



A vertical column of five color swatches: dark blue, medium blue, light blue, and two very light blue squares at the bottom.

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Technical Reference
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ISS45 Fuel Control Center Technical Reference

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Address comments and corrections to:

StoreNext Retail Technologies LLC
Software Program Director
6100 Tennyson Parkway
Suite 130
Plano, Texas 75024

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1

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

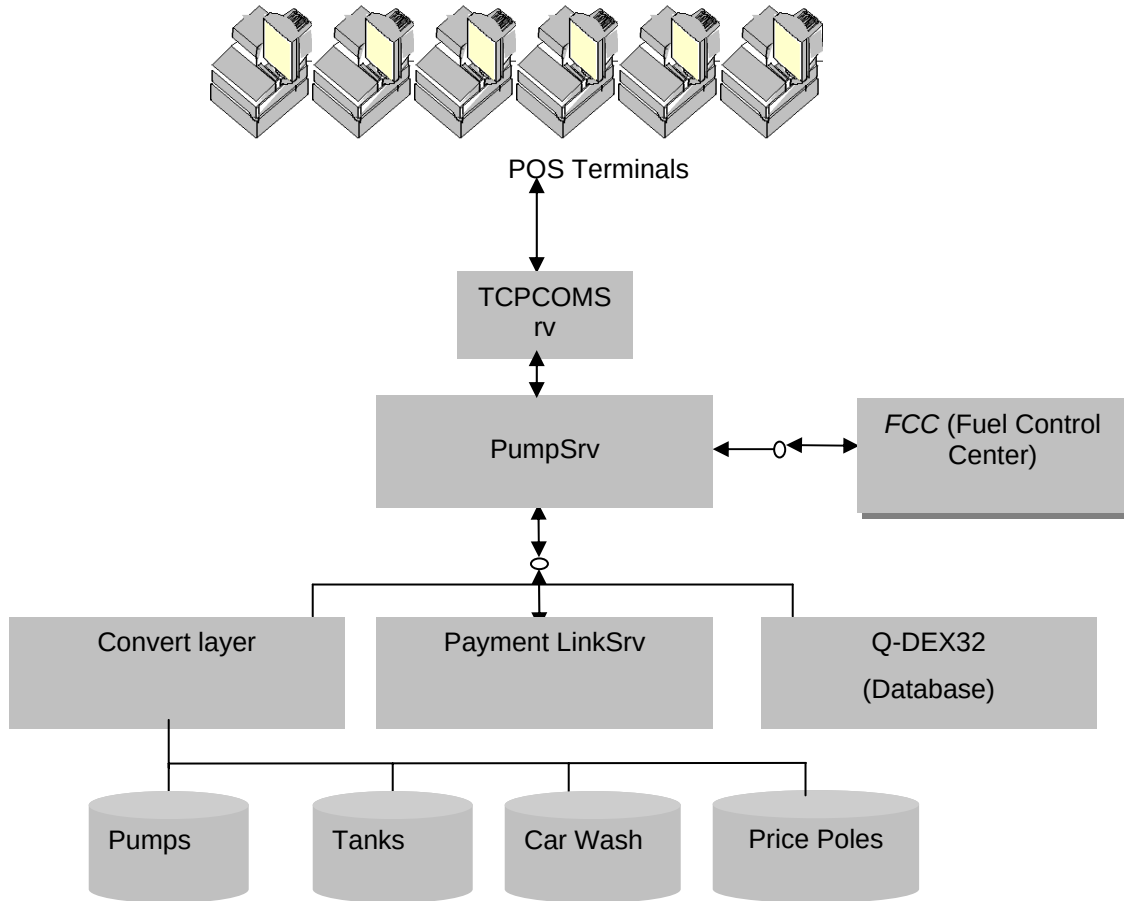


Figure 1

- 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:**

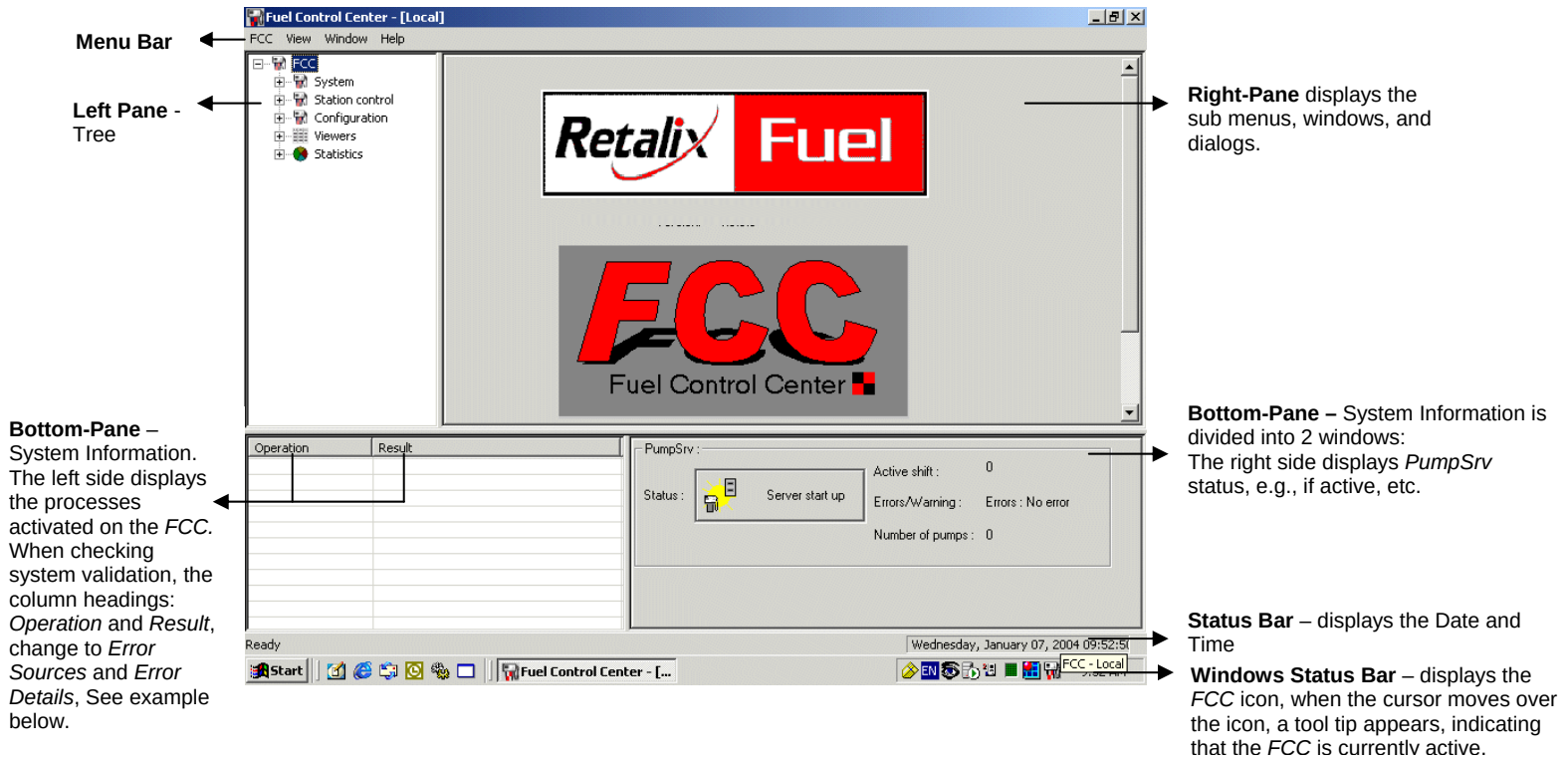
- 1 Select *FCC.exe* from the path where the Fuel system is installed, e.g., Start\Programs\Positive Office\PumpSrv\FCC. The *FCC Main Interface* is opens, and a second later the *Connection* dialog is displayed. The **FCC** icon appears at the bottom right corner of the screen

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*.

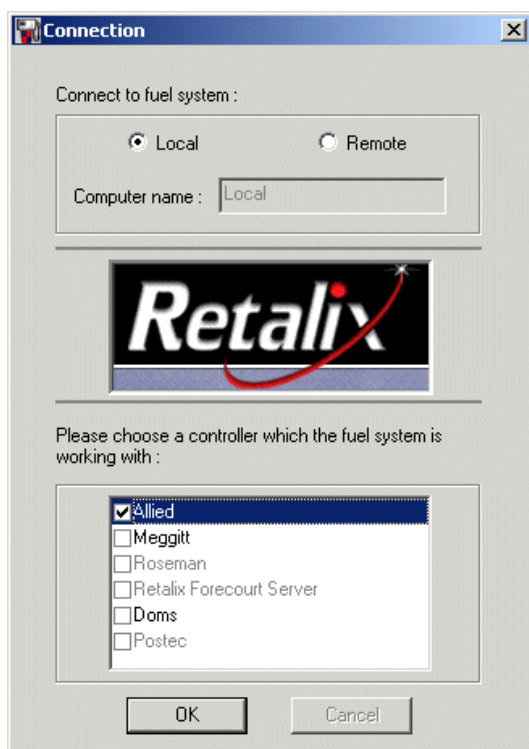
Each menu is explained in detail in *Chapter 2 - The FCC Properties*.

- 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*.

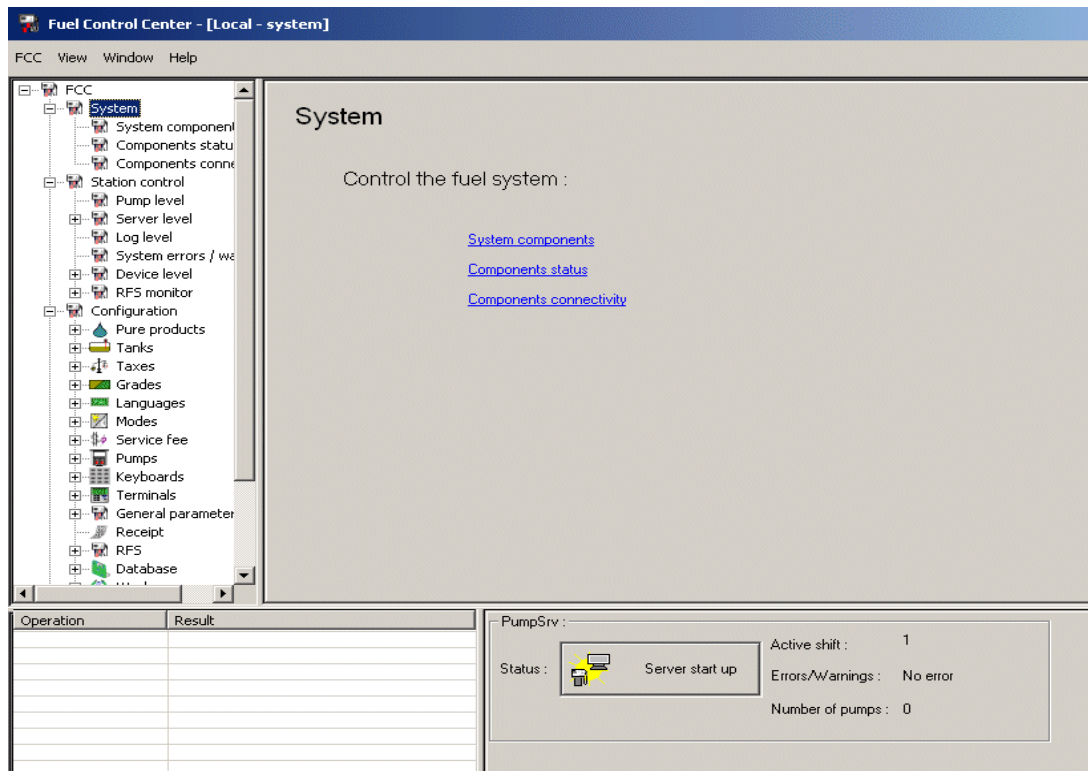
Before you Start

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 *FCC Tree* 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:

Program properties

General | System information list | Logger

Timers | Security | Connection | Validation check

System (local only):

System components status : 4000 mSec.

Station control (local only):

Pump level refresh rate : 2000 mSec.

Pump level remote refresh rate : 5000 mSec.

Server level refresh rate : 2000 mSec.

Server level remote refresh rate : 5000 mSec.

Statistic Automatic Refresh Rate : 5000 mSec.

Start / Stop fuel system settings :

Sleep time : 30000 mSec.

FuelDA :

Response time out : 60 Sec.

Sleep time : 20000 mSec.

Use :

☐ Extrans

☐ VP

☐ TcpCom

OK Cancel Apply

- 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 <i>System Components</i> menu of the <i>System Components</i> window.
Station Control area:	
Pump level Refresh Rate	Displays the refresh rate of the <i>Pump level</i> menu in the <i>Station control</i> window.

Fields	Description
Pump Level Remote Refresh Rate	Displays the refresh rate of the <i>Pump level</i> menu in the <i>station control</i> window of a remote connection.
Server Level Refresh Rate	Displays the refresh rate of the <i>Server level</i> menu in the <i>Station control</i> window.
Server Level Remote Refresh Rate	Displays the refresh rate of the <i>Server level</i> menu in the <i>Station control</i> window of a remote connection.
Statistic Automatic Refresh Rate	Displays the refresh rate of the information in the <i>Device Level / Communication Statistics</i> menu.
Start/Stop Fuel System Settings area:	
Sleep time	Specifies after how long, in seconds, the <i>FCC</i> 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 <i>Systems Components</i> 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:	
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 <i>PumpSrv</i> 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  Administrator 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  Administrator 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

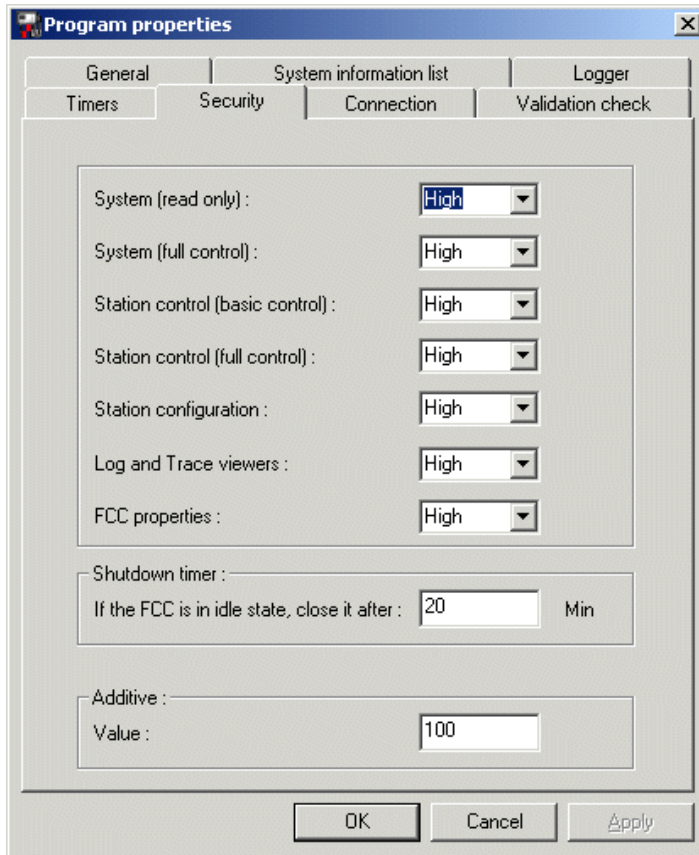
Or

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 <i>System Components</i> menu.
System Components (full control)	Displays the minimal security level necessary for changing statuses of the <i>System Components</i> .
Station Control (basic control)	Displays the minimal security level necessary for accessing <i>Station Control</i> , 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.
Log and Trace Viewers	Displays the minimal security level necessary for viewing the <i>Log and Trace viewers</i> .

Fields	Description
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: Displays the additive value. The default is 100.

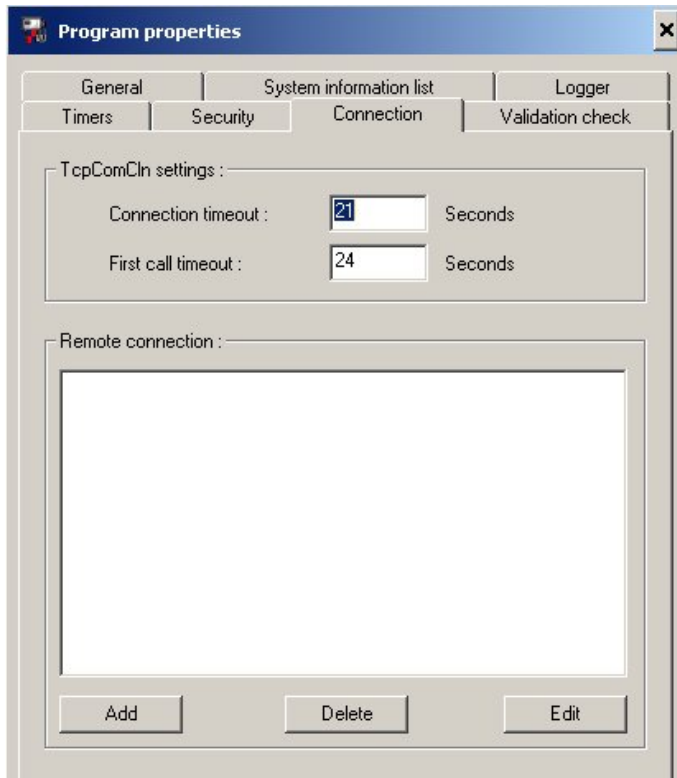
- 3 Click *Apply* to save the data.

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:

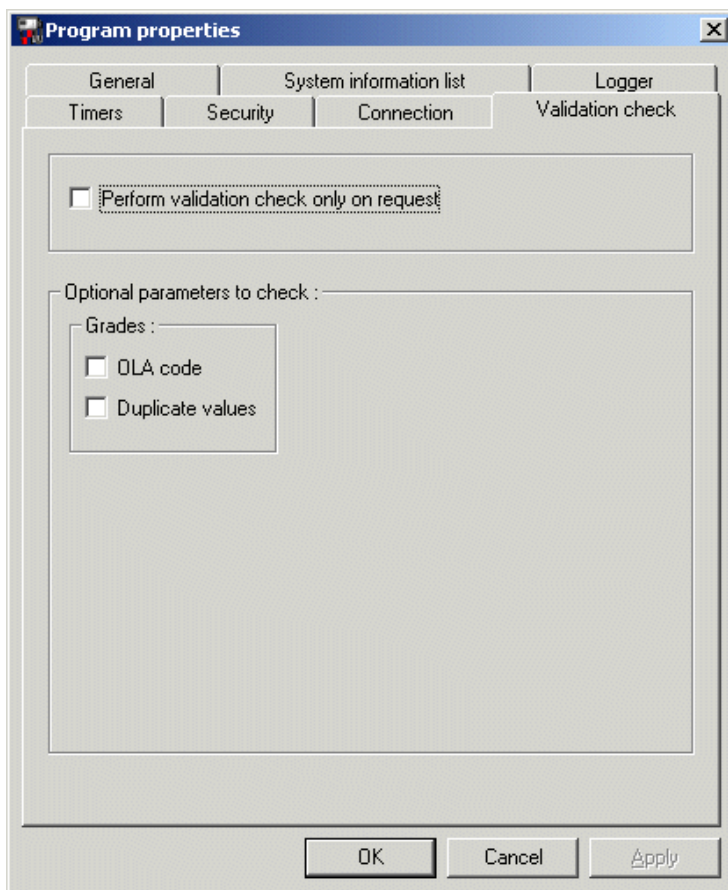
Fields	Description
TcpComCln settings area:	
Connection timeout	Defines number of seconds computer waits to receive a connection, before it goes into timeout.
First call timeout	Defines number of seconds that the computer waits the first time you call to connect to the remote computer, before it goes 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 <i>OLA Code</i> defined when configuring Grades is correct and valid when performing a <i>Validation Check</i> . If not checked, the <i>FCC</i> does not check the <i>OLA Code</i> defined in the Grades menu when performing a <i>Validation Check</i> .
Duplicate Values	If checked, enables the same <i>Grades</i> to have the same properties. For example, 2 <i>Tanks</i> can have the same <i>Pure Product</i> , which is the same <i>Grade</i> .

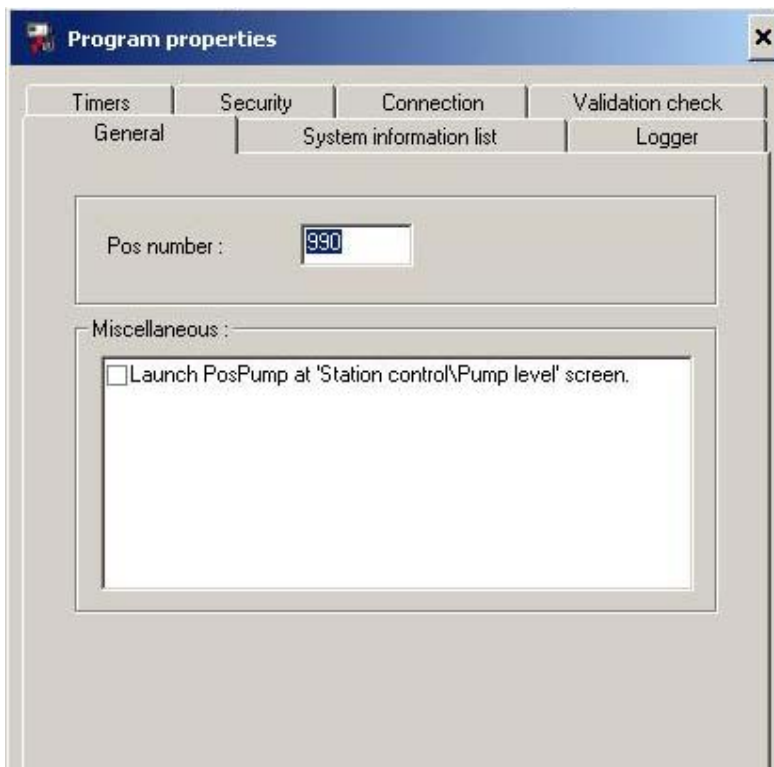
- 3 Click *Apply* to save.

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:

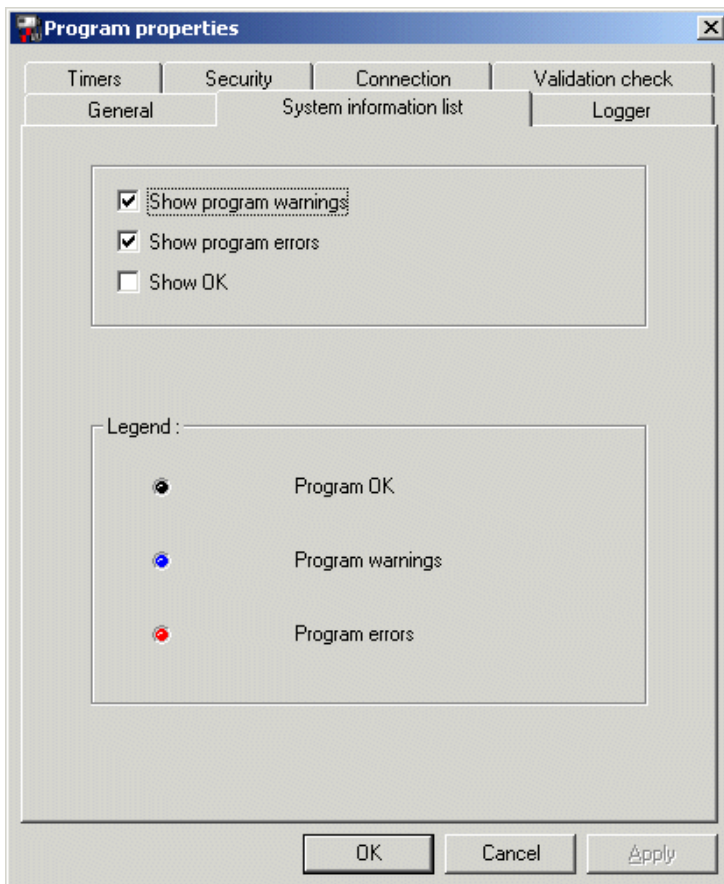
Fields	Description
POS Number	Displays the ID that the FCC uses to connect to <i>PumpSrv</i> as a PoS.
Miscellaneous	Select the checkbox to launch POSPump through the FCC. When launching POSPump, users are able to view a graphical view of the fuel forecourt, exactly as presented by the POS from the Station 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:

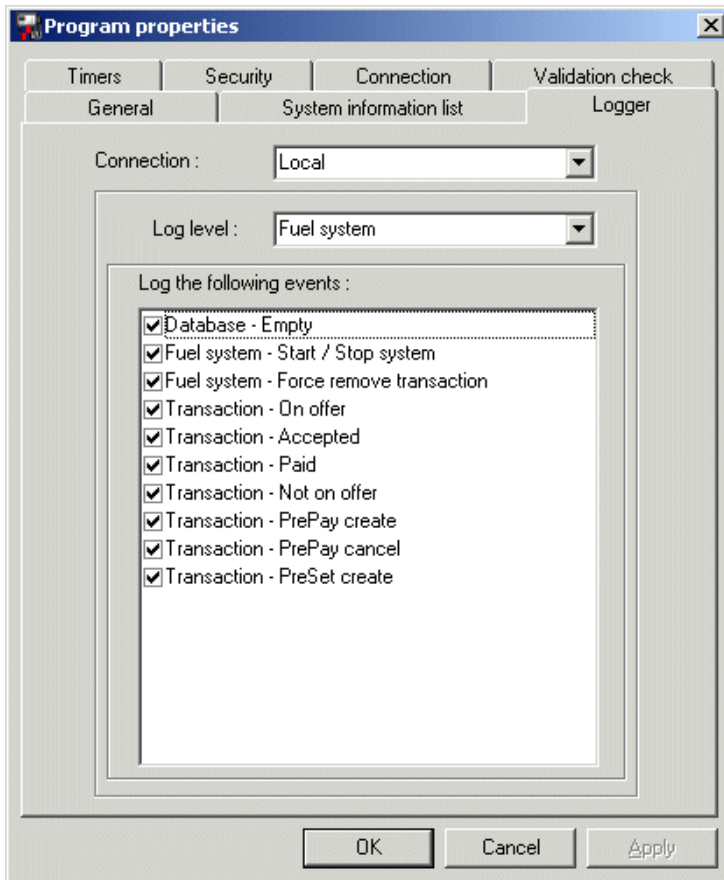
Fields	Description
Show Program Warnings	If checked, displays Program Warnings in the bottom-pane of each dialog in blue font. For example, FCC system – Connection is suspended.
Show Program Errors	If checked, displays the Program Errors in the System in the bottom-pane of each dialog in red font. For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

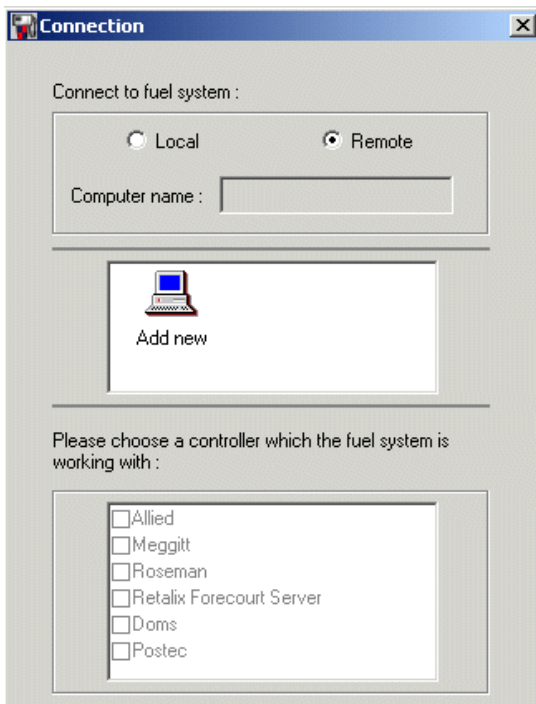
From the New Connection option, you can connect to a remote computer.

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.

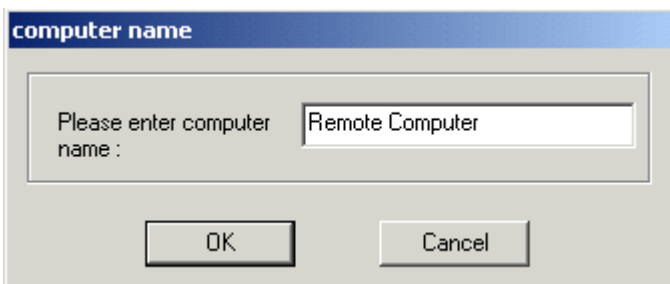
The Remote server must have TCPComSrv (Server), and the workstation you are using must have TCPComCln (Client) to have a server/client relationship. Call your System Administrator to set up a server/client relationship, if required.

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

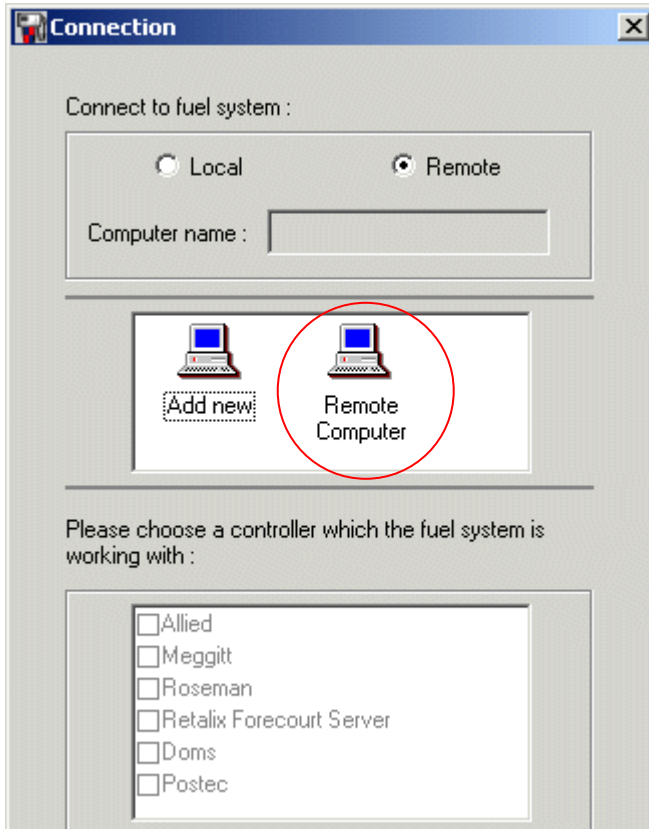
- 1 From the FCC Menu Bar, select FCC/New Connection. The *Connection* dialog is displayed:



- 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:



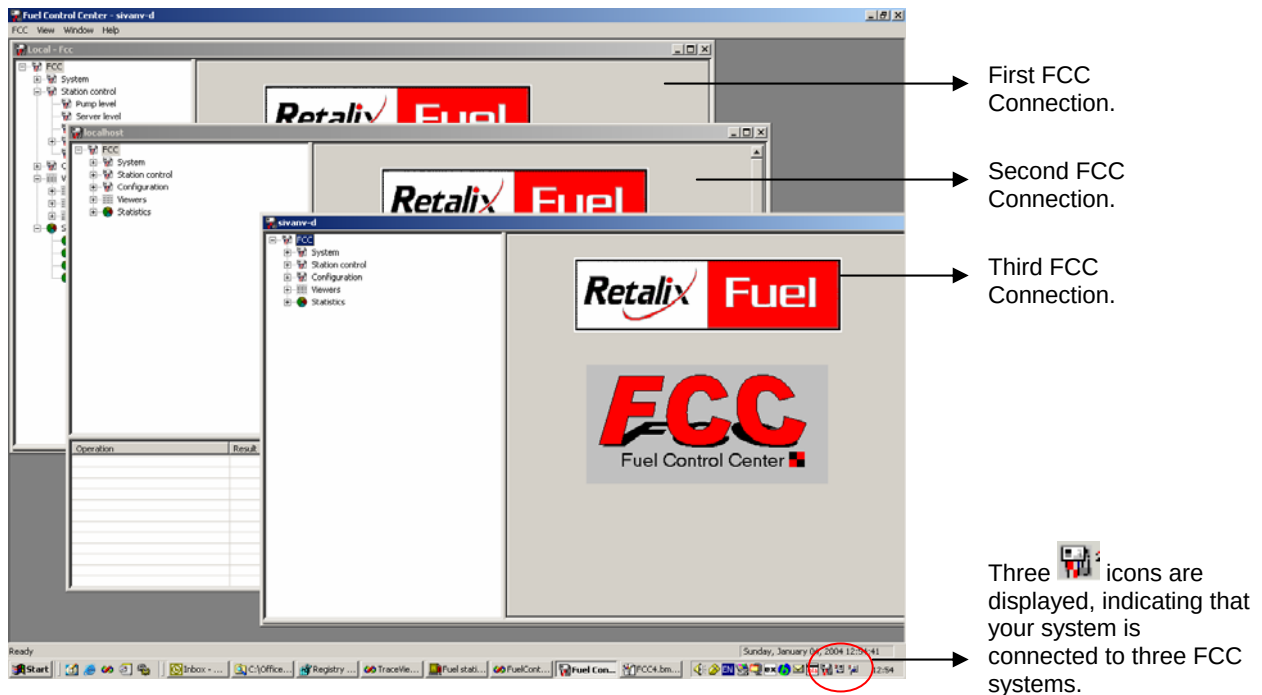
- 4 Enter the name of the remote computer, then click *OK*. If you have connected successfully, the name of the Remote computer is displayed in the *Connection* dialog, as follows:



You can add as many computers as required.

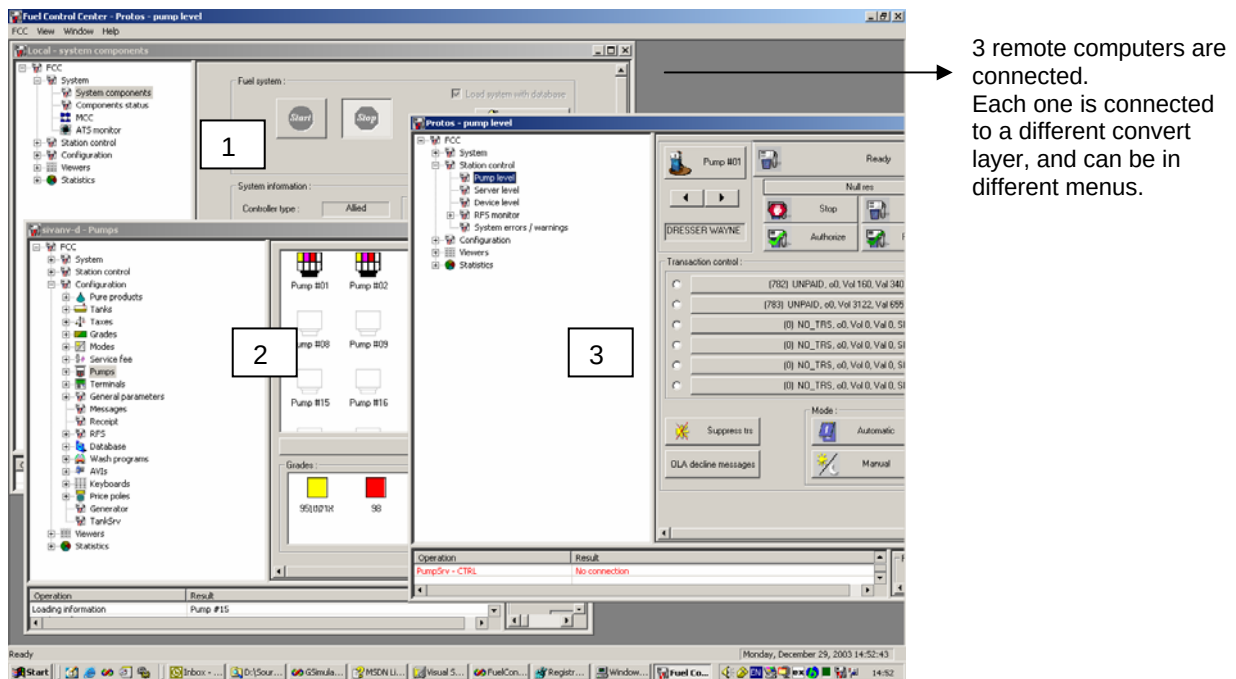
- 5 Select the controller that the remote computer is working with, e.g., *Allied*, *Meggitt*, *RFS*, or *Doms*.
- 6 Click *OK*. The system will connect to the remote computer, and the *FCC Main Interface* is displayed with the  icon appearing at the bottom right corner of the screen.

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



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:



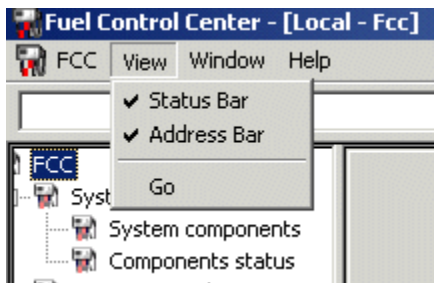
View

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

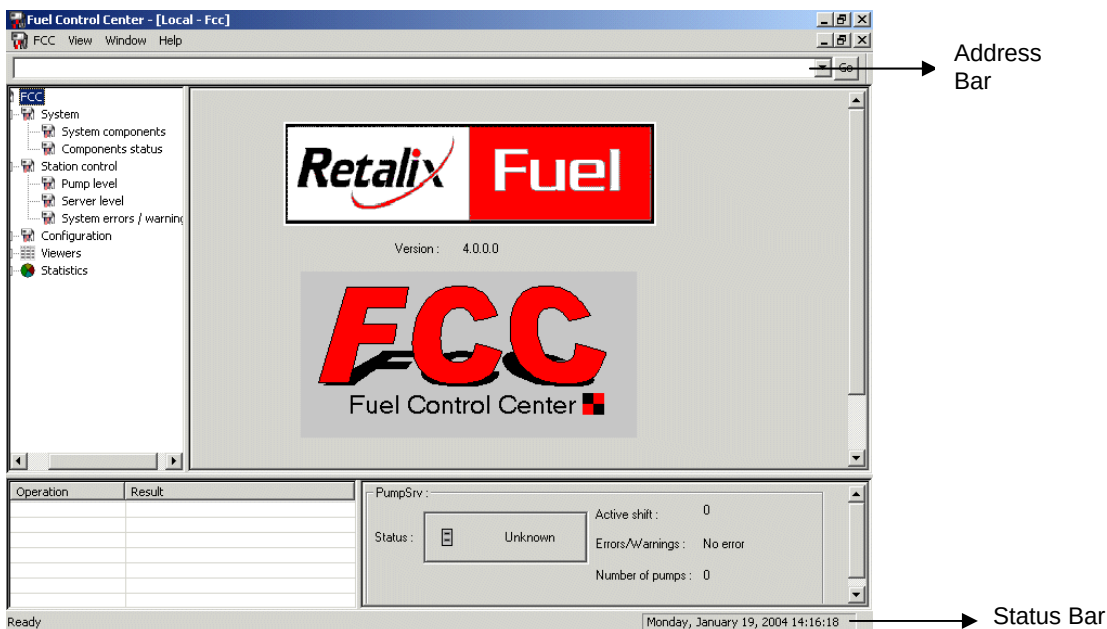
The Status bar appears at the bottom of the screen and enables you to view the current Time and Date. If the system is running, the text “Ready” appears on the left hand side of the Status bar.

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:

The screenshot displays the 'Fuel Control Center - [Local - Grade #01]' window. The interface includes a menu bar (ECC, View, Window, Help) and a toolbar with a 'Go' button. A tree view on the left shows the system hierarchy: FCC > System > Components > MCC > Station control > Configuration > Pure products > Tanks > Taxes > Grades. The 'Grades' folder is expanded, showing a list of grades from Grade01 to Grade10. The main area is titled 'Grade : 01' and contains several input fields and checkboxes.

Grade : 01

☒ Valid

Full name : Unleaded

Short name 3 : UNd

Short name 5 : UNd

DLA 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

Credit : Full service : \$ 1.000

Self service : \$ 1.000

Taxes :

☐ ABC

☐ DEF

Reward :

Discount per unit : 0 cents

Valid for : 0 days

Discount type : -- Non

Discount per unit : 1 \$

Max unit for discount : 5

Operation

Operation	Result

PumpSrv :

Status : Server no controller

Active shift : 0

Errors/Warnings : No error

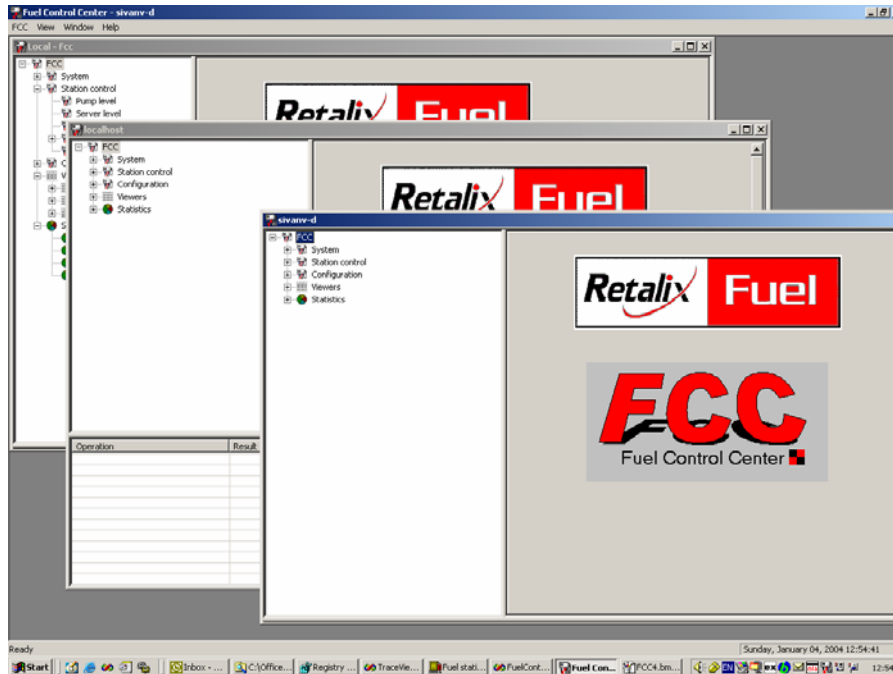
Number of pumps : 0

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.

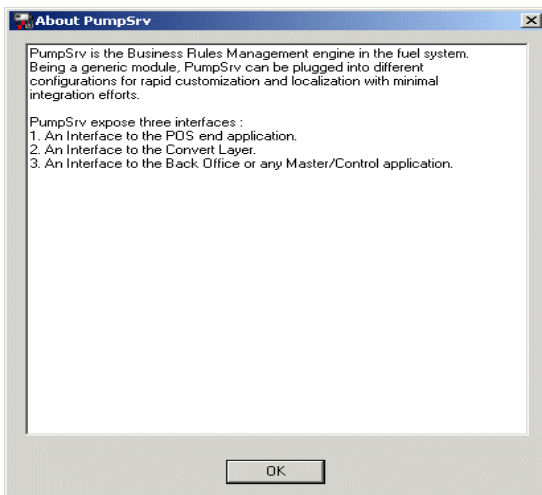
About Retalix Fuel

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:**

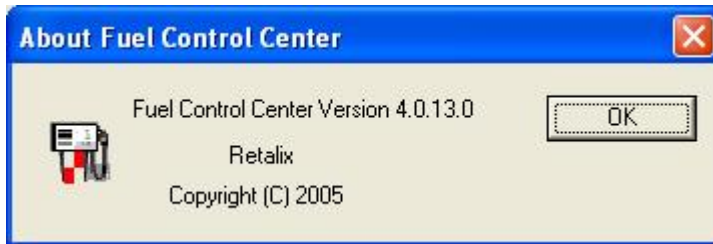
- 1 From the *FCC Menu Bar*, select *Help/About Retalix Fuel*, and then select each component. For example, select *PumpSrv*. The *About PumpSrv* dialog is displayed:



- 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.



3

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 - REMOVED
■ 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

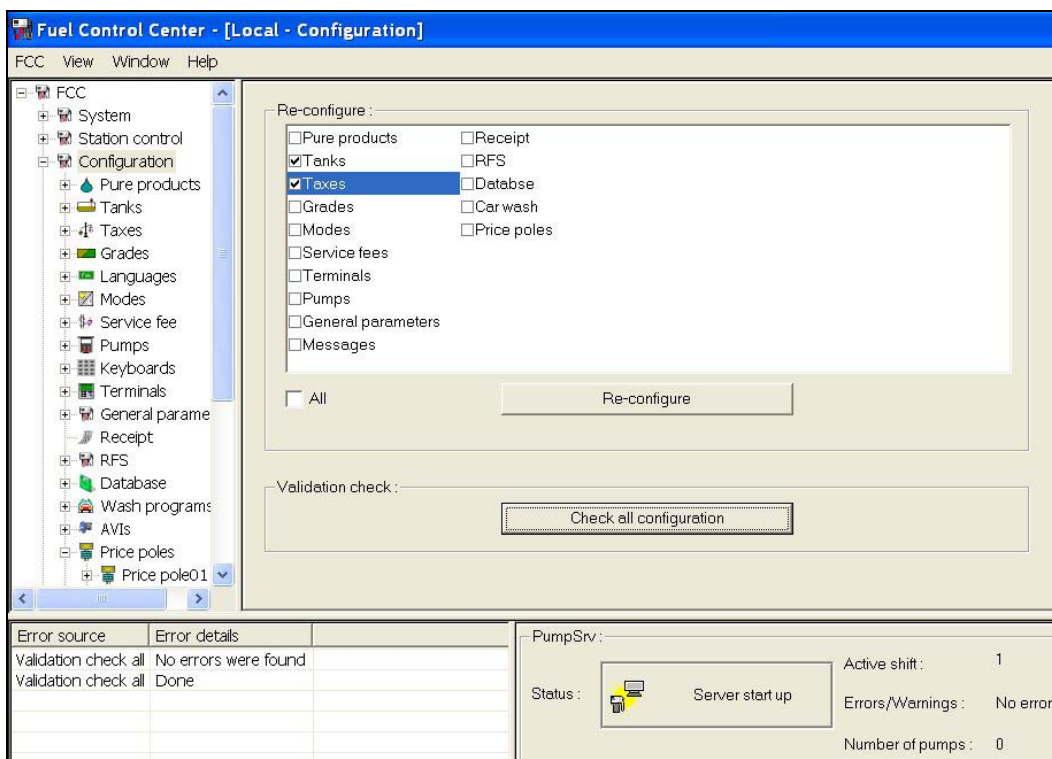
button will the new Service fees take affect.

In addition, if you only require the new Service fees to take affect 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

➤ To Re-Configure Fuel System Parameters:

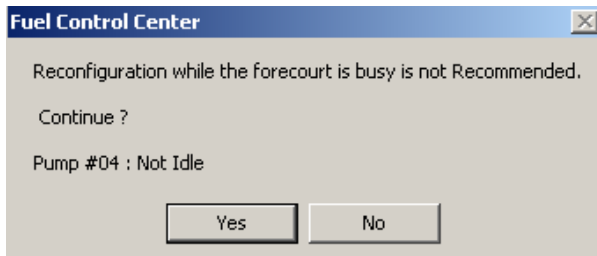
- 1 From the *FCC Tree*, select *Configuration*. The *Configuration* dialog is displayed:



- 2 Click the

Re-configure

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 affect.

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.

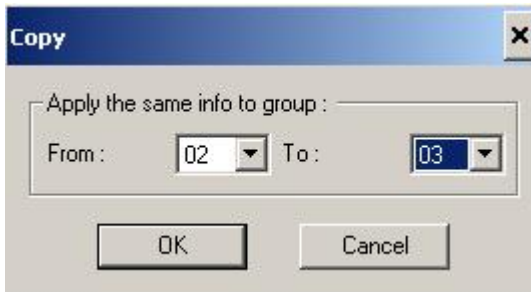
You may copy any one of the System Registry tables in the configuration menu. You may copy the properties of one component to a group of components. For example, you may copy the properties of Pure Product number 2 to Pure Product number 3, or copy the properties of Pure Product number 2 to the Pure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

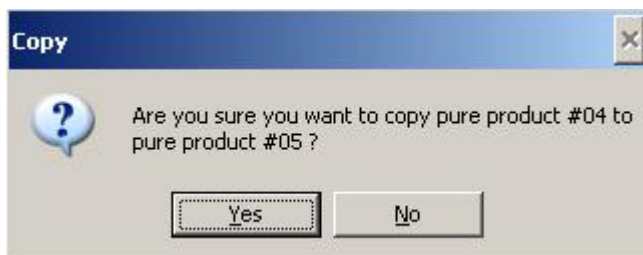
- 1 From the *FCC Tree*, select *Configuration*, then select the System Registry table you wish to copy from, displaying its graphical view in the right pane.
- 2 Right-click the icon whose properties you want to copy, then click *Copy*. The *Copy* dialog is displayed:



- 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** 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.

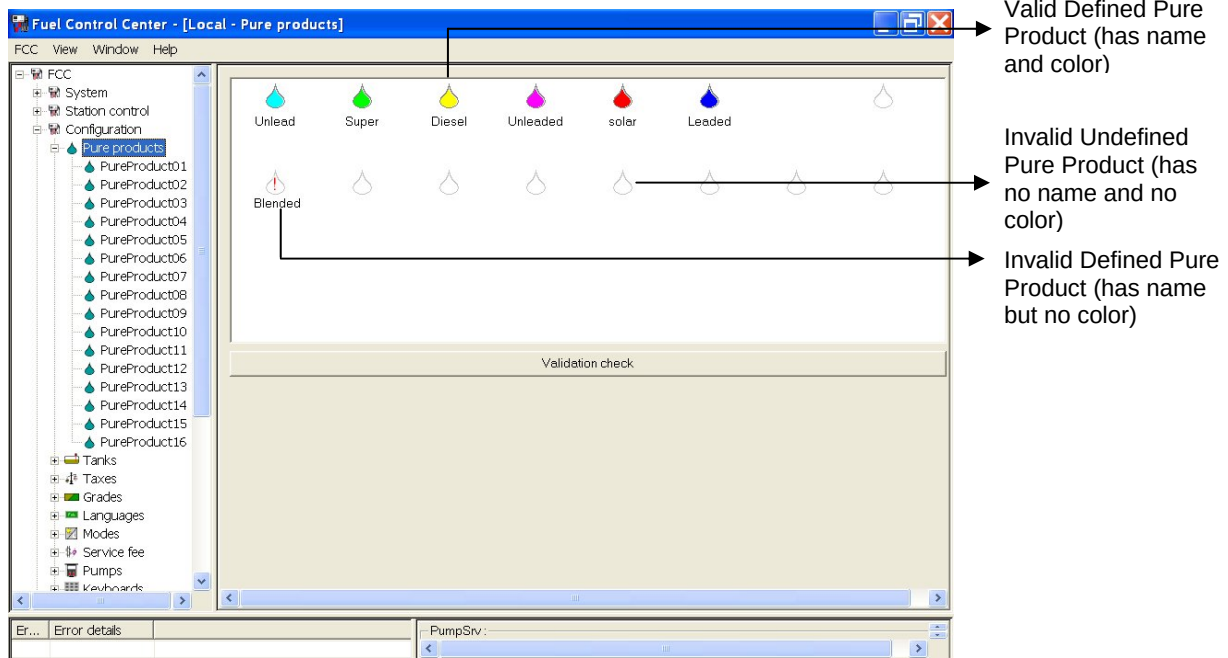
Proceed to the Pure Products configuration menu.

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 window is displayed with icons of all the Pure Products. Expand the *FCC Tree* to view the list of Pure Products:

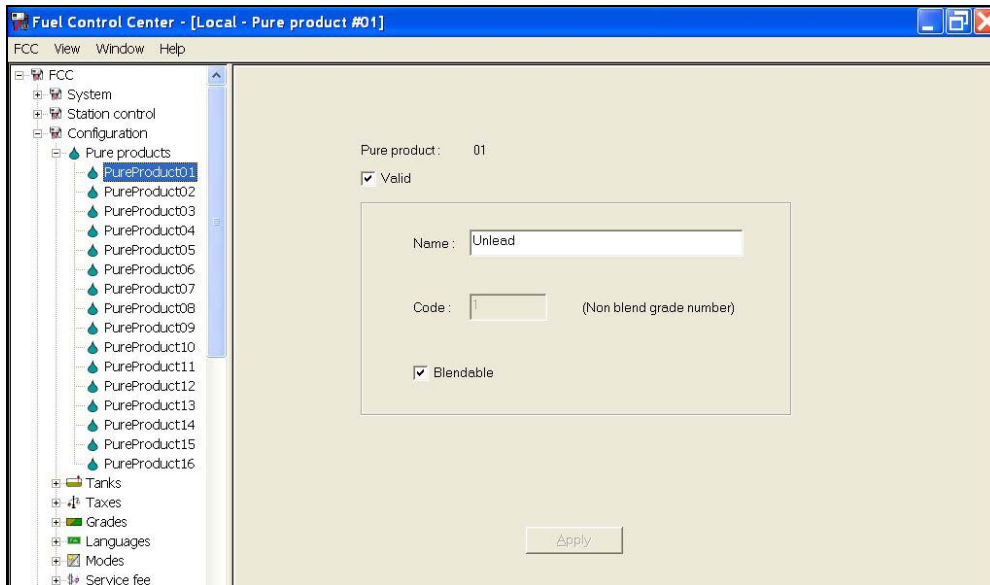


- 2 Click *Validation Check* to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

You may define up to 16 different Pure Products.

➤ **To define or revise a Pure Product:**

- 1 Double-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 <i>PumpSrv</i> .
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.)

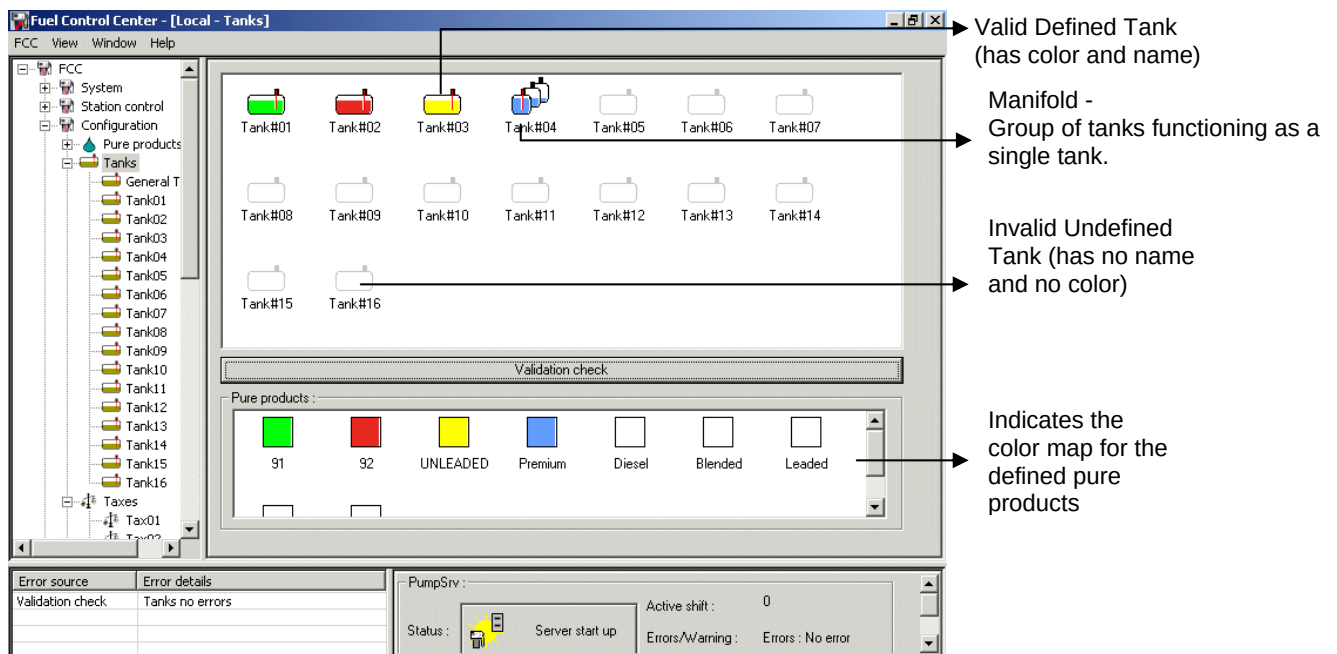
Once you have configured Pure Products, continue to configure the Tanks.

