



■ *ISS45 Fuel Control Center*
■ *Technical Reference*
■ *Version 4.0.25.0*
■
■

ISS45 Fuel Control Center Technical Reference

Date of Issue	Product Identification Number	Part Number	Brief Description
January 2004			4.0.0.0 Release
July 2005			4.0.10.0 Release
April 2006	45001/046	89000348	4.0.13.0 Release
March 2007	45001/046	89000463	4.0.17.0 Release
February 2011	45001/046	89000626	4.0.25.0 Release

© Copyright StoreNext Retail Technologies LLC 1995-2011
All rights reserved

This publication is protected by federal copyright law. This document and its contents are the proprietary, confidential information and property of StoreNext.. Unauthorized disclosure, reproduction, distribution or use of this document and/or its contents in any form is strictly prohibited. No part of this publication may be reproduced or transmitted into any human or computer language in any form or by any means, stored in a retrieval system, transmitted, redistributed, translated or disclosed to third parties, or de-compiled in any way including, but not limited to, photocopy, photograph, electronic, mechanical, magnetic or manual without the express written permission of StoreNext Retail Technologies LLC or its licensors, if any. This document, notwithstanding the above, may be distributed in electronic or printed form to personnel who are employed by either (1) a StoreNext customer of the subject system of this document or (2) personnel from an authorized StoreNext dealer of the subject system of this document. All copies, so distributed and/or so authorized, shall contain a full copy of this copyright notice.

StoreNext Retail Technologies LLC has prepared this manual for use by users, authorized third parties and personnel of StoreNext Retail Technologies LLC as a guide to the proper installation, operation, customization and/or maintenance of StoreNext Retail Technologies LLC equipment and software. The drawings and specifications contained herein are the property of StoreNext Retail Technologies LLC and/or its licensors.

StoreNext Retail Technologies LLC endeavors to ensure that the information in this document is correct and fairly stated but does not accept liability for any error or omission. StoreNext Retail Technologies LLC makes no representation or warranties with respect to the contents hereof, and specifically disclaims any implied warranties of merchantability or fitness for a particular purpose or non-infringement. No commitments by StoreNext or its suppliers are made from this documentation which is provided for information only.

Development of StoreNext products and documentation is continuous: StoreNext Retail Technologies LLC reserves the right to revise this publication and to make changes from time to time in the contents hereof or in the products herein described or discussed without notice and without any obligation of StoreNext Retail Technologies LLC to notify any person or organization of such revision or changes. Information published in this document will likely become obsolete over time and it is recommended that users regularly check for updates and newer versions.

The trademarks StoreNext and Retalix are registered trademarks or trademarks of Retalix; all other trademarks or registered trademarks are the property of their respective owners. Third-party products, services, or company names referenced in this document may be trademarked or copyrighted by their respective owners, and are for identification purposes only.

Copyrights, trademarks and license agreements shall be governed and construed in accordance with the laws of the State of Texas and the Federal Arbitration Act, and shall benefit Retalix, its successors, and assigns.

Address comments and corrections to:

StoreNext Retail Technologies LLC
Software Program Director
797 Commonwealth Drive
Warrendale, PA 15086

Table of Contents

1 The FCC	1
Introduction	2
Scope	2
Overview	3
FCC System Component Architecture	4
FCC Icons	5
Accessing the FCC	5
The FCC Main Interface	6
Before you Start	9
2 FCC Menu Bar	10
FCC Properties	11
Timers Tab	11
Security Settings	13
Connections	17
Validation Check	18
General.....	19
System Information List.....	20
Logger	22
FCC New Connection	23
View	26
Window.....	28
Help.....	29
About Retalix Fuel	29
About FCC.....	30
3 Getting Started	31
Configuration.....	32
Accessing the Configuration Menu.....	33
Copying Object Properties	35
Comparing Object Properties	36
Pure Products.....	37
Tanks.....	40
Taxes.....	47

Grades.....	50
Languages.....	55
Modes.....	59
Service Fee	63
Pumps	67
Terminals.....	78
General Parameters	91
Receipt	119
Convert Layer.....	121
Configuring an Allied Convert Layer.....	122
Configuring a Meggitt Convert Layer.....	132
Configuring the RFS.....	135
Configuring the Doms Convert Layer	145
Configuring the Postec Convert Layer	148
Configuring the Wayne Convert Layer	150
Configuring the IFSF Convert Layer.....	152
Configuring the htec Convert Layer.....	156
AVIs (Auto Vehicle Identification)	158
Keyboards	163
Database	168
Wash Programs.....	172
Price Poles	176
Loyalty	182
TerminalSrv	187
TankSrv	188
Flow Control	193
Service Modes.....	197
Fuelling Modes	200
Fuelling Mode Groups	203
Transactions.....	205
Decimal Points	209
Generator	211
Bank Notes.....	212
Debits Setup.....	214
4 Forecourt Management	219
System Components.....	220
System Components	222
Components Status	224

Components Connectivity	225
Station Control	226
Pump Level	227
Server Level	235
Log Level	247
System Errors/Warnings	249
Device Level	250
RFS Monitor	254
5 Log Viewer.....	259
Viewers	260
Logs.....	261
Database	269
Real Time	289
6 Statistics.....	291
Statistics.....	292
Transactions Totals	293
Transactions by Pump.....	294
Transactions by Shift.....	295
Pumps Total	296
Glossary and Abbreviations	297

The FCC

This chapter provides an overview of the various chapters included in the FCC (Fuel Control Center) software manual. The FCC is a Fuel Forecourt Management Utility.

This chapter describes the functionality of the FCC, as well as the scope of this document. In addition, it includes a diagram of the FCC system architecture components, as well as a description of the FCC icons.

In this chapter:

- *Introduction*
- *Scope*
- *FCC Overview*
- *System Architecture*
- *FCC Icons*
- *Accessing the FCC*
- *The FCC Main Interface*
- *Before You Start*

Introduction

This manual provides instructions for configuring and monitoring the Forecourt of a Fuel Station using the FCC components. It includes the following chapters:

- **Chapter 1** provides an overview of the FCC and its features and icons. An architectural diagram displays the system architecture of the FCC in the Retalix fuel environment. It also describes the main interface and how to access the FCC.
- **Chapter 2** describes the FCC Menu Bar, and shows you how to define the system properties, securities and connections when using a remote computer. In addition, it provides definitions for the system components.
- **Chapter 3** explains how to configure the various system parameters.
- **Chapter 4** explains how to manage the Forecourt, view the system components and control the station.
- **Chapter 5** explains how to view logs and system data.
- *Chapter 6* displays a graphic summary of the various activities that were performed in the Fuel Station within the current month. It enables you to monitor the number of transactions that were performed by each Pump, in each Shift, as well as the number of transactions for each payment type.
- **Chapter 7** provides a step-by-step description of selected procedures.

Scope

This manual is intended for technical support personnel, Configuration personnel, or Management who will perform most of the functions described in the chapters to come.

This manual is written with the assumption that you are familiar with the basic understanding of the Fuel Forecourt in general and PumpSrv Interfaces.

Overview

The **FCC (Fuel Control Center)** is a comprehensive management utility for the *Retalix* Fuel Station.

The **FCC Main Menu** includes the following options:

- **System Components**

System Components allows you to monitor the Fuel system components and their versions. You can also load any system component, e.g., Convert Layer, PumpSrv, Payment LinkSrv. For each component you can view its status, e.g., whether it is active or not, as well as other functions.

- **Station Control**

Station Control is a module allowing you to control and monitor the Fuel Forecourt, including transactions and PumpSrv statuses. If you are using the *RFS* system, at any given time you may view a real-time accurate device map of the device levels in the Fuel Forecourt.

Note:

The RFS software is an enhanced software-based Forecourt Controller that integrates the Retalix Fuel System with all the fuel station hardware devices. The RFS eliminates the need for a Controller, allowing flexibility in the configuration of a Fuel Forecourt, enabling device types and manufacturers to operate in a transparent environment. For further details on the RFS see the **RFS Wiring and Configuration Technical Guide**.

- **Configuration**

Configuration enables you to configure and add Pure Products; set up Tanks, Grades, Modes and Mode Schemes; and configure Pumps. You can also set General System Parameters for various Transaction types, Price changes, Shifts, Payment LinkSrv (On-Line Authorization) and Wetstock.

- **Viewers**

Viewers enables you to view the Fuel System data within log files. You may view Shift logs, Convert Layer logs and PumpSrv logs, as well as perform various actions such as packing and sending these logs, and querying transactions.

- **Statistics**

The Statistics option enables you to display a graphic summary of the various activities that were performed in the Fuel Station within the current month. It enables you to monitor the number of transactions that were performed by each Pump, in each Shift, as well as the number of transactions for each payment type.

FCC System Component Architecture

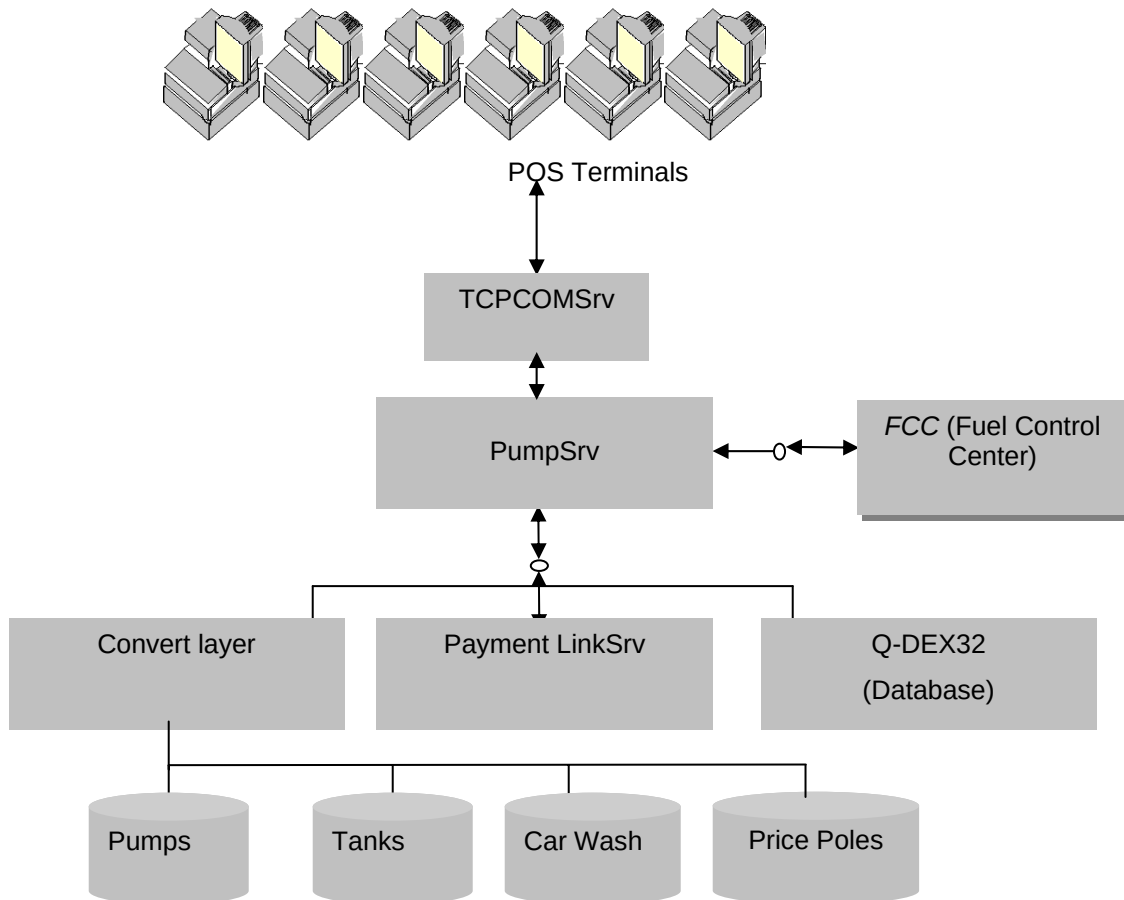


Figure 1

- 1 The **FCC** manages the Fuel Forecourt.
- 2 The **PumpSrv** is the Business Rules Management engine in the Fuel System.
- 3 The **Convert Layer** component is used as a protocol and concept converter – supported by the **Forecourt Controller** and **Generic Controller** interface of **PumpSrv**.
- 4 The **Payment LinkSrv** confirms all credit authorization required.
- 5 The **Q-dex** is the real-time database used by the **PumpSrv**.
- 6 Pumps, Tanks, Car Wash, Price Poles are hardware devices connected to the system.

FCC Icons

Two icons represent the **FCC** utility:



The **FCC** icon consists of a pump with two small red squares. It is located in the tray of the Task Bar.

When static, the two small red squares in the icon indicate that the Fuel system is inactive, and that one of the critical components (Convert Layer or PumpSrv) has not loaded.

When the two small red squares are in motion, the **FCC** icon indicates that the Fuel system is operating.

Accessing the FCC

➤ To Open the FCC Main Interface:

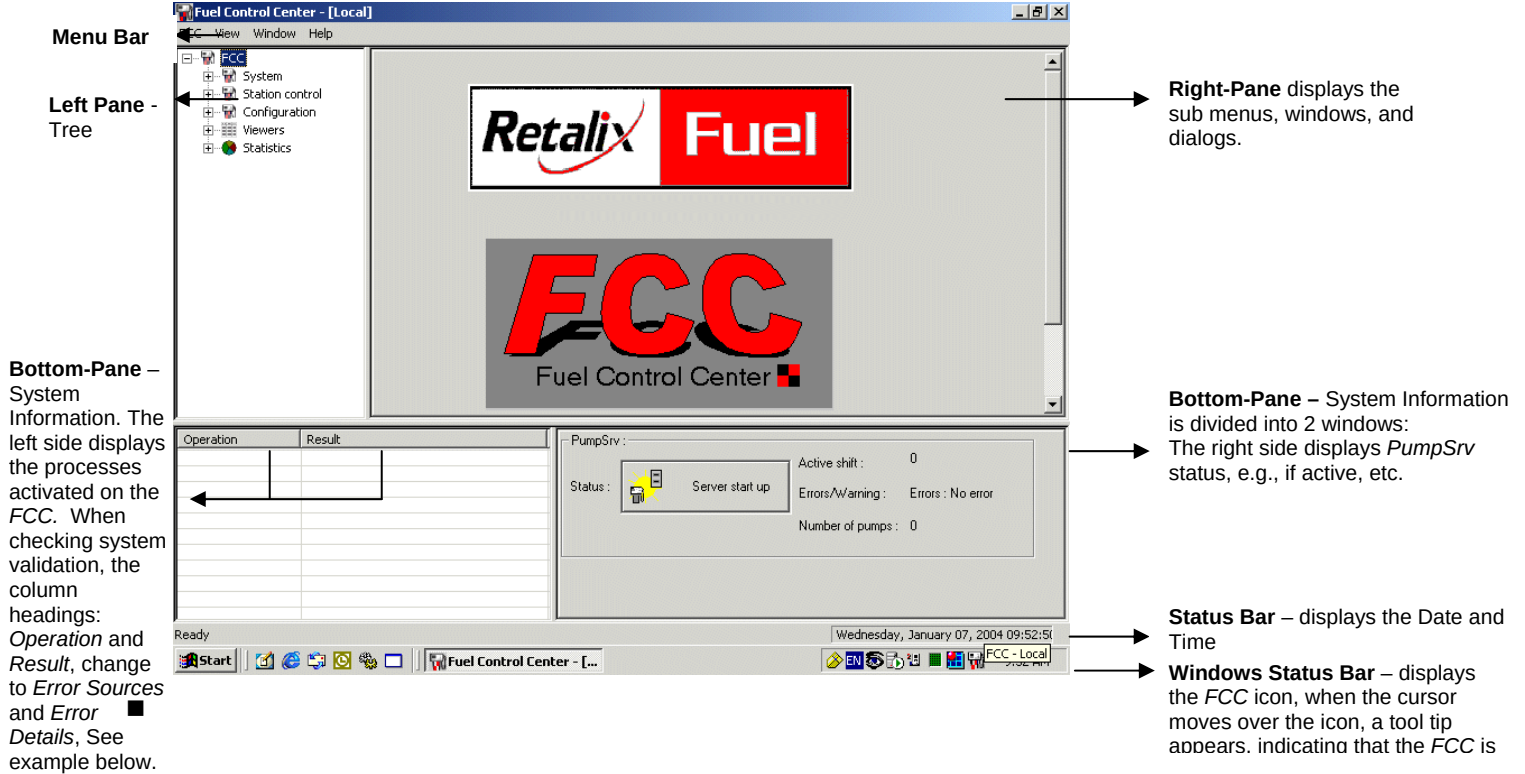
- 1 Select **FCC.exe** from the path where the Fuel system is installed, e.g., *Start\Programs\Positive Office\PumpSrv\FCC*. The **FCC Main Interface** opens, and a second later the **Connection** dialog is displayed. The **FCC** icon appears at the bottom right corner of the screen

Or

Create a shortcut by right-clicking **FCC** from the path *Start\Programs\Positive Office\PumpSrv\FCC*. Click and drag the shortcut to the desktop.

- 2 From the desktop, double-click the **FCC** icon. The **FCC Main Interface** is displayed and the  icon appears at the bottom right corner of the screen:

The FCC Main Interface



The Main Interface specifies the name of the computer connected on the dialog title, and displays:

■ The Menu Bar:

- FCC – enables you to set up and define the FCC Program Properties.
- View – enables you to view the system status.
- Window – enables you to define the way that the Main Interface windows are displayed.
- Help – provides definitions of each System Component, as well information on the current version of the FCC.

Each menu is explained in detail in **Chapter 2 – The FCC Properties**.

- The **left pane** is organized hierarchically, and called the **FCC Tree**, made up of expandable menus.
- The **right pane** displays the sub menus, windows, and dialogs. (See the example in Step 1, below, which displays sub menus.)

- The **bottom-pane** displays System Information, and all processes activated on the **FCC**. You can define which information will be displayed, for further details, see **Chapter 2, System Information List**. The name of the Operation performed and its results are displayed, but when checking system validation, the column headings change to Error Sources and Error Details. On the right-hand side, the PumpSrv status is displayed.

Error source	Error details	PumpSrv :	
FccSystem	Connection is suspend	Status :  Unknown	Active shift : 0
FccSystem	Connection is suspend		Errors/Warning : Errors : No error
FccSystem	Connection is suspend		Number of pumps : 0
FccSystem	Connection is suspend		
FccSystem	Connection is suspend		

If your registry includes more than one convert layer, on accessing the FCC, the **Connection** dialog is displayed, displaying the list of controllers, as follows:



- 1 Select the relevant connection. If you are connecting to a local computer, select the **Local** radio button, and then from the list of controllers, select the controller in which the fuel system is working with.

- 2 Click OK. The **FCC Main Interface** is displayed and the  icon appears at the bottom right corner of the screen, as displayed previously.

If your registry includes only one convert layer, to connect to a remote computer, see **Chapter 2, The FCC Properties**.

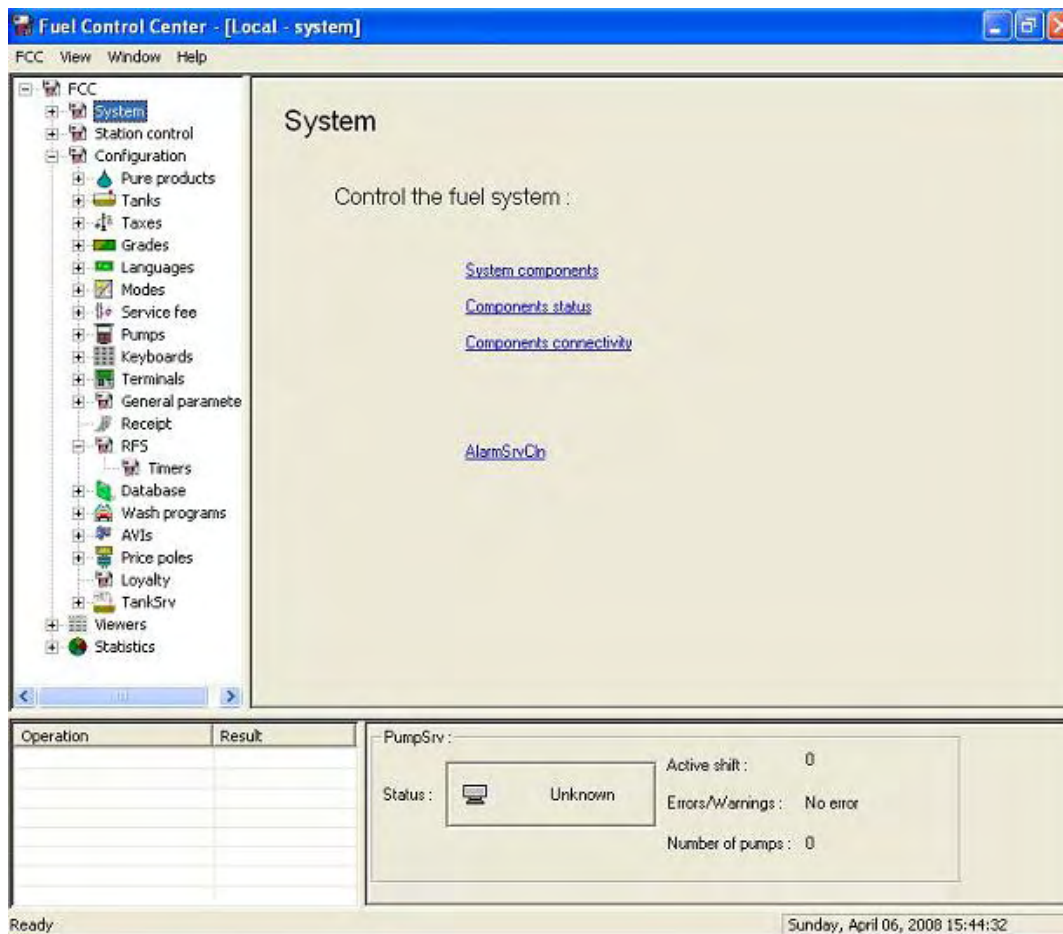
Before you Start

The following important notes should be noted before you start:

- 1 When setting up the FCC it is highly recommended that you start with the Configuration of the Fuel System parameters, see **Chapter 3, Getting Started**.
- 2 When configuring the FCC Convert Layer, choose the Convert Layer in this manual relevant to your system, as the parameters are different for each convert layer. For more details on the Convert Layer parameters, see section in **Chapter 3, Getting Started, Configuring – Convert Layers**.
- 3 Before using the application for the first time make sure the **FCC Properties** are configured correctly. See **Chapter 2 – Properties**.

➤ **To Use the FCC:**

- 1 Click the required menu on the b to display the sub menus in the right pane, as displayed below:



- 2 From the **FCC Tree**, click the '+' signs to expand the menus.

2

FCC Menu Bar

This chapter explains how to define all the FCC properties, concerning the system components, securities and connections.

In this chapter:

- *FCC*
- *View*
- *Windows*
- *Help*

FCC Properties

The **FCC Properties** menu enables you to view and define the FCC properties, such as Timers, Security, Connections, and Validation Checks.

➤ **To Access the FCC Properties Menu:**

- 1 From the FCC Menu Bar, select **FCC/Properties**. The **Program Properties** dialog is displayed. The following menu options are provided:
 - Timers
 - Security
 - Connection
 - Validation Check
 - General
 - System Information List
 - Logger
- 2 From the **Program Properties** dialog, select the relevant tab and define the various menus as required.

Timers Tab

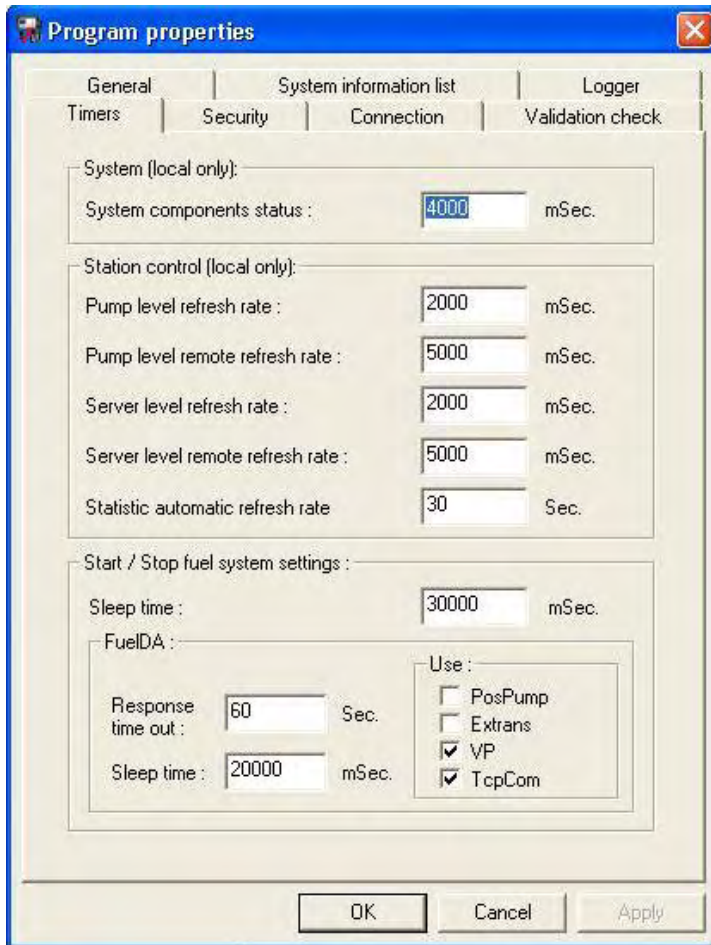
The **Timers** menu enables you to define the Station Control Refresh Rates in the system.

The Timer settings are critical for the proper use of the FCC. Often problems are a result of Timers defined incorrectly, which may be set too low.

The **Timers** option also enables you to define the time in seconds for the fuel system to respond, after the fuel system has been stopped or started. In addition you can specify after how long the fuel system will retry to stop or start if there is no response at first. If the fuel system fails to start up, the system is disabled. If this should happen, refer to the section on System Components and Components Status to try and establish the problem, or contact technical support.

➤ **To View and Define Timers:**

- 1 From the **Program Properties** dialog, select the **Timers** tab. The **Program Properties** dialog displays the Timers menu:



- 2 Enter the required information as described in the table below:

Fields	Description
System (local only) area:	Timers are defined in milliseconds.
System Components Status	Displays the refresh rate of the system view in the System Components menu of the System Components window.
Station Control area:	
Pump level Refresh Rate	Displays the refresh rate of the Pump level menu in the Station control window.
Pump Level Remote Refresh Rate	Displays the refresh rate of the Pump level menu in the station control window of a remote connection.
Server Level Refresh Rate	Displays the refresh rate of the Server level menu in the Station control window.

Fields	Description
Server Level Remote Refresh Rate	Displays the refresh rate of the Server level menu in the Station control window of a remote connection.
Statistic Automatic Refresh Rate	Displays the refresh rate of the information in the Device Level / Communication Statistics menu.
Start/Stop Fuel System Settings area:	
Sleep time	Specifies after how long, in seconds, the FCC will wait for the remote computer (or local computer), after the fuel system has started up or stopped, to check that the remote or local computer succeeded in starting or stopping. From the Systems Components menu, you can view if the system succeeded in starting or stopping.
FuelDA area:	
Response time out	Specifies after how long, in seconds, the system will display that it is disabled, after the fuel system has been started or stopped.
Sleep Time	Specifies after how long, in seconds, for the system to wait before retrying to start up or stop the fuel system.
Use area:	
POSPump	If checked, indicates that the system will check that the POS Pump component, which enables the system to connect to the POS terminal pumps, connects or disconnects upon starting or stopping of the fuel system.
Extrans	If checked, indicates that the system will check the Extrans component upon starting or stopping of the fuel system.
Note:	
This field is not currently supported.	
VP	If checked, indicates that the system will check the VP (Virtual POS) component connects or disconnects on starting or stopping of the fuel system. The VP is a component that extracts all transactions performed at the Forecourt from PumpSrv and saves them in a Transaction file in the Back Office.
TcpCom	If checked, indicates that the system will check that the TcpCom component, which enables the system to connect to a remote computer, connects or disconnects upon starting or stopping of the fuel system.

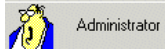
- 3 Click **Apply** to save the data.

Security Settings

The **Security Settings** menu enables you to define the Security Level settings for the System Components, Station control, Station Configuration, Log and Trace Viewers, and the FCC Properties.

In addition, in the Security Settings menu you can define the Password to access the FCC.

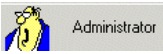
As an 'Administrator' you have access to all menus in the FCC. If the security settings are set to **High**, from all screens you have the option to switch to Administrator User status, by clicking the



button, and entering a password to enable you to access and perform changes to the FCC.

There are three security levels defining the various settings in the FCC:

- **Low** implies that there is a low level of security and all users may access the *FCC*, as well as make changes to the various menus. If defined, on accessing the *FCC*, the system does not prompt for a password.
- **Medium** implies that you can view all the menus, but to perform changes, you must switch to Administrator User status. This is useful, for example, in screens where you can view information, as well as perform changes, i.e., the PumpLevel and ServerLevel screens. In these examples you may monitor (view) information, as well as perform changes. To view information, a security level set to Medium is enough, but to perform changes, the user must switch to Administrator status.
- **High** implies that without the Administrator's password you may not access the *FCC*.

By default the FCC is accessed in low permission, and on clicking the  button, you have the option to enter a password and switch to administrator status with all permissions. To change this default, you must send the following command via the command line:

/Password=XXXX(the admin password) ::Access as admin

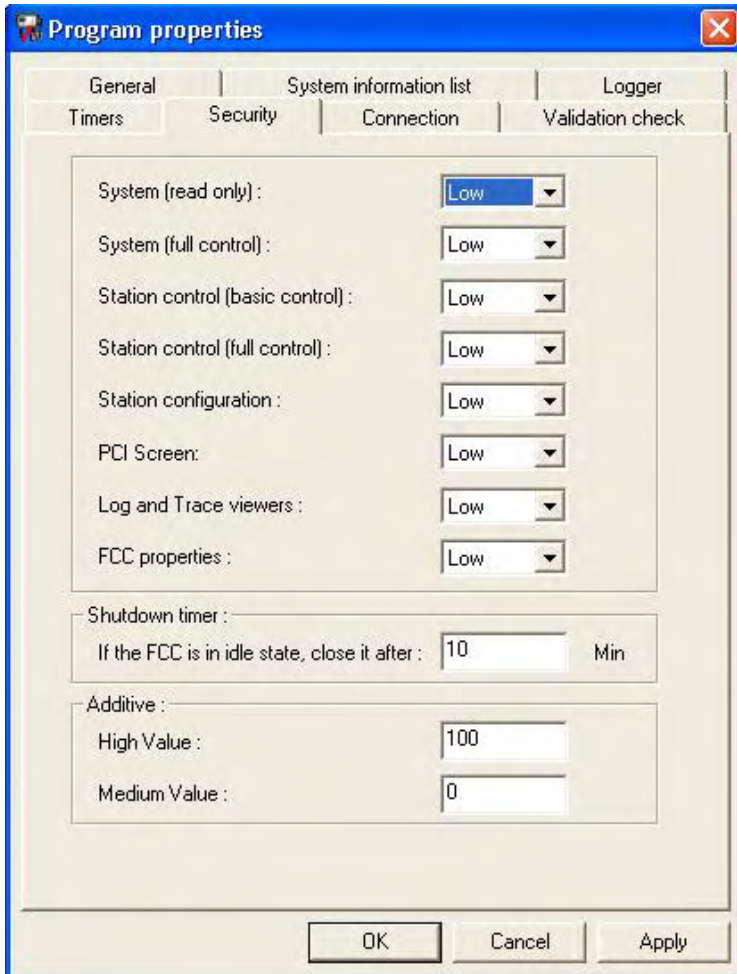
Or

From the **Program Properties** dialog, select the *Security* tab. Then set the required security levels, as described below.

The Securities are very important. Make sure the parameters are correctly defined.

➤ **To View and Define Security Settings:**

- 1 From the **Program Properties** dialog, select the **Security** tab. The **Program Properties** dialog displays the Security menu:



- 2 Select **Low**, **Medium**, or **High** from the drop-down list to enter the required information, as described in the table below:

Fields	Description
System Components (read only)	Displays the minimal security level necessary for viewing the System Components menu.
System Components (full control)	Displays the minimal security level necessary for changing statuses of the System Components.
Station Control (basic control)	Displays the minimal security level necessary for accessing Station Control, and performing basic actions.
Station Control (full control)	Displays the minimal security level necessary for enabling full control of the station.
Station Configuration	Displays the minimal security level necessary for configuring the station.

Fields	Description
PCI Screen	Displays the minimal security level necessary for configuring the PCI.
Log and Trace Viewers	Displays the minimal security level necessary for viewing the Log and Trace Viewers.
FCC Properties	Displays the minimal security level necessary for defining the security settings.

Note:

If the Security level is set to **High**, Administrator authorization is required to enable access to FCC Properties. Every time the Administrator accesses the FCC Properties, a user name and password are prompted for.

Shutdown Timer area:

If the FCC is in Idle State, Close it After: Displays the number of minutes that the FCC remains in Idle mode, before shutting down.

Additive area:

High Value Displays the additive value applied to passwords for entries that are configured with a high security level. The default is 100.

Medium Value Displays the additive value applied to passwords for entries that are configured with a medium security level. The default is 100.

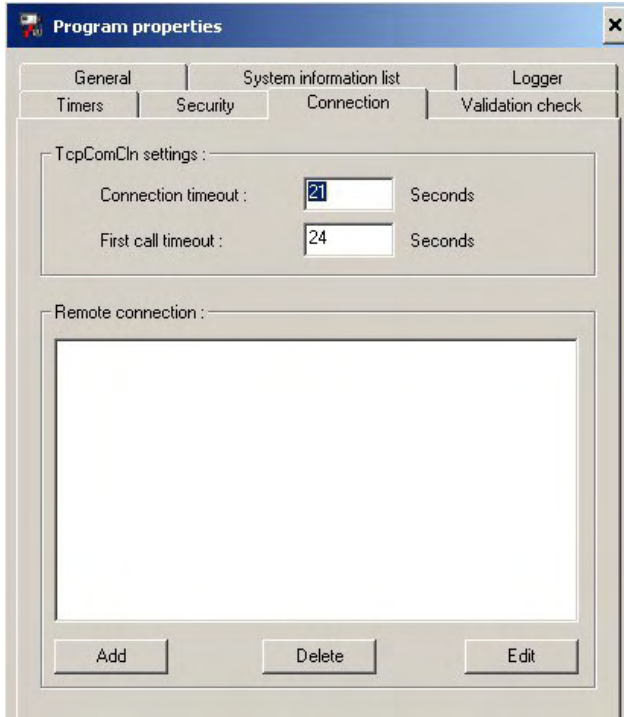
- 3** Click **Apply** to save the data.

Connections

The **Connections** menu enables you to connect to a Remote computer allowing you to monitor System Components via a Remote computer.

➤ **To View and Set Connections:**

- 1 From the **Program Properties** dialog, select the **Connection** tab. The **Program Properties** dialog displays the Connection menu:



- 2 Enter the required information as described in the table below:

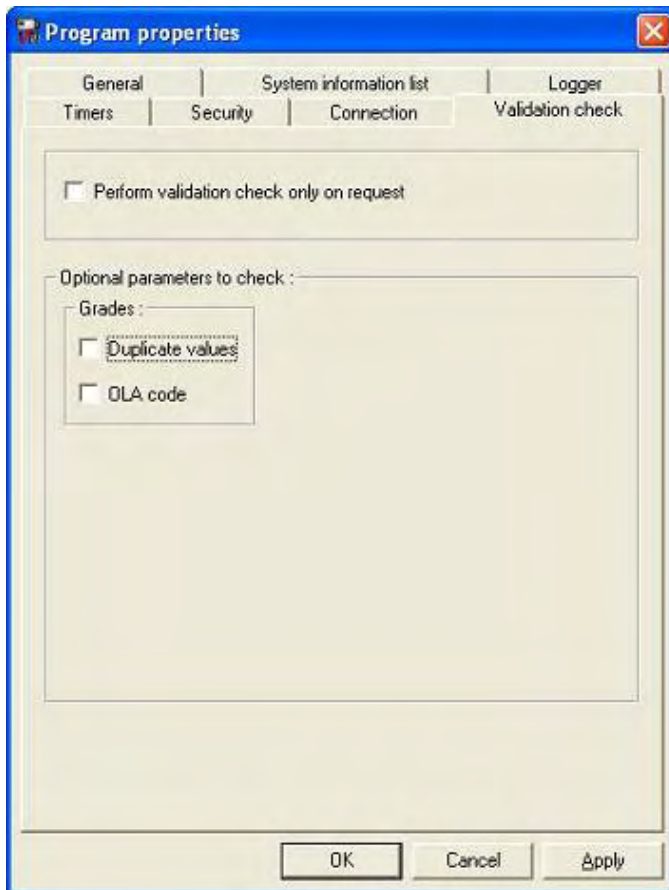
Fields	Description
TcpComCln settings area:	
Connection timeout	Defines number of seconds computer waits to receive a connection, before it goes into timeout.
First call timeout	Defines number of seconds that the computer waits the first time you call to connect to the remote computer, before it goes into timeout.
Remote Connection	Displays the details of any remote connection.

Validation Check

The Validation Check menu enables you to perform regular Validation Checks of the OLA Code Grades. OLA Code Grades are predefined and represent specific OLA Authorization Codes. Each fuel type has a unique OLA Code.

➤ **To Access the Validation Check:**

- 1 From the **Program Properties** dialog, select the **Validation Check** tab. The **Program Properties** dialog displays the **Validation Check** menu:



- 2 Enter the required information as described in the table below:

Fields	Description
Perform Validation Check Only on Request	If checked the system will perform validation checks only when requested.
Optional Parameters to Check area:	
Grades:	There are OLA Codes for each Grade.

Fields	Description
OLA Code	If checked, the system ensures the OLA Code defined when configuring Grades is correct and valid when performing a Validation Check. If not checked, the FCC does not check the OLA Code defined in the Grades menu when performing a Validation Check.
Duplicate Values	If checked, enables the same Grades to have the same properties. For example, 2 Tanks can have the same Pure Product, which is the same Grade.

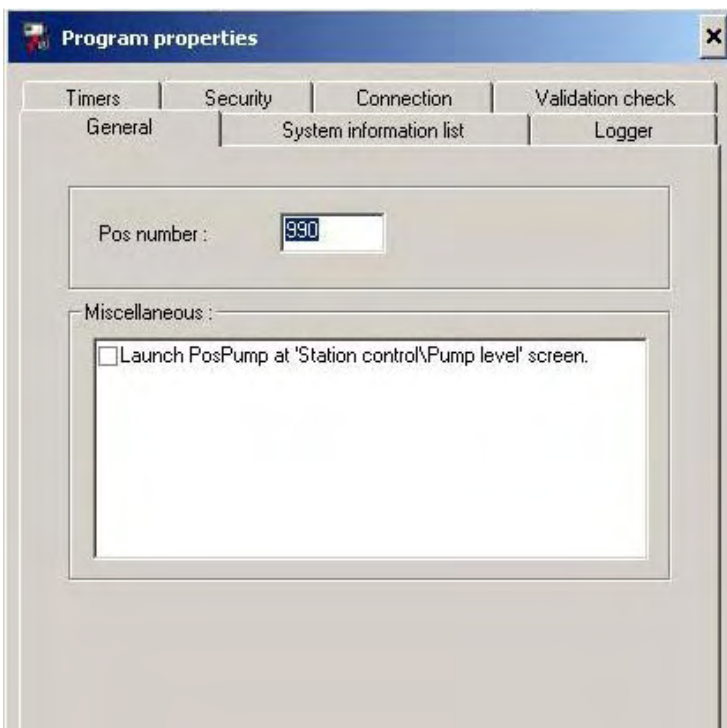
- 3 Click **Apply** to save.

General

The **General** option enables you to specify the ID number that the FCC uses to connect to PumpSrv as a POS.

➤ To View the General Setting:

- 1 From the **Program Properties** dialog, select the **General** tab. The **Program Properties** dialog displays the General menu:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
POS Number	Displays the ID that the FCC uses to connect to PumpSrv as a POS.

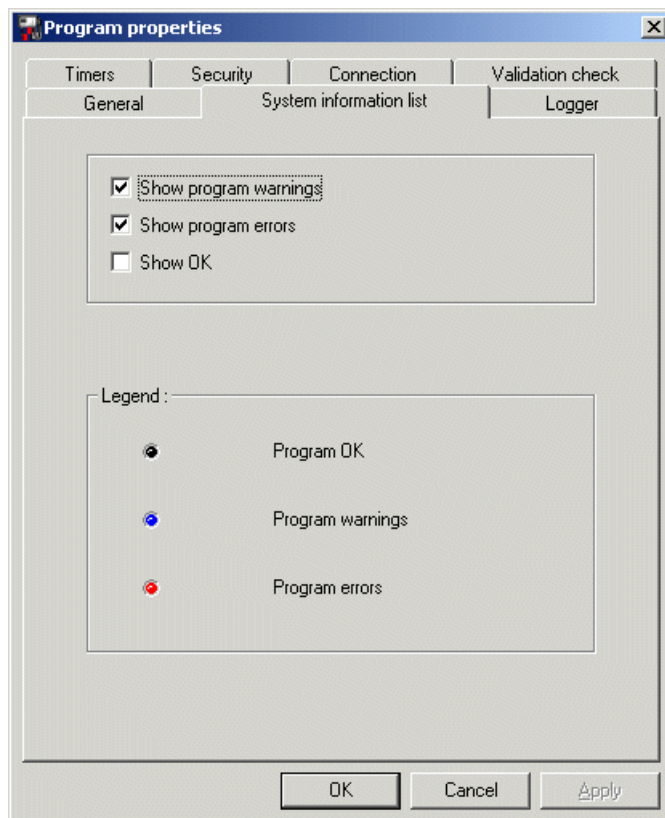
Fields	Description
Miscellaneous	Select the checkbox to launch POSPump through the FCC. When launching POSPump, users are able to view a graphical view of the fuel forecourt, exactly as presented by the POS from the Station Control/Pump Level screen.

System Information List

The System Information List option enables you to define which information will be displayed in the **Bottom-Pane** of each dialog, which displays the processes activated on the FCC. When checking system validation, the column headings: Operation and Result, change to Error Sources and Error Details.

➤ To View and Define the System Information List:

- 1 From the **Program Properties** dialog, select the **System Information List** tab. The **Program Properties** dialog displays the **System Information List** menu:



- 2 Enter the required information as described in the table below:

Fields	Description
Show Program Warnings	If checked, displays Program Warnings in the bottom-pane of each dialog in blue font. For example, FCC system – Connection is suspended.

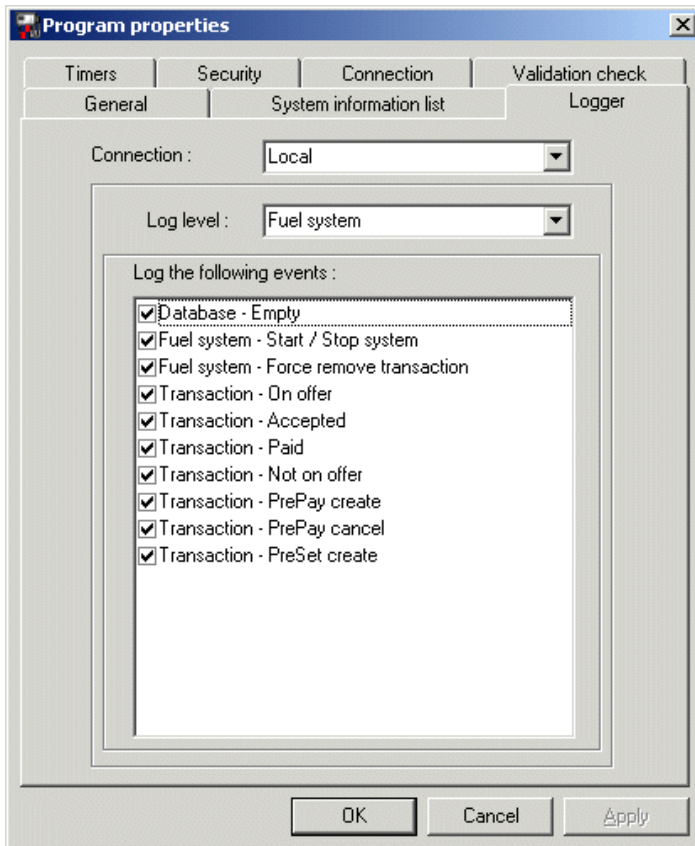
Fields	Description
Show Program Errors	If checked, displays the Program Errors in the System in the bottom-pane of each dialog in red font. For example, FCC no connection.
Show OK	If checked, displays system information on processes that succeed in the bottom-pane of each dialog in black font. For example, Validation Check – Pure Products no errors.

Logger

The Logger option enables you to save logs of various events that occur in the system, such as, when the fuel system starts or stops, the event is recorded in the log.

➤ **To View and Define Loggers:**

- 1 From the **Program Properties** dialog, select the Logger tab. The **Program Properties** dialog displays the **Logger** menu:



- 2 Enter the required information as described in the table below:

Fields	Description
Connection	Select the connection type from the drop-down list. E.g., Local or remote computer.
Log level	Select the log level from the drop-down list. For example, Fuel system indicates that any event that occurs within the fuel system may be saved in the logger.
Log the following events	Check the checkboxes of each event in which you request the log to be recorded and saved.

FCC New Connection

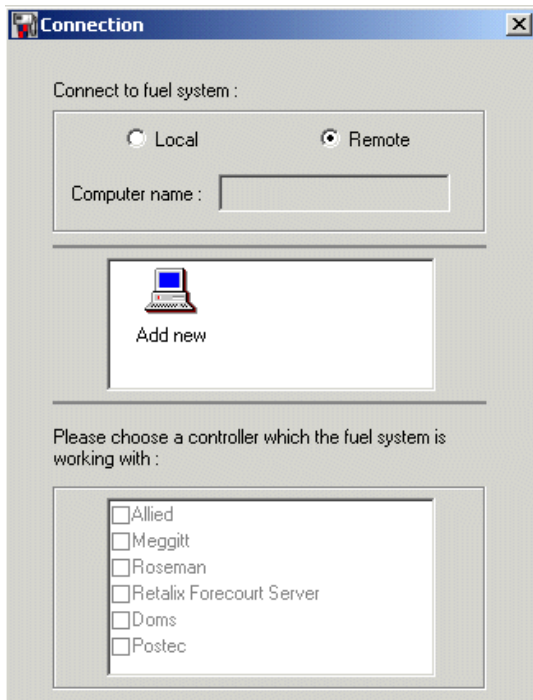
From the New Connection option, you can connect to a remote computer.

When connecting to a Remote computer the first time, you are prompted to save the Computer name, creating an icon on the *Connection* dialog, which represents the Remote Computer. This enables a direct connection to that computer name the next time you are connecting.

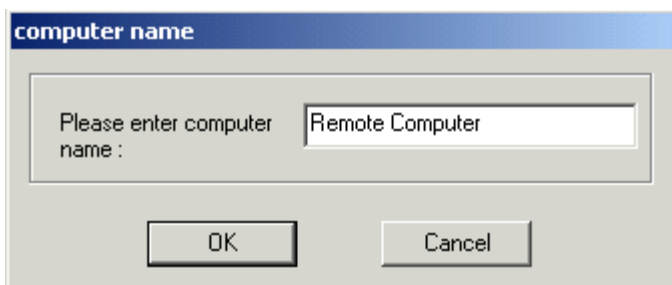
The Remote server must have TCPComSrv (Server), and the workstation you are using must have TCPComCln (Client) to have a server/client relationship. Call your System Administrator to set up a server/client relationship, if required.

➤ **To Connect to a Remote Computer:**

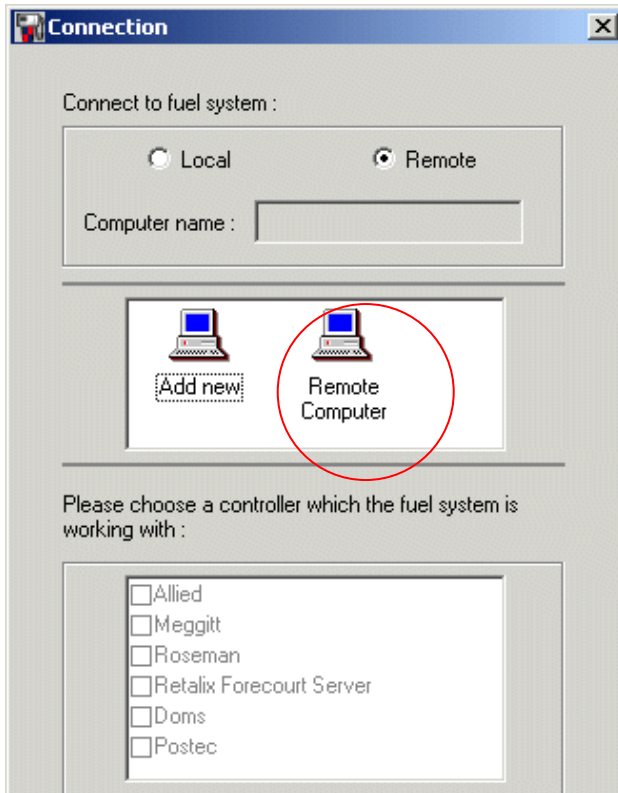
- 1 From the **FCC** menu bar, select **FCC/New Connection**. The **Connection** dialog is displayed:



- 2 Select the **Remote** radio button. The **Add New** icon is displayed in the white window, as shown above.
- 3 Double-click the **Add New** icon. The **Computer Name** dialog is displayed:



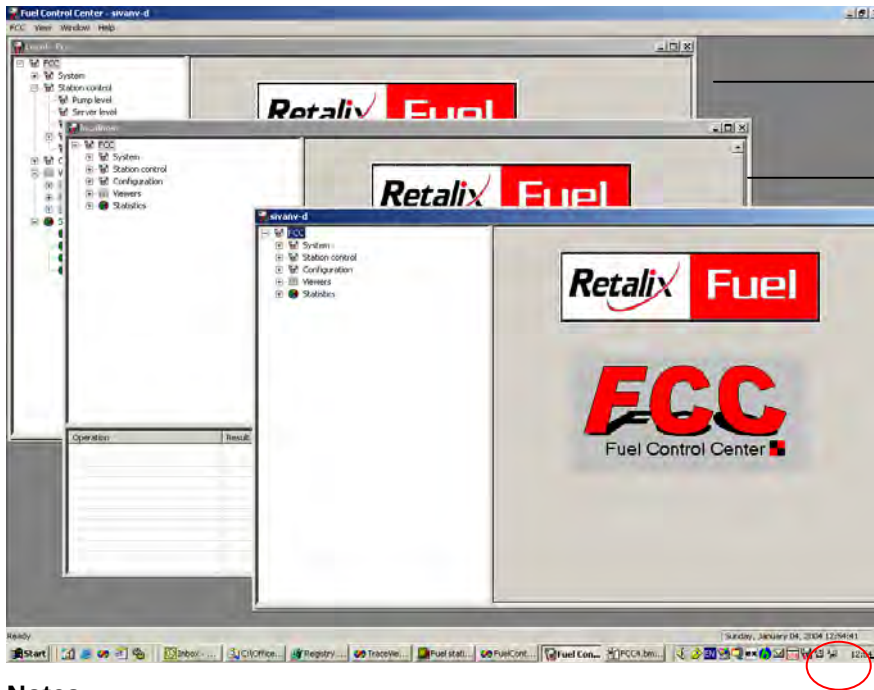
- 4 Enter the name of the remote computer, then click **OK**. If you have connected successfully, the name of the Remote computer is displayed in the **Connection** dialog, as follows:



You can add as many computers as required.

- 5 Select the controller that the remote computer is working with, e.g., Allied, Meggitt, RFS, or Doms.
- 6 Click **OK**. The system will connect to the remote computer, and the FCC Main Interface is displayed with the  icon appearing at the bottom right corner of the screen.

You can connect to a few remote computers at the same time, as displayed below:



First FCC Connection.

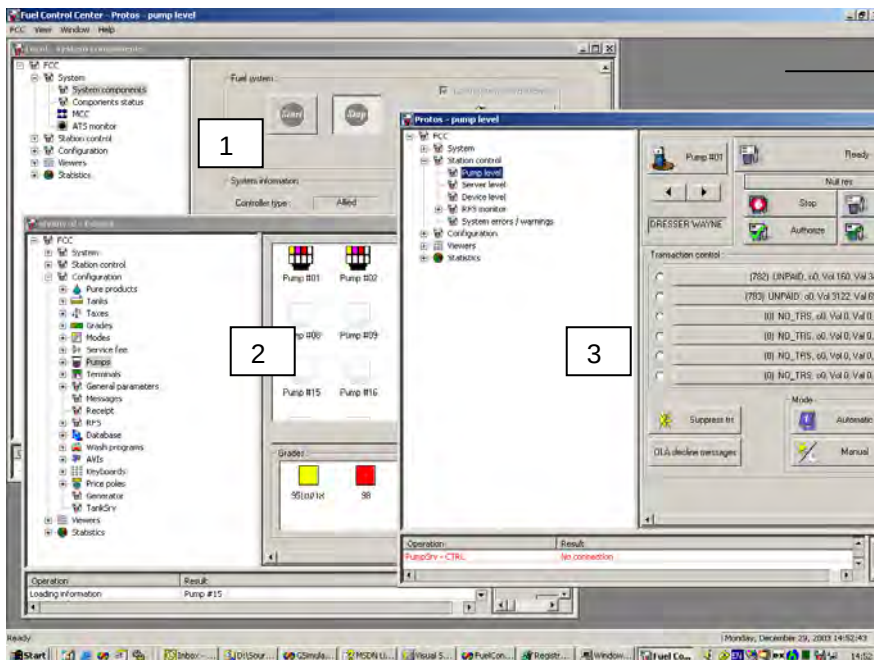
Second FCC Connection.

Third FCC Connection.

Three  icons are displayed, indicating that your system is connected to three FCC systems.

Notes:

1. If you place the cursor on one of the  icons, a tool tip is displayed, indicating which is the current active computer.
2. You may access a different screen or menu in any of the remote computers connected, while you are connected. See below:



3 remote computers are connected. Each one is connected to a different convert layer, and can be in different menus.

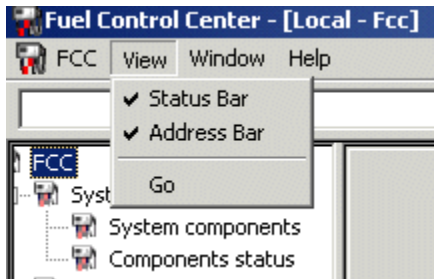
View

From the **View** menu, you have the option to enable the Status and the Address bar to be displayed.

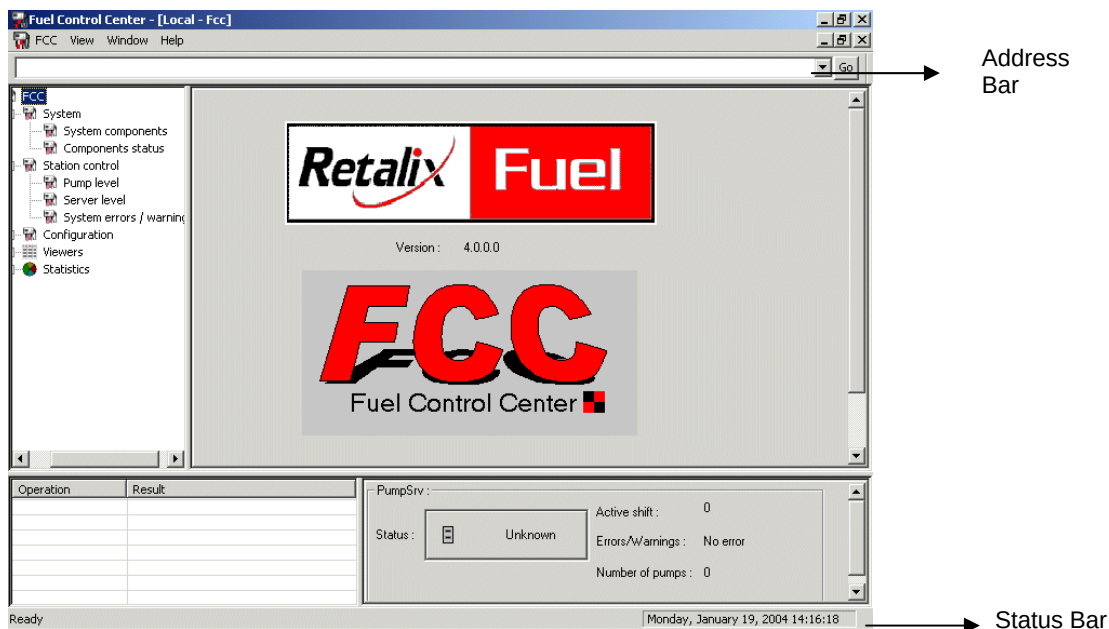
The **Status Bar** appears at the bottom of the screen and enables you to view the current Time and Date. If the system is running, the text "Ready" appears on the left hand side of the Status bar.

The **Address Bar** appears at the top of the screen, under the Menu Bar, and enables you to enter, and go to the address of a specific path.

- 1 From the FCC menu bar, select **View**. The menu displays the **Status Bar**, and the **Address Bar**:



- 2 Select to display the Status Bar and the Address Bar as follows:



- 3 Enter a Path in the Address bar, and click **Go**.

For example, if you need to go to Grade #1 in the Grades menu, enter `FCC\Configuration\Grades\Grade01`, and click **Go**. The screen you require is displayed as shown below:

Fuel Control Center - [Local - Grade #01]

ECC View Window Help

`FCC\Configuration\Grades\Grade01` Go

Grade: 01

☒ Valid

Full name: Unleaded

Short name 3: UNd

Short name 5: UNd

OLA code: 1

Convert code 1: 00

Convert code 2: 00

☒ Loyalty applicable

Blending (Pure products):

High: UNLEDEC

Low: -- None --

High blend ratio: 100

Prices:

Cash:

Full service: \$ 1.500

Self service: \$ 1.000

Credit:

Full service: \$ 1.000

Self service: \$ 1.000

Reward:

Discount per unit: 0 cents

Valid for: 0 days

Discount type: -- Non

Discount per unit: 1 \$

Max unit for discount: 5

Taxes:

☐ ABC

☐ DEF

Operation Result

PumpSrv:

Status: Server no controller

Active shift: 0

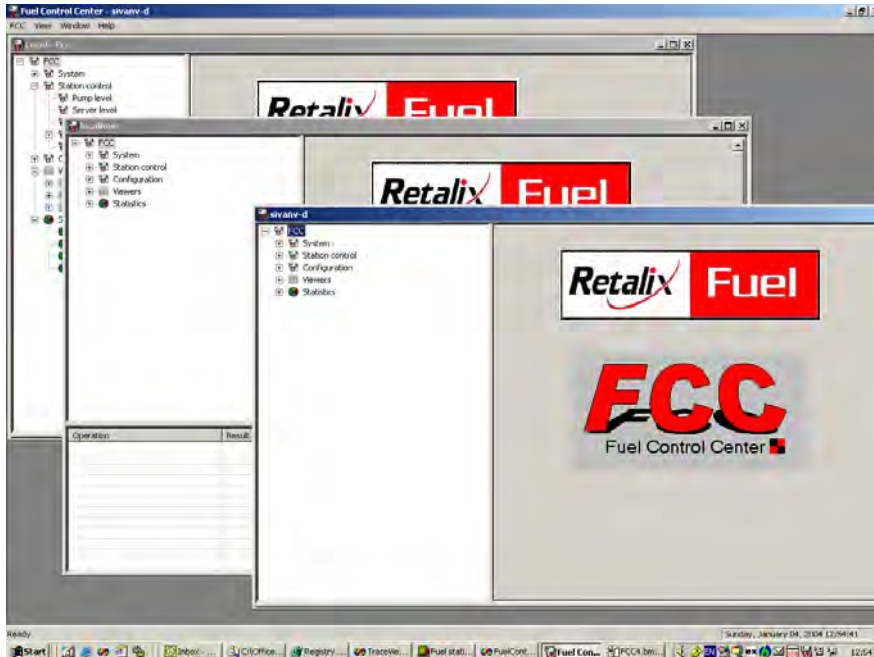
Errors/Warnings: No error

Number of pumps: 0

Ready Monday, January 26, 2004 11:46:13

Window

If you are connected to a few remote computers at once, you have the option to view the screens either, cascaded, or tiled. For example, the following diagram displays 3 FCC systems cascaded:



Help

This option provides definitions of each System Component.

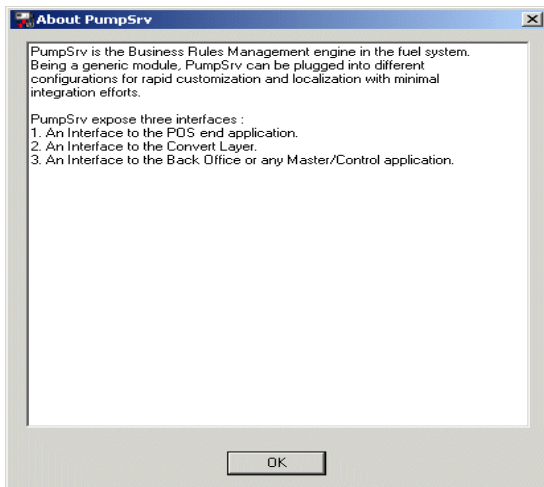
About Retalix Fuel

The following fuel system components are explained in the About Retalix Fuel:

- PumpSrv
- Convert layer
- Fuel Control Center
- POSPump
- MultiSync
- Generator
- TankSrv

➤ **To Access the About Retalix Fuel Menu:**

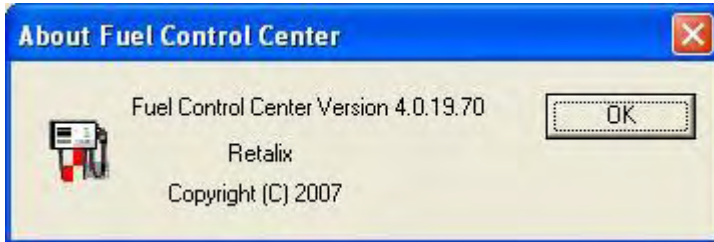
- 1 From the **FCC** menu bar, select **Help/About Retalix Fuel**, and then select each component. For example, select PumpSrv. The **About PumpSrv** dialog is displayed:



- 2 Select each menu to display a definition and explanation of each System Component.

About FCC

This option provides the current version number and year of the Fuel Control Center installed on your system.



Getting Started

This chapter introduces you to the main FCC interface and menus. In addition, it describes the necessary settings and configuring of the parameters for setting up the FCC.

In this chapter:

- *Configuration*
- *Accessing the Configuration Menu*
- *Copying Object Properties*

Configuration

The **System Configuration** menu enables you to configure the relevant parameters for the following Registry tables:

■ Pure Products	■ Database
■ Tanks	■ Wash Programs
■ Taxes	■ AVIs
■ Grades	■ Keyboards
■ Languages	■ IPTs
■ Modes	■ Price Poles
■ Service Fee	■ Generator
■ Pumps	■ Bank Notes
■ Terminals	■ Service Modes
■ General Parameters	■ Fuelling Modes
■ Messages	■ Fuelling Mode Groups
■ Receipt	■ Transactions
■ Convert Layer	■ TankSrv

Notes:

1. If your Controller uses the **Meggitt Convert Layer**, you do not have to configure all the system parameters in the Configuration section. The mandatory parameters are Modes, General Parameters, and Database, and then proceed to the Convert Layer section.
2. If your Controller uses the **Postec Convert Layer**. The **only** sections relevant from the Configuration chapter are: Grades and Pumps, which must be defined as Valid.
3. The following Registry tables: Bank Notes, Service Modes, Fuelling Modes, Fuelling Mode Groups, and Transactions are only applicable if your Controller uses the **Doms Convert Layer**.
4. Once you have configured a particular system parameter, if there is an icon that is displayed with an exclamation mark (!), this indicates that an error occurred in the configuration process. To view error details click **Validation Check**.

Accessing the Configuration Menu

Upon accessing the Configuration menu, the **Configuration** dialog is displayed, including Registry tables. Next to each Registry table is a checkbox that is automatically checked when changes are applied to any one of them after configuration. For example, you may have configured all the configurable tables, and then updated the Service Fee settings. The **Service Fee** checkbox in the **Configuration** dialog will then be automatically checked. Only when you click the

Re-configure

button will the new Service fees take effect.

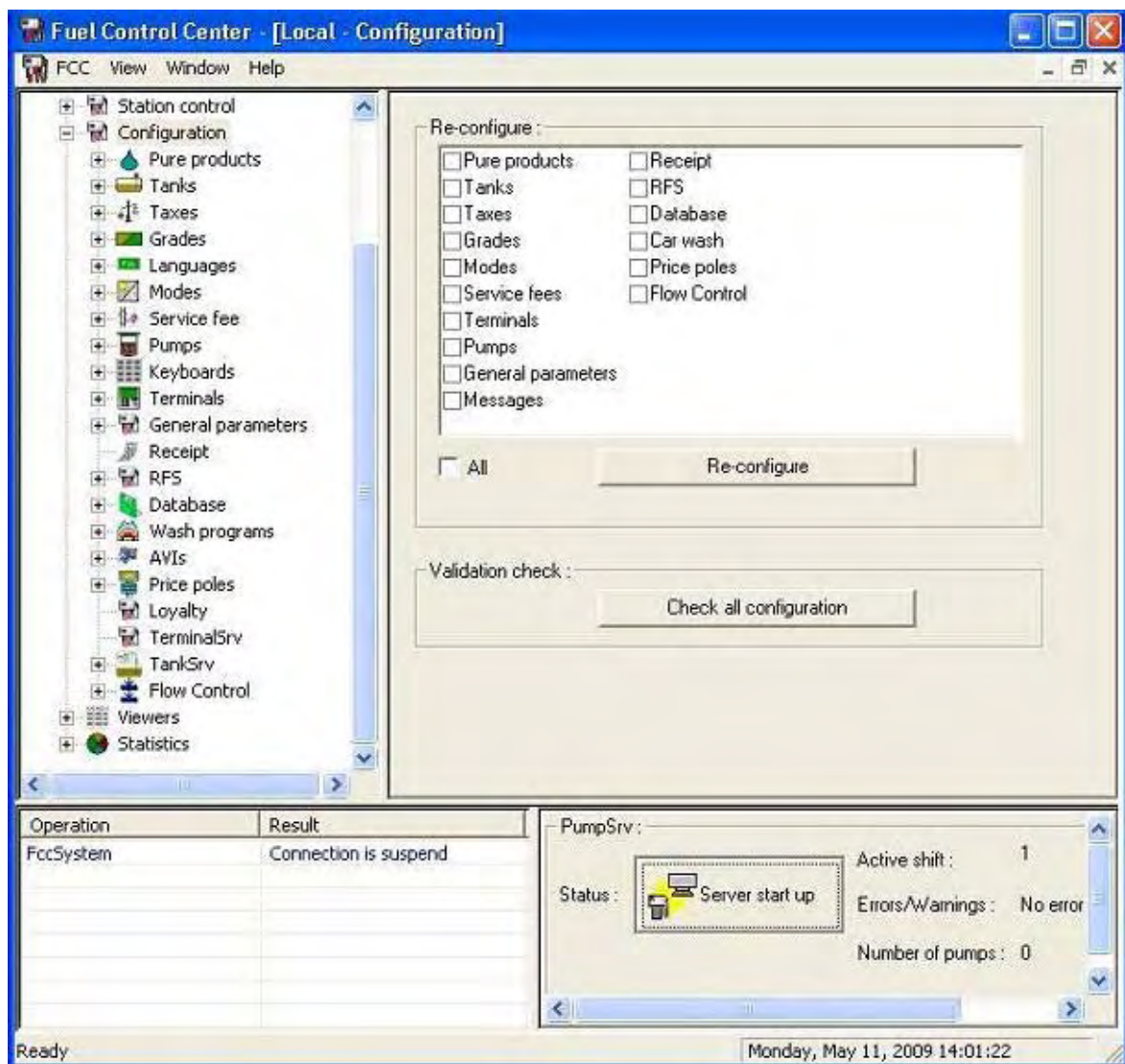
In addition, if you only require the new Service fees to take effect on the following day, uncheck the checkbox to make sure that the new settings of that specific table are not re-configured whilst reconfiguring other settings. On the day that the changes need to be applied, recheck the checkbox, and then click the

Re-configure

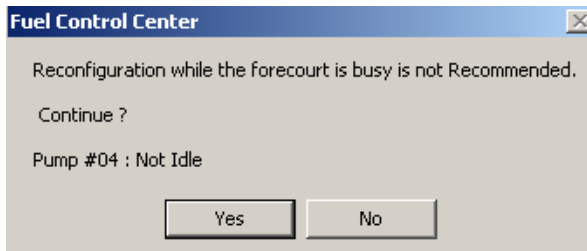
button.

➤ To Re-Configure Fuel System Parameters:

- 1 From the **FCC Tree**, select **Configuration**. The **Configuration** dialog is displayed:



- 2 Click the  button to apply the new configuration settings. If for example, one of the pumps on the Site is not idle, the system prompts:



- 3 Click **Yes** to continue, the new settings take effect.

Or

No to cancel, and then wait for the Pump to be idle before retrying.

If there are any validation errors, they are displayed in the bottom-pane.

Copying Object Properties

The **System Configuration** allows you to copy the properties of a particular object in the menu, and apply the properties to other objects in the same menu.

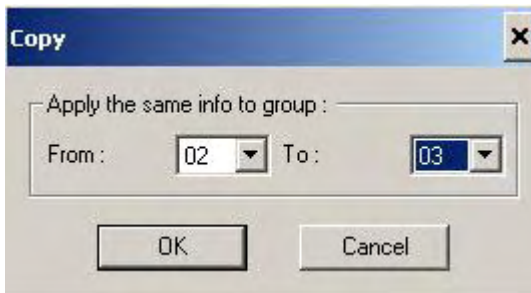
You may copy any one of the System Registry tables in the configuration menu. You may copy the properties of one component to a group of components. For example, you may copy the properties of Pure Product number 2 to Pure Product number 3, or copy the properties of Pure Product number 2 to the Pure Product number 3 and 4, at the same time.

Warning!

Do not use the Copy function unless you are very familiar with the FCC. If you do use the copy function, make sure the objects you are copying have the same system data, to avoid configuration system errors.

➤ To Copy Properties from One Object to Another:

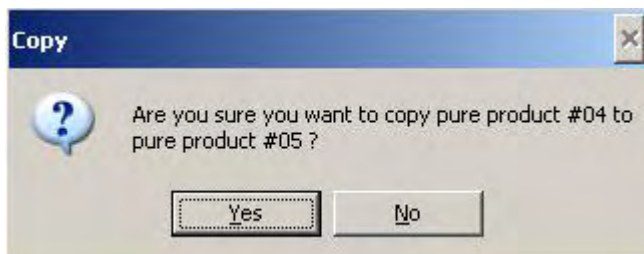
- 1 From the **FCC Tree**, select **Configuration**, then select the System Registry table you wish to copy from, displaying its graphical view in the right pane.
- 2 Right-click the icon whose properties you want to copy, then click *Copy*. The *Copy* dialog is displayed:



- The **From** field displays the component from which you are copying.
- The **To** field displays the component to which you are copying the properties.

For example, if you are copying from Pure Product number 2 to Pure Product number 3, from the **From** the field drop-down list, select 02, and from the **To** field drop-down list, also select 02. If you are copying the properties of Pure Product number 2 to the Pure Product number 3 and 4, from the **To** drop-down list, select 03.

- 3 Click **OK**. The following message is prompted:



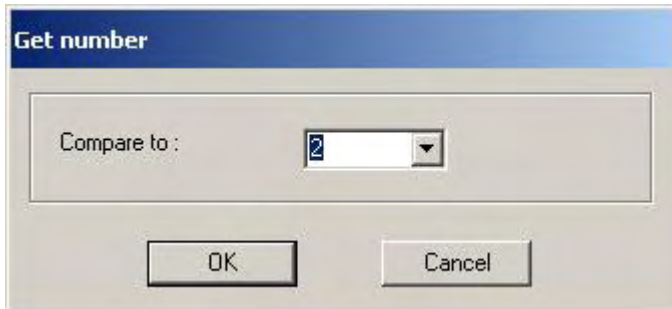
- 4 Click **Yes** to copy. Copy objects to save time.

Comparing Object Properties

The System Configuration allows you to compare the properties of a particular object in the menu, and view the differences in the bottom left pane.

➤ **To Compare Object Properties:**

- 1 From the **FCC Tree**, select **Configuration**, then select the System Registry table you wish to copy from, displaying its graphical view in the right pane.
- 2 Right-click the icon whose properties you want to compare, then click **Compare**. The **Get Number** dialog is displayed:



- 3 From the **Compare To** drop-down list, select the object to which you are comparing properties, then click **OK**.

View the results in the bottom left pane. For example, if you were to compare two Pure Products, such as Diesel and Super, the following results are displayed:

Param...	PureProducts\Pure...	PureProducts\Pure...
Blendable	0	1
Name	Diesel	Super

Proceed to the Pure Products section.

➤ **To Configure Fuel System Parameters:**

Each fuel System Registry table in the Configuration menu consists of a list of Registry tables displayed on the tree in the left pane, and a graphical view displaying icons of each one is displayed in the right pane.

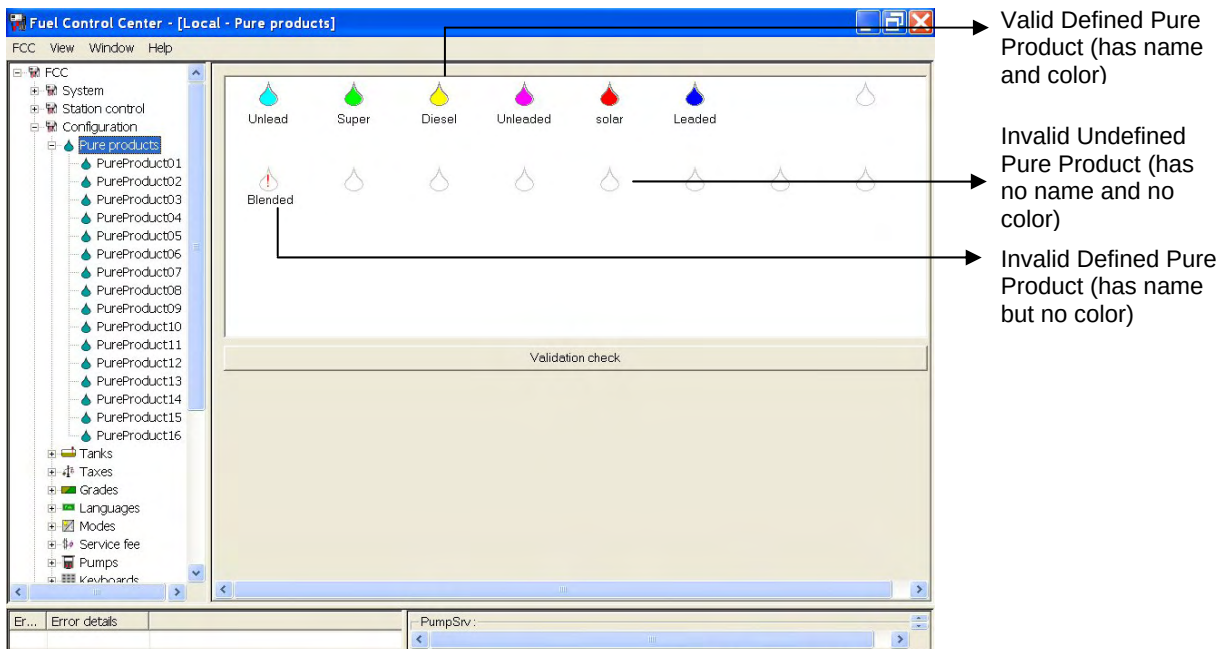
Proceed to the Pure Products configuration menu.

Pure Products

Pure Products are the Fuel products pure form. The **Pure Products** menu enables you to view, add, revise or copy properties of each Pure Product in the system.

➤ **To View the Pure Products Properties:**

- 1 From the **FCC Tree** click **Configuration**, then click the **Pure Products** menu. The **Pure Products** screen is displayed with icons of all the Pure Products. Expand the FCC Tree to view the list of Pure Products:

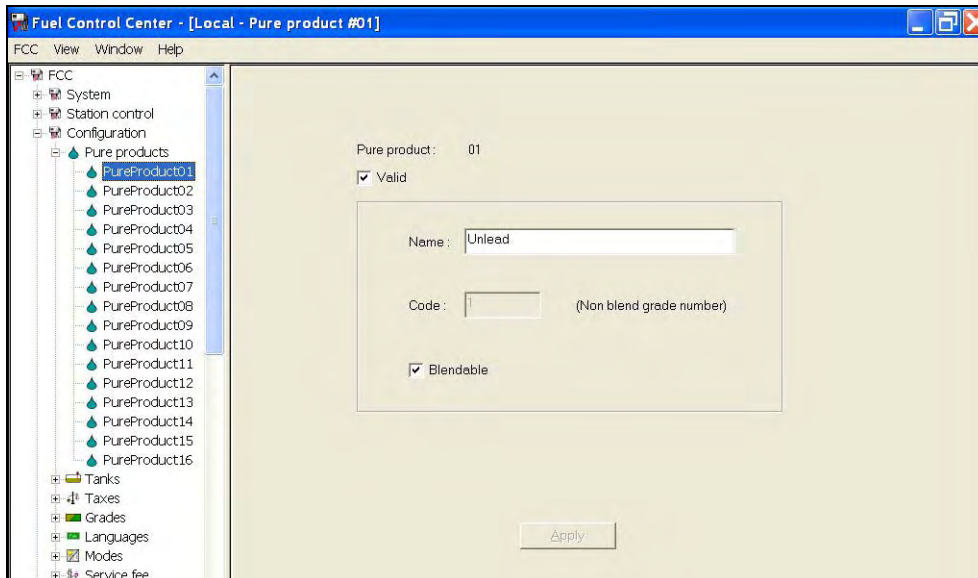


- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

You may define up to 16 different Pure Products.

➤ **To Define or Revise a Pure Product:**

- 1 Click an undefined Pure Product icon or select a Pure Product from the **FCC Tree**. The **Configuration Pure Product** dialog is displayed, as follows:



You may view the properties of each Pure Product by selecting the Pure Product number from the **FCC Tree**. You may move from one Pure Product to the next and apply changes as necessary.

- 2 Enter the required data for each new Pure Product in the fields, as described in the table below:

Fields	Description
Pure Product Number	An internal code for a Pure Product as used in PumpSrv.
Valid	If checked, indicates that the product exists in the system.
Name	Enter the name of the Pure Product.
Code	Displays the Pure Product code and is not revisable.
Blendable	Indicates whether or not the Pure Product may be blended with another Pure Product. For example, Unleaded may be blended with another Pure Product.

- 3 Click **Apply** to save.

- 4 From the **FCC Tree**, click **Pure Products** to view all the Pure Products defined. Each Pure Product that is defined has a name and is a designated color.

