



MDE-4821J

Fleet Head Office System and Fuel Management Software

INSTALLATION AND USER MANUAL

This manual supports released version 6.4.410.XX and later.

This document is based on Orpak's FHO and FMS Installation and User Manuals,
P/N 817423708 and 817423706.



SAFETY CONSIDERATIONS

Read all warning notes and instructions carefully. They are included to help you installing the Product safely in the highly flammable environment of the fuel station. Disregarding these warning notes and instructions could result in serious injury or property damage. It is the installer responsibility to install, operate and maintain the equipment according to the instructions given in this manual, and to conform to all applicable codes, regulations and safety measures. Failure to do so could void all warranties associated with this equipment.

Remember that the fuel station environment is highly flammable and combustible. Therefore, make sure that actual installation is performed by experienced personnel, licensed to perform work in fuel station and at a flammable environment, according to the local regulations and relevant standards.

WARNING - EXPLOSION HAZARD

Use separate conduit for the intrinsically safe. Do not run any other wires or cables through this conduit, because this could create an explosion hazard.

Use standard test equipment only in the non- hazardous area of the fuel station, and approved test equipment for the hazardous areas.

In the installation and maintenance of the Product, comply with all applicable requirements of the National Fire Protection Association NFPA30 “Flammable and Combustible Liquids Code”, NFPA 30A “Code for Motor Fuel Dispensing Facilities and Repair Garages”, NFPA 70® “National Electric Code”, federal, state and local codes and any other applicable safety codes and regulations.

Do not perform metal work in a hazardous area. Sparks generated by drilling, tapping and other metal work operations could ignite fuel vapors and flammable liquids, resulting in death, serious personal injury, property loss and damage to you and other persons.

CAUTION - SHOCK HAZARD

Dangerous AC voltages that could cause death or serious personal injury are used to power the Product. Always disconnect power before starting any work. The Product has more than one power supply connection points. Disconnect all power before servicing.

WARNING - PASSING VEHICLES

When working in any open area of fuel station, beware of passing vehicles that could hit you. Block off the work area to protect yourself and other persons. Use safety cones or other signaling devices.

WARNING

Components substitutions could impair intrinsic safety.
Attaching unauthorized components or equipment will void your warranties.

CAUTION

Do not attempt to make any repair on the printed circuit boards residing in the Product, as this will void all warranties related to this equipment.

PROPRIETY NOTICE

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DISCLAIMER

This document is provided for reference only. Although every effort has been made to ensure correctness, ORPAK SYSTEMS does not guarantee that there are no errors or omissions in this document.

FCC COMPLIANCE STATEMENT

The FCC Wants You to Know:

This equipment has been tested and found to comply with the limits for a Class B & C digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- a) Reorient or relocate the receiving antenna.
- b) Increase the separation between the equipment and receiver.
- c) Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- d) Consult the dealer or an experienced radio/TV technician.

FCC WARNING

Modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC Rules.

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1 – General Description

1.1 Introduction

This manual describes the web-based application of the SiteOmat Fleet Head Office System (hereafter referred to as the FHO) and the Fuel Management Software (FMS). The manual provides instructions on how to use the various features offered in the FHO: such as real-time gas station definition and management, data collection and distribution from/to all relevant stations, data reporting, product management, and pricing. Additionally, in the FMS: viewing the fuel level of gas station/sites, monitoring fuel status alarms, making recommendations for fuel orders in stations with low fuel levels, and more.

This Installation and User Manual defines the functions of three major applications:

- 1 Administrator Application
- 2 FHO Application
- 3 FMS Application

The audience for this manual is any authorized user of the FHO (for example, fleet managers, head office managers or system administrators), FMS (for example, station managers or fuel manager) and System Administrators using the Administration Application.

FMS and FHO are web-based applications that use a secured SSL connection (HTTPS), where any authorized user can access them via a browser (Internet Explorer™ 7 and up). For security measures, it is highly advised that the external network use a VPN (Virtual Private Network), so it will not be exposed to the Internet.

1.2 FHO Product Overview

1.2.1 General

The FHO System is a centralized fleet management and authorization server for all fleet-oriented activity in a region.

The system uploads all fleet-oriented data from the stations and generates centralized reports per fleet, including exception and efficiency performance. Graphical reports are available to the fleet managers via web interface. Each fleet manager uses a secured link to log into the system to manage his fleet.

1.2.2 Features

The main FHO system features are:

- Centralized reporting per fleetSecure web interface for fleet managers: each manager is able to manage his or her own fleet and has no access to other fleets.
- System administration enables control of the entire system, setup of accounts, new fleets and vehicles.
- Interface to a card/tag/VIU (Vehicle Identification Unit) fleet payment and authorization of device issuing system, according to fleet account and debit procedure settings defined for each card/vehicle to be included in the system.
- Advanced authorization method, available for the fleet manager via the web, including several rules and restrictions to be applied to each fueling authorization unit.
- The system works in both online and offline modes, with all the authorization parameters mentioned above. A grace period can be defined to limit the time a station can continue authorizing vehicles in offline mode.
- The FHO includes a fleet credit/debit account (OBLIGO). Minimum credit must be maintained for each fleet in order to enable refueling.
- Backup database – Either by the system backup mechanism or according to company policy.
- Export of data to other third-party systems.

1.2.3 Fleet Management

FHO is responsible for collecting and distributing information regarding the fleets from and to all relevant SiteOmat stations. The process complies with the following criteria:

- Each station is connected to the FHO directly.
- Data is collected at pre-defined time intervals.
- Only the changed data (delta) from last collection is captured, which reduces communication overhead. Data collection is done at predefined time intervals. The update interval can be set for each station.
- Access to data is protected by username and password. The user must be defined in the Station Controller that is connected to the FHO.
- All authorizations are done locally – the stations are online because since the authorization data is continuously updated by the FHO.
- A station may continue working offline, under the constraints imposed by configuration.
- The FHO can retrieve only the data relevant to its fleets.

1.3 FMS Product Overview

1.3.1 General

The FMS enables the user to see a complete overview of the fuel status and levels at the entire chain of stations and at each tank separately.

The user is able to view the entire picture of all stations in a table form (grid). The status of stations is presented in different colors. The user utilizes a friendly GUI (Graphic User Interface) to change the sorting filter and view all stations, only stations with alarms, stations belonging to a specific group, and other filters.

Selection of a single station displays online alarms and station status screen. In this screen the user is able to see additional details related to the tanks (for example, temperature, water level, and density).

The FMS mechanism is based on data collection from several sources:

- Fuel alarms from TLG (Tank Level Gauging) or SiteOmat forecourt controller
- Fuel transactions from SiteOmat
- Fuel deliveries from TLG or SiteOmat or FMS (manual entry)
- Periodic fuel readings from pumps and tanks. Readings can be made every several minutes/hours.
- SiteOmat End of shift data (mandatory for some of the reconciliation reports)

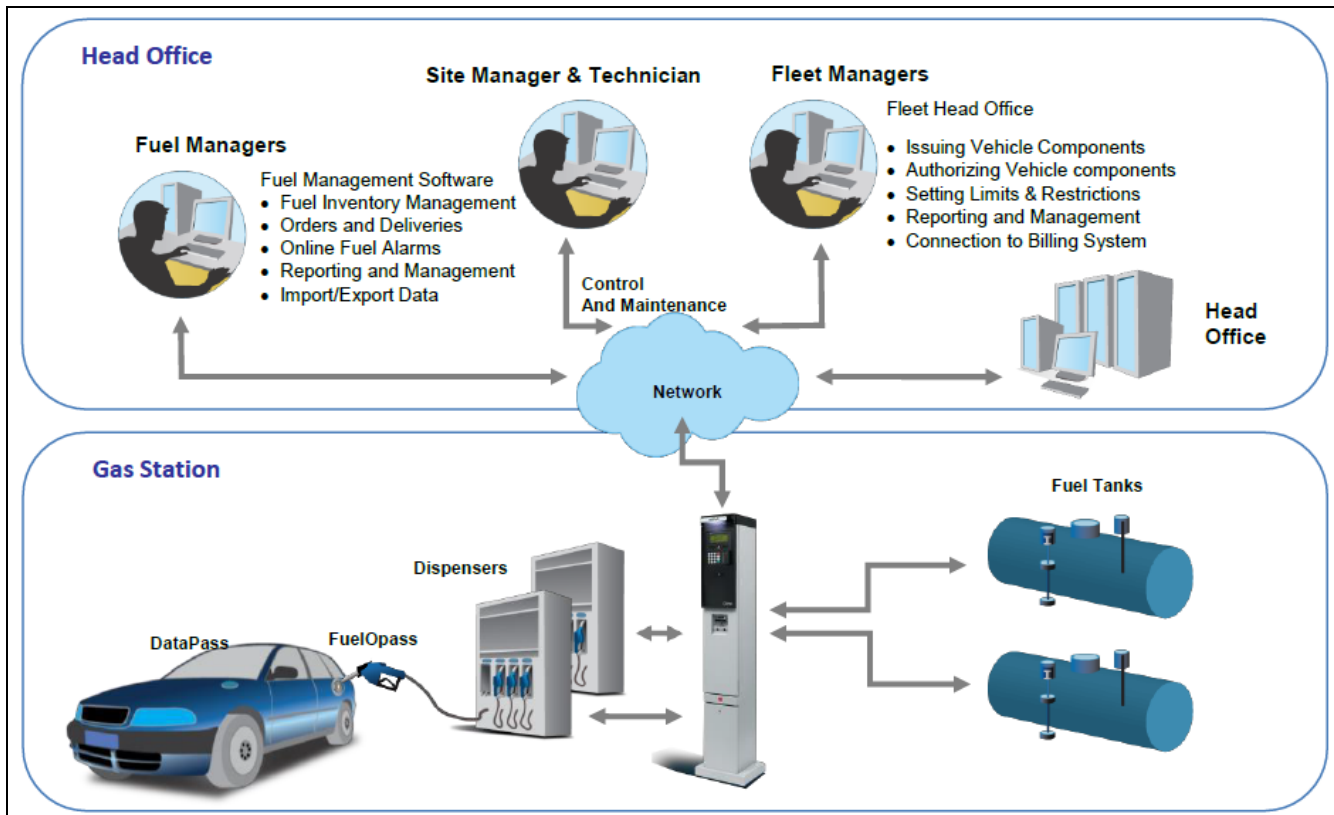
1.3.2 Features

The main FMS system features are:

- Fuel Inventory Management: FMS automatically receives all stations' wet inventory data via web services according to SiteOmat setup in each station. There is no need to configure the system twice. The FMS regularly obtains updates from a station (for example, new tanks, tanks with different fuel type), displays fuel level, water level, temperature and tank density per each individual tank. The software stores history for each tank and provides forecasting for future deliveries.
- Orders and Deliveries: FMS connects orders to fuel deliveries and reconciles the relevant amounts (order vs. TLG vs. Bill of Loading Vs. deep stick readings), enables tight data tracking designed to minimize losses and maximize efficiency for the service stations.
- Online Fuel Alarms: FMS manages alerts for stations with critical fuel levels, leaks, overfills and other events. All alerts can be sent to a single user group/s via email or SMS. Fuel order forms can be produced directly via the alarm screen, in cases where low fuel level alarms were activated.
- Reporting and Management: FMS enables the user to generate several sales, stock and reconciliation reports at company level (i.e. amount of fuel in all stations, alarms for all stations) and at station level.

The interaction between the various components of the fleet management is shown in [Figure 1](#).

Figure 1: FMS and FHO Architecture



1.3.3. Authentication

FHO and FMS are designed to provide access to content in accordance with the user's access level. Upon login request into the FHO/FMS web-based application, the system checks whether the user with these login credentials (username and password) exists. If the login credentials are not found in the user list, access to the application is denied. If these login credentials are validated, the application opens, with content suitable to the user's access level.

1.4 Manual Structure

This manual comprises the following sections:

Section 1: General Description: This section provides a general description of the FMS and FHO systems.

Section 2: Hardware and Software Requirements: This section provides the FHO and FMS Hardware and Software Requirements.

Section 3: System Installation: This section provides instructions for physically installing the FHO and FMS programs.

Section 4: Common Functional Principles: This section explains generic principles, which the user must be familiar with for proper operation of the FHO and FMS applications, and which are not detailed in each occurrence.

Section 5: Getting Started: This section provides initial instructions needed for the user to start using FHO and FMS, namely application launch, login and general orientation of the application.

Section 6: Operating as Administrator: This section provides instructions for setting up the System, and for using administrative features, such as user management, group management, Product management, Defining Stations, and backup. This section applies only to users with Administrator access level, as only they have access to these features.

Section 7: Fleet Management: This section provides instructions for managing the vehicle fleets, including: creating fleets, adding vehicles, setting rules, creating group rules etc.

Section 8: FHO Reports: This section provides instructions for generate reports using the FHO application.

Section 9: Fuel Management Software Application: This section provides the Fuel and Station Managers, instructions to access the various capabilities of the FMS Application, such as the effective Fuel Inventory and Alarms List features.

Section 10: FMS Orders and Deliveries: This section provides instruction on sending and reconciling fuel orders for stations/sites.

Section 11: FMS Station Data: This section provides instructions for navigating through the FMS Station Data screens, to access a station's current inventory and view actual fuel levels in each tank.

Section 12: FMS Reports: This section provides instructions for generating data reports using the FMS application.

Section 13: Event Viewer and Alarms: This section describes the event and alarm viewer features of the applications, which enable viewing system warnings and logins.

Section 14: Glossary: This section provides a glossary of abbreviation used in the SiteOmat manuals.

Appendix A: General Guide for Web Client Users: This appendix provides instructions to enhance the connection from a web client to the FHO/FMS applications.

Appendix B: Import Devices Required Files: This appendix provides a full description of all the required fields in the upload CSV file.

Appendix C: WP Registration and Setup: This appendix provides instructions for registering a Wireless Programmer device in the organization's FHO, as required prior to programming Fuel Point PLUS wireless vehicle identification units.

1.5 Using This Manual

This manual includes comments to draw the reader's attention to important issues. The comments are accompanied by symbols for ease of reference. The following comment types are used:

 WARNING	
	Alerts you to a hazard or unsafe practice that could result in death or serious injury.

CAUTION	
	Designates a hazard or unsafe practice which may result in property or equipment damage.

TIP	
	A useful guidance, whose purpose is to use the system in a more efficient way.

INSIGHT	
	Theoretical or functional information regarding the system, which has to do with the discussed issue.

1.6 References

For additional and complementary information regarding Orpak's home base gas station management system, refer to the following manuals:

- *MDE-4811 Islander PLUS Installation Manual*
- *MDE-4813 CFN PLUS Installation Manual*
- *MDE-4814 Fuel Truck Controller Installation Manual*
- *MDE 4815 Fuel Point PLUS Installation*
- *MDE-4817 SiteOmat Station Controller Setup and Maintenance Manual*
- *MDE-4818 SiteOmat Station Controller User Manual*
- *MDE-4851 Fuel Point PLUS Setup*

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2 – Software and Hardware Requirements

2.1 Installation

The FHO and FMS Systems should be installed by the user on a dedicated PC platform or a server that is appropriately resourced to handle the applications, depending on the number of stations it manages.

There are multiple levels of FHO licenses:

- 1 station
- Up to 5 stations
- Up to 10 stations
- Up to 20 stations
- Up to 50 stations
- Up to 100 stations
- Up to 150 stations

2.2 Power Source

The system requires connection to power supply through an Uninterruptible Power System (UPS).

2.3 Hardware Requirements

2.3.1 General

The tables below provide the minimum hardware requirements for the FHO and FMS systems, in server configuration or PC configuration (see [Table 1](#), [Table 2](#) on [page 10](#), and [Table 4](#) on [page 11](#)).

2.3.2 Hardware Configuration for One Station to Five Stations

Capacity: 1-5 stations KS612K001

Table 1: PC Hardware Configuration

Item	Requirement
CPU	Intel Core i7-3770K
Memory	8 GB min.
Hard Disk	1 TB SATA
Network card	10/100/1000 Mbps Ethernet Interface Card
Display	SVGA 1024 x 768 pixels min.
Operating System	Microsoft Windows Server 2008 and 2012 or above, Windows 7 32-bit and 64-bit, and Windows 10
Database	Microsoft SQL Express 2008 or above

Item	Requirement
Applications	Microsoft IE7, IE8, IE9, IE10, IE11 (in compatibility mode, see note on page 11) Adobe Flash player 9 or up .NET Framework 3.5 required Java – current version Windows Installer 3.5 or above

2.3.3 Medium PC Configuration

Capacity: 6 to 20 stations (KS612K003, KS612K004).

Table 2: Medium PC Hardware Configuration

Item	Requirement
CPU	Intel Core i7-3770K
Memory	8 GB min.
Hard Disk	1 TB SATA
Network card	10/100/1000 Mbps Ethernet Interface Card
Display	SVGA 1024 x 768 pixels min.
Operating System	Microsoft Windows Server 2008 and 2012 and above, Windows 7 32-bit and 64-bit, and Windows 10
Database	a. Microsoft SQL Standard/Enterprise 2005, 2008, 2008 R2 and 2012 and above b. Client License per user
Applications	Microsoft Internet Explorer 7 (IE 7), IE8, IE9, IE10, IE11 (in compatibility mode, see note on page 11) Adobe Flash player 9 or up .NET Framework 3.5 required Java – current version Windows Installer 3.5 or above
Backup	As defined by client IT management

2.3.4 FHO AND FMS Server Configuration

Capacity: More than 20 stations.

Table 3: Database Server Hardware Configuration

Item	Requirement
CPU	Intel® Xeon® E5-2620 4 core – 2.0GHz
Memory	32G Byte – DDR3
Hard Disk	1 TB – RAID 0+1
Display	SVGA 1024 x 768 pixels min.
Network Card	1G
Operating System	Microsoft Windows Server 2008 and 2012 and above, Windows 7 32-bit and 64-bit, and Windows 10
Database	a. Microsoft SQL Server 2008 R2 – 64 bit edition, Microsoft SQL 2012 and above b. Client License per user
Backup	As defined by client IT management
Virtual Machine	The applications can be installed on a Virtual Machine

Table 4: Application Server Hardware Configuration

Item	Requirement
CPU	Intel Xeon E5-2620 4 core – 2.0GHz
Memory	8G Byte – DDR3
Hard Disk	1 TB SATA
Network card	1G
Display	SVGA 1024 x 768 pixels min.
Operating System	Microsoft Windows Server 2008 – 64Bit Microsoft Windows Server 2012 and above
Applications	Microsoft Internet Explorer 7 (IE7), IE8, IE9, IE10, IE11 (in compatibility mode, see note on page 11) Adobe Flash player 9 or up .NET Framework 3.5 required Java – current version Windows Installer 3.5 or above
Backup	As defined by client IT management
Virtual Machine	The applications can be installed on a Virtual Machine

Notes: 1) It is highly recommended to use a dedicated server for the FHO/FMS applications. If customers choose to run the application on a non-dedicated server, they assume the responsibility to verify that the server is properly resourced and networked to facilitate its applications.

2) If you are using Internet Explorer 10/11, add HO/SO IP to Compatibility View Settings:

- 1. In IE, go to **Tools** (Alt +X).*
- 2. Click **Compatibility View Settings**.*
- 3. Click **Add**.*
- 4. Click **Close**.*

2.4 Internet

The applications require a high-speed Ethernet interface card in order to enable connection to the Internet via a broadband download/upload link. The Internet is needed for remote support and remote sites. However, the system may run on a self-contained LAN if neither of these options is necessary. A dialup option is available for sites that must use it, but offers users only limited use of the system. Dialup cannot be used with sites using Fuel Point PLUS.

2.5 Database

The FHO and FMS are based on an Microsoft SQL Server data management software. It is required to install the Microsoft SQL Server 2005 Standard Edition (and above) prior to the FHO and FMS installation.

For small companies with up to five sites, you may use the free MS-SQL express edition which can be downloaded from Microsoft's website.

The Head Office uses ODBC (Open Database Connectivity) connection to MSSQL Database; ODBC is included in the Windows OS.

Database backup is done either by the SQL Server backup mechanism or according to the company's policy.

2.6 MS Windows Services

The FHO server runs as a Windows service on the OS. The installation program installs four windows services configured to start automatically when Windows starts. The names of these services begin with the word “ORPAK.”:

- Administrator: handles administration tasks (user and setup)
- FHO: handles all fleet management tasks
- FMS: handles all fuel management tasks
- OLIC: handles the device issuing process (not used by Gasboy, for retail only)
- Data communication: background process to handle all communication to and from stations

2.7 Access Requirements

In order to access the FHO server from users’ PCs, verify that the following ports are open on the server and through any firewall and routers on the network:

- Port 443 (HTTPS) – Administration for OrCU connection
- 2443 – Fleet Management
- 2444 – Fuel Management
- 2445 – Communicator
- 2446 – OLIC (not used in home base)
- 6443 – HO - ORDATA

For any server configuration questions, contact your IT Manager.

2.8 Server Security Recommendations

The customer should purchase and install the required hardware as specified above, and refer to the recommendations below when installing the server.

- 1 Prior to the installation, protect the server from hostile network traffic, until the operating system is installed and secured
- 2 Install the latest service packs and hot fixes from Microsoft
- 3 Enable automatic notification of Microsoft patch availability
- 4 Configure satisfactory Audit policy
- 5 Set minimum password length
- 6 Enable Password Complexity
- 7 Configure event Log Settings
- 8 Disable or uninstall unused services (for example, SNMP service)
- 9 Install antivirus and anti-spyware keeping updated according to the customer's customary update schedule
- 10 Disable the guest account and unused accounts
- 11 Use Microsoft *Security Compliance Management Toolkit series*

<http://download.microsoft.com/download/B/2/4/B24D224D-054A-46A2-BB30-925B943F00E1/Security%20Compliance%20Management%20Toolkit%20-%20All.z>

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3 – Application Installation

3.1 General

This section provides instructions for installing the HEAD OFFICE system.

The installation package includes the following customized clean installation options, provided to suit different system architectures:

- **Express Installation:** Installs HEAD OFFICE application (refer to [“3.2 Express Installation”](#) on page 16).
- **Custom Install – Full Local:** Installs both HEAD OFFICE application and database on the same computer (refer to [“3.3 Custom Install – Full Local”](#) on page 22).
- **Custom Install – Full Remote:** Installs HEAD OFFICE application on the local computer and the HEAD OFFICE database on a remote computer (refer to [“3.4 Custom Install – Full Remote”](#) on page 30).
- **Custom Install – Head Office Only:** Installs only HEAD OFFICE application on the computer (refer to [“3.5 Custom Install – Head Office Only”](#) on page 32).
- **Custom Install – Database Only:** Installs only the HEAD OFFICE database on the computer (refer to [“3.6 Custom Install – Database Only”](#) on page 34).

This section also describes the following procedures:

- **HEAD OFFICE upgrade** (refer to [“3.7 Upgrading Head Office”](#) on page 36).
- **HEAD OFFICE uninstallation** (refer to [“3.8 Uninstalling Head Office”](#) on page 37).

3.1.1 Database Requirements

As aforesaid, MS SQL Server is required. After SQL Server installation and prior to the HEAD OFFICE installation, restart the PC.

3.2 Express Installation

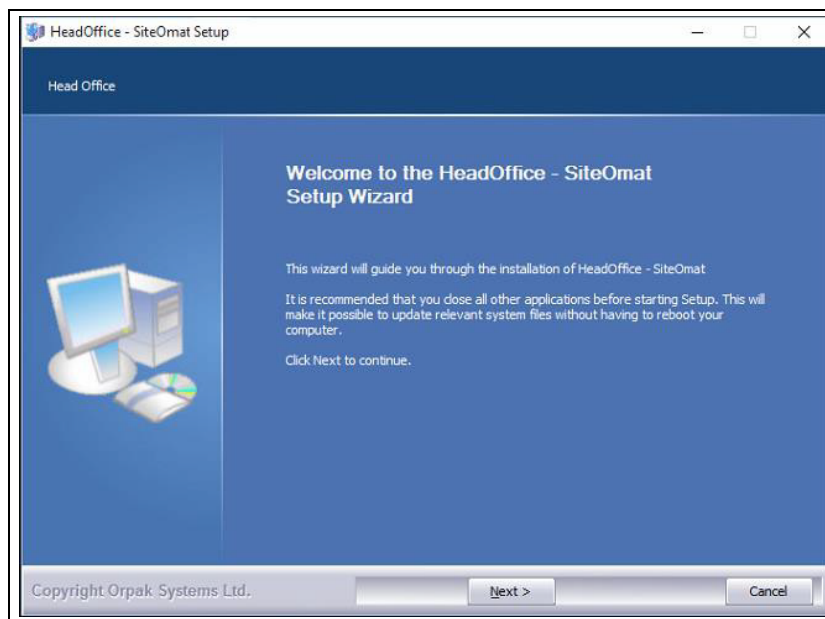
The following describes the Express Installation designed to provide a complete setup solution. The package includes the HEAD OFFICE application and HEAD OFFICE database.

The installation file (**HeadOffice_yy_mm_dd X_X_X_XX XXX.exe** – with the correct date and version number in the file name) is provided by Gasboy.

The file is accessed from Gasboy's FTP site.

The following Welcome Screen opens (see [Figure 2](#)).

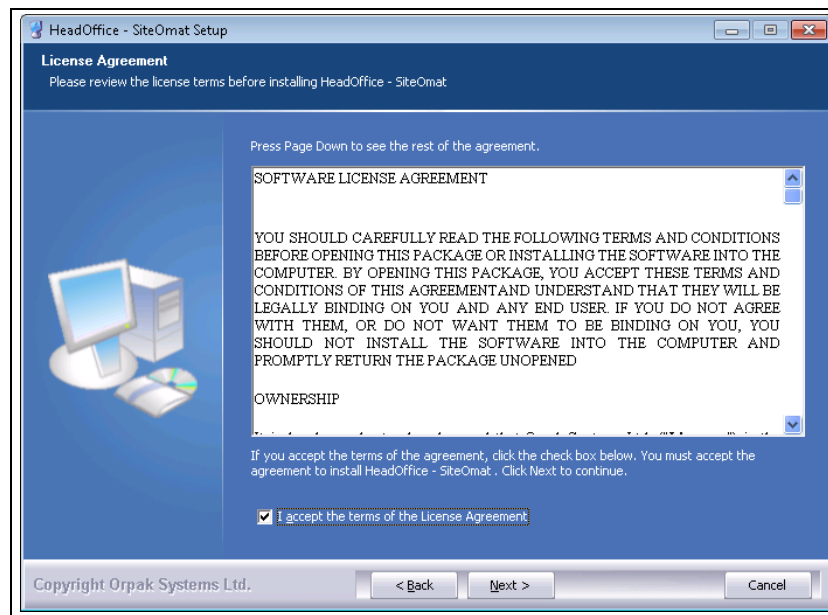
Figure 2: Head Office Setup Wizard Welcome Screen



Proceed as follows:

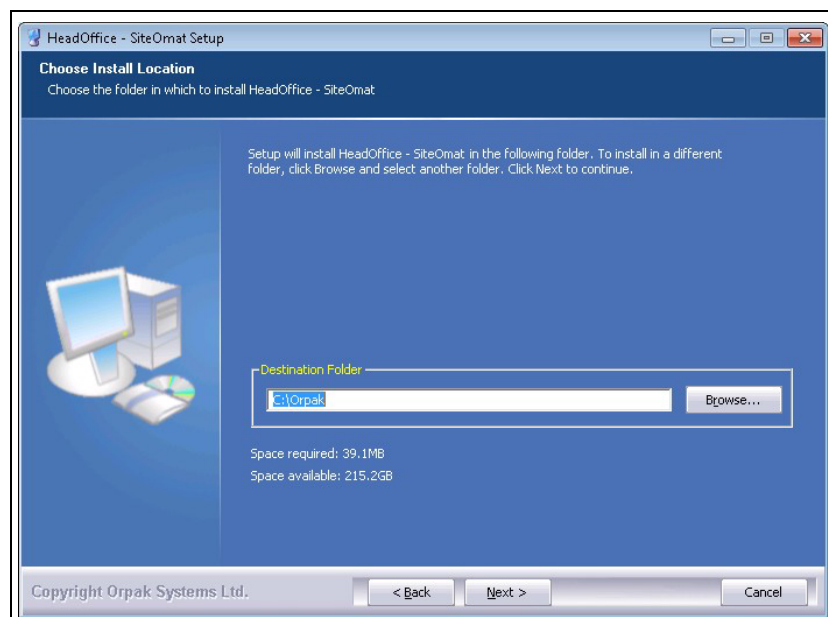
- 1 Click **Next**. The License Agreement screen opens (see [Figure 3](#)).

Figure 3: License Agreement Screen



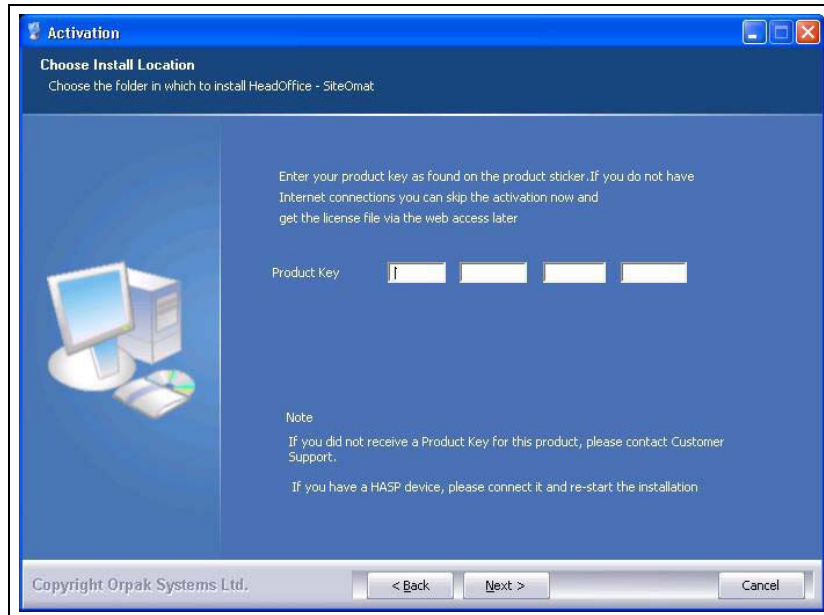
- 2 Select **I accept the terms of the License Agreement** check box and click **Next**. The Choose Install Location screen opens (see [Figure 4](#)).

Figure 4: Choose Install Location Screen



- 3 Click **Next** to install the files in the default folder (C:\Orpak), or click **Browse** to select another destination folder and then click **Next**. The following screen opens (see [Figure 5](#)).

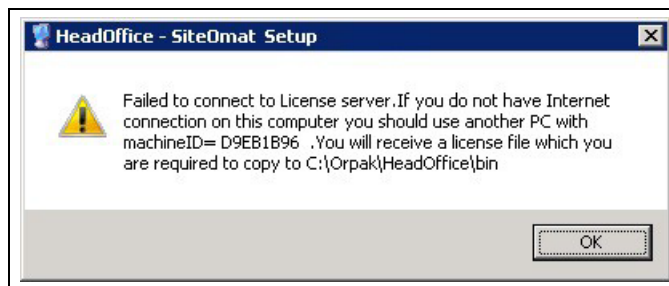
Figure 5: Activation Screen



- 4 Enter your unique product key, and then click **Next**.

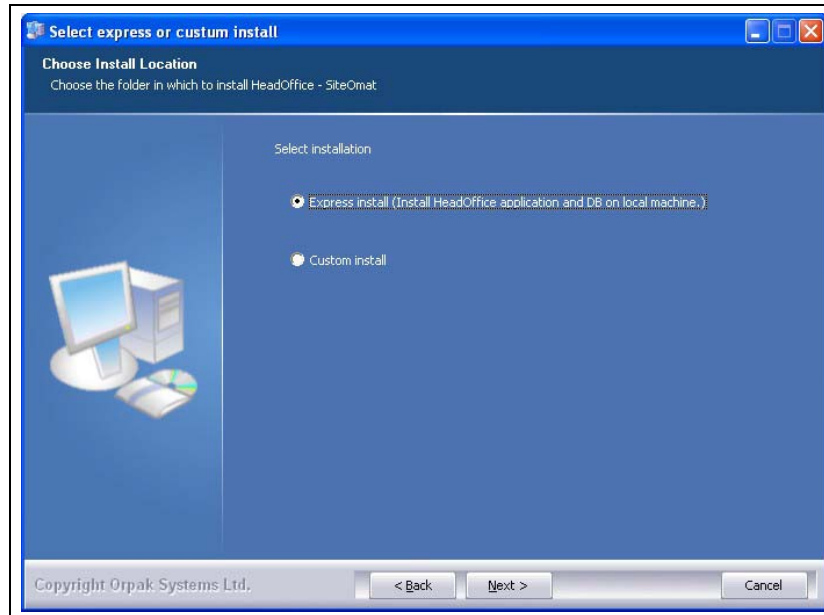
If there is no internet connection, the following message is displayed (see [Figure 6](#)).

Figure 6: Offline Activation Message



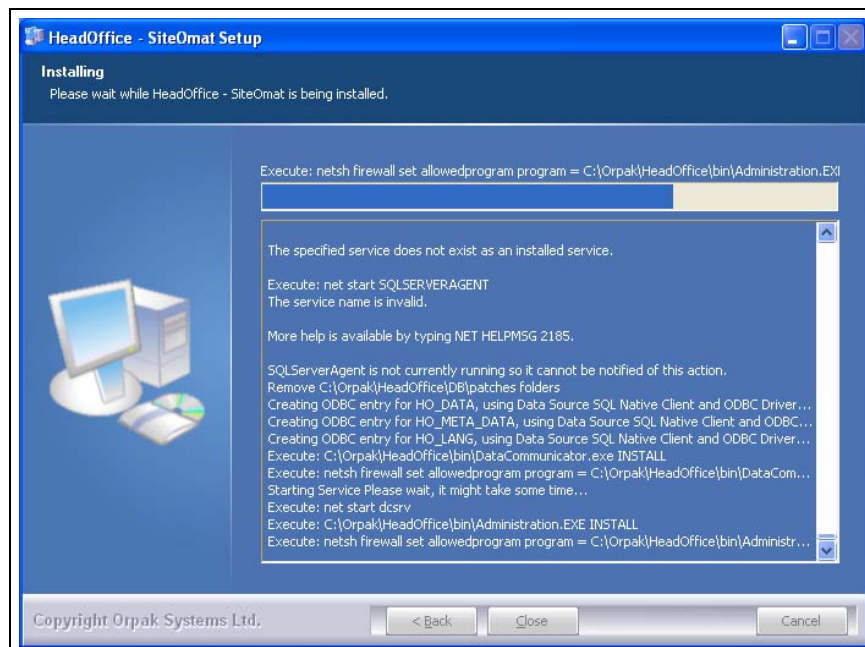
Keep your machine ID as you will need it for activating your software, and click **OK**. The following screen opens (see [Figure 7](#)).

Figure 7: Select Installation Mode Screen – Express Install



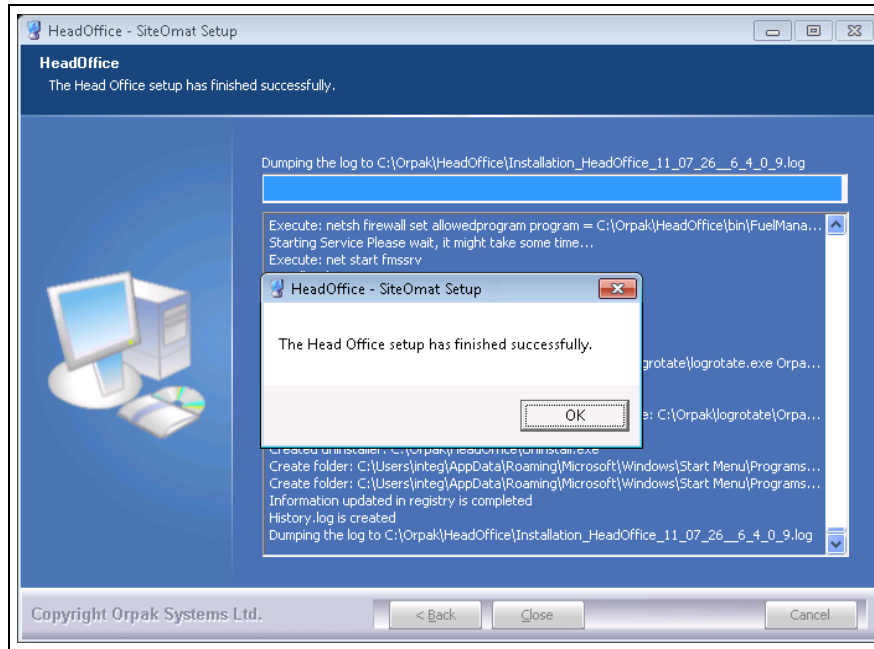
- 5 Select the **Express install** radio button and click **Next**. The installation process is fully automated. The Installing screen displays process messages, as well as possible error messages (see [Figure 8](#)).

Figure 8: Installing Screen – Express Installation



At the end of the installation, the Setup Completed Successfully message is displayed (see [Figure 9](#)).

Figure 9: Setup Complete Message

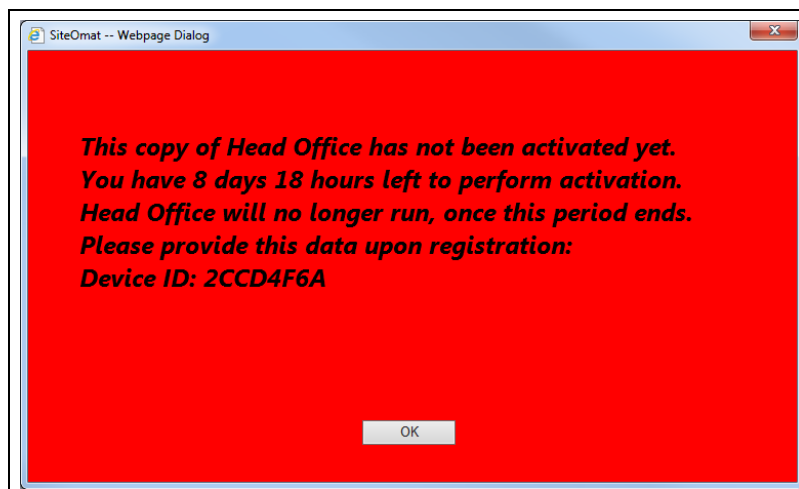


- 6 Click **OK**, and then click **Close** to exit the Wizard.

Note: It is strongly recommended to restart the system a few minutes after finishing the installation process.

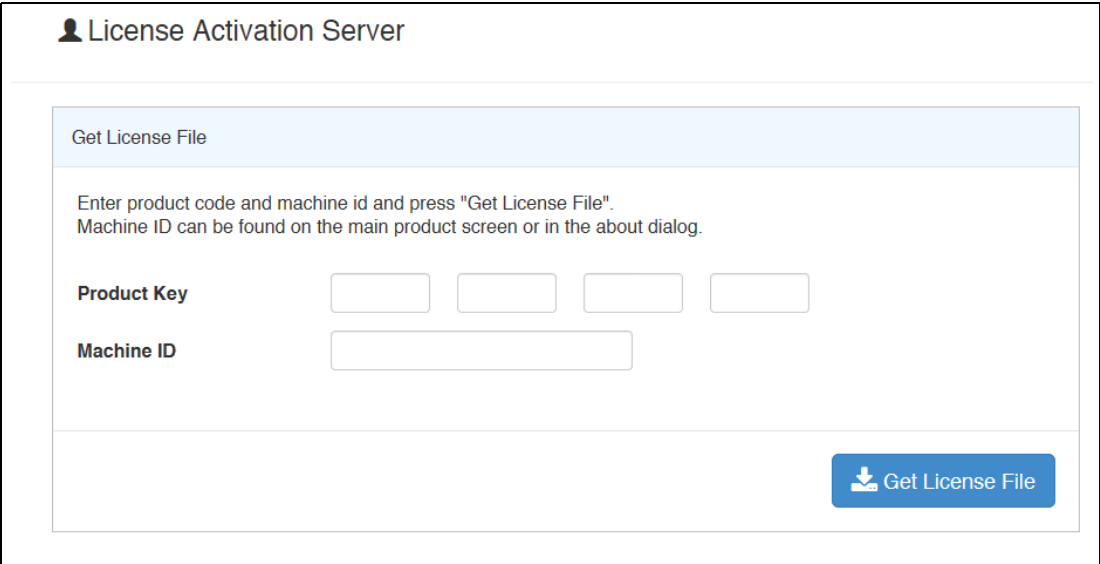
- 7 If you did not have Internet connection during setup, you will receive the following message when first launching the software (see [Figure 10](#)).

Figure 10: License Activation Warning



- 8 Browse to Activation Server: <https://www.getlicensefile.com> (see [Figure 11](#)).

Figure 11: License Activation Server



The screenshot shows a web browser window with the title "License Activation Server". Inside the browser, there is a light blue header bar with the text "Get License File". Below this, a white box contains the following text: "Enter product code and machine id and press 'Get License File'. Machine ID can be found on the main product screen or in the about dialog." Below the text, there are two input fields. The first is labeled "Product Key" and consists of four small, side-by-side text boxes. The second is labeled "Machine ID" and is a single, wider text box. At the bottom right of the white box, there is a blue button with a white download icon and the text "Get License File".

- 9 Enter your **Product Key**, the **Machine ID** generated during setup, and then click **Get License File** to download the *license.lic* file.

Note: The Machine ID is case sensitive.

- 10 Place the file under Your_Location\HeadOffice\bin.

3.3 Custom Install – Full Local

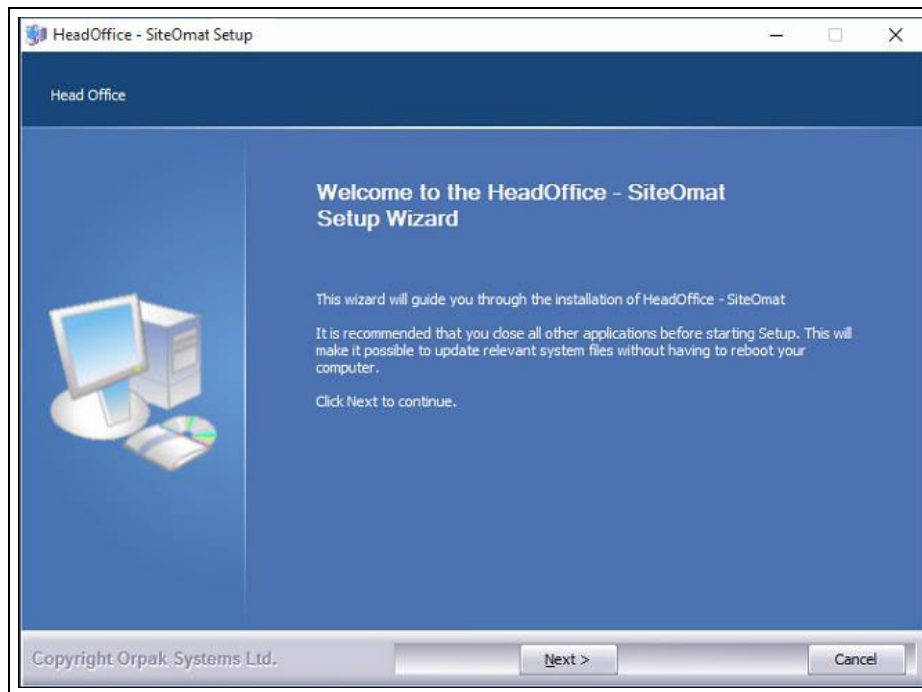
The following describes the installation of both HEAD OFFICE application and database on the same computer.

Note: Prior to installing HEAD OFFICE, verify that MS SQL Server 2005 Standard Edition has been previously installed.

The installation file (**HeadOffice_yy_mm_dd X_X_X_XX XXX.exe** – with the correct date and version number in the file name) is accessed from Gasboy's FTP site.

The following Welcome Screen opens (see [Figure 12](#)).

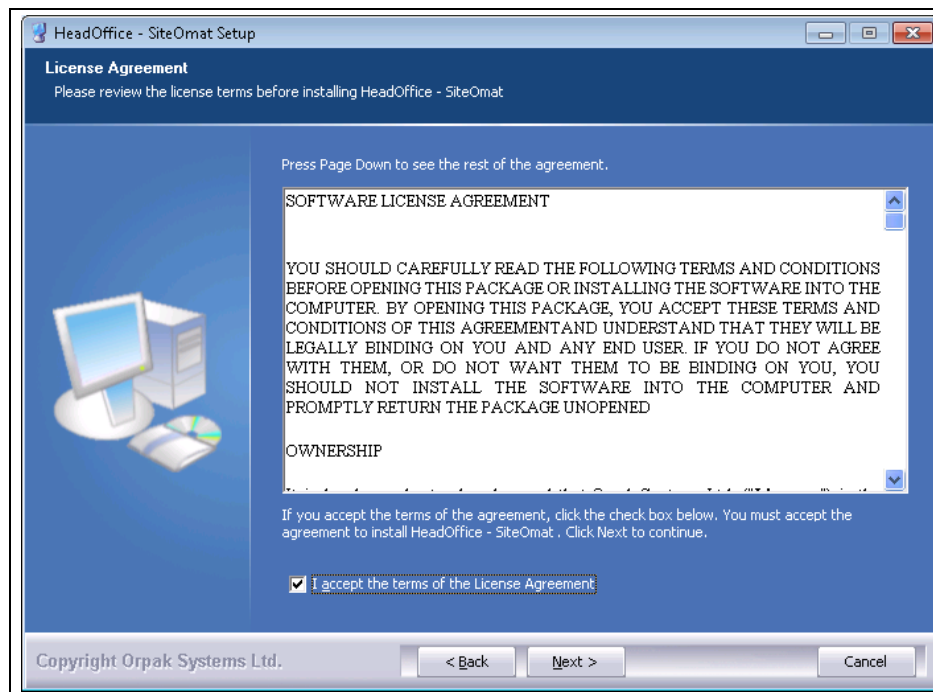
Figure 12: Head Office Setup Wizard Welcome Screen



Proceed as follows:

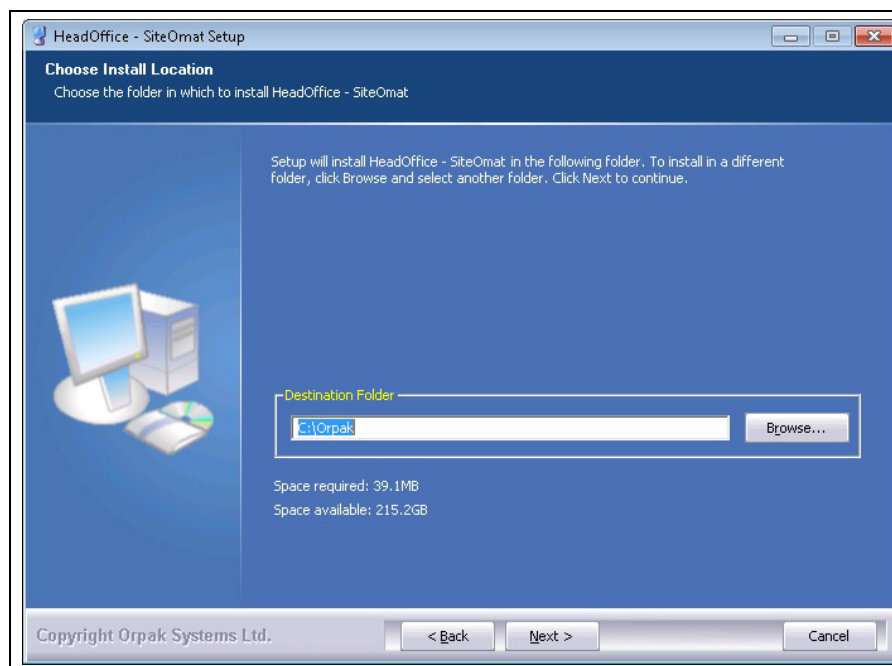
- 1 Click **Next**. The License Agreement screen opens (see [Figure 13](#)).

Figure 13: License Agreement Screen



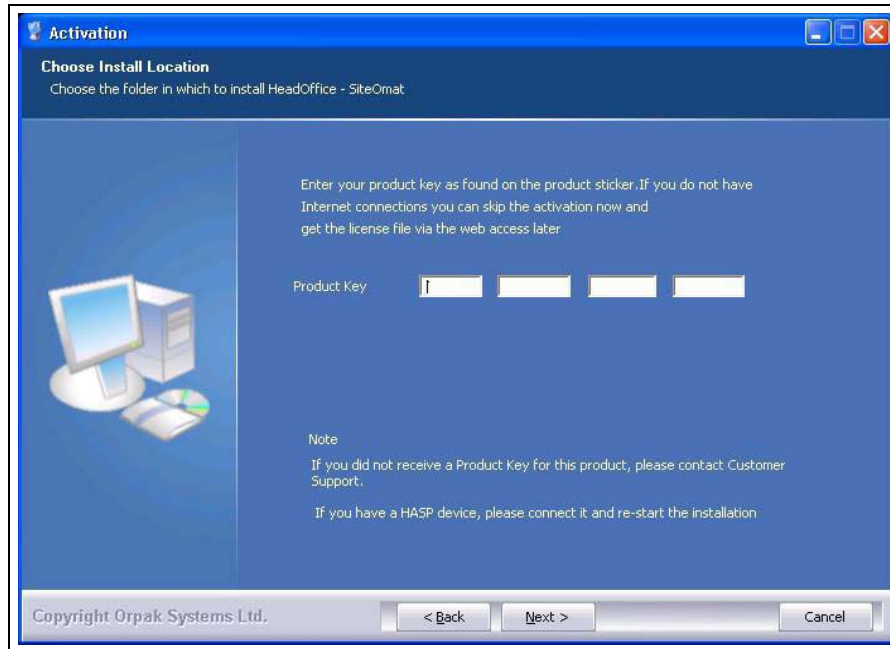
- 2 Select **I accept the terms of the License Agreement** check box and click Next. The Choose Install Location screen opens (see [Figure 14](#)).

Figure 14: Choose Install Location Screen



- 3 Click **Next** to install the files in the default folder (C:\Orpak), or click **Browse** to select another destination folder and then click **Next**. The following screen opens (see [Figure 15](#)).

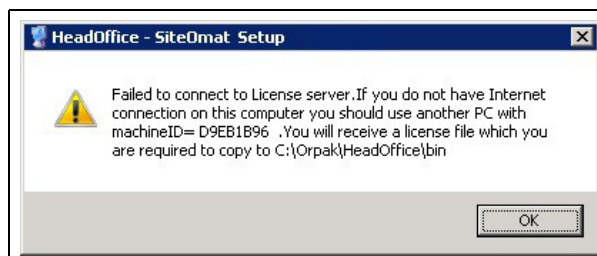
Figure 15: Activation Screen



- 4 Enter your unique product key and then click **Next**. The Select Installation Method screen opens (see [Figure 17](#) on [page 24](#)).

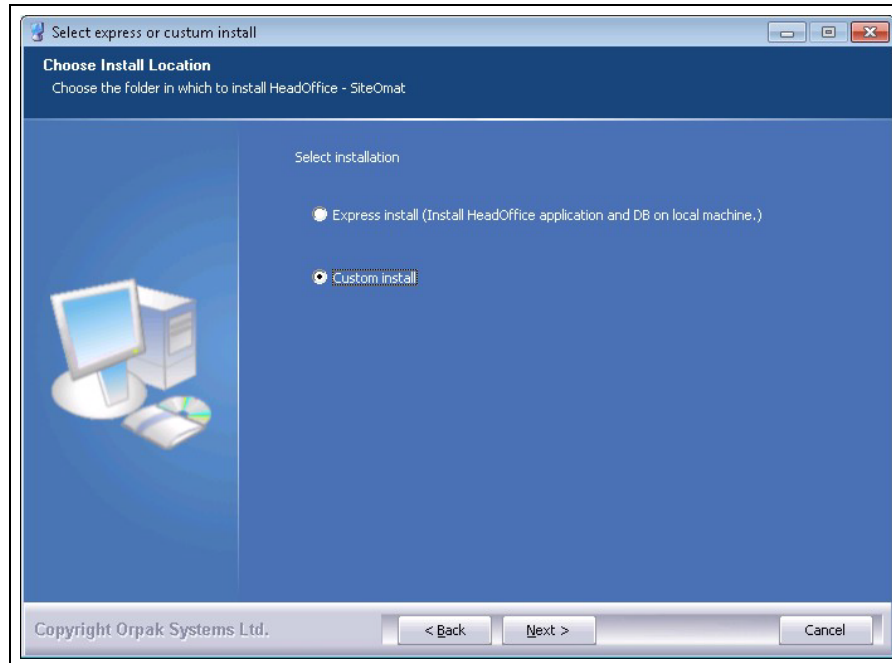
If there is no internet connection, the following message is displayed (see [Figure 16](#)).