Tanks

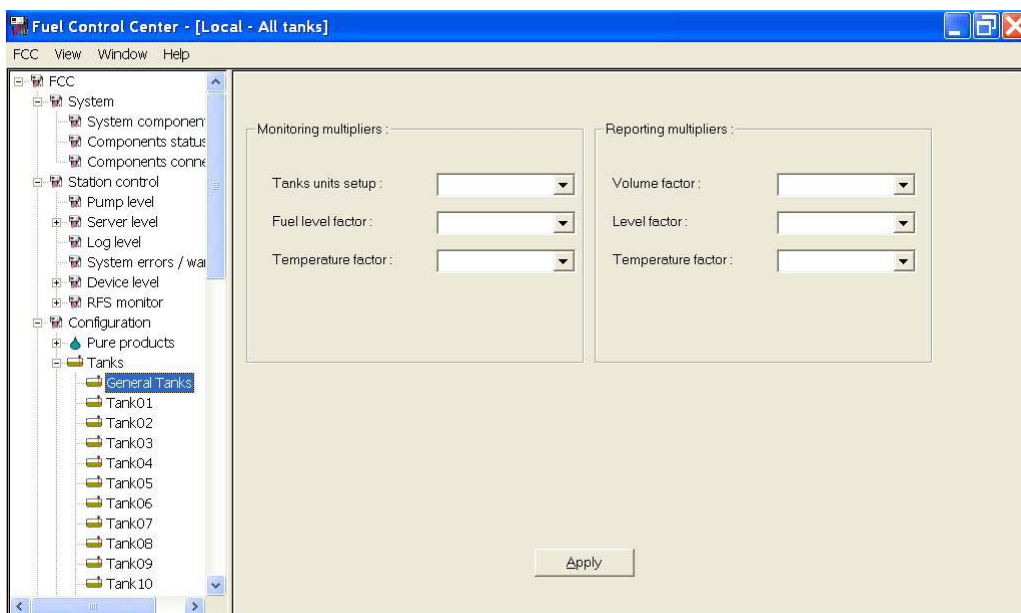
The *Tanks* menu enables you to connect the various pure products to the respective tanks.

➤ To View Tank Properties:

- 1 From the *FCC Tree*, click *Configuration*, then click the *Tanks* menu. The Tanks window 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
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, <i>PosPump</i> (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 <i>PumpSrv</i> reports to <i>PosPump</i> that there is 88607 liters of fuel in the tank, <i>PosPump</i> 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.
Volume Multiply	This field specifies how many decimal points are used in the report on fuel volumes in the tanks. If the Volume Multiply field is defined as 100, and there are a total of 10000 liters in all the tanks, in the QDX file it is saved as 100000,00.
Fuel Level Factor	This field specifies how many decimal points are used in the report on the fuel level factor. 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.

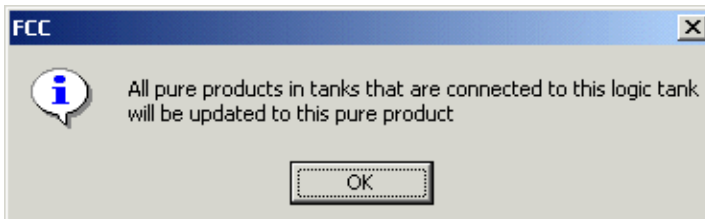
➤ **To Define or Revise Tank Properties:**

- 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 <i>PumpSrv</i> .
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.
Minimum Delivery	A mark in each of the tanks, measured in gallons, signifying 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 <i>POSPump</i> as the Low Level red line.

Fields	Description
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 <i>POSPump</i> as the High Level red line. Note: The Low Level and High Level Limit parameters are used to send alarms to the <i>Alarmsrv</i>, notifying that the fuel level is at the Low Level or High Level Limit.
Full Height Volume	Specifies the maximum Tank capacity.
Maximum Volume Limit	Specifies the maximum volume of fuel in the tank.
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 <i>Lock Nozzle When Tank Is Under Predefined Limit</i> in the <i>General System Parameters</i> module is selected.
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*.)

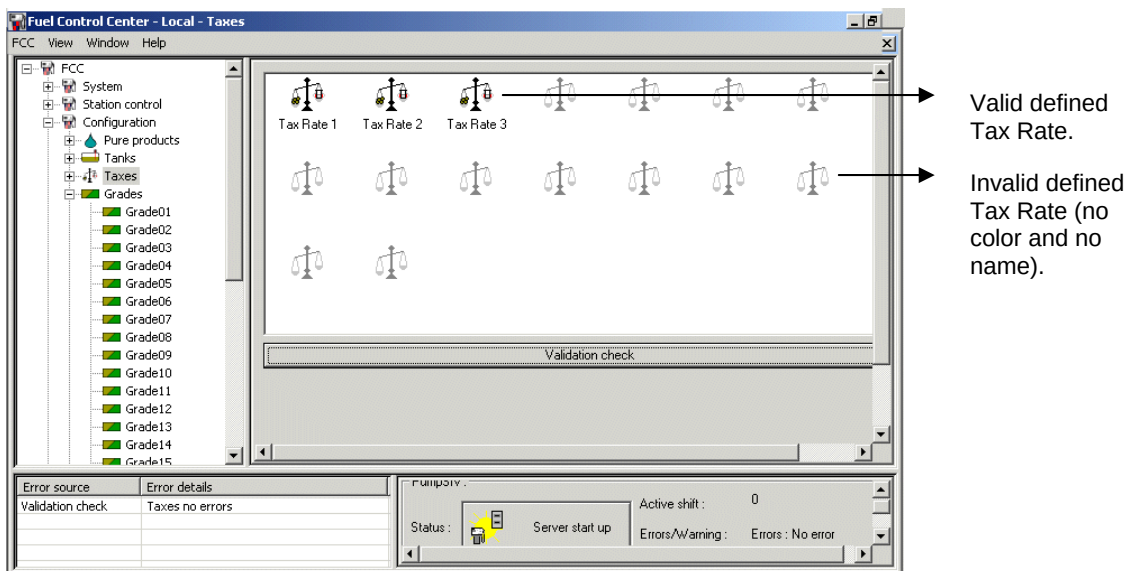
Once the Tanks are configured, continue to define Taxes.

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:

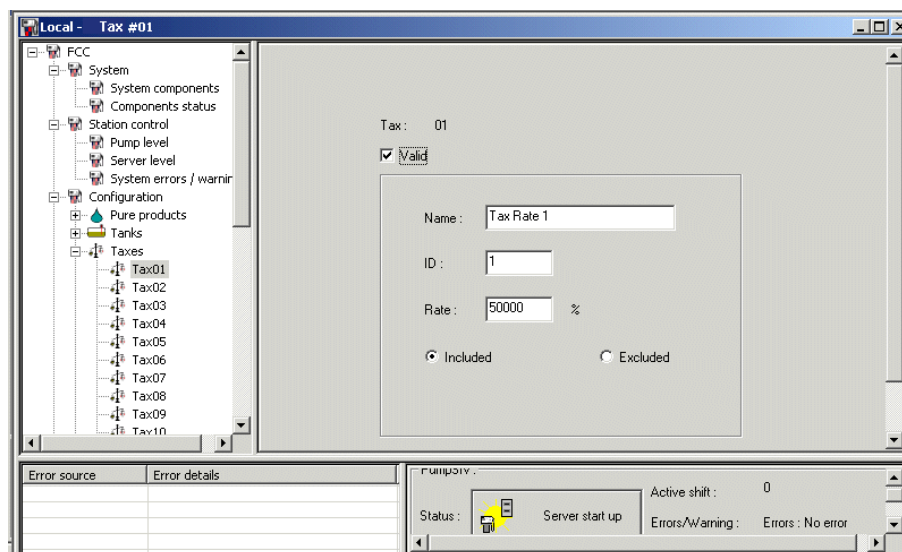


- 2 Click *Validation Check* to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

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 <i>PumpSrv</i> .
Valid	If checked, indicates that the tax exists in the system.
Name	Enter the name of the tax.
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*.)

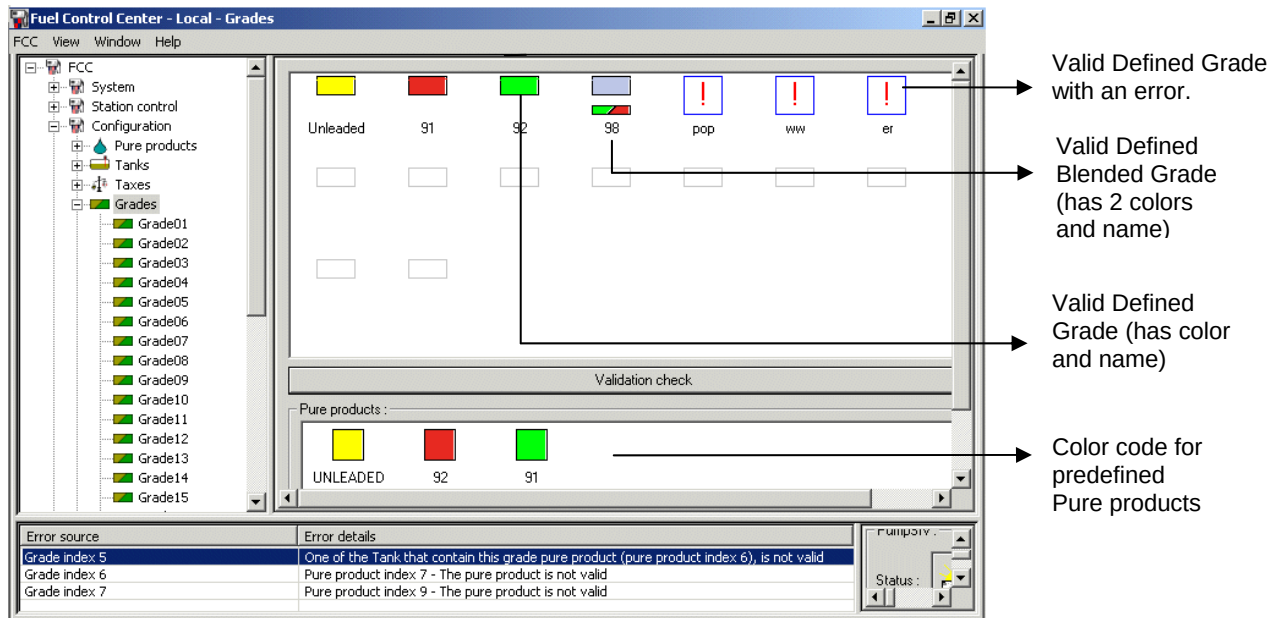
Once the Taxes are configured, continue to define Grades.

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.

➤ **To define or revise Grade Properties:**

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

The screenshot shows the 'Fuel Control Center - [Local - Grade #01]' dialog box. The 'FCC Tree' on the left lists various system components, with 'Grades' expanded. The main area displays configuration fields for Grade #01. The 'Valid' checkbox is checked. The 'Full name' is 'Unleaded', 'Short name 3' is '87', 'Short name 5' is 'Unleaded', 'OLA code' is '1', 'Convert code 1' is '00', and 'Convert code 2' is '00'. The 'Loyalty applicable' checkbox is checked. The 'Blending (Pure products)' section shows 'High' as 'Unleaded' with a ratio of '100' and 'Low' as 'None' with a ratio of '0'. The 'Prices' section shows 'Full service' and 'Self service' both at '\$ 1.559' for 'Cash' and 'Credit'. The 'Taxes' section is empty. The 'Reward' section shows 'Discount per unit' as '0 cents' and 'Valid for' as '0 days'. The 'Discount type' is set to 'None'. The 'PumpSrv' section shows 'Status' as 'Server start up', 'Active shift' as '1', 'Errors/Warnings' as 'No error', and 'Number of pumps' as '0'. The bottom status bar shows 'Ready' and the date/time 'Thursday, March 09, 2006 14:31:04'.

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 <i>PumpSrv</i> .
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 <i>Convert Layer/Configuring an Allied Convert Layer</i> .)	

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 <i>Convert Layer/Configuring an Allied Convert Layer</i> .)
OLA Code	OLA code number for the pure product. Note: Each code represents a grade for Online authorization. (See the <i>Validation</i> section under <i>FCC Properties</i> in <i>Chapter 2</i> .)
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.
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.
Blending area:	
High pure product	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.
Low pure product	Pure Product in low ratio.
High blend ratio	Percentage of High pure product in the grade. For example, if the high blend is 60%, the low blend is automatically 40%.
Prices area:	
Cash area:	
Full Service	Price for Full Service when paying in cash.
Self Service	Price for Self Service when paying in cash.
Credit area:	
Full Service	Price for Full Service when paying in credit.
Self Service	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:	

Fields	Description
Discount in Cents 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.

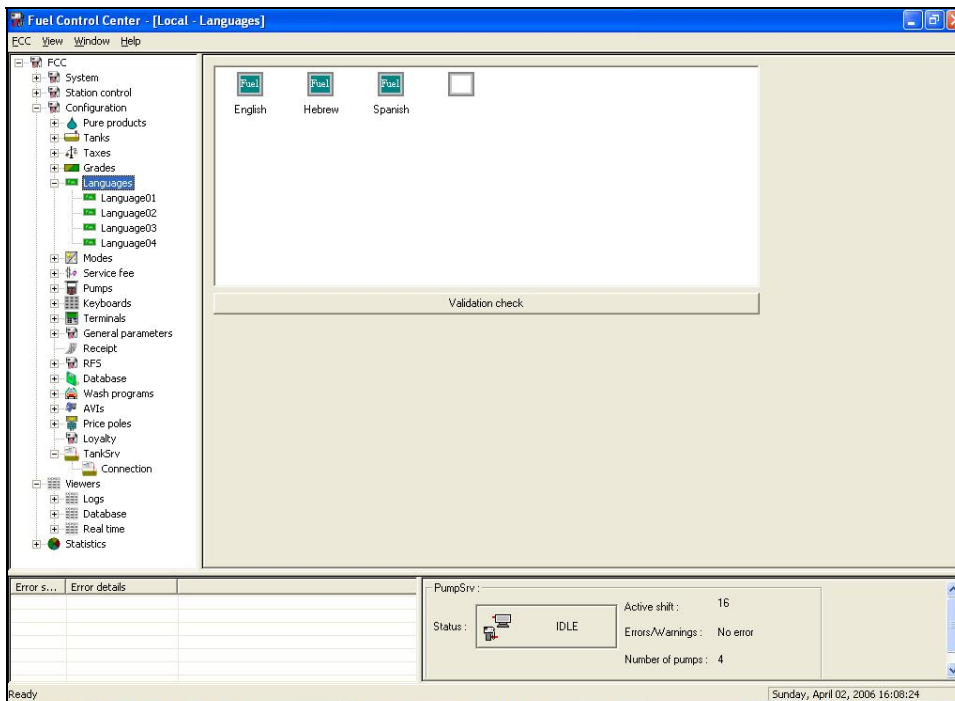
Languages

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.

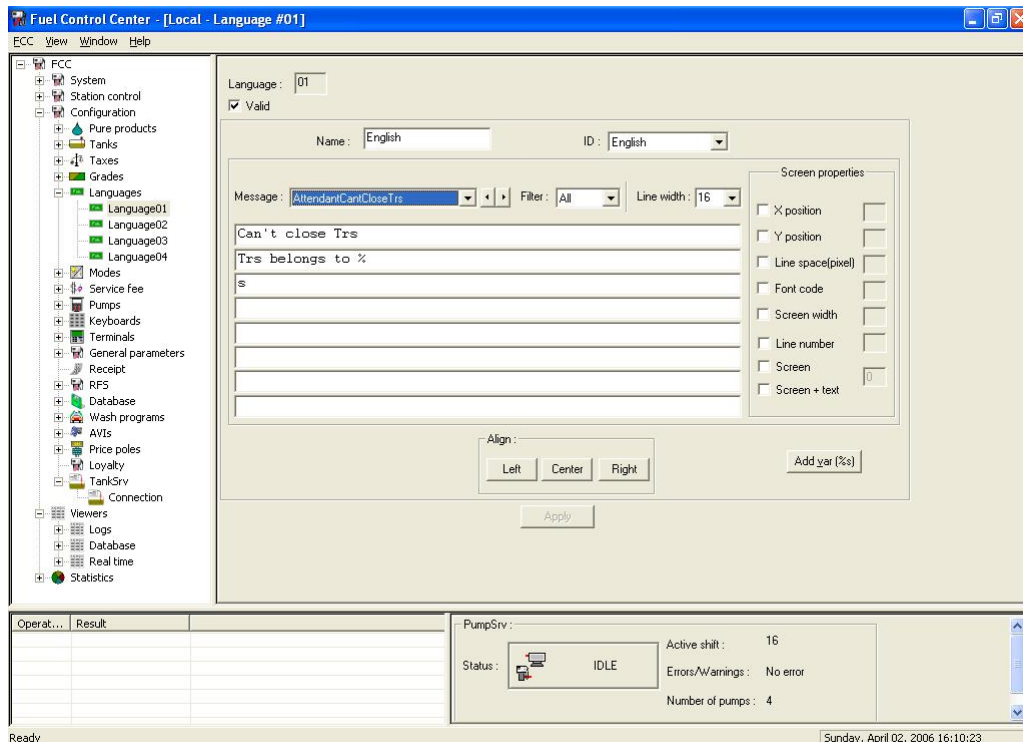


- 2 Click *Validation Check* to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog.

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 <i>PumpSrv</i> .
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.
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.
Screen	Select to indicate that graphics are used instead of text.
Screen +text	Select to indicate that there is a background image and text is placed in front.
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*.)

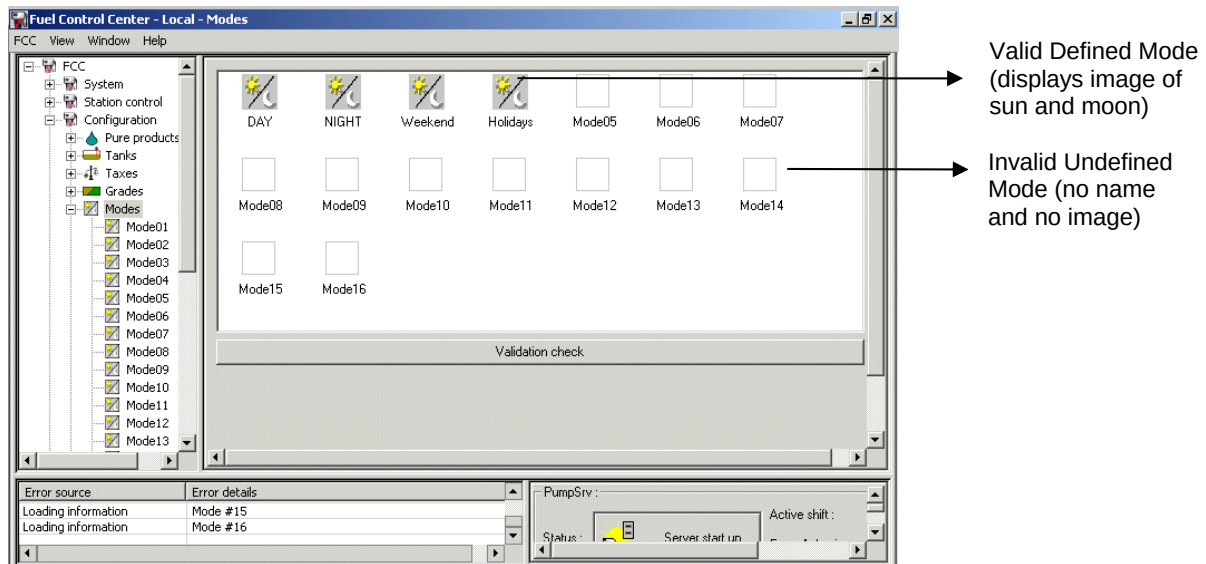
Once the Languages are configured, continue to define Modes.

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 properties of a Mode:

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

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 <i>PumpSrv</i> .
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.

Fields	Description
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.
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 is still to pay.
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".

- 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 Fees

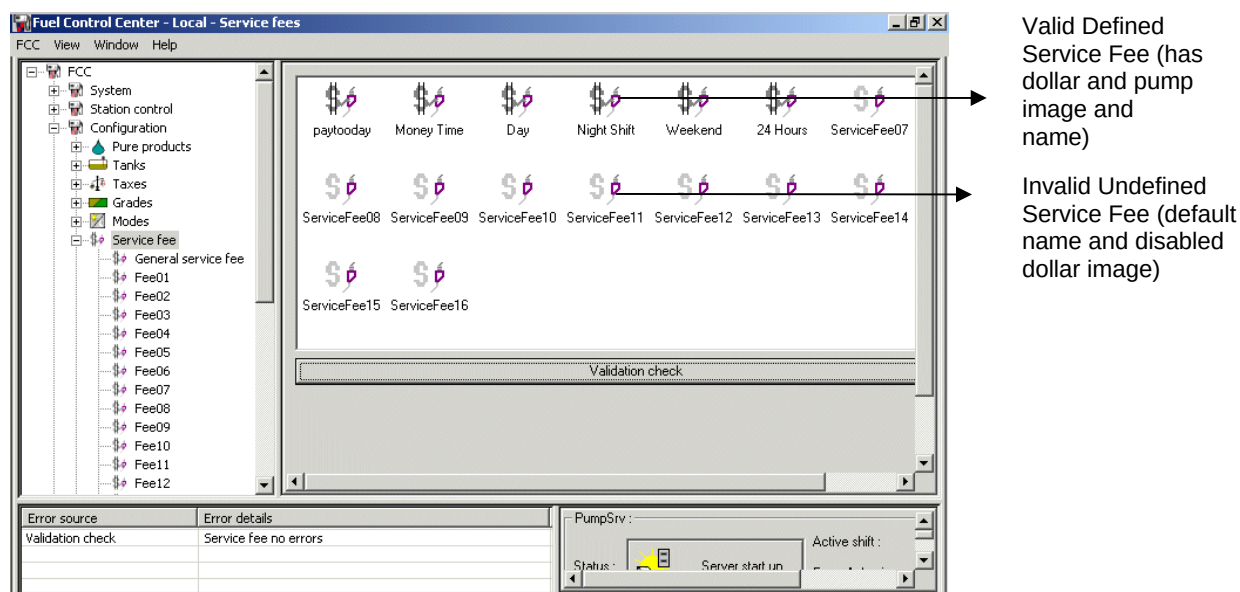
The Service Fees menu enables you to define and view the defined Service Fees. Different Service Fees may be defined for different modes, e.g., for a Day Mode, Night Mode, Weekend Mode, Holiday Mode etc. The Fuel Station sets these monetary values, which are added to the customer's bill. Service Fees 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 the *RFS* and *Allied, and Meggit Convert Layer*. A system using the *Doms Convert Layer* does not support the *Services Fees* functionality.

➤ To View Service Fee Properties:

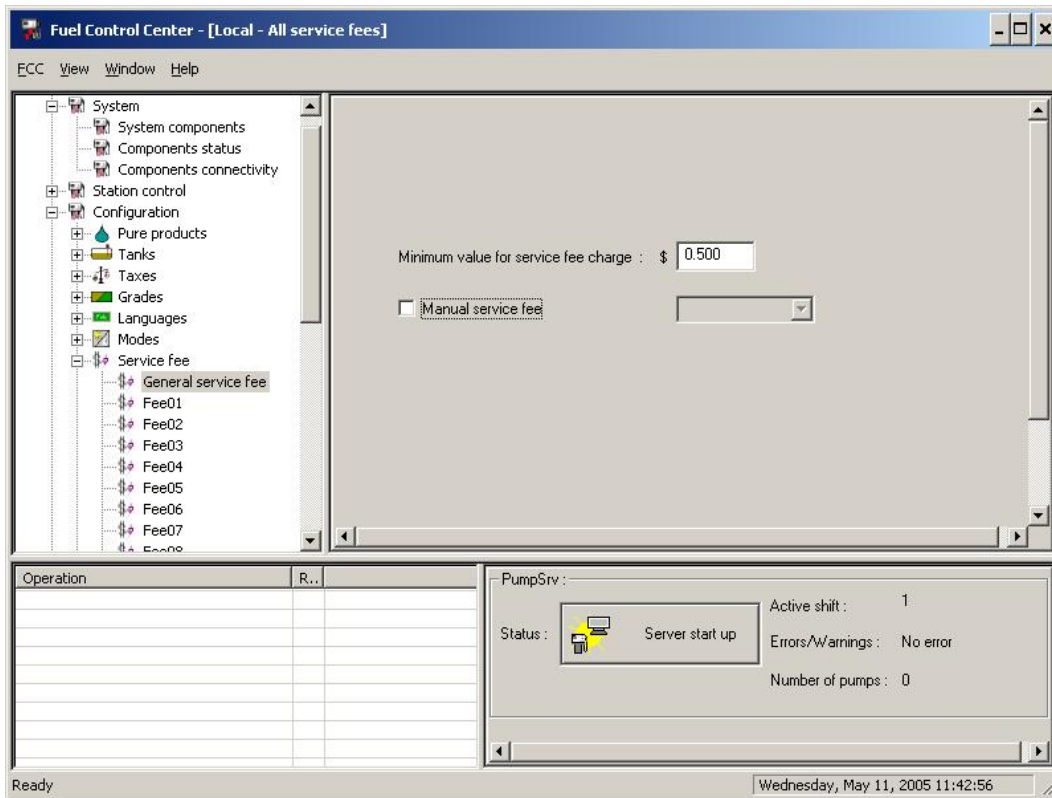
- 1 From the *FCC Tree*, click *Configuration*, then click the *Service Fee* menu. The Service Fee window is displayed with icons of all the Service Fees. Expand the *FCC Tree* to view the list of Service Fees:



- 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:

Fuel Control Center - Local - Service fee #01

FCC View Window Help

Service fee : 01

☒ Valid

Name : paytoday

	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 \$

Error source Error details

PumpSrv : Active shift : Status : Server start up

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 <i>PumpSrv</i> .
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.

Fields	Description
Pay AVI	Enter the monetary value if there is a Service Fee for the AVI Full Service.
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*.)

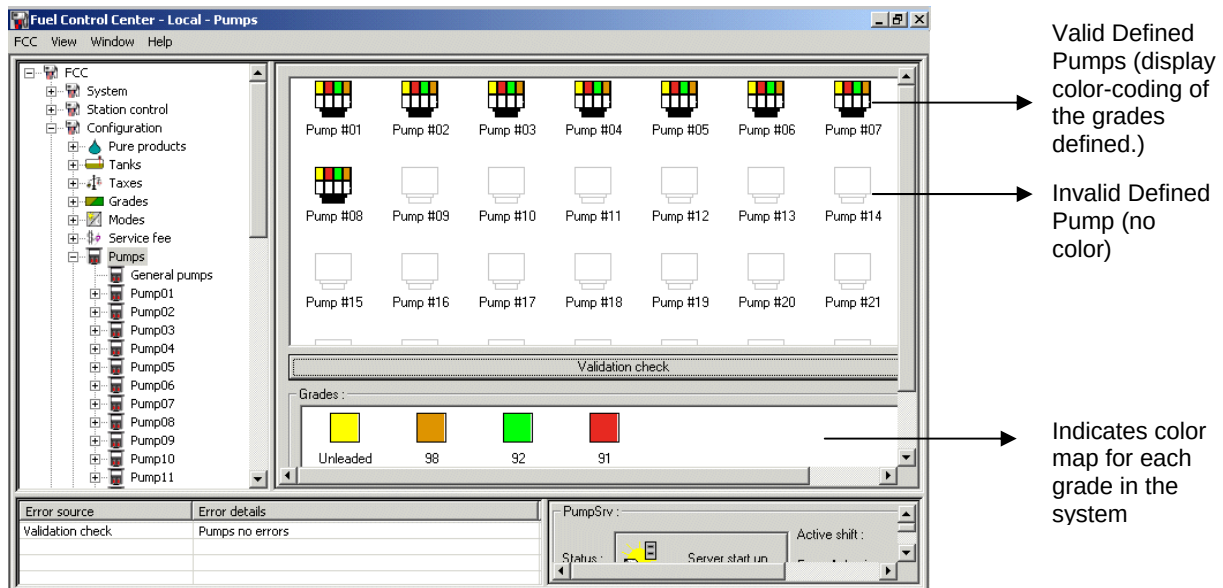
Once you have configured Service Fees, continue to define Pumps.

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.

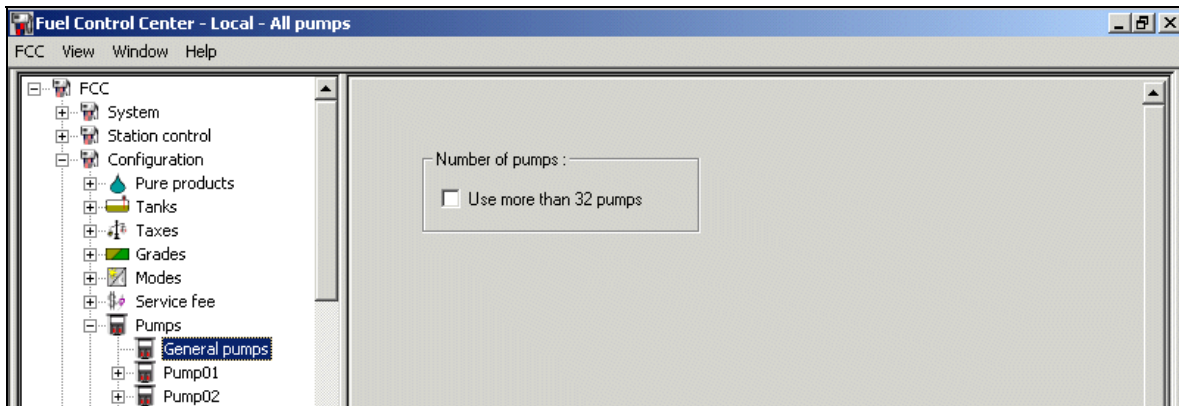
➤ To View Pumps Properties:

- 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*:



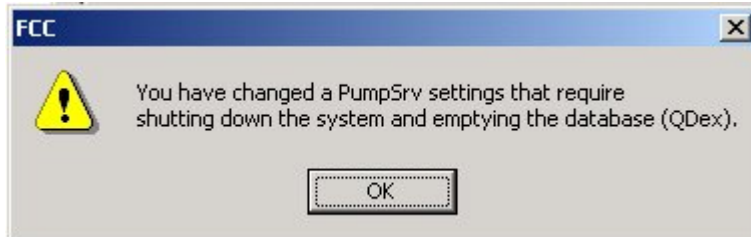
- 2 Click *Validation Check* to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

- 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.

- 2 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 <i>PumpSrv</i> .
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.
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.

Fields	Description
Grade Assignment area:	
Grade Assignment	Defines, for each pump, grade assignment for each nozzle. There can be up to 8 nozzles per pump. Select the Grade type from the drop-down list next to the icon, which represents a nozzle. If you cannot locate a particular Grade, check that the Tank is configured. (See the section <i>To Define or Revise Tank Properties</i>.)
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.
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.

Fields	Description
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 <i>PumpSrv</i> 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.
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.

Fields	Description
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 <i>Pump Mode Scheme</i> 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 <i>Pump Mode Scheme</i> 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.
Time Out (Seconds) area:	
Dispensing	Defines after how long, in seconds, the <i>PosPump</i> 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.

Fields	Description
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.

- 3 Click *Apply* to save.
- 4 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

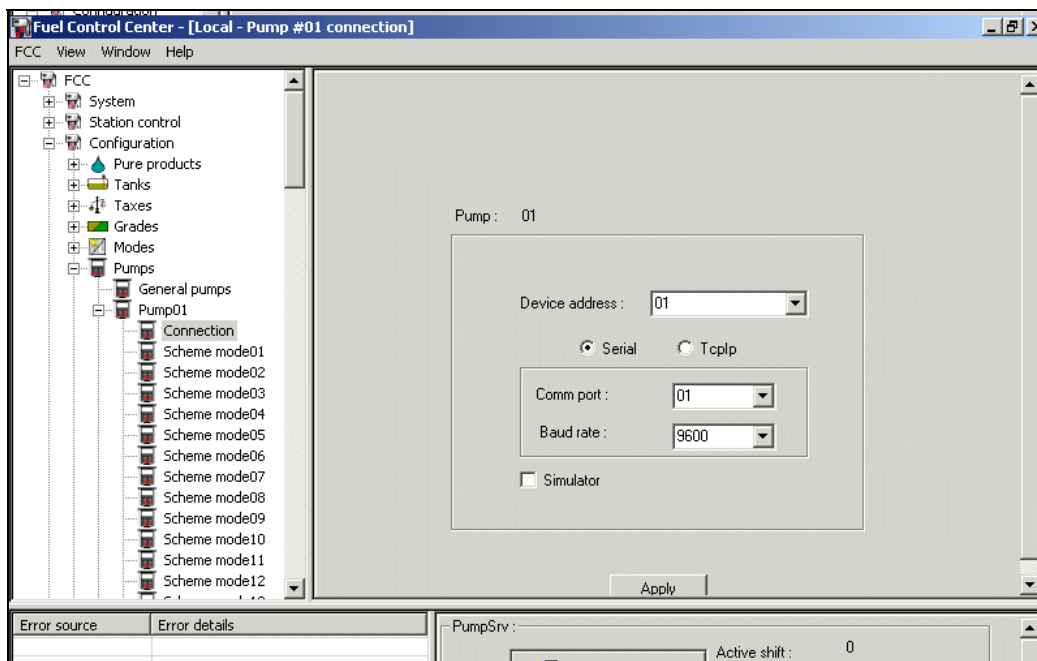
The *Connections* menu enables you to define the settings when connecting devices to the pumps. You must define if you are configuring serial-based communication or TCP/IP. When using a TCP/IP based communication system, the Port and Address are required. When using serial-based communication, the comm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

Fields	Description
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 <i>Doms</i> 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.
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 64 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.

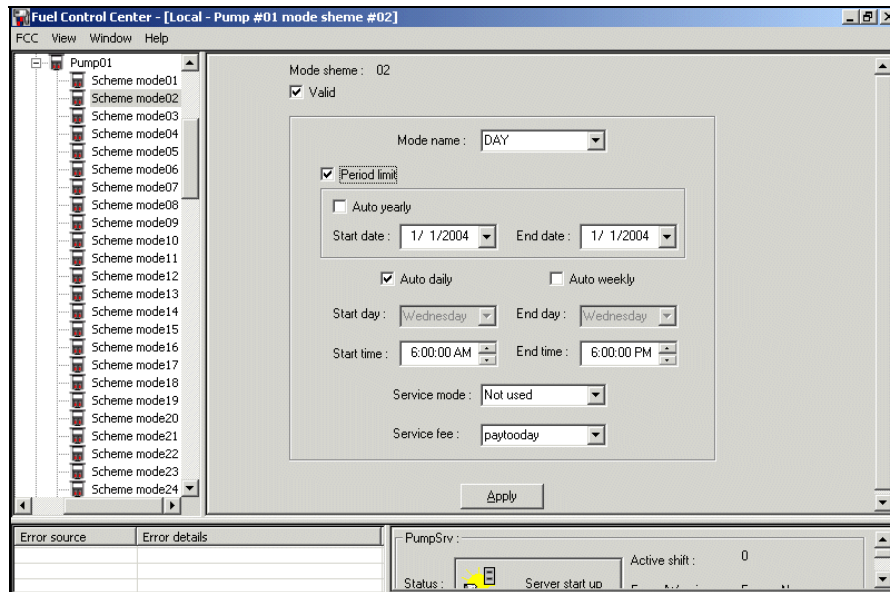
➤ To assign modes to a Pump using the Pump Mode Scheme:

- 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.

- Click the relevant Mode Scheme to open the *pump, 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.

- 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 <i>PumpSrv</i> . 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.

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).

Fields	Description
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.

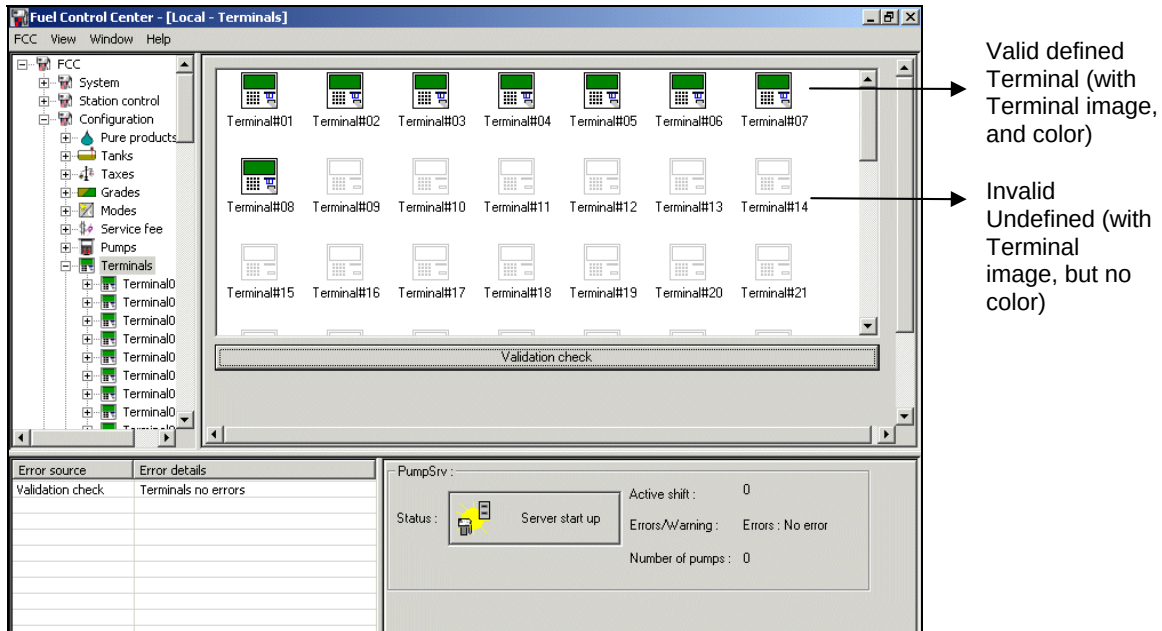
For further details refer to *RFS Wiring and Configuration Technical Guide Version*.

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.

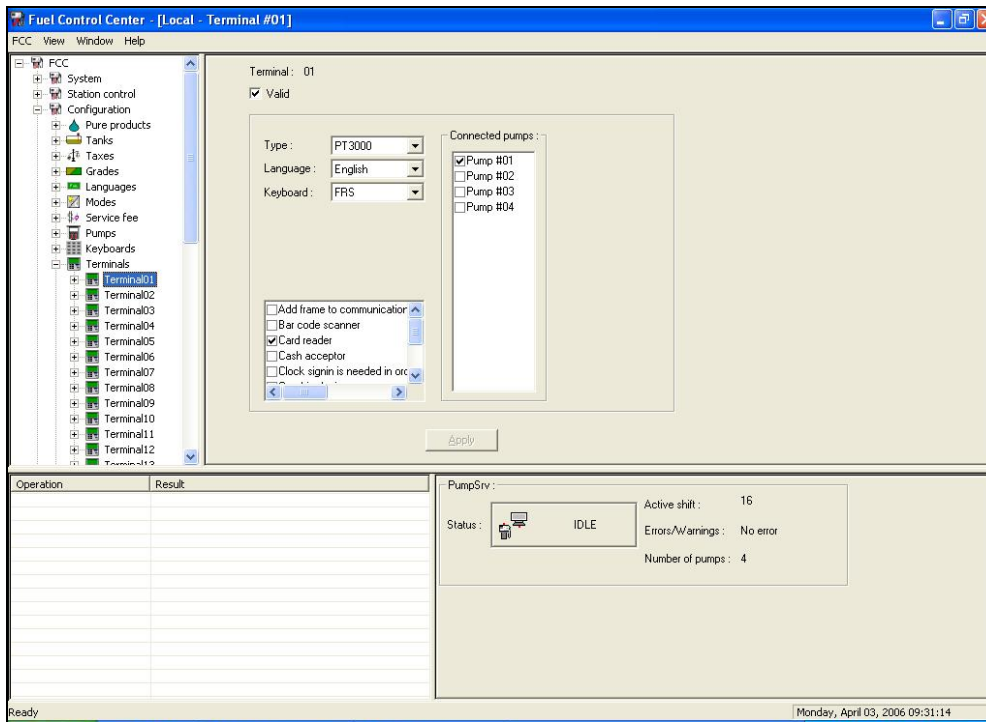
➤ **To Define or Revise Terminal Settings:**

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

Note:

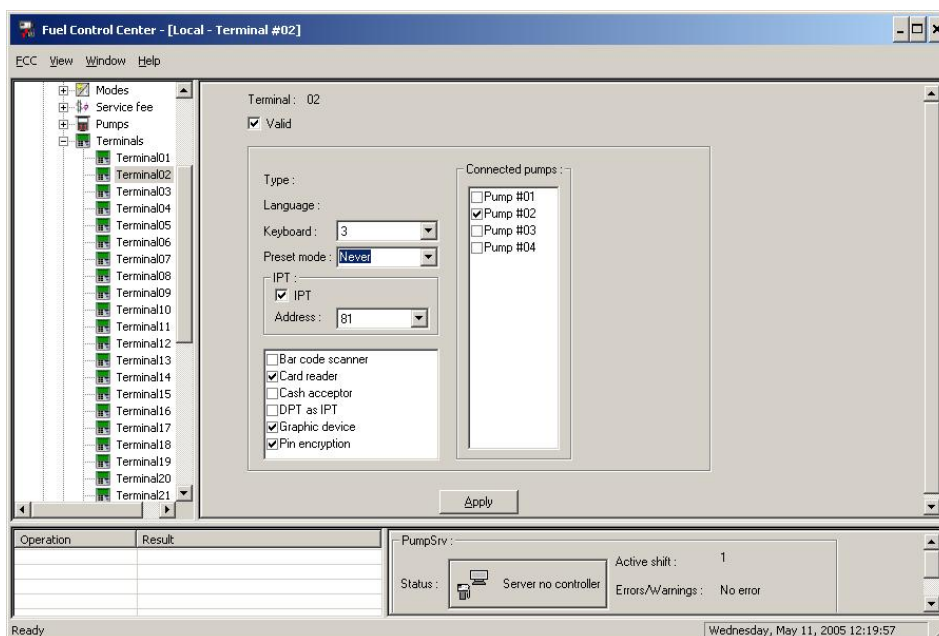
The fields vary according to the convert layer supported by your system.

If your system supports the *RFS*, *Meggitt* or *Postec* convert layer, the following screen is displayed:



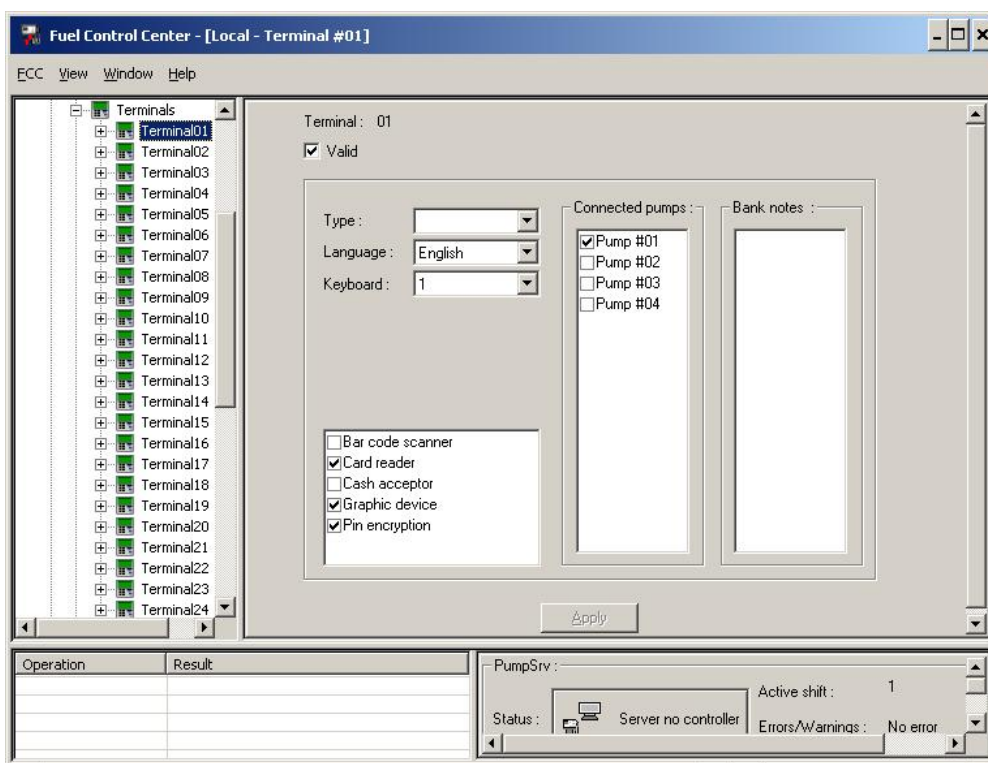
Or

If your system supports the 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 <i>PumpSrv</i> .
Valid	If checked, indicates the Terminal is valid in the system.
Type	Manufactures name for the terminal, e.g., PT3000. Select terminal type from the drop-down list.
Language	Select the default language to be displayed on the terminal display from the drop-down list. Languages are defined in the Language module.
Keyboard	From the drop-down list select a keyboard code, representing a keyboard type. Note: Verify that the Keyboard is configured.
Preset Mode	This parameter determines if the customer or attendant is to be prompted to enter a preset amount at the terminal keyboard. From the drop-down list, select the relevant option: • Never • Always • Only for Pay-Inside sales. • Only for Pay-Outside sales. • Only for Full-Service sales. • Only for Full-Service Pay-Inside sales. • Only for Full-Service Pay-Outside sales. • Only for Attendant Card sales. Note: This parameter is only relevant if your system supports an <i>Allied</i> convert layer.
IPT	Select the IPT checkbox to indicate that the terminal has an IPT connection, instead of a DPT connection. <i>IPT</i> – is an Island Payment Terminal (stand alone) dispenser payment device, which is not integrated on the fuelling point. <i>DPT</i> is a Dispenser Payment Terminal integrated on a fuelling point. If active, then from the Address drop-down list, select the relevant terminal ID number to connect the IPT to the terminal. Note: This parameter is only relevant if your system supports an <i>Allied</i> convert layer.

Fields	Description
Add frame to communication	If checked, indicates that extra bytes are added to the communication protocol for port servers that use this information.
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.
Pin encryption	If checked, terminal supports Pin encryption.
DPT as IPT	If checked, indicates that even if the terminal is a DPT terminal, it behaves as an IPT terminal. See explanation on DPT and ITP terminals, above.
	Note:
	This parameter is only relevant if your system supports an <i>Allied</i> convert layer.
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.
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 <i>Doms</i> convert layer. If your system works with the <i>Allied</i> , <i>RFS</i> , <i>Postec</i> , or <i>Meggitt</i> convert layer, this field is not displayed.
	Check the checkboxes of each Bank Note recognized by the terminal.

- 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 *Meggitt* 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 comm 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:

The screenshot shows the 'Terminal #01 - Connection' dialog box. On the left, a tree view lists terminals from Terminal01 to Terminal22. The 'Terminal01' node is selected, and its 'Connect' sub-item is highlighted. The main area of the dialog is titled 'Terminal : 01'. It contains a 'Device address' dropdown set to '01'. Below this are two radio buttons: 'Serial' (selected) and 'TcpIp'. Under the 'Serial' option, there are two dropdowns: 'Comm port' set to '01' and 'Baud rate' set to '9600'. At the bottom of the dialog, there is a checkbox labeled 'Simulator' which is checked. An 'Apply' button is located at the bottom right of the dialog. The background of the screenshot shows the FCC application window with a menu bar (FCC, View, Window, Help) and a status bar at the bottom. The status bar includes a table with 'Operation' and 'Result' columns, and a 'PumpSrv' section showing 'Status' with a server icon, 'Server start up', 'Active shift' set to '1', and 'Errors/Warnings' set to 'No error'.

- 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 <i>PumpSrv</i> .
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.
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)	
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.

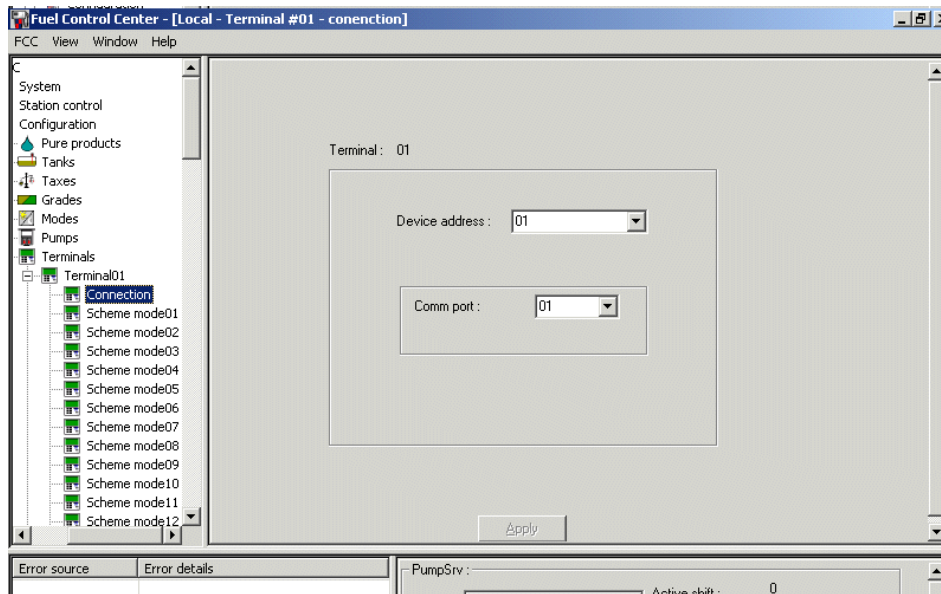
- 3 Click *Apply* to save.
- 4 From the *FCC Tree*, click *Terminals* to view all the Terminals defined in the system, and continue to define the *General Parameters*.

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 comm 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 <i>PumpSrv</i> .
Device Address	Indicates device address. It is a unique numeric address predefined for each device. Select the required address from the drop-down list.
Comm Port	Indicates the communication port number. Select the required number from the drop-down list.

- 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.

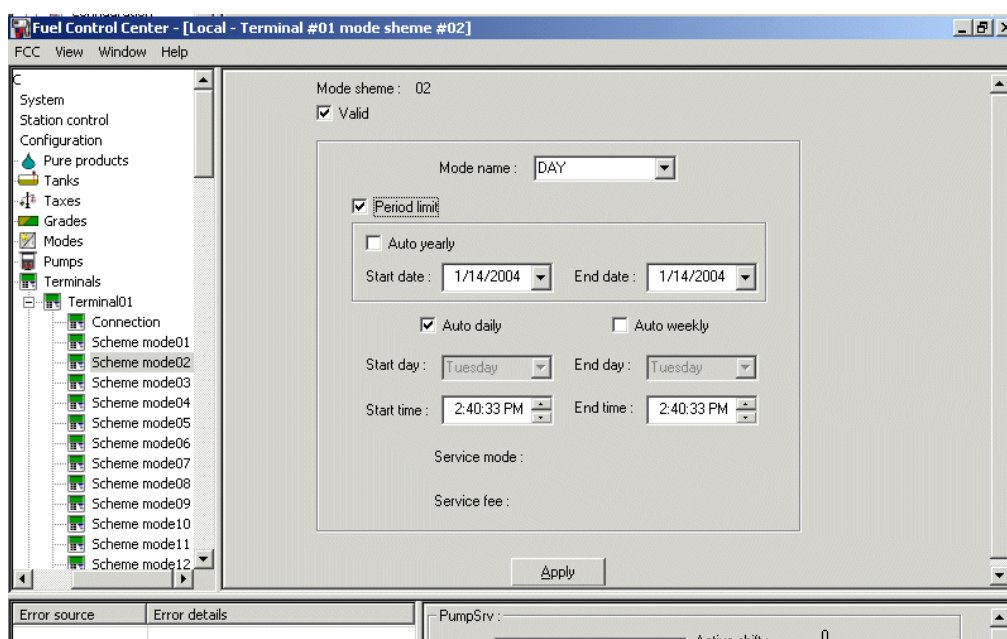
Any number of Modes can be defined for a 24-hour period. For each terminal there are 64 Mode Schemes enabling the Fuel Station to set as many different Modes as necessary.

➤ **To Define Terminal Mode Schemes:**

- 1 From the *FCC Tree*, select a 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 <i>PumpSrv</i> . 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.

Fields	Description
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 <i>Modes</i> section.
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.

Fields	Description
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 <i>PumpSrv</i> version number.
Working Region	Indicates Business logic. The region is unique.
Alternate Server Auto Switch	If checked, indicates that if <i>PumpSrv</i> does not respond, all POS terminals connected to that particular <i>PumpSrv</i> are automatically diverted to an alternate <i>PumpSrv</i> . (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
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.
Shift area:	
Active #	Number of current shift.
Mode	Indicates whether shifts are assigned automatically or manually.
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.
Mode Change area:	
Idle Pumps Only	If checked, indicates that whenever prices are changed, the pumps are locked.
No Open Prepay	If checked, indicates that you cannot change a mode in the middle of a prepay transaction.
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 limit (displayed when the value limit type is selected)	Defines the maximum limit per one credit card transaction.
Cash limit (displayed when the value limit type is selected)	Indicates the maximum limit per one cash transaction.
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.

Fields	Description
POSPump display running value threshold	Enter a threshold amount that when reached, is displayed on the PosPump button as follows:  . This option enables you to control site limits.
Controller Software File Path	Enter the path for the software updates. This is usually necessary if changes are applied to the system, or new software is required. Click  to browse through the files and select the relevant path.

Note:

The *Controller* field is relevant for *Allied* systems only.

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 <i>Auto Log on</i> 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 Param area:

Process lock request	Indicates whether the pumps were locked as a result of <i>PumpSrv</i> transmitting this command. (This is a read-only field and has a set default, which is No.)
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.
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.

Fields	Description
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 <i>PumpSrv</i> .
PumpSrv will Authorize PAP Before Host	If checked, indicates that <i>PumpSrv</i> 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).
Prepay only on idle pump	If checked, indicates that a prepay transaction may not be performed if the pump is not idle.
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 <i>Reconfigure</i> screen is automatically checked. For further details on updating new settings, see <i>Accessing the Configuration Menu</i> , at the beginning of this chapter.	
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.