Note:

1. If you have any Pure Products displaying  , click **Validation Check** to display the **Error Source** and **Error Details** for each Pure Product. All System Information is displayed in the bottom-pane of each dialog. For example, you may have copied a Pure Product to another Pure Product with the same name. Each Pure Product name cannot be assigned more than once, resulting otherwise, in an error.
2. Go to the Pure Product to correct the error. (See To Define or Revise a Pure Product, above.)

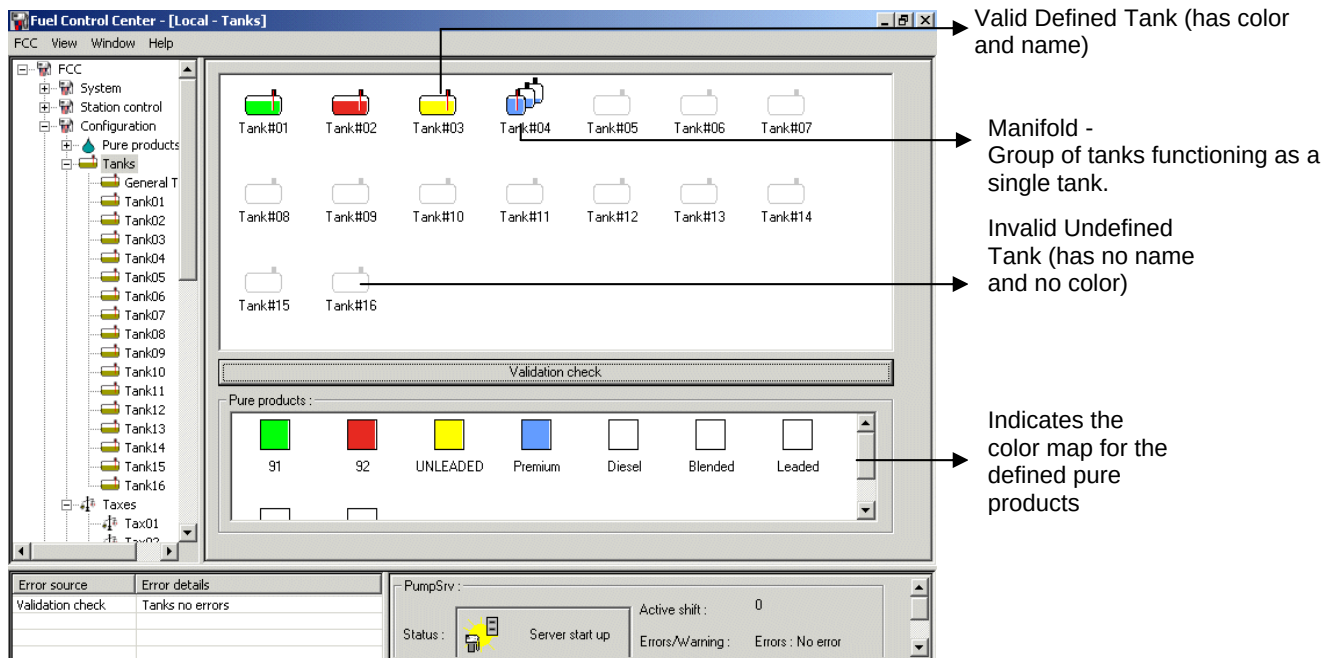
Once you have configured Pure Products, continue to configure the Tanks.

Tanks

The **Tanks** menu enables you to connect the various pure products to the respective tanks.

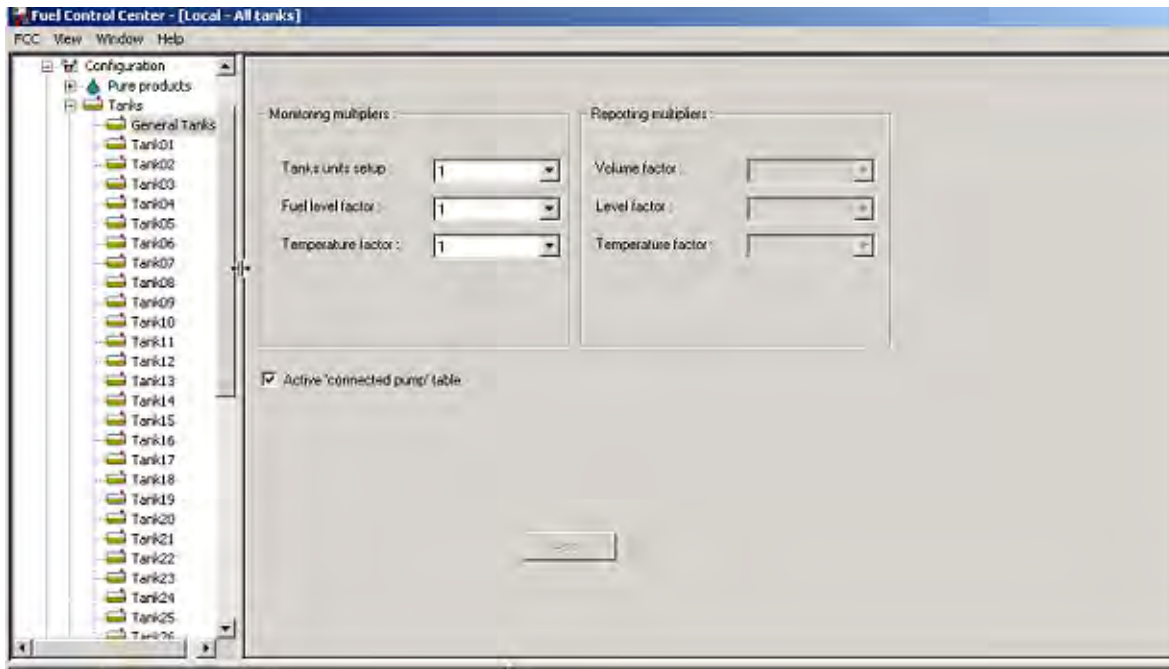
➤ To View Tank Properties:

- 1 From the **FCC Tree**, click **Configuration**, then click the **Tanks** menu. The **Tanks** screen is displayed with icons of all the Tanks. Expand the FCC Tree to view the list of Tanks:



- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

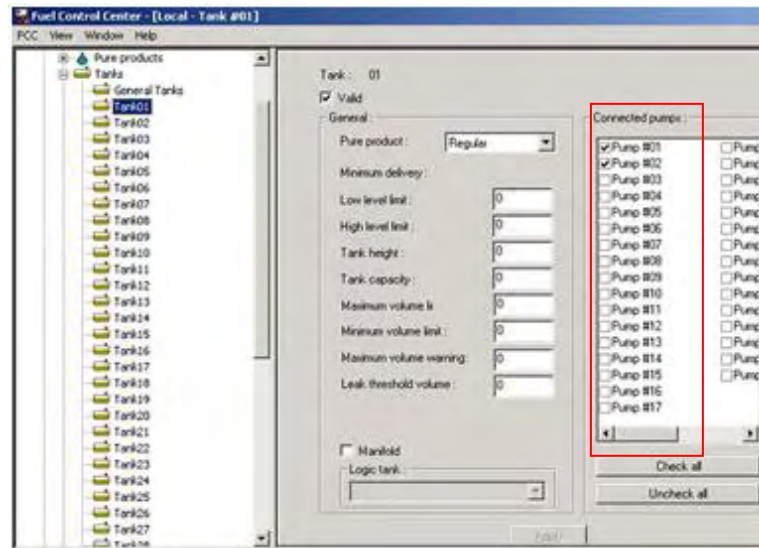
- 3 From the **FCC Tree**, click **General Tanks**. The **Configuration: General Tanks** dialog is displayed:



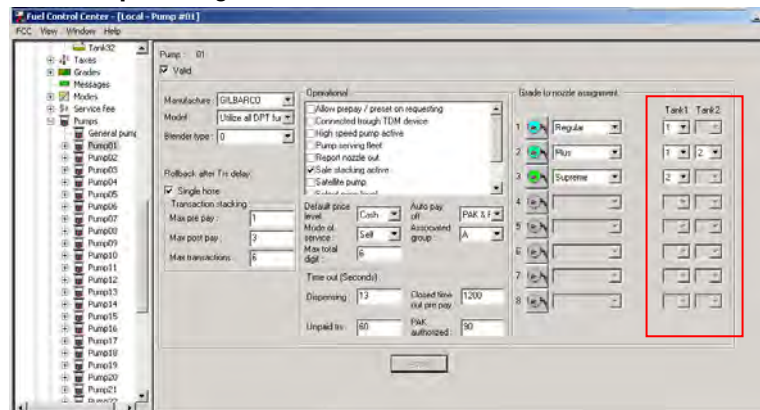
- 4 Enter the required information in the fields, as described in the table below:

Fields	Description
Monitoring Multipliers:	
Tanks Units Setup	From the POS terminal at the fuel station, you can view the fuel level represented graphically per site by a tank icon. Usually the amount is too large to view, and therefore, PosPump (POS terminal component) calculates the volume of fuel, by the amount specified in this field to report the number of liters, and represent the level of fuel graphically by a tank icon. For example, if PumpSrv reports to PosPump that there is 88607 liters of fuel in the tank, PosPump divides 88607 by 100 as specified in this field. From the POS terminal, the cashier can immediately view if the tank is half full, or how much fuel remains on the site.
Fuel Level Factor	This field specifies how many decimal points are used in the report on the fuel level factor at the POS. The fuel level factor is measured by a fuel stick, which marks the level of the fuel in the tanks. If defined as 100, and the fuel level is 100000, in the report it is displayed as 1000 liters.
Temperature Factor	This field specifies how many decimal points are used in the report on the temperature factor at the POS
Reporting Multipliers:	

Fields	Description
Volume Factor	This field specifies how many decimal points are used in the report on the fuel volume factor. For example, if the ATG report on fuel volume is defined as 10 and the fuel volume is 25000, in the report it is displayed as 2500 liters (25000/10).
Level Factor	This field specifies how many decimal points are used in the report of the fuel height factor. For example, if the ATG report on fuel height is defined as 10 and the fuel height is 2500, the report is displayed as 250 meters (2500/10).
Temperature Factor	This field specifies how many decimal points are used in the report of the fuel temperature factor. For example, if the ATG report on fuel temperature is defined as 10 and the fuel temperature is 100 degrees, the report is displayed as 10 degrees (100/10).
Active 'connected pump' table	This checkbox affects both Tanks and Pumps. Check to indicate that every tank is connected to a pump. When this checkbox is selected, a list of connected pumps is displayed in the Tanks dialog as follows:

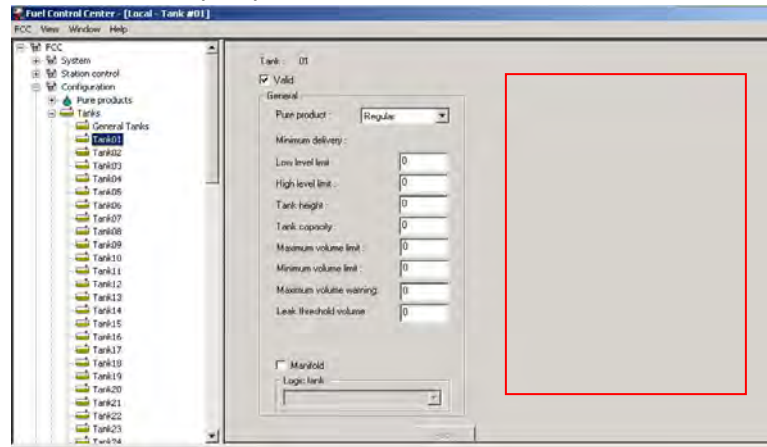


When this checkbox is not selected, then every nozzle is connected to a pump and the connected tanks are displayed in the **Pumps** dialog as follows:



Fields	Description

This also affects the tanks, so when viewing the **Tanks** dialog, the area for the pumps is blank, as follows:



➤ **To Define or Revise Tank Properties:**

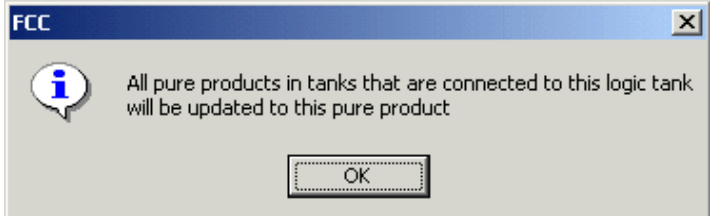
- 1 Double-click an undefined Tank icon or select a Tank from the **FCC Tree**. The **Configuration Tank** dialog is displayed, as follows:

You may view the properties of each Tank by selecting the required Tank number from the **FCC Tree**. You may move from one Tank to the next, and apply changes as necessary.

- 2 Enter the required information in the fields, as described in the table below:

Fields	Description
Tank area:	
Tank	Internal code number of tank as used in PumpSrv.
Valid	If checked, indicates that this is a valid Tank in the system.
General area:	
Pure Product	From the drop-down list select the name of the Pure Product linked to this Tank.

Fields	Description
Minimum Delivery	Specifies a minimum volume change in liters. A mark in each of the tanks, measured in gallons, signifies that any sudden rise above it is attributable to a fuel delivery. Note: A sudden change in fuel level below this mark, for example, due to an earthquake, or any other cause for motion in the tank, will not alert the system.
Low Level Limit	Specifies the lowest level of fuel in the tank, before fuel delivery is required. This value is recorded by POSPump as the Low Level red line. If the fuel goes below the lowest level, an alarm will be triggered.
High Level Limit	Specifies the highest level of fuel that is stored in the tank, according to the regulations in each site, regardless of the maximum volume that can be stored in a tank. This value is recorded by POSPump as the High Level red line. If the fuel goes about the highest level, an alarm will be triggered. Note: The Low Level and High Level Limit parameters are used to send alarms to the Alarmsrv, notifying that the fuel level is at the Low Level or High Level Limit.
Tank Height	Specifies the physical height of the tank (level).
Tank Capacity	Specifies the actual physical tank capacity (volume not level).
Maximum Volume Limit	Specifies the maximum volume of fuel in the tank. An alarm will be triggered if the fuel volume exceeds the maximum limit.
Minimum Volume Limit	Specifies the minimum volume of fuel in the tank. If the fuel drops below the specified limit, the nozzles on the pumps connected to the specified tanks are locked if the parameter Lock Nozzle When Tank Is Under Predefined Limit in the General System Parameters module is selected.
Maximum volume warning	Specifies the maximum volume of fuel in the tank that is reached before a warning is sent out. The system warns that the volume is reaching the maximum.
Leak Threshold Volume	If there is an amount of fuel missing in the tank this can be due to leakage. This parameter specifies the threshold that distinguishes between real leakage, and a lack of fuel due to liquid movements. When the missing volume of the fuel in the tank reaches a certain threshold, a leak alarm will be triggered.

Fields	Description
Manifold	If selected, indicates that the tank is a Manifold. A Manifold Tank is a group of Tanks connected operationally, functioning as a single tank. It is used, for example, when a large amount of one Pure Product is required. Note: If this field is selected, the Logic Tank field is enabled, allowing you to connect the relevant tanks to the manifold. After indicating the tank number/s, the manifold is represented graphically by a tank icon. After selecting the Manifold checkbox, select the appropriate tanks from the drop-down list. The following message prompts: 
Logic Tank	A group of two or more Tanks that contain the same Pure Product, and function logically as one, but are physically separate units. The Logic Tanks field displays the number of the Tanks within the Manifold.

Connected pumps area:

Pump 1, Pump 2, etc. If checked, indicates that this Pump is connected to the specified Tank. Move the slider to view all the Pumps, as the dialog is too small to display all.

Note:

Ensure that you have connected the required Tanks to the required Pumps, to avoid system errors.

- 3 Click **Check all** to check all the Connected Pumps checkboxes, connecting them all to the specified Tank.
- 4 Click **Uncheck all** to uncheck all the Connected Pumps checkboxes, disconnecting them from the specified Tank.
- 5 Click **Apply** to save.

Note:

1. If you have any Tanks displaying , click Validation Check to display the Error source and Error details for each Tank. All System Information is displayed in the bottom-pane of each dialog.
2. Go back to the Tank with the error to correct. (See the section To Define or Revise Tank Properties.)

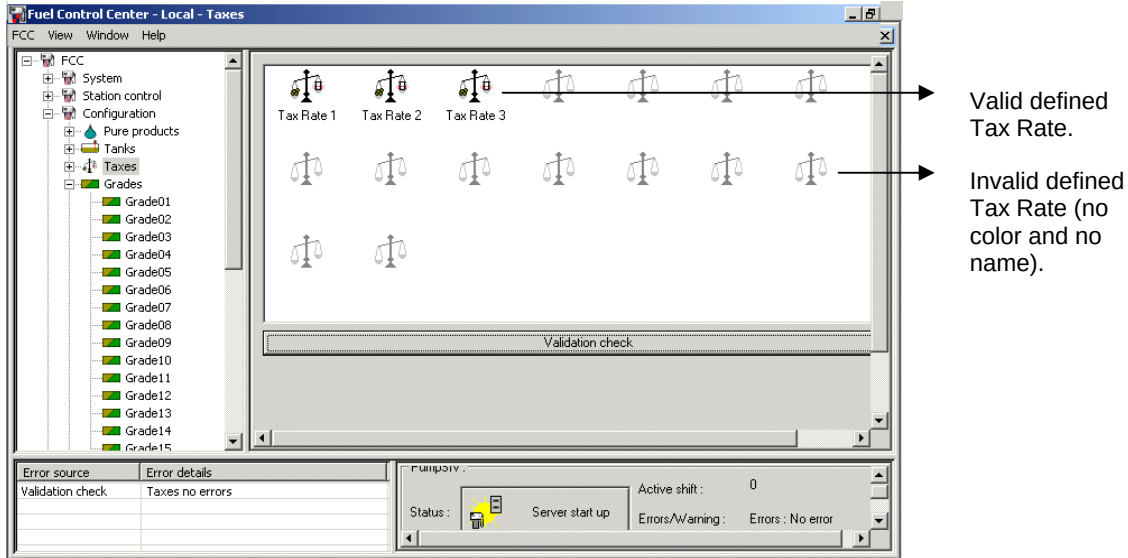
Once the Tanks are configured, continue to define Taxes.

Taxes

The **Taxes** menu enables you to define and view the taxes in the system. Multiple tax rates can be applied. For example, if in certain environments there is more than one value added tax rate on fuel, the site can calculate the different tax rates within the same transaction.

➤ To View Tax Properties:

- 1 From the **FCC Tree**, click **Configuration**, then click the **Taxes** menu. The **Taxes** window is displayed with icons of all the Taxes. Expand the FCC tree to view the list of Taxes:

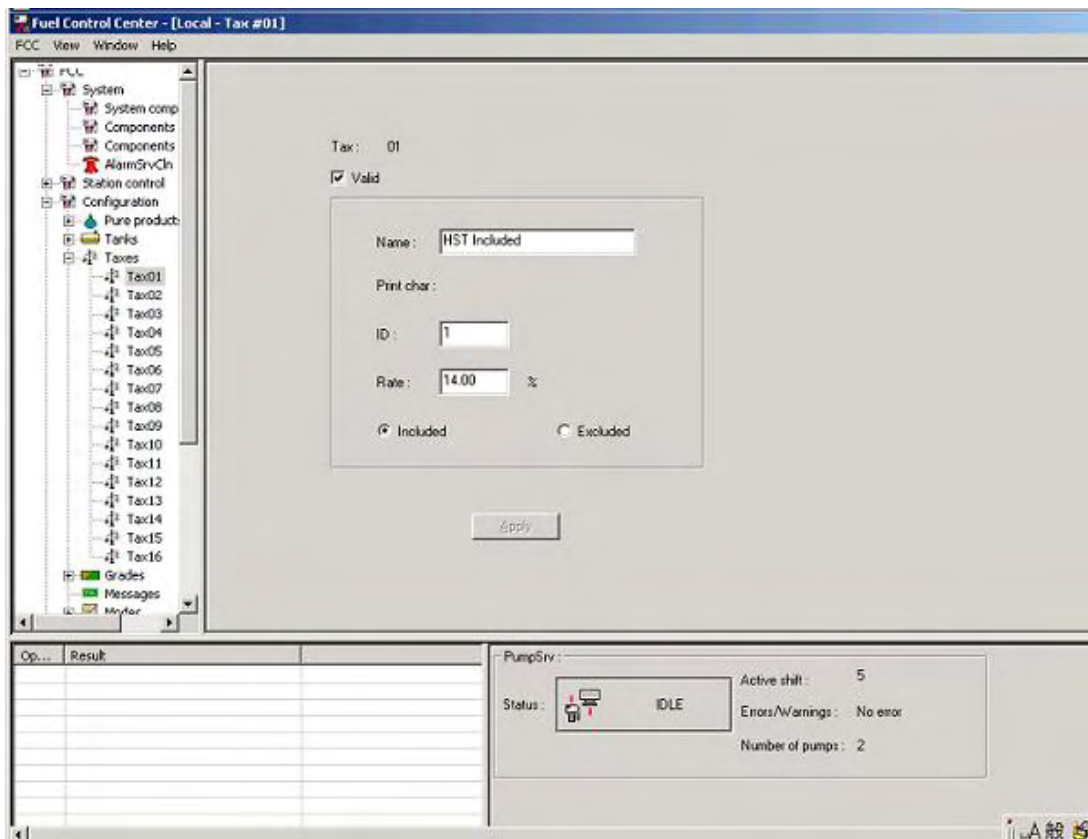


- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

You may define up to 16 different Tax Rates.

➤ **To Define or Revise Tax Properties:**

- 1 Double-click an undefined Tax icon. The **Configuration: Tax** dialog is displayed, as follows:



View the properties of each Tax rate by selecting the Tax number from the **FCC Tree**.

- 2 Enter the required information in the fields, as described in the table below:

Fields	Description
Tax Number	An internal code for taxes as used in PumpSrv.
Valid	If checked, indicates that the tax exists in the system.
Name	Enter the name of the tax.
Print Char area:	
ID	Displays the tax ID code and is not revisable.
Rate	Enter the tax rate used in your environment.
Included	If selected, indicates tax rate is included in the price.
Excluded	If selected, indicates tax rate is excluded from the price.

- 3 Click **Apply** to save.
- 4 From the **FCC Tree**, click **Taxes** to view all the defined taxes. Each tax icon is displayed in black, and has a tax name displayed next to it.

Note:

1. If there are any Taxes displaying , click *Validation Check* to display the *Error source* and *Error details* for each Tax. All System Information is displayed in the bottom-pane of each dialog. For example, you may have copied a Tax to another Tax with the same name. The same name cannot be assigned more than once, resulting in an error.
2. Go to the Tax with the error and correct it. (See *To Define or Revise Tax Properties*.)

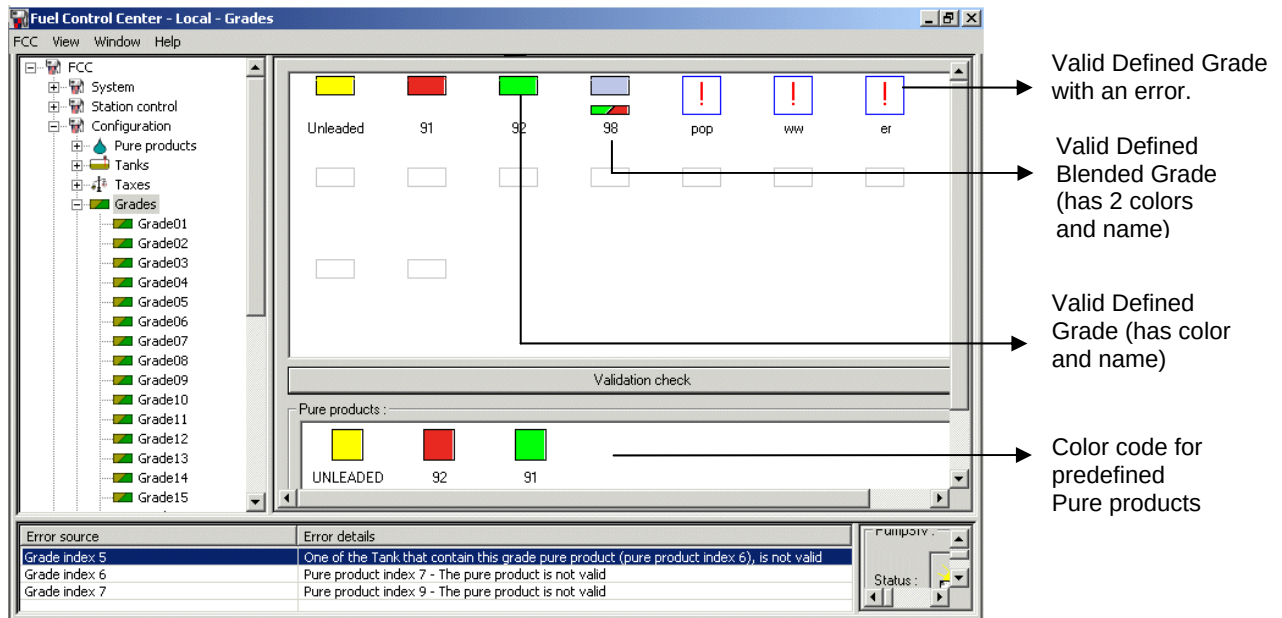
Once the Taxes are configured, continue to define Grades.

Grades

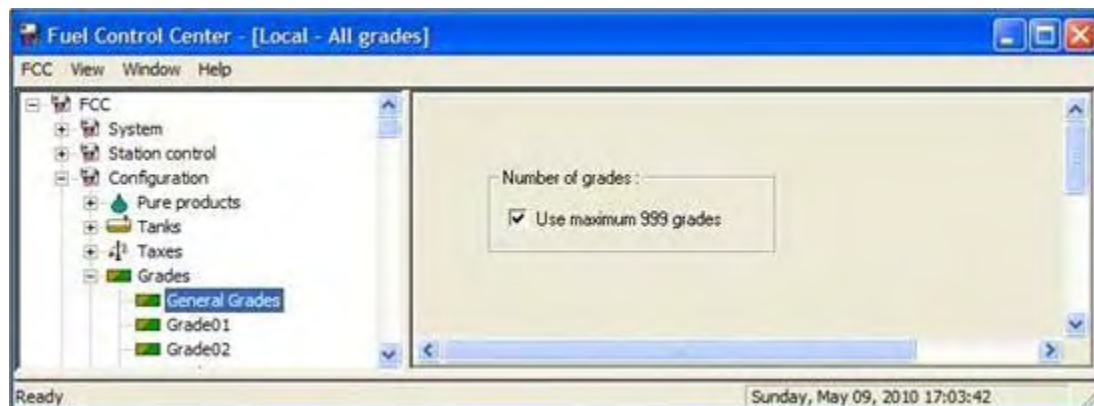
The **Grades** menu enables you to define and view the grades in the system. A Grade can be a Pure Product or a blend of 2 Pure Products.

➤ To View Grades Properties:

- 1 From the **FCC Tree**, click **Configuration**, then click the **Grades** menu. The **Grades** window is displayed with icons of all the Grades. Expand the FCC Tree to view the list of Grades:



- 2 Click **Validation Check** to ensure there are no system errors.
 - 3 Drag the slider  left or right to view the whole screen.
- You may define up to 16 different Grades.
- 4 (Optional) To support up to 999 Grades, from the FCC Tree, select **General Grades**. The General Grades dialog is displayed:



- 5 Select the **Use maximum 999 grades** checkbox.

Note:

The **Use maximum 999 grades** checkbox is selected only if you require the system to support up to 999 grades.

➤ **To Define or Revise Grade Properties:**

- 1 Double-click an undefined Grade icon. The **Configuration: Grade** dialog is displayed, as follows:

You may view the properties of each Grade by selecting the Grade number from the **FCC Tree**. You may move from one Grade to the next, and apply changes as necessary.

- 2 Enter the required information in the fields, as described in the table below:

Fields	Description
Grade	Internal code number of the grades used by PumpSrv.
Valid	If checked, indicates that this is a valid grade in the system.
General area:	
Full name	Enter the Grade name.
Short name 3	Enter a 3 character abbreviated Grade Name for extra validation.
Note:	
This parameter applies only to systems using Allied configuration.	
(For further details on Allied Configuration, see the section on Convert Layer/Configuring an Allied Convert Layer.)	

Fields	Description
Short name 5	Enter a 5 character abbreviated grade name for extra validation. Note: In Allied Configuration the Short Name 5 is used for the Credit Card host name when Allied is the card authorizer. (For further details on Allied Configuration, see the section on Convert Layer/Configuring an Allied Convert Layer.)
OLA Code	OLA code number for the pure product. Note: Each code represents a grade for Online authorization. (See the Validation section under FCC Properties in Chapter 2.)
Convert Code1	Enter the appropriate code recognized by the AVI device for this grade. Each grade has a code number recognized regionally. Select the code number from the drop-down list.
Convert Code 2	Enter the appropriate code for an AVI device to be able to use 2 grade types. Select the code number from the drop-down list.
Additional Code	Displays the code used by a third party application, such as Product PLU, sent by the Fuel system.
Loyalty Applicable	If checked, indicates that Loyalty discounts are applicable at a grade level. A Loyalty card is a customer-specific member card scheme offering bonuses or special benefits.
Car Wash Discount Applicable	If checked, indicates that car wash discounts are applicable at a grade level. Available only in Allied and RFS.
Extended Grade ID	Displays the extended Grade ID, which allows working with up to 999 grades (1-999), and is used by external components, such as BOS/POS. The external component sends an extended Grade ID, for example 340, which is eventually converted by PumpSrv into the real Grade ID. The default value is the Grade ID.
Blending (Pure Products) area:	
High	Pure product in high ratio: If a non-blendable pure product is selected, the Low pure product field is automatically set for "None", and the "High blend ratio" is set for 100 and disabled.
Ratio	Percentage of High pure product in the grade. For example, if the high blend is 60%, the low blend is automatically 40%.
Low	Pure Product in low ratio.
Ratio	Percentage of Low pure product in the grade. For example, if the high blend is 60%, the low blend is automatically 40%.
Prices area:	
Full Service area:	
Cash	Price for Full Service when paying in cash.
Credit	Price for Full Service when paying in credit.
Self Service area:	
Cash	Price for Self Service when paying in cash.

Fields	Description
Credit	Price for Self Service when paying in credit.
Taxes area:	
Tax rate	Indicates which tax rates are applied to the Grade.
Discount per unit	Discount per gallon or liter in dollars.
Max unit for discount	Maximum volume on which a discount may be applied.
Reward area:	
Discount Per Unit	Indicates discount amount in cents per gallon. Various Credit Card Companies provide the rewards in co-operation with different Stores and Fuel Stations. The discounts apply to items specified on a coupon, printed at the Pump. For example, if the discount amount is 10 Cents, and the customer purchases 10 gallons of fuel, a coupon is allocated for \$1.00 off the value of the item specified, providing the Credit Card Company supports the special offer. Note: These fields are only relevant to systems using the Allied Convert Layer, in which coupon-printing details are set up in the Convert Layer. In addition, a receipt template for a coupon must be defined.
Valid for	Indicates the number of days during which the coupon is valid.
Discount type	Select the Discount type from the drop-down list. The options are: None – indicating no discount (if you select this option, the following Min/Max \$ or Min/Max Gal/Ltr parameters are disabled).
Min \$	If you selected Discount Type by Value, enter the minimum amount in dollars per transaction, in which a discount is allowed.
Max \$	If you selected Discount Type by Value, enter the maximum amount in dollars per transaction, in which a discount is allowed.
Min Gal/Ltr	If you selected Discount Type by Volume, enter the minimum number of gallons or liters per transaction, in which a discount is allowed.
Max Gal/Ltr	If you selected Discount Type by Volume, enter the maximum number of dollars per transaction, in which a discount is allowed.

3 Click **Apply** to save.

4 From the **FCC Tree**, click **Grades** to view all the defined Grades. Each one has a name and color code.

Note:

1. If there are any Grades displaying , click **Validation Check** to display the Error source and Error details for each Grade. All System Information is displayed in the bottom-pane of each dialog. For example, you may have copied a Grade to another Grade with the same name. The same name cannot be assigned more than once, resulting in an error.
2. Go to the Grade with the error and correct the error. (See To Define or Revise Grade Properties.)

Once the Grades are configured, continue to define Languages.

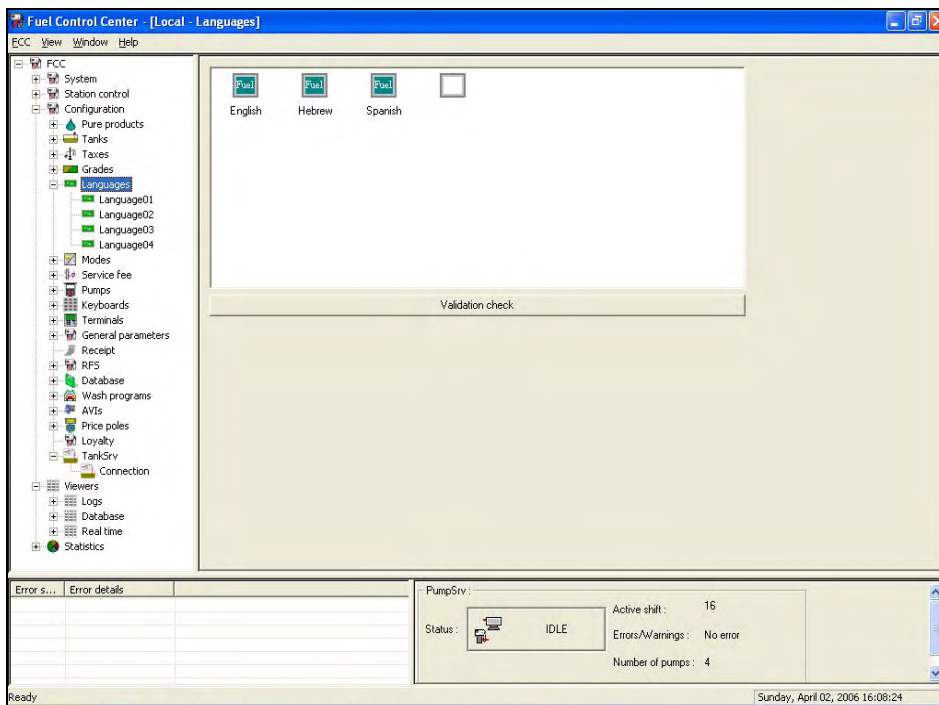
Languages

The **Languages** module enables you to define the various messages that are displayed on the customer display at the payment terminals in different languages. This option enables you to select the local language spoken in your country to be used at the terminal. The **Languages** menu enables you to define up to 4 different languages. You may have different languages on each terminal in one site.

All the messages are predefined internally in the fuel system, and through the FCC, the user can localize or modify them to suit their required terminology and language.

➤ To View Languages in the System:

- 1 From the **FCC Tree** click **Configuration**, then click the **Languages** menu. The Languages window is displayed with icons of all the Languages defined in the system. Expand the FCC Tree to view the list of Languages.

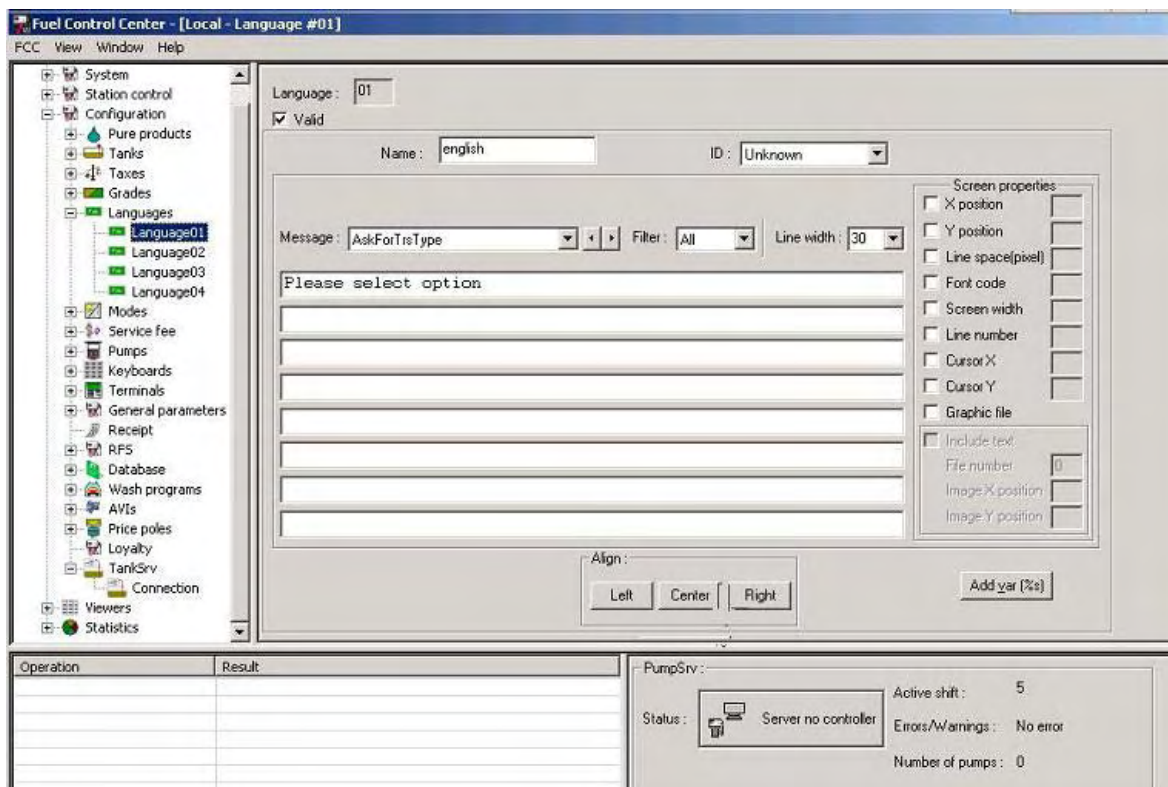


- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog.

You may define up to 4 different Languages.

➤ To Define or Revise a Language:

- 1 Double-click an undefined Language icon or select a Language from the FCC Tree. The **Configuration Local Language** dialog is displayed, as follows:



You may view the properties of each Language by selecting the Language number from the FCC Tree. You may move from one Language to the next and apply changes as necessary.

- 2 Enter the required information in the fields, as described in the table below:

Fields	Description
Language	Internal code number as defined in PumpSrv.
Valid	If checked, indicates the language is valid in the system
Name	Displays the language name.
ID	From the ID drop-down list, select the language ID. This ID is not necessarily the name of the language; however, the system identifies the language used at the terminal via the ID.
Message	From the drop-down list, select the relevant message.
	Note:
	Select Default Properties, to display the default attributes that are pre-defined.
Free Text Space	Enter the translation for the message selected.

Fields	Description
Filter	This filter is provided to sort the list of messages in the drop-down list enabling you to translate according to the subject matter. E.g. if you wish to only translate the Attendant messages, select Attendant. The available options are: ▪ All – populates the drop-down list with all the terminal messages available in the system ▪ Attendant – populates the drop-down list with all the terminal messages related to the Attendant, e.g., Attendant Not Authorized. ▪ Buy At Pump – populates the drop-down list with all the terminal messages related to the items that may be purchased at the terminal, e.g., BAP Enter Unit Price
Line Width	From the drop-down list, select the relevant line width. Note: The line width may only be as wide as the terminal display.
Screen Properties area:	
X position	Select to specify the position of the message on the x axis.
Y position	Select to specify the position of the message on the y axis.
Line spacing	Select to define spacing between lines on the screen.
Font code	Select to specify the type of font, according to the defined codes.
Screen width	Select to specify the width of the screen in characters.
Line number	Select to specify the maximum number of lines on the screen.
Cursor X	Select to specify the position of the cursor on the x axis.
Cursor Y	Select to specify the position of the cursor on the y axis.
Graphic File	If selected, enables graphic insertion and the following parameters are enabled:
Include Text	Indicates that text can also be displayed with graphics in the message.
File Number	Displays the number of the file in which the graphic is saved.
Image X position	Displays the position of the image on the x axis.
Image Y position	Displays the position of the image on the y axis.
Align area:	
Left	Indicates that the text is aligned to the left
Center	Indicates that the text is aligned to the center
Right	Indicates that the text is aligned to the right
Add var	Click the variable button to add a new variable to the message, for example, when a message includes limits that change according to data entered.

3 Click **Apply** to save.

From the **FCC Tree**, click **Languages** to view all the defined languages. Each one has a name and color.

Note:

1. If there are any languages displaying , click **Validation Check** to display the Error source and Error details for each language. All System Information is displayed in the bottom-pane of each dialog. For example, you may have copied a language to another language with the same name. The same name cannot be assigned more than once, resulting in an error.
2. Go to the language with the error and correct the error. (See To Define or Revise Language Properties.)

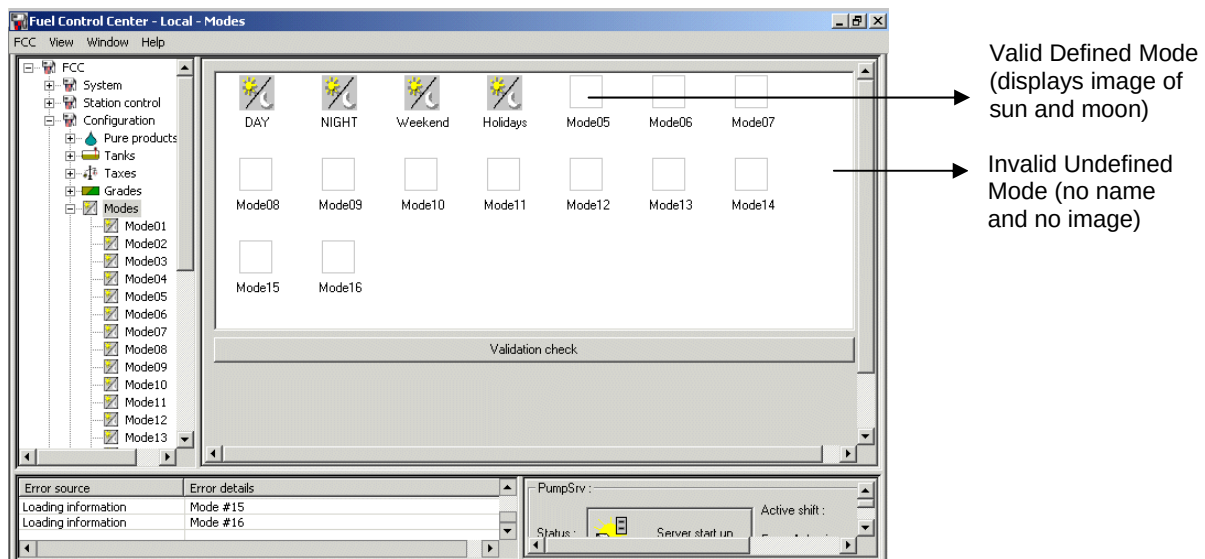
Once the Languages are configured, continue to define Modes.

Modes

The **Modes** menu enables you to define and view the various modes, and the payment methods they each support. Examples of modes may include: Day Mode, Night Mode, Holiday Mode etc. For information on Assigning Modes to pumps, and using the Pump Mode Scheme, refer to Configuring Pumps further on in this section.

➤ To View Modes Properties:

- 1 From the **FCC Tree**, click **Configuration**, then click the **Modes** menu. The **Modes** window is displayed with icons of all the Modes. Expand the FCC Tree to view the list of Modes:



- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.
- 3 Drag the slider  left or right to view the whole screen.

You may define up to 16 different Modes.

➤ **To Define or Revise Mode Properties:**

- 1 Double-click an undefined Mode icon or select a Mode from the FCC Tree. The **Mode** dialog is displayed, as follows:

The screenshot shows the 'Fuel Control Center - [Local - Mode #01]' window. On the left is the 'FCC Tree' with categories like System, Station control, Configuration, Pure products, Tanks, Taxes, Grades, Languages, Modes (selected), Service fee, Pumps, Keyboards, Terminals, General parameters, Receipt, Convert layer, and Database. The 'Modes' list includes Mode01 through Mode16. The main area displays the 'Mode : 01' dialog. It has a 'Valid' checkbox checked and an 'Unattended' checkbox unchecked. The 'Name' field contains 'Day'. There are three sections for payment methods: 'Pay at kiosk' (Valid checked, Auto authorized unchecked, Auto reconcile unchecked, Auto auth loyalty only unchecked), 'Pay at pump' (Valid checked, Auto authorized checked, Auto auth loyalty only unchecked), and 'Pay AVI' (Valid checked, Auto authorized checked). Below these are 'Pre pay' (Valid checked, Auto authorized checked), 'Bank notes' (Valid unchecked, Auto authorized unchecked), and 'Pay attendant' (Valid unchecked, Auto authorized unchecked). The 'Price level' is set to 'Credit' and 'Mode of service' is 'Self'. The 'Idle message' is 'Idle01'. The 'Station limit' section has 'Type' set to 'N/A', 'Credit' at '\$ 0', and 'Cash' at '\$ 0'. At the bottom right, there's a 'PumpSrv' status area showing 'Status' with a server icon, 'Server start up', 'Active shift : 75', 'Errors/Warnings : No error', and 'Number of pumps : 0'.

You may view the properties of each Mode by selecting the Mode number from the FCC Tree. You may move from one mode to the next and perform changes as necessary.

- 2 Enter the required information in the fields, as described in the table below:

Fields	Description
Mode area:	
Mode	Internal code number as defined in PumpSrv.
Valid	If checked, indicates the mode is valid in the system.
Name	Enter the name of the mode in the system.
Pay at kiosk area:	
Valid	If checked, indicates that Pay at Kiosk is supported in this mode.
Auto authorized	If checked, indicates that Pay at Kiosk is supported in this mode with Auto-authorized option. Auto-authorized means that when a pump nozzle is lifted, and the system is in Requesting status, the system will automatically authorize the nozzle to begin fuelling.

Fields	Description
Auto reconcile	If checked, indicates that the transaction is automatically reconciled as a PAK transaction, even though the customer pays the attendant. For example, a) Customer requests to fuel, b) pump is automatically authorized, c) once customer completes fuelling, the customer pays the attendant and the transaction is automatically closed. Usually, the pump on the POS terminal in the kiosk displays a yellow dot, indicating that the customer must still pay.
Auto auth Loyalty only	If checked, indicates that when the "PumpAutoStart" property is received from Loyalty Fuel, auto authorize the pump on requesting. Loyalty Fuel is the link between the LPE and the Fuel system.
Pay at pump area:	
Valid	If checked, indicates that Pay at Pump is supported in this mode.
Auto authorized	If checked, indicates that Pay at Pump supports the Auto-authorized option. See details above.
Pay AVI area:	
Valid	If checked, indicates that Pay AVI (Automatic Vehicle Identification) is supported in this mode.
Auto authorized	If checked, indicates that Pay AVI supports the Auto-authorized option. See details above.
Pre pay area:	
Valid	If checked, indicates that Prepay is supported in this mode.
Auto authorized	If checked, indicates that Prepay supports the Auto-authorized option. See details above.
Bank Notes area:	
	Note:
	These parameters apply only to systems using the Allied and Doms controller.
Valid	If checked, indicates that Bank Notes are supported in this mode.
Auto authorized	If checked, indicates that Bank Notes support the Auto-authorized option. See details above.
Pay attendant area:	
Valid	If checked, indicates that Pay Attendant is supported in this mode.
Auto authorized	If checked, indicates that Pay Attendant supports the Auto-authorized option. See details above.

Fields	Description
Price level	From the drop-down list, select the method of payment to indicate the price limits. This field is used to enhance the cashier mode, as it is only relevant to customers who have a POS terminal. Note: To activate the Price Level and Mode Of Service fields, you must select the parameter System On Manual Modes located in the General Parameters menu.
Mode of service	From the drop-down list, select the service mode for the defined price level.
Idle message	From the drop-down list, select the message displayed on the terminal display while the pump is in idle mode during this Mode type. The messages are sent from the POS terminal. For example, in Full Service mode, the terminal may display the following message "Hello See Attendant". In Self Service mode, the terminal may display the following message "Hello, Please Lift Nozzle".
Station Limit:	
Type	Defines how to limit a transaction, according to the mode that is defined, i.e., day, night. Select the limit type from the drop-down list; by value or by volume. For example, when in night mode, define a value limit for credit transactions because there is no cashier around to supervise.
Credit Limit (when value type is displayed)	Defines the maximum limit per one credit transaction.
Cash Limit (when value type is displayed)	Defines the maximum limit per one cash transaction.
Liters/Gallon Limit (when volume type is displayed)	Defines the maximum amount of liters/gallons per one transaction.

3 Click **Apply** to save.

4 From the **FCC Tree**, click **Modes** to view all the defined Modes. Each Mode that is defined has a name.

Once you have configured Modes, continue to define Service Fees.

Service Fee

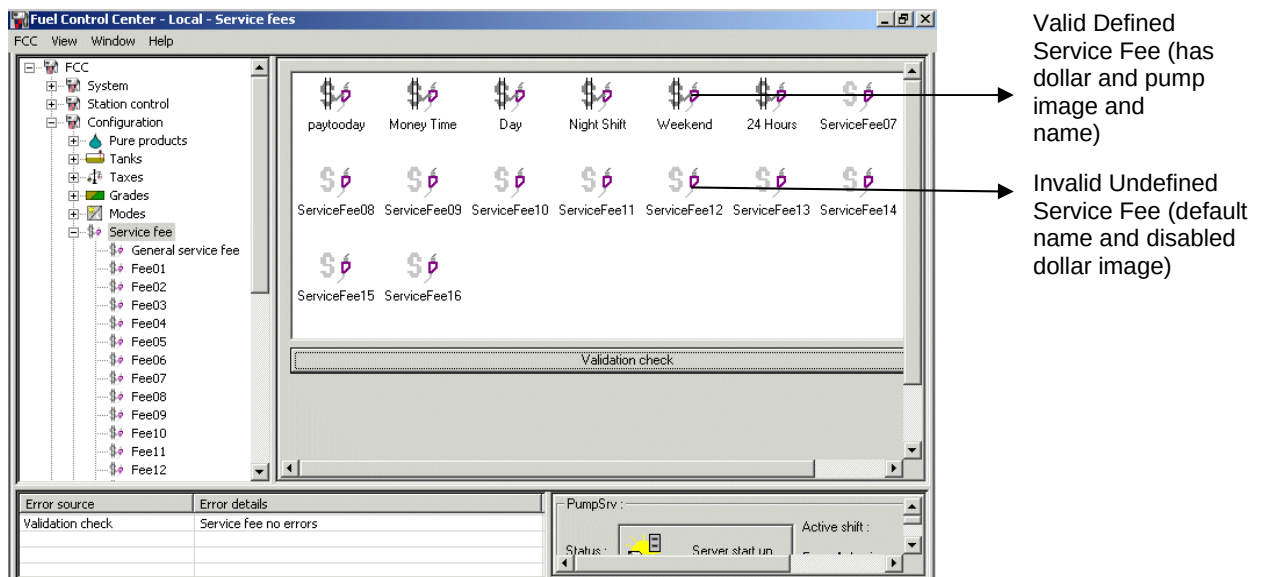
The **Service Fee** menu enables you to define and view the defined Service Fees. Different Service Fees may be defined for different modes, e.g., for a Day Mode, Night Mode, Weekend Mode, Holiday Mode etc. The Fuel Station sets these monetary values, which are added to the customer's bill. Service Fees are defined in the Mode Scheme to connect the mode to the Service Fee. For more details, see Defining Modes Using the Pump Mode Schemes further on in this section.

Note:

Currently **Service Fees** apply only to systems using RFS and Allied.

➤ **To View Service Fee Properties:**

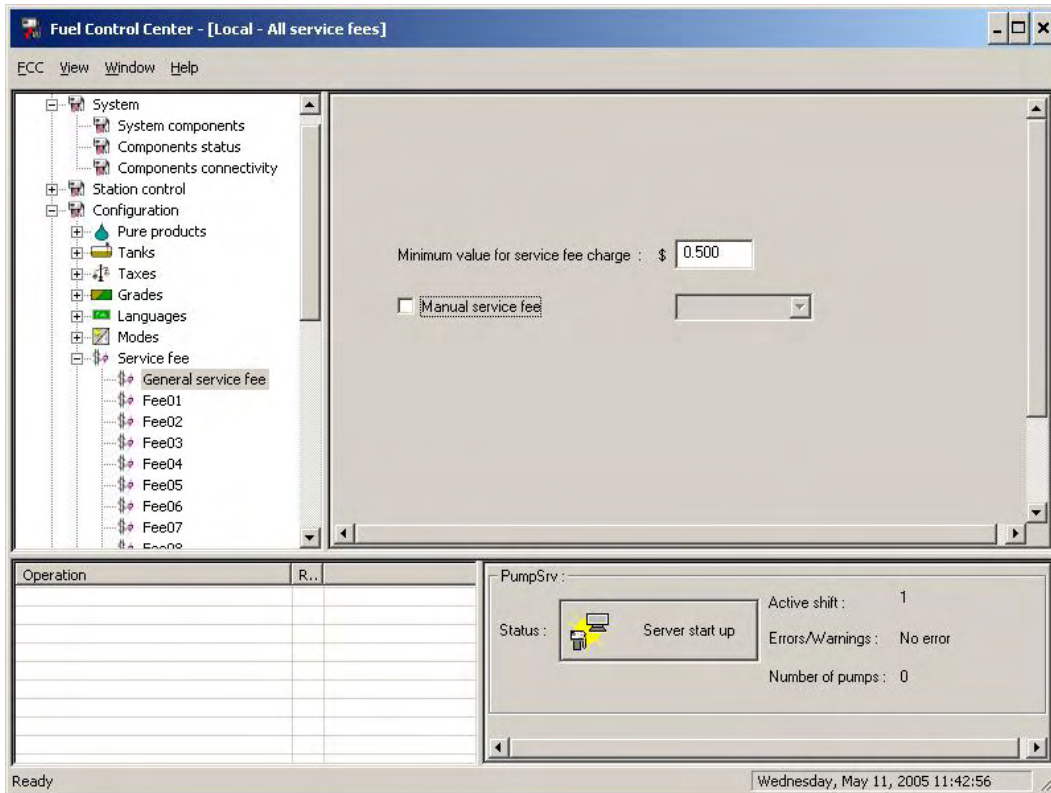
- 1 From the **FCC Tree**, click **Configuration**, then click the **Service Fee** menu. The **Service Fee** window is displayed with icons of all the Service Fees. Expand the FCC Tree to view the list of Service Fees:



- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

You may define up to 16 different Service Fees.

- 3 From the FCC Tree, click **General Service Fee**. The **Configuration: General Service Fee** dialog is displayed:



- 4 Enter the minimum value of a fuel transaction for which a Service fee will be charged. Any transaction below this value will not be charged for a service fee.

Or

Select the **Manual Service Fee** checkbox, then select the service fee applicable. This parameter enables the system to work with an external Service Fee set, with no dependence on the Fee Set configured at pump level in the mode scheme.

- 5 Click **Apply** to save.

➤ **To Define or Revise Properties of a Service Fee:**

- 1 Double-click an undefined **Service Fee** icon or select a Service Fee from the FCC Tree. The **Configuration: Service Fee** dialog is displayed, as follows:

	Full service	Self service
Pre pay :	1.100 \$	0.000 \$
Pay at pump :	2.100 \$	0.000 \$
Pay at kiosk :	2.200 \$	0.000 \$
Pay AVI :	0.055 \$	3.000 \$
Pay attendant :	5.000 \$	0.000 \$

You may view the properties of each Service Fee by selecting the Service Fee from the FCC Tree. You may move from one Service Fee to the next and perform changes as necessary.

Note:

A different Service Fee may be defined for each payment method within the same Mode, e.g., PAK, PAP etc. The Full Service Fees apply to pumps defined to support a Full service charge. The Self Service Fees apply to pumps defined with a Self Mode of Service charge. The Mode of Service for each pump is defined in Configuring Pumps further on in this section.

- 2 Enter the required information in the fields, as described in the table below:

Fields	Description
Fee area:	
Service Fee	Internal code number as defined in PumpSrv.
Valid	If checked, indicates the Service Fee is valid in the system.
Name	Name of the Service Fee in the system.
Full Service area:	
Pre Pay	Enter the monetary value if there is a Service Fee for Pre Pay Full Service.
Pay At Pump	Enter the monetary value if there is a Service Fee for Pay at Pump Full Service.
Pay At Kiosk	Enter the monetary value if there is a Service Fee for Pay at Kiosk Full Service.
Pay AVI	Enter the monetary value if there is a Service Fee for the AVI Full Service.

Fields	Description
Pay Attendant	Enter the monetary value if there is a Service Fee for the Attendant Full Service.
Self Service area:	
Pre Pay	Enter the monetary value if there is a Service Fee for Pre Pay Self-Service.
Pay At Pump	Enter the monetary value if there is a Service Fee for Pay at Pump Self-Service.
Pay At Kiosk	Enter the monetary value if there is a Service Fee for Pay at Kiosk Self-Service.
Pay AVI	Enter the monetary value if there is a Service Fee for AVI Self-Service.
Pay Attendant	Enter the monetary value if there is a Service Fee for Attendants Self-Service.

3 Click **Apply** to save.

4 From the **FCC Tree**, click **Service Fee** to view all the defined Service Fees. Each Service Fee that is defined has a name.

Note:

1. If you have any Service Fees displaying **!**, click **Validation Check** to display the Error source and Error details for each Service Fee. All System Information is displayed in the bottom-pane of each dialog.
2. Go back to the Service Fee with the error and continue to correct it. (See To Define or Revise Properties of a Service Fee.)

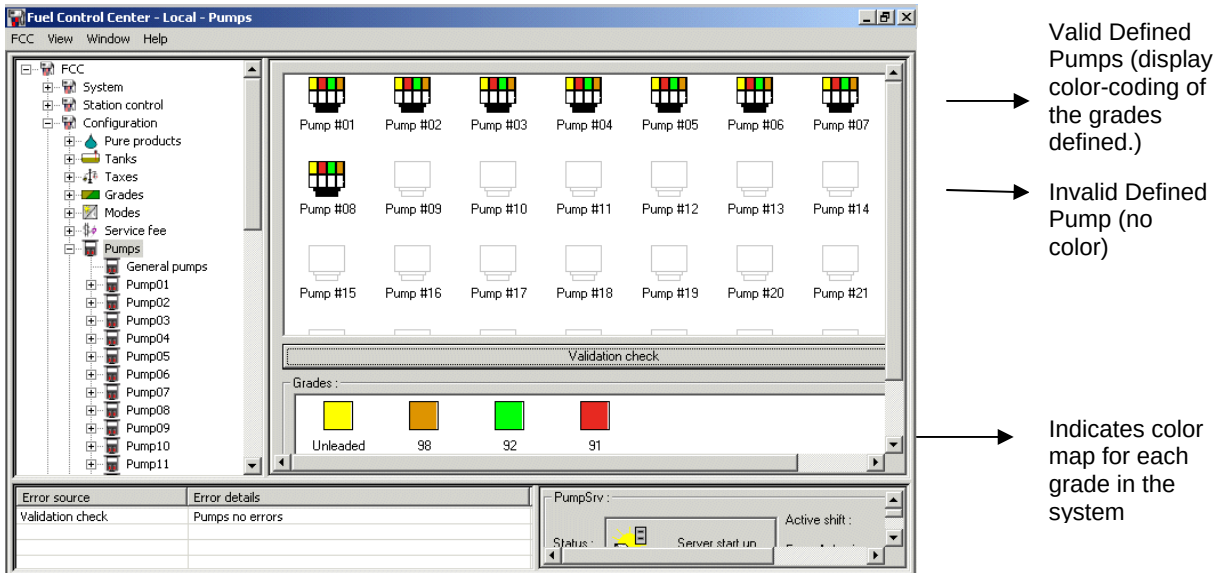
Once you have configured Service Fees, continue to define Pumps.

Pumps

The Pumps menu enables you to view and configure the pumps in the system by assigning grades, modes and various transaction criteria for specific pumps. Pumps may differ according to the manufacturer. Some pumps may have up to eight hoses, whereas others may only have one, which includes a blender inside.

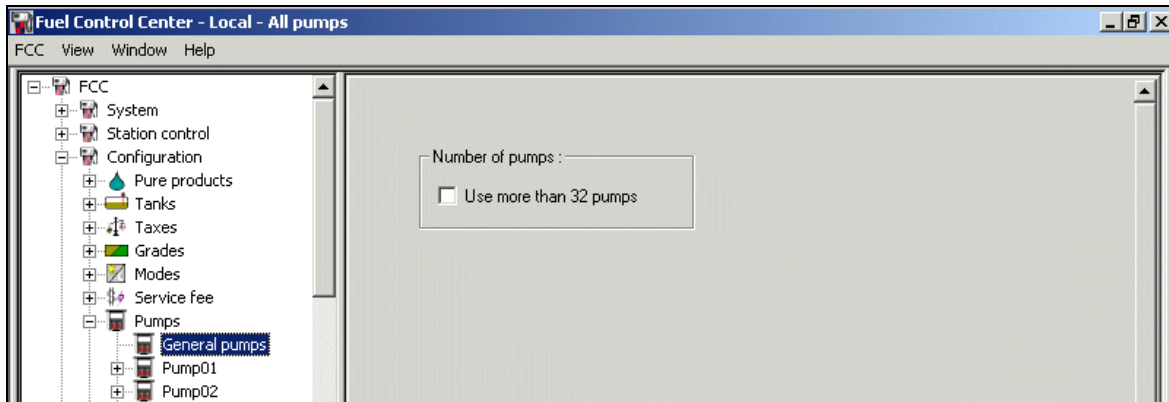
➤ To View Pumps Properties:

- 1 From the **FCC Tree**, click **Configuration**, then click the **Pumps** menu to display all the Pumps graphically. Expand the FCC Tree to view the list of Pumps:



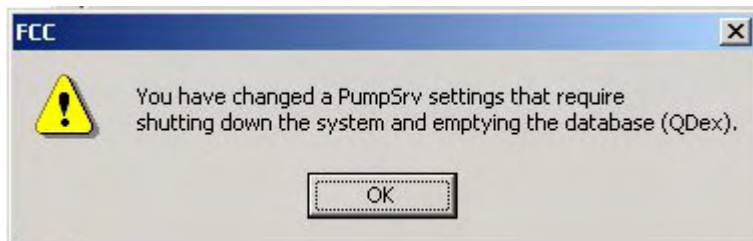
- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-panne of the dialog as shown above.

- 3 From the **FCC Tree**, click **General Pumps**. The **General Pumps** dialog is displayed:



(Optional)

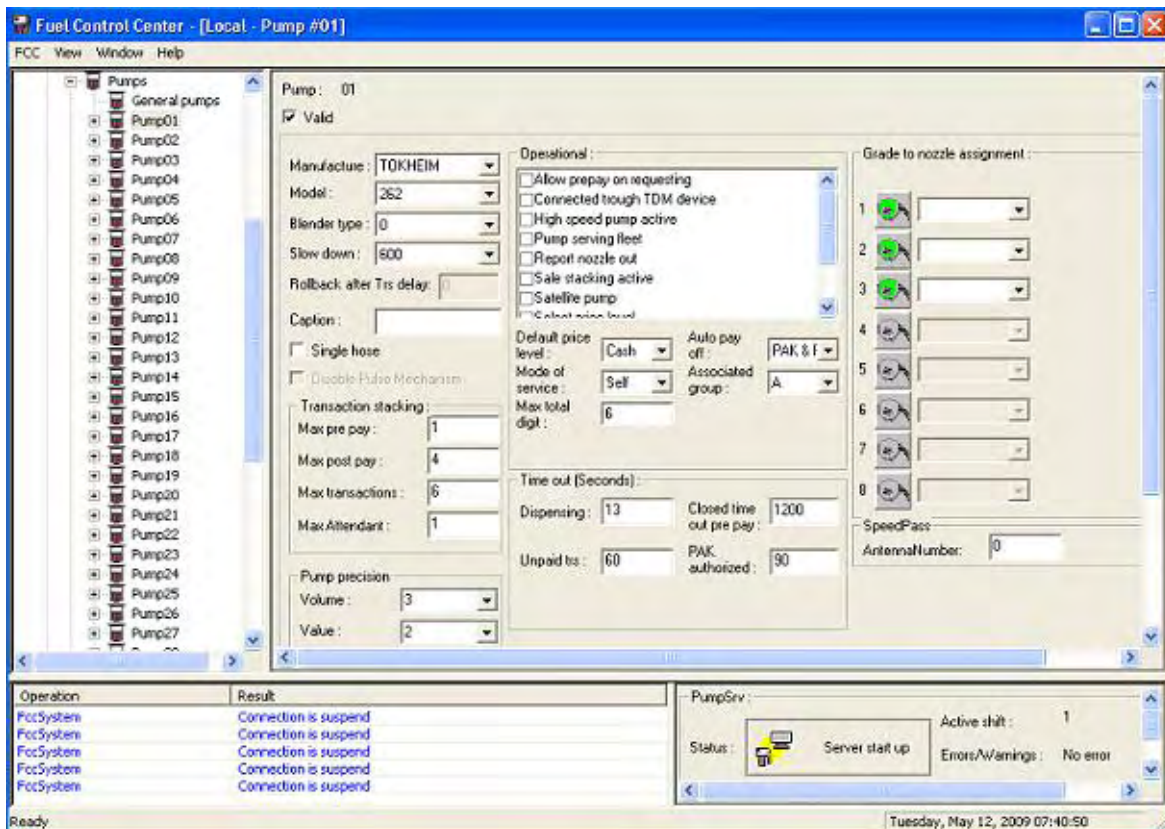
- 4 Check the **Use more than 32 pumps** checkbox, only if you require the system to support more than 32 Pumps. The following prompt is displayed:



- 5 Click **OK** to continue.
Continue to define the Pumps.

➤ **To Define or Revise Pump Properties:**

- 1 Double-click an undefined pump icon or select a Pump from the **FCC Tree**. The **Pump** dialog is displayed, as follows:



32 Mode Schemes may be defined for each pump.

Enter the required information in the fields, as described in the table below:

Fields	Description
Pump area:	
Pump	Internal code number of Pump as used in PumpSrv.
Valid	If checked, indicates that this is a valid pump in the system.
Dispenser Definition area:	
Manufacturer	Name of pump manufacturer.
Model	Pump Model number or type according to the manufacturer.
Blender Type	If a Grade consists of more than one Pure Product, define where and how the blending is done – either automatically at the pump, or by a device before the Pure Products reach the pump.
Slow down	Displays how many liters, before the fuel reaches its limit, the fuel rate should start slowing down.

Fields	Description
Rollback after Trs delay	Displays how long to wait to rollback to the original price on fuel, after a discount. Note: This parameter is enabled, only after selecting the <i>Premier</i> model from the <i>Model</i> drop-down list.
Single hose	If checked, indicates that the pump has only a single nozzle, and for each transaction the required Grade is selected by pressing a button. All Grades dispense from the same hose on the pump.
Disable Pulse Mechanism	If checked, indicates that the system disables the pulse mechanism (converting amount to pulse count) in order to avoid overflow problems during preset transactions. Note: This parameter is only available for editing for DRESSER WAYNE manufacturer pumps.
Transaction Stacking area:	
Max Prepay	Enter the maximum number of Pre pay transactions that can be performed per pump. If the maximum number of Pre pay transactions is set to 1, you can only have one Pre pay transaction per pump, while the pump is in Idle Mode. Once the transaction is fuelling you may enter another Pre pay transaction, which automatically begins when the current transaction is completed. If the maximum number of Pre pay transactions is set to 0, you can only have one Pre pay transaction per pump, while the pump is in Idle Mode and once the transaction is fuelling you may NOT enter another Pre pay transaction. You must wait for the current transaction to finish and then start another. Note: The default is 1.
Max Post Pay	Enter the maximum number of unpaid Post pay transactions (Pay at Kiosk) that can be performed per pump. The maximum is 4 by default.
Max Transactions	Enter the maximum number of transactions that can be performed per pump. This includes all types of transactions and is not limited to pre-pay, post pay, etc. The maximum is 6 by default.
Max Attendant	
Pump precision	Displays the way the pumps are set-up to report the number of decimal places
Volume	Displays the position of the decimal point for the volume, e.g., 3 indicates 12.123.
Value	Displays the position of the decimal point for the amount, e.g., 2 indicates 50.25.
Price display	Displays the position of the decimal point for the price of the fuel.

Fields	Description
Transaction Deviation %	Displays the percentage over which a deviation between the amount of a preset transaction and the pulse count (which is the actual fuel dispensed) causes an alarm to be raised.
Operational area:	
Allow Prepay/Preset on Requesting	If checked, indicates that a Pre pay transaction is allowed from this pump when it is in Requesting status.
Connected through TDM device (Time Division Module)	If checked, indicates that the TDM device performs certification between the hardware and the pumps. Note: This field is only relevant for Retalix Italy Customers.
High Speed Pump Active	If checked, indicates that the Pump contains a high-powered motor. These Pumps usually support only 2 decimal points in the transaction volume. Note: This type of motor is used, for example, for fuelling trucks as they have large fuel tanks.
Pump serving fleet	If checked, indicates that this pump is used for big trucks that have trailers. This enables the driver to get authorization once, however fill up two tanks. E.g., the cashier authorizes the pump, then the customer fills up the main truck tank, and then without having to get authorization, customer may fuel the trailer. A fleet is a group of vehicles (trucking company) operated under unified control. Note: This field is relevant to systems using the Allied Convert layer only.
Report Nozzle Out	If checked, indicates that in the event that a nozzle has been left out, the cashier is alerted.
Sale Stacking Active	If checked, determines that the controller allows a dispenser to start a new transaction before the previous one is paid off. This parameter is usually set to 0 as PumpSrv does the transaction stacking. Note: This parameter applies only to systems using the Allied controller.
Satellite Pump	If checked, indicates that the pump is defined as a satellite pump. A satellite pump is a unique single hose pump with two nozzles that are configured to the same position. Note: During an AVI transaction it is possible to operate both nozzles at the same time if both rings supply the same AVI data.
Select price level	If checked, the option of selecting Credit or Debit is displayed on the payment terminal.

Fields	Description
Use Preset Keypad	If checked, indicates that the Pump's preset key is enabled and the user can limit fueling using this key. A preset button is a dispenser key used instead of the terminal's preset button. If the limit is defined in more than one resource, the lower limit takes preference. Note: This parameter applies only to Tatsuno pumps.
Use Start button	If checked, indicates that if there is a Start button, you must press it after lifting the nozzle, before you begin to fuel.
Default Price Level	From the drop-down list, select a default price for the pump, either the Cash price or the Credit price. Note: This field is used by Agip in replace of the fields in the Pump Mode Scheme dialog further on.
Mode of Service	From the drop-down list, select a service mode for this pump of either Self-service or Full-service. Note: This field is used by Agip in replace of the fields in the Pump Mode Scheme dialog further on.
Max Total Digit	Enter the maximum number of digits that can be displayed on the pump meter.
Auto Pay Off	From the drop-down list, select a Pay Off mode for this pump of either, None, PAK, or PAK & PrePay. For example, if you select PAK, this implies that at this pump you can only perform PAK transactions. This parameter determines if the Allied controller will automatically pay off a transaction after the customer completes fuelling. It is usually set to the PAK & PrePay option, but if it is a Full Service pump with the buy@Pump option, then it should be set to None. Note: This parameter applies only to systems using the Allied controller.
Associated Group	From the drop-down list, select the designated group number for this pump in the forecourt. For example, you can assign all pumps with special nozzles to group A, or all unleaded pumps to group B.
Requesting Only After Pay Inside Press	If selected, indicates that when the nozzle is lifted, a grade is selected and authorization of the pump is requested, the user must first select the Pay Inside key before authorization is granted. This parameter applies to pumps with terminals only. If not selected, the controller requests for pump authorization, and does not wait for the user to select the Pay Inside key.

Time Out (Seconds) area:

Dispensing	Defines after how long, in seconds, the PosPump POS component will alert the cashier with a special buzzing sound that the nozzle was left out, without dispensing. At the POS terminal this is displayed as 'Drive off'.
Unpaid trs	Defines how long, in seconds, an unpaid transaction will remain in Unpaid status until the Time-Out alerts the cashier. For example, a pump is authorized for fuelling, and at the end of the transaction a yellow dot appears on the icon of the pump at the POS terminal. If the time-out is set to 60 seconds, at the end of the transaction the customer has 60 seconds to pay, otherwise the yellow dot turns to red, alerting the cashier of a possible problem.
Closed timeout pre pay	Defines how long in seconds, a Prepay transaction is kept in the memory, after fuelling has been completed, and change is due to the customer. Once the time-out is reached, and the customer returns for his/her change, it is no longer in the memory.
PAK authorized	Defines how long, in seconds, a Pay at Kiosk transaction that has been authorized, and fuelling has not yet begun, will still be available. For example, a cashier authorizes a transaction and the time-out is 90 seconds. If the customer does not start fuelling within the 90 seconds, the transaction requires re-authorization.

Grade to nozzle assignment area:

Nozzles:	Displays the nozzles:
1.	 displays the 1 st nozzle.
2.	 displays the 2 nd nozzle.
3.	 displays the 3 rd nozzle, etc..

SpeedPass area:

Antenna Number	Displays the antenna number linking the pump to the RFID device.

- 2 Click **Apply** to save.
- 3 From the **FCC Tree**, click **Pumps** to view all the Pumps defined in the system.

Note:

1. If any Pumps display , click **Validation Check** to display the Error source and Error details for each Pump. All System Information is displayed in the bottom-pane of each dialog. An error may occur, for example, if you did not define a grade for a pump.
2. Go back to the Pump with error and continue to correct it. (See To define or revise Pumps.)

Once you have configured the Pump, define the Mode Scheme for each Pump.

Note:

If you are working with a Doms or RFS controller, you must first configure the connection.

Configuring the Connection for Doms or RFS Controllers

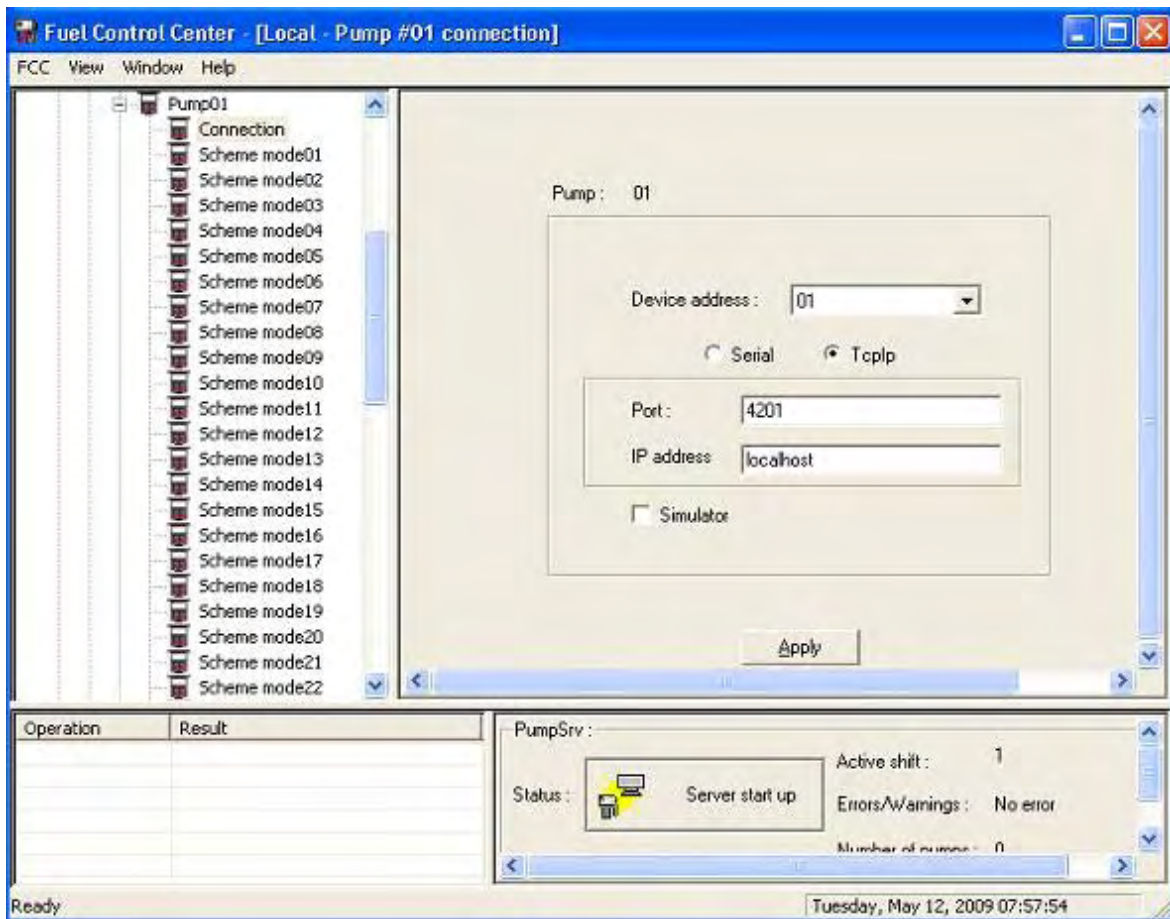
The **Connections** menu enables you to define the settings when connecting devices to the pumps. You must define if you are configuring serial-based communication or TCP/IP. When using a TCP/IP based communication system, the Port and Address are required. When using serial-based communication, the comm port and baud rate are required.

Note:

This section only applies, if you are working with a Doms or RFS controller.

➤ **To Configure the Connection:**

- 1 From the **FCC Tree**, expand the Pump number that was just defined, and then click **Connection**. The **Pump #01 – Connection** dialog is displayed as follows:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Pump number	Internal code number of pump as used in PumpSrv.
Device address	Indicates device address. It is a unique numeric address predefined for each device. Select the required address from the drop-down list.

Fields	Description
Serial	Select this radio button if your system uses a serial system to connect between the servers and pumps, and then proceed to select the Comm port and Baud Rate numbers.
Comm port	Indicates the communication port number. For an RFS system, select the required number from the drop-down list. For a system working with a Doms controller, select Dynamic, which automatically connects the controller to the Pumps.
Baud Rate	From the drop-down list, select the baud rate, indicating the rate of the communication line, which is the number of transitions (voltage or frequency changes) that are performed per second.
Tcplp	Select this radio button if your system uses Tcplp to connect between the servers and pumps, and then enter the relevant Port and IP Address.
Port	Indicates the communication port number.
IP Address	Displays the IP address of the host.
Simulator	If checked, indicates the terminal is used with a software pump simulator.

3 Click **Apply** to save.

From the FCC Tree, click **Pumps** to view all the Pumps defined in the system, and continue to define the Pump Mode Scheme.

Defining Modes Using the Pump Mode Scheme

The **Pump Mode Scheme** enables you to assign the required Modes to each pump, as well as to define the hours and dates when each Mode will be active in the pump. Examples of Mode Schemes may include: "Mode Scheme #3, Day, from 7:30am to 1:00pm, Auto –daily, 10 cents Service Fee", or "Mode Scheme #8, Holiday, 25 December, from 6:00am to 12:00pm, Auto-yearly, 30 cents Service Fee".

Any number of Modes can be defined for a 24-hour period. For each Pump there are 32 Mode Schemes enabling the Fuel Station to set as many different Modes as necessary.