Figure 16: Offline Activation Message



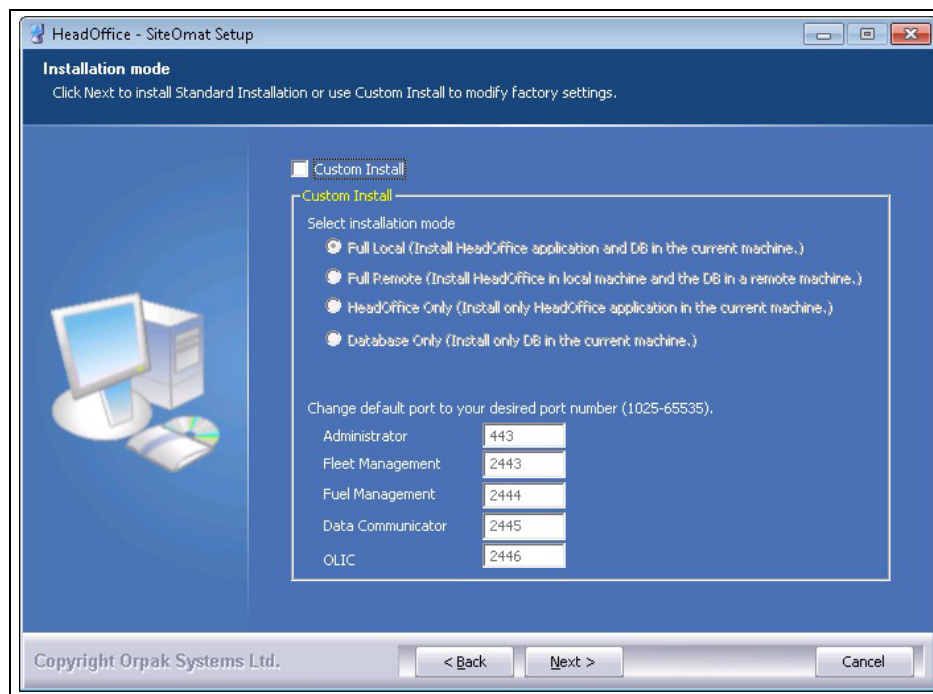
- 5 Keep your machine ID as you will need it for activating your software and click **OK**. The following screen opens (see [Figure 17](#)).

Figure 17: Select Installation Mode Screen – Custom Install



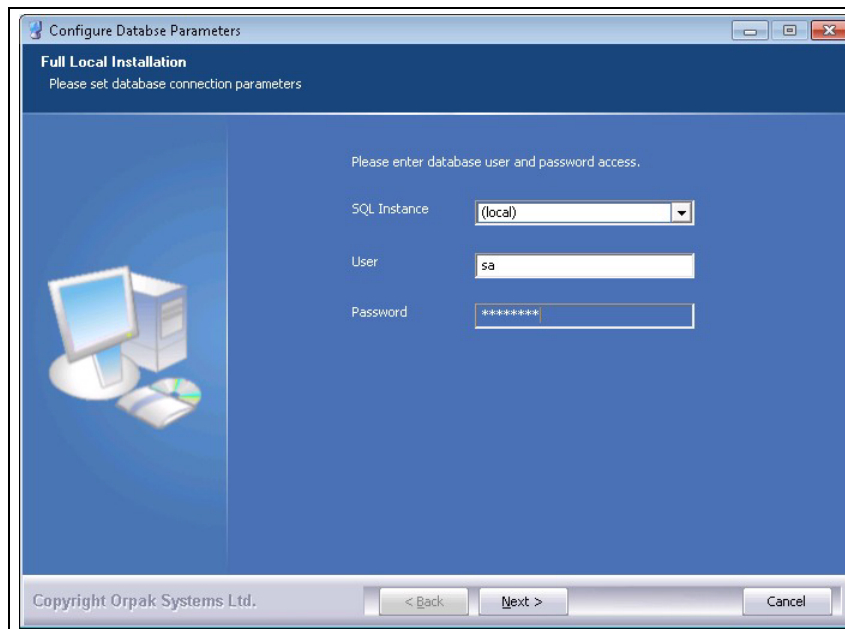
- 6 Select the Custom install radio button and click **Next**. The Installation Mode screen opens (see [Figure 18](#)).

Figure 18: Installation Mode Screen



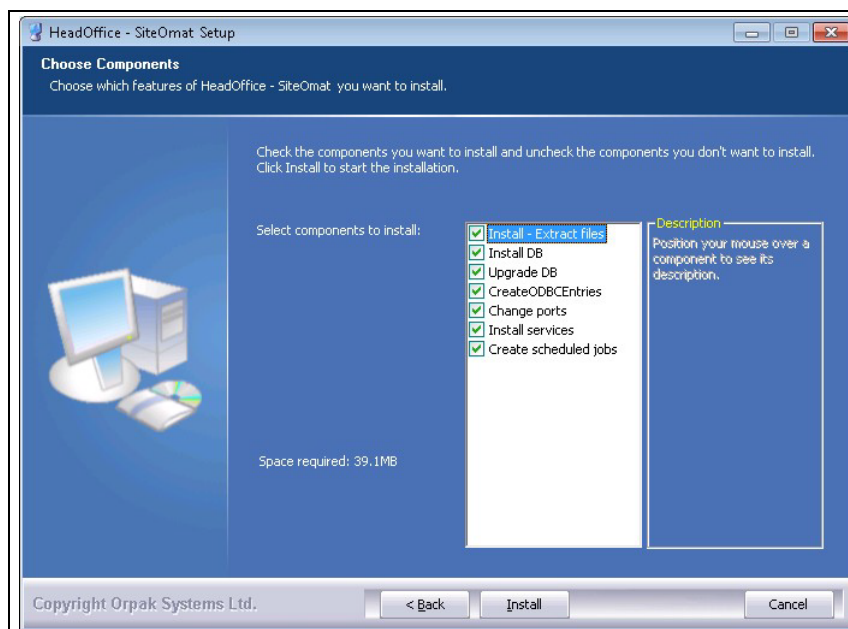
- 7 This screen allows selection of the installation mode and modification of port numbers assigned to the HEAD OFFICE services. To activate the fields on the screen, select the **Custom Install** check box. Since Full Local installation is selected by default, click **Next** to continue.
- 8 The Configure Database Parameters screen opens (see [Figure 19](#)).

Figure 19: Configure Database Parameters Screen



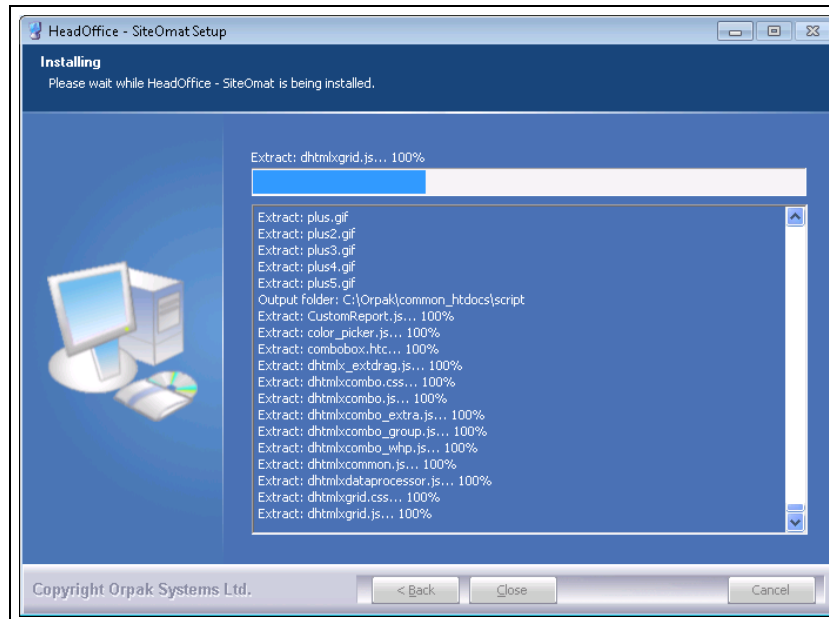
- 9 Select the **SQL Instance**, enter SQL Server **Username** and **Password** as set during the SQL installation, and click **Next**.

Figure 20: Choose Components Screen



- 10 The Choose Components screen opens (see [Figure 20](#) on [page 26](#)) allowing selection of the components to be installed. Unless otherwise specified leave as is and click Install. The installation process is fully automated. The Installing screen displays process messages, as well as possible error messages (see [Figure 21](#)).

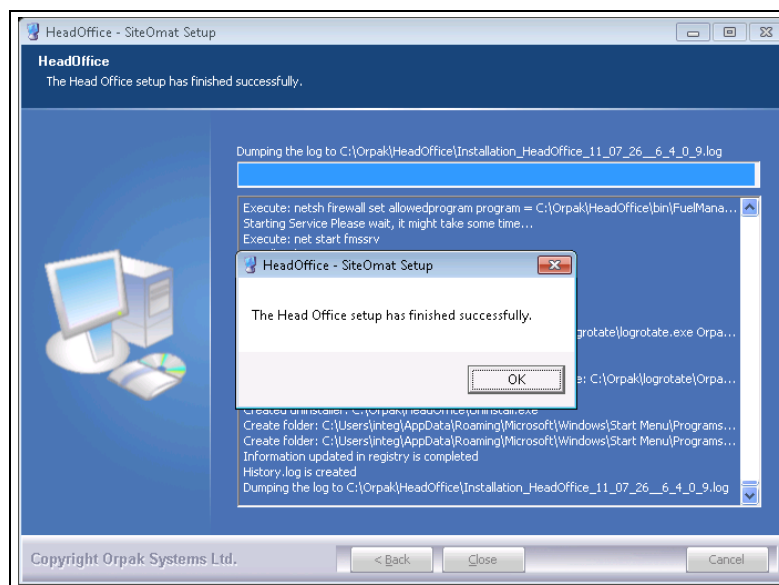
Figure 21: Installing Screen – Custom Install



Because most of the errors are related to database access, verify that the database service is running.

The Head Office is installed as a Windows Service; therefore, it performs specific functions, without requiring user intervention. At the end of the installation, the Setup Completed Successfully message is displayed (see [Figure 22](#)).

Figure 22: Setup Complete Message

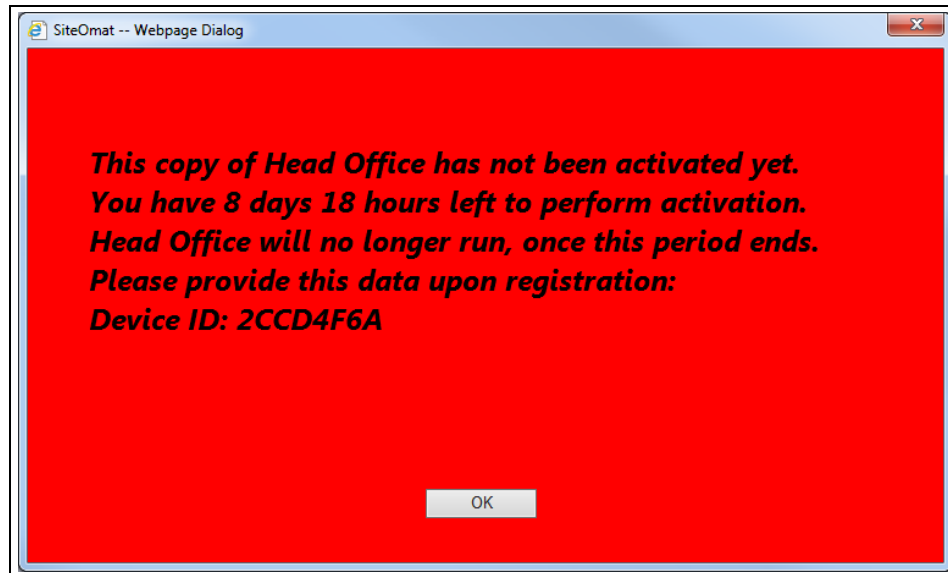


- 11 Click **OK** and then click **Close** to exit the Wizard.

Note: It is strongly recommended to restart the system a few minutes after finishing the installation process.

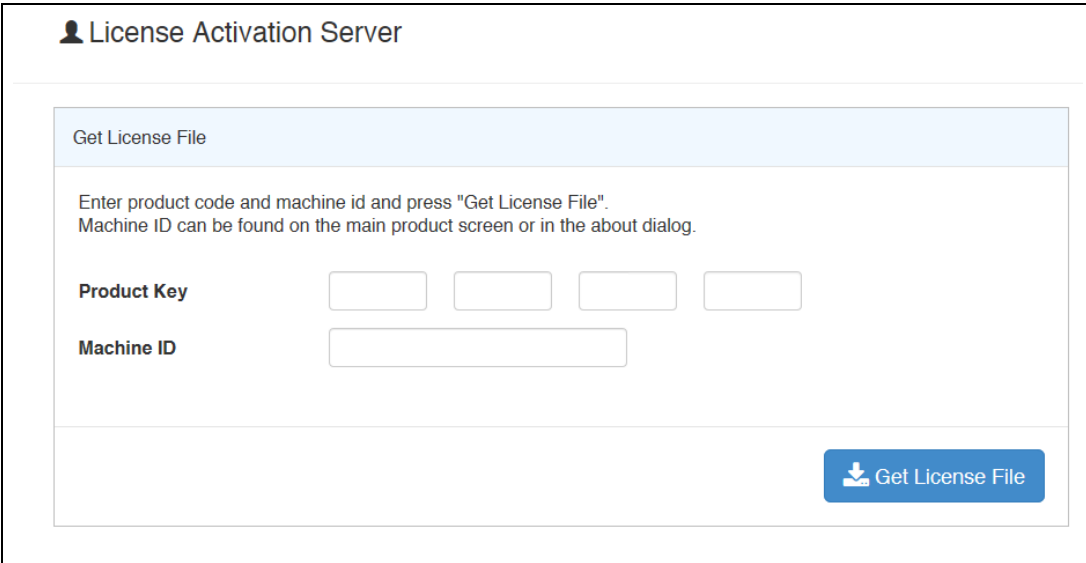
- 12 If you did not have Internet connection during setup, you will receive the following message when first launching the software (see [Figure 23](#)).

Figure 23: License Activation Warning



- 13 Browse to the Activation Server (see [Figure 24](#)).

Figure 24: License Activation Server



- 14 Enter your **Product Key**, the **Machine ID** generated during setup, and then click **Get License File** to download the *license.lic* file.

Note: The Machine ID is case sensitive.

- 15 Place the file under Your_Location\HeadOffice\bin.

The installation of the HEAD OFFICE installs the following files:

Under C:\Orpak\HeadOffice

- *History.log* – history of HEAD OFFICE installation and upgrades
- *Installation_HeadOffice_YY_MM_DD X_X_X_XX XXX.log* – log of the installation (its name varies upon on the installed version)
- *Uninstall.exe* – HEAD OFFICE uninstall program
- *VERSION* – contains the full version of the current installed HEAD OFFICE

Under C:\Orpak\HeadOffice\bin

- *HEAD OFFICE_Serv_start.bat* – starts all services at once
- *HEAD OFFICE_Serv_stop.bat* – stops all services at once
- Under C:\Orpak\backup, all the automatic backup DB files are placed

3.4 Custom Install – Full Remote

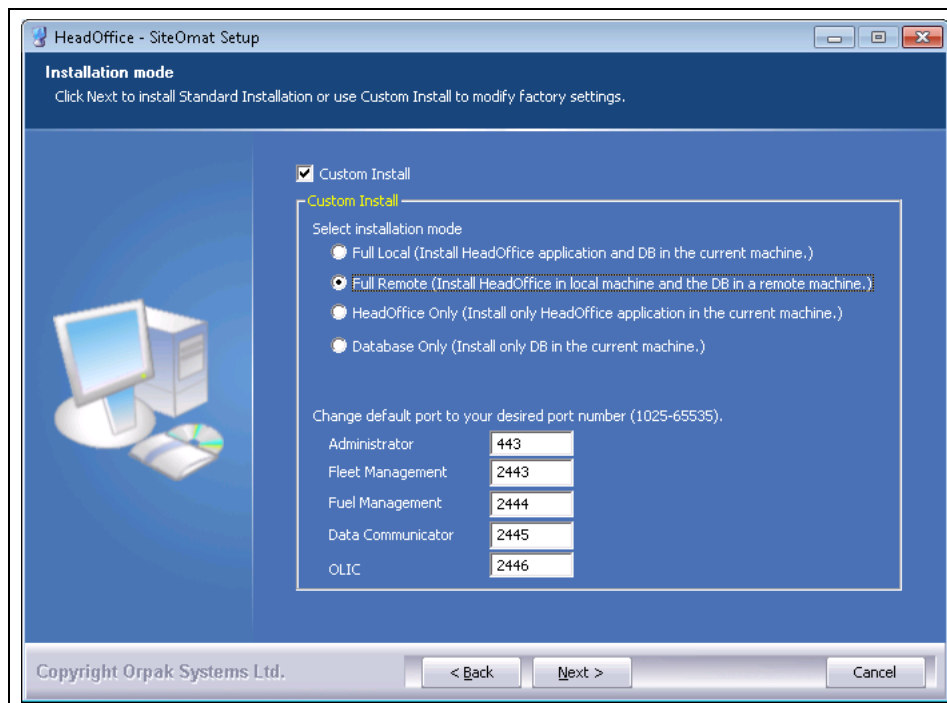
The following describes the installation of HEAD OFFICE application on the local computer and the HEAD OFFICE database on a remote computer.

Note: Prior to installing HEAD OFFICE, verify that Microsoft SQL Server 2005 Standard Edition has been previously installed on the remote computer.

Proceed as follows:

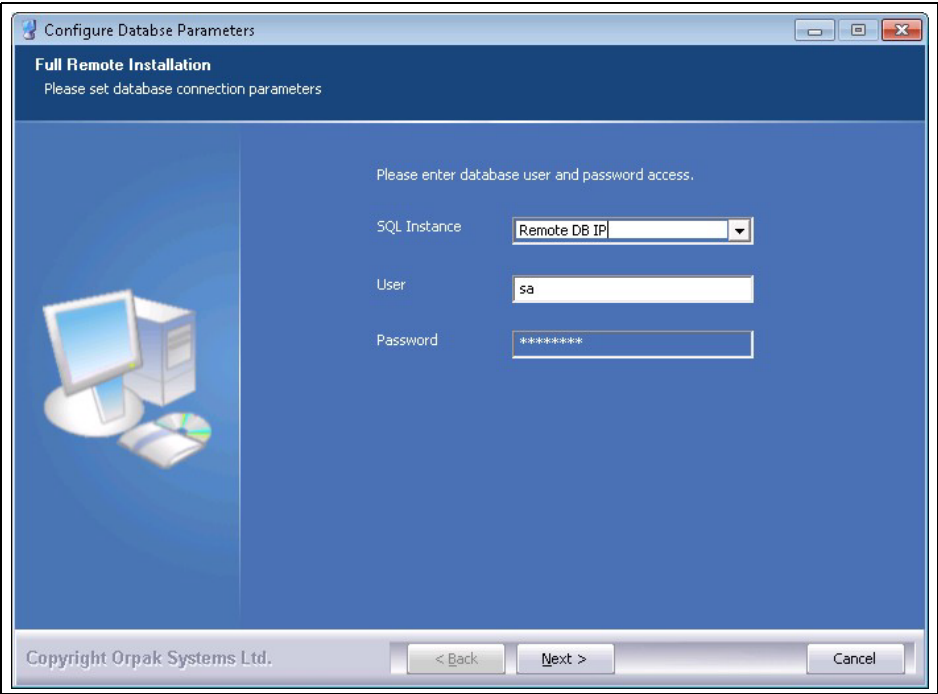
- 1 Perform steps 1 to 6 described above (refer to “3.3 Custom Install – Full Local” on [page 22](#)).
- 2 On the Installation Mode screen, select the **Custom Install** check box, and then select the Full Remote radio button (see [Figure 25](#)).

Figure 25: Installation Mode Screen – Selecting Full Remote Mode



- 3 Click **Next**. The Configure Database Parameters screen opens (see [Figure 26](#)).

Figure 26: Configure Database Parameters Screen – Full Remote Mode



Configure Database Parameters

Full Remote Installation

Please set database connection parameters

Please enter database user and password access.

SQL Instance: Remote DB IP

User: sa

Password: *****

Copyright Orpak Systems Ltd.

< Back Next > Cancel

- 4 Enter the remote computer IP address in the **SQL Instance** text box, enter SQL Server **Username** and **Password** as set during the SQL installation, and click **Next**.
- 5 Proceed from step 11 as described in “[3.3 Custom Install – Full Local](#)” on [page 22](#).

3.5 Custom Install – Head Office Only

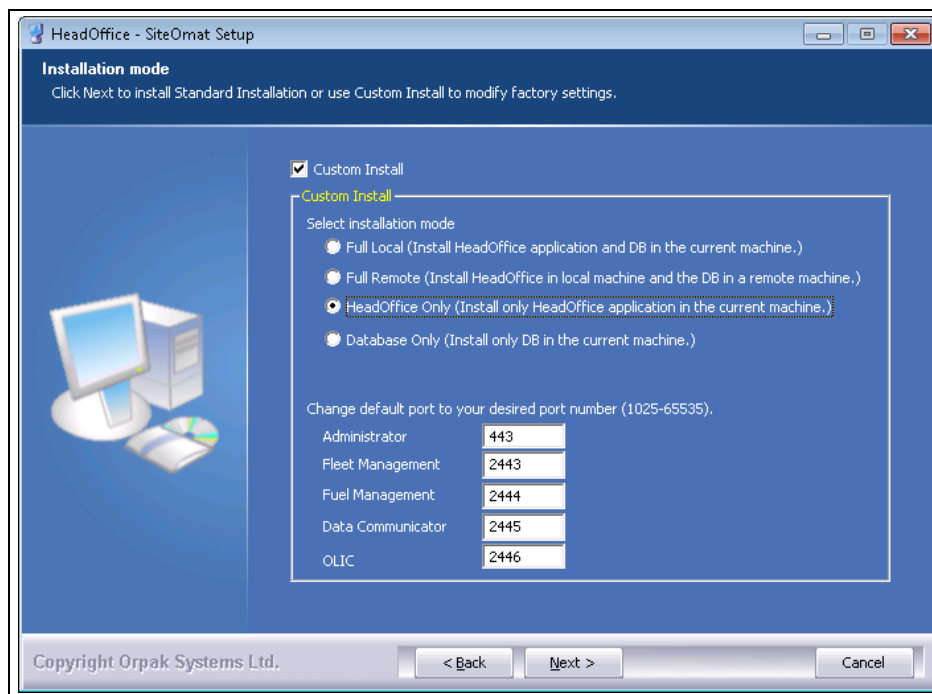
The following describes the installation of HEAD OFFICE application (without HEAD OFFICE database) on the local computer.

Note: Prior to installing HEAD OFFICE, verify that Microsoft SQL Server 2005 Standard Edition and HEAD OFFICE database has been previously installed on the computer. When selecting the option of installing Head Office only, the Database will not be modified.

Proceed as follows:

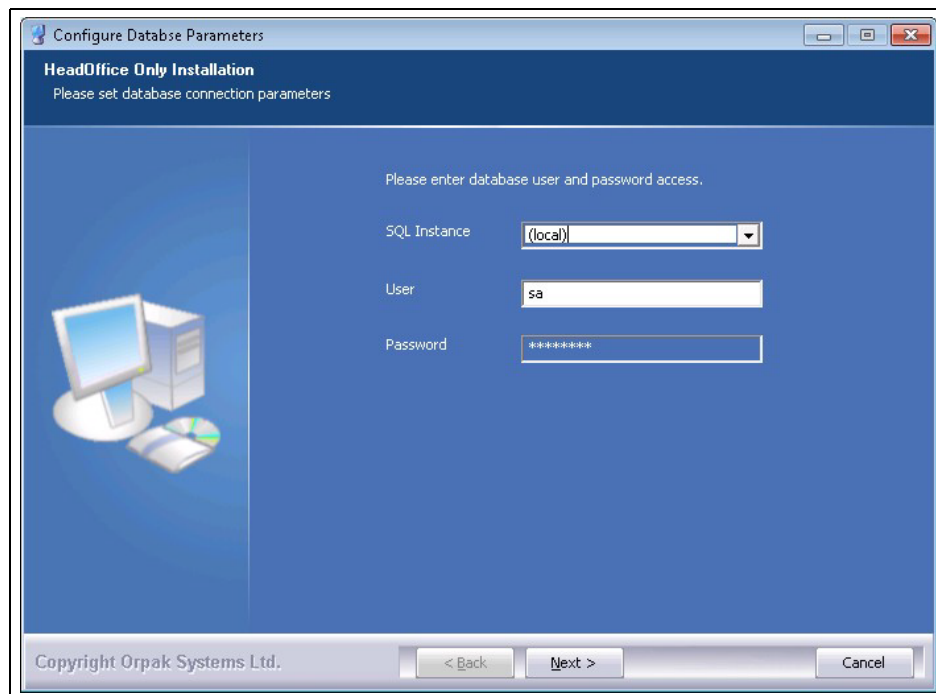
- 1 Perform steps 1 to 6 described in “3.3 Custom Install – Full Local” on page 22.
- 2 On the Installation Mode screen, select the **Custom Install** check box, and then select the **Head Office Only** radio button (see Figure 27).

Figure 27: Installation Mode Screen – Selecting Head Office Only Mode



- 3 Click **Next**. The Configure Database Parameters screen opens (see [Figure 28](#)).

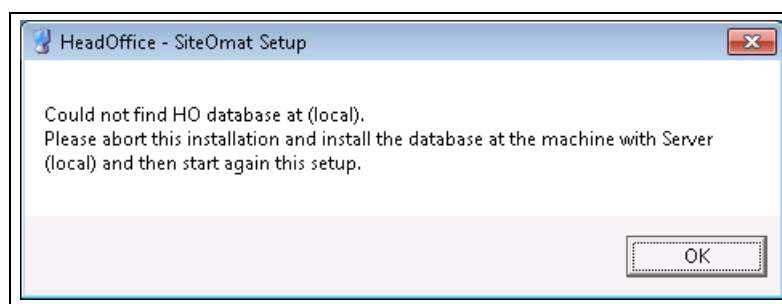
Figure 28: Configure Database Parameters Screen – Head Office Only Mode



- 4 Select the **SQL Instance**, enter SQL Server **Username** and **Password** and click Next.

Note: HEAD OFFICE database must be installed before installing HEAD OFFICE application. In cases where HEAD OFFICE database is not found, an error message is displayed (see [Figure 29](#)). Abort the installation and restart after HEAD OFFICE database was installed.

Figure 29: HEAD OFFICE Database Not Found Message



- 5 Proceed from step 9 as described in “[3.3 Custom Install – Full Local](#)” on [page 22](#).

3.6 Custom Install – Database Only

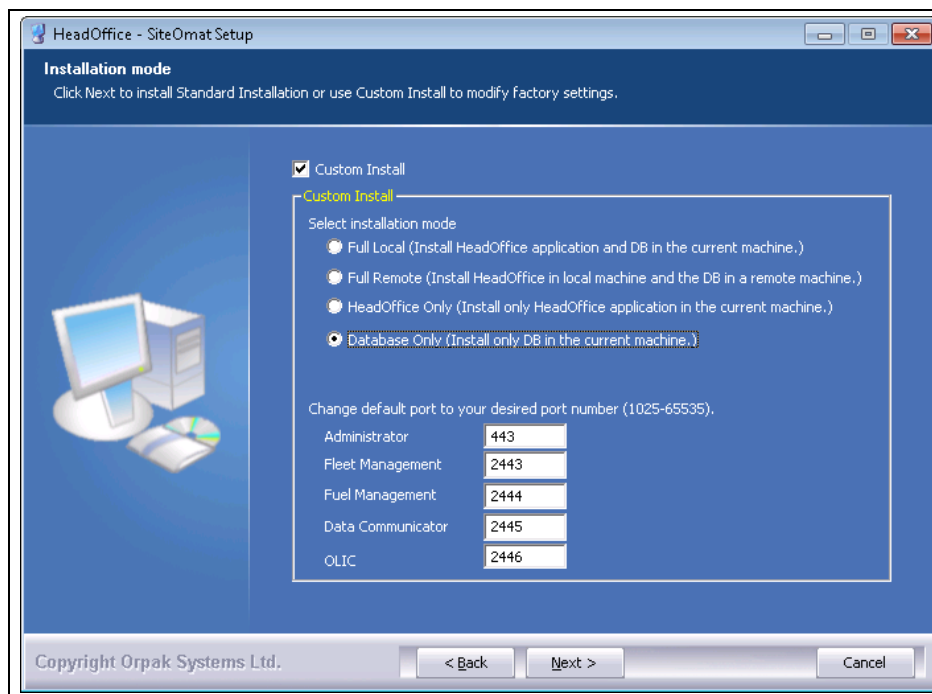
The following describes the installation of HEAD OFFICE database (without HEAD OFFICE application) on the local computer.

Note: Prior to installing HEAD OFFICE database, verify that MS SQL Server 2005 Standard Edition has been previously installed on the remote computer.

Proceed as follows:

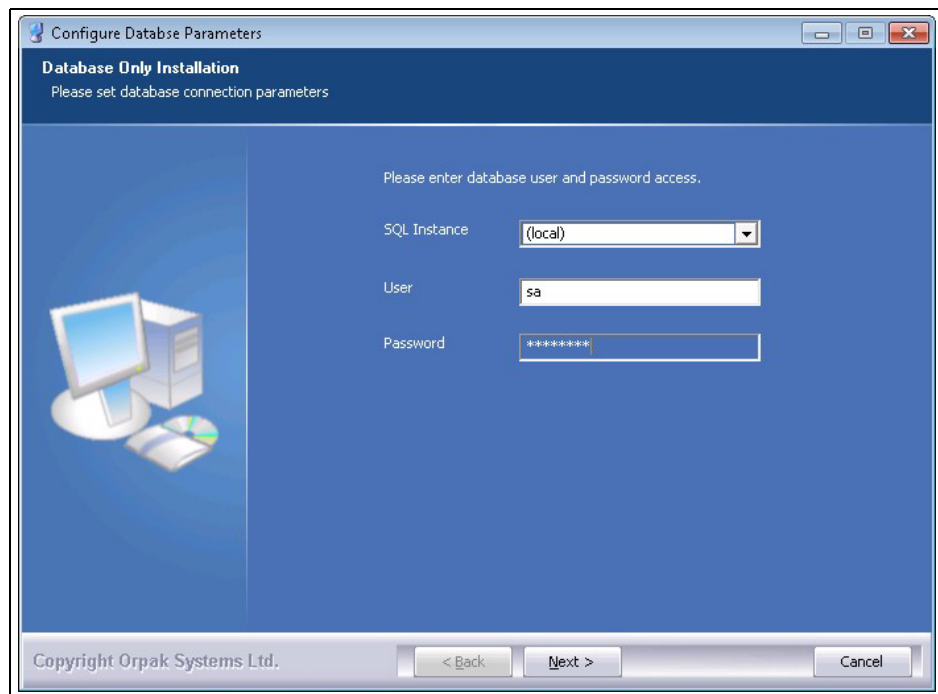
- 1 Perform steps 1 to 6 described in “3.3 Custom Install – Full Local” on page 22.
- 2 On the Installation Mode screen, select the **Custom Install** check box, and then select the **Database Only** radio button (see Figure 30).

Figure 30: Installation Mode Screen – Selecting Database Only Mode



- 3 Click **Next**. The Configure Database Parameters screen opens (see [Figure 31](#)).

Figure 31: Configure Database Parameters Screen –Database Only Mode



- 4 Select the SQL Instance, enter SQL Server Username and Password as set during the SQL installation, and click **Next**.
- 5 Proceed from step 11 as described in [“3.3 Custom Install – Full Local”](#) on [page 22](#).

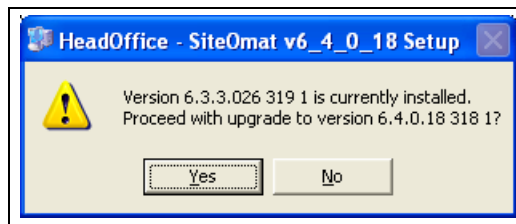
3.7 Upgrading Head Office

The following describes the upgrade of HEAD OFFICE application to version 6.4.X.XX.

Proceed as follows:

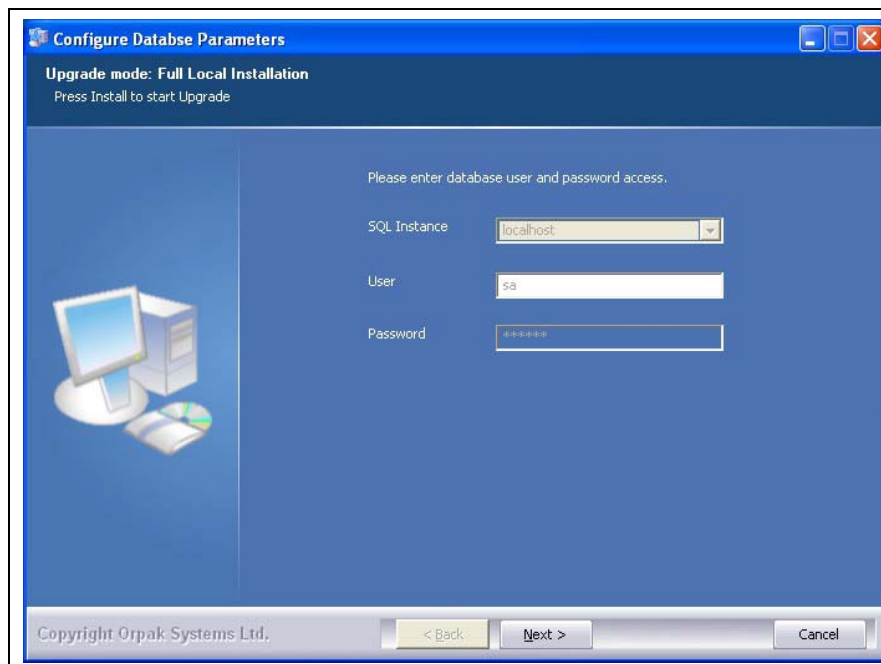
- 1 Perform steps 1 to 2 described in paragraph 3.3. The following confirmation message is displayed (see [Figure 32](#)).

Figure 32: Example of Head Office Upgrade Confirmation Message



- 2 Click **Yes**. The Configure Database Parameters screen opens (see [Figure 33](#)). The applicable fields are disabled because SQL Server parameters shouldn't be modified when upgrading the application.

Figure 33: Configure Database Parameters Screen – HEAD OFFICE Upgrade



- 3 Click **Next** and proceed from step11 on page 53 as described in “3.3 Custom Install – Full Local” on [page 22](#).

Note: In cases where the HEAD OFFICE application was upgraded and after the procedure is completed, it may be necessary to delete the cookies from each client IE, in order for the browser to reflect the changes.

3.8 Uninstalling Head Office

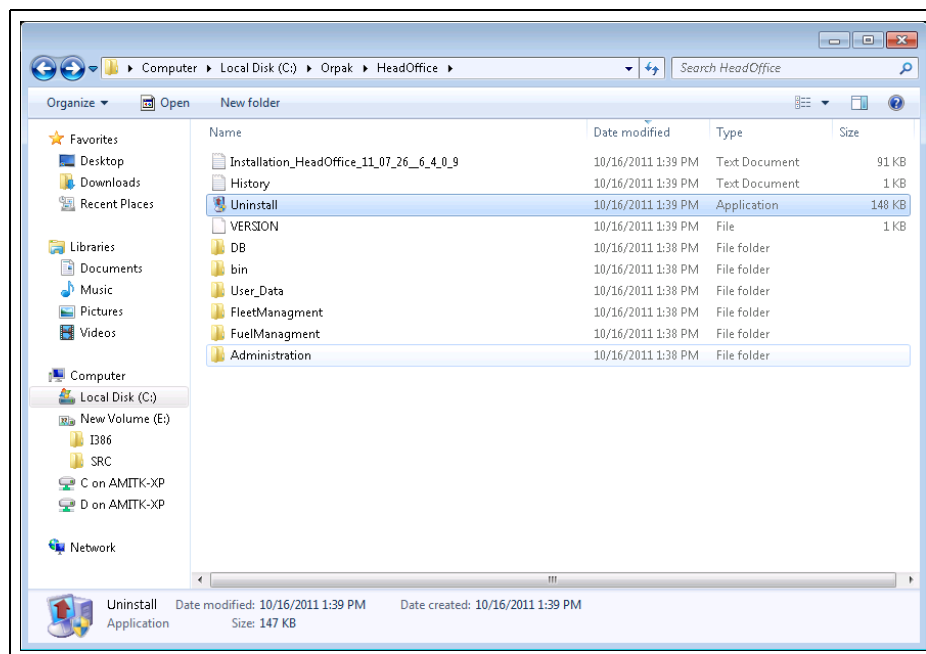
The following describes the uninstallation of HEAD OFFICE application.

Note: It is highly recommended to backup HEAD OFFICE database prior to uninstalling HEAD OFFICE from the computer.

Proceed as follows:

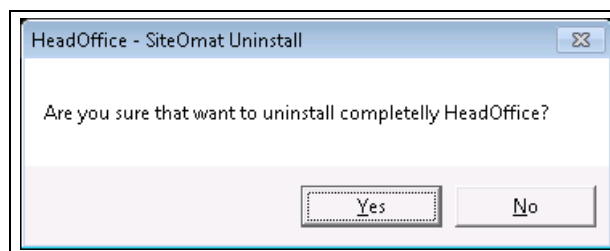
- 1 Double-click the Uninstall executable file, located under Orpak\HeadOffice folder (see [Figure 34](#)).

Figure 34: Orpak\HeadOffice Folder



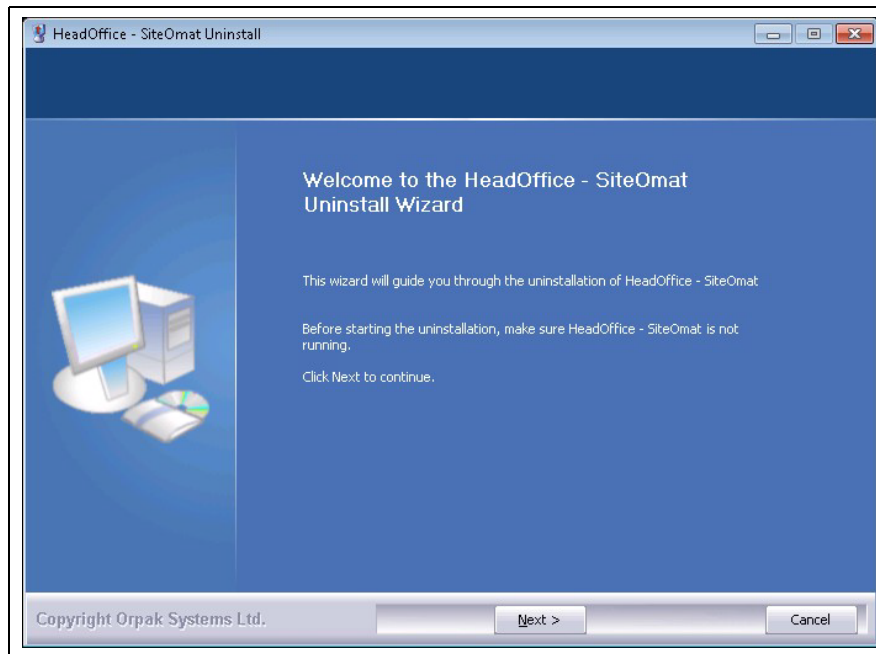
- 2 The following confirmation message is displayed (see [Figure 35](#)).

Figure 35: Uninstalling HeadOffice Confirmation Message



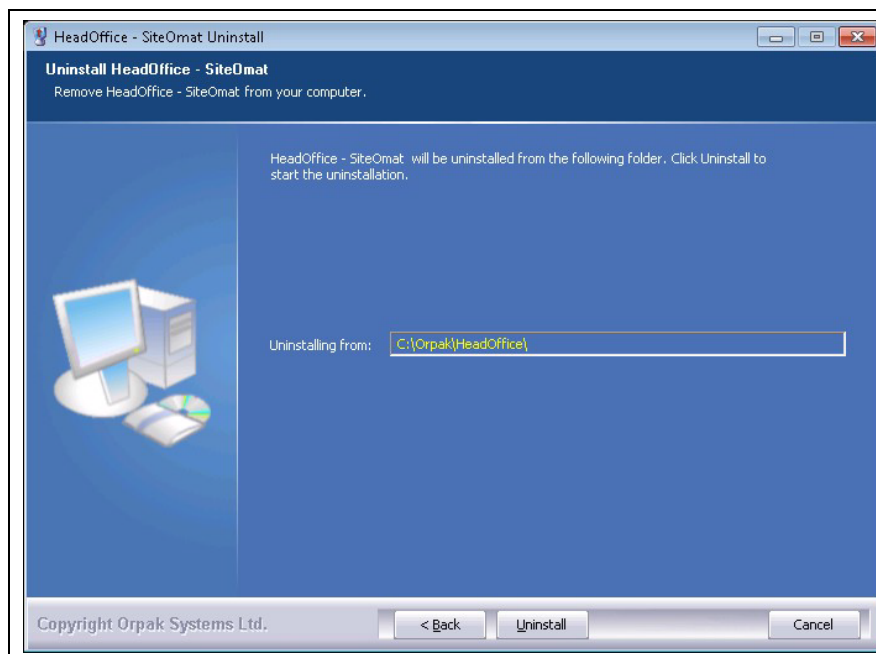
- 3 Click **Yes**. The following Welcome screen opens (see [Figure 36](#)).

Figure 36: Head Office Uninstall Wizard Welcome Screen



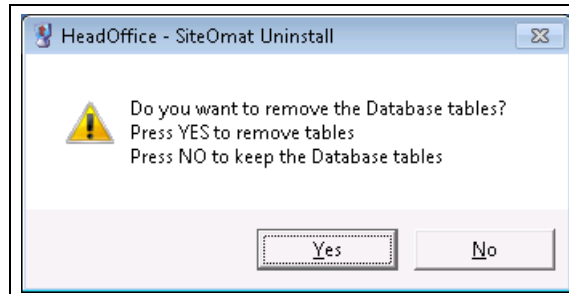
- 4 Click **Next**. The following screen opens, displaying the path of the folder which is to be removed (see [Figure 37](#)).

Figure 37: Head Office Location Screen



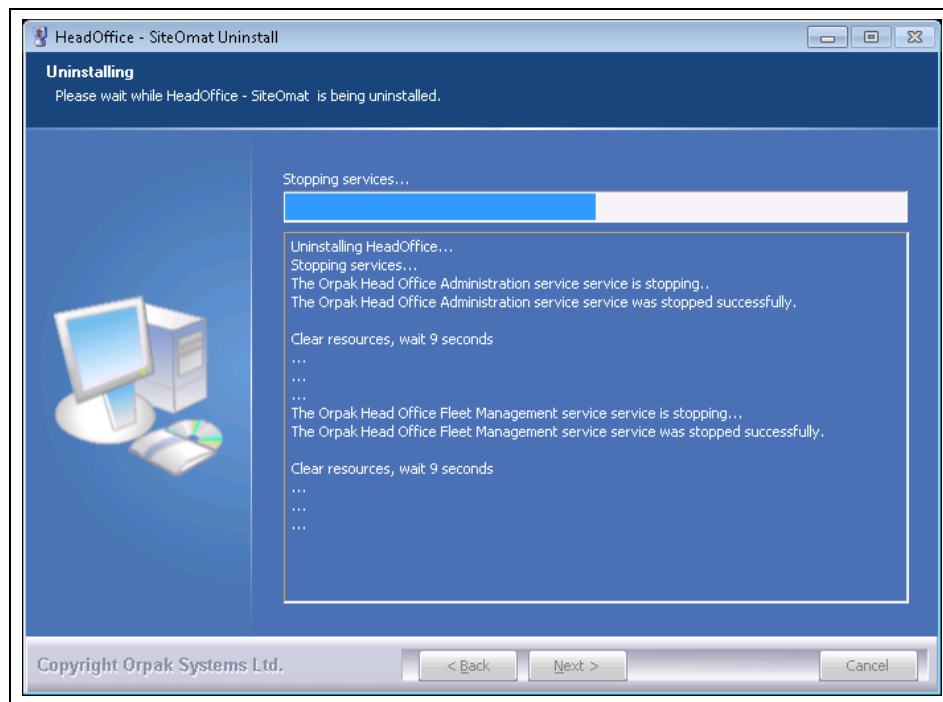
- 5 Click **Uninstall** to start the uninstallation process. The following confirmation message is displayed (see [Figure 38](#)).

Figure 38: Database Tables Removal Confirmation Message



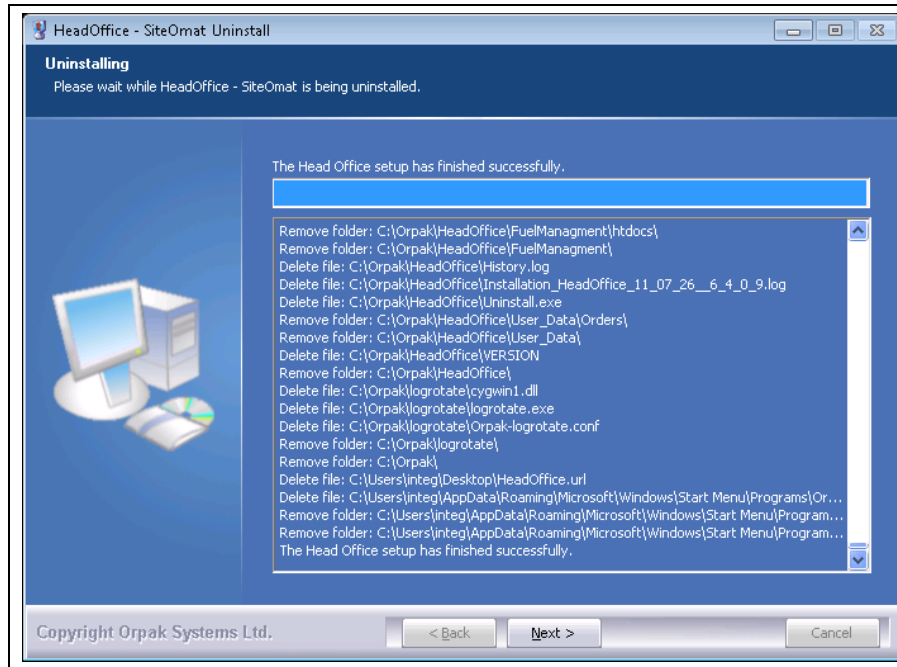
- 6 Click **Yes** to remove HEAD OFFICE database tables, or click **No** to keep the tables on the computer. The process is fully automated. The Uninstalling screen displays process messages, as well as possible error messages (see [Figure 39](#)).

Figure 39: Uninstalling Screen



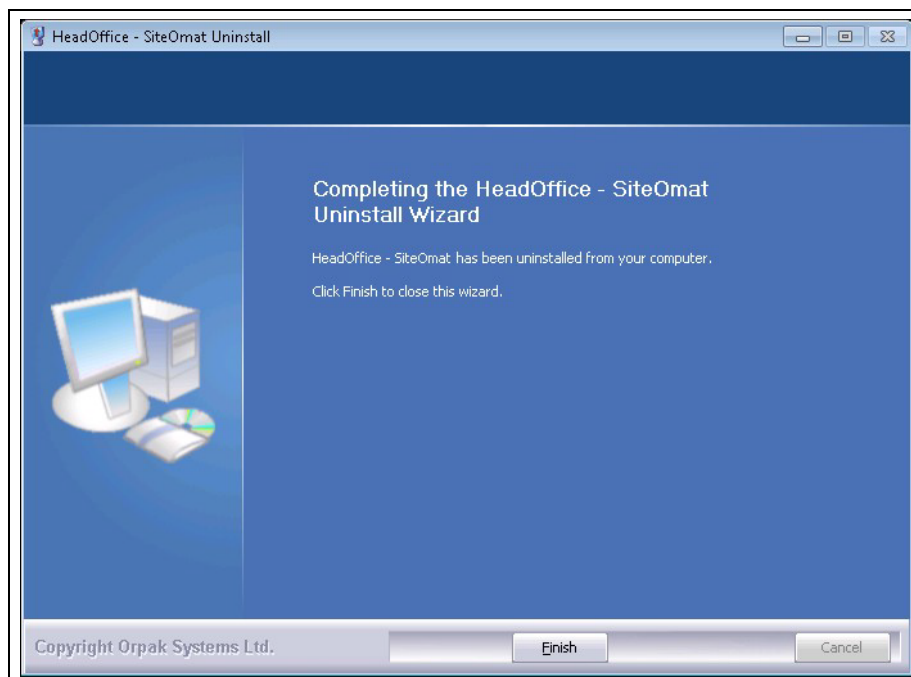
At the end of the installation, the “Head Office setup has finished successfully” message is displayed (see [Figure 40](#)).

Figure 40: Uninstallation Complete Message



- 7 Click **Next**. The following screen opens (see [Figure 41](#)).

Figure 41: Uninstallation Complete Screen



- 8 Click **Finish** to exit the Wizard.

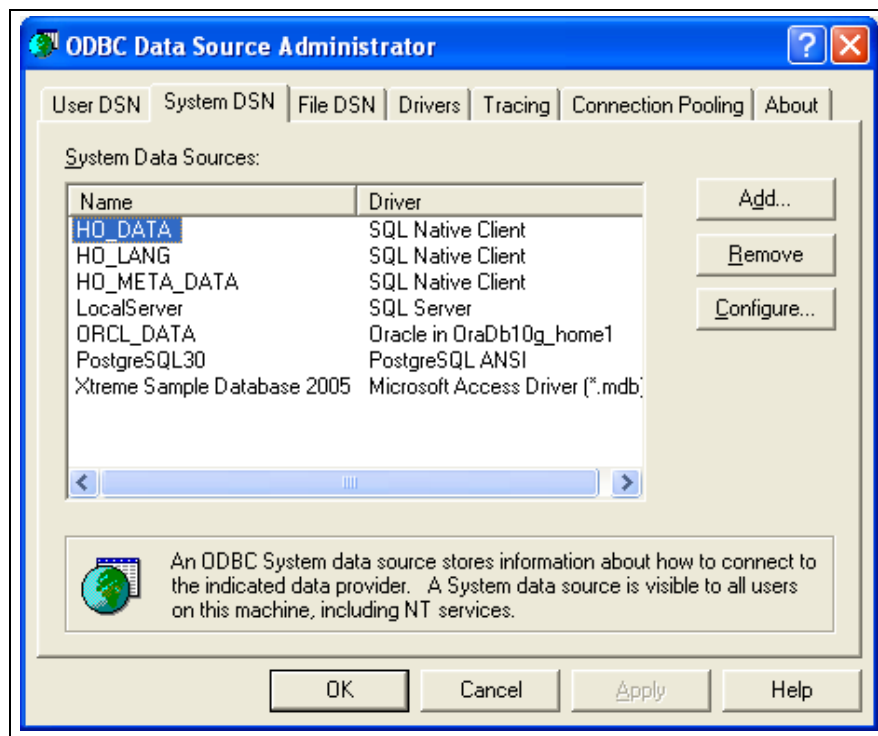
3.9 Failure To Run The Head Office Program

Note: The following details instructions for Advanced users only.

Possible causes of failure are:

- 1 DotNet2.0 or Windows Installer 3.5 are not installed
- 2 One of the server Web ports 443, 2443, 2444, 2445, 2446, or 6443 is being used by another application. Verify that no other Web servers, such as IIS, are running. Some programs, such as Skype, may also use these ports and cause failures. Ports 443, 2443, 2444, 2445, 2446, and 6443 must be available. In such cases where they are occupied by other applications, define another port for them.
- 3 ODBC connection to database does not work. Go to the ODBC connection window (select Control Panel, Administrative Tools, Data Sources), as shown below (see [Figure 42](#)).