Fields	Description
PCI Compliant	If checked, indicates that the system is compliant with the Payment Card Industry, Visa (PCI, VISA) set of data security rules when storing, processing, and transmitting Credit Card cardholder data.
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.
Roll Back On Price Change When Offline	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.

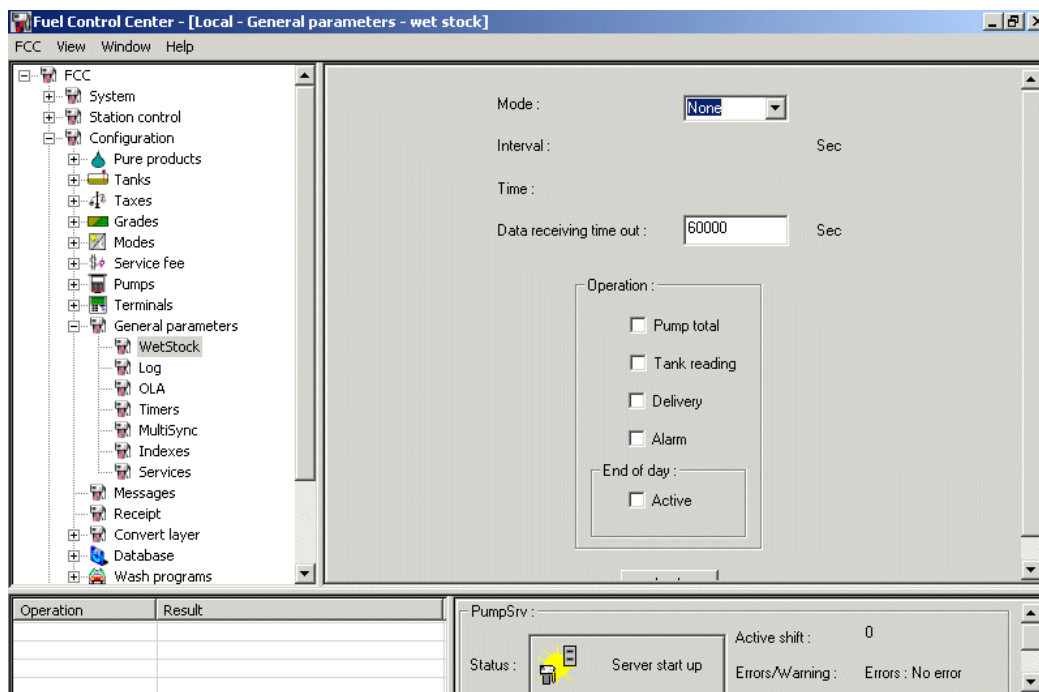
3 Click *Apply* to save.

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	Indicates intervals, in seconds, between each fuel reading.
Time	Indicates time of day when Wetstock Reading is performed.
Data receiving timeout	Indicates in seconds, how long the system waits for data from a tank reading before it stops the Wetstock Reading process.
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.

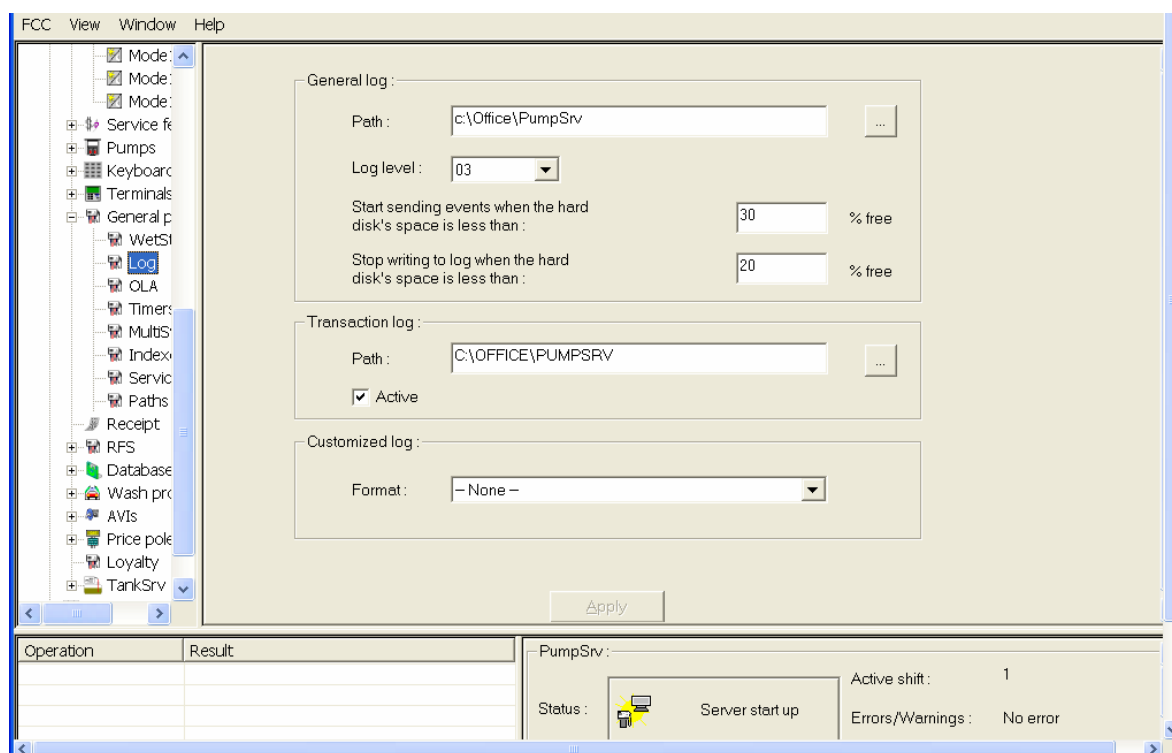
Fields	Description
Alarm	If checked, indicates that the log alerts of any system problems that are written to the log.
End of Day area:	
Active	If checked, indicates that in addition to the regular EOD process, another process that saves specific QDX information on Wetstock readings will take place.

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

Log

➤ To Define Log Readings:

- From the FCC tree, select the *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:

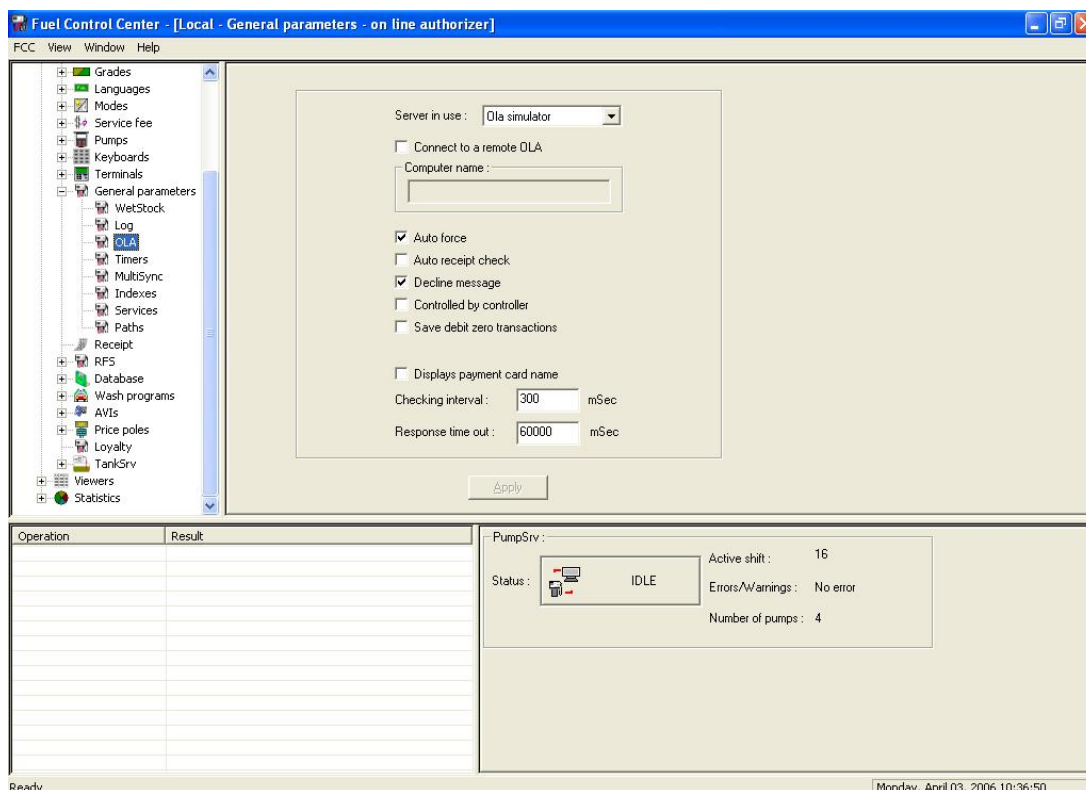
Fields	Description
Log area:	
Path	Specifies the path of the <i>PumpSrv</i> and <i>Convert Layer</i> log files.
Log level	Internal code number indicating level of detail in the log level. For example, log level 1 indicates no logs, log level 3 is some detail and log level 5 is full details in the log files. Select the required log level details from the drop-down list. Note: The log level details apply to <i>PumpSrv</i> 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 <i>PumpSrv</i> transaction logs.
Active	If checked, indicates the transaction log file is active.
Customized log area:	
Format	Data export components get information from <i>PumpSrv</i> , 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.

- 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 <i>OLASrv</i> 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 <i>PumpSrv</i> 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 <i>PumpSrv</i> "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, <i>Pumpsrv</i> "asks" OLA for authorization of the transaction.
Response Time- Out	Indicates how long, in milliseconds, <i>Pumpsrv</i> 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**.

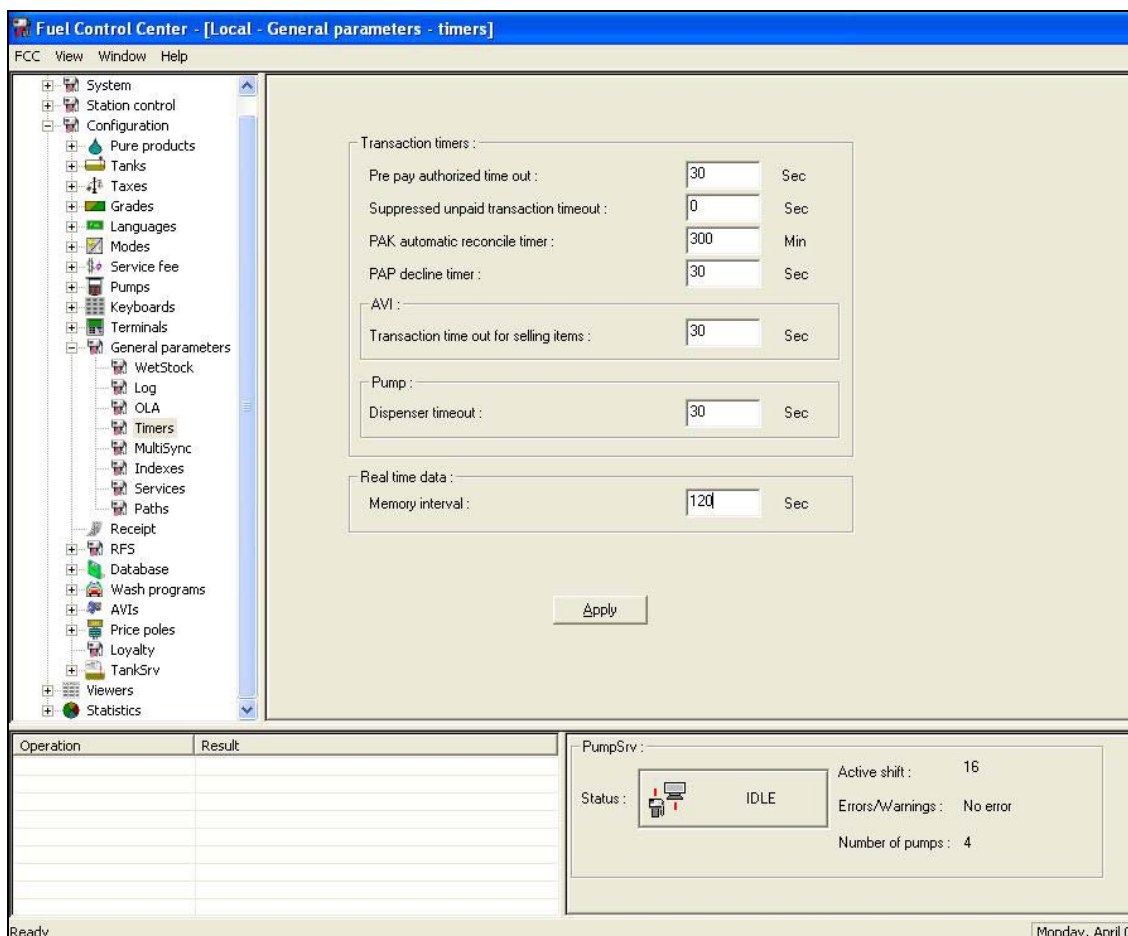
- 3 Click *Apply* to save.

Continue to define the *Timers*.

Timers

➤ To Define Timers:

- 1 From the FCC tree, select the *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.
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.

Fields	Descriptions
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 authorized the pump, resulting in a drive-off.
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.
Dispensers area:	
Dispenser Timeout	Indicates after how long in seconds, a warning sent by <i>PumpSrv</i> is sent to notify that the nozzle was left out with no fueling.
Real Time Data area:	
Memory Interval	Indicates, in seconds, tank reading interval for real time tank monitoring data.

3 Click *Apply* to save.

Continue to define *MultiSync* readings.

MultiSync

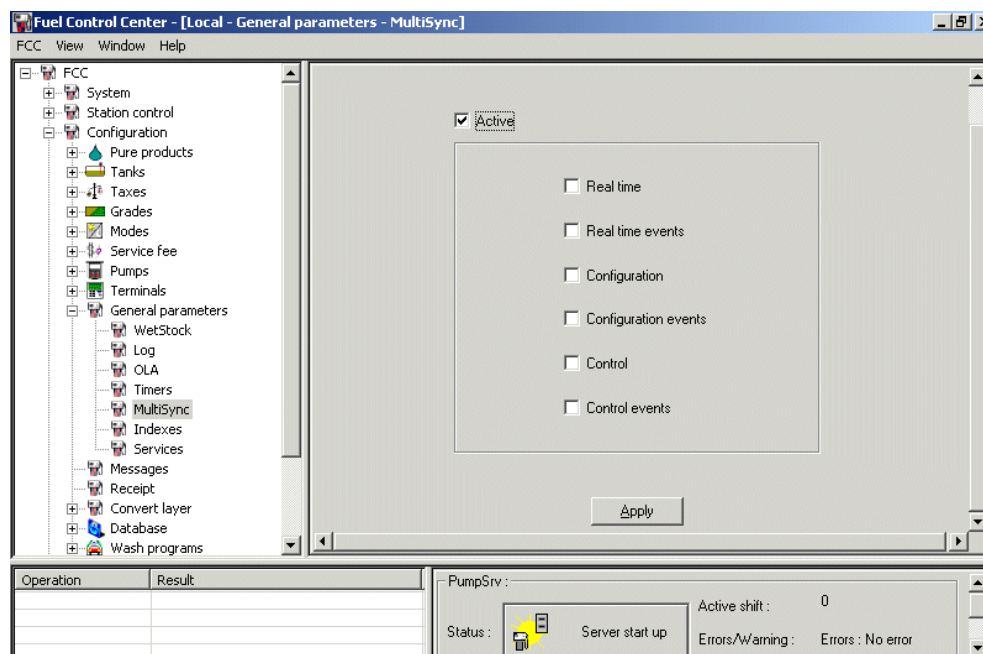
The *MultiSync* is the engine that backs up the QDX files and the Registry. The *FCC* enables the configuration of how *PumpSrv* works with *MultiSync*.

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 the *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 <i>MultiSync</i> cannot operate without the QDX engine.
Real Time Events	If checked, indicates that this interface enables <i>PumpSrv</i> to get notification from the <i>MultiSync</i> Server when QDX files have been updated.
Configuration	If checked, indicates that there is an active interface to the Registry activities. The <i>MultiSync</i> can read and write from and to the Registry.

Fields	Description
Configuration Events	If checked, indicates that this interface enables <i>PumpSrv</i> to get notification from the <i>MultiSync Server</i> when the Registry has been updated.
Control	If checked, indicates that <i>PumpSrv</i> will receive, during run time, the status of all operations from the <i>MultiSync Server</i> to monitor the data updates.
Control Events	This field is under development.

Note:

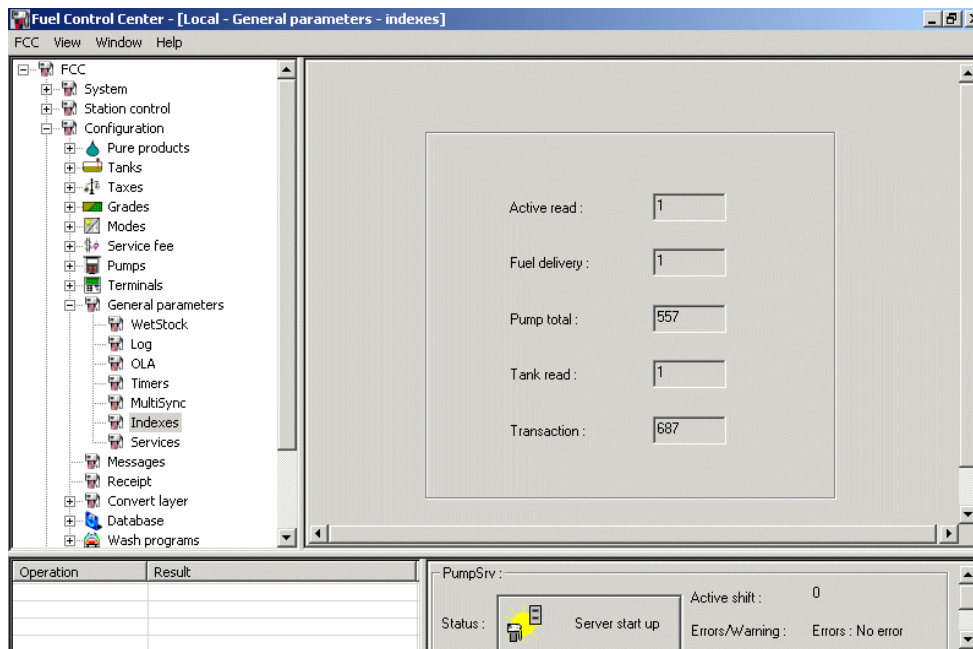
If your system supports the MultiSync application, all the fields above must be checked active.

- Click *Apply* to save.
Continue to define Index Readings.

Indexes

➤ **To View Index Readings:**

- From the FCC tree, select the *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 <i>Active Read</i> file.
Fuel delivery	Number of entries in the <i>Fuel Delivery</i> file.
Pump total	Number of entries in the <i>Pump Total</i> database file.
Tank read	Number of entries in the <i>Tank Read</i> index.
Transaction	Number of entries in the <i>Database</i> 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:

Fuel Control Center - [Local - General parameters - services]

FCC View Window Help

Active services :

- ☐ Accumulation shift total
- ☒ Buy at pump
- ☐ Cash acceptor active
- ☐ Data export server
- ☐ Loyalty discount
- ☒ Post void
- ☒ Service fee
- ☒ Virtual POS

Transaction paid restriction :

- ☐ Paid attended
- ☐ Paid pay at kiosk
- ☐ Paid pay at pump
- ☐ Paid pay avi
- ☐ Paid pre pay

AlarmSrv :

Not active

PosPump vocal alarm severity minimal priority level :

Not active

Apply

Operation Result PumpSrv Active shift: 1

- 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:

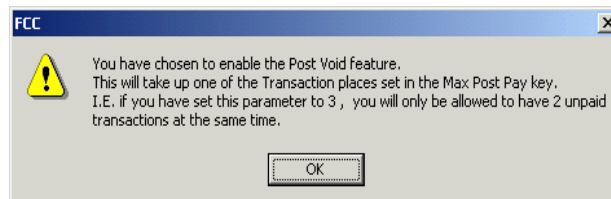
This field is not relevant to system working with the Doms controller.

Cash acceptor active	If checked, indicates that the cash acceptor is available for use. A cash acceptor enables you to insert cash into the pump to pay for your fuel.
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 system 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 *Configuration – Pumps Chapter 2*.

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.
Virtual POS	If checked, indicates that <i>PumpSrv</i> 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, <i>PumpSrv</i> 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.

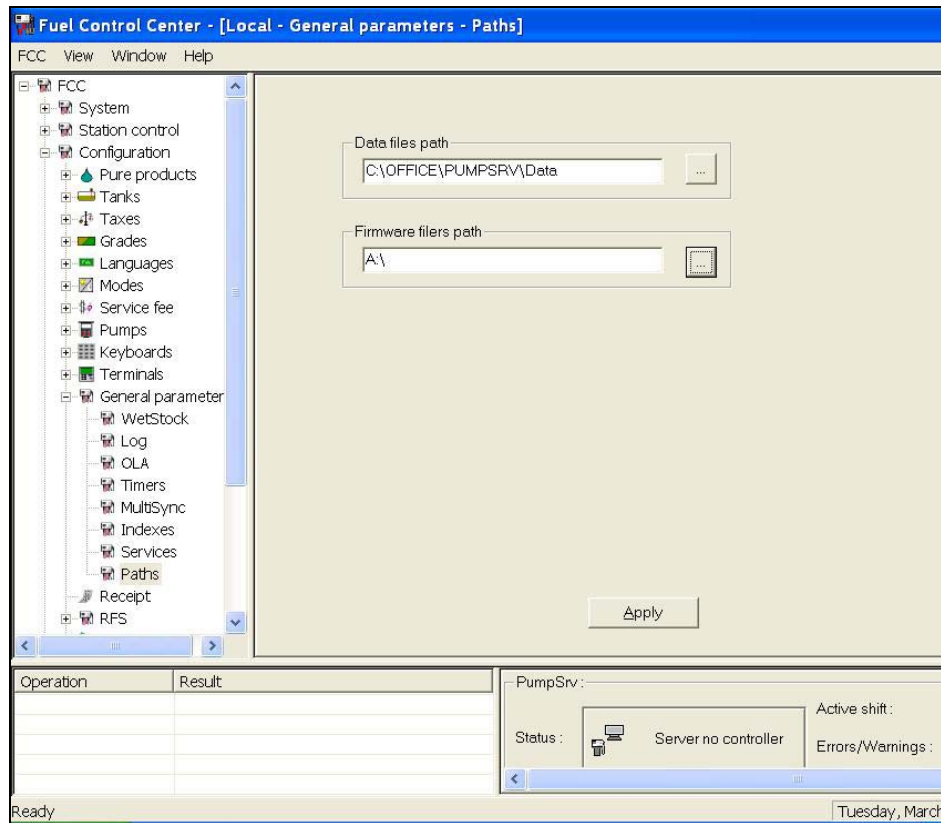
4 Click *Apply* to save.

Continue to define *Paths*.

Path

➤ To Define Services:

- 1 From the FCC tree, select the *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.

- 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 *Receipt* dialog is displayed:

Fuel Control Center - [Local - Receipt]

ECC View Window Help

FCC Tree:

- System
- Station control
- Configuration
 - Pure products
 - Tanks
 - Taxes
 - Grades
 - Languages
 - Modes
 - Service fee
 - Pumps
 - Keyboards
 - Terminals
 - General parameter:
 - Receipt**
 - RFS
 - Database
 - Wash programs
 - AVIs
 - Price poles
 - TankSrv
- Viewers
- Statistics

Receipt part : Header

Text area: Welcome !!!

Line length : 20

Reprint receipt :

- Reprint time out : 2 Week
- Maximum number of copies : 4

Counters :

- Receipt number : 00
- Counter : 18
- Max counter : 18

Align : Left Center Right

Clear all

Apply

Extra receipt index :

- ☒ Active

- 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 <i>PumpSrv</i> can reprint, if requested, before Reprint Timeout has elapsed. (For further details see <i>Reprint Timeout</i> , 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.

- 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 five types of *Convert Layers*:

- Allied
- Meggitt
- RFS
- DOMS
- Postec

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 <i>Convert Layer</i> supports credit cards.
Accept Debit	Indicates whether the <i>Convert Layer</i> 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 Pay	If checked, enables the system to stop a card transaction during fuelling. 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

Fields	Description
	automatically disregards the card and the customer may continue with the PAK transaction.
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 <i>Convert Layer</i> 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 <i>Convert Layer</i> supports a simulator.
Use Graphic Messages	Indicates whether you can display predefined graphic messages.
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	Indicates the type of message displayed on the customer's display at the pump. Options include: No Effect, Default Price Level, or Clear Volume and Value. If No Effect is selected, this means that the terminal display displays the amounts of the last transaction until the next transaction starts. If Default Price Level is selected, the terminal display, displays the Default Price after each transaction is completed. If Clear Volume and Value is selected, the Terminal display clears the Volume and Value amounts of the last transaction.
Delay	Indicates number of seconds between displaying last transaction information, and the Idle mode information.
Receipt area:	
Ask to Print Receipt	Indicates when to prompt the customer about receiving a receipt: At Beginning of Fuelling, While Fuelling, After Fuelling, or No Receipt Needed.
Generator Active	If checked, indicates that a Receipt Generator formats the receipt printed at the terminal.
Print Customer Acct.	Indicates whether the customer's credit card account number is printed on the receipt.
Format Receipt area:	

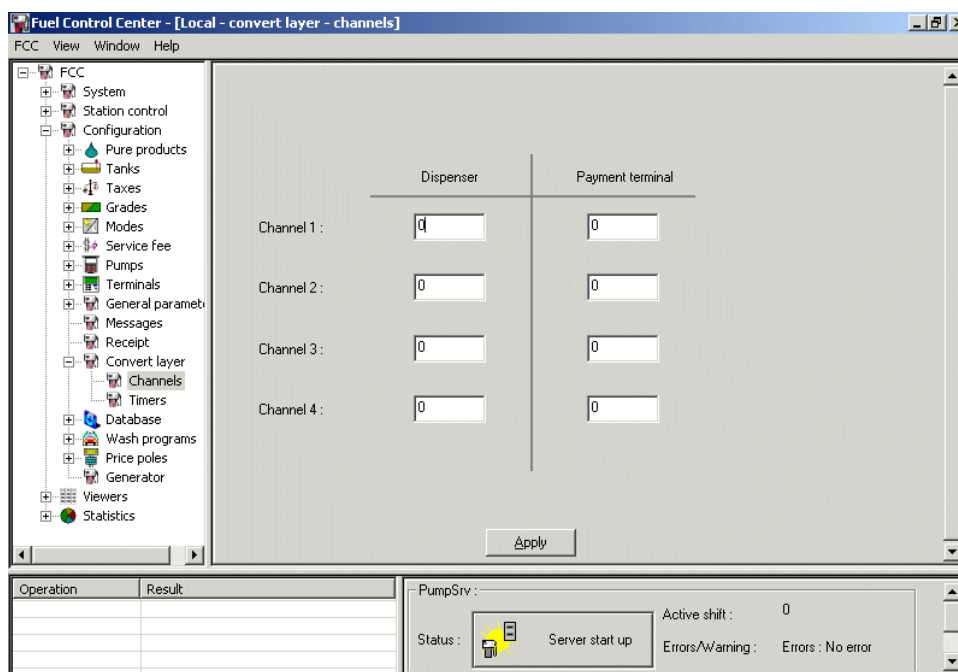
Fields	Description
Allied	When selected, indicates that the first receipt that is printed at the Pump is formatted by Allied, in the standard Allied format. This format includes the variants that always appear on receipts, e.g., Receipt Number, Pump Number, Grade Type, etc. Note: Once this radio button 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 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. - 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 <i>Allied</i> and <i>PumpSrv</i>, above.)
Connection area:	
Baud	Indicates communication speed between the convert layer and the Allied box.
Com Port	Indicates communication port number between the convert layer and the Allied box.
Log area:	
Log 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:	
Cash Amount Limit	Indicates the maximum cash amount accepted by the Cash Acceptor per transaction.
Cash 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.
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 <i>Configuration/Grades</i> . 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

Fields	Description
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	Indicates type of encryption for PINs (Personal Identity Number). Select an option from the drop-down list:
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.
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:
Company Code	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.

Fields	Description
Transaction Seed	A parameter used to maintain synchronization with the site controller.
Slow Down Offset (Liter)	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, <i>PumpSrv</i> requests a status update from the pump, during fuelling.
Forecourt Preset Mode	If checked, indicates that the Customer or Attendant is prompted to enter a Preset Amount at the pump terminal keyboard.
DPT Operation Mode	Indicates that the Payment terminal is integrated into the fueling point.

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

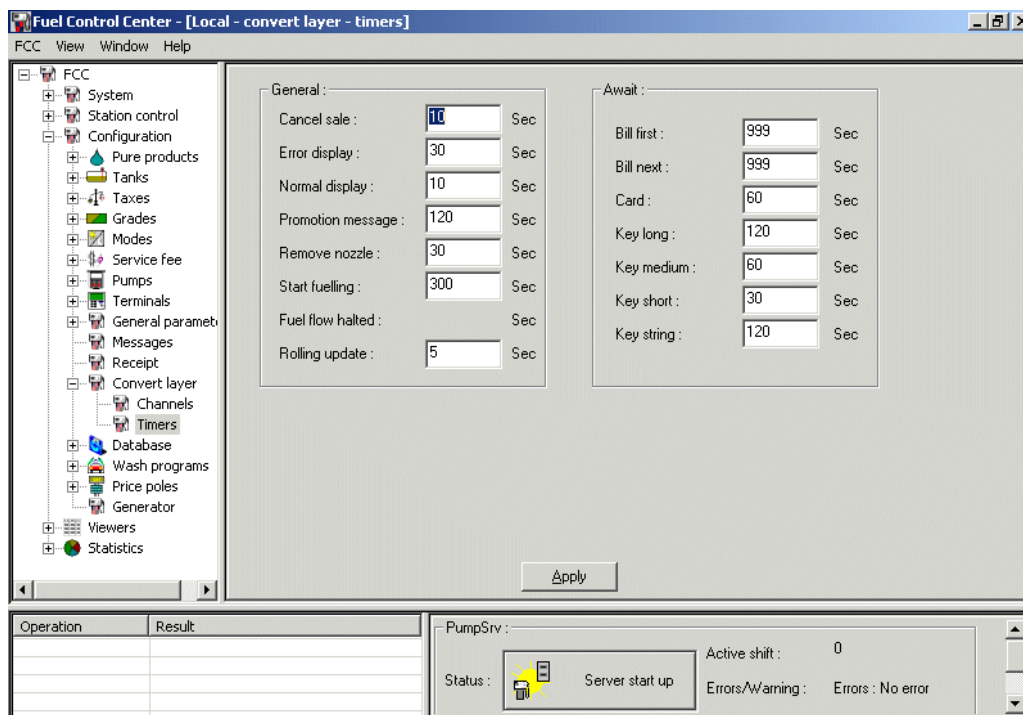


- Enter the required information in the fields as described in the table below:

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.

Fields	Description
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.

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



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

Fields	Description
Timers (seconds) area:	
Cancel Sale	Indicates how long the payment terminal displays a cancellation

Fields	Description
	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.
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, <i>PumpSrv</i> requests a status update from the pump, during fuelling.
Timer 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 .

Fields	Description
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.

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.

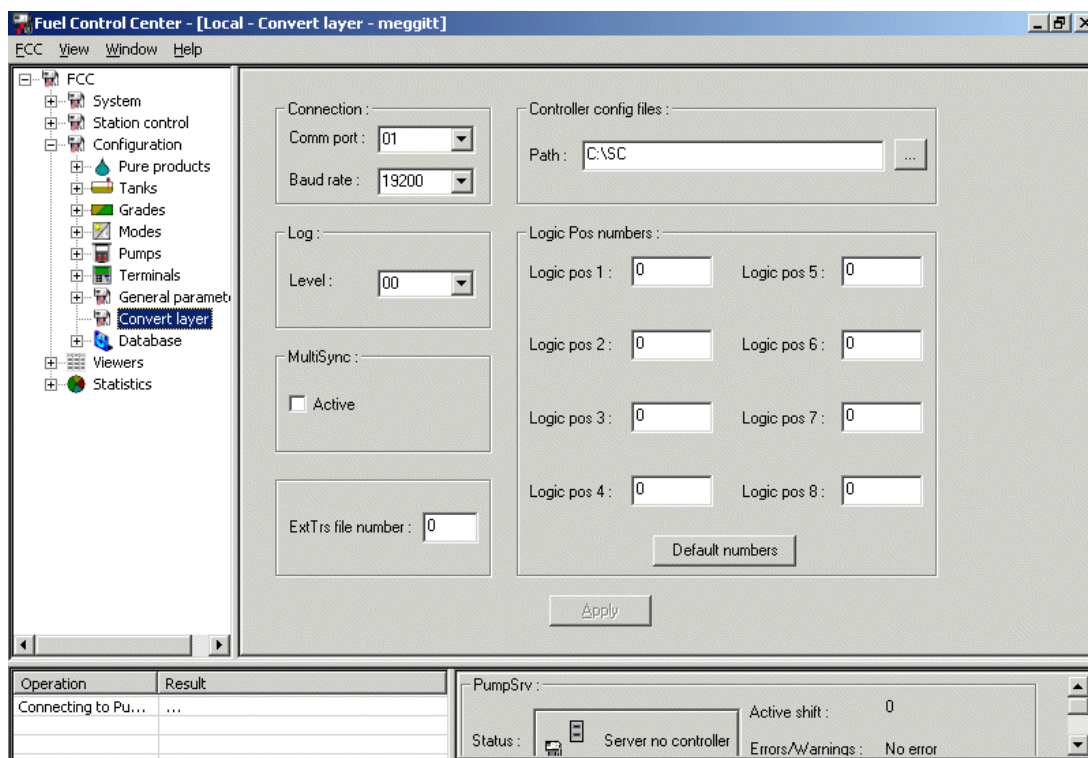
If your controller uses a *Meggitt Convert Layer*, configure the *Convert Layer* as explained below.

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 <i>PumpSrv</i> 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*.

Fields	Description
Controller config files area:	
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 <i>Meggitt Convert Layer</i> 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:

- 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.
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.

Fields	Description
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: Master/Session DUKPT MLKH (Canadian Debit) Wayne Encryption (20 bit)
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 entered when the system request a Pin number to validate a credit card. ⁴
Add service fee to preset on credit transaction	If checked, indicates that a service fee is automatically added to credit transactions.
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.	
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.
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.
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.

Fields	Description
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.
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.
Write Transactions Log	If checked, all transactions are written to a transaction log file, including all the details, e.g., date, time, value, etc.
Allow Terminal Switch on Idle Pump Only	If checked, indicates that you may only switch from one terminal to another when the pump is idle. This functionality is required when you have more than one pump per terminal, and you need to switch between pumps. The pump must be idle before switching.
Hold Pump totals 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.
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 you 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.
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 <i>Unsolicited Message Encoding Validation</i> field is then referred to.

Fields	Description
AVI area:	
AVI 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 <i>PumpSrv</i> 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.
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 <i>AVI Conflict Volume Limit</i> 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, <i>PumpSrv</i> 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:	
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.
Pay at pump area:	

Fields	Description
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.
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.
Print Receipt for Zero Transaction	If checked, indicates that even if the transaction had a zero value, the receipt is printed.
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 <i>TankSrv</i> component is active.
Reconciliation active	If <i>TankSrv</i> is active, and this field is checked, all information from the tanks will be reconciled by <i>TankSrv</i> , using the reconciliation method. This parameter should always be checked active.

- 4 Click *Apply* to save.

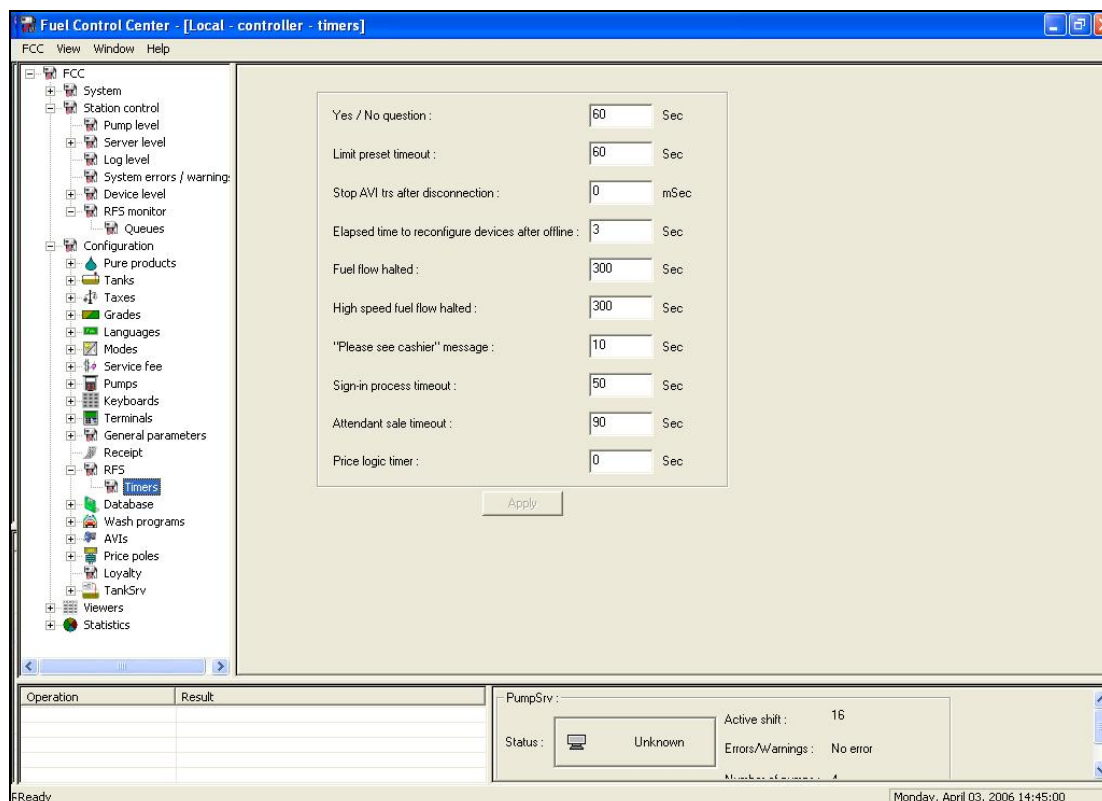
- Click *Validation Check* to check for any errors. The results are displayed in the bottom-pane of the dialog.

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.

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



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

Fields	Description
Timers area:	
Yes/No question	Indicates how long, in seconds, the system waits for the customer to respond to a Yes/No question(s) at the terminal.
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.

Fields	Description
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.
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.
Please See Cashier Message	Indicates how long, in seconds, the system displays the message "Please See Cashier" if the fuel flow is halted.
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.

3 Click *Apply* to save.

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

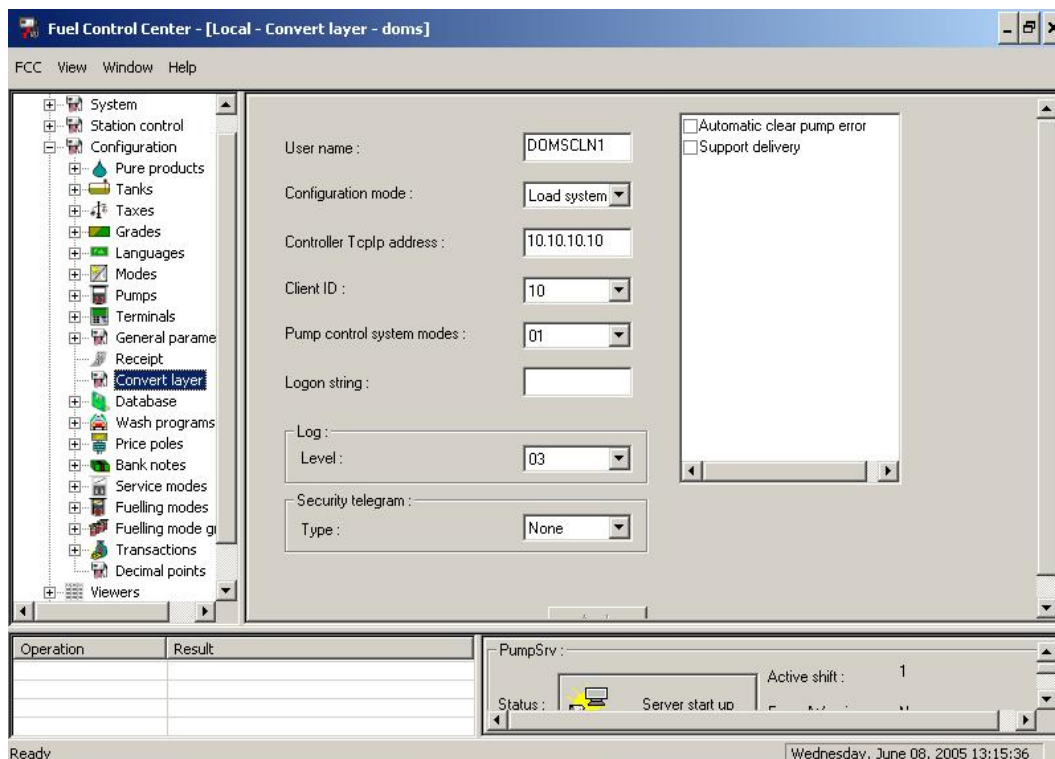
Configuring the Doms Convert Layer

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.
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 <i>PumpSrv</i> configuration settings are downloaded to <i>Doms</i>. Down load PumpSrv configuration to controller – if selected, indicates that when the system loads, there is no need to perform

Fields	Description
	a master reset, and <i>PumpSrv</i> 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 <i>Doms</i> 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 <i>Mode Schemes</i> 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 <i>PumpSrv</i> 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.
Automatic Clear Pump Error	If checked, indicates that pump errors will be automatically 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.

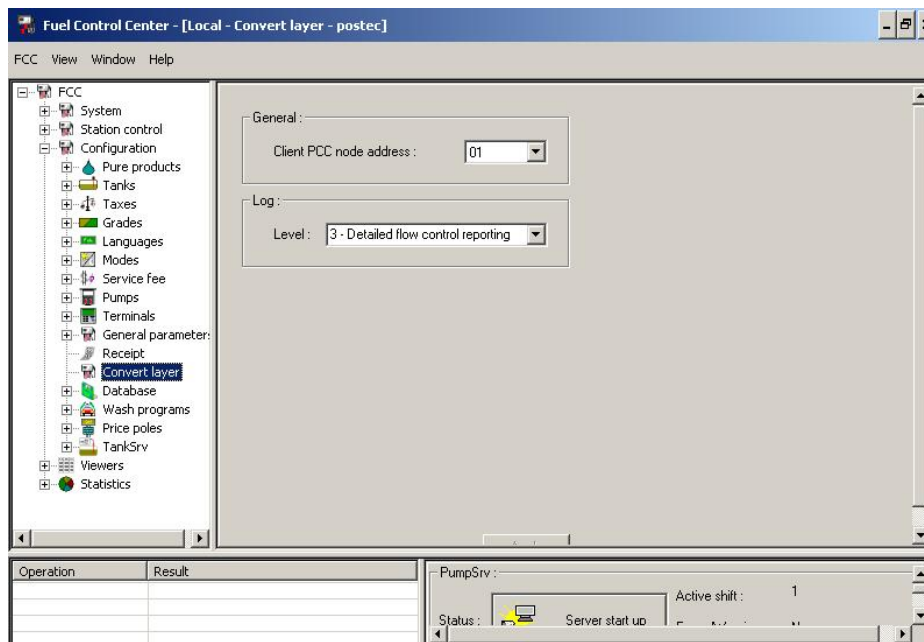
Note:

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.

- 4 Click *Apply* to save.
The *Postec 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: _____

☐

Roseman AVI

Comm Port: _____

Cable Name: _____

☒

Orpak VIT

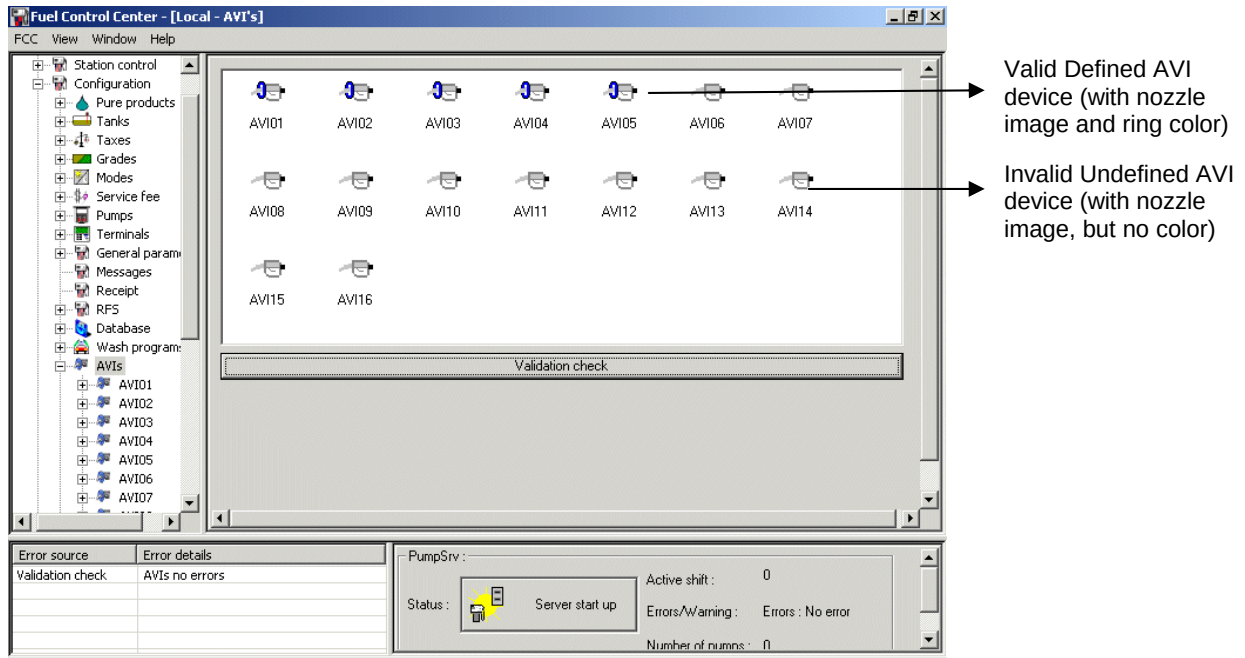
Low-Level Protocol: _____

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:

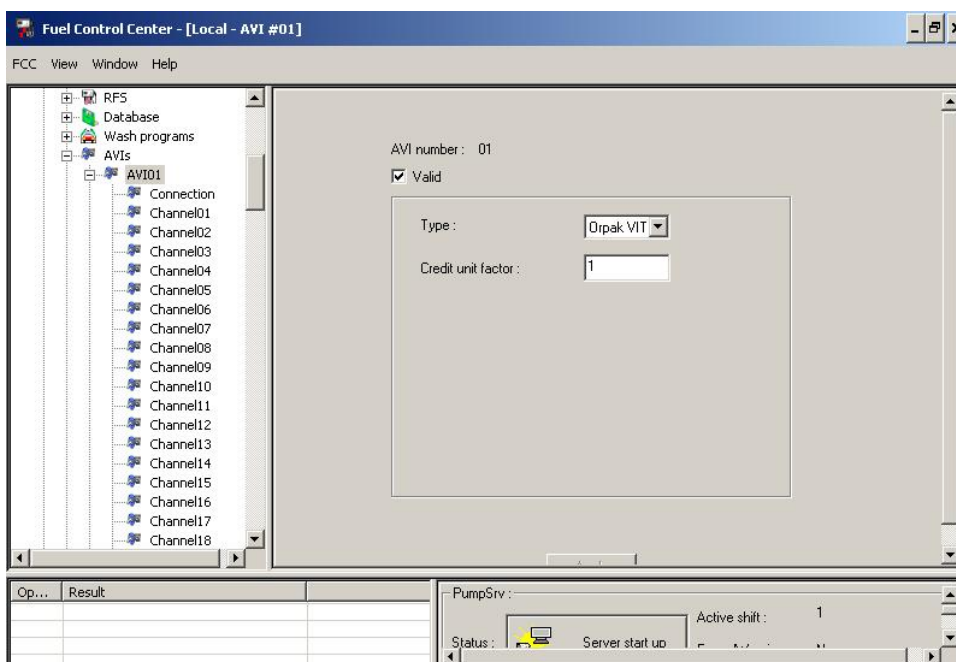


- 2 Click *Validation Check* to ensure there are no AVI system errors. The status is displayed in the bottom-pane of the dialog as shown above.

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 <i>PumpSrv</i> .
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.

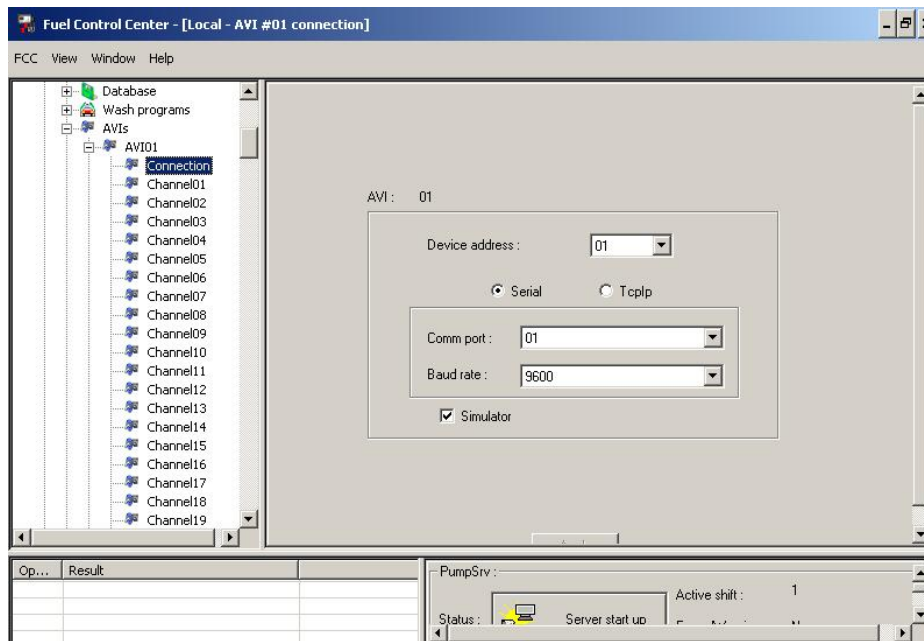
- 3 Click *Apply* to save.

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 <i>PumpSrv</i> .
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.
Port	Enter the Connection Port number for communication with the AVI dispensers.
IP Address	Enter the relevant IP Address.
Simulator	If checked, indicates AVI device is used with a software pump simulator.
Proceed to define the <i>Channels</i> .	

Channels

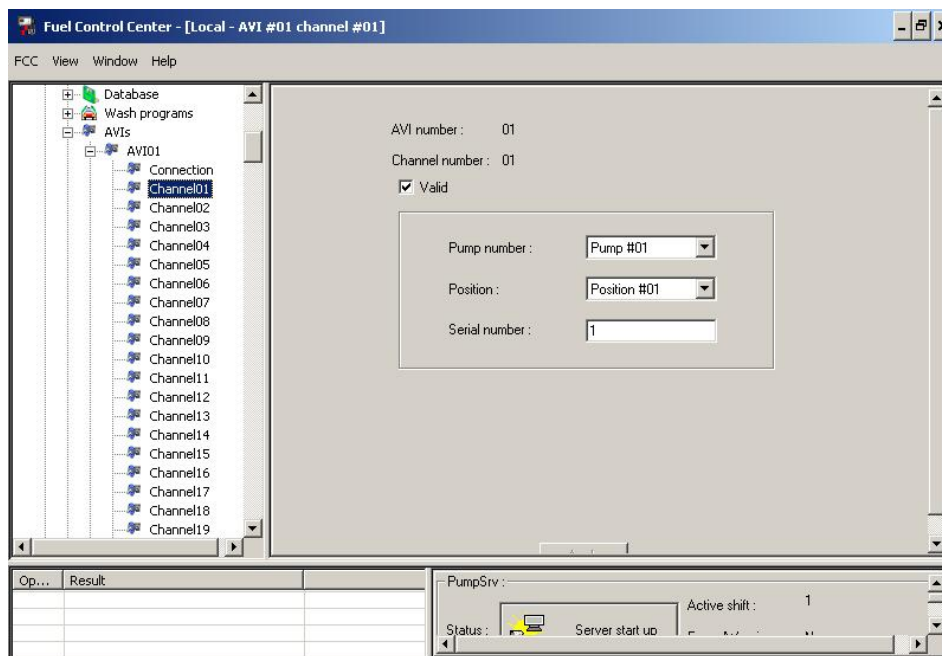
A Channel (also referred to as a Ring) is a magnetic receiver located on a nozzle. As the nozzle makes contact with the AVI device, information about the vehicle and the transaction is transmitted. A Channel enables the device to detect which Pump number, and in which position in the Pump it is located.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

Fields	Description
	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.

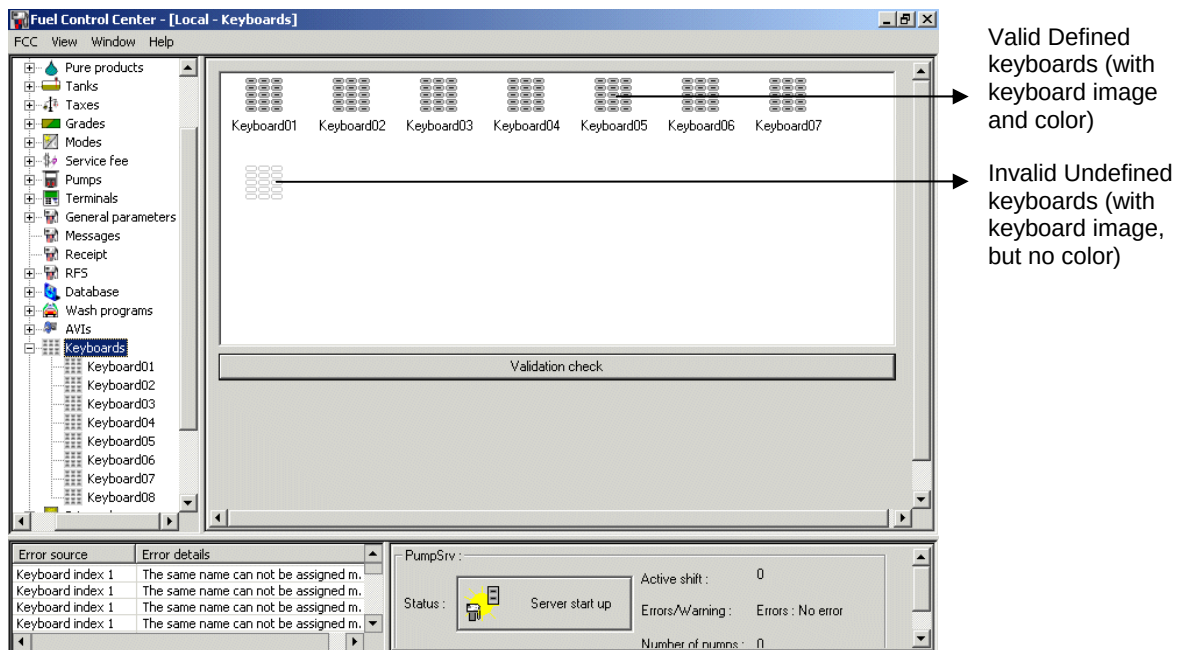
Keyboards

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.