Notes:

1. Mode Scheme #1 in PumpSrv is always defined as the default mode. This means that if there are times unaccounted for in a day, or in a particular time period, these hours will fall within the parameters of default mode #1.
2. PumpSrv uses the defined Mode Schemes, by checking Mode Scheme #1, then #2 etc. Once PumpSrv detects overlapping number schemes, it automatically applies the highest index number configuration.

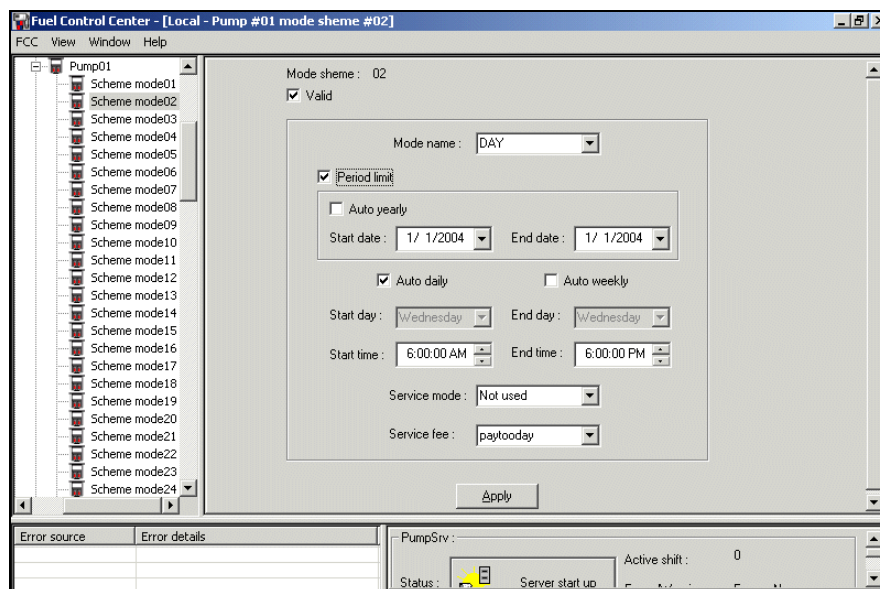
➤ To Assign Modes to a Pump Using the Pump Mode Scheme:

- 1 From the **FCC Tree**, select **Pumps**. Expand the FCC Tree and select the Pump number you are defining.
- 2 Expand the FCC Tree again to view the Mode Schemes under the Pump menu.

Note:

If you are working with a Doms Controller, keep note of the configuration settings you define for each Mode Scheme, as the same settings must be applied in the following menu options: Service Modes, Fuelling Modes, Fuelling Mode Groups, and Transactions, further on in this chapter. PumpSrv can interface with the Doms controller via those menu options.

- 3 Click the relevant Mode Scheme to open the **Pump#nn Mode Scheme** dialog. The following dialog displays the Mode Scheme number 02 that is assigned to pump 01:



Note:

When assigning Mode Schemes to a Pump, establish a hierarchical schedule. For example, starting with Yearly, then Monthly, then Weekly. The lower number Mode Schemes should include the Modes that are most frequently operative, e.g., Day Mode.

For example, if you define the regular Day Mode as Mode Scheme 02 and a specific public holiday (that falls on a specific day every year) as Mode Scheme 08, the system checks the Mode Schemes and days coherently and, upon finding the day of that specific public holiday, assigns Mode Scheme 08 instead of the regular Day Mode 03.

- 4 Enter the required information in the fields, as described in the table below:

Fields	Description
Mode Scheme number	Internal code number of the Mode Scheme in PumpSrv. Mode #1 is the default mode. The settings cannot be altered.
Valid	If checked, indicates that this is a valid Mode Scheme in the system.
Mode name	Name of mode assigned to this pump, for example, "Normal mode" or "Weekend mode".

Note:

Select the mode from the drop-down list, which was predefined in the **Modes** section.

Fields	Description
Auto daily	If checked, indicates that this mode is automatically applied to the assigned pump every day between specific hours. Then enter Start Times and End Times (see below).
Auto weekly	If checked, indicates that this mode is automatically applied to the assigned pump every week between specific days and hours. Enter the Start Date and End Date as well as Start Time and End Time.
Period limit	If checked, indicates that this mode is automatically applied to the assigned pump for a certain period of time. Enter the Start and End dates as well as Start and end times.
Auto yearly	If checked, indicates that this mode is automatically applied to the assigned pump every year between specific dates. Enter the Start and End dates as well as Start and end times.
Start date	Start date for Mode Scheme. To change the Start Date, click ▼ next to the date to display the calendar. Select the month and day.
End date	End date for this Mode Scheme. To change the End Date, click ▼ next to the date to display the calendar. Select the month and day.
Start day	If Auto-weekly is checked, the Start Day option is enabled. Select the relevant day from the drop-down list.
End day	If Auto-weekly is checked, the End day option is enabled. Select the relevant day from the drop-down list.
Start time	Start Time for the Mode Scheme. To change the time click the up and down arrows next to the time.
End time	End Time for the Mode Scheme. To change the time click the up and down arrows next to the time.
Service Mode	From the drop-down list, select a Pump service mode for this pump of either Self-service or Full service.
Service Fee	The name of the Service Fee added for this Mode Scheme. For example, a Service Fee of 10 cents is charged during a night shift.

Note:

This field applies only to *Allied*, *Meggitt*, or *RFS* systems.

- 5 Click **Apply** to save.
- 6 Select the next Mode Scheme from the FCC Tree, or click **Pump** from the FCC Tree to go back to the Pump you are defining.

Once Mode Schemes are configured, continue to define the Terminals.

Terminals

A Terminal, also referred to as Payment Terminal, is a Device usually located at the Pump. Terminals contain Card Readers and Cash Acceptors as well as a Customer Display that displays transaction information. The **Terminal** menu enables you to configure the terminal parameters.

Before defining Terminals in the FCC, Terminals are configured at the station. There are certain preliminary Wiring and Configuration procedures that must be performed for each Terminal. A major part of the Configuration procedure is filling out the **Pump Configuration Form**. The parameters in the FCC Terminal Configuration are determined by a technician, and entered in the **Pump Configuration Form**. (Example displayed below.)

Each Pump is checked for Device Type (Dispenser and Terminal). Its Manufacturer Name and Model are entered appropriately in the **Pump Configuration Form**, as shown in the example below. Information regarding a Terminal is recorded in the spaces next to Terminal. Information regarding a Dispenser is recorded in the spaces next to Dispenser.

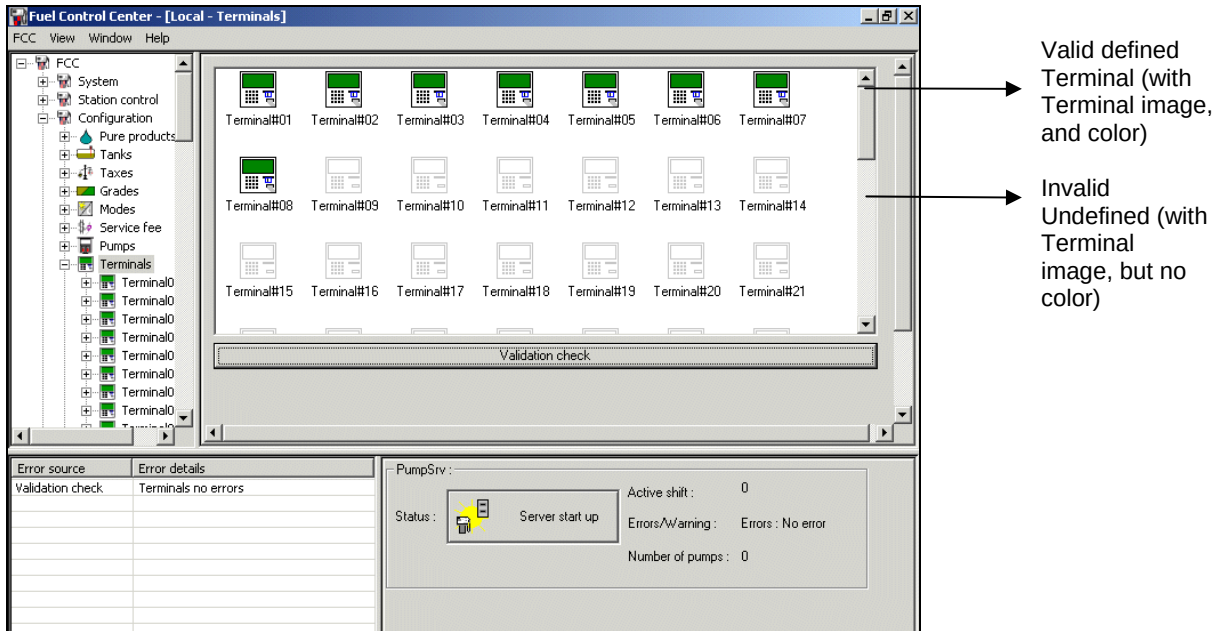
For further details refer to **RFS Wiring and Configuration Technical Guide Version**.

Pump No.	Device Type	Manufacturer Name	Model	Baud Rate	Comm Port	Low-Level Protocol	Cable Name	Device Address
1	Dispenser							
	Terminal	<i>Tokheim</i>	<i>DPT</i>	<i>9600</i>	<i>2</i>	<i>RS-485</i>	<i>T1</i>	<i>32</i>
2	Dispenser							
	Terminal							

Based on the filled-out form, the technician can configure the Terminals in the FCC, by entering the data of the filled-out forms for each Terminal and Dispenser in the station.

➤ **To View Terminals:**

- 1 From the **FCC Tree**, click **Configuration**, then click the **Terminals** menu. The **Terminals** window is displayed with icons of all the Terminals. Expand the FCC Tree to view the list of Terminals:



- 2 Click **Validation Check** to ensure there are no Terminals with system errors. The status is displayed in the bottom-pane of the dialog as shown above.

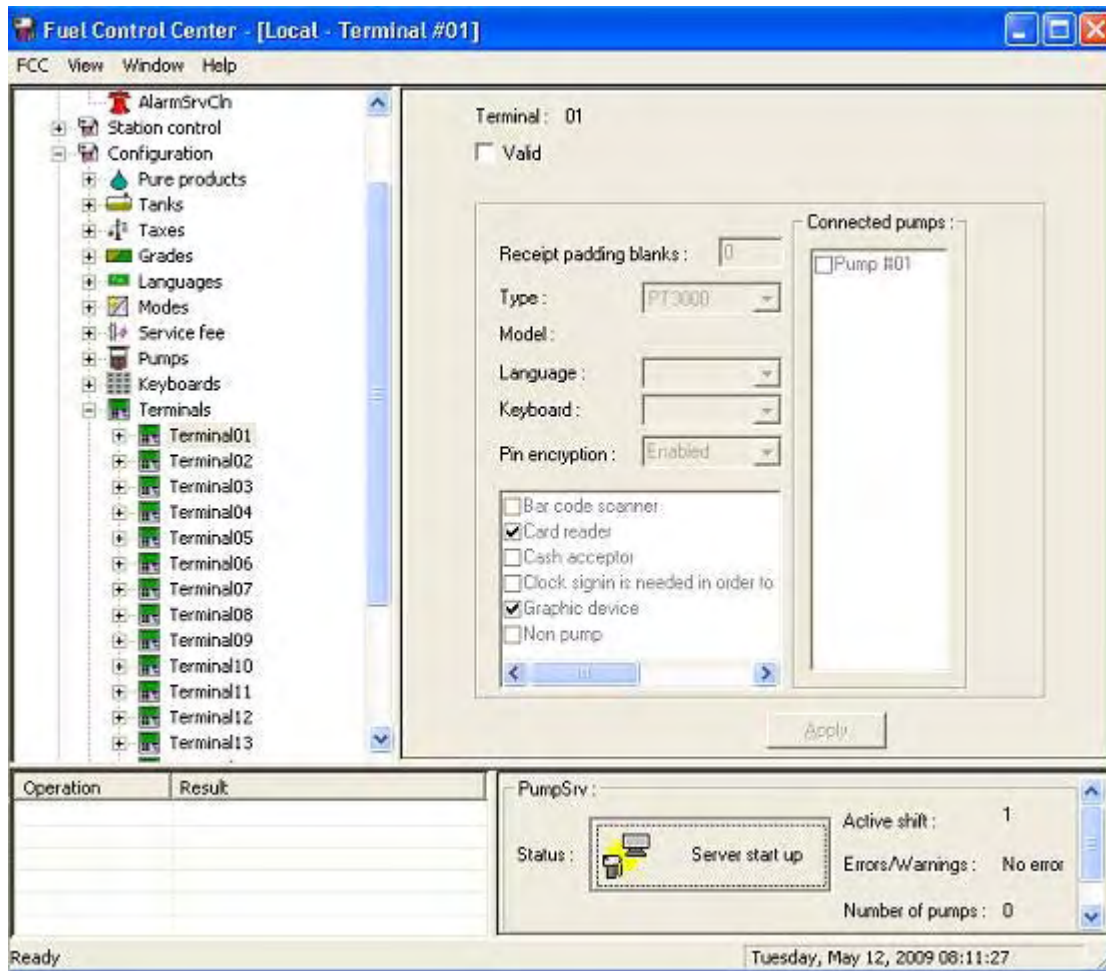
➤ **To Define or Revise Terminal Settings:**

- 1 Double-click an undefined Terminal icon, or select a terminal from the FCC Tree. The **Terminal** dialog is displayed.

Note:

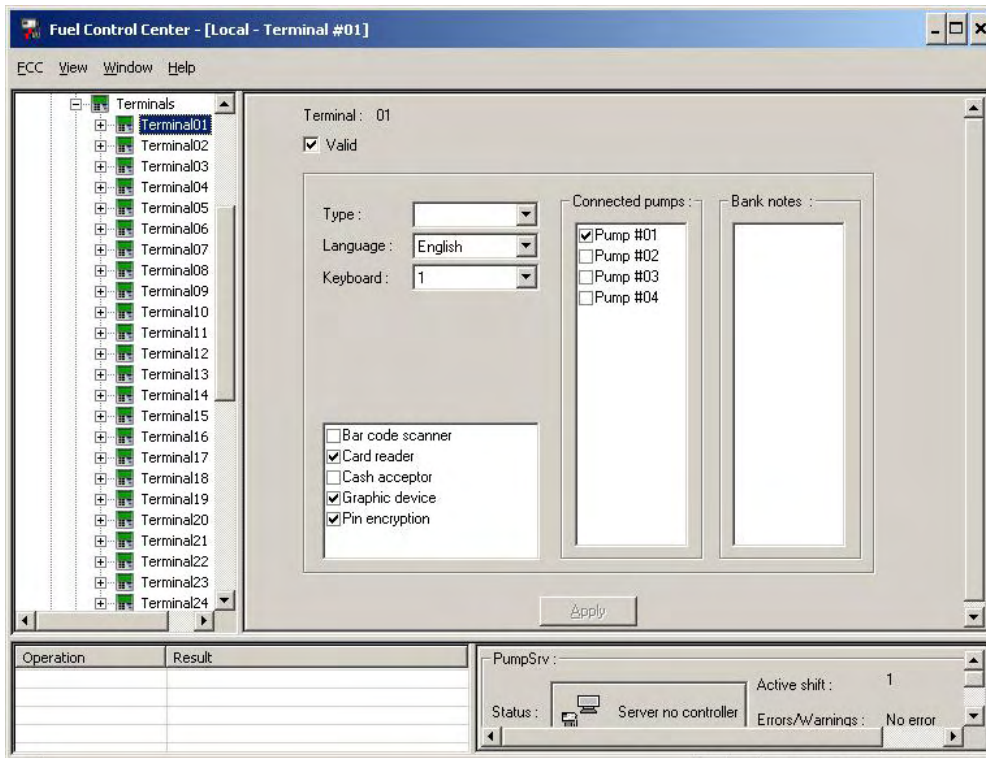
The fields vary according to the convert layer supported by your system.

If your system supports the RFS, Meggit, Postec, Allied convert layer, the following screen is displayed:



Or

If your system supports the **Doms** convert layer, the following screen is displayed:



You may view the properties of each Terminal by selecting the Terminal from the FCC Tree. You may move from one Terminal to the next and apply changes as necessary.

- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Terminal number	Internal code number of terminal as used in PumpSrv.
Valid	If checked, indicates the Terminal is valid in the system.
Receipt padding blanks	Displays the amount of space to leave blank on the sides of a receipt, when printing a receipt. For example, to indicate that two spaces must be left before a list of items on the receipt, enter 2.
Type	Manufactures name for the terminal, e.g., PT3000. Select terminal type from the drop-down list.
Model	Displays the name of the terminal's model.
Language	Select the default language to be displayed on the terminal display from the drop-down list. Languages are defined in the Language module.

Fields	Description
Keyboard	From the drop-down list select a keyboard code, representing a keyboard type. Note: Verify that the Keyboard is configured.
Pin encryption	Indicates that pin encryption is supported in debit flows. The following options are available: None – indicates that the terminal does not support Debit flows/encryption. Enabled – indicates that the terminal supports Debit encryption flows. Restricted – (Used only for SAM terminals) indicates that the terminal uses a Mid generation encryption device. Limited – (Used only for SAM terminals) indicates that the terminal uses an Old generation encryption device. Note: To enable debits, you must enable the pin encryption on every terminal. You must select the Enabled option from the drop-down list and the value must be greater than none.
Barcode scanner	If checked, indicates that the terminal is connected to a Barcode Scanner.
Card reader	If checked, terminal comprises a card reader.
Cash acceptor	If checked, terminal contains a cash acceptor.
Clock sign-in is needed in order to become operational	If checked, indicates that the attendant is required to sign-in in order to have access to the terminal. Note: This parameter is only relevant if your system works with the RFS.
Graphic device	If checked, indicates terminal contains a graphics device.
Non Pump	If checked, indicates a terminal that is not connected to a pump. Car wash transactions are performed on this type of terminal.
Re-download graphics	If checked, the RFS would resend the graphic screens data to the terminal. This is required for example, if lightening strikes the terminals, and the graphics get corrupted, or the terminal is changed, etc. Note: This parameter is only relevant if your system works with the RFS.
Support on screen softkeys	If checked, indicates that the screen can support the use of soft keys on the terminal. Note: This parameter is only relevant if your system works with the RFS.

Fields	Description
Connected Pumps area:	
Pump #'s	Check the checkboxes of each pump connected to the terminal.
Bank Notes area:	
	Note:
	The Bank Notes area only applies to systems working with the Doms convert layer. If your system works with the Allied, RFS, Postec, or Meggit convert layer, this field is not displayed.
	Check the checkboxes of each Bank Note recognized by the terminal.

- 3** Click **Apply** to save, and click **Terminals** to view all the Terminals defined in the system.

Note:

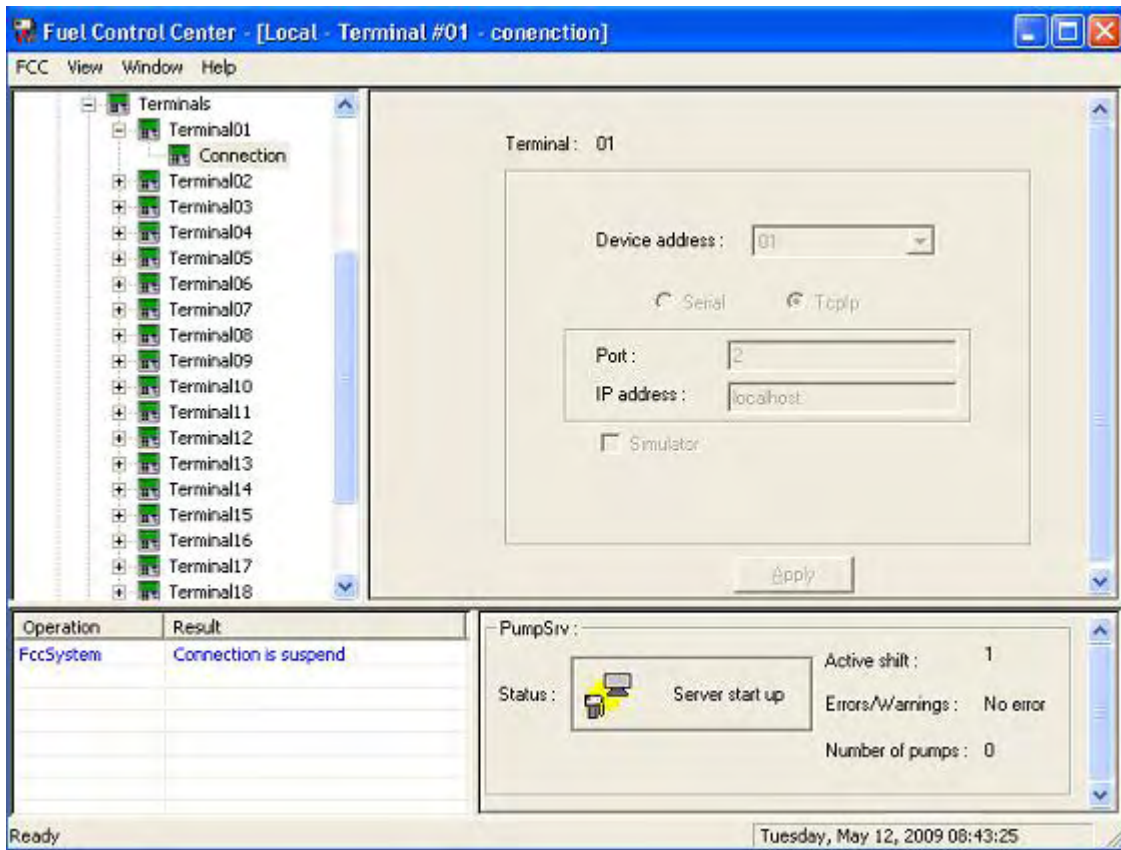
- If your system is working with an RFS controller, proceed to define the Terminal connection, see Configuring Terminal Connections for a System Working with an RFS Convert Layer, below.
- If your system is working with the Doms controller, proceed to define the Terminal connection, and then the Terminal Mode Schemes, see Configuring Terminal connections for a System Working with a Doms Convert Layer, and Defining Modes Using the Terminal Mode Scheme, further on.
- If your system is working with an Allied, or Meggit controller, proceed to defining the General Parameters.

Configuring Terminal Connections for a System Working with an RFS Controller

The **Connections** menu enables you to define the settings when connecting devices to the terminals. You must define if you are configuring serial-based communication or TCP/IP. When using a TCP/IP based communication system, the Port and Address are required. When using serial-based communication, the 840mm. port and baud rate are required.

➤ **To Configure the Connection:**

- 1 From the FCC Tree, expand the Terminal number that was just defined, and then click **Connection**. The **Terminal #01 – Connection** dialog is displayed as follows:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Terminal number	Internal code number of terminal as used in PumpSrv.
Device address	Indicates device address. It is a unique numeric address predefined for each device. Select the required address from the drop-down list.
Serial	Select this radio button if your system uses a serial system to connect between the servers and terminals, and then proceed to select the Comm port and Baud Rate numbers.
Comm Port	Indicates the communication port number. Select the required number from the drop-down list.

Fields	Description
Baud Rate	From the drop-down list, select the baud rate, indicating the rate of the communication line, which is the number of transitions (voltage or frequency changes) that are performed per second.
Tcplp	Select this radio button if your system uses Tcplp to connect between the servers and terminals, and then enter the relevant Port and IP Address. Note: When connecting via a Tcp/Ip connection, a warning message is raised to avoid setting more than one device with same port IP address, and device address. (Unlike working with serial connections where the validation is more restricted)
Simulator	If checked, indicates the terminal is used with a software pump simulator.

3 Click **Apply** to save.

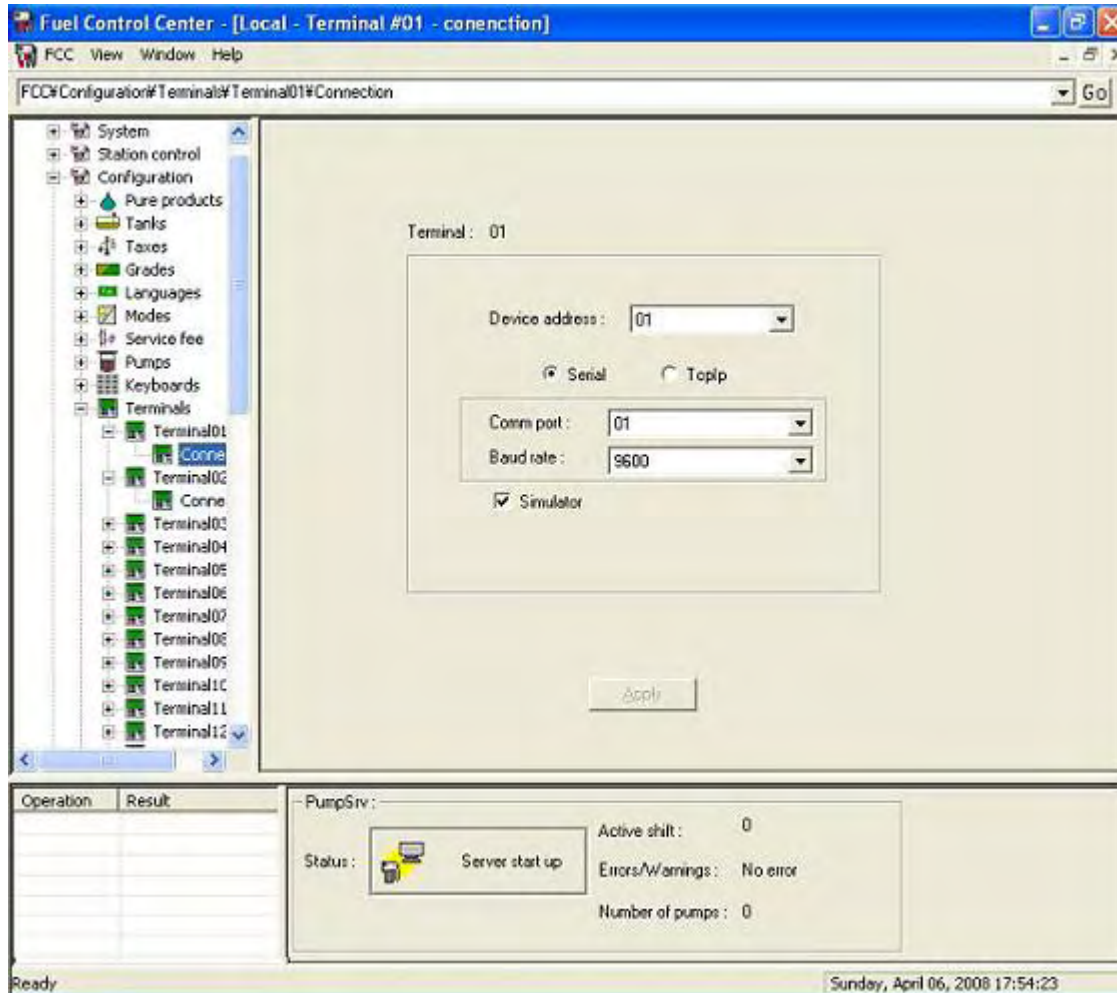
4 From the FCC Tree, click **Terminals** to view all the Terminals defined in the system, and continue to define the General Parameters.

Configuring Terminal Connections for a System Working with a Doms Controller

The **Connections** menu enables you to define the settings when connecting devices to the terminals. The Doms controller works with serial-based communication and the 860mm. port must be defined.

➤ To Configure the Connection:

- 1 From the FCC Tree, expand the Terminal number that was just defined, and then click **Connection**. The **Terminal #01 – Connection** dialog is displayed as follows:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Terminal number	Internal code number of terminal as used in PumpSrv.
Device Address	Indicates device address. It is a unique numeric address predefined for each device. Select the required address from the drop-down list.

Serial	Select this radio button if your system uses a serial system to connect between the servers and terminals, and then proceed to select the Comm port and Baud Rate numbers
Tcplp	Select this radio button if your system uses Tcplp to connect between the servers and terminals, and then enter the relevant Port and IP Address
Comm Port	Indicates the communication port number. Select the required number from the drop-down list.
Baud Rate	From the drop-down list, select the baud rate, indicating the rate of the communication line, which is the number of transitions (voltage or frequency changes) that are performed per second
Simulator	If checked, indicates the terminal is used with a software pump simulator.

3 Click **Apply** to save.

From the FCC Tree, click **Terminals** to view all the Terminals defined in the system, and continue to define the Terminal Mode Scheme.

Defining Modes Using the Terminal Mode Scheme

The **Terminal Mode Scheme** enables you to control when, and which devices are connected to the terminals. The Doms Controller enables more than one terminal to control more than one pump. For example, Terminal #1 and #2 can control Pump #5, #6 and #7.

You can assign various Terminal Mode Schemes to each terminal, as well as to define the hours and dates when each Mode will be active in the terminal.

For example, you may define a Terminal Mode Scheme to enable the Cash acceptor and Pay at Pump (Card reader) devices to be available during the day on pumps #5-7, and then during the night enable the Pay at Pump (Card Reader) device only.

First, define the Terminals:

Define Terminal #2:

- a. Select the type, language, keyboard.
- b. Check the Card reader and Cash Acceptor checkboxes.
- c. Check the pumps you are connecting to the terminal, e.g., #5-7

Then, define the Terminal Mode Scheme as follows:

"Mode Scheme #2, Day, from 7:30am to 17:00pm, Auto –daily."

Define Terminal #3:

- a. Select the type, language, keyboard.
- b. Check the Card reader checkbox only.
- c. Check the pumps you are connecting to the terminal, e.g., #5-7

Then, define the Terminal Mode Scheme as follows:

"Mode Scheme #2, Night, from 17:01pm to 7:29am, Auto-daily."

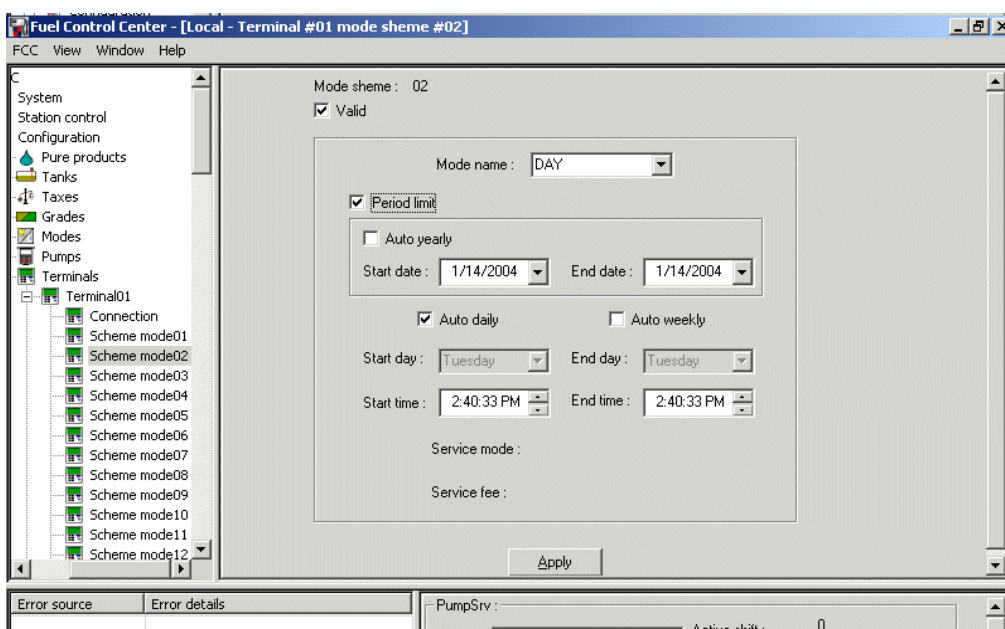
Any number of Modes can be defined for a 24-hour period. For each terminal there are 64 Mode Schemes enabling the Fuel Station to set as many different Modes as necessary.

➤ **To Define Terminal Mode Schemes:**

- 1 From the **FCC Tree**, select **Configuration/Pumps**, and then **Scheme Mode**, for example Scheme mode #2. The Terminal #01 – Mode Scheme #01 dialog is displayed as follows:

Notes:

1. Mode Scheme #1 in PumpSrv is always defined as the default mode. This means that if there are times unaccounted for in a day, or in a particular time period, these hours will fall within the parameters of default mode #1.
2. PumpSrv uses the defined Mode Schemes, by checking Mode Scheme #1, then #2 etc. Once PumpSrv detects overlapping number schemes, it automatically applies the highest index number configuration.



Define the Mode Schemes.

- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Mode Scheme number	Internal code number of the Mode Scheme in PumpSrv. Mode #1 is the default mode. The settings cannot be altered.
Valid	If checked, indicates that this is a valid Mode Scheme in the system.
Mode name	Name of mode assigned to this pump, for example, "Normal mode" or "Weekend mode".

Note:

Select the mode from the drop-down list, which was predefined in the **Modes** section.

Fields	Description
Period limit	If checked, indicates that this mode is automatically applied to the assigned pump for a certain period of time. Enter the Start and End dates as well as Start and end times.
Auto daily	If checked, indicates that this mode is automatically applied to the assigned pump every day between specific hours. Then enter Start Times and End Times (see below).
Auto weekly	If checked, indicates that this mode is automatically applied to the assigned pump every week between specific days and hours. Enter the Start Date and End Date as well as Start Time and End Time.
Auto yearly	If checked, indicates that this mode is automatically applied to the assigned pump every year between specific dates. Enter the Start and End dates as well as Start and end times.
Start date	Start date for Mode Scheme. To change the Start Date, click ▼ next to the date to display the calendar. Select the month and day.
End date	End date for this Mode Scheme. To change the End Date, click ▼ next to the date to display the calendar. Select the month and day.
Start day	If Auto-weekly is checked, the Start Day option is enabled. Select the relevant day from the drop-down list.
End day	If Auto-weekly is checked, the End day option is enabled. Select the relevant day from the drop-down list.
Start time	Start Time for the Mode Scheme. To change the time click the up and down arrows next to the time.
End time	End Time for the Mode Scheme. To change the time click the up and down arrows next to the time.
Service Mode	From the drop-down list, select a Service Mode for this terminal: Self-service or Full service. Note: This field is not relevant to systems working with the <i>Doms</i> Controller.
Service Fee	From the drop-down list, select a Service Fee applicable to this terminal. Note: This field is not relevant to systems working with the <i>Doms</i> Controller.

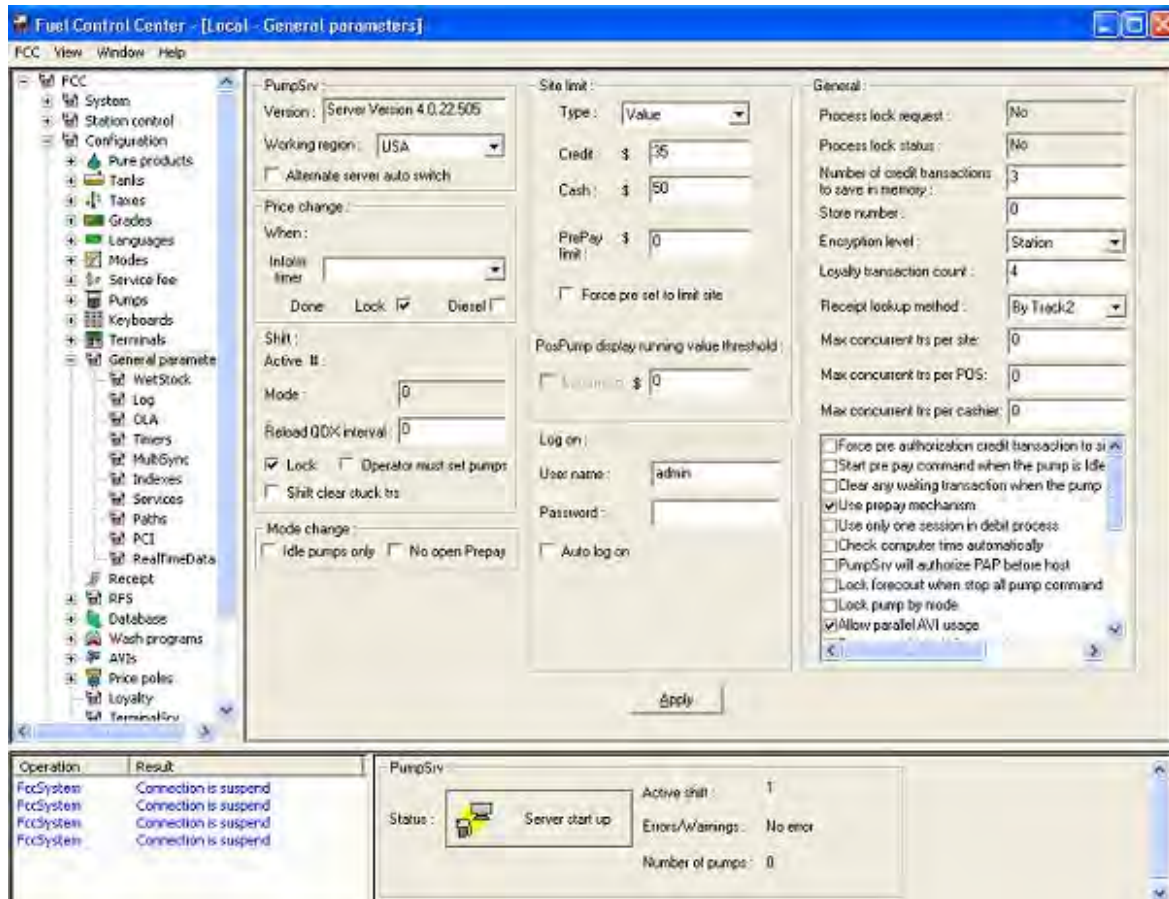
Once you have defined the Terminals, continue to define the General Parameters.

General Parameters

The **General Parameters** menu enables you to define General Parameters for Price Changes, Shifts, OLA, Timers, Indexes, Wetstock Readings and Services.

➤ To Open the General Parameter Menu:

- 1 From the FCC Tree, select **Configuration**, then click the **General Parameters** menu. The **General Parameters** dialog is displayed:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
PumpSrv Properties area:	
Version	Displays PumpSrv version number.
Working Region	Indicates Business logic. The region is unique.
Alternate Server Auto Switch	If checked, indicates that if PumpSrv does not respond, all POS terminals connected to that particular PumpSrv are automatically diverted to an alternate PumpSrv. (For further details, refer to Notes at the end of this table.)
Price Change area:	
When	Displays date and time of the last price change.

Fields	Description
Inform Timer	Displays the time, in minutes, the system waits for acknowledgments from all pumps on price changes, before displaying that the operation has failed.
Done	If checked, indicates that the price change process has been completed.
Lock	If checked, indicates that all pumps in the Fuel Station will be locked during price change. If not checked, the price change is applied to each pump, as soon as the pump is available.
Diesel	If checked, indicates that after a price change, the system informs the bank/authorizer that new prices were downloaded in the system and have taken affect.
Ignore non - valid grades	If checked, indicates that price changes for grade prices of non-valid grades will be ignored. If not checked, non-valid grades will be created in the system.
Shift area:	
Active #	Number of current shift.
Mode	Indicates whether shifts are assigned automatically or manually.
Reload QDX Interval	Indicates after how many shifts the QDX files are reloaded. This is part of the QDX Maintenance process, which is part of the system's maintenance routine procedures. Reloading the QDX files on a regular basis prevents these files from being damaged due to extended use.
Lock	When checked, indicates that pumps are locked during shift change.
Operator must set pumps	If checked, indicates that when the attendant closes a shift from the terminal, the forecourt must first be locked.
Shift clear stuck trs	If checked, indicates if there were transactions that were not finalized (stuck transactions) during a shift change, the transactions are automatically cleared.
Mode Change area:	
Idle Pumps Only	If checked, indicates that mode change will be done only on IDLE Pump.
No Open Prepay	If checked, indicates that you cannot change a mode in the middle of a prepay transaction.
Controller Software Path	Specifies the path of the Convert Layer software files. Used in the Allied environment.
Site Limit area:	
Type	Defines how to limit a transaction, e.g., by Value or by Volume. Select the Limit type from the drop-down list.
Credit (displayed when the value limit type is selected)	Defines the maximum limit per one credit card transaction.
Cash (displayed when the value limit type is selected)	Indicates the maximum limit per one cash transaction.

Fields	Description
Liters/Gallons limit (displayed when the volume limit type is selected)	Defines the maximum amount of liters/gallons per one transaction.
PrePay Limit	Indicates the maximum amount per one PrePay transaction. Note: If 0 is defined, there is no prepay limit.
Force Pre-Set to Limit Site	If checked, indicates that the cashier can pre set the pump to work according to the site limits defined, overriding the PrePay limit. If the cashier enters a Force Pre-Set value that is higher than the Cash Site limit, the system will automatically work according to the Cash Site limit.
POSPump display running value threshold	Enter the threshold amount that when reached, is displayed on the PosPump button as follows:  . This option enables you to control site limits.
Enhanced	If checked, indicates that the rolling display amount is displayed with more detail, e.g., 2 decimal places for PAK transactions. While the transaction is dispensing, and after the transaction is dispensed, but not yet paid, the full and accurate amount is displayed on the pump and POSPump. Note: If the threshold value in the field above is set to zero, this checkbox is disabled.
Log on area:	
User name	Enter user identification when logging on. This allows the user to enter the system. The user must have administrator authorization to enable the Auto Log on field.
Password	Enter a password, used to serve as a security measure against unauthorized access.
Auto log on	If checked, the fuel server loads automatically once the system has restarted. For example, if there is a power failure in the forecourt and you switch on the server, it loads automatically. If this field is active, the User Name and Password fields below must be entered.
General area:	
Process lock request	Indicates whether the pumps were locked as a result of PumpSrv transmitting this command. (This is a read-only field and has a set default, which is No.)

Fields	Description
Process lock Status	Indicates the stage of the Pump Locking process. (This is a read-only field and has a set default, which is No.)
Number of Credit Transactions to Save in Memory	Indicates the number of transactions performed with credit cards that are saved in the memory.
Store Number	Specifies the Store/Site number.
Encryption Level	Indicates whether encryption is defined for all pumps in the station, or for each individual pump. Select the required specification from the drop-down list. The default is Station.
Loyalty transaction count	Displays the number of the last loyalty transactions, to be saved in the paid transactions qdx.
Receipt lookup method	Specifies the method used to search for receipts for reprinting. The options are: ▪ By Account – indicates that the search is according to the card account number ▪ By Track2 – indicates that the search is according to the card track data.
Max concurrent trs per site	Displays the maximum number of concurrent transactions that can be processed for a fuel site.
Max concurrent trs per POS	Displays the maximum number of concurrent transactions that can be processed for a POS.
Max concurrent trs per cashier	Displays the maximum number of concurrent transactions that can be processed for a cashier.
Force Pre Authorization Credit Transaction to Site Limit	If checked, ensures that Pre-Authorization of Credit Transactions is controlled by the Site Limit value and not by OLA, for example, if the Site Limit in the FCC is defined as 100 dollars, and a credit card is swiped with OLA of 200 dollars, the Station Manager may control the transaction limit if the field is checked active.
Start Pre Pay Command when the Pump is Idle	If checked, indicates that a Pre Pay transaction at the kiosk can only be authorized when the Pump is idle.
Clear Any Waiting Transaction when the Pump Moves to Idle	If checked, and a transaction was authorized but never started, or the pump got stuck, when the Pump moves to Idle state, it clears the current transaction on that pump.
Use Pre Pay Mechanism	If checked, indicates that the Pre Pay process mechanism is active, and that you can perform PrePay transactions.
Use Only One Session in Debit Process	If checked, indicates that the system will use only one session during debit processing. There are 2 processes of debiting: Session By Session, or Multi Sessions. These are internal banking processes, which are determined by the specific bank regulations in the country.
Check Computer Time Automatically	If checked, this means that the time displayed on the computer is periodically checked to synchronize 'clocks' in all the systems, e.g., in the Site Controller and in PumpSrv.

Fields	Description
PumpSrv will Authorize PAP Before Host	If checked, indicates that PumpSrv can authorize a credit card before OLA receives authorization for a PAP transaction.
Lock ForeCourt When Stop All Pump Command Was Sent	If checked, indicates that the forecourt will be locked and no transactions will be allowed when the Stop All Pump command is sent. This command is performed from the Station Control or by the POS. It acts as an emergency button, to enable the stopping of all pumps at once, and the locking of pumps that are not active.
Lock pump by mode	If checked, indicates that when a Mode is valid, however, was not configured, any pumps pointing to that Mode Scheme will be locked.
Allow Parallel AVI Usage	If checked, this means that one AVI device can fuel from more than one pump at the same time. This is generally used for trucks with two AVI devices containing the same data.
Remove Multiple AVI Post Sales	If checked, you cannot use an AVI device as a method of payment more than once (from POS).
Allow authorization on non-requesting pump	If checked, indicates that even if the customer did not lift the nozzle yet, the cashier can still authorize the transaction.
Prepay only on idle pump	If checked, indicates that a prepay transaction may not be performed if the pump is not idle.
System on manual modes	If checked, indicates that the system operates on manual mode. When in manual mode, switching between modes, i.e., day, night, is performed manually, not according to the Fuel Server Scheduler.
Lock Nozzle When Tank is Under Predefined Limit	If checked, indicates that if the tank level drops below the specified limits defined in the Tank settings, all nozzles connected to this tank are locked, preventing fuelling from the nozzle.
Reset Pump Transaction Display on Price Change	If checked, indicates that the pump transaction data is cleared whenever there is a price change.
Note: If you change the setting of this parameter at any time, the pump configuration settings must be updated. The Pump checkbox in the Reconfigure screen is automatically checked. For further details on updating new settings, see Accessing the Configuration Menu, at the beginning of this chapter.	
Price Change Lock While there are Unpaid Transactions	If checked, indicates that no price changes may be downloaded if there are any open transactions. The pump must be in idle status (not operational) during the change, regardless if the prices are loaded due to a price change process, or a mode change that also reflects the prices.
Support loyalty	If checked, indicates that the system is compliant with the Retailx Loyalty Promotion Engine System (LPE).

Fields	Description
Roll Back On Price Change Failure	If checked, indicates that if any problems occur on the Price Poles, to avoid a potential discrepancy between the prices on the Price Poles and the Pumps, the system can perform a rollback to return to the old prices. Note: When a new price is higher than the existing forecourt prices, the prices are downloaded first to the Price Poles, and only then to the Pumps. If the new prices are lower than the existing prices, the system downloads the new prices first to the Pumps.
Support NACS Restrictions	If checked, indicates that the system supports the NACS restrictions. (National Administrative Code Service) restrictions. NACS provides a list of product codes when using a specific card, during the process of online authorization, and PumpSrv can restrict the sale of products accordingly.
Finished Prepay Indication	If checked, indicates that when a prepay process is fully dispensed, it should be available for POS reconciliation. The transaction should not be closed automatically, .i.e., the 'P' (pump indication) is displayed on the button on the POS as in an unbalanced prepay. This field applies to special credit cards that you have to swipe when paying prior to fuelling, and again after fuelling to complete the transaction.
Print Receipt for zero transaction	If checked, indicates that a receipt is printed for transactions in which the total is zero. For example, when the transaction is cancelled, or the nozzle is put back before fuelling.
Allow manual entry of loyalty on idle pump	If checked, indicates that Loyalty information can be manually entered at the beginning of the fueling process, for example, while the pump is idle.

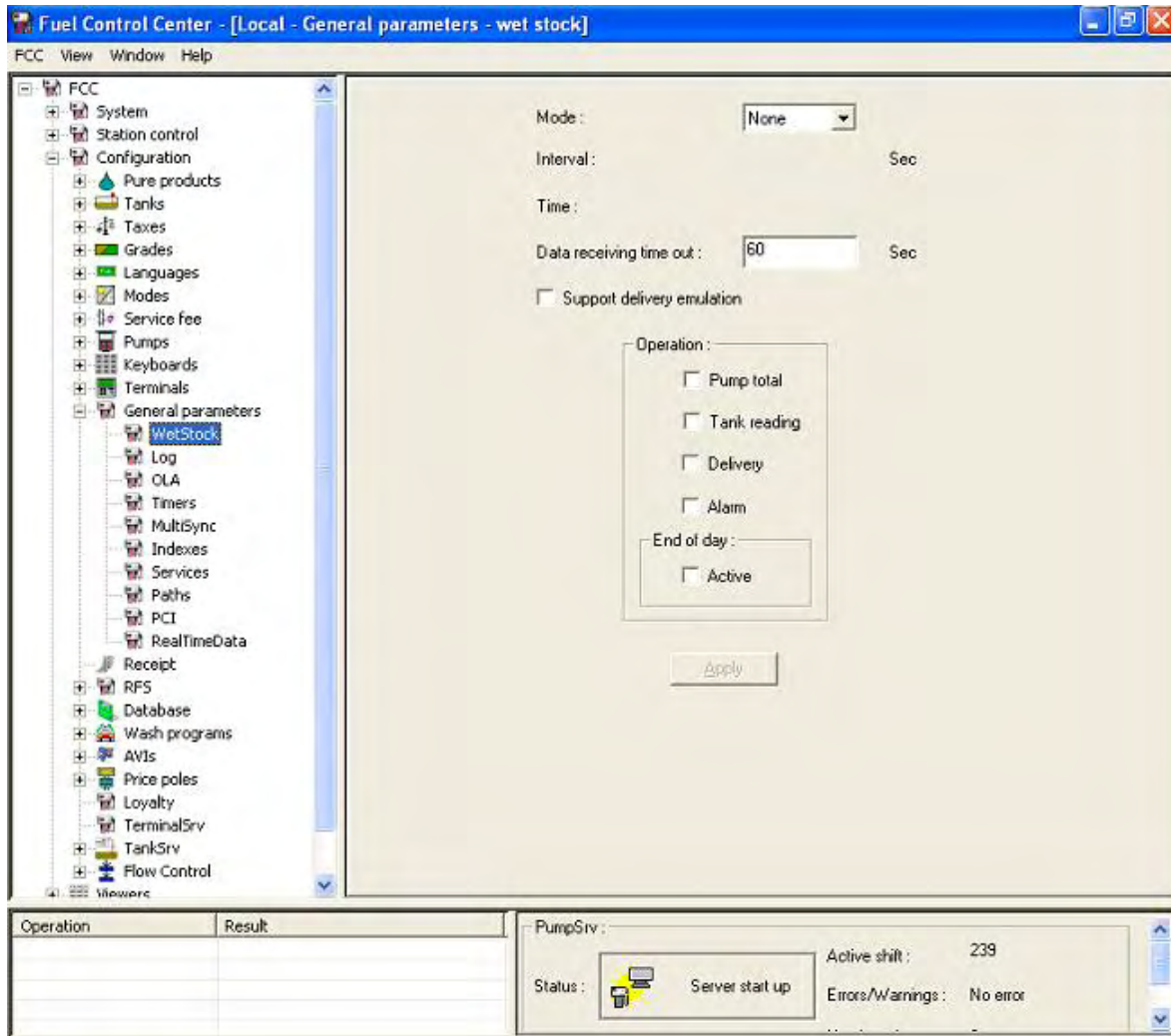
3 Click **Apply** to save.

Once you have configured the General Parameters, define the WetStock Readings.

Wetstock

➤ To Define Wetstock Readings:

- 1 From the FCC Tree, select the **General Parameters**, then click the **Wetstock** menu. The **Configuration : General parameters – Wetstock** dialog is displayed:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Wetstock area:	
Mode	Indicates how often, if at all, a Wetstock Reading is performed. When None is selected, no Wetstock Reading will be performed. Select the required Mode from the drop-down list.
Interval	Drop-down menu displaying values that indicate the intervals between each fuel reading.
Time	Indicates time of day when Wetstock Reading is performed.

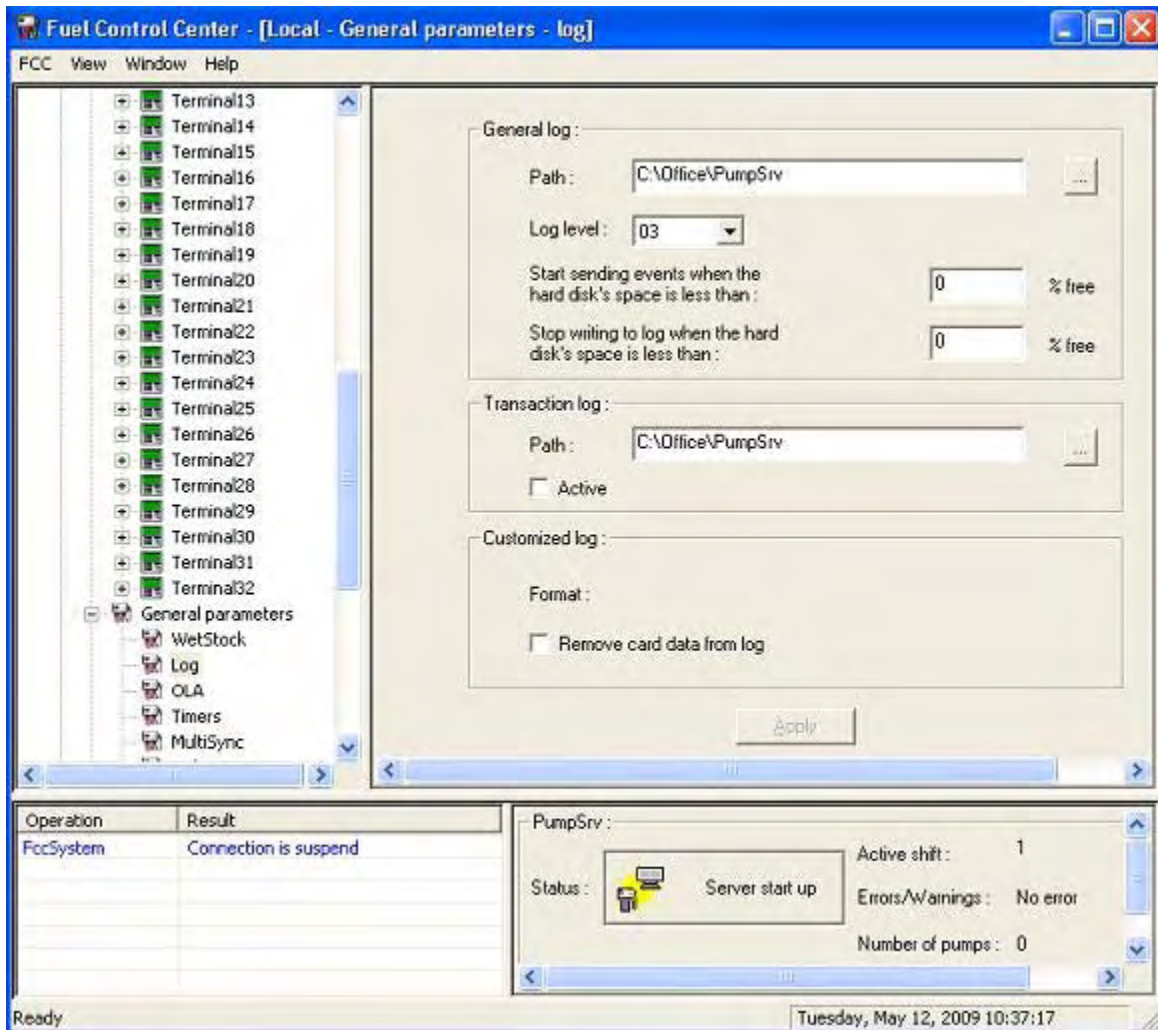
Fields	Description
Data receiving timeout	Indicates in seconds, how long the system waits for data from a tank reading before it stops the Wetstock Reading process.
Support delivery emulation:	If checked, adds support to delivery emulation in PumpSrv in site that does not have RFS or ATG that support delivery
Operation area:	
Pump total	If checked, indicates that Pump Total readings are performed.
Tank reading	If checked, indicates that a Tank Reading is performed.
Delivery	If checked, indicates that Delivery Reports readings are performed.
Alarm	If checked, indicates that the log alerts of any system problems that are written to the log.
End of Day area:	
Active	If checked, indicates that in addition to the regular EOD process, another process that saves specific QDX information on Wetstock readings will take place.

- 3** Click **Apply** to save.
Continue to define Logs.

Log

➤ To Define Log Readings:

- 1 From the FCC Tree, select **General Parameters**, then click the **Log** menu. The **Configuration : General parameters – Log** dialog is displayed:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Log area:	
Path	Specifies the path of the <i>PumpSrv</i> and <i>Convert Layer</i> log files.

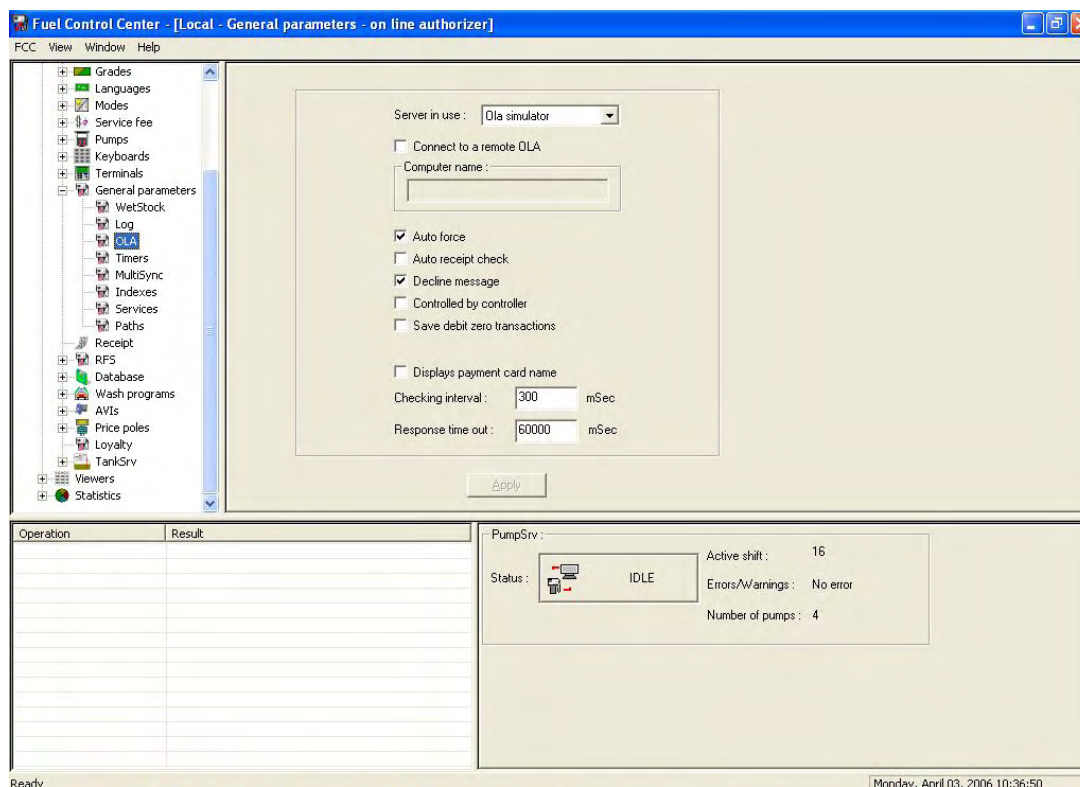
Fields	Description
Log level	Internal code number indicating level of detail in the log level. For example, log level 1 indicates no logs, log level 3 is some detail and log level 5 is full details in the log files. Select the required log level details from the drop-down list. Note: The log level details apply to PumpSrv only. The default is set to 3 and it should not be changed other than by Retalix Technical Personnel.
Start Sending Events When the Hard Disk's Space is Less Than:	The percentage of disk space left, before an event is triggered to alert that the disk is full.
Stop Writing to Log When the Hard Disk's Space is Less Than:	The percentage of disk space left in the logs, before the system stops writing to the log.
Transaction log area:	
Path	Specifies the path of the PumpSrv transaction logs.
Active	If checked, indicates the transaction log file is active.
Customized log area:	
Format	Data export components get information from PumpSrv, for example, wetstock data, which is customized information according to the customer's preferences. This log is used to specify the format of the data export component in which the customized information is saved for each customer.
Remove card data from log	If selected, indicates that the card track and account data is removed from the fuel logs. Note: In the RFS environment, the data is also removed from the high log level.

- 3 Click **Apply** to save.
- Continue to define OLA readings.

OLA

➤ To Define OLA Readings:

- 1 From the FCC Tree, select the **General Parameters**, then click the **OLA** menu. The **Configuration : General parameters – OLA** dialog is displayed:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Server in use	Indicates which OLASrv is in use for the specific fuel environment. Select the appropriate server from the drop-down list.
Connect to remote OLA	If checked, a remote computer is connected to receive OLA.
Computer name	Enter the remote computer name.
On Line Authorization (OLA) area:	
Auto force	If checked, indicates that PumpSrv will start a Complete session at the end of the PAP transaction. This parameter is not checked in environments where the controller is the card authorizer. The Complete session begins when the fuelling is done and the sum due is known. The credit card is charged accordingly, which completes the transaction after receiving On-line Authorization, and the status changes to Paid .

Fields	Description
Auto receipt check	If checked, indicates that PumpSrv “asks” OLA whether the customer received a receipt. If yes – pump is available for fuelling. If no – customer has finished fuelling but did not receive a receipt. If receipt is then requested, customer must swipe card to receive the receipt. Before OLA requests authorization, the customer is prompted as to whether or not a receipt is requested.
Decline message	If checked, a decline message is displayed.
Controlled by Controller	If checked, indicates that OLA is controlled by the relevant controller.
Save Debit Zero Transactions	If checked, indicates that even if a transaction was cancelled and the total displays Zero, the transaction is saved in the transaction file.
Present card name	If checked, indicates that the system requests the credit card type name during OLA. E.g., Visa and presents it on the POS Pump transaction screen.
Checking interval	When checked, indicates how often, in milliseconds, Pumpsrv “asks” OLA for authorization of the transaction.
Response Time- Out	Indicates how long, in milliseconds, Pumpsrv waits for a response from OLA before Time-Out message is displayed.

Notes:

1. The Alternate PumpSrv is defined in:
HKEY_LOCAL_MACHINE\Software\Positive\System\Servers\PumpSrv_GPI
HKEY_LOCAL_MACHINE\Software\Positive\System\Servers\PumpSrv_CTRL
2. Host 1 is defined as the Host on which Remote OLA is installed.
3. In the event of failure of Host 1, if the above parameter is switched on, Host 1 will shift to Host 2. MasterHost should be defined the same as Host1.

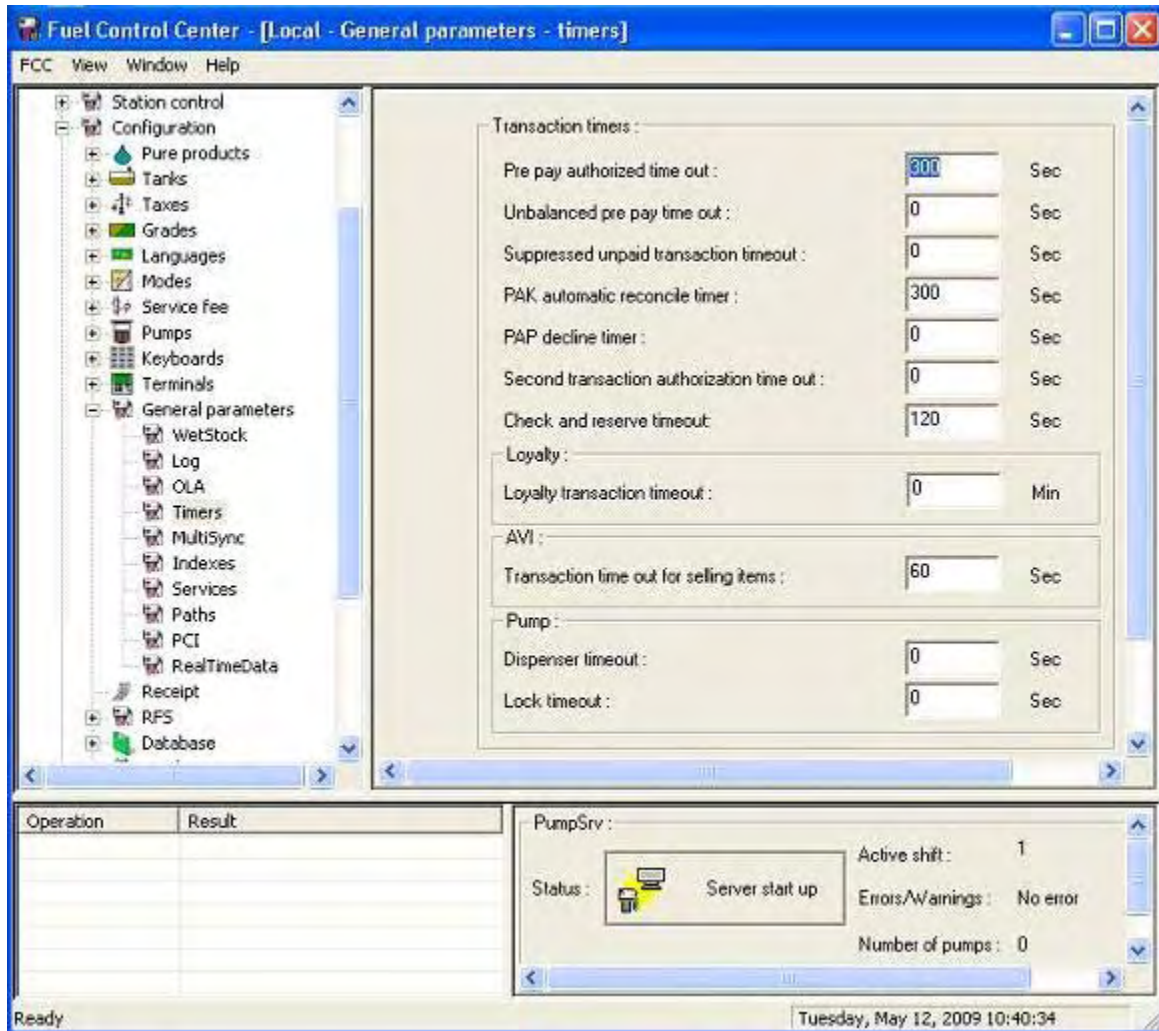
3 Click **Apply** to save.

Continue to define the *Timers*.

Timers

➤ To Define Timers:

- 1 From the FCC Tree, select **General Parameters**, then click the **Timers** menu. The **Configuration : General Parameters – Timers** dialog is displayed:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Descriptions
Transaction timers area:	
Prepay authorized Time-Out	Displays how long, in seconds, a pump is authorized for Prepay fuelling before changing back to the Ready status.
Unbalanced pre pray time out	Displays how long, in seconds, a pump that has unbalanced pre-pay stays locked.

Fields	Descriptions
Suppressed unpaid transaction timeout	Indicates the period of time, in seconds, after which the buzzing is resumed, after an unpaid transaction has been suppressed. If "0" is entered, once the transaction is suppressed, the buzzing will not resume.
PAK automatic reconcile timer	Indicates how long, in seconds, after the time of payment that the transaction is closed, to enable the customer to still swipe a loyalty card.
PAP decline timer	Indicates how long, in seconds, after which a PAP transaction was declined authorization, for a message to popup on the POS in the kiosk in order to notify the cashier that there was a problem with the customer's credit card, and to warn the cashier before authorizing a PAK on the same pump. If a customer's card was declined at the Pump, the cashier could still authorize the pump, resulting in a drive-off.
Second transaction authorization time out	In cases where there are double transactions (Diesel/Reefer), indicates how long, in seconds, the transaction stays authorized before reaching a timeout. For example, the first customer is authorized for both diesel and reefer grades. After dispensing the first diesel transaction the customer decides not to dispense the reefer and drives away. The next customer pulls up to the pump and the pump is armed and ready to fuel. Customer dispenses fuel into his tank on the first customer's ticket. In order to avoid this situation, an additional support for a unique time out for the second fuel transaction (Reefer) is added.
Check and reserve timeout	Check and Reserve is a method used by the POS to ensure that a selected pump, against which a transaction is initiated, will be available to accept the authorize command when it arrives. This reservation of the pump lasts until the authorization command arrives, or the reservation is cancelled by POS, or until this timeout definition. The default is 120 seconds.
Loyalty area:	
Loyalty transaction timeout	Indicates how long, in minutes, after a transaction takes place, the transaction will be included in the paid transactions query list.
AVI area:	
Transaction time out for selling items:	Indicates within how many seconds (from when OLA authorization was received) a customer has to purchase an additional item and charge it to an AVI device. For example, at the end of a transaction the customer may decide to purchase a product from the Kiosk and charge the AVI device after fuelling. The customer has a time limit to make this purchase and still charge the product to the AVI device.
Pump area:	

Fields	Descriptions
Dispenser Timeout	Indicates after how long in seconds, a warning sent by PumpSrv is sent to notify that the nozzle was left out with no fueling.
Lock Timeout	Indicates the time in seconds PumpSrv keeps the pump lock in the Delivery Emulation process.

3 Click **Apply** to save.

Continue to define MultiSync readings.

MultiSync

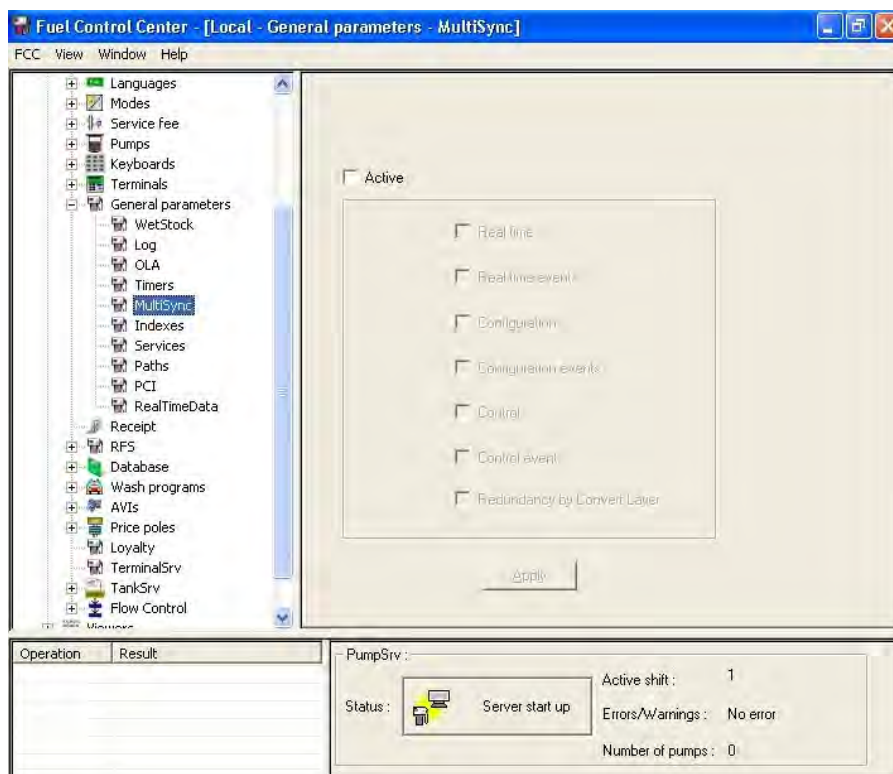
The **MultiSync** is the engine that backs up the QDX files and the Registry. The FCC enables the configuration of how PumpSrv works with MultiSync.

Note:

The MultiSync utility is covered in a separate document. Refer to the Retalix MultiSync Control Center Administrator's Guide.

➤ To Define MultiSync Readings:

- 1 From the FCC Tree, select **General Parameters**, then click the **MultiSync** menu. The **Configuration : General Parameters – MultiSync** dialog is displayed:



- 2 Select the required flags, as described in the table below:

Fields	Description
Active	If checked, indicates that the components selected are active in the system.
Real Time	If checked, indicates that the interface to QDX Database operations is backed up. The MultiSync cannot operate without the QDX engine.
Real Time Events	If checked, indicates that this interface enables PumpSrv to get notification from the MultiSync Server when QDX files have been updated.
Configuration	If checked, indicates that there is an active interface to the Registry activities. The MultiSync can read and write from and to the Registry.

Fields	Description
Configuration Events	If checked, indicates that this interface enables PumpSrv to get notification from the MultiSync Server when the Registry has been updated.
Control	If checked, indicates that PumpSrv will receive, during run time, the status of all operations from the MultiSync Server to monitor the data updates.
Control Events	This field is under development.
Redundancy by Convert Layer	If checked, indicates that data redundancy is performed by the Convert Layer using the controller capabilities.

Note:

If your system supports the MultiSync application, all the fields above must be checked active.

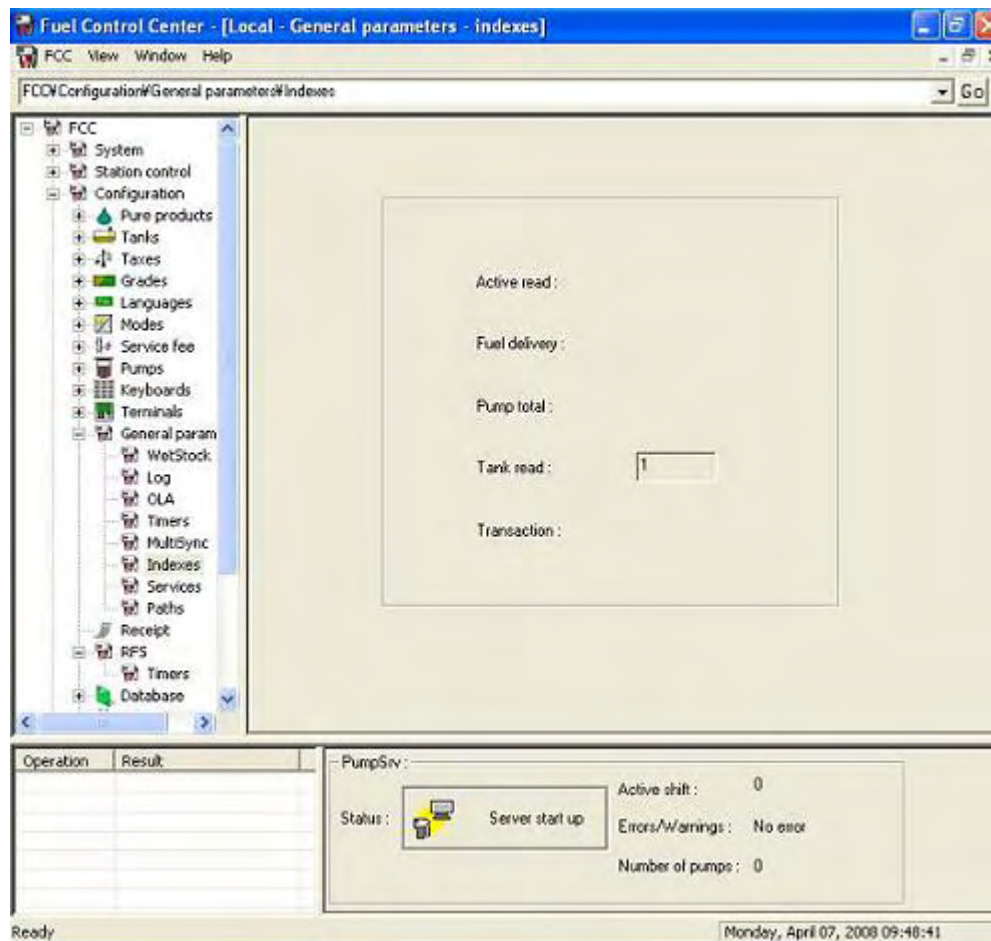
- 3** Click **Apply** to save.

Continue to define Index Readings.

Indexes

➤ To View Index Readings:

- 1 From the FCC Tree, select **General Parameters** and then the **Indexes** menu. The **Configuration: General Parameters – Indexes** dialog is displayed:



- 2 View the required information in the following fields, as described in the table below:

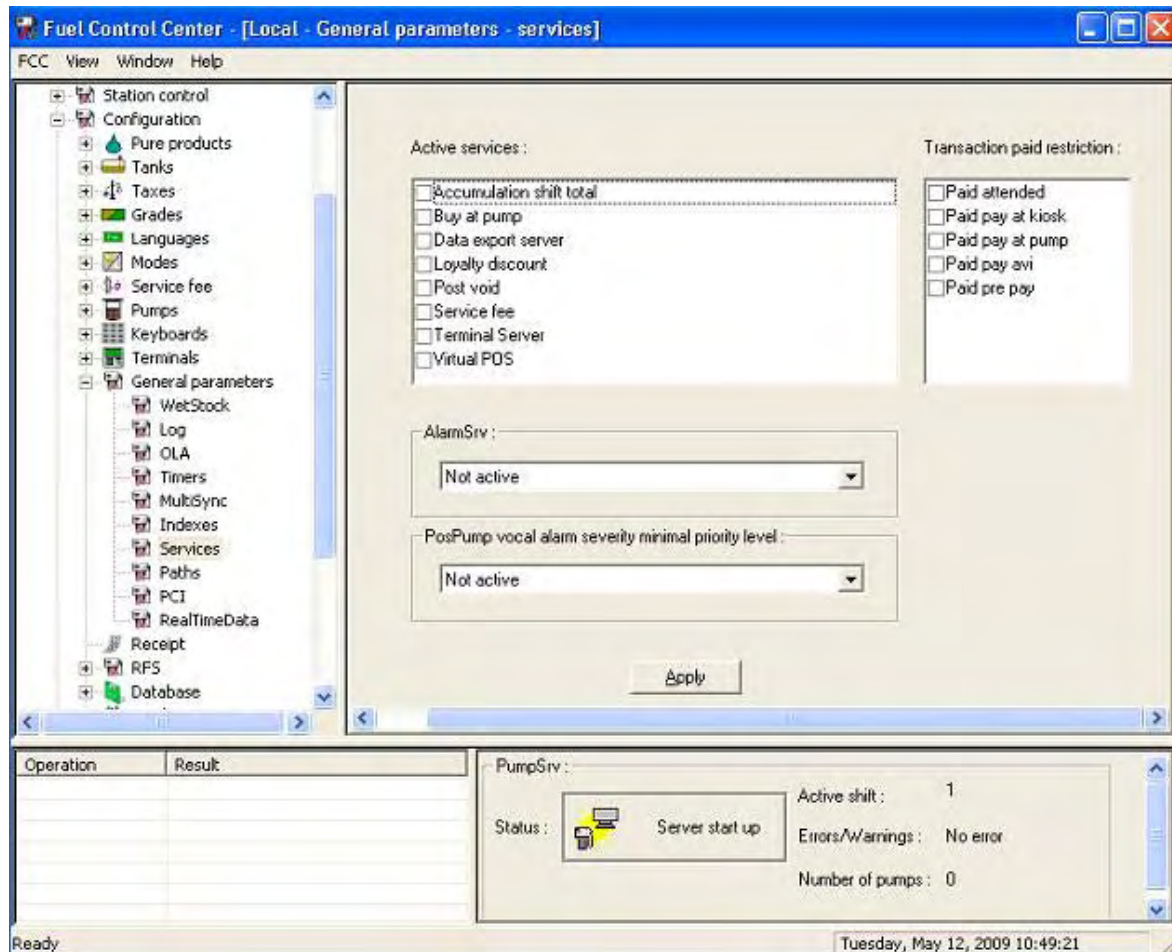
Fields	Description
Indexes area:	
Active read	Number of entries in the Active Read file.
Fuel delivery	Number of entries in the Fuel Delivery file.
Pump total	Number of entries in the Pump Total database file.
Tank read	Number of entries in the Tank Read index.
Transaction	Number of entries in the Database file.