Figure 42: ODBC Connection Dialog Screen

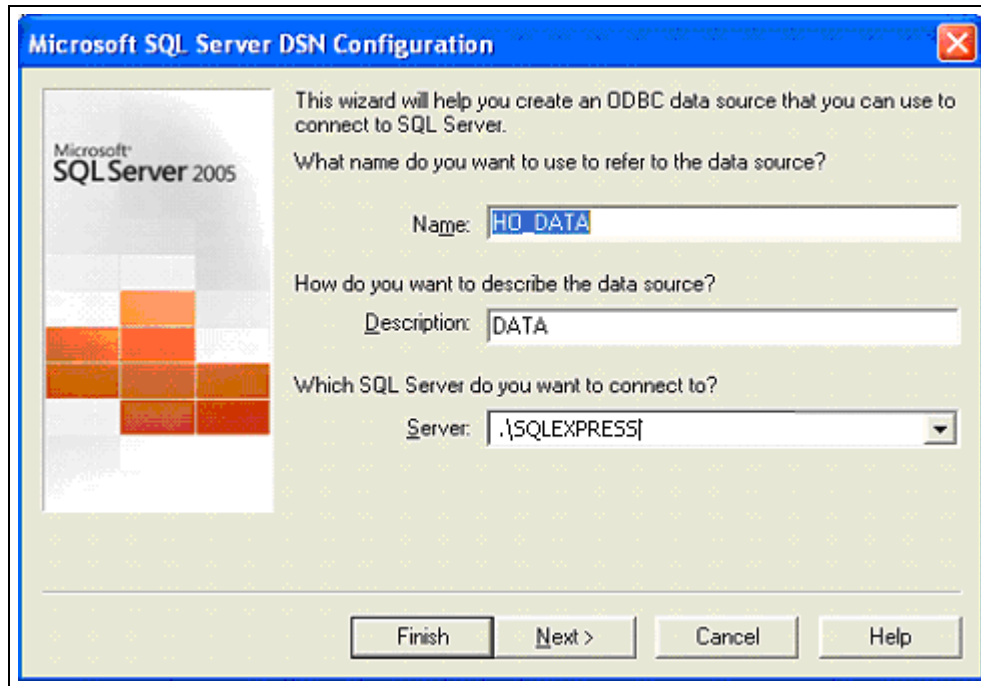


Proceed as follows:

- 1 Select the system DSN tab.
- 2 Select HO_DATA and click Configure. The following screen opens (see [Figure 43](#)).

Note: ODBC Microsoft SQL Server Setup is part of Windows OS installation; therefore, the procedure is not described in this manual.

Figure 43: SQL Server DSN Configuration



- 3 If the user manages a small fleet using SQLEXPRESS software, make sure that the definition in the 'Server' box is '.SQLEXPRESS'.
- 4 Click **Next** and follow the instructions until the connection can be tested.
- 5 Repeat the same procedure for HO_LANG and HO_META_DATA.
- 6 In order to use a language other than English, change the language in the Head Office Setup screen. If the change has been made but the correct fonts are not listed, open SQL Studio and run the following scripts in 'C:\Orpak\HeadOffice\DB\mssql': 'LANG_drop.sql' followed by 'LANG.sql' then 'META_DATA_drop.sql' followed by 'META_DATA.sql'.

Database collation needs to be set to **SQL_Latin1_General_CP1_CI_AS**.

Only Username and Password are case sensitive.

4 – Common Functional Principles

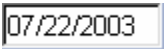
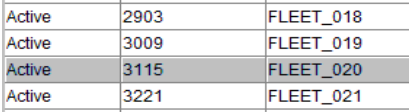
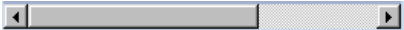
4.1 General

This section explains generic principles, which the user should be familiar with, for proper operation of the Administration, FMS and FHO applications and which will not be detailed in each occurrence.

4.2 Terminology

The FHO and FMS applications are user-friendly, window-based applications with a graphical interface similar to other Windows applications. Common terms are used in this manual assuming that their meaning is obvious, as depicted in [Table 5](#).

Table 5: Common Terms (Examples from SiteOmat Application)

No.	Name	Appearance (Typical)	Description
1.	Cursor		An indicator pointing where text is to be inserted.
2.	Pointer		Points where the mouse is located on the screen.
3.	Text Box		An element allowing the user to input text information.
4.	Check box		An element permitting the user to enable/disable a specific option.
5.	Combo Box		An element allowing the user to choose one value from a list. Clicking on the arrow-shaped button in the combo box opens the list of values.
6.	Radio Buttons		An element allowing the user to choose only one of a predefined set of options.
7.	Grid		A database consisting of columns (fields) and rows (records). Grids are a common way of displaying and handling data in the SiteOmat application.
8.	Scroll Bar		A bar allowing continuous text to be viewed even if it does not fit into the space in the window. Clicking the arrow-shaped buttons in the ends allows moving the body of the document. Scroll bars may be either horizontal or vertical.
9.	Tab		An element, usually located on the top of a window, allowing the user to switch from multiple documents located in a single window.

4.3 Common Actions In Grid

4.3.1 General

The user-interface of the applications is intuitive and requires little experience for using it. The operative actions are common and generic across the various windows.

The Grids are displayed on most screens. All grids have paging options, enabling the user to go forward and backward through the lists pages. A page contains up to 50 lines.

The common actions in a grid are as follows:

- a Navigating a grid
- b Selecting a row in a grid
- c Marking row(s) in a grid
- d Sorting a grid

4.3.2 Navigating a Grid

To navigate between pages in a grid, use the navigation bar at the left of the grid ([Figure 44](#)). The user may move one page forward or backwards, or go to the first and last page (buttons that are not applicable are grayed). The number in brackets displays current lines shown, out of total lines.

Figure 44: Grid Pages Selection Buttons

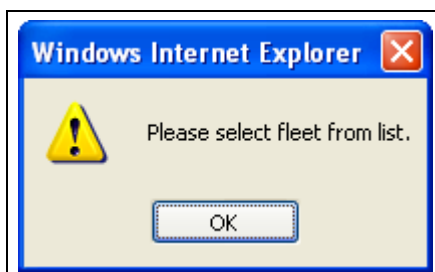


When in a page with a grid, you may perform the following:

- Click a grid column header to sort this page by this column.
- Hold and drag the line separator between columns to change column width.
- Use the scroll bar to scroll lines and horizontal scroll bar to show more columns.

Many buttons require selection of a grid row for operation. If not selected, an error message is displayed (such as in the fleet grid); see below.

Figure 45: Grid Row Selection Message



4.3.3 Selecting a Row in a Grid

Selection of a row in a grid serves several purposes, such as for displaying the data associated with grid. To select a row, click the applicable row. Consequently, the row is highlighted in a blue color (as seen in [Figure 46](#)), indicating that the row is currently selected.

Figure 46: Selecting a Row in a Grid

Active	2903	FLEET_018	No Restriction
Active	3009	FLEET_019	No Restriction
Active	3115	FLEET_020	No Restriction
Active	3221	FLEET_021	No Restriction
Active	3327	FLEET_022	No Restriction

1 - 30 [30]

4.3.4 Marking Row(s) in a Grid

Marking a row, or multiple rows, in a grid is done prior to performing an action (for example, selecting stations to a cluster), which affects the marked row(s). To mark a row, check the check box in the left-hand side of the relevant row (see [Figure 47](#)).

Figure 47: Marking Grid Row(s)

	Name	Station id	Host/IP	Address	Contact name
☒	Chicago Airport	4141	172.16.6.41		
☒	Chicago police	2222	172.16.6.22		
☐	Chicago University	4343	172.16.6.43		

4.3.5 Sorting a Grid

Sorting a grid is done simply by clicking on a column header (see [Figure 48](#)). The records are consequently sorted by the selected column in an ascending order. Second click arranges the records by descending order. The small triangle in the right side of the selected header indicates the current sorting order.

Figure 48: Sorting Grid Rows

Fleet	No.Trans. 	Amount (EURO)	Volume (lit)	Credit Left (EURO)
FLEET_001	75	3180.71	2133.770	7237.42
FLEET_011	77	3246.30	2211.140	0.000
FLEET_030	85	3615.69	2487.860	0.000
FLEET_021	86	3656.84	2460.460	0.000
FLEET_024	87	3672.60	2482.090	0.000
FLEET_005	90	4004.40	2622.550	0.000
FLEET_027	90	3876.75	2623.070	0.000
FLEET_012	93	4003.78	2679.960	0.000
FLEET_004	94	4003.16	2701.500	0.000
FLEET_019	95	3993.91	2707.720	0.000

1 - 30 [30]

Note: Sorting a grid unmarks all rows in grid.

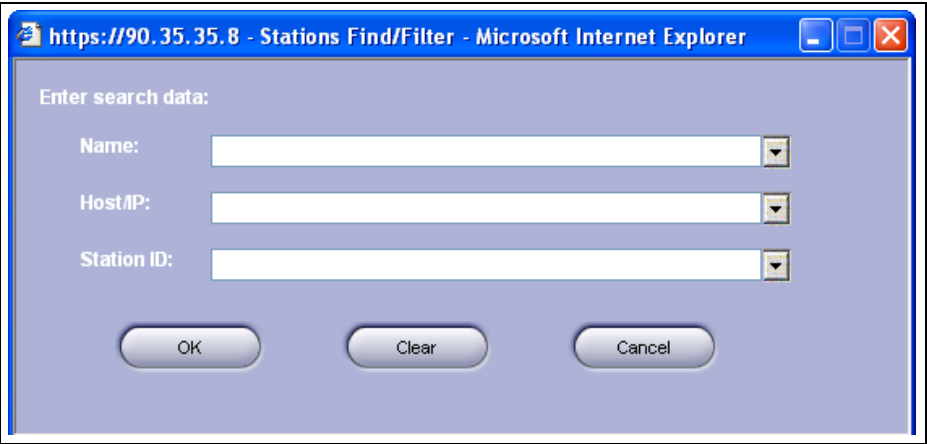
4.3.6 Filtering a Grid

Many windows containing data grids provide an option to filter the grid according to search criteria, thus showing only the entries that comply with the specified criteria. This option is especially useful in cases where there are a large number of records.

There are two filtering options throughout the application:

- 1 Click the **Find/Filter** button. The Stations Find/Filter window opens. Enter the search criteria in the applicable text boxes (see [Figure 49](#)).

Figure 49: Stations Find/Filter Dialog Box



- 2 Select the search criteria from the drop-down lists or the editable boxes in the headers, multiple criteria may be selected (see [Figure 50](#)).

Figure 50: Filter Options in Grid Headers

Station	Date	Device Name
Chicago Airport (4141) ▾	From:	
	To:	
Chicago Airport	2010/01/06 09:48:32	G01225
Chicago Airport	2010/01/06 09:03:19	G15078
Chicago Airport	2010/01/06 07:06:42	FGM506
Chicago Airport	2010/01/06 06:20:51	G20138
Chicago Airport	2010/01/05 23:55:08	FGM153
Chicago Airport	2010/01/05 23:23:43	G18533

4.4 Navigation Notes

4.4.1 General

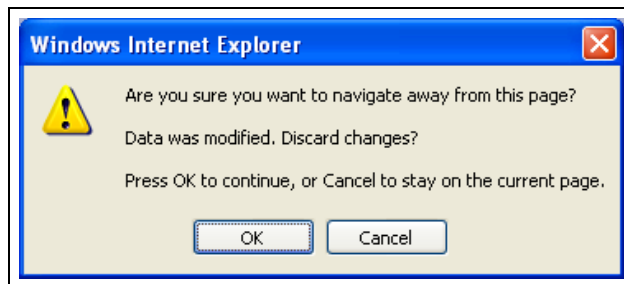
The user-interface of the Administration, FMS and FHO applications may display common messages during operation. These messages are common to several situations, and they are provided below for general information.

Note: Do not use special characters (such as @#\$\$%) in all text fields throughout the applications, except _ (underscore) and a single space bar.

4.4.2 Not Saving Change

If data has been changed in a dialog box or a screen and the user tries to navigate away from it without saving the changes, the following message is displayed (see [Figure 51](#)).

Figure 51: Saving Changes Dialog Box



Click **OK** for approval, or Cancel to continue working in the same screen.

4.4.3 Filling All Fields

In many dialogue boxes, fields are mandatory and their captions are usually shown bold. If the user tries to save data without filling these fields, the following message is displayed (see [Figure 52](#))

Figure 52: Mandatory Fields Fill Requirement Dialog Box

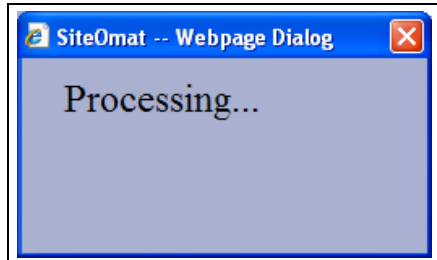


Click **OK** for approval. The empty field is selected and in focus. Proceed to complete the data.

4.4.4 Saving Data

When saving data or performing an operation, the following message is displayed (see [Figure 53](#)).

Figure 53: Processing Data Message



The dialog box closes automatically when operation is performed (sometimes an additional message Operation successful is displayed). If the operation seems to take too long (stuck), close the dialog box by clicking on the X button.

4.5 Log Files

4.5.1 General

The Administration, FMS and FHO applications include different Log files for debugging. These can be enabled or disabled upon request.

4.5.2 Enabling Log File

Users may enable log files. Proceed as follows:

- a** Click **Admin** in the menu bar.
- b** Click **System Command** menu.
- c** Click **Enable logs** button. Once this feature has been enabled, the **Enable** button changes to **Disable logs**. The Debug.log function is always enabled.

Each log line starts with date and time format:

[2008-06-30 15:08:09.053 00011204]

The last number is the internal thread ID and may be used to track the flow of messages.

4.5.3 Logs Location

Logs are located in the following directory:

xx:\Orpak\HeadOffice\bin\log

4.5.4 Types of Log Files

There are several log files, differentiated by user access level (that is, `administration_xxx.log`, `fleetmanagment_xxx.log`, etc.) and by the type of information they contain:

debug.log

This is the main application log. It shows the communication status with stations and errors due to a failure to connect to a station.

Each time a station needs to be updated, it displays a message similar to:

```
Station updater: Time to update: {station name}
```

If an error occurs, the message displays:

```
Station updater: Could not login into {station name} 192.168.1.5)
```

If the station is connected but data cannot be pushed or entered (similar to polling action), it displays an error message:

```
Station updater: Failed push to station {station name}  
(192.168.1.5)
```

During normal process of receiving data from stations, the following message shows how much data was received and calculated:

```
Calculation process: Found 76 transactions
```

DATA.log

Logs all SQL queries from the main database. It contains the user and stations data.

LANG.log

Logs access to the LANG database. This log file gets language-dependent strings for display.

META_DATA.log

Logs access to the META_DATA database. It provides fixed data as currency and other measurements tables.

WebAccess443.log

Logs all access to the web server (port 443). It includes error messages and status of connections.

WebComm443.log

Logs all web server traffic. It includes all HTML, scripts and XML files sent and received from the browser. This Log file includes Web services requests.

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5 – Getting Started

5.1 General

This section provides initial instructions needed for the user to start using the FMS and FHO Applications, namely launching the applications, login and familiarizing with the general orientation of the application. This section provides references to the subsequent sections, which discusses the different operative parts of the System.

Note: The FHO and FMS applications have been designed and tested to run properly on Microsoft Internet Explorer 7 and up. On any other browser (or version), the application may not function properly.

5.2 FHO/FMS Application Startup

FHO and FMS Applications can be logged into using a standard browser from any PC. The application is launched from the FHO computer and may be accessed from any networked computer (directly connected to the FHO/FMS via the LAN) or from a remote computer with an Internet browser over the Internet.

Note: In cases where the FHO server was upgraded and after the procedure is completed, it may be necessary to delete the cookies from each client IE, in order for the browser to reflect the changes.

To access the application, launch the Internet browser and enter the address (IP address or domain name) as follows:

<https://localhost> or <https://FHOserverIPAddress>

(Each customer's IP address may differ based on their network.).

IMPORTANT
Before proceeding, go to “ Appendix A: General Guide for Web Client User ” on page 309 , and follow the procedure. This enables the connection from a web client to the FHO/FMS and improves browsing capabilities

Once a link is established, the application login window opens.

The system grants access to authenticated users only. It sets its access level in accordance with the organizational level of the user. The information regarding the login level of the user is provided “[5.3 Login](#)” on [page 52](#).

5.3 Login

5.3.1 User and Password Identification

The FHO and FMS Applications incorporate powerful SSL mechanisms to allow only authorized users to view and alter its contents. The application opens with a login dialog box, requesting the username and password. The accessible contents and privileges of the user depend upon its access level, as set in the User Management definitions of the Administration application (refer to “[6.8.1 User Properties Screen](#)” on [page 106](#)). The application is designed to grant each user with suitable privileges and block other capabilities; for example, a station manager cannot view/modify stations other than his or her own.

To access the Administration Application (as an administrator only), or the FMS Application (as station manager for example) or the FHO Application (as fleet manager for example), enter the correct **User** name and **Password** and click the **Login** button as shown in [Figure 54](#). The system checks the entered information against the users listed in the system.

Figure 54: Login Dialog Box for Accessing the Applications



Note: The initial password will be provided by Gasboy Customer Support. After installation, you must change the password. Create a secure password that includes a combination of upper and lowercase alphabetic letters and digits, and to keep your password protected. Please note that we will not be able to recover your password, so it is crucial that you perform database backup on a regular basis (refer to MDE-4817- SiteOmat Setup and Maintenance Manual, Section 6-7).

If the user and the password are authenticated, the user logs into either Administration Application or FHO/FMS Applications with its applicable access level.

Note: Disable any sort of pop-up blockers, because they can interfere with the operation of the application.

Otherwise, the following message is displayed (see [Figure 55](#)).

Figure 55: Bad User or Password Message



You may click the **Login/Pass** button (see [Figure 56](#)), to enter the system and immediately obtain a dialog box to change the password:

Figure 56: Password Change Screen



Enter the selection in the New Password and Confirm Password field boxes

A Password must have at least six characters. Otherwise, the following request message is displayed (see [Figure 57](#)). If the user clicks **Cancel**, the dialog box closes, password change is not made and the user is not logged into the system.

Figure 57: Password Minimum Characters Message



Also, both passwords field boxes must match. Otherwise, the following request message is displayed (see [Figure 58](#)).

Figure 58: Password Do not Match Message



Once the Password and Confirmation have been typed correctly, click **OK** to save the new password

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6 – Operating as Administrator

6.1 General

This section provides instructions for operating at a higher level in the management hierarchy, as defined in the Head Office Administration system: for operating as an administrator only.

Note: The windows and actions described in this section are only accessible to Administrators.

6.2 Administrator Application Start Screen

After successful login, the Administrator Application screen opens (see [Figure 59](#)).

This screen includes two sections:

- a** Navigation Bar for the Administration Application (located on the left side of the screen).
- b** Application Icon per each FHO application that the company has purchased (located on the center of screen). Clicking each icon opens the relevant application.

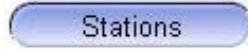
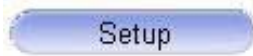
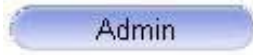
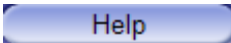
Figure 59: Administration Application - Start Screen



6.3 Navigating Through The Administration Application

Accessing the various capabilities of the Administration Application is done using the Navigation Bar on the left-hand side of the window. The Navigation Bar contains buttons, which lead to the various windows of the application, within the boundaries of the user's access level. Those buttons and screens allow the administrator to define and change parameters relevant to all FHO applications. The objective of each button in the Navigation Bar is described as follows (see [Table 6](#)):

Table 6: Navigation Bar Buttons

Element	Description
	Presents the main screen with all FHO application buttons.
	Connects the SiteOmat Station Controllers situated in each gas station to the HEAD OFFICE System, and bundles the stations into clusters.
	Sets up and customizes the application (interface language, measurements, formats, etc.).
	Enables viewing system warnings and logins.
	Sets the operating mode of the Administrator, defines users' level of authentication, and accordingly the level of access rights to define stations and data displayed.
	Opens a PDF file of Help documentation in a separate window.
	Closes the current window and opens the login dialog box - in order to exit the Administration Application.

6.4 Setup Section

The following paragraphs provide instructions for setting up the Administration Application (for example, setting the interface language, setting the measurement units), describe the user management and group management features, and provide instructions for setting backup parameters.

The setup of the Administration Application is the next stage after the physical installation and power-up of the unit at the installation site. The Setup section in the application, available only to Administrator users, is accessed by clicking the **Setup** navigation button, and consists of the following subsections:

- General – includes general setup parameters.
- Reports – sets report headers and company logo.
- Formats Setup – serves for specifying the measurement units and format of data types presented in the application (for example, in the reports).
- Alarms – serves for displaying alarm summary reports. The user may define alarms priority and audio and perform several actions such as alarm acknowledgements.
- Products – defines the products that the company is providing.
- FMS – defines the setup parameters relevant to FMS screens.
- Card-Format – allows definition of new refueling authorization card formats.

6.4.1 General Tab

To enter the General Setup window (see [Figure 60](#)), click the on the Setup navigation button, or select the General tab if already in the Setup section.

Figure 60: Setup Screen – General Tab

In the General tab, the administrator can define the following settings (see [Table 7](#)):

Table 7: General Tab Fields

Section	Description
Company Data	Enables the administrator to enter the following company information: Name, Address, Phone, Email, Contact Person and Owner Name. The Company name is displayed in report headers
Tag Acquiring Device	Defines the communication channel to the MiFare reader/Fleet Head Office Pod in order to acquire tags
Year first day for limits rule	Sets the day of the year on which the Year Limit begins (default: January 1st)
Language	Enables the administrator to select the language for the interface and reports. To update all screens with the new language, click Save , log out the system and log in again
Fleet Management Import	Enables users to configure the automatic devices and entities import process, refer to “6.4.1.1 Fleet Management Import” on page 58 .
Mail configuration	The Properties button opens a dialog box in which the administrator can view and change mail configurations: Host IP, Port, User, Password, filling the corresponding text boxes
Receipt Generator	Refer to “6.4.1.2 Receipt Generator” on page 59 .
AVL Server	Refer to “6.4.1.3 Defining AVL Server” on page 63 .
Use Company Control	Enables defining multiple companies, refer to “6.4.1.4 Defining Multiple Companies” on page 64 .
Customize OPT Messages	Refer to “6.4.1.5 Customize OPT Messages” on page 68 .

Section	Description
Support OrData Systems	Configures the system to interface with DataPass PLUS devices, which collects On-Board Diagnostics error codes and additional vehicle parameters (Refer to “8.6.2.3 OBD Data Report” on page 221). This feature is available in version 6.3.2 or later
Update stations with not burned devices	Enables the creation of devices without card number field. The card number can be added later manually or automatically by selecting the next check box (Card number automatically generated).
Card number automatically generated	Enables creating devices without needing to fill up the Card number field. The vehicle is identified by its plate, fleet code, and the organization ID and automatically receives its Card number after the first fueling.
Upload Transaction Policy	Defines the transaction upload method, to match the company's billing policies and facilitate reconciliation. • Select the All radio button to upload all transactions, including cash, credit cards, local accounts, attendant or auto authorize transactions (Default) • Select Transactions authorized by HO to upload transactions performed with devices defined in FHO only
Clock synchronization	Enables users to synchronize all station clocks based on FHO server clock. The clock synchronization mechanism supports different time zones as follows: • The HEAD OFFICE sends the time based on GMT time zone • SiteOmat receives the time and modifies it according to the local time zone as previously set in SiteOmat OrCU Administration Screen or Setup Wizard (see SiteOmat Setup and Maintenance Manual P/N 817423756 paragraphs 3-5. and 4-3.2 respectively) Select the time for executing daily synchronization utilizing the drop- down lists.
Credit Info Cleaning Settings	Sets the frequency/time limit for storing online authorization holds. FHO preauthorizes the fleet for a specific amount, holding this balance as unavailable until settlement. Since the preauthorized amount could differ from the transaction amount, or the transaction could be cancelled, the system renders the balance available again in order to keep the fleet credit accurately updated

6.4.1.1 Fleet Management Import

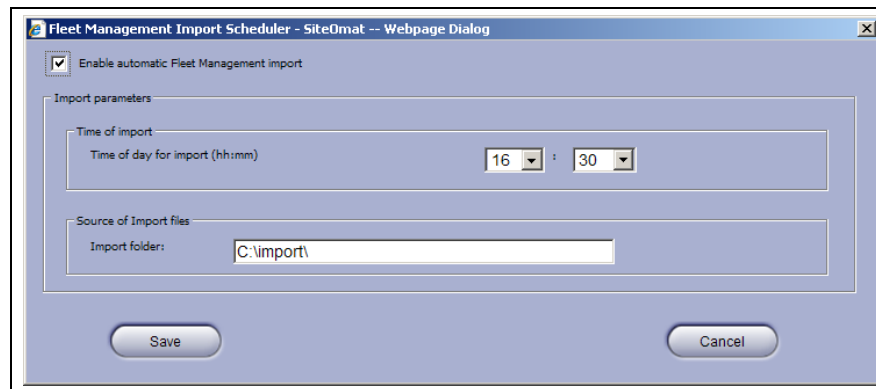
Devices and all related entities (Model, Rule, Group Rule, Fleet and Department) can be imported in one or separate files to the FHO system from the customer ERP. The Fleet Management Import option enables users to schedule an automatic daily import process.

Devices and entities import can be also done manually, by clicking on the **Import** button on the respective Fleet Management screen (Refer to [“Fleet Management”](#) on [page 121](#)).

To set the automatic process, proceed as follows:

- 1 Click **Setup** button in the Fleet Management Import section on the Setup Screen shown above.
- 2 The Fleet Management Import Scheduler dialog box opens (see [Figure 61](#) on [page 59](#)).
- 3 Leave the **Enable automatic Fleet Management import** check box selected.

Figure 61: Fleet Management Import Scheduler Dialog Box



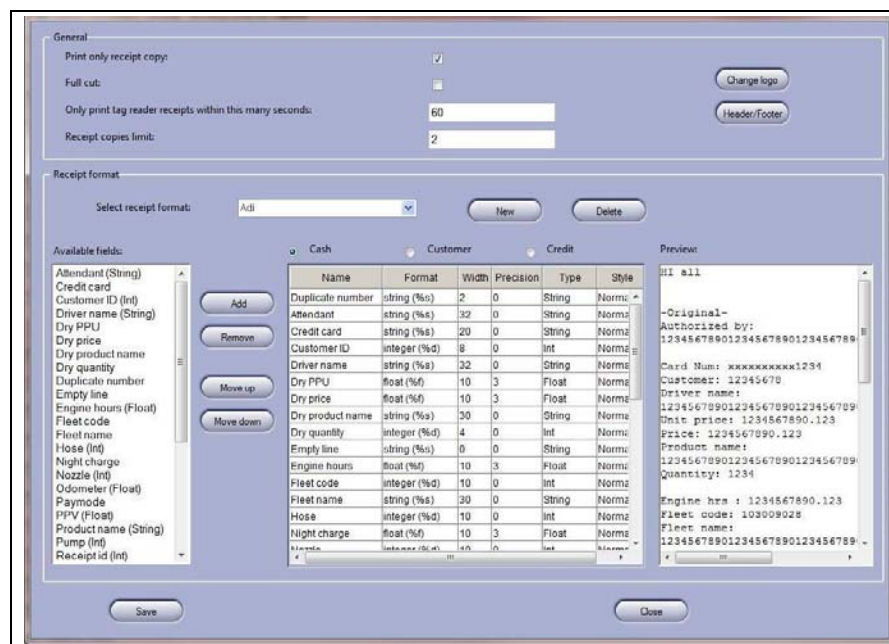
- 4 Select the time of import, utilizing the **Time of day for import (hh:mm)** drop-down lists
- 5 Enter the source folder into the **Import Folder** box.
- 6 Click **Save** to save the changes and close the dialog box, or **Cancel** to close the dialog box without saving the changes

Note: The file format should be Microsoft Office Excel ASCII Comma Separated Values (CSV). For further information on the import file format and fields refer to “[Appendix B: Import Devices File Format](#)” on page 319.

6.4.1.2 Receipt Generator

Click Setup, to select the receipt format. A dialog box opens (see [Figure 62](#)), enabling the users to select a format from a list of fully customizable templates as well as create new receipt formats to better meet their needs.

Figure 62: Receipt Format Selection Dialog Box



6.4.1.2.1 General Settings

The General section includes the following settings (see [Table 8](#))

Table 8: Select Receipt Format – General Section Settings

Element	Description
Change Logo	Enables loading a PCX file for a logo printout at the top of the receipt. The logo should be a monochrome (black and white) PCX file, with a maximum size of 1 KB.
Header/Footer	Click Header/Footer to define up to 10 lines for header and footer. The Format Receipt Header/Footer dialog box opens (see Figure 63). The typed text is added as is to the receipt. Click Save to save the changes and Close to close the dialog box and return to the Select Receipt Format screen.
Print only receipt copy	Select this check box to print only one copy of each receipt.
Full Cut	Select this check box to cut the receipt
Only print tag reader receipts within this many seconds	Enter the time limit for the user/attendant to present the tag and automatically print a receipt. Receipts will not be issued past this limit.
Receipt Copies limit	Enter the maximum number of receipt copies that the costumer or the attendants are allowed to withdraw for each transaction.

Figure 63: Format Receipt Header/Footer Dialog Box



6.4.1.2.2 Defining Receipt Formats

This option enables the user to define the fields to be included in the receipt, their order of appearance and additional customizations. Several templates may be defined.

The following options are available:

- Selecting a previously defined format from the menu.
- Selecting a format from the menu and then modifying its properties.
- Entering a name in the menu and then clicking **New** to create a new format.

To edit the fields to be included in the receipt, proceed as follows:

- 1 Select the required fields (see [Table 9](#)) by clicking on the field row in the **Available Fields** list and then clicking **Add**. The field is added to the grid on the center.
- 2 (Optional) Click a row in the grid and:

a Click **Move up** or **Move down** to change the field's order of appearance in the receipt.

b Double-click **Name** field to rename the field.

Note: The Format, Width, Precision, and Style columns are view-only. refer to [Table 11](#) on [page 69](#) for a description of the different formats.

- 3 (Optional) Select the **Cash/Customer/Credit** radio buttons to specify formats for the different types of transactions and repeat steps 1 and 2.
- 4 Click **Save** to save the settings. A preview of the format is displayed on the right-side pane.

To remove a field from the report, click the row in the right-side grid and then click **Remove**.

To remove a format from the system, select the format from the drop-down and then click **Delete**.

Table 9: Receipt Fields

Field Name	Description
Attendant	Attendant who authorized the transaction
Balance	Customer credit balance
Credit Card	Credit card Primary Account Number protected and masked complying with PCI standards
Customer ID	ID number of the customer
Driver Name	Driver name entered for identification
Dry PPU	Price per unit of dry goods
Dry Price	Total price of dry goods sold
Dry Product Name	Name identifying the item
Dry Quantity	Quantity of dry units sold
Duplicate Number	Number of receipt copy
Empty Line	Empty line to distinguish between the different sections of the receipt
Engine Hours	Current number of engine hours
Fleet Code	Numeric code identifying the fleet
Fleet Name	Name identifying the fleet

Field Name	Description
Hose	Number of the hose used to supply the fuel in the transaction
Night Charge	Night charge added to a transaction performed at night shifts
Nozzle	Number of the nozzle used to supply the fuel in the transaction
Odometer	Odometer reading from the vehicle
Paymode	Means of payment used in the transaction
Personal Message	Free-text message
PPV	Price Per Volume
Product Name	Name identifying the product in the system
Pump	Number of the pump head, from which the transaction was performed
Receipt ID	Ordinal unique number assigned by the system to each receipt as included in each printed receipt
Reference Number	Pre-authorization code sent by payment processor
Sale after Discount	Sum collected in the transaction after discount
Signature	Space provided for customer's signature
Station Name	Gas station name
Terminal	Payment terminal used to perform the transaction
Total pre VAT	Total sum before VAT
Total Price	Total sum collected in the transaction (including taxes)
Totalizer	Pump totalizer
Transaction Date	Date of the transaction
Transaction Driver ID	ID of the driver
Transaction ID	Unique transaction ID
Transaction Time	Time of the transaction
VAT	Value Added Tax percentage
Vehicle No.	License plate number or unique number of the vehicle
Volume/Quantity	Fuel volume supplied in the transaction
Wetsale	Sum of money collected for wet products

Table 10: Receipt Field Formats

Format Name	Description
Empty/Default	Default field format
Float (%f)	Decimal floating point numbers
Float 0-pad (%0*. *f)	Decimal floating point numbers with zero padding to the required width
Integer (%d)	Decimal numbers
Hex (%x)	Hexadecimal numbers
Int/ 0-pad	Decimal numbers with zero padding out to the required width
Hex/ 0-pad	Hexadecimal numbers with zero padding out to the required width
Int/exact/0-pad	Decimal numbers with zero padding out to the required width
Hex/exact/0-pad	Hexadecimal numbers with zero padding out to the required width
Int/ 0-pad/LJ	Decimal numbers with zero padding out to the required width, left justified
Hex/ 0-pad/LJ	Hexadecimal numbers with zero padding out to the required width, left justified
String (%s)	Alphanumeric characters
Right Part of String	Right characters in the string, according out to the required width

Format Name	Description
Date Formats	Available formats: YYYY-MM-DD YYYYMMDD DD-MM-YYYY MM-DD-YYYY DD/MM/YYYY MM/DD/YYYY DD/MM/YY MM/DD/YY DDMMYYYY MMDDYYYY
Time Formats	Available formats: hh:mm:ss hhmmss hh:mm hhmm

Click **Save** to save the settings and Close to exit the dialog box and return to the Global tab; or click **Close** to exit the dialog box without saving the changes.

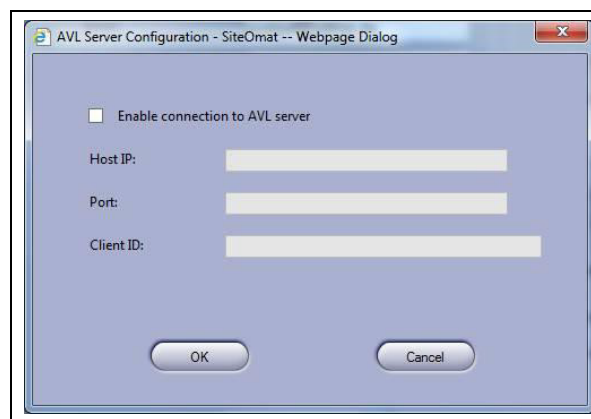
6.4.1.3 Defining AVL Server

This feature allows data to be automatically retrieved from the AVL server. For example, if a transaction does not have an odometer or engine hour reading, FHO will retrieve this information and add it to the transaction.

To set up the AVL Server, proceed as follows:

- 1 Click **Setup** button, next to AVL Server. The following screen opens (see [Figure 64](#)).

Figure 64: AVL Server Configuration Dialog Box



- 2 Select the **Enable connection to AVL server** check box to enable the feature.
- 3 In the **Host IP** field, enter the AVL Server's IP address.
- 4 In the **Port** field, enter the IP's port.
- 5 In the **Client ID** field, enter the AVL Server's unique ID number (displayed on the AVL Server).
- 6 Click **OK**.

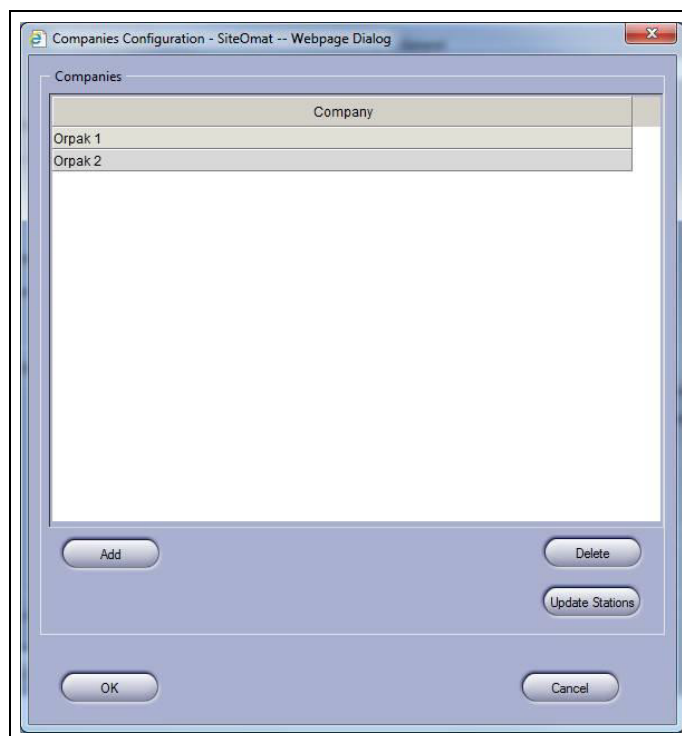
6.4.1.4 Defining Multiple Companies

This feature enables defining and managing multiple companies from the Head Office. This allows linking stations and fleets to different companies, as well as sending fleet data to stations that are both linked to the same company.

To define a company, proceed as follows:

- 1 Select the **Use company control** check box to enable the feature.
- 2 Click **Save** on the bottom right to save configuration.
- 3 Click **Companies** button, next to the **Use company control** check box. The following message is displayed (see [Figure 65](#)).

Figure 65: Companies Configuration Dialog Box

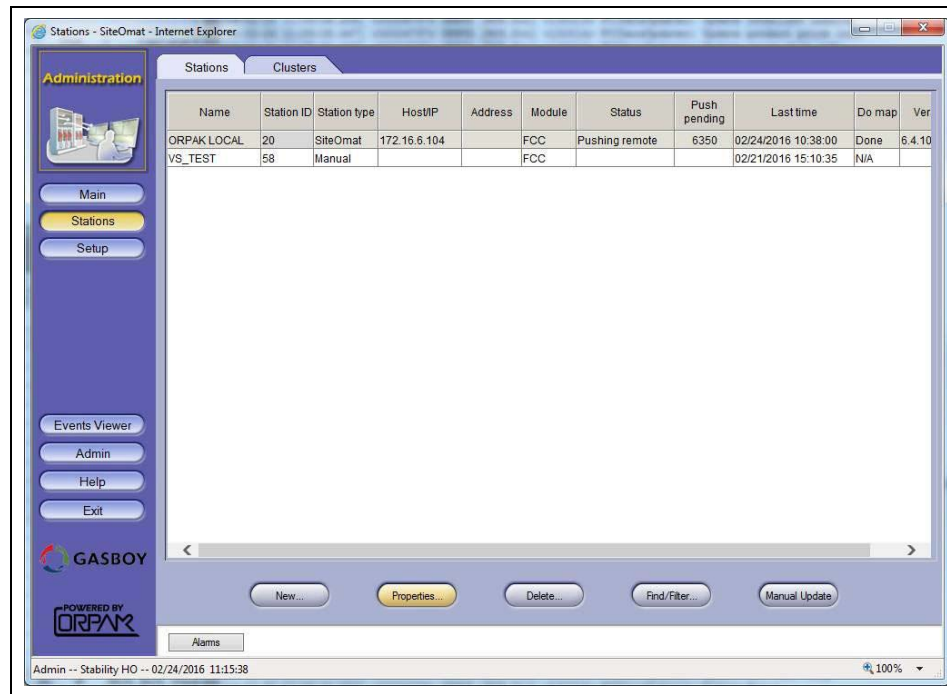


- 4 Click **Add**. A new row will appear in the dialog box.
- 5 Enter a descriptive and unique name (up to 64 alphanumeric characters) for the company.
- 6 You may do one of the following:
 - Click **Add** to save the company and add another one.
 - Select a company's row and click **Delete** to delete that company.
 - Select a company's row and click **Update Stations** to fully update fleet data in the company's stations.
 - Click **OK** to save the company and return to setup.

To link a station to a newly defined company, proceed as follows:

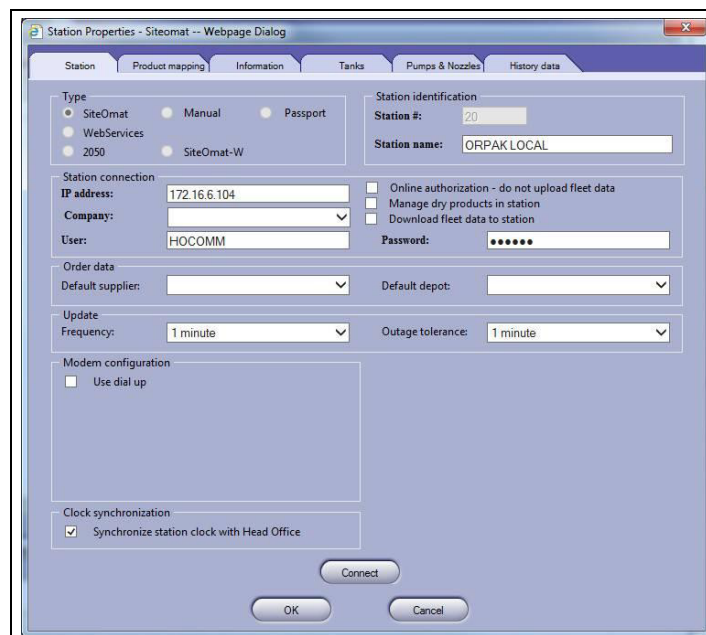
- 1 Click **Stations** navigation button (see [Figure 66](#)).

Figure 66: Stations Screen and Tab



- 2 Select the station's row in the upper grid that you'd like to link to a company.
- 3 Click **Properties**. The following dialog box opens (see [Figure 67](#)).

Figure 67: Stations Properties Dialog Box

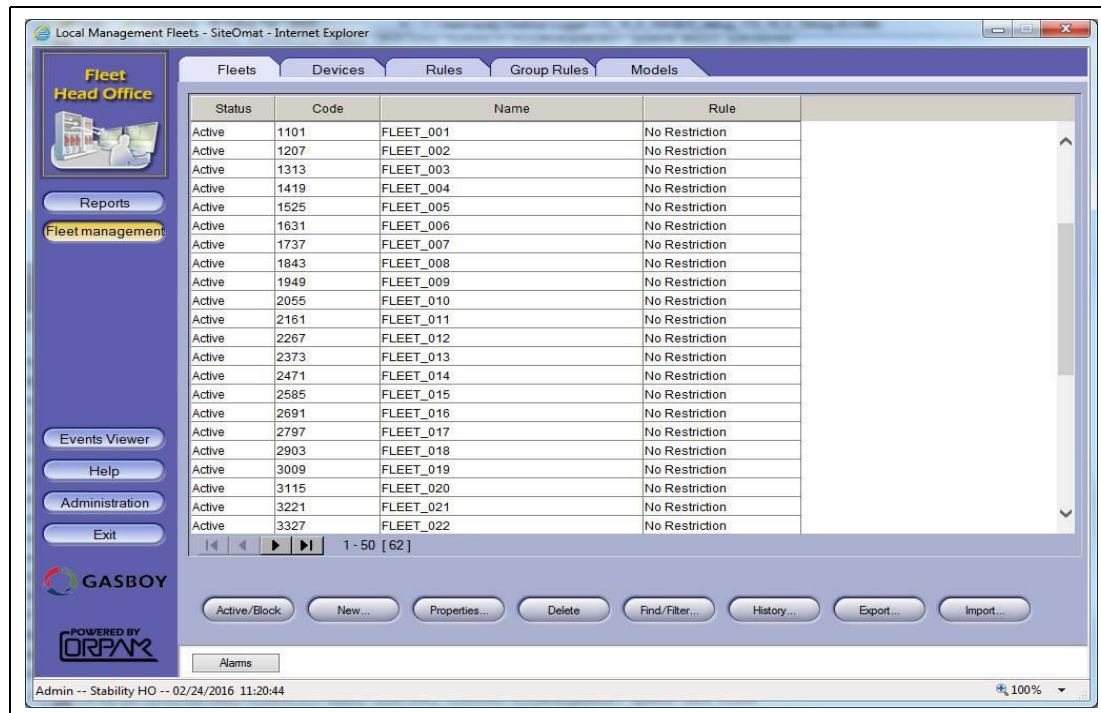


- 4 In the **Company** drop-down, select the company you'd like to link to the station.
- 5 Click **OK**.

To link a fleet to a newly defined company, proceed as follows:

- 1 Click **Fleet Management** navigation button on the FHO start screen (see [Figure 68](#)).

Figure 68: Local Fleet Management Screen – Fleets Tab



- 2 Select the fleet's row in the upper grid that you'd like to link to a company.

- 3 Click **Properties**. The following dialog box opens (see [Figure 69](#)).

Figure 69: Fleet Properties Dialog Box

Fleet Properties - Siteomat -- Webpage Dialog

General Information Account Validation

Fleet name: FLEET_001

Fleet code: 1101

Company: [dropdown]

Rule to use when creating new Departments in this Fleet:

No Restriction [dropdown]

A default Positive-list department will automatically be created for a fleet. Please use the Departments button to modify their Negative/Positive setting.

Departments...

OK & New OK Cancel

- 4 In the **Company** drop-down, select the company you'd like to link to the fleet
- 5 You may do one of the following:
 - Click **OK & New** to save the information on the fleet and open a dialog box to create a new fleet.
 - Click **OK** to save the information and return to the Local Fleet Management screen.
 - Click **Cancel** to return to exit the dialog box without saving any changes.

6.4.1.5 Customize OPT Messages

This feature allows the user to customize the messages displayed on payment terminals.

Click **Setup** button, next to Customize OPT messages. The following screen opens (see [Figure 70](#)).

Figure 70: OPT – Screens and Prompts Customization

The screen includes three tabs:

- **4x20**: for OPT, CRIND and CAT displays
- **2x16**: for OrTR displays
- **PAIS** (see 6.4.1.5.1)

OPT messages tabs includes two panes:

- **Factory Settings**: Shows factory settings for the selected message
- **Customization**: Enables editing messages

Proceed as follows:

- 1 Select the display resolution tab, according to the OPT you'd like to modify.
- 2 In the **Screen State** list, select a message (see for a list of messages and prompts). A short description of the message is displayed next to the drop-down for most messages.
- 3 In the **Customization** pane, double click a cell to start editing the message
(Optional) Click **Clear** to delete all the text.
(Optional) Click **Factory Settings** to return to the factory settings of the message

- 4 If the message includes a prompt for user input, you may use the **Prompt Settings** radio buttons to select the required format:

a Barcode Reader

b Numeric

c Alphanumeric

Note that not all prompts are configurable (i.e. PIN Code). In this case the Prompt Settings buttons will be disabled.

- 5 Click **Save** to close the dialog and save the changes, or click **Cancel** to exit it without saving.

Note: You cannot change the location and length of prompts (for user input). Prompt cells are read-only and grayed. You may modify OPT messages at the network level via FHO or at the station level (SiteOmat). To overwrite local changes with FHO messages, proceed as follows:

1. Select a message
2. Click **Factory Settings**
3. Click **Save**
4. Edit the message
5. Click **Save**.

Not all messages are available in 2x16 resolution. Special characters are not supported.

Table 11: OPT Messages

Message	Description
Blocked Pump	Selected pump is blocked
Card/Tag not authorized	Device is not authorized
Checking Card	Card is being checked
Device not found	Device is not found in database
Enter device ID	Swipe card/tag, enter device ID using OPT keypad
Enter driver (2-stage)	Enter driver ID at second stage of 2-stage authorization
Enter Driver ID	Swipe card/tag, enter driver ID using OPT keypad
Enter Engine Hours	Enter Engine Hours
Enter Odometer	Enter Odometer reading
Enter PIN	Enter PIN code
Enter Plate	Enter license plate number
Enter Plate (receipt)	Enter license plate number to be added to receipt
Enter Receipt Number	Enter/select receipt number
Enter Reference Number	Enter reference number of a receipt to be printed
Enter vehicle (2-stage)	Enter vehicle ID at second stage of 2-stage authorization
Enter vehicle ID	Swipe card/tag, enter vehicle ID using OPT keypad
Entry too short	User input is below the minimum length defined for the prompt
Fueling Suspended	Fueling is suspended after the nozzle was removed from fuel filler
Idle messages	Idle messages displayed between transactions according to OPT keypad configuration as set in SiteOmat (refer to Section 6-3 of SiteOmat Installation and Maintenance Manual)

Message	Description
Invalid number	Invalid E.H./Odometer reading entered (as a result of reasonability check)
Invalid PIN Code	Invalid PIN code
Invalid Vehicle	Invalid Vehicle ID
No pump allowed	Selected pump is not connected to OPT
Not authorized	Device is not authorized
Nozzle out of service	Nozzle is unserviceable
Ongoing fueling	Message displayed during transaction
Present Credit Card	Swipe credit card
Present driver (2-stage)	Present driver ID at second stage of 2-stage authorization
Present vehicle (2-stage)	Present vehicle ID at second stage of 2-stage authorization
Printing receipt	Message displayed during printing
Pump did not refuel recently	No recent receipts for the selected pump
Pump is busy	Selected pump is busy
Pump not found	Pump number is invalid
Receipt not found	No receipts for the selected pump
Set nozzle back	Return nozzle to holster
Start Refuel	Start refueling
Swipe Card	Swipe card
Tag is blocked	Presented tag is blocked
Wrong Fuel Type	Selected fuel type is not authorized

6.4.1.5.1 PAIS

This feature allows setting third party clearing system prompts format (for user input) for cases where these are not defined in the payment processor. Settings defined in the processor will override any changes made in the below screen ([Figure 71](#)).

Figure 71: PAIS Prompts Settings

OPT - Screens and Prompts Customization -- Webpage Dialog

Select the screen state and the layout tab. Customize the screen message on the bottom table. If applicable, set the prompt type. Select the PAIS tab to customize its specific prompts.

4x20 2x16 PAIS

Per prompt, select its type and min/max size

Prompt Name	Type	Min. Length	Max. Length	Masked
Driver Number	Numeric	0	0	☐
User Id	Numeric	0	0	☐
Odometer	Numeric	0	0	☐
Vehicle Number	Numeric	0	0	☐
Control Number	Numeric	0	0	☐
License Number	Numeric	0	0	☐
License State	Numeric	0	0	☐
Driver License	Numeric	0	0	☐
Driver License State	Numeric	0	0	☐
Name	Alphaumeric	5	7	☐
Driver Last Name	Numeric	0	0	☐
Driver 1st. Initial	Numeric	0	0	☐
Birthday	Numeric	0	0	☐
Pin Number	Numeric	0	0	☐
Hubometer Reading	Numeric	0	0	☐
Refer Hour Meter Reading	Numeric	0	0	☐
ICC Number	Numeric	0	0	☐
Purchase Order Number	Numeric	0	0	☐
Social Security Number	Numeric	0	0	☐

Save Cancel

Proceed as follows:

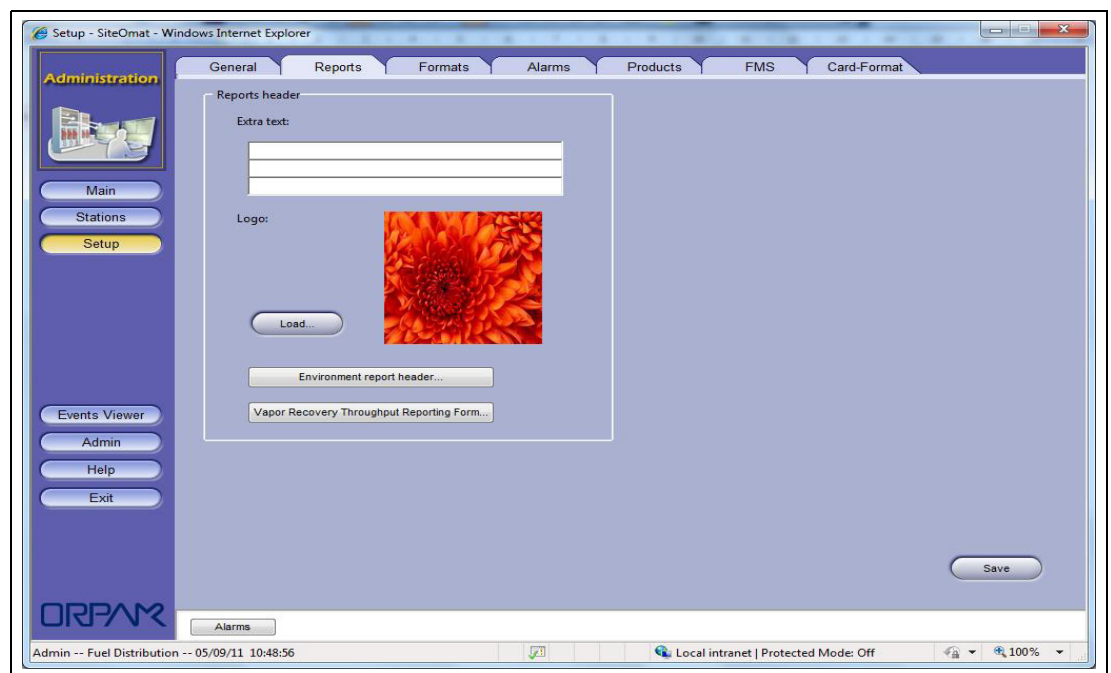
- 1 Double click a cell to edit values. The following parameters can be edited:
 - **Type**: Select Numeric, alphanumeric or Swipe card
 - **Minimum** and **Maximum Length**
 - **Masked**: Select to mask user input. Input will be replaced by asterisks on the OPT's screen.
- 2 Set the prompts in use and then click **Save**.