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:

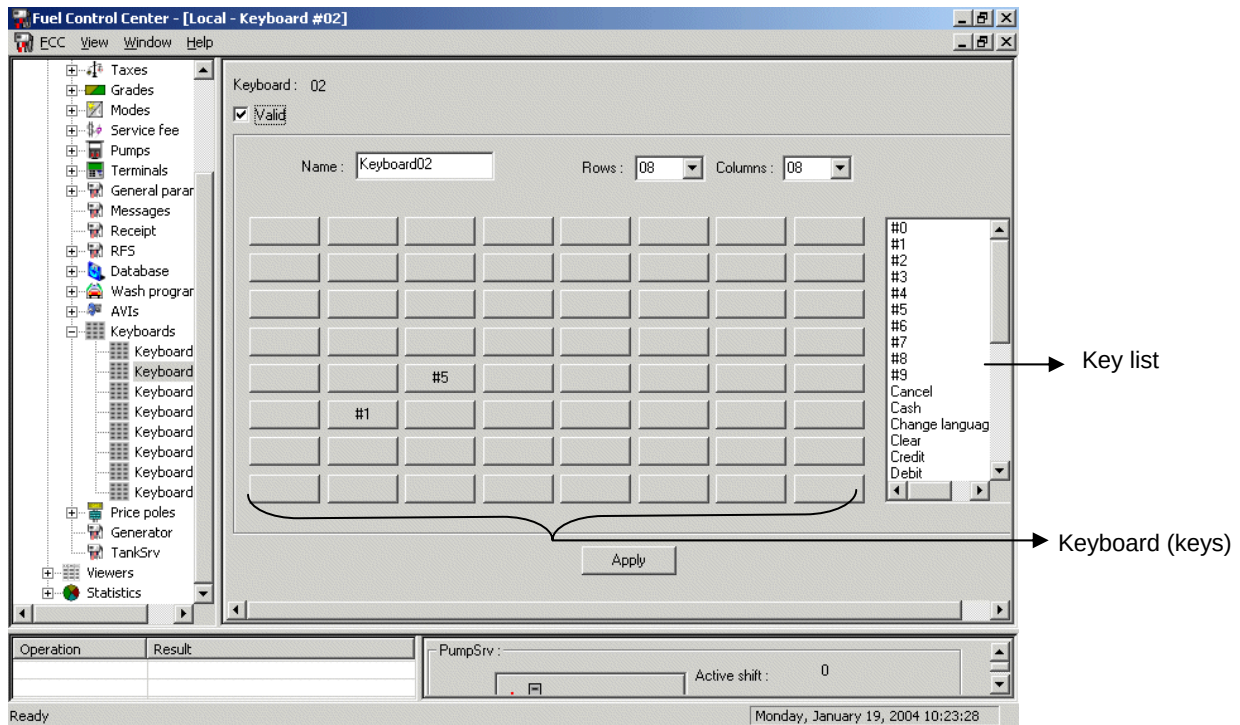


- 4 Click *Validation Check* to ensure that there are no keyboards with system errors. The status is displayed in the bottom-pane of the dialog as shown above.

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 <i>PumpSrv</i> .
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.

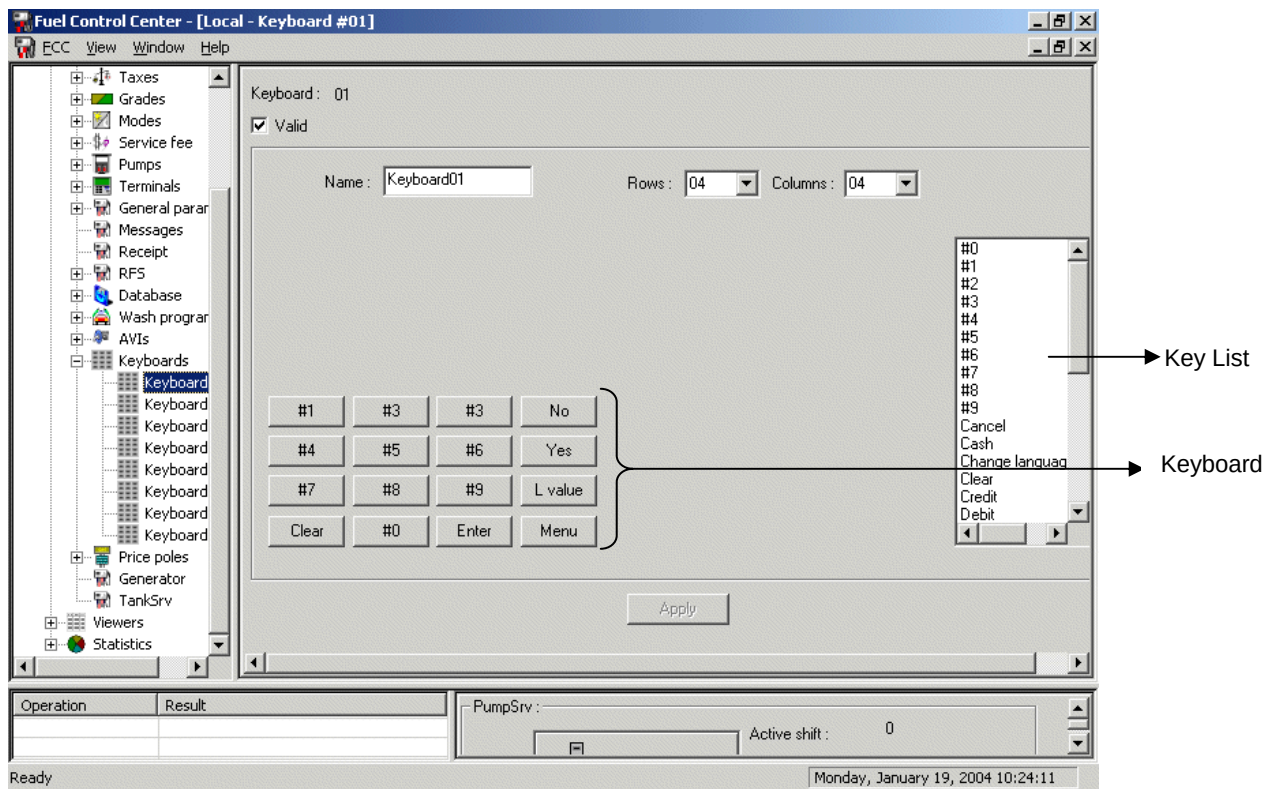
- 3 Click *Apply* to save.
- 4 From the *FCC Tree*, click *Keyboards* to display all the keyboard types defined in the system.

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 according to the keyboard device.
- 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, or Cash.
- 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:



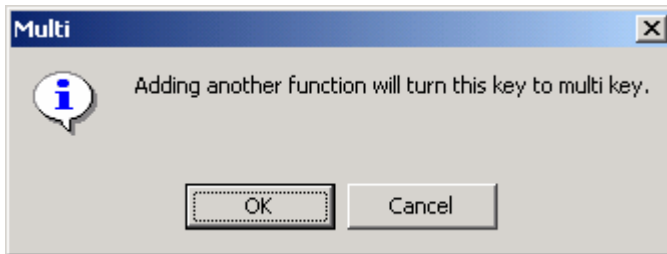
Notes:

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*.

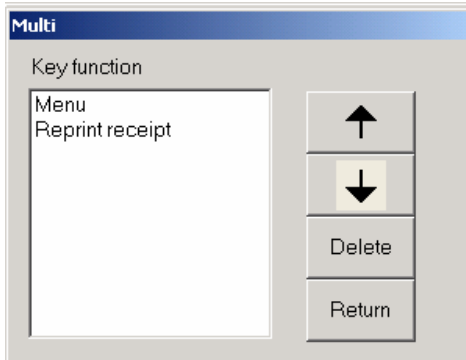
You have defined the Keyboard with a single layer keypad. See *To Define a Multi Layers Keyboard*, below.

➤ **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

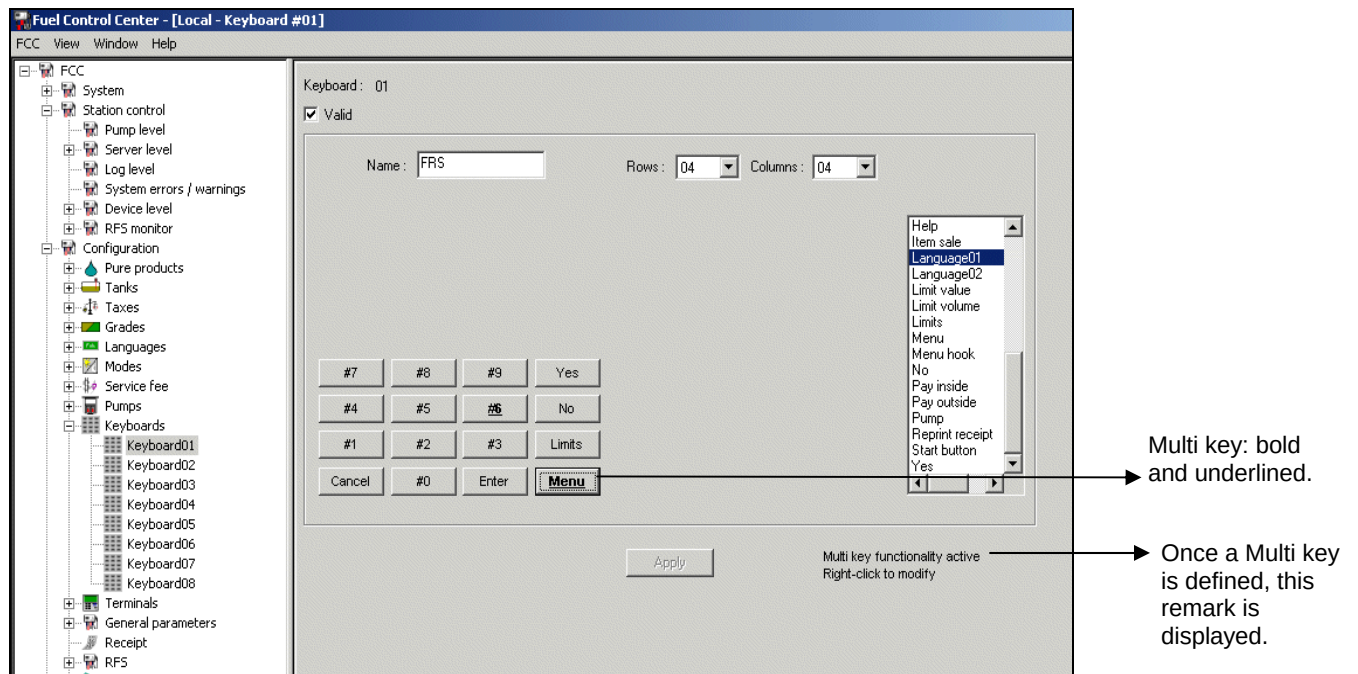
Select the function you are reverting and click *Return*. . If you have many key functions, use the down arrow  or up arrow  to navigate through the functions. On selecting *Delete* or *Return*, the dialog is closed.

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:



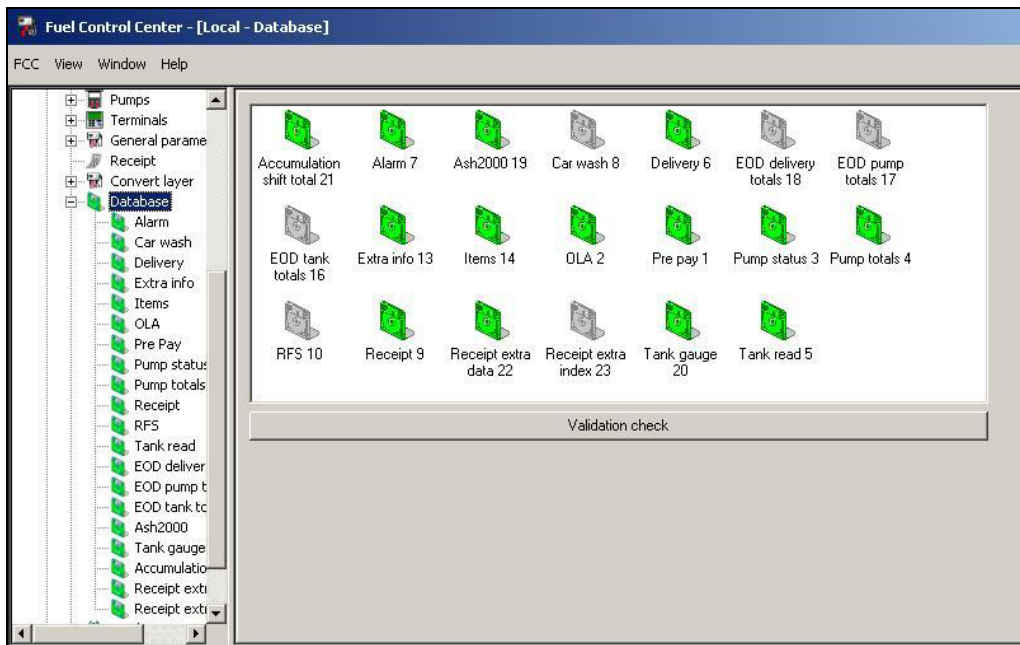
You have defined Keyboards. Continue to configure the *Database*.

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:

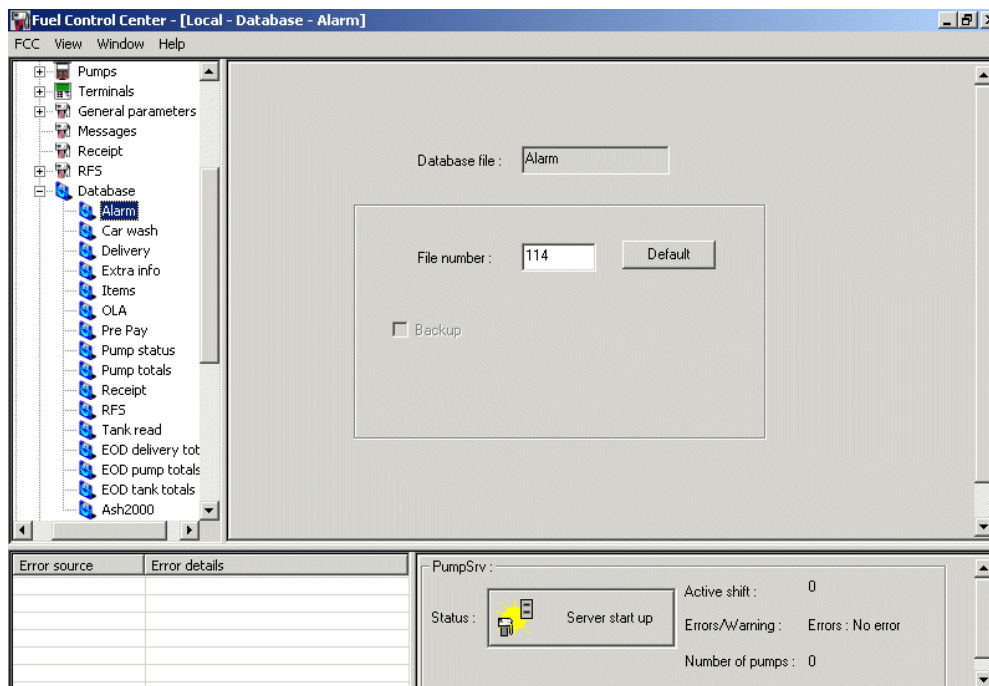
- 1 From the *FCC Tree*, click *Configuration*, the *Configuration* menu opens.
- 2 Click the *Database* menu, and then expand the *Database* menu on the *FCC Tree*. The *Database* dialog window opens displaying all the databases graphically:



There are 15 QDX Files, listed on the *FCC Tree*:

- Alarm
- Car Wash
- Delivery
- Extra Info
- Items
- OLA
- Pre Pay
- Pump Status
- Accumulate Shift Total
- Receipt Extra Data
- Pump Totals
- Receipt
- RFS
- Tank Read
- EOD Delivery
- EOD Pump Totals
- EOD Tank Totals
- Ash2000
- Tank Gauge
- Receipt Extra Index

- 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 <i>Default</i> and select the required Fuel environment from the drop-down menu. The default <i>PumpSrv</i> database file numbers for the selected environment is displayed.
Backup	If checked, the MultiSync backup system for <i>PumpSrv</i> is enabled.

Note:

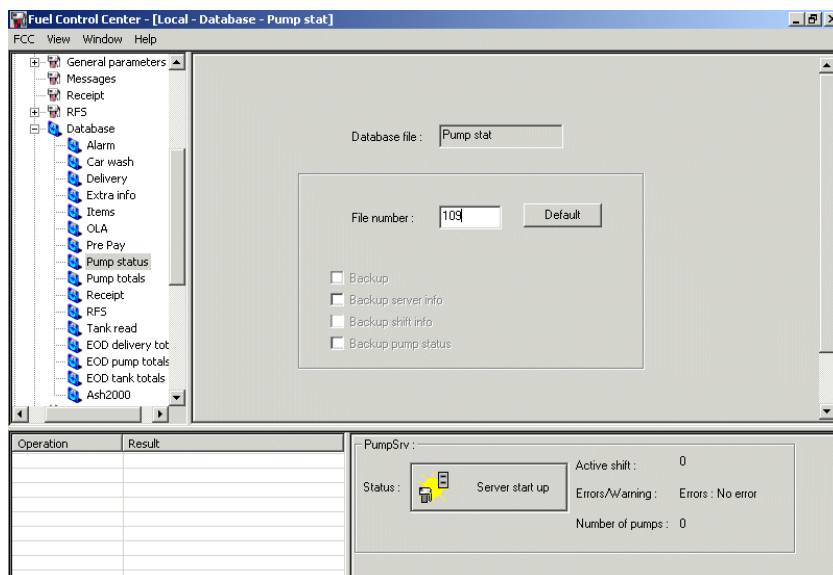
MultiSync is a backup system for *PumpSrv*. The MultiSync utility is described in the *MultiSync Control Center Administrator's Guide*.

- 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 <i>Default</i> and select the required Fuel environment from the drop-down menu. The default <i>PumpSrv</i> 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 <i>PumpSrv</i> is enabled.
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:

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

Note:

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

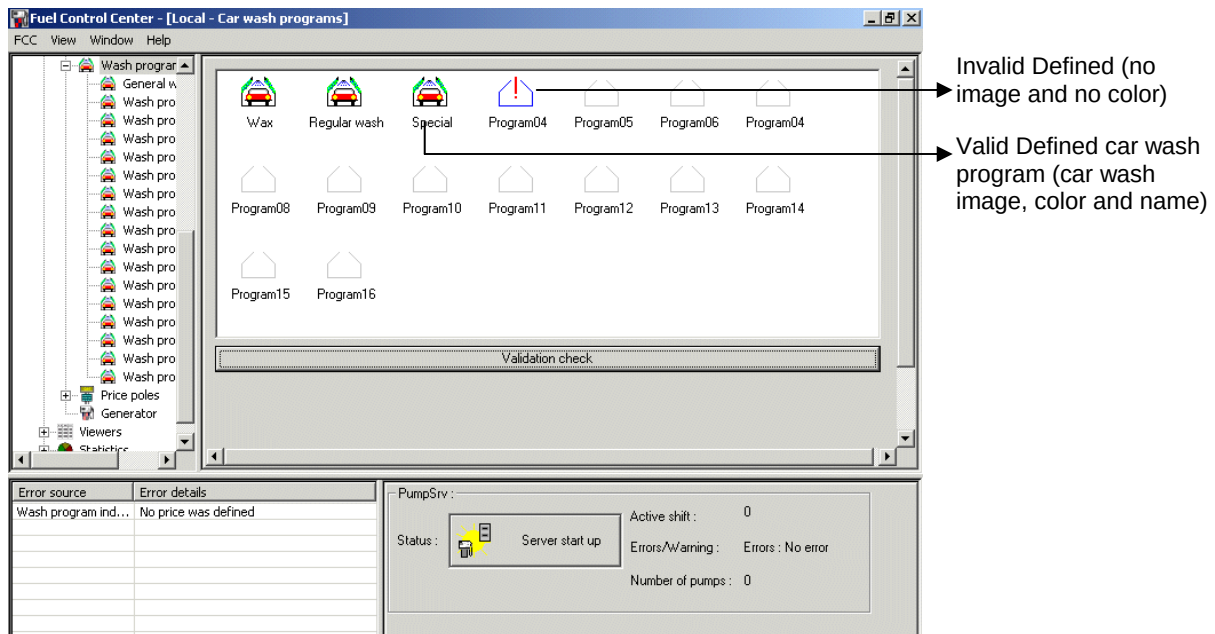
- 8 Click *Apply* to save.
The Database is defined. Continue to configure the Car Wash.

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.

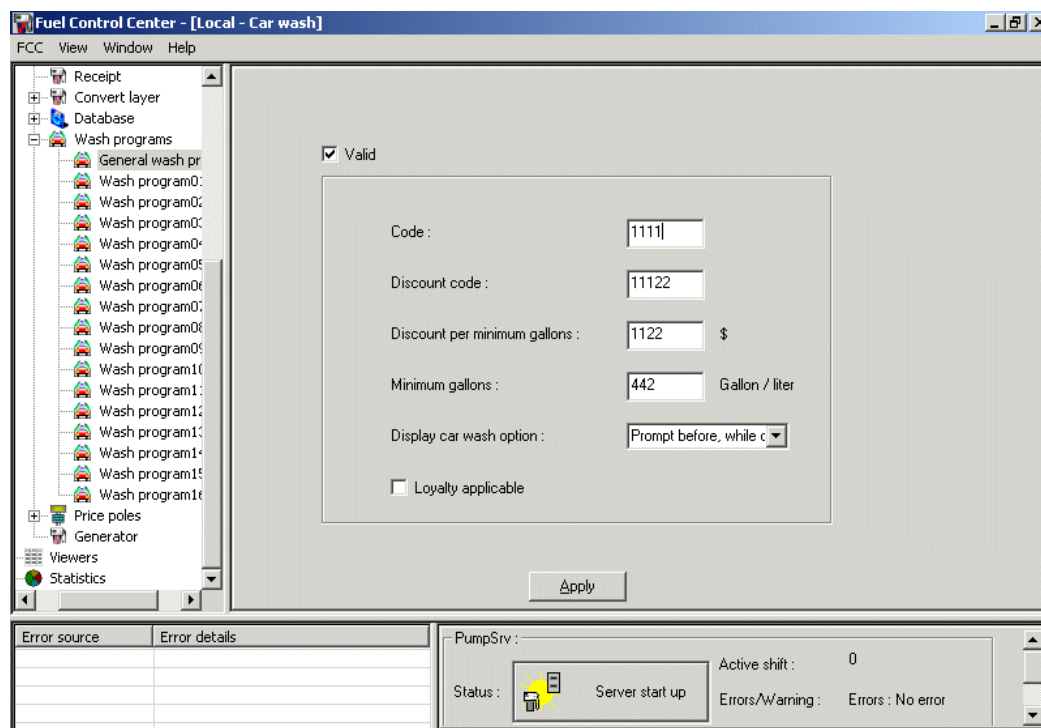
You may define up to 16 different Wash Programs.

➤ **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
Car Wash Code	Code of car wash program.
Discount Code	Code of discount.
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.
Type	Manufactures name for the Wash Program.
Comm Port	Indicates the communication port number. Select the required number from the drop-down list.
Baud Rate	Indicates communication speed. Select from the drop-down list the relevant Baud rate.
IP Address	Enter the relevant IP Address.
Simulator	If checked, indicates the Wash Programs device is used with a Fuel simulator.

- 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:

The screenshot shows the 'Fuel Control Center - [Local - Wash program #01]' window. On the left is the 'FCC Tree' with a tree view containing 'Receipt', 'Convert layer', 'Database', 'Wash programs' (expanded), 'Price poles', 'Generator', 'Viewers', and 'Statistics'. Under 'Wash programs', there are several 'Wash program0:' and 'Wash program1:' icons. The main area is the 'Wash Program' dialog for 'Car wash program : 01'. It has a 'Valid' checkbox which is checked. Below it are input fields: 'Name : Wax', 'Price : 44.000 \$', and 'Product code : 01'. A 'Tax' section contains three checkboxes: 'Tax Rate 1', 'Tax Rate 2', and 'Tax Rate 3', all of which are unchecked. An 'Apply' button is at the bottom of the dialog. At the very bottom of the window, there is a status bar with 'Error source', 'Error details', 'PumpSrv :', 'Status :', 'Server start up', 'Active shift : 0', and 'Errors/Warning : Errors : No error'.

- 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.
Tax Rate	Rate of applicable tax.
Product Code	Code of Car Wash Program as appears at PoS terminal. Select from the drop-down list.

- 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

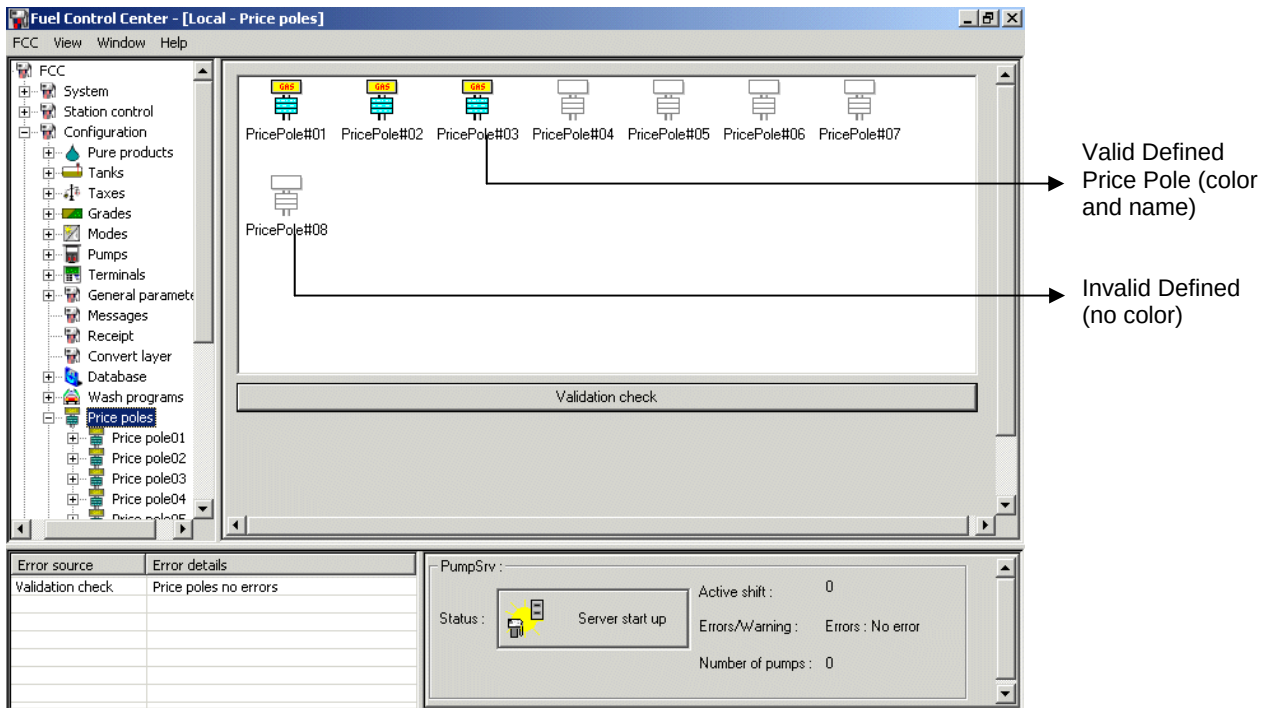
The *Price Poles* menu enables you to configure the Price Poles option, if it is supported by the system. Price Poles are electronic signs that display the current fuel prices of selected products and service prices, at the entrances of a fuel site, which drivers can view from the road. Each Price Pole 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 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.

➤ 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*:

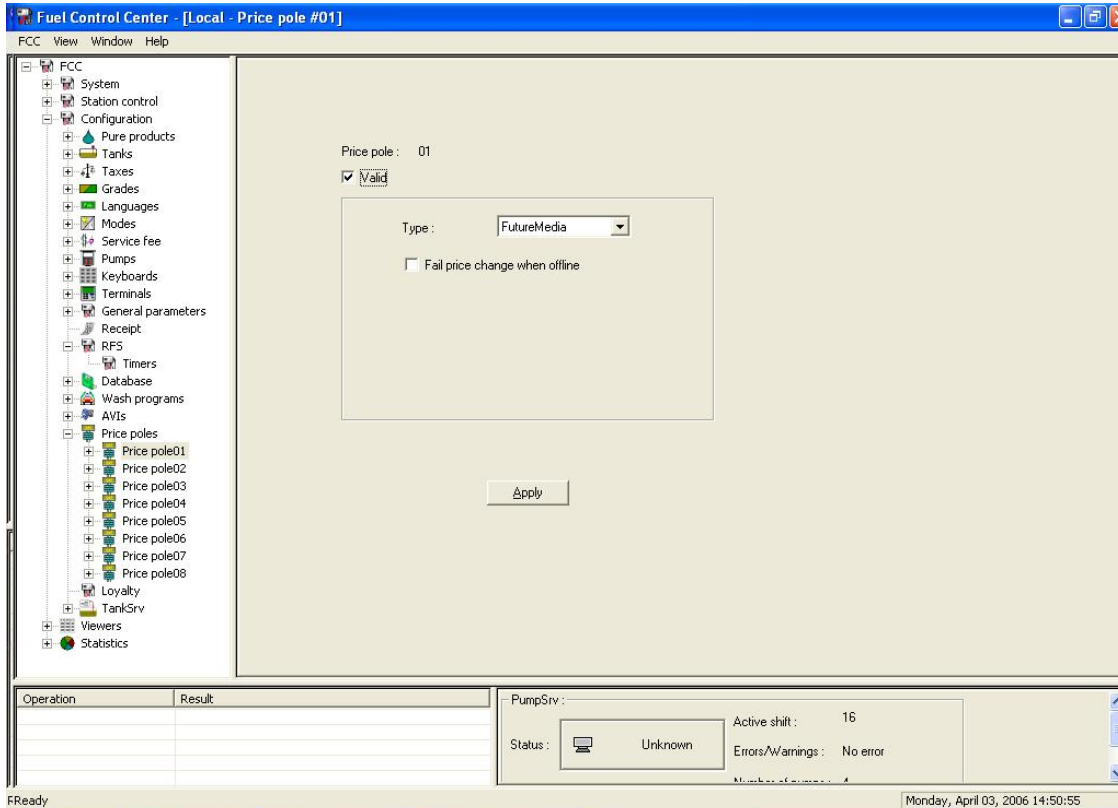


- 2 Click *Validation Check* to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

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:



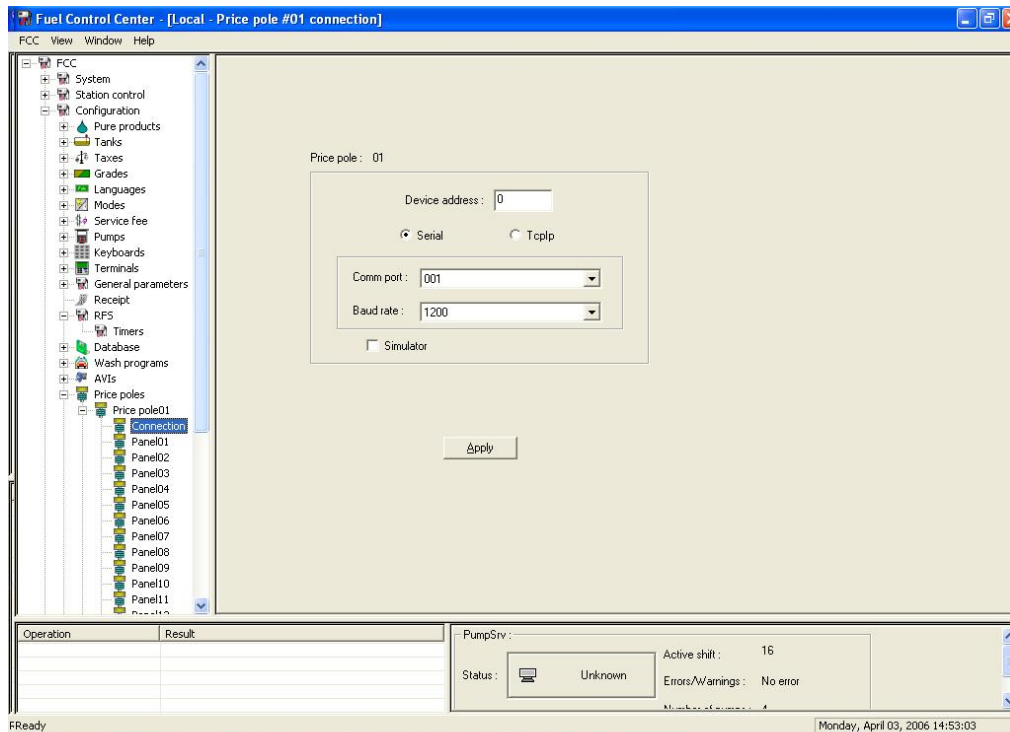
You may view the properties of each *Price Pole* by selecting the *Price Pole* number from the *FCC Tree*. You may move from one *Price Pole* to the next and apply the changes as necessary. The *Price Pole* number is an internal code number of *Price Poles* as used in *PumpSrv*.

- 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 Select the **Fail Price Change When Offline** to indicate that if there is a problem with the *Price Sign*, the manager can still download the new prices to the *Pumps*.

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*.

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



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

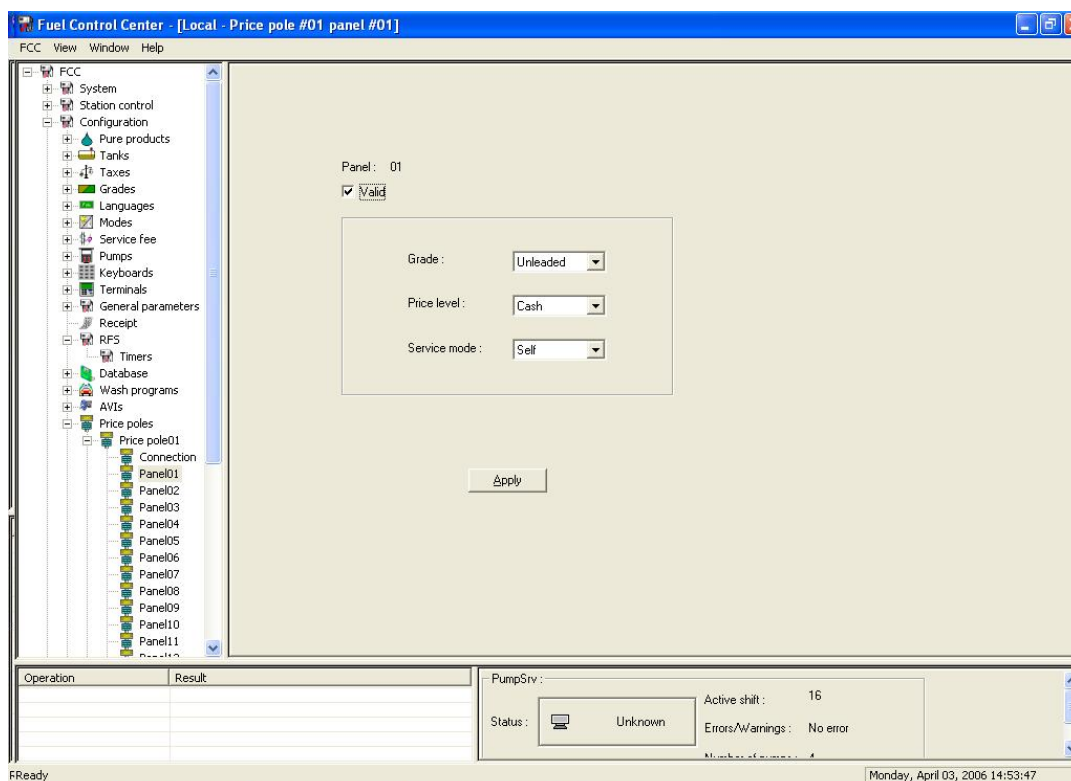
Fields	Description
Device Address	Select the required device address from the drop-down list. This is a unique numeric address predefined for each Price Pole.
Serial	Select this radio button if your system uses a serial system to connect between the servers and price poles, and then proceed to select 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.
Com 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.

- 8 Click *Apply* to save.

- 9 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 <i>PumpSrv</i> .
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.

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.

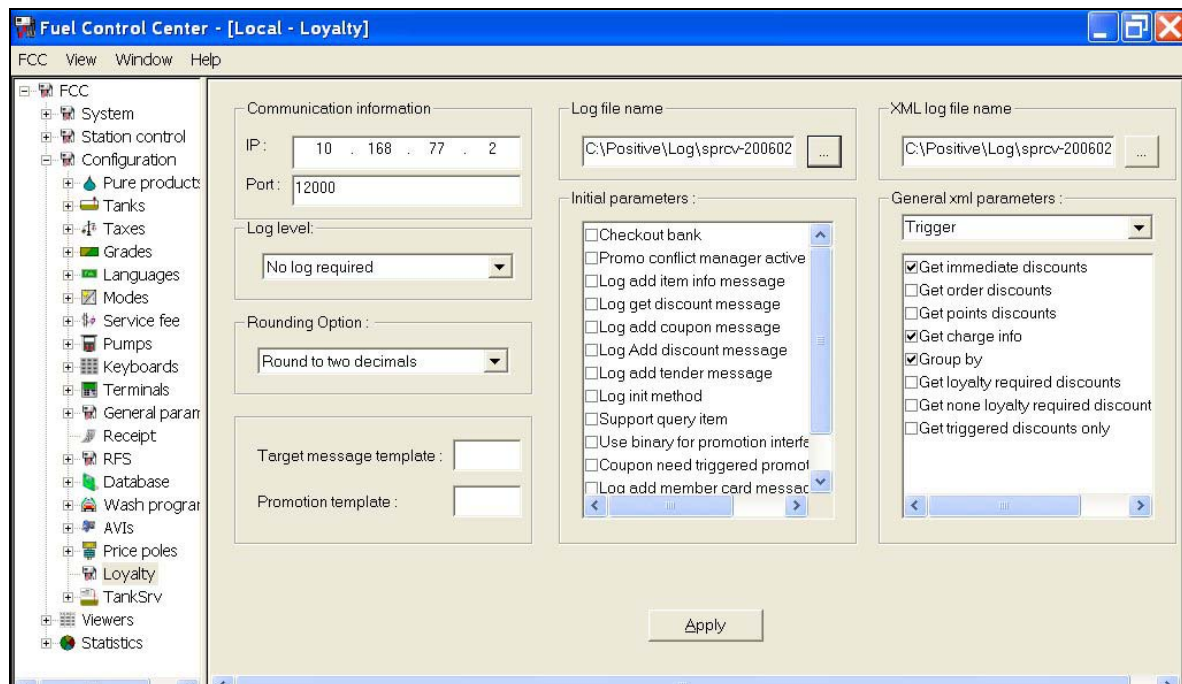
The Loyalty option enables you to define the Loyalty settings when connecting the PromSrv to the system.

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
Communication Information area:	
IP	Enter the relevant IP Address.
Port	Enter the Connection Port number for communication with the promotion server.

Fields	Description
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.
Log File Name	Click  , and browse to the path where the log file 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.

Fields	Description
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.
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.
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.

Fields	Description
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 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.

TankSrv

TankSrv is a COM server that connects between the different clients, and a Tank Gauge. Currently it only supports the *RFS*. 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: _____
 → → → Parity: _____
 Model: TCS-350R → → →

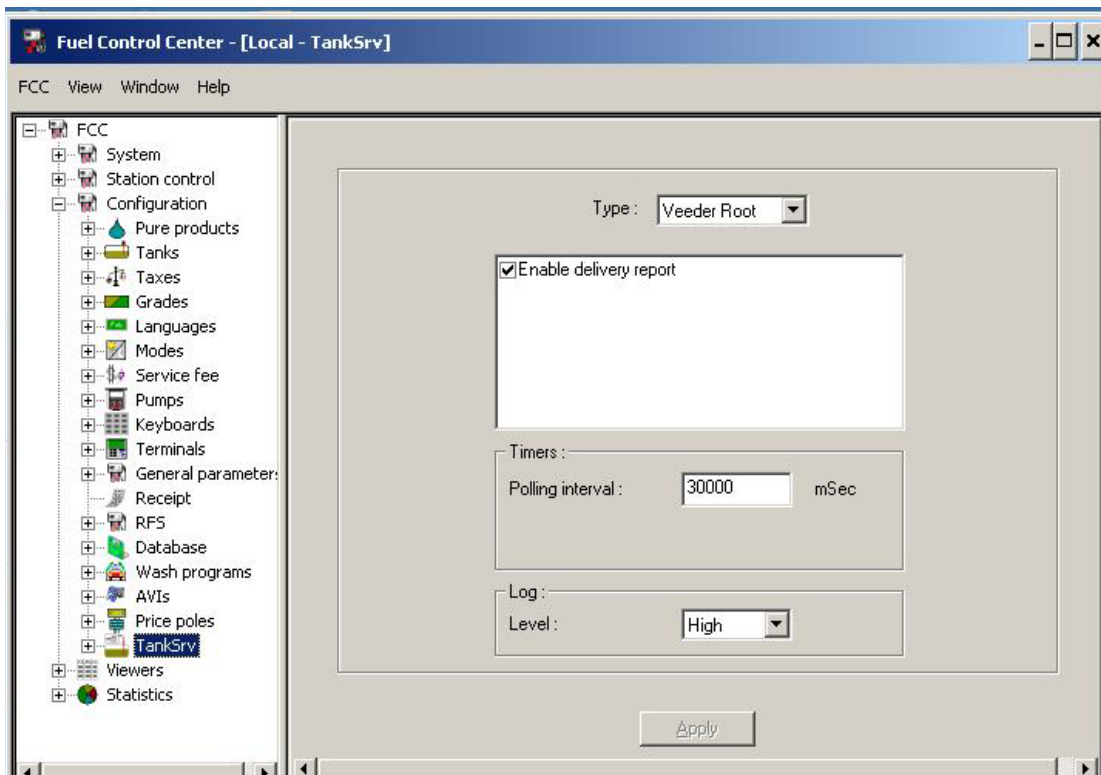
Tank No.:	Product:
1	Diesel
2	Premium Unleaded

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:



- 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 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.
 - 5 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
 - None – indicates that only the minimum amount of detail is kept in the log.
 - 6 Click *Apply* to save the details.
- Continue to define the Connection between *TankSrv* and the *FCC*.

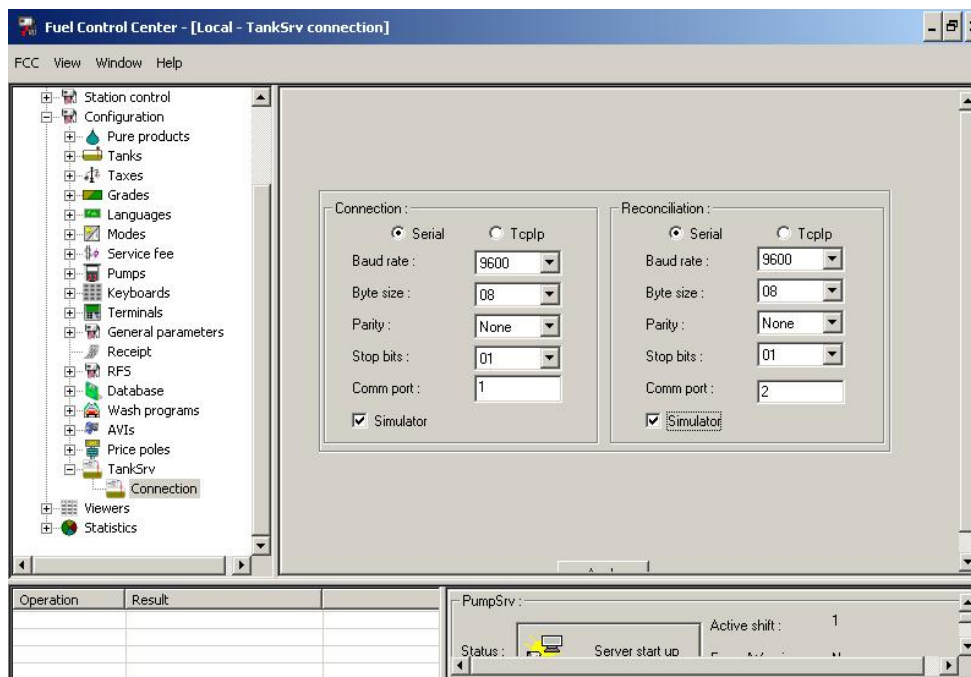
Connection

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 comm. Port to connect between TankSrv and the tank guage, 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.

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*.

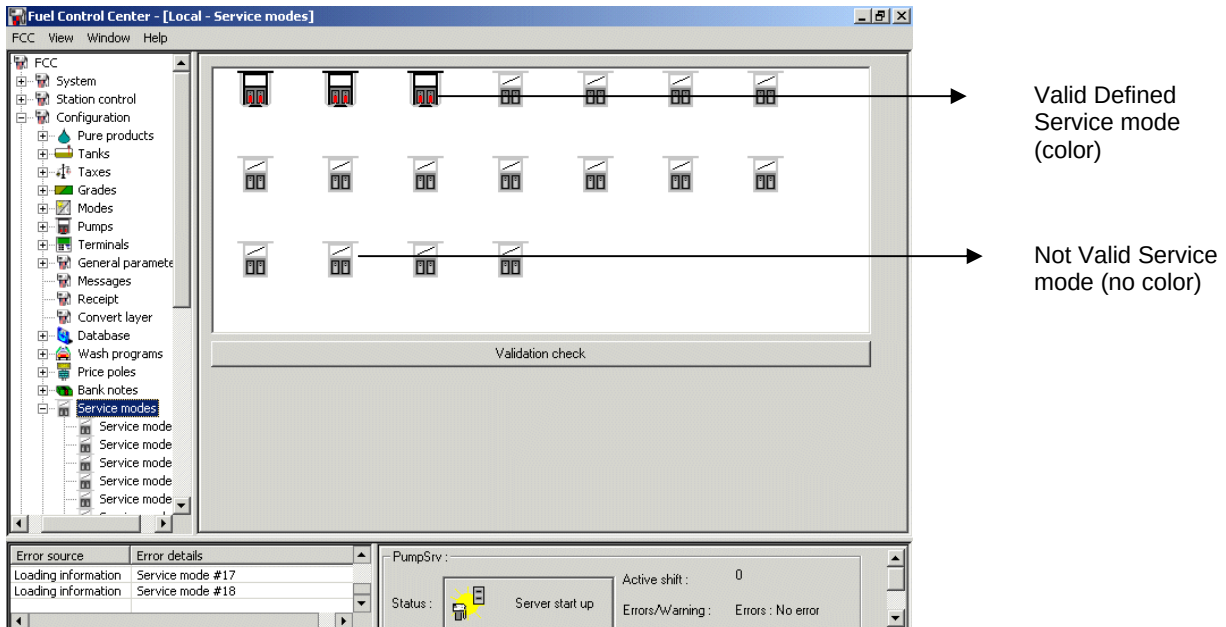
The *Service Modes* menu enables you to define the Service Mode types for the different payment methods. From the Service Mode type, the payment method may be determined. For example, you may define the Service Modes called PAK and PrePay as the active service modes in the pumps. You must define a Service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

Note:

Service Modes apply only to systems using the *Doms Convert Layer*. Systems using the *Allied*, *RFS* or *Meggitt Convert 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 <i>PumpSrv</i> .
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 <i>PumpSrv</i> .
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 <i>Service Mode</i> is the active <i>Service Mode</i> , the fuelling point will be automatically authorized when the <i>Service Mode</i> 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

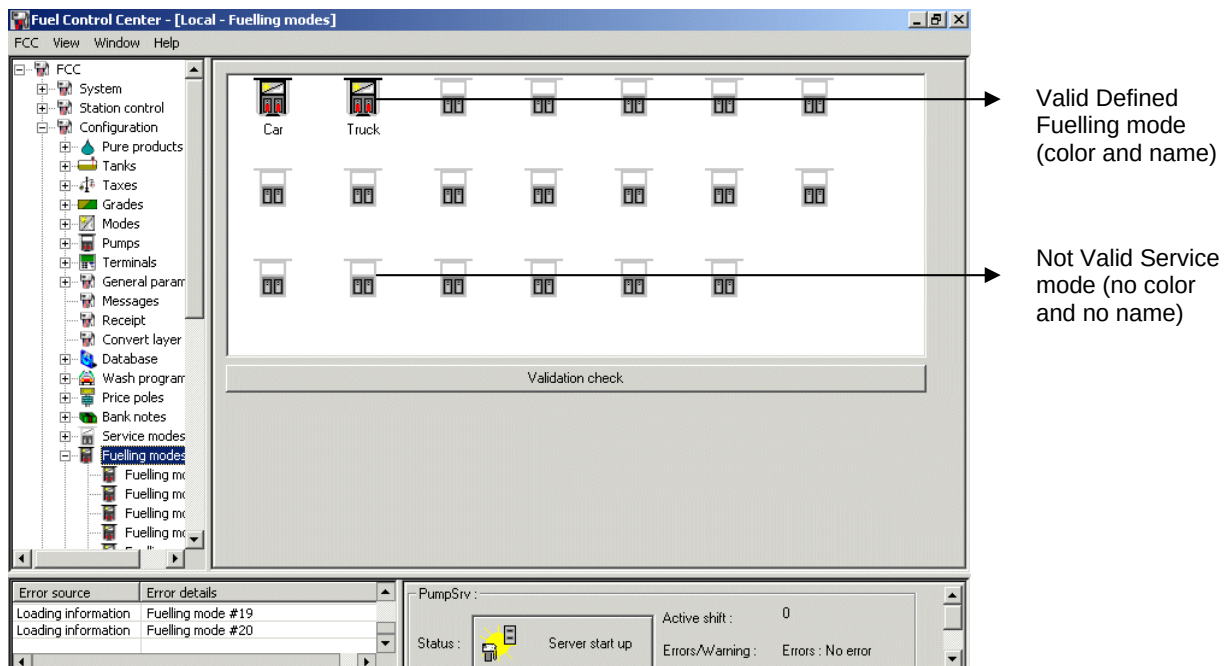
The *Fuelling Mode* is one of the dispense controller parameters, which provide the services needed to control fuelling. This option enables you to define the *Fuelling Modes* for each environment. For example, you may define different *Fuelling Modes* for Cars, Trucks, Buses, etc.

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 <i>Fuelling Mode</i> as used in <i>PumpSrv</i> .
Valid	If checked, indicates the <i>Fuelling Mode</i> is valid in the system.
Name	Enter a name for the <i>Fuelling Mode</i> . E.g., Car, Truck, etc.
Special Pump Type	Enter the pump number if for this <i>Fuelling Mode</i> 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

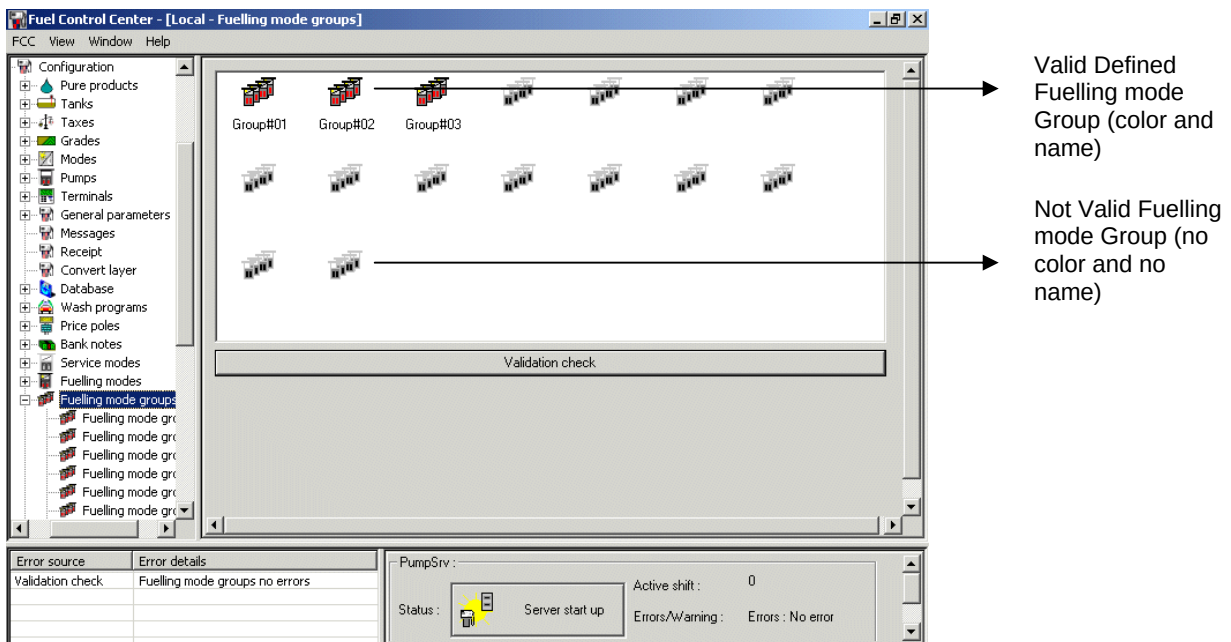
The *Fuelling Mode Groups* menu enables you to configure a set of rules for each *Fuelling Mode*. Every *Fuelling Mode Group* must be linked to a *Fuelling Mode*. For example, you can define a *Fuelling Mode Group* called “Daily Mode” which can be linked to Cars that fuel with Grade type 91 and 95, and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

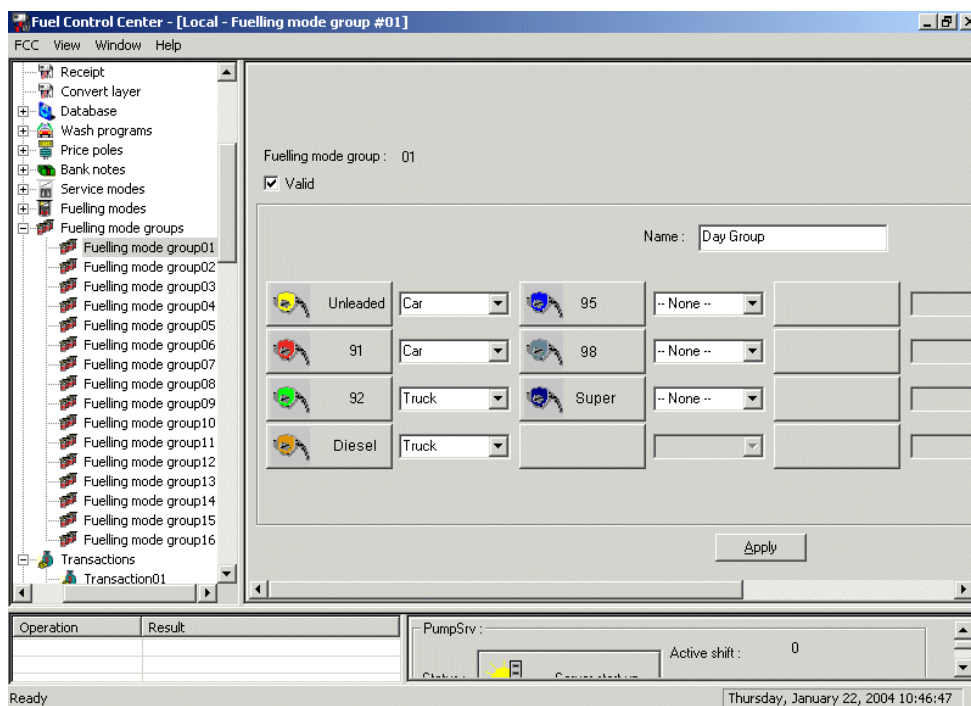


- 2 Click *Validation Check* to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

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 *Configuration: Fuelling Mode* 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 <i>PumpSrv</i> .
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.
Unleaded, 91, 92, 98, etc.	Select the <i>Fuelling Mode</i> from the drop-down list, if you would like to attach the <i>Fuelling Mode</i> to this <i>Fuelling Mode Group</i> . For example, next to the Unleaded grade icon, select Car from the drop-down list. This indicates that Cars belong to the <i>Fuelling Mode Group</i> "Daily Mode", and can fuel with Unleaded fuel.

