropdown menu showing "prox".
- Receipt Printer No.:** A text box containing "1".

Navigation buttons at the top include Close, Save, Add, Delete, First, Previous, Next, and Last.

It is possible that second or third UI boards controlling remote slave card readers will be linked to the same PCU Main Control Board. Each UI board must be assigned a unique number and address. To do so; click the **Add** button.

**Tab (6) Communications Setup**

This screen is used to create communication parameters for this PCU.

**Tab (7) Transaction Format Screen**

The screenshot shows a software interface with two tabs: "Transaction Format (7)" and "Receipt Format (8)". The "Transaction Format (7)" tab is active. It contains a list of fields with checkboxes and length input boxes. The fields are: Vehicle (checked, length 10), Operator (unchecked, length 10), Odometer (unchecked, length 6), Hours (unchecked, length 6), Misc1 (unchecked, length 6), Misc2 (unchecked, length 6), Misc3 (unchecked, length 6), Price (unchecked, length 6), and Fuel (checked, length 10). A sub-section titled "Show Pump Diagnostics" (unchecked) contains four fields: ipc\_endstate (length 10), ipc\_response (length 1), ipc\_initcnt (length 1), and ipc\_endcnt (length 1).

The transaction record layouts created by each C6000 are automatically configured, based on the entry fields you selected in Tab (2) Display Prompts Screen. Fields that you selected for the PCU will appear in bold script in the above screen along with factory set maximum number of numeric characters. You can use this screen to increase or decrease the length of each field. For example, if you are using commercial credit cards, you must change Operator length to 17 (16 card digits plus 1 space for a buffer)

Always add 1 character to the total so a space will appear between the fields on your audit print outs.

**Tab (8) Receipt Format Screen**

Transaction Format (7)			Receipt Format (8)		
Line	Field	Label on Receipt	Line	Field	Label on Receipt
1	Header 1	Welcome	16	Misc 3	Option 3
2	Header 2		17	Blank Line	
3	Header 3		18	Pump	Hose #
4	Blank Line		19	Fuel	Volume:
5	Date Time		20	Units	UoM:
6	Blank Line		21	Price	Price
7	Transaction Nu	Transaction #:	22	Blank Line	
8	Term	Term Code:	23	Footer 1	Thank You
9	Blank Line		24	Footer 2	Please
10	Operator	Operator	25	Footer 3	Come Again
11	Vehicle	Vehicle	26	Blank Line	
12	Odometer	Odometer	27	None	
13	Hours	Hours	28	None	
14	Misc 1	Option 1	29	None	
15	Misc 2	Option 2	30	None	