Note: You may modify PAIS prompts format at the network level through FHO or at the station level (SiteOmat), in either case, settings will be overridden by FHO.

6.4.2 Reports Tab

The Reports screen enables the user to define report headers and company logo. To open this screen (see [Figure 72](#)), click the on the Setup navigation button and select the Reports tab.

Figure 72: Setup Screen – Reports Tab



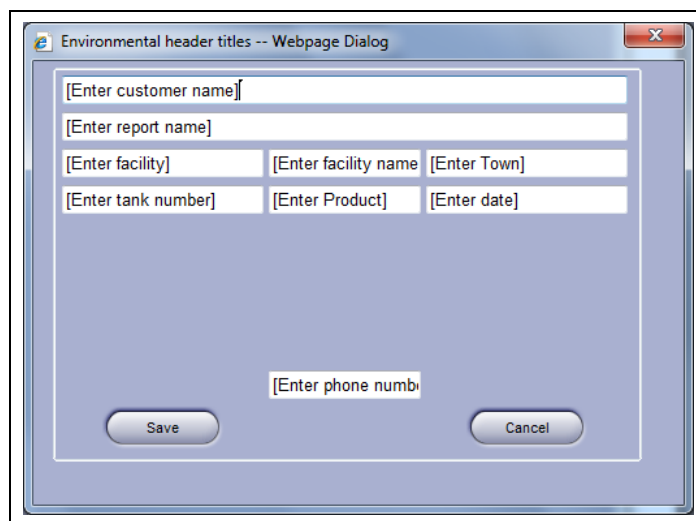
To create a header, proceed as follows:

- 1 Enter text for the report header in the **Extra Text** boxes.
- 2 Click **Load** to select an image file to be used as the company logo.
- 3 Click **Save** to save any changes made to this tab before navigating to another task.

Note: After changing an existing logo in FHO server, it may be necessary to delete the cookies from each client Internet Explorer, in order for the browser to reflect the changes.

Clicking on the **Environment Report Header** button opens the Environmental Header Titles dialog box (see [Figure 73](#)) that contains several text boxes for titles and subtitles edition. The changes are saved by clicking on the **Save** button.

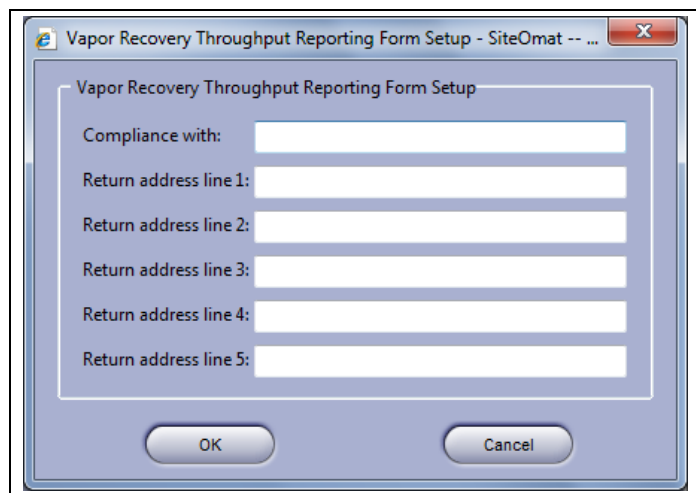
Figure 73: Environment Report Header Dialog Box



The dialog box titled "Environmental header titles -- Webpage Dialog" contains several text input fields for editing header information. The fields are arranged as follows: a single-line field for "[Enter customer name]", a single-line field for "[Enter report name]", a row of three single-line fields for "[Enter facility]", "[Enter facility name]", and "[Enter Town]", and a row of three single-line fields for "[Enter tank number]", "[Enter Product]", and "[Enter date]". Below these fields is a single-line field for "[Enter phone number]". At the bottom of the dialog are two buttons: "Save" on the left and "Cancel" on the right.

Click **Vapor Recovery Throughput Form** opens the dialog box (see [Figure 74](#)) that contains text boxes for editing the details of the local environmental authority to which the form is submitted. The changes are saved by clicking on the OK button.

Figure 74: Vapor Recovery Throughput Form Setup Dialog Box



The dialog box titled "Vapor Recovery Throughput Reporting Form Setup - SiteOmat -- ..." contains a group box labeled "Vapor Recovery Throughput Reporting Form Setup". Inside the group box are six text input fields: "Compliance with:", "Return address line 1:", "Return address line 2:", "Return address line 3:", "Return address line 4:", and "Return address line 5:". At the bottom of the dialog are two buttons: "OK" on the left and "Cancel" on the right.

6.4.3 Formats Tab

Use the Formats tab to define all measurement units used throughout the Head Office screens and reports. Consumption measurement units affect the calculation of consumption.

To open the Formats screen (see [Figure 75](#)), click the **Setup** navigation button and select the **Formats** tab.

Figure 75: Setup Screen – Formats Tab

Click **Save** before navigating away from this tab to save the changes.

The measurements parameters to be used in screens and reports are as follows (see [Table 12](#)):

Table 12: Measurement Parameters

Parameter	Description
Volume	Volume measurement (default: gallons).
Distance	Distance measurement (default: miles).
Currency	Currency in use (default: US dollars).
VAT	Value Added Tax (VAT) percentage (default: 0%).
Odometer Consumption	Distance per fuel consumption measurement (default: miles per gallon).
Density	Fuel density at a certain temperature (Default: lb/ft³).
Height (measurement)	Measurement of tank height level (Default: inches).
Temperature	Temperature Display inside the fuel tank (Default °F).
EH Consumption	Time per fuel consumption measurement (default: hours per gallon).
Flow Rate	Volume of fuel which passes per unit time (default: gallons per hour).
Height (display)	Height of the tank displayed on screens and reports (Default: inches).

The display formats to be used in screens, receipts and reports are as follows (see [Table 13](#)):

Table 13: Display Formats

Display	Description
Date	The date format used in the application (default: DD/MM/YY).
Time	The time format used in the application (default: HH:MM:SS).
Thousand Separator:	The thousand separator used in the application (default: comma).
Decimal Notation	The decimal notation used in the application (default: dot).
Volume display	The volume format used in the application (default: xxxxx.xx).
Currency display	The volume format used in the application (default: xxxxx.xx).
PPV display	The Price Per Volume format used in the application (xxxxx.xxx).

6.4.4 Alarms Tab

To open the Alarms screen, select the Alarm tab (see [Figure 76](#)).

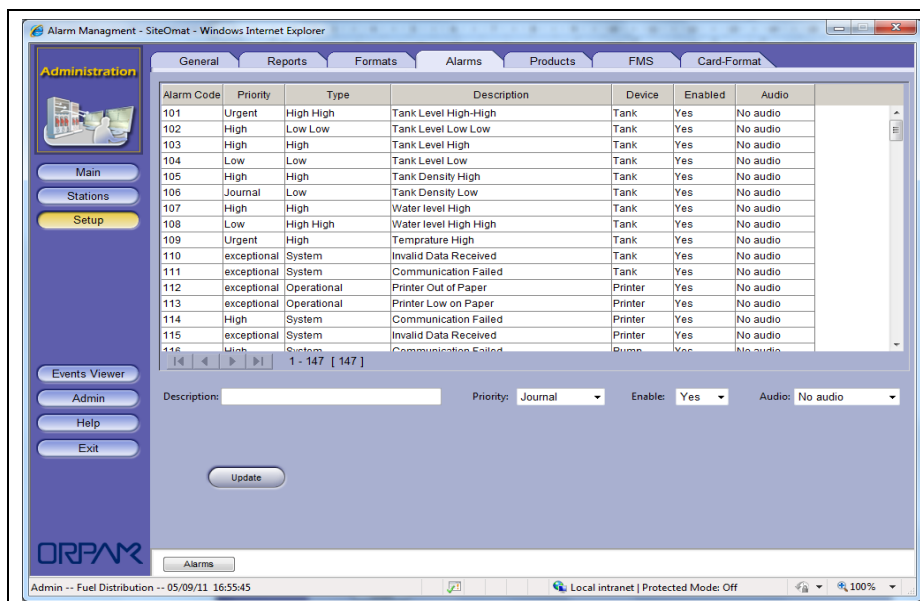
The Alarms Management screen enables users to define the alarm attributes. The types of alarms are predetermined in the system, and they are listed in the Alarm Code column by ascending number. The administrator can only change their attributes.

To change an alarm attributes, first select the alarm by clicking on the corresponding row. The selected alarm attributes are shown in the selection boxes (along with its name in the left box). Set the attributes from the drop-down lists:

- Priority: Select from Journal to Urgent (5 selections)
- Enable: Yes or No (to Disable an alarm)
- Audio: Select from No Audio to Attention (6 selections)

Click **Update** to apply the selections. Verify that the new attributes are displayed on the alarm's corresponding row.

Figure 76: Setup Screen – Alarms Tab

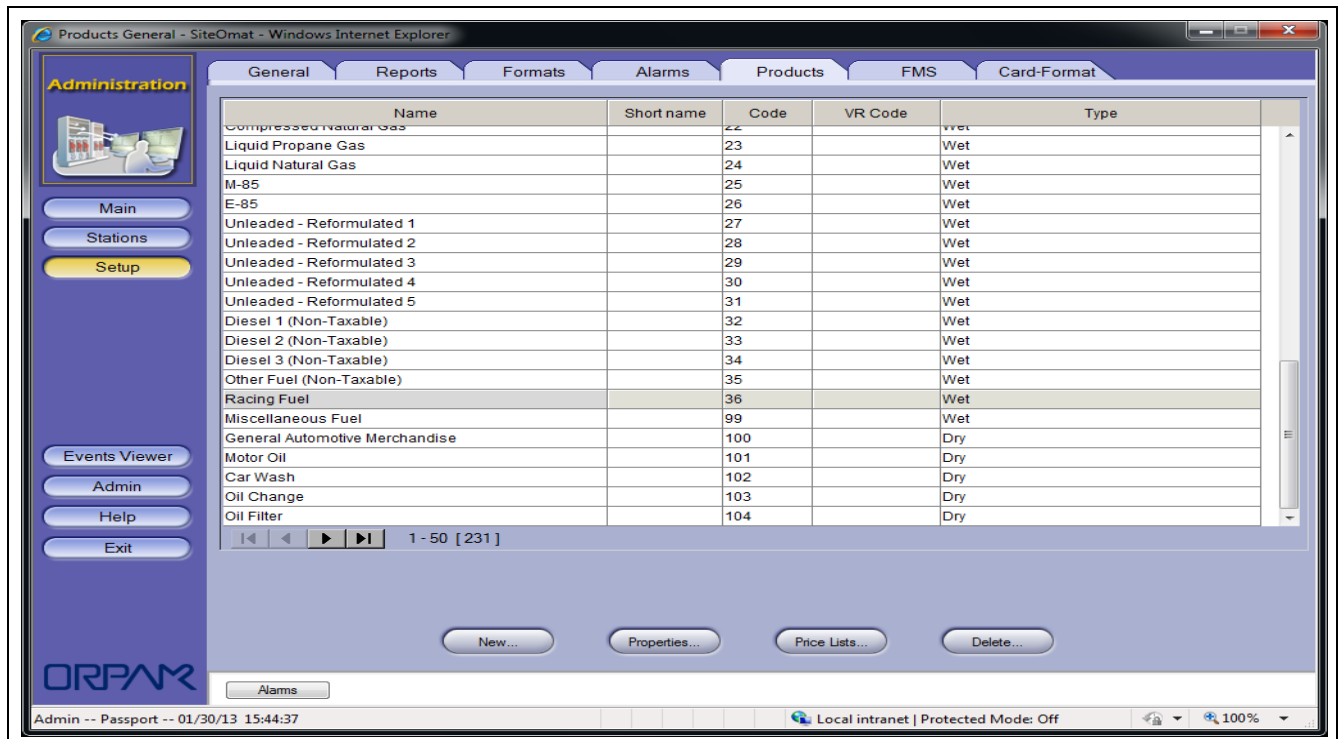


6.4.5 Products Tab

This paragraph provides instructions for defining the various products (may be petrol products or lubricants), which exist in the gas stations connected to the system and consequently may appear in the FHO and FMS reports.

To open the Products main window, select the Products tab (see [Figure 77](#)).

Figure 77: Setup Screen – Products Tab



Note: It is important to define the products, as much as possible, before connecting the gas station to the system. If a new product is added after the stations are connected, map the product in the relevant station (refer to “6.5.2.5 Product Mapping Tab” on page 94). If connected to stations that have blended products (composed of two base products stored in two different tanks), define the mixed product, for FMS will include the blended products in the relevant reports

6.4.5.1 Creating a New Product

To define a new product, proceed as follows:

- 1 Click the **New** button in the Products main window.
- 2 The Products screen opens (see [Figure 78](#)).
- 3 Fill the applicable fields (see [Table 14](#)).

Figure 78: New Product Dialog Box

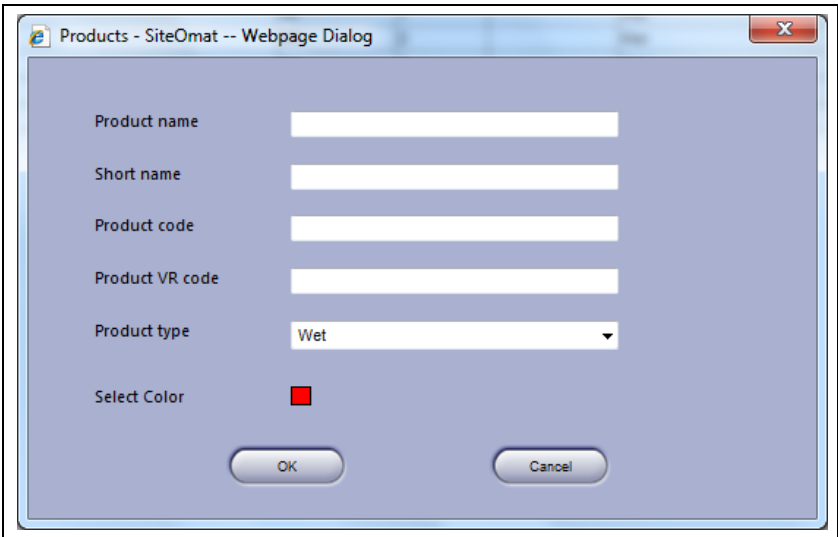


Table 14: Products Dialog Box Fields

Display	Description
Product Name	Name identifying the product in all system screens and reports
Short Name	Abbreviation identifying the product in all system screens and reports
Product Code	Code identifying the product in all system screens and reports
Product VR Code	Product code for the Vapor Recovery Throughput Reporting Form, refer to "12.2.3.6 Vapor Recovery Throughput Reporting Form" on page 275 .
Product Type	Product type: Wet, Dry, Lubricants, Services, Fees . Selected using the drop-down list
Color	Color representing the product in graphic reports. To select the color, click the color square to open a pop up color palette

- 4 Click **OK** to save changes and close the window.

6.4.5.2 Product Properties

To modify products properties, proceed as follows:

- 1 Select a product by clicking on the corresponding row.
- 2 Click **Properties**.
- 3 The Product screen opens.
- 4 Enter the changes in the respective text boxes.
- 5 Click **OK**.

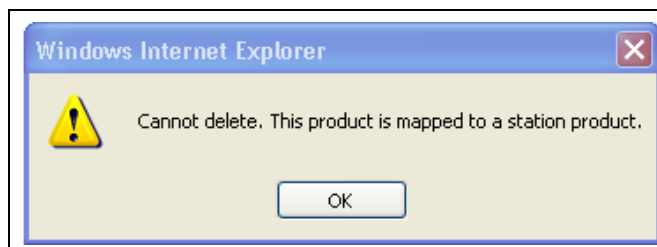
6.4.5.3 Deleting a Product

To delete an existing product from the FHO/FMS database, proceed as follows:

- 1 Double-click a row for selecting the product to be deleted.
- 2 Click **Delete** button.
- 3 A confirmation message is displayed to prevent accidental deletion.
- 4 Click **OK**.

Note: A Product may not be deleted if a product in a station is mapped to it (refer to “6.5.2.5 Product Mapping Tab” on page 94, see Figure 93 on page 94).

Figure 79: Cannot Delete Product Message



6.4.6 Price Lists

6.4.6.1 General

Fleets, departments and devices can be associated to a particular price list. Price lists are derived from the base price defined for each product.

While refueling and after identification, the driver sees the specific price linked to the device on the dispenser (on dispensers supporting price display). The price changes back to base price right after the transaction is completed and the nozzle is placed back on the dispenser.

Note: Price lists can only be associated to handheld vehicle devices. If a driver lifts the nozzle first and then presents the card/tag/key, the driver notified and the process is stopped.

The transaction is not authorized in the following cases:

- a A device linked to a price list is recognized, but the pump price update has failed.
- b A driver using a device linked to a price doesn't return the nozzle back to dispenser, and consequently the system doesn't update the pump back to the base price.

6.4.6.2 Setup

Departments and devices automatically inherit the fleet's price list; the association may still be overridden by assigning departments or devices different price lists or none.

Note: Price lists will ONLY be inherited for newly created entities. For example, if a fleet is created and associated with a price list – all departments and devices created under this fleet will inherit that price list. Otherwise, if an existing fleet with departments and devices will be associated with a new price list, ALL departments and devices that are associated with that fleet will NOT inherit the new price list. Only departments and devices that were added after the price list was associated to that fleet, will inherit the price list.

To define special discount lists, click the **Price Lists** button. The Wet Price Lists dialog box opens (see [Figure 80](#)).

Figure 80: Wet Price Lists Dialog Box

Wet Price Lists - SiteOmat -- Webpage Dialog

Price lists:

Name	Used	Send price to pump
Price_list1	No	Yes

1 - 1 [1]

Price list name: Price_list1

Send price to pump: ☒

New Update Delete

Product list for price list: Select an entry in the price list above

Name	Code	Discount Type	Discount Price
Diesel	1	None	0.00
Regular	3	None	0.00

1 - 2 [2]

Product: Discount type: None Discount:

Update

Close

The dialog box contains two grids:

- a The upper grid contains all price list defined.
- b The lower grid displays all products previously set in the system.

To create a new price list, proceed as follows:

- 1 Enter a name in the **Price list name** text box.
- 2 Select the **Send price to pump** check box in cases where the special price is sent to the pump. Otherwise, the base price remains in the transaction, and the controller calculates the price after discount.
- 3 Click **New** button. The new list is displayed in the Price lists grid.
- 4 Select a product from the grid by clicking on a row
- 5 Select the **Discount type** to be applied, utilizing the drop-down list:
 - **Fixed**: to set a fixed price
 - **Absolute** to reduce a specific amount,
 - **Percentage** to reduce a percentage of the base price,
 - or **None** to leave the price as is
- 6 Enter the amount or percentage in the **Discount** text box.
- 7 Click **Update** button to apply the changes.

To update an existing price list, select the required list from the **Price list** grid by clicking on it and proceed as described from step 3 onwards.

To delete a price list, select the required list from the **Price list** grid by clicking on it and click **Delete**.

Click **Close** to close the dialog box and return to the Products screen.

After a price list is defined, devices can be associated to it from the Information tab on the Fleet/Department/Device Properties dialog boxes (refer to “[7.8.4 New Fleet – Information Tab](#)” on [page 146](#), “[7.9.4 New Department – Information Tab](#)” on [page 155](#), and “[7.10.1.2 New Device – Information Tab](#)” on [page 160](#) respectively).

6.4.7 FMS Screen

The FMS screen enables users to define parameters relevant to the different FMS screens (Order form, status screen, etc.)

To open the FMS screen (see [Figure 81](#)), select the FMS tab.

Figure 81: FMS Screen

Level status
Please select warning levels (days left) and colors for expected tank level forecasts. These will be used on Fuel Management Status screen. For Alarms, select only color.

Level 1: 1 (Red)
Level 2: 4 (Orange)
Level 3: 8 (Yellow)
Alarms: (Red)

Fuel order & delivery
Order form text line 1:
Order form text line 2:
Order form text line 3:
Invoice diff percentage: 0
Report diff percentage: 0
☐ Manual delivery input fields (check - start & end, uncheck - end)

Depot setup
Name: Roman Riquelme

Flow rate interval
15 minutes

Deliveries Screen Selection
☐ checked - Deliveries
☐ unchecked - Orders & Deliveries

Supplier setup

Name	Contact Person	Plate Number	E-Mail	Fax	Ad
Denis Lux	Joseph Ellington	440280	joseph@lux.com	45826883	

6.4.7.1 Level Status

This section enables users to define tank-status warning levels depending on days left to sell, and select colors associated with the defined fuel level warnings and alarms.

Set up the warning levels as follows:

- 1 For 1-2 days left to sell: select '1' in Level 1 box. Assign a red color for this indication (or a different color) by clicking the rectangular box associated with Level 1. Select a color from the popup color selection table.
- 2 For 3-5 days left to sell: select '4' in Level 2 combo box and assign an orange color (or a different color) for level 2 indication as described above.
- 3 For 6-9 days left to sell: select '9' in Level 3 combo box and assign a yellow color (or a different color) for level 3 indication as described above.

In addition, assign a color for alarms in the system as described above. Click **Save** to save the changes.

6.4.7.2 Flow Rate Interval

Flow Rate checks the average flow from each tank. This feature helps the administrator to avoid the possibility of fraud.

Select the time interval values for flow rate checks, utilizing the drop-down list (1 up to 60 minutes) and click Save to apply the changes.

6.4.7.3 Historical Volume Averages for Tanks Calculation

Clicking on the Calculate button calculates volume averages for all tanks, essential for the expected days forecast included in the Daily Inventory by Fuel Type FMS report (refer to “[12.2.2.4 Daily Inventory by Fuel Type Report](#)” on [page 270](#)). This feature enables users to generate the report based on existing database.

The data is processed by the system and at completion, a successful operation message is displayed. Click **OK** to close the message.

6.4.7.4 Fuel Order and Delivery

This section enables to delineate fuel orders and set warning parameters for differences found on fuel deliveries or reports (see [Table 15](#)).

Table 15: Fuel Order & Delivery Elements

Element	Description
Order form text lines 1, 2 & 3	Enables users to enter header text lines to accompany the produced orders.
Invoice diff percentage	Enables users to determine the maximum acceptable percentage of deviation of fuel delivered from the invoice data. A higher percentage generates an alarm.
Report diff percentage	Enables users to determine the maximum acceptable percentage of deviation of fuel delivered from the invoice data in Invoice VS. Order report.
Manual delivery input fields check box	Select the check box in cases when the user manually measures the fuel levels using a dip stick before and after the delivery; clear the check box in cases when manual delivery measurement is done only after the delivery.

Click **Save** to save the changes.

6.4.7.5 Depot and Supplier Setup

This section enables users to view or modify the Depot and Supplier lists. Depots are sorted by names.

The supplier list includes the following details:

- Name
- Contact Person
- Plate Number (vehicle number)
- Email
- Fax

Click **Add** to create a new item in the corresponding list, double-click the next available line to place the cursor for entering the Depot Name. Click **Delete** to eliminate an existing item from the lists and click **Save** to save the changes.

6.4.7.6 Deliveries Screen Selection

Deliveries Screen Selection enables customers who manage Deliveries but not Orders to configure the system for deliveries management only (refer to “[10.5 Deliveries Screen](#)” on [page 245](#)).

Default setting is Orders and Deliveries (the check box is clear). To change this setting, select the **Deliveries Screen Selection** check box, and click **Save** button

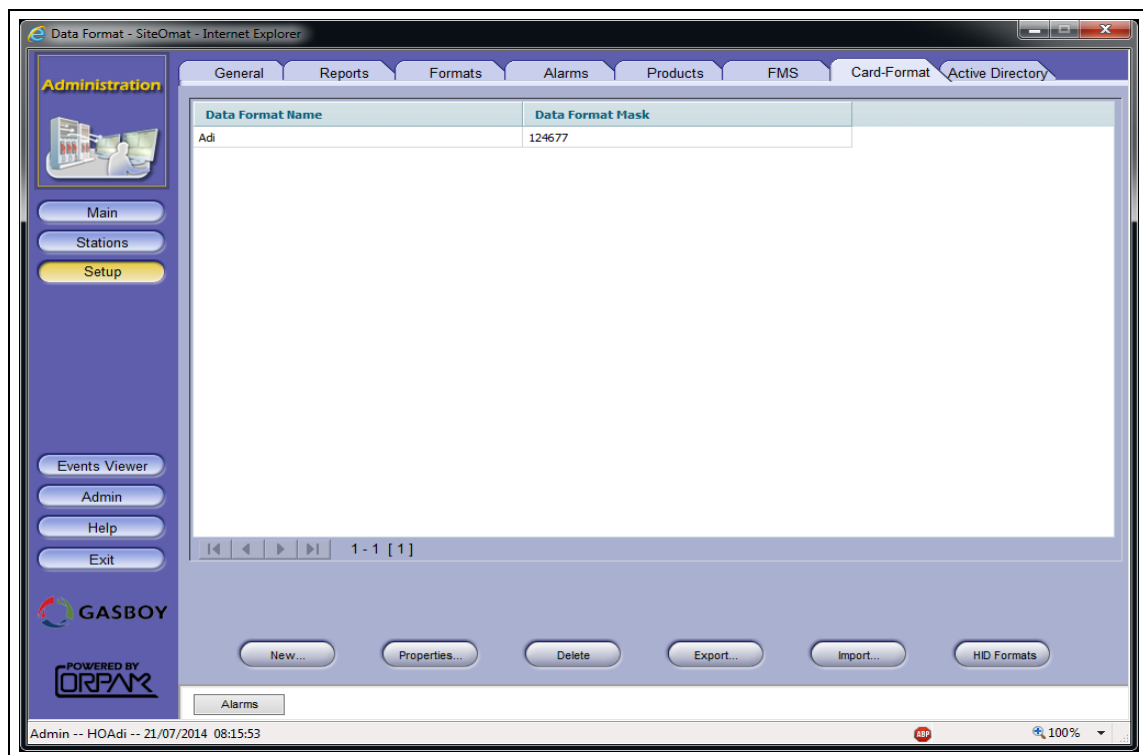
The data is processed by the system and at completion, a successful operation message is displayed. Click **OK** to close the message.

6.4.8 Card-Format

This screen allows professional technicians to customize and insert new refueling authorization card formats into the system by defining the card layout attributes.

To open the Card-Format screen (see [Figure 82](#)), select the **Card-Format** tab.

Figure 82: Card Format Screen

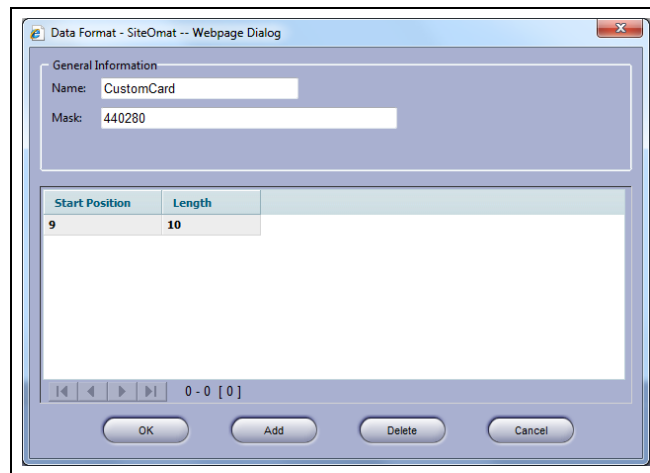


6.4.8.1 Defining a New Card Format

To define a new card format, proceed as follows:

- 1 Click **New** button.
- 2 The Data Format dialog box opens (see [Figure 83](#)).

Figure 83: Data Format Dialog Box



- 3 Enter the new format **Name**.
- 4 Enter the string **Mask**, namely the series of characters used to identify the specific card format in the system.
- 5 Click **Add** button to define the position of the **Card Number** within the string:
 - a Double click **Start Position** row and enter the Card Number start position.
 - b Double click **Length** to enter the Card Number length.
 - c Perform steps a and b again if the Card Number is made up of more than one part.
- 6 Click **OK** to save the changes and close the dialog box.

Clicking **Cancel** closes the dialog box without saving the changes.

Clicking **Delete** deletes the previously selected Card Number definition row from the grid.

For example, the string layout for the “CustomCard” magnetic card is:

=440280=xxxxxxxx=yyyyyyyyyyyyyyyyyy==

Where:

- a. = is a field separator
- b. = **440280** = = == is the masking (where the dots stand for don't cares)
- c. **xxxxxxxx** is the ten-character Card Number
- d. **yyyyyyyyyyyyyyyyyy** is optional information

The system identifies the format by the masking and recognizes the ninth to eighteenth characters as the Card Number.

6.4.8.2 Modifying Card Format Properties

This feature enables users to modify the attributes of a previously defined format. Proceed as follows:

- 1 Select the Card Format by clicking the corresponding row in the Card Format grid (see [Figure 82](#) on [page 82](#)).
- 2 Click **Properties** button to open a window identical to the one described above.
- 3 Proceed as defined for a new card format.
- 4 Click **OK** to save the changes.

6.4.8.3 Deleting a Card Format

To delete a previously defined format, proceed as follows:

- 1 Select the Card Format by clicking the corresponding row in the Card Format grid (see [Figure 82](#) on [page 82](#)).
- 2 Click **Delete** button.
- 3 A confirmation message is displayed.
- 4 Click **OK**.

6.4.8.4 Export / Import Card Formats

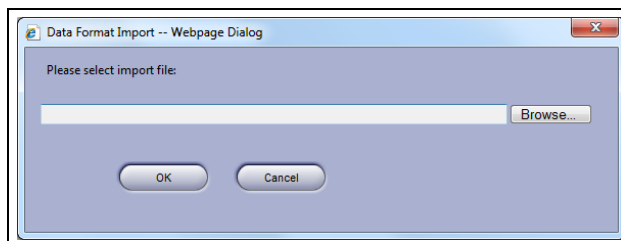
The system enables the user to Export / Import card formats.

To export previously created formats, click Export button on the Card Format screen (see [Figure 82](#) on [page 82](#)). The data is written into an XML file, which can be stored on local PCs.

To import previously exported formats, proceed as follows:

- 1 Click **Import** button.
- 2 The Data Format Import dialog box opens (see [Figure 84](#)).

Figure 84: Data Format Import Dialog Box



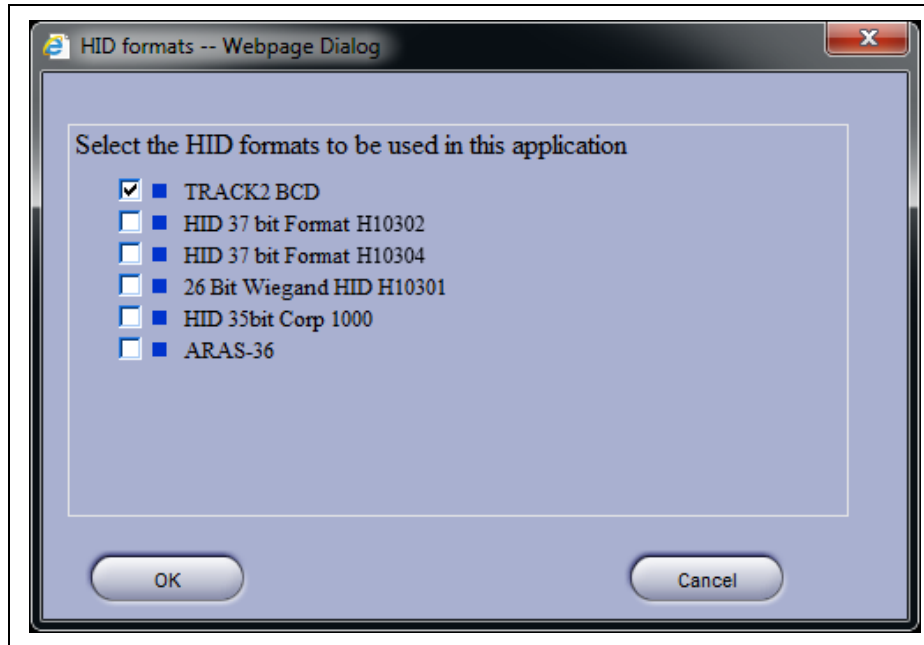
- 3 Click **Browse** to select the XML file.
- 4 Click **OK** to start the import process.

6.4.8.5 HID Formats

The system supports multiple HID card formats. Use this feature to set the formats used in your network.

- 1 Click HID Formats. The following screen opens (see [Figure 85](#)).

Figure 85: HID Formats Dialog Box



- 2 Select the formats in use and then click OK.

Note: Do not select HID formats that are not required. After adding stations to the system, in order to send the HID configuration to the newly added sites, open HID Formats dialog box and save settings again by clicking OK.

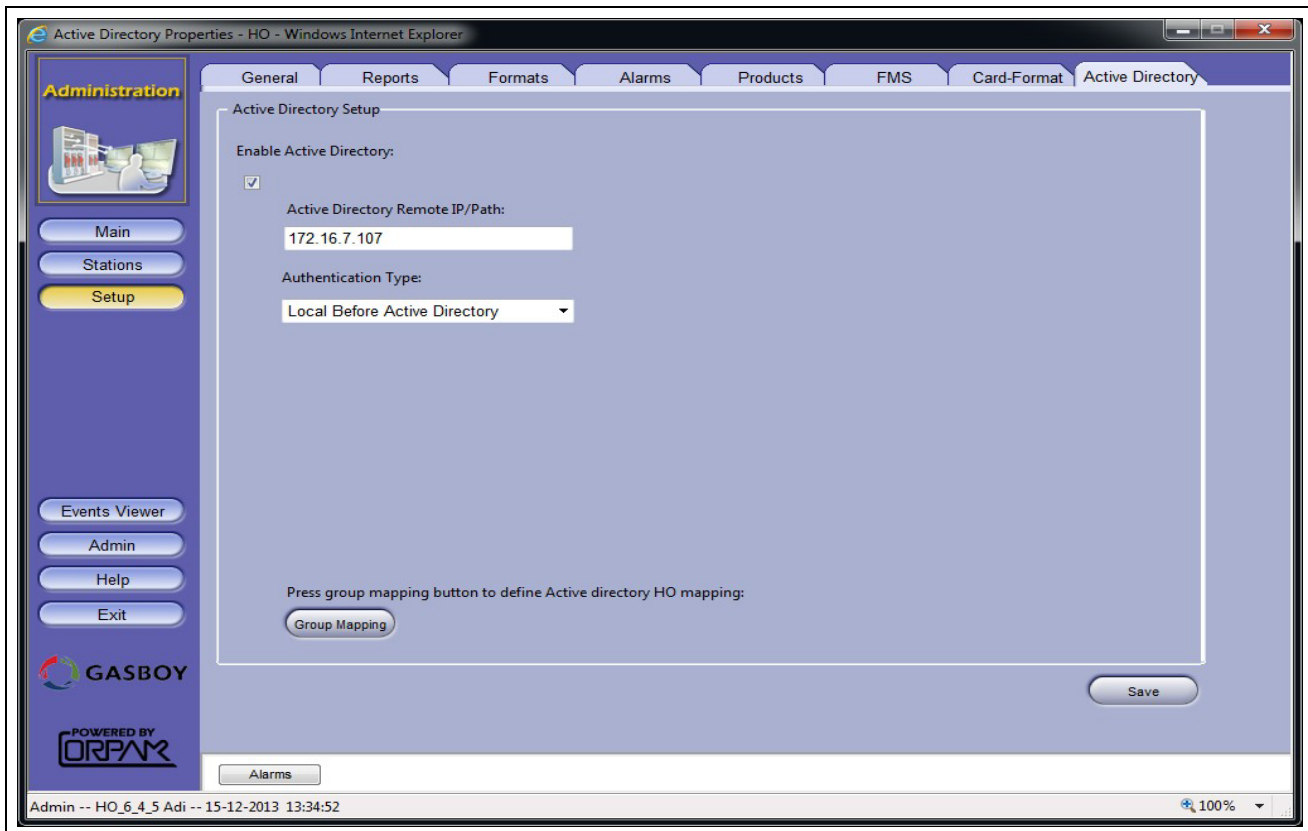
6.4.9 Active Directory

Note: This feature is supported from version 6.4.45.34 and later.

This screen allows administrators to integrate user and user group information from Windows Active Directory. FHO periodically imports Active Directory data and updates users' definitions.

In order to open the Active Directory screen (see [Figure 86](#)), select the **Active Directory** tab.

Figure 86: Active Directory Screen



Proceed as follows:

- 1 Select the **Enable Active Directory** check box.
- 2 In the **Active Directory Remote IP/Path** field, enter the AD IP.
- 3 In the **Authorization Type** list, select the authentication mode:
 - **Active Directory only:** The system admits only users defined in the Active Directory.
 - **Local before Active Directory:** The system checks first for users defined locally in FHO and then checks the Active Directory.
 - **Active Directory before Local:** The system checks first for users defined in the Active Directory and then checks FHO users database.

- 4 Click **Group Mapping**. The Active Directory Properties dialog box opens (see [Figure 87](#)).

Figure 87: Active Directory Properties Dialog Box

The dialog box is titled "Active Directory Properties - HO -- Webpage Dialog". It contains two main sections: "Roles Groups" and "Code Groups".

Roles Groups Section:

Group Role	AD Used Prefix	Actual Group Name
Administrator:	HO_Administrator	HO_Administrator
Fleet Manager:	Adj_Manager	HO_FleetManger
Fleet Report Viewer:	HO_FleetReportViewer	HO_FleetReportViewer
Department Manager:	HO_DepartmentManager	HO_DepartmentManger
Department ReportViewer:	HO_DepartmentReportViewer	HO_DepartmentReportViewer
Fuel Manager:	HO_FuelManager	HO_FuelManger
Fuel ReportViewer:	HO_FuelReportViewer	HO_FuelReportViewer
Administrator Translator:	HO_AdministratorTranslator	HO_AdministratorTranslator
Fuel Translator:	HO_FuelManagerTranslator	HO_FuelTranslator
Fleet Translator:	HO_FleetManagerTranslator	HO_FleetTranslator

Code Groups Section:

Group Code	AD Used Prefix	Actual Group Name
Fleet:	HO_Fleet	HO_Fleet_FFFFFFFF
Department:	HO_Department	HO_Department_FFFFFFFF_DDDDDD
Fuel:	HO_Fuel	HO_Fuel_SSSSSS

At the bottom of the dialog box are three buttons: "Set To Default", "Save", and "Close".

- 5 A Role Group should be created in AD for each FHO user group. In the Role Groups section, you can edit the **AD Used Prefix** fields to map Active Directory role groups to FHO groups.
- 6 In the Code Groups section, you may edit **AD Used Prefix** fields to map the fleet/department/station groups created in the Active Directory.

Because Fleet/Department/Fuel users access data relevant to their fleet/department/stations only, these AD users should be assigned to the following groups added to the Active Directory for each fleet, department and station:

- Fleet_FFFFFFFF (fleet code)
- Department_FFFFFFFF_DDDDDD (fleet and department code)
- Fuel_SSSSSS (station code)

- 7 Click Save to apply the changes.

Note: AD user password cannot be modified from FHO. When logging in using AD user credentials, the Change Password button will not be displayed. User names must be unique. Do not define the same user name in both FHO and AD.

6.5 Stations Tab

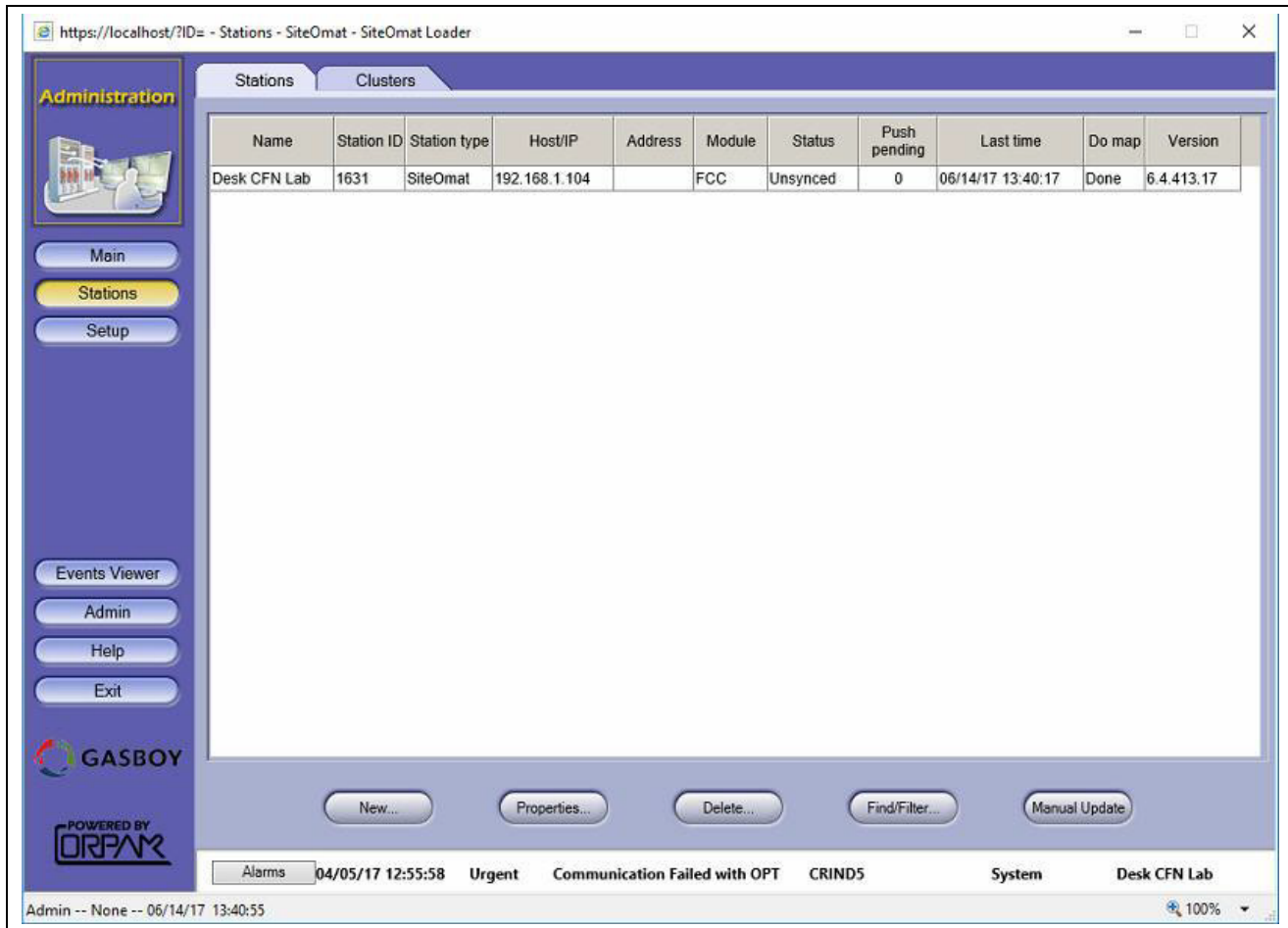
This section provides instructions for connecting the SiteOmat Station Controllers (or third-party Forecourt Controller) situated in each gas station to the System, as well as creating station clusters.

6.5.1 Stations Screen

To display the Stations screen, click the Stations button in the Fleet Head Office Navigation Bar (see [Figure 88](#)).

The screen includes a grid listing all the stations defined in the Fleet Head Office and their connection status. At the bottom of the screen there are four utility buttons: New, Properties, Delete and Find Filter.

Figure 88: Stations Screen



6.5.1.1 Station Grid Elements

The Station grid comprises several elements; each serves a different role in the identification of the gas station (see [Table 16](#)).

Table 16: Station Grid Elements

Element	Description
Name	Name of the station as provided during the station identification procedure.
Station ID	Code (identification) number of the station as set during the station identification procedure.
Host/IP	Host/IP number of the Station Controller that defines it in the network.
Address	Physical address of the station as provided during its identification procedure.
Module	System installed in the station: FCC (Forecourt Controller), OrData, or both.
Status	Operational status of data communication in the Station Controller. The station can be in any of the following statuses: • Success – Last connection succeeded • Pulling – In process of receiving data from station (for example, transactions) • Pushing – In process of sending data to stations (for example, devices) • Unsynchronized (unsynchronized) – Last connection failed • “(Empty) –Web services stations that FHO/FMS does not initiate communication with.
Push pending	Data from the FHO in queue to be sent to the stations.
Last Time	Last time the station identification data was updated.
Do Map	Indicates if the station needs product mapping. In cases where the FHO/FMS Systems recognize that the product codes of a station are not matched with the ones defined in the system (in the Products section), a request (Done, Not Done) is displayed in the Do Map column, in order to draw the user's attention to that matter.
Version	SW Version installed

Note: Selecting a station in the table (by double-clicking it) opens the SiteOmat Station Controller Application of the selected station.

6.5.2 Defining a New Station

6.5.2.1 General

This paragraph describes the procedures required for the definition of a new station in the Administration Application.

6.5.2.2 Adding a New Station

Proceed as follows:

- 1 Click **New** button on the Stations main window (see [Figure 88](#) on [page 88](#)).
- 2 The Station Properties dialog box opens (see [Figure 89](#) on [page 90](#)).
- 3 The station Identification Data is displayed in six tabs. Fill in the fields on the Station tab (refer to “[6.5.2.3 Station Tab](#)” on [page 91](#)).
- 4 Click **Connect**.
- 5 Select the **Product Mapping** tab and proceed with product mapping (refer to “[6.5.2.5 Product Mapping Tab](#)” on [page 94](#)).

- 6 Click **OK** and close the dialog box.
- 7 Reopen the dialog box (select the newly added station from the grid and then click **Properties**).
- 8 Fill in the other tabs and then click **OK**.

Figure 89: Station Properties Screen

The screenshot shows the 'Station Properties - Siteomat -- Webpage Dialog' window. It features several tabs: Station, Product mapping, Information, Tanks, Pumps & Nozzles, and History data. The 'Station' tab is active, displaying various configuration fields. The 'Type' section has radio buttons for SiteOmat (selected), Manual, Passport, WebServices, OrData Only, 2050, and SiteOmat-W. The 'Station identification' section includes fields for 'Station #' and 'Station name'. The 'Station connection' section has fields for 'IP address', 'Company' (a dropdown menu), 'User', and 'Password'. There are checkboxes for 'Online authorization - do not upload fleet data', 'Manage dry products in station', and 'Download fleet data to station'. The 'Order data' section includes 'Default supplier' and 'Default depot' dropdown menus. The 'Update' section has 'Frequency' and 'Outage tolerance' dropdown menus, both set to '1 minute'. The 'Modem configuration' section has a checkbox for 'Use dial up'. The 'Clock synchronization' section has a checkbox for 'Synchronize station clock with Head Office'. The 'OrData Settings' section has a checkbox for 'Add OrData to station' and a message: 'OrData setup is possible for existing stations only. You must finish the new station setup first.' At the bottom, there are 'Connect', 'OK', and 'Cancel' buttons.

6.5.2.3 Station Tab

The first tab contains the new station identification data and should be filled according to the following fields (see [Table 17](#)):

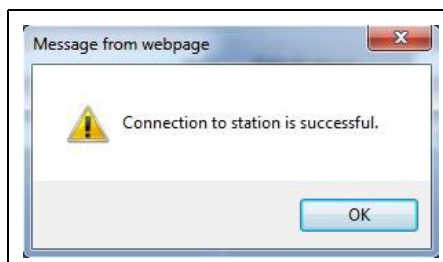
Table 17: Station Tab Fields

Element	Description
Station Type	Type of Station Controller. Four options are available: SiteOmat: These stations are passive and the FHO/FMS is responsible for communication. Stations can work in offline mode as all fleet and devices data are passed and updated to them. WebServices: Station operates fully online using Web services to get authorization and report transactions. (Relevant for specific customers only) 2050 – Old Orpak's controllers. (Not supported yet.) Manual – Stations that do not have any controller automation, data is entered manually on the station or in the Fuel Management System. OrData Only: Sites equipped with OrData for collecting and storing DataPass PLUS Vehicle Units records. (i.e. fleet facilities which include WGT units for tight tracking of vehicles condition). This feature is available in versions 6.3.2 or later SiteOmat-W: Station equipped with SiteOmat-W (Relevant for specific customers only) Passport: Stations equipped with Passport POS & FCC system, refer to <i>Passport Authorization Server Setup and User's Manual</i> . Note: Not all the fields detailed below are relevant for all station types.
Clock Synchronization	Synchronizes the station clock based on FHO server clock (refer to "6.4.1 General Tab" on page 57).
Station #	Code (identification) number of the station.
Station Name	Name of the station.
Default supplier	Default Fuel supplier for this station.
Default Depot	Default depot for fuel purchasing.
IP Address	Host/IP number of the Station Controller, which defines it in the network.
Company	(Optional – if managing multiple companies only) In the Company drop-down, select the company that you'd like to link to the station from the list of companies that you've previously defined (refer to "6.4.1.4 Defining Multiple Companies" on page 64).
Username	Username and Password of any user authorized to log in to the station controller. The user must be previously defined in the station as Head Office Communicator. Username = HOCOMM (default and created by SiteOmat setup wizard) This data enables the user to log in to the station and is activated as soon as OK button is clicked on. If the login credentials are not found in the user list, the station cannot be added.
Password	Password of the administrator for authentication (see Username above). Default password = 123456
Online authorization – do not upload fleet data	Disables offline authorization. Fueling authorization is checked against HEAD OFFICE, not locally by the Station Controller. The station must be connected to HEAD OFFICE therefore fleet and devices data (such as limits) is not sent to the Station Controller
Manage dry goods in station	Enables management of dry goods from Station Controller
Update Frequency	Defines the time frequency for retrieving transaction records from the Station Controller in the FHO/FMS database. Starts the station updater process in the FHO/FMS. The update is triggered at the update interval, previously selected from the drop-down menu.
Outage Tolerance	Defines the time a station can continue working in offline mode, in case of communication failure. This is also the maximal period that local data can be used to authorize devices without being updated by the system. Once the time defined in this text box has passed without an update from the system, the Station Controller disables refueling transactions.

Element	Description
Modem – use dial up	Enables/ disables modem connection. In cases where the check box is selected, the four fields below are displayed.
Remote user	User as defined in the station, user type should be FHO/FMS Communicator. Username default is dialin (cannot be changed).
Remote Dial up #	Phone number.
Remote password	Password for the user. Default PW is dialin (cannot be changed).
Dial up connection	Windows dialer name.
OrData Settings	Select the Add OrData to Station check box in order to add OrData capabilities to an already defined station. This configuration must be done after the station was fully set and saved. The following OrData Settings are displayed only after the station configuration was saved: • OrData Port: Port for OrData storage • OrData Username: Authorized OrData username • OrData Password: Authorized OrData password • HW Configuration: OrData hardware configuration. Stand Alone or included in the SiteOmat cabinet This feature is available in version 6.3.2 or later

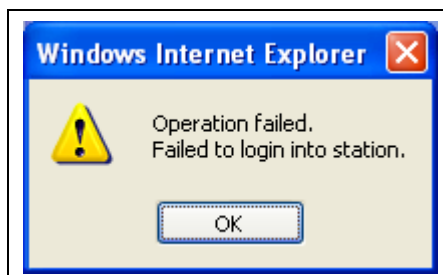
After entering the relevant data, click Connect button in order to initiate a connection to the station and transfer the relevant station setup data. The new station is saved in the database. A dialog box opens, indicating whether a successful connection was established therefore completing the addition process successfully (see [Figure 90](#)). Once the station is added, the administrator must select the Product mapping from the popup to match the station product codes to the ones defined in the system (refer to “[6.5.2.5 Product Mapping Tab](#)” on [page 94](#)).

Figure 90: Connection to Station Successful Message



If the new station cannot be connected to the Administration Application, an error message is displayed (see [Figure 91](#)). Repeat the station data entry process.

Figure 91: Station Add Failure Message



6.5.2.4 Selecting Different Station Type

WebServices is not currently supported by Gasboy and should not be selected.