- 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.

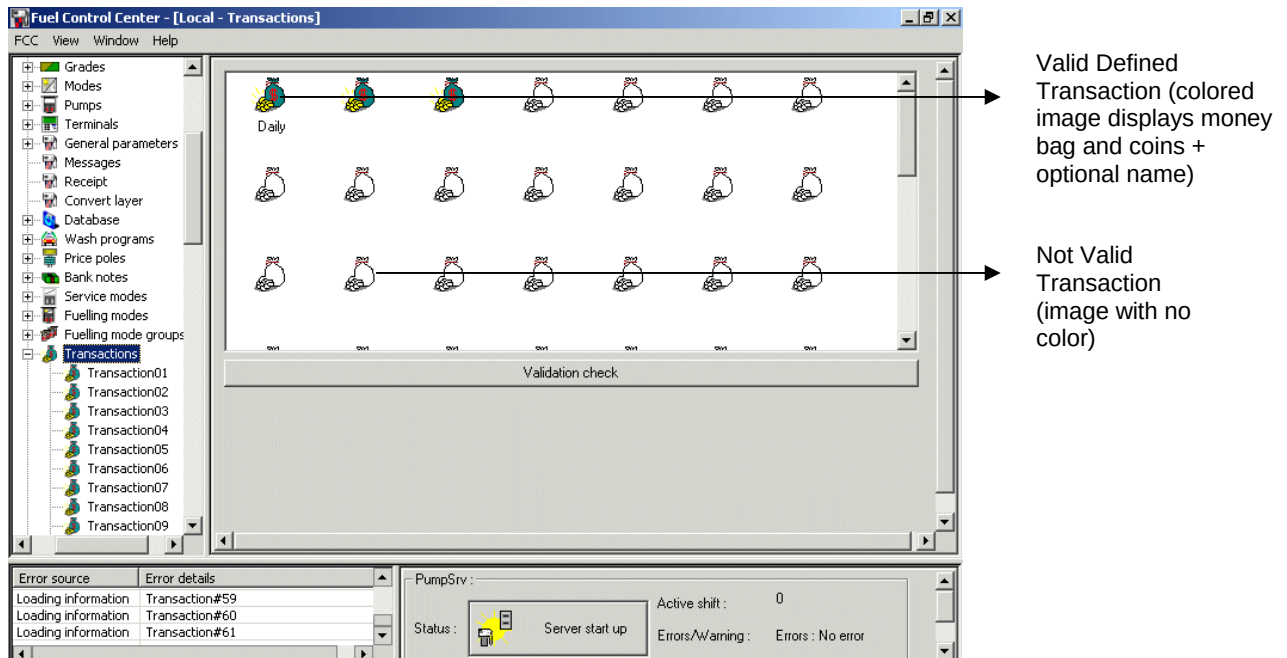
Up to 61 different Transaction types may be defined.

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*:

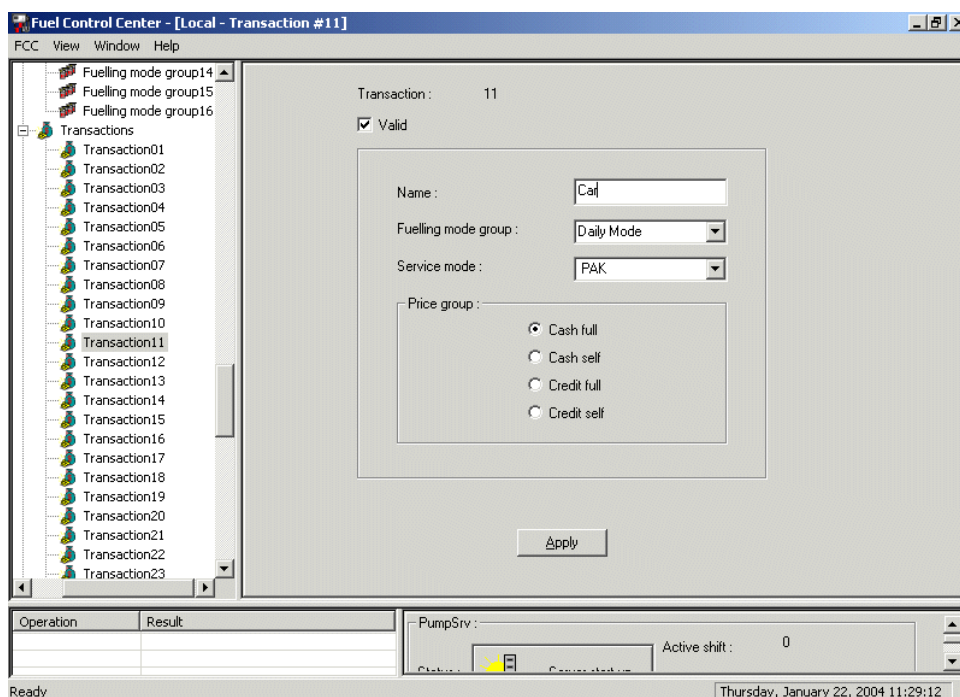


- 2 Click *Validation Check* to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

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.

- 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 <i>PumpSrv</i> .
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 <i>Fuelling Mode Group</i> from the drop-down list. Each <i>Fuelling Mode Group</i> is linked to a <i>Fuelling Mode</i> .
Note: The <i>Fuelling Modes</i> are previously defined in <i>Fuelling Modes</i> , and linked to Grades in the <i>Fuelling Mode Group</i> .	
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.

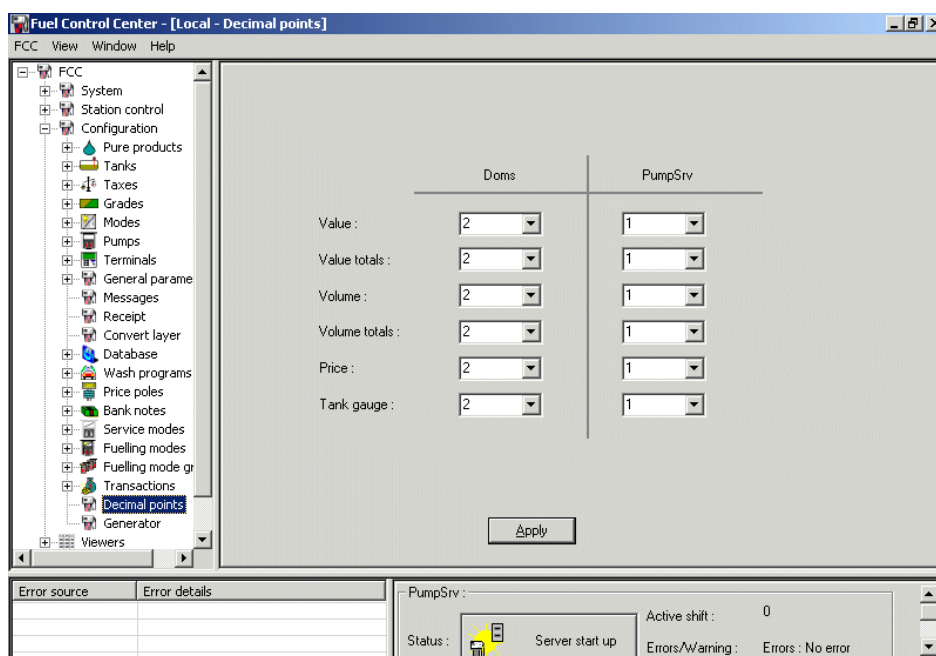
If the Doms site controller uses 2 decimal points, the convert layer will automatically calculate that *PumpSrv* requires 1 more decimal point to get the correct value.

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.
Volume	Select the number of decimal points from the drop-down list used by the Doms Convert layer.

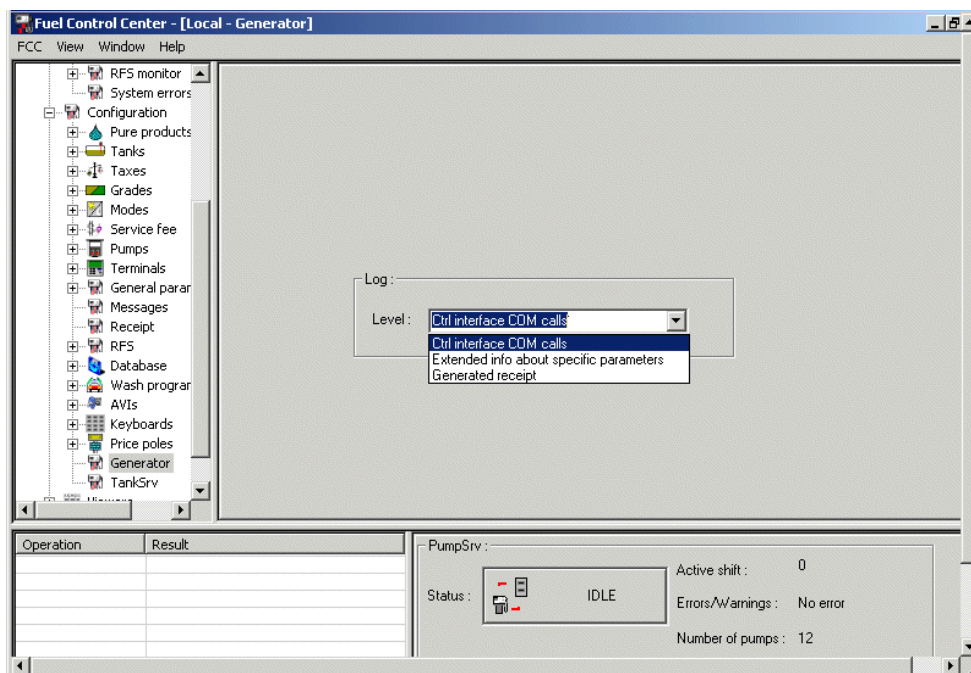
Fields	Description
Volume totals	Select the number of decimal points from the drop-down list used by the Doms Convert layer.
Price	Select the number of decimal points from the drop-down list used by the Doms Convert layer.
Tank guage	Select the number of decimal points from the drop-down list used by 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 <i>PumpSrv</i> .
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 <i>PumpSrv</i> .
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 <i>PumpSrv</i> .
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 <i>PumpSrv</i> .
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 <i>PumpSrv</i> .
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 <i>PumpSrv</i> .

- 5 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

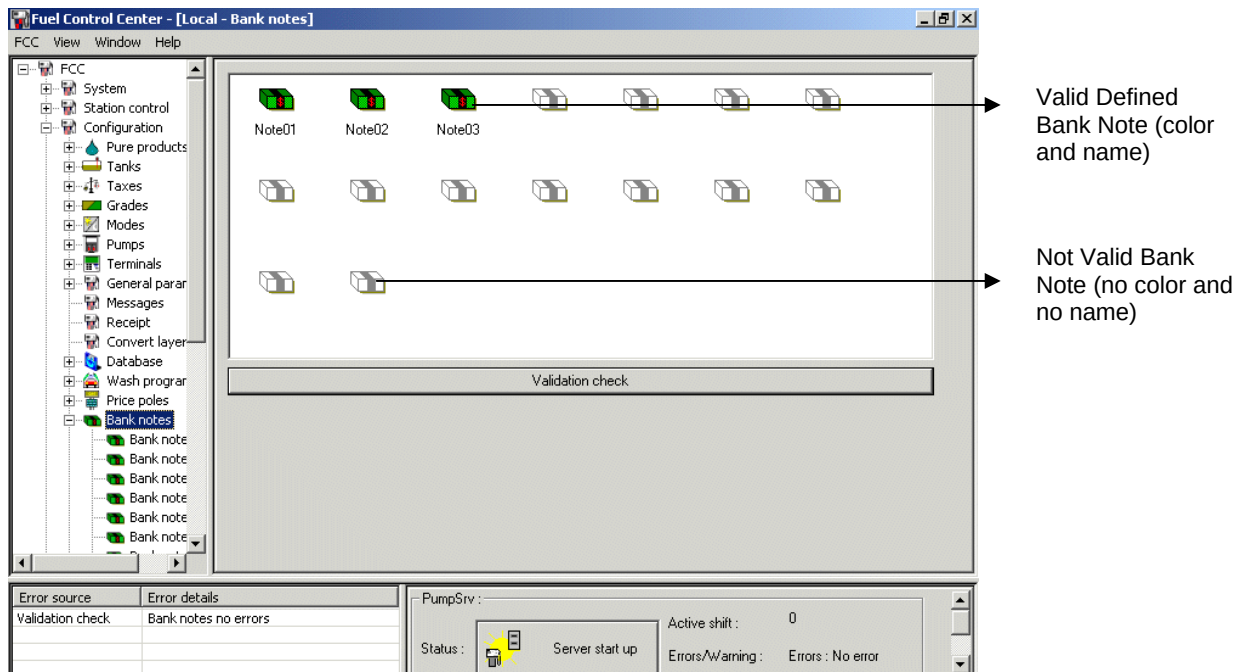
The *Bank Notes* menu enables you to configure which bills can be inserted into the Cash Acceptor device at the terminal, if it is supported by the system. For example, you can define that the Cash Acceptor can take \$100, \$50, and \$20, bills.

Note:

Currently Bank Notes apply only to systems using the *Doms Convert Layer*. Systems using the *Allied*, *RFS* or *Meggitt 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*:

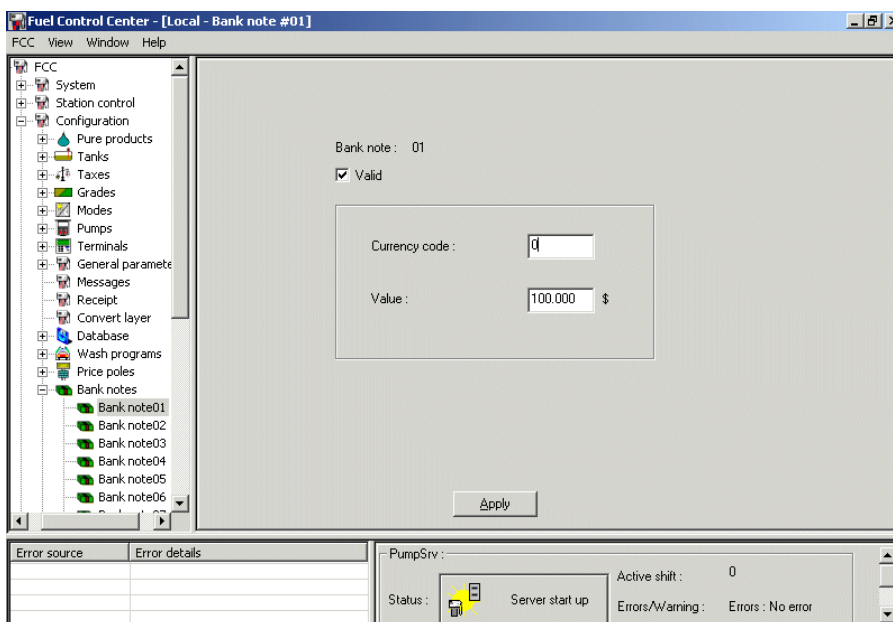


- 2 Click *Validation Check* to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog as shown above.

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 *Configuration: 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 <i>PumpSrv</i> .
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.

4

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:**

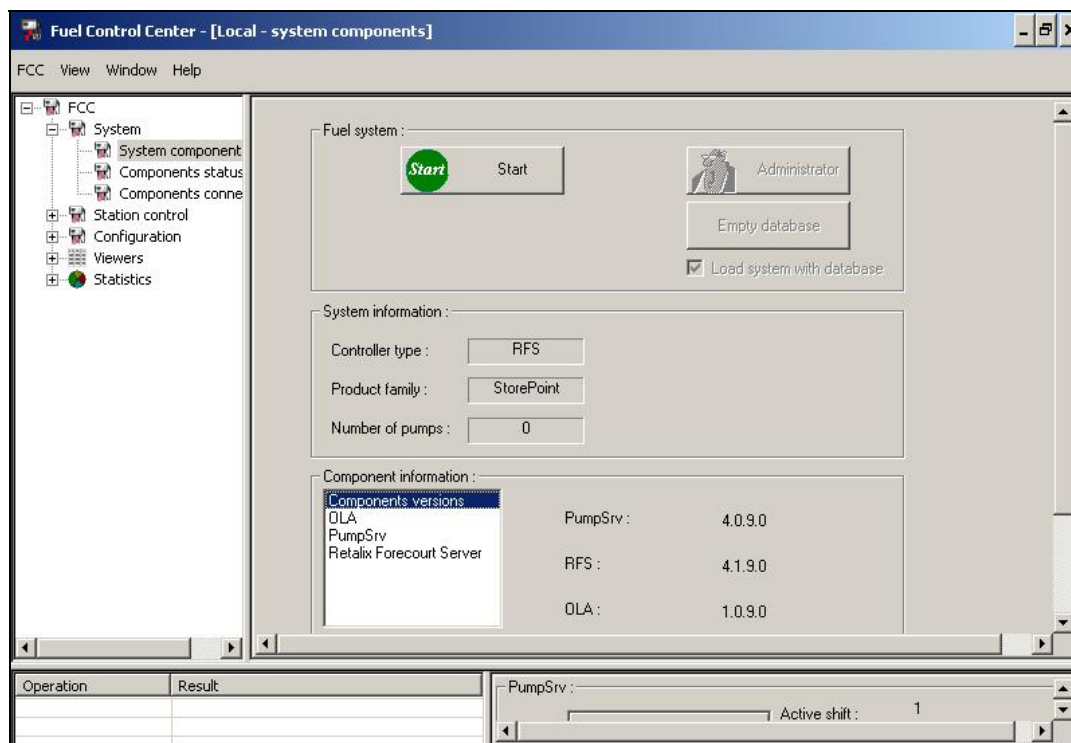
From the *FCC Tree* click *System Components* and expand the *tree* displaying the following sub menus in the right pane:

- 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 “Unload Database?”
- 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* 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 Qdx	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 <i>Convert Layer</i> is connected to the system, e.g., <i>RFS</i> , <i>Allied</i> , <i>Meggitt</i> , or <i>Doms</i> .
Product Family Name	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.
OlaSrv	Click <i>OLASrv</i> to display information, such as PID#, Threads, Memory, and Handles.
PumpSrv – Database	Click <i>PumpSrv</i> to display information, such as PID#, Threads, Memory, and Handles.
ConvertLayer	Click <i>Convert Layer</i> 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
Full Name	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:

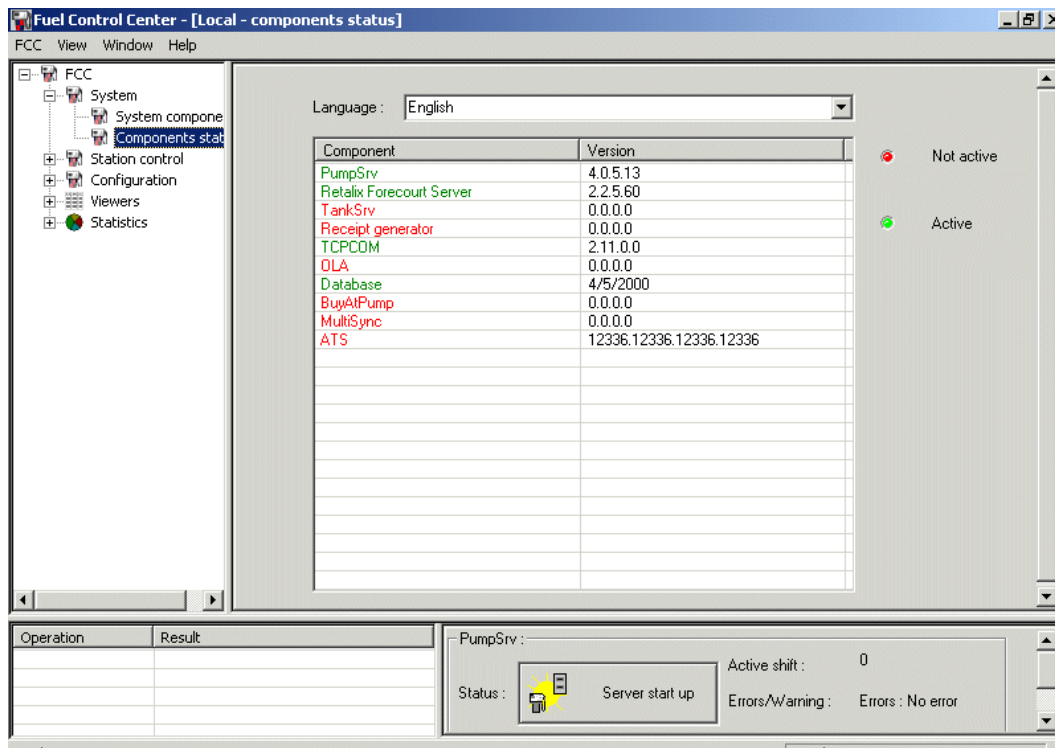
If there are any system errors or problems, it is displayed in the bottom-pane of the *System Components* dialog. All System Information is displayed in the bottom-pane of each dialog. For further details on this section of the dialog, see *Chapter 1, The FCC*.

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 *Components Status*. The Components status dialog is displayed:



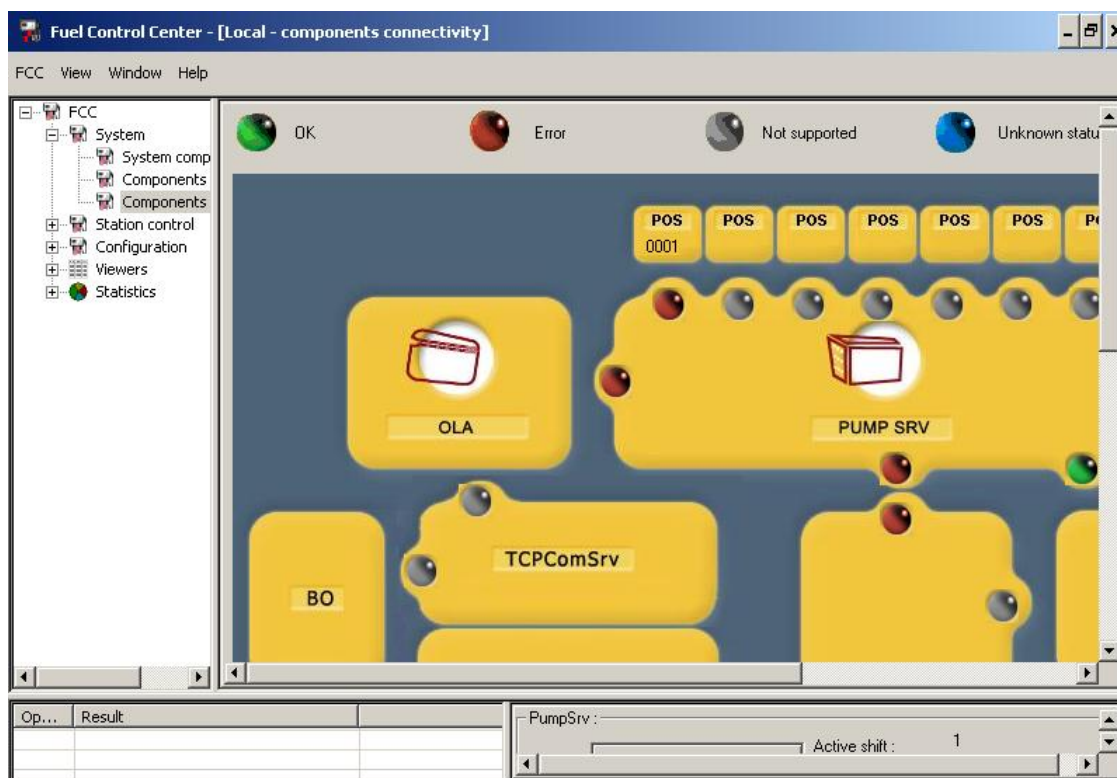
- 2 From the Language drop-down list, select the required interface language that is supported by your computer.

Components Connectivity

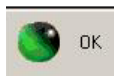
The Components Connectivity option enables you to view if each component in the system was loaded on startup and connected. Its status in the system is displayed graphically enabling you to quickly locate a component that was not loaded. There are various statuses, which are color-coded. This is a read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

➤ To System Connectivity:

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



- 2 View the connectivity statuses as follows:



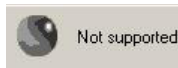
OK

Indicates that the component was loaded and is connected.



Error

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



Not supported

Indicates that the component is not supported in the system.



Unknown status

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:

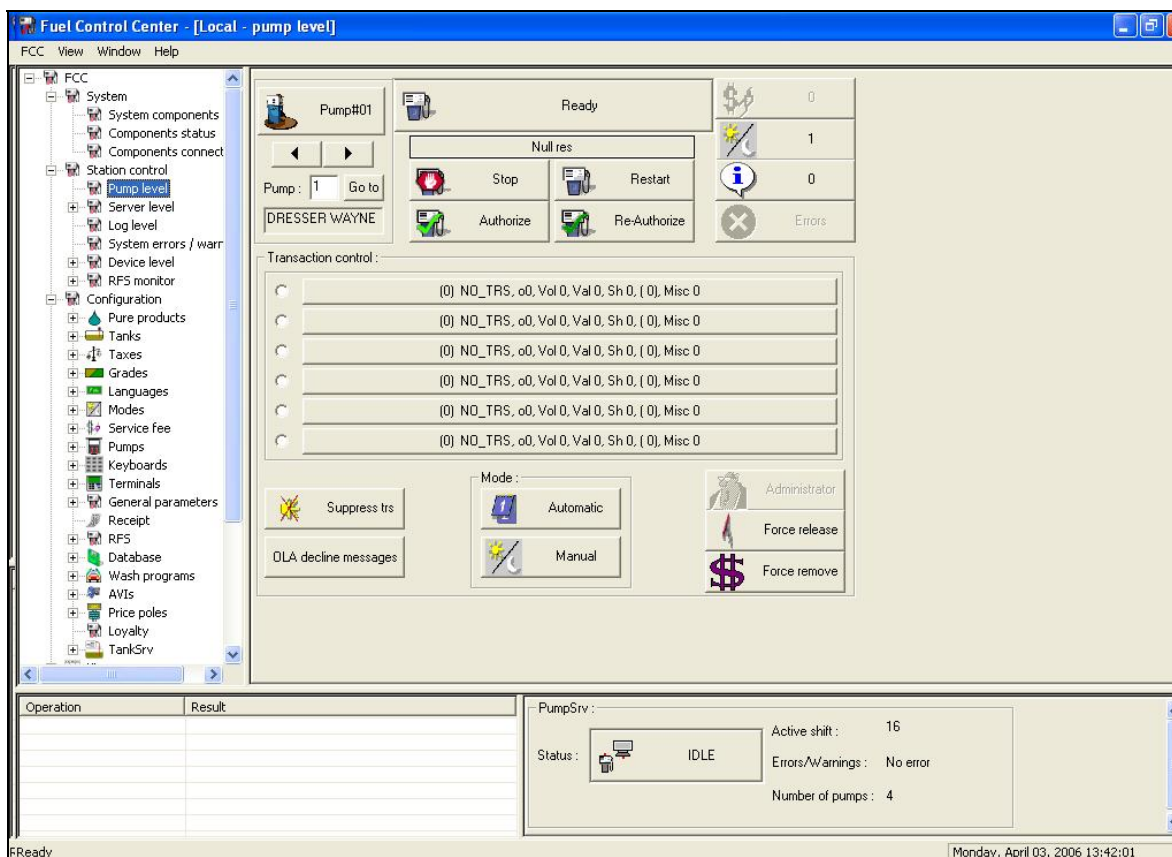
- Pump level
- Server level
- Log Level
- System Errors/Warnings
- RFS monitor (For systems using the RFS)
- Device level (For systems using the RFS)
- Queues (For systems using the RFS)

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.

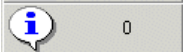
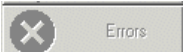
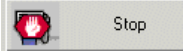
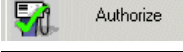
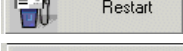
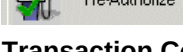
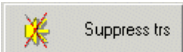
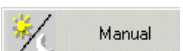
➤ **To open the Pump level dialog:**

- 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: Ready, Requesting, Authorized, Dispensing, Stopped by Operator, Out of Service etc.

Fields	Description
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 .
	Displays the Service Fee currently in use for the current mode in the Pump (see <i>Fee</i> section, below).
	Displays the current mode in use at the pump. The 0 indicates no modes are supported. (See <i>Mode</i> section below).
	Displays miscellaneous information about the current mode at the pump (see <i>Miscellaneous Information</i> section below).
Manufacture	Displays the name of the manufacturer of the pump.
Device	Specifies a device number, in which an error or warning messages appear.
Warning	Specifies a warning regarding a particular device, for example, "Printer is out of paper".
	Specifies the type of error that occurred on the device.
	Enables you to stop operation of a pump.
	Enables you to authorize a pump.
	Enables you to restart operation of a pump that was stopped.
	Re-authorizes Prepay transactions.
Transaction Control area:	Provides information regarding the status of each transaction. Select the <i>radio button</i> of the transaction on which you would like to operate. (See <i>Transaction Info</i> section, below)
	Suppresses the notification of an unpaid transaction, after the dispenser has been buzzing for a certain period of time.
OLA Decline Messages	Displays information on transactions that authorization was declined by OLA. (see Decline Messages section, below).
Mode area:	
	Automatically enables all the modes that were defined in the Mode Scheme configuration (see Chapter 3: <i>Defining Modes using the Pump Mode Scheme</i>).
	Enables you to manually choose the mode for the specific pump from the list of modes defined in the modes section. (See <i>Modes</i> , <i>Manual/Automatic</i> in the section, below.)
	The <i>Administrator</i> button enables an Administrator, to enter a password and to access the various <i>FCC</i> 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 <i>Chapter 2 – FCC Menu Bar/FCC Properties</i> for more details on Securities). Click the <i>Administrator</i> button and enter your password to enable the <i>Force Remove</i> and <i>Force Release</i> buttons.

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.

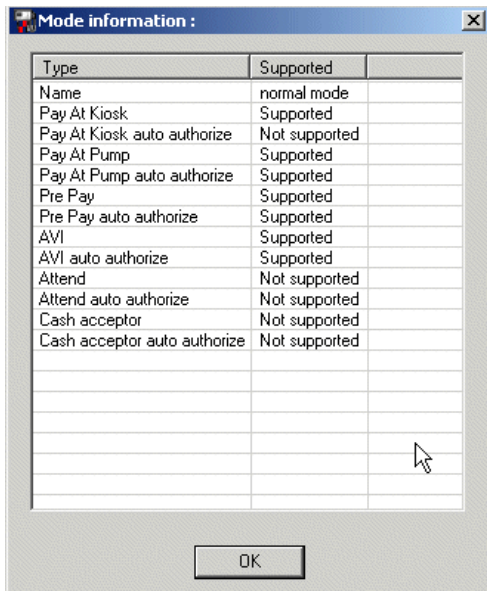
The *Fee* option provides the information on Full Service and Self-Service Fees defined in the system and currently in use.

Mode

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

➤ **To Open the Mode More Info Dialog:**

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



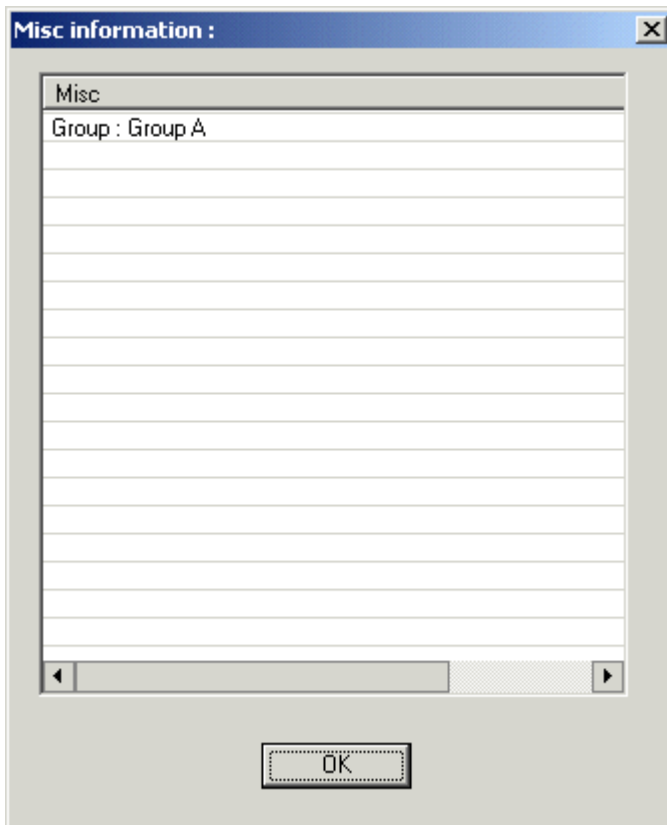
The Modes are configured in the Configuration –Modes section.

Miscellaneous Information

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

➤ **To Open the Misc. More Info Dialog:**

- 1 From the *Pump Level* dialog, click  0, the *Misc More Info* dialog is displayed:



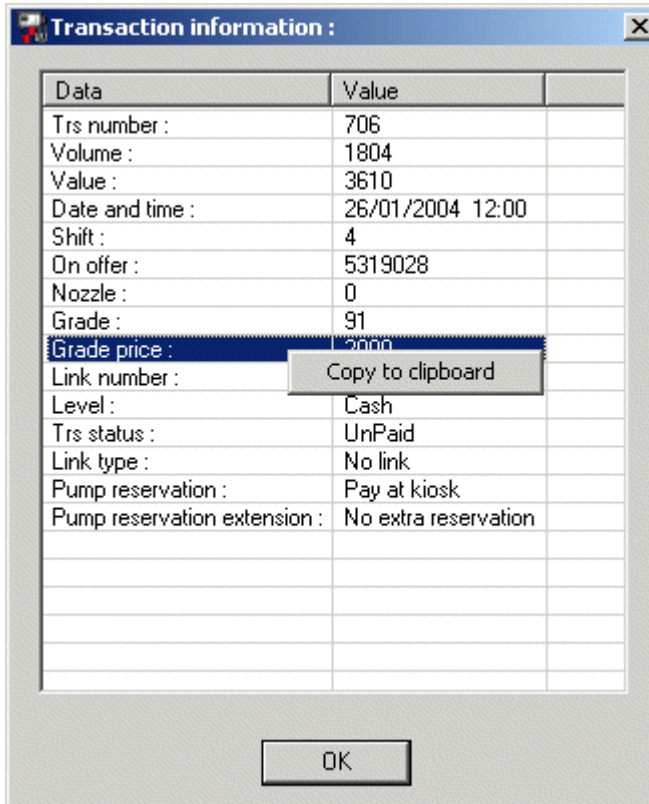
- 2 Click *OK* to close.

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 Info 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.

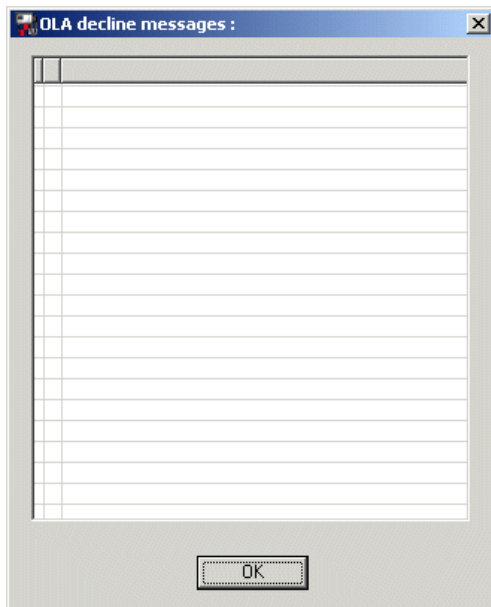
OLA Decline Messages

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:



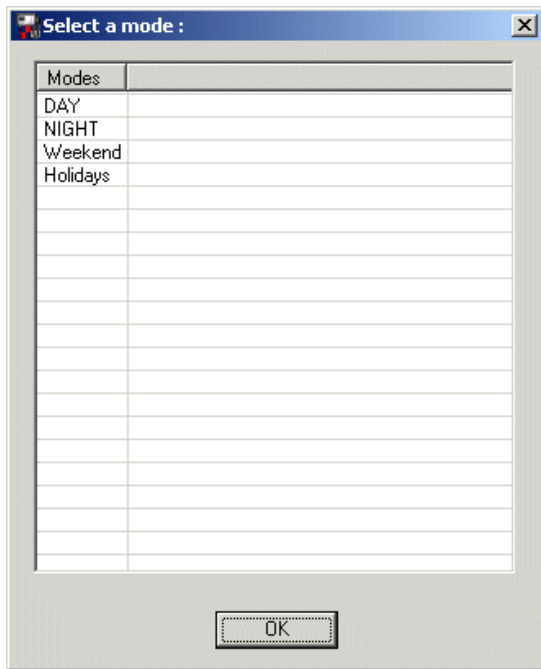
- 2 Click *OK* to close the dialog.

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.

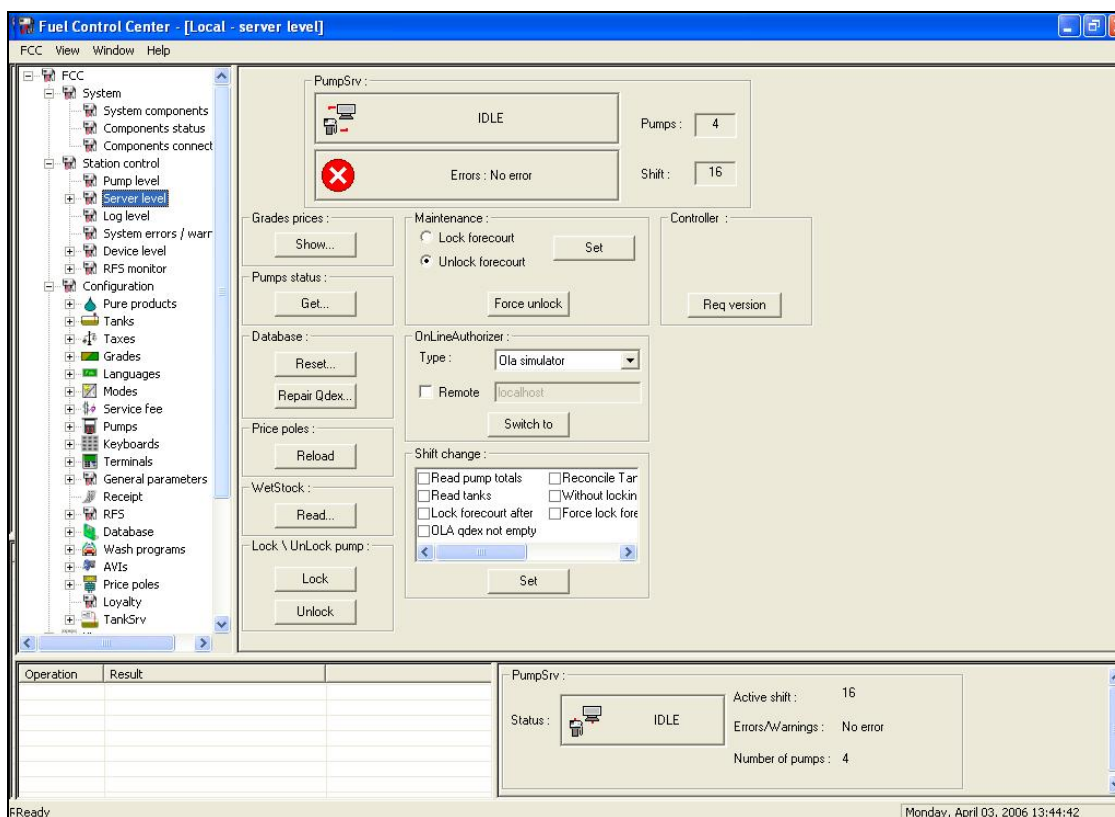
- 3 Click *OK* to close the dialog.
- 4 Click *Automatic* if you wish to return to the previous Mode. (See *Chapter 3, Configuration, Modes*.)

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:

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 <i>PumpSrv</i> .
Pumps	Indicates the number of active pumps defined in <i>PumpSrv</i> .
Error	Indicates if there are any errors in the various <i>PumpSrv</i> processes.
Shift	Indicates the current shift number.
Grade prices area:	
Show...	Displays <i>Grade Prices</i> dialog, where you can set and change prices (For further details refer to the <i>Price Changes</i> section, below.)
Maintenance area:	

Fields	Description
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.
Set	Sets the selected status for the forecourt (see <i>Lock Forecourt</i> , <i>Unlock Forecourt</i> , above).
Force Unlock	Click to start the process that unlocks the <i>Forecourt</i> 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 <i>Unlock Forecourt</i> function, described above, is not working properly for any reason.
Controller area:	
Sync time	Click to synchronize between <i>PumpSrv</i> and Site Controller.
Update Software	If you have installed new software, click the update tab.
Note:	
This applies only to systems using the Allied convert layer. Allied systems include certain software's. Periodically the versions are updated, etc., and in turn the <i>FCC</i> must also update. For further details on this field, refer to the Controller Software File Path field in <i>Configuration/General Parameters</i> in <i>Chapter 2, Getting Started</i> .	
Req Version	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 <i>Viewers/Logs</i> in <i>Chapter 5, Log Viewer</i> .
Online Authorizer area:	
Type	Displays the type of OLA server remote connection.
Remote OLA	If checked, supports remote OLA.
Computer Name	If the Remote OLA is checked active, the remote OLA computer name appears.
Switch To	Enables you to toggle to the remote computer if required.
Pumps Status area:	
Get Status	Initiates a check and displays the status of the entire station. Checks which pumps are in <i>Idle</i> mode, and displays the status. (See <i>Get Status</i> section, below.)

Database area:

Fields	Description
Reset	Enables the technician to reset the database reports generated during the time that <i>PumpSrv</i> is processing Shift Change Readings, Pump Total Readings, Tank Readings, or Price Change Readings. When you select Reset, the <i>Reset Database</i> dialog is displayed, allowing you to choose which database to reset. (See <i>Reset Database</i> section, below) Note: Applicable only to the <i>PumpSrv</i> 4 version.
Repair QDX	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:	
Reload	Click <i>Reload</i> 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:	
Read	Click <i>Read</i> to display the <i>Wetstock Flags</i> dialog. (For an explanation on each flag see <i>Wetstock Flags</i> section, below.)
Lock\Unlock Pump area:	
Lock	Click to lock a specific pump, stopping it from being used. For an explanation on locking and unlocking pumps, see <i>Lock\Unlock Pumps</i> section, further on.
Unlock	Click to unlock a specific pump enabling it for use.
Shift Change area:	
Lock Forecourt	When checked, indicates that the <i>FCC</i> will lock the forecourt from <i>PumpSrv</i> after the shift change, requested by the <i>FCC</i> .
OLA qdex not empty	When checked, enables the <i>FCC</i> to close a shift even if the OLA.Qdx still contains records.
Read Pump Totals	When checked, indicates that the <i>FCC</i> will get a Pump Total reading from <i>PumpSrv</i> at a Shift Change, requested by the <i>FCC</i> .
Read Tanks	When checked, indicates that the <i>FCC</i> will get a Tank Reading from <i>PumpSrv</i> at a Shift Change, requested by the <i>FCC</i> .

Fields	Description
ReconcileTankSrv	When checked, indicates that the <i>FCC</i> will send a reconciliation event to the controller during the shift process. Note: This field does not apply to systems working with the <i>Allied Convert Layer</i> .
Set	Click to set the shift for the above fields, from the <i>FCC</i> .

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, click *Show Price Sets*. The *Grade Prices* dialog is displayed, as follows:

Grade	Cash		Credit	
	Self	Full	Self	Full
Grade91	8	34354	6	1
Grade92	99	33	6	11
Grade98	1959	33	6	1
MIX100	2000	2222	6	2000

>>> >>> >>>

Select the above list to be the current list

Exit

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 as follows:

The screenshot shows the 'GradePrices' application window. It features a list of fuel grades on the left: Unleaded, 91, 92, 98, pop, ww, and er. To the right of this list are two main sections: 'Cash' and 'Credit'. Each section contains two columns of input fields: 'Self' and 'Full'. Below these columns are three arrow buttons labeled '>>>'. At the bottom of the window, there are four buttons: 'Save to file', 'Load from file', 'View current', and 'Exit'. A text label 'Select the above list to be the current list' is positioned above the 'Exit' button.

- 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.
View Current	Displays the current price for each grade defined in the system.
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.

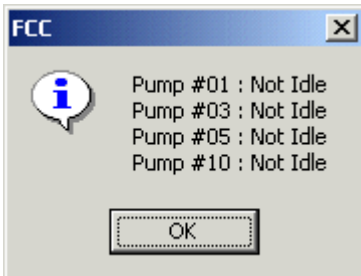
- 7 Click *Exit* to return to the *Server Level* dialog.

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, click *Get Status*. 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.

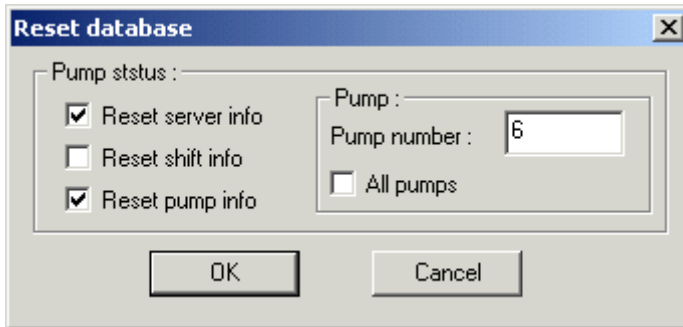
Reset database

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:

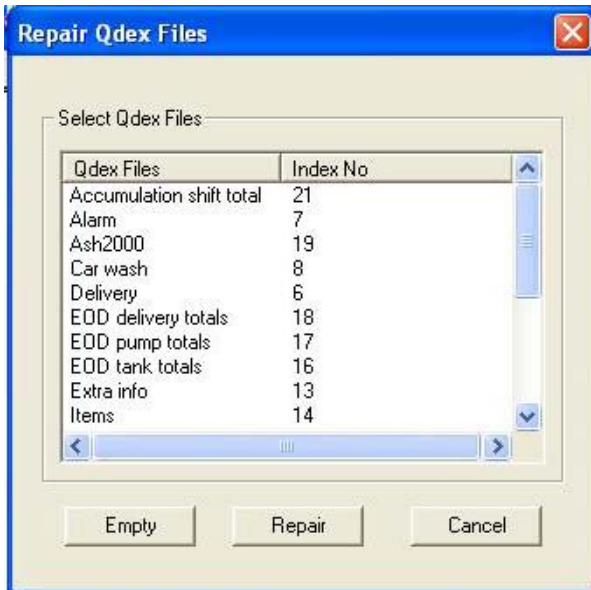
Fields	Description
Pump status area:	
Reset Server Info	If checked, indicates the server information is reset.
Reset Shift Info	If checked, indicates the shift information is reset.
Reset Pump Info	If checked, indicates the Pump information is reset.
Pump area:	
Pump Number	Number of the Pump being reset.
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:

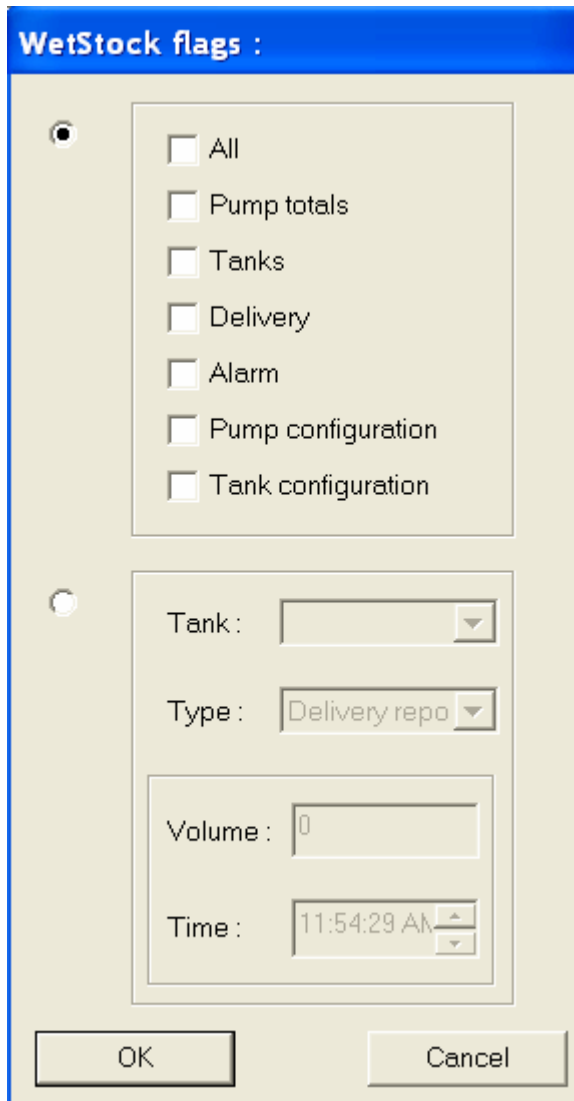


- 2 Select a QDX file that requires resetting, and click *Repair*. The system prompts "Are you sure you want to repair the QDX file?".
- 3 To repair, click Yes.
- 4 To empty the QDX, select the QDX file and click *Empty*. The system prompts "Are you sure you want to empty the QDX file?".
- 5 To empty, 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, click *Read Wetstock Data*. The WetStock flags dialog is displayed:



The image shows a Windows-style dialog box titled "WetStock flags :". It has a blue title bar. Inside, there are two radio buttons on the left. The first radio button is selected. To its right is a list of checkboxes: "All", "Pump totals", "Tanks", "Delivery", "Alarm", "Pump configuration", and "Tank configuration". The second radio button is unselected. To its right are several input fields: a "Tank:" dropdown menu, a "Type:" dropdown menu showing "Delivery repo", a "Volume:" text box with "0", and a "Time:" spinner box showing "11:54:29 AM". At the bottom are "OK" and "Cancel" buttons.

- 2 Check the appropriate checkboxes. You may check *All* the checkboxes 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 *Lock*. The Lock Pump WetStock flags 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*.

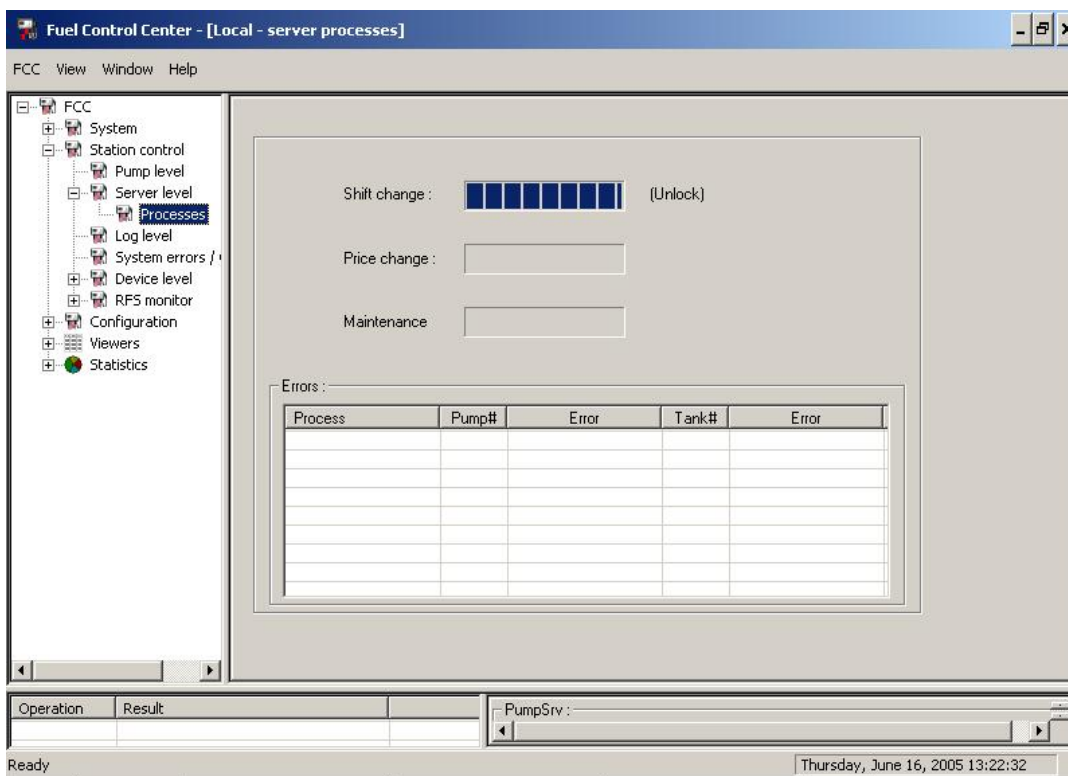
Repeat the same procedure to Unlock the pumps.

Processes

This option enables you to view the server processes progress. A blue stripe displays a process is in progress.

➤ To View Processes:

- 1 From the *FCC Tree*, click *Station Control/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

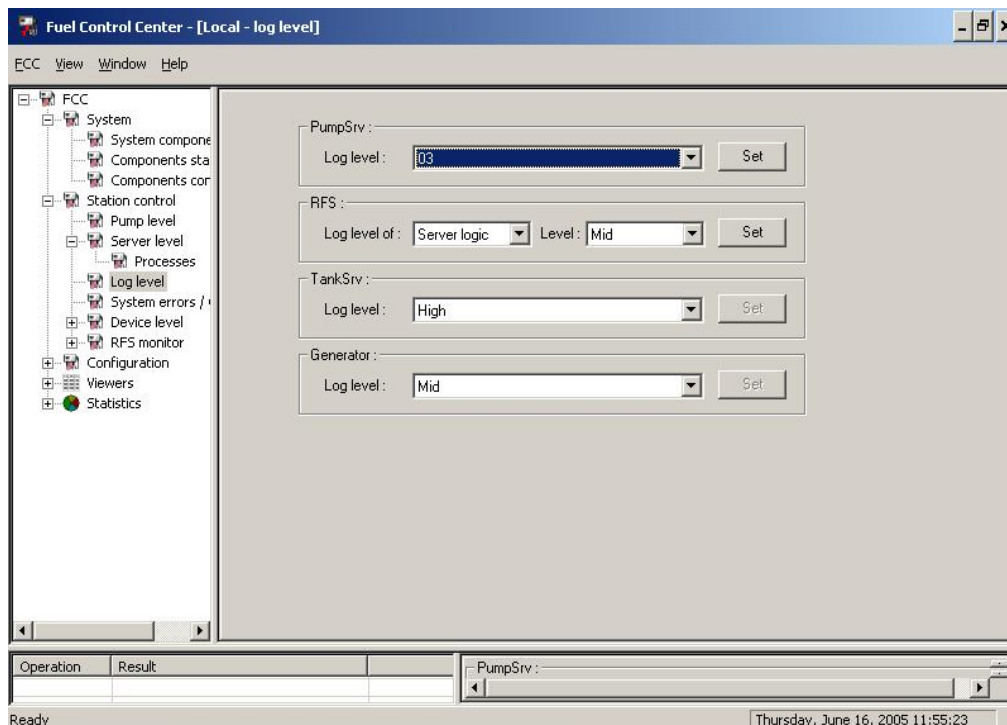
The Log Level option enables you to define the log levels for PumpSrv, RFS/Convert Layers, TankSrv, and the Generator.