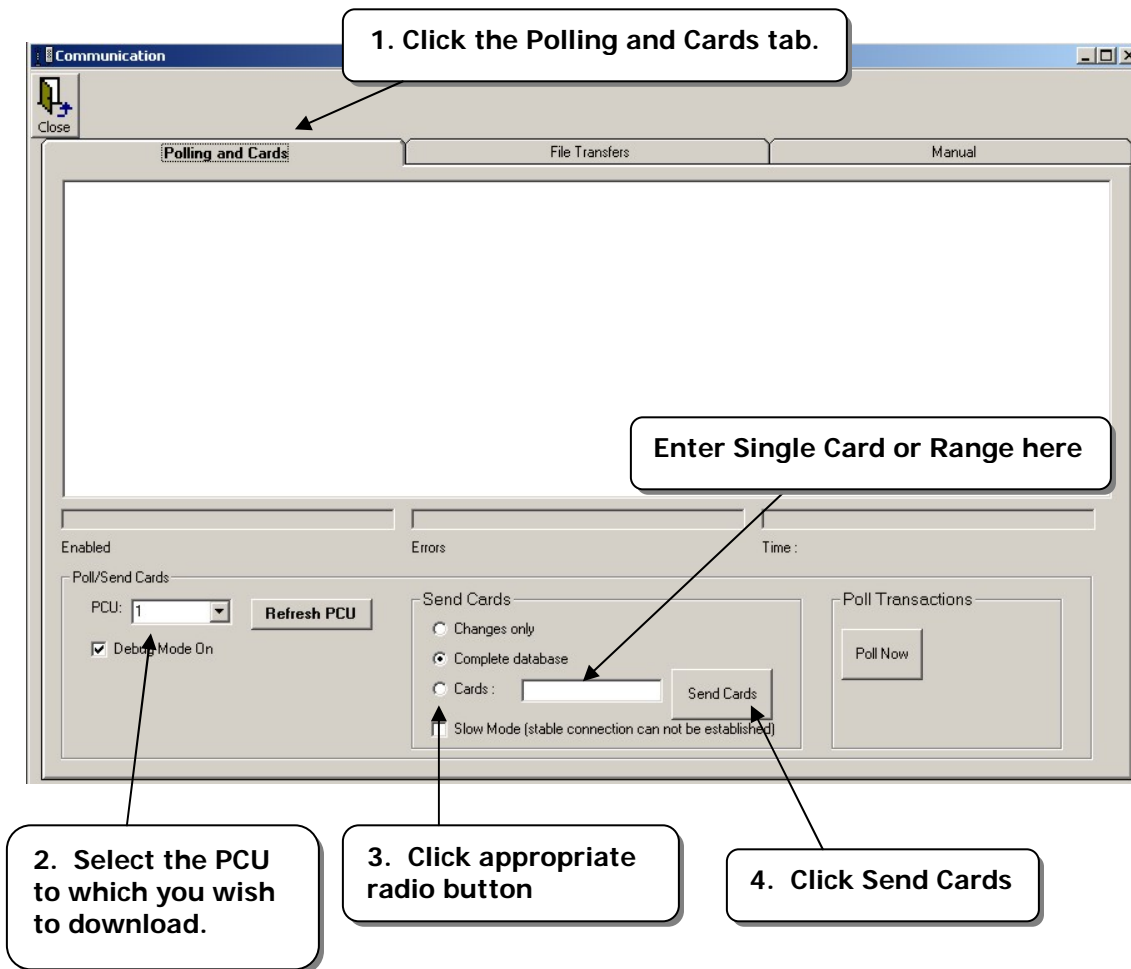
Date

Time

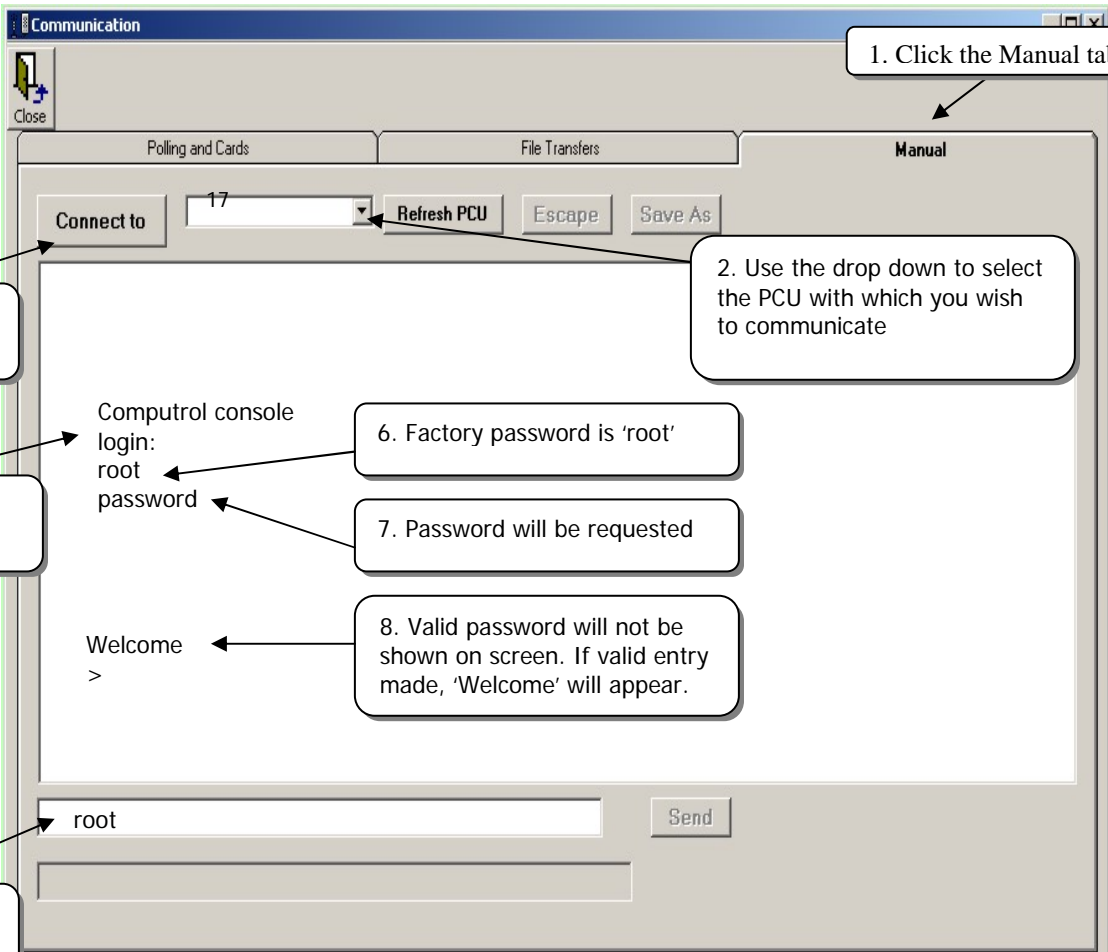
## Sending Cards/Numbers to PCU's

Fuel cards, Vehicle numbers and Employee Numbers can be quickly downloaded individually or in batches to the Pump Control Units. This feature provides for easy broadcast of cards/numbers/meter values/fuel restrictions, whether you are starting up a new system or making changes to your existing card/number authorizations. All card/number entries and changes must be made in the Users section of the program.

To download card/numbers, open the Communications Screen.



To begin click the  icon in the task bar.



The screenshot shows the 'Communication' window with three tabs: 'Polling and Cards', 'File Transfers', and 'Manual'. The 'Manual' tab is selected. The interface includes a 'Connect to' dropdown menu with '17' selected, and buttons for 'Refresh PCU', 'Escape', and 'Save As'. The main console area displays the following text: 'Computrol console login: root password', 'Welcome', and '>'. Below the console is a text input field containing 'root' and a 'Send' button. Eight numbered callouts provide instructions: 1. Click the Manual tab; 2. Use the drop down to select the PCU with which you wish to communicate; 3. Click button to "Connect to"; 4. PCU responds with "login"; 5. Type your commands here; 6. Factory password is 'root'; 7. Password will be requested; 8. Valid password will not be shown on screen. If valid entry made, 'Welcome' will appear.