- 3 Click **Apply** to save.
Continue to define Services.

Services

➤ To Define Services:

- 1 From the FCC Tree, select the **General Parameters**, then click the Services menu. The **Configuration : General Parameters – Services** dialog is displayed:

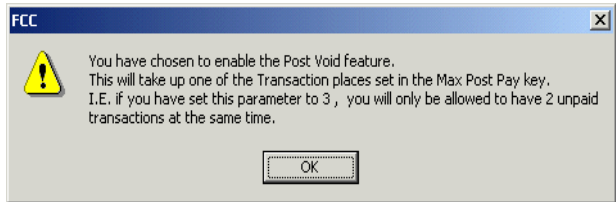


- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description

Active Services area:

Accumulation of Shift Total	If checked, indicates that shift totals (all sales data) are accumulated in PumpSrv.

Buy at Pump	Check that your system supports Buy@Pump to enable this feature. If checked, indicates customer may make purchases, other than fuel, at the Terminal. For example, the customer may buy a newspaper at the Terminal. Note: This field is not relevant to systems working with the Doms controller.
Data Export Server	If checked, indicates that PumpSrv runs the Data Export Server in the system. XML data files are created, which are packed and exported as required. E.g. data on tank readings may be sent on a regular basis, etc.
Loyalty Discount	If checked, Loyalty card discounts are applied. Note: This field is not relevant to systems working with the Doms controller.
Post Void	A fuel station may define a maximum of 4 Post Pay (Pay at Kiosk) transactions at one pump. However, if the Post Void checkbox is selected, this indicates that the Post Void feature will use one of the places set for a Post Pay transaction. If selected, the following pop-up warning prompts. Click OK if you accept.  Note: This field refers to the Max Post Pay key in <i>Configuration – Pumps Chapter 2</i>.
Service Fee	If checked, indicates that the Service Fee is operational, and, if configured, a service fee is charged. Note: This field is not relevant to system working with the Doms controller.
TerminalServer	If checked, indicates that TerminalSrv is active. This module enables a mode of operation where a third party EPS provider is responsible for both terminal control and processing financial transactions (card authorization/completion) Vs the bank. TerminalSrv updates EPS regarding the pumps status (in order for the terminals to reflect the status), and gets updates from the EPS regarding the actions made on the terminal and regarding card authorization/completion processing.

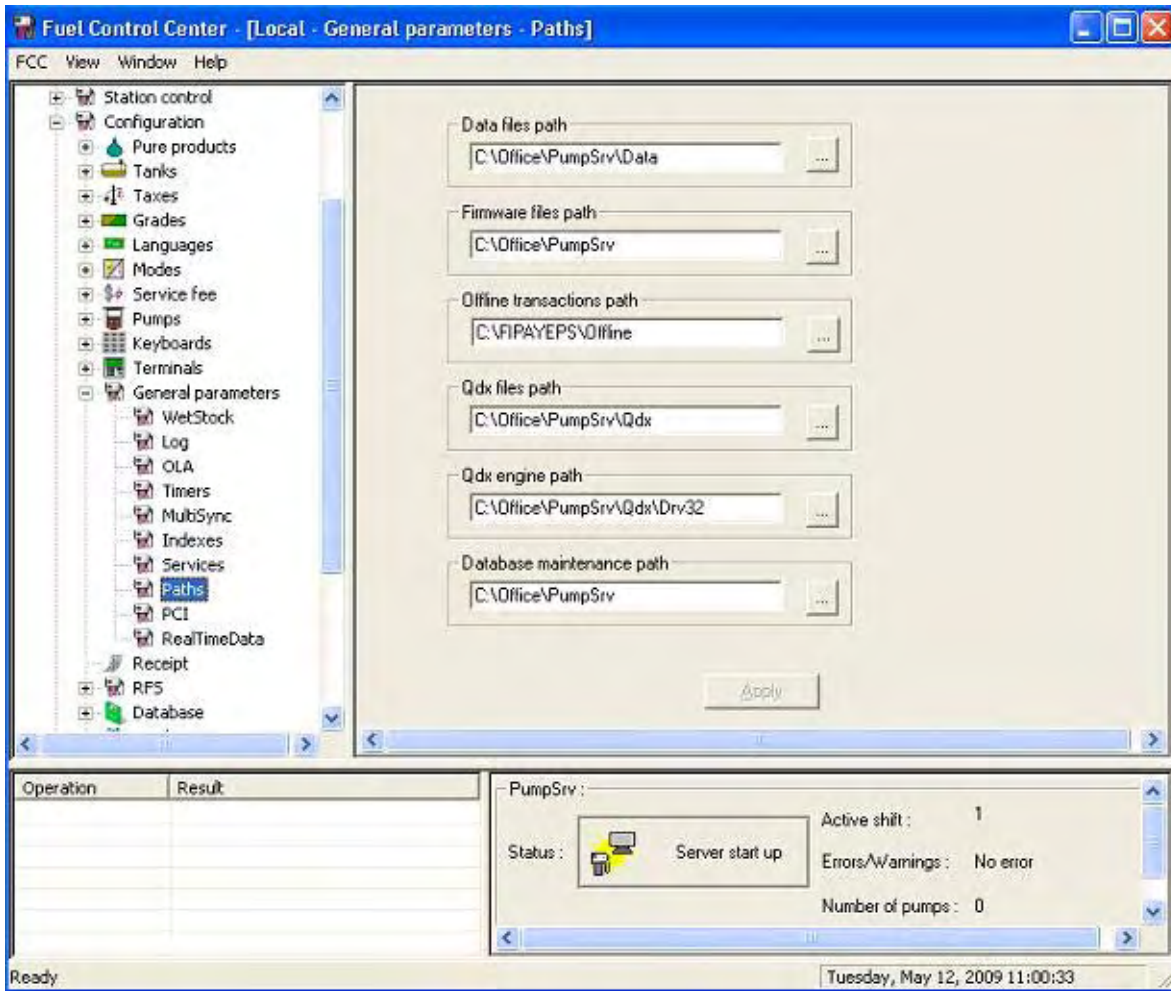
Virtual POS	If checked, indicates that PumpSrv will launch on start up, and shutdown the Virtual POS.
Transaction Paid Restriction area:	Note: These parameters are relevant for Retalix Italy Customers Only. These parameters are used to specify for which transactions loyalty points can be accumulated. When a transaction is paid and a loyalty card was swiped, PumpSrv does not calculate the Loyalty points earned. The points are taken from a specific QDX file in which all loyalty points are defined per transaction.
Paid attended	If checked, indicates that for Attendant transactions loyalty points are calculated.
Paid pay at kiosk	If checked, indicates that for Pay At Kiosk transactions loyalty points are calculated.
Paid pay at pump	If checked, indicates that for Pay At Pump transactions loyalty points are calculated.
Paid pay AVI	If checked, indicates that for AVI transactions loyalty points are calculated.
Paid pre pay	If checked, indicates that for Prepay transactions loyalty points are calculated.
AlarmSrv area:	Check that your system supports the AlarmSrv component to enable this feature.
AlarmSrv	The Alarm Server is a component that manages all the alarms in the system. For example, Out of Paper, Card Reader Error. From the drop-down list, select one of the following options: Not Active – (AlarmSrv is not active in the system). Active – Supported by PumpSrv. Active – Supported by PumpSrv & PosPump.
PosPump vocal alarm severity minimal priority level	Indicates that when the severity level reaches a certain number, an alarm is sounded. From the drop-down list, select the severity level. For example, select 2 to define that all severity level 2's will sound an alarm when reached.

- 3** Click **Apply** to save.
Continue to define *Paths*.

Paths

➤ To Define Paths:

- 1 From the FCC Tree, select **General Parameters**, then click the **Paths** menu. The **Configuration : General Parameters – Paths** dialog is displayed:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Data files path	Click  to select the path and folder in which all configuration data, other than the Registry data, is saved. E.g., XML receipt files, etc.
Firmware filers path	Click  to select the path and folder in which all external data for the terminal is saved. E.g., the RFS downloads data, such as system files for hardware use, to the folders in this path.

Offline Transaction path	Click  to select the path and folder to which transactions are recorded by a controller in case the controller is offline with the fuel system.
Qdx files path	Click  to select the path and folder in which the actual qdx files are saved.
Qdx engine path	Click  to select the path and folder in which the q-load32.exe file is saved.
Database maintenance path	Click  to select the path and folder to which the records of the reloaded QDX (each time a different QDX), is saved.. E.g. for a PumpSrv reload PAP.qdx, new PAP records will be created in MaintQDX folder. When the PAP.qdx reload process ends, PumpSrv will copy the new records to PAP.qdx, while deleting the record file from MaintQDX.

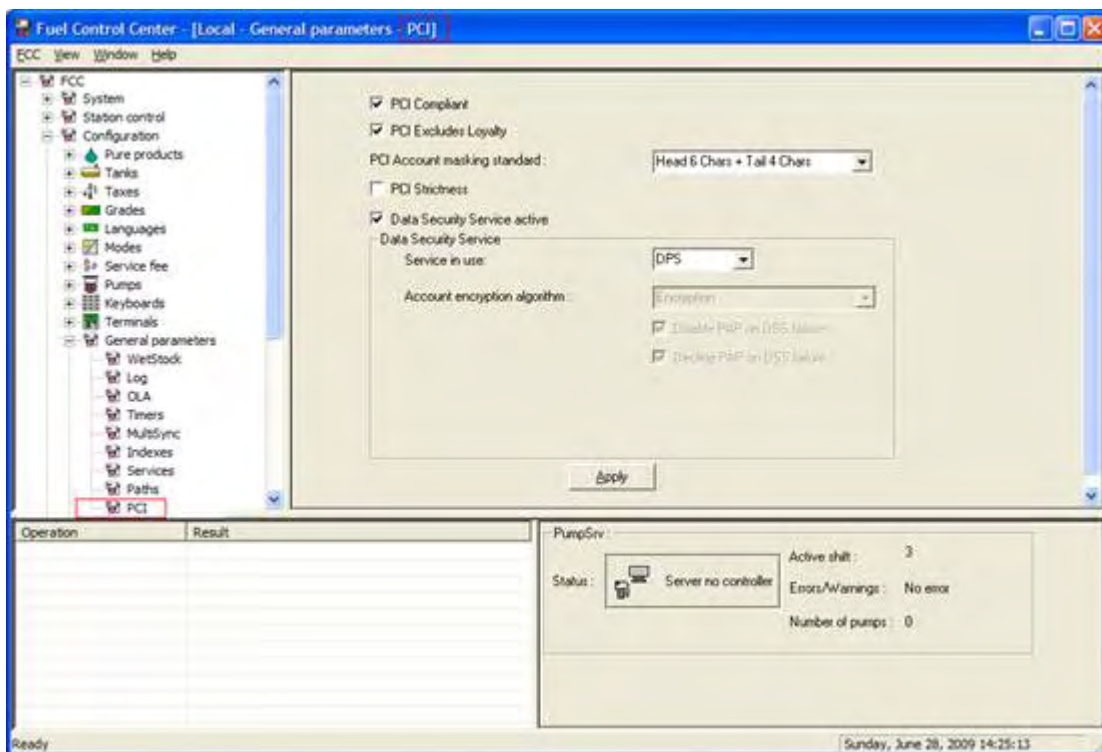
- 3 Click **Apply** to save.
Continue to define PCI.

PCI

The PCI module defines the card account number encryption for transaction data processing, and account number hashing to support receipt searches for reprint.

➤ To Define the PCI:

1. From the FCC Tree, select **General Parameters**, then click the **PCI** menu. The **Local – General Parameters - PCI** dialog is displayed:



2. Enter the required information in the following fields, as described in the table below:

Fields	Description
PCI Compliant	If checked, indicates that the fuel system is compliant with PCI standard requirements.
PCI Excludes Loyalty	If checked, indicates that Loyalty card data will not be masked or removed.
PCI Account masking standard	Specifies the masking standard used for the PCI account. The options are: ▪ Head 6 Chars + Tail 4 Chars – applied to the first 6 characters 'head' and the last 4 characters 'tail' of the PAN number. This is the current standard. ▪ Tail 4 Chars – only the last 4 characters are saved ▪ 16 Digit Rule - applied in addition to the encryption and hashing to the current existing account field in databases (16 digit rule) and in various logs (last 4 characters).

PCI Strictness	If checked, indicates that a validation Add a sensitivity measure to the validation, i.e. strictness of compliance per parameter or parameter set.
Data Security Service Active	If checked, indicates that the DSS is active in the fuel system.
DSS area:	The fields in the DSS area are enabled only if the DSS Active checkbox is checked.
Service in Use	Displays the DSS used.
Account Encryption Algorithm	Specifies the type of account encryption used. The options are: ▪ Encryption - ▪ Hashing – a one way encryption method which produces identical hash code for identical input ▪ Encryption and Hashing - ▪ Asymmetric Encryption and Hashing
Disable PAP on DSS failure	If checked, the Pay at Pump transactions process is disabled when the DSS fails. The fuel system will continuously re-attempt the initialization session in order to recover PAP and receipt reprint functionality.
Decline PAP on DSS failure	If checked, the Pay at Pump transactions are declined, and not authorized after a DSS failure.
Maximum number of PANs to process before re-initialize	Displays the number of cards processed without encryption before trying to re-initialize the encryption processes
	Note: This field is enabled only when Asymmetric Encryption and Hashing is selected from the Account Encryption Algorithm drop-down list

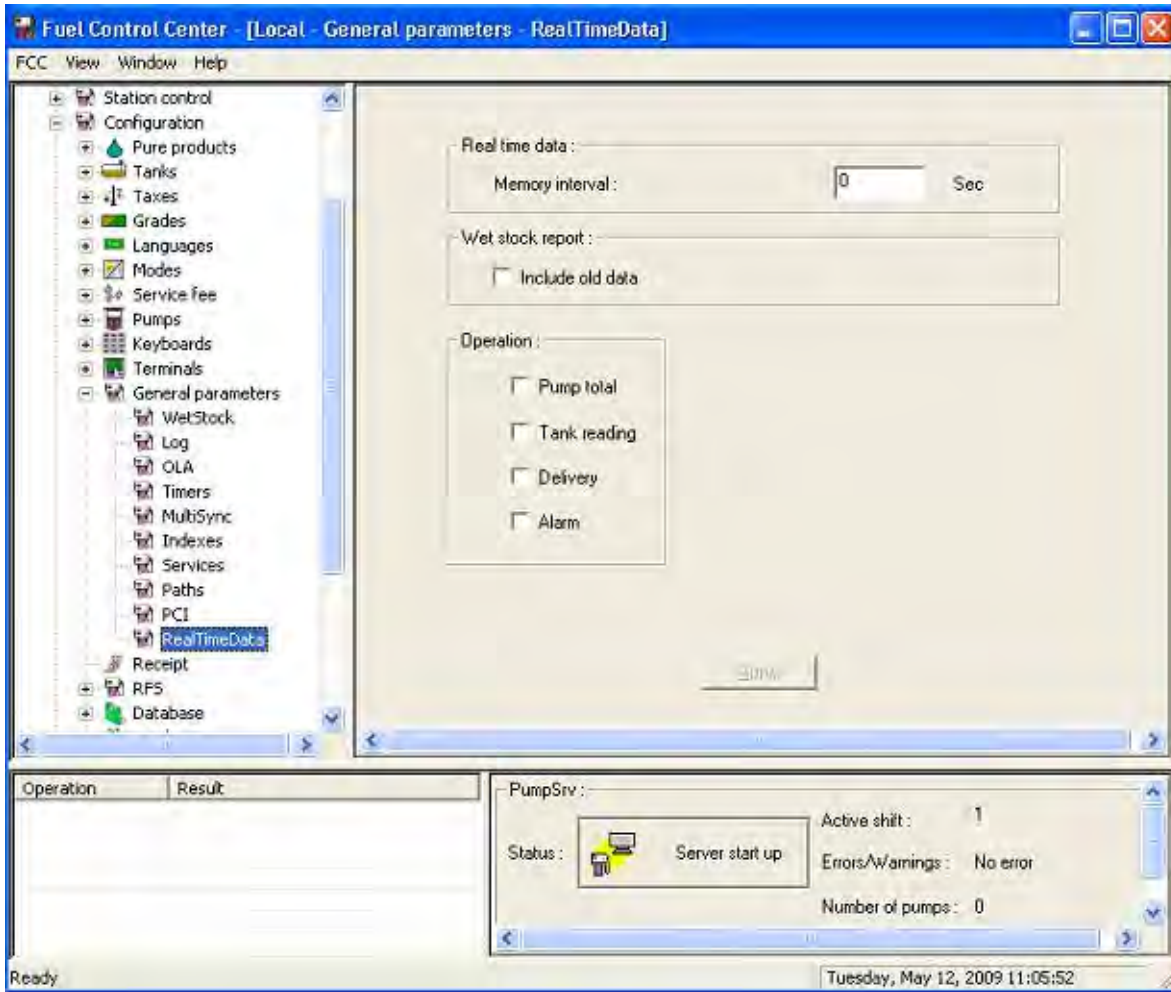
3. Click **Apply** to save.

Continue to define Real Time Data.

Real Time Data

➤ **To Define the Real Time Data:**

1. From the FCC Tree, select **General Parameters**, then click the **Real Time Data** menu. The **RealTime Data** dialog is displayed



2. Enter the required information in the following fields, as described in the table below:

Fields	Description
Real Time Data area	
Memory Interval	Drop-down menu displaying values that indicate the intervals PumpSrv requests the Wetstock readings from the fuel component. The default value is 3600 seconds.
Wet stock report area:	
Include old data	If unchecked, indicates that only current data is included in the Wetstock report.
Operation area:	

Pump total	If checked, indicates that Pump Total readings are performed.
Tank reading	If checked, indicates that a Tank Reading is performed.
Delivery	If checked, indicates that Delivery Reports readings are performed.
Alarm	If checked, indicates that the log alerts of any system problems that are written to the log.

3. Click **Apply** to save.

Once the General Parameters are defined, continue to configure Messages.

Receipt

The **Receipt** menu enables you to customize a customer's receipt. You may add your own header and trailer, for example, Thank You and Good Bye. You may also define messages to print on a receipt if a customer's credit card is declined. The remaining data defined on a receipt, e.g., the Pump Number, Grade, Price etc., which are variants, are parameters defined internally.

➤ **To Define Receipts in the Receipt Menu:**

- 1 From the FCC Tree, click **Configuration**. The **Configuration** menu is displayed.
- 2 Click the **Receipt** menu. The **Receipt000000000** dialog is displayed:

Fuel Control Center - [Local - Receipt]

FCC View Window Help

System
Station control
Configuration
Pure products
Tanks
Taxes
Grades
Languages
Modes
Service fee
Pumps
Keyboards
Terminals
General parameters
Receipt
RFS
Database
Wash programs
AVIs
Price poles
Loyalty
TerminalSrv
TankSrv
Connection
Flow Control
Viewers
Statistics

Receipt part : Header

Welcome !!!

Line length : 20

Reprint receipt :
Reprint time out : 5 Hours
Maximum number of copies : 3

Counters :
Receipt number : 01
Counter : 1666
Max counter : 999999

Align :
Left Center Right

Clear all

Apply

Extra receipt index :
☐ Active

Extra receipt Data:
Print receipt extra data every 0 receipts

Operation	Result

PumpSrv :
Status : Server start up
Active shift : 1
Errors/Warnings : No error
Number of pumps : 0

- 3 Enter the required information in the following fields, as described in the table below:

Fields	Description
Receipt part area:	Select Header , Trailer or Hot Pumping from the drop-down list, to indicate which section of the receipt you wish to define. Header appears at the top of the receipt. Trailer appears at the bottom of the receipt. Hot Pumping is a message that is printed on the receipt if a credit card is declined. It only applies when a credit card is used and Hot Pumping is enabled. Note: Once you have selected the receipt part type, the name of the selected part of the receipt is displayed in the text field.
Align area:	
Left	Indicates that the text is aligned to the left.
Center	Indicates that the text is centered.
Right	Indicates that the text is aligned to the right.
Clear all	Clears all text from the fields above.
Line length	Number of characters per line.
Reprint Receipt area:	
Reprint Timeout	Indicates how long a receipt is kept in the QDX file, before deleting. For example, if you define 3 weeks, a customer may receive a reprint of a receipt within 3 weeks from the time of the transaction.
Maximum number of copies	Indicates maximum number of copies that PumpSrv can reprint, if requested, before Reprint Timeout has elapsed. (For further details see Reprint Timeout, above.)
Counters area:	This area of fields only applies to RFS Systems.
Receipt number	The type of the receipt.
Counter	Invoice number.
Max counter	The maximum number of Invoice numbers before the system restarts the counting.
Extra Receipt Index area:	
Active	If checked, indicates that receipts may be reprinted according to Car's Registration number, which is printed on the receipt.
Extra Receipt Data area:	
Print Receipt Extra Data every x receipts	Indicates the number of receipts that must be printed before the Extra data message is printed on the receipt. For example, if 5 is entered, the Extra Data message is printed on every sixth receipt printed.

- 4 Click **Apply** to save.

Once you have defined receipts, continue to configure the **Convert Layers**.

Convert Layer

The **Convert Layer** menu enables you to set up and define various parameters for payment and payment terminals.

The Convert Layer is a software component which bi-directionally converts general commands of PumpSrv into specific Controller commands and responses.

Note:

Before you begin the configuration of the Convert Layer, identify the type of Convert Layer in your forecourt. Then refer to the appropriate section in this manual, describing the particular Convert Layer.

There are eight types of Convert Layers described in this document:

Allied

Meggitt

RFS

DOMS

Postec

Wayne

IFSF

htec

Configuring an Allied Convert Layer

If your controller uses an Allied Convert Layer, configure the Convert Layer as explained below.

➤ **To Enter Data in the Convert Layer:**

- 1 From the FCC Tree, click **Configuration**. The configuration menus are displayed.
- 2 Click the **Convert Layer** menu. The **Convert Layer – Allied** dialog is displayed:

Note:

You may not be able to see the full screen; click the scroll-bar  to view all parts of the screen.

- 3 Enter the required information in the fields as described in the table below:

Fields	Description
General area:	
Accept Credit	Indicates whether the Convert Layer supports credit cards.
Accept Debit	Indicates whether the Convert Layer supports debit cards.
Card Host Store/Forward	If checked, indicates that on this system the ANDI site controller is connected directly to the Card Host and that the Card Host supports a store/forward mechanism. If not selected, the customer is not prompted to swipe a card at the terminal when the connection with the Card Host is down.
Card Suspends Post	If checked, enables the system to stop a card transaction during fuelling.

Fields	Description
Pay	For example, if a specific pump is defined as Pay at Kiosk, and a customer starts fuelling, and then by error swipes a card for authorization, intending to Pay at Pump, the system automatically disregards the card and the customer may continue with the PAK transaction.
Carwash requires printer	If checked, indicates that the system requires a working printer at the forecourt through the DPT or IPT, for purchasing a car wash.
Credit by Controller	If checked, the forecourt controller is responsible for processing online authorization of credit and debit cards against the authorizer. This enables the system to support gift cards as payment at the pumps, the system routes these cards to an additional authorizer through the Retalix modules. Credit and debit transactions are routed to one authorizer (through the forecourt controller), and the SVC transactions to another.
Press Enter when done	This parameter enables you to enable or disable the system prompt “Press Enter When Done”, or “Then Press Enter” during a transaction flow in which a Customer is required to press the Enter key after an amount, or any other numeric input, such as an odometer or driver ID number is entered.
Price Change While Nozzle Out	Indicates that the Convert Layer supports price changes when the handle is up during a price change process.
Remove Nozzle Pay Inside	If checked, on removing the nozzle the default specifies that the Customer must pay inside the kiosk. There is no need to press a Pay Inside button.
Simulator	If selected, the Convert Layer supports a simulator.
Treat barcode scan as card reader swipe	If checked, indicates that the card barcode can be scanned on the terminal. The data returned is identical to the data returned when the card is swiped.
Use Graphic Messages	Indicates whether you can display predefined graphic messages.
Use Mode Related Prompt	If checked, indicates that the PumpSrv controls the mode scheme and sends the data to the convert layer.
TLS Capture area:	TLS is the Tank Level System. This field refers to the Tank gauge. Enter the text file name where the data on the Tank gauge is saved.
File	TLS is the Tank Level System. This field refers to the Tank gauge. Enter the text file name where the data on the Tank gauge is saved.
Remote File Access area:	
Path	The path indicating the location of remote files accessible to the <i>Site Controller</i> , and is used to define the path of the terminal graphic images when graphical terminals are used.
Sales Display area:	
Mode	Determines the behavior of the dispenser sales display after a transaction is paid off. The options are: ▪ 0 – Pay off does not affect the dispenser sales display. ▪ 1 – Displays the default price level. If the default price level differs from the price level of the last sale, then both the amount and volume are displayed. ▪ 2 – Displays the default price level and always clears both the amount and volume displays.
Delay	Indicates number of seconds between displaying the last transaction information, and the Idle mode information. This field requires that the

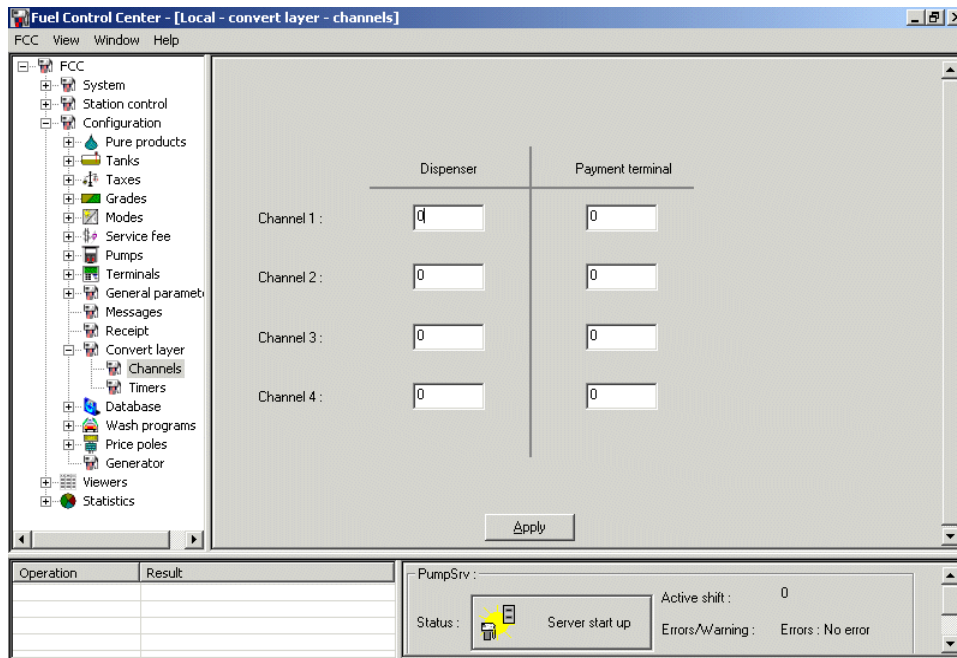
Fields	Description
	Sales Display Mode is set to 1 or 2.
Carwash Price	From the drop-down list, select the option to indicate if car wash prices are displayed with or without tax at the Pump. The options are: ▪ Don't Show - indicates that no carwash price is displayed ▪ Show With Tax – to show the carwash price at the pump including tax ▪ Show Without Tax - to show the carwash price at the pump without taxes This field is relevant to sites in regions where the tax laws dictate how prices should be displayed.
Receipt area:	
Ask to Print Receipt	Indicates when to prompt the customer about receiving a receipt: After card approval, At Beginning of Fuelling, While Fuelling, After Fuelling, Print always or No Receipt Needed.
Receipt Prompt Default	From the drop-down list, select the option to determine the action if there is a timeout for the Receipt Yes/No prompt after fuelling. The options are: ▪ Yes – indicates that a receipt is printed ▪ No – indicates that a receipt is not printed or the prompt returns after fueling
Generator Active	If checked, indicates that a Receipt Generator formats the receipt printed at the terminal.
POS Receipts Only	If checked, indicates that hat only receipts issued at the POS are printed.
Print Customer Acct.	Indicates whether the customer's credit card account number is printed on the receipt.
Limit area:	
Limit handler	Displays the method used to calculate the transaction limit. The options are: ▪ Allied - Limits are sent to Allied as they are ▪ CL by Value - CL calculates the maximum value available, using the following formula: Loyalty volume limit * Most expensive grade ▪ CL by Volume – Limits the volume
Format area:	
Allied	When selected, indicates that the first receipt that is printed at the Pump is formatted by Allied, in the standard Allied format. This format includes the variants that always appear on receipts, e.g., Receipt Number, Pump Number, Grade Type, etc. Note: Once this radio button is selected the Reprint Receipt Format drop-down list is enabled; for further details see <i>Reprint Receipt Format</i>, below.
PumpSrv	When selected, indicates that <i>PumpSrv</i> formats both the original receipt printed at the pump, as well as receipt reprints printed at the terminal. From the drop-down list select the required format for printing the receipt. Notes: Once this radio button is selected the Reprint Receipt Format drop-down

Fields	Description
	list is disabled, since both the format of the receipt, as well as the format of the reprinted receipt, are selected next to the radio button.
	2. Selecting the receipt type is available only when using credit cards.
Reprint Receipt Format	Enables you to select a format of the reprinted receipt. (For further details see Allied and PumpSrv, above.)
Static area:	The following fields are used to configure the antenna when the station is using an RFID (an Radio Frequency ID) device to allow customers to pay.
Active	If checked, indicates that the RFID is active in the system.
Station ID	Displays the ID number of the station.
Page ID	Displays the Page ID number.
Company ID	Displays the Company ID number.
Log File Name	Displays the name of the log file used to save the transactions.
Coupon Printing area:	The coupon printing is related to the reward setup at the Grade level. If the following Coupon Printing parameters: Prepay and PAP is set, the system checks for the relevant grade setup, and if the customer is entitled to a reward, a coupon is printed.
	Note:
	The reward details and threshold are defined in <i>Grade</i> setup. For further details, see Configuration/Grades. In addition, a receipt template must be defined for a coupon.
Pre Pay	Indicates that during pre pay transactions coupons may be printed. From the drop-down list, select the relevant option: - Always print - Never print
PAP	Indicates that during pay at pump transactions coupons may be printed. From the drop-down list, select the relevant option: - Always print - Never print - Print for members
Log area:	
Level	Indicates level of log details, e.g., level 1 indicates no logs, level 5 indicates full log details.
Log Watchdog	Indicates whether <i>Watchdog</i> actions are included in the <i>Convert Layer</i> log.
	Note:
	It is not recommended to check the Log active, unless there are communication problems between the Allied box and the <i>Convert Layer</i> .
Cash Limits area:	
Amount Limit	Indicates the maximum cash amount accepted by the Cash Acceptor per transaction.
Bill Limit	Indicates the highest cash bill accepted by the Cash Acceptor per transaction.

Fields	Description
Language area:	
Default Language	From the drop-down list, select the default language displayed on the customer payment terminal.
Language Selection	If checked, indicates that more than one language is available on the terminal display.
Member area:	
Default ID	Enter the default ID, which is used by <i>PumpSrv</i> to record Member details.
Prompt Mode area:	
Active	If checked, indicates that Pay At Pump customers are required to present a Member ID at the terminal to unlock the dispenser before fueling. The Member ID may be a magnetic stripe, Barcode, keyed number, etc. Once the dispenser is unlocked, the terminal prompts the customer to select one of the payment methods.
Manual Entry	If checked, keyed Member ID is allowed.
Card Swipe	If checked, the customer's member card is accepted as payment.
Barcode as Member	If checked, a Barcode is accepted as the Member's ID.
Barcode as Payment	If checked, a Barcode is accepted as payment or discount coupon.
Requesting as Ready	Indicates when the authorized request appears at the PoS terminal. Select an option from the drop-down list: - No - Only full service - Only self service - Yes always
Card Type	After a customer has swiped card, this parameter indicates whether the card is identified as a credit or debit card – at the pump or at the PoS. Select an option from the drop-down list.
Encryption Type	From the drop-down list, select the relevant encryption type according to how your site works and what environment it supports. The options are: DUKPT – indicates that every transaction gets an encryption key. Master/Session – indicates that the bank decides when to send the key for an update. MLKH (Canadian Debit) – Used for Canadian debit. Note: This field relates to debits. For further details, see the section on Debits Setup.
Customer Prompt Mode	This field is the Terminals configuration parameter that allows the POS to control at what point in the transaction the Station Site Controller displays the customer prompts, e.g., Remove Nozzle. Select an option from the drop-down list. Note: This is an internal configuration for the <i>Convert Layer</i> . We advise you to contact Retalix technical support to define this field.

Fields	Description
VR Protocol	Veeder Root is the name of a Tank gauge system. Select an option from the drop-down list: TLS250 or TLS350.
Debit Price Level	Indicates whether a debit card is charged at Credit card price or Cash price. Select an option from the drop-down list:
Business Logic	This code is currently relevant to a specific client. Enter the applicable code. Select an option from the drop-down list:
Card Reader Pay Mode	A configuration parameter that allows the POS to control at what point in the card reading pay mode the Station Site Controller displays customer prompts. Select an option from the drop-down list: Note: This is an internal link for the <i>Convert Layer</i> . We advise you to contact Retalix technical support to define this field.
Forecourt Preset Mode	If checked, indicates that the Customer or Attendant is prompted to enter a Preset Amount at the pump terminal keyboard.
Transaction Seed	A parameter used to maintain synchronization with the site controller.
Slow Down Offset (Gal/10)	The value indicates after how many gallons, before the end of the transaction, the pump must start reducing the flow of fuel, before reaching the requested amount. For example, if the sum authorized is 15 gallons, and the Slow down offset is set to 1, at 14 gallons the pump starts reducing the flow of fuel.
Rolling Update (Sec)	Indicates how often, in seconds, PumpSrv requests a status update from the pump, during fuelling.
DPT Operation Mode	Indicates that the Payment terminal is integrated into the fueling point.
Minimum value to arm diesel pump	Indicates the minimum value allowed for a Reefer transaction. In a combined transaction the Diesel transaction is authorized first, and the Reefer part will be authorized only if the credit value remains after the fuel is sufficient for a minimum transaction.
Injected Prompts	Indicates that during the card authorization process, the system occasionally displays messages on the terminal screen display, such as "Your fee is \$x", or "Please enter car registration", etc. In an environment where there is no option to send text directly to the terminal, the convert layer compares the text sent to find the screen number of the predefined injected prompt. The options are: ▪ None - Default, indicates that it is not active. ▪ Commercial Fueling - in this environment Allied are in charge of injecting the proper prompt ▪ Regular – indicates that there is Convert Layer Manipulation to check the received prompt through string comparison, enabling the system to then load the proper Allied prompt.
DPT Show Ads	Indicates that the system displays Ads at the DPT and/or IPT displays.

- 4 Click **Apply** to save settings. Proceed to define the Channels within the Allied Convert Layer.
- 5 From the FCC Tree, expand the Convert Layer, and then click **Channels**. The **Convert Layer – Channels** dialog is displayed:

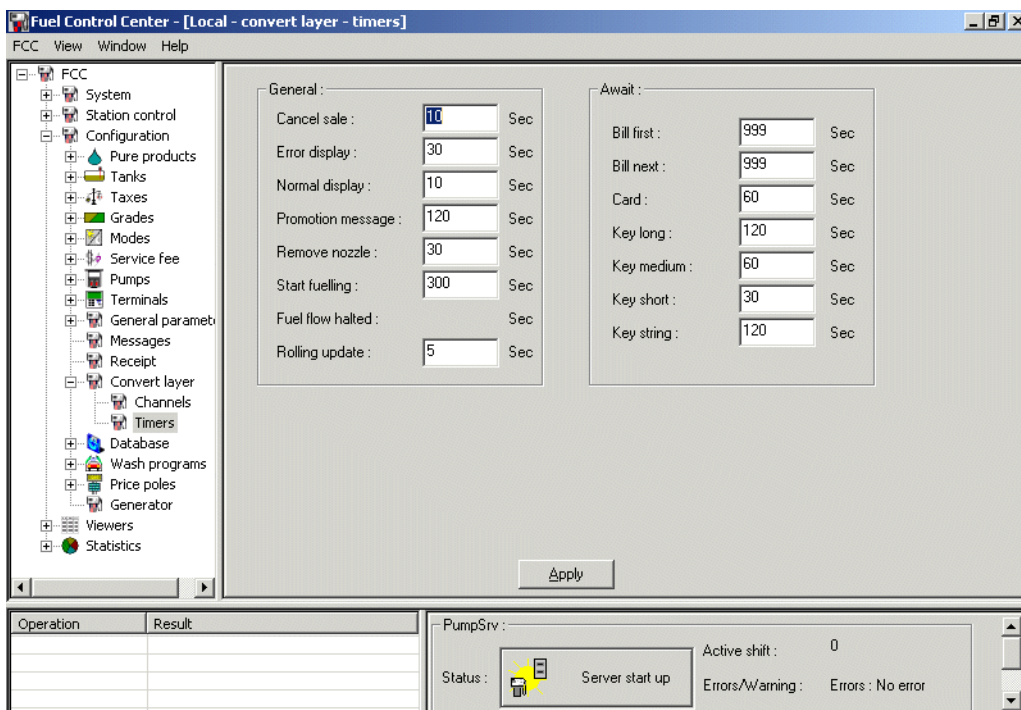


- 6 Enter the required information in the fields as described in the table below:

Fields	Description
Dispenser area:	
Channel 1	Indicates number of dispensers connected to serial cable channel 1.
Channel 2	Indicates number of dispensers connected to serial cable channel 2.
Channel 3	Indicates number of dispensers connected to serial cable channel 3.
Channel 4	Indicates number of dispensers connected to serial cable channel 4.
Payment Terminal:	
Channel 1	Indicates number of payment terminals connected to serial cable channel 1.
Channel 2	Indicates number of payment terminals connected to serial cable channel 2.
Channel 3	Indicates number of payment terminals connected to serial cable channel 3.
Channel 4	Indicates number of payment terminals connected to serial cable channel 4.

- 7 Click **Apply** to save the Allied Channels. Proceed to define the Timers.

- 8 From the FCC Tree, expand the Convert Layer, and then click **Timers**. The **Convert Layer – Timers** dialog is displayed:



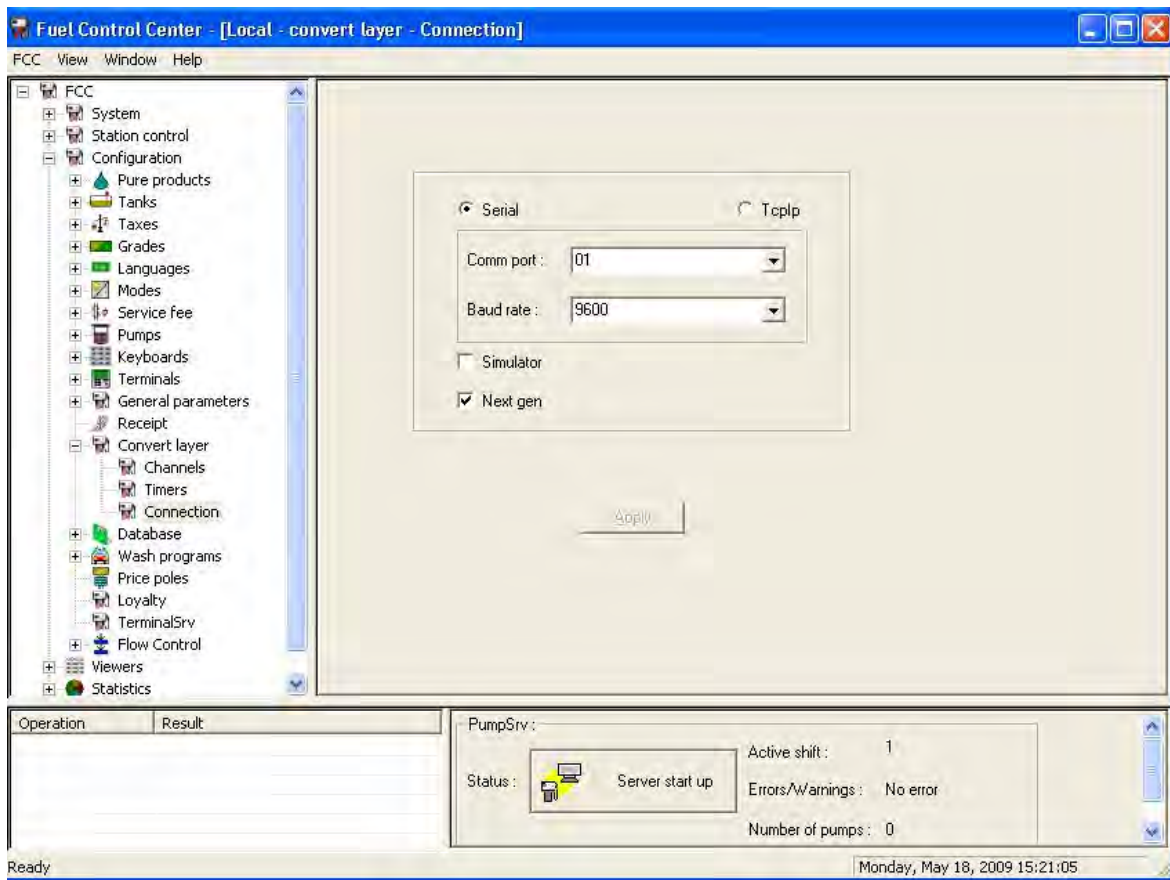
- 9 Enter the required information in the fields as described in the table below:

Fields	Description
General (seconds) area:	
Cancel Sale	Indicates how long the payment terminal displays a cancellation message before reverting to Idle mode.
Error Display	Indicates the maximum time that an error message displays on the payment terminal before the system reverts to Idle mode.
Normal Display	Indicates the maximum time that a normal message (e.g., Thank You, Receipt Ready) is displayed, before the terminal reverts to Idle mode.
Promotion Message	If a promotional message has been programmed, the payment terminal toggles between the fuelling message and the promotional message while the dispenser is fuelling. This parameter determines the display duration of the promotional message.
Remove Nozzle	After the payment terminal authorizes a sale, the customer has a limited time to initiate the sale by removing the nozzle. This parameter determines that interval. If the nozzle is not removed within the specified period, the sale is cancelled, and the dispenser is de-authorized.
Start Fuelling	After a sale is authorized, the customer has a limited time to start dispensing fuel. This parameter determines that interval. If fuelling does not begin within the specified period, the sale is cancelled and the dispenser is de-authorized.

Fields	Description
Fuel Flow Halted Timer	This function is used to prevent a customer from fueling at the expense of the previous customer if the nozzle was not replaced after the first customer stopped fueling. Once a fuel flow starts, the Station Controller starts monitoring the sale to determine if the dispensed volume is increasing. Once it stops increasing, the timer starts, and after the specified number of seconds passes, the Station Controller will issue a pump stop command. This prevents further fuel flow within the transaction.
Rolling Update	Indicates how often, in seconds, PumpSrv requests a status update from the pump, during fuelling.
Await (seconds) area:	
Bill First	Indicates how long the system waits for the first bill once the customer selects Pay Cash at the Cash Acceptor, before canceling the transaction. Note: The Cash Acceptor option is not yet supported by Allied.
Bill Next	Indicates how long the system waits for the customer to insert the next bill, if the customer selects Pay Cash at the Cash Acceptor option, before canceling the transaction. Note: The Cash Acceptor option is not yet supported by Allied.
Card	Indicates how long the system waits for card data after the customer selects Pay Credit Outside .
Key Long	Indicates how long the system waits for customer input. The input is a single keystroke, for example: "Car Wash? Yes or No." Used when the system needs a response, or when the prompt is displayed while fuelling.
Key Medium	Indicates how long the system waits for customer input; the input is a single keystroke. Used when a customer is prompted to make a selection from a menu, which may be displayed using a scrolling text, for example: "Select Car Wash 1" or "Economy 2" or "Deluxe".
Key Short	Indicates how long the system waits for customer input. The input is a single keystroke, for example: "Receipt? Yes or No." Used when there is a default response, or when the prompt can be repeated at a later time.
Key String	Indicates how long the system waits for customer input, which can consist of multiple keystrokes on the keyboard. Examples: "Enter Odometer Reading," "Enter Drive Number" or "Enter Preset \$."

10 Click **Apply** to save. Proceed to define the Connection.

11 From the FCC Tree, expand the Convert Layer, and then click **Connection**. The **Convert Layer – Connection** dialog is displayed:



- 12 Enter the required information in the fields as described in the table below:

Fields	Description
Serial	Select this radio button if your system uses a serial system to connect between the servers and pumps, and then proceed to select the Comm port and Baud Rate numbers.
Tcplp	Select this radio button if your system uses Tcplp to connect between the servers and pumps, and then enter the relevant Port and IP Address.
Comm Port	Indicates communication port number.
Baud Rate	From the drop-down list, select the baud rate, indicating the rate of the communication line, which is the number of transitions (voltage or frequency changes) that are performed per second.
Simulator	If checked, indicates that the Allied Convert layer is used with a software pump simulator.
NexGen	If checked indicates that the system supports the Allied NexGen controller.

- 13 Click **Apply** to save.

The **Allied Convert Layer** is defined. Proceed to the Database Configuration.

Configuring a Meggitt Convert Layer

In the Meggitt system the Site Controller uses a Meggitt Convert layer and is responsible for the transition of information between the site controller and POSpump.

PumpSrv, which generally works in two operating modes: Master and Slave, in this setup, is intended to be a Slave system. It synchronizes its display with whatever system status the site controller reports, and in this setup acts as the interface to the Back Office, the Master application.

The files used are SC text files, which are usually located in C:/SC. The text files hold all the configuration details and default information required by the site controller and the pumps.

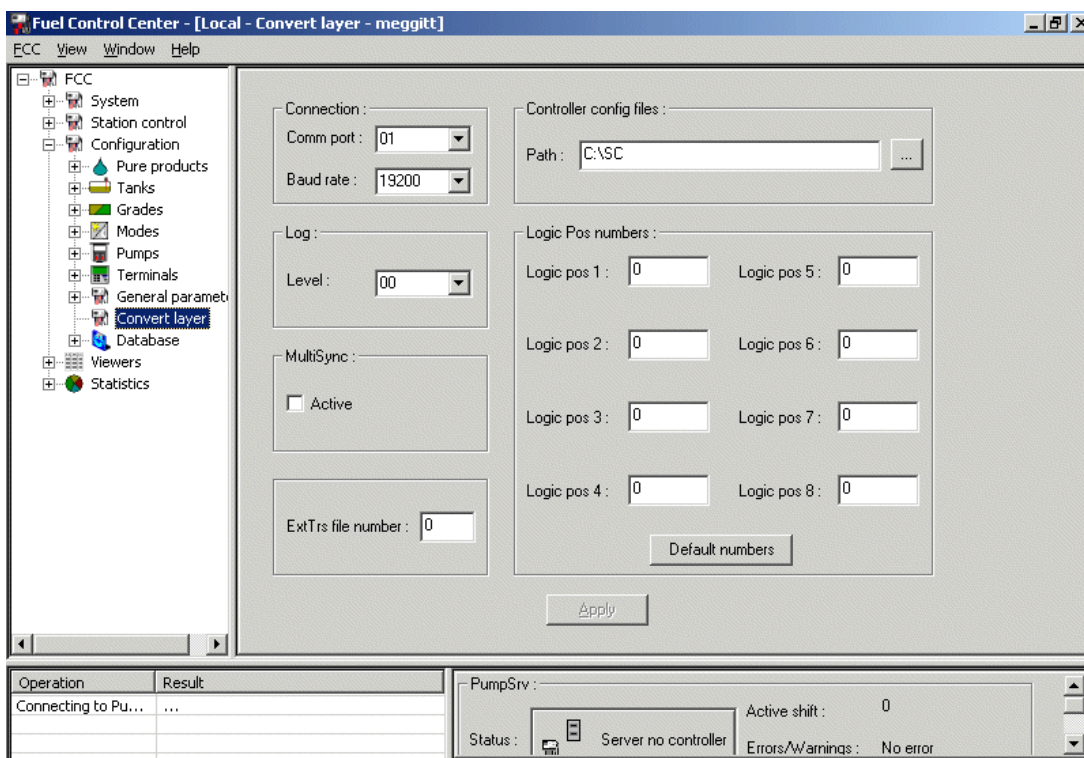
If your controller uses a Meggitt Convert Layer, configure the Convert Layer as explained below.

Note:

1. You do NOT have to configure the system Registry tables in the FCC Configuration section.
2. Meggitt receives configuration data and upgrades via the SC text files.
3. The **only** sections relevant from the Configuration chapter are: General Parameters and Modes, which must be defined as Valid. See Configuring Modes and Configuring General Parameters, earlier in this chapter.

➤ **To Enter Data in the Convert Layer:**

- 1 From the FCC Tree, click **Configuration**, then click the **Convert Layer** menu. The **Convert Layer –Meggitt** dialog is displayed:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Connection area:	
Baud	Indicates communication speed. Select from the drop-down list the relevant Baud rate.
Com Port	Indicates communication port. Select the relevant Com Port from the drop-down list.
Log Level area:	
Current Log Level	The Log details are saved by PumpSrv in a Log file. From the drop-down list, select the level of log details, e.g., level 00 indicates no logs, level 03 indicates full log details.
MultiSync area:	
Active	If checked, indicates that the MultiSync Management Utility is active in the system.
Note:	
For further details on the MultiSync Management Utility, refer to the Retalix MultiSync Management Utility Administrator's Guide .	
Controller config files area:	

Fields	Description
Controller config files	The path indicating the Controller configuration files accessible to the site controller. Note: Currently the Controller Configuration files are the SC files. Click  to display the directories to select the controller configuration files path. This field enables you to browse and change file location. Currently the SC files are usually located in C:/SC
ExtTrs File Number	External transaction QDX file number for all fuel transactions in the system. The ExtTrs component creates a code containing all transaction parameters (date, hour amount etc.) to the server and the information is stored.
Logic Pos Numbers area:	The Meggitt Convert Layer can only support up to 8 PoS devices per Site Controller. In a Fuel Station, the PoS terminals may be installed and defined with local numbers, e.g., a store may have PoS terminals numbered 88, 63, 65 etc. The Logic PoS acts as a converter table, enabling it to recognize the relevant POS terminal.
Logic Pos 1	Enter the POS number defined in the Fuel Station, e.g., 81 is the current default.
Logic Pos 2	Enter the POS number defined in the Fuel Station, e.g., 82 is the current default.
Logic Pos 3	Enter the POS number defined in the Fuel Station, e.g., 83 is the current default.
Logic Pos 4	Enter the POS number defined in the Fuel Station, e.g., 84 is the current default.
Logic Pos 5	Enter the POS number defined in the Fuel Station, e.g., 85 is the current default.
Logic Pos 6	Enter the POS number defined in the Fuel Station, e.g., 86 is the current default.
Logic Pos 7	Enter the POS number defined in the Fuel Station, e.g., 81 is the current default.
Logic Pos 8	Enter the POS number defined in the Fuel Station, e.g., 00 is the current default.
Default Numbers	Click to return default numbers.

3 Click **Apply** to save.

You have defined the **Meggitt Convert Layer**.

Configuring the RFS

If your controller uses the RFS, configure the Convert Layer as explained below. When configuring the RFS there are extra specific parameters to define.

➤ **To Enter Data in the Convert Layer:**

- 1 From the FCC Tree, click **Configuration**. The **Configuration** menu opens.
- 2 Expand the FCC Tree to view the list of menus, and then click the **RFS menu**. The **Convert Layer – RFS** dialog is displayed:

The screenshot shows the 'Fuel Control Center - [Local - controller]' window with the 'RFS' menu selected in the left-hand tree. The main area displays the 'Convert Layer – RFS' configuration options:

- General:**
 - Volume for promotion: 5 Liter / Gallon
 - Number of digits in vehicle id: 7
 - Minimum number of odometer digits: 4
 - Encryption type: Master/Session
 - Debit pin max input length: 4
 - Debit pin min input length: 1
 - Fueling validation threshold (cc): 0
 - ☐ Hold pump totals information in memory, and update it
 - ☐ Present confirmation question after EOS is chosen from
 - ☐ Prompt limit before authorization of waste trs
 - ☐ Save loyalty card info on transaction cancel
 - ☐ Stop pump on transaction deviation
 - ☐ Trs are cleared by POS
 - ☐ User must choose grade before authorizing pump
 - ☒ Write transactions log
- Receipt mode:**
 - AVI: Ask user
 - Pay at pump: Ask user
 - Pay at kiosk: Never
 - Attendant: Always
 - Cash acceptor: Always before fueling
 - PrePay: Never
 - ☐ Parse receipt unsolicited text
- AVI:**
 - Conflict volume limit: 1000 milli Liter / Gallon
 - ☒ Check for AVI conflict
 - ☐ Check fuel code
 - ☐ Ignore AVI during PAP and Attendant
- Attendant / Buy at pump:**
 - ☐ Ask for loyalty always (cash or credit)
 - ☐ Ask for payment card on attendant transac
 - ☐ Attendant double check
 - ☐ Auto close on preset cash
- Pay at pump:**
 - Maximum bad swipes: 5
 - Display post transaction message: 0
 - ☒ Ask for loyalty card while PAP
 - ☐ Authorize pump with price level from OLA
 - ☒ Authorizer needs grade to authorize
 - ☐ Card detection during PAK
 - ☐ Cash Register Printer
- TankSrv:**
 - ☐ Active
 - ☐ Reconciliation active

The bottom status bar shows 'Ready', 'Status: Server start up', 'Active shift: 1', 'Errors/Warnings: No error', and 'Number of pumps: 0'. The date and time are 'Tuesday, May 12, 2009 11:22:17'.

- 3 Enter the required information in the fields described in the table below:

Fields	Description

General area:

Volume For Promotion	Each time the dispenser reaches the displayed number of gallons; the system triggers a promotional message.

Fields	Description
Number Of Digits In Vehicle ID	Defines the number of vehicle ID digits entered when paying by credit card. The payment terminal prompts after swiping a card, to enter the vehicle ID digits.
Minimum number of odometer digits	Displays the minimum amount of digits that must be entered for the odometer.
Encryption Type	From the drop-down list, select the relevant encryption type according to how your site works and what environment it supports. The options are: ▪ DUKPT – indicates that every transaction gets an encryption key. ▪ Master/Session – indicates that the bank decides when to send the key for an update. ▪ Wayne Encryption (20 bit) – indicates that there is no need to install an external encryption device. Only in use with Wayne CAT's. ▪ MLKH (Canadian Debit) – Used for Canadian debit. Not supported in the RFS. Note: When enabling the Encryption Type for debits, you must also enable the encryption in Terminals. For further details, see Configuring Terminals.
Debit Pin Max Input Length	Specify the maximum number of digits that must be entered when the system requests a Pin number to validate a credit card.
Debit Pin Min Input Length	Specify the minimum number of digits that must be entered when the system request a Pin number to validate a credit card.
Add service fee to preset on credit transaction	If checked, indicates that a service fee is automatically added to credit transactions.
Allow loyalty in PAK transaction	If checked, indicates that a loyalty card can be swiped in a PAK transaction.
Allow loyalty swipe while dispensing	If checked, indicates that the customer can swipe a loyalty card during a transaction.
	Note: This field is only relevant if your system supports loyalty.
Allow pay at kiosk on card reader error	If checked, indicates that if at a PAP transaction, there is a card error, the system can transfer the transaction to the cashier (PAK). A PAK soft key is displayed. If the User doesn't press the key, the transaction is cancelled.
Allow terminal switch pump only on IDLE pumps	If checked, enables switching between pumps only if the pump is in idle state.
Attendant is asked for item sale after fueling	If checked, indicates that the terminal prompts the attendant to enter any item sales once fuelling is complete. E.g., Are you interested in more Items"? Once the attendant selects 'Yes', the system then prompts the list of items, and the qty, etc., until the transaction is complete. If this parameter is not checked, the item list is displayed automatically once fuelling is complete.

Fields	Description
Attendant preset transaction is set to cash price level as default	If checked, indicates that even if the transaction is not a cash transaction, if it is a preset transaction, the system takes the Cash Price Level as the default. The Cash Price Level is predefined in Grade Setup.
Attendant transaction without item sale	If checked, indicates that no item sales are prompted during the transaction. E.g., once the system prompts "Please Replace Nozzle", the transaction is complete, and the system proceeds to the payment type screen, skipping the item sales screens.
Note:	
This flag is only relevant to Attendant flows.	
Cancel as clear	If checked, indicates that pressing 'Cancel' while waiting for the user to enter data, such as the odometer number, car registration, etc., does not cancel the transaction, however, clears the numbers already entered.
Disable discount downloading	If checked, indicates that if there is a discount on the fuel and the price changes, there will be no rollback at the pump. However, the system will re-calculate the discounted price after fuelling.
Disable reprint when no PAP	If checked, when a pump is idle, and a PAP transaction is not available, the "Reprint PAP Receipt" function is disabled.
Don't Shutdown after 1 hour when using high hardware log level	If checked, indicates that the high hardware log level is not shut down after one hour. High log levels record every activity and event between the RFS and the devices, and the log gets very heavy. In order to avoid it becoming mega giga bytes, this parameter is set off, however, during circumstances where a problem is not found, you may need a high log level.
Enforce transaction type selection	If checked, indicates that after the nozzle is lifted, the user must select the transaction type (pay inside/pay outside) before the pump can be authorized.
Hold pump totals information in memory, and update it after every finished transaction	If checked, indicates that the RFS keeps each Pump's total for all transactions performed in the memory. This data can be retrieved during EOS on the Back Office.
Present confirmation question after EOS is chosen from the terminal	If checked, indicates that once EOS is selected from the terminal's menu, the terminal prompts to confirm that EOS is to take place.
Prompt limit before authorization of waste trs	If checked, indicates that during waste transactions, a transaction limit is prompted before authorization.
Save loyalty card info on transaction cancel	If checked, indicates that the system saves the loyalty card information even when a payment card is cancelled or declined. This is so that the information is saved for the next payment card.
Trs cleared by POS	If checked, indicates that the POS should inform the fuel server that the transaction is complete. Only then, the transaction will close in the controller itself (RFS).
User must choose grade before authorizing pump	If checked, indicates that the user must select the grade type before the pump can be authorized. This screen is prompted during the transaction flow.

Fields	Description
Write Transactions Log	If checked, all transactions are written to a transaction log file, including all the details, e.g., date, time, value, etc.
Receipt mode area:	
AVI	Specifies whether the customer will receive a receipt after an AVI transaction. Select the required option from the drop-down list, e.g., Ask User.
PAP	Specifies whether the customer receives a receipt after a PAP transaction. Select the required option from the drop-down list, e.g., Ask User or Always.
PAK	Specifies whether the customer will receive a receipt after a PAK transaction. Select the required option from the drop-down list, e.g., Always, Ask User, or Never.
Attendant	If your system supports Attendant /Buy at Pump transactions (cash or credit), the terminal prompts the customer for a loyalty card after the transaction begins.
Cash Acceptor	Specifies that the system supports a Cash Acceptor peripheral on outside payment terminals. The options are: After Fueling Unbalanced Only- the system prints a receipt when the customer pays into the Cash Acceptor, which specifies the amount paid and trs no. After fuelling, another slip is printed specifying the customer's change due. The customer may claim change, if relevant, from the cashier. Always Before Fueling- the system prints a receipt when the customer pays into the Cash Acceptor, which specifies the amount paid and trs no., and no slip is printed at the end of the transaction. The customer must go to the cashier and request change, if relevant, according to the pump No. on which the transaction was performed. Never- no receipt is printed.
PrePay	Specifies whether the customer will receive a receipt after a PrePay transaction. This is only relevant for balanced pre paid transactions. Select the required option from the drop-down list, e.g., Always, Ask User, Never.
Parse Receipt Unsolicited Text	If checked, system looks for messages sent by the authorizer to be placed in the receipt. If this field is checked, the Unsolicited Message Encoding Validation field is then referred to.
AVI area:	
Conflict Volume Limit	The maximum number of gallons liable for payment by the AVI device, or the customer if the pump detects an AVI device after it starts dispensing. For example, if the volume limit is 2 gallons and PumpSrv detects an AVI device after dispensing 1.5 gallons, the AVI device is liable to pay for the 1.5 gallons. If it is over the limit, the customer is liable to pay for the fuel.

Fields	Description
Check For AVI Conflict	Handles RFS logic when an AVI device is detected while dispensing via any transaction type. If checked, and an AVI device is detected, the AVI Conflict Volume Limit field is then used. (See below). For example, customer may start fuelling without knowing the vehicle contains an AVI device, and after one gallon is dispensed an AVI device is detected by the system. If not checked, and a transaction starts and then an AVI device is detected, the system stops the fuelling and continues with the original transaction type.
Check Fuel Code	If checked, PumpSrv checks if the correct grade is dispensed to the correct AVI device, before allowing authorization. Each AVI device has a code connected to a predefined fuel code.
Ignore AVI During PAP and Attendant.	If checked, indicates that the transaction is a PAP and Attendant, and therefore, it must ignore the AVI device.
Attendant/Buy at Pump area:	If your system supports Buy at Pump, the customers can purchase items at the pump, e.g., drinks etc.
Ask for Loyalty always (cash or credit)	If checked, indicates that during Buy at Pump transactions (cash or credit), the terminal prompts the customer for a loyalty card, after the transaction begins.
Ask For Payment Card On Attendant Transaction	If checked, the pump prompts the attendant to swipe the customer's payment card before fuelling can begin, (after the ATT card was swiped).
Attendant Double Check	This parameter is used to prevent customers from swiping their cards to perform a PAP transaction on a pump that is in the middle of an unattended Attendant transaction. Once fuelling is complete and the nozzle is replaced, any other menu action except for 'pay automatically by cash' requires another attendant card swipe. If this parameter is checked, when the ATT card is swiped, the system verifies if the card belongs to the attendant in the middle of a transaction, and if yes, the Item menu is displayed and the transaction may continue. If not, a message is displayed requiring that the Attendant Identification must be checked. Note: This feature is required on pumps that allow both Self and Full Service.
Auto close on preset cash	If checked, indicates that during an attendant transaction that is preset and no payment is selected, the transaction is automatically closed. For example, if the attendant enters a preset for \$20.00, and the customer pays with a \$20.00 bill, and no change is required, the transaction is automatically closed at the end.
Buy at pump for auto reconciled PAK	If checked, indicates that during auto reconcile PAK transactions dry items can also be purchased in the same transaction at the pump. For example, when the post pay transaction fueling is finished the customer can purchase water as well.
Change Treatment	If checked, indicates that during a Buy at Pump transaction, the system automatically provides the sum of the transaction and how much change should be given back. For example, if the total is \$20 and the customer pays \$50, a screen displays the total change as \$30.

Fields	Description
Full service price on attendant detection	If checked, indicates that if the customer fuelled at a self service island, and an attendant is called, the transaction is automatically considered "full service" and full service fees are charged.
Go to tenders screen after one item is entered into the ticket	If checked, indicates that during a Buy at Pump transaction, after selecting one item, the Tenders screen is displayed automatically.
Initiate car registration	If checked, indicates that during a Buy at Pump transaction, the system automatically requests car registration information after the attendant card is swiped.
Key terminator for items quantity	If checked, enables customers to purchase more than 9 items in one transaction. Therefore two decimal places, accommodates 10 items and more.
Only open attendant can close transaction	If checked, indicates that all Buy at Pump transactions must be opened and closed by the same attendant. Only the attendant who opened the transaction can close the same transaction.
Selecting payment method at the beginning of attendant transaction (unchecked means selecting at the end of attendant transaction)	If checked, indicates that at Buy at Pump transactions, the payment method list is displayed and the method of payment is selected at the beginning of the transaction.
Update menus immediately	If checked, indicates that at Buy at Pump transactions, all new menus are updated automatically, even if a transaction is in the middle of payment, or still open.
Pay at Pump area:	
Maximum Bad Swipes	Enter the number of times that the Attendant may swipe the Customer's payment card, before the system blocks authorization for the transaction, due to an invalid card, and prompts the user to contact the cashier.
Display post transaction message	This parameter is not in use.
Ask For Loyalty Card While PAP	If checked, attendant must ask customer for a Loyalty card when paying at the pump.
Authorize Pump With Price Level From OLA	If checked, OLA can authorize the price level of a specific transaction, overriding the Site limit. For example, if the site limit is \$50, and a customer is paying with a credit card that received authorization with a limit of \$100 from OLA, the customer is allowed to fuel for a sum of up to \$100.
Authorizer Needs Grade to Authorize	If checked, the credit authorizer company must be notified of the grade type, in order to authorize the transaction.
Card detection during PAK	If checked, indicates that if during a Pay at Kiosk transaction the customer card is swiped, the transaction is automatically changed from a PAK transaction to Pay at Pump transaction.
Carwash Requires Printer	If checked, indicates that the system requires a working printer at the forecourt through the DPT or IPT, for purchasing a car wash.

Fields	Description
Display limit for pre paid card	If checked, indicates that if paying with a pre-paid card at Pay at Pump transactions, the system automatically displays the limit of the card, e.g., "Your card balance is \$35."
Enable card reader on idle pump	If checked, indicates that the card reader is activated for idle pumps.
Force credit card before loyalty	If checked, indicates that the customer must swipe a credit card before swiping a Loyalty card.
PAP display post transaction message	This parameter is not in use.
Print Receipt for Zero Transaction	If checked, indicates that even if the transaction had a zero value, the receipt is printed.
Prompt limit before authorization	If checked, indicates that the system will display the user's pre-set limits.
Treat barcode scan as car reader swipe	If checked, indicates that barcode scanning is allowed. The barcode is opened whenever the card reader is open.
Verify Transaction Type	If checked, indicates that the system must verify if the Pay At Pump transaction is credit or debit before starting.
TankSrv area:	
Active	If checked, the TankSrv component is active.
Reconciliation active	If TankSrv is active, and this field is checked, all information from the tanks will be reconciled by TankSrv, using the reconciliation method. This parameter should always be checked active.

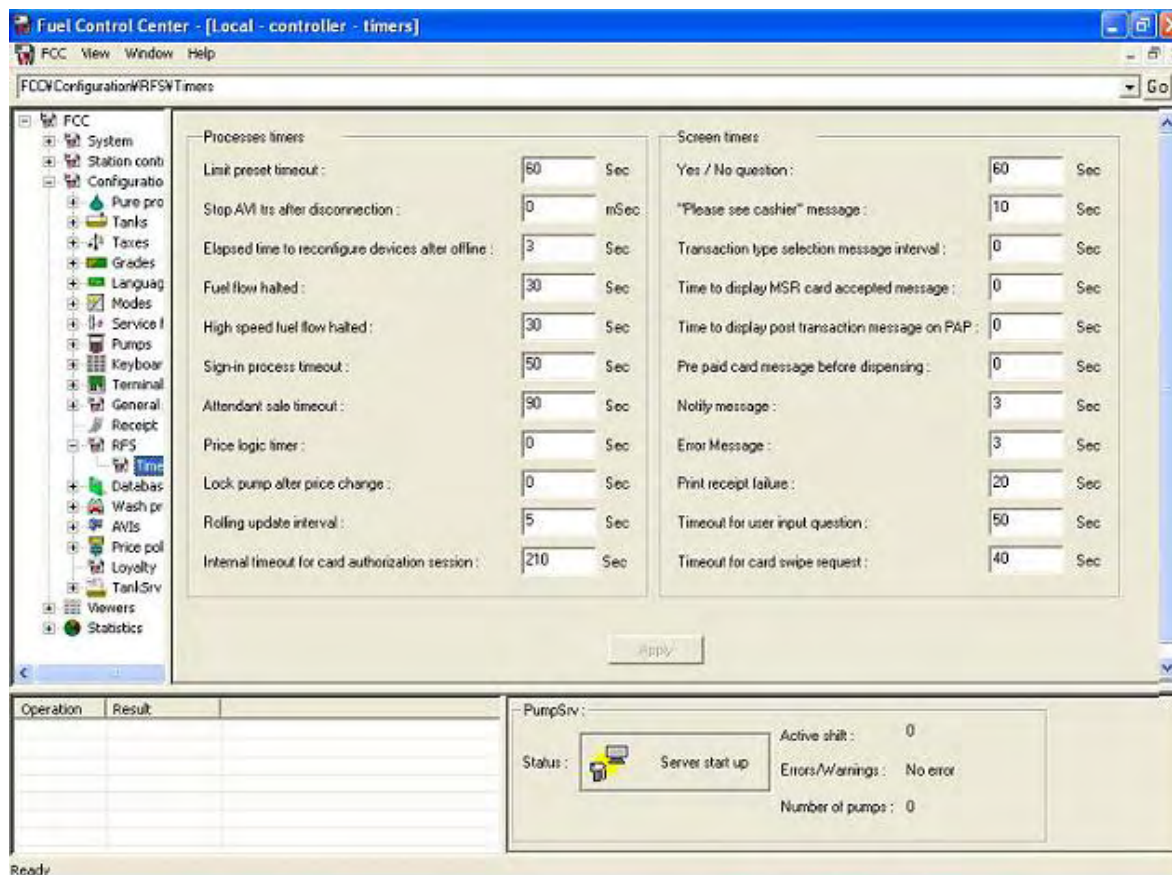
- 4 Click **Apply** to save.
- 5 Click **Validation Check** to check for any errors. The results are displayed in the bottom-pane of the dialog.

Proceed to define the RFS timers.

Timers

This option enables you to define the timeout limit in seconds for various processes. E.g., Define how long the system should wait to reconfigure devices if the system went offline.

- 1 From the FCC Tree, click **RFS** and then **Timers**. The **Timers** dialog is displayed:



- 2 Enter the required information in the fields as described in the table below:

Fields	Description
Preset Timers area:	
Limit Preset Timeout	The time, in seconds, that a preset timeout at the terminal will take effect before expiring.
Stop AVI Trs After Disconnection	The time, in milliseconds, that an AVI transaction is stopped after a disconnection. This prevents any minor interruptions or delays harming the flow.
Elapsed Time To Reconfigure Devices After Offline	Specifies after how long, in seconds, a fuel device will be uploaded, if it went offline.
Fuel Flow Halted	Enter the number of seconds after which if fuelling started and then stopped, and was not resumed, the transaction is stopped. This applies to regular pumps only.

Fields	Description
High Speed Fuel Flow Halted	Enter the number of seconds after which if fuelling started and then stopped, and was not resumed, the transaction is stopped. This applies to high speed pumps only.
Sign-in process timeout	Indicates how long, in seconds, the system waits for the attendant to act in response to the sign-in process.
Attendant Sale Timeout	Indicates how long, in seconds, the system waits for an Attendant to act in response to the screens during item sale flows.
Price Logic Timer	Indicates how long, in seconds, the system waits between sending the new prices to the sign and sending them to the pumps. If the new price is higher than the old prices, then the process starts at the sign. If the prices are lower, then the process starts at the pumps.
Lock pump after price change	Indicates how long, in seconds, the pump locks after a price change. If "0", the pump does not lock.
Rolling update interval	Indicates how long in seconds, the system refreshes the rolling update data. The default is 5 seconds.
Interval timeout for card authorization session	Indicates how long, in seconds, the system waits before proceeding with authorization, enabling the system to display messages on the terminal screen, such as: 'Please enter odometer', 'Please enter car registration', etc. On timeout, the pump is authorized and fuelling can start.
Screen Timers area:	
Yes /No question	Indicates how long, in seconds, the system displays a Yes/No question for the consumer, such as "would you like a receipt? Y/N" are displayed.
Please See Cashier Message	Indicates how long, in seconds, the system displays the message "Please See Cashier" if the fuel flow is halted.
Transaction type selection message interval	Indicates how long, in seconds, a message blinks requesting selection of payment type.
Time to display MSR card accepted message	After swiping a payment card, indicates the amount of time that passes before saying that the card was accepted.
Time to display post transaction message on PAP	Indicates how long, in seconds, a post message is displayed at the end of a Pay at Pump transaction. For example, the system prompts, "Thank you for fuelling Retalix."
Pre paid card message before dispensing	After swiping a pre-paid card, indicates how long the prepaid value will be displayed at the terminal until a defined timeout.
Notify message	Determines how long temporary customer messages such as "please take receipt" are displayed.
Error message	Indicates the amount of time an error message is displayed. For example, if the odometer number must be one number from 1-6 and 0 is entered, the system prompts, "Invalid odometer." The error message will be displayed for X seconds.
Print receipt failure	Indicates the amount of time a message is displayed notifying the cashier the printing of the receipt has failed.

Fields	Description
Timeout for user input question	Indicates the amount of time the transaction is stopped for the user to enter input through the terminal. For example: type, vehicle number, or car odometer etc.
Timeout for card swipe request	Indicates the amount of time the transaction is stopped for the POS to prompt the cashier to swipe the card.

3 Click **Apply** to save.

The **Convert Layer** is defined. Continue to configure the AVIs.

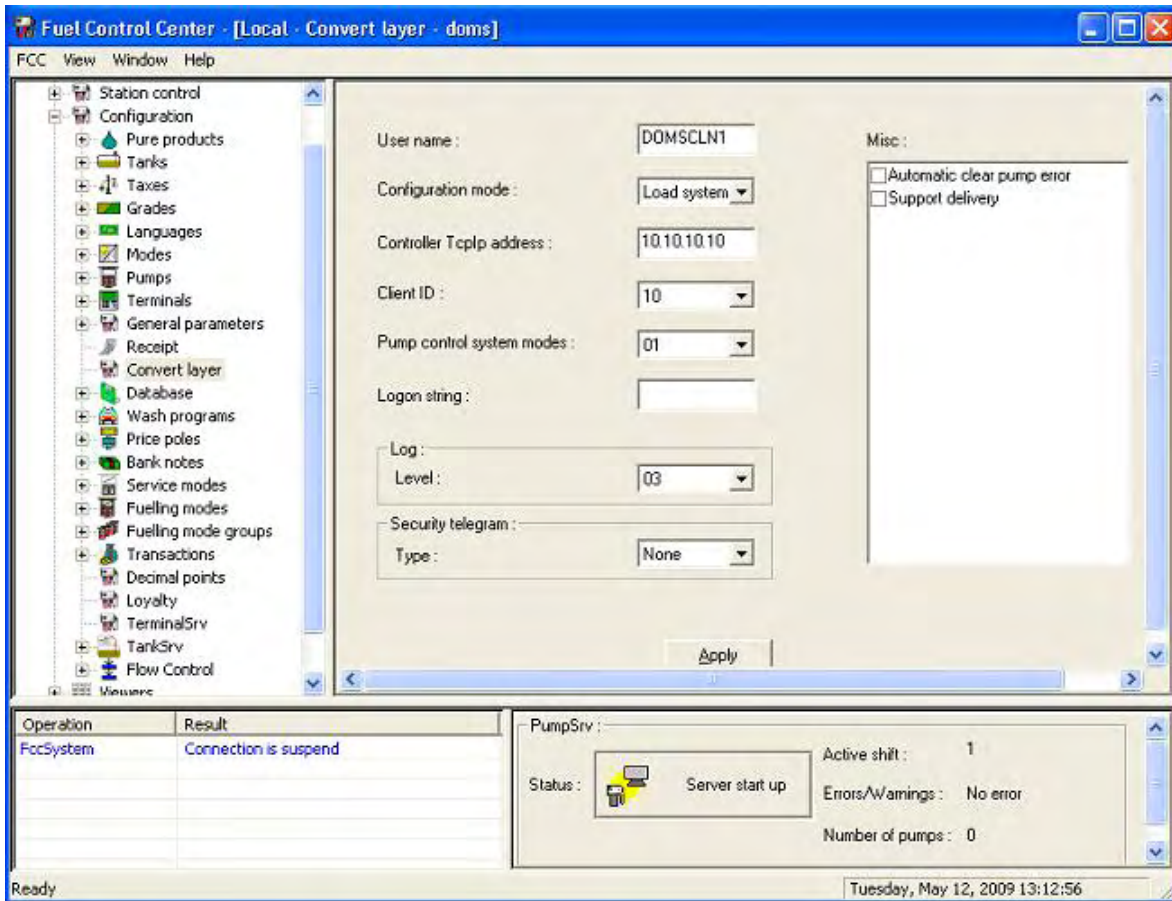
Configuring the Doms Convert Layer

In the Doms system the Site Controller uses a Doms Convert layer and is responsible for the transition of information between the site controller and PumpSrv.

If your controller uses a Doms Convert Layer, configure the Convert Layer as explained below.

➤ To Enter Data in the Convert Layer:

- 1 From the FCC Tree, click **Configuration**. The configuration menus are displayed.
- 2 Click the **Convert Layer** menu. The **Convert Layer – Doms** dialog is displayed:



- 3 Enter the required information in the fields as described in the table below:

Fields	Description
User Name	Enter your system user name.

Fields	Description
Configuration mode	Select an option from the drop-down list: ▪ Load System without down load configuration – if selected, indicates that when the system loads, the system is already configured, and there will be no changes in the configuration setup. ▪ Erase all configuration from the controller – if selected, indicates that when the system loads, a master reset is performed, clearing all the configuration settings. Then, all the PumpSrv configuration settings are downloaded to Doms. ▪ Down load PumpSrv configuration to controller – if selected, indicates that when the system loads, there is no need to perform a master reset, and PumpSrv configuration settings will be automatically downloaded.
Controller TcpIp Address	Enter the Site Controllers Ip address.
Client ID	Enter the POS terminal ID number.
Pump Control System Modes	Enter the master pump number. In the Doms system a master Pump number is required which determines the operation mode, instead of each pump being connected to a Mode Scheme. For example, if you select Pump no.1 as the master, all the pumps will have the same operational mode. You can define up to 4 mode schemes for the Pump to accommodate different shifts and times of the day, which will apply to all the pumps. See the section on Mode Schemes for further details.
Log-On String	Enter the logon string, which indicates how the controller logs on. For example, the string, POS RI, Curreny_Code=Eur, APPL_ID indicates that when the controller logs on, the password is POS, and when the system logs on to change the currency to Euro. The string can include a number of details required when logging on. Contact Technical Personnel to verify the correct string for your system.
Log	Internal code number indicating level of detail in the log level. For example, log level 1 indicates no logs, log level 3 is some detail and log level 5 is full details in the log files. Select the required log level details from the drop-down list. Note: The log level details apply to PumpSrv only. The default is set to 3 and it should not be changed other than by Retalix Technical Personnel.
Security Telegram	This field enables the system to determine the type of encryption to enable a high level of security in the system.
Type	From the drop-down list, select the type of encryption used by the system. The type is read by the POS and sent to the controller.
Misc area:	
Automatic Clear Pump	If checked, indicates that pump errors will be automatically

Fields	Description
Error	cleared.
Support Delivery	If checked, indicates that the controller reports all fuel deliveries to the Back Office.

4 Click **Apply** to save.

The **Doms Convert Layer** is defined. Proceed to the Database Configuration.

Configuring the Postec Convert Layer

The **Postec Convert Layer** can be interfaced to any electronic device on the forecourt.