➤ 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, Server logic, Terminal, AVI, Pump, or Price display and then indicate the level of detail in the log level.

Or

From the **Convert Layer Log Level** drop-down list, select the log level details, then click *Set*.

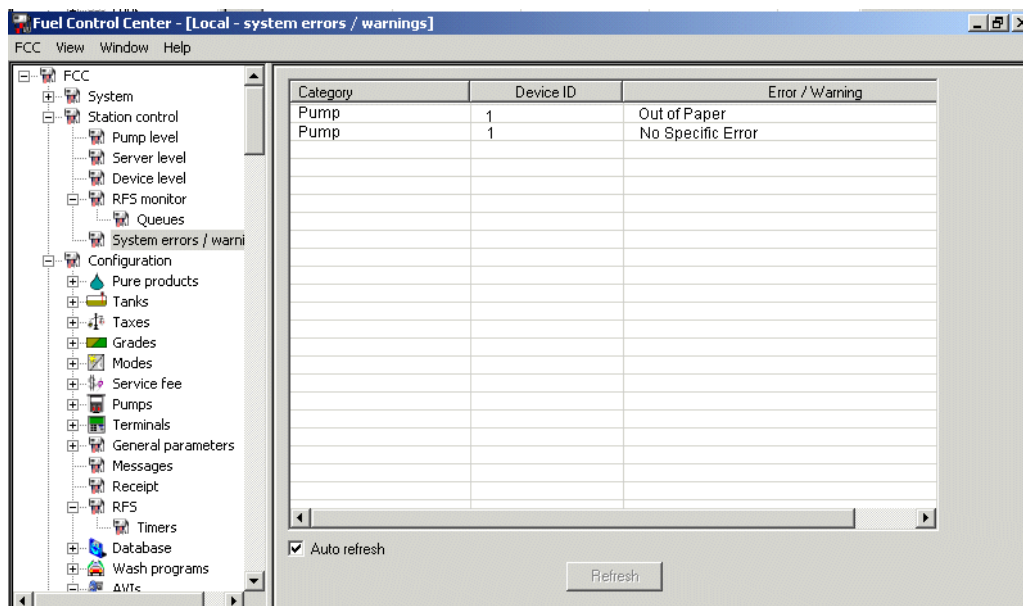
- 5** From the **TankSrv Log Level** drop-down list, select the log level details related to the tank server, then click *Set*.
- 6** From the **Generator Log level** drop-down list, select the log level details relevant to the Generator, then click *Set*.

System Errors/Warnings

The system Errors/Warnings menu enables you to view any system errors or warnings, for example, a warning may include, “Out of Paper”. *PumpSrv* checks for any system problems and reports them to *AlarmSrv*. *AlarmSrv* reports back to *PumpSrv* with the details of the system error or warning, and then *PumpSrv* reports the errors or warnings in the System Errors/Warnings menu of the *FCC*.

➤ **To View System Errors/Warnings:**

- 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*, and then click *System Errors/Warnings*. The *Station Control: System Errors/Warnings* dialog is displayed:



- 3 Select the *Auto Refresh* checkbox to enable the system to automatically update with any new system errors or warnings.

Or

Click *Refresh* to update any new system errors or warnings.

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:

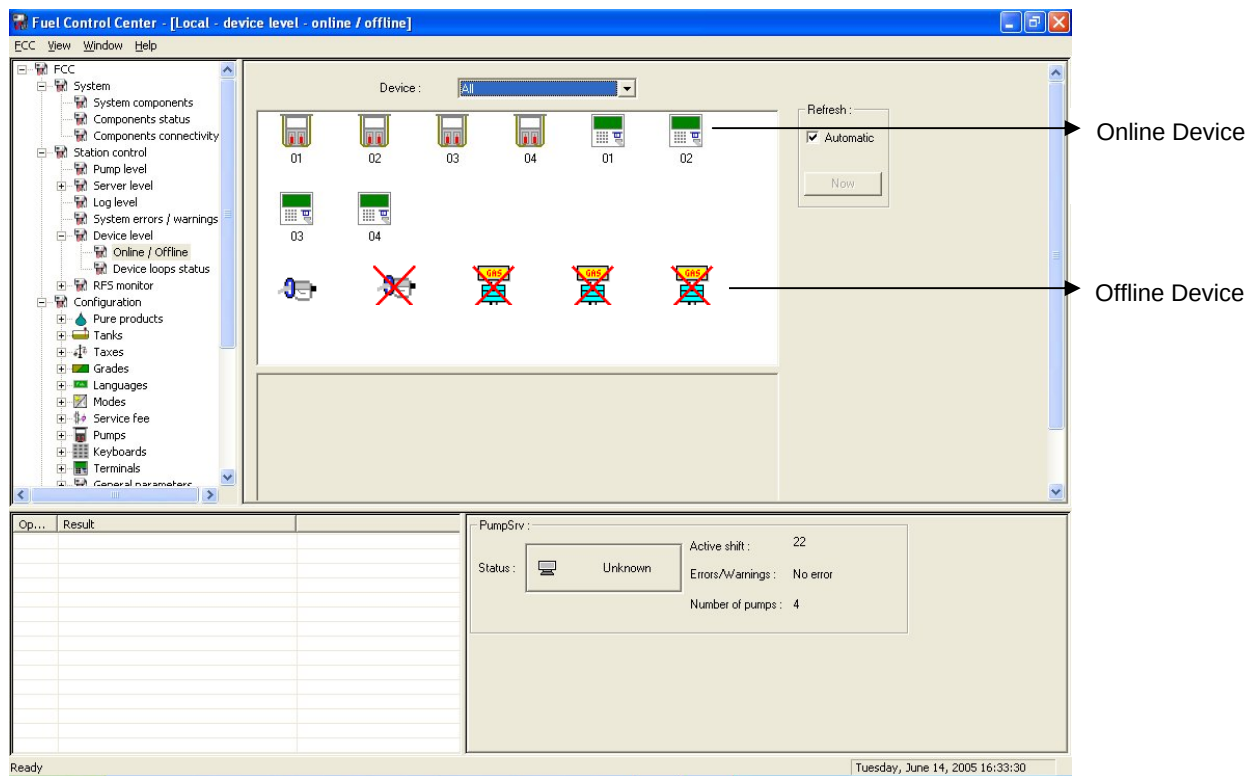
The *Device Level* menu only applies to the *RFS Convert Layer*.

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 to display the following dialog:
- 2 From the **Device** field drop-down list, select the relevant device, or **All** to view all devices. The following dialog is displayed:



Note:

All Devices that are offline are marked with an X.

- 3 Select an option from the **Device** drop-down list, if you want to display only AVI devices, or only Terminal devices etc.
- 4 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.

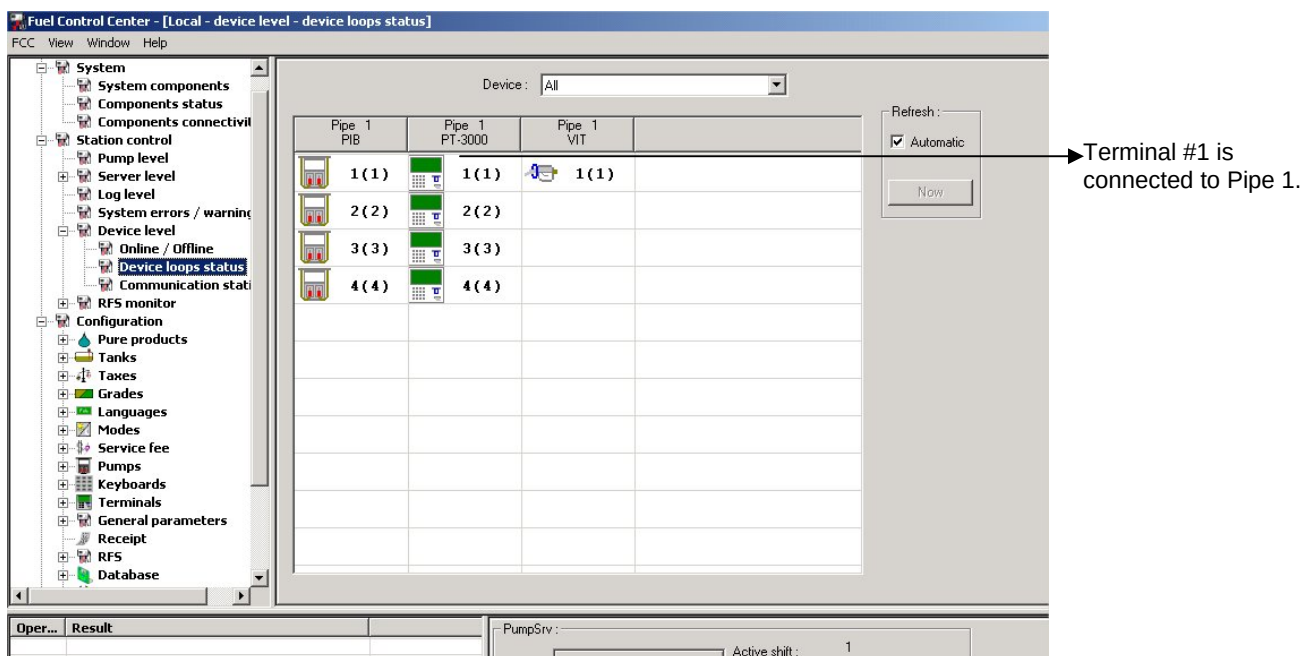
See also *Device Loops Status*, further on.

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 to display the following dialog:



- 2 From the **Device** field drop-down list, select the relevant device, or **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 to display the following dialog:

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	91
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

	Avi Pipe 1 VIT	Dispenser Pipe 1 PIB	Terminal Pipe PT-3000
	92.86%	64.29%	100.00%

Refresh:

☒ Automatic

Now

Oper... Result

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 **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

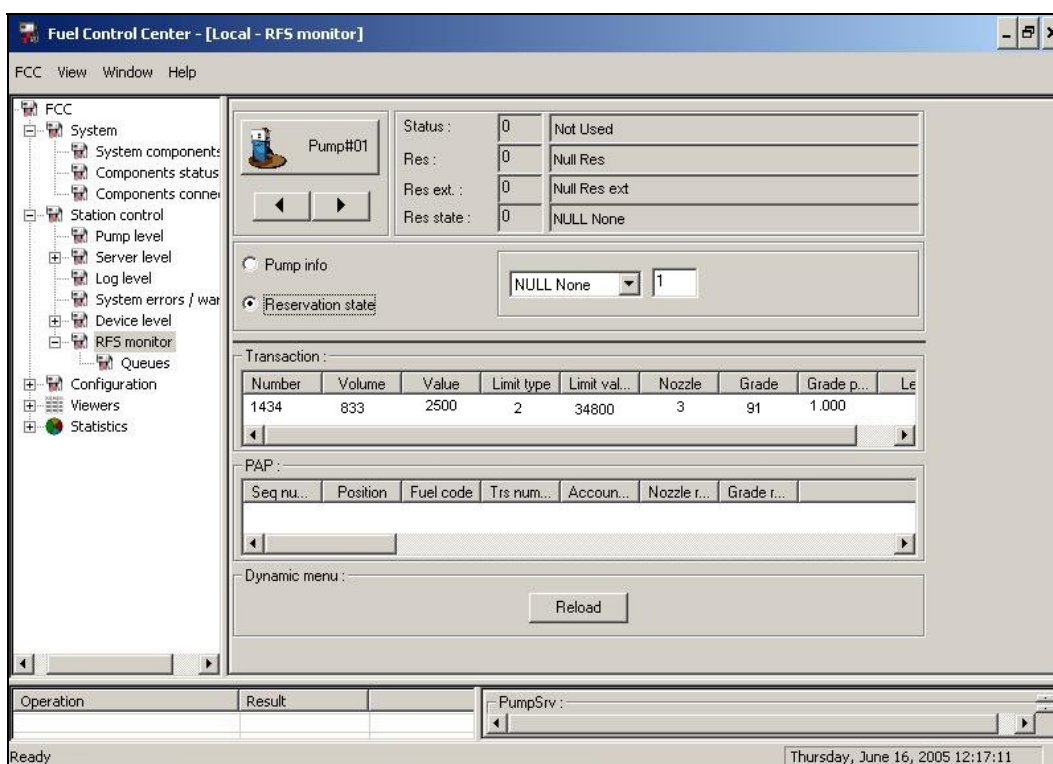
Note:

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 to display the *RFS Monitor* dialog:

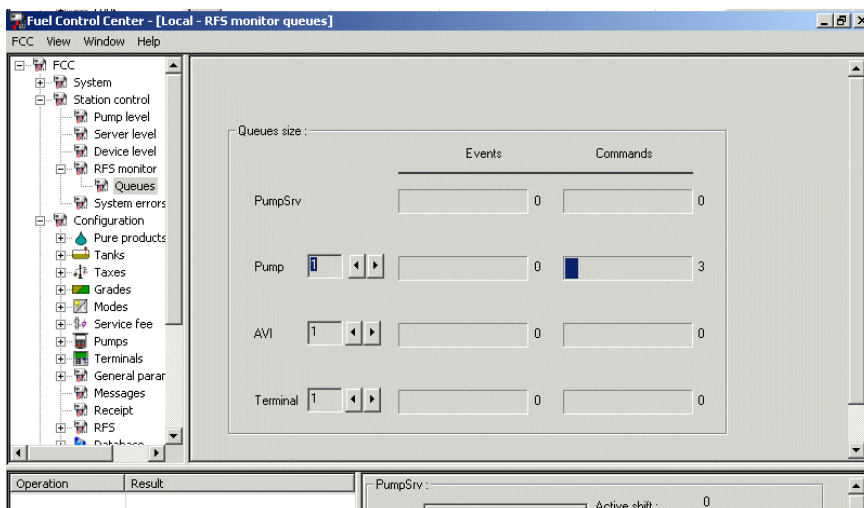


The table below describes the various fields where you can view the information in the *RFS Monitor* dialog:

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.
Auto Refresh Every	If checked, the <i>RFS</i> is monitored, displaying current transaction information, and ensures the information is refreshed every

Fields	Description
Sec	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 <i>Set</i> and <i>Force Complete</i> buttons are enabled. The <i>Set Reservation</i> state 'moves' the RFS state machine to the required state.
Note:	
The <i>Set Reservation</i> 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 <i>Force Complete</i> 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 <i>Station Control - Pump Level</i> window. For example, a reserved Pump with a stacked IN_PROGRESS transaction, where the Pump nozzle was replaced may be released by clicking the <i>Force Complete</i> 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.
Dynamic menu area:	The Dynamic menu produces a text menu on the Terminal.
Reload	Click <i>Reload</i> to refresh the Dynamic menu, for example, if you produced a report, and the name of the report changes, click <i>Reload</i> 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: • <i>PumpSrv</i> • 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 • <i>PumpSrv</i> • 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*.

5

Log Viewer

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

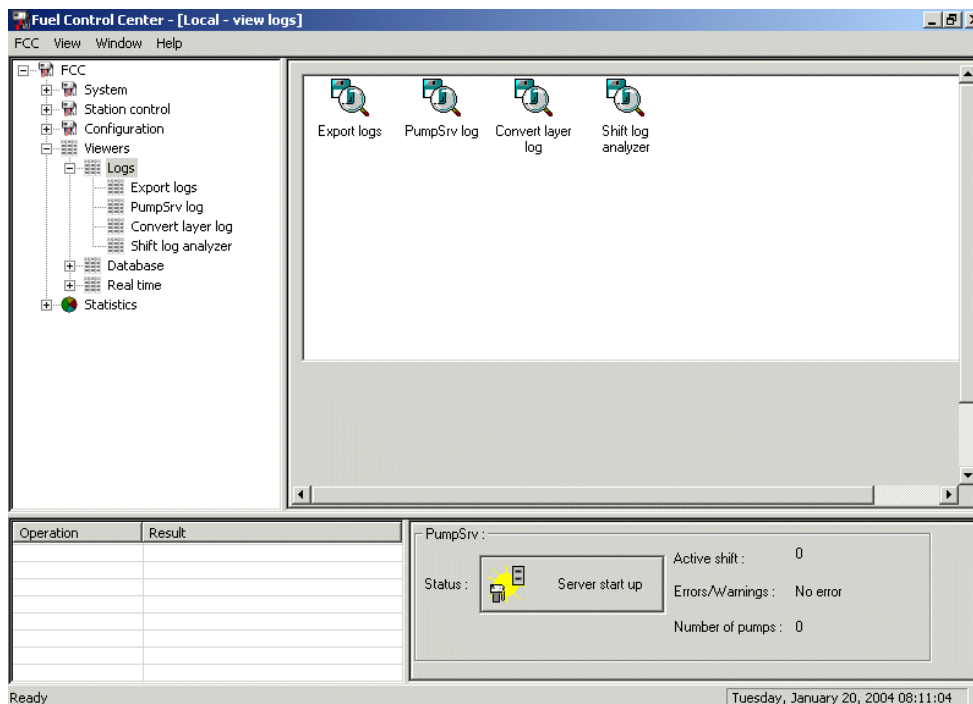
Viewers

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.

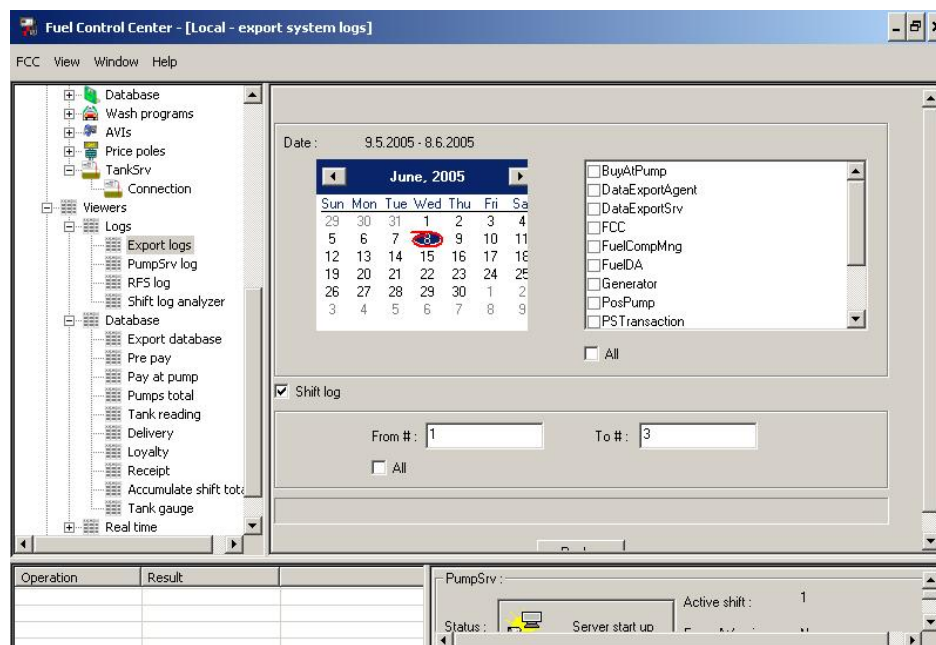
Logs

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 Click *Export Logs* from the *FCC Tree*. The *Logs – Export 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
PumpSrv and Controller Log	If checked, includes all <i>PumpSrv</i> logs as well as the <i>Convert Layer</i> logs.
All	If checked, includes all <i>PumpSrv</i> 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.
Include Controller Database	If checked, includes <i>Convert Layer</i> logs. If checked, the logs will include QDX database files. Select the checkboxes of each QDX database file required, or for all entries, select <i>All</i> .

System Parameters area:

Retalix Branch	Includes the registry entry from the <i>Retalix</i> branch.
Fuel Branch	Includes the registry entry from the <i>PumpSrv</i> branch.

ShiftLog area:

From – To	If checked, includes logs for the indicated shift numbers.
All	If checked, includes logs for all shifts in the system.

- 3 Click the *Pack To* 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.

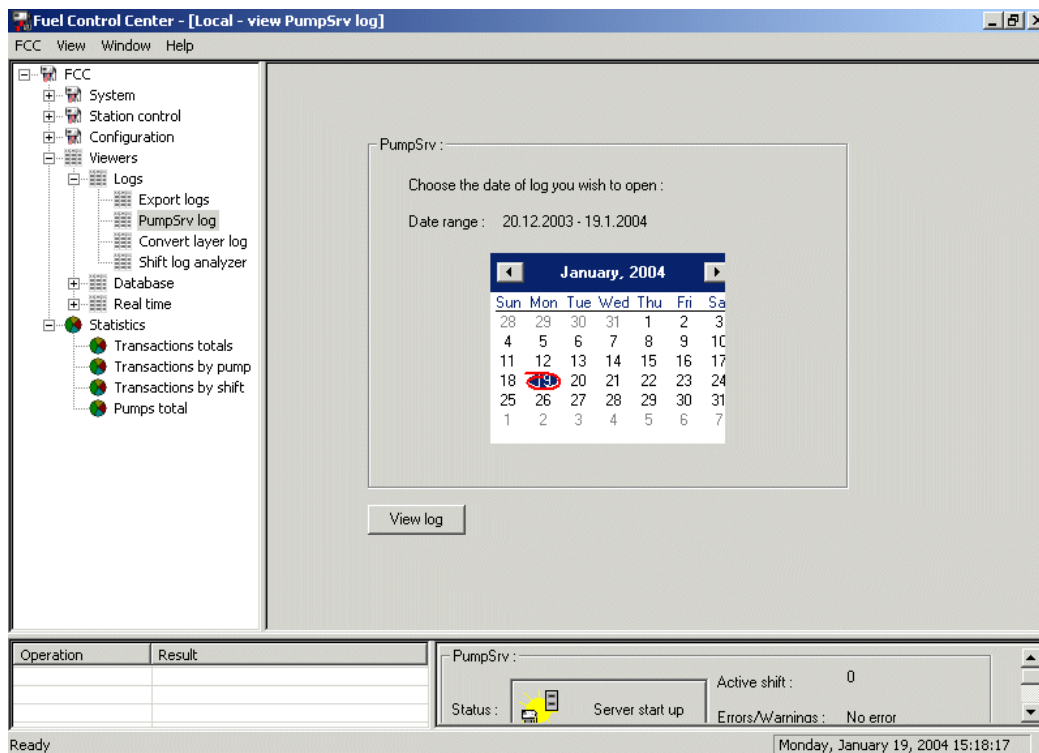
PumpSrv Logs

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.

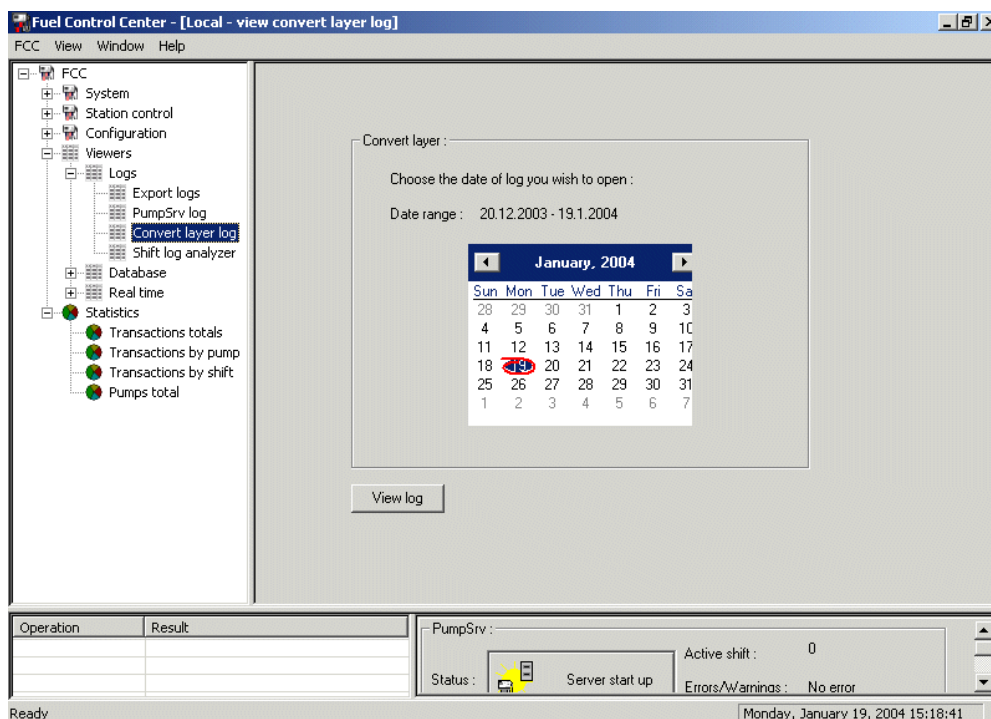
Note:

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.

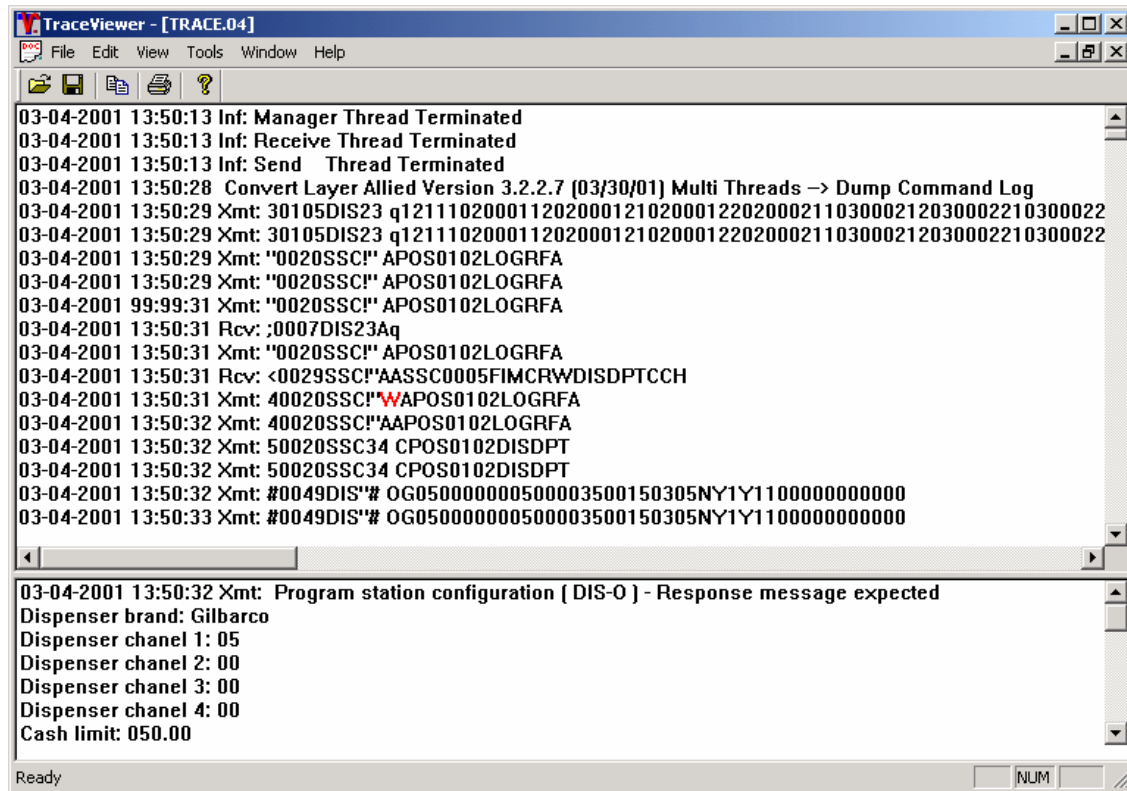
Using the *Trace Viewer* you can display all the information logged to the Trace File, you can perform a search, or you can refine your search by running a query. Running a query enables you to display only specific information from the Trace File, for example, only records of the *Dispenser Control*, 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*.

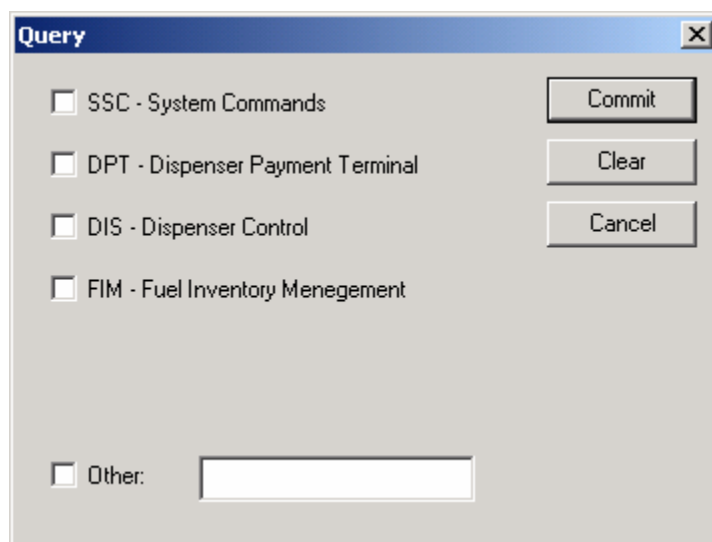
The required translation is displayed in the lower part of the *Trace Viewer*.

**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.

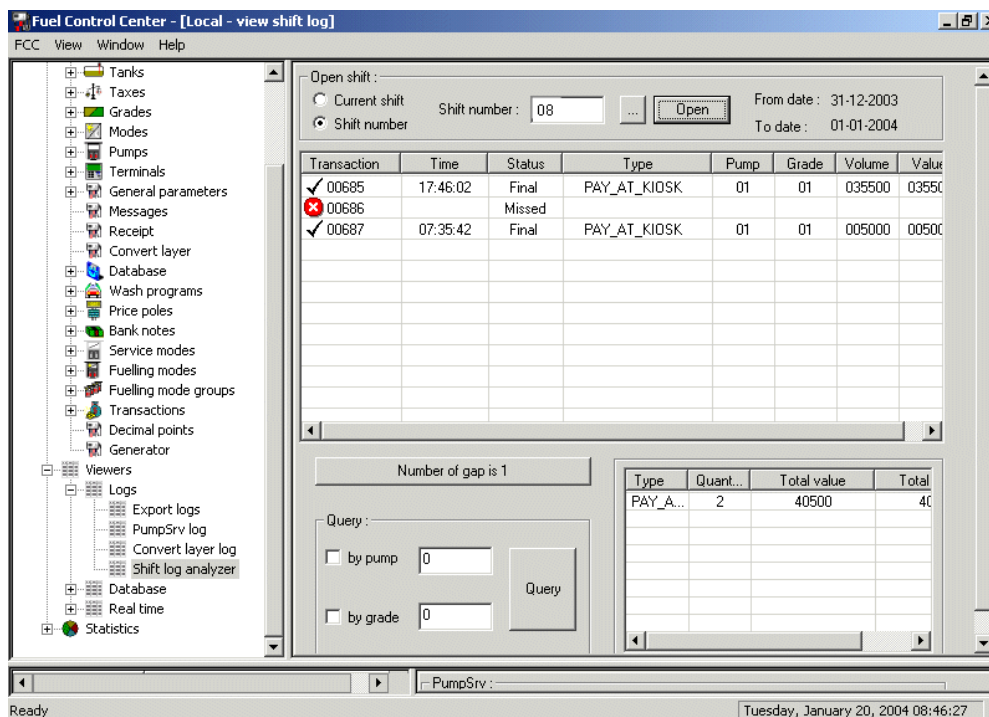
Shift Logs Analyzer

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 *Shift Logs Analyzer* 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

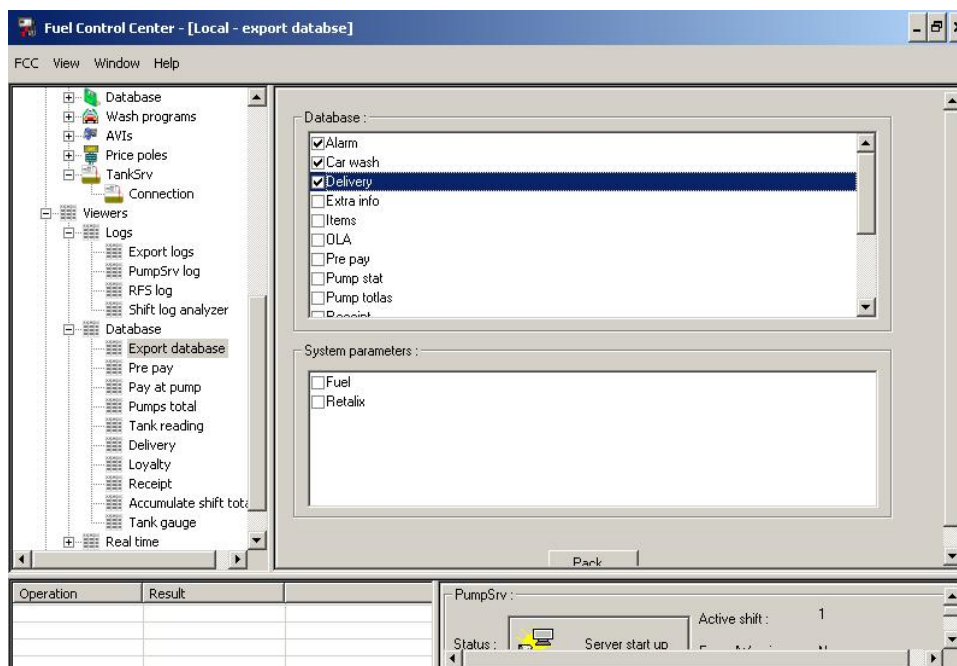
This section explains how to view information stored in the database. This information includes Prepay and PAP transaction information, Pump totals, Tank and Delivery Readings, Loyalty transactions, Receipt records, Accumulated shift totals, and Tank gauge information.

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*. 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:

Retalix Branch	Includes the registry entry from the <i>Retalix</i> branch.
Fuel Branch	Includes the registry entry from the <i>PumpSrv</i> branch.

- 4 Click the *Pack To* 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.

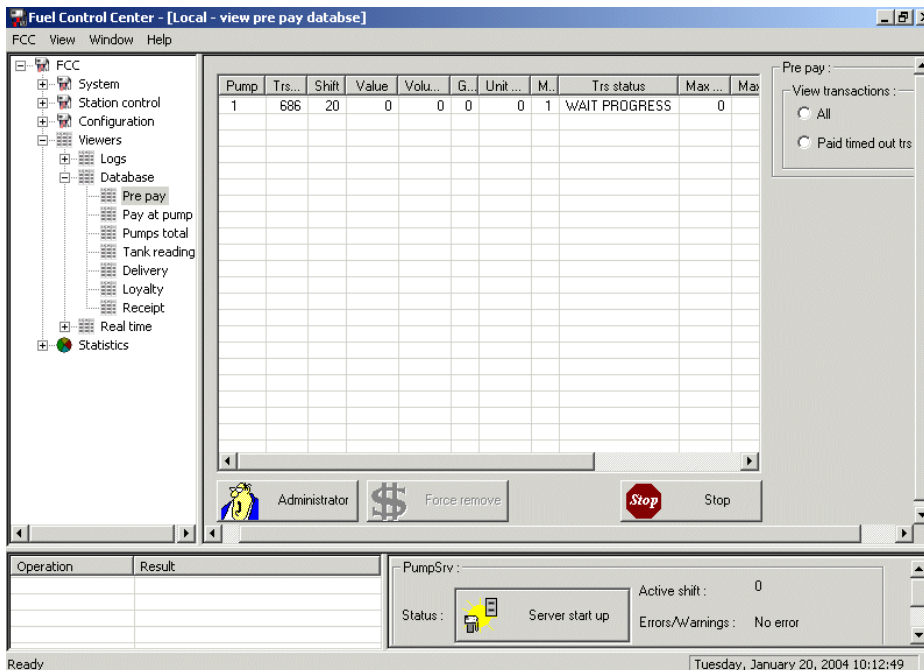
You have selected and exported Database Tables. Proceed to view each database table.

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 *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.

- 2 From the **View transactions** area, select *All*, then click *Start* to display a list of transactions as they appear chronologically in the database table.

Or

Select *paid timed out trs*, and click *Start* to display a list of Paid timed out transactions as they appear in the database table.

- 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 **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 <i>PumpSrv</i> .
POS #	The number of the POS from which the Prepay transaction was performed.
Total Reward	Indicates the value recorded from discounts within Prepay transactions.

- 5 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.

- 4 Highlight the required **PAP** transaction. Information on this transaction is displayed in the following fields, as described in the table below:

Columns	Description
TRS Pump	Number of pump on which transaction was performed.
TRS Number	Transaction number.
TRS 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.
Sequence #	Number of OLA transaction 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.
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:

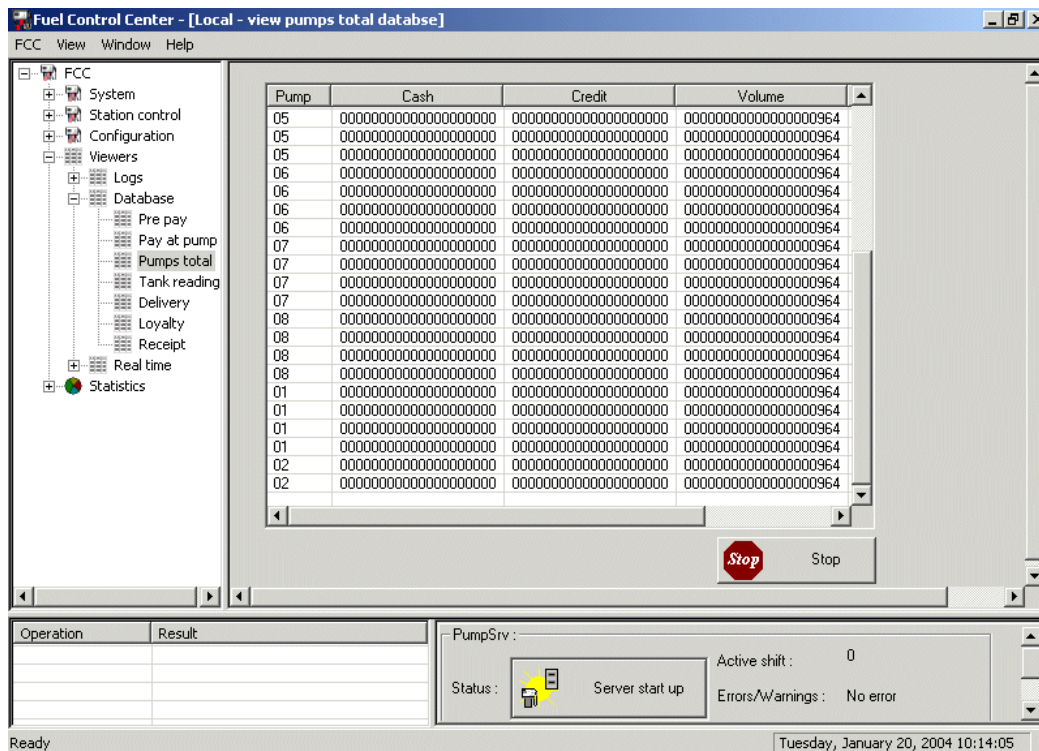
The *Force Remove* button is available only for the administrator. Click the *Administrator* button and enter your password to enable the *Force Remove* button.

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 *Start* to display a list of pump readings as they appear in the database table.
- 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:

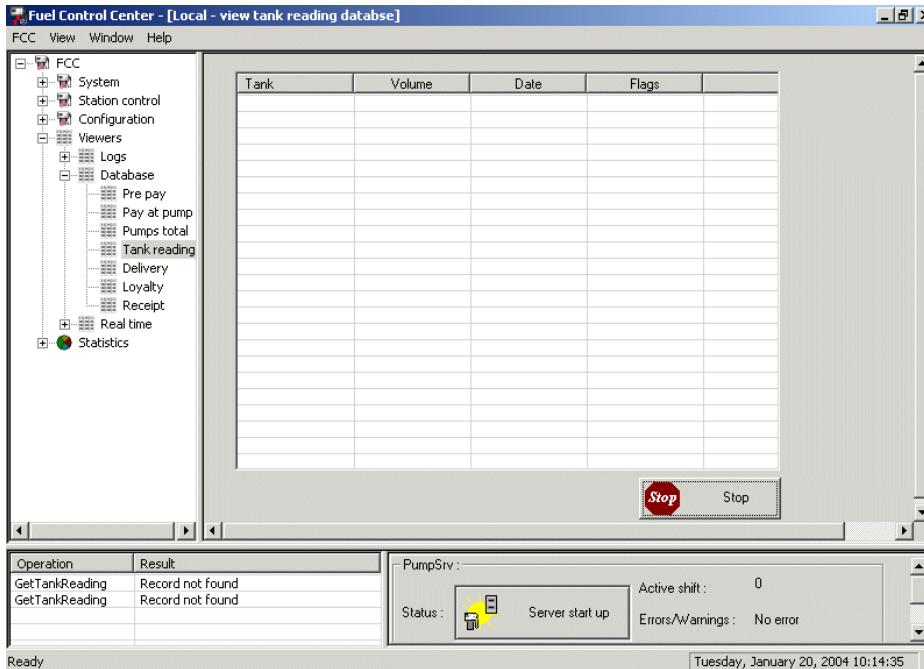
Columns	Description
Pump	Number of pump
Cash	The value, paid in cash, of the volume reading for the specific pump.
Credit	The value, paid in credit, of the volume reading for the specific pump.
Date	Displays the date of the specific pump reading and database entry.
Flag	Flags used internally for <i>PumpSrv</i> .

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 *Start* to display a list of Tank Readings as they appear in the database table.
- 3 Highlight the required **Tank reading**. Information on each Tank reading is displayed in the following fields, as described in the table below:

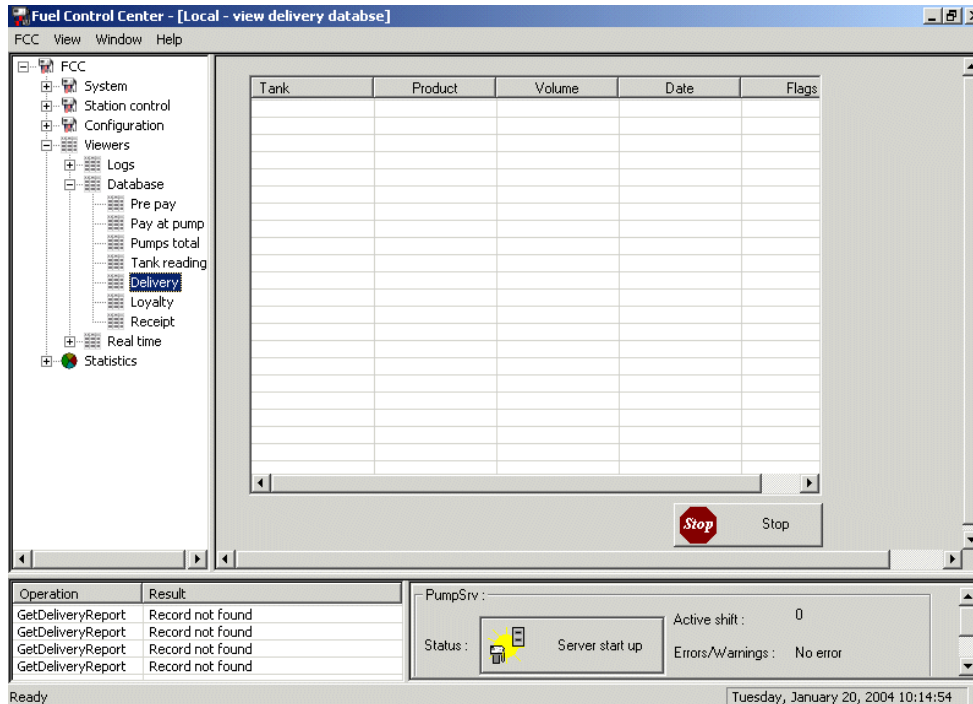
Columns	Description
Tank	Number of tank
Volume	Volume in the tank
Date	Displays the date of the database entry.
Flag	Flags used internally for <i>PumpSrv</i> .

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 *Start* to display a list of delivery readings as they appear in the database table.
- 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:

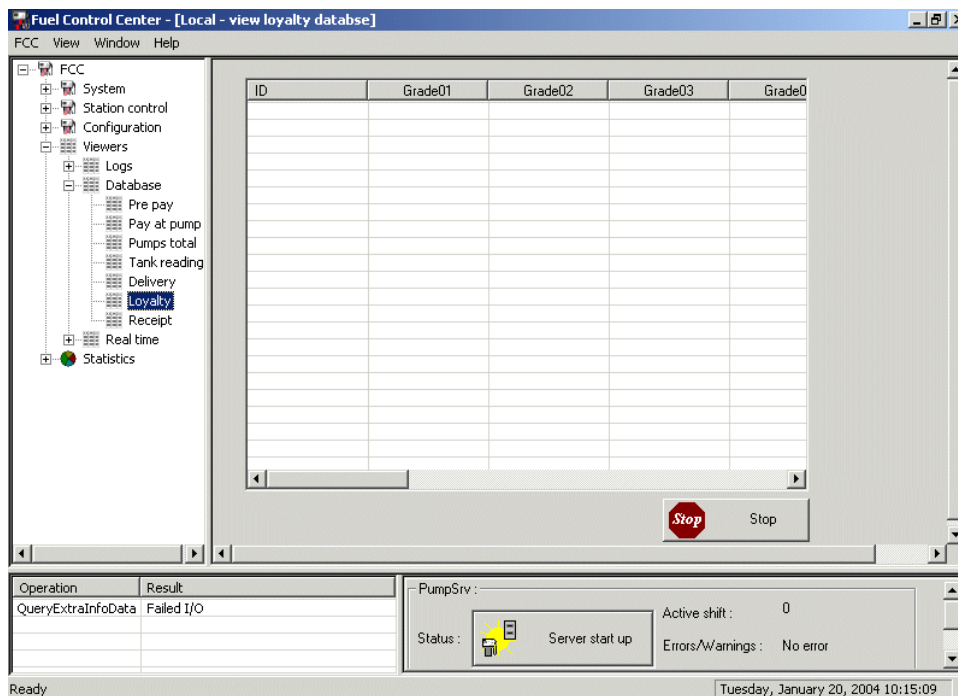
Columns	Description
Tank	Tank number for the specific delivery reading.
Product	The product code for the specific delivery reading.
Volume	Total volume of fuel in the tank
Date	Date of the specific delivery reading and database entry.
Flag	Flags used internally for <i>PumpSrv</i> .

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 *Start* to display a list of Loyalty Card readings as they appear in the database table.
- 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:

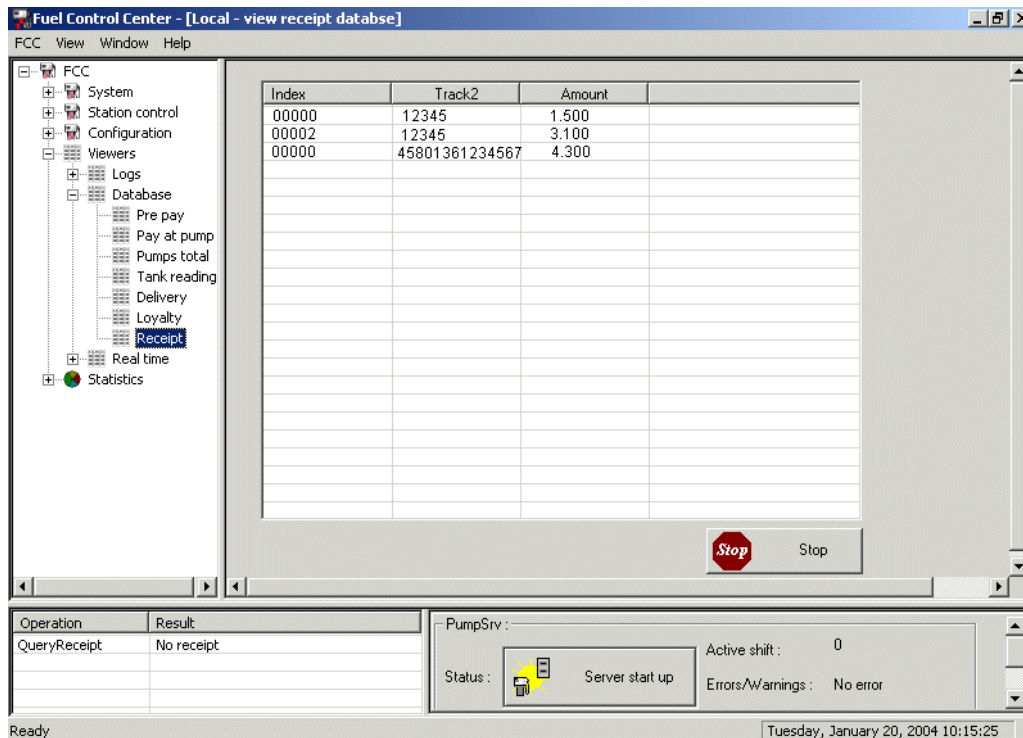
Columns	Description
ID	Customer's identification card number.
Grades 01-16	Name of grade purchased using a specific Loyalty Card.

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 *Start* to display a list of Receipt Readings as they appear in the database table.

- 3 Highlight the required **Receipt Reading**. Information on each Receipt is displayed in the following fields, as described in the table below:

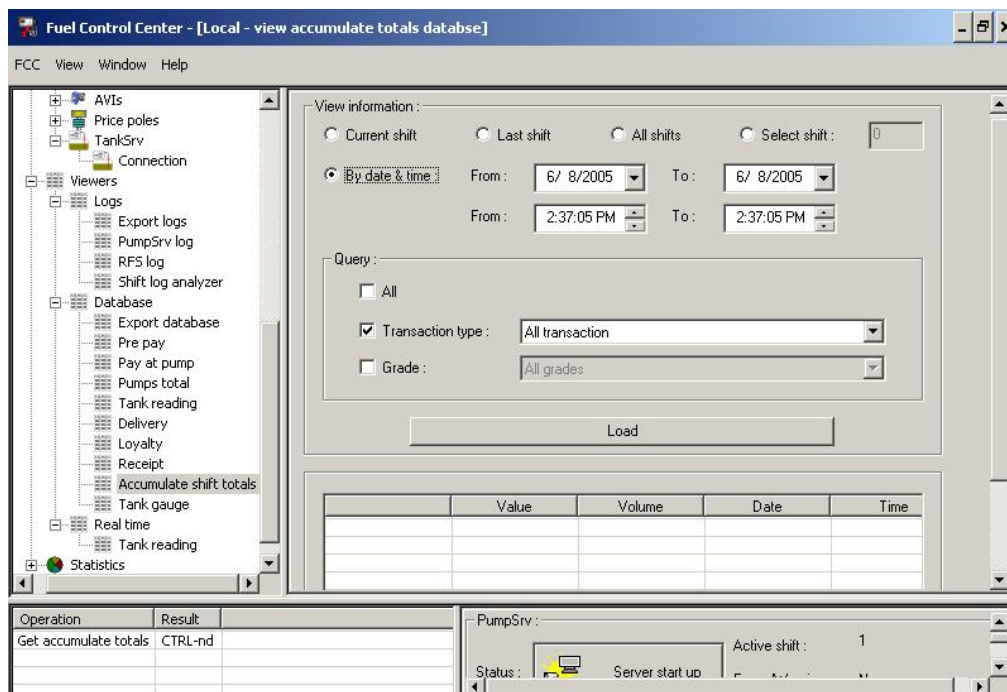
Columns	Description
Index	Index number of the receipt record in the database.
Track 2	Displays the details of the customer's credit card.
Amount	Receipt amount.

Accumulate Shift Totals

The Accumulate Shift Total 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:

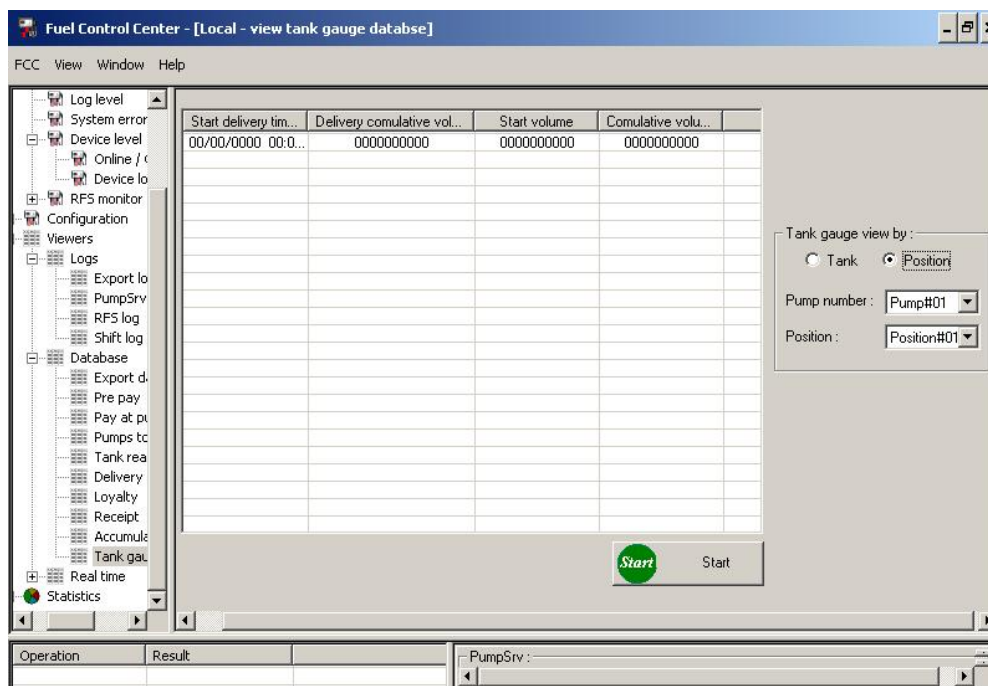
Columns	Description
Value	Displays the monetary value of the transaction.
Volume	Displays the volume of fuel dispensed during the transaction.
Date	Displays the date on which the transaction was performed.
Time	Displays the time on which the transaction was performed.

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.