9. You can now issue manual commands from the tables on the following page.

Once logged on using the 'root' command and root password, other commands are available. Use the command 'help' to display a table of Main Commands. Note that Table 1 serves as a guide only. Abbreviated Operable Commands are shown in Table 2.

**Table 1 – Main Commands**

add	cd	clear	config
copy	del	dir	disable
edit	enable	help	list
logout	mkdir	passwd	print
reboot	receive	remove	rename
rmdir	send	set	type
?			

**Table 2 – Operational Commands**

**Cards**

ad c (add card)  
ed c (edit cards)  
r c (remove cards)

**Pumps**

p pu (print pumps)  
ed pu (edit pumps)  
l pu (list pumps)

**General**

l ta (list transactions)  
p st (print status)  
p ui (print UI boards)  
l ui (list UI boards)

## Polling Transactions

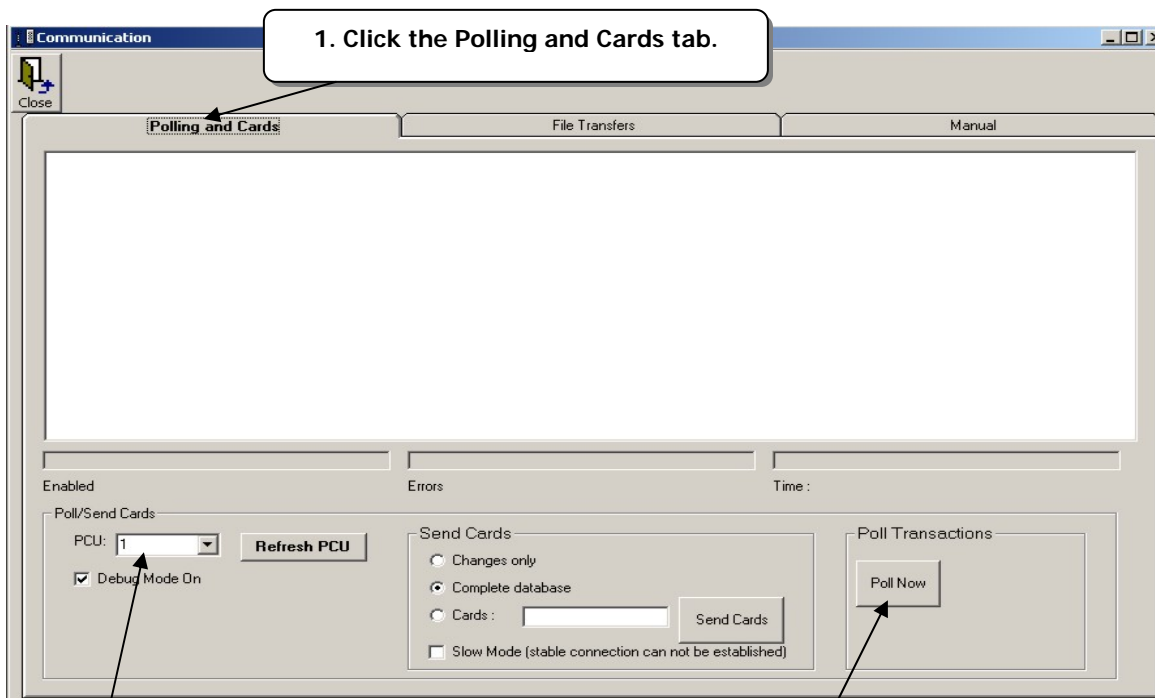
Raw fuel sales transactions are safely stored in battery protected memory in the Pump Control Unit(s) until it is convenient for the System Manger to Poll (retrieve) them. Polling can be conducted Semi-automatically. In certain circumstances polling can be accomplished with manually entered commands. Or ProFuel can be set to automatically poll one or more PCU's in an unattended mode.