In the Postec system the Site Controller uses a Postec Convert layer and is responsible for the transition of information between the site controller and POSpump.

PumpSrv, which generally works in two operating modes: Master and Slave, in this setup, is intended to be a Slave system. It synchronizes its display with whatever system status the site controller reports, and in this setup acts as the interface to the Back Office, the Master application.

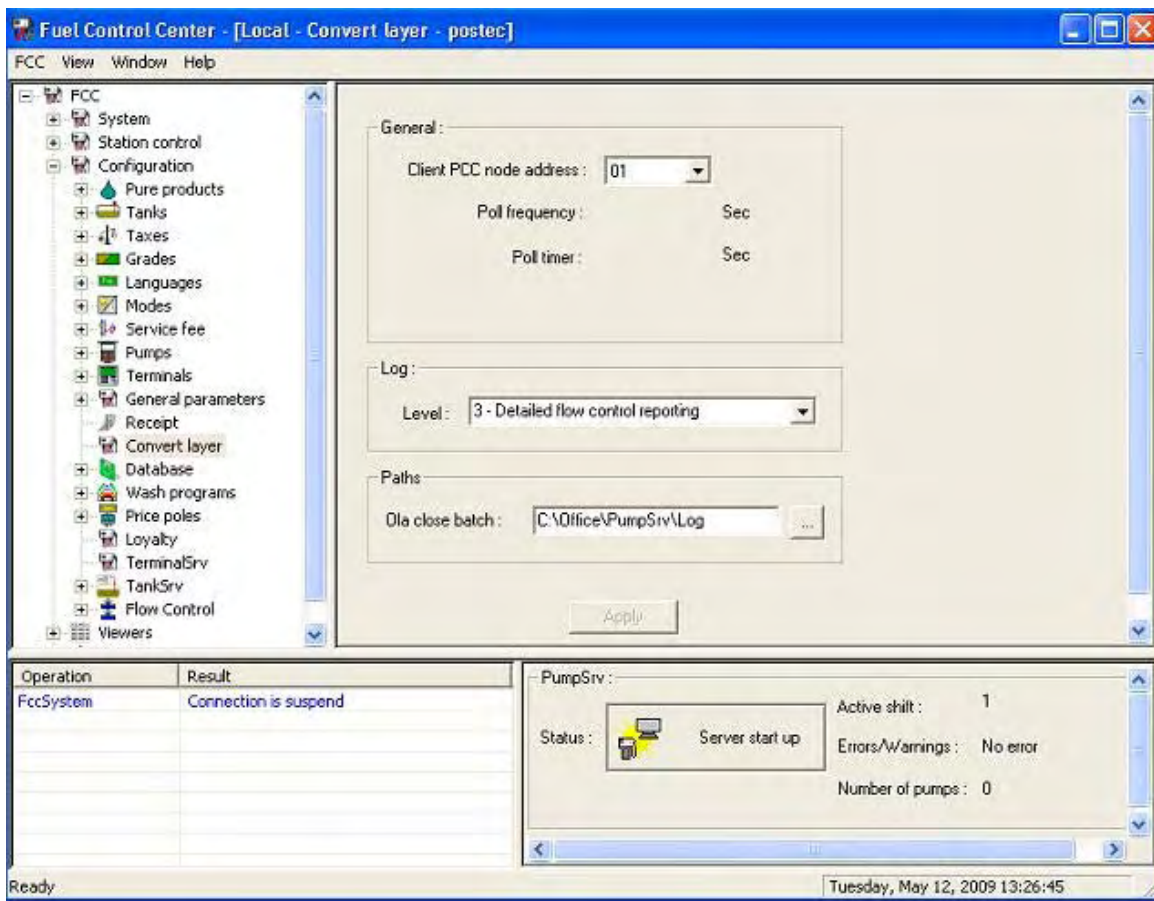
Notes:

1. You do NOT have to configure all the system Registry tables in the FCC Configuration section.
2. Postec receives configuration data and upgrades the files.
3. The **only** sections relevant from the Configuration chapter are: Grades and Pumps, which must be defined as Valid. See Configuring Grades and Pumps, earlier in this chapter.

If your controller uses a Postec Convert Layer, configure the Convert Layer as explained below.

➤ To Enter Data in the Convert Layer:

- 1 From the FCC Tree, click **Configuration**. The configuration menus are displayed.
- 2 Click the **Convert Layer** menu. The **Convert Layer – Postec** dialog is displayed:



- 3 Enter the required information in the fields as described in the table below:

Fields	Description
General area:	
Client PCC node address	From the drop-down list, select Postec Communication Controller's node number to specify the address, which is interfaced to any electronic device on the forecourt
Log area:	
Level	From the drop-down list, select the relevant log level option. E.g., 3 – Detailed Flow Control Reporting. 0 specifies that only errors or exceptions would be recorded, etc.
Paths area:	
Ola close batch	Click  , and browse to the path where the OLA Close Batch file is saved. The path is specified in the field. The OLA Batch file contains all the OLA transactions performed in the batch, a new batch is created each time Close Batch is performed.

- 4 Click **Apply** to save.

The **Postec Convert Layer** is defined.

Configuring the Wayne Convert Layer

The **Wayne Convert Layer** can be interfaced to any electronic device on the forecourt.

The Wayne Convert Layer supports the Wayne nucleus controller. In a fuel forecourt which is controlled by the Wayne controller, all Pay at Pump (PAP) transactions are fully controlled by the Wayne controller. The Retalix fuel system is updated with the full transaction card information when the transactions are closed, through XML files that are saved on the disk. In order to close transactions properly in the Retalix system, the XML should be parsed and stored. In addition, the Wayne controller can work in Fallback mode. In this case, PAP XML files are also be stored on the disk. When the Retalix system recovers, it automatically loads all PAP file.

The Wayne controller enables users to perform price changes directly from the headquarters to the forecourt controller. This is in use in environments based on the consignment model, where price changes control is done through non - Retalix systems.

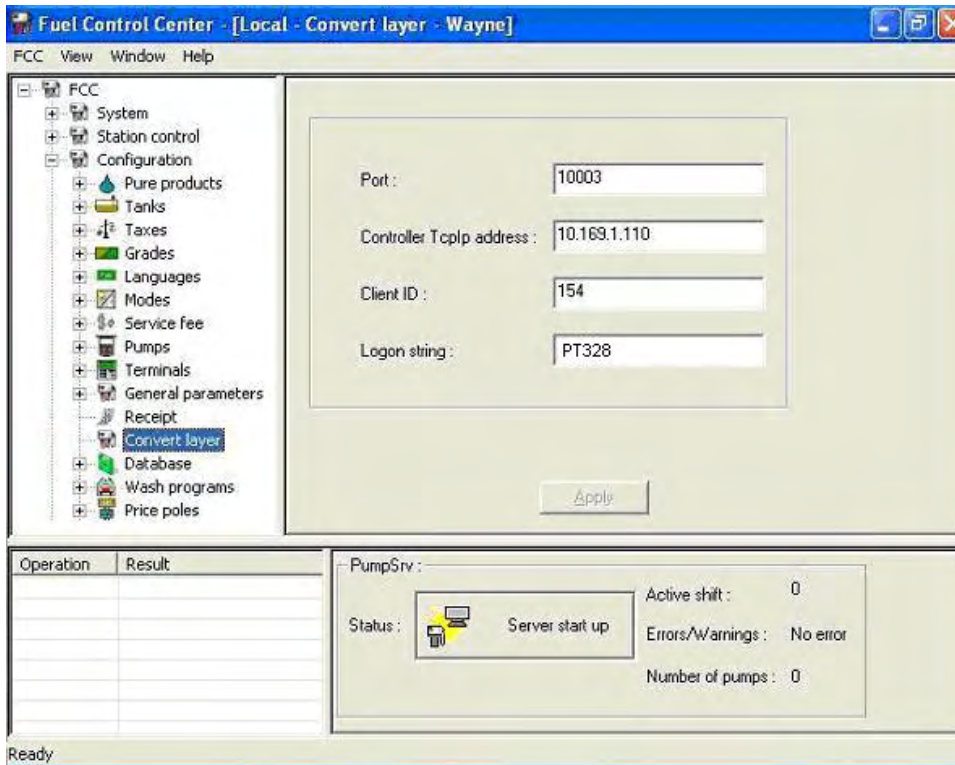
Notes:

1. You do NOT have to configure all the system Registry tables in the FCC Configuration section.
2. Wayne receives configuration data and upgrades the files.
3. The **only** sections relevant from the Configuration chapter are: Grades and Pumps, which must be defined as Valid. See Configuring Grades and Pumps, earlier in this chapter.

If your controller uses a Wayne Convert Layer, configure the Convert Layer as explained below.

➤ **To Enter Data in the Convert Layer:**

- 1 From the FCC Tree, click **Configuration**. The configuration menus are displayed.
- 2 Click the **Convert Layer** menu. The **Convert Layer – Wayne** dialog is displayed:



- 3 Enter the required information in the fields as described in the table below:

Fields	Description
Port	Enter the relevant communication port number for the site to connect between the servers and pumps.
Controller TcpIp Address	Enter the site's IP Address to connect between the servers and pumps.
Client ID	Enter the POS terminal ID number.
Logon String	Enter the logon string, which indicates how the controller logs on. The string can include a number of details required when logging on. Contact Technical Personnel to verify the correct string for your system.

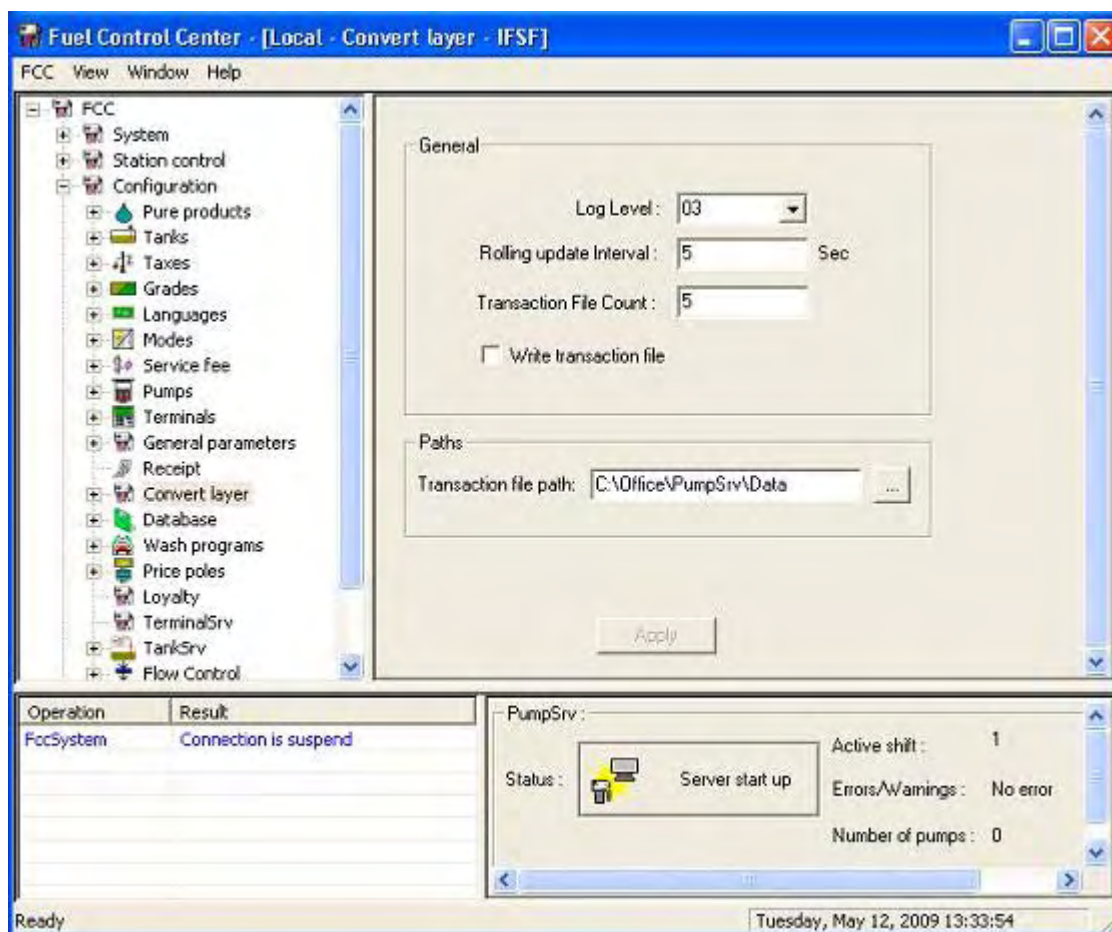
- 4 Click **Apply** to save.
The **Wayne Convert Layer** is defined.

Configuring the IFSF Convert Layer

If your system supports the IFSF (International Forecourt Standards Forum) convert layer, set up the parameters as described below. The IFSF convert layer is responsible for the transition of information between the site controller and PumpSrv over IFSF protocol. It enables the system to connect to dispensers and tank gauges.

➤ **To Enter Data in the Convert Layer:**

- 1 From the FCC Tree, click **Configuration**. The configuration menus are displayed.
- 2 Click the **Convert Layer** menu. The **Convert Layer – IFSF** dialog is displayed:



- 3 Enter the required information in the fields as described in the table below

Fields	Description
General area:	
Log Level	From the drop-down list, select the level of details to be recorded in the log. The Log levels available are from 0-5. 5 is the highest level, indicating that every detail is recorded in the log.

Rolling update interval Indicates how often, in seconds, the system refreshes the rolling update data.

Transaction File Count Indicates the number of transaction files in the log

Write transaction file If selected, indicates that a transaction file is generated

Paths area:

Transaction file path Click , and browse to the path where the Transaction file is saved.

- 4** Click **Apply** to save.

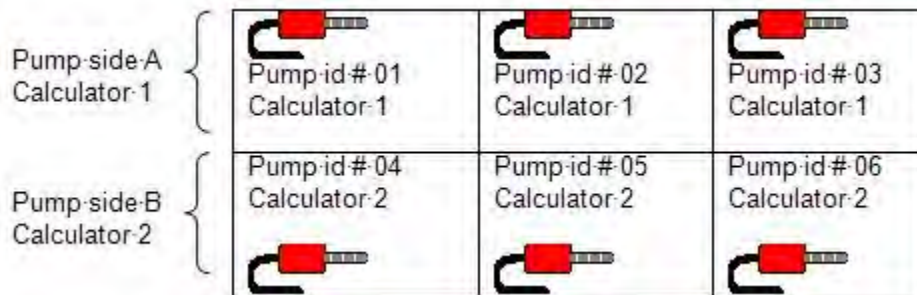
Continue to define the Calculators.

4.

Calculators

The IFSF convert layer supports the mapping of the Retalix fuel pump ID to the FCC controller related calculator number.

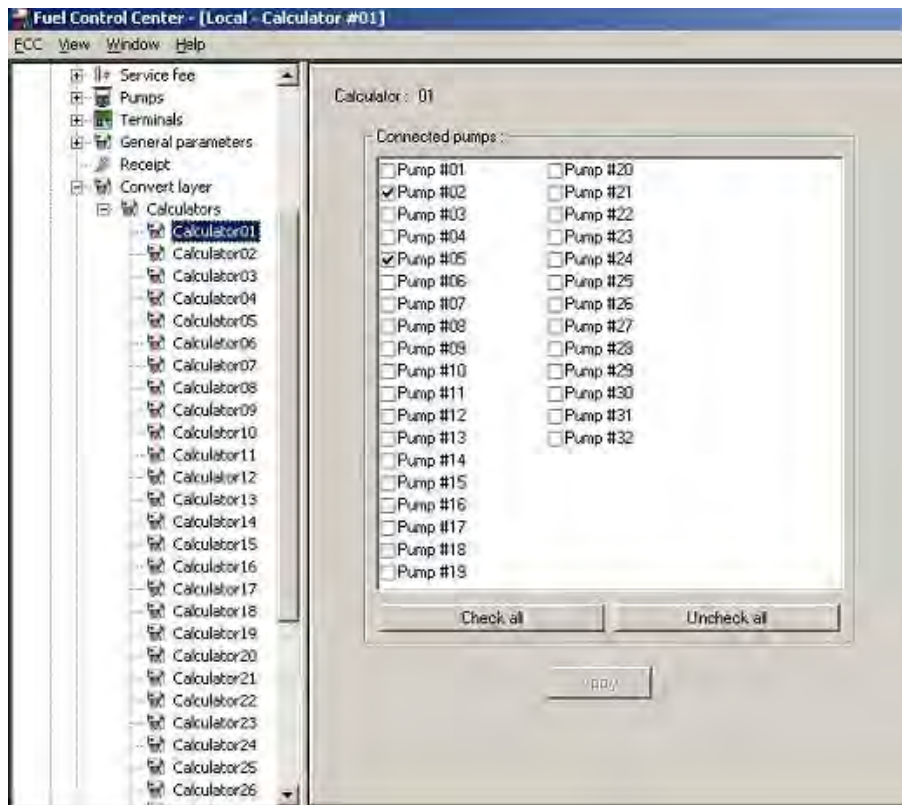
For example shows this connectivity:



A fuel pump, controlled by the FCC controller, has 2 sides A & B. Each side has a calculator number, and 3 nozzles. Since it is possible to fuel out of all nozzles simultaneously, they are defined in the Retalix fuel system as 6 different pumps – Pump #01 to Pump #06.

➤ To Define the Calculators:

1. From the FCC Tree, expand the Convert Layer that was just defined, and then click **Calculator01**. The **Calculator01** dialog is displayed as follows:



2. Select the Pumps you want to link to the Calculator.

Notes:

1. Up to 4 pumps can be linked to a Calculator.
2. One Pump cannot be linked to 2 different Calculators.
3. FCC supports expanding the Pump selection from 32 to 64 Pumps, if the **Use More than 32 pumps** checkbox is selected in the General Pumps screen in the Pumps module. If this option is selected, the number of Calculator nodes is increased to 64.

3. Click **Apply**.

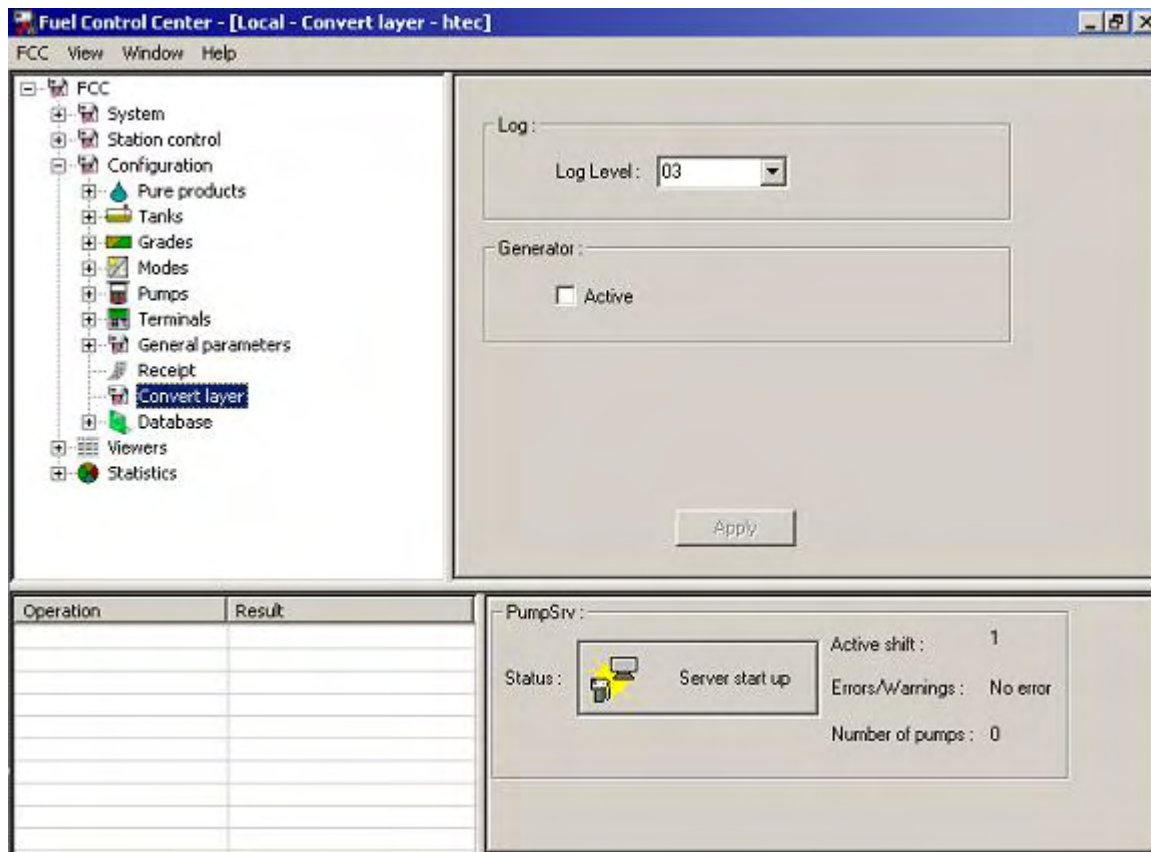
The **IFSF Convert Layer** is defined.

Configuring the htec Convert Layer

In the htec system the Site Controller uses a **htec Convert Layer** and is responsible for the transition of information between the site controller and *PumpSrv*.

➤ **To Enter Data in the Convert Layer:**

1. From the FCC Tree, click **Configuration**. The configuration menus are displayed.
2. Click the **Convert Layer** menu. The **Convert Layer – htec** dialog is displayed.



3. Enter the required information in the fields as described in the table below:

Fields	Description
Log Level	From the drop-down list, select the level of details to be recorded in the log. The Log levels available are from 0-5. 5 is the highest level, indicating that every detail is recorded in the log.
Generator Active	If checked, indicates that a Receipt Generator formats the receipt printed at the terminal.

4. Click **Apply** to save.

The **htec Convert Layer** is defined.

AVIs (Auto Vehicle Identification)

AVI devices are supported by the RFS. The **AVI (Automatic Vehicle Identification)** menu enables you to define AVI devices and to set their parameters in the system. The pump's nozzle makes contact with the AVI device, and the relevant information about the vehicle is transmitted. Upon receiving AVI confirmation, the RFS determines the authorization and limitations. Each AVI device can support up to 16 channels, also referred to as rings. (For further details, refer to Channels below).

For Pumps to support AVI capability and to transmit the relevant information on an AVI transaction, it is necessary to initially configure each AVI device in the station. A major part of the configuration procedure of AVI devices is filling out the AVI Configuration Form. The parameters in the FCC Channel configuration are determined from the AVI Configuration Form.

Each AVI device in the forecourt is checked for its Device Number and Device Type, and this information is entered in the AVI Configuration Form (example displayed below). For further details refer to RFS Wiring and Configuration Technical Guide Version:

AVI Device Number: 5 **Device Type (Check one):**

Address: _____

Baud Rate: _____

Comm Port: _____

Cable Name: _____

Low-Level Protocol: _____

☐

Roseman AVI

☒

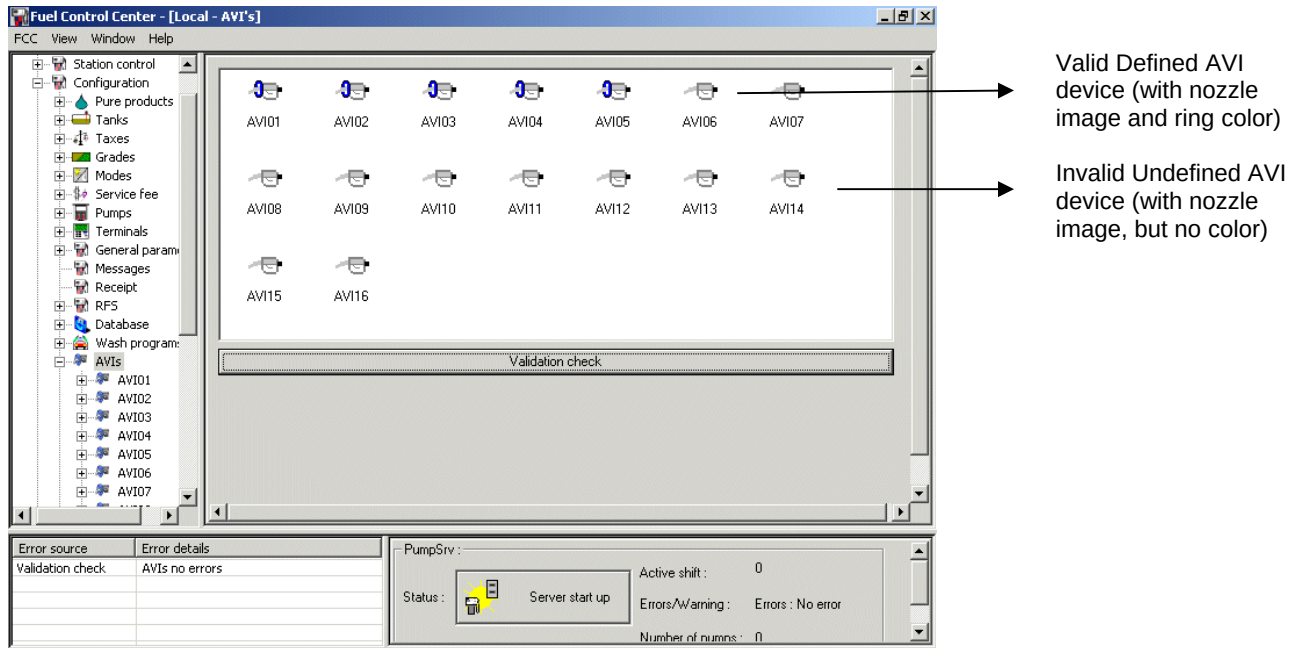
Orpak VIT

Channel No. (Ring)	Pump No.	Position
1		
2		

Based on the filled-out AVI Configuration Form, the technician can configure the Channels in the FCC, by entering the data of the filled out forms, for each device in the station.

➤ **To View the AVI Devices:**

- 1 From the FCC Tree, click **Configuration**, then click the **AVI** menu. The **AVI** window is displayed with icons of all the AVIs. Expand the FCC Tree to view the list of AVIs:

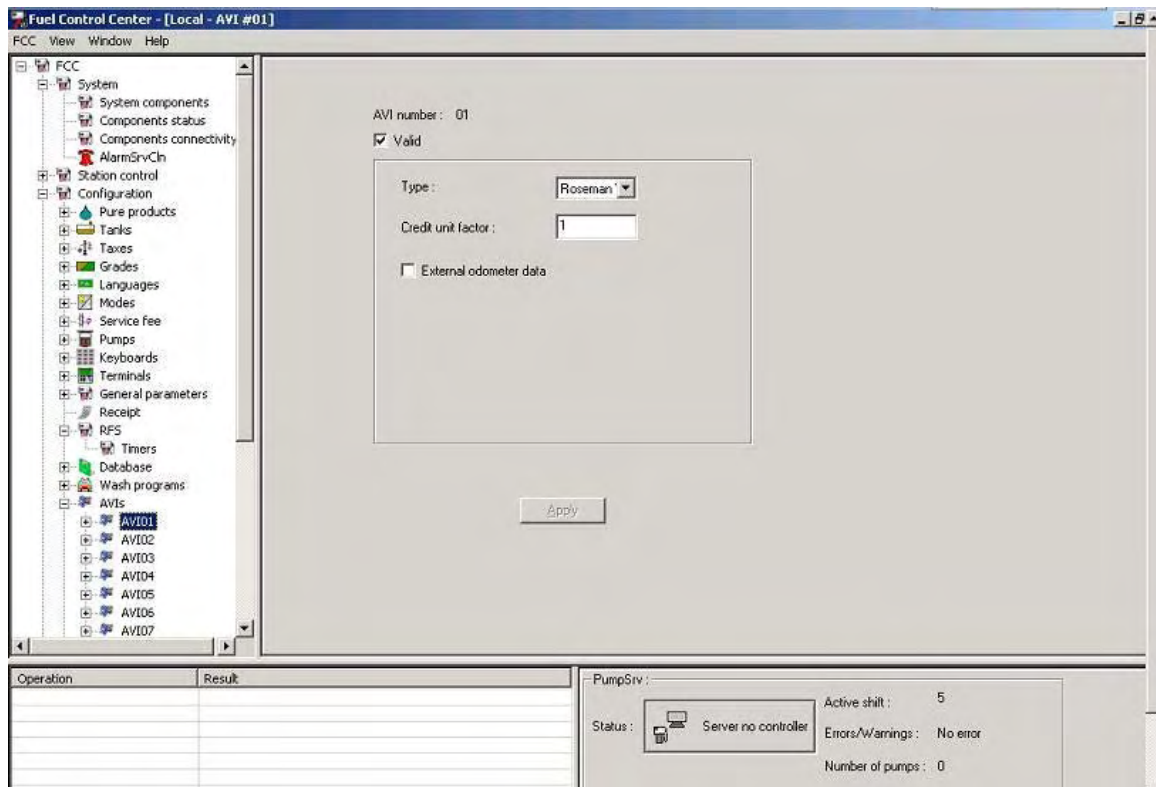


- 2 Click **Validation Check** to ensure there are no AVI system errors. The status is displayed in the bottom-pane of the dialog as shown above.

You may define up to 16 AVI devices.

➤ **To Define or Revise AVI Device Properties:**

- 1 Double-click an AVI device icon, or select an AVI device from the FCC Tree. The **Convert Layer – RFS, AVI** dialog is displayed:



You may view the properties of each AVI device dialog by selecting the required AVI device from the FCC Tree. You may move from one AVI dialog to the next and apply changes as necessary.

- 2 Enter the required information in the fields, as described in the table below:

Fields	Description
AVI Number	Device number. Internal code as defined in PumpSrv.
Valid	If checked, indicates AVI is valid in the system.
Type	AVI device manufacturer.
Credit Unit Factor	AVI devices are defined with a maximum fuel limit. This parameter specifies the value of each unit for the total pre authorized fuel limit. For example, 1 unit can be defined to equal \$300. A private vehicle may have an AVI device defined to allow up to 1 unit, and will only be allowed to fuel up to \$300, whereas a trucks AVI device may be defined to allow up to 2 units, and will be allowed to fuel up to \$600.
External odometer data	If checked, indicates that the odometer data is not integrated from the AVI device. Rather, the information is taken from another system.

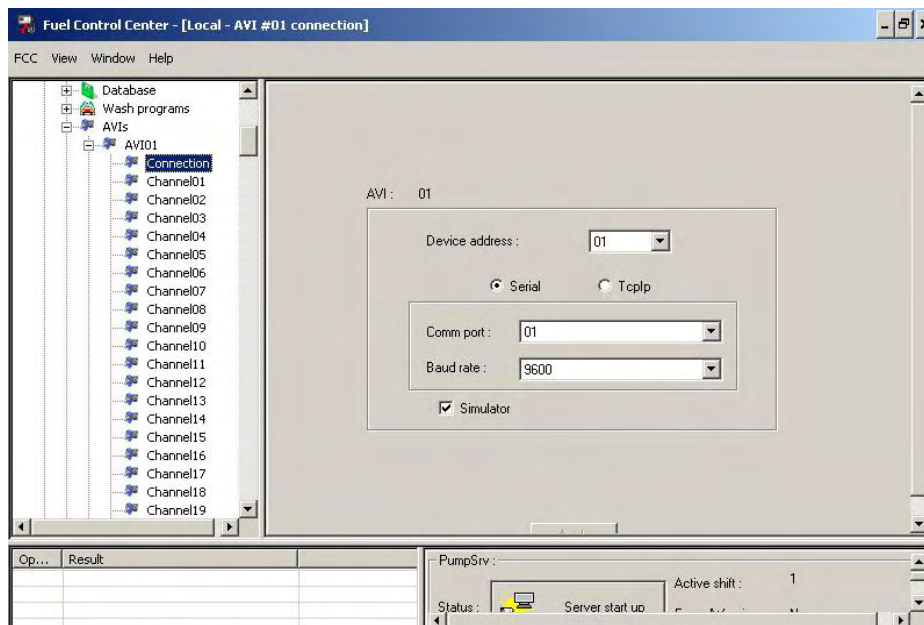
- 3 Click **Apply** to save.

Once you have defined the AVIs, continue to define the *Connections*.

Connections

➤ To Configure the Connection:

- 1 From the FCC Tree, expand the AVI number that was just defined, and then click **Connection**. The **AVI #01 – Connection** dialog is displayed as follows:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
AVI Number	Device number. Internal code as defined in PumpSrv.
Device Address	Indicates device address. It is a unique numeric address predefined for each device.
Serial	Select this radio button if your system uses a serial system to connect between the servers and pumps, and then proceed to select the Comm port and Baud Rate numbers.
TcpIp	Select this radio button if your system uses TcpIp to connect between the servers and pumps, and then enter the relevant Port and IP Address.
Comm Port	Indicates communication port number.
Baud Rate	From the drop-down list, select the baud rate, indicating the rate of the communication line, which is the number of transitions (voltage or frequency changes) that are performed per second.
Simulator	If checked, indicates AVI device is used with a software pump simulator.

Proceed to define the Channels.

Channels

A **Channel** (also referred to as a Ring) is a magnetic receiver located on a nozzle. As the nozzle makes contact with the AVI device, information about the vehicle and the transaction is transmitted. A Channel enables the device to detect which Pump number, and in which position in the Pump it is

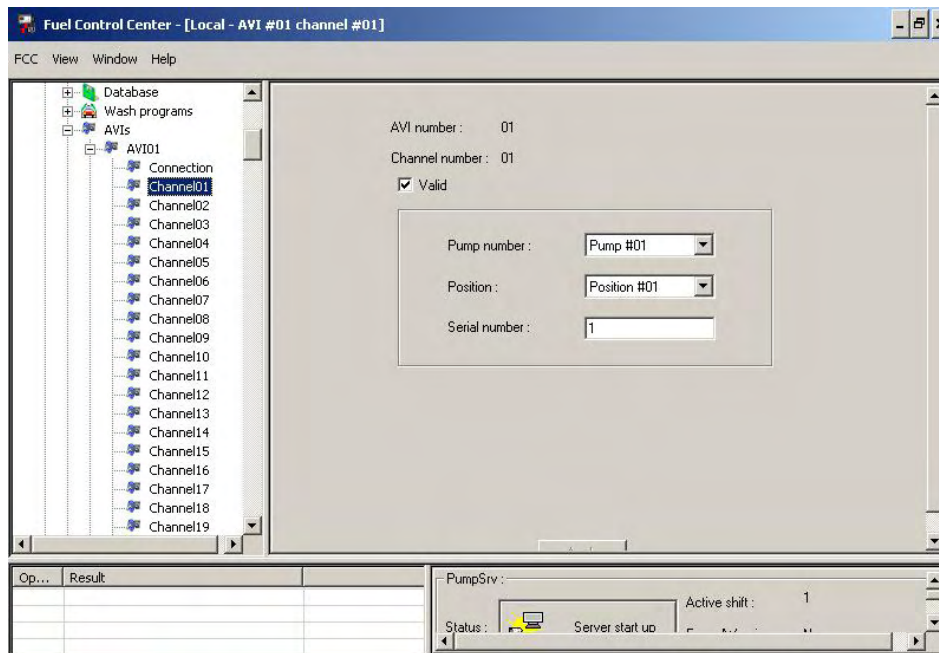
located. For example, an AVI device may have 8 channels. Each channel is connected to a specific position in the pump, enabling the monitoring of the grade that is being dispensed.

Notes:

1. The initial wiring and configuration of the AVI device should be performed by a technician of each specific manufacturer.
2. The technician must have the AVI Configuration Form to configure the Channels in the FCC.

➤ **To Define an AVI Channel:**

- 1 From the FCC Tree, select an **AVI**. Expand the FCC Tree to view the list of channels.
- 2 Click a **Channel** to open the **Convert Layer – RFS – AVI, Channel** dialog:



- 3 Enter the required information in the fields, as described in the table below:

Fields	Description
AVI number	Device number. Internal code as defined in PumpSrv.
Channel number	Indicates number as defined in AVI device.
Valid	If checked, indicates channel is valid in the system.
Pump number	Indicates the number of Pump connected to the AVI device.
Position	Indicates the position number within the Pump, to which the AVI channel is linked.
Serial Number	Indicates the serial number provided by the manufacturer of OTI devices (wireless device). The channel can identify the AVI device on the vehicle from this serial number.

- 4 Click **Apply** to save.

You have defined the AVI devices and their Channels. Continue to configure the Keyboards.

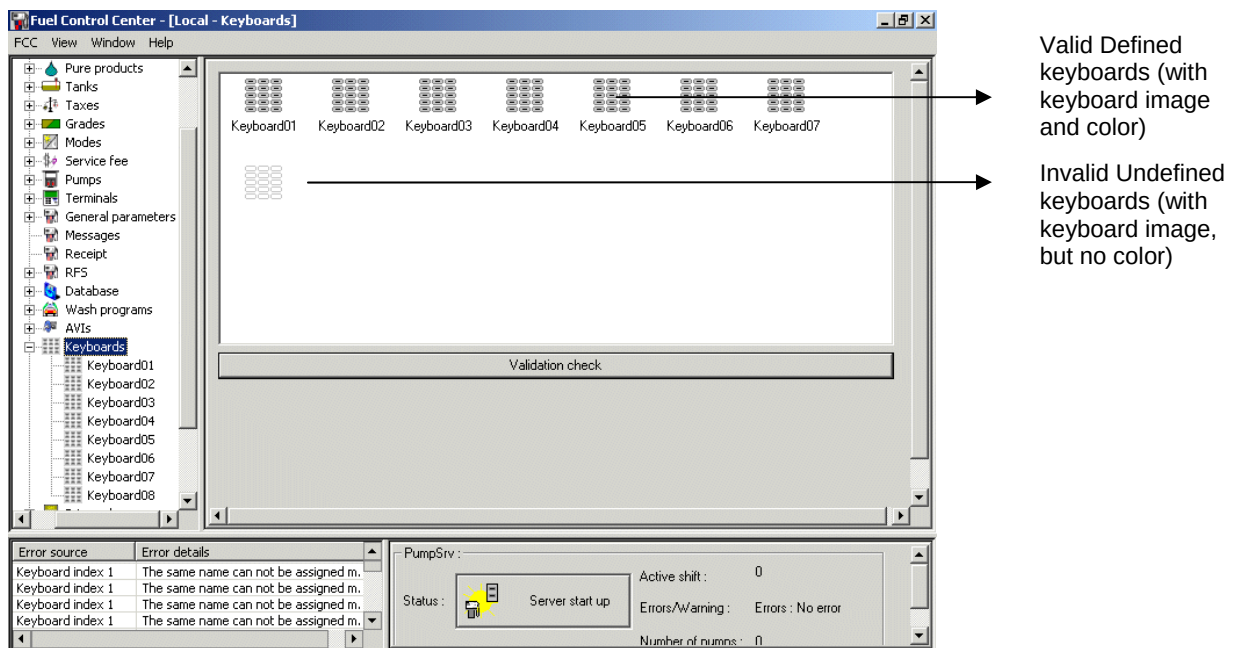
Keyboards

The **Keyboard** menu enables you to define and link the relevant Keyboard layout template to the required Terminal. Different Terminal types may have different types of Keyboards, where keys are placed in different positions. You can also define the softkeys on a terminal.

In addition, one key may have multi layers, indicating that it can have different functionality in different states. E.g., in one screen you may have a 'Yes' button, whereas in another screen, the 'Yes' button may not be required, and the 'Yes' button is also a 'Reprint' button.

➤ To View Keyboards:

- 1 From the FCC Tree, click **Configuration**. Expand the **Configuration** menu on the FCC Tree.
- 2 Click and expand the **RFS** menu, and then the **Keyboards** menu to display the keyboards.
- 3 From the FCC Tree, click **Keyboards**. The **Configuration: Convert layer – RFS, Keyboards** window opens displaying all the Keyboards graphically:

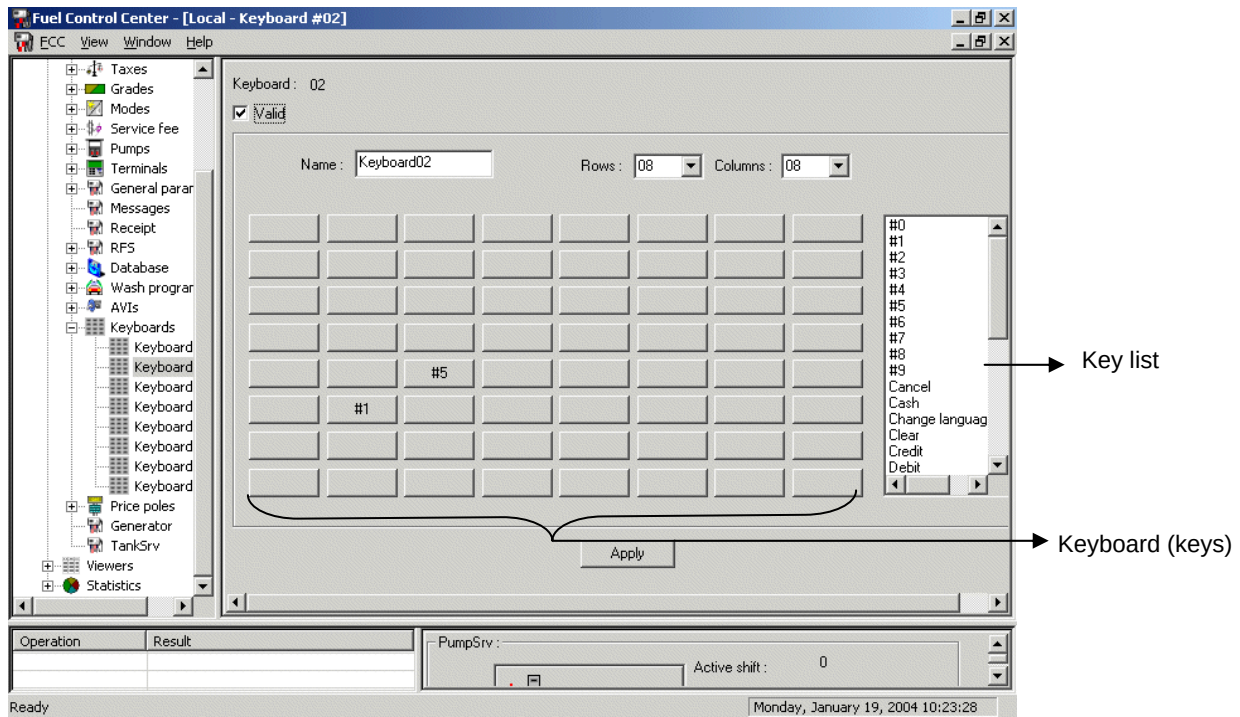


- 4 Click **Validation Check** to ensure that there are no keyboards with system errors. The status is displayed in the bottom-pane of the dialog as shown above.

You may define up to 8 keyboards.

➤ **To Define or Revise a Keyboard:**

- 1 Double-click an undefined keyboard icon or select a Keyboard from the FCC Tree. The **RFS, Keyboard** dialog is displayed:



You may view the properties of each keyboard by selecting the keyboard from the FCC Tree. You may move from one keyboard to another and revise as required.

- 2 Enter the required information in the fields, as described in the table below:

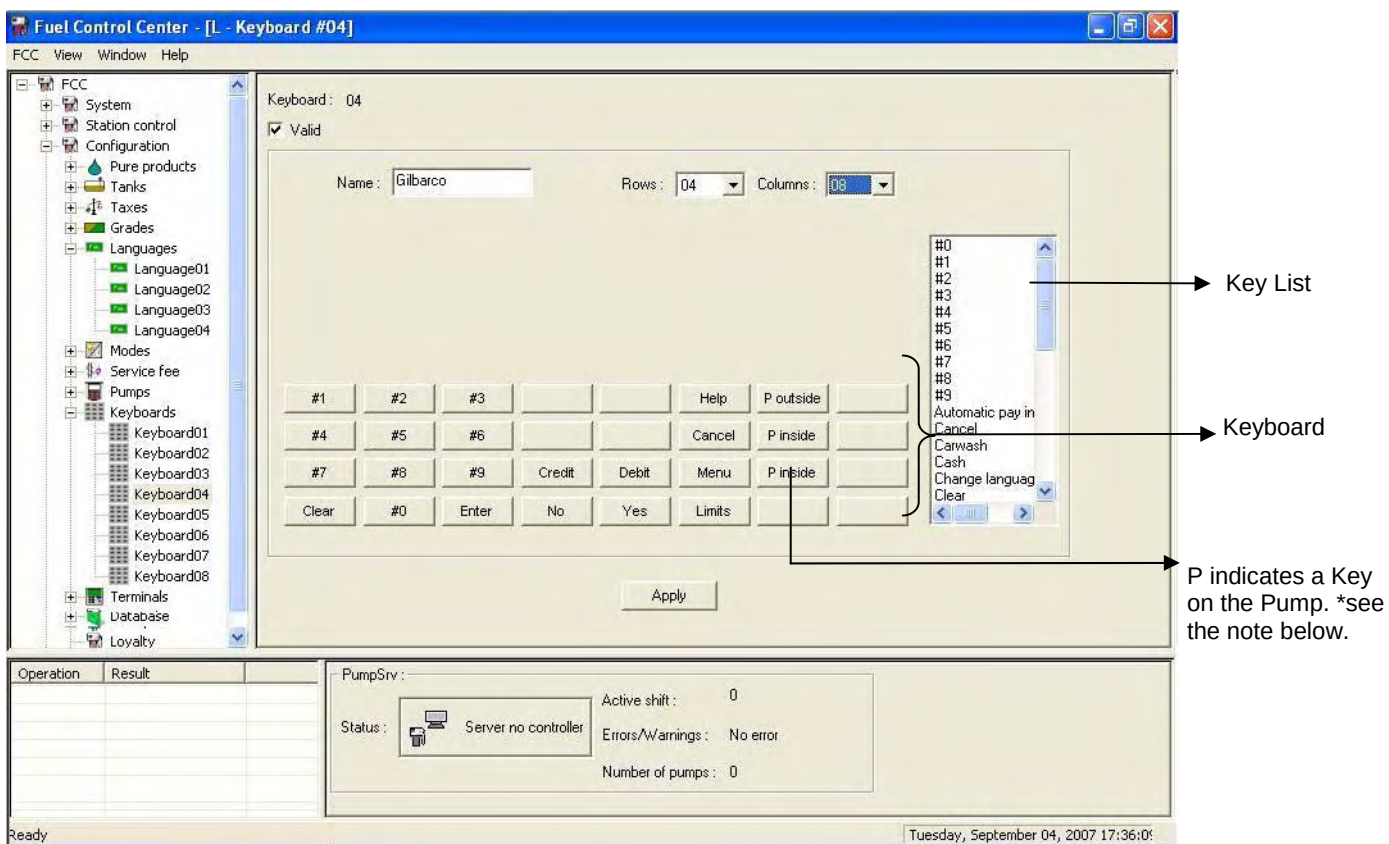
Fields	Description
Keyboard	Internal keyboard code as used in PumpSrv.
Valid	If checked, keyboard is valid in the system and recognized by the terminal.
Name	Specifies Keyboard name.
Rows	Indicates number of rows on the keyboard.
Columns	Indicates number of columns on the keyboard.

- 3 Click **Apply** to save.
- 4 From the FCC Tree, click **Keyboards** to display all the keyboard types defined in the system.

You may reset or customize a Keyboard to meet your requirements, see **To Customize or Reset a Keyboard**, and define multi layers on the keypad, see **To Define and Revise a Multi Layer Keyboard**.

➤ **To Customize or Reset a Keyboard:**

- 1 From the Rows and Columns drop-down lists, select the number of rows and columns required, according to the keyboard device available.
- 2 From the key list in the window on the right of the keyboard dialog, scroll-down the list and click a Key number or name. It is highlighted. For example, click #0, Cash, Car Wash, etc.
- 3 Select the specific location in the keyboard, where you wish to place the key, then click the key to place the Key name. For example, if you clicked #0, and then clicked the first key in the first row and column, that key becomes #0.
- 4 To cancel the key, click the key again. The selection is cleared, then reselect if required.
- 5 Click **Apply** to save. The following screen displays an example of a customized keyboard:



Notes:

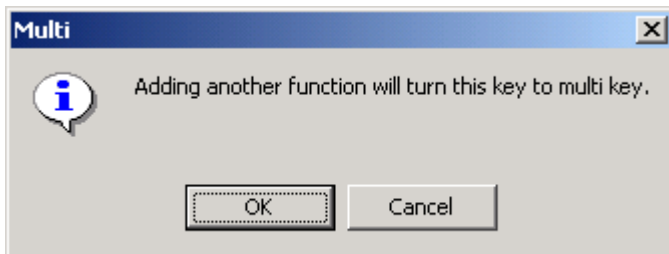
1. Some Terminals may have several keys that are larger than others, and may take up the space of 2 keys. These can be used for example, for defining an 'Enter' key.
2. Remember to link the keyboard to the appropriate Terminal number. For further details to define this parameter see the section – *Terminals*.
3. The **Support On Screen Softkeys** field must be selected in order to be able to define softkeys. The appearance on the screen is set as you define on the keys.

4. *The customer can decide how to pay for a transaction. P Inside indicates that the Pump is authorized, and at the end of the transaction, the customer enters the kiosk to pay for the transaction. P Outside indicates that the customer is prompted to swipe their credit card at the pump.

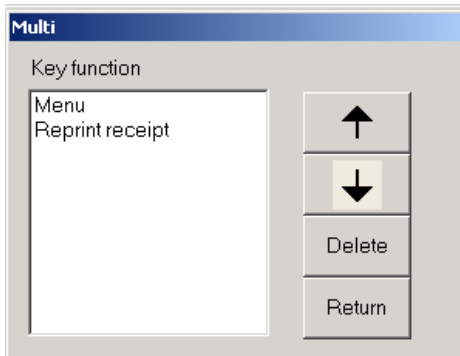
You have defined the Keyboard with a single layer keypad. See **To Define a Multi Layers Keyboard**, below.

➤ To Define and Revise Multi Layer Keyboards:

- 1 From the key list in the window on the right of the keyboard dialog, scroll-down the list, and select the key to which you are adding another function, as the second layer. The system prompts:



- 2 Click **OK** to confirm that you are adding an additional function to the key.
- 3 Select the specific location on the keyboard, where you wish to place the key, then click the key to place the Key name. For example, if the 'Yes' button is also the 'Reprint' button, select the Reprint button from the key list, and then click the 'Yes' button on the keyboard. The button is displayed in **bold** and underlined indicating that it is a multi layer key.
- 4 To edit the multi key, or revert the multi key back to a single key function, from the keyboard, right-click the key. The **Multi** dialog is displayed:



- 5 From the **Key Function** list, select the function you are deleting, and click **Delete**

Or

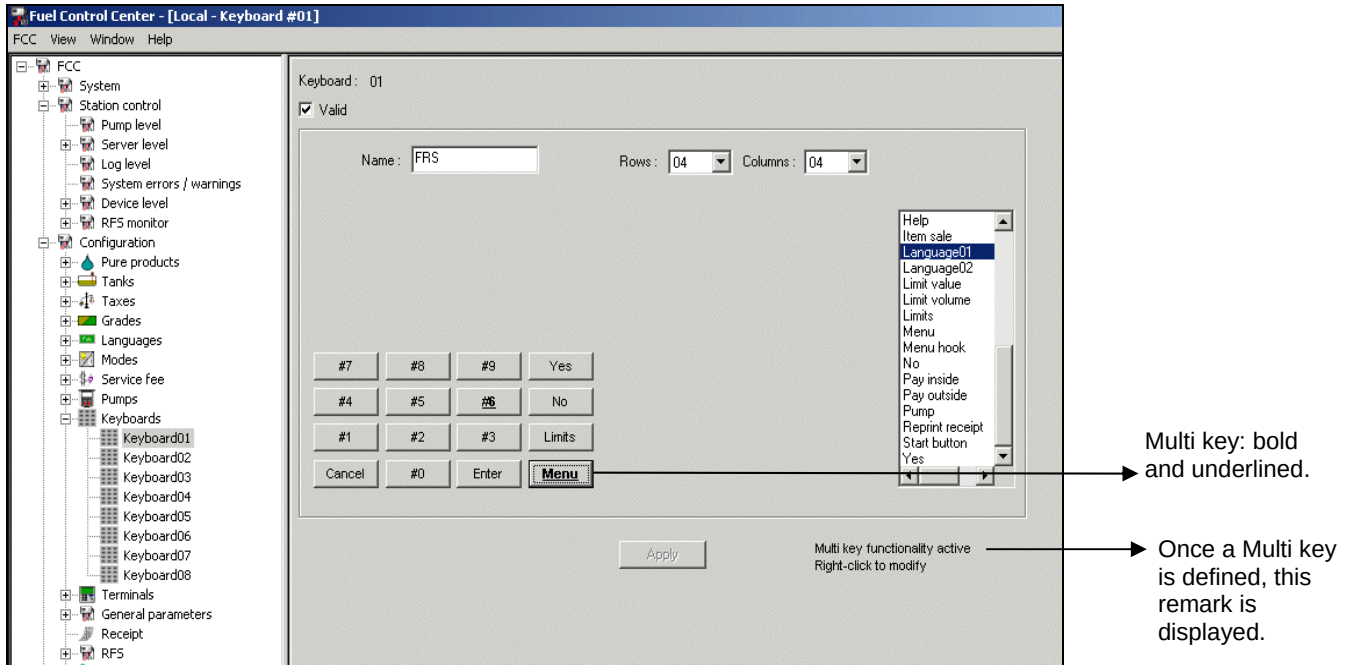
Select the function you are reverting and click **Return**. . If you have many key functions, use the down arrow  or up arrow  to navigate through the functions. On selecting **Delete** or **Return**, the dialog is closed.

Note:

Once you define a multi layer keyboard, the text “Multi Key functionality active, Right-click to modify”, appears on the bottom right-hand side of the Keyboard dialog, as displayed in the dialog below.

6 Click **Apply** to save.

The following screen displays an example of a multi layer keyboard:



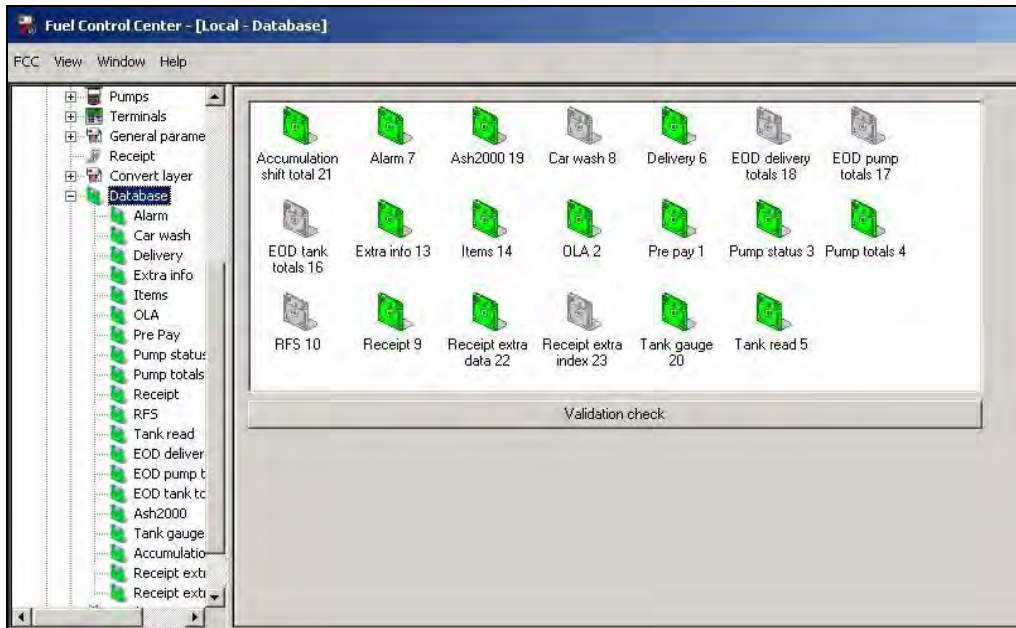
You have defined Keyboards. Continue to configure the *Database*.

Database

The **Database** is based on QDX, and data is written to the appropriate QDX files. Each QDX file has a unique number, and the **Database** menu enables you to define the QDX file numbers.

➤ To Open the Database Dialog:

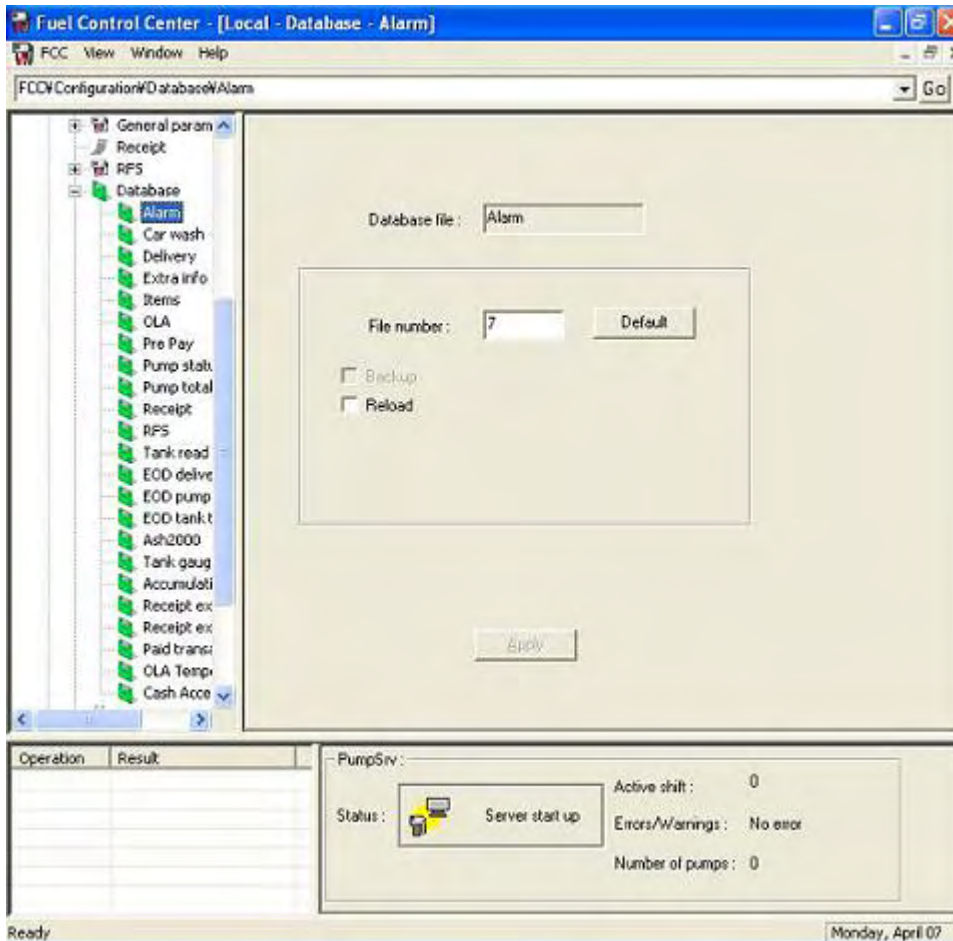
- 1 From the FCC Tree, click **Configuration**, the **Configuration** menu opens.
- 2 Click the **Database** menu, and then expand the Database menu on the FCC Tree. The **Database** dialog window opens displaying all the databases graphically:



There are 23 QDX Files, listed on the FCC Tree:

▪ Alarm	▪ EOD Delivery
▪ Car Wash	▪ EOD Pump Totals
▪ Delivery	▪ EOD Tank Totals
▪ Extra Info	▪ Ash2000
▪ Items	▪ Tank Gauge
▪ OLA	▪ Accumulation shift totals
▪ Pre Pay	▪ Receipt Extra Index
▪ Pump Status	▪ Receipt Extra Index
▪ Pump Totals	▪ Paid Transaction
▪ Receipt	▪ OLA Temporary
▪ RFS	▪ Cash Acceptor
▪ Tank Read	

- 3 Click a QDX File to display the *Database* dialog for each QDX File, as follows:



- 4 Enter the required information in the fields, as described in the table below:

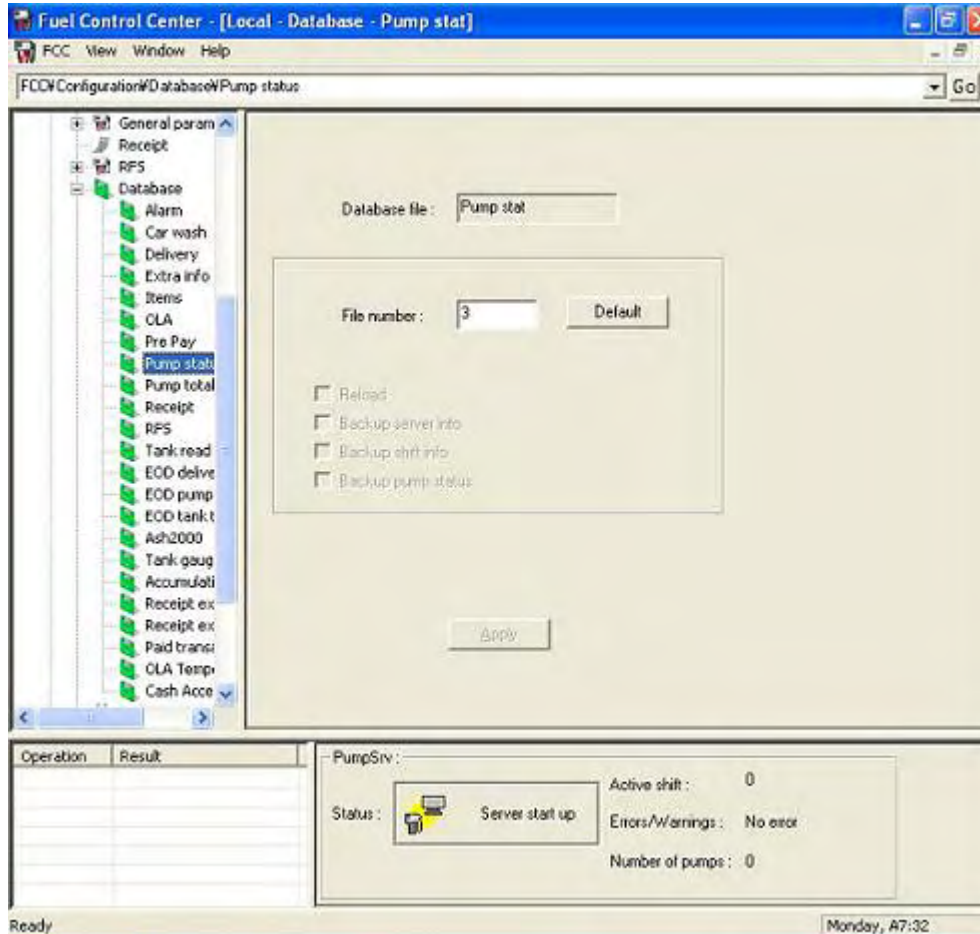
Fields	Description
Database File	Name of the QDX File.
File Number	Number of the QDX File. Each QDX File has a unique number, and may not be changed.
Default	Click Default and select the required Fuel environment from the drop-down menu. The default PumpSrv database file numbers for the selected environment is displayed.
Backup	If checked, the MultiSync backup system for PumpSrv is enabled.
Note: MultiSync is a backup system for PumpSrv. The MultiSync utility is described in the MultiSync Control Center Administrator's Guide.	

- 5 Click **Apply** to save.

Note:

The Pump Status QDX File is different than the other QDX Files, as it is made up of 3 sections, as displayed below in Steps # 6 and # 7.

- 6 From the FCC Tree, click **Pump Status**. The **Database, Pump Status** dialog is displayed:



- 7 Enter the required information in the fields, as described in the table below:

Fields	Description
Database File	Name of the QDX file.
File Number	Number of the QDX file.
Default	Click Default and select the required Fuel environment from the drop-down menu. The default PumpSrv database file numbers for the selected environment is displayed.
Backup	If checked, the MultiSync backup system is enabled for that specific QDX file.
Backup Server Info	If checked, the MultiSync backup system for PumpSrv is enabled.

Note:

MultiSync is a backup system for PumpSrv. The MultiSync utility is described in the MultiSync Control Center Administrator's Guide.

Fields	Description
Backup Shift Info	If checked, the MultiSync backup for shift information is enabled.
Backup Pump Status	If checked, the MultiSync backup for Pump status data is enabled.

Note:

Do not select this checkbox if your system uses the Meggit Convert Layer. The Meggit Convert Layer saves Pump Status backup data in the Meggit Controller, and not in PumpSrv.

8 Click **Apply** to save.

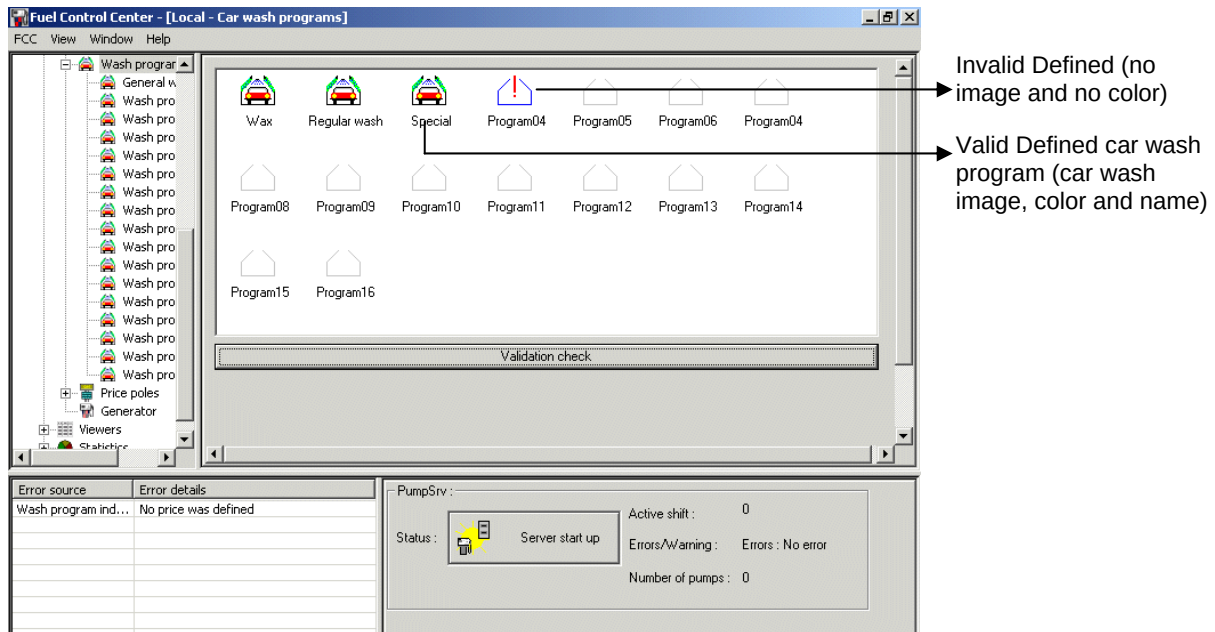
The Database is defined. Continue to configure the Car Wash.

Wash Programs

The *Wash Programs* menu enables you to configure the car *Wash Programs* option, if it is supported in the system.

➤ To View the Wash Programs Option:

- 1 From the FCC Tree, click **Configuration**, then click the **Wash Programs** menu. The **Wash Programs** window is displayed with icons of all the Wash Programs. Expand the FCC Tree to view the list of Wash Programs:



- 2 Expand the FCC Tree to view the list of Wash Programs.
- 3 Click **Validation Check** to ensure that there are no Wash Programs with system errors. The status is displayed in the bottom-pane of the dialog as shown above.

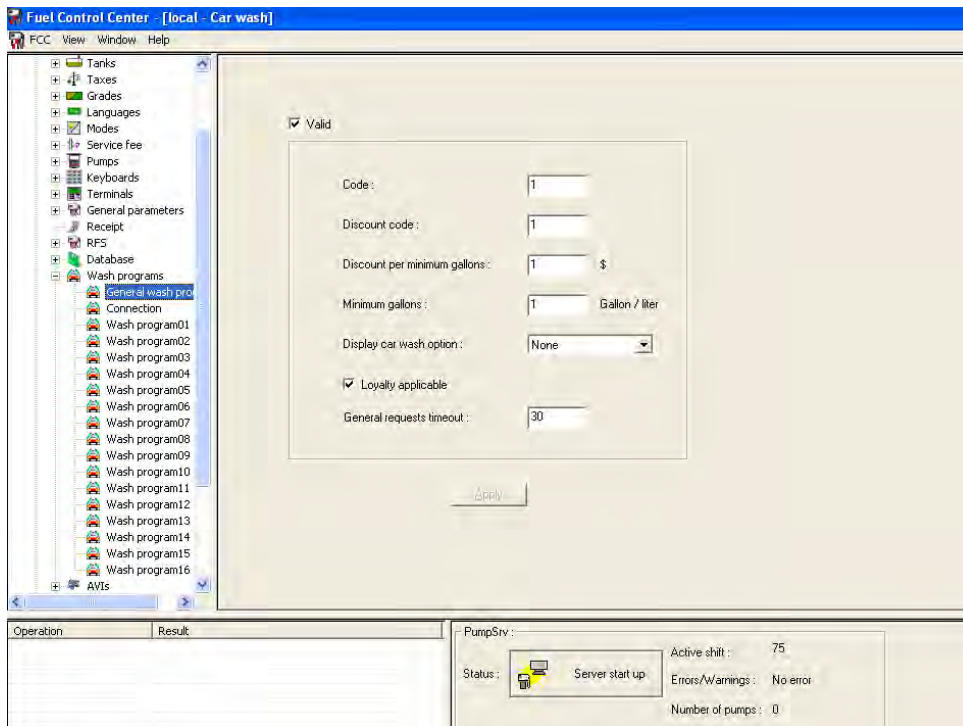
You may define up to 16 different Wash Programs.

➤ **To Define and View General Wash Program Settings:**

Note:

Once data is entered, the data applies to all valid Car Wash Programs.

- 1 From the FCC Tree, click **Wash Programs**, then click **General Wash Program**. The **Configuration: General Wash Program** dialog is displayed:



- 2 Enter the required information in the fields, as described in the table below:

Fields	Description
Code	Displays the generic OLA code for all carwash items and/or programs.
Discount Code	Displays the OLA code for the Carwash Discount Item.
Discount Per Minimum Gallons	Indicates discount amount per minimum gallons (See below Minimum gallons.)
Minimum Gallons	Minimum volume entitling to a discount.

Fields	Description
Display Car Wash Option	Specifies when, if at all, <i>Car Wash</i> option is displayed on the payment terminal. From the drop-down list, select the relevant Car Wash option, to indicate at what point the wash options will be displayed. For example, Prompt only before fueling. This indicates that the customer is prompted to select and purchase a Car Wash before fuelling begins. Note: When you select the Disabled option, this will be indicated as “N” in the Car Wash field on the <i>System Components</i> screen. When you select one of the other options, this will be indicates as “Y” in the Car Wash field on the <i>System Components</i> screen.
Loyalty Applicable	If checked, Loyalty member cards are accepted.
General Requests Timeout	Displays the response timeout between PumpSrv and CL for a Car Wash request.

3 Click *Apply* to save.

➤ **To Define or Revise a Wash Program:**

- 1 Double-click an undefined Wash program icon or select the Wash program from the FCC Tree. The **Wash Program** dialog is displayed:

- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Car Wash Program	Internal number of Car Wash program.
Valid	If checked, indicates that this is a valid program in the system.
Name	Name of Car Wash Program.
Price	Price of Car Wash Program.
Product Code	Code of Car Wash Program as appears at POS terminal.
Grade Discount	Cents Off for fuel when buying the car wash for all grades. This field is relevant in Allied and RFS systems.
Tax	Rate of applicable tax.

- 3 Click **Apply** to save.
- 4 From the FCC Tree, click **Wash Programs** to view all the programs defined in the system.

The Car Wash programs are defined. Continue to define the Price Poles.

Price Poles

The **Price Poles** menu enables you to configure the Price Poles option, if it is supported by the system. Price Poles are electronic signs that display the current fuel prices of selected products and service prices, at the entrances of a fuel site, which drivers can view from the road. Each Price Pole can display up to 16 panels and is revised periodically. A panel is a row of text displaying miscellaneous information. For example, you could display the price of 3 different grades with service, and 4 different grades without service. You can display the prices when paying by cash or credit, as well as special promotions and offers.

Note:

Currently Price Poles apply to systems using the RFS, Doms Convert Layer and Allied convert layers. Systems using the Wayne, Postec, Meggitt, or Htec Convert Layers do not yet support the Price Poles functionality.

The configuration for RFS and Doms is different to that of Allied. To view the Allied configuration, proceed to Allied Price Pole Configuration.

RFS/Doms Price Pole Configuration

➤ To View Price Poles Option:

- 1 From the FCC Tree, click Configuration, then click the **Price Poles** menu. The **Price Poles** window is displayed with icons of all the Price Poles. Expand the FCC Tree to view the list of Price Poles:

Valid Defined Price Pole (color and name)

Invalid Defined (no color)

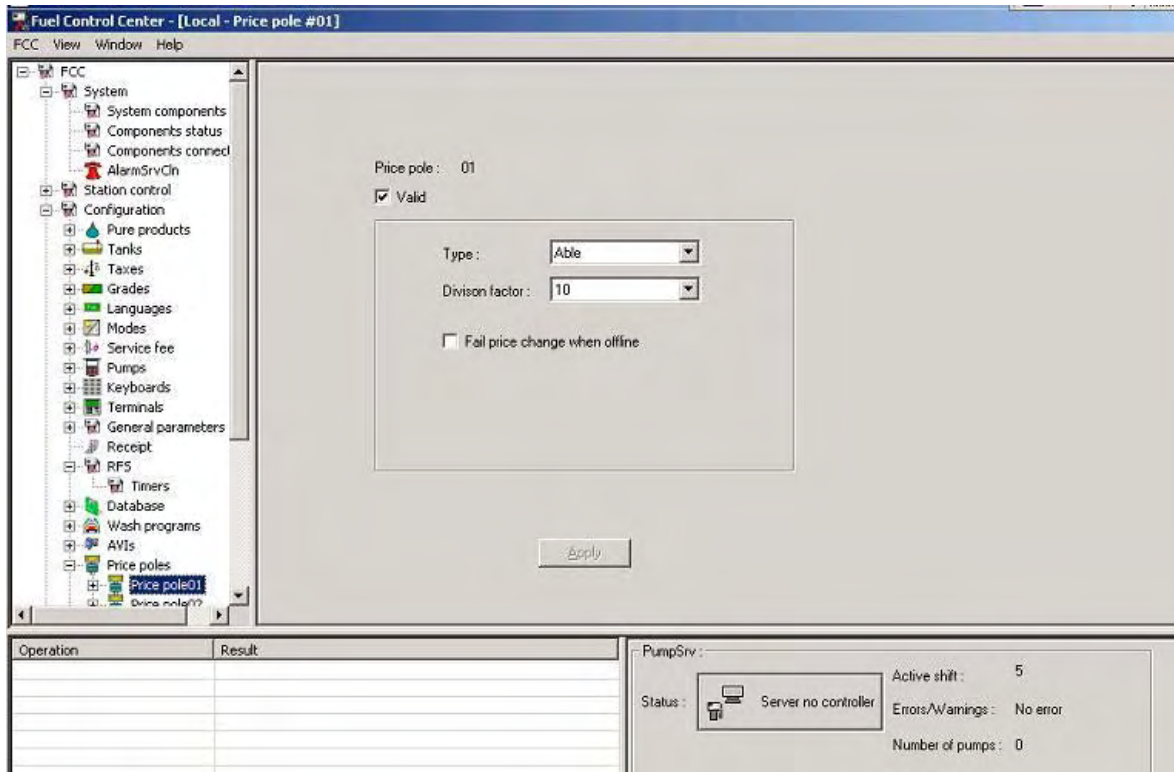
Error source	Error details
Validation check	Price poles no errors

PumpSrv :
 Status : Server start up
 Active shift : 0
 Errors/Warning : Errors : No error
 Number of pumps : 0

- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.
You may define up to 8 different Price Poles.

➤ **To Define or Revise Price Pole Settings:**

- 1 Double-click an undefined **Price Pole** from the FCC Tree. The **Price Pole #** dialog is displayed:



You may view the properties of each **Price Pole** by selecting the **Price Pole** number from the FCC Tree. You may move from one Price Pole to the next and apply the changes as necessary. The Price Pole number is an internal code number of Price Poles as used in PumpSrv.

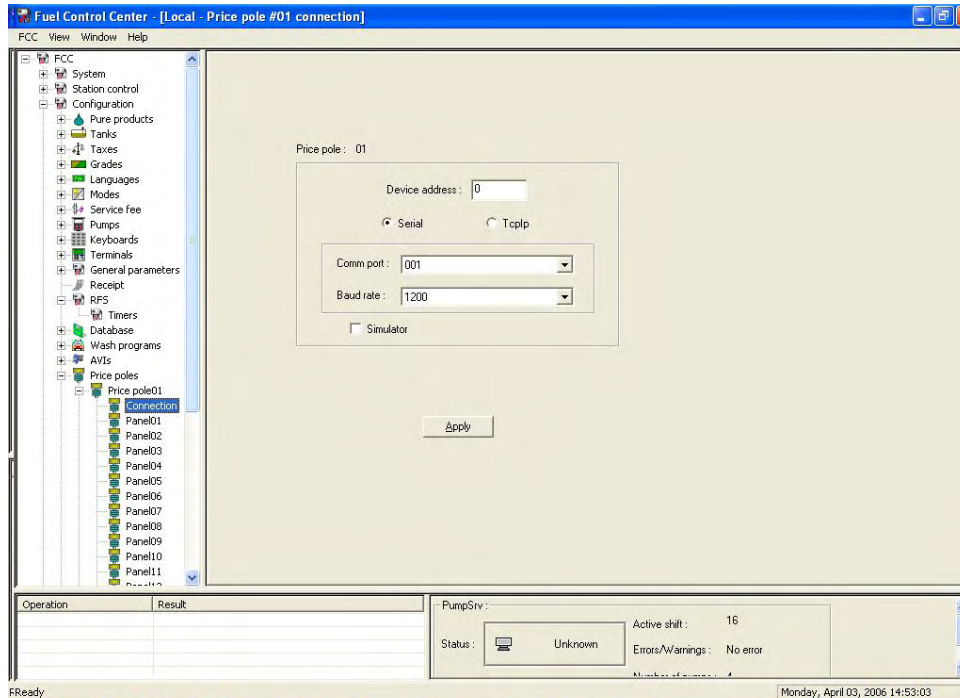
- 2 Select the **Valid** checkbox to indicate that the Price Pole is valid in the system.
- 3 From the **Type** drop-down list, select the manufacturer's type from the drop-down list.
- 4 From the **Division Factor** drop-down list, select the number of decimal places that are used to represent the price.
- 5 Select the **Fail Price Change When Offline** to indicate that if a price change occurs when offline, the price change will not occur at the forecourt. If not checked, even when the price pole is offline, the price change will occur.

Note:

Generally the fuel prices on the Price Sign and the Pump must be the same, however, if a digital Price Sign goes offline or the price sign is illegible, the Site Manager can still download prices to the Pump.

- 6 Click **Apply** to save. Then proceed to define the connection type.