Whenever the user selects the Station Type as WebServices, the Station definition screen changes (see [Figure 92](#)). In this case, the Update Frequency and Outage Tolerance fields are removed. These fields are irrelevant since the station now operates fully online, using Web services to get authorization and to report transactions. All other fields are identical, and should be filled as described above.

If the Station added is defined as a Manual Station (see [Figure 92](#)), enter only Station Code and Name.

Figure 92: Adding a New Manual Station Screen

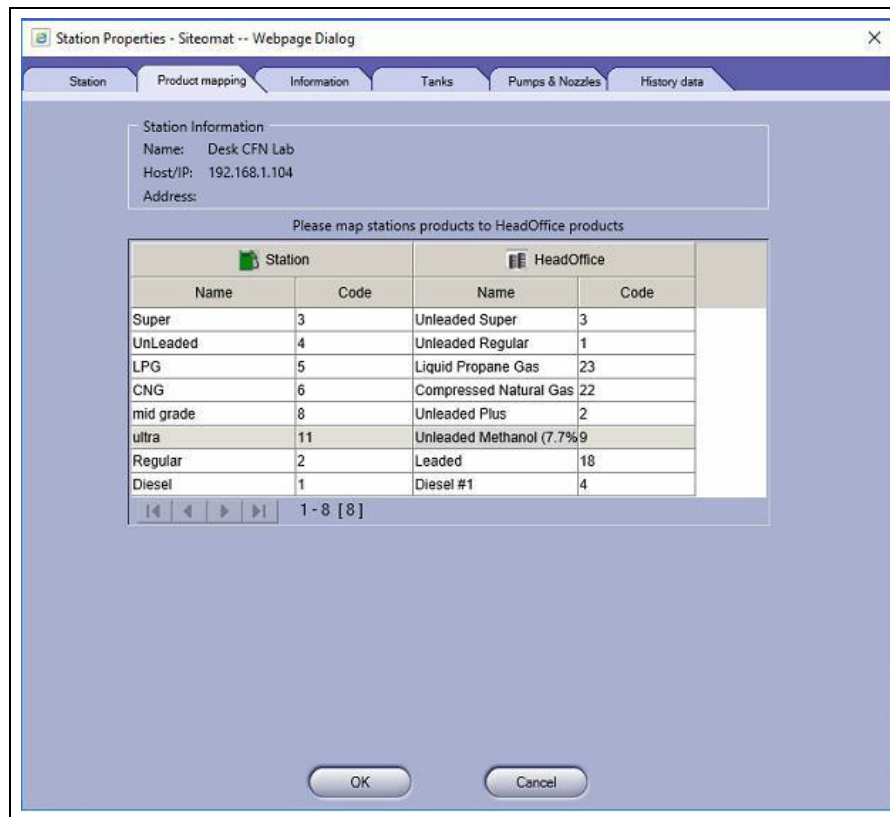
The screenshot shows a web-based dialog box titled "Station Properties - Siteomat -- Webpage Dialog". It features several tabs: "Station", "Product mapping", "Information", "Tanks", "Pumps & Nozzles", and "History data". The "Station" tab is active. Within this tab, there is a "Type" section with five radio button options: "SiteOmat", "Manual" (which is selected), "WebServices", "OrData Only", and "2050". To the right of the "Type" section is a "Station identification" section containing two input fields: "Station #" and "Station name". Below these is an "Order data" section with two dropdown menus labeled "Default supplier:" and "Default depot:". At the bottom of the dialog is a "Clock synchronization" section with a checkbox labeled "Synchronize station clock with Head Office". The "OK" and "Cancel" buttons are located at the very bottom of the window.

6.5.2.5 Product Mapping Tab

Several products in various gas stations may have different products codes. Therefore, they must be associated with the products defined in the system so as to appear correctly in the system reports:

Select the Product Mapping tab (see [Figure 93](#)) after adding a new station.

Figure 93: Matching the Station Products



To match the products, proceed as follows:

- 1 In the right side of the window (Head Office), select the products corresponding to the products listed in the left side of the window (Station).
- 2 To select new products, double-click the **Name** header in the Head Office table, and a drop-down list of available products in Head Office is displayed.
- 3 Enter the same code number for the same product in both Code columns.
- 4 Click **Update** in cases where modifying an existing station.
- 5 Click **Save** in cases where adding a new station.
- 6 Click **Cancel** if both columns are identical and the procedure is not necessary. In cases where adding a new station, if the mapping process is canceled, the station is still added. However, no connection to the station is possible until mapping is completed. The Do Map field displays Not done (refer to [“6.5.1.1 Station Grid Elements”](#) on [page 89](#)).

6.5.2.6 Information tab

The third tab contains general information about the new station (see [Figure 94](#), see [Table 18](#)):

Figure 94: Information Tab

Table 18: Information Tab Elements

Element	Description
Address - Street & number:	Physical address of the station
Address - City	City of the station
Address - Zip	Zip code
Address - State	State/Province
Address - country	Country
Contact Name:	Name of personnel responsible for the running of the FHO/FMS system in the station
E-mail:	E-mail address of contact personnel
Fax :	Fax number of contact personnel
Telephone 1:	Telephone number of contact personnel
Telephone 2:	Second phone number of contact personnel

6.5.2.7 Tanks Tab

This screen enables the user to view and edit the setup of tanks in the specific station (see [Figure 95](#), see [Table 17](#)):

Figure 95: Tanks Tab

Description	Number	Fuel type	Maximum capacity (gallon)	Low (Order) level (gallon)	Order amount (gallon)	GPS
Diesel	1	Diesel	20000.0000	0.0000	0.0000	
Unleaded	2	UnLeaded	20000.0000	0.0000	0.0000	

1 - 2 [2]

Wet stock:
By checking the box below all wet stock management information will be managed only in the FMs and not in the station.

☐ Manage wet stock only in FMS

SiteOmat stations auto-populates most of the tank fields; the rest need to be added by the administrators. For manual sites, all fields need to be entered.

Table 19: Tanks Tab Grid Elements

Element	Description
Description:	Description of the fuel tank.
Number:	Number of the tank.
Maximum Capacity (gallon):	The maximum storage capacity of the tank, measured in gallons.
Low (order) level (gallon):	The minimum fuel level in the tank, defined for fuel reorder; measured in gallons.
Order Amount (gallon):	Predefined fuel order amount.
GPS	Physical location coordinates of the tank.

For manual stations, enter the station tanks data from this screen:

- Click **Add Tank** to manually enter the new tank data in the grid.
- Click **Delete Tank** to manually delete a tank from the list.

Manage wet stock only in FMS: by selecting this option the wet stock is managed in the FMS application only: deliveries entered in SiteOmat, and TLG readings if available are not transferred to the FMS. Only the current amount of the tanks (which changes after each transaction) is transferred and displayed on the FMS Tanks Status screen.

Note: Select this check box only in cases where the specific station wet stock is managed from FMS, in order to prevent mismatches between HEAD OFFICE level and station level since data entered to FMS is not transferred to SiteOmat; otherwise leave the option unchecked.

6.5.2.8 Pumps and Nozzle Tab

This screen enables the user to view the pump and nozzle data from the specific station (see [Figure 96](#), see [Table 20](#)):

Figure 96: Pumps & Nozzles Tab

The following data need to be edited for manual sites. SiteOmat stations auto-populates this information.

Table 20: Pumps & Nozzles Tab Grid Elements

Element	Description
Pumps	
Pump #	Identification number of the pump
# of Nozzles	Number of nozzles connected to the pump
Nozzles	
Tank Name	Identification of the tank connected to the pump
Pump #	Identification number of the pump
Nozzle #	Identification number of the nozzle
# in Pump	Number of nozzles connected to the pump

For manual stations enter the station pump and nozzle data from this screen:

- Click **Add Pump** to manually enter the new tank pump in the grid.
- Click **Delete Pump** to manually delete a pump from the list.
- Click **Delete Nozzle** to manually delete a nozzle from the list.

6.5.2.9 History Data Tab

This screen allows the user to enter sales data derived from the past year in order to start producing the forecasting reports.

6.5.3 Stations Properties

The Station screen provides a station properties dialog box including information on its identification in the gas stations company.

This information is obtained by clicking the Properties button (see [Figure 88](#)). The fields are similar to the New Station dialog box, described in “[6.5.2 Defining a New Station](#)” on [page 89](#).

6.5.4 Delete Station

This button enables you to remove a station from a list. Click the station row to select it, and then click **Delete**. A confirmation message is displayed to prevent accidental deletion.

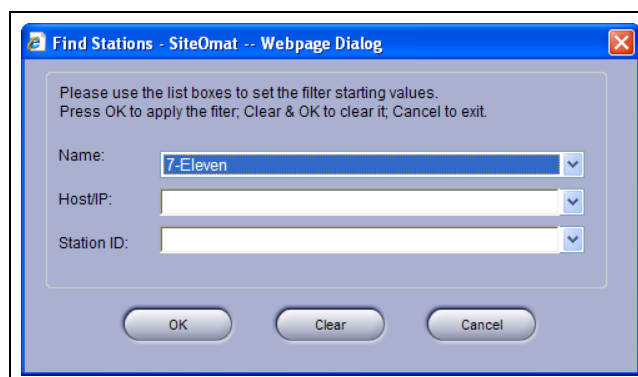
6.5.5 Find Filter

This button allows filtering the list to find a specific station within multiple stations.

- 1 Click **Find Filter** to open the filter dialog box.
- 2 Click **Clear** to remove all previous selections in the criteria fields (if necessary).
- 3 Select the search data in each field [Name, Host/IP, Station ID] using the drop-down list (see [Figure 97](#)).
- 4 Click **OK** to activate the filter.

The filtered list is displayed in the Station tab screen.

Figure 97: Station List Filtering Dialog Box



6.5.6 Manual Update

The frequency of the station updater process in the system is predetermined at station setup (refer to “[6.5.2.6 Information tab](#)” on [page 95](#)) and can be changed if the customer finds a need to automatically update more or less frequently than initially thought.

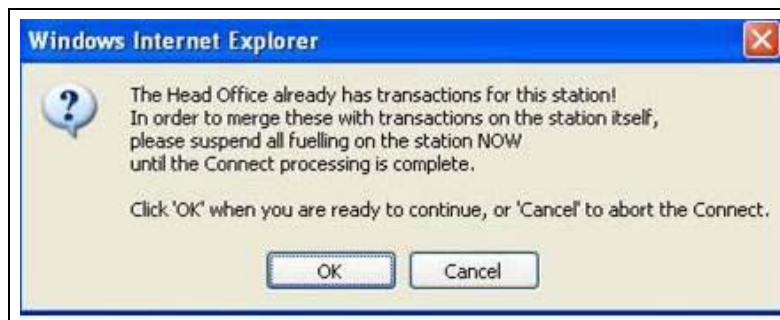
Click **Manual Update** button to trigger the update process immediately.

6.5.7 Redefining a Station

In cases where SiteOmat was reinstalled in a station already connected to HEAD OFFICE, in order to synchronize the station, merging transactions saved in HEAD OFFICE with the Station transactions, and to avoid overriding, the station should be deleted from HEAD OFFICE and reconfigured as follows:

- 1 Delete the station from the Stations grid (see [Figure 88](#)).
- 2 Create the station a new with the same Station Code.
- 3 Fill in all station parameters as described above for a new station (IP, User, Password, etc.).
- 4 Click Connect. The following message is displayed (see [Figure 98](#)).

Figure 98: Transactions Database Merging Message



- 5 Click **OK**.
- 6 Continue with the station synchronization process as described above for a new station.

6.6 Cluster Tab

6.6.1 General

The Station window includes the Cluster tab used to define a cluster of stations. Clusters are groups of stations having common rules, previously defined. Using cluster rules, the user can restrict or allow a device from been used at specific stations. For example, a rule for vehicle refueling restriction stipulates the gas station in which a vehicle from a fleet may refuel.

Although fleet rules definition is subsequently described in this manual, note that a rule can apply to a cluster of stations, rather than to a single station. The station clusters are set up in the Clusters window (see [Figure 99](#)).

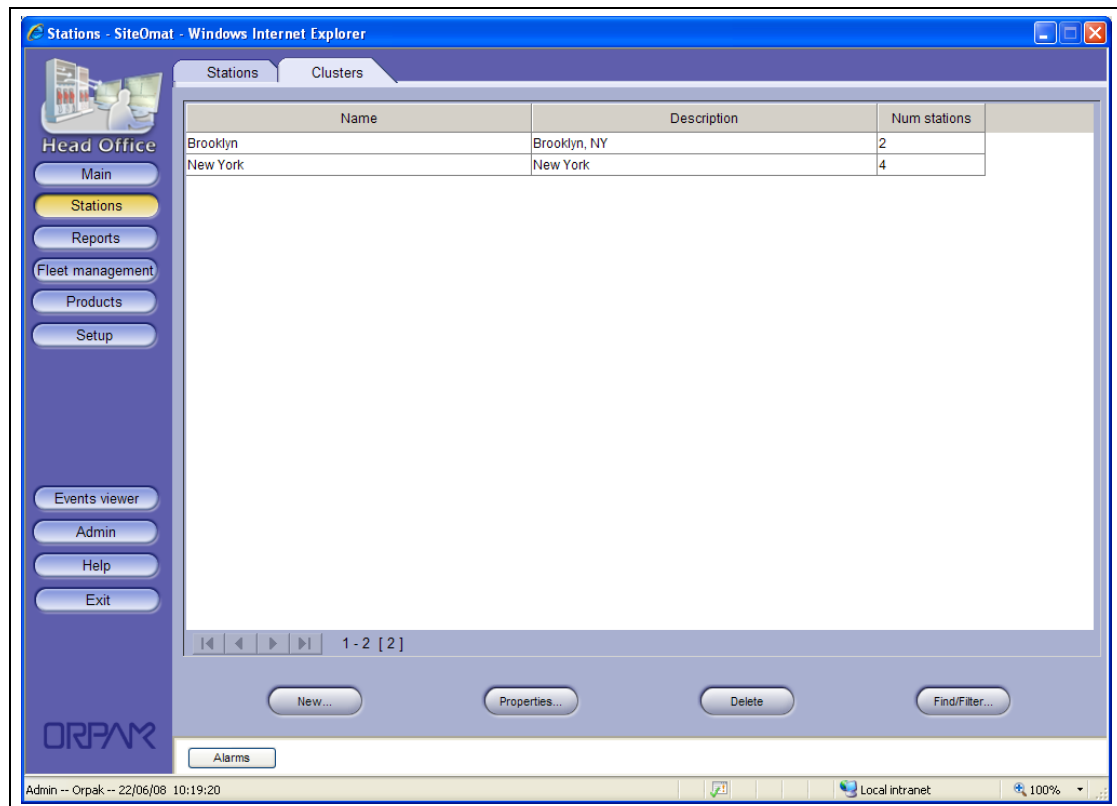
6.6.2 Displaying Clusters

To display the clusters list:

Select the Cluster tab in the Station window. The Clusters list screen opens ([Figure 99](#)).

The Clusters list defines the cluster by Name, Description and Number of Stations included.

Figure 99: Clusters Tab



6.6.3 Creating a New Cluster

To create a new cluster of gas stations, proceed as follows:

- 1 In the Clusters window, click **New**.
- 2 The Cluster Properties dialog box opens. (see [Figure 100](#)).
This grid lists the stations defined in the application.
- 3 Enter a name in the **Name** field to identify it later, when assigning fleet rules.
- 4 Enter the cluster description (location or any other definition) in the **Description** field.
- 5 To select the stations to be included in the new cluster, select the check boxes for the relevant stations.
- 6 Click **OK & New** to save the definition and reopen the dialog box for new definition.

Note: A station may be defined as being part of more than one cluster.

Figure 100: Adding a New Cluster

	Name	Station id	Host/IP	Address	Contact name
☐	ST_Demo1	9001	192.168.1.104		
☐	ST_Demo2	9002	192.168.1.204		
☐	ST_Demo3	9003			

A defined cluster must contain at least one station. Otherwise, a fail message is displayed (see [Figure 101](#)).

Figure 101: Incorrect New Cluster Definition Message



6.6.4 Modifying an Existing Cluster

To modify an existing cluster of gas stations, proceed as follows:

- 1 In the Clusters window, select the Cluster to be modified by clicking its row.
- 2 In the Clusters window, click **Properties**.
- 3 The Cluster Properties dialog box opens (see [Figure 100](#)).
- 4 Select the check box of the stations to be included in the modified cluster.
- 5 Press **OK** to save this selection or **OK & New** button to save the definition and reopen the dialog box for new definition.

Note: A station may be defined as being part of more than one cluster.

6.6.5 Deleting a Cluster

To delete an existing cluster, proceed as follows:

- 1 Double-click the row of the cluster to be deleted.
- 2 Click **Delete** button.
- 3 The Delete procedure requires approval to execute the action.
- 4 Click **OK**.

6.6.6 Cluster Properties

To view or modify the cluster properties, click Properties button in the Cluster window. The Cluster Properties dialog box opens, as described in “[6.6.3 Creating a New Cluster](#)” on [page 101](#).

6.7 Events Log (User Events)

The User Events tab on the Events Viewer screen provides two types of information:

- A list of all the successful and unsuccessful logins into the system, including the date and time, username and result (see [Figure 102](#)).
- A list of all the reports produced in the system, including the date and time, the user who produced the report and the title of the report (see [Figure 103](#) on [page 104](#)).

To open the User Events screens, click **Event Viewer** navigation button, and select the User Events tab.

To switch between the two lists, select **Login** or **Reports** in the drop-down list.

Figure 102: Log Viewer – Login List

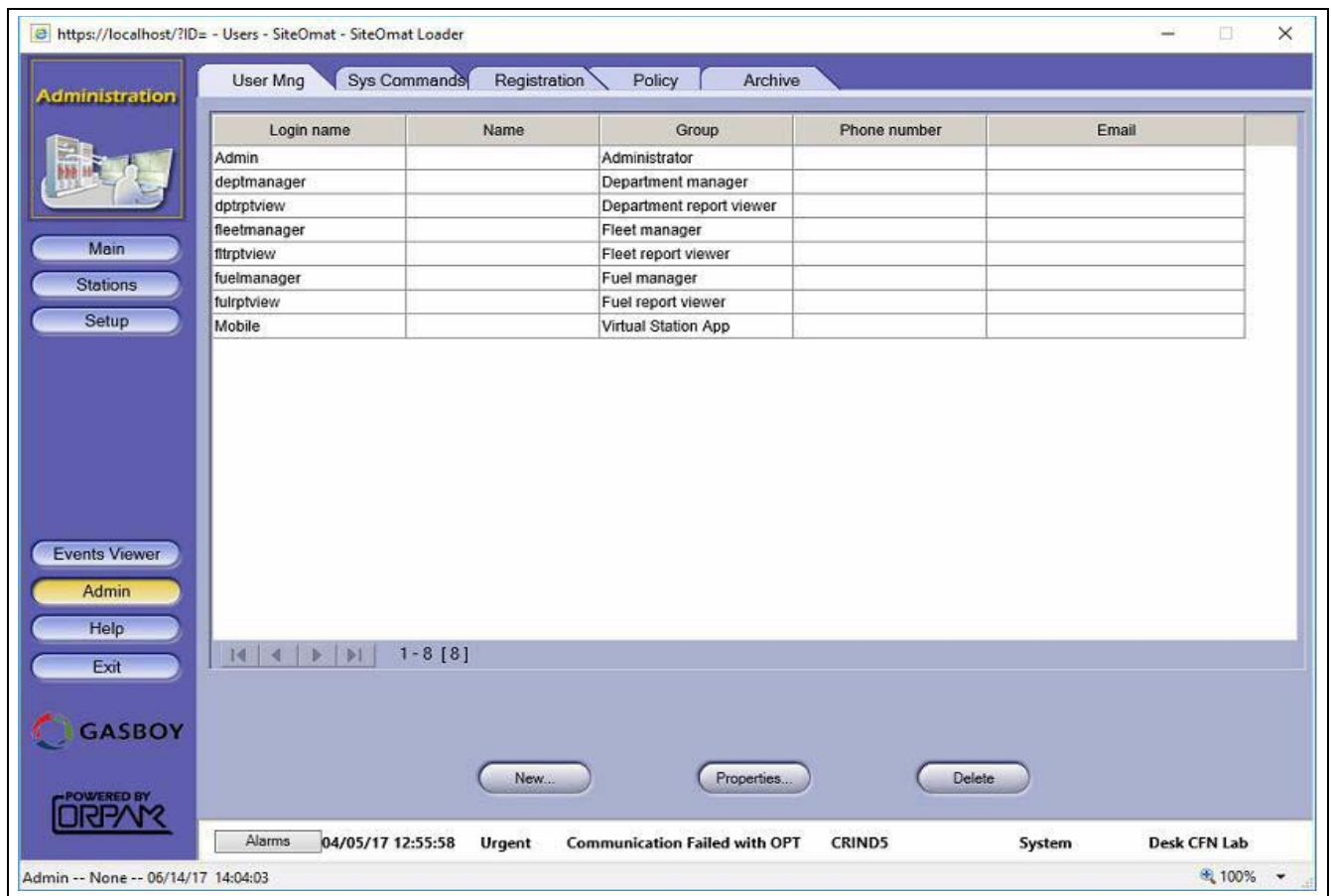


Figure 103: Log Viewer – Report List

The screenshot shows a web application interface titled "Event Log-reports - SiteOmat - Windows Internet Explorer". The browser address bar displays a URL from headoffice.orpak.com. The interface has a sidebar on the left with a navigation menu including "Administration", "Main", "Stations", "Setup", "Events Viewer", "Admin", "Help", and "Exit". The main content area has tabs for "Events" and "User Events", with "User Events" selected. Below the tabs is a dropdown menu showing "History logs" and "Reports". The "Reports" dropdown is open, displaying a table of reports.

Action	Time	User	Title	User Date	User Time
View	22/11/09 19:30:53	Admin	SiteOmat - Custom Report	2009-11-22	19:30:53
View	19/11/09 22:31:05	Admin	SiteOmat - Custom Report	2009-11-19	22:31:05
View	19/11/09 22:30:26	Admin	SiteOmat - Custom Report	2009-11-19	22:30:26
View	19/11/09 22:29:58	Admin	SiteOmat - Custom Report	2009-11-19	22:29:58
View	16/11/09 19:17:07	Admin	SiteOmat - Custom Report	2009-11-16	19:17:07
View	16/11/09 19:12:26	Admin	SiteOmat - Custom Report	2009-11-16	19:12:26
View	16/11/09 19:11:50	Admin	SiteOmat - Custom Report	2009-11-16	19:11:50
View	16/11/09 19:11:28	Admin	SiteOmat - Custom Report	2009-11-16	19:11:28
View	16/11/09 19:10:28	Admin	SiteOmat - Custom Report	2009-11-16	19:10:28
View	16/11/09 11:34:08	FHO_USER	SiteOmat - Obligo Report	2009-11-16	11:34:08
View	22/10/09 15:55:46	FHO_USER	SiteOmat - Custom Report	2009-10-22	15:55:46
View	11/10/09 19:30:51	FHO_USER	SiteOmat - Custom Report	2009-10-11	19:30:51
View	11/10/09 19:30:23	FHO_USER	SiteOmat - Custom Report	2009-10-11	19:30:23
View	07/10/09 22:06:50	FHO_USER	SiteOmat - Custom Report	2009-10-07	22:06:50
View	07/10/09 22:06:29	FHO_USER	SiteOmat - Custom Report	2009-10-07	22:06:29
View	16/09/09 15:15:10	Admin	SiteOmat - Custom Report	2009-09-16	15:15:10
View	16/09/09 15:08:08	Admin	SiteOmat - Custom Report	2009-09-16	15:08:08
View	16/09/09 14:18:55	Admin	SiteOmat - Alarm Duration Report	2009-09-16	14:18:55
View	16/09/09 14:06:24	Admin	SiteOmat - Alarm Duration Report	2009-09-16	14:06:24
View	16/09/09 14:04:32	Admin	SiteOmat - Alarm Duration Report	2009-09-16	14:04:32
View	16/09/09 14:03:44	Admin	SiteOmat - Alarm Duration Report	2009-09-16	14:03:44
View	16/09/09 14:00:28	Admin	SiteOmat - Alarm Duration Report	2009-09-16	14:00:28

At the bottom of the table, there are navigation controls (back, forward, search) and a status bar showing "1 - 50 [74]". The ORPAX logo is visible in the bottom left corner of the interface.

Refer to “Event Viewer and Alarms” on page 299 for further information on events and alarms.

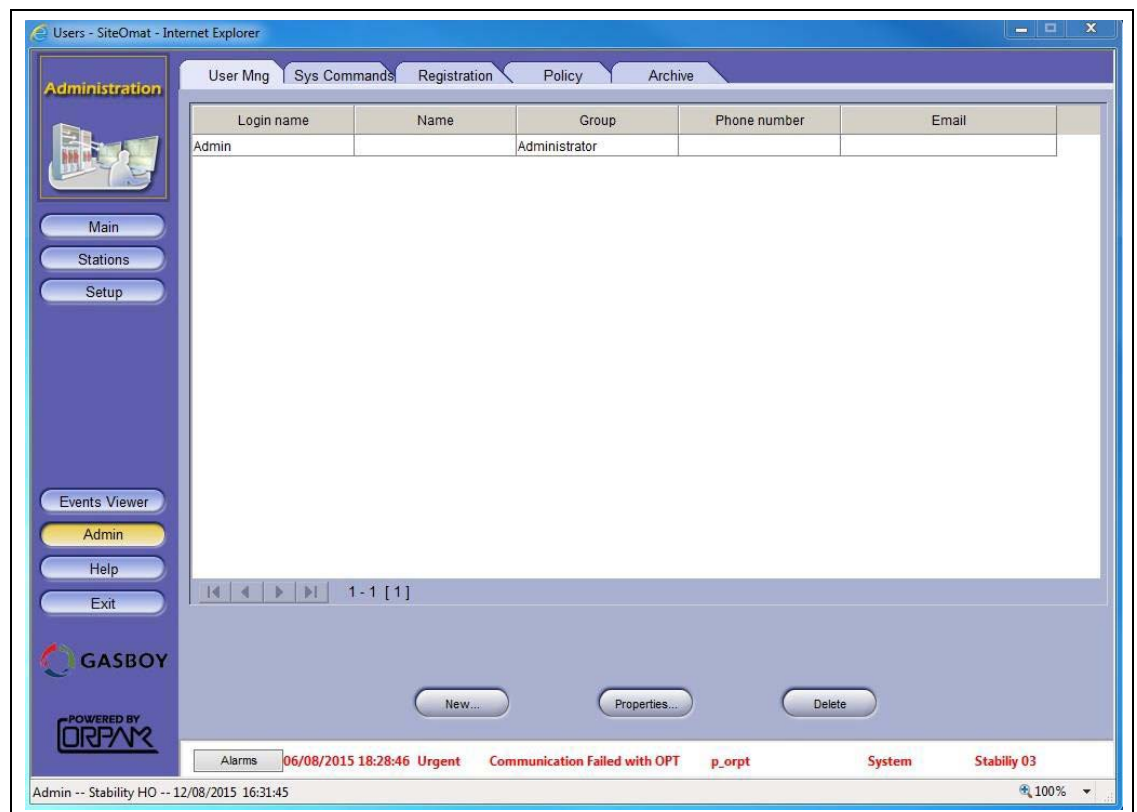
6.8 Administration Section

The administrator screen includes the following tabs (see [Figure 104](#)):

- User Mng (manager)
- Sys (system) Commands
- Registration
- Policy
- Archive

The functions related to all four tabs are relevant to all FHO applications. The User Mng screen is the default screen at the Administrator selection.

Figure 104: Administration Screen



6.8.1 User Properties Screen

6.8.1.1 General

The User Mng screen enables administrators to define the users and their access level or group. The grid displays all the current users defined in the system, their access level or group.

6.8.1.2 Adding a New User

To add a new user, proceed as follows:

- Click **New**

The User Properties screen opens. This screen has two operational screen tabs:

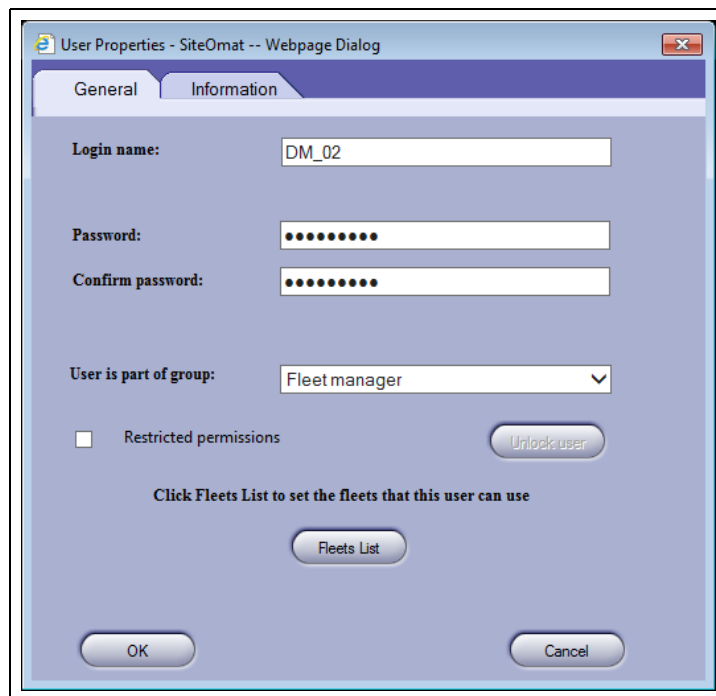
- **General**: Enables administrators to define the new user
- **Information**: Enables administrators to add more detailed information on the user

6.8.1.3 General Information on a New User

In order to add a new user, enter his or her user **Login Name** and a **Password**.

In addition, select a group for the user.

Figure 105: User Properties Dialog Box



Click **Unlock User** to activate users blocked after failed login attempts, as set in Password Policy tab (refer to [“6.8.4 Password Policy”](#) on [page 112](#)).

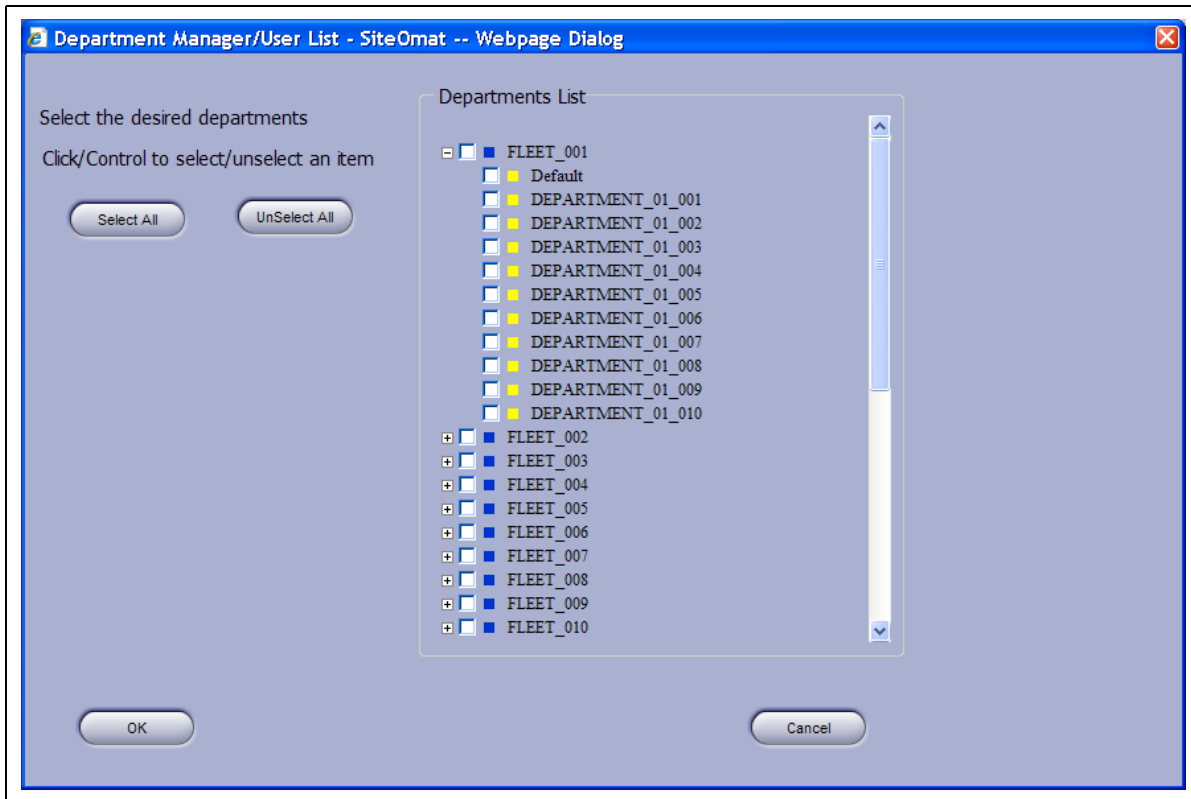
The available groups are (see [Table 21](#)):

Table 21: User Groups

Group	Access Rights
Administrator	This user has full Head Office rights to all applications.
Fleet Manager	Fleet Manager has reading and writing access to his or her own fleets including Departments and Devices, as well as Rules, Models, Events and Alarms that apply to this fleet only. Fleet Managers have neither access to the station list, setup and products menus, nor the possibility to change fleet account information. Fleets must be defined before adding this user. You may also define Fleet Managers to have restricted permissions, refer to “6.8.1.4 Adding Users with Restricted Permissions” on page 108 .
Fleet Report Viewer	This user can view FHO reports that contain data relevant to his or her fleets only. Fleets must be defined before adding this user.
Fuel Manager	Fuel Manager can access and view FMS data related to its own gas station only. He can run all FMS features except for the administration features.
Fuel Report Viewer	Fuel Report Viewers can view FHO reports that contain data relevant to their stations only.
Department Manager	Department Manager has almost equivalent privileges to those of the fleet manager except for: cannot create rules/ models, cannot create a new department. A single user can be assigned to an unlimited number of departments from different fleets. Departments must be defined before adding this user. You may also define Department Managers to have restricted permissions, refer to “6.8.1.4 Adding Users with Restricted Permissions” on page 108 .
Department Report Viewer	This user can view FHO reports that contain data relevant to his or her departments only. Departments must be defined before adding this user.
Administrator Translator	This access level is intended to enable the user to modify the translation of the GUI and the driver interface messages displayed on payment/identification terminals into the language previously set on the General Setup screen (refer to “6.4.1 General Tab” on page 57). For further information on this feature, refer to “6.9 UI Text Localization” on page 116 .
Fleet Manager Translator	This access level is intended to enable the user to modify the translation of the FHO GUI for the relevant fleet.
Fuel Manager Translator	This access level is intended to enable the user to modify the translation of the FMS GUI for the relevant gas station.
Virtual Station App	This user group grants access for manual transaction entry mobile application.

The administrator can specify the stations/fleets to which the FMS/FHO user in each group mentioned in the above list has access. Proceed as follows:

- 1 Click **Fleet/Station List** button on the User Properties screen (see [Figure 105](#) on [page 106](#)).
- 2 The existing fleets/stations list is displayed (see [Figure 106](#) on [page 108](#)). Select on the check box of each fleet/station to select it.
- 3 Click **OK** to return to the User Properties screen.

Figure 106: User Properties – Department Manager List Dialog Box

6.8.1.4 Adding Users with Restricted Permissions

The system enables defining Fleet and Department Managers with restricted permissions. These users will have access to reports of their fleets/departments and can edit a limited number of device parameters in the Device Properties dialog box → Information tab, including:

- Department
- Group Rule
- Tank Capacity
- Standard Odometer Consumption
- Standard EH Consumption

To define a Fleet/Department Manager with restricted permissions:

- 1 In the User Properties dialog box, enter Login name, Password and Password Confirmation (refer to “[6.8.1.2 Adding a New User](#)” on [page 106](#)).
- 2 Select Fleet Manager/Department Manager group.

- 3 Once one of the above groups has been selected, the Restricted permissions check box is displayed (see [Figure 107](#)). Select this check box.

Figure 107: User Properties – Defining Users with Restricted Permissions

The screenshot shows a web-based dialog box titled "User Properties - SiteOmat -- Webpage Dialog". It has two tabs: "General" and "Information", with "Information" currently selected. The form contains the following elements:

- Login name:** A text input field containing the name "Richard".
- Password:** A password input field with masked characters (dots).
- Confirm password:** A second password input field with masked characters (dots).
- User is part of group:** A dropdown menu showing "Fleet manager" with a downward arrow.
- Restricted permissions:** A checkbox that is checked, with the text "Restricted permissions" to its right.
- Buttons:** An "Unlock user" button is located to the right of the "Restricted permissions" checkbox. Below it is a button labeled "Fleets List". At the bottom are "OK" and "Cancel" buttons.
- Instructions:** Text below the "Fleets List" button reads: "Click Fleets List to set the fleets that this user can use".

- 4 Proceed to define the Fleet/Department lists to which the user has access.

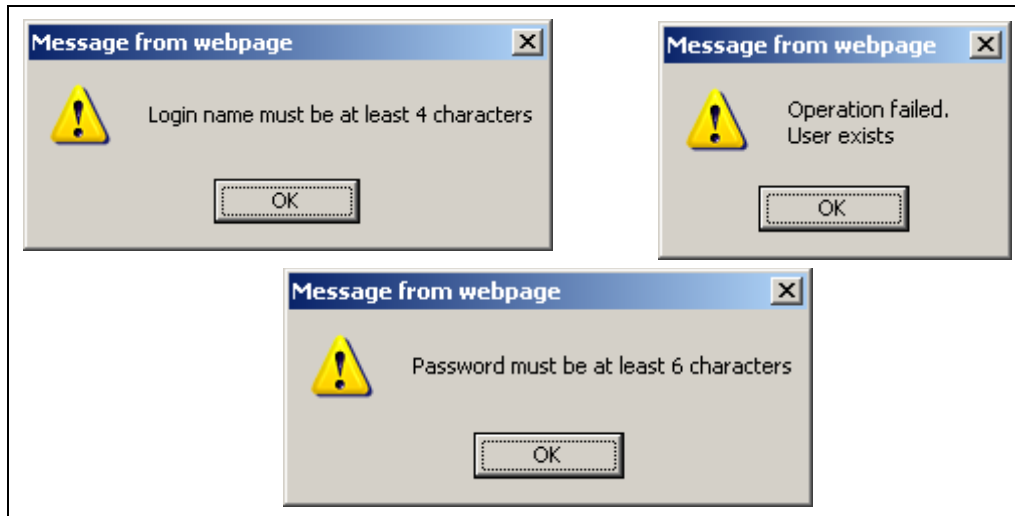
6.8.1.5 Login Name of a New User - Fail

When defining a new user, follow these rules:

- Login name must be unique
- Login name must have at least four characters
- Passwords must have at least six characters

Otherwise the following fail messages are displayed (see [Figure 108](#)):

Figure 108: New User Definition – Fail Messages

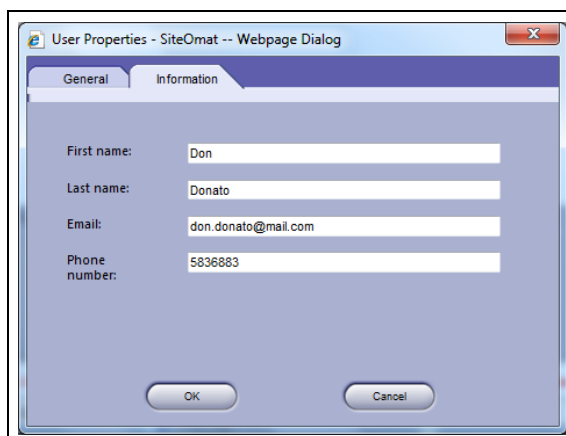


6.8.1.6 Entering More Information on a New User

The Information screen enables Administrators to enter optional information on a selected User. Proceed as follows:

- 1 Select the Information tab (see [Figure 109](#)).
- 2 Enter additional information: First and Last Name, E-Mail address and Phone Number.
- 3 Click OK to save and return to the Users screen.

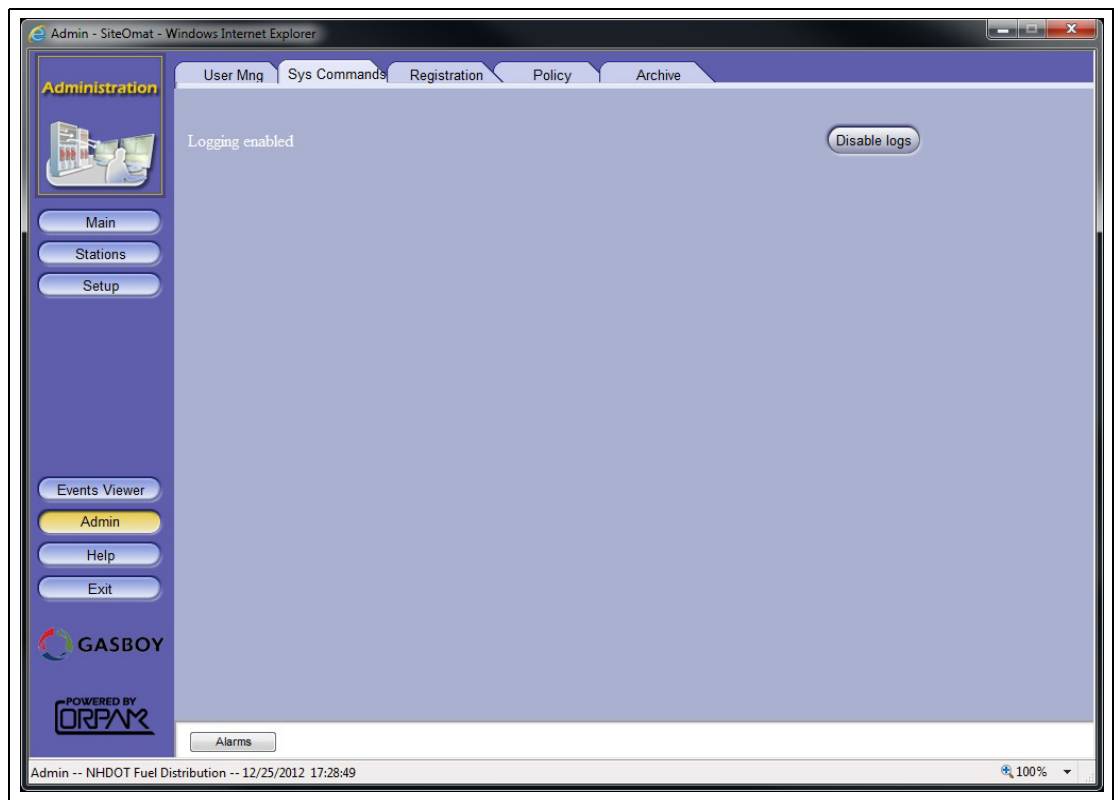
Figure 109: User Properties - Information Dialog Box



6.8.2 Sys Commands Tab

The Sys Commands tab includes a single functional button: Enable/Disable Logs (see [Figure 110](#)). Click Enable logs button to generate FHO/FMS logs regularly. When this feature has been enabled, the Enable button changes to Disable logs. Click Disable logs button to disable generation of logs. For further information on logs refer to [“4.5 Log Files”](#) on [page 48](#).

Figure 110: Sys Commands Tab



6.8.3 Registration

The registration screen is intended for registration of the Wireless Programmer device used for programming Fuel Point PLUS wireless vehicle identification units.

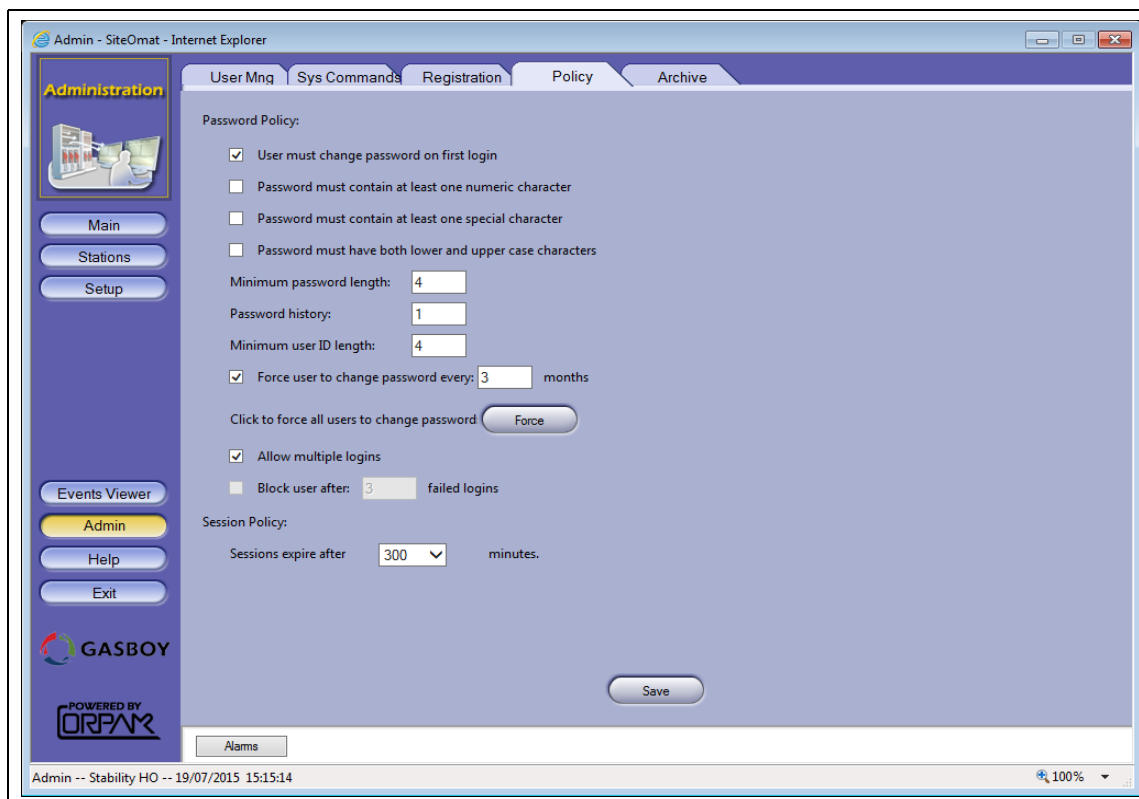
For further details, see [“Appendix C: WP Registration and Setup”](#) on [page 337](#).

For a full description of the solution, refer to *MDE-4868 Fuel Point PLUS Vehicle Installation and Configuration Manual*.

6.8.4 Password Policy

The system enables the Administrator to set the password policy properties. To open the Policy screen (see [Figure 111](#)) click **Admin** button and select the **Policy** tab.

Figure 111: Policy Tab



The following password complexity requirements may be defined to meet the customer's security needs (see [Table 22](#)):

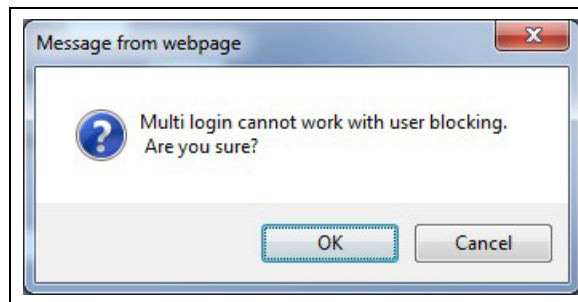
Table 22: Policy Screen Fields

Field	Description
User must change password on first login	If this option is selected, the system forces all users to modify their passwords on first login.
Password must contain at least one numeric character	If this option is selected, passwords must contain at least one digit.
Password must contain at least one special character	If this option is selected, passwords must contain at least one special character (such as comma, parenthesis, etc.).
Field	Description
Password must have both lower and upper cases	If this option is selected, passwords must contain at least one upper case letter and one lower case letter.
Minimum password length	Defines the least number of characters that a password for a user account may contain.
Password history	Prevents users from using the same password multiple times. If password history functionality is enabled, by entering a maximum password history count, the system checks a list of previously-used passwords and if the requested password is found, the system does not allow that password to be used.

Field	Description
Minimum user ID length	Defines the least number of characters that a User ID for a user account may contain.
Force user to change password every X months	If this option is selected, the system forces the user to change the password after the defined time interval has elapsed. The time interval is measured from the last time the password was changed.
Force	By clicking this button, the system forces all users to modify their password on the next login.
Allow Multiple Logins	If this option is selected, the same user may log in from multiple browsers. If this option is selected, you cannot select the block user after X failed logins option. The following message is displayed when trying to select both options (see Figure 112).
Block user after X failed logins	If this option is selected, the system blocks login by a user that has more failed login attempts than specified.
Sessions expire after X minutes	If this option is selected, the session is closed after the period of inactivity specified.

Click **Save** to apply the changes.

Figure 112: Multi Login and User Blocking Error Message

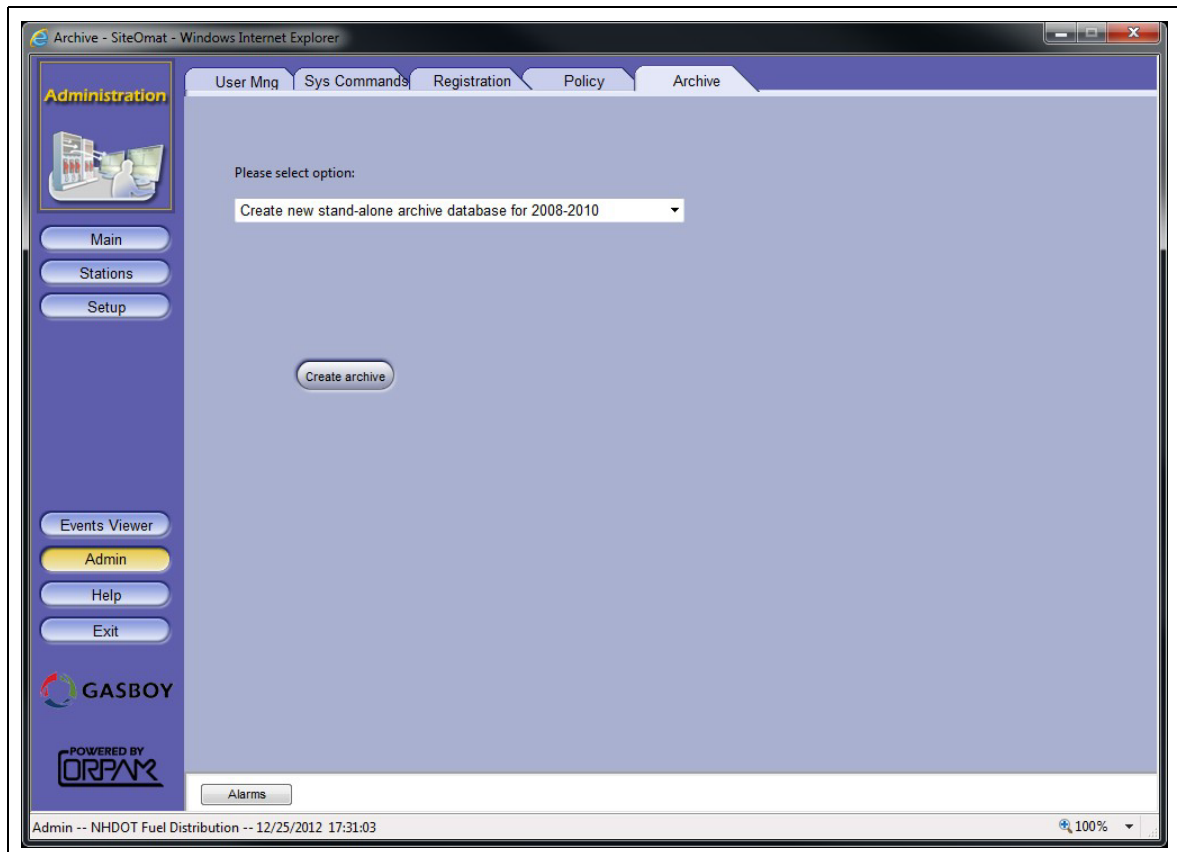


6.8.5 Database Archiving

This feature enables the system Administrator to transfer data from previous years into a new database to reduce the size of primary storage and improve application performance, lowering storage requirements for copies of the database for backup and other purposes.

To open the Archive screen (see [Figure 113](#)), click **Admin** button and select the Archive tab.