Automatic or automated polling is particularly convenient if you wish to retrieve dispensing data when line charges are lowest or when pump traffic is minimal.

## Semi-Automatic Polling

Polling is accomplished by use of the main menu button denoted **Communication** which appears on the main menu toolbar

When you click  the Communication Screen opens and displays three tabs



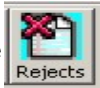
1. Click the Polling and Cards tab.

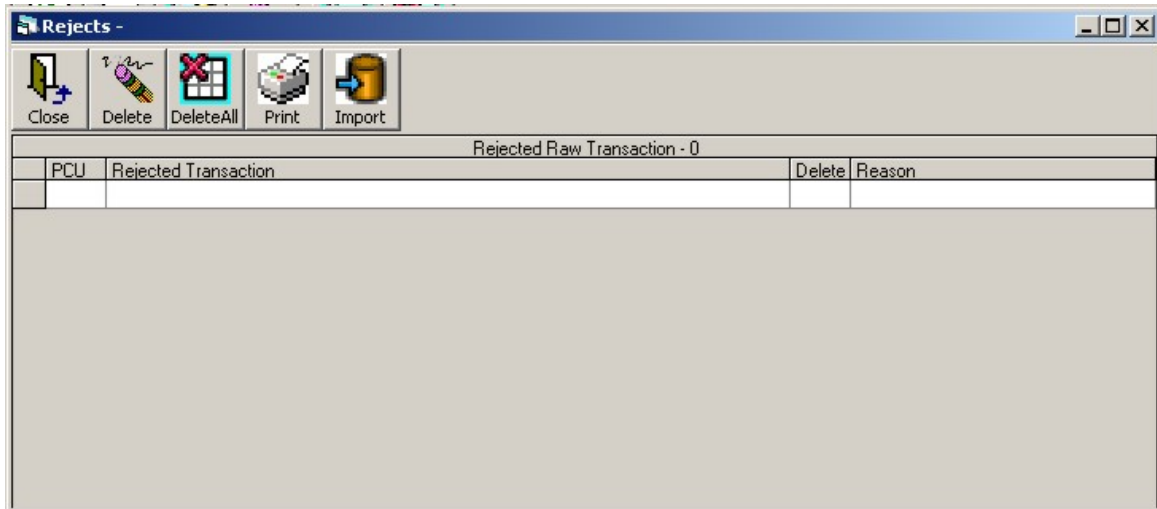
2. Select the PCU you wish to poll


3. Click Poll Now




## Processing Rejected Transactions

Clicking the  will display the Rejects List Screen shown below.



This screen clearly displays each rejected transaction and the reason for rejection. It is advisable to note Frequency and Site origin of any zero volume transactions to ensure pump is not broken. Note that the Delete column for all zero Volume transactions is automatically set to 'yes'. If you click the Delete tab  all transactions set for Delete = Yes, will now be deleted.

In order to merge rejected transactions which show Card or Account not in database, open the appropriate database file, Users or Accounts and create and save a new record. Return to the Rejects Screen and click.  The rejected transaction will now proceed to All Transactions.


Transactions rejected because of unreasonable meter values will have to be edited and correct values inserted. You can then import these transactions.