Real Time

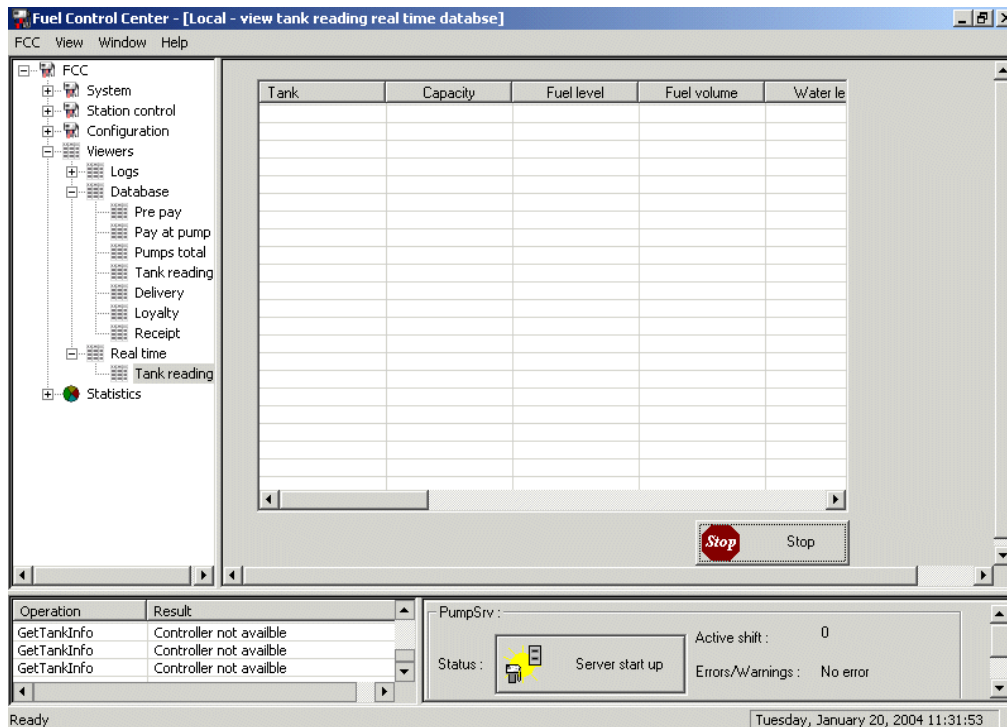
The *Real time* view is a current real-time Tank Reading. In the Database you may view Tank Readings that occurred.

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 *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 *Start* to display a list of the current Tank Readings as they appear in the Real-time table.
- 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.

6

Statistics

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:**

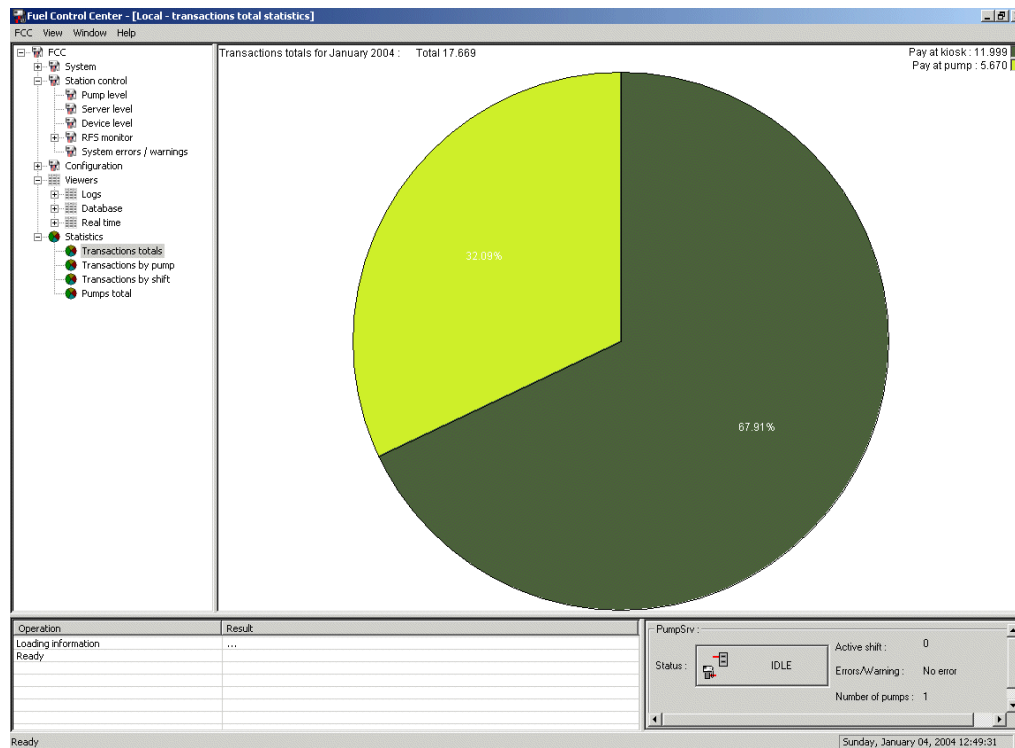
- 1 From the *FCC Tree*, click *Statistics* and expand the *FCC Tree* displaying the sub menus in the right panel. The following sub-menus are displayed:
 - Transactions Totals
 - Transactions by Pump
 - Transactions by Shift
 - Pumps Total
- 2 Select the required menu, in which you wish to view statistics, 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:



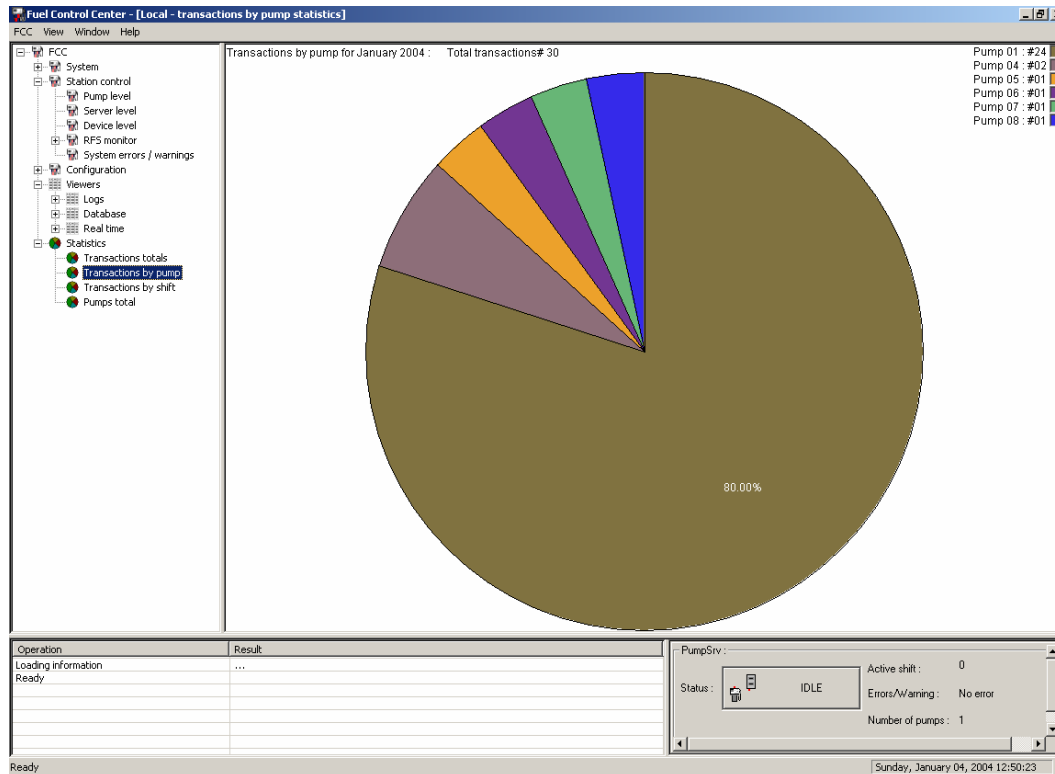
- 2 The following information is displayed:
 - The name of the month and the total number of transactions performed during that month. E.g., Transactions for January 2004: Total 17899.
 - Percentage of total transactions performed per each payment type
 - The Legend displays the payment type next to 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:



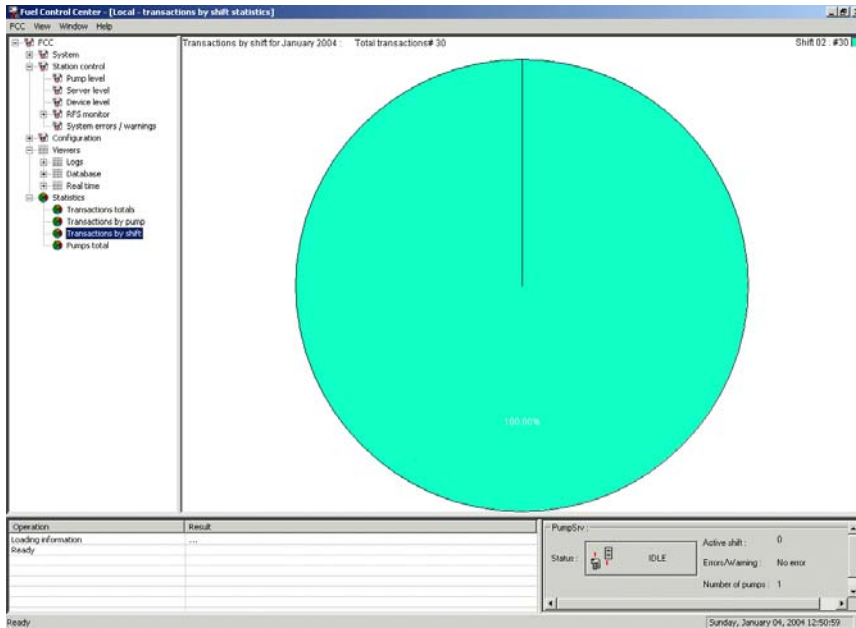
- 2 The following information is displayed:
 - The name of the month and the total number of transactions performed by all the pumps during that month.
 - Percentage of transactions performed by each pump, for example:
Pump #1 performed 25 transactions, 25% of the total transactions that month.
 - The 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:



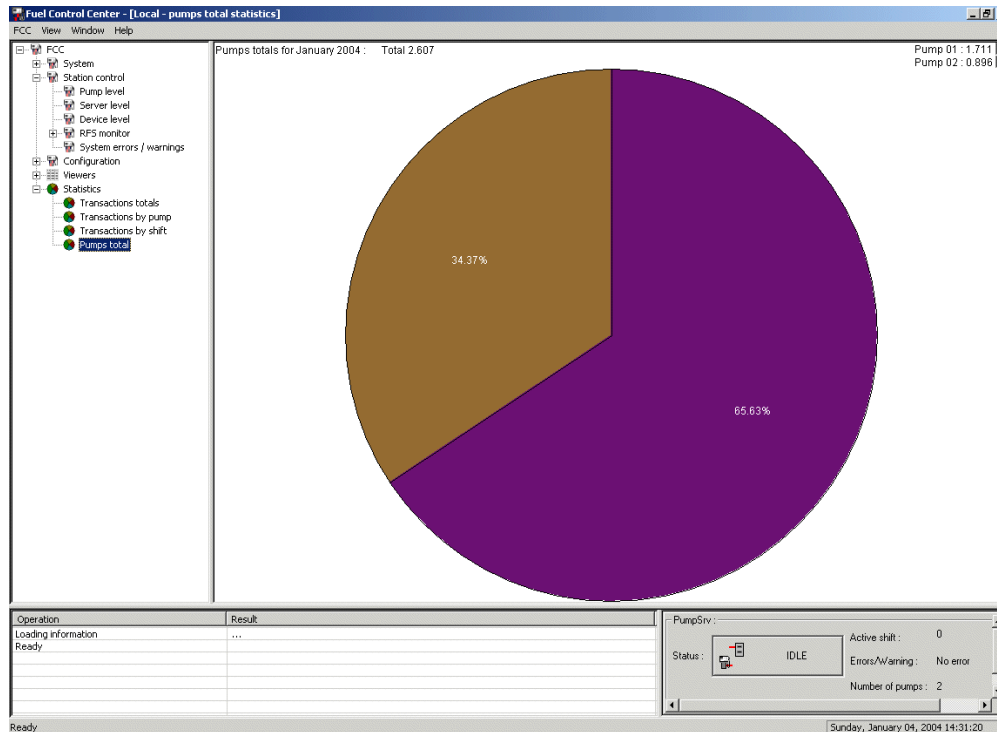
- 2 The following information is displayed:
 - The name of the month and the total number of transactions performed during all the shifts during that month.
 - Percentage of transactions performed in each shift.
 - The Legend displays the Shift number next to a color that corresponds with the color in 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.

7

How to:

This chapter provides step-by-step explanations of several common procedures.

In this chapter:

- Format a Receipt
- Define a Mode
- Set up a car wash program
- Set up parameters for Wet Stock Management
- Define Messages and Images to appear on Pump Terminal Display
- Configuring PAK and Prepay Via Doms Controller

Format, Print, and Reprint a Receipt

This procedure describes how to format, customize, and reprint a new Receipt. The following example, below, displays the layout and sections that may appear on a Receipt.

Example of a Receipt:

```
*****
Welcome !!!

Retalix LTD
- Original -
*****
Credit Type :
4580100799501299

Vehicle ID :

07-16-2002      17:22
Receipt #      : 000143

Pump Number    : 1
Grade          : Diesel
Unit price     : $ 2.50
Amount        : 2.145 Gals
Total         : $ 6.04
Service fee    : $ 0.10
Tax           : $ 0.89
To pay        : $ 6.14

Thank You for
Visiting us in Retalix!!!
```

Header

Trailer

The example above displays the **Header** and **Trailer** sections. **HotPumping** is only applicable where a credit card is used and the **Hotpumping** function is enabled. See General parameters in *Chapter 3, Configuring General Parameters*.

All other receipt fields that appear on receipts, e.g., Receipt Number, Pump Number, Grade Type etc., which are all variable parameters, are defined and formatted according to the *Convert Layer* used by your system.

If your system uses an *Allied Convert Layer*, and the Generator Active parameter is selected, a Receipt Generator controls the defining of the variables. If it is not selected, then Allied sets the parameters for the Receipt types. If your system uses the *RFS*, the Receipt Generator controls the defining of the variables.

Note:

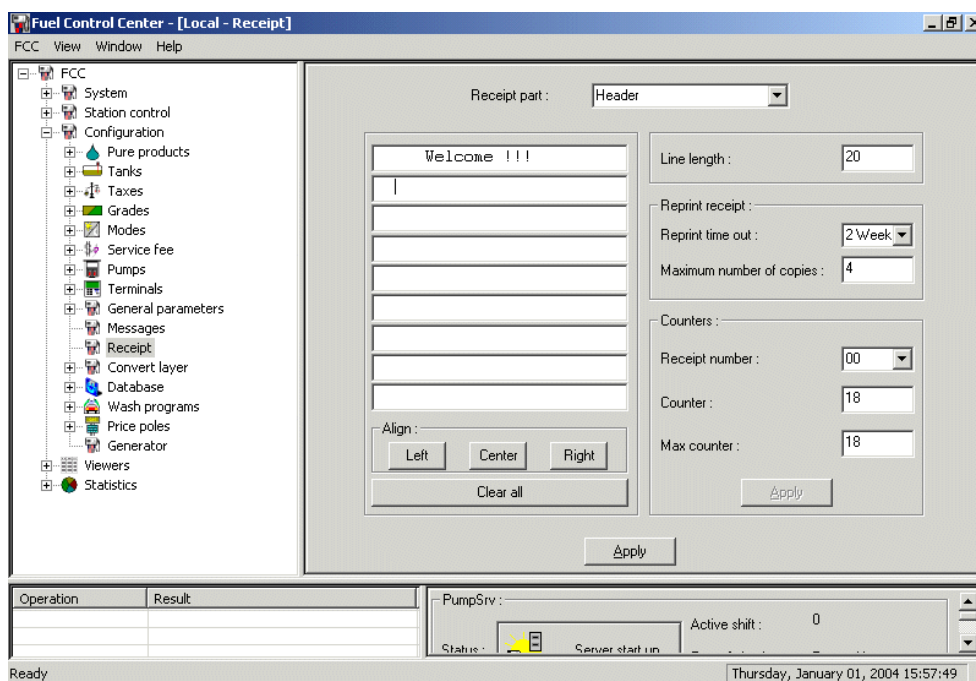
The Receipt Generator is not covered in the scope of this document.

Continue with the procedure, following the Steps carefully.

Step 1

➤ To Define a Receipt:

- 1 Start the *FCC* from the Start menu. The *FCC* main interface displays.
- 2 From the *FCC Tree*, click *Configuration*. The *Configuration* menu opens displaying the Fuel System Registry tables in the right pane.
- 3 Click the *Receipt* menu to display the *Receipt* dialog:



The Receipt dialog enables you to define the three sections of the receipt. Define each section individually.

Defining the header:

- a. Select *Header* from the **Receipt part** field drop-down list. *Header* appears at the top of the text area.
- b. Click the first line in the Header section and type in the text that appears at the top of the receipt. For example, Welcome !!!
- c. Align the text you typed, clicking *Left*, *Center*, or *Right* buttons, and then click *Apply*.
- d. Click *Clear all* if you want to delete all the text you entered.

Note:

Do not click *Clear all* to revise the message, as this function deletes the entire message. To revise, click the line or specific word you wish to make changes to, and delete or over type the new text.

- e. Enter the number of characters per line, including spaces, in the **Line Length** field.

Note:

The **Line Length** field is defined according to your printer. Check the width of the printer paper before entering the line length. The **Line Length** should be less than the printer paper width.

The header is defined. Define the Hot pumping section.

Defining the hot pumping section:

The Hot Pumping part of the receipt is what is printed on the receipt when authorization of a credit card transaction is denied by OLA. If the Hot Pumping feature is enabled in the General Parameters section, the message is displayed in the OLA Decline Messages dialog, and can be printed on the receipt, an example of such a message is, "Card was declined, please see cashier". To print the messages on the receipt follow the steps below:

- a. Select *HotPumping* from the **Receipt part** field drop-down list. *HotPumping* appears at the top of the text area.
- b. Click the first line in the HotPumping section and type in the text that appears in the body of the receipt. For example, "Card was declined, Please see cashier".
- c. Align the text you typed, clicking *Left*, *Center*, or *Right* buttons, and then click *Apply*.
- d. Click *Clear all* if you want to delete all the text you entered.

Note:

Do not click *Clear all* to revise the message. This function deletes the entire message. The **Line length** should be less than the printer paper width.

The hotpumping area is defined. Define the trailer.

Defining the trailer:

- a. Select *Trailer* from the **Receipt part** field drop-down list. *Trailer* appears at the top of the text area.
- b. Click the first line in the Trailer section and type in the text that appears at the bottom of the receipt. For example, "Thank You!!!".
- c. Align the text you typed, clicking *Left*, *Center*, or *Right* buttons, and then click *Apply*.
- d. Click *Clear all* if you want to delete all the text you entered.

Note:

Do not click *Clear all* to revise the message. This function deletes the entire message. To revise, click the line or specific word you wish to make changes to, and delete or over type the new text.

The trailer is defined. Proceed to *Step 2* below.

Step 2

➤ **To Define the Reprinting of a Receipt**

Reprinting a receipt is necessary, for example, when a customer fuels and then leaves without taking a receipt. The customer may request a reprint of the receipt, and receive a copy up to a predefined amount of time.

- 1 From the *FCC Tree*, click the *Receipt* menu to display the *Receipt* dialog as displayed in *Step 1* above.
- 2 Select from the **Reprint timeout** drop-down list the number of days or weeks before the information is deleted.
- 3 Enter the number of copies per receipt in the **Maximum number of copies** field. For example, if you enter 2, the customer may fuel and receive a receipt, and then a few days later come back and receive a copy of the original receipt. If the customer comes back a third time, a reprint is no longer available.
- 4 From the **Counter** drop-down list, select the number of the Receipt.

Note:

The Counter fields are relevant only in systems using the *RFS*.

- 5 Enter the number of times a receipt type may be used in the **Counters** field.

- 6 Enter the maximum number of receipt types that maybe printed per receipt, before the system restarts the numbering in the **Max counter** field. For example, the Max counter may be set to 400. A specific receipt type maybe printed 400 time's, before it restarts the numbering.

The Receipt sections are defined. Continue with the other parameters to continue defining a Receipt.

Step 3

➤ Monitoring the Receipts Using RFS:

If your system uses the *RFS*, follow the steps below:

- 1 From the *FCC Tree*, click *RFS* to open the *Convert Layer - RFS* dialog.
- 2 From the *Receipt Mode area*, select the *Receipt modes* from the drop-down lists for the **AVI** and **PAP** fields.

Select one of the following options specifying when to print a receipt for a customer:

- Always
- Ask user
- Never

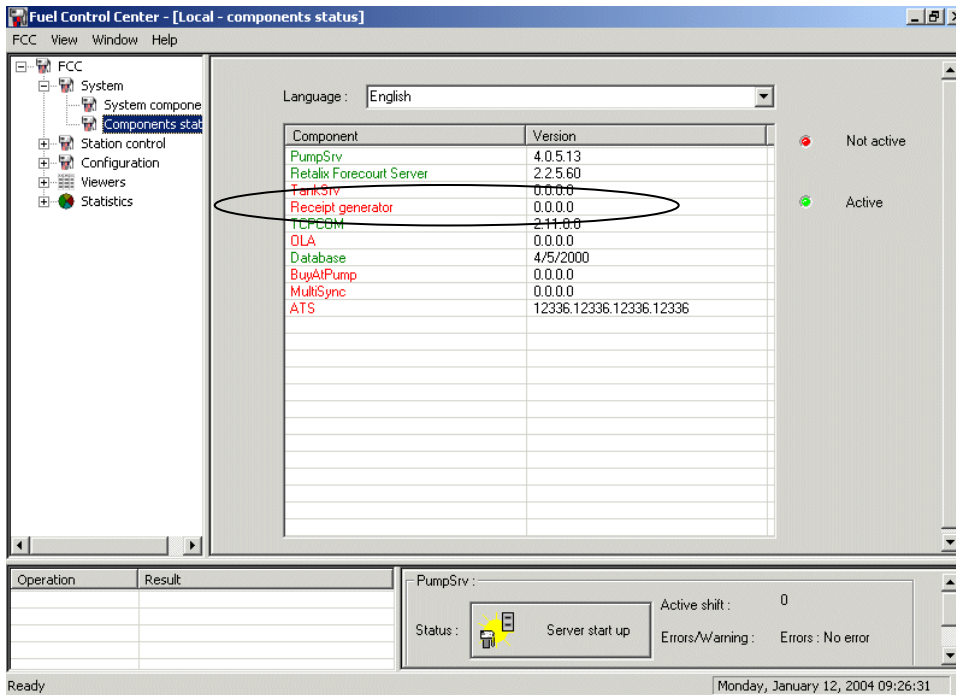
Note:

This parameter is determined by the station manager.

- 3 Click *Apply* to save.

The Receipt Generator

The *RFS* uses a system component called Receipt Generator to format the receipt that is printed at the terminal. From the *Allied* convert layer, there is the option to either use the Receipt Generator or the *Allied* receipt formatting. Although the Receipt Generator is outside the scope of this document in the **FCC/System components/Components status** you may view all the active system components that are active, including the Receipt Generator, as shown below:



- Represents an active component
- Represents an inactive component.

Proceed to *Step 4* below.

Step 4

➤ Monitoring Receipts Using an Allied Convert Layer:

If your system uses an *Allied Convert Layer*, follow the steps below:

- 1 From the *Ask to print receipt* drop-down list, select one of the following options to indicate when to print a customer's receipt:
 - While fuelling
 - At beginning
 - At end
 - Print always
- 2 Select *Allied* or *PumpSrv* from the Format receipt area. You have the option to either use the *Allied* receipt formatting, or *PumpSrv* with a Receipt Generator.
- 3 If you select *Allied*, and in the **Reprint receipt format** field *None*, this indicates that the original receipt is printed in the standard *Allied* format, and the reprint (copies of the original receipt) are also formatted by *Allied* standard formatting.
- 4 If you select *Allied*, and you want the reprints (copies of the original receipt) to be formatted by *PumpSrv*, select the appropriate Company name from the drop-down list in the **Reprint receipt format** field.

- 5 If you select *PumpSrv*, you must also select the **Generator Active** field from the Format Receipt area. The Receipt Generator formats the receipt printed at the terminal. *PumpSrv* formats the original receipt and the reprint (copies of the original receipt). Select the name of your company from the drop-down list to apply the relevant formatting from *PumpSrv*.
- 6 Check the *Print customer account* check box in the Receipt area to specify that the customer's credit card account number will be printed on the receipt, when a credit/debit card was used.
The *Convert Layer* parameters are set. Proceed to *Step 5* below.

Step 5

➤ Viewing the Receipts in the Database:

- 1 From the *FCC Tree*, select *Viewers/Database/Receipt*. The Viewers: Database – Receipt dialog is displayed enabling you to view records in the database, of all printed receipts.
- 2 Click *Refresh* every time new receipt data is recorded to update the database.

You have successfully formatted, printed, and reprinted a receipt. Refer to Chapter 3 *Configuring – Receipts* for more information on receipts.

Define a Mode

A Mode is a set of parameters defined for a day shift, night shift, weekend shift etc. These parameters include payment methods and Service Fees. There are 5 possible payment methods that you may define for the different Modes:

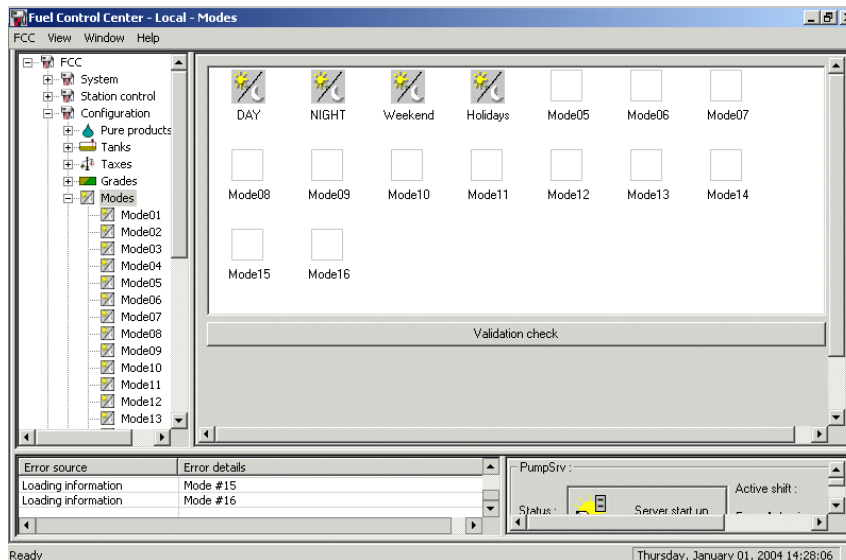
- Pay at Kiosk
- Pay at pump
- Pre pay
- Pay AVI
- Pay Attendant

This procedure of defining a Mode includes the configuration of several fields in different menus. Follow the steps carefully.

Step 1

➤ To Define the Mode:

- 1 Start the *FCC* from the Start menu. The *FCC* main interface is displayed.
- 2 From the *FCC Tree*, click *Configuration*. The *Configuration* menu displays the Fuel System Registry tables in the right pane.
- 3 Click the *Modes* menu to display the Modes in the system. The Modes window is displayed:



You may define up to 16 different Modes.

Note:

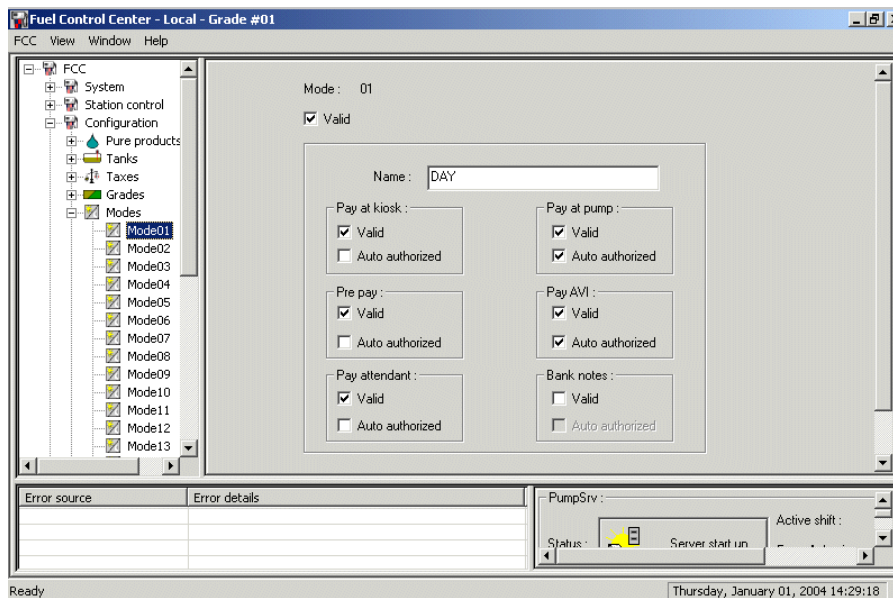
Steps #4 - #5 below, describe the process of defining a Day mode, Night mode, Weekend mode, and Holiday mode. Once a mode has been defined, the appropriate icon will appear as shown in step #3.

- 4 Expand the *Modes* menu on the *Tree*. The Modes are listed from 01-16.

Note:

Mode 01 is the default mode. This indicates that if at any stage during the day a mode is not defined, the system uses the default settings in Mode 01.

- 5 Double-click Mode02 icon, or select the Mode02 from the *FCC Tree*. The Mode02 dialog is displayed:



- 6 Check the *Valid* checkbox to validate the Mode in the system.
- 7 Enter the *Name* of the Mode in the *Name* field.
- 8 Check the required checkboxes to indicate which payment methods are valid during the Mode.

Note:

The *Auto authorized* field indicates that the payment methods are automatically authorized. For example, if a pump nozzle is lifted, and the system is in **Requesting** status, the system will automatically authorize to begin fuelling.

For details on the various fields used for configuring Modes, see *Chapter 3 – Configuration, Modes*.

- 9 Click *Apply*.
- 10 From the *FCC Tree*, click Mode03.
- 11 Check the *Valid* checkbox to validate the mode in the system.
- 12 Enter the *Name* of the Mode in the name field.
- 13 Check the appropriate checkboxes. For example, if the kiosk does not operate at night, de-select the *Pay at Kiosk* checkboxes. Your station may only support *Pay at Pump* or *Pay AVI* at night.

Note:

If there are no attendants and the kiosk does not operate at night, you must check the *Auto authorized* checkboxes to enable authorization, as there is no one to perform manual authorization.

- 14 Click *Apply*.
- 15 Repeat the steps #5-#9 to define Mode04 as a Weekend mode and Mode 05 as a Holiday mode.

Before you continue, click *Validation Check*, to verify there are no errors. A mode with an error displays as . If there are errors, correct them in the *Mode* dialog.

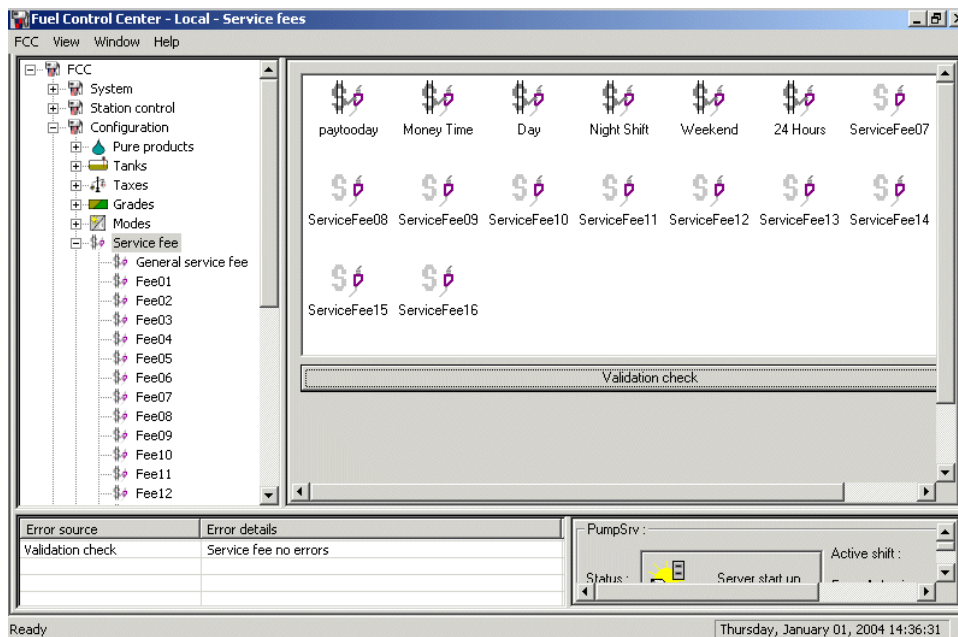
Proceed to *Step 2* to define the Service Fees that are relevant to the Modes.

Step 2

➤ To Define the Service Fee:

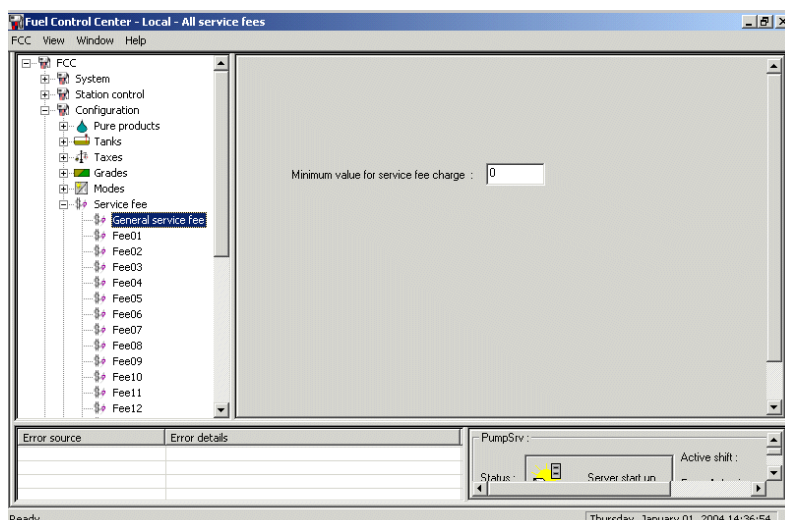
The Service Fees are added to the price of the transaction. Different Service Fees may be defined for a day or night shift. It is advised that the Service Fee names match the Mode names.

- 1 From the *FCC Tree*, click Service Fee. The *Service Fee* window is displayed:

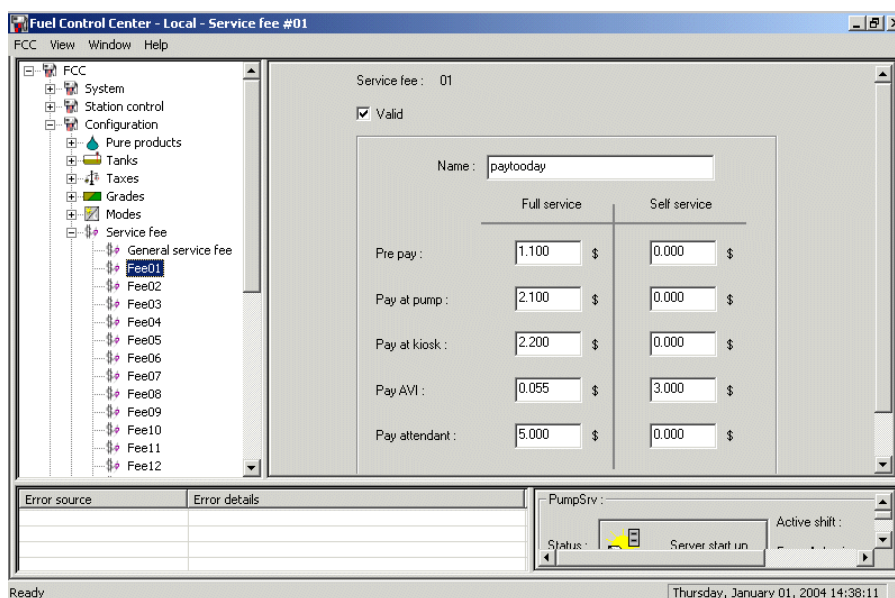


You may define up to 16 different Service Fees. This depends on the policy of the Station. For each Payment type the Service Fee may be different. For example, the price of Self-Service is usually less than Full-Service.

- 2 Expand the Service Fee menu from the *FCC Tree*. The Service Fees are listed 01-16.
- 3 From the *FCC Tree*, click *General Service Fee*. The *Configuration: General Service Fee* dialog is displayed:



- 4 Enter an amount in the Minimum Value For Service Fee Charge field to specify that if a customer fuels for an amount below the Minimum Value For Service Fee Charge, no service fee will be charged. For example, if you entered \$2.00, then any transaction for less than \$2.00 will not be charged a service fee.
- 5 From the *FCC Tree*, select the Service Fee01. The *Configuration: Service Fee01* dialog is displayed:



There are 2 categories to which Service Fees may be applied, as shown in the dialog above:

- Full service
- Self service

Each category includes a list of the various payment methods. You may apply a Service Fee to any payment method.

- 6 Check the *Valid* checkbox to validate the Service Fee in the system.

- 7 Enter the *Name* of the Service Fee, for example, Day.
- 8 Enter the required Service Fee amount for each payment method. For example, in the Full-service Attendant field enter 250 indicating that if an attendant fuels the vehicle, a Service Fee of 25 cents is automatically added to the price.
Enter any additional Services Fees.
- 9 Click *Apply*.
- 10 From the *FCC Tree*, click Service Fee02.
- 11 Repeat the steps #4-#7 to define Service Fee02 as a Weekend Service Fee, and Service Fee 03 as a Holiday Service Fee.
Define any additional Service Fees.
The next step is to connect the Modes and Service Fees to the relevant Pumps, and define the schedule. Proceed to *Step 3* below.

Step 3

➤ To Link Modes to Pumps:

Note:

Before linking Modes to Pumps, you must first Configure the Pumps in the station. For further details refer to *Chapter 2 – Configuration, Pumps*.

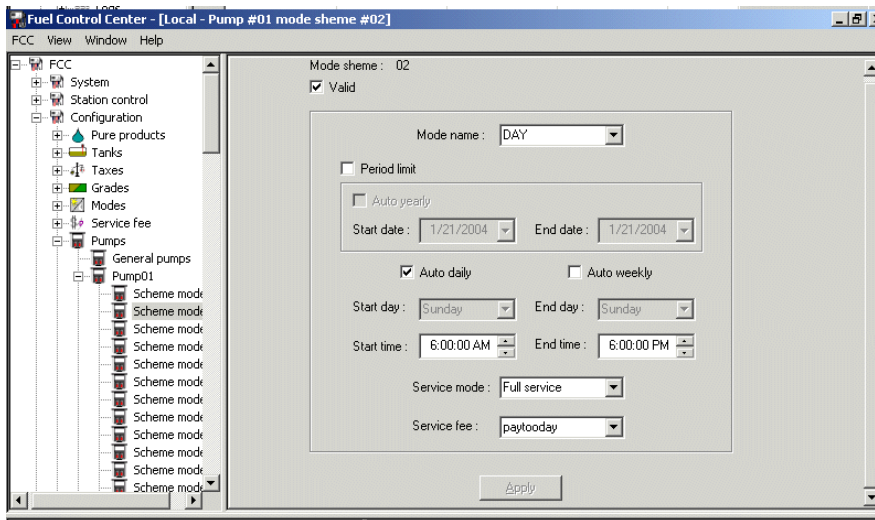
- 1 From the *FCC Tree*, click *Pumps* and expand the *Tree*.
- 2 From the *FCC Tree*, select the Pump to which you are connecting the Mode and Service Fee. Expand the menu on the *Tree*, then select Pump, displaying the *Mode Schemes*.

Note:

The system supports up to 64 Pumps and 64 Mode Schemes per Pump.

The steps below describe how to link the required Modes to Pump –01.

- 3 From the *FCC Tree* under the Pump01 menu, click *Mode Scheme02*. The *Mode Scheme* dialog is displayed:



- 4 Check the *Valid* checkbox to validate that Mode Scheme number 02 is linked to the Pump01 in the system.
- 5 From the Mode Name drop-down list, select the relevant Mode Name. For example, Day.
- 6 Check the *Auto daily* checkbox to determine that this Mode is automatically applied to pump01 every day between specific hours.
- 7 Select the *Start time* and *End time* by clicking the up and down arrows next to the time fields to specify that this Mode is applied between the specified times on a daily basis.

Note:

You may define a Mode Scheme for a specific period if the *Period limit* checkbox is checked. Alternatively, you may define the Mode hourly, daily, weekly etc. Define the Modes according to the station's policy.

For more information on Mode Schemes see *Chapter 3, Configuring Mode Schemes*.

- 8 Select a *Fee* from the drop-down list. The Service Fee is usually defined to match the Mode. For example, the Day Service Fee is linked to the Day Mode. This specifies that a specific Service Fee is added to all transactions performed through this Pump, that are linked to Mode Scheme 02.

Note:

You may define several Mode Schemes and link them to the *Day* mode, so that during the day at different hours, various Service Fees are charged.

- 9 Click *Apply*.

The Modes are defined and connected to the Pumps. Proceed to *Step 4* to ensure the Service Fees defined are used.

Step 4

➤ **To Ensure the Service Fee is Used:**

- 1 From the *FCC Tree*, click *General Parameters*, and then the *Services* menu to display the *Configuration – General Parameters - Services* dialog.
- 2 From the *Service Fee* area, select the *Active* checkbox to ensure the Service Fees defined in the system are used.

Proceed to *Step 5* below to see how to change a predefined Mode manually from the Station Control dialog.

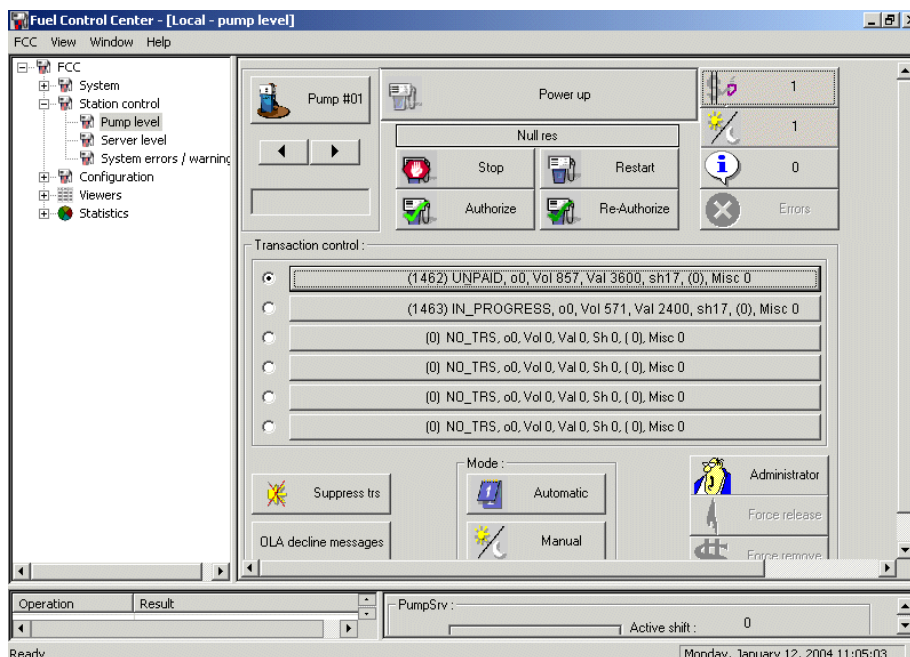
Step 5

➤ **To Change a Mode Manually From the Station Control Dialog:**

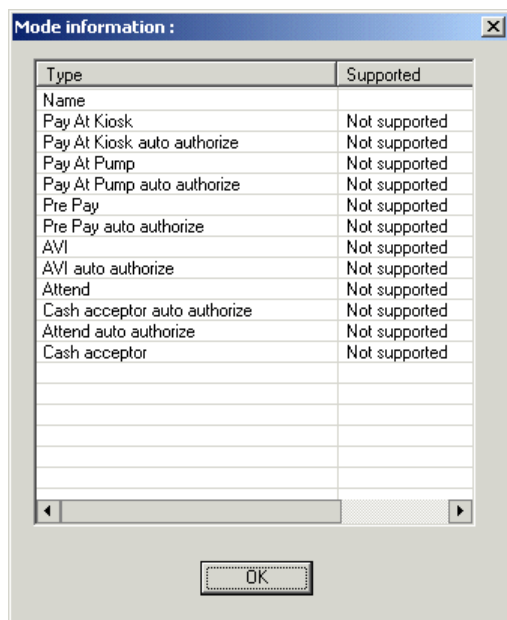
The *Station Control* dialog enables you to view statuses and processes of the various transactions. In addition, you may view the Modes attached to the different Pumps.

In this menu there is a function enabling you to manually apply a different Mode to a specific Pump. For example, a Pump may be linked to the *Day* Mode; you may manually change it to *Holiday* Mode. The Pump is connected to the new Mode until you click the *Automatic* button (see below), which then reconnects the Pump to the Mode originally configured.

- 1 From the *FCC Tree*, click *Station control/Pump level*. The *Pump Level* dialog is displayed:

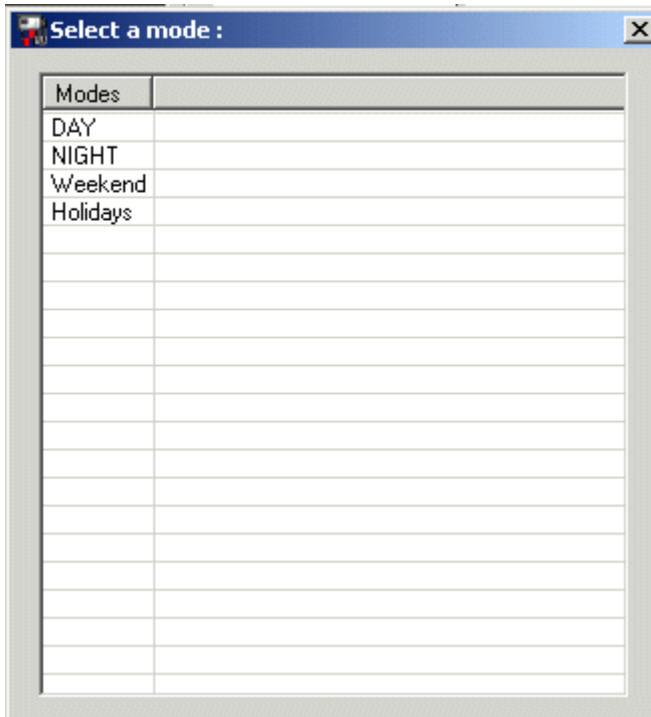


- 2 Click ◀ ▶ to scroll through the Pumps. Each Pump may have various Modes defined for it.
- 3 Click *Mode*, which displays the number of the current Mode in use, to open the *Mode More Info* dialog.



For each operating Pump you may view which transaction types are attached to the Mode.

- 4 Click OK to close the dialog.



Set up Parameters for Wetstock Management

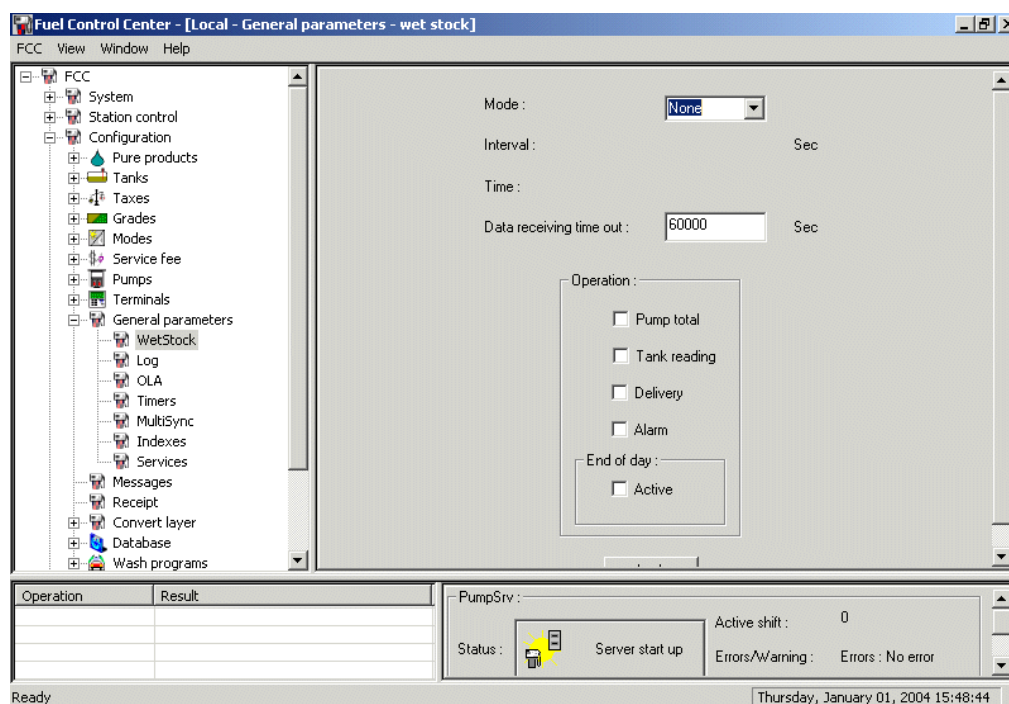
Wetstock Management enables a Fuel Station to monitor the amount of Wetstock that enters and exits the station. This is achieved by obtaining continuous updates on Purchasing, Sales, and Fuel Levels in the station.

The following procedure describes how to define the parameters required for setting up Tank Readings and for enabling the viewing of relevant data in the 'Viewers'.

Step 1

➤ To Define Parameters for Wetstock Readings:

- 1 From the *FCC Tree*, click and expand the *Configuration* menu.
- 2 From the *Configuration* menu, click *General Parameters*.
- 3 Expand the *General Parameters* menu, and click *WetStock*. The *Configuration: General Parameters – Wetstock* dialog is displayed:



- 4 From the Wetstock area, select a *Mode* from the *Mode* drop-down list:
 - Selecting *None* specifies that no Wetstock Readings will be taken
 - Selecting *Every X Seconds* specifies that a Wetstock Reading is taken as specific intervals.
 - Selecting *At time X* specifies that Wetstock Readings are taken at a specific time
- 5 Enter the number of seconds per interval if you selected *Every X Seconds* Mode.
- 6 Enter the *Time* if you selected *At time X* Mode, to specify the time of the reading.
- 7 From the *Data Receiving Timeout* field, enter the number of seconds. This indicates, how long in seconds, after a Tank Reading was requested and no response was received from the system, the request will be cancelled.
- 8 Select the relevant *Flags* checkboxes. The options are listed below:
 - Pump totals
 - Tank reading
 - Delivery
 - Alarm

Checking a particular checkbox specifies where the Wetstock Reading is required, e.g., Pump total, Tank, Delivery, or Alarm.

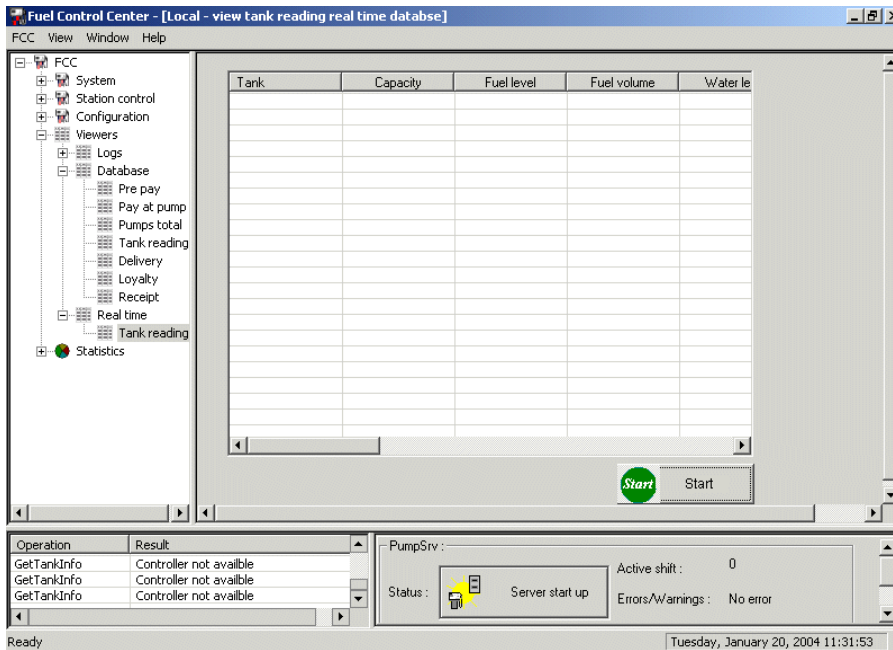
- 9 From the End Of Day area, select the *Active* checkbox to enable a process that saves specific QDX information on wetstock readings during End Of Day, in addition to the regular End Of Day process.

Proceed to *Step 2*, below, to view Wetstock Readings.

Step 2

➤ **To View the Defined Wetstock Readings:**

- 1 From the *FCC Tree*, click *Viewers*. The *View Fuel System Data* menu is displayed.
- 2 Click the *Real time Tank Reading* menu. The *Real time – Tank Reading* dialog is displayed:



- 3 Click  to start the Tank Reading. The Tank Reading begins, and the data on the screen continuously changes according to the Refresh options that were defined.
- 4 Click *Refresh* to get an immediate updated data reading.
- 5 From the Refresh Options area, select the *Auto* checkbox to enable continuous automatic Wetstock Readings.

You have successfully defined the parameters for Wetstock Management, and for viewing Tank Readings in the *Viewers*.

For more details on the Wetstock parameters, refer to *Chapter 5 Viewers, Tank Reading*.

Set up a Car Wash Program

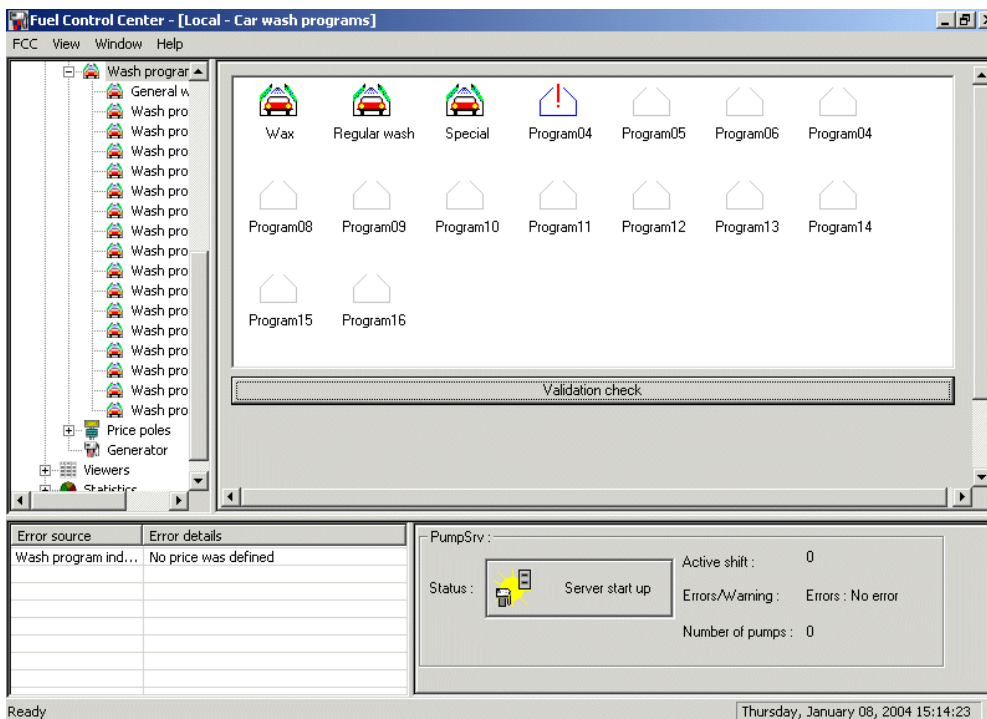
The Car Wash Program enables you to define the various Car Wash Programs in your forecourt. The following procedure describes how to set up a Car Wash Program. You have the option to set up a general wash program with data that applies to all valid Car Wash Programs in the system.