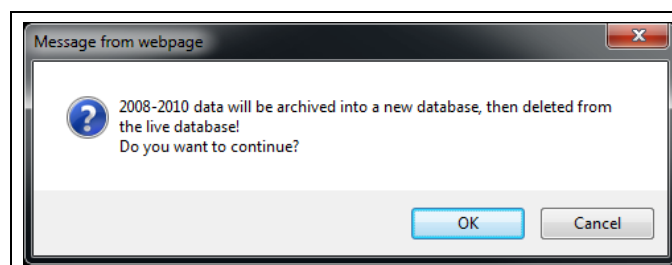
Figure 113: Archive Tab



Proceed as follows:

- 1 Select the period of time from the drop-down.
- 2 Click **Create archive**. The following confirmation message is displayed (see [Figure 114](#)).

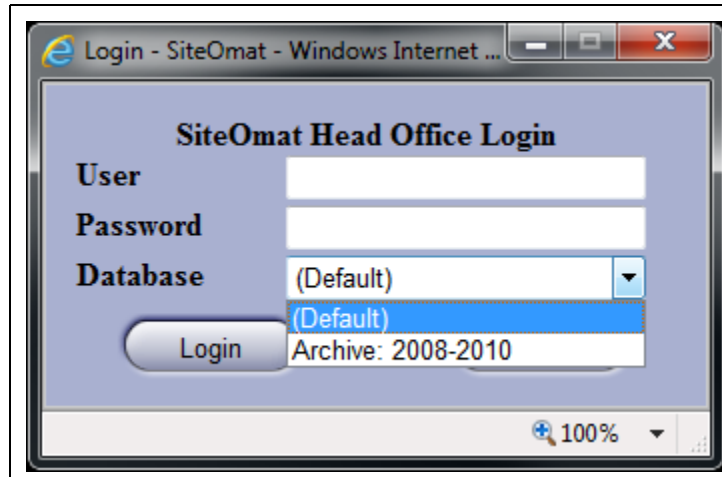
Figure 114: Database Archiving Confirmation Message



3 Click OK.

On next login the user may choose which database to work with from a drop-down (see [Figure 115](#)).

Figure 115: Login Dialog Box – Database Selection



If other than primary database is selected (Default), a notification stating that the application is connected to an archive database is displayed on each screen.

6.9 UI Text Localization

The system enables the customer to translate/modify the translation of the GUI. This feature is activated when logging in as Administrator/Fleet Manager/Fuel Manager Translator (see [Table 21](#) on [page 107](#)) in cases where the system language was set to other than English on the General Setup screen (refer to “[6.4.1 General Tab](#)” on [page 57](#)).

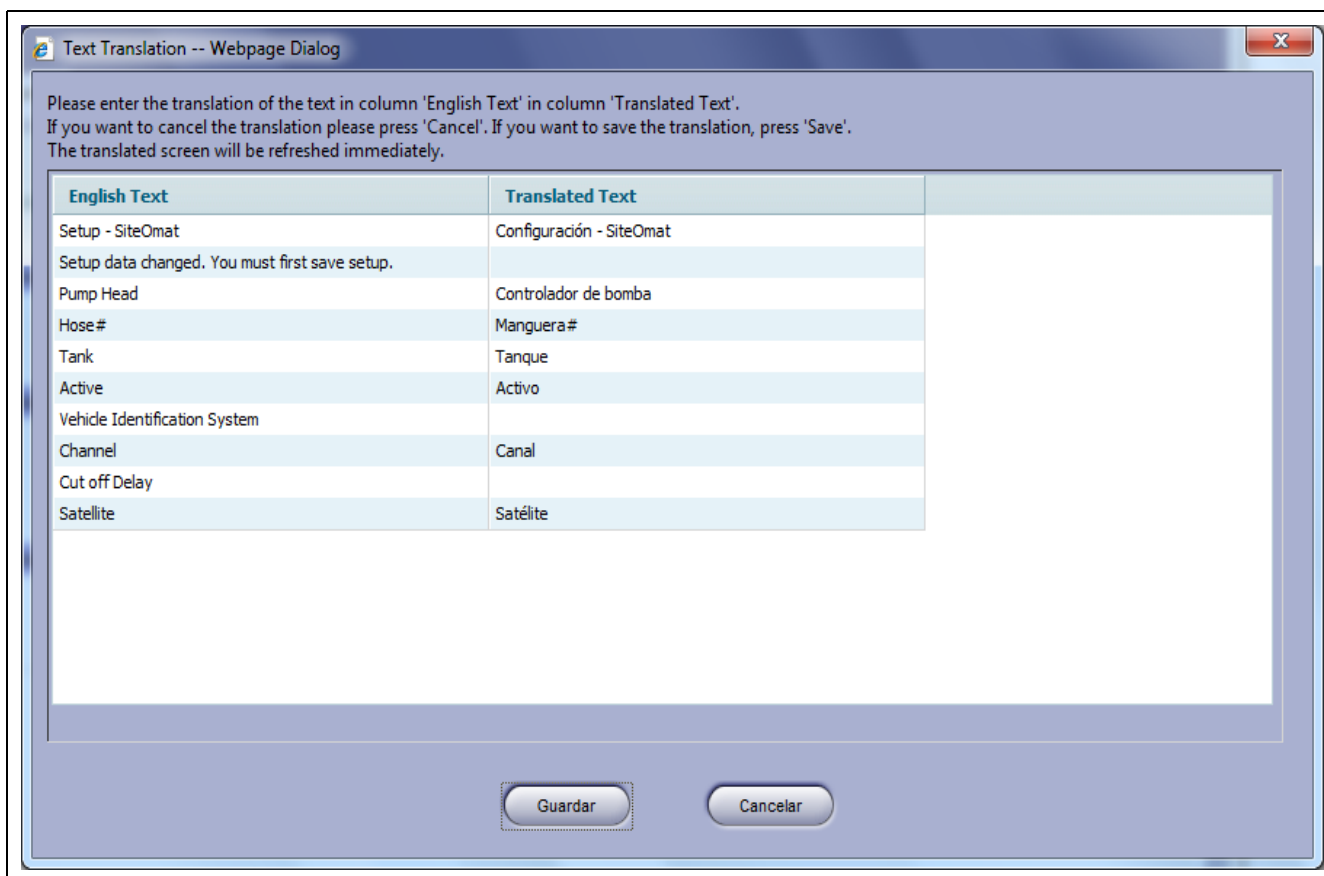
Administrator Translators may also Export/Import translated text and translate OPT and Tag Reader messages.

6.9.1 UI Text Localization

In order to modify the translation of the text displayed on a specific screen, press CTRL+ALT+T. The Text Translation dialog box opens (see [Figure 116](#)). Enter the new translation of the field's text in the corresponding row of the Translated Text column.

Click **Save** to close the dialog box and apply the changes, or click Cancel to exit the dialog box without saving the changes.

Figure 116: Text Translation Dialog Box



6.9.2 Driver Interface Messages Translation

In order to modify the translation of the text displayed to drivers on OPT/Tag Reader screens, proceed as follows:

- 1 Log in as Administrator Translator.
- 2 Click **Setup** navigation button.
- 3 Select the **Formats** tab. The Formats screen contain the Text Translation section (see [Figure 117](#)).

Figure 117: Formats Screen, Additional Options for Administrator Translators

Configuraci?n - SiteOmat - Windows Internet Explorer

Administration

Principal

Estaciones

Configuraci?n

Events Viewer

Admin

Ayuda

Salir

ORPAM

General Informes **Formatos** Alarmas Productos FMS Card-Format

Parametros para pantallas y recibos

Volumen	Ltr	Distancia	kilometer
Currency	Israel Shekel	IVA	0%
Odometer Consumption	lit/100km	EH Consumption	hr/100km
Densidad	kg/m³	Flow rate	lit/hr
Height (measurement)	cm	Height (display)	cm
Temperatura	°C		

Formatos a usar en pantalla e informes

Formato de fecha	DD/MM/YY	Formato de hora	HH:MM:SS
Separador de miles	, (coma)	Notacion decimal	. (punto)
Pantalla de volumen	xxxxx.xx	Currency display	xxxxx.xx
		PPV display	xxxxx.xx

Export/Import Translated Text

Export Text Import Text Specific Text

Save

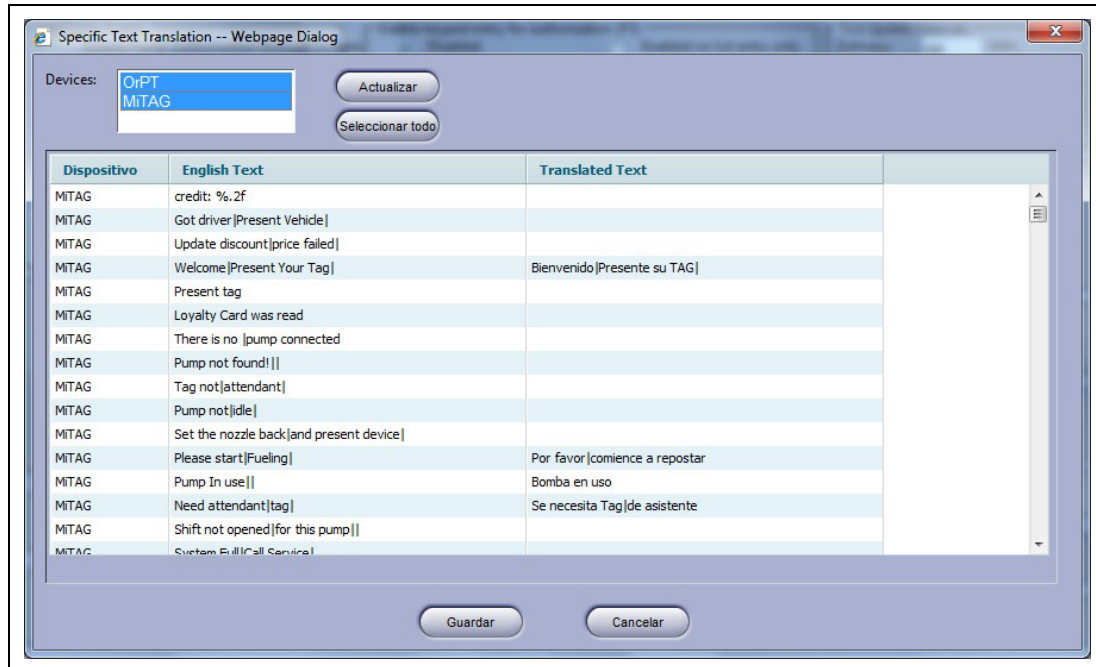
Alarmas

AdminTrans -- Fuel Distribution -- 07/09/11 01:12:51

Local intranet | Protected Mode: Off

- 4 Click the **Specific Text** button. The Specific Text Translation dialog box opens (see [Figure 118](#)).

Figure 118: Specific Text Translation Dialog Box



- 5 Select the device for which the screens are to be translated, using the **Devices** list. Multiple selection is allowed by clicking **CTRL** key while selecting the devices. To select all devices deployed at the station, click **Select All** button.
- 6 Enter the new translation of the field's text in the corresponding row of the **Translated Text** column.
- 7 Click **Refresh** button to refresh the screen with the latest data in the database.
- 8 Click **Save** to close the dialog box and apply the changes, or **Cancel** to exit the dialog box without saving the changes.

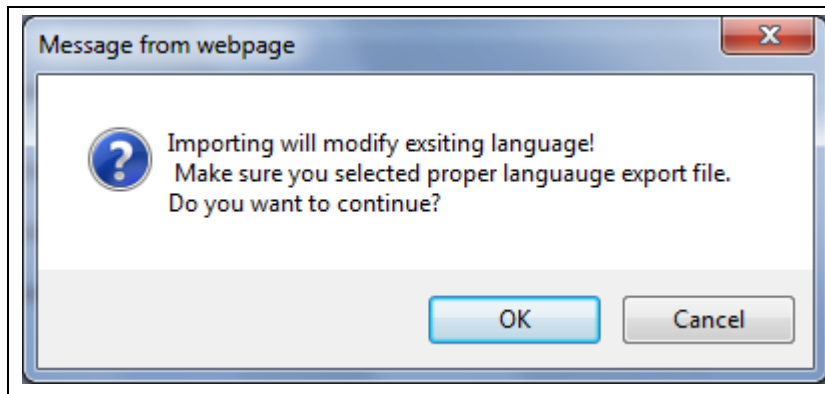
6.9.3 Export/Import Translation

The system enables Administrator Translators to Export/Import translated text.

To export the modified translation, click **Export Text** button on the Formats screen (see [Figure 117](#) on [page 117](#)). The data is written into an XML file, which can be stored on local PCs. To import previously translated strings, proceed as follows:

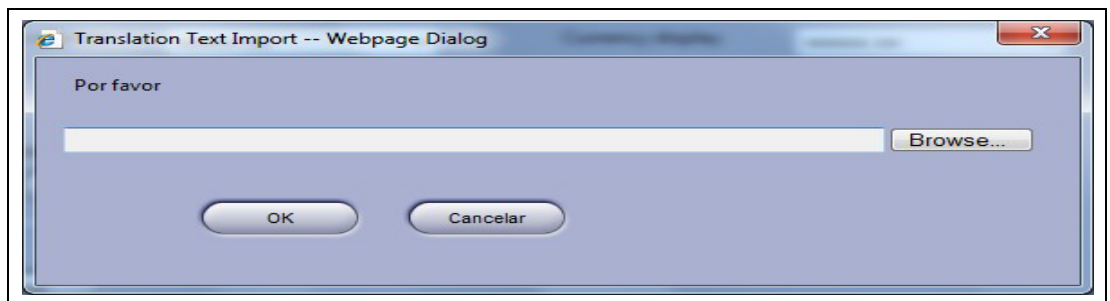
- 1 Click **Import Text** button. A warning message is displayed (see [Figure 119](#)).

Figure 119: Translation Text Import Warning Message



- 2 Click **OK** to proceed.
- 3 The Translation Text Import dialog box opens (see [Figure 120](#)).

Figure 120: Translation Text Import Dialog Box



- 4 Click **Browse** to select the XML file.
- 5 Click **OK** to start the import process.

6.10 Help

Currently not in use.

6.11 Exit

This button on the navigation bar closes the current window and enables the user to exit the Administration Application and return to the login screen.

7 – Fleet Management

7.1 General

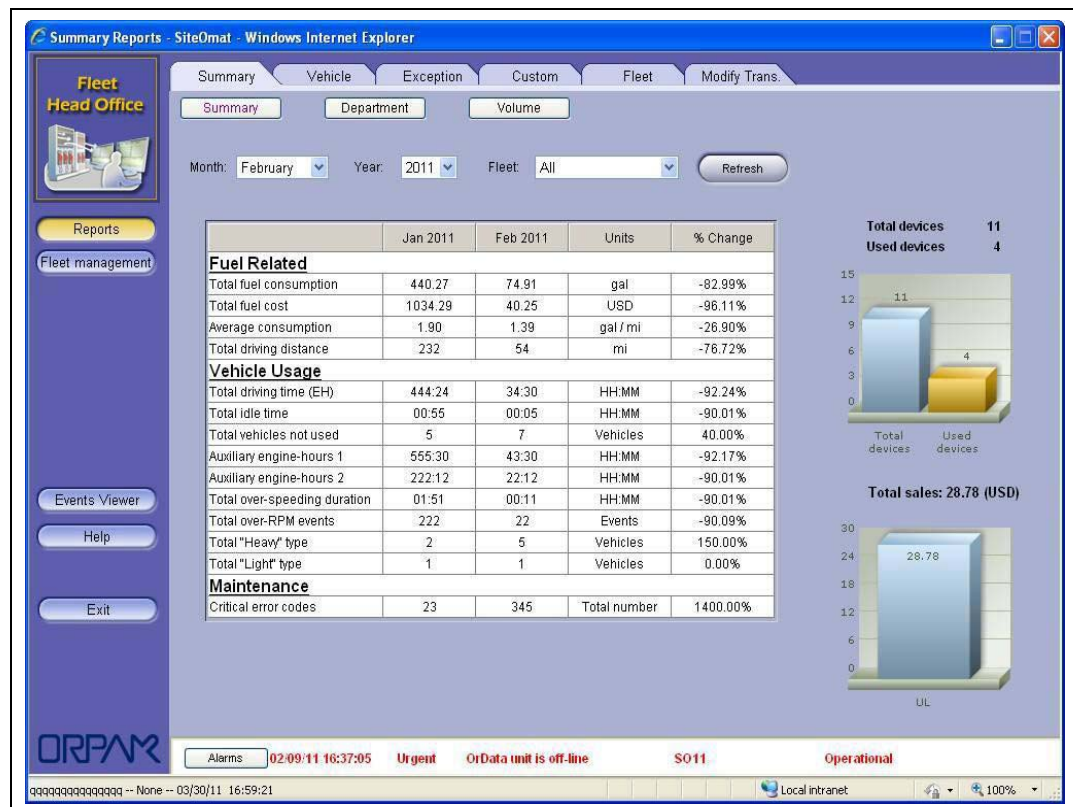
This section describes the fleet management process in the FHO System. This section should be used by both the FHO Administrator role, which creates the fleets and the vehicles associated with each fleet, and the Fleet Manager, whose role is to apply limits of various types to the fleet.

7.2 FHO Start Screen

After successful login as Fleet Manager, the main FHO screen opens (see [Figure 121](#)). The screen displays statistical data for the selected time range and the managed fleets. On the bottom of the screen the alarm status line exhibits the highest priority active alarm (usually in red).

In cases where an administrator enters the FHO, he views a different start screen which contains statistics about refuel usage in all fleets. See [Figure 166](#) on [page 175](#).

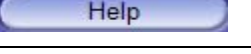
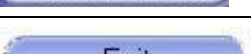
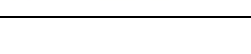
Figure 121: FHO System Start Screen (Fleet Manager)



7.3 Navigating Through The Fleet Head Office

Accessing the various capabilities of the FHO application is done using the Navigation Bar on the left-hand side of the window. The Navigation Bar appears throughout the FHO and contains buttons, which lead to the various windows of the application, within the boundaries of the user's access level. The objective of each button in the Navigation Bar is as follows (see [Table 23](#)):

Table 23: FHO Navigation Bar Buttons

Button	Description
	A report generator tool, which facilitates producing a wide variety of reports on the data in the FHO System.
	Enables managing the vehicle fleets, including: creating fleets, departments and devices, setting rules, creating group rules, etc.
	Enables viewing system warnings and logins.
	Currently not in use.
	Relevant for administrators only - Returns administrators to the Administration Opening Screen (see Figure 59 on page 55).
	Closes the current window and opens the login dialog box - Used for exiting the FHO Application.

Note: Not all navigation buttons are available to all users. For detailed information regarding the access levels and the content accessible to each level, refer to “[6.8.1 User Properties Screen](#)” on [page 106](#).

7.4 Fleet Management – Overview

7.4.1 Concept

Fleet Management is used to define fleets, departments, vehicles and rules. The level of access depends on the user definition:

- Administrators have full access
- Managers or users can only view or change their own controlled fleets. They cannot change the fleet credit.

7.4.2 Devices Definition

A device in the FHO system is a physical authorization device such as VIU (Vehicle Identification Unit), tag, key or magnetic card. A keypad entry is also a device. All devices are part of a department because a department is part of a fleet.

In order to refuel, an authentication device should be recognized by the SiteOmat. Once the reading and parsing of the device string are done, a search for a match is executed in the SiteOmat database. SiteOmat includes lists of fleets, and each fleet has a list of vehicles with their authentication devices.

A set of rules are set for each device to check if the device is allowed to fuel under the current conditions. Fleet lists (the vehicles) can work in two modes:

- Positive list (preferred method): Only vehicles found in the list can refuel and in addition, each vehicle must meet a set of rules.
- Negative list: All vehicles in this fleet can refuel except the ones that are in the negative list.

Positive/Negative lists apply only to the department level of a fleet, and not to the fleet itself. There can be only one department classified as a negative list in a fleet.

Each fleet has a set of rules that are defined as default rules for each vehicle. It is possible to change the rule per vehicle. If the fleet list is defined as negative, then the fleet rules are used for each vehicle that is not in the list. This allows global restrictions on a fleet without the need to set boundaries for each vehicle.

Rules templates are defined and can be used for fast and global definition of authorization. A fleet or vehicle can be set to comply with any of these rules templates. If the rule template is changed, it affects any device associated with it.

7.4.3 Workflow

Creating Models, Rules, and Group Rules are preliminary stages of setting fleet definitions. See paragraphs “[7.4.4 Programing Devices](#)” on [page 124](#) below for models and rules creation and paragraphs “[7.8 Managing Fleets](#)” on [page 143](#), “[7.9 Departments](#)” on [page 152](#), and “[7.10 Managing Devices \(Vehicles\)](#)” on [page 158](#) for fleet, department and devices definition respectively.

Define fleets, then departments, then rules, group rules and models, and finally the various devices.

A device pertains to a department which is part of a fleet. A new rule created for and imposed to a fleet is inherited by its new subordinate departments and therefore by the devices related to the department. The rule can be overridden at the lower levels (a specific Device/ Department can be defined oppositely to the fleet rule).

As the fleet management section serves both the Administrator and the Fleet Manager, each of the users should use it according to their needs and authorization level. For example, a fleet manager can only view or modify the fleet that he or she is authorized to manage.

Note: Rules and Group Rules created by the FHO Administrator are available for use by all the Fleet Managers (but may not be modified by Fleet Managers). A Fleet Manager can see only his or her Rules and Group Rules and those created by an FHO Administrator.

7.4.4 Programing Devices

7.4.4.1 Programming Vehicle Mounted Devices

There are two ways to program vehicle-mounted devices:

Automatic Card Number Feature (Recommended)

This feature enables you to easily add a vehicle-mounted device to the system. A newly programmed device will be allowed to refuel once, and then both the Vehicle No. and Card No. will be linked and added to FHO.

Proceed as follows:

- 1 Select the **Card number automatically generated** check box in the FHO (refer to “[6.4.1 General Tab](#)” on [page 57](#)).
- 2 Using the Wireless Programmer previously connected to the FHO (refer to “[Appendix C: WP Registration and Setup](#)” on [page 337](#)), install and program the Vehicle ID unit.
- 3 Refuel the vehicle. The device is automatically added to the system’s database after the first refuel.
- 4 In the Devices grid, locate and select the newly added device by the Vehicle No., click **Properties** and continue defining the remaining parameters (refer “[7.10.1 Creating a New Device](#)” on [page 159](#)).

Locally Acquiring Card Number in SiteOmat

You may use a SiteOmat controller connected to Fuel Point PLUS to acquire the card number, and then manually copying and pasting into the FHO database, as follows:

- 1 In the Local Management screen, select the **Devices** tab.
- 2 Click **New**.
- 3 In the General tab, select the **Vehicle mounted** radio button.
- 4 Attach the nNR to the vehicle-mounted device.
- 5 Select the **Format** tab, click **Acquire**. The card number is displayed.
- 6 Copy the card number and paste it in the **Card number** field when creating a new device in FHO

Note: Do not save the acquired card number in SiteOmat.

7.4.4.2 Programming Handheld Devices

There are two ways to program handheld devices:

Acquiring Card Number with the FHO Pod (Recommended)

This feature enables you to easily add a hand held device into the global FHO database. Proceed as follows:

- 1 In the General Setup screen select the Tag Acquiring check box (refer to [“6.4.1 General Tab”](#) on [page 57](#)).
- 2 Connect the FHO Pod to the system and set up the pod communication parameters (refer to *MDE-5076 FHO Pods User’s Manual*).
- 3 In the Local Management screen, select the **Devices** tab.
- 4 Click **New**.
- 5 In the General tab, select the **Hand held** radio button.
- 6 Select the **Format** tab, click **Acquire**. The card number is displayed.
- 7 Continue defining the remaining parameters (refer [“7.10.1 Creating a New Device”](#) on [page 159](#)).

Locally Acquiring Card Number in SiteOmat

You may use a SiteOmat controller connected to Fuel Point PLUS to acquire the card number, and then manually copying and pasting into the FHO database, as follows:

- 1** In the Local Management screen, select the **Devices** tab
- 2** Click **New**.
- 3** In the General tab, select the **Vehicle mounted** radio button.
- 4** Present the card/tag to the OPT.
- 5** Select the **Format** tab, click **Acquire**. The card number is displayed.
- 6** Copy the card number and paste it in the **Card number** field when creating a new device in FHO.

Note: Do not save the acquired card number in SiteOmat.

7.5 Defining Vehicle Models

7.5.1 General

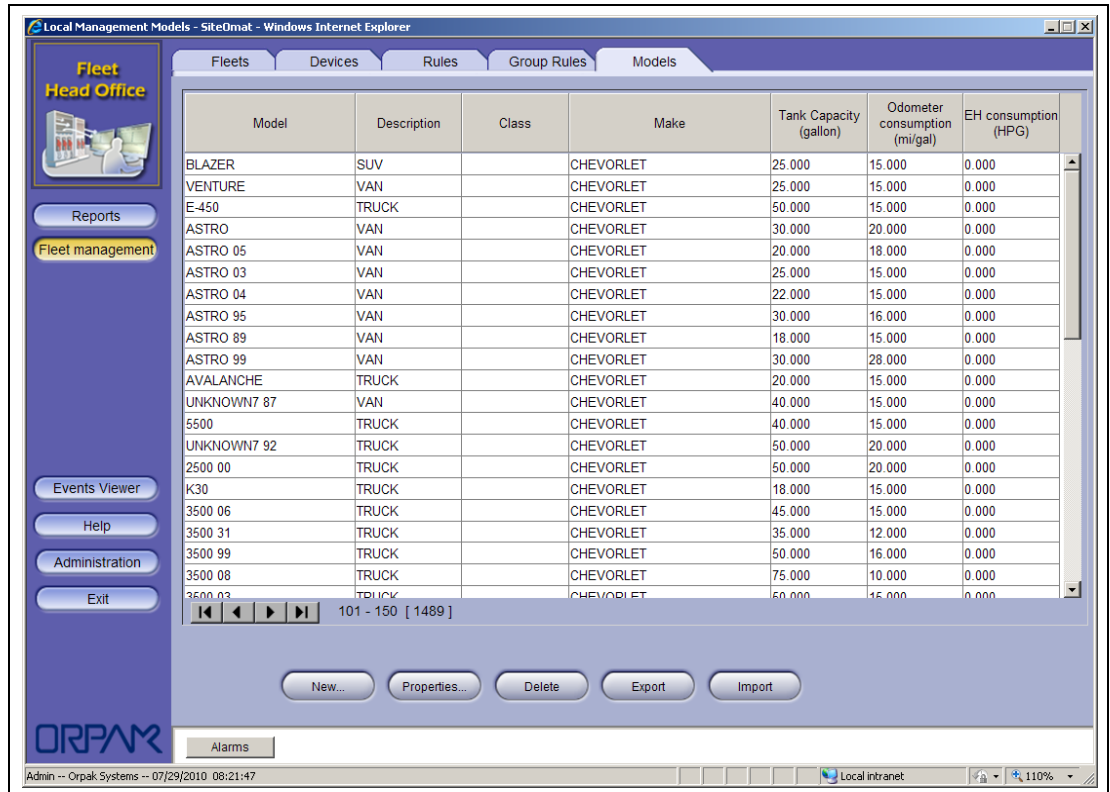
Defining vehicle models is not a mandatory stage in the vehicle management process, yet it is meant to ease the task of defining the vehicles at a later stage. When defining vehicle models, the type and manufacturer are provided. Also their tank capacity and standard fuel consumption are specified. Later, when defining a vehicle, selecting its model from a list automatically fills in this information.

7.5.2 Vehicle Models Screen

To open the Vehicle Model screen (see [Figure 122](#)):

- 1 Click the **Fleet Management** navigation button on the FHO start screen (see [Figure 121](#) on [page 121](#)).
- 2 Select the **Models** tab.

Figure 122: Local Management Models Main Screen



Note: The information in the figure above is for example purposes only and does not reflect the actual information of the specified vehicle models.

7.5.3 Defining a New Model

Unless models database was imported, the models grid is empty. To define a new vehicle model, proceed as follows:

- 1 Click **New** button.
- 2 The Model Properties dialog box is displayed (see [Figure 123](#)).

Figure 123: Model Properties Dialog Box

The screenshot shows a 'Model Properties' dialog box with the following fields and values:

- Make:** FORD
- Model:** ESCORT 94
- Description:** CAR
- Class:** (empty)
- Tank capacity:** 14.000 gallon
- Standard odometer consumption:** 15.000 mi/gal
- Standard EH consumption:** 0.000 GPH

Buttons at the bottom: OK & New, OK, Cancel.

Note: The information in the figure above is for example purposes only, and does not reflect the actual information of the specified vehicle models.

- 1 Fill in the model characteristics in the applicable fields (see [Table 24](#)). All fields are mandatory.

Table 24: Model Properties Fields

Field	Description
Make	Vehicle's manufacturer
Model	Vehicle's model
Description	General description
Class	Additional description
Tank Capacity	Vehicle's tank capacity
Standard Odometer Consumption	Vehicle's average fuel consumption
Standard EH Consumption	Vehicle's average fuel consumption per engine hour

- 2 Click **OK & New** to save the definition and define another model.
- 3 Click **OK** to save changes and close the dialog box, or **Cancel** to close the dialog box without saving the changes.

7.5.4 Modifying a Model Properties

The Local Management Models screen enables users to view/modify the model properties. Proceed as follows:

- 1 Select a model by double-clicking a row in the grid of the Local Management Models screen (see [Figure 122](#) on [page 127](#)); the Model Properties opens (see [Figure 123](#) on [page 128](#)).
- 2 Modify the model characteristics in the applicable fields.
- 3 Click **OK** to save changes and close the dialog box, or **Cancel** to close the dialog box without saving the changes.

7.5.5 Deleting a Model

To delete an existing vehicle model, proceed as follows:

- 1 Select a model by clicking a row in the grid of the Local Management Models screen (see [Figure 122](#) on [page 127](#)).
- 2 Click **Delete**.
- 3 The Delete procedure requires approval to implement the action.
- 4 Click **OK**.

7.6 Defining Rules

The rules, defined in the Fleet Management section, are the means by which the vehicle refueling is limited. The FHO System offers a comprehensive mechanism of limit definition. The Fleet Manager, by defining the rules, can set virtually any combination of rules.

The rules defined in this section are individual units, which, in effect, are not applied directly to a fleet/department/vehicle. Instead, once defining the rules, the fleet manager creates group rules (described in detail in paragraph 7.7) that consist of a number of rules. These group rules are then imposed on the fleet/department/vehicle to limit refueling.

To enter the Rules screen (see [Figure 124](#) on [page 130](#)), click Fleet Management navigation button, and select the Rules tab. As in other data-bound screens, the Rules main window consists of a grid listing the existing rules and several action buttons. Each row in the grid describes a rule name, type, description and the contents of the rule, as well as the fleet, for the Fleet Manager user.

The following rule types are available:

a Cluster: If the gas stations are bundled in clusters, this limit type defines in which clusters the vehicle may refuel.

b Time Range: Defines the days and times (within each day) during which the vehicle may refuel.

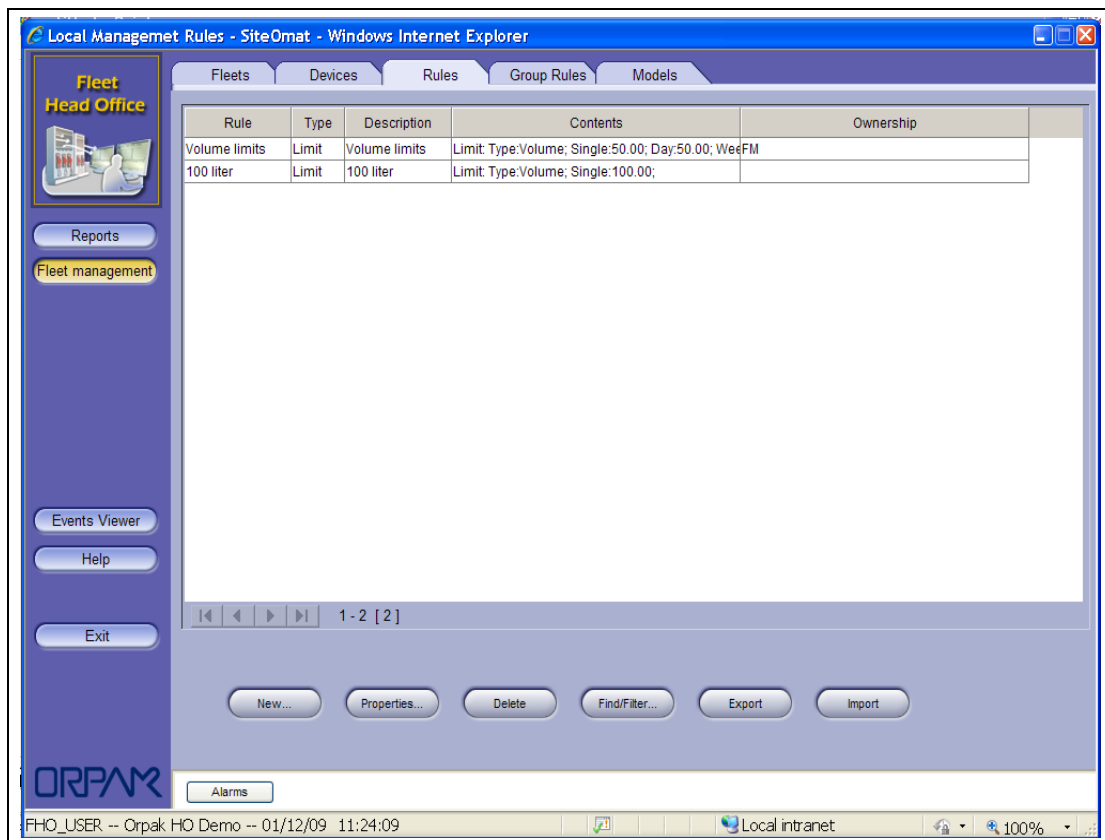
c Limits: Defines fuel limits per day/week/month/year, set in money/volume, for the device.

d Visits: Specifies the maximum number of visits to fuel stations allowed for the vehicle per day/week/month.

e Fuel: Limits the refueling vehicle to certain types of fuel.

Note: The Head Office Manager user may define general rules, which are available for all Fleet Manager Users to use. However, rules created by a Fleet Manager User are only available to him.

Figure 124: Rules Main Screen

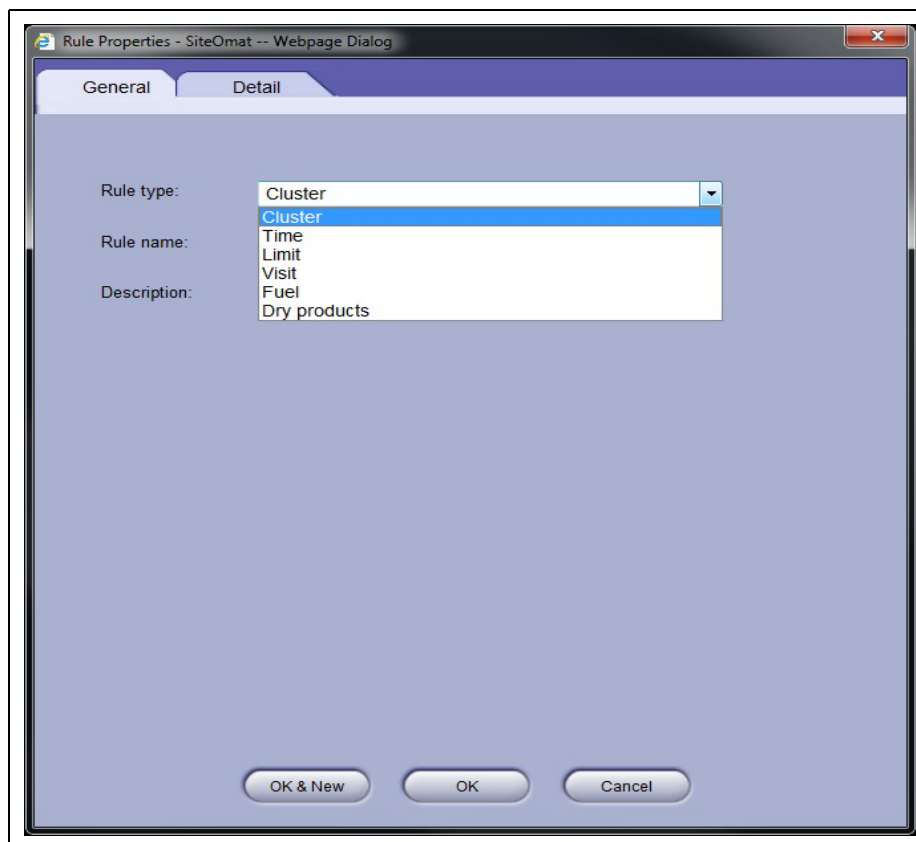


7.6.1 Creating a New Rule

To create a new rule, follow the instructions below:

- 1 Click the **New** button on the Local Management Rules screen.
- 2 The Rule Properties window opens (see [Figure 125](#)). The New Rule window consists of two tabs: **General** and **Detail**. While the General tab is fixed, the contents of the Detail tab changed depending upon the selected rule type.
- 3 Select the desired rule type from the list.
- 4 Enter a descriptive name and a description for the rule.
- 5 Select the **Detail** tab. The Detail tab for each rule type is described in the following paragraphs:
 - Cluster Rule - Refer to [“7.6.1.1 Cluster Rule”](#) on [page 132](#).
 - Time Range Rule - Refer to [“7.6.1.2 Time Range Rule”](#) on [page 133](#)
 - Limits Rule - Refer to [“7.6.1.3 Limits Rule”](#) on [page 134](#)
 - Visits Rule - Refer to [“7.6.1.4 Visits Rule”](#) on [page 136](#)
 - Fuel Rule - Refer to [“7.6.1.5 Fuel Rule”](#) on [page 137](#)
 - Dry Products - Refer to [“7.6.1.6 Dry Products Rule”](#) on [page 138](#)

Figure 125: Rule Properties Screen



7.6.1.1 Cluster Rule

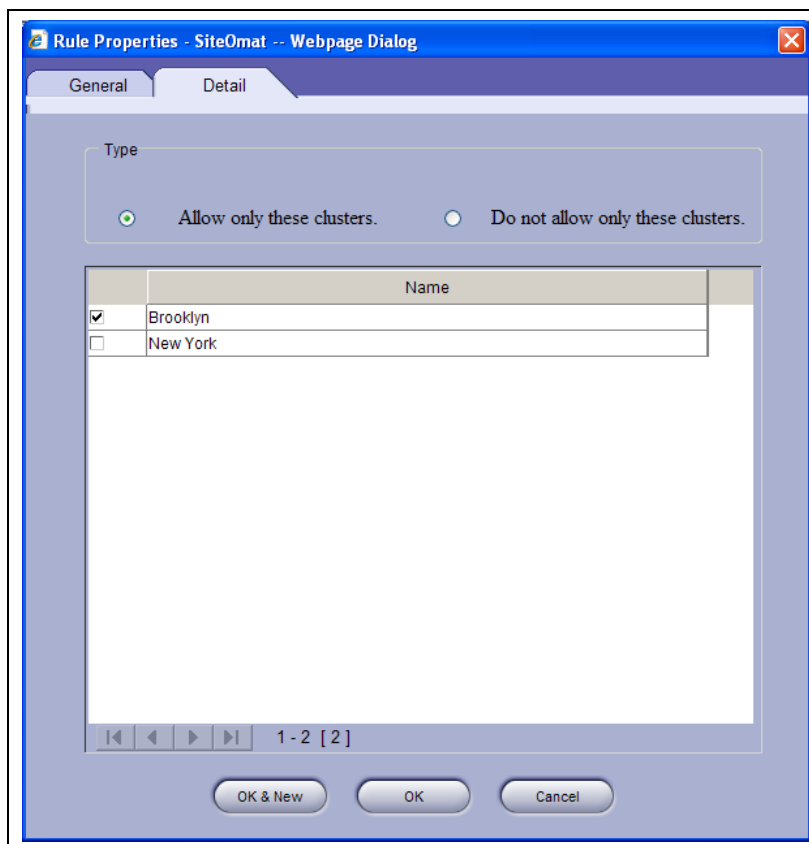
The Cluster rule is meant to restrict a fleet/department/vehicle to refuel (or not refuel) only in specific gas stations. As described in “6.6 Cluster Tab” on page 100, gas stations can be grouped together in clusters. By using the Cluster rule, the fleet manager limits refueling to specified clusters.

If the selected rule type in the Rule Properties screen (see Figure 125 on page 131) was Cluster, the Detail tab displays the information shown in Figure 126.

To define the Cluster rule:

- 1 Select whether to allow or to ban refueling in the station clusters to be selected.
- 2 Select the check box adjacent to the clusters in which refueling is to be allowed/disallowed.
- 3 Click **OK** to apply changes and close the window.

Figure 126: Cluster Rule Detail Tab



7.6.1.2 Time Range Rule

The Time Range rule is meant to limit vehicle refueling to specific days and periods during the day. By applying this rule to a vehicle, it can only refuel in the specified times.

If the selected rule type in the Rule Properties screen (see [Figure 125](#) on [page 131](#)) was Time Range, the Detail tab displays the information shown in [Figure 127](#).

Figure 127: Time Range Rule Detail Tab

Type	
☒	Allow fuelling only in selected day/time ranges
☐	Do not allow fuelling in selected day/time ranges.

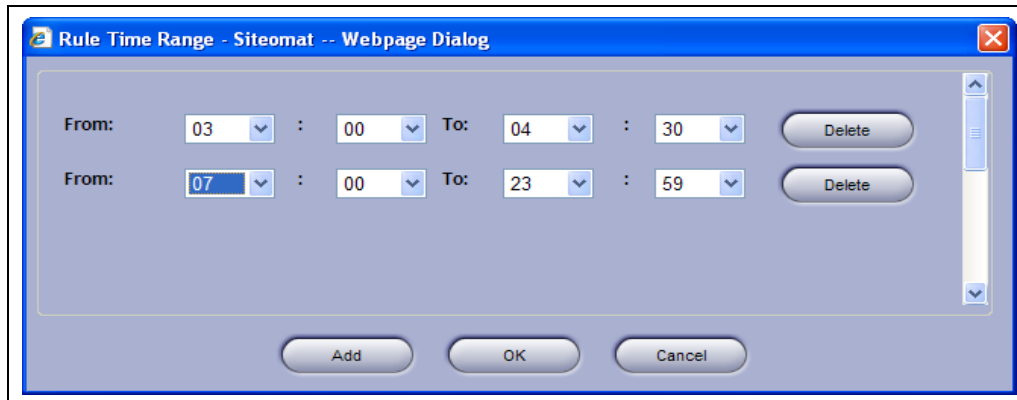
☒	Monday	Time	☐	Friday	Time
☒	Tuesday	Time	☐	Saturday	Time
☐	Wednesday	Time	☐	Sunday	Time
☐	Thursday	Time			

To define the Time Range rule:

- 1 Select whether to allow or ban refueling in the time ranges to be defined.
- 2 Select the check boxes adjacent to the days in which refueling is to be allowed/disallowed, or click **Set All** button to mark all days.
- 3 By default, selecting a certain day allows/disallows refueling during the entire day, from 00:00 to 23:59. To change the time within a certain day, click **Time** button adjacent to the day.
- 4 The Rule Time Range dialog box opens (see [Figure 128](#) on [page 134](#)).
- 5 Define the desired time range (from HH:MM to HH:MM).
- 6 Click **Add** to define another time range.
- 7 Clicking on the **Delete** button adjacent to a time range row deletes that time range.

- 8 Once defining all time ranges, click **OK** to save changes and close the window.
- 9 Repeats steps 3 to 8 for all the days in which the time ranges are to be defined.
- 10 Click **OK** to save changes and close the window.

Figure 128: Rule Time Range Dialog Box



7.6.1.3 Limits Rule

The Limits rule defines fuel limits per a single refuel or per day/week/month/year, set in money or in volume, for the fleet/department/vehicle.

If the selected rule type in the Rule Properties screen (see [Figure 125 on page 131](#)) was Limits, the Detail tab displays the information shown in [Figure 129 on page 135](#).

Note: The limits per day/week/month/year can only be applied to departments classified as positive lists. The reason is that a negative list restricts the devices associated to it ad-hoc, and does not reference any information, as the amount of credit used, regarding the devices. In Passport stations, the Volume limit is converted to Money limit. To define a Volume Limit Rule for a system connected to Passport, proceed as follows:

- 1) Associate the device to a Group Rule with Fuel Rule
- 2) Associate the Device to a fixed discount Price List (refer to [“7.10.1.2 New Device – Information Tab” on page 160](#)). The limit sent is the result of the following calculation $\text{Volume Limit} \times \text{Fixed Price List}$ Set the fixed price list accordingly. Note that in cases where more than one product was allowed, only the lowest fixed price will be used for calculating the limit for all products.

Figure 129: Limits Rule Detail Tab

Rule Properties - SiteOmat -- Webpage Dialog

General Detail

Single refuel:

Day amount:

Week amount:

Month amount:

Year amount:

☒ Money (Dollars)

☐ Volume (Gallon)

Note: Restrictions only apply to devices in Positive-list departments.

OK & New OK Cancel

To define the Limit rule:

- 1 In the Amount Type pane, select whether the limits to be defined refer to Money (American dollars) or to fuel Volume.
- 2 In the Single Refuel text box, enter a limit imposed per a single refuel.
- 3 In the Day Amount text box, enter a limit imposed per day.
- 4 In the Week Amount text box, enter a limit imposed per week.
- 5 In the Month Amount text box, enter a limit imposed per month.
- 6 In the **Year Amount** text box, enter a limit imposed per year. The day of the year on which the Year Limit begins is set in Administration → Setup → General (refer to “6.4.1 General Tab” on page 57).

Note: There is no need to enter limits in all the text boxes. It depends on the kind of limit to be applied. However, verify that the limits are entered in a logical way (for example, the day limit should be less than the week limit).

- 7 Click **OK** to save changes and close the window.

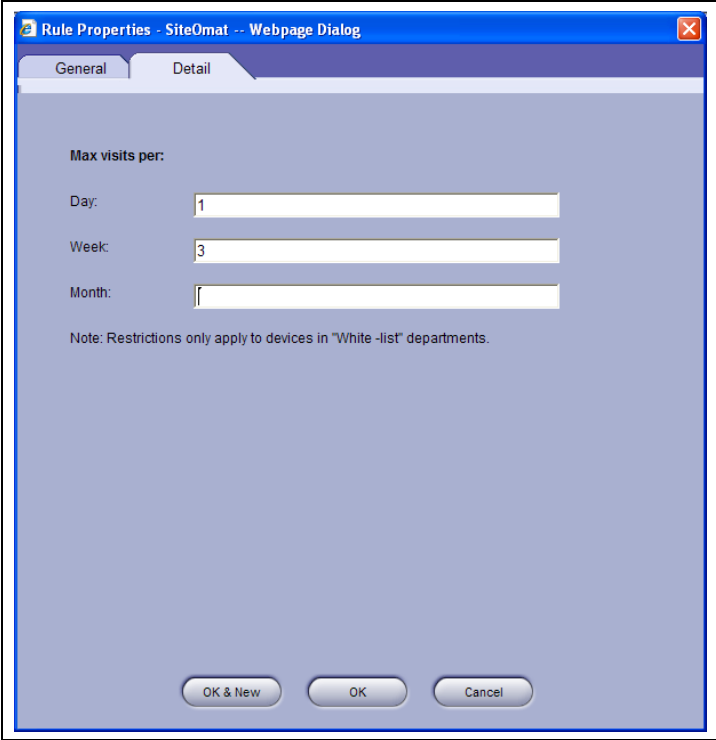
7.6.1.4 Visits Rule

The Visits rule is meant to limit a vehicle refuel in a given period of time. For example, a vehicle may be limited to refueling twice a day maximum.

If the selected rule type in the Rule Properties screen (see [Figure 125](#) on [page 131](#)) was Visits, the Detail tab displays the information shown in [Figure 130](#).

Note: The Visits rule can be applied only to departments classified as positive lists. The reason is that a negative list restricts the devices associated to it ad-hoc, and does not reference any information, as the number of past visits, regarding the devices.

Figure 130: Visits Rule Detail Tab



To define the Visits rule:

- 1 In the **Day** text box, enter the maximum visits allowed per day.
- 2 In the **Week** text box, enter the maximum visits allowed per week.
- 3 In the **Month** text box, enter the maximum visits allowed per month.
- 4 Click **OK** to apply changes and close the window.

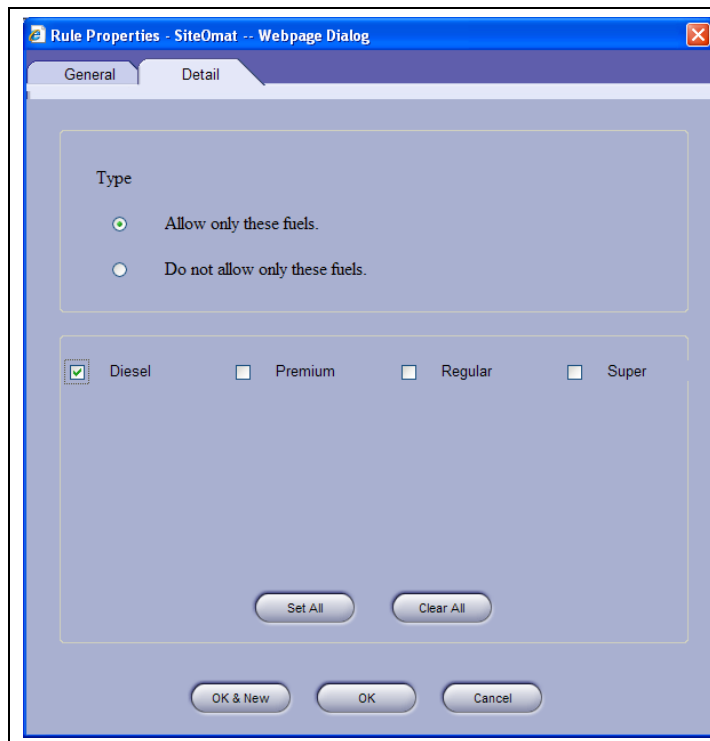
Note: There is no need to enter limits in all the text boxes. It depends on the kind of limit to be applied. However, verify that the limits are entered in a logical way (for example, the day limit should be less than the week limit). Error messages may appear when entering incorrect data.

7.6.1.5 Fuel Rule

The Fuel rule restricts the refueling vehicle to certain types of fuel. This is a helpful rule to prevent drivers from refueling with unsuitable fuel types.

If the selected rule type in the Rule Properties screen (see [Figure 125](#) on [page 131](#)) was Fuel, the Detail tab displays the information shown in [Figure 131](#).

Figure 131: Fuel Rule Detail Tab



To define the Fuel rule:

- 1 Select whether to allow or disallow the specified fuel types.
- 2 The lower section includes all the fuel types defined in the FHO database. Select the check boxes adjacent to the fuel types that are to be allowed/disallowed, or click Set All to select all check boxes.
- 3 Click **OK** to apply changes and close the window.

7.6.1.6 Dry Products Rule

The Dry Products rule allows the device to purchase specific dry goods.

If the selected rule type in the Rule Properties screen (see [Figure 125](#) on [page 131](#)) was Dry Products, the Detail tab displays the information shown in [Figure 132](#).

Figure 132: Dry Products Rule Detail Tab

	Name	Code
☐	Bottled Propane	303
☐	Brake Fluid	108
☒	Brake Service	124
☐	Bread - Packaged	474
☐	Call Out Fee	188
☒	Car Wash	102
☐	Cargo Handling	195
☐	Cash Back	955
☐	Cash Back Fee	956
☐	Catering	185
☐	Charter Fee	192
☒	Cigarettes	411
☐	Cold Dispensed Beverages	432
☐	Communication Fee	193
☐	Coupon 1	905
☐	Coupon 2	906
☐	Coupon 3	907

To define the Dry Products rule:

- 1 Select whether to allow or disallow the specified products.
- 2 The grid includes all the dry products defined in FHO database. Select the check boxes next to the goods that are to be allowed/disallowed (up to 20 items may be selected).
- 3 Click **OK** to apply changes and close the dialog box.

7.6.2 Rule Properties

Clicking on the Properties button in the Local Management Rules screen opens a window identical to the one described in “7.6.1 Creating a New Rule” on page 131, and enables you to modify the information previously entered.

7.6.3 Deleting a Rule

To delete an existing rule, perform the following instructions:

- 1 Click a row in the Local Management Rules screen to select the rule to be deleted.
- 2 Click **Delete** button.
- 3 The Delete procedure requires approval to implement the action.
- 4 Click **OK**.