The reports available in ProFuel II are broken down into three main groups:

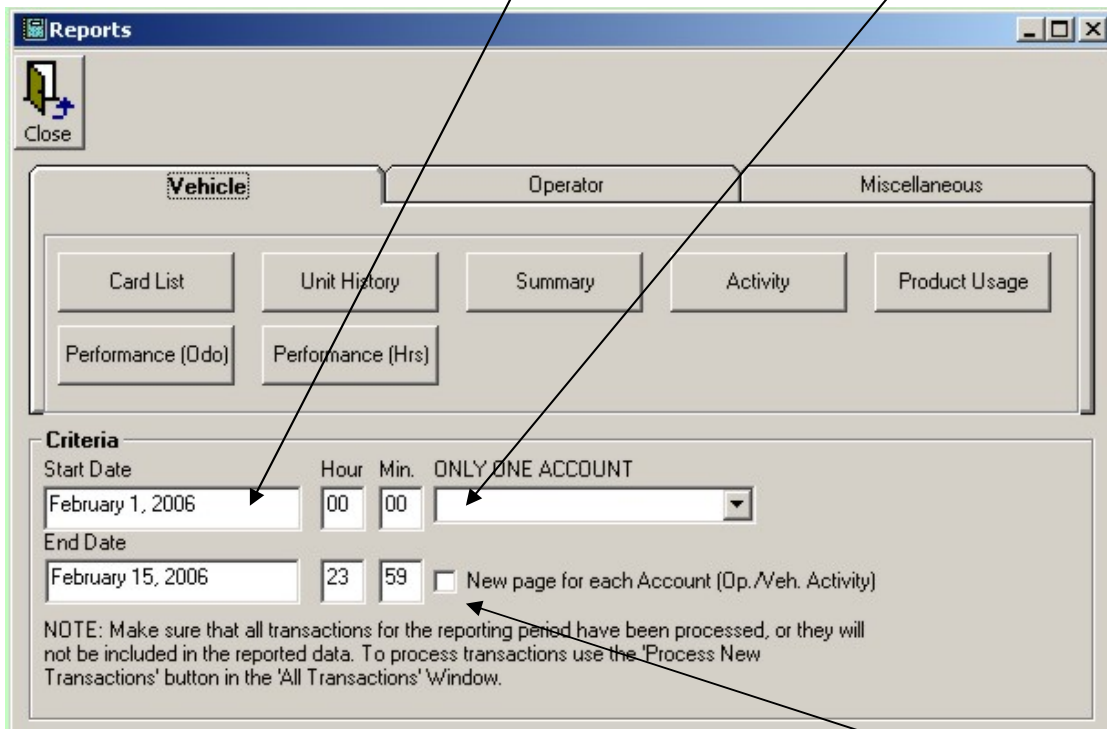
Vehicle Reports

Operator Reports

Miscellaneous Reports

The Report Button  brings the report screen up to Vehicle Reports as shown below.

On each report you must specify the **Start Date** and **End Date, One Account** or blank for ALL accounts.



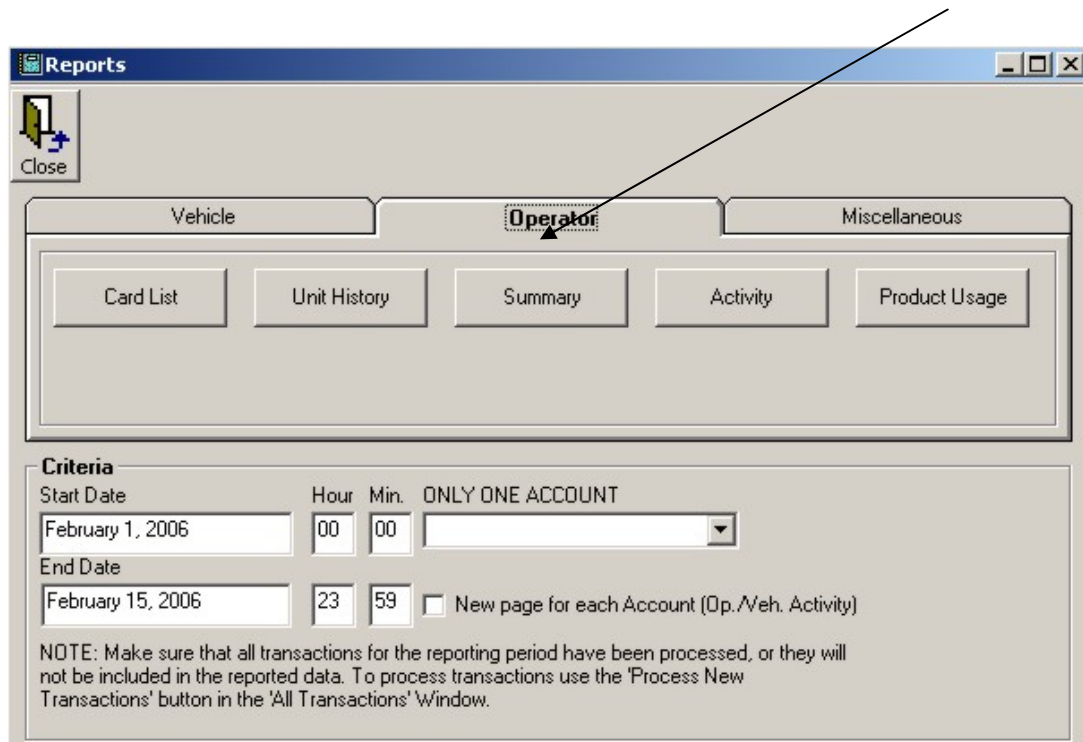
There is also a small check box which you can use if you require a **new page for each account**. This last feature is used when a report is to be distributed to different departments or companies.