In this example, we will set up a general wash program that applies to a specific car wash program. Before a customer will start fueling, the terminal will display that a Wash and Wax car wash program is available for the specified price and that if the customer purchases a specified volume of fuel a discount will be applicable.

Step 1

➤ **To Access Car Wash Program Options:**

- 1 From the *FCC Tree*, click and expand the *Configuration* menu.
- 2 Click the *Wash Programs* menu to display the Car Wash Programs graphically:



You may define up to 16 different Car Wash Programs.

- 3 Expand the *FCC Tree* displaying the list of Car Wash Programs. The Car Wash Programs are numbered from 01-16.

Continue to define the General Wash Program. Proceed to *Step 2* below.

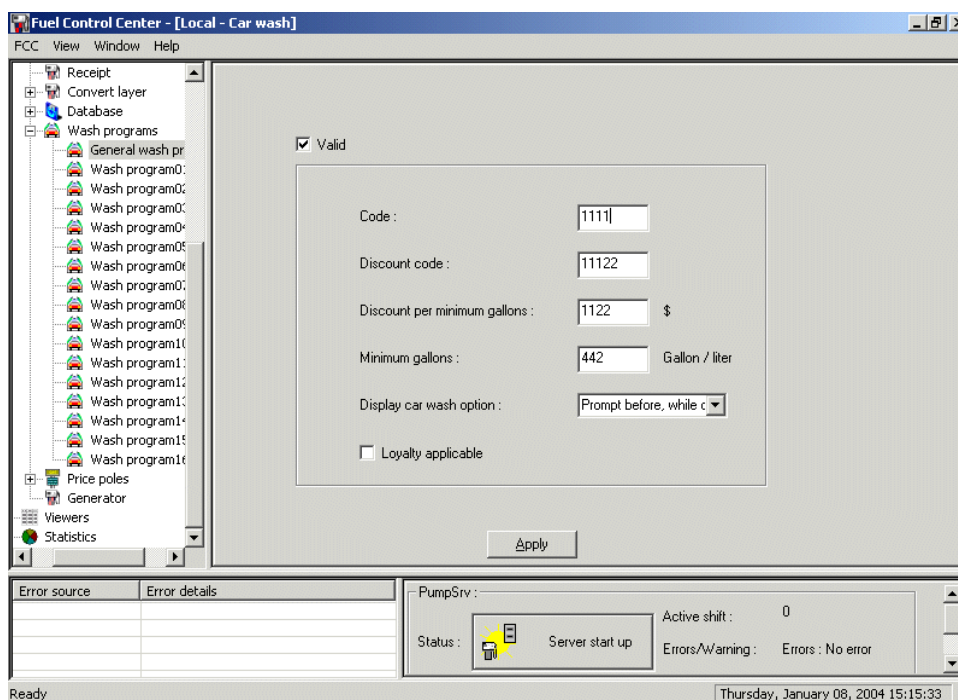
Step 2

➤ To Define a General Wash Program:

In this Step you are going to set up a General Wash Program that specifies:

- Before every customer starts fuelling, the terminal will display the car wash options available.
- If the customer purchases minimum 25 gallons, a specified discount will be applied.

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



- 5 Enter the Car Wash Code in the Car Wash Code field. This is an internal number.
- 6 Enter the Discount code in the Discount code field, which is an internal number to identify the wash programs with the discounts.
- 7 Enter the discount amount entitled per minimum volume of fuel purchased in the Discount per Minimum Gallons field.
- 8 Enter the minimum volume of fuel that a customer must purchase before being entitled to the discount in the Minimum Gallons field.

- 9 From the Display car wash option drop-down list, select a Display Car Wash Option. In this example, we will select Before Fueling, implying that before the customer starts fuelling, the terminal will prompt the different Car wash options or specials available.
- 10 Select the Loyalty applicable checkbox if your site accepts loyalty member cards.
- 11 Enter the name of the Wash Program manufacturer in the Type field.
- 12 Enter the communication port number in the Comm Port field.
- 13 From the Baud Rate drop-down list, select the relevant Baud rate.
- 14 Enter the relevant IP Address in the IP Address field.

Note:

If the Simulator is selected, it indicates that the Wash Programs device is used with a software pump simulator.

- 15 Click *Apply* to save.

The data you have entered will apply to all the wash programs you continue to define.

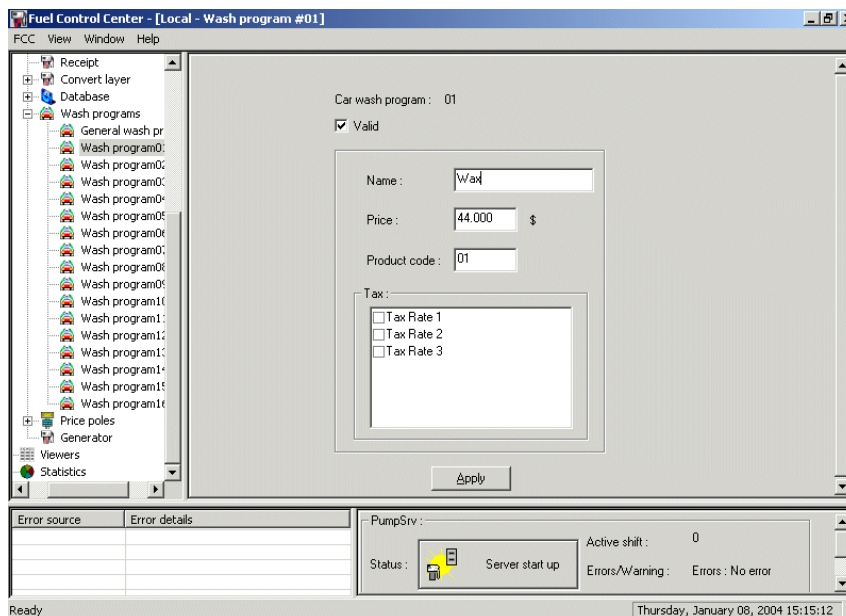
➤ **To Define a Wash Program:**

- 1 Double-click an undefined Car Wash Program, or select a Car Wash Program from the *FCC Tree*.

Note:

A Car Wash Program that is not named or does not include a car icon, is an undefined Wash Program.

The *Wash program* dialog is displayed:



- 2 From the *FCC Tree*, you may click any Wash Program to display its properties.
- 3 Select the Valid checkbox to activate the car wash program you are setting up.
- 4 Enter the name of the Car Wash Program in the Name field. For example, the wash program you are setting up, may be a Wash and Wax.
- 5 Enter the price of the car wash program in the Price field.
- 6 Select a Product Code from the drop-down list, which will appear at the POS terminal.
- 7 Check the appropriate Tax rate checkbox if there is tax applicable on car wash programs.
- 8 Click *Apply* to save.
- 9 From the *FCC Tree*, click *Wash Programs* to view all the defined Car Wash Programs in the system.
- 10 Click *Validation Check* to ensure there are no system errors. The status is displayed in the bottom-pane of the dialog.

The Car Wash Program is defined, which is based on the parameter settings in the *General Wash Program* dialog.

You may continue to set up further wash programs if required.

Configuring PAK And Prepay Via Doms Controller

The following procedure describes the various steps required to configure **PAK (Pay @ Kiosk)** and **PrePay** modes to operate in a fuel forecourt, via a Doms controller.

Notes:

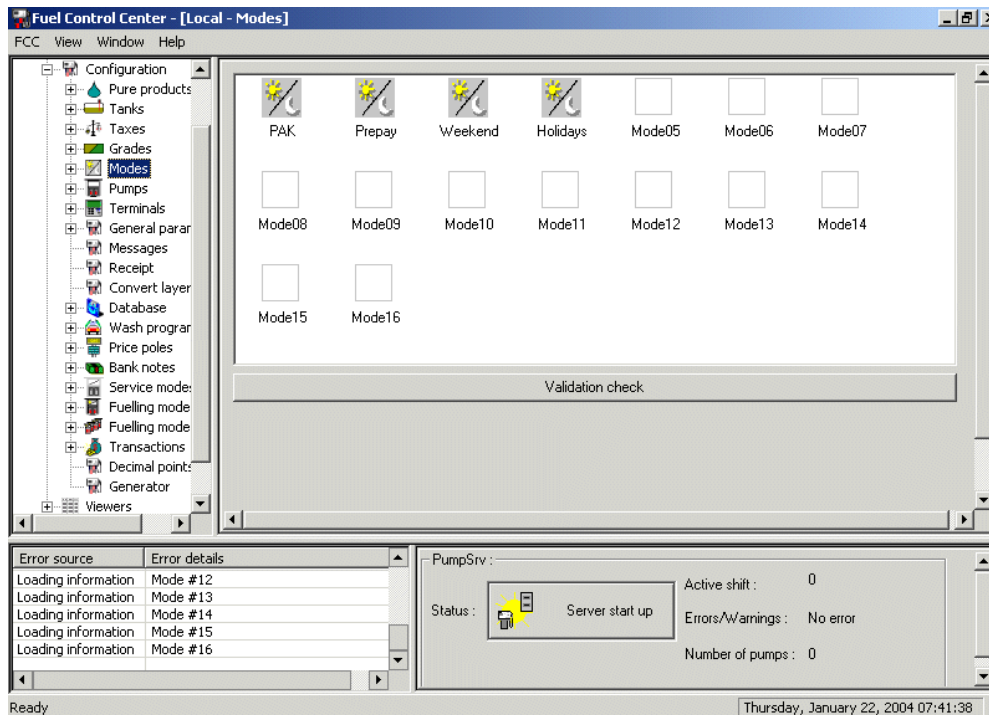
The procedure described below is intended only for stations that interface with the Doms convert layer.

Step 1 - Define PAK and Prepay Modes

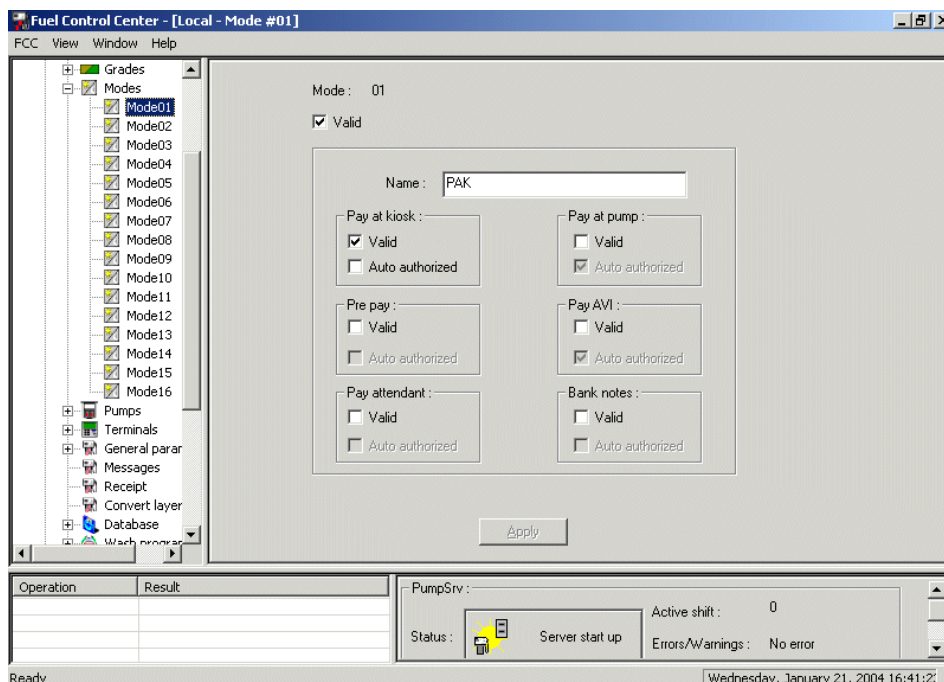
This step describes how to define PAK and Prepay modes.

➤ To Define PAK and Prepay Modes:

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



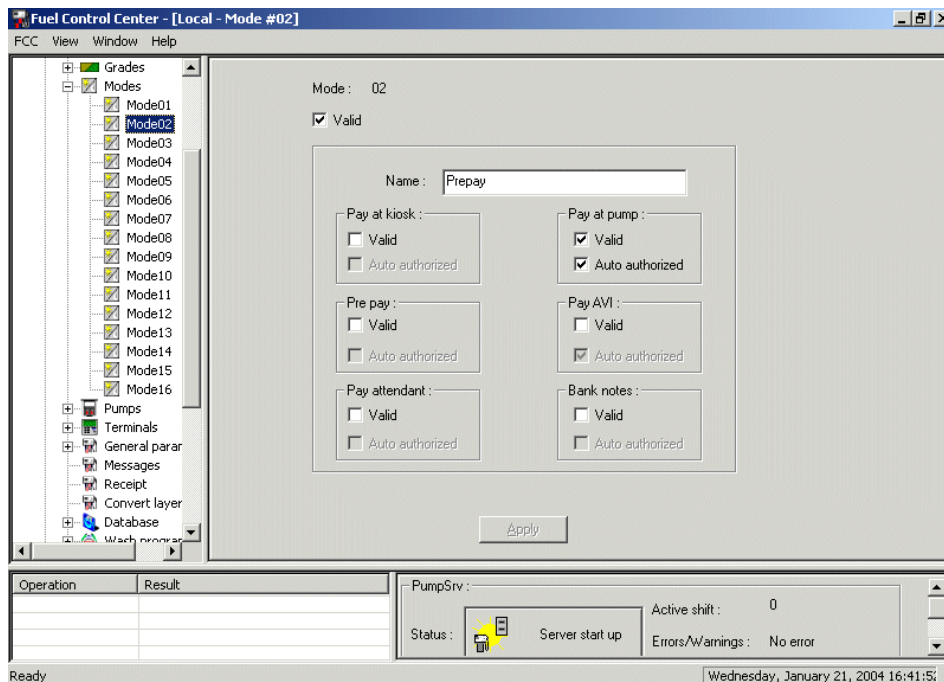
- 2 Double-click **Mode01** from the *FCC tree*. The Mode #01 dialog is displayed:



- 3 Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
Mode 01	An internal code for the Mode as used in <i>PumpSrv</i> .
Valid	Select the checkbox.
Name	Enter PAK
Pay at Kiosk area:	
Valid	Select the checkbox.
Auto	Select this checkbox only if you wish to configure PAK transactions to be automatically authorized. 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.

- 4 Click *Apply*.
- 5 Double-click **Mode02** from the *FCC tree*. The Mode #02 dialog is displayed:



- 6 Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
Mode 02	An internal code for the Mode as used in <i>PumpSrv</i> .
Valid	Select the checkbox.
Name	Enter PrePay
PrePay area:	
Valid	Select the checkbox.
Auto	Select this checkbox only if you wish to configure PrePay transactions to be automatically authorized. 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.

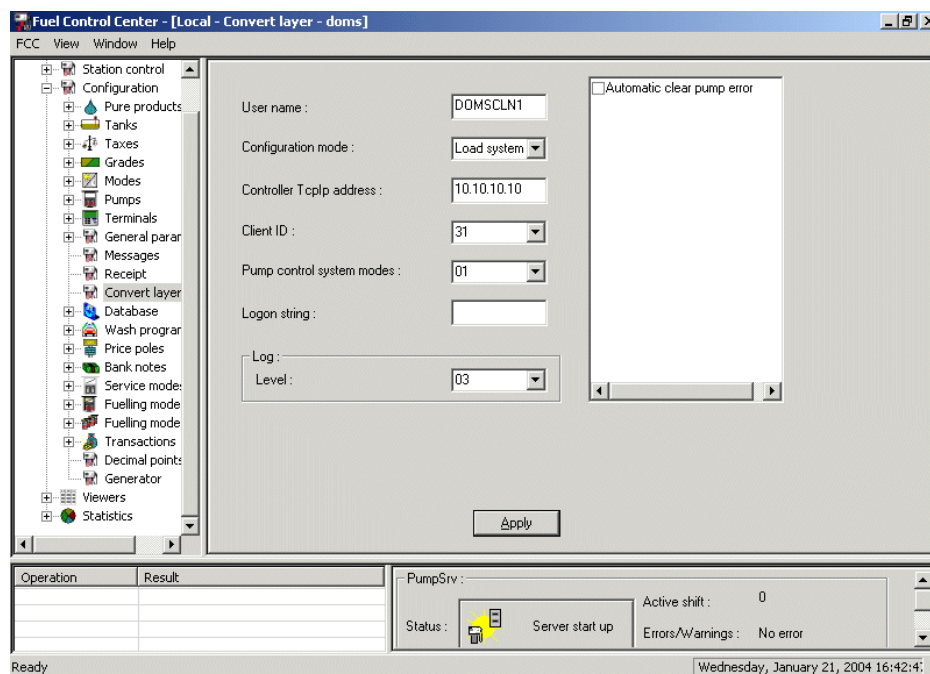
- 7 Click *Apply*.
- 8 From the *FCC tree*, click *Modes* to view all the Modes defined. Each Mode that is defined has a name and the image of the sun and moon in color.
- Proceed to *Step 2* to define the Master Pump in the Convert Layer.

Step 2

This step describes how to designate one pump as a Master Pump, from which its modes will then be copied to all the other pumps. For example, if you select Pump #01 as the master, it's mode schemes will be copied to all the pumps connected in the system.

➤ To Define a Master Pump in the Convert Layer:

- 1 From the *FCC tree*, select *Configuration*, then select *Convert Layer*. The *Convert Layer-doms* is displayed:



- 2 Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
User Name	Enter your system user name. For example, DOMSCLN2 .
Configuration mode	Select an option from the drop-down list. It is recommended to select - 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. The other options are: 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 <i>PumpSrv</i> configuration settings are downloaded to <i>Doms</i>. Down load PumpSrv configuration to controller – if selected, indicates that when the system loads, there is no need to perform a master reset, and <i>PumpSrv</i> configuration settings will

Fields	Description
	be automatically downloaded.
Controller TcpIp Address	Verify and enter the Site Controllers Ip address, as it appears on the controller display.
Client ID	Enter the POS terminal ID number, e.g., 31.
Pump Control System Modes	Select 01 to designate pump #1 as the Master Pump .
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. Note: The log level details apply to <i>PumpSrv</i> only. The default is set to 3 and it should not be changed other than by Retalix Technical Personnel.
Logon String	Enter the logon string, which indicates how the controller logs on to the system each time. For example, the string, POS RI, APPL_ID indicates how the controller will handle the log when logging on to <i>Doms</i> . This example indicates that each time the controller logs on, the password POS must be entered, and any errors are sent back to the controller. Verify with Technical Personnel that the correct logon string is displayed.
Automatic Clear Pump Error	If checked, indicates that pump errors will be automatically cleared. This is an optional field.

3 Click *Apply*.

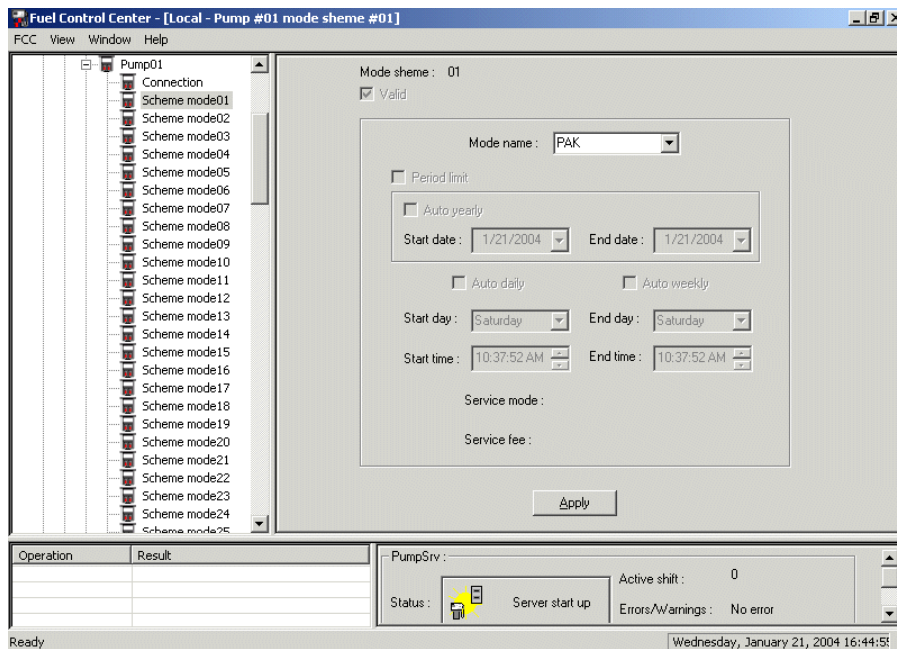
Proceed to *Step 3* to define the Default Mode Scheme for the Master Pump.

Step 3

This step describes how to define the default mode scheme for the Master Pump. 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 active in the Pump. The system will revert to the default mode scheme in the event of failure.

➤ **To Define Default Mode Scheme for Master Pump:**

- 1 From the *FCC tree*, click *Configuration*, then *Pumps*. Expand the *FCC tree* and select the *Pump 01*.
- 2 Expand the *FCC tree* again to view the *Mode Schemes* under the *Pump* menu.
- 3 Click the Scheme Mode 01. The *Pump 01 Mode Scheme 01* dialog is displayed:

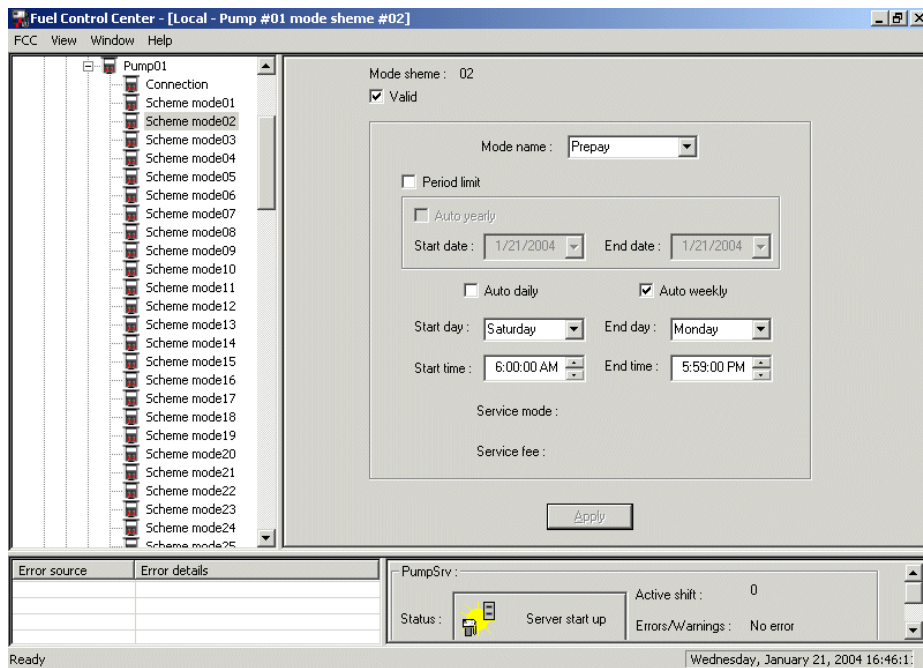


- 4 In the **Mode Name** field, select **PAK** to define this as the default mode of the default mode scheme.
 - 5 Click *Apply*.
- Proceed to Step 4 to define Additional Mode Schemes.

Step 4

This step describes how to define any other required mode schemes.

- 1 From the *FCC tree*, click *Configuration*, then *Pumps*. Expand the *FCC tree* and select the *Pump 01*.
- 2 Click the Scheme Mode 02. The *Pump 01 Mode Scheme 02* dialog is displayed:



- 3 Enter the relevant information in the fields displayed in the right, as described below:

Fields	Description
Mode Scheme 02	An internal code for the Mode as used in <i>PumpSrv</i> .
Valid	Select the checkbox.
Name	Enter PrePay to specify that the PrePay mode will be active for this Pump and mode scheme you are defining.
Auto Weekly	Select this checkbox to specify that this mode scheme is applied automatically every weekend.
Start Day	Enter Saturday to define the day on which this mode scheme becomes effective.
End Day	Enter Monday to define the day on which this mode scheme ends.
Start Time	Enter 60:00:00 to specify that at 6am Saturday this mode scheme becomes effective.
End Time	Enter 5:59:00 to specify that at 5.59am Monday this mode scheme ends.

- 4 Click *Apply*.

Note:

Repeat *Step 4* to define any other required mode schemes.

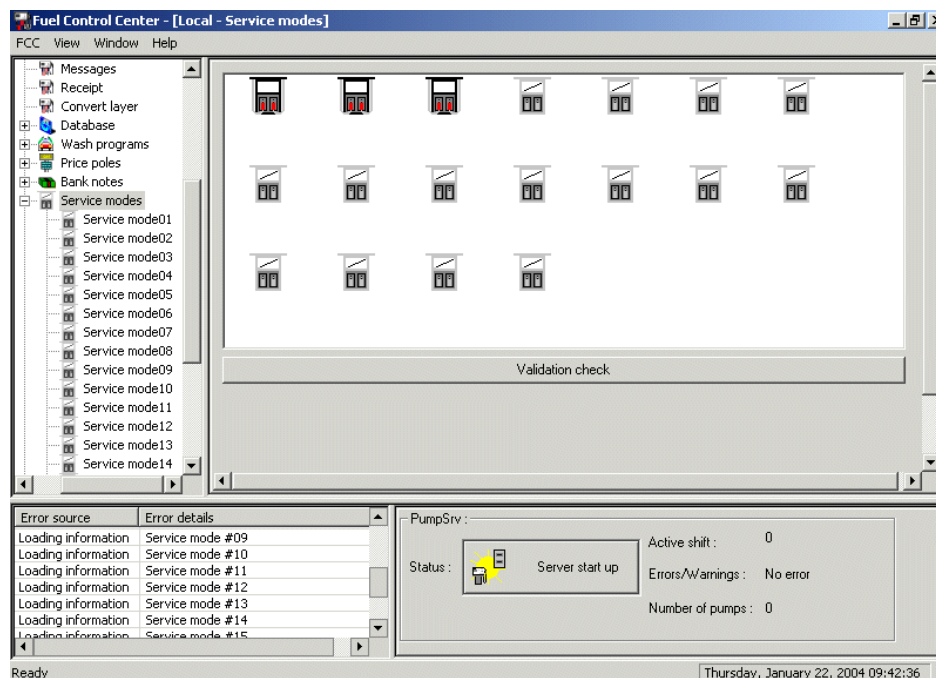
Proceed to *Step 5* to Define Service Modes for the Doms Controller.

Step 5

This step describes how to define, in the Doms Controller, PAK and PrePay as the active service modes in the pumps. You must define a Service Mode for each payment type.

➤ To Define Active Service Modes In Doms Controller:

- 1 From the *FCC tree*, click *Configuration*, then *Service Modes*. The *Service Modes* dialog is displayed. Expand the *FCC tree* to view the list of *Service Modes*:



- 2 Double-click *Service Mode 01*, the *Service Mode #01* dialog is displayed:

- 3 Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
Service Mode	Internal code number of Service Mode as used in <i>PumpSrv</i> .
Valid	Select the checkbox.
Name	Enter PAK.
Type	Select "Payment At POS #11". The Service mode ID 11 indicates the way of payment.
Minimum Volume to consider transaction as 'Zero-transaction'	Select 01 from the drop-down list. This means that only if the amount of fuel that leaks out of a nozzle exceeds 1 milliliter, the controller will process it as a 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.
Minimum value to consider transaction as 'Zero-transaction'	Select 50 from the drop-down list. This means that only if the amount of fuel that leaks out of a nozzle (this could happen when a nozzle is lifted, right before fuelling begins) exceeds \$0.50, the controller will process it as a transaction.
Timers area:	
Authorized	The value should be '99999'. This means that if a pump is authorized before the nozzle was lifted, authorization will last for 9 seconds before the pump reverts to Idle mode.

Fields	Description
Authorize after nozzle has been replaced	Enter 10. This means that once a pump is authorized, and a customer lifted the wrong nozzle, there are 10 additional seconds in which the pump will remain authorized, while customer replaces the wrong nozzle and lifts the correct one.
Add the parameter value\volume\grade to transaction	Select the checkbox to indicate that the value, volume, and grade used during the transaction is saved.
Authorize pump when service mode select	Select the checkbox. When checked, and the specified <i>Service Mode</i> is the active <i>Service Mode</i> , the fuelling point will be automatically authorized when the <i>Service Mode</i> is selected.
On final transaction report money due	Select the checkbox. When 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	Select the checkbox. When 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.	Select the checkbox. When checked, the current transaction is saved when the pump is authorized.

- Click *Apply*.
- From the *FCC tree*, double-click *Service Mode 02*, the *Service Mode #02* dialog is displayed:

Fuel Control Center - [Local - Service mode #02]

FCC View Window Help

Service mode : 02

☒ Valid

Name : PrePay

Type : PrePaymer

Minimum volume to consider transaction as 'zero-transaction' : 01

Minimum value to consider transaction as 'zero-transaction' : 50

Timers :

Authorized : 9999 Sec

Authorize after nozzle has been replaced : 10 Sec

☒ Add the parameter value/v

☒ Authorize pump when servi

☒ On final transaction report t

☒ Report zero transaction to

☒ Store current transaction w

Apply

Operation Result

PumpSrv : Status : Server start up Active shift : 0 Errors/Warnings : No error

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- Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
Service Mode	Internal code number of Service Mode as used in <i>PumpSrv</i> .
Valid	Select the checkbox.
Name	Enter PrePay.
Type	Select "PrePayment At POS #21". The Service mode ID 21 indicates the way of payment.
Minimum Volume to consider transaction as 'Zero-transaction'	Select 01 from the drop-down list. This means that only if the amount of fuel that leaks out of a nozzle exceeds 1 milliliter, the controller will process it as a 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.
Minimum value to consider transaction as 'Zero-transaction'	Select 50 from the drop-down list. This means that only if the amount of fuel that leaks out of a nozzle (this could happen when a nozzle is lifted, right before fuelling begins) exceeds \$0.50, the controller will process it as a transaction.
Timers area:	
Authorized	The value should be '99999'. This means that if a pump is authorized before the nozzle was lifted, authorization will last for 9 seconds before the pump reverts to Idle mode.
Authorize after nozzle has been replaced	Enter 10. This means that once a pump is authorized, and a customer lifted the wrong nozzle, there are 10 additional seconds in which the pump will remain authorized, while customer replaces the wrong nozzle and lifts the correct one.
Add the parameter value\volume\grade to transaction	Select the checkbox to indicate that the value, volume, and grade used during the transaction is saved.
Authorize pump when service mode select	Select the checkbox. When checked, and the specified <i>Service Mode</i> is the active <i>Service Mode</i> , the fuelling point will be automatically authorized when the <i>Service Mode</i> is selected.
On final transaction report money due	Select the checkbox. When 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	Select the checkbox. When 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.	Select the checkbox. When checked, the current transaction is saved when the pump is authorized.

7 Click *Apply*.

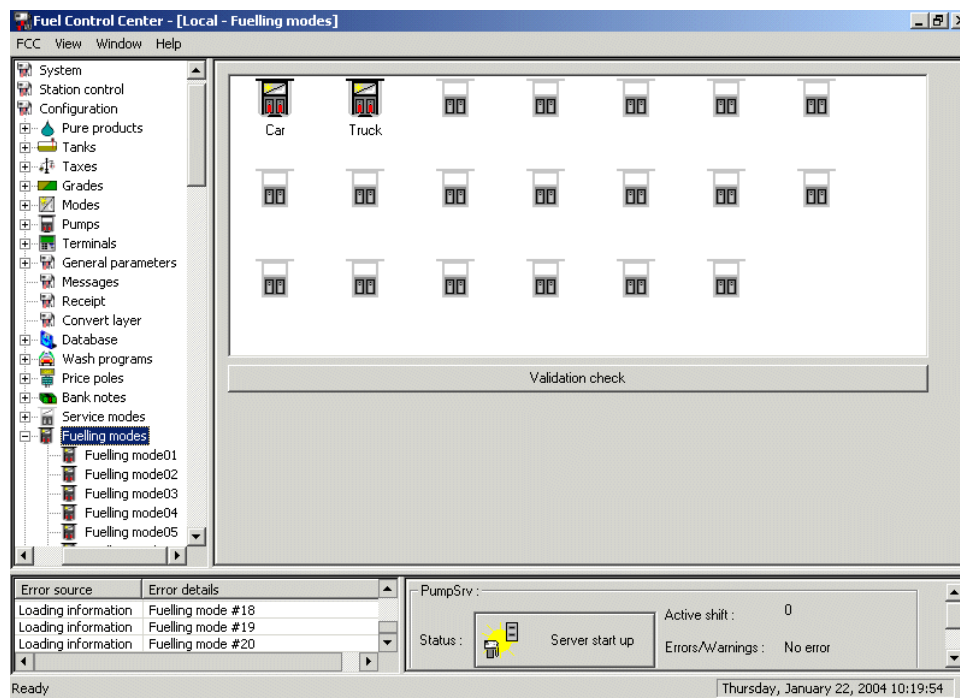
Proceed to Step 6 to define Fuelling Modes for the Doms Controller.

Step 6

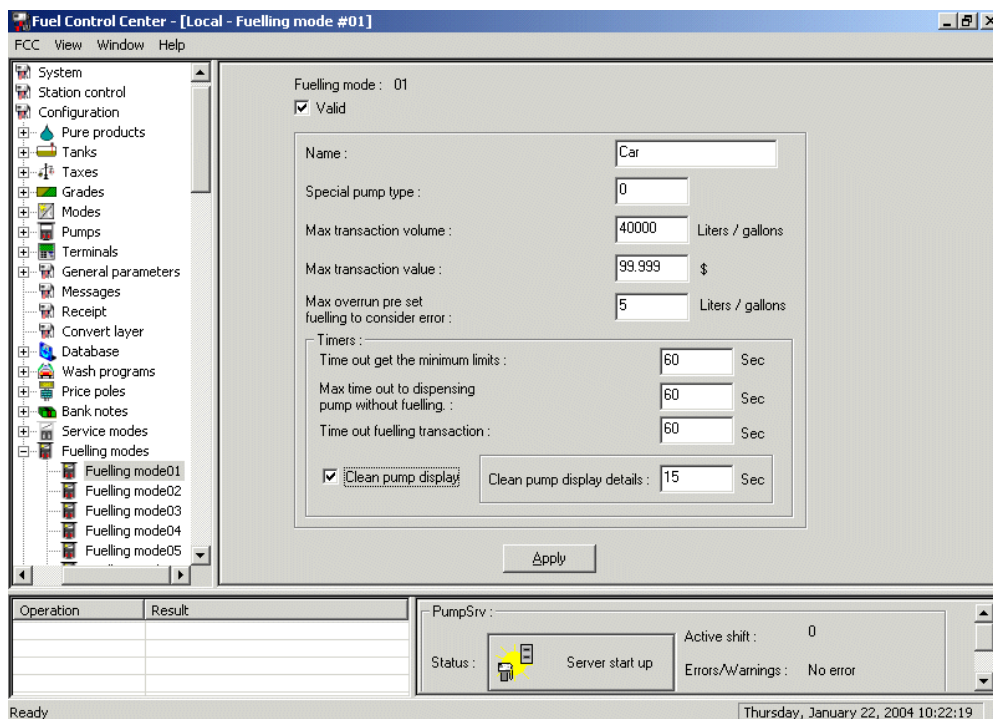
This step describes how to define Fuelling Modes, which define limits related to different fuelling environments, such as types of vehicles (cars, trucks, buses, etc.), maximum fuelling volume or value, max fuelling time, etc.

➤ To Define Fuelling Modes Via Doms Controller:

- 1 From the *FCC tree*, click *Configuration*, then *Fuelling Modes*. The *Fuelling Modes* dialog is displayed. Expand the *FCC tree* to view the list of *Fuelling Modes*:



- 2 Double-click the Fuelling Mode 01. The *Fuelling Mode 01* dialog is displayed:



- 3 Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
Fuelling Mode	Internal code number of <i>Fuelling Mode</i> as used in <i>PumpSrv</i> .
Valid	Select the checkbox to indicate that the <i>Fuelling Mode</i> is valid in the system.
Name	Enter Car, the name for the <i>Fuelling Mode</i> .
Special Pump Type	Enter the pump number if for this <i>Fuelling Mode</i> a special pump type is required. If you are not sure, call Technical Personnel to verify.
Max Transaction Volume	Enter 40.000 to define the maximum volume (in liters) a customer is allowed to fuel a private car, per transaction, from this pump. If fuelling exceeds the amount specified in this field, fuelling will be stopped.
Max Transaction Value	Enter 99 to define the maximum value (in Euros) 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 5 to define the volume that can exceed the preset limit in liters/gallons. 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.

Timers area:

Fields	Description
Time out get the minimum limits	Enter 60. 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 60 seconds, as specified 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	Enter 60. If fuelling exceeds the minimum limit defined, but the fuelling data does not change for 60 seconds as specified in this parameter, fuelling will be terminated. A new transaction cannot be started before the nozzle has been replaced.
Timeout fuelling transaction	Enter 60 to specify that if a fuelling transaction was not completed after 60 seconds, fuelling will be terminated. A new transaction cannot be started before the nozzle has been replaced.
Clean pump display (Optional)	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 (Optional)	Specifies after how long in seconds the display screen is cleared.

- 4 Click *Apply*, and proceed to define the next *Fuelling Mode*.
- 5 Double-click the Fuelling Mode 02. The *Fuelling Mode 02* dialog is displayed:

Fuel Control Center - [Local - Fuelling mode #02]

FCC View Window Help

System
Station control
Configuration
Pure products
Tanks
Taxes
Grades
Modes
Pumps
Terminals
General parameters
Messages
Receipt
Convert layer
Database
Wash programs
Price poles
Bank notes
Service modes
Fuelling modes

Fuelling mode : 02

☒ Valid

Name : Truck

Special pump type : 0

Max transaction volume : 100 Liters / gallons

Max transaction value : 999.999 \$

Max overrun pre set fuelling to consider error : 5 Liters / gallons

Timers :

Time out get the minimum limits : 60 Sec

Max time out to dispensing pump without fuelling : 60 Sec

Time out fuelling transaction : 60 Sec

☒ Clean pump display

Clean pump display details : 15 Sec

Apply

Error source Error details

PumpSrv :
Status : Server start up
Active shift : 0
Errors/Warnings : No error

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- 6 Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
Fuelling Mode	Internal code number of <i>Fuelling Mode</i> as used in <i>PumpSrv</i> .
Valid	Select the checkbox to indicate that the <i>Fuelling Mode</i> is valid in the system.
Name	Enter Truck, the name for the <i>Fuelling Mode</i> .
Special Pump Type	Enter the pump number if for this <i>Fuelling Mode</i> a special pump type is required. If you are not sure, call Technical Personnel to verify.
Max Transaction Volume	Enter 100 to define the maximum volume (in liters) a customer is allowed to fuel a truck, per transaction, from this pump. If fuelling exceeds the amount specified in this field, fuelling will be stopped.
Max Transaction Value	Enter 99 to define the maximum value (in Euros) 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 5 to define the volume that can exceed the preset limit in liters/gallons. 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.

Timers area:

Time out get the minimum limits	Enter 60. 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 60 seconds, as specified 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	Enter 60. If fuelling exceeds the minimum limit defined, but the fuelling data does not change for 60 seconds as specified in this parameter, fuelling will be terminated. A new transaction cannot be started before the nozzle has been replaced.
Timeout fuelling transaction	Enter 60 to specify that if a fuelling transaction was not completed after 60 seconds, fuelling will be terminated. A new transaction cannot be started before the nozzle has been replaced.
Clean pump display (Optional)	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 (Optional)	Specifies after how long in seconds the display screen is cleared.

7 Click *Apply*.

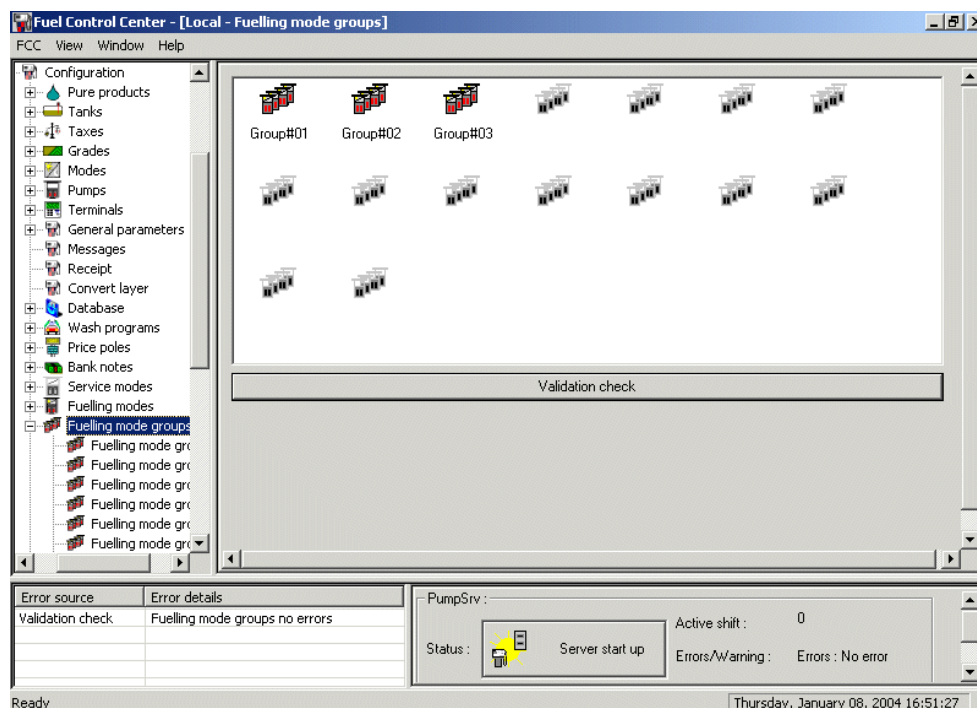
Proceed to *Step 7* to Define Fuelling Mode Groups for the Doms Controller.

Step 7

This step describes how to configure Fuelling Mode Groups that define limitation on grades, per each Fuelling Mode. For example, to define a Fuelling Mode Group for the Fuelling Modes 'Car' and 'Truck', you can specify that Cars are allowed to fuel with Unleaded, Super, and Leaded Fuel grades, while trucks are allowed to fuel with Diesel.

➤ To Define Fuelling Mode Groups Via Doms Controller:

- 1 From the *FCC tree*, click *Configuration*, then *Fuelling Mode Groups*. The *Fuelling Mode Groups* dialog is displayed. Expand the *FCC tree* to view the list of *Fuelling Mode Groups*:



- 2 Double-click the Fuelling Mode Group 01. The *Fuelling Mode Group 01* dialog is displayed:

- 3 Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
Fuelling Mode Group	Internal code number of Fuelling Mode Group as used in <i>PumpSrv</i> .
Valid	Select the checkbox to indicate that the Fuelling Mode Group is valid in the system.
Name	Enter Day Mode as the name of the Fuelling Mode Group.
Nozzle buttons area:	Each button displays the names of the grades defined in the system.
Unleaded, 91, 92, Diesel, 98, etc.	Select the <i>Fuelling Mode</i> from the drop-down list that you are linking to the <i>Fuelling Mode Group</i> . For example, select Car in the Unleaded, and 91 grade options drop-down list, and Truck in the Diesel drop-down list.

- 4 Click *Apply* to save.

Proceed to *Step 8* to Define Transactions for the Doms controller.

Step 8

This step describes how to configure the various transaction types to handle fuelling at the pump. The Manager can set up the fuel station to work with only PAK transactions during the week, and on the weekend to allow PrePay transactions, to accommodate times when the Kiosk is closed. To do this, link the Fuelling Mode Group code (defined earlier in this procedure) to the required Service Mode and price.

For example, Transaction 011 and 012 are defined to accommodate cars and trucks in PAK transactions.

Transaction 011 is defined to include the Fuelling Mode Group called 'Day Mode', previously linked to Unleaded, and 91 grade types. The Service Mode is PAK, (previously defined as Mode Scheme 01 in *PumpSrv* – defining PAK transactions as the default mode scheme); and 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 012 is defined in the same way as 011, but is linked to Trucks, enabling trucks to fuel with the relevant grade of fuel.

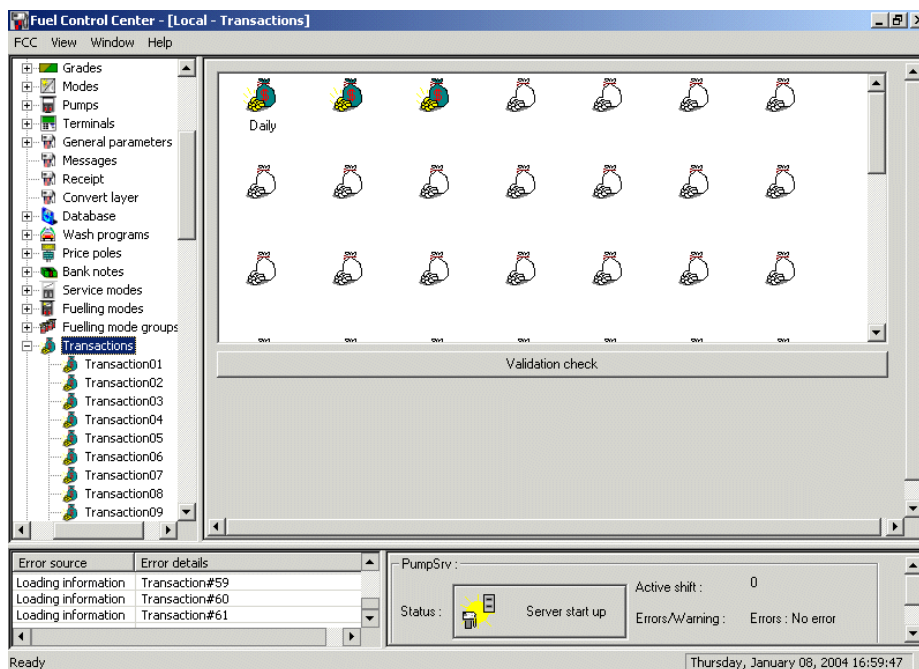
A second example, Transaction 021 and 022 are defined to accommodate cars and trucks in PrePay transactions.

Transaction 021 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*); and 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.

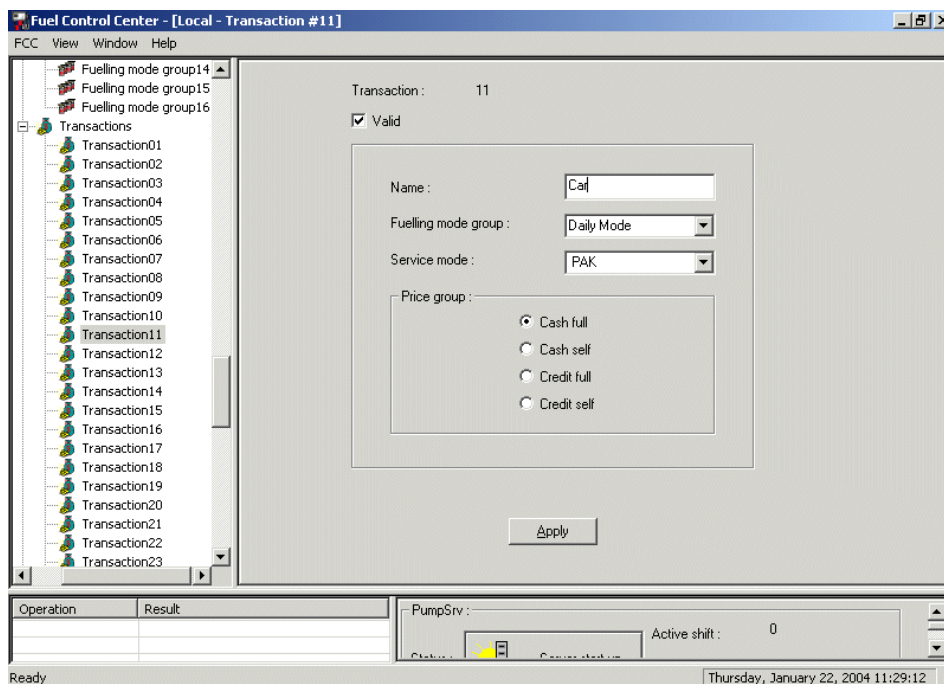
Transaction 022 is defined in the same way as 021, but is linked to Trucks, enabling trucks to fuel with the relevant grade of fuel.

➤ **To Define Transactions in Doms Controller:**

- 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*:



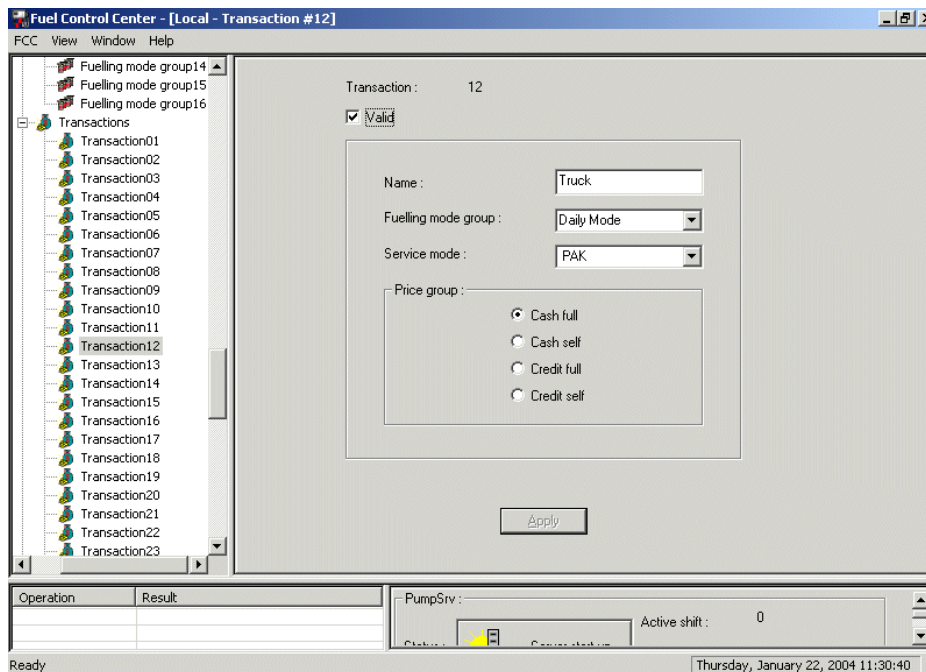
- 2 Expand the *FCC tree*, and double-click the Transaction 11. The *Transaction #11* dialog is displayed:



- 3 Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
Transaction	Internal code number of the Transaction as used in <i>PumpSrv</i> .
Valid	Select the checkbox to indicate that 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 this example, call it Car .
Fuelling Mode Group	Select Daily Mode from the <i>Fuelling Mode Group</i> drop-down list. Each <i>Fuelling Mode Group</i> is linked to a <i>Fuelling Mode</i> .
Note:	
The <i>Fuelling Modes</i> are previously defined in <i>Fuelling Modes</i> , and linked to Grades in the <i>Fuelling Mode Group</i> .	
Service Mode	Select PAK from the Service Mode drop-down list. This indicates the payment method that will be used in this transaction.
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 the Cash Full radio button, indicating that the transaction will be charged a price for Full Service when paying in cash.

- 4 Click *Apply* to save, then define Transaction 12 to accommodate trucks.
- 5 From the *FCC tree*, double-click the Transaction 12. The *Transaction #12* dialog is displayed:



- 6 Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
Transaction	Internal code number of the Transaction as used in <i>PumpSrv</i> .
Valid	Select the checkbox to indicate that 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 this example, call it Truck .
Fuelling Mode Group	Select Daily Mode from the <i>Fuelling Mode Group</i> drop-down list. Each <i>Fuelling Mode Group</i> is linked to a <i>Fuelling Mode</i> .
Note: The <i>Fuelling Modes</i> are previously defined in <i>Fuelling Modes</i> , and linked to Grades in the <i>Fuelling Mode Group</i> .	
Service Mode	Select PAK from the Service Mode drop-down list. This indicates the payment method that will be used in this transaction.
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 the Cash Full radio button, indicating that the transaction will be charged a price for Full Service when paying in cash.

- 7 Click *Apply* to save, then proceed to define Transactions 21 and 22 to enable PrePay transactions at the fuel station.

- 8 From the *FCC tree*, double-click the Transaction 21. The *Transaction #21* dialog is displayed:

- 9 Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
Transaction	Internal code number of the Transaction as used in <i>PumpSrv</i> .
Valid	Select the checkbox to indicate that 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 this example, call it Car .
Fuelling Mode Group	Select Daily Mode from the <i>Fuelling Mode Group</i> drop-down list. Each <i>Fuelling Mode Group</i> is linked to a <i>Fuelling Mode</i> .
Note:	
The <i>Fuelling Modes</i> are previously defined in <i>Fuelling Modes</i> , and linked to Grades in the <i>Fuelling Mode Group</i> .	
Service Mode	Select PrePay from the Service Mode drop-down list. This indicates the payment method that will be used in this transaction.
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 the Credit Self radio button, indicating that the transaction the price for Self Service when paying by credit card.

- 10 Click *Apply* to save, and proceed to define Transaction 22 to accommodate Trucks in PrePay transactions.
- 11 From the *FCC tree*, double-click the Transaction 22. The *Transaction #22* dialog is displayed:

The screenshot shows the 'Fuel Control Center - [Local - Transaction #22]' window. On the left is a tree view of transactions from Transaction01 to Transaction26. Transaction22 is selected. The main pane shows the configuration for Transaction 22. It includes a 'Transaction : 22' label, a checked 'Valid' checkbox, and several input fields: 'Name : Truck', 'Fuelling mode group : Daily Mode' (a dropdown), 'Service mode : PrePay' (a dropdown), and 'Price group :'. The Price group section contains four radio buttons: 'Cash full', 'Cash self', 'Credit full', and 'Credit self', with 'Credit self' being selected. An 'Apply' button is located at the bottom of the main pane. At the bottom of the window, there is a status bar with 'Ready', a 'PumpSrv' field, an 'Active shift : 0' field, and a timestamp 'Thursday, January 22, 2004 12:03:01'.

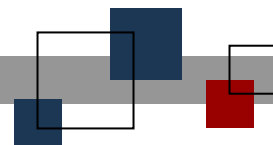
- 12 Enter the relevant information in the fields displayed in the right pane, as described below:

Fields	Description
Transaction	Internal code number of the Transaction as used in <i>PumpSrv</i> .
Valid	Select the checkbox to indicate that 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 this example, call it Truck .
Fuelling Mode Group	Select Daily Mode from the <i>Fuelling Mode Group</i> drop-down list. Each <i>Fuelling Mode Group</i> is linked to a <i>Fuelling Mode</i> .
Note: The <i>Fuelling Modes</i> are previously defined in <i>Fuelling Modes</i> , and linked to Grades in the <i>Fuelling Mode Group</i> .	
Service Mode	Select PrePay from the Service Mode drop-down list. This indicates the payment method that will be used in this transaction.
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 the Credit Self radio button, indicating that the transaction

Fields	Description
	the price for Self Service when paying by credit card.

13 Click *Apply* to save.

You have completed the 8 main steps to configuring PAK and PrePay transactions via a Doms Controller.



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