Note: The type of a rule may be changed if it is not part of any group rule. Whenever a rule is changed, the user is prompted. A rule may not be deleted while being part of a group rule. Any part of a rule may be changed (including its name) and the group rules that include it automatically reflect the change.

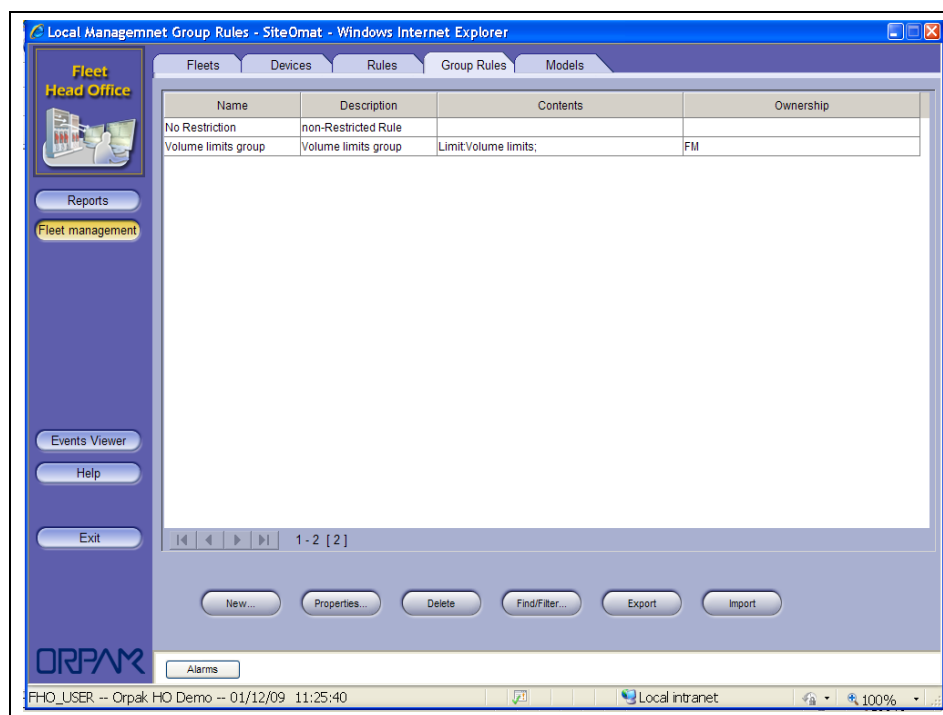
7.7 Creating Group Rules

As previously described, after the basic rules are defined, they must then be grouped into group rules. The fleet manager applies these group rules to fleets/departments/vehicles.

To enter the Group Rules screen (see [Figure 133](#)), click Fleet Management button and then select the Group Rules tab. The Group Rules main window consists of a grid listing the existing rules and several action buttons. Each row in the grid describes a group rule name, type, description, and the contents of the group rule.

Note: The Fleet Head Office Administrator user may define general group rules, which are available for all Fleet Manager Users to use. However, group rules created by a Fleet Manager User are only available to that user. When working with Passport stations, the number of products in a Group Rule that combines Fuel and Dry Product rules should not exceed 20 products.

Figure 133: Group Rules Screen

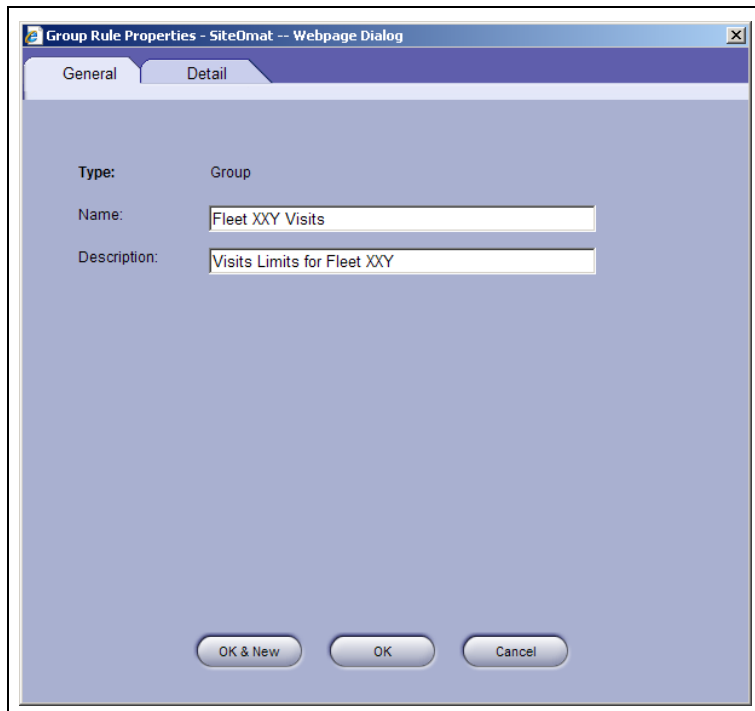


7.7.1 Creating a New Group Rule

To create a new group rule, follow the instructions below:

- 1 In the Group Rules screen, click **New** button.
- 2 The Group Rule Properties dialog box opens (see [Figure 134](#)).
- 3 In the General tab, enter a name and description for the group rule.

Figure 134: Group Rule Properties – General Tab

The screenshot shows a web-based dialog box titled "Group Rule Properties - SiteOmat -- Webpage Dialog". It has two tabs: "General" and "Detail". The "General" tab is active. Inside the dialog, there are three labels: "Type:", "Name:", and "Description:". The "Type:" label is followed by the text "Group". The "Name:" label is followed by a text input field containing the text "Fleet XXY Visits". The "Description:" label is followed by a text input field containing the text "Visits Limits for Fleet XXY". At the bottom of the dialog, there are three buttons: "OK & New", "OK", and "Cancel".

- 4 Select the Detail tab.
- 5 In the Detail window (see [Figure 135](#)), select the rules to be included in the Group Rule, out of the defined rules (one rule of each type maximum).

Note: There is no need to enter limits in all the text boxes. It depends on the kind of limit to be applied. However, at least one rule must be defined.

- 6 Click **OK** to save changes and close the window.

Figure 135: Group Rule Properties – Detail Tab

Group Rule Properties - SiteOmat -- Webpage Dialog

General Detail

Select the rule that will be used for default rule definition.

Clusters: No Restriction

Time range: No Restriction

Limits: No Restriction

Visits: Visit_Test

Fuel: OnlyDiesel

OK & New OK Cancel

7.7.2 Group Rules Properties

Clicking on the **Properties** button on the Group Rules screen opens a window identical to the one described in “[7.7.1 Creating a New Group Rule](#)” on [page 141](#), and enables to modify the information previously entered.

7.7.3 Deleting a Group Rule

To delete an existing group rule, perform the following instructions:

- 1 Click a row in the Group Rule screen to select the group rule to be deleted.
- 2 Click **Delete** button.
- 3 The Delete procedure requires approval to implement the action.
- 4 Click **OK**.

Note: A Group Rule may not be deleted while referenced by a fleet, department or a device (vehicle).

7.8 Managing Fleets

7.8.1 General

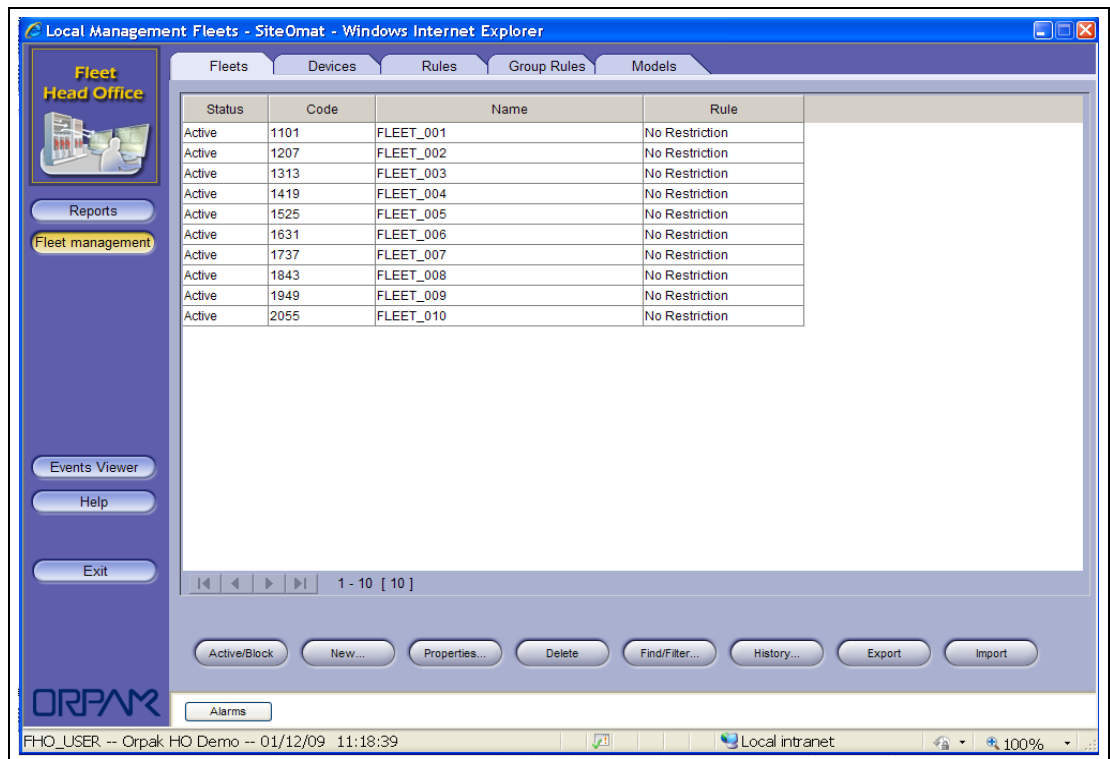
The fleet management task is divided into two subtasks, each performed by a different type of user:

- a** Creating and modifying fleets - the creation of a fleet can be performed only by the FHO Administrator.
- b** Setting Rules for a fleet - defining rules (limits) for the fleet departments and vehicles can be done by the Administrator or the Fleet Manager.

To enter the Fleets main screen (see [Figure 136](#)):

- Click **Fleet Management** button in the navigation bar.
- In the Fleet Management section, select the **Fleets** tab.

Figure 136: Local Management Fleets Screen



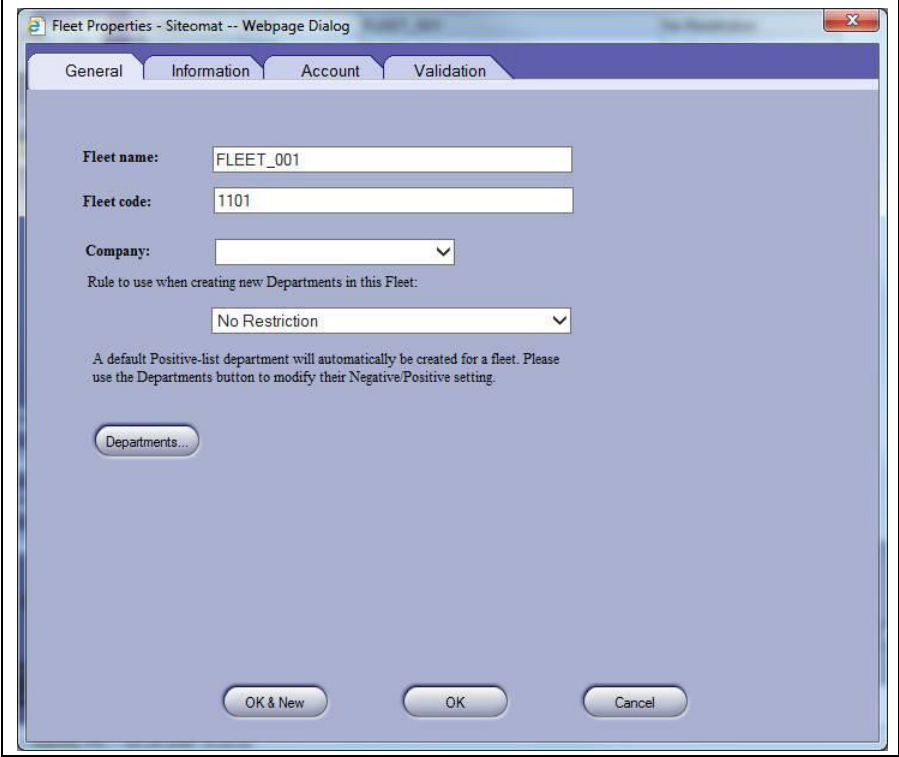
The grid in the Fleets main screen lists the fleets authorized for the user logged-on, including the fleet status (active/blocked), code, name and the group rule applied to the fleet (if applicable).

7.8.2 Creating a New Fleet

As mentioned above, only the FHO Administrator may create a new fleet. To create a new fleet, proceed as follows:

- 1 Click **New** button in the Fleets main window.
- 2 The Fleet Properties dialog box opens (see [Figure 137](#)).

Figure 137: Fleet Properties Dialog Box – General Tab



The screenshot shows a dialog box titled "Fleet Properties - Siteomat -- Webpage Dialog". It has four tabs: "General", "Information", "Account", and "Validation". The "General" tab is selected. The form contains the following fields and controls:

- Fleet name:** A text box containing "FLEET_001".
- Fleet code:** A text box containing "1101".
- Company:** A dropdown menu with a downward arrow.
- Rule to use when creating new Departments in this Fleet:** A dropdown menu with "No Restriction" selected.
- A text box with the following text: "A default Positive-list department will automatically be created for a fleet. Please use the Departments button to modify their Negative/Positive setting."
- A button labeled "Departments..." (note the spelling).
- At the bottom, there are three buttons: "OK & New", "OK", and "Cancel".

- 3 The Fleet Properties window is divided into four tabs: General, Information, Account and Validation, each containing a different set of parameters.

7.8.3 New Fleet – General Tab

Proceed as follows:

- 1 Fill in the following information in the applicable fields:
 - a Fleet Name: A name identifying the fleet (String 80).
 - b Fleet Code: A numeric code identifying the fleet (Integer 8) Fleet code and name must be unique in the Head Office. Otherwise, a fail message is displayed (see [Figure 138](#) on [page 146](#)).
- 2 (Optional – if managing multiple companies only) In the Company list, select the company that you'd like to link to the fleet from the list of companies that you've previously defined (refer to “[6.4.1.3 Defining AVL Server](#)” on [page 63](#)).
- 3 Select a Rule to use (from the drop-down list): A rule applies to a Department and applies to the entire fleet by default. This rule is used when defining a new department (as the default rule). This is not the rule applied at runtime to fleets or devices.
- 4 Click **OK & New** to save the information on the new fleet without closing the window. Creating departments is not allowed until saving the new fleet's information.
- 5 Click **OK** in cases where the attributes of an existing fleet have been modified.
- 6 Click **Departments** button to define the fleet departments (refer to “[7.9 Departments](#)” on [page 152](#)).

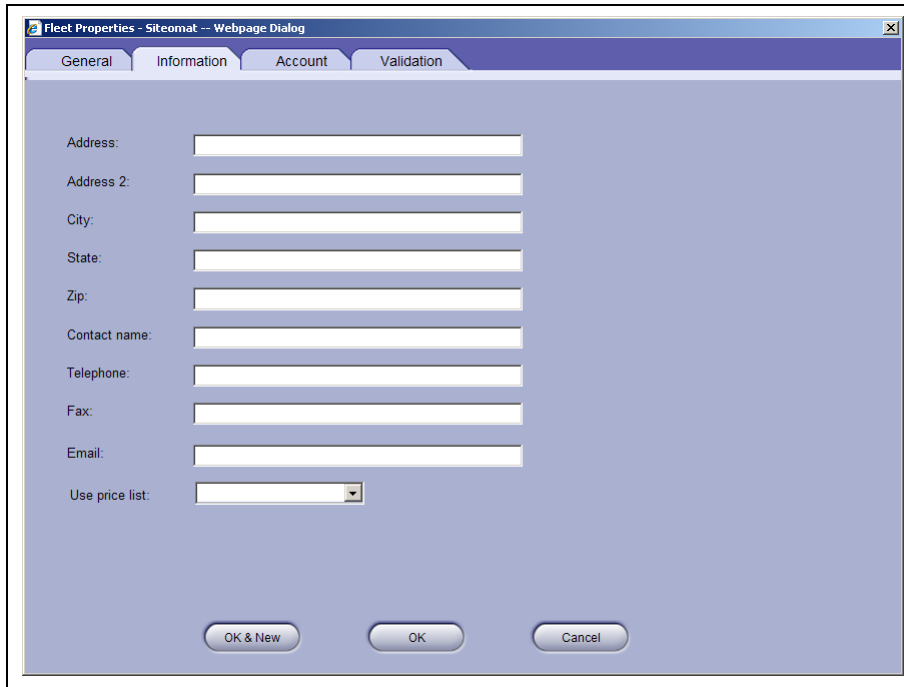
Note: A default department is automatically created for a fleet once the fleet is created.

7.8.4 New Fleet – Information Tab

Select the Information tab to add descriptive information to the fleet (see [Figure 138](#)). Enter the fleet general information in the applicable fields.

Utilize the Use price list to associate the fleet to a previously defined discount list (see “[6.4.6 Price Lists](#)” on [page 77](#)).

Figure 138: Fleet Properties – Information Tab

The image shows a web-based dialog box titled "Fleet Properties - Siteomat -- Webpage Dialog". It has four tabs: "General", "Information", "Account", and "Validation". The "Information" tab is currently selected. The form contains several input fields: "Address:", "Address 2:", "City:", "State:", "Zip:", "Contact name:", "Telephone:", "Fax:", "Email:", and "Use price list:". The "Use price list:" field is a dropdown menu. At the bottom of the dialog, there are three buttons: "OK & New", "OK", and "Cancel".

7.8.5 New Fleet – Account Tab

To display the Account screen for a new or existing fleet, select the Account tab on the Fleet Properties screen (see [Figure 137](#) on [page 144](#)). The Account screen opens (see [Figure 139](#) on [page 147](#)). It contains the following sections, intended to set all the fleet account information:

- Enable Account Limits: Select this check box to enable account limits for the fleet.
- Credit Limitations: Set a Line of credit and Minimum Balance (for information only) (essentially to show and record high and low limits. Limits are not set in these fields.)
- Set Credit Details as follows:

a Last value added: the value entered in the previous credit update.

b Last balance: the credit balance from the previous update.

c Current balance: the actual balance on the fleet's account before the current update.

d Pending Transactions: the total sum of transactions not yet calculated in the balance.

e New Balance: the balance that is calculated with combination of the current balance, the new value, and the button selected (In the example, Add to Balance was selected so $620+120=740$).

There are three possible operations related to the New Value:

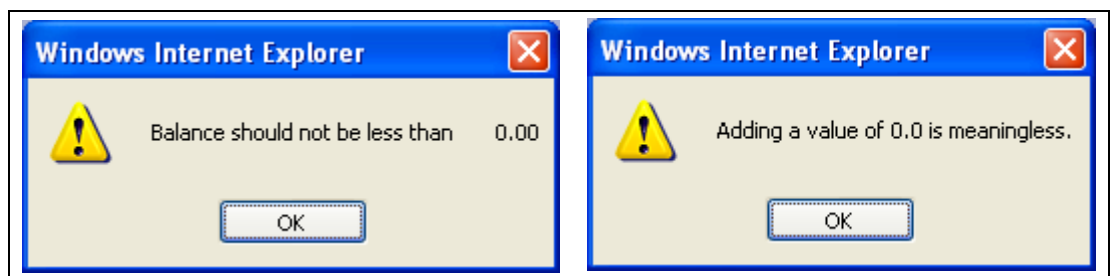
- Set balance – Replaces the Current Balance with the New Value The OK button must be selected to update balance and save changes.
- Add to Balance – Adds the New Value to the Current Balance The OK button must be selected to update balance and save changes.
- Withdraw from Balance – Subtract the New Value from the Current Balance. Click OK to update balance and save changes.

f Reference Number: An auto generated ID to be used as reference for the current operation.

The following warning messages may appear, when executing operations within the New Balance fields (see [Figure 140](#)).

Figure 139: Fleet Properties Screen – Account Tab

Figure 140: Fleet Properties – Account Tab - Wrong Value Message



7.8.6 New Fleet – Validation Tab

The validation tab is used to define the attributes allowing fueling by the vehicle's department when checking in the OrPT (Orpak Outdoor Payment Terminal) unit (see [Figure 140](#) on [page 147](#)). Click relevant check boxes to define the validation information in the applicable fields.

a Pin Code: If checked, the driver is required to enter a PIN after presenting or swiping a fueling tag/card. The two optional radio buttons: From authorization mean or Use value from DB define the storage location of the PIN for validation control. In the first option, the number is stored on the card and in the second option in the system DB. The driver can be allowed to retry several times (numeric integer), after which two options can be defined: the device is blocked and cannot be used any more (should be unblocked by an administrator), or the refueling is authorized even after PIN validation failure.

b Odometer: If checked, the driver is required to insert odometer reading. This is valid only for devices that do not have odometer reading (VIUs). If reasonability check is required, then the Max delta allowed (numeric integer) from previous value is checked. The driver can be allowed to retry several times (numeric integer) to input the correct odometer, according to the defined number of Retries. Unless Reject Fueling if check fails is enabled, fueling is still authorized even if it fails reasonability, in this case the system generates an event on the Event Viewer screen (refer to [“13.2 Event Viewer”](#) on [page 299](#)): Wrong odometer entered that also informs about the OPT from which the transaction was executed.

c Engine Hours: Select to prompt the driver to enter engine hours:
Select Reasonability check to compare between last and current value and enter Max delta allowed (numeric integer). Set the number of Retries that the driver is allowed.
Select Reject fueling if check fails to decline transaction if the driver exceeds the number of retries.

d Vehicle Number: If this option is checked, the driver is required to enter the vehicle number on the OPT. The entered value must match the vehicle number defined for the specific device in the database. This number is not saved in the transaction record.

e Prompt for additional fields on OrPT for all transaction types: If checked, the system requests the defined validation parameters also for vehicle mounted devices, which otherwise start the transaction without driver interaction with the payment terminal. By default (check box unmarked), the system prompts the driver only if the transaction started from OrPT.
This feature is mainly intended for vehicles equipped with FuelOpass only.

Figure 141: Fleet Properties – Validation Tab

Fleet Properties - Siteomat -- Webpage Dialog

General Information Account **Validation**

Enable validation fields that require user input from OrPT

☐ PIN code

☒ From authorization mean
☐ Use value from DB

Retries:

☐ Block if all retries failed

☐ Engine Hours

☐ Reasonability check

Max delta allowed: hrs

Retries:

☐ Reject fueling if check fails

☐ Odometer

☒ Reasonability check

Max delta allowed: Mi

Retries:

☐ Reject fueling if check fails

☐ Ask for vehicle number and verify with database value

☐ Prompt for additional fields on OrPT for all transaction types

OK & New OK Cancel

7.8.7 Fleet Functional Buttons

The Local Management Fleets screen (see [Figure 137](#) on [page 144](#)) includes additional features that can be activated by clicking the relevant button located on the bottom part of the screen.

These include:

- a** Active/Block (refer to [“7.8.7.1 Changing a Fleet’s Status \(Active/Block\)”](#) on [page 150](#))
- b** Properties (refer to [“7.8.7.2 Fleet Properties”](#) on [page 150](#))
- c** Delete (refer to [“7.8.7.3 Deleting a Fleet”](#) on [page 150](#))
- d** Find/Filter (refer to [“7.8.7.4 Finding a Fleet”](#) on [page 151](#))
- e** History (refer to [“7.8.7.5 History of a Fleet”](#) on [page 151](#))
- f** Export: Exports data on fleets from the FHO database. The data is written to CSV file that can be stored on local PCs.
- g** Import: Imports data on fleets to the FHO database. This feature enables users to fill in the new fleet attributes in the CSV file from a similar, existing fleet without necessitating a complete new definition. Clicking on the Import button opens a browsing screen that allows the user to search for CSV files. (Refer to Appendix B for more details.)

7.8.7.1 Changing a Fleet's Status (Active/Block)

A fleet can be either in:

- Active status: meaning that its vehicles/departments are allowed to refuel (within the defined limits), or in
- Blocked status: namely all its vehicles/departments are denied automatic refueling

To toggle between Active status and Block status of a fleet:

- 1 Click row of the applicable fleet in the grid (see [Figure 137](#) on [page 144](#)).
- 2 Click Active/Block... button.
- 3 The status of the selected fleet is changed.

7.8.7.2 Fleet Properties

This feature enables to modify the attributes of an existing fleet. Proceed as follows:

- 1 Click Properties button on the Local Management Fleets screen (see [Figure 137](#) on [page 144](#)) to open a window identical to the one described in “7.8.2 Creating a New Fleet” on [page 144](#) (see [Figure 138](#) on [page 146](#)).
- 2 Proceed as defined for a new fleet.
- 3 Click **OK** to save the changes.

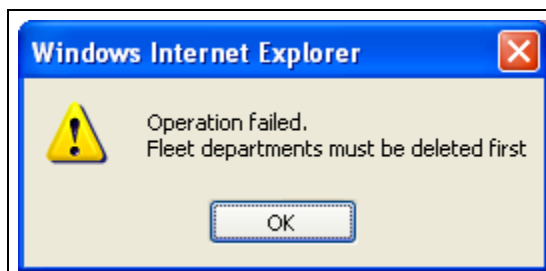
7.8.7.3 Deleting a Fleet

To delete an existing fleet, perform the following procedure:

- 1 Click a row in the fleet grid to select the fleet to be deleted (see [Figure 137](#) on [page 144](#)).
- 2 Click **Delete** button.
- 3 The Delete procedure requires approval to implement the action.
- 4 Click OK.

Note: Deletion of a fleet can be performed only if all its departments are deleted (see [Figure 142](#)).

Figure 142: Deleting a Fleet – Departments Delete Warning Message



7.8.7.4 Finding a Fleet

When the FHO is running, there may be several fleets. The user may either:

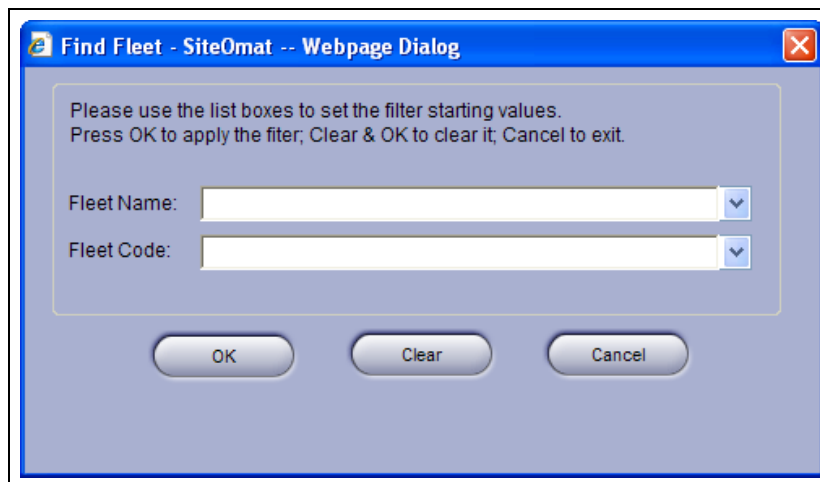
- Look for (Find) a fleet or
- Limit the attributes of the displayed list (Filter)

To find a fleet or filter the list:

- 1 Click Find/Filter button in the fleet grid (see [Figure 137](#) on [page 144](#)). The Find Fleet dialog box is displayed (see [Figure 143](#)).
- 2 Define the search criteria by selecting a name from the drop-down menu.
- 3 Define the search criteria by selecting a code from the drop-down menu.
- 4 Click **OK** to activate the search/filter, or Click **Clear** to erase the current selection and start the selection process again.

The results are displayed in the fleet grid (see [Figure 137](#) on [page 144](#)).

Figure 143: Find Fleet Dialog Box



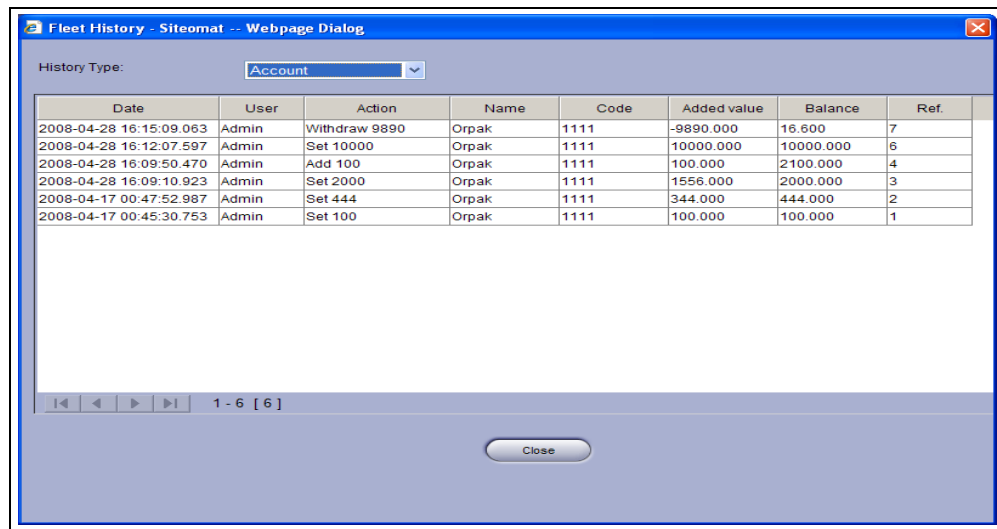
7.8.7.5 History of a Fleet

The History button enables users to display the operations performed by the fleet. The current account operations are also supported.

To display the history of a fleet, perform the following instructions:

- 1 Click a row in the fleet grid (see [Figure 137](#) on [page 144](#)) to select the requested fleet.
- 2 Click History button.
- 3 The Fleet History dialog box opens (see [Figure 144](#) on [page 152](#)). It displays a list of actions along with the following data: Date, User, Name, Code, Added Value, Balance, and Reference Number.

Figure 144: Fleet History Dialog Box



7.8.8 Saving a Fleet Definition

Once the user has entered all the attributes to a new or to an existing fleet, the Fleets dialog box (see [Figure 138](#) on [page 146](#)) enables the user to save the data. Proceed as follows:

- 1 Click **OK & New** to save the information on the new fleet and to open a window to create a new fleet.
- 2 Click **OK** in cases where the attributes of an existing fleet have been modified.

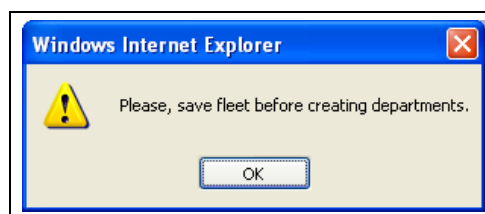
7.9 Departments

7.9.1 General

A department is a sub-division of the fleet. This hierarchy enables defining limits more easily. For example, vehicles pertaining to the management are likely to have different limits than vehicles of the sales agents. By creating departments, the fleet manager can apply limits to a department instead of to each vehicle separately.

Consequently, a fleet must have at least one department. FHO automatically creates a default department when you create a new fleet. Therefore, before defining or modifying departments, you need to save the fleet. Otherwise, a fail message is displayed (see [Figure 145](#)).

Figure 145: Department Definition – Error Message

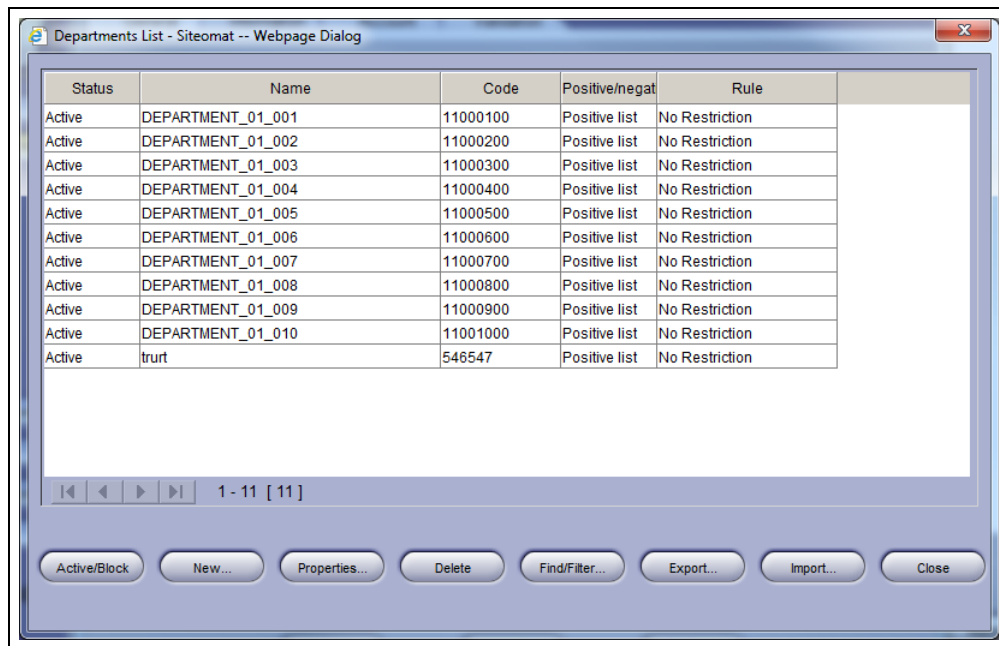


7.9.1.1 Displaying the Departments List Dialog Box

To display the Departments dialog box (see [Figure 147](#) on [page 154](#)).

- 1 Verify that the fleet has been created.
- 2 Click the **Departments** in the Fleet Properties window (see [Figure 138](#) on [page 146](#)).

Figure 146: Departments Dialog Box



7.9.2 Adding a New Department

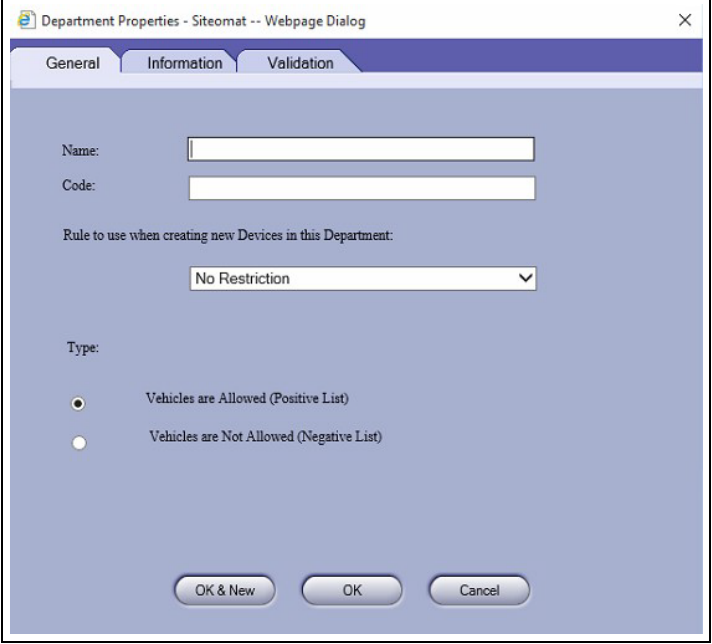
To add a new department, proceed as follows:

- 1 Click **New** in the Departments dialog box.
- 2 The Department Properties dialog box opens (see [Figure 147](#) on [page 154](#)). The New Department dialog box includes three tabs: General, Information, and Validation.

7.9.3 New Department – General Tab

Proceed as follows:

Figure 147: Department Properties Dialog Box – General Tab



The screenshot shows a web-based dialog box titled "Department Properties - Siteomat -- Webpage Dialog". It has three tabs: "General", "Information", and "Validation". The "General" tab is selected. The dialog contains the following fields and controls:

- Name:** A text input field.
- Code:** A text input field.
- Rule to use when creating new Devices in this Department:** A drop-down menu with "No Restriction" selected.
- Type:** Two radio buttons:
 - ☒ Vehicles are Allowed (Positive List)
 - ☐ Vehicles are Not Allowed (Negative List)
- Buttons:** "OK & New", "OK", and "Cancel" at the bottom.

- 1 Fill in the following information in the applicable fields:

a Name: Name identifying the department.

b Code: Numeral code identifying the department.

c Rule: Group rule, which applies to the entire department by default.

Select a Rule to use (from the drop-down list): The rule is applied to the entire Department, by default.

- 2 Type: Sets whether the department vehicles are allowed to refuel (pertaining to a positive list) or not allowed to refuel (negative list).

Note: A maximum of one department can be classified as a negative list in a fleet. Once a department has been included on a (negative list, if users want to return that department to a positive list, the department must be deleted and re-entered.

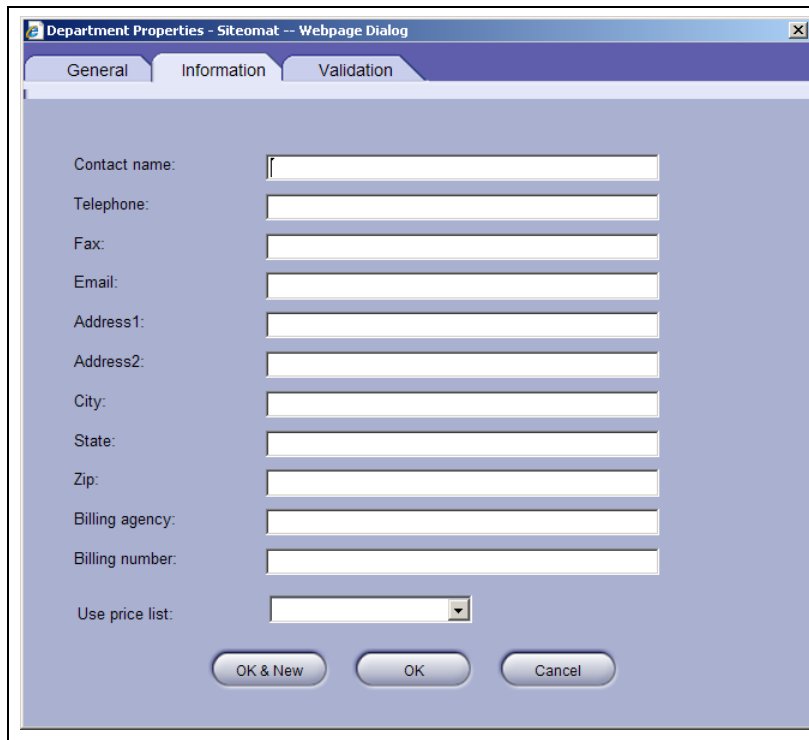
7.9.4 New Department – Information Tab

Click **Information** tab to add descriptive information to the department (see [Figure 148](#)).

Enter the department general information in the applicable fields. Billing agency and Billing number are used when working with any billing system.

Utilize the Use price list to associate the department to a previously defined discount list (see [“6.4.6 Price Lists”](#) on [page 77](#)).

Figure 148: Department Properties Dialog Box – Information Tab

The image shows a screenshot of a web-based dialog box titled "Department Properties - Siteomat -- Webpage Dialog". It has three tabs: "General", "Information", and "Validation". The "Information" tab is currently selected. The dialog box contains several input fields for contact and address information, followed by billing-related fields and a price list selection. At the bottom, there are three buttons: "OK & New", "OK", and "Cancel".

Contact name:	
Telephone:	
Fax:	
Email:	
Address1:	
Address2:	
City:	
State:	
Zip:	
Billing agency:	
Billing number:	
Use price list:	

7.9.5 New Department – Validation Tab

This screen is similar to the Validation Tab shown in [Figure 141](#) on [page 149](#). Select on the relevant check boxes to define the validation information in the applicable fields. For a full description of each setting, refer to the validation section in fleet setup for the field's details refer to [“7.8.6 New Fleet – Validation Tab”](#) on [page 148](#)).

7.9.6 Department Functional Buttons

The Department List dialog box (see [Figure 146 on page 153](#)) contains additional features that can be activated by clicking on the relevant button located on the bottom part of the screen.

These include:

- a** Active/Block (refer to “[7.9.6.1 Changing a Department’s Status \(Active/Block\)](#)” on [page 156](#))
- b** New (refer to “[7.9.2 Adding a New Department](#)” on [page 153](#))
- c** Properties (refer to “[7.9.6.2 Department Properties](#)” on [page 156](#))
- d** Delete (refer to “[7.9.6.3 Deleting a Department](#)” on [page 157](#))
- e** Find/Filter (refer to “[7.9.6.4 Finding a Department](#)” on [page 157](#))
- f** Export: Exports data on departments from the FHO database. The data is written to a CSV file that can be stored on local PCs.
- g** Import: Imports data on departments to the FHO database. This feature enables users to fill in the new department attributes from a similar, existing department without necessitating a complete new definition. Clicking on the Import button opens a browsing screen that allows the user to search for CSV files.
- h** Close: Closes the current Department screen without saving changes.

7.9.6.1 Changing a Department’s Status (Active/Block)

A department can be in either status:

- Active status: Vehicles in the department are allowed to refuel (within the defined limits).
- Blocked status: All vehicles in the department are denied automatic refueling.

To toggle between Active status and Block status of a department:

- 1 Click row of the applicable department in the grid (see [Figure 146 on page 153](#)).
- 2 Click Active/Block button.
- 3 The status of the selected department is changed.

7.9.6.2 Department Properties

This feature enables users to modify the attributes of an existing department. Proceed as follows:

- 1 Click Properties button in the Departments dialog box (see [Figure 146 on page 153](#)) to open a window identical to the one described in “[7.9.2 Adding a New Department](#)” on [page 153](#).
- 2 Proceed as defined for a new department (refer to “[7.9.2 Adding a New Department](#)” on [page 153](#)).
- 3 Press OK to save the changes.

7.9.6.3 Deleting a Department

To delete an existing department, perform the following instructions:

- 1 Click a row in the department grid (see [Figure 146](#) on [page 153](#)) to select the department to be deleted.
- 2 Click the Delete button.
- 3 The Delete procedure requires approval to implement the action.
- 4 Click **OK**.

Note: Deleting a department referenced by a device (vehicle) is not allowed. Deleting all departments of a fleet impedes addition of devices (vehicles) to the fleet.

7.9.6.4 Finding a Department

Once the FHO is running, there may be several departments. The user may either:

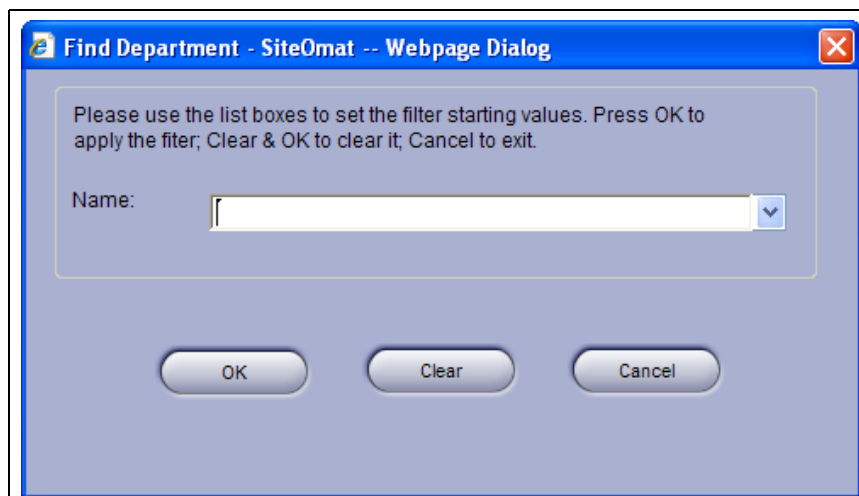
- Look for (Find) a department or
- Limit the attributes of the displayed list (Filter)

To find a department or filter the list:

- 1 Click the Find/Filter button on the department grid (see [Figure 146](#) on [page 153](#)). The Find Department dialog box opens (see [Figure 149](#)).
- 2 Define the search criteria by selecting a value from the Name list.
- 3 Click OK to activate the search/filter, or
- 4 Click Clear to erase the current selection and start the selection anew.

The results are displayed in the department grid (see [Figure 146](#) on [page 153](#)).

Figure 149: Finding a Department



7.10 Managing Devices (Vehicles)

Once the FHO Administrator has defined the fleets, the next stage is to define the vehicles pertaining to each fleet. Similar to fleet creation, only the FHO Administrator is authorized to define vehicles.

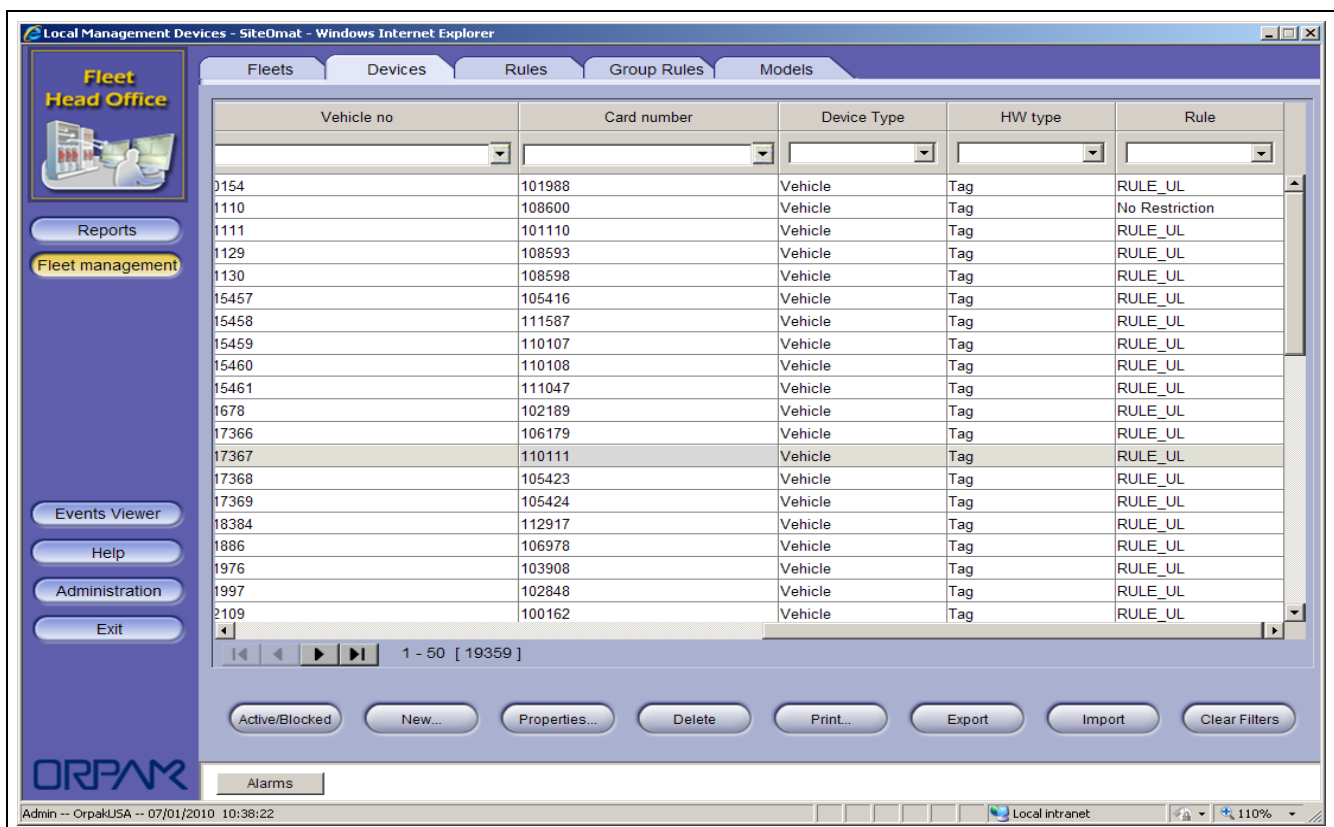
The term device refers to the entity defined as the authorizing device, which may be a VIU (FuelPoint PLUS) or a smart tag, key or magnetic card and not the vehicle itself.

Normally, fleets contain vehicles and each vehicle is associated with an authorization device. However, an attendant or a driver can also use an authorizer device, which, in this case, is not vehicle mounted (for example, card, key, tag or keypad entry).

In order to make the definition simple and logical, authorizer devices and vehicles are defined in the same screen.

To enter the Devices screen (see [Figure 150](#)), click Fleet Management navigation button and select the Devices tab.

Figure 150: Devices Screen



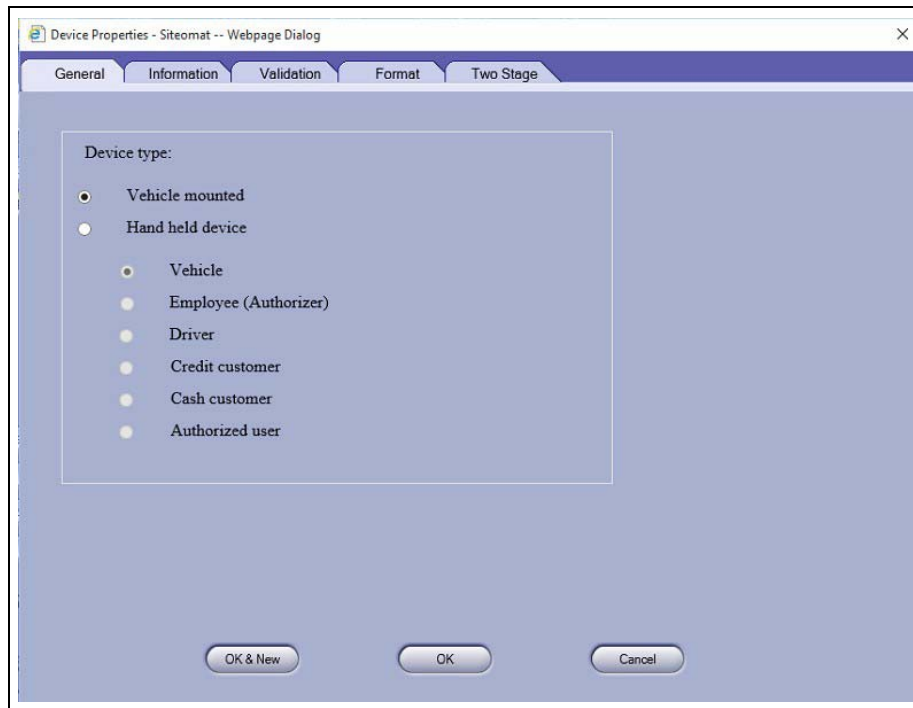
The Devices screen enables users to filter the list by any criteria, utilizing the drop-down lists or the combo boxes in the headers, multiple criteria may be selected.

7.10.1 Creating a New Device

To add a new authorizer device, perform the following instructions:

- 1 Click New button on the Devices screen.
- 2 The Device Properties window opens (see [Figure 150](#)).

Figure 151: Device Properties Screen – General Tab



- 3 The Device Properties window consists of five tabs, as described in the following paragraphs.

7.10.1.1 New Device – General Tab

- 1 Select the type of the device:
 - **Vehicle Mounted:** for devices mounted inside the vehicle (for example, VIU, FuelPoint PLUS)
 - **Handheld:**

a Vehicle: Device that enable automatic refueling and are not installed in a specific vehicle (for example, smart tags, magnetic cards)

b Employee (Authorizer): select this option if defining a gas station attendant authorizer (applicable only to the station)

c Driver: Used for the two-stage authorization process. The driver receives an authorization device and is allowed to refuel only if using both authorization devices (one for the vehicle and one for the driver)

Note: When working with Passport stations, Rules and Validation features (see below) cannot be set for Driver ID devices.

d Credit Customer: select this option for defining a gas station attendant authorizer device used for credit card transactions.

e Cash Customer: select this option for defining a gas station attendant authorizer device used for cash transactions.

f Authorized User: User allowed operating CNG/LPG dispensers. After this authorization device was presented and approved all other existing fueling scenarios can be applied. This device supports validation by PIN only.

- 2 Move to the information tab (described in “7.10.1.2 New Device – Information Tab”).

7.10.1.2 New Device – Information Tab

- 1 Selecting the Information tab displays the Device Information screen (see Figure 152).

Figure 152: Device Properties Screen – Information Tab

The screenshot shows the 'Device Properties - Information' tab in the Siteomat software. The form is organized into several sections:

- Top Section:**
 - Name: VIS_1100006
 - Fleet: LOCAL (dropdown)
 - Vehicle no: 1100006
 - Department: Default (dropdown)
 - Group rule: No Restriction (dropdown)
- Middle Section:**
 - Chassis Number: (empty text field)
 - Make: Select Make (dropdown)
 - Model: Select Model (dropdown)
 - Year: 1900
 - Tank capacity: 0.00 (text field) with a unit dropdown set to Gallon
 - Odometer: 6598 (text field) with a unit dropdown set to Mi
 - EH: 28 (text field)
 - Std. odometer consumption: 0.00 (text field) with a unit dropdown set to Mi/Gal
 - Std. EH consumption: 0.00 (text field) with a unit dropdown set to GPH
- Bottom Section:**
 - Expiration:
 - ☒ Disabled
 - ☐ Enabled by date: 00/00 mm/yy
 - ☐ Enabled from physical device
 - Pressure level: N/A (dropdown)
 - Use price list: (empty dropdown)

At the bottom of the form are three buttons: 'OK & New', 'OK', and 'Cancel'.