To run the report click on a button representing the report you require:

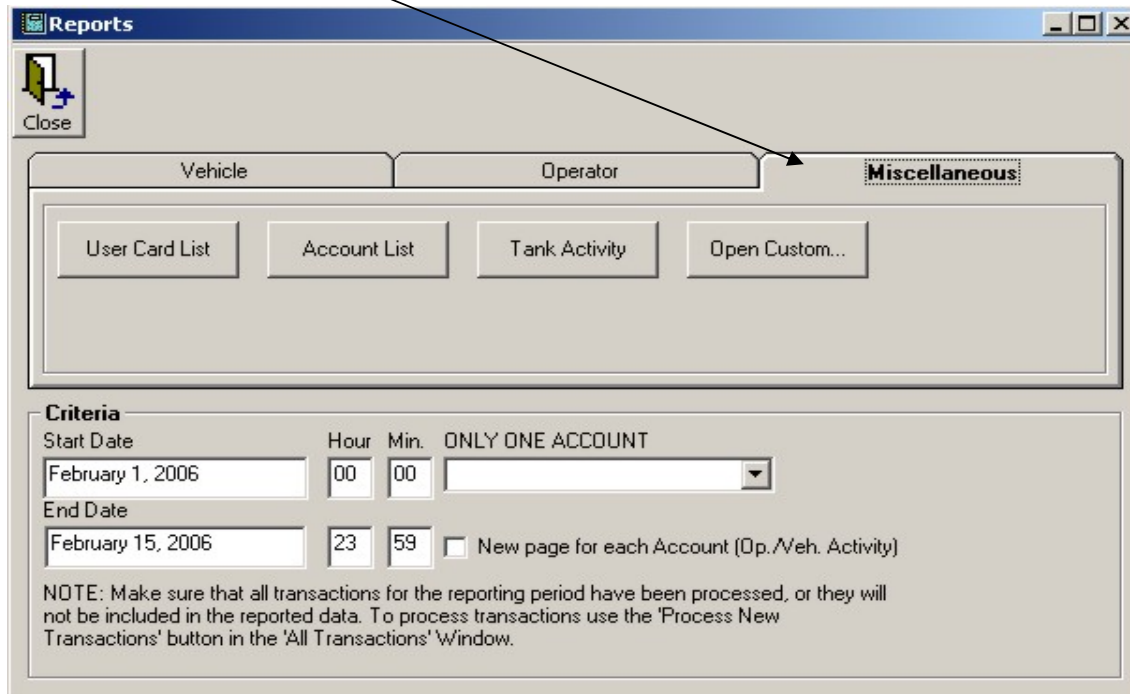
**Vehicle Card List,  
Vehicle Unit History,  
Vehicle Summary,  
Vehicle Activity,  
Vehicle Product Usage,  
Vehicle Performance (odometer) or  
Vehicle Performance (Hours).**

It's a good idea for new program users to run all or many of the reports to see what is available.