- 7 From the FCC Tree, expand the **Price Pole** menu and select the **Connection** menu under the Price Pole number you are defining. The following dialog is displayed:



- 8 Enter the required information in the following fields, as described in the table below:

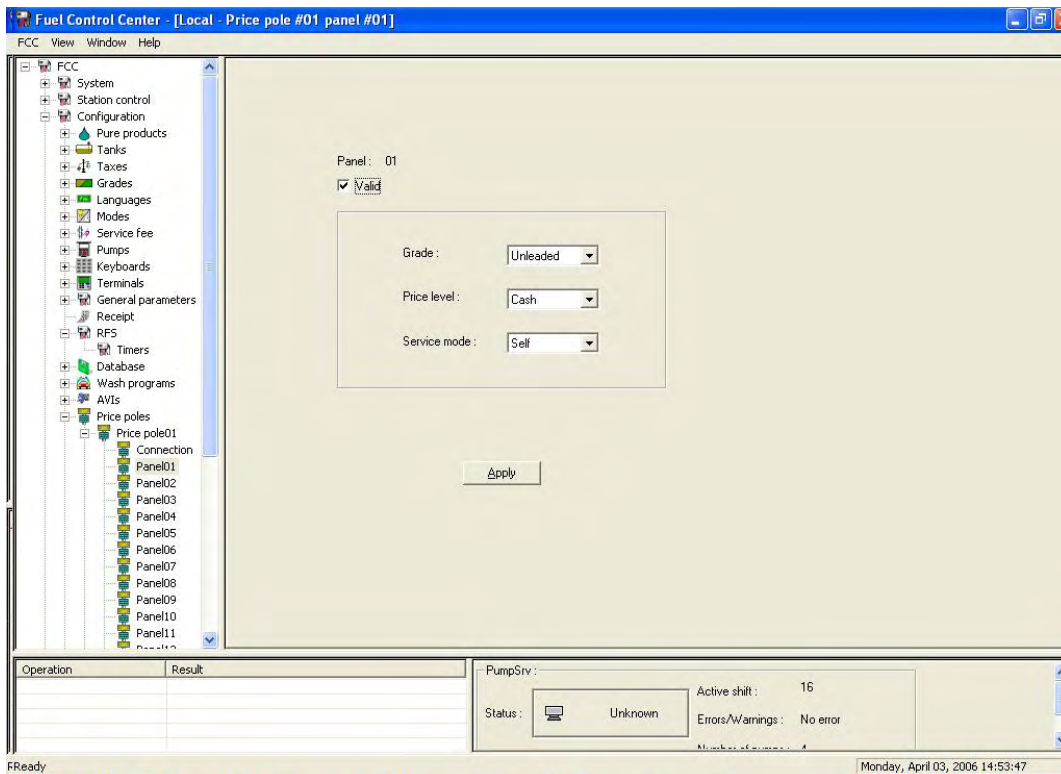
Fields	Description
Device Address	Select the required device address from the drop-down list. This is a unique numeric address predefined for each Price Pole.
Serial	Select this radio button if your system uses a serial system to connect between the servers and price poles, and then proceed to select the Comm port and Baud Rate numbers.
TCP	Select this radio button if your system uses TcpIp to connect between the servers and price poles, and then enter the relevant Port and IP Address.
Comm Port	Select the required communication port number from the drop-down list.
Baud Rate	From the drop-down list, select the baud rate, indicating the rate of the communication line, which is the number of transitions (voltage or frequency changes) that are performed per second.
Port	Enter the Connection Port number for communication with the Price Poles.
IP Address	Enter the relevant IP Address.
Simulator	Select to indicate that the system works with a simulator.

- 9 Click **Apply** to save.

- 10 From the FCC Tree, click **Price Poles** to view all the Price Poles defined in the system. Proceed to define the Panels. Each Price Pole can display up to 16 rows of information.

➤ **To Define Panels:**

- 1 From the FCC Tree, click **Price Poles**. Expand the FCC Tree and select the Panel number you are defining. The **Configuration: Price Pole** dialog is displayed:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Panel Number	Internal code number of Panel as used in PumpSrv.
Valid	If checked, indicates the Panel is valid in the system.
Grade	Select the Grade type you want to display on the Price Pole from the drop-down list.
Price Level	Select the Price level, either cash or credit, from the drop-down list.
Service Mode	Select the Service Mode, either self or full, from the drop-down list.

- 3 Click **Apply** to save.

You can define up to 16 different panels.

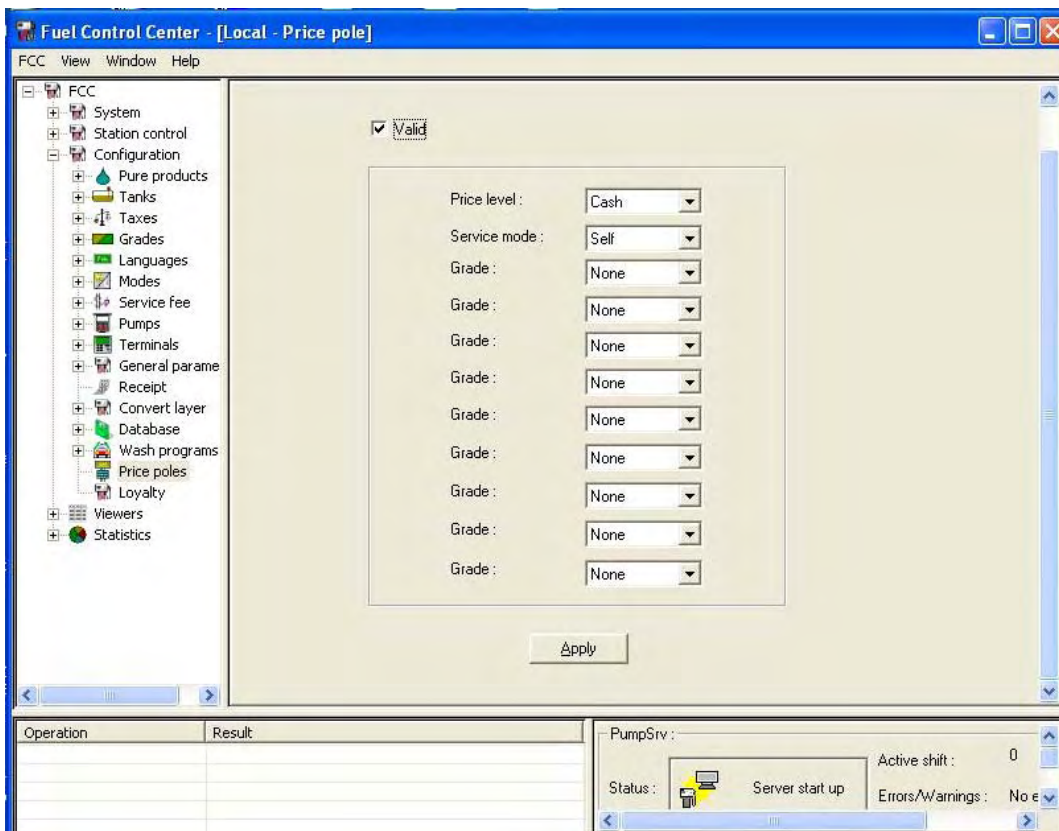
You have configured the Price Poles continue to view the Generator.

Allied Price Pole Configuration

The Allied environment enables you to configure price pole grades. In addition, the system sends the grade pricing during price-change process to the Allied Electronics ANDI controller, enabling prices to be displayed on the Price Pole in the required locations.

➤ **To Define Panels:**

- 1 From the FCC Tree, click **Price Poles**. The **Configuration: Price Pole** dialog is displayed:



- 2** Enter the required information in the following fields, as described in the table below:

Fields	Description
Valid	If checked, indicates the Panel is valid in the system.
Price Level	Select the Price level, either cash or credit, from the drop-down list.
Service Mode	Select the Service Mode, either self or full, from the drop-down list.
Grade	Select the Grade type you want to display on the Price Pole from the drop-down list.

- 3** Click **Apply** to save.

Loyalty

Loyalty is implemented as a COM server that connects between the different clients and a Promotions Engine component called PromSrv. The Promotions Engine provides customer promotions by request. Customers are able to use their loyalty cards to participate in promotions run by the fuel station in order to earn rewards.

The Loyalty option enables you to define the Loyalty settings when connecting the PromSrv to the system.

Note:

Currently **Loyalty** applies only to systems using the RFS and Allied convert layers.

➤ To View and Define the Loyalty Options:

- 1 From the FCC Tree, click **Configuration**, then click the Loyalty menu. The **Loyalty** dialog is displayed:

- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Loyalty Server	From the drop-down list, select the relevant loyalty system integrated with the Fuel System. The options are: ▪ LPE ▪ Copient ▪ StorePoint Promotion Server (SPPS) ▪ LPE Stand alone (LPESA)
Communication Information area:	
IP	Enter the relevant IP Address.
Port	Enter the Connection Port number for communication with the promotion server.
Log Level	From the drop-down list, select the log level to define the priority of the information saved in the log. The options are: ▪ No log required – indicates no information is saved in the log. ▪ Debug level – indicates that the log records every process performed during every transaction. This is the Highest level of information recorded in the log. ▪ Info level – indicates that all data information is included in the log; it is not as detailed as the debug level. ▪ Warning level – indicates that only warnings are saved in the log. ▪ Error level – indicates that only errors are saved in the log.
Rounding Option	From the drop-down list, select the relevant rounding option. This parameter enables you to define the type of rounding that is required when calculating the Percentage Off, Amount Off, and New Price rewards. The options are: ▪ Round to two decimals ▪ Always round up ▪ Truncate to 2 decimals
Target Message Template	Enter the prefix number of the template for the target message promotion. The 'message' specifies what the reward is. The prefix number and the message are sent as the promotion's reward.
Promotion Template	Enter the prefix number for the promotion's template required when printing the receipt. Each promotion includes an individual template name for printing. Each promotion includes an individual template name, which is attached after the prefix.
LPE Parameters area:	
Virtual POS ID	Displays the ID of the fuel system in the LPE system, when both Fuel and POS are running on the same machine
Loyalty Unique Client ID	Displays the ID to identify each pump in the LPE system.
Department Code	Displays the Department code to indicate that it is a Fuel item.
Cashier ID	Used by LPE
Store Language	At Init , LPE used it for Dynamic receipt for LangId attribute

Fields	Description
Print Msg Destination	Where should the messages be printed
Print Device	Device used for printing, also defines the paper size
Decimal Points	This parameter is related to the currency
Xml Supported Language	Supporting special characters (for example -Chinese)
Training Mode	Used by LPE, default should be 0
Refund Ticket	Indicates a refund transaction
Dynamic att for Grade Id	The dynamic attribute ID that represents the Grade ID in the Fuel system
Pump Auto Start for Segment Id	The segment ID that indicates pump auto authorization
Data Path	Click  , and browse to the path where the file holding the data is saved.
XML Log File Name	Click  , and browse to the path where the XML log file is saved. The path is specified in the field. If no path is supplied the log file is saved in the PromSrv.dll directory. Input and output XML information is sent to the log file.
Initial Parameters area:	These parameters are optional. You may select more than one attribute, however for performance issues, do not select all methods for logging.
	Note:
	These parameters should only be defined by technical personnel. Once the Log level is defined, the relevant attributes are automatically selected.
Checkout bank	If checked, indicates that the promotions are only run on the specific checkout bank defined in the Store in which the promotion is triggered from.
Promo conflict manager active	If checked, indicates that promotions are prioritized in order to avoid conflicts, for example, when two promotions are running at the same time that provide the same reward, the store can specify which promotion the customer is awarded.
Log add item info message	If checked, indicates that the xml log file includes the add item info message method.
Log get discount message	If checked, indicates that the xml log file includes the Log Get Discount Message method.
Log add coupon message	If checked, indicates that the xml log file includes the Log Add Coupon method.
Log add discount message	If checked, indicates that the xml log includes the Log Add Discount method.
Log add tender message	If checked, indicates that the xml log includes the Log Add Tender Message method.
Log init method	If checked, indicates that the xml log includes the Log Init method, performed at the beginning of a ticket.
Support query item	If checked, indicates that the system logs all queries.
Use binary for promotion interface	If checked, indicates that a slow client can switch from the XML promotion interface to a direct binary interface by sending this attribute.

Fields	Description
Coupon need triggered promotion	If checked, indicates that the promotion coupon is only accepted if other promotion's terms are met. If not, the promotion coupon is accepted any time during itemization.
Log add member card message	If checked, indicates that the xml log file includes the Log Add Member Card Message method.
Get triggered discounts only	If checked, indicates that only triggered discounts are saved in the log.
Authorize Payment Before Start Ticket	If checked, indicates that the system sends a request to authorize the loyalty payment before starting the loyalty ticket. If not, the system must authorize the loyalty payment after starting the loyalty ticket.
General XML Parameters area:	These attributes determine what information is received from the promotion server in the XML format. Note: These parameters should only be defined by technical personnel.
Trigger/AddItem/Query	Select the General XML parameter option, and then select the checkboxes of the corresponding attributes for each option. For example, if you selected Query, and then the Get Immediate Discount flag, it indicates that the system can receive information on what discounts are available immediately. The options are as follows: Select Add Item, which indicates that the system receives new items from the promotion server which are on promotion, in the xml format. Then define the relevant checkboxes. Select Query, which indicates that the system is able to receive information on what promotions are currently available from the server in xml format. I.e., once a customer swipes their loyalty card, the system automatically sends the new information to the terminal. Then define the relevant checkboxes. Select Trigger, which indicates that the available promotions are triggered at the forecourt when using a loyalty card. Then select the relevant checkboxes.
Checkbox options:	The following options are available.
Get Immediate Discounts	If checked, indicates that the system sends promotions with an immediate discount, and enables customers to get the discounts available immediately.
Get order discounts	If checked, indicates that the system can send order discounts.
Get points discounts	If checked, indicates that the system can send points discounts.
Get charge info	If checked, indicates that the system returns the apportionment calculation from the loyalty server. An apportionment algorithm is used to determine how discounts are allocated internally in order for the site to track on which items the discount is allocated. E.g., the discount may be calculated and allocated over all the items, or only on the trigger items.
Group by	If checked, indicates that the output information returned as Discount Lines from the loyalty server, are grouped by Promotion. E.g., when items are sold, all discounted items are grouped by Promotion.

Fields	Description
Get loyalty required discounts	If checked, indicates that the system can send loyalty required discounts.
Get none loyalty required discounts	If checked, indicates that the system can send discounts that are not controlled by loyalty.
Get triggered discounts only	If checked, indicates that the system only sends triggered discount information.

3 Click **Apply** to save.

You have configured Loyalty continue to view TankSrv.

TerminalSrv

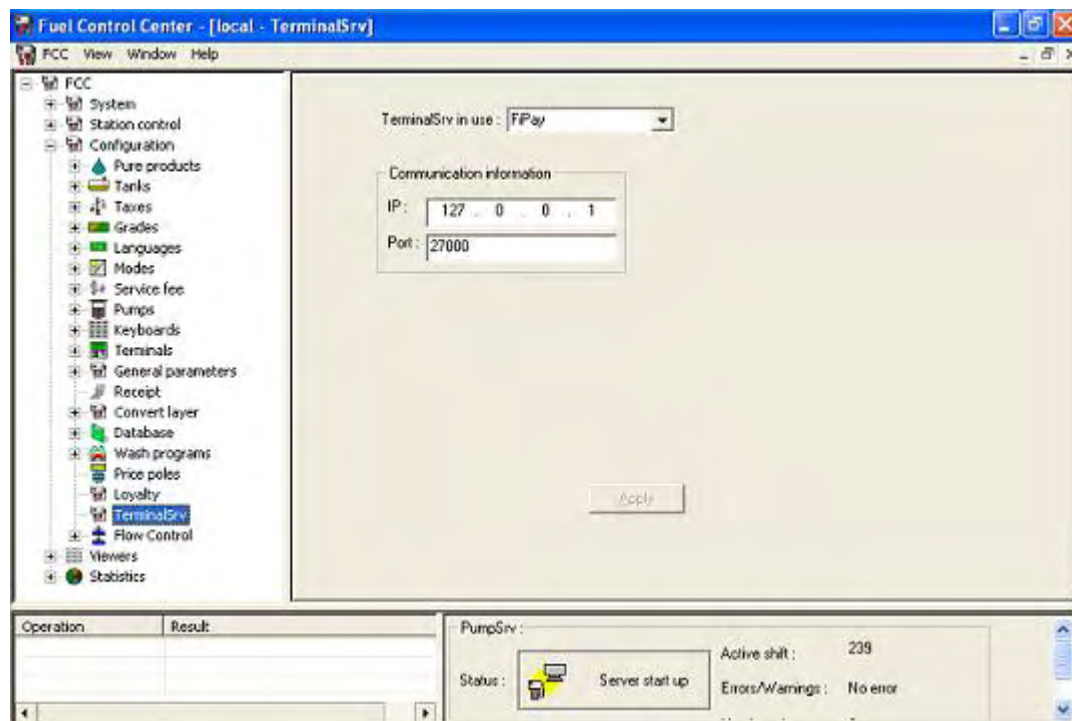
The TerminalSrv module enables a mode of operation where a third party EPS provider is responsible for both terminal control and processing financial transactions (card authorization/completion) Vs the bank. TerminalSrv updates EPS regarding the pumps status (in order for the terminals to reflect the status), and gets updates from the EPS regarding the actions made on the terminal and regarding card authorization/completion processing.

Note:

This module is enabled if **Terminal Server** is selected in the **Active Services** area in the **Services** module.

➤ To View and Define the TerminalSrv Options:

- 1 From the FCC Tree, click **Configuration**, then click the **TerminalSrv** menu. The **TerminalSrv** dialog is displayed:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
TerminalSrv in Use	Displays the Terminal server used in the system.
Communication Information area:	
IP	Displays the relevant IP Address.
Port	Displays the Connection Port number for communication with the server.

TankSrv

TankSrv is a COM server that connects between the different clients, and a Tank Gauge. Currently this option only supports the RFS and Doms controllers. The TankSrv option enables you to define the Tank Server's settings when connecting the Tank Server to the system.

Tank monitoring systems are used for performing tank readings of fuel, water and air, and for generating fuel delivery reports. The tank monitoring system is connected to the Fuel server, i.e., the *RFS*, as well as to the tanks, and transmits data from the tanks to the *RFS*. The enhanced models are equipped also with a reconciliation capability, enabling them to receive transaction reconciliation data transmitted from the *RFS*. With this data the tank monitoring system can calibrate the fuel tanks' internal conversion tables, and also detect possible leaks.

Tank monitoring systems use Point-to-Point communication. Only one tank monitoring system is required in a forecourt, and up to 16 tanks can be connected to each tank monitoring system.

One part of the configuration procedure is filling out the **Tank Monitoring System Configuration Form** (example displayed below). For further details refer to RFS Wiring and Configuration Technical Guide Version. The Tank server in the forecourt is checked for its Connection and Reconciliation settings, and this information is taken from the Tank Configuration Form

Tank Monitoring System → → → Comm-Port: _____
 Manufacturer (Check one): → → → Low-Level Protocol: _____
 ☒ Veeder Root → → → Cable Name: _____
 ☐ Emco → → → Reconciliation Enabled:
 ☐ Other _____ → → →
 → → → Baud Rate: _____
 → → → Data Bits: _____
 → → → Stop Bits: _____
 Model: TLS-350R → → → Parity: _____
 →

Tank No.:	Product:
1	Diesel
2	Premium Unleaded

Note:

Wiring and configuration between the tank monitoring system and the tanks are outside the scope of this manual.

➤ **To Define TankSrv:**

- 1 From the FCC Tree, click **Configuration**, then click the **TankSrv** menu. The **TankSrv** dialog is displayed:

Fuel Control Center - [Local - TankSrv]

FCC View Window Help

Tree View:

- Languages
- Modes
- Service fee
- Pumps
- Keyboards
- Terminals
- General parameters
 - WebStock
 - Log
 - OLA
 - Timers
 - MultiSync
 - Indexes
 - Services
 - Paths
 - PCI
 - RealTimeData
 - Receipt
 - RFS
 - Database
 - Wash programs
 - AVIs
 - Price poles
 - Loyalty
 - TerminalSrv
 - TankSrv**
 - Connection
 - Flow Control

Main Settings:

Type: Veeder Root

☒ Enable delivery report
☐ Support negative delivery
☐ Write free text response into file

Timers:

Polling interval: 30000 mSec
 Number of connections retries: 0
 Connection retries interval: 30 Sec

Log:

Level: Mid

PumpSrv:

Status: Server start up
 Active shift: 1
 Errors/Warnings: No error
 Number of pumps: 0

Operation	Result

- 2 From the **Type** drop-down list, select the type of Tank connected to the system.
- 3 Select the **Enable Delivery Report** to indicate that delivery reports are to be generated by the hardware (tank gauge), and to send the reconciliation data (transaction info) to the device.
- 4 Select the **Support Negative Delivery** checkbox to indicate that negative delivery is supported in cases where the customer would like to take fuel out. For example, if two sites are next to each other and one site is short of fuel, the second sight can transfer over fuel.
- 5 Select the **Write free text response into file** checkbox to indicate that all “free text” commands that are received or sent from/to the tank gauge, are saved in a separate file. This enables monitoring of raw data from the tank gauge, in order to find any differences in the end of shift process.
- 6 In the **Timers** area in the **Polling Interval** field enter the number of milliseconds to specify how often status data is collected from the tank gauge.
- 7 In the **Number Of Connections Retries** field, enter the number of connection retry attempts allowed before a timeout is performed.

Note:

If the "Number of connections Retries" key is set to '0', TankSrv will perform as before. If not then TankSrv will connect to the ATG on system start up, and disconnect after all the installation procedure is completed.

Every time TankSrv receives a request from RFS, it connects to the ATG and remains connected until the request is processed.

- 8 In the **Connection Retries Interval (Sec)** field, enter the number of seconds to specify the interval between the Connection Retries.
- 9 In the **Log** area from the **Level** drop-down list, select the relevant option:
 - High – indicates that a very detailed log is kept. (Communication traffic dump)
 - Low – indicates that a low level of details is kept in the log
 - Mid – indicates that a medium level of details is kept in the log.
 - None – indicates that only the minimum amount of detail is kept in the log.
 - Console – indicates that the component will display a console window. This window displays all the logs that are recorded when the application runs and can be used for monitoring.
- 10 Click **Apply** to save the details.

Continue to define the Connection between TankSrv and the FCC.

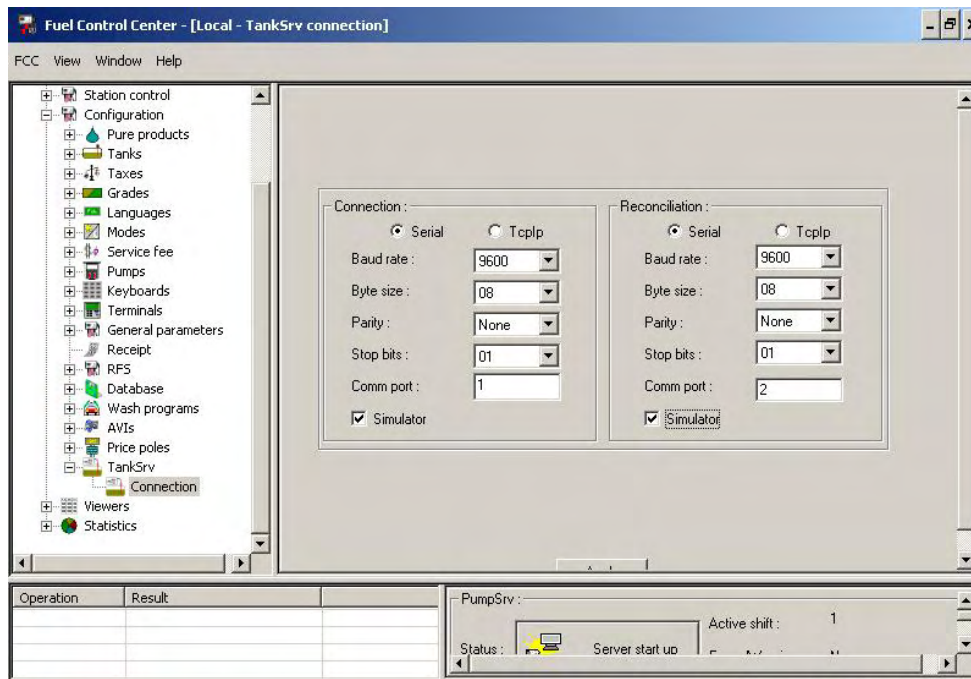
Connection

To define TankSrv in the system, you must define if you are configuring serial-based communication or TCP/IP.

When using a TCP/IP based communication system, the Port and IP Address are required. When using serial-based communication, the comm. port and serial communication settings, e.g., baud rate are required to connect Tanksrv to the Tank Monitoring System.

➤ To Configure the Connection:

- 1 From the FCC Tree, expand the TankSrv menu, and then click **Connection**. The **TankSrv Connection** dialog is displayed as follows:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Connection/ Reconciliation area:	The Connection area displays the configuration to connect the TankSrv to the system in order to receive tank and delivery readings. The Reconciliation area displays the configuration settings in order for the system to transmit transaction reconciliation data from TankSrv to the tank monitoring system.
Serial	Select this radio button if your system uses a serial 191omm.. Port to connect between TankSrv and the tank gauge, and then proceed to select the Comm port and Baud Rate settings.
Comm Port	Indicates the serial communication port number.

Fields	Description
Note:	
The Communication settings defined in the fields described below, must match the communication settings defined in the Tank Gauge system.	
Baud Rate	From the drop-down list, select the baud rate, indicating the rate of the communication line.
Byte Size	From the drop-down list, select the relevant byte size indicating the number of bits in a byte.
Parity	From the drop-down list, select the parity type.
Stop bits	From the drop-down list, select the value required.
Tcplp	Select this radio button if your system uses Tcplp to connect between the server and the tank gauge, and then enter the relevant Port and IP Address.
Port	Enter the Connection Port number for communication with the tank.
IP Address	Enter the relevant IP Address.
Simulator	If checked, indicates that the Tank is used with a software pump simulator.

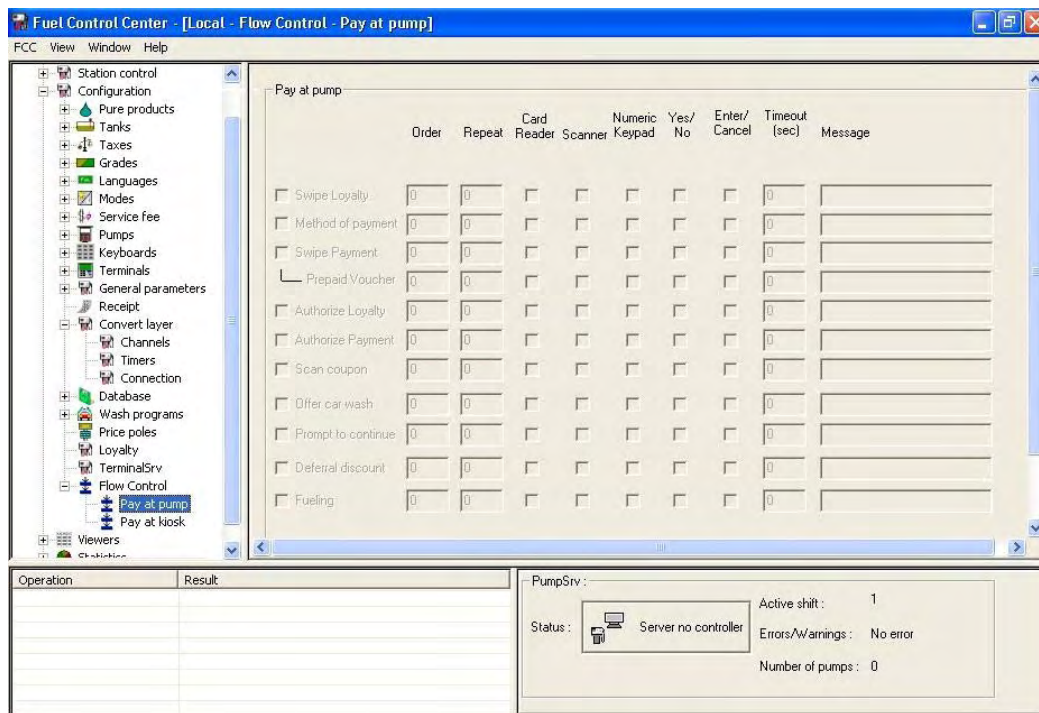
- 3 Click *Apply* to save the connection settings.

Flow Control

The Flow Control screen enables you to configure the order and prompt display of the different prompts during a loyalty related Pay At Pump and Pay at Kiosk transactions. You can define different flows to support the different business scenarios. For example: you can specify if the system will prompt the user to buy a car wash item before or after prompting for loyalty card swipe. The system prompts the user with the defined messages in the defined order.

➤ To View the PAP Flow Control Options:

- 1 From the FCC Tree, click **Configuration**, then click the **Flow Control** menu, and then **Pay at Pump**. The **Flow Control** dialog is displayed:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Pay at Pump area:	The following prompts may be displayed in Pay At Pump transaction before fueling.
Swipe Loyalty	If selected, a loyalty card swipe prompt is displayed.
Method of Payment	If selected, a method of payment prompt is displayed. This message is defined in the Message column. E.g., Press Y to pay inside or swipe payment card.
	Note:
	This field is selected only when the Swipe Loyalty checkbox is selected, indicating that the Loyalty card is swiped before payment.
Swipe Payment	If selected, a payment swipe prompt is displayed.
Prepaid Voucher	If selected, a prepaid voucher scan prompt is displayed.

Fields	Description
Authorize Loyalty	If selected, a loyalty authorization prompt is displayed.
Authorize Payment	If selected, a payment authorization prompt is displayed.
Scan Coupon	If selected, a coupon scan prompt is displayed.
Offer Car Wash	If selected, a purchase car wash prompt is displayed.
Prompt to Continue	If selected, indicates that the system prompts the user if to continue with the loyalty transaction according to the defined flow.
Deferral Discount	If selected, indicates that a deferral discount prompt is displayed.
Fueling	

Note:

The following parameters can be defined for each prompt.

Order	Indicates the order in which the prompts are handled. For example, if you specify the following: Swipe Loyalty Card = 1 Scan Coupon = 2 Offer Car Wash = 3 The system then prompts the user to swipe their loyalty card first, next the system will prompt to scan coupons, and finally offer a car wash.
Repeat	Indicates the number of times that a prompt is repeated.
Card Reader	This option is disabled for editing. It indicates if the card reader is enabled for this prompt.
Scanner	This option is disabled for editing. It indicates if a scanner is enabled for this prompt.
Numeric Keypad	This option is disabled for editing. It indicates if a numeric keypad is enabled for this prompt.
Yes/No	This option is disabled for editing. It indicates if the Yes and No buttons are enabled for this prompt.
Enter/Cancel	This option is disabled for editing. It indicates if the Enter and Cancel buttons are enabled for this prompt.
Timeout	This option displays the number of seconds, after which if the customer does not respond to the prompt, the transaction is cancelled.
Message	Displays the message prompted. E.g., If the Swipe Loyalty checkbox is selected, the message may be "Swipe Loyalty Card. It is possible to define the name of a Message (from the Languages setup) and the relevant message display is prompted.

Note:

The message defined for this field, does not apply to car wash prompts.

- 3 Select **Apply** to save the prompts defined. The system verifies that the **Order** option starts from 1, and increments sequentially per option in all valid prompts, and that the **Repeat** value is at least 1.

➤ **To View the PAK Flow Control Options:**

- 1 From the FCC Tree, click **Configuration**, then click the **Flow Control** menu, and then **Pay at Kiosk**. The **Flow Control** dialog is displayed:

Order	Repeat	Card Reader	Scanner	Numeric Keypad	Yes/No	Enter/Cancel	Timeout (sec)	Message
☒ Swipe Loyalty	1	☐	☒	☒	☐	☐	90	Swipe Loyalty/Yes = Manual/No = Continue
☒ Authorize Loyalty	2	☐	☐	☐	☐	☐	90	
☐ Scan coupon	0	☐	☐	☐	☐	☐	90	
☒ Deferral discount	3	☐	☐	☐	☒	☐	90	You have \$%3f / gal in GAS REWARDS pc

Apply

Operation Result

PumpSrv:

Status: Server start up

Active shift: 792

Errors/Warnings: No error

Number of pumps: 0

Ready

Tuesday, May 19, 2009 14:53:50

- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Pay at Kiosk area:	The following prompts may be displayed in Pay At Kiosk transaction before fueling.
Before Fueling:	
Before Starting the Loyalty Ticket area:	The following prompts may be displayed in Pay At Pump transaction before fueling, and before starting the loyalty ticket:
	▪ Swipe Loyalty – if selected, a loyalty card swipe prompt is displayed ▪ Authorize Loyalty – if selected, a loyalty authorization prompt is displayed ▪ Scan Coupon – if selected, a coupon scan prompt is displayed ▪ Deferral Discount – if selected, a prompt enabling the customer to defer the loyalty discount is displayed

Fields	Description
Note:	
The following parameters can be defined for each prompt, e.g., for Prompt to continue, Offer Car Wash, Scan Coupon, Swipe Loyalty card.	
Order	Indicates the order in which a loyalty card, coupon, or Car wash prompts are handled. For example, if you specify the following: Swipe Loyalty Card = 1 Scan Coupon = 2 Offer Car Wash = 3 The system then prompts the user to swipe their loyalty card first, next the system will prompt to scan coupons, and finally offer a car wash.
Repeat	Indicates the number of times that a prompt is repeated.
Card Reader	This option is disabled for editing. It indicates if the card reader is enabled for this prompt.
Scanner	This option is disabled for editing. It indicates if a scanner is enabled for this prompt.
Numeric Keypad	This option is disabled for editing. It indicates if a numeric keypad is enabled for this prompt.
Yes/No	This option is disabled for editing. It indicates if the Yes and No buttons are enabled for this prompt.
Enter/Cancel	This option is disabled for editing. It indicates if the Enter and Cancel buttons are enabled for this prompt.
Timeout	This option displays the number of seconds, after which if the customer does not respond to the prompt, the transaction is cancelled.
Message	Displays the message prompted. E.g., If the Swipe Loyalty checkbox is selected, the message may be "Swipe Loyalty Card. It is possible to define the name of a Message (from the Languages setup) and the relevant message display is prompted.
Note:	
The message defined for this field, does not apply to car wash prompts.	
After Starting the Loyalty Ticket area:	The following prompts may be displayed in Pay At Pump transactions, before fueling and after starting the loyalty ticket.
Prompt to continue	If selected, indicates that the system prompts the user if to continue with the loyalty transaction according to the defined flow.
After Fueling area: Before Adding Fuel Item to Loyalty Ticket	The following prompts may be displayed in Pay At Pump transactions, after fueling and before adding fuel items to the loyalty ticket.
Offer Car Wash	If selected, a purchase car wash prompt is displayed.

- 3** Select **Apply** to save the prompts defined. The system verifies that the **Order** option starts from 1, and increments sequentially per option in all valid prompts, and that the **Repeat** value is at least 1.

Service Modes

The Doms system includes a dispense controller, providing the services needed to monitor the status of the dispensers and handle the commands to control fuelling. One of the parameters for dispense control is the Service Modes.

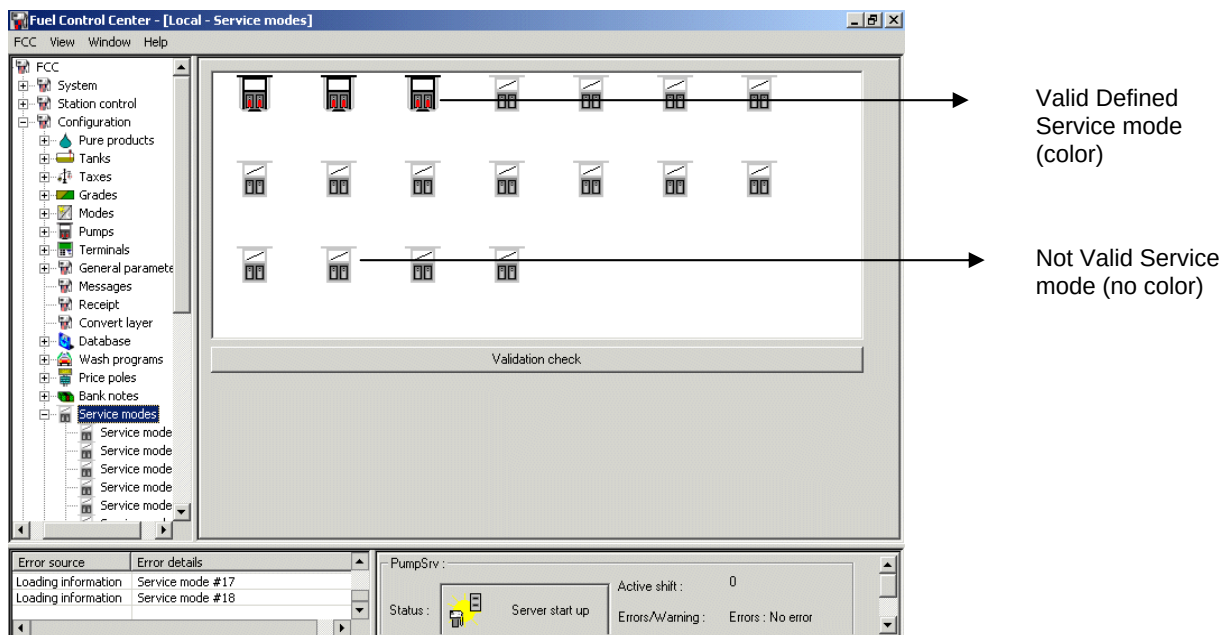
The **Service Modes** menu enables you to define the Service Mode types for the different payment methods. From the Service Mode type, the payment method may be determined. For example, you may define the Service Modes called PAK and PrePay as the active service modes in the pumps. You must define a Service Mode for each payment type.

Note:

Service Modes apply only to systems using the Doms Convert Layer. Systems using the Allied, RFS, Meggitt or HtecConvert Layers do not support the Service Modes functionality.

➤ To View Service Modes Option:

- 1 From the FCC Tree, click **Configuration**, then click the **Service Modes** menu. The **Service Modes** dialog is displayed with Terminal icons. Expand the FCC Tree to view the list of Service Modes:



- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

You may define up to 18 different Service Modes.

➤ To Define or Revise Service Modes:

- 1 Double-click an undefined Service Mode from the FCC Tree. The **Configuration: Service Mode** dialog is displayed:

You may view the properties of each Service Mode by selecting the Service Mode number from the FCC Tree. You may move from one Service Mode to the next and apply the changes as necessary.

- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Service Mode	Internal code number of Service Mode as used in PumpSrv.
Valid	If checked, indicates the Service Mode is valid in the system.
Name	Enter the name of the Service Mode. E.g., PAK if you are setting up a service mode that supports PAK transactions.
Type	Select a Service Mode type from the drop-down list. E.g., Post Payment at POS (11). The Service mode ID is 11, indicating the way of payment, which is equivalent to PAK in PumpSrv.
Minimum Volume to consider transaction as 'Zero-transaction'	Select the minimum volume in milliliters from the drop-down list. E.g., 1 milliliter. If the transaction volume and money values are both below the minimum limits, the transaction is called a 'zero-transaction'. A 'zero-transaction' is a transaction so small, it is not counted for in any way. For example, when the nozzle is removed from the pump, and just before fuelling starts, a few drops of fuel may have dripped out. If the amount is less than the amount specified in this field, the customer is not charged. These amounts of fuel are considered waste.

Fields	Description
Minimum value to consider transaction as 'Zero-transaction'	Select the minimum value in money from the drop-down list. E.g., 0.50 cents. If the transaction volume and money values are both below the minimum limits, the transaction is called a 'zero-transaction'. A 'zero-transaction' is a transaction so small, it is not counted for in any way. For example, when the nozzle is removed from the pump, just before fuelling starts, a few drops of fuel may have dripped out. If the amount is less than the amount specified in this field, the customer is not charged. These amounts of fuel are considered waste.
Timers area:	
Authorized	A fuelling point can be authorized for fuelling before the nozzle is lifted. Enter the number of seconds in which authorization will last, before the pump goes back to Idle mode.
Authorize after nozzle has been replaced	Normally an authorization is removed when the nozzle is replaced, and authorization is lost. Enter the number of seconds in which authorization can be delayed after replacing the nozzle. This is useful if the customer is given authorization, however, removes the wrong nozzle. The customer has a few seconds to replace the nozzle and pick up another one while still in authorization mode.
Add the parameter value\volume\grade to transaction	If checked, indicates that the value, volume, and grade used during the transaction are saved.
Authorize pump when service mode select	If checked, and the specified Service Mode is the active Service Mode, the fuelling point will be automatically authorized when the Service Mode is selected.
On final transaction report money due	If checked, indicates that at the end of a transaction a report is printed specifying, volume, value and, money that was due to the customer.
Report Zero transaction to POS	If checked, indicates that if during a PAP transaction, the transaction was cancelled, a report will be saved to show that a transaction with a zero value was performed.
Store Current transaction when pump is authorized.	If checked, the current transaction is saved when the pump is authorized.

3 Click **Apply** to save.

4 From the FCC Tree, click **Service Modes** to view all the Service Modes defined in the system.

You have configured Service Modes, proceed to configuring Fuelling Modes.

Fuelling Modes

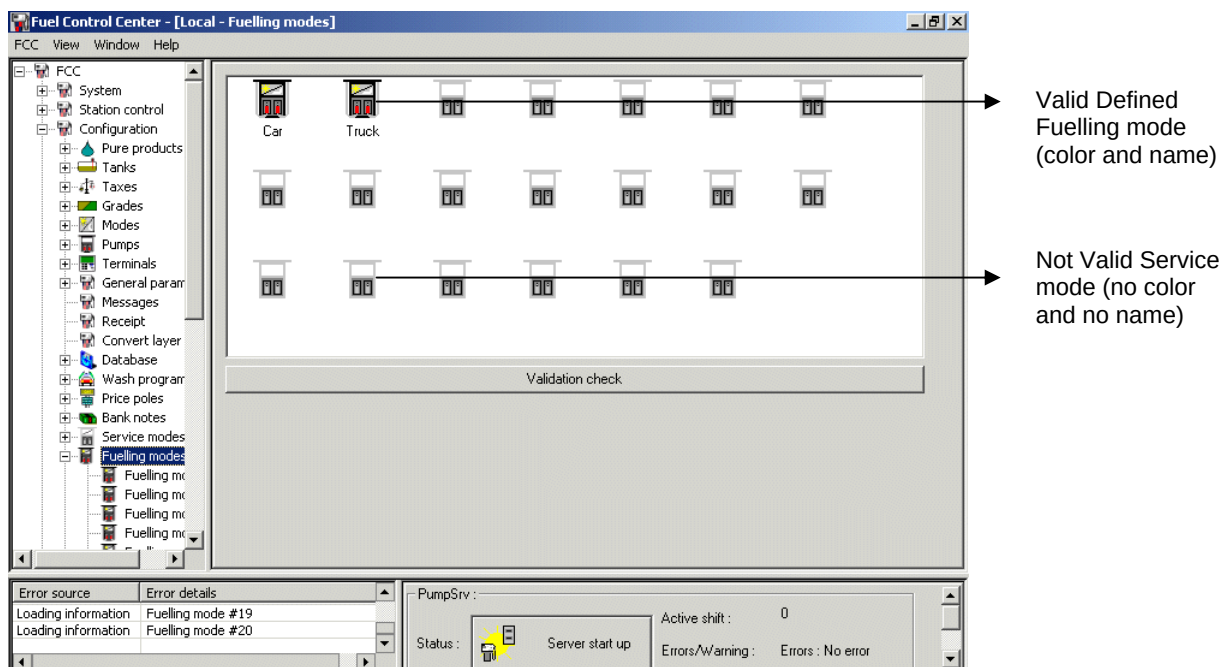
The **Fuelling Mode** is one of the dispense controller parameters, which provide the services needed to control fuelling. This option enables you to define the Fuelling Modes for each environment. For example, you may define different Fuelling Modes for Cars, Trucks, Buses, etc.

Note:

Fuelling Modes apply only to systems using the Doms Convert Layer. Systems using the Allied, RFS or Meggitt Convert Layers do not support the Fuelling Modes functionality.

➤ **To View Fuelling Modes Option:**

- 1 From the FCC Tree, click **Configuration**, then click the **Fuelling Modes** menu. The **Fuelling Modes** window is displayed with Terminal icons. Expand the FCC Tree to view the list of Fuelling Modes:



- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

You may define up to 16 different Fuelling Modes.

➤ **To Define or Revise Fuelling Modes:**

- 1 Double-click an undefined Fuelling Mode from the FCC Tree. The **Configuration: Fuelling Mode** dialog is displayed:

You may view the properties of each Fuelling Mode by selecting the Fuelling Mode number from the FCC Tree. You may move from one Fuelling Mode to the next and apply the changes as necessary.

- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Fuelling Mode	Internal code number of Fuelling Mode as used in PumpSrv.
Valid	If checked, indicates the Fuelling Mode is valid in the system.
Name	Enter a name for the Fuelling Mode. E.g., Car, Truck, etc.
Special Pump Type	Enter the pump number if for this Fuelling Mode a special pump type is required. Contact Doms Technical Personnel to verify the correct number, if required.
Max Transaction Volume	If fuelling exceeds the amount specified in this field, fuelling will be stopped.
Max Transaction Value	Enter the maximum amount in dollars for which a customer is allowed to fuel, per transaction from this pump. If fuelling exceeds the amount specified in this field, fuelling will be terminated.
Max overrun pre set fuelling to consider error	Enter the amount in liters/gallons that may exceed the preset limit. For example, if a pump defined with a preset limit, experiences problems, such as a defect slow-down valve, this parameter defines how much volume overrun is accepted before it should be considered an error.

Fields	Description
Timers area:	
Time out get the minimum limits	If the time from a fuelling that was started, to the time fuelling data was received on a pump that exceeded the minimum limits, is greater than the number of seconds in this parameter, fuelling will be terminated. A new transaction cannot be started before the nozzle has been replaced.
Max time out to dispensing pump without fuelling	If fuelling exceeds one of the minimum limits defined, but the fuelling data does not change for the number of seconds specified in this parameter, fuelling will be terminated. A new transaction cannot be started before the nozzle has been replaced.
Timeout fuelling transaction	The fuelling timer starts when fuelling data received from the pump exceeds either the minimum volume or money limits. If the transaction is not complete after the number of seconds defined in this parameter, the fuelling will be stopped. A new transaction cannot be started before the nozzle has been replaced.
Clean pump display	If checked, the display screen at the terminal will be cleared after the number of seconds defined in the Clean Pump Display Details parameter, below. This is used for example, if a customer received a discount, the following customer will not see that the previous customer received a discount.
Clean pump display details	Specifies after how long in seconds the display screen is cleared.

3 Click **Apply** to save.

4 From the FCC Tree, click **Fuelling Modes** to view all the Fuelling Modes defined in the system.

You have configured Fuelling Modes, proceed to configuring Fuelling Mode Groups.

Fuelling Mode Groups

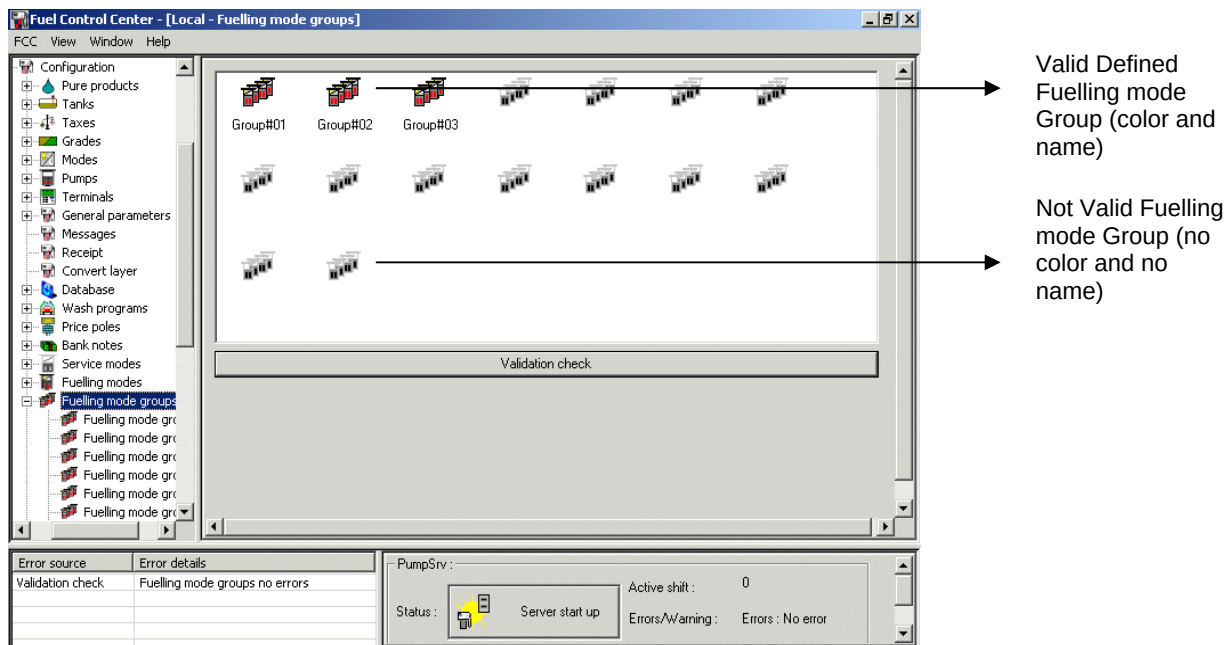
The **Fuelling Mode Groups** menu enables you to configure a set of rules for each Fuelling Mode. Every Fuelling Mode Group must be linked to a Fuelling Mode. For example, you can define a Fuelling Mode Group called “Daily Mode” which can be linked to Cars that fuel with Grade type 91 and 95, and to Trucks that fuel with Diesel.

Note:

Currently **Fuelling Mode Groups** apply only to systems using the Doms Convert Layer. Systems using the Allied, RFS or Meggitt Convert Layers do not yet support the Fuelling Mode Groups functionality.

➤ To View Fuelling Mode Groups Option:

- 1 From the FCC Tree, click **Configuration**, then click the **Fuelling Mode Groups** menu. The **Fuelling Mode Groups** window is displayed with groups of Terminal icons. Expand the FCC Tree to view the list of Fuelling Mode Groups:

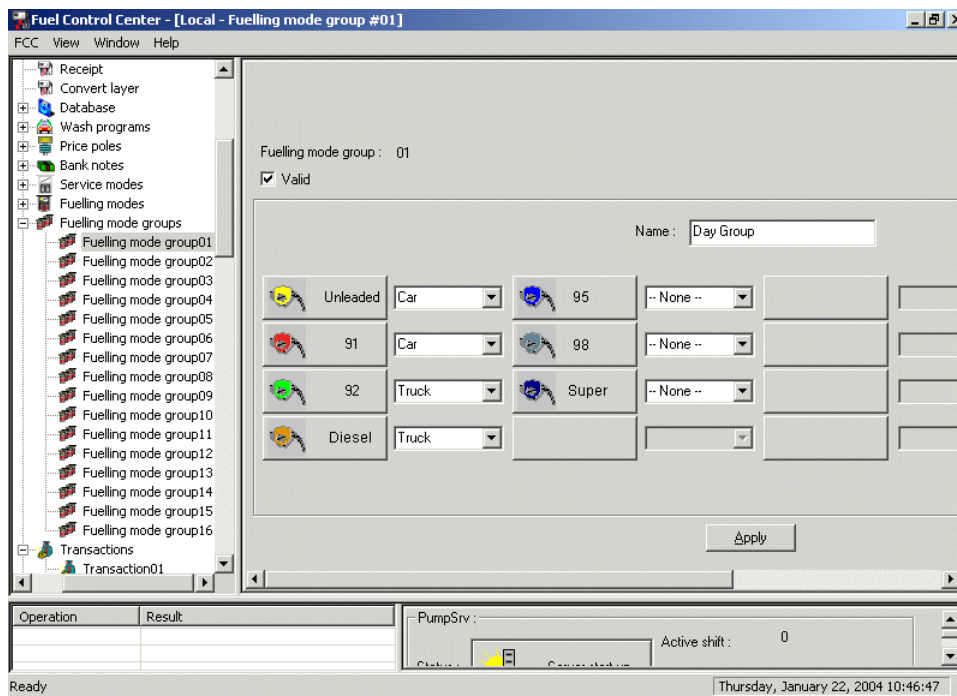


- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

You may define up to 16 different Fuelling Mode Groups.

➤ **To Define or Revise Fuelling Mode Groups:**

- 1 Double-click an undefined Fuelling Mode from the FCC Tree. The **Fuelling Mode Group** dialog is displayed:



You may view the properties of each Fuelling Mode Group by selecting the Fuelling Mode Groups number from the FCC Tree. You may move from one Fuelling Mode Group to the next and apply the changes as necessary.

- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Fuelling Mode Group	Internal code number of Fuelling Mode Group as used in PumpSrv.
Valid	If checked, indicates the Fuelling Mode Group is valid in the system.
Name	Enter the name of the relevant Fuelling Mode, e.g., Daily Mode, and then link to the Daily Mode the relevant grades for each Fuel Mode.
Nozzle buttons area:	Each button displays the names of the grades defined in the system.

- 3 Click **Apply** to save.
- 4 From the FCC Tree, click **Fuelling Mode Groups** to view all the Fuelling Mode Groups defined in the system.

You have configured Fuelling Mode Groups, proceed to configuring Transactions

Transactions

The **Transactions** menu enables you to define different transaction processes that define how the pump handles fuelling. Transactions are defined to be able to give each Fuelling Point a logical identifier. A Transaction points to a Service Mode, a Fuelling Mode group, which is linked to Fuelling Modes, and a Price group.

For example, Transaction #11 and #12 may be defined to accommodate cars and trucks in PAK transactions.

- Transaction #11 is defined to include the Fuelling Mode Group called 'Day Mode', previously linked to Unleaded, and 91 grade types, used by Cars.
- The Service Mode is PAK, (previously defined as Mode Scheme 01 in PumpSrv – defining PAK transactions as the default mode scheme).
- The Price Group is Cash Full, indicating that this transaction type must be paid in Cash when receiving Full Service.
- The Mode Scheme is defined to enable PAK transactions everyday of the week.
- Transaction #12 is defined in the same way as #11, but is linked to Trucks, enabling trucks to fuel with the relevant grade of fuel.

A second example, Transaction #21 and #22 are defined to accommodate cars and trucks in PrePay transactions.

- Transaction #21 is defined to include the Fuelling Mode Group called "Day Mode". It was previously linked to Unleaded, and 91 grade types.
- The Service Mode is PrePay, (previously defined as Mode Scheme 02 in PumpSrv).
- The Price Group is Credit self, indicating that this transaction type must be paid in Credit when performing Self Service.
- The Mode Scheme is defined to enable PrePay transactions every weekend, from Saturday 8am to Monday 5.59am.
- Transaction #22 is defined in the same way as #21, but is linked to Trucks, enabling trucks to fuel with the relevant grade of fuel.

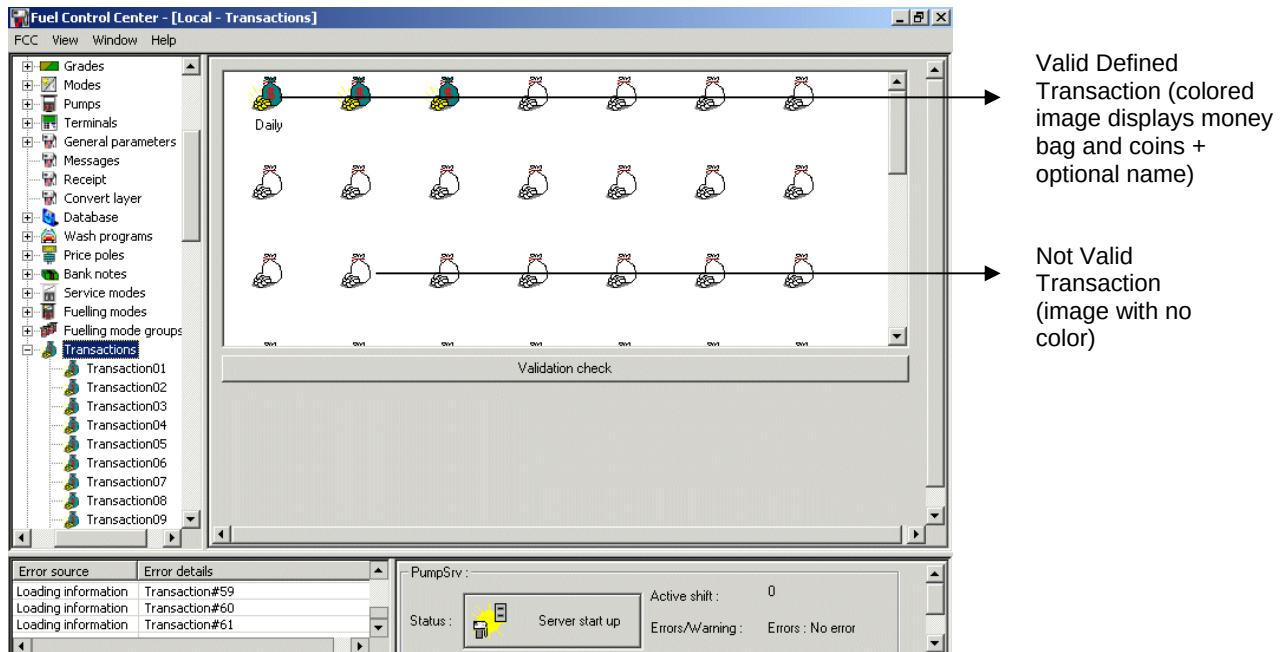
Up to 61 different Transaction types may be defined.

Note:

Currently **Transactions** apply only to systems using the Doms Convert Layer. Systems using the Allied, RFS or Meggitt Convert Layers do not support the Transactions functionality.

➤ **To View Transactions Option:**

- 1 From the FCC Tree, click **Configuration**, then click the **Transactions** menu. The **Transactions** window opens. Expand the FCC Tree to view the list of Transactions:

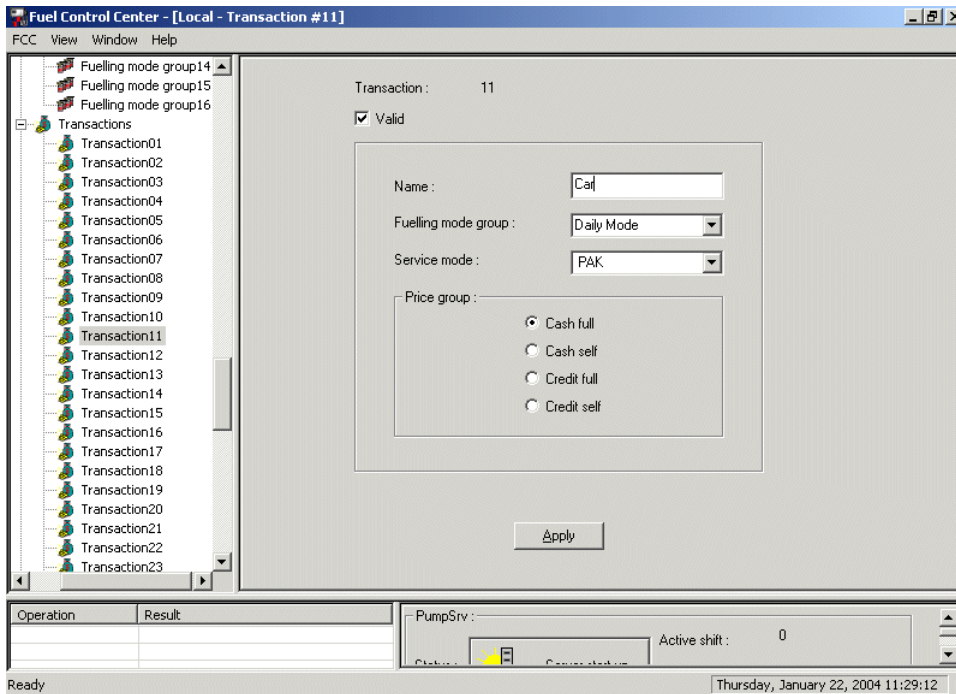


- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

You may define up to 61 different Transactions.

➤ **To Define or Revise Transactions:**

- 1 Double-click an undefined Transaction from the FCC Tree. The **Configuration: Transactions** dialog is displayed:



You may view the properties of each Transaction by selecting the Transactions number from the FCC Tree. You may move from one Transaction to the next and apply the changes as necessary.

- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Transaction	Internal code number of the Transaction as used in PumpSrv.
Valid	If checked, indicates the Transaction is valid in the system.
Name	Enter a name to identify the Transaction. The name is only for identification purposes, and therefore, optional. For example, call the transaction Car and then define the Fuelling Mode Group and Service Mode relevant to Cars.
Fuelling Mode Group	Select a Fuelling Mode Group from the drop-down list. Each Fuelling Mode Group is linked to a Fuelling Mode.
Note:	
The Fuelling Modes are previously defined in Fuelling Modes, and linked to Grades in the Fuelling Mode Group.	
Service Mode	Select a Service Mode from the drop-down list. This indicates the payment method that will be used in this transaction.

Fields	Description
Price Group	The Price Group defines the limits when paying by cash or credit. The actual limits for either cash or credit are defined in the section <i>Grades</i>. Select one of the radio button options: Cash Full – Price for Full Service when paying in cash. Cash Self – Price for Self Service when paying in cash Credit Full – Price for Full Service when paying by credit Credit Self – Price for Self Service when paying by credit

3 Click **Apply** to save.

4 From the FCC Tree, click **Transactions** to view all the Transactions defined in the system.

You have configured Transactions, proceed to configuring Decimal Points.

Decimal Points

The **Decimal Points** menu enables you to specify how many decimal points the Doms Site Controller uses to perform various calculations, such as volumes, values, etc., and how many decimal points must be added to PumpSrv for it to be equivalent to the Doms controller and receive the correct values. PumpSrv by default is defined to recognize that 1,000 = 1 liter, indicating that PumpSrv uses 3 decimal points.

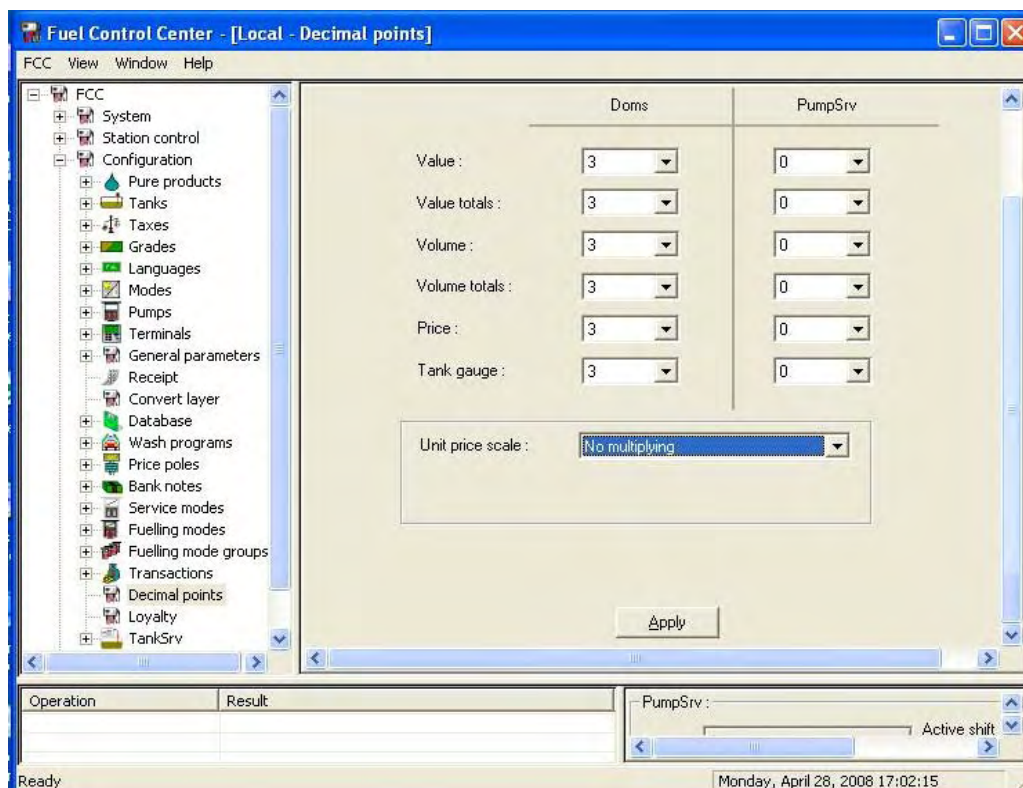
If the Doms site controller uses 2 decimal points, the convert layer will automatically calculate that PumpSrv requires 1 more decimal point to get the correct value.

Note:

Decimal Points apply only to systems using the Doms Convert Layer.

➤ **To Define or Revise Decimal Points Option:**

- 1 From the FCC Tree, click **Configuration**, then click the **Decimal Points** menu. The **Decimal Points** dialog is displayed:



- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Doms area:	
Value	Select the number of decimal points from the drop-down list used by the Doms Convert layer.
Value totals	Select the number of decimal points from the drop-down list used by the Doms Convert layer.

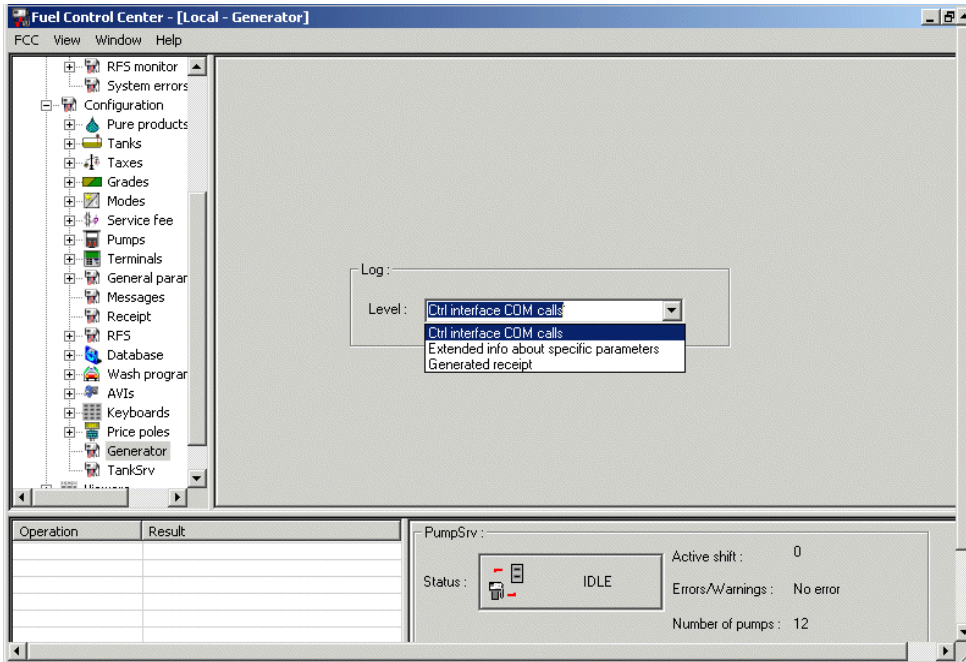
Fields	Description
Volume	Select the number of decimal points from the drop-down list used by the Doms Convert layer.
Volume totals	Select the number of decimal points from the drop-down list used by the Doms Convert layer.
Price	Select the number of decimal points from the drop-down list used by the Doms Convert layer.
Tank gauge	Select the number of decimal points from the drop-down list used by the Doms Convert layer.
PumpSrv area:	
Value	Select the number of decimal points from the drop-down list that must be added to the number of decimal points used by the Doms Convert layer, to get the correct value on PumpSrv.
Value totals	Select the number of decimal points from the drop-down list that must be added to the number of decimal points used by the Doms Convert layer, to get the correct value on PumpSrv.
Volume	Select the number of decimal points from the drop-down list that must be added to the number of decimal points used by the Doms Convert layer, to get the correct value on PumpSrv.
Volume totals	Select the number of decimal points from the drop-down list that must be added to the number of decimal points used by the Doms Convert layer, to get the correct value on PumpSrv.
Price	Select the number of decimal points from the drop-down list that must be added to the number of decimal points used by the Doms Convert layer, to get the correct value on PumpSrv.
Tank gauge	Select the number of decimal points from the drop-down list that must be added to the number of decimal points used by the Doms Convert layer, to get the correct value on PumpSrv.
Unit Price Scale	This option enables you to select the scale by which the unit price of a grade is calculated. The default is zero, however, if for example, the unit price of a grade is more than \$9.99 per liter, and the pump can not be configured for scaling, due to the type of pump, then it should be configured with the option Multiply by 10. The options are: ▪ No Multiplying ▪ Multiply by 10 ▪ Multiply by 100

3 Click **Apply** to save.

Generator

The **Generator** writes logs for the Receipt Generator. This menu enables you to define the level of detail recorded in the log.

- 1 From the FCC Tree, click **Configuration**, then click the **Generator** menu. The **Generator** dialog is displayed:



- 2 From the **Level** drop-down list, select the required option:
 - **CTRL Interface Com calls** – indicates the system writes the receipts as they were sent to the client in the log.
 - **Extended info about specific parameters** – provides values of specific parameters sent by the clients in the log.
 - **Generated Receipts** – indicates that all logs will be recorded every time a receipt is generated

Bank Notes

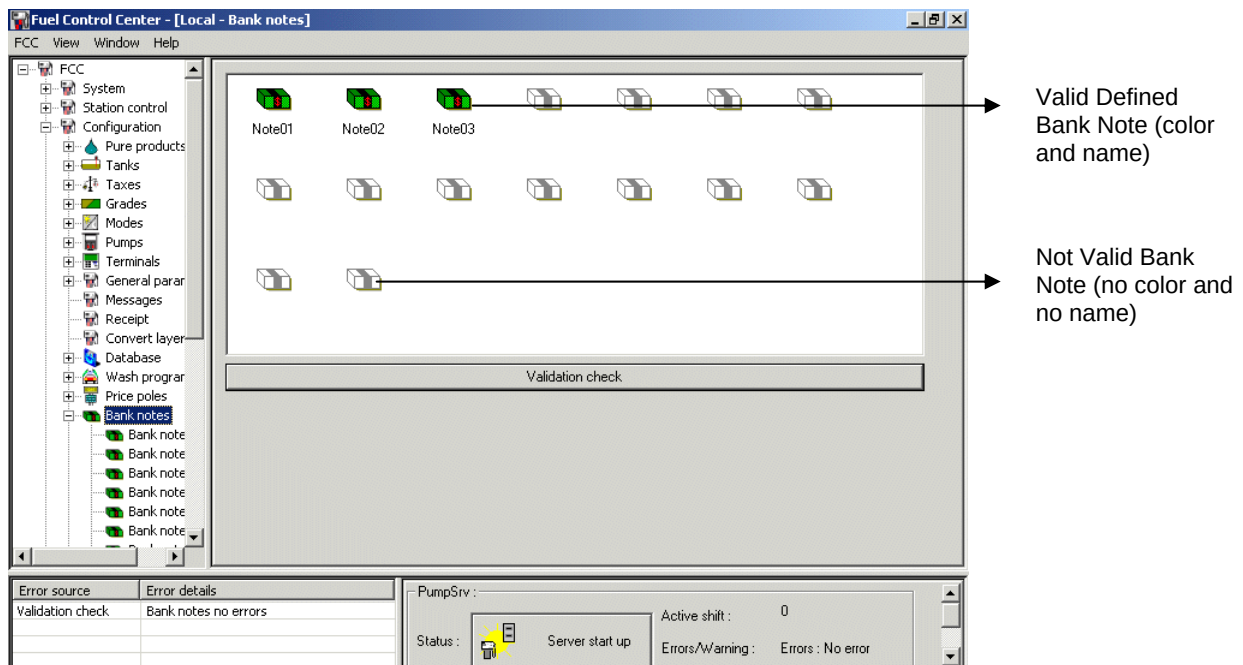
The **Bank Notes** menu enables you to configure which bills can be inserted into the Cash Acceptor device at the terminal, if it is supported by the system. For example, you can define that the Cash Acceptor can take \$100, \$50, and \$20 bills.

Note:

Currently Bank Notes apply only to systems using the Doms Convert Layer. Systems using the Allied, RFS, Meggitt, POSTEC, Wayne, or htec Convert Layers do not yet support the Bank Notes functionality.

➤ To View Bank Notes Option:

- 1 From the FCC Tree, click **Configuration**, then click the Bank Notes menu. The **Bank Notes** window is displayed with icons of all the Bank Notes. Expand the FCC Tree to view the list of Bank Notes:

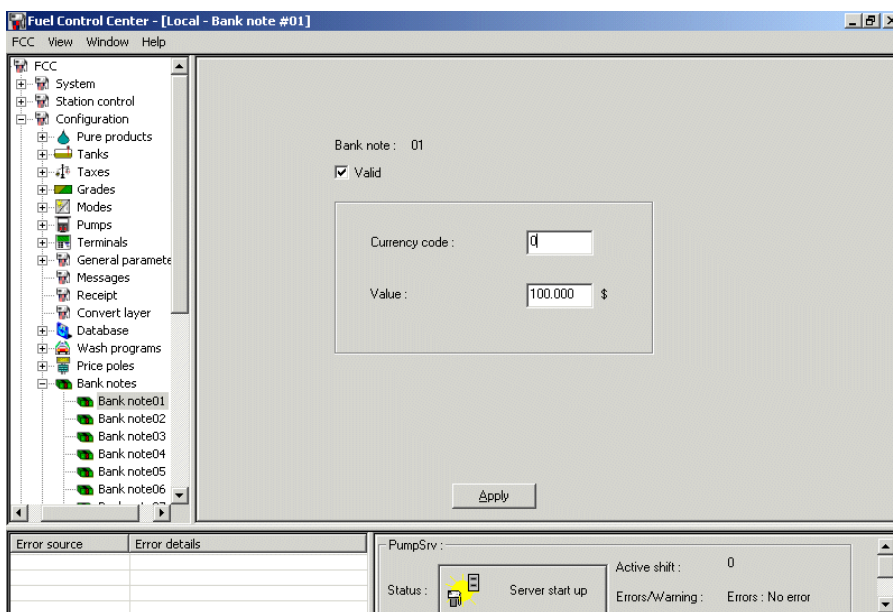


- 2 Click **Validation Check** to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

You may define up to 16 different Bank Notes.

➤ **To Define or Revise Bank Notes:**

- 1 Double-click an undefined Bank Note from the FCC Tree. The **Bank Note** dialog is displayed:



You may view the properties of each Bank Note by selecting the Bank Note number from the FCC Tree. You may move from one Bank Note to the next and apply the changes as necessary.

- 2 Enter the required information in the following fields, as described in the table below:

Fields	Description
Bank Note	Internal code number of Bank Note as used in PumpSrv.
Valid	If checked, indicates the Bank Note is valid in the system.
Currency Code	Enter the relevant country code. Each country has an International currency code.
Value	Enter the value of the Bank Note, e.g., \$100, \$50, \$20, etc.

- 3 Click **Apply** to save.
- 4 From the FCC Tree, click **Bank Notes** to view all the Bank Notes defined in the system.

You have configured Bank Notes.

The configuration of the FCC is completed. Continue to the Forecourt Management, Chapter 4, for additional information on the FCC.

Debits Setup

Debits Setup enables you to configure the use of debits in the system. This enables the use of debit cards at the terminal. The debit type must be configured according to the encryption type and every terminal in which debits are to be used must be configured accordingly. Debits are setup differently according to the different systems.

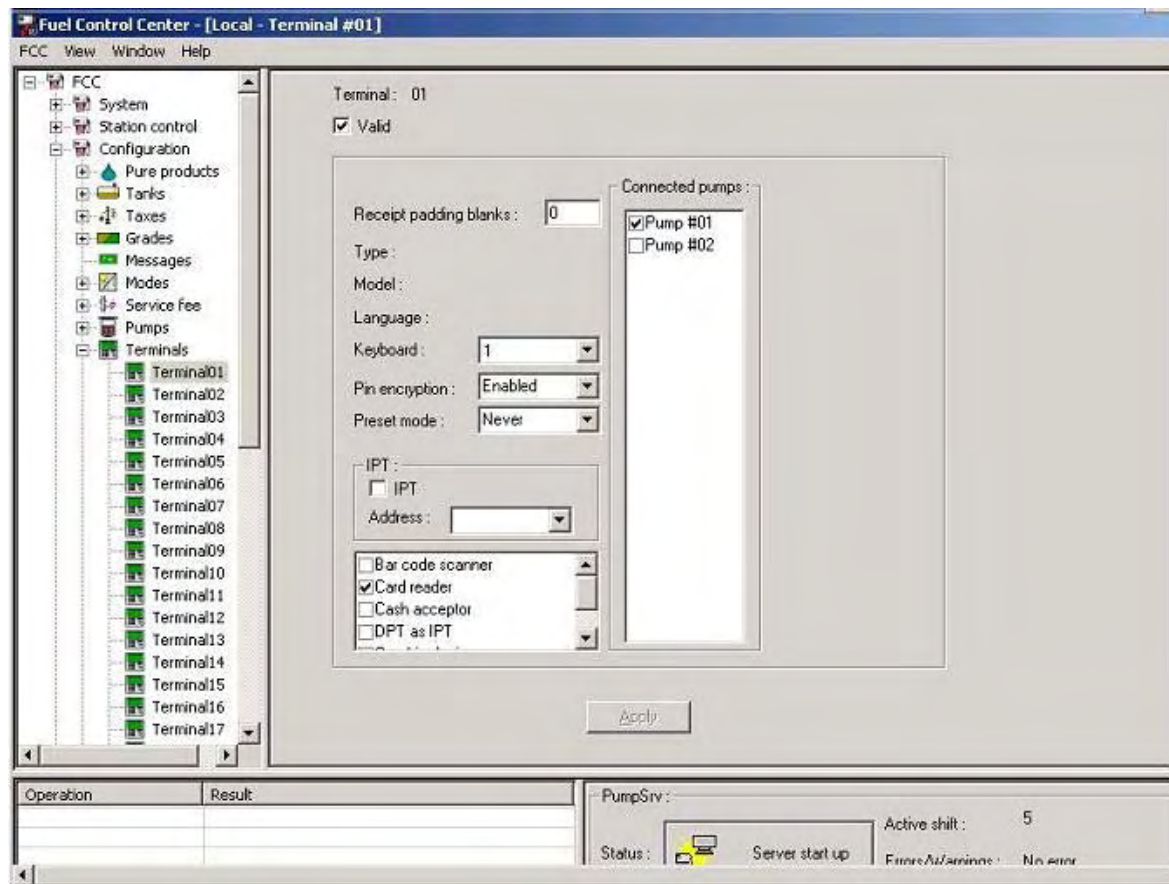
The following example shows how to setup debits in the system.

➤ To Setup Debits in the System:

- 1 From the FCC Tree, click **Configuration**, then click the **RFS** menu. The **Configuration** menu is displayed.
- 2 From the **Encryption Type** drop-down list, select the relevant option:

Fields	Description
DUKPT	Indicates that every transaction receives an Encryption key.
Master/Session	Indicates that the bank will decide when to send the Key for update.
Wayne Encryption	No external encryption device is needed.
MLKH	Used for Canadian debit.