- 2 In the Device Information screen, enter the following information in the applicable fields:
 - a Name: Name identifying the specific device.

TIP



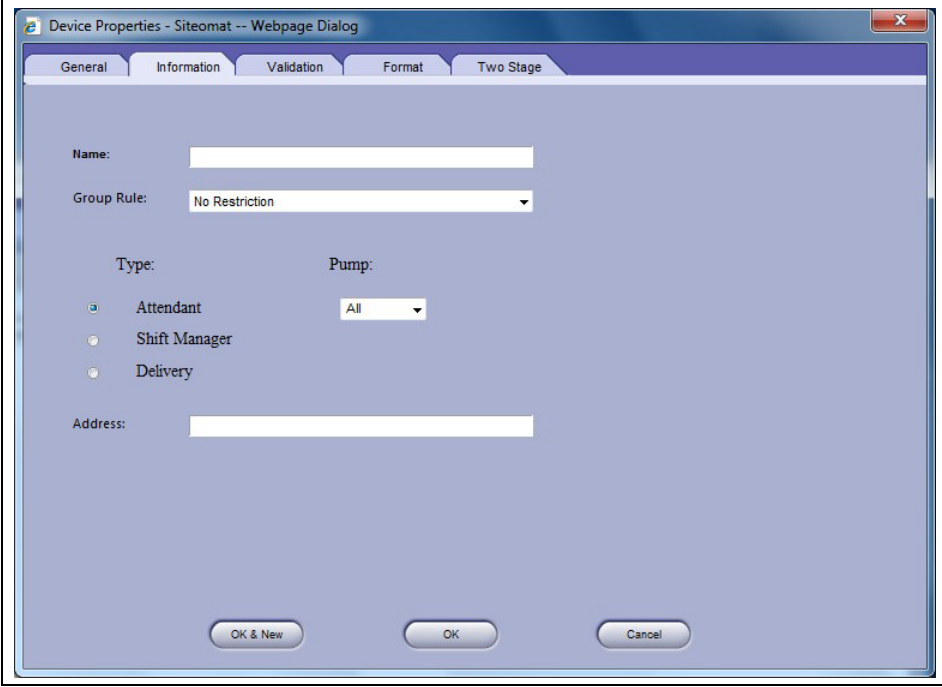
If this device is vehicle mounted, enter the license plate number or the vehicle ID number; if it is handheld, enter the name/ID of the person or vehicle, to which the device belongs.

- b Fleet:** The name of the fleet, with which the device is associated.
- c Department:** The department, with which the device is associated, within the selected fleet.
- d Vehicle number:** The license plate number or unique number of the vehicle, to which the device is mounted or assigned.
- e Group rule:** Connects the device to a group of rules. Refer to [“7.7 Creating Group Rules”](#) on [page 140](#).
- f Chassis number:** Vehicle chassis number.
- g Make:** Vehicle manufacturer.
- h Model:** Vehicle model. The content displayed on the list changes according to Make selection.
- i Year:** Manufacturing year of the vehicle.
- Note: Selecting the vehicle model out of the list automatically fills in the Tank capacity and the Standard consumption fields (derived from the model information).*
- j Tank Capacity:** The vehicle’s fuel tank capacity (filled in automatically if model is selected).
- k Odometer:** The actual number of miles/kilometers indicated on the odometer.
- l Engine hour:** The vehicle’s engine hour.
- m Standard Odometer Consumption:** The vehicle’s average fuel consumption (filled in automatically if model is selected).
- n Standard EH Consumption:** The vehicle’s average engine hours fuel consumption.
- o Expiration:**
- **Disabled:** Select this radio button for a device that has no expiration date.
 - **Enabled by Date:** Sets an expiration date for the device. Select this radio button and enter the required date (mm/yy).
 - **Enabled from physical device:** Select this radio button for Series 1000 devices that include expiration date. The system will read and apply expiration data.
- p Customer ID:** The ID number of the customer.
- q Pressure level:** Required pressure level for vehicle (gas pumps).
- **N/A:** Not Applicable
 - **1:** Saturated vehicles (8 bars – 116 PSI)
 - **2:** Super saturated vehicles (18 bars – 260 PSI)
 - **3:** Cold vehicles (3 bars – 43.5 PSI)
- r Use price list:** Associates the hand held vehicle device to a previously defined discount list (refer to [“6.4.6 Price Lists”](#) on [page 77](#)).
- s Click OK** to save changes and close the window.

7.10.1.3 New Employee Device – Information Tab

In cases where a new Employee (Authorizer) device is being defined, enter the following data in the applicable fields (see [Figure 153](#)):

Figure 153: Device Properties Screen – Employee Device Information Tab



a Name: Employee's name/ID

b Group Rule: Default is No Restriction

c Type: Defines employee type, by selecting the one of the following radio buttons

- **Attendant:** Manned station attendant (in charge of providing services). This user is not used in home base configurations, only in retail management.
- **Shift Manager:** Manned station shift manager (in charge of opening and closing station as well as providing services). This user is not used in home base configurations, only in retail management.
- **Delivery:** Predefined tag enabling attendants to receive fuel deliveries and enter relevant delivery data through OrPTscreens. This tag requires defining a PIN code in the Validation screen.

d Pump: Authorizes the attendant to open to a specific pump, selected from the drop-down list. All pumps may also be selected.

e Address: Employee address

After defining the aforementioned parameters, click OK to save the changes.

7.10.1.4 New Device – Validation Tab

The validation tab is used to define the attributes allowing fueling of the vehicle when checking in the OrPT (Orpak Outdoor Payment Terminal) unit (see [Figure 154](#)). Click the relevant check boxes to define the validation information in the applicable fields.

Figure 154: Devices Properties Screen – Validation Tab

The Odometer and Engine Hours fields are similar to the fields on the Fleets Validation Tab shown in [Figure 141](#) on [page 149](#). For a full description of each setting, refer to the validation section in fleet setup (refer to “[7.8.6 New Fleet – Validation Tab](#)” on [page 148](#)).

PIN Code: If checked, as mentioned previously, the driver is required to enter a PIN after presenting or swiping a fueling tag/card and the following definitions are available:

From authorization mean: Select this radio button in cases where the PIN Code is stored on the card.

Use: Select this radio button to define the PIN Code of the specific device and enter the code in the adjacent text box.

The driver can be allowed to retry several times (numeric integer) after which two options can be defined: the device is blocked and cannot be used any more (should be unblocked by an administrator), or the refueling is authorized even after PIN validation failure.

Prompt for vehicle info and...: Select this check box to enable vehicle number/device name insertion from OrPT during the authorization process when using a “Proxy Device”.

This option is relevant for fleet vehicles with broken devices or new fleet vehicles that have not installed a device yet but would like to refuel.

For each station or fleet a “Proxy device” needs to be defined in order to assist the drivers in performing such transactions. The proxy device is usually held by station managers.

When creating a new proxy device select the type: Hand Held → Vehicle (Not Employee), see [“7.10.1 Creating a New Device”](#) on [page 159](#) for more details.

The transaction is saved with the vehicle details as the main transaction device for billing and rules calculation, the proxy device data is saved also in each transaction for controlling purposes.

The following validation options are available:

a Verify as valid Vehicle no., and authorize for fueling (by proxy): Verifies that the vehicle number exists in the vehicle list of the system.

b Verify as valid Device name, and authorize for fueling (by proxy): Verifies that the device name exists in the system.

c Save entry as is without verification (and authorize current device): Does not verify the data entered with the lists. In this case the proxy device remains as the main transaction device and the entered number is saved in the vehicle number field in the transaction record.

d Verify entry as Vehicle no. of current device (and authorize): Verifies the vehicle number burned on the proxy device. This option does not record the actual refueling vehicle number.

Retries: Enter the number of retries allowed (numeric integer). Fueling is still authorized even if the user exceeds the number of incorrect retries unless the next text box is selected.

Block if all retries fail: Select this check box to block the transaction in cases where the user exceeds the number of incorrect inputs defined in the Retries text box.

Note: The OrPT displays the validation prompt along with the relevant pump number (see Figure 7-35). This procedure requires setting the association of the dispenser to a specific OrPT terminal for message presentation (refer to MDE-4817 SiteOmat Setup and Maintenance Manual – Section 7.11.)

Figure 155: Validation Prompt Including Pump Number

Enter Odometer

For Pump 3

7.10.1.5 New Device – Format Tab

The Device Format window enables users to enter the device technical information (see [Figure 156](#) on [page 166](#)):

- a** Enter the Card number of the device (the unique ordinal ID number given by the system to the device.) This number can be entered manually, or derived from a device connected to the FHO System.
- b** Click the Acquire button to read the last card number that was presented to OPT and was not recognized. In cases where the Card number automatically generated flag is checked (refer to [“6.4.1 General Tab”](#) on [page 57](#)) and the device in use is vehicle mounted, leave this field empty. The number is entered automatically after the first refuel (in FuelPoint PLUS stations).
- c** Select the hardware type of the device (see [Table 25](#)). Use the Hardware type list to select the appropriate type, the list content changes according to the device type (for example hand held does not display VIU). Similarly, the Manual entry type can be selected, allowing the drivers to enter the card number manually via the OrPT.

Table 25: Devices

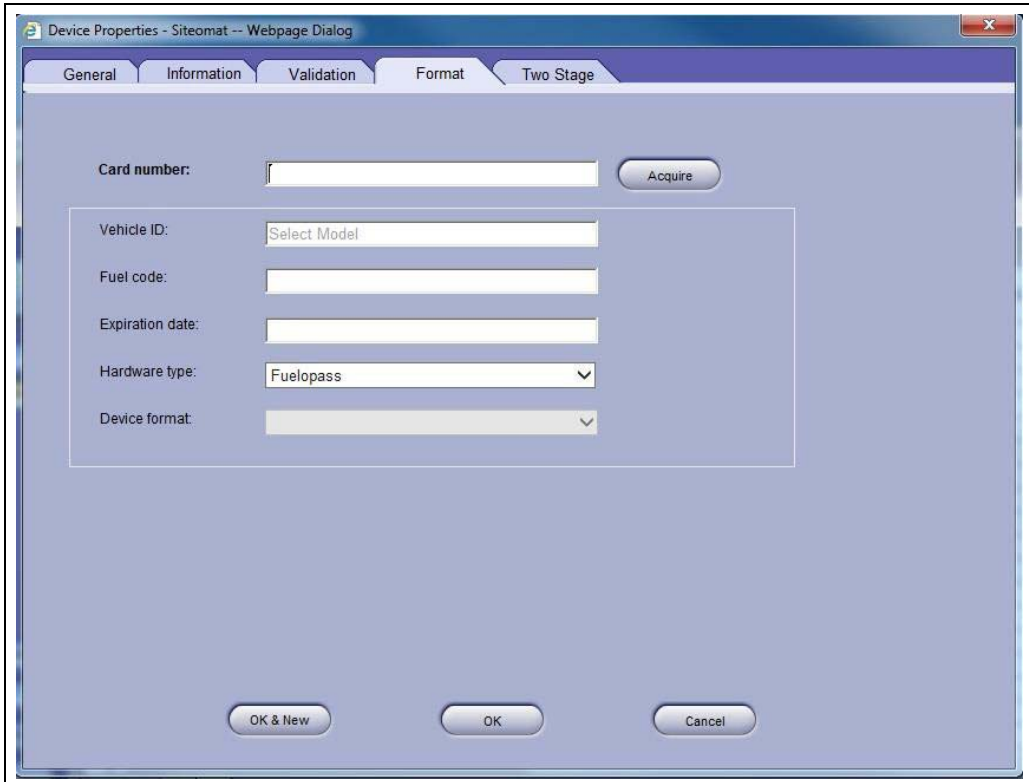
Device Type	Hardware Type	Description	
Vehicle Mounted	FuelOpass, FP HS	Fuel ring, used for refueling authorization only, easy vehicle installation, not including Odometer or EH readings (Require DataPass or manual readings). See more details in MDE- 4815.	
	TRU	Traditional Orpak's Trip Recorder Unit.	
	VIU 3	Traditional Orpak's Vehicle Identification Unit. Not relevant for Gasboy.	
	VIU 4	Traditional Orpak's Vehicle Identification Unit. Not relevant for Gasboy.	
	VIU 45	Traditional Orpak's Vehicle Identification Unit. Not relevant for Gasboy.	
	VIU 35, 35E, 35NT	Traditional Orpak's Vehicle Identification Unit. Not relevant for Gasboy.	
DP Only		Miniature unit that connects to the vehicle bus and captures data from the vehicle CPU/BUS. See more details in MDE- 4815.	
	DP + FP	FP and DP devices installed on the same vehicle, correlated to prove secure vehicle identification and accurate vehicle data.	
Hand Held	Fuel Card	Fuel card including vehicle or driver details. Used for refueling authorization. For further information on this format, refer to “7.10.9 Gasboy Magnetic Cards Format” on page 170 .	
	Gasboy Key	Known also as “fleet key” or “data key”, used for vehicle or driver identification.	
	Manual Entry	Allows users to manually type the device number in the OrPT.	

Device Type	Hardware Type	Description	
Hand Held	Tag	RFID contactless tag, known as Orpak's MiTag, used for vehicle or driver identification.	
Authorizer		Attendant or station manager authorization device, allows attendants to authorize any vehicle. In full service stations, allows attendants to open the attendant menu in the OrPT. Note: Not relevant for Gasboy.	
Master Authorizer		Traditional Orpak's Vehicle Authorizer. Not relevant for Gasboy.	

d All other fields (Vehicle ID, Fuel Code, Expiration Date, Device Format) are disabled and not used currently.

e Number of card numbers: Specifies the number of devices mounted on a truck, this field is relevant for trucks having more than a single tank (fuel or others) and more than a single VIU device attached to the truck. Up to five different devices per vehicle can be defined. Numbers are entered automatically by the system after the first refuel. The different numbers are displayed in the card number field separated by semicolons. This option is available only if the Update stations with not burned devices and Card number automatically generated options in the Setup screen - General tab are selected (refer to [“6.4.1 General Tab”](#) on [page 57](#)).

Figure 156: Device Properties Screen – Format Tab



Device Properties - Siteomat -- Webpage Dialog

General Information Validation **Format** Two Stage

Card number:

Vehicle ID:

Fuel code:

Expiration date:

Hardware type:

Device format:

7.10.1.6 New Device – Two Stage Tab

Selecting the Two Stage tab displays the Device Two Stage screen (see [Figure 157](#)).

This tab is active only when defining a vehicle device. This tab allows connecting the vehicle device to a specific driver or a group of drivers.

In cases where the Two-Stage authorization is selected, the driver is prompted to present Driver ID tag or manually enter Driver ID through OrPT keypad.

Note: Maximum number of characters for manual entry into OrPT is 20.

The user can select the Specific radio button and select a name from the list or the Departments button to select the Default or any other departments. As an option, Any driver in same fleet or Any driver in any fleet radio buttons are available to allow all fleet drivers or all drivers in any fleet to refuel this vehicle respectively.

A device must be saved before users can apply the Two-Stage option.

Two-stage required for non-vehicle mounted entry only: If checked, Two-Stage authorization is required only in cases where the vehicle mounted device was not recognized and the transaction is initiated from the OrPT (using the station proxy device, manual entry or Driver ID tag).

Figure 157: Device Properties Screen – Two Stage Tab

The screenshot shows a web-based dialog window titled "Device Properties - Siteomat -- Webpage Dialog". It has five tabs: "General", "Information", "Validation", "Format", and "Two Stage", with "Two Stage" being the active tab. The main content area is light blue and contains the following elements:

- A checkbox labeled "This means requires driver ID for authorization".
- A group box containing four radio buttons:
 - "Specific:" with an adjacent text input field.
 - "Departments:" with an adjacent text input field.
 - "Any driver in same fleet:"
 - "Any driver in any fleet:" (which is selected).
- A checkbox labeled "Two-stage required for non vehicle-mounted entry only".
- At the bottom, three buttons: "OK & New", "OK", and "Cancel".

7.10.2 Device Properties

Clicking on the **Properties** button on the Local Management Devices screen opens a window identical to the one described in paragraph 7.10.1, and enables users to modify the information previously entered.

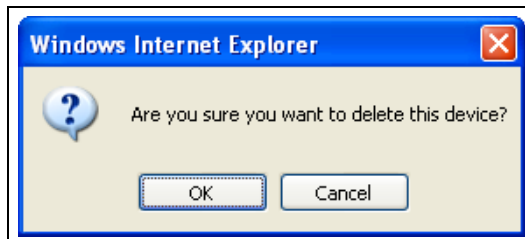
Note: Changing the fleet of an already defined device is not allowed.

7.10.3 Deleting a Device

To delete an existing device, perform the following steps:

- 1 Click a row in the Local Management Devices screen (see [Figure 150](#) on [page 158](#)) to select the device to be deleted.
- 2 Click Delete button.
- 3 The Delete procedure requires approval to implement the action (see [Figure 158](#)):

Figure 158: Delete Device Approval Message



- 4 Click OK.

7.10.4 Changing a Device's Status

A device can be either in Active status, meaning that the device is allowed to refuel (within the defined limits), or in Blocked status, denied automatic refueling.

To toggle between Active status and Block status of a device:

- 1 Click row of the applicable fleet in the grid on the Local Management Devices screen (see [Figure 150](#) on [page 158](#)).
- 2 Click Active/Block button.
- 3 The Status of the selected device is changed.

7.10.5 Importing Device Data

Device data may be imported into the FHO System database. The FHO application supports Comma Separated Values (CSV) format only.

To import device data from a text file in CSV format, click Import button on the Local Management Devices screen. A dialog box opens (see [Figure 159](#) on [page 169](#)), prompting for the path of the file to be imported.

All entities can be imported from a single file or from separate files for each entity (if so, the files should be imported according to priorities: model, fleets, department, devices). The first line in the imported file is ignored, as it is assumed to be the header of the information. Lines that starts with two slashes (//) are to be ignored by the system.

The first three fields in all entities are equal:

a Action – The type of action intended on the line in the list: R – Replace, A – Add, D – Delete.

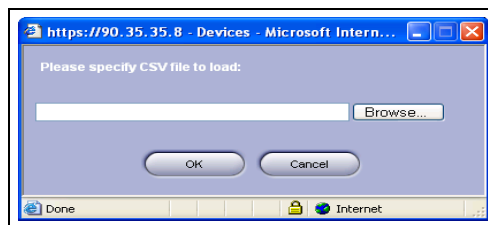
b Record_Type – Type of entity, the type need to be precise.

c Name – Device Name (Information Screen).

Import rules: If importing a device file and the device does not include the “Card number” field, the plate number must be unique, otherwise the import process is stopped.

Note: In cases where there are errors in the format of the imported file, a dialog box opens, specifying the errors. To see more information about import files fields, refer to Appendix B of this manual.

Figure 159: Import Device Data



7.10.6 Exporting Devices Data

The FHO application enables exporting the device data from the database. To export the device data, click Export button. The data is displayed in CSV format, from which it can be saved in various formats.

7.10.7 Printing Devices Report

The FHO enables users to print the devices data displayed on the grid, creating a devices report. To generate the report, proceed as follows:

- 1 Select the required filters, if any, utilizing the drop-down lists and combo boxes in the headers.
- 2 Click Print button. A preview of the report is displayed (see [Figure 160](#)).
- 3 The Print dialog box opens, enabling users to send the report to a printer.

Figure 160: Devices Report - Example

Status	Fleet	Department	Device Name	Vehicle no	Card number	Device type	HW type	Rule
Active	DEPARTMENT OF SAFETY	SAFETY COAST GUARD GRANT	003354	003354	102651	Vehicle	Tag	RULE_UL
Active	DEPARTMENT OF SAFETY	SAFETY COAST GUARD GRANT	003478	003478	102397	Vehicle	Tag	RULE_DS1
Active	DEPARTMENT OF SAFETY	SAFETY COAST GUARD GRANT	003619	003619	107277	Vehicle	Tag	RULE_UL
Active	DEPARTMENT OF SAFETY	SAFETY COAST GUARD GRANT	003766	003766	104757	Vehicle	Tag	RULE_UL
Active	DEPARTMENT OF SAFETY	SAFETY COAST GUARD GRANT	003810	003810	110725	Vehicle	Tag	RULE_UL
Active	DEPARTMENT OF SAFETY	SAFETY COAST GUARD GRANT	004234	004234	105028	Vehicle	Tag	RULE_UL
Active	DEPARTMENT OF SAFETY	SAFETY COAST GUARD GRANT	004556	004556	103346	Vehicle	Tag	RULE_UL
Active	DEPARTMENT OF SAFETY	SAFETY COAST GUARD GRANT	004557	004557	103395	Vehicle	Tag	RULE_UL

***** END *****

Note: See Section 8 for further information on FHO reports.

7.10.8 Clearing the Device Filters

In order to clear the previously defined filters, click **Clear Filters** button. The filters are reset, the list is refreshed and it displays all the records.

7.10.9 Gasboy Magnetic Cards Format

Standard format cards, used for refueling authorization, include vehicle or driver details. The following paragraph describes the card field layout for Gasboy Magnetic Cards.

The string layout for a magnetic card is:

=ssssss=cccccccccccccccccc=xxxxxxxxxxx

Where:

= is a field separator

ssssss is a two- to six-digit system ID number

cccccccccccccccccc is up to 19 digits of account information. This entire area can be used for a string of information up to 19 digits; or can be broken into subfields, the total of which cannot exceed 19 digits. For example, if using 19 digits for card number, other fields cannot be included

xxxxxxxxxxx is optional information

The system recognizes the first two sections as the card number (i.e.:

sssssscccccccccccccccccc).

Note: Incorrectly programmed cards, are not accepted by payment terminals. The following message is displayed: "Invalid Card". All cards should be added to the system's database prior to being presented to the OrPT. Otherwise, the card is rejected and the following message is displayed: "Card Not Defined".

8 – FHO Reports

8.1 General

This section provides instructions for generating data reports using the FHO application. The FHO provides various kinds of reports, as described in the following paragraphs.

As the FHO Administrator and the Fleet Manager have different interests and responsibilities, reports available to each type of user are different. Therefore, the reports of each user type are described separately.

8.2 Filters

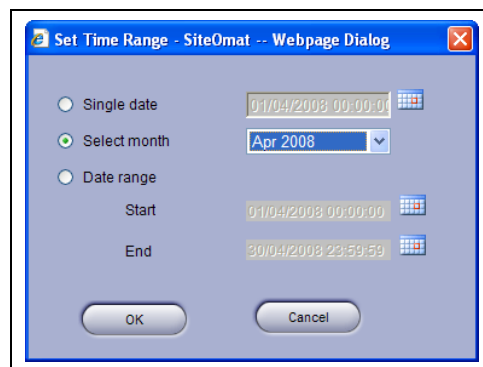
To obtain more focused information, various reports may be filtered by several criteria:

8.2.1 Set Time Range

All reports apply to a selected period of time, as specified by clicking the **Time Range** button and setting the desired period in the subsequent dialog box (see [Figure 161](#)).

The report can apply to a single day, a month or a time range (from start date to end date). This filter is applicable to both Administrator and Fleet Manager reports.

Figure 161: Time Range Dialog Box



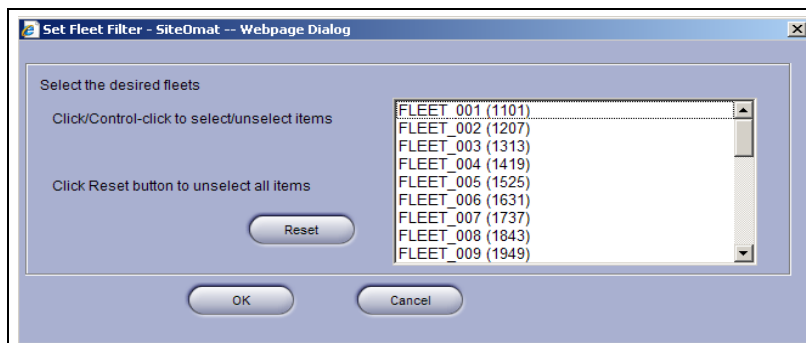
8.2.2 Fleet Filter

This filter is applicable to Administrator reports only.

To filter the fleets to be included in the report, proceed as follows:

- 1 Click **Fleet Filter** button.
- 2 The Set Fleet Filter dialog box opens (see [Figure 162](#)). Select the requested fleet from the drop-down list. To select multiple fleets, hold the **CTRL** key and select the fleets.
- 3 Click Reset to unselect all fleets, OK to save the changes, or Cancel to close the dialog box without saving the changes.

Figure 162: Set Fleet Filter Dialog Box



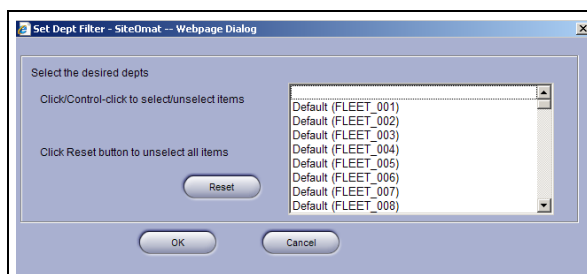
8.2.3 Department Filter

This filter is applicable to Administrator reports only.

To filter the departments to be included in the report, proceed as follows:

- 1 Click **Dept Filter** button.
- 2 The Set Dept Filter dialog box opens (see [Figure 163](#)). Select the requested department from the drop down list. To select multiple departments, press the **CTRL** key and select the departments.
- 3 Click Reset to unselect all departments, Click OK to save the changes, or Cancel to close the dialog box without saving the changes.

Figure 163: Set Dept Filter Dialog Box



8.2.4 Vehicle Filter (Authorization Mean)

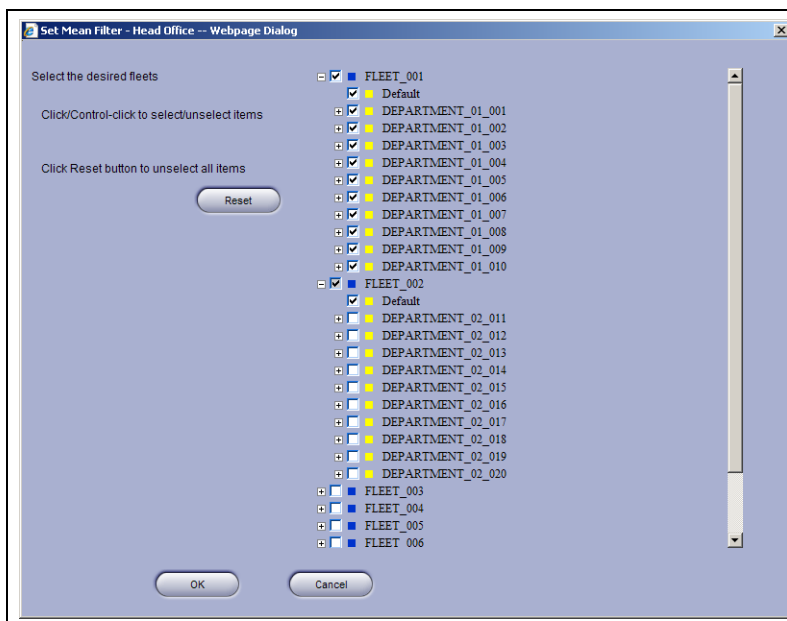
To filter the vehicles to be included in the report, proceed as follows:

- 1 Click **Veh. No. Filter** button.
- 2 The Set Mean Filter dialog box opens (see [Figure 164](#)). Vehicles are displayed in a hierarchical tree structure, allowing the user to select up to ten individual devices, or select the entire branch.
- 3 Click **Reset** to unselect all departments, **OK** to save the changes, or **Cancel** to close the dialog box without saving the changes.

Deleted devices are marked with a red icon. Note that the user can obtain reports also on deleted devices to verify that data is accurate.

This filter is applicable to Fleet Manager/User Vehicle and Exception reports (see paragraphs 8.6.2 and 8.6.3 respectively).

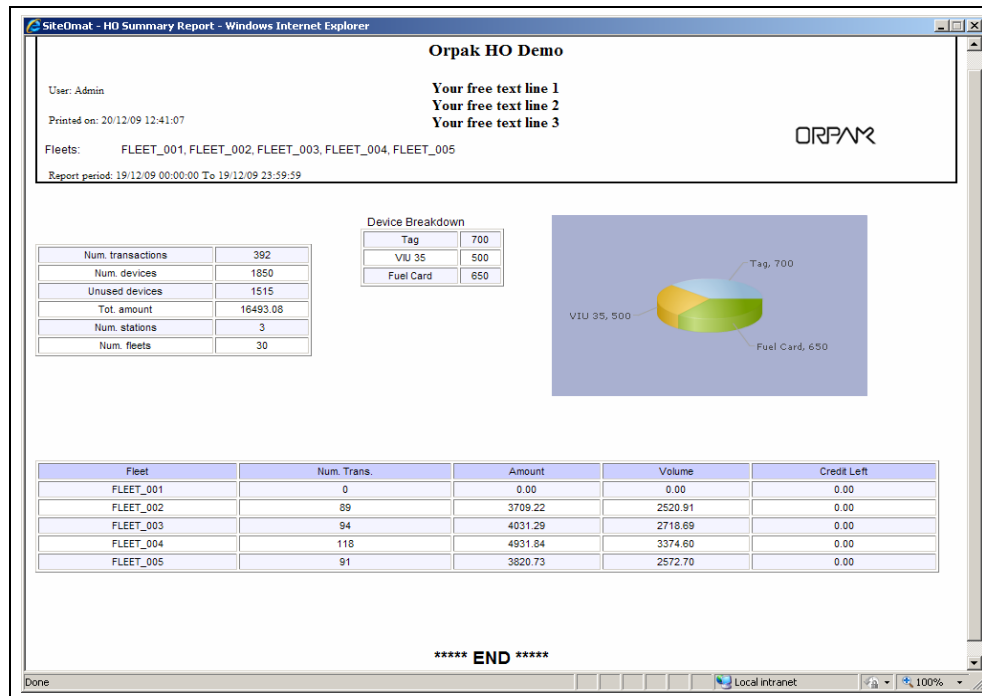
Figure 164: Reports – Set Mean Filter Dialog Box



8.3 Printing a Report

All the FHO reports can be printed, by clicking the **Print** button. Clicking **Print** opens a print preview of the report (see [Figure 165](#)) prior to sending it to the printer.

Figure 165: Print Preview



8.4 Saving a Report

Most of the reports can be saved to a file, by clicking on the **Save** button. Clicking **Save** opens a dialog box, prompting to select the path and filename, into which the reports are saved.

8.5 FHO Administrator Reports

8.5.1 Summary Report

Summary Reports (see [Figure 166](#) on [page 175](#)) provide the following information for the selected time range:

- a** No. Trans: Number of transactions completed.
- b** Total Devices: Total number of devices in the fleets.
- c** Unused Devices: Number of devices that did not take part in any transaction.
- d** Total Amount: Total amount of money charged for the transactions.

e Total volume: Total volume supplied in the transactions.

f No. Station: Number of stations, from which the data was derived.

g No. Fleets: Number of defined fleets.

h The right-hand side of the screen provides a breakdown by device type, and a pie-chart illustrating the percentage of each device type (FP stands for FuelPoint PLUS).

The upper part shows various statistical data for the selected filters. The grid shows all fleets selected by using the Fleet Filter.

Use the Print button to obtain a printable version. Use the Save button to save the data to CSV file format (see [Figure 167](#) on [page 176](#)).

Figure 166: Summary Reports Screen (FHO Administrator)

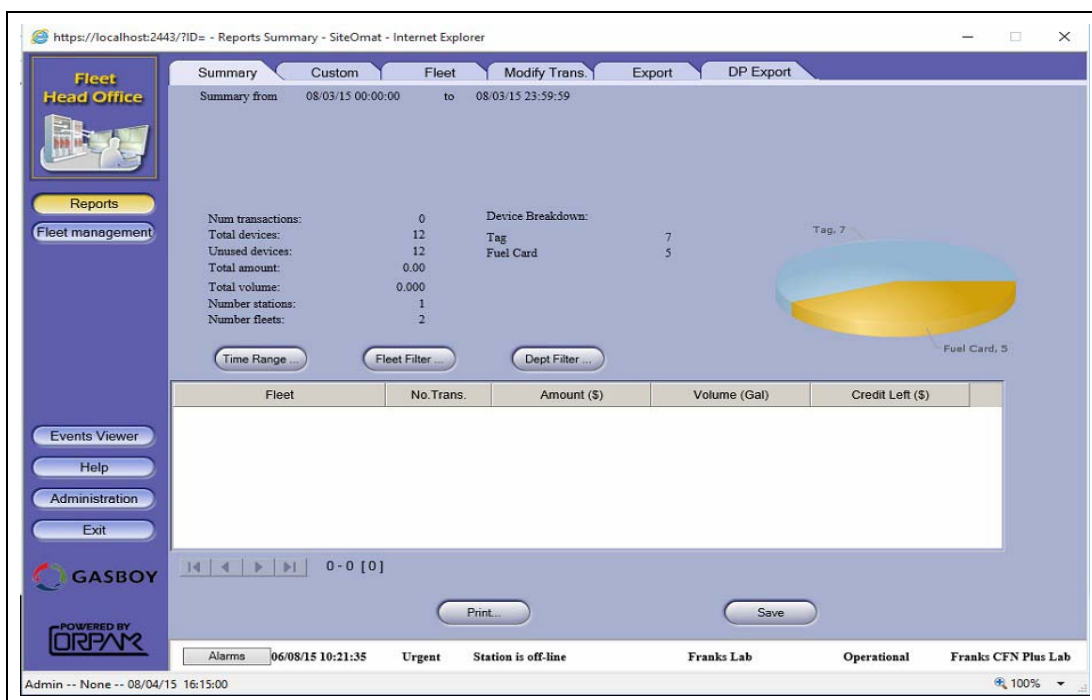


Figure 167: HEAD OFFICE Summary Report in CSV File Format

Microsoft Excel - SummaryReport[1].csv

	A	B	C	D	E	F	G	H
1	Company	Orpak						
2	Company Address							
3	Title	SiteOmat - HO Summary Report						
4	Date From	01/04/2008 0:00						
5	Date To	30/04/2008 23:59						
6	Fleet Filter							
7	User	Admin						
8								
9	Num. Tran	6						
10	Num. Devi	10						
11	Unused De	6						
12	Tot. Amou	435.5						
13	Num. Stati	5						
14	Num. Flee	4						
15								
16	Fuelopass	3						
17	VIU 3	4						
18	Tag	2						
19	Fuel Card	1						
20								
21	Fleet	Num. Transactions	Amount	Volume	Credit Left			
22	Orpak	1	9.43	2.3	51000			
23	Unicode	0	0	0	6768			
24	Coca Cola	5	426.07	104.7	5880			
25	IBM	0	0	0	0			
26								
27								
28								

Ready NUM

8.5.2 Custom Reports

The Custom reports screen (see [Figure 168](#)) enables the fleet manager to generate reports of the transactions performed by vehicles of his or her fleet in various profiles.

8.5.2.1 Custom Report Window Elements

The Custom reports window comprises the following elements:

- a Report header
- b Rows in page
- c Report Criteria
- d Template Options
- e Report Structure Options
- f Functional Buttons

Figure 168: Custom Report Screen

8.5.2.2 Report Header

The report header text box sets the title of the report.

TIP



Use the report header to identify the nature of each report, for distinguishing between produced reports.

8.5.2.3 Rows in Reports

The Rows in Page text box sets the number of rows (records) in each report page.

8.5.2.4 Report Criteria

The report criteria section is the main part of the report, as it establishes the data to be included in the report. The produced report displays only the transactions that meet the specified criteria.

A text box is adjacent to each field name, to specify the field's order of appearance in the report. If the Order text box of a field is empty, double-click the text box to include the field in the report.

TIP



To completely reorder the fields in the report, click **Clear Fields Order** and specify the order again.

The Custom Report fields are listed in [Table 26](#) along with their criteria types. The criteria types are:

- range (minimum and maximum values)
- specific values selected from combo box, or drop-down list (multi-selection is available)
- N/A (no criteria is available)

Note: The Amount field, which lists the amount of money charged for the transaction, does not include any discount given. Include the Discount column in the report to see the amount of money charged after discount.

Table 26: Custom Report Fields

No.	Field Name	Description	Criterion Type
1	Station	The gas station where the transactions are performed (may be a single station or all stations).	Selected from drop-down list.
2	Date	The date of the transaction.	Selected from date and time dialog box.
3	Time	The time of the transaction.	N/A (previously selected in the time dialog box).
4	Fleet	The fleet, to which the fueling vehicles belong.	Selected from combo box.
5	Transaction Type	The type of transaction carried out.	Selected from drop-down list.

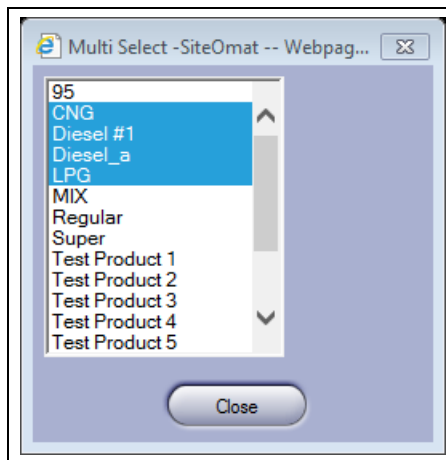
No.	Field Name	Description	Criterion Type
6	Vehicle Number	The license plate number or vehicle ID of the fueled vehicle. The vehicle number appears in the transaction only if provided from the VIU (Vehicle Identification Unit), or entered by the authorizer in the OrPT (Orpak Outdoor Payment Terminal). Note: The list of vehicles also includes deleted devices (if any). These vehicles are indicated with a red square.	Selected from combo box.
7	Product	Types of products available.	Selected from drop-down list.
8	Quantity	The fuel volume supplied in the transaction.	Range
9	Total Sale	The sum of money collected in the transaction. This field does not include any discount given to the client.	Range
10	Receipt No.	An ordinal unique number assigned by the SiteOmat System Controller to each transaction and included in each printed receipt.	Specific Receipt ID
11	Fleet Code	The fleet Code, to which the fueling vehicles belong.	Specific Fleet Code
12	Pay Mode	The means of payment used in the transaction.	Selected from drop-down list.
13	Transaction Id	A unique ordinal ID number given by the SiteOmat Station Controller to each transaction. The ID is generated only after the transaction is closed (the nozzle was returned to its hang-up).	Range
14	Authorized By	The user who authorized the transaction.	Selected from drop-down list.
15	Department	The department to which the vehicle belongs to.	Selected from combo box
16	PPU	Price Per Unit, i.e. the ratio between the gallon value and the amount value.	N/A
17	Odometer	The odometer reading from the vehicle.	N/A
18	Engine	Number of engine hours of the vehicle, as reported by the VIU (if supported in the VIU) or manually entered at the keypad.	N/A
19	Pump	Number of the pump head, from which the transaction was performed.	Selected from drop-down list.
20	Tank	The tank associated with the pump used in this transaction.	Selected from drop-down list.
21	Nozzle	The nozzle number in the pump head, used to supply the fuel in the transaction.	N/A
22	Density	Fuel density at a certain temperature.	N/A
23	Temperature	Temperature Display inside the fuel tank.	N/A
24	Vehicle Type	Type of vehicle used.	Selected from drop-down list.
25	Ref./Slip No.	The slip number (or reference number).	N/A
26	Driver Name	Driver name entered for identification.	Selected from combo box.
27	Dept code	The code of the department to which the vehicle belongs to.	Selected from combo box.
28	Card Number	A unique ordinal ID number given by the system to each device.	Selected from combo box.
29	Device Name	Device type description.	Selected from combo box.
30	Total billing sale	Displays the transaction amount in cases where the PPV was changed after the transaction has already been made.	Range
31	Sent to FHO	A flag defining whether a transaction was sent to the FHO application or not.	N/A
32	Proxy Device	Proxy device used to authorize the transaction.	Selected from drop- down list.
33	Credit card Comp	Credit Card Company details.	N/A
34	Credit card num	Credit Card Number.	N/A
35	Base Price	Product base price.	Range
36	Price List	Price List associated to the device.	Selected from combo box.
37	Sale after discount	The sum of money collected in the transaction after discount.	N/A
38	Model	Vehicle model	Selected from combo box.
39	Reject Text	Text message sent by payment processor for rejected credit card transactions.	N/A
40	Reject Code	Rejection message code	N/A

No.	Field Name	Description	Criterion Type
41	Refund	Includes in the report refund transactions.	N/A
42	Authorization Mode	Filters the report by authorization mode: Swiped Card or Manual Entry .	Selected from drop- down.
43	Authorized User	CNG/LPG authorized user	N/A
44	Totalizer	Offset-compensated pump totalizer	N/A
45	Original Totalizer	Pump totalizer	N/A
46	Truckstop Invoice	Invoice reference code sent by payment processor	N/A
47	AUX 1	Utility Engine #1 EH current reading	N/A
48	AUX 2	Utility Engine #2 EH current reading	N/A
49	Tail ID	The plan number – read from the card and validated	N/A
50	Application ID	The ID of the manual transaction app that the transaction was reported from	N/A
51	Job Code	The number entered in the manual transaction app and saved as part of transaction	N/A
52	Manual Entry Transactions	The transactions from the manual transaction entry mobile application	All Transactions/Only Manual Entry Transactions

8.5.2.5 Multi Select Option

In Custom Reports, all fields that are selected from a drop-down list include a multi-selection option. By choosing multi-select – the last option in the drop-down list – the multi-select popup opens. This includes a list of all items in the selected field. In order to select more than one item, click the items while holding the CTRL key (see [Figure 169](#)).

Figure 169: Multi Select Popup



8.5.2.6 Template Options

The Template options enable saving specific report parameters (header, criteria, structure), for inserting these parameters automatically in the future by selecting the template, instead of manually typing in the parameters.

TIP



Save parameters of commonly used reports into templates, to avoid manually specifying them each time the report is required.

The order and field list as well as the Report Header, Sort by and Break by can be saved for later use as a template for similar reports. A new template can be saved by simply selecting the fields, writing a template name in the New field at the template section and clicking on the Modify button. A template can be deleted by selecting it from the list and clicking on the Delete button.

8.5.2.7 Report Structure Options

The lower frame in the Transactions Report Window includes several options, which affect the way the report is structured. The options are:

- a Break by:** Specifies a field, by which the report breaks and sums-up (each time the field value is changed)
- b Order by:** Indicates the field (column) by which the report is sorted (ascending order)

8.5.2.8 Functional Buttons

The Custom Report screen includes the following four buttons:

- a Clear Fields Order:** Clears all Order text boxes in the Custom report.
- b To File:** Saves the Report into a text file.
- c Preview:** Displays the Custom report in a new screen, from which report printing and saving is possible.
- d Print:** Opens the Printers dialog box, for sending Custom report to a printer.

8.5.2.9 Custom Report Production Example

Use the Preview button to view the report. Use the Print button to view the report and open the browser printing dialog box.

The output of the report has a header including the station name, report title and user name. The report period (date range) is also displayed on the header (see [Figure 170](#)).

Figure 170: Custom Report (Typical)

None

User: Admin
Printed on: 06/16/17 09:54:59

Report period: 06/01/12 09:54:00 To 06/17/17 09:54:00

Ser. No.	Date	Time	Fleet	Vehicle Number	Product	Quantity	Total Sale
1	03/03/17	08:47:24	default_fleet	Admin	Diesel #1	1.282	1.28

Product-wise Summary

Fuel	Total Amount (Dollars)	Quantity (Gallons)
Diesel #1	1.28	1.282

Payment Mode Summary

Mode	Amount (Dollars)
Cash	1.28
Total Amount	1.28

Page : 1 out of : 1

***** END *****

The report data is divided into three sections.

- a** Transactions: This section contains the transactions details in order and broken by the selected field. If data contains more than one page, then the filled header is repeated on each page. The page number is displayed at the bottom of each page. If a break is selected it adds a summary line. In the example above, the break creates a product bottom line.
- b** Product-wise Summary section: sums up all data in the report by product, containing Total transactions Amount and Quantity sold.
- c** Payment Mode Summary section: sums up all data in the report by pay mode. Pay mode can be Customer, Credit or Cash depending on the application settings.

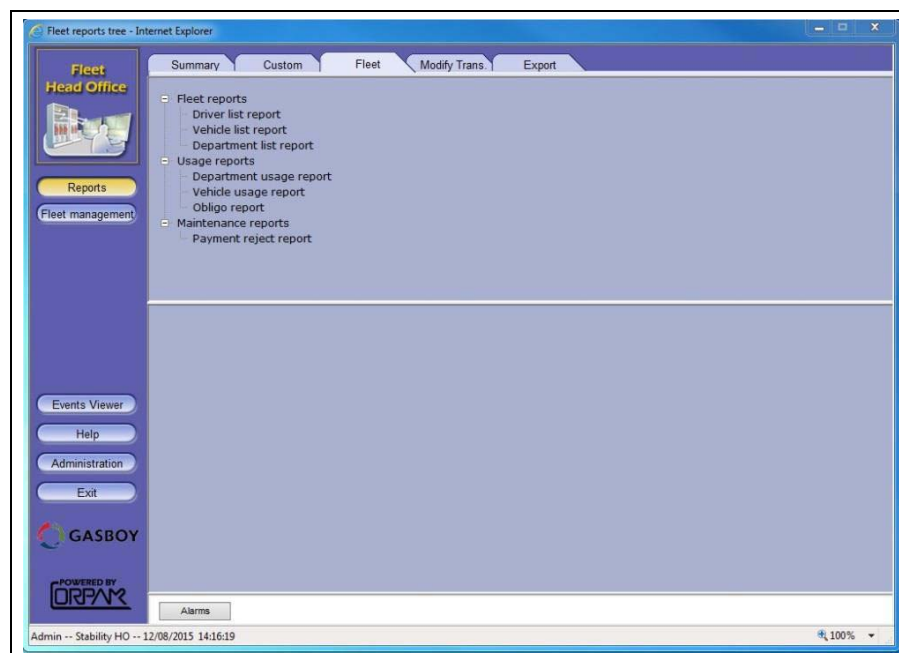
8.5.3 Fleet Reports

The Fleet screen (see [Figure 171](#)) allows producing several reports on the fleet status and on the history of a fleet. The Fleet tab displays the reports in a hierarchical tree for selection. The tree has three main sections:

- a** Fleet Reports
- b** Usage Reports
- c** Maintenance Reports

To access a report, click the corresponding section in the tree and click the requested report. The report screen opens.

Figure 171: Fleet Reports Screen



Driver List Report

This report enables the user to view a list of the selected billing agency/fleet/department drivers (see [Figure 172](#) on [page 184](#)). To filter the drivers to be included in the report, proceed as follows:

- 1 Select Fleets&Departments or Billing Agencies radio button to choose the filter mode.
- 2 Select the check box next to the required fleets/departments/agencies.
- 3 To select specific departments, expand the branch by clicking on the plus (+) sign next to the fleet and select the departments.
- 4 To include Blocked or Deleted drivers, select the corresponding Status check boxes (multiple selection is allowed).

- 5 To select all the fleets, click Select All button, to reset the selection click Unselect All button.

All selected criteria are displayed on the report header. The driver list is classified by departments and it includes several fields as described in [Table 27](#):

Table 27: Driver List Report Fields

Field Name	Description
Employee Name	Driver's name
Card Number	Device number
Type	Device type
Issued Date	Device issue date and time
Update Date	Device last update date and time
Last Used	Date and time of the last transaction performed by the vehicle
Status	Device status (Active/Blocked/Deleted)

Click **Preview** to display the report on a new screen (see [Figure 173](#) on [page 185](#)).

Click **Print** (refer to “[8.3 Printing a Report](#)” on [page 174](#)) to send the report to a printer, or click **To File** (refer to “[8.4 Saving a Report](#)” on [page 174](#)) to save the report.

Figure 172: Driver List Report Section

The screenshot displays the 'Driver list report' section of the software. On the left, a sidebar shows a tree view with 'Fleet reports' expanded, and 'Driver list report' selected. The main content area is titled 'Fleets & Departments List'. It features a list of items, each with a checkbox and a small icon. The items are: 1234, 2STAGEbug, 3434, fff, flleeeeeeeet, FLEET_001, FLEET_002, FLEET_003, FLEET_004, FLEET_005, FLEET_006, FLEET_007, and FLEET_008. Below this list are two buttons: 'Select All' and 'UnSelect All'. To the right of the list, there is a 'Status' section with three checkboxes: 'Active' (checked), 'Blocked', and 'Deleted'. At the bottom of the main area, there are three buttons: 'Preview...', 'To File...', and 'Print...'.

Figure 173: Driver List Report – Example

SiteOmni - Driver List Report - Windows Internet Explorer

Printed on: 02/27/2011 16:39:11

Selected Criteria: Active, Deleted

Driver List Report

Fleet Name:DEPT OF AGRICULTUREFleet Code:20180000Contact Person:Phone:

Department Name:AGRICULTURE ANIMAL INDUSTRYDepartment Code:20182700Contact Person:Phone:271-3685

Employee Name	Card Number	Device Type	Issued Date	Update Date	Last Used	Status
BAILEY, RICHARD P	605452	Fuel Card	01/01/1900 00:00:00	02/25/2009 10:05:26	01/01/1900 00:00:00	Deleted
COLBY, LESTER E	606922	Fuel Card	01/01/1900 00:00:00	02/25/2009 10:06:34	01/01/1900 00:00:00	Deleted
CRAWFORD, STEPHEN	613146	Fuel Card	01/01/1900 00:00:00	02/25/2009 10:12:40	11/10/2010 12:42:45	Active
NUDD, GEORGE	600633	Fuel Card	01/01/1900 00:00:00	02/25/2009 10:02:11	01/25/2011 19:22:46	Active
SWEENEY, MICHAEL	604795	Fuel Card	01/01/1900 00:00:00	06/29/2009 08:04:43	11/17/2010 13:35:36	Active
SWEENEY, MICHAEL	604795	Fuel Card	01/01/1900 00:00:00	02/25/2009 10:04:57	01/01/1900 00:00:00	Deleted
TURCO, GEORGE, TARA	601836	Fuel Card	01/01/1900 00:00:00	02/25/2009 10:02:55	11/19/2010 16:35:22	Active

Total cards for department: 7

Department Name:AGRICULTURE BUREAU REGULATORY SDepartment Code:20182600Contact Person:Phone:271-3685

Employee Name	Card Number	Device Type	Issued Date	Update Date	Last Used	Status
CONNER, JANIS	605961	Fuel Card	01/01/1900 00:00:00	02/25/2009 10:05:48	11/15/2010 06:00:36	Active
SLOAN, THOMAS	613677	Fuel Card	01/01/1900 00:00:00	02/25/2009 10:13:19	01/29/2011 15:20:32	Active
SMITH, VICTORIA	607751	Fuel Card	01/01/1900 00:00:00	02/25/2009 10:07:11	11/22/2010 16:20:07	Active
UNCLES, RICHARD, B	606666	Fuel Card	01/01/1900 00:00:00	02/25/2009 10:06:23	01/01/1900 00:00:00	Active

Total cards for department: 4

Total cards for fleet: 11

Done

Local intranet | Protected Mode: Off

90%

8.5.3.2 Vehicle List Report

This report enables the user to view a list of the selected agency/fleet/department devices (see [Figure 174](#) on [page 186](#)). To filter the vehicles to be included in the report, proceed as follows:

- 1 Select **Fleets&Departments** or **Billing Agencies** radio button to choose the filter mode.
- 2 Select the check box next to the required fleets/departments/agencies.
- 3 To select specific departments, expand the branch by clicking on the plus (+) sign next to the fleet and select the departments.
- 4 To select all the fleets, click **Select All** button, to reset the selection click **Unselect All** button.
- 5 If required, use the following available filters:

a Device Type: Vehicle Mounted, Hand Held. Multiple selection is allowed by marking the corresponding check boxes.

b Device Status: Active, Blocked, Deleted, Not Burned Devices Only (devices lacking the card number field). Multiple selection is allowed by marking the corresponding check boxes.

c Make List, Model List and Year List. These dynamic