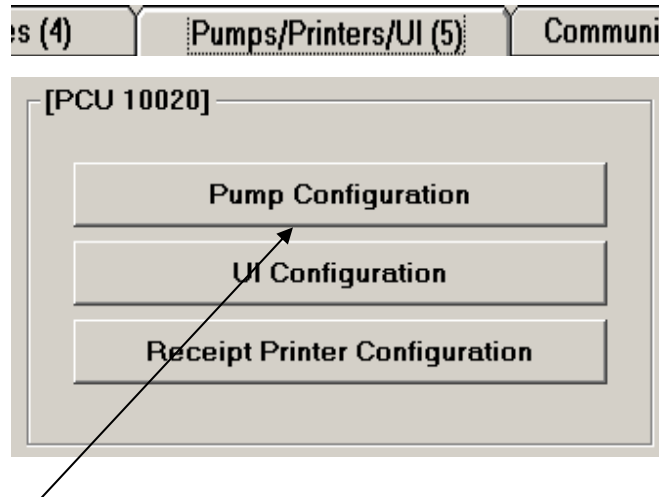
Click on the Operator tab and the screen changes slightly to offer Reports by **Operator**.



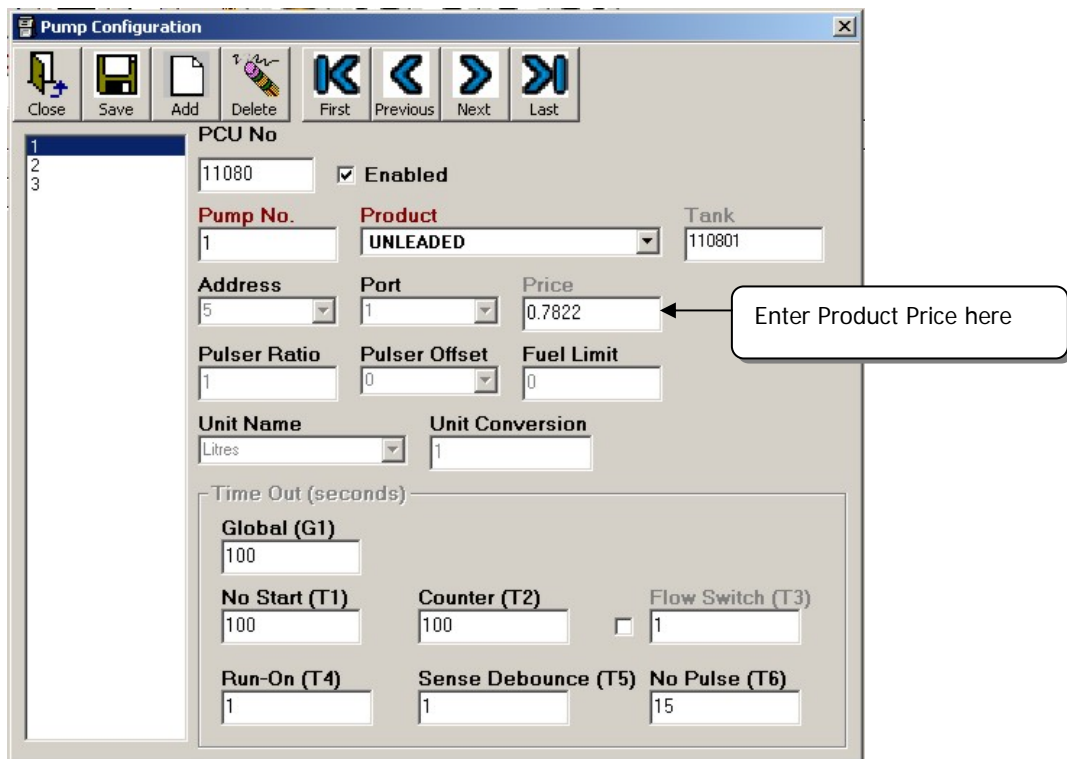
Click on the **Miscellaneous** tab to see the following report options:



The base resale price on each product is entered in the Pump Configuration Screen (Tab 5) on PCU Screen. (see page )