- 3 From the **Terminals** menu, select a Terminal. The **Terminal** dialog is displayed:



- 4 From the **Pin encryption** drop down list, select **Enabled** to enable the use of pin encryption.

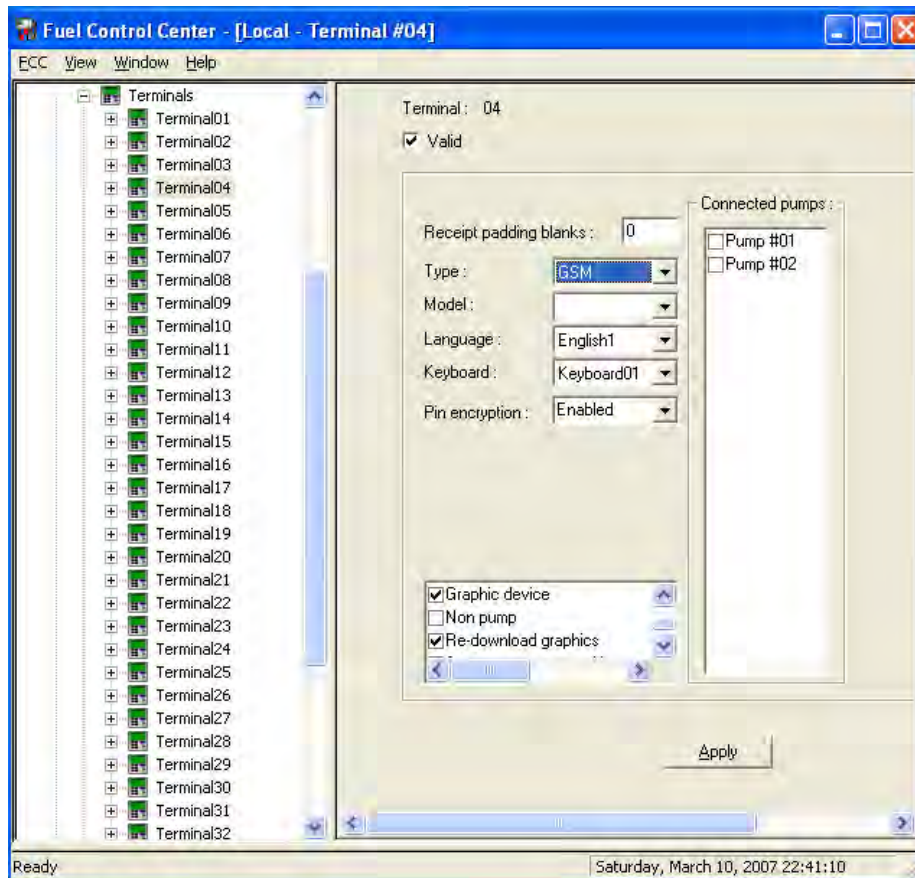
Note:

If you are setting up Debits on a SAM terminal, select either limited or restricted.

RFS Hardware Related Issues:

The following section describes the different environments and the different types of encryptions available.

- **Wayne** – there are two encryption types in the Wayne environment:
 - External encryption device (MSM master/session, DSM DUKPT). Must be connected to the first communication channel. The communication object is automatically created by the RFS with the same communication properties as the first terminal of the first communication channel.
 - Integrated encryption - within the Wayne CAT.
- **Tokhiem** – does not need external encryption properties.
- **Gilbarco** – uses a GSM encryption device. Due to the fact the GSM needs its own communication properties, a dedicated terminal must be defined as follows:



There are a few issues with the Gilbarco environment:

- All the encryption is based on a synchronization process between each terminal and the GSM device. The process starts after receiving the terminal version. It arrives after the power is recycled, or five minutes after there is no communication between the RFS and the terminal. It can not be requested, due to Gilbarco protocol limitation.
- No terminal Reconfigure can be issued.
- **SAM** – uses a pre-defined set of messages (injected prompts) and has three generations of encryption devices that need to be configured in the terminal properties screen:
- Enabled – can only be used with the newest encryption device.
- Limited/Restricted – can only be used with the older encryption devices.

The difference between the different encryption devices is described in the following table:

Desired Fuel Release 1012 Fleet DIN/PIN Operation				Schlumberger SAM Protocol - Keypad Commands			
Dispenser Models	Keypad Modules	SSM	Debit Type	FCC "PIN Encryption"	Command	Mode	Fleet DIN/PIN Result
4000 Series	4000 Non-debit	No	None	None	(32H) Enable Numeric Input	(33H) Echo with Terminator Key	Masked
4000 Series	4000 Original Debit	Yes	Master Session	Limited	(34H) Debit Module Data	(04H) Hidden Encrypted	Masked
Centurion	Centurion Non-debit	No	None	None	(32H) Enable Numeric Input	(33H) Echo with Terminator Key	Masked
Centurion	Centurion Old Debit	Yes	Master Session	Restricted	(34H) Debit Module Data	(01H) Numeric Data	Unmasked
Centurion	Centurion New Debit	Yes	Master Session	Enabled	(34H) Debit Module Data	(06H) Hidden Non-encrypted	Masked

Forecourt Management

This chapter enables you to view the statuses of the various system components at any given time. This information is important for monitoring and controlling the FCC components.

In this chapter:

- *System Components*
- *Components Status*
- *Station Control*

System Components

The **System Components** enables you to monitor and control the Fuel System Components, their attributes and compatibility.

➤ To Access the System Components Menu:

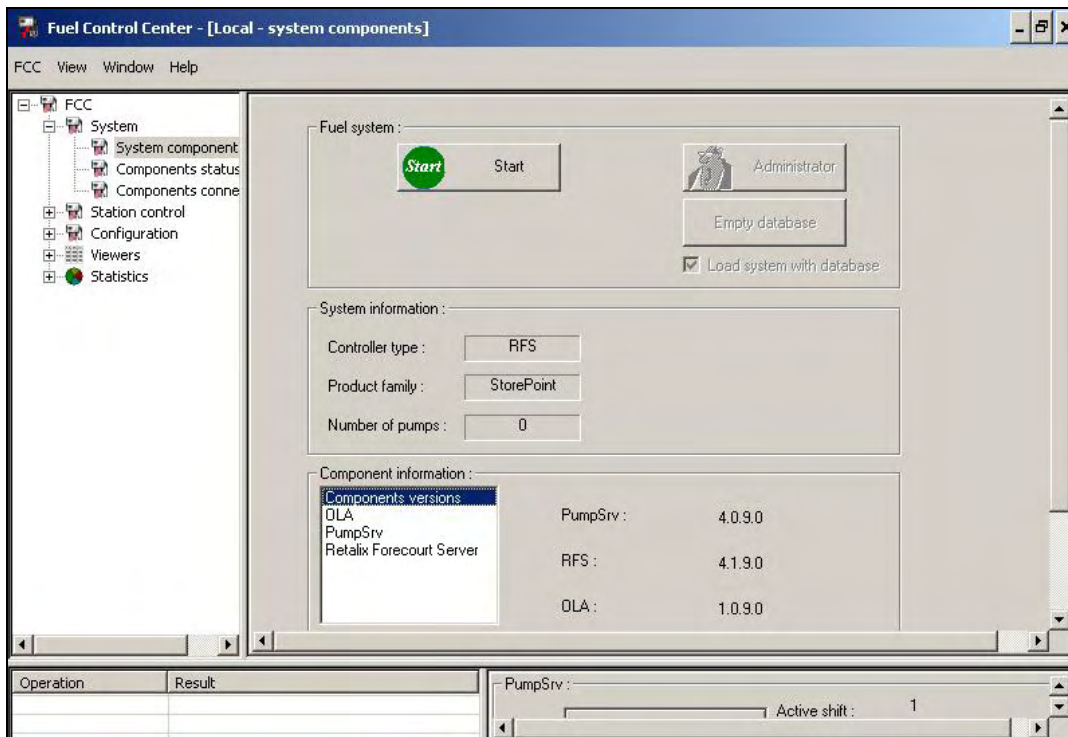
From the FCC Tree, click **System**, and expand the tree displaying the following sub menus in the right pane:

- System Components
- Components Status
- Components Connectivity

➤ To Enable the System Status and System Components:

- 1 Click **System Components** from the tree or from the menu in the right pane.

The **System Components** dialog is displayed:



- 2 Click the  button. The system components are started and the database files are loaded, i.e., the Forecourt is started up.

Notes:

1. Q-Dex is the real-time database used by the Fuel server, PumpSrv.
2. Verify that you are in the Storepoint environment. The FCC is not responsible for the loading of QDX files in other environments.

➤ **To Stop Services:**

- 1 Click the  button to manually stop the services.

The system prompts “Are you sure you want to unload the fuel system?”

- 2 Click **Yes** if you would like to unload the database, or **No** to keep the database.

If you selected **Yes**, on restarting the services, make sure the field Load System with Database is checked so that the QDX files are loaded.

When all the services are down, next to each component the following icon is displayed:

**Note:**

1. The Services will be stopped only if PumpSrv and cl2PumpSrv is not running.
2. For an explanation of how to define the frequency of updating the System Components areas, see Chapter 2, FCC Menu Bar/FCC Properties section.

System Components

The **System Components** screen enables you to view which active components are connected to the Fuel system.

The table below describes the various fields and options in the **System Components** dialog:

Area	Description
Fuel System area:	
Start	Click to start up services and load the database (QDX files).
Stop	Click to stop the services.
Load system with database	If checked, indicates that the database (QDX files) are automatically loaded when the system starts up.
Administrator	The Administration button enables an Administrator to enter a password and access the various <i>FCC</i> System Components. This button is enabled only if the security level in the Security section is set to High. If set to Low, the button is disabled, and access is allowed to all components without the need of a password.
Empty database	Warning: For use only by authorized technical support personnel! When enabled it allows you to empty all Fuel-related database files.
System Information area:	
Controller	Indicates which Convert Layer is connected to the system, e.g., RFS, Allied, Meggitt, or Doms.
Product Family	Displays the type of PoS system environment hosting the fuel system.
Number of Pumps	Indicates the number of active pumps connected to the system.
Component information area:	
Components Versions	Click to view each one of the <i>System Components</i> versions. When enabled, indicates the current version number of each component and that they are running properly.
OLA	Click OLASrv to display information, such as PID#, Threads, Memory, and Handles.
PumpSrv	Click PumpSrv to display information, such as PID#, Threads, Memory, and Handles.
ConvertLayer	Click Convert Layer to display information, such as PID#, Threads, Memory, and Handles.

System Components Attributes:

Click each one of the System Components in the Component Information area to view the following attributes:

Area	Description
Path	Displays the path of the active system component file in the system.
PID	Displays Process ID number.
Threads	Displays the number of threads used by the component.
Memory	Displays the amount of memory the component consumes in the system.
Handles	Displays the number of handles currently in use by the component.

Note:

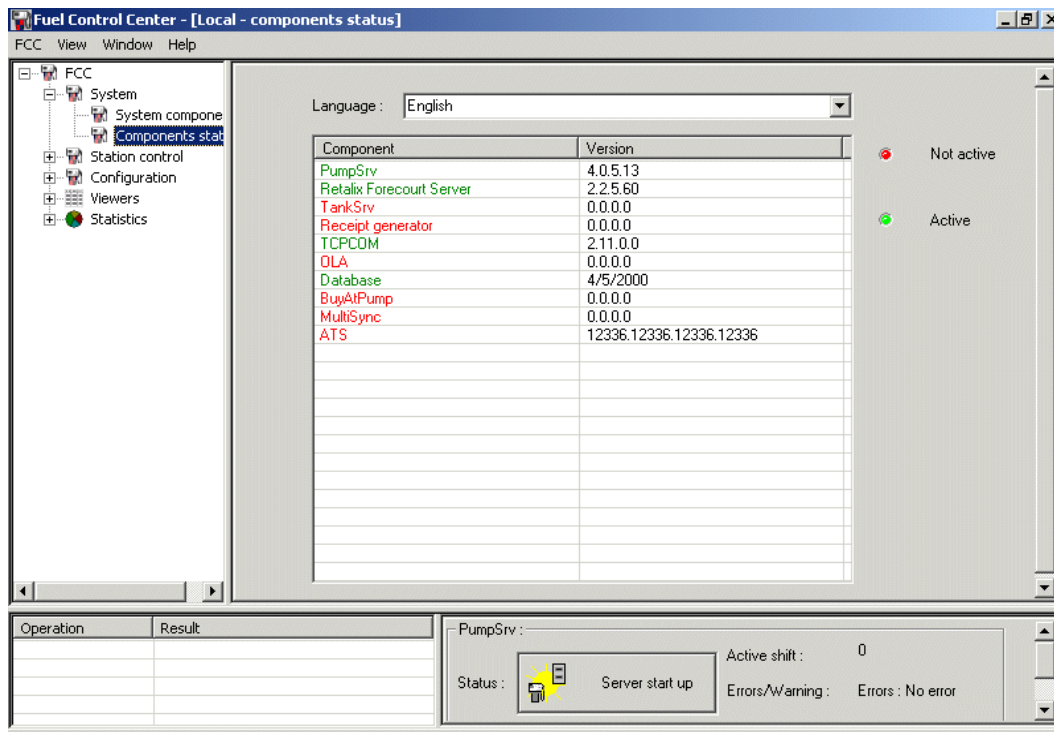
If there are any system errors or problems, it is displayed in the bottom-pane of the System Components dialog. All System Information is displayed in the bottom-pane of each dialog. For further details on this section of the dialog, see **Chapter 1, The FCC**.

Components Status

The **Components Status** dialog enables you to view the Status of each System Component and its Version number. This is a read-only dialog, except for the language field. The Version number and Component name are automatically updated by the system. Active components appear in green font, and inactive components appear in red font.

➤ To View the Components Status Dialog

- 1 From the FCC Tree, click **System**, and then **Components Status**. The **Components Status** dialog is displayed:



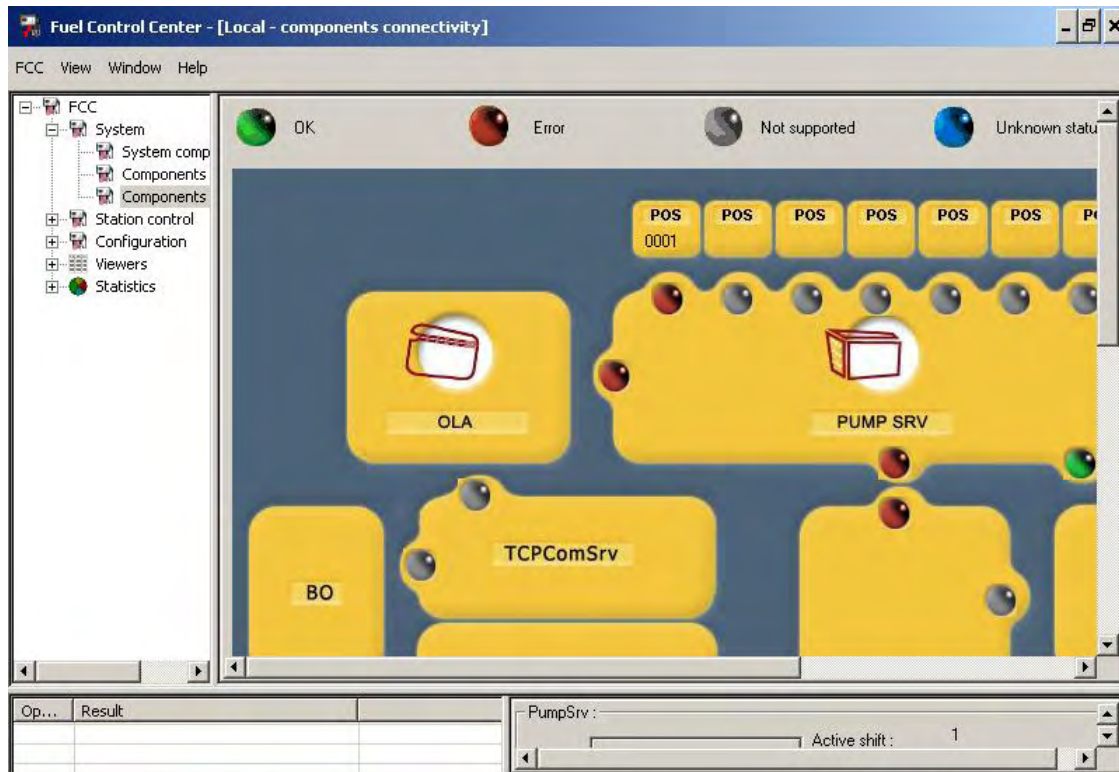
- 2 From the **Language** drop-down list, select the required interface language that is supported by your computer.

Components Connectivity

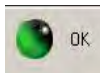
The **Components Connectivity** option enables you to view if each component in the system was loaded on startup and connected. Its status in the system is displayed graphically enabling you to quickly locate a component that was not loaded. There are various statuses, which are color-coded. This is a read only dialog.

➤ **To View System Connectivity:**

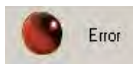
- 1 From the FCC Tree, click **System**, and then **Components Connectivity**. The **Components Connectivity** dialog is displayed:



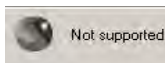
- 2 View the connectivity statuses as follows:



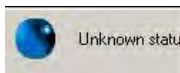
Indicates that the component was loaded and is connected.



Indicates that an error occurred and the component is not connected.



Indicates that the component is not supported in the system.



Indicates that the components status is unknown.

Station Control

The **Station Control** module enables you to control and monitor all pumps configured in the forecourt, including transaction statuses and processes in PumpSrv. You may also view and refresh all the devices configured and connected to the system.

➤ **To Access the Station Control Menu:**

From the FCC Tree click and expand the **Station Control** menu displaying the following sub-menus:

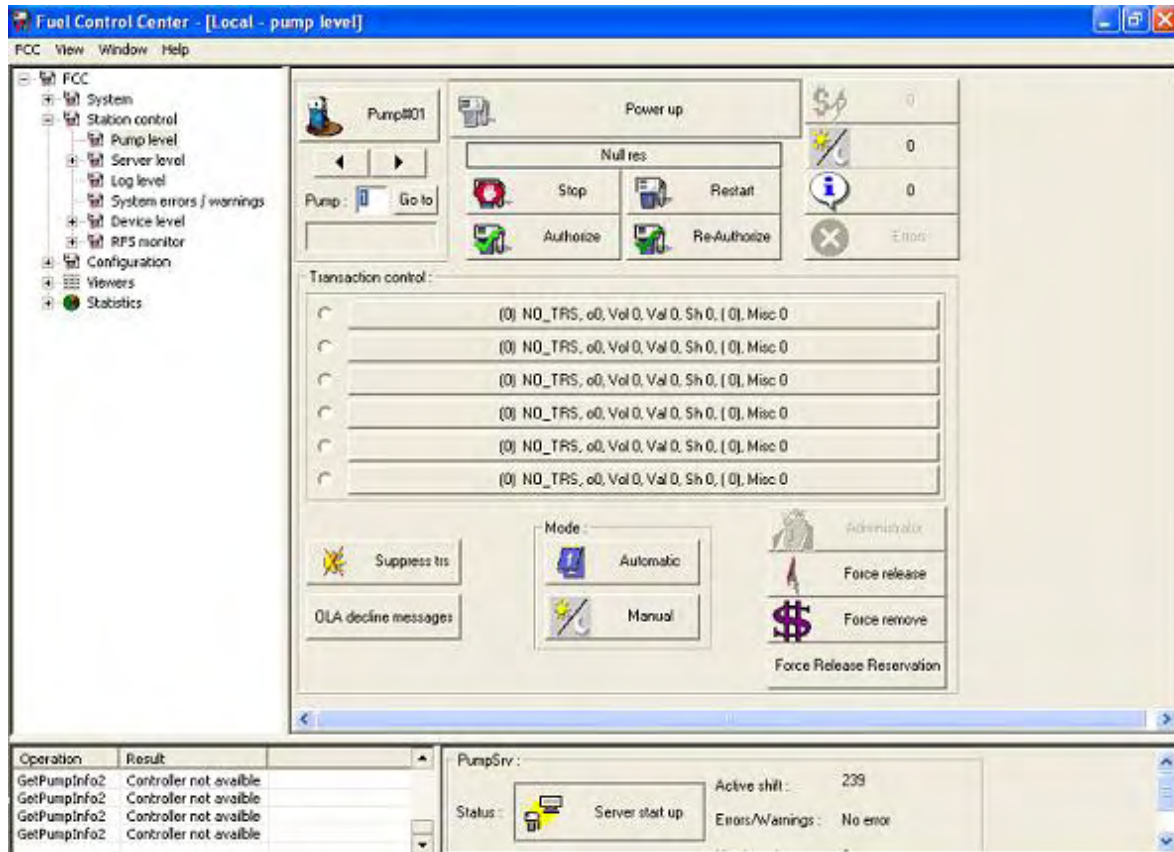
- Pump level
- Server level
- Log Level
- System Errors/Warnings
- RFS monitor (For systems using the RFS)
- Device level (For systems using the RFS)
- Queues (For systems using the RFS)

Pump Level

The **Pump Level** menu enables you to view and control basic functions of the pumps in the Fuel Station, such as manufacturer's name, transaction information and current Mode names for each pump. This information is transmitted from PumpSrv, and relates only to valid pumps.

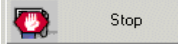
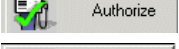
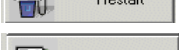
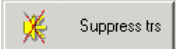
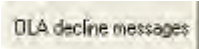
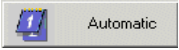
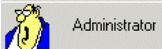
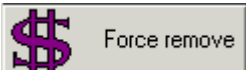
➤ To Open the Pump Level Dialog:

- 1 From the FCC Tree, click the **Pump Level** menu. The **Pump Level** dialog is displayed:



- 2 The table below describes the various fields and buttons where you can view pump information in the **Pump Level** menu:

Fields	Description
 Pump #01	Displays pump number. Click the left and right arrows to scroll through the various pump numbers. The system supports up to 64 pumps.
 Power up	Displays the status of a pump. Possible statuses include: Unknown, Ready, Requesting, Authorized, Dispensing, Stopped by Operator, Out of Service etc.
Reservation	Displays the transaction type that is currently active at the Pump, e.g., Prepay, PAK , etc. The possible reservation types include: Null_Res, PaP, PaK, Prepay .

Fields	Description
 1	Displays the Service Fee currently in use for the current mode in the Pump (see Fee section, below).
 1	Displays the current mode in use at the pump. The 0 indicates no modes are supported. (See Mode section below).
 0	Displays miscellaneous information about the current mode at the pump (see Miscellaneous Information section below).
 Errors	Specifies the type of error that occurred on the device.
 Stop	Enables you to stop operation of a pump.
 Authorize	Enables you to authorize a pump.
 Restart	Enables you to restart operation of a pump that was stopped.
 Re-Authorize	Re-authorizes Prepay transactions.
Transaction Control area:	Provides information regarding the status of each transaction. Select the radio button of the transaction on which you would like to operate. (See Transaction Info section, below)
 Suppress trs	Suppresses the notification of an unpaid transaction, after the dispenser has been buzzing for a certain period of time.
 DLA decline messages	Displays information on transactions that authorization was declined by OLA. (see Decline Messages section, below).
Mode area:	
 Automatic	Automatically enables all the modes that were defined in the Mode Scheme configuration (see Chapter 3: Defining Modes using the Pump Mode Scheme).
 Manual	Enables you to manually choose the mode for the specific pump from the list of modes defined in the modes section. (See Modes, Manual/Automatic in the section, below.)
 Administrator	The Administrator button enables an Administrator, to enter a password and to access the various FCC System Components. This button is enabled if the security level in the Security section is set to High. If set to Low, the button is disabled, and access is allowed to all components (see Chapter 2 – FCC Menu Bar/FCC Properties for more details on Securities). Click the Administrator button and enter your password to enable the Force Remove and Force Release buttons.
 Force release	Enables you to release a transaction that had been reserved for a particular POS terminal, and then reserve the transaction for a different POS terminal.
 Force remove	Enables you to delete a transaction from the database.

Fields	Description
Force Release Reservation	Enables you to select a Check and Reserve process for a specific transaction. Check and Reserve is a method used by the POS to check if the Pump can be reserved and after how long it will timeout, or until an authorize command is sent from the POS to the Pump, indicating that it is no longer reserved.

Notes:

The **Force Remove** and **Force Release** buttons are available only for the Administrator, if the security level is set to High. Click the Administrator button and enter your password to enable the Force Remove and Force Release buttons.

Fee

The **Fee** option provides the information on Full Service and Self-Service Fees defined in the system and currently in use.

➤ **To Open the Service Fee Information Dialog:**

From the **Pump Level** dialog, click . The **Service Fee Information** dialog is displayed:

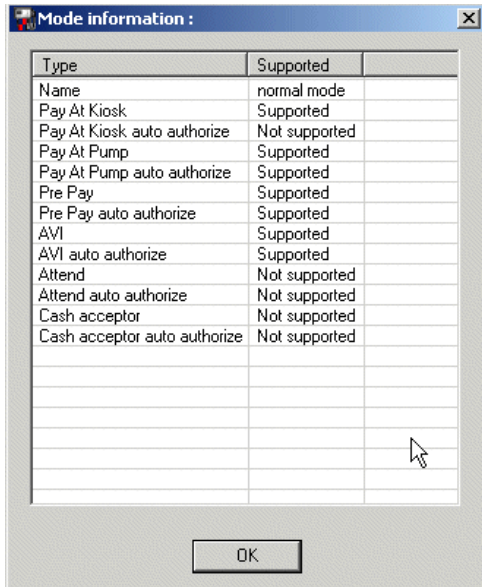


Mode

The **Mode** option enables you to view information on the various modes defined for each operating pump.

➤ To Open the Mode Information Dialog:

From the **Pump Level** dialog, click  1. The **Mode Information** dialog is displayed:



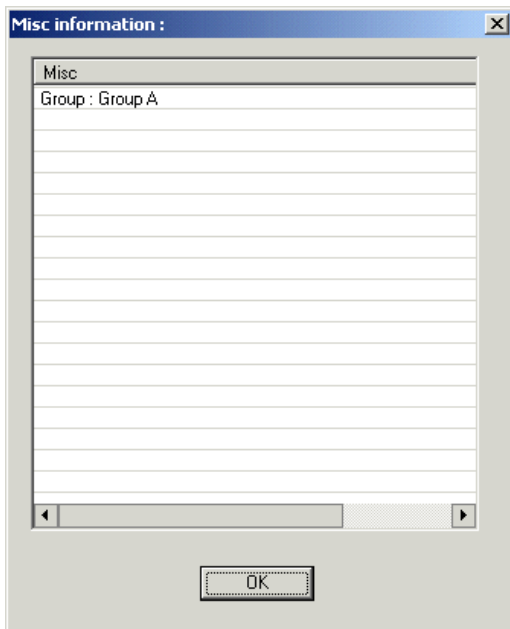
The Modes are configured in the Configuration –Modes section.

Miscellaneous Information

The **Miscellaneous Information** option enables you to view miscellaneous messages regarding the Pumps.

➤ **To Open the Misc. Information Dialog:**

- 1 From the **Pump Level** dialog, click , the **Misc Information** dialog is displayed:



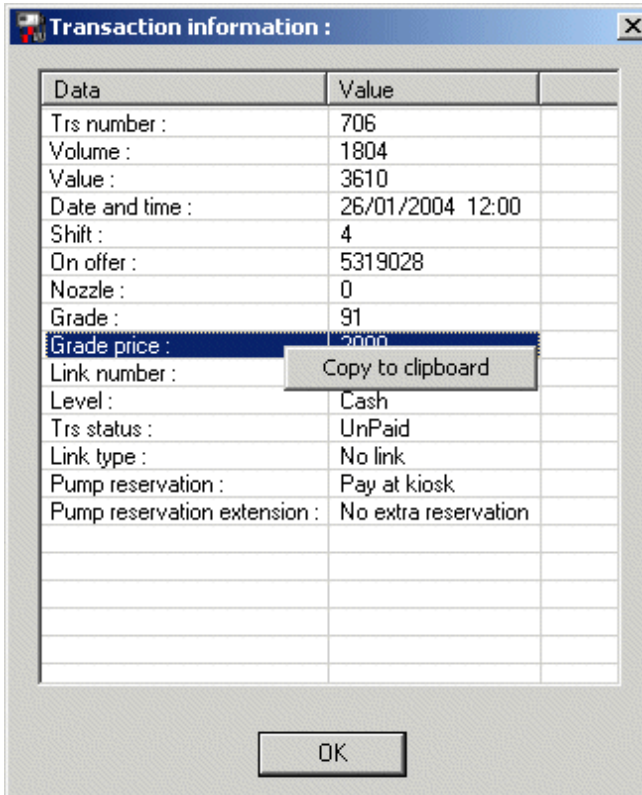
- 2 Click **OK** to close.

Transaction Info

The **Transaction Info** option enables you to view all the transaction parameters, and monitor problems. You can copy transaction details from the dialog to your clipboard, which can then be sent to technical support in the event of a query or a problem.

➤ **To View the Transaction Information Dialog:**

- 1 From the **Pump Level** dialog, click the required transaction required from the Transaction control area, to view the specific transaction details. The **Transaction Info** dialog is displayed:



- 2 Select the data that you querying, or are required to send to technical support, and right-click. The **Copy to clipboard** button is displayed, as shown above.
- 3 Click the **Copy to clipboard** button to copy the data from the transaction.
- 4 Open any text editor, for example, Notepad, right-click and select Paste. If you would like to email the transaction details, you may paste the data directly into an email.
- 5 Click **OK** to close the **Transaction Information** dialog.

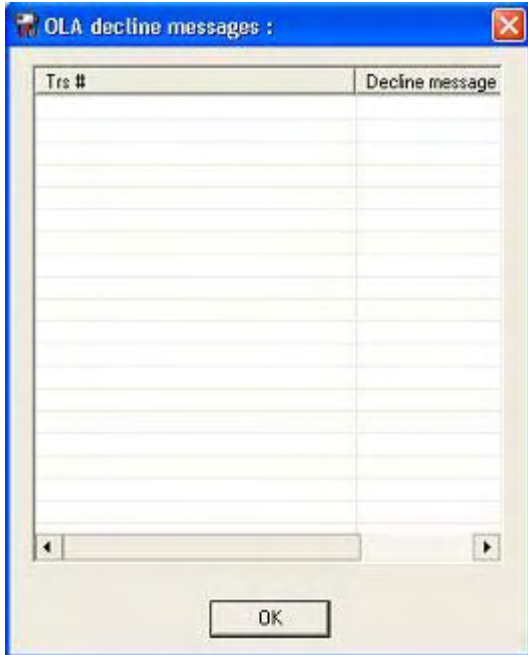
OLA Decline Messages

The **OLA Decline Messages** option enables you to view any credit card transaction for which authorization was denied by OLA. The OLA Decline message is displayed, explaining why authorization was denied by OLA.

OLA decline messages may appear on the receipt. See Chapter 3, the section on *Receipts*.

➤ **To Open the Decline Message Dialog:**

- 1 From the **Pump Level** dialog, click **OLA Decline messages**. The **OLA Decline Message** dialog is displayed:



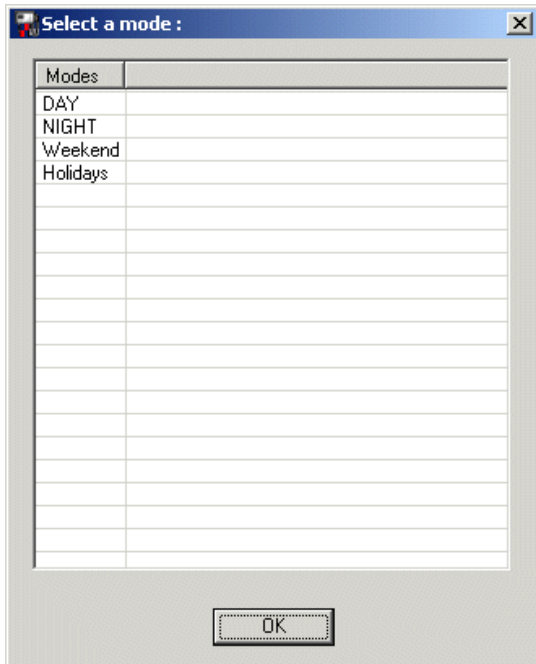
- 2 Click **OK** to close the dialog.

Modes (Manual/Automatic)

The **Modes** option allows you to manually select a specific Mode, and apply it to a pump. (For further information on Configuring Modes, refer to Chapter 2.)

➤ **To Open the Modes Dialog:**

- 1 From the **Pump Level** dialog, click **Manual**. The **Modes** dialog is displayed:



- 2** Select a Mode Name from the list, and click **OK**.

Note:

The Mode you select becomes the current mode for the specific pump selected from the Pump Level dialog, overriding any other Mode Schemes defined for that Pump.

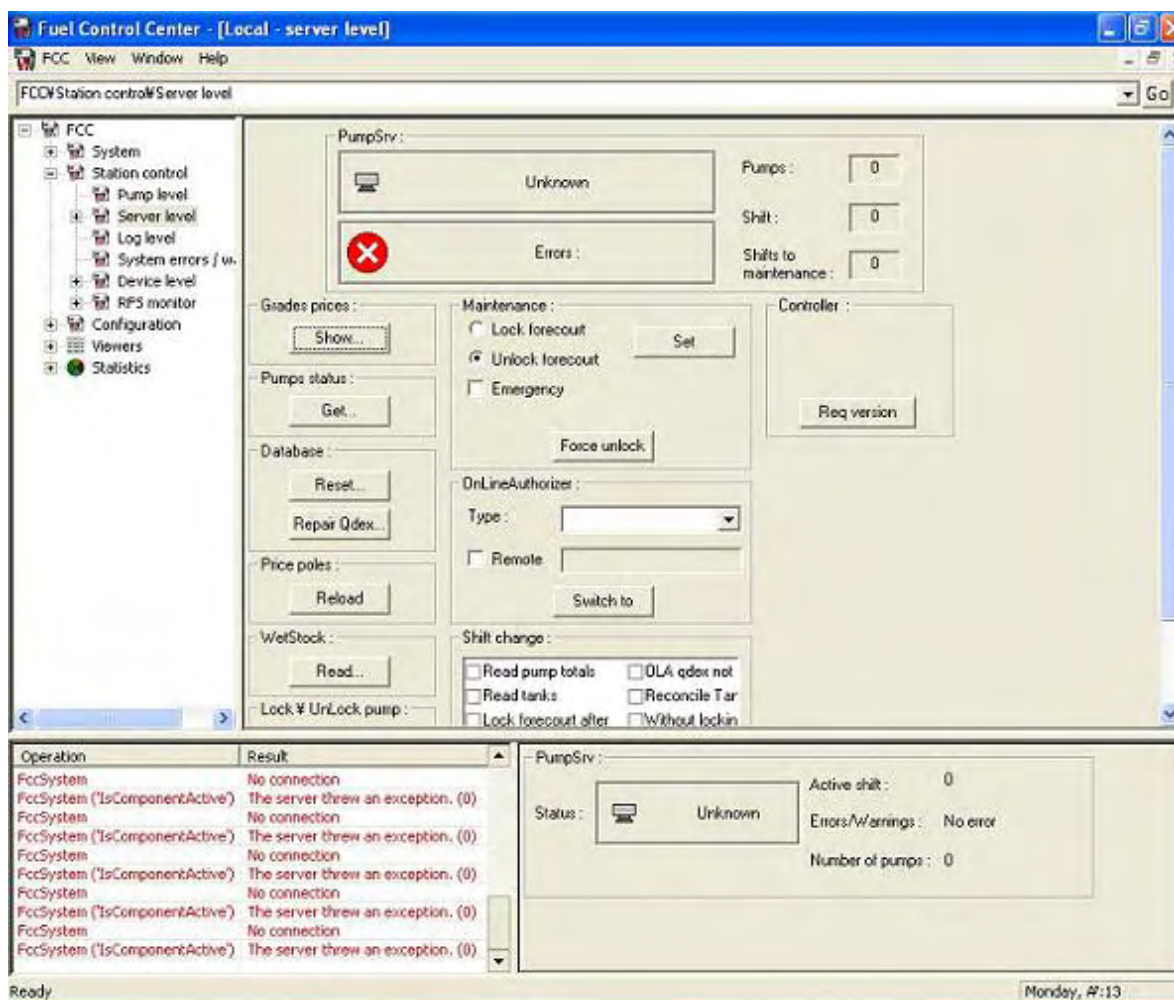
- 3 Click **OK** to close the dialog.
- 4 Click **Automatic** if you wish to return to the previous Mode. (See Chapter 3, Configuration, Modes.)

Server Level

The **Server Level** menu enables you to view general information in the PumpSrv database, as well as to view statuses of various processes in PumpSrv.

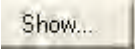
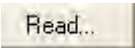
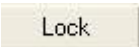
➤ To Open the Server Level Dialog:

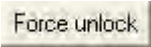
- 1 From the FCC Tree, click **Station Control**, then click the **Server Level** menu to display the following dialog:



The table below describes the various fields and options in the **Server Level** dialog:

Fields	Description
PumpSrv area:	
Status	Indicates status of PumpSrv.
Pumps	Indicates the number of active pumps defined in PumpSrv.
Error	Indicates if there are any errors in the various PumpSrv processes.
Shift	Indicates the current shift number.

Fields	Description
Shifts to maintenance	Indicates the number of shifts before the Database Maintenance operation starts. This operation can be part of the End of Day process, or it can be done as a separate operation.
Grade prices area:	
	Click to display the Grade Prices dialog, where you can set and change prices (For further details refer to the Price Changes section, below.)
Pumps Status area:	
	Initiates a check and displays the status of the entire station. Checks which pumps are in Idle mode, and displays the status. (See Get Status section, below.)
Database area:	
	Enables the technician to reset the database reports generated during the time that PumpSrv is processing Shift Change Readings, Pump Total Readings, Tank Readings, or Price Change Readings. When you select Reset, the Reset Database dialog is displayed, allowing you to choose which database to reset. (See Reset Database section, below) Note: Applicable only to the PumpSrv 4 version.
	Enables the technician to repair or reset a single problematic QDX, using a remote FCC. This is necessary if the help desk receives QDX alarms that need to be fixed to recover the site. The database errors are usually sent from the fuel systems that use AlarmSrv. Click to display the Repair QDX Files dialog. For further details, see Repairing QDX files, further on.
Price Poles area:	
	Click Reload to load new data on the Price Poles whenever there is a price change, or change in the product names that are displayed on the Price Poles of the forecourt. Note: Currently Price Poles apply only to systems using the RFS and Doms Convert Layer. Systems using the Allied or Meggitt Convert Layer do not yet support the Price Poles functionality.
Wetstock area:	
	Click Read to display the Wetstock Flags dialog. (For an explanation on each flag see Wetstock Flags section, below.)
Lock\Unlock Pump area:	
	Click to lock a specific pump, stopping it from being used. For an explanation on locking and unlocking pumps, see Lock\Unlock Pumps section, further on.
	Click to unlock a specific pump enabling it for use.

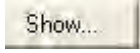
Fields	Description
Maintenance area:	
Lock Forecourt	Enables you to select the forecourt to be locked. The forecourt is only locked once you click the <i>Set</i> button.
Unlock Forecourt	Enables you to select the forecourt to be unlocked. The forecourt is unlocked only once you click the <i>Set</i> button.
Emergency	Enables you to automatically lock all the pumps with no conditions.
	Sets the selected status for the forecourt (see Lock Forecourt, Unlock Forecourt, above).
	Click to start the process that unlocks the Forecourt immediately with no conditions. This is used when there is a problem at the site, e.g., if a pump is stuck and will not lock or unlock, or if the Unlock Forecourt function, described above, is not working properly for any reason.
Online Authorizer area:	
Type	Displays the type of OLA server remote connection.
Remote	If checked, supports remote OLA.
	Enables you to toggle to the remote computer if required.
Shift Change area:	
Read Pump Totals	When checked, indicates that the FCC will get a Pump Total reading from PumpSrv at a Shift Change, requested by the FCC.
Read Tanks	When checked, indicates that the FCC will get a Tank Reading from PumpSrv at a Shift Change, requested by the FCC.
Lock Forecourt after	When checked, indicates that the FCC will lock the forecourt from PumpSrv after the shift change, requested by the FCC.
OLA qdex not empty	When checked, enables the FCC to close a shift even if the OLA.Qdx still contains records.
ReconcileTankSrv	When checked, indicates that the FCC will send a reconciliation event to the controller during the shift process.
Note:	
This field does not apply to systems working with the Allied Convert Layer.	
Without locking forecourt	When checked, indicates that the forecourt will not be locked during the shift change process.
Force lock forecourt	When checked, indicates that the forecourt will be locked during the shift change process, even if the configuration is different.
Get HW version	When checked, indicates that on a Set shift request, the forecourt hardware information will be collected in addition to tank readings and pump totals.
Controller area:	

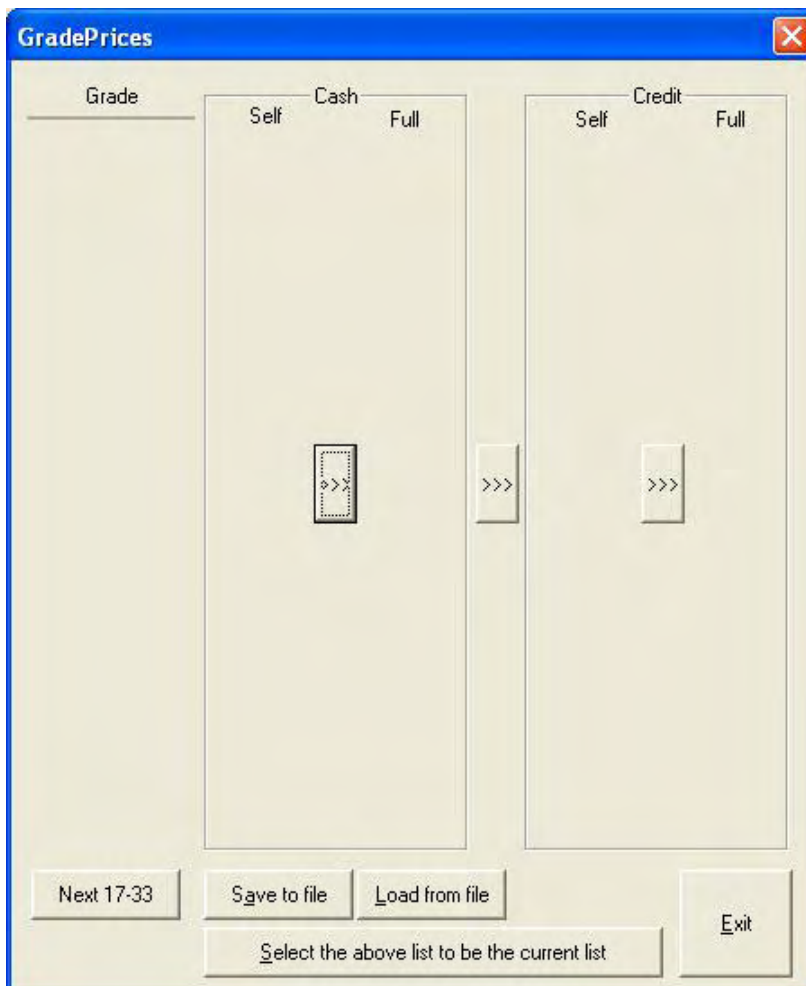
Fields	Description
	Select the Controller version field, and click <i>Request</i> to enable the Allied convert layer to report on all the software versions in the log. This log is viewable in the TraceViewer. For further details, see Viewers/Logs in Chapter 5, Log Viewer.

Grade Prices

The **Grade Prices** dialog enables you to view and modify prices for the various grades. Grade prices are downloaded to the system automatically. If you have the access rights, you can save or load grade price information to PumpSrv.

➤ **To Open Grade Prices Dialog:**

- 1 From the FCC Tree, click **Station Control**, and select the **Server Level** tab.
- 2 From the **Server Level** tab, in the **Grade Prices** area, click . The **Grade Prices** dialog is displayed, as follows:



Note:

Grade prices are downloaded to the system automatically.

If you have the developer's password, a **Save to file** and **Load to file** button is displayed. See step #5 below.

- 3 The information in the fields is as described in the table below:

Fields	Description
Cash area:	
Self	Displays price of grade when Self Service cash payment is selected.
Full	Displays price of grade when Full Service cash payment is selected.
Credit area:	
Self	Displays price of grade when Self Service credit payment is selected.
Full	Displays price of grade when Full Service credit payment is selected.

- 4 Clicking an arrow button copies the prices from the left column (relatively to the button) to the right column. The middle button copies prices from both left columns to both right columns.

- 5 Click **Select The Above List To Be The Current List**. The prices are downloaded into the system, and the **Server Level** tab is re-displayed.

Or

If you have a developer's password, the **Save to file**, and **Load to file** buttons are displayed.

- 6 Perform the required functions as described in the table below:

Buttons	Description
Save to File	Saves all price changes, as currently displayed, to a file.
Load From File	Loads previously saved files, which include data on grade prices.
Select The Above List To Be The Current List	Saves the data displayed currently on the screen as the current list.

Note:

This button is enabled only when data has been saved.

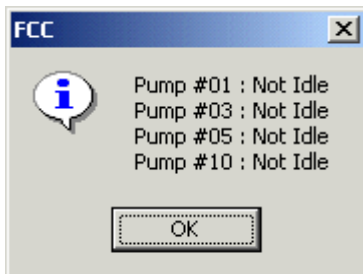
- 7 Click **Exit** to return to the **Server Level** dialog.

Get Status

The **Get Status** option enables you to view the statuses of configured pumps in the system.

➤ **To View the Pump Status:**

- 1 From the **Server Level** dialog, in the **Pumps Status** area, click . The FCC window displays the Pumps that are Not Idle. If all the Pumps are idle, a message prompts: "All Pumps are IDLE."



- 2 Click **OK** to close the window and return to the **Server Level** dialog.
Continue to monitor the forecourt and view the Reset Database function.

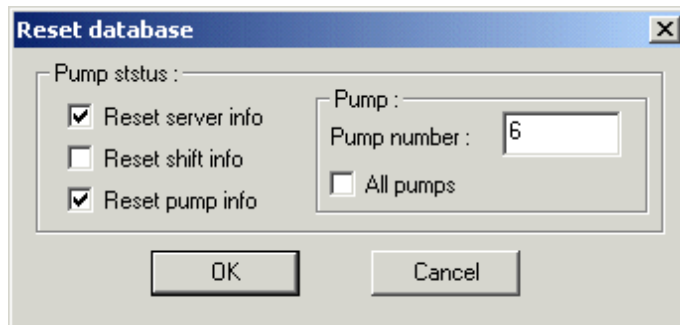
Reset database

The **Reset** database option enables you to reset the Pumps database.

Note:

This function is only applicable to the PumpSrv 4 version.

- 1 From the **Server Level** dialog, click **Reset**. The **Reset Database** dialog is displayed:



- 2 Enter the required information in the fields, as described in the table below:

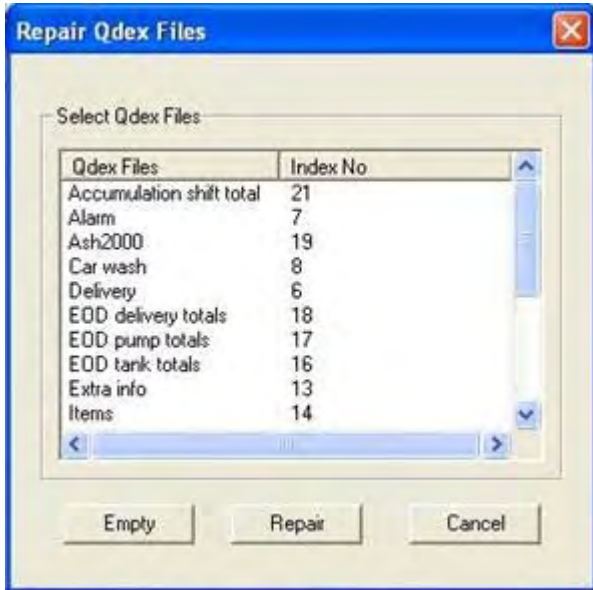
Fields	Description
Pump status area:	
Reset Server Info	If checked, indicates the server information is reset.
Reset Shift Info	If checked, indicates the shift information is reset.
Reset Pump Info	If checked, indicates the Pump information is reset.
Pump area:	
Pump Number	Number of the Pump being reset.
All Pumps	If checked, indicates all information in the database for each Pump is reset.

- 3 Click **OK** to return to the **Server Level** dialog.
Continue to view the Wetstock flags option.

Repairing QDX Files

The **Repair QDX Files** option enables you to select a specific QDX that is causing problems, and repair it from remote access.

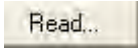
- 1 From the **Server Level** dialog, click **Repair QDX**. The **Repair QDX Files** dialog is displayed:

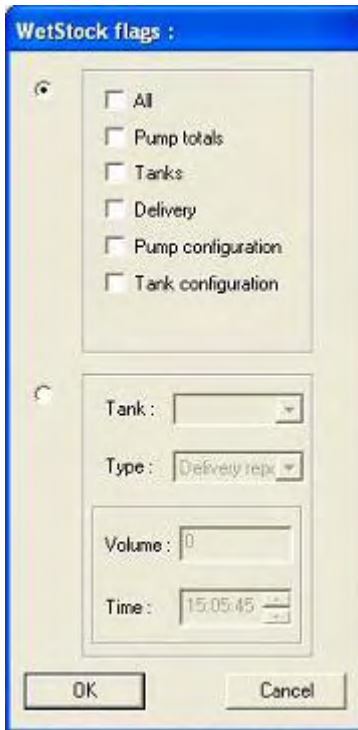


- 2 Select a QDX file that requires resetting, and click **Repair**. The system prompts "Are you sure you want to repair the QDX file?".
- 3 To repair, click **Yes**.
- 4 To empty the QDX, select the QDX file and click **Empty**. The system prompts "Are you sure you want to empty the QDX file?".
- 5 To empty, click **Yes**.
- 6 Click **Cancel** to close the dialog.

WetStock flags

The **WetStock Flags** option enables you to select which wetstock data you wish to read. The results are viewed in the Viewers Log files.

- 1 From the **Server Level** dialog, in the **Wetstock** area, click . The **WetStock Flags** dialog is displayed:



- 2 Check the appropriate checkboxes. You may check the **All** checkbox and enable all Wetstock Data readings.
 - 3 Click **OK** to return to the **Server Level** dialog.
- See the Wetstock section in Chapter 3, Configuration, General Parameters, for an explanation on each field.

Lock\Unlock Pumps

The **Lock\Unlock Pumps** option enables you to lock or unlock a specific pump in the system.

- 1 From the **Server Level** dialog in the **Lock\Unlock Pump** area, click . The **Lock Pump** dialog is displayed:



- 2** From the **Select a Pump** drop-down list, select the pump number of which you are locking, then click **OK**.
- 3** Click **OK**.

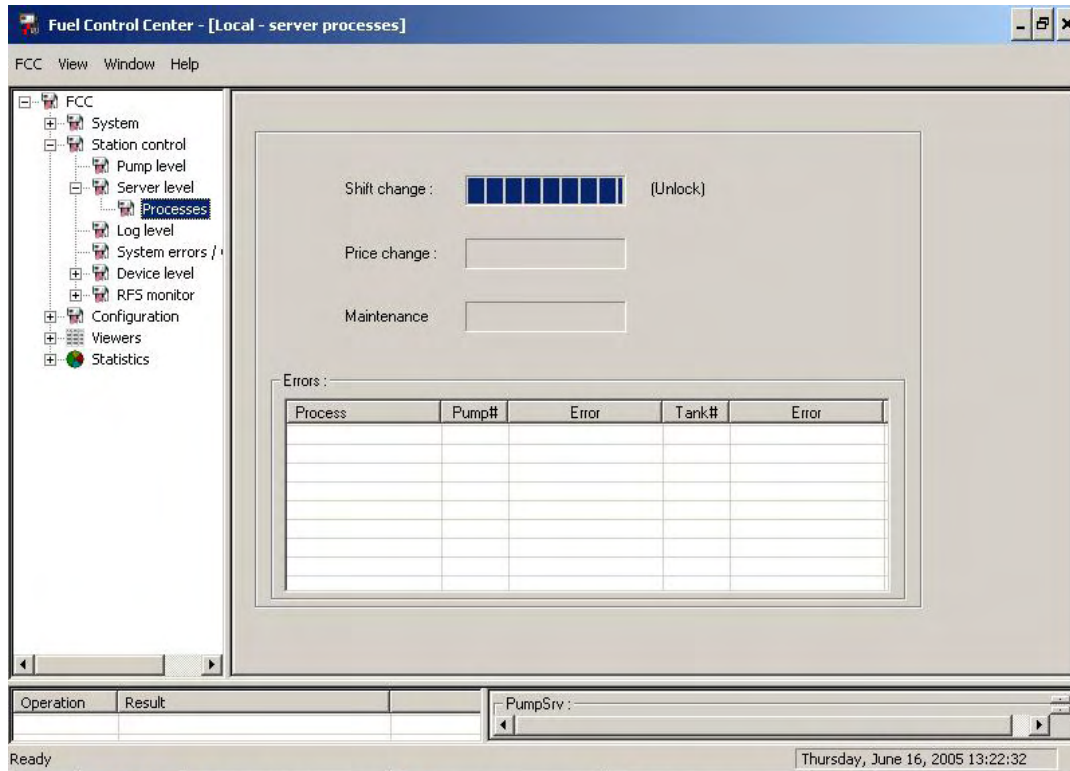
Repeat the same procedure to Unlock the pumps.

Processes

This option enables you to view the server processes progress. A blue stripe indicates that a process is in progress.

➤ To View Processes:

- 1 From the FCC Tree, click **Station Control**, and then **Server Level**.
- 2 Expand the Server Level menu on the FCC Tree, then click **Processes**. The **Server Processes** dialog is displayed:



Proceed to view and set Log Levels.

Log Level

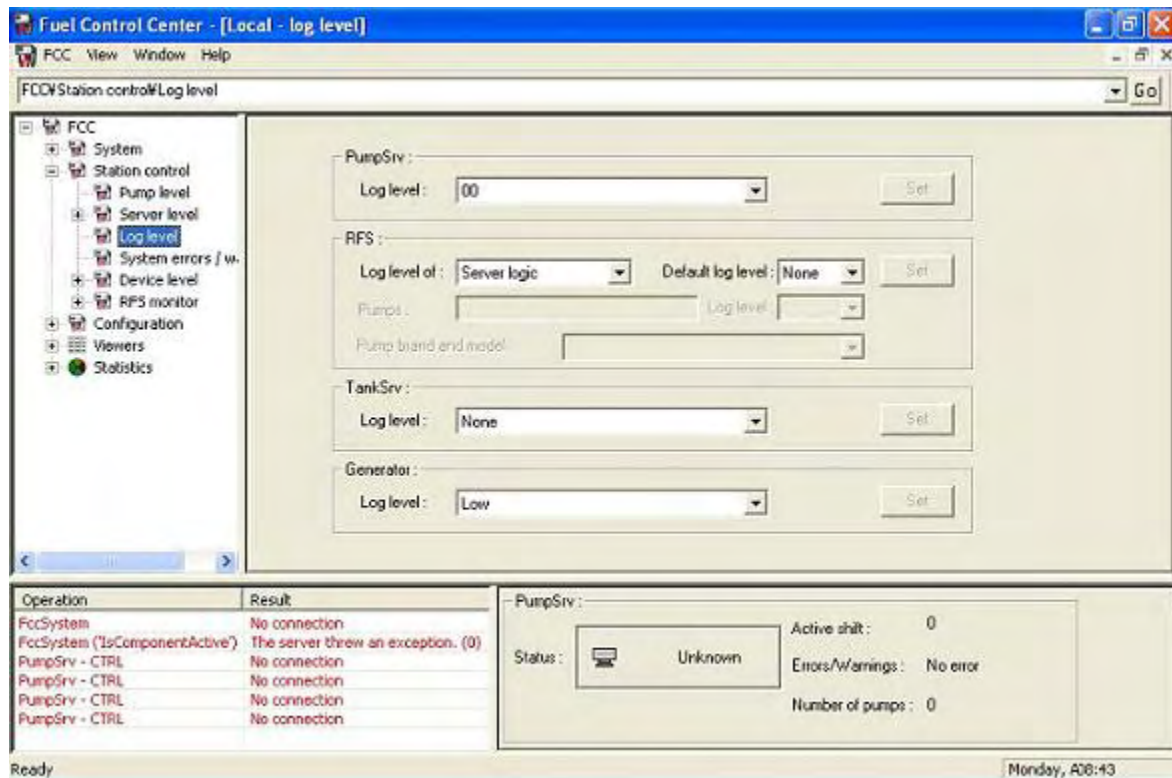
The **Log Level** option enables you to define the log levels for PumpSrv, RFS/Convert Layers, TankSrv, and the Generator. Each component of the Fuel Product creates a log file during run time. If your system supports the RFS, the FCC can create logs for each individual device, e.g., the Pumps, AVI, Terminal, Price display, and car wash devices.

➤ **To Define Log Levels:**

- 1 From the FCC Tree, click **Station Control**. The **Station Control** window opens in the right pane displaying its sub-menus.
- 2 Expand the **Station Control** menu on the FCC Tree, then click **Log Level**. The **Log Level** dialog is displayed:

Note:

The dialog below displays the RFS, however if your system uses a different convert layer, Convert Layer replaces RFS. If you are using a Doms system, the Log level may be defined via the Convert Layer, or from the Station Control/Log Level option.



- 3 From the **PumpSrv Log level** drop-down list, select the log level details to indicate the level of details in the log related to PumpSrv, then click **Set**.
- 4 From the **RFS Log level of** drop-down list, select, the device for which you are defining log level details:

Notes:

For the Server Logic, Car Wash, and Price Display options, you can only set a default log level. For Terminals, AVIs, and Pumps, you can define a default log level for each device, however, you can also define an additional specific log level for a specific device. For example, You may define a default log level for all the terminals, and in addition, define a different log level for a specific terminal.

High – indicates all details are recorded.

Med - indicates all common information is recorded.

Low – indicates that only transaction details and exceptions are recorded.

- Select **Server Logic** to indicate the level of log details in the log related to PumpSrv, then click **Set**.

Or

- Select **Terminal, AVI, Pump, Price Display, or Car Wash** to indicate the level of log details for each of the above mentioned groups of devices. On selecting one of these options, define the following:
 - a. From the **Default Log Level** drop-down list, select the level, e.g., Low, Med, High. This level applies to all the devices. To define a specific level for one specific device, see step # b below.
 - b. In the **Terminal, AVI, or Pump** field enter the ID number of each device for which you are defining a specific log level, if different to the default. Then from the **Log Level** drop-down list, select the level, e.g., Low, Med, High.
 - c. From the **Terminal, AVI, or Pump brand and model** drop-down list, select **All** to specify that the log levels apply to all the device's types on the forecourt, or select the device type for which you defined the log levels.

5 Click  to apply. The data is sent to the RFS.

6 From the **TankSrv Log Level** drop-down list, select the log level details related to the tank server, then click **Set**.

7 From the **Generator Log level** drop-down list, select the log level details relevant to the Generator, then click **Set**.

➤ **To View System Errors/Warnings:**

- [illegible]

- Or**

249

Device Level

The **Device Level** menu enables you to monitor and assess the status of all the devices that are connected to the fuel system, such as Pumps, Terminals, AVI devices, etc. There are three different options enabling you to verify if the devices are online or offline, check their connection status, as well as check if there are any communication problems.

From the FCC Tree click Station Control and expand the tree displaying the following sub menus in the right pane:

- Online/Offline
- Device Loops Status
- Communication Statistics

Note:

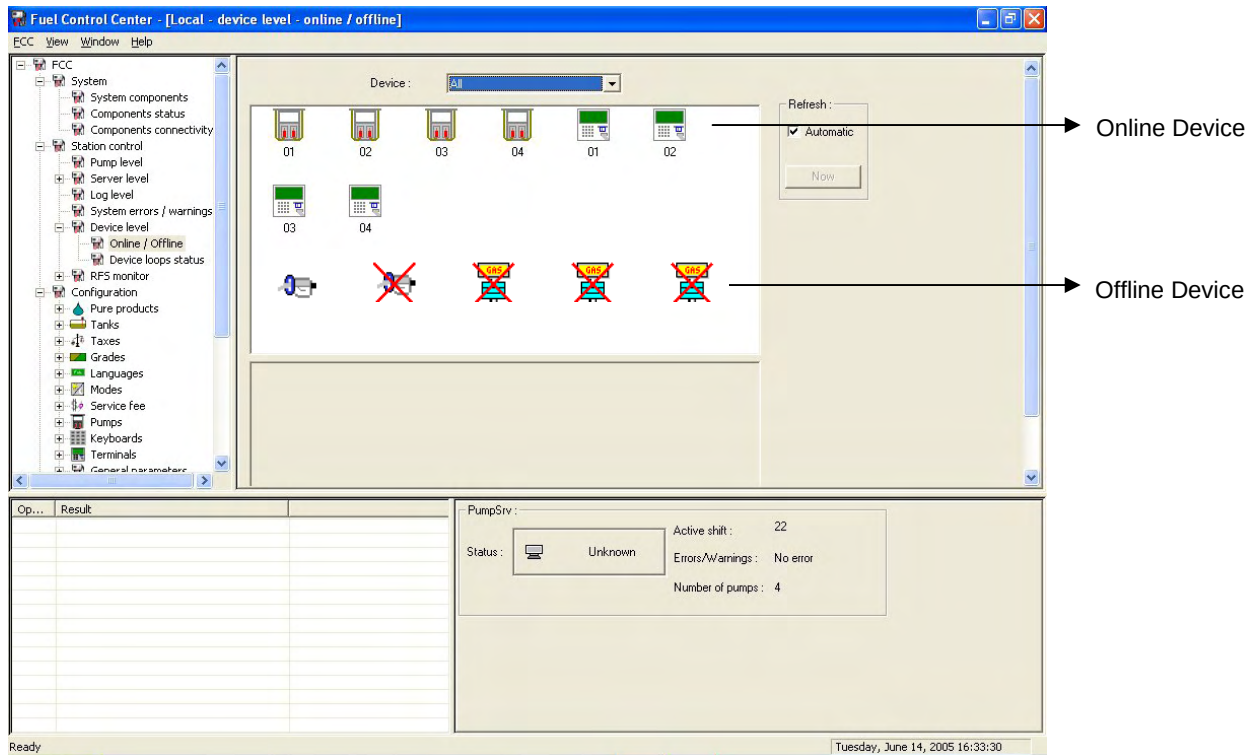
The **Device Level** menu only applies to the RFS Convert Layer.

Online/Offline

This option enables you to graphically view if all devices or a specific device is online or offline.

➤ To View the Online/Offline Devices:

- 1 From the FCC Tree, click **Station Control/Device Level**, then click the **Online/Offline** menu.
- 2 From the **Device** field drop-down list, select the relevant device, or select **All** to view all devices. The following dialog is displayed:



Note:

All Devices that are offline are marked with an X.

- 3 In the **Refresh** area, select the **Automatic** checkbox to automatically refresh the devices all the time.

Or

Click **Now** to refresh the devices on demand.

See also **Device Loops Status**, further on.

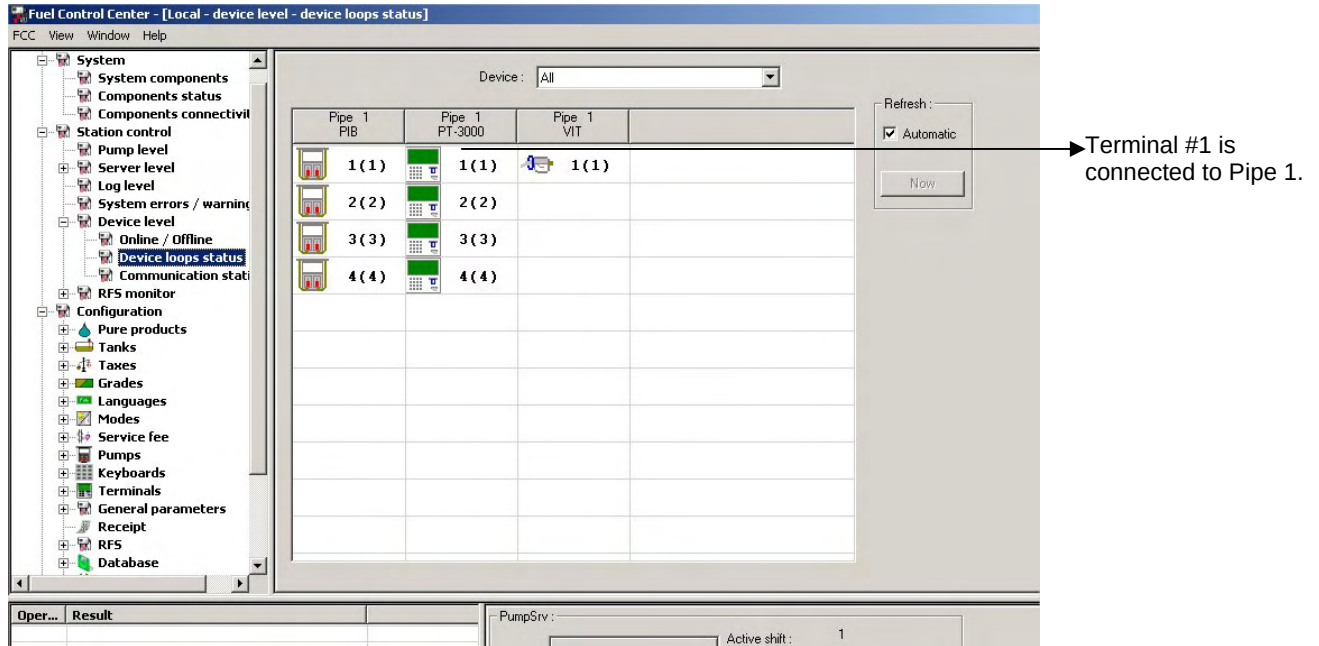
Device Loops Status

The **Device Loops Status** displays the current status of each or all the devices connected to the system. For example, you may view which terminals are connected to which pipes.

➤ To View the Device Loops Status:

- 1 From the FCC Tree, click **Station Control/Device Level**, then click the **Device Loops Status** menu.

The **Device Loops Status** dialog is displayed.



- 2 From the **Device** field drop-down list, select the relevant device, or select **All** to view all devices.
- 3 In the **Refresh** area, select the **Automatic** checkbox to automatically refresh the devices all the time.

Or

Click **Now** to refresh the devices on demand.

Communication Statistics

This option is used to assess the communication statuses of each or all the devices connected to the system without using log files. On accessing the **Communication Statistics** screen, an RFSCommStats.xml file is created with the current data, which may then be sent to technical support to analyze any problems, or the reason for deterioration of the communication quality, if required. This file is located in C:\PumpSrv\Log. The data that is analyzed is composed of various parameters such as, response time, checksum errors, TCPIP socket problems and device responses.

➤ To View Communication Statistics:

- 1 From the FCC Tree, click **Station Control/Device Level**, then click the **Communication Statistics** menu.

The **Communication Statistics** dialog is displayed.

Indicates an error that is interrupting the communication

Indicates 100% communication

Indicates that there is a problem, but overall, it is considered acceptable.

	Avi Pipe 1 VIT	Dispenser Pipe 1 PIB	Terminal Pipe PT-3000
Average response time	62	136	15
Maximum response time	78	7329	156
Minimum response time	62	93	15
Checksum error (Noise)	0.00%	0.00%	0.00%
Socket error	0.00%	0.00%	0.00%
No response from device	0.00%	0.00%	0.00%
Overall communication quality	92.86%	64.29%	100.00%

PumpSrv: Status: Unknown Active shift: 1 Errors/Warnings: No error Number of pumps: 4

- The top pane lists a breakdown of communication entries
 - The bottom pane displays an overall communication quality in percentage
- 2 From the **Device** field drop-down list, select the relevant device, or select **All** to view all devices.
 - 3 In the **Refresh** area, select the **Automatic** checkbox to automatically refresh the devices all the time. The default, defined in the *FCC/Properties/Timers* is every minute. For further details, see Chapter 2, FCC Menu Bar, FCC Properties.

Or

Click **Now** to refresh the devices on demand.

RFS Monitor

Note:

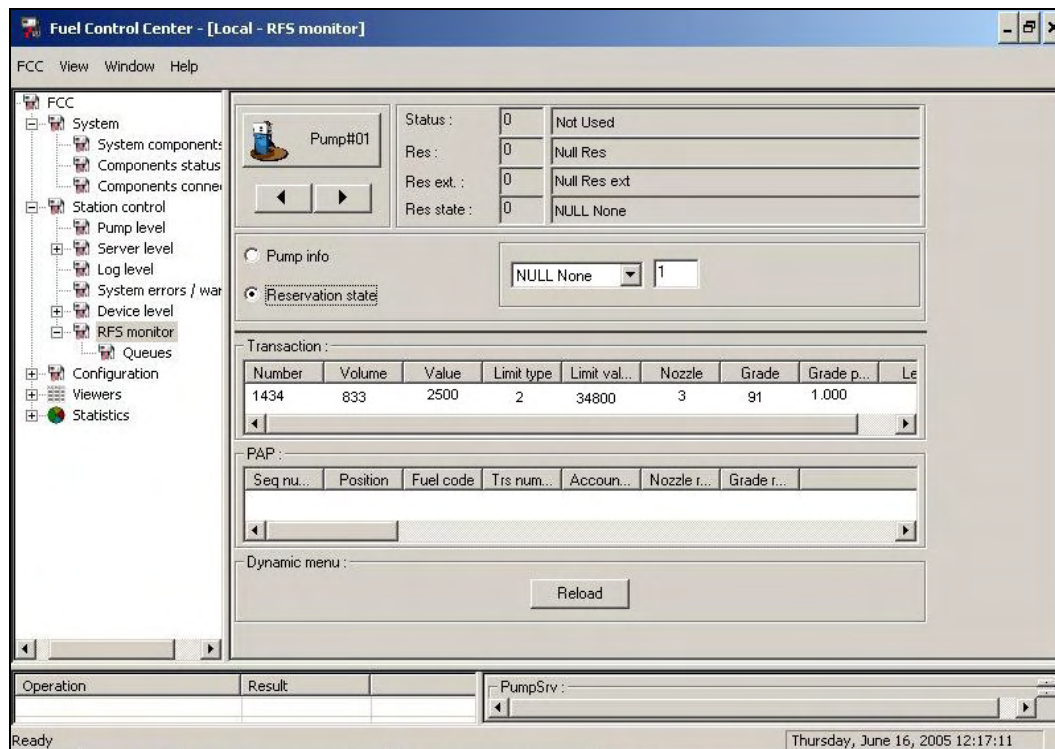
This section is only relevant if your system uses the RFS.

The **RFS Monitor** menu enables the monitoring of the RFS. It allows you to view the relevant data of the Pumps, including: Status, Reservations, etc. In addition, General Information, Transaction Information, PAP Information, Queues and Log Information can be viewed.

➤ To View the RFS Monitor:

- 1 From the FCC Tree, click **Station Control**, then click the **RFS Monitor** menu.

The **RFS Monitor** dialog is displayed.



The table below describes the various fields where you can view the information in the **RFS Monitor** dialog:

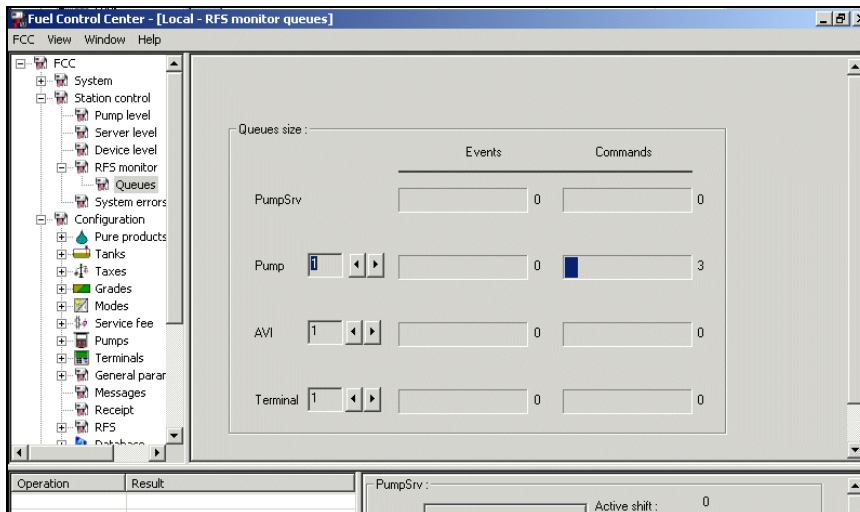
Fields	Description
Pump area:	
Pump Number	Displays the Pump number. Click the left and right arrows to scroll through the various Pump numbers. The system may supports up to 32 pumps, unless specified otherwise during configuring of the Pumps.

Fields	Description
Auto Refresh Every Sec	If checked, the <i>RFS</i> is monitored, displaying current transaction information, and ensures the information is refreshed every second. Note: This field must be checked.
Status	Displays the status of a Pump.
Res (Reservations)	Displays the transaction type that is currently active at the Pump, e.g., Prepay , PAK , etc.
Res Ext. (Reservation Extension)	Displays the Reservation Extension types, which include: Null_Res , PaP , PaK , Prepay .
Res State (Reservation State)	Displays the state of the Reservation, for example, if it is a PAK Reservation, it specifies whether it is in progress or not.
Pump State area:	
Pump Info	If selected, the <i>Reset</i> button is enabled. Click <i>Reset</i> to refresh the Pump data of the number of the Pump you wish to <i>Reset</i> .
Reservation State	If selected, the Set and Force Complete buttons are enabled. The Set Reservation state 'moves' the RFS state machine to the required state. Note: The Set Reservation state should only be set by Retalix Technical support as it can influence the core of RFS, and cause severe damage if moved to the wrong state. The Force Complete button releases the system from a scenario where the Pump is reserved while fueling, and cannot finalize the transaction because it fails to get the transaction totals from the Pump. The problem can be identified in the Station Control - Pump Level window. For example, a reserved Pump with a stacked IN_PROGRESS transaction, where the Pump nozzle was replaced may be released by clicking the Force Complete button.
Transaction area:	Provides information regarding the status of each transaction, including: Number of Transaction, Volume, Value, Limit type, Limit Value, Nozzle, Grade, Grade Price, and Level per transaction.
General Info area:	
Terminal Number	Displays the number of the Terminal for the Pump specified.
PAP info area:	Provides information regarding the status of each PAP transaction, including: Sequence Number, Position, Fuel Code, Transaction Number, Account Number, Nozzle Restrict, Grade, Track 1, Track 2.

Fields	Description

Dynamic menu area:	The Dynamic menu produces a text menu on the Terminal. Click  to refresh the Dynamic menu, for example, if you produced a report, and the name of the report changes, click Reload to load the menu with the changes, without having to restart the system.

- 2 From the FCC Tree, click **RFS Monitor** and then the **Queues** menu. The following dialog is displayed:



Fields	Description

Queues Size area:	A place for holding internal data.
Events	Displays the progress of incoming Events for: ▪ PumpSrv ▪ Pump ▪ AVI ▪ Terminal Click the left and right arrows to scroll through the various Pump, AVI, and Terminal numbers.
Commands	Displays the progress of out going Commands for ▪ PumpSrv ▪ Pump Number ▪ AVI Number ▪ Terminal Number Click the left and right arrows to scroll through the various Pump, AVI, and Terminal numbers.

You have accessed the **RFS Monitor** menu; continue to view the **Device Levels**, which are also relevant if your system uses RFS.

This chapter describes how to view the various Log Files that contain system data. In addition, explanations are provided as to how you pack and export a log file to the Head Office, as well as how to detect and solve miscellaneous problems.

In this chapter:

- *Logs*
- *Database*
- *Real Time*

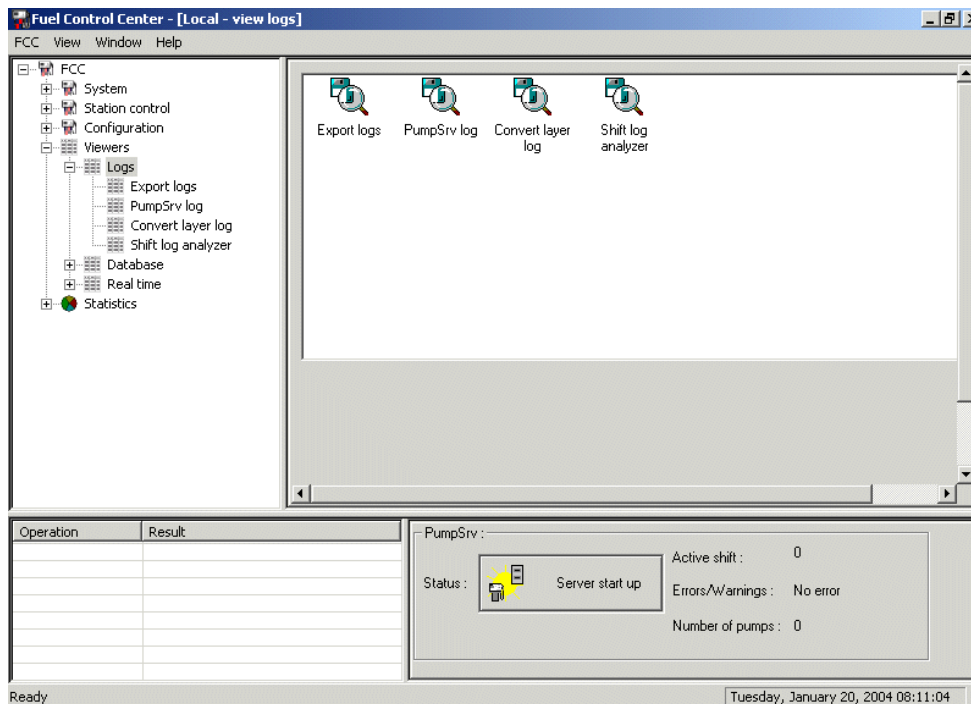
Viewers

The **Viewers** option enables you to view the fuel system data in log files. The *Viewers* menu is divided into the following 3 main sections:

- Logs
- Database
- Real time

➤ **To Access the Viewers Menu:**

- 1 From the FCC Tree, click **Viewers** and expand the FCC Tree displaying the following sub-menus in the right panel:
 - Logs
 - Database
 - Real time
- 2 From the FCC Tree select each option or from the menu in the right pane. Each option is displayed graphically. For example, click **Logs**. The **View Logs** dialog is displayed with icons of all the different View Log options. Expand the FCC Tree to view the list of Logs:



Proceed to view each log type.

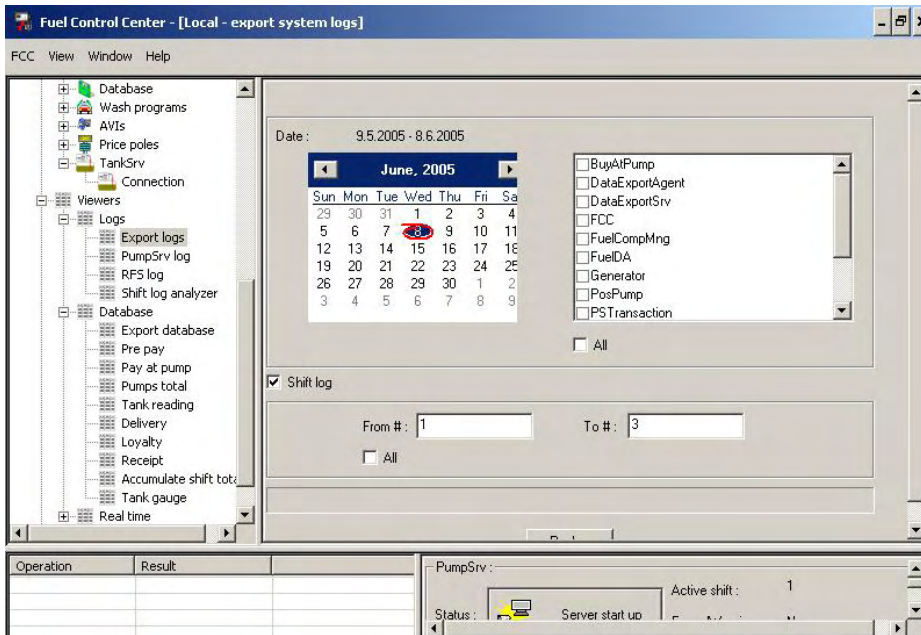
Logs

Export Logs

The *Export Logs* option is a utility enabling easy gathering of information from the *PumpSrv* Logs and the Registry. This information can be sent directly to technical support personnel, to facilitate locating and solving problems and errors in the system.

➤ To Send Export Logs:

- 1 From the FCC Tree, click **Viewers/ Logs/ Export Logs**. The **Export System Logs** dialog is displayed:



- 2 To send all the existing log files, select the **PumpSrv** and **Controller Log** checkbox and select **All**.

Or

Highlight the required dates in the calendar. Then check the required checkboxes to specify the log files to be sent, as described in the table below:

Checkboxes	Description
All	If checked, includes all PumpSrv logs for the specified dates. If not checked, select the required dates from the calendar. Use the left and right arrows to scroll through the months.

Shift Log area:

From – To If the Shift Log Checkbox is checked, includes logs for the indicated shift numbers.

All If checked, includes logs for all shifts in the system.

- 3** Click the **Pack** button to pack all the specified files to zip files, the system then gives the option to send the zip files by email. A message prompts: "Would you like to email the logs?".
- 4** Click **Yes** to e-mail the logs. A message prompts: "Please enter e-mail".
- 5** Enter the relevant e-mail address, and click **OK**.

The logs are e-mailed to the relevant address.

You have selected and exported Log Files. See other log options.

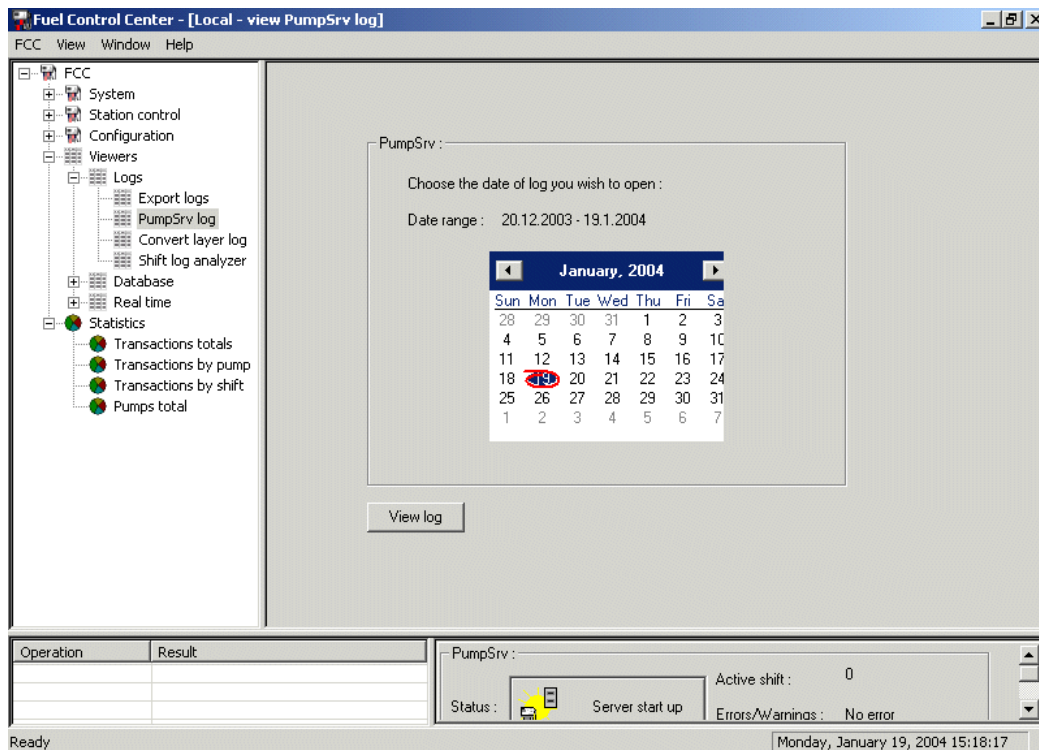
PumpSrv Logs

The **PumpSrv Logs** menu enables you to view PumpSrv Logs. You can view logs by defining dates from today one month back.

Logs are saved by default in the PumpSrv\Log directory. When you click to view a specific log file on a specific date, the log is displayed in the Notepad: for example, PumpSrv.18 is a log generated on the 18th of a specified month. If you generate a log on the 18th of the month following, it will replace the current log. For example, the log generated on the 18th of July replaces the log on the 18th of June.

➤ To Display PumpSrv Logs:

- 1 Click **PumpSrv Logs** from the FCC Tree. The **PumpSrv Logs** dialog is displayed:



- 2 Select the month and day of the required logs on the calendar.
- 3 Click **View Log**. The log is displayed in the PumpSrv – Notepad.

If there is no log, a message prompts:

“You don’t have log file to this date.”

Convert Layer Logs

The **Convert Layer Logs** menu enables you to view the Convert Layer logs and the Trace Viewer (the Trace Viewer is specific to Allied). You may view logs on specific dates.

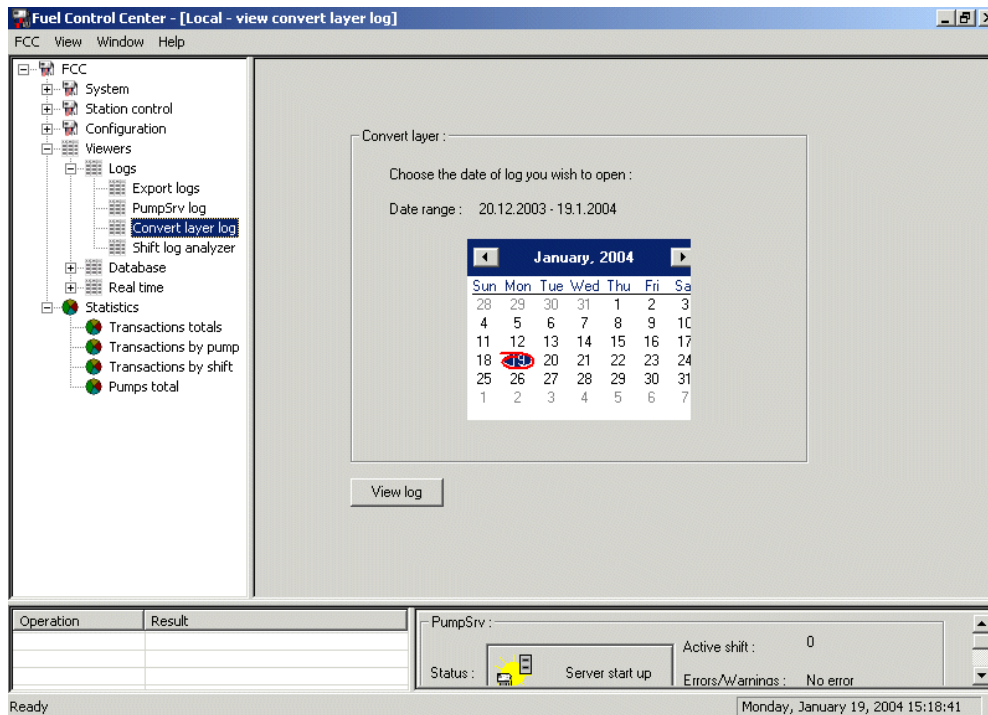
Note:

For RFS systems, the Convert Layer Logs menu is called RFS Log.

Displaying the Convert Layer Logs

➤ **To View Convert Layer Logs:**

- 1 Click **Convert Layer** from the FCC Tree. The **Convert Layer Logs** dialog is displayed:



- 2 Select the month and day of the required log from the calendar.
- 3 Click **View Log**. The log is displayed in the PumpSrv - Notepad.

If you are working with an Allied Controller, continue to view the Trace Files, otherwise proceed to the Shift Log Analyzer section, further on.

Enabling the Trace Viewer

The **Trace Viewer** displays the encoded information sent to and from the controller, and enables you to translate the information into a legible format.

The recorded information is stored in Trace Files. The current Trace File has the extension **lis**, whereas the Trace Files created in the past are identified by the file extension representing the creation date of the file. For example, **trace.04** represents the file created on the fourth of the current month. Trace Files are saved for a period of one calendar month.

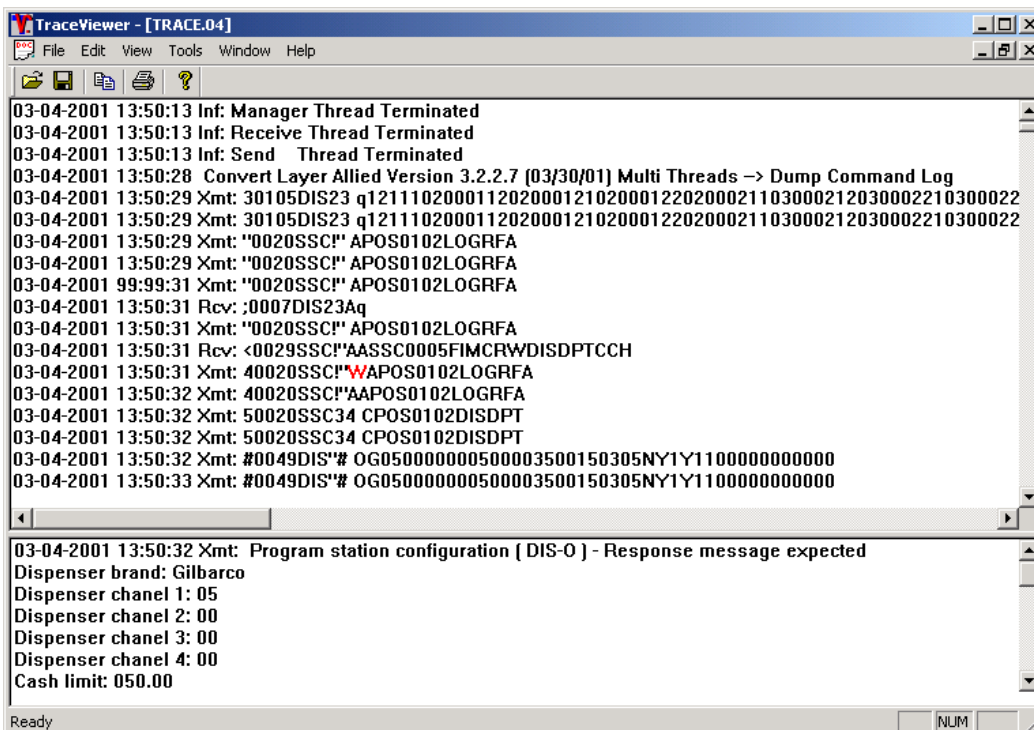
Using the Trace Viewer you can display all the information logged to the Trace File, you can perform a search, or you can refine your search by running a query. Running a query enables you to display only specific information from the Trace File, for example, only records of the Dispenser Control, or only System Commands.

The Trace Viewer opens the Trace File according to the date selected from the calendar.

➤ To View a Trace File:

- 1 From the FCC Tree, click **Convert Layer**. The **Convert Layer Logs** dialog is displayed.
- 2 Click **View Trace**. The **TraceViewer [TRACE.Lis]** is displayed.
- 3 From the **Tools** menu, select **Translate** to display a partial translation of the entire file. For a more detailed translation, select the line you want to translate, then from the **Tools** menu select **Translate**.

The required translation is displayed in the lower part of the Trace Viewer.

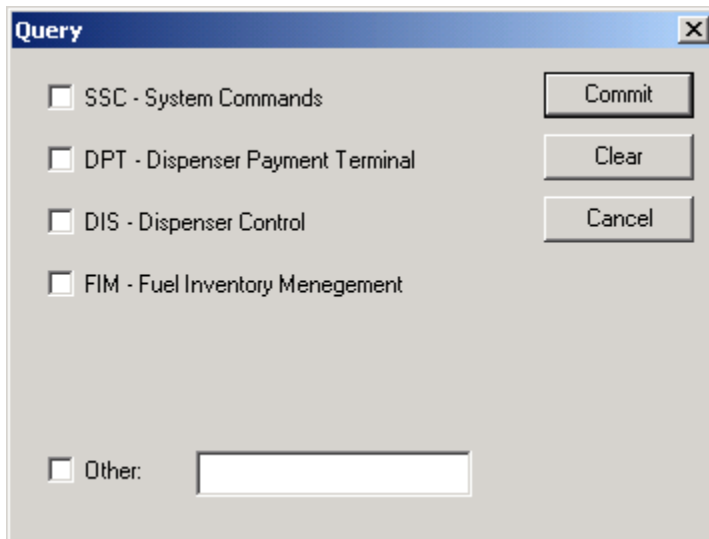


Note:

You can restore the original encoded view of the Trace Viewer after viewing the translation of the Trace file, by selecting **Original** from the **Tools** menu.

➤ **To Run a Query:**

- 1 In the **Trace Viewer**, click the **Tools** menu and select **Queries**. The **Query** dialog is displayed.



Note:

The fields displayed in the **Query** dialog may vary according to the Controller type.

- 2 Select the relevant check boxes and click **Commit**. Only the lines of the selected commands are displayed in the Trace Viewer. If necessary, translate the codes.
Click **Clear** to redisplay the entire Trace file.

➤ **To Perform a Search:**

- 1 In the Trace Viewer, click the **Tools** menu and select Find. The **Find** dialog is displayed.
- 2 In the **Find** dialog, enter the code you want to display or a part of the code. The matching codes are displayed. If necessary, translate the codes.

Note:

You can define a part of the code by which you want to search, by specifying its first and last letters, for example "E..S", where the two periods represent 2 irrelevant characters. The records retrieved in this example could be EABS, E12S or ECGS. All that is relevant in the search is that the letter E is in the first position, and the letter S is in the fourth position.

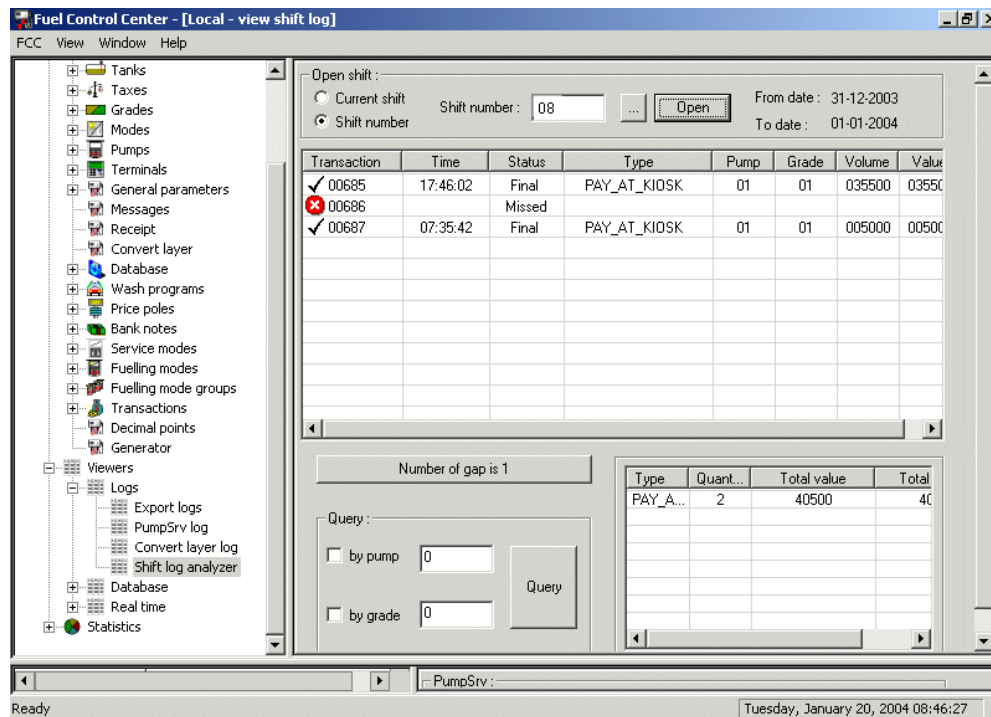
Shift Logs Analyzer

The **Shift Logs Analyzer** option enables you to view logs for the various transactions, e.g. **Prepay**, **PAP**, **Pay at Kiosk**, or **AVI**.

An updated log is displayed every time you select **Current Shift**.

➤ To View Shift Logs:

- 1 Click **Shift Logs Analyzer** from the FCC Tree. The **View Shift Log** dialog is displayed:



- 2 Enter the required information in the fields as described in the table below:

Note:

You can display a shift file by using any of the following methods: Open Log, Current shift, or Browse.

Fields	Description
Open Shift area:	
Current Shift	Select to display the transaction of the current shift. If selected, the following field, <i>Shift Number</i> is grayed out.
Shift Number	Select if you require a specific shift number.
Shift Number	Enter the required Shift number, or click  to browse to your files to search and select a required log.
Open	Opens a log for the required shift.
Number of Gap Is...	Displays the numbers of the transactions that are missing from the log, as well as the total number of missing transactions. The number changes according to 'change' and if there are gaps, it specifies the number of gaps found.
Query by Pump and/or Grade area:	
By Pump	If checked, and upon entering pump number, displays all transactions for this pump when pressing the <i>Query</i> button.
By Grade	If checked, and upon entering grade number, displays all transactions for this grade when pressing the <i>Query</i> button.
Type, Quantity, Total Value, Total Volume area:	
Type	Displays type of transaction, e.g., PAK, PAP. etc.
Quantity	Displays the number of transactions per type.
Total Value	Displays total value of all transactions for the specified type.
Total Volume	Displays total volume for all transactions of the specified type.

Note:

The totals are displayed at the bottom of the Total Value and Total Volume columns for each transaction type.

Database

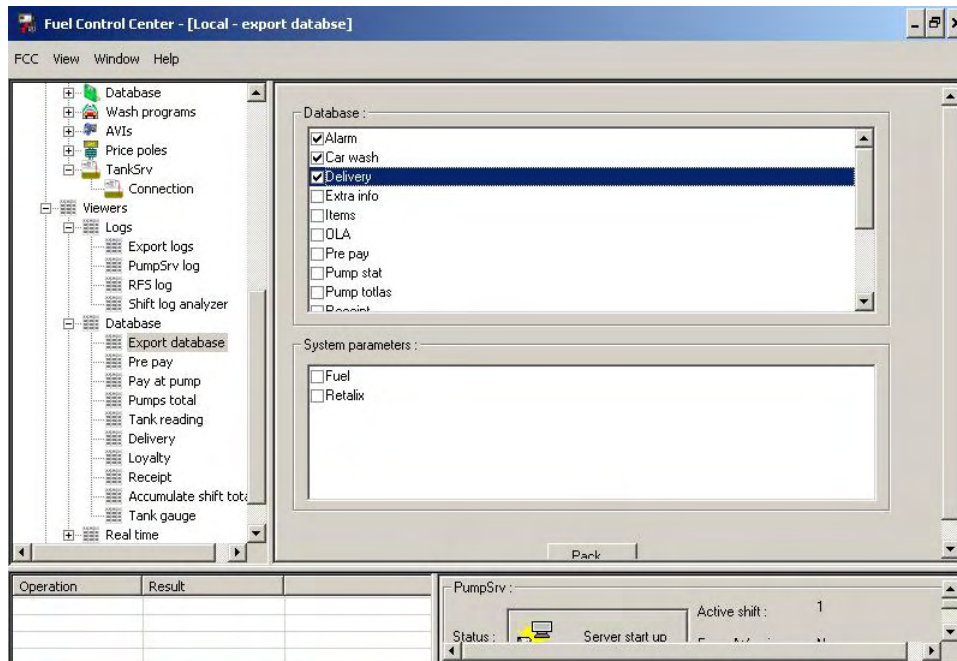
This section explains how to view information stored in the database. This information includes Prepay and PAP transaction information, Pump totals, Tank and Delivery Readings, Loyalty transactions, Receipt records, Accumulated shift totals, and Tank gauge information.

Export Database

The **Export Database** option is a utility enabling easy gathering of information from the *PumpSrv* and the Registry. This information can be sent directly to technical support personnel, to be able to install the database at a different site.

➤ To Export the Database:

- 1 From the FCC tree, click **Database**, and then **Export Database**. The **Export Database** dialog is displayed:



- 2 From the **Database** options, select the checkboxes of each table in the database that you are exporting.

- 3 From the **System Parameters** options, select the relevant option:

Checkboxes	Description

System Parameters area:

Fuel	Includes the registry entry from the PumpSrv branch.
Retalix	Includes the registry entry from the Retalix branch.

- 4 Click the **Pack** button to pack all the specified files to zip files, the system then gives the option to send the zip files by email. A message prompts: "Would you like to email the logs?".
- 5 Click **Yes** to e-mail the database tables. A message prompts: "Please enter e-mail".
- 6 Enter the relevant e-mail address, and click **OK**.

The database tables are e-mailed to the relevant address.

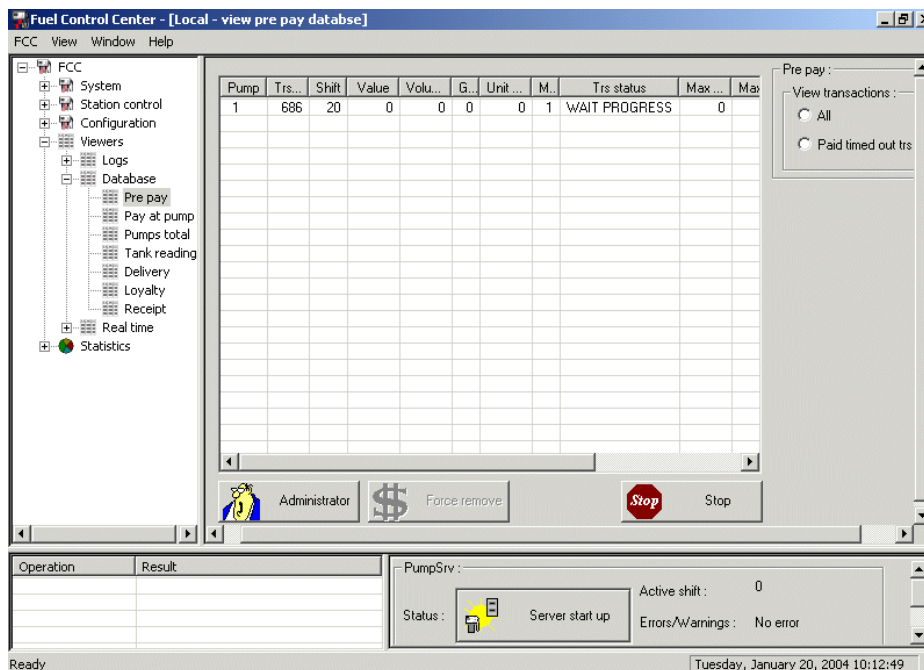
You have selected and exported Database Tables. Proceed to view each database table.

PrePay

The **Prepay View** menu enables you to view **Prepay** transactions in the database files.

➤ To Display PrePay Transactions:

- 1 From the FCC tree, click **Viewers/Database**, and then **PrePay**. The **View PrePay Database** dialog is displayed:



Note:

The bottom panel of the screen displays Operations and their results. The FCC communicates with PumpSrv via the GPI interface and CTRL interface. Any call to these interfaces returns a **Result** of operation.

- 1 From the *View transactions* area, select **All**, then click  to display a list of transactions as they appear chronologically in the database table. The button changes to .

Or

Select **paid timed out trs**, and click  to display a list of Paid timed out transactions as they appear in the database table.

- 2 Click ◀ or ▶ to view all the fields displaying each pump reading, or drag the slider to move the screen left or right.
- 3 Highlight the required **PrePay** transaction. Information on this transaction is displayed in the following fields, as described in the table below:

Columns	Description
Pump	Number of pump on which transaction was performed.
TRS Number	Transaction number.
Shift	Number of shift on which transaction was performed.
Value	The value of the pre paid transaction.
Volume	The volume of the pre paid transaction.
Grade	Price per grade.
Mode	The mode number that indicates which mode is valid for Prepay transactions.
Trs Status	Specifies the status of the transaction, e.g., Wait Progress, or Complete.
Max Value	The Maximum value allowed in pre paid transaction.
Max Volume	The Maximum volume allowed in pre paid transaction.
Flags	Flags used internally for PumpSrv.
POS #	The number of the POS from which the Prepay transaction was performed.
Total Reward	Indicates the value recorded from discounts within Prepay transactions.

- 4 Click **Force Remove** to delete the transaction record from the database.

Note:

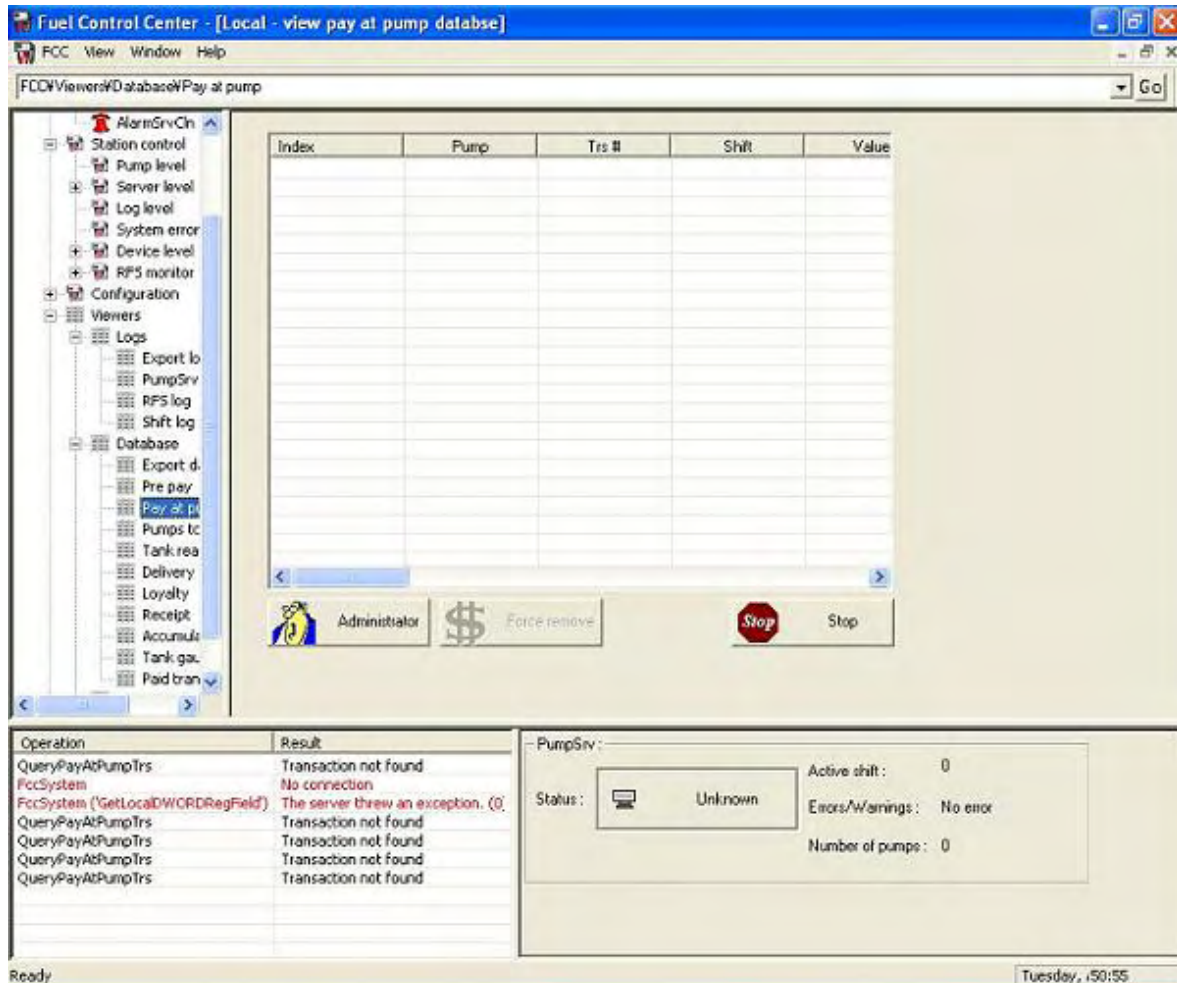
The **Force Remove** button is available only for the administrator. Click the **Administrator** button and enter your password to enable the **Force Remove** button.

Pay at Pump

The **Pay at Pump** menu enables you to view **PAP** transactions in the Database.

➤ **To Display a PAP Transaction:**

- 1 From the FCC tree, click **Database**, and then **Pay at Pump**. The **View Pay at Pump Database** dialog is displayed:



Note:

The bottom panel of the screen displays Operations and their results. The FCC communicates with PumpSrv via the GPI interface and CTRL interface. Any call to these interfaces returns a Result of operation.

- 2 Click  to display a list of transactions as they appear chronologically in the database table. The button changes to .
- 3 Click ◀ or ▶ to view all the fields displaying each pump reading, or drag the slider to move the screen left or right.

- 4 Highlight the required **PAP** transaction. Information on this transaction is displayed in the following fields, as described in the table below:

Columns	Description
Index	Displays the serial number of the table.
Pump	Number of pump on which transaction was performed.
TRS #	Transaction number.
Shift	Number of shift on which transaction was performed.
Value	The value of the Pay at Pump transaction.
Volume	The volume of the Pay at Pump transaction.
Grade	Grade number used in the Pay at Pump transaction.
Unit Price	Price per grade.
Mode	The mode number that indicates which mode is valid for Pay at Pump transactions.
Status	Displays the status of the transaction.
Sequence #	Number of OLA transactions generated by the <i>Convert Layer</i> .
Track 2	Credit card Track 2 information.
Account	Account number of credit card used during the transaction.
Expire	Expiry date of credit card used during the Pay at Pump transaction.
Requested	Preauthorized amount in value.
Authorize	Authorized amount in value.
Authorization #	Authorization reference number sent by the Authorizer.
Approval	Date and time of when the transaction was approved.
OLA Status	Displays the status of the OLA transaction
Result	Return code of OLA , e.g., A =Approved.
Club ID	The club parameters are displayed if the customer owns a club card - customer's ID number.
Club Scheme	The club parameters are displayed if the customer owns a club card - number of Scheme.
Club Points	The club parameters are displayed if the customer owns a club card - number of Scheme points earned as a result of the transaction.

- 5 Click **Force Remove** to delete the transaction from the database.

Note:

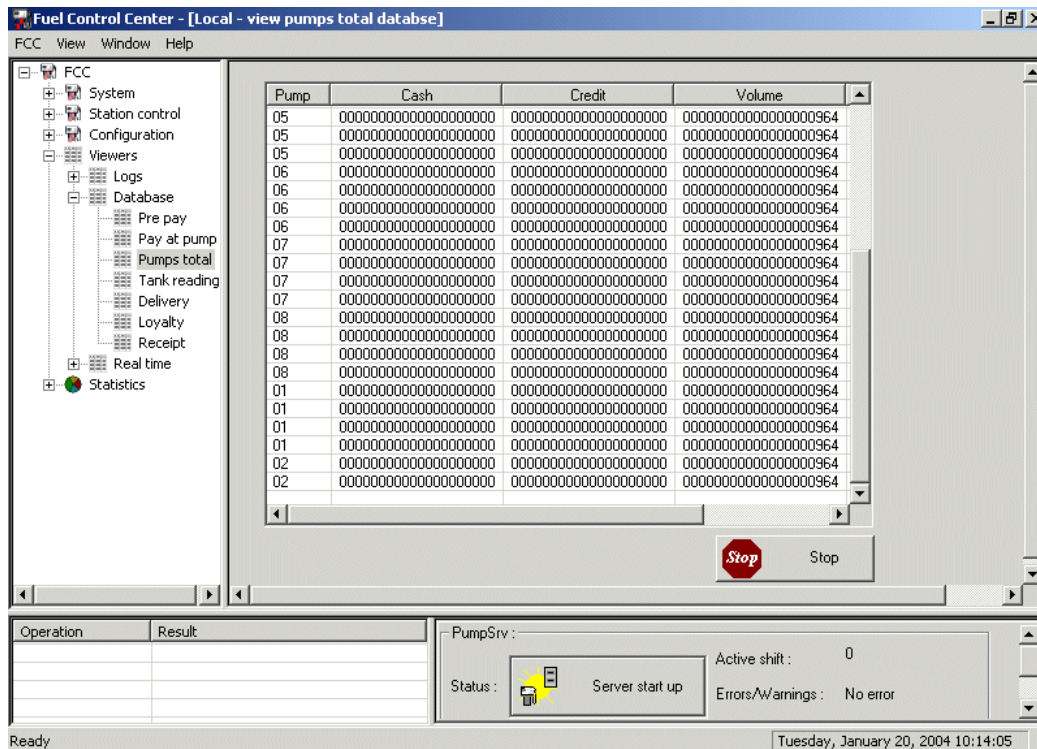
The **Force Remove** button is available only for the administrator. Click the **Administrator** button and enter your password to enable the **Force Remove** button.

Pumps Total

The **Pumps Total** menu enables you to view a depository of accumulated index records on Pump readings in the database.

➤ To Display Pump Totals:

- 1 From the FCC tree, click **Database**, and then **Pumps Total**. The **View Pumps Total Database** dialog is displayed:



Note:

The bottom panel of the screen displays Operations and their results. The FCC communicates with PumpSrv via the GPI interface and CTRL interface. Any call to these interfaces returns a **Result** of operation.

- 2 Click  to display a list of pump readings as they appear in the database table. The button changes to .
- 3 Click ◀ or ▶ to view all the fields displaying each pump reading, or drag the slider to move the screen left or right.

- 4 Highlight the required **Pump reading** transaction. Information on this transaction is displayed in the following fields, as described in the table below:

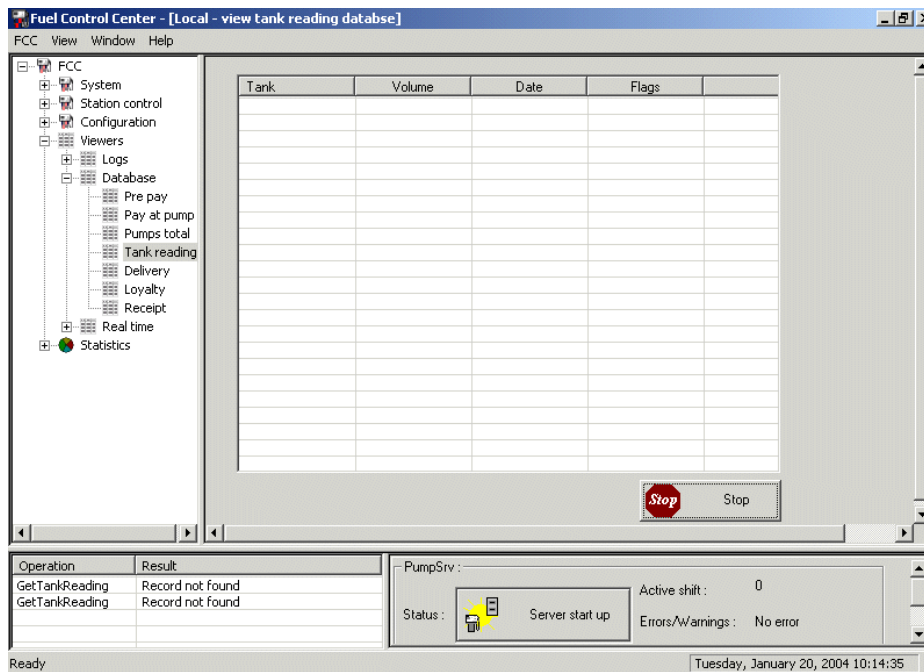
Columns	Description
Pump	Number of pump
Cash	The value, paid in cash, of the volume reading for the specific pump.
Credit	The value, paid in credit, of the volume reading for the specific pump.
Volume	Displays the volume reading of the pumps volume counter.
Date	Displays the date of the specific pump reading and database entry.
Flags	Flags used internally for PumpSrv.

Tank Reading

The Tank reading menu enables you to view a depository of accumulated index records on tank readings. These records are stored temporarily in this depository, which is emptied periodically, and the records are then moved and stored in the database.

➤ To View the Tank Readings:

- 1 From the FCC tree, click **Database**, and then **Tank Reading**. The **View Tank Reading Database** dialog is displayed:



Note:

The bottom panel of the screen displays Operations and their results. The FCC communicates with PumpSrv via the GPI interface and CTRL interface. Any call to these interfaces returns a **Result** of operation.

- 2 Click  to display a list of Tank readings as they appear in the database table. The button changes to .
- 3 Highlight the required **Tank reading**. Information on each Tank reading is displayed in the following fields, as described in the table below:

Columns	Description
Tank	Number of tank
Volume	Volume in the tank
Date	Displays the date of the database entry.
Flags	Flags used internally for PumpSrv.
Product	Displays the product code for the specific tank reading.
Status	Displays the status of the tank.

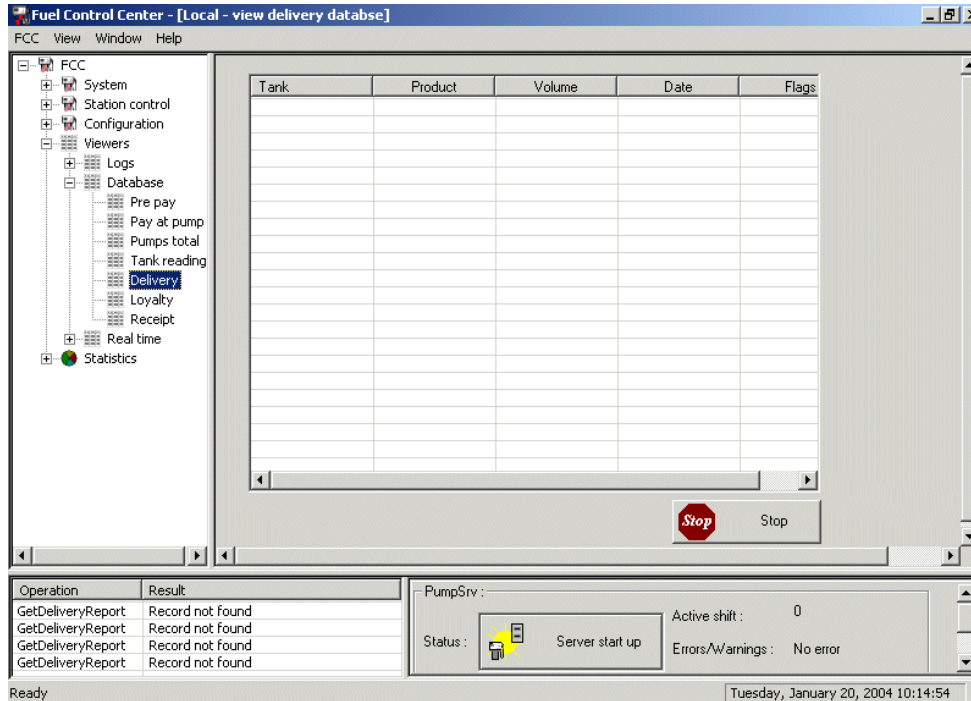
Fuel Level	Displays the fuel level of the tank.
Water Level	Displays the water level of the tank.
Temperature	Displays the temperature of the fuel in the tank.
Water Volume	Displays the amount of water in the tank.
Read Number	Displays the number of the Tank Reading.
Shift Number	Displays the shift number during which the tank reading was performed.

Delivery

The **Delivery** view menu enables you to view delivery readings from a depository of accumulated index records on delivery readings. These records are stored temporarily in this depository, which is emptied periodically, and the records are then moved and stored in the database files.

➤ To View the Delivery Readings

- 1 From the FCC tree, click **Database**, and then **Delivery**. The **View Delivery Database** dialog is displayed:



Note:

The bottom panel of the screen displays Operations and their results. The FCC communicates with PumpSrv via the GPI interface and CTRL interface. Any call to these interfaces returns a **Result** of operation.

- 2 Click  to display a list of delivery readings as they appear in the database table. The button changes to .
- 3 Click ◀ or ▶ to view all the fields displaying each delivery reading, or drag the slider to move the screen left or right.

- 4 Highlight the required **Delivery reading**. Information on each Delivery Reading is displayed in the following fields, as described in the table below:

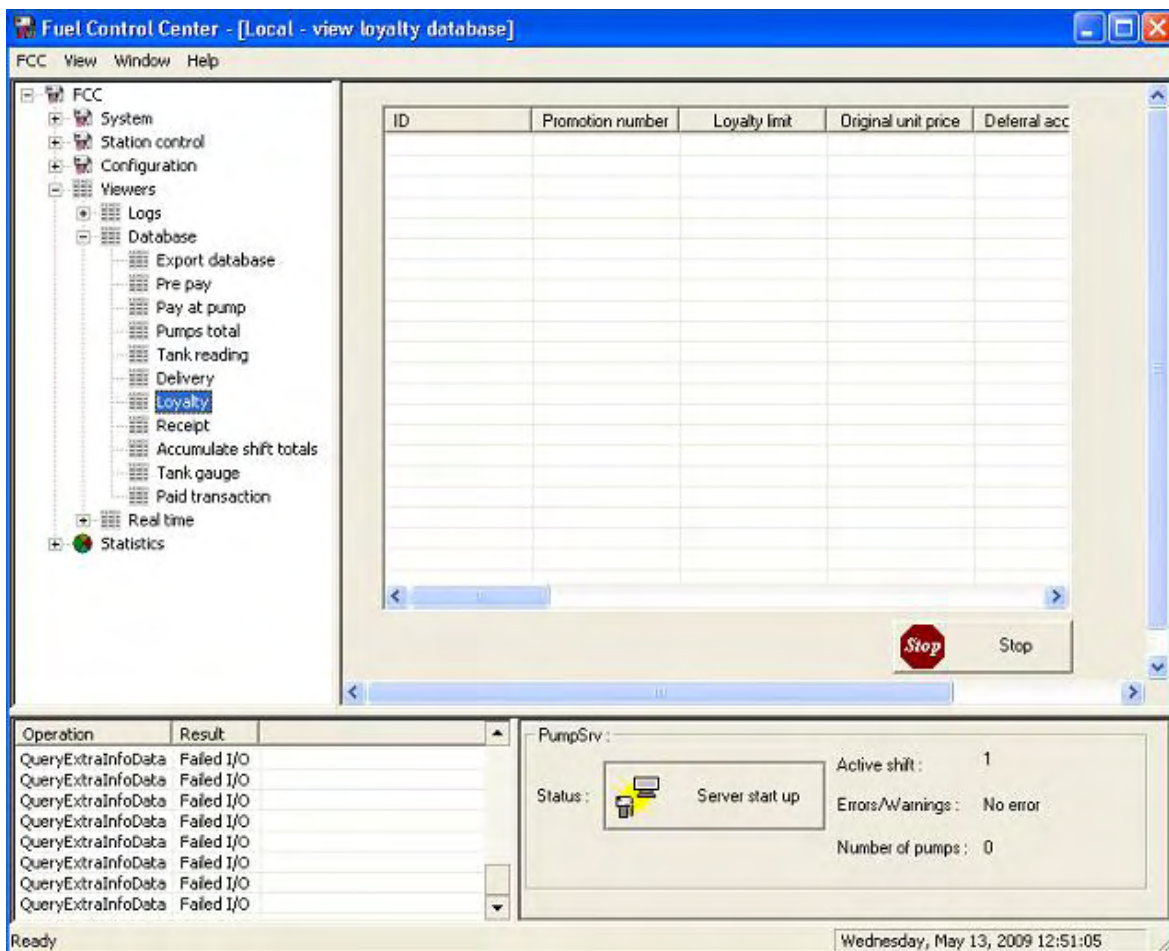
Columns	Description
Tank	Tank number for the specific delivery reading.
Product	The product code for the specific delivery reading.
Volume	Total volume of fuel in the tank
Date	Date of the specific delivery reading and database entry.
Flags	Flags used internally for <i>PumpSrv</i> .

Loyalty

The **Loyalty** menu enables you to view Loyalty Card Readings from a depository of accumulated index records on Loyalty Card Readings. A Loyalty Card is a card scheme allowing customers to receive benefits and special offers. The Loyalty Card Reading provides information on the number and ID of Loyalty Cards that were used, and which Grades were purchased by each of the Loyalty Cards.

➤ **To View the Loyalty Card Readings:**

- 1 From the FCC tree, click **Database**, and then **Loyalty**. The **View Loyalty Database** dialog is displayed:



Note:

The bottom panel of the screen displays Operations and their results. The FCC communicates with PumpSrv via the GPI interface and CTRL interface. Any call to these interfaces returns a **Result** of operation.

- 2 Click  to display a list of Loyalty Card readings as they appear in the database table. The button changes to .

- 3** Click ◀ or ▶ to view all the fields displaying each loyalty card reading field, or drag the slider to move the screen left or right.

- 4 Highlight the required **Loyalty Card Reading**. Information on each Loyalty Card reading is displayed in the following fields, as described in the table below:

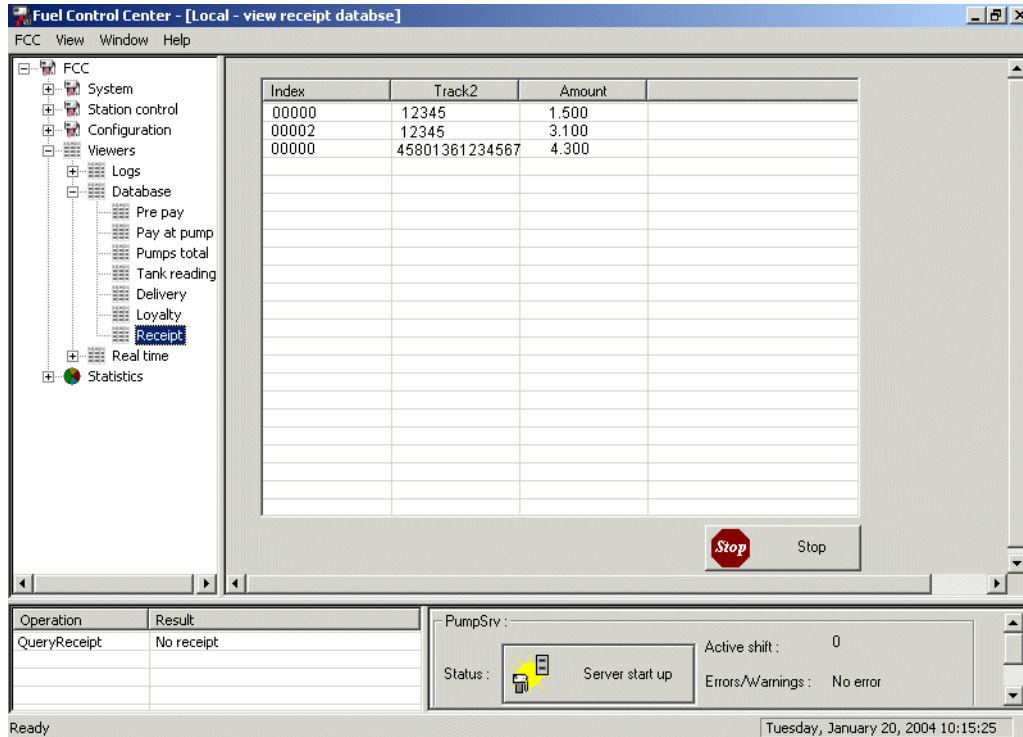
Columns	Description
ID	Customer's identification card number.
Promotion Number	Displays the number of the promotion triggered by the Loyalty card
Loyalty Limit	The transaction limit sent from the Loyalty server.
Original Unit Price	The unit price before a discount is applied.
Deferral Accepted	Indicates that the consumer request to defer a loyalty discount was accepted.
Grades 01-16	Name of grade purchased using a specific Loyalty Card.

Receipt

The **Receipt** menu enables you to view all the records recorded for each Receipt, including the Index number, Track2 (Credit Card String number), and the Amount in the database.

➤ To View Receipt Readings:

- 1 From the FCC tree, click **Database**, and then **Receipt**. The **View Receipt Database** dialog is displayed:



Note:

The bottom panel of the screen displays Operations and their results. The FCC communicates with PumpSrv via the GPI interface and CTRL interface. Any call to these interfaces returns a **Result** of operation.

- 2 Click  to display a list of Receipt readings as they appear in the database table. The button changes to .
- 3 Highlight the required **Receipt Reading**. Information on each Receipt is displayed in the following fields, as described in the table below:

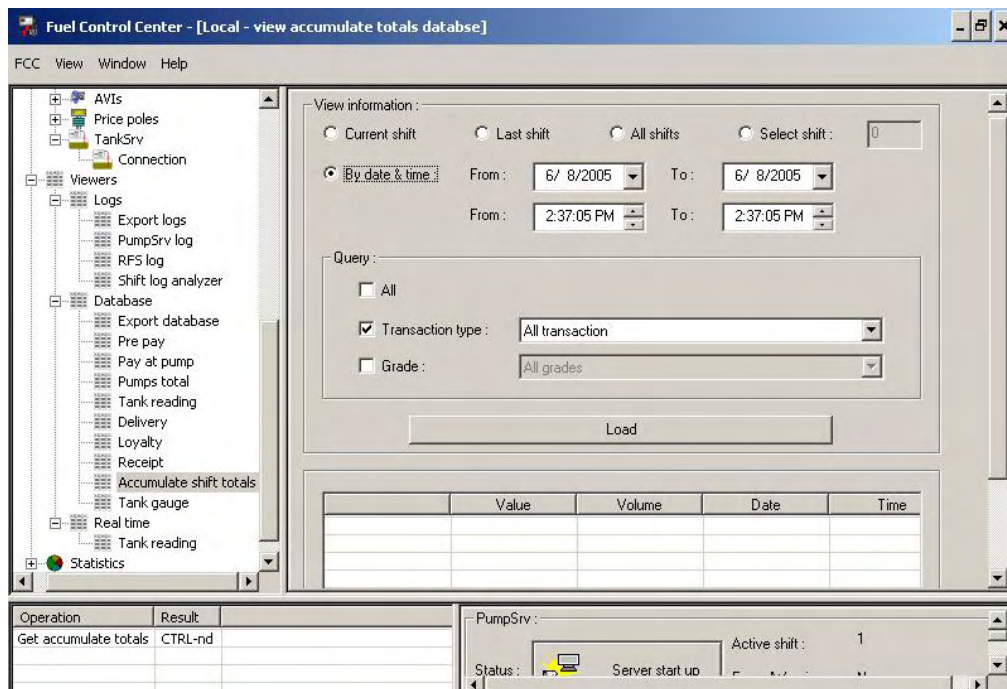
Columns	Description
Index	Index number of the receipt record in the database.
Track 2	Displays the details of the customer's credit card.
Amount	Receipt amount.

Accumulate Shift Totals

The **Accumulate Shift Totals** option enables you to view all shift totals recorded. You may view the current, last or all shift totals, or specify a date and time on which you wish to view shift totals. You may run a query on a specific date for a specific type of transaction in which a specific grade was sold.

➤ To View Accumulated Shift Totals:

- 1 From the FCC tree, click **Database**, and then **Accumulate Shift Totals**. The **View Accumulate Totals Database** dialog is displayed:



- 2 From the **View Information** area, select an option:

- Current Shift
- Last Shift
- All Shifts
- Select Shift (if selected, enter the shift number)

Or

Select the **By Date & Time** radio button to view shift totals on a specific date:

- 3 In the **From** field enter the date from which you are searching for shift total information. Use the calendar by clicking the  arrow. The calendar is displayed:



- 4 Click the left or right arrows to select the month, then click the day to select the date.
- 5 In the **To** field enter the date up to which you wish to view shift total information. Use the calendar as described above.
- 6 In the **From** field enter the time from which you are searching for shift total information. Use the Up and Down arrows to increment the hour by one each time you click.
- 7 In the **To** field enter the time up to which you are searching for shift total information. Use the Up and Down arrows to increment the hour by one each time you click.
- 8 From the **Query** section, select the **All** checkbox to view all the transactions during the period previously selected.

Or

Select the **Transaction Type** checkbox to indicate that you wish to view a specific type of transaction, then from the drop-down list, select the type of transaction. E.g., Pay At Kiosk transactions.

- 9 Select the **Grade** checkbox to indicate that you wish to filter transactions that included a specific grade. Then, from the drop-down list, select the type of grade.
- 10 Click *Load* to accumulate the shift totals for the specified period.
- 11 View the information as follows:

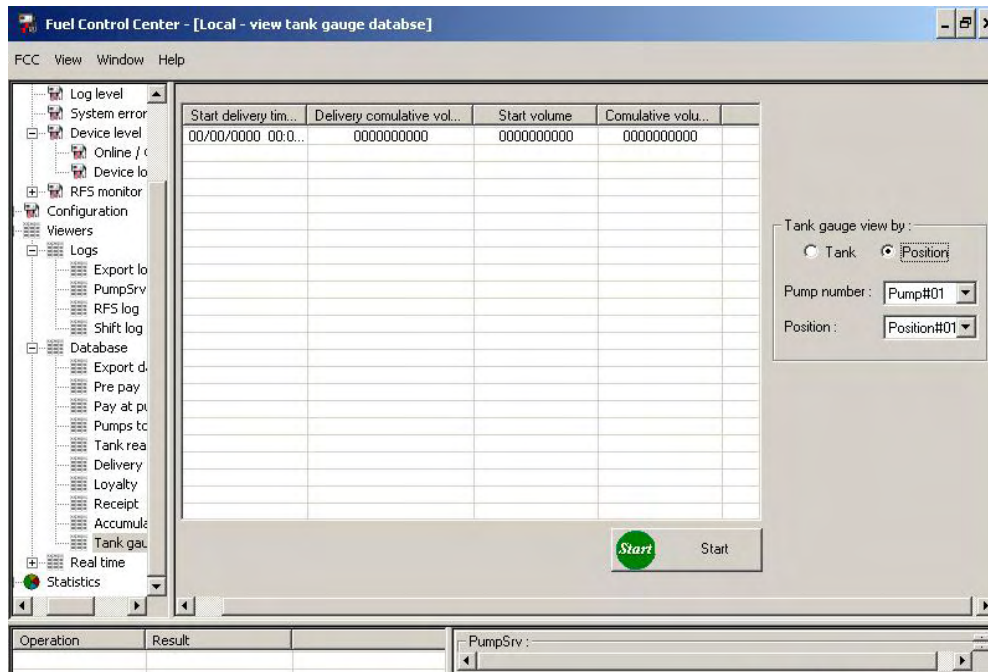
Columns	Description
Value	Displays the monetary value of the transaction.
Volume	Displays the volume of fuel dispensed during the transaction.
Date	Displays the date on which the transaction was performed.
Time	Displays the time on which the transaction was performed.

Tank Gauge

The **Tank Gauge** option enables you to view all fuel totals recorded in the tanks. You may view the delivery times, and the total accumulated volume delivered, as well as the total volume and cumulated volume.

➤ To View Tank Gauge Totals:

- 1 From the FCC Tree, click **Database**, and then **Tank Gauge**. The **View Tank Gauge Database** dialog is displayed:



- 2 From the **Tank Gauge View By** area, select the **Tank** radio button, then from the **Tank Number** drop-down list, select the tank number.

Or

Select the **Position** radio button, then from the **Pump Number** drop-down list, select the Pump to which the tank is connected, and from the **Position** drop-down list, select the pumps position.

- 3 Click  to start the tank gauge reading. The button changes to .
- 4 View the Tank Gauge fields as follows:

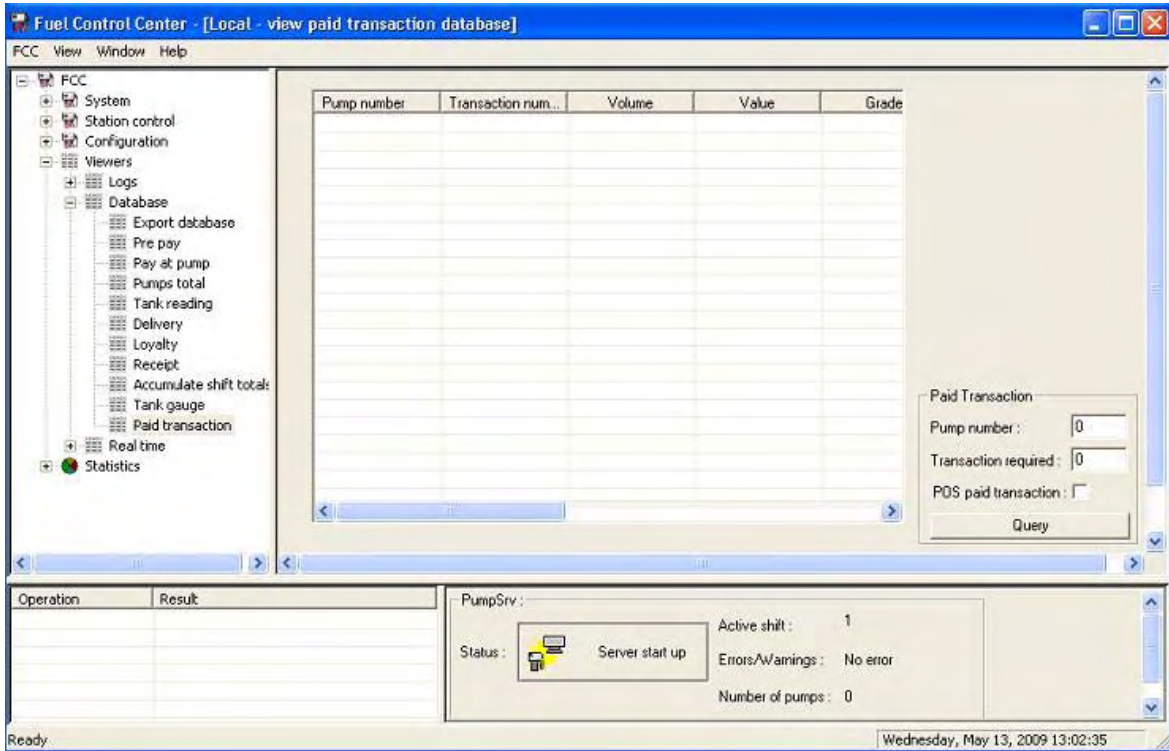
Columns	Description
Start Delivery Time	Displays the time and date of a fuel delivery.
Delivery Cumulative Volume	Displays the total volume of fuel delivered.
Start Volume	Displays the volume of fuel that was in the Tank before a delivery.
Cumulative Volume	Displays the total volume of fuel in the tanks.

Paid Transaction

The **Paid Transaction** option enables you to view all the paid transactions recorded. You can view the value of the transaction, the number of the pump the transaction was performed on as well as the fuel grade sold.

➤ To View the Paid Transactions:

- 1 From the FCC tree, click **Database**, and then **Paid Transactions**. The **View Paid Transaction Database** dialog is displayed:



- 2 From the **Paid Transaction** area, do the following:
 - a. In the **Pump Number** field, enter the number of the pump for which you want to view the Paid Transactions.
 - b. In the **Transaction Required** field, enter the transaction number, if known.
 - c. To view POS Paid transactions, select the **POS Paid transaction** checkbox.
- 3 Click **Query**. The transactions are displayed in the grid.
- 4 View the Paid Transaction fields as follows:

Columns	Description
Pump Number	The number of the Pump that performed the transaction.
Transaction number	The number of the transaction.
Volume	The amount of fuel sold in the transaction.
Value	The value of the transaction.

Columns	Description
Grade	The fuel grade sold in the transaction.
Status	The status of the pump.
Time	The time the transaction was performed.
Shift	The shift number, during which the transaction was performed.
Mode	The mode that was used when the transaction was performed. For further details, see <i>Defining a Mode</i> .
Reservation	Displays the transaction type that was active at the Pump, when the transaction was initiated.
Reservation Ext	Displays the Reservation Extension type that was used when the transaction was initiated.

Real Time

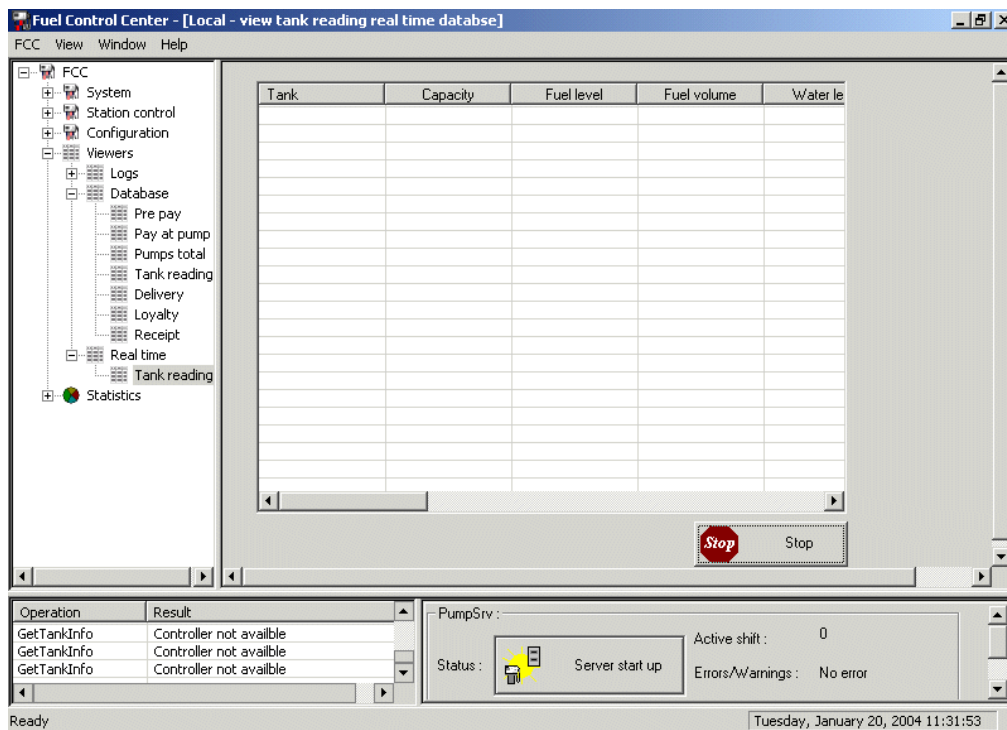
The **Real Time** view is a current real-time Tank Reading. In the Database you may view Tank Readings that occurred.

Tank Reading

The **Tank Reading** menu option enables you to view all the details of a Tank Reading.

➤ To View Real Time Tank Reading:

- 1 From the FCC Tree, click **Viewers/Real Time**, and then **Tank Reading**. The **View Tank Reading Real Time Database** dialog is displayed:



Note:

The bottom panel of the screen displays Operations and their results. The FCC communicates with PumpSrv via the GPI interface and CTRL interface. Any call to these interfaces returns a **Result** of operation.

- 2 Click  to display a list of the current Tank Readings as they appear in the Real-time table.. The button changes to .
- 3 Click ◀ or ▶ to view all the fields displaying each real-time tank reading field, or drag the slider to move the screen left or right.

- 4 Highlight the required **Tank Reading** record. Information on each Tank Reading record is displayed in the following fields, as described in the table below:

Columns	Description
Tank#	Number of the tank.
Capacity	Capacity the tank can hold.
Fuel Level	Level of fuel in the tank in gallons.
Fuel Volume	Volume of fuel in the tank.
Water Level	Water level in the tank in gallons.
Water Volume	Volume of water in the fuel.
Product	Name of the product.
Product#	Product code number.
Temperature	Temperature of fuel in the tank.
Ullage	The amount that the tanks lacks of being full.
TC Volume	Temperature Compensated volume. A function that calculates the volume according to the temperature. The volume fluctuates at different temperatures.
Shift#	Number of current shift during the tank reading.
Date	Current date of tank reading.
Manifold#	Logic tank numbers, if the manifold box is checked indicating the tank is a manifold.
General Status	Indicates status of the tank during various processes.
Special Status	Indicates any special status of the tank during various processes.
Flags	Flags used internally for <i>PumpSrv</i> .

The current Tank Readings may be refreshed as often as required. See Chapter 2,FCC Menu Bar/FCC Properties, to Set Refresh Processing and Timers.

This chapter displays a graphic summary of the various activities that were performed in the Fuel Station within the current month. It enables you to monitor the number of transactions that were performed by each Pump, in each Shift, as well as the number of transactions for each payment type.

In this chapter:

- *Transaction Totals*
- *Transactions by Pump*
- *Transaction by Shift*
- *Pumps Total*

Statistics

The **Statistics** menu enables you to view the percentages and numbers of all transactions that were performed within the month at the fuel station, such as the total number of transactions in the month of January 2004, as well as the number or percent of PrePay, or Pay at Pump transactions that were performed.

➤ **To Access the Statistics Menu:**

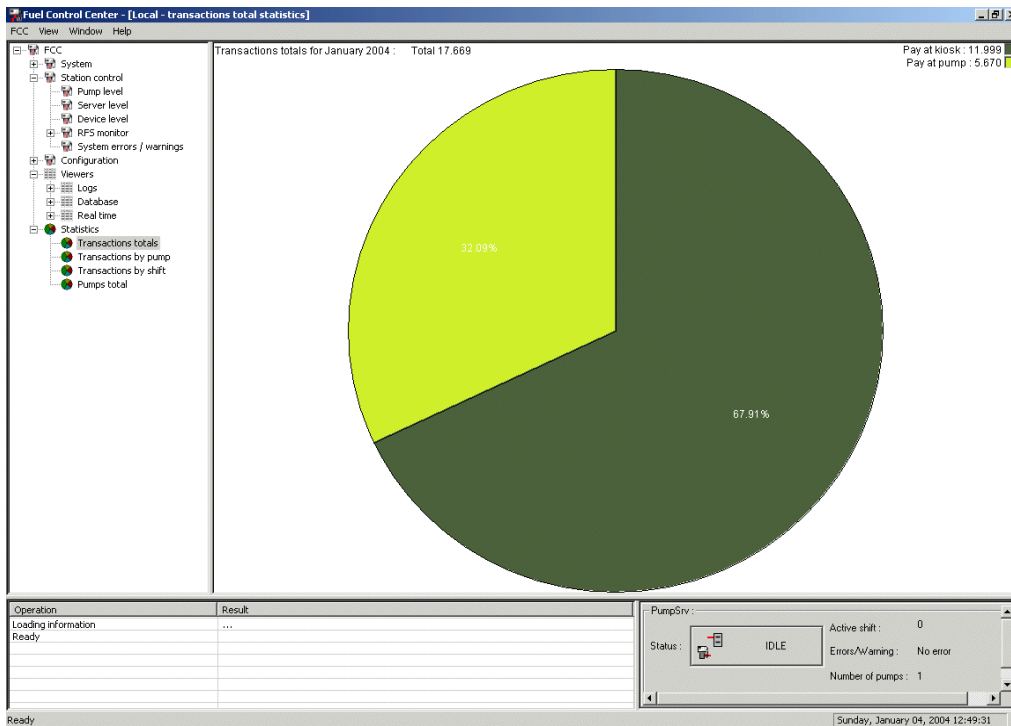
- 1 From the FCC Tree, click **Statistics** and expand the FCC Tree displaying the sub menus in the right panel. The following sub-menus are displayed:
 - Transactions Totals
 - Transactions by Pump
 - Transactions by Shift
 - Pumps Total
- 2 Select the required menu, in which you wish to view statistics, and refer to each option, as described below.

Transactions Totals

The **Transactions Totals** menu enables you to view a graphical summary of the total number of transactions that were recorded during the month.

➤ To View Transaction Totals:

- 1 From the FCC Tree, click **Statistics**, and then **Transactions Total**. The **Transactions Total Statistics** dialog is displayed:



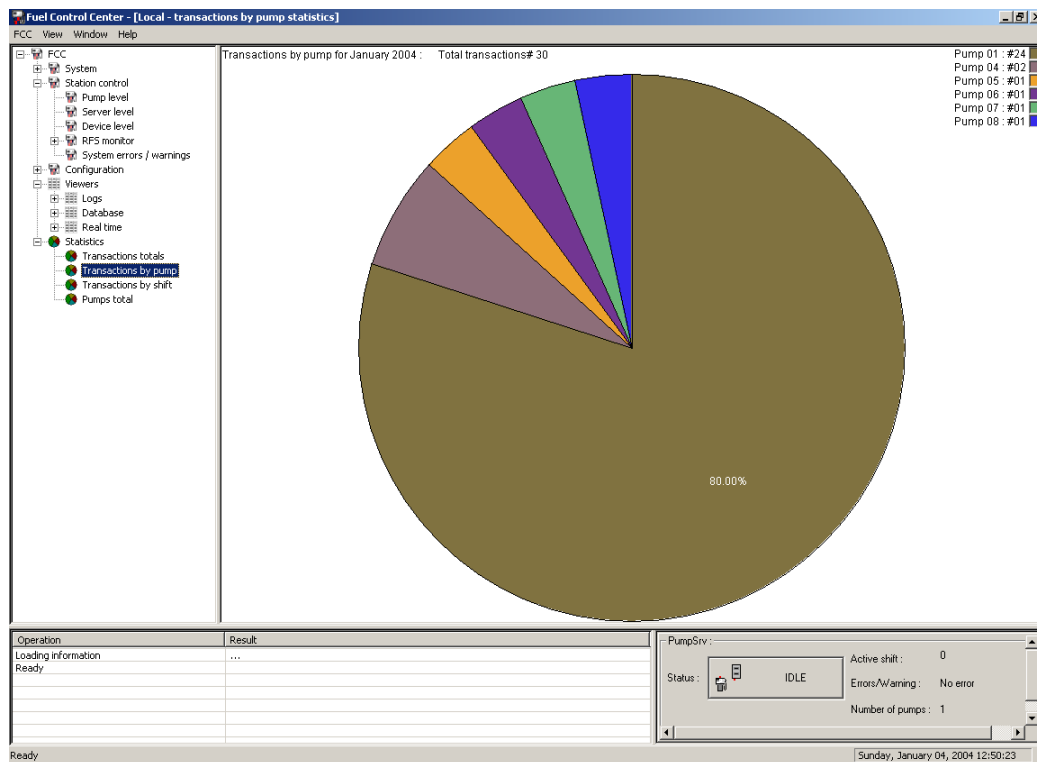
- 2 The following information is displayed:
 - The name of the month and the total number of transactions performed during that month. E.g., Transactions for January 2004: Total 17899.
 - Percentage of total transactions performed per each payment type
 - The Legend displays the payment type next to a color that corresponds with the color in the pie chart, and the number of transactions performed by that specific payment type, for example:
 - Total number of Pay at Kiosk transactions are displayed in the pie chart as a percentage, and the total number of transactions is displayed next to the legend in the top right corner of the screen.
 - Total number of Pay at Pump transactions are displayed in the pie chart as a percentage, and the total number of transactions is displayed next to the legend in the top right corner of the screen.

Transactions by Pump

The **Transactions by Pump** menu enables you to view a graphical summary of the total number of transactions performed by each pump in the fuel station that were recorded during the month.

➤ To View Transactions by Pump:

- 1 From the FCC Tree, click **Statistics**, and then **Transactions by Pump**. The **Transactions by Pump** dialog is displayed:



- 2 The following information is displayed:
 - The name of the month and the total number of transactions performed by all the pumps during that month.
 - Percentage of transactions performed by each pump, for example:

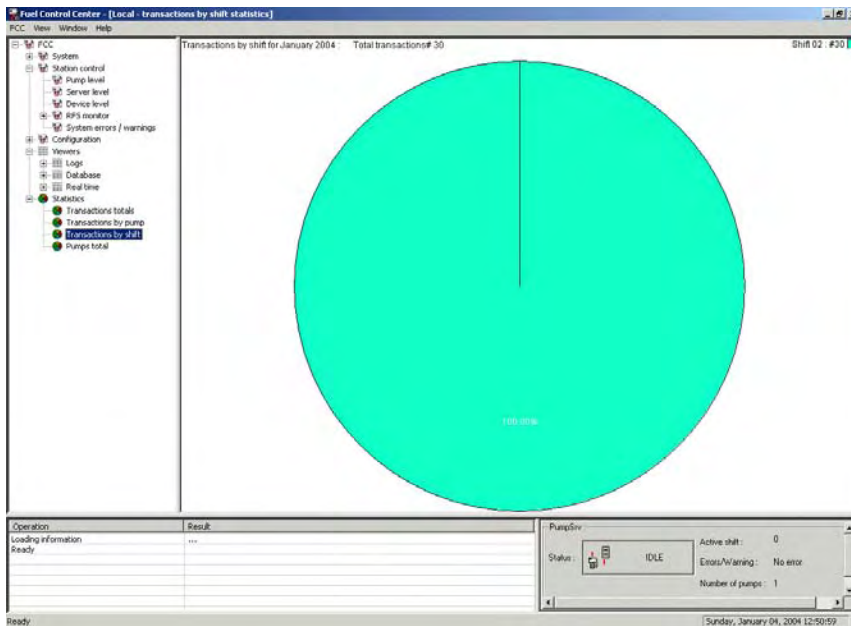
Pump #1 performed 25 transactions, 25% of the total transactions that month.
 - The Legend displays the Shift number next to a color that corresponds with the color in the pie chart, and the number of transactions performed by that specific shift, e.g.,
 - Pump number and the number of transactions performed by that pump.

Transactions by Shift

The **Transactions by Shift** menu enables you to view a graphical summary of the total number of transactions that were recorded per shift during the specified month.

➤ **To View Transaction Totals:**

- 1 From the FCC Tree, click **Statistics**, and then **Transactions by Shift**. The **Transactions by Shift Statistics** dialog is displayed:



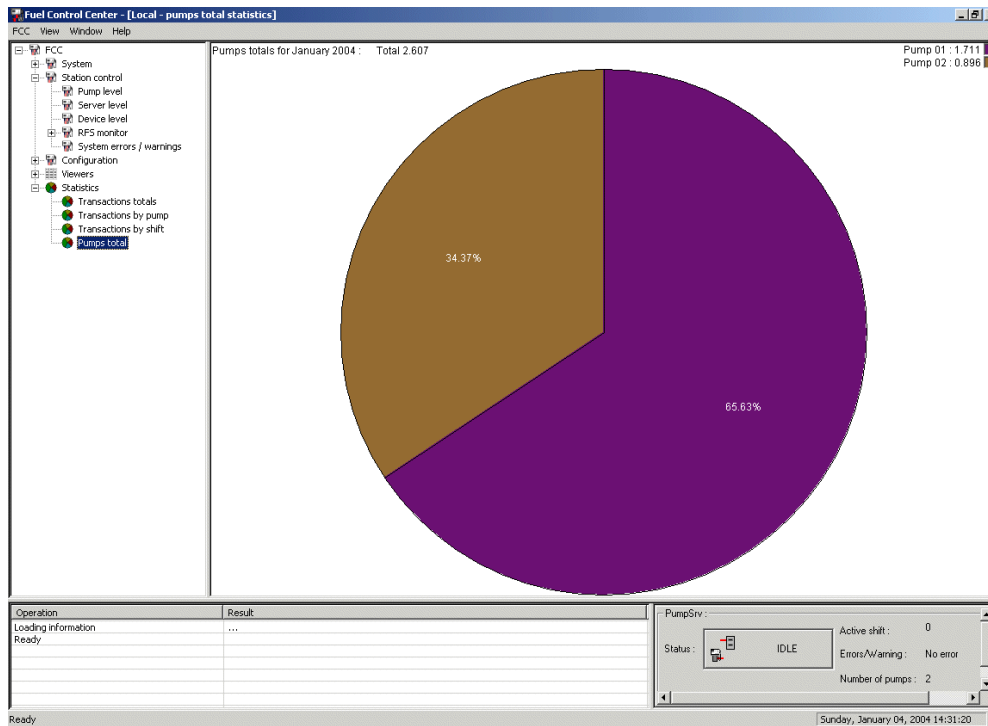
- 2 The following information is displayed:
 - The name of the month and the total number of transactions performed during all the shifts during that month.
 - Percentage of transactions performed in each shift.
 - The Legend displays the Shift number next to a color that corresponds with the color in the pie chart, and the number of transactions performed by that specific shift.

Pumps Total

The **Pumps Total** menu enables you to view a graphical summary of the total number of transactions performed by all the pumps in the fuel station that were recorded during the month.

➤ To View Pumps Total:

- 1 From the FCC Tree, click **Statistics**, and then **Pumps Total**. The **Pumps Total Statistics** dialog is displayed:

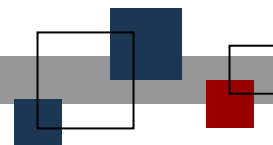


- 2 The following information is displayed:

- The name of the month and the Pumps totals during that month.
- Percentage of totals performed by each pump, for example:
 - Pump #1 performed 25% of the total pumps transactions during that month.
- The Legend displays the Pump number next to a color that corresponds with the color in the pie chart, and the number of transactions performed by that specific pump, e.g.,
 - Pump number and the number of transactions performed by that pump.

Glossary and Abbreviations

AJB	Software that communicates with the EPS and interfaces with the Retalix Fuel System.
ATG	Automatic Tank Gauge (Same as TLG)
ATT	Attendant
AVI	Automatic Vehicle Identification
BO	Back office
CA	Cash Acceptor
CR	Change Request
CW	Car Wash
DB	Data base
DO	Data object
EPS	Electronic Payment Server
EMV	Europay Mastercard Visa
EOS	End of Shift
GR	Gas Reward
GUI	Graphic User Interface
HQC	Headquarter Center
IPT	Integrated Payment Terminal
LPE	Loyalty Promotion Engine
NMP	Need More Param
ONMP	Open Need More Param
OPT	Outdoor Payment Terminal
PAK	Pay At Kiosk
PAP	Pay At Pump
PCI	Payment Card Industry
PIC	Payment Island Cashier
POS	Point of sale
RTAPS	Retalix Accurate Price Server (Retalix Promotion Server)
SPED	Secure PIN Entry Device
TD	Test Director
TLG	Tank level Gauge (Same as ATG)
Trs	Transaction



© StoreNext Retail Technologies LLC 2011

StoreNext Retail Technologies LLC endeavors to ensure that the information in this document is correct and fairly stated but does not accept liability for any error or omission.

The development of StoreNext products and services is continuous and published information may not be up to date. It is important to check the current position with StoreNext. This document is not part of a contract or license save insofar as may be expressly agreed.