Select **Pump Configuration**

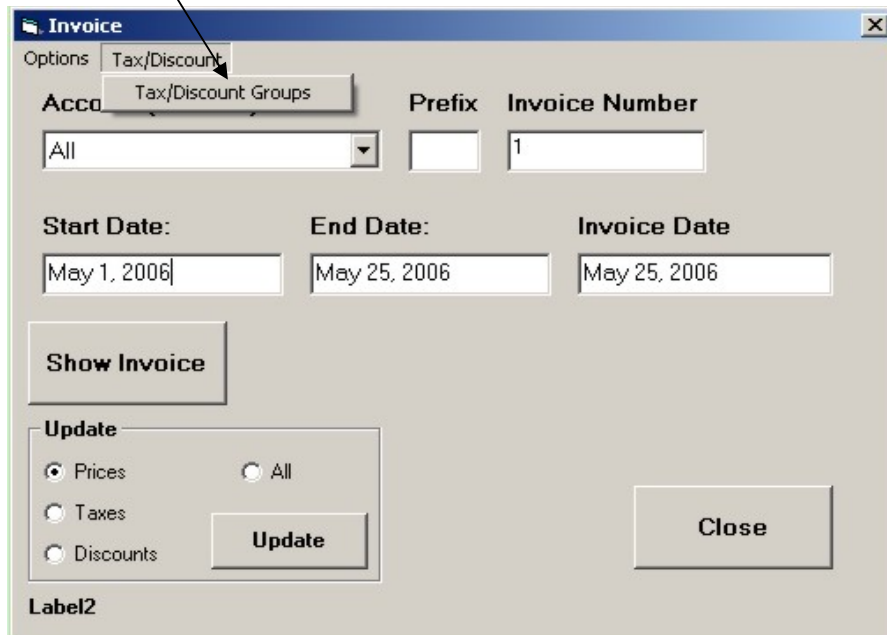


## Taxes and Discounts

Selecting the **Invoice** tab on the task bar will take you into the invoice screen.



Select the **Tax/Discounts** tab to enter the Tax/Discount Groups screen to set up your tax and discount groups for your customers



## Setup for Tax and Discounts

ProFuel provides the Tax Group setup screen in which you can create groups of taxes to apply to the fuel you sell. The group may have any number of taxes included but they are grouped to reflect the way they apply to products sold in a specific tax region. Since the taxes applied to the product as it comes from the pump, the same product may have different taxes applied in each location you sell it.

Tax Groups (**GST & PST not required)						
Tax Group	Tax Type **	Product	Rate (% or ¢)	Percent	Included	
▶ All	EEEE	DIESEL	30.00	No	No	
All	AAAA	DIESEL	10.00	No	Yes	
All	EEEE	DYED DIESEL	25.00	Yes	No	
All	EEEE	PROPANE	10.00	Yes	Yes	
All	BBBB	DIESEL	20.00	No	No	
Two	EEEE	PROPANE	0.00	Yes	No	
*						

Discount Groups			
Name	Product	Rate (¢)	
▶ NONE	DYED DIESEL	0.0000	
OnePenny	DYED DIESEL	1.0000	
test	UNLEADED	1.0000	
TwoDotFive	DIESEL	2.5000	
TwoDotFive	DYED DIESEL	2.5000	
TwoDotFive	PROPANE	2.5000	
TwoDotFive	UNLEADED	2.5000	
*			

Like the taxes, discounts are groups so one Discount Group can be applied to all of the discounted products a Customer may purchase. In this way it is also easy to create a Discount Group for a single product for the customer who buys a significant amount of Diesel but rarely buys Gas or other products.

The next page will detail the set up process for each type of group.

**Tax Groups**

In the Tax Group example, taxes for All Tax Groups have been created in the Tax Type field for each type of Product sold. The rate is set as a percent (%) or a monetary value (\$) be sure to indicate yes or no in the percent field for the correct rate type to apply. Yes or No in the last column indicates the taxes are all in addition (No) or included (Yes) in the price shown in the PCU screen for the pump it is assigned to.

Tax / Discount						
Tax Groups (**GST & PST not required)						
Tax Group	Tax Type **	Product	Rate (% or \$)	Percent	Included	
▶ All	EEEE	DIESEL	30.00	No	No	
All	AAAA	DIESEL	10.00	No	Yes	
All	EEEE	DYED DIESEL	25.00	Yes	No	
All	EEEE	PROPANE	10.00	Yes	Yes	
All	BBBB	DIESEL	20.00	No	No	
Two	EEEE	PROPANE	0.00	Yes	No	
*						

**Discount Groups**

In the Discounts example, the Name field is where you will enter your discount level names significant to your business. Assigning the discount group to a customers account provides that customer with a discount from the stated price on all products purchased by them. This discount group will affect no other product.

Discount Groups			
Name	Product	Rate (\$)	
▶ NONE	DYED DIESEL	0.0000	
OnePenny	DYED DIESEL	1.0000	
test	UNLEADED	1.0000	
TwoDotFive	DIESEL	2.5000	
TwoDotFive	DYED DIESEL	2.5000	
TwoDotFive	PROPANE	2.5000	
TwoDotFive	UNLEADED	2.5000	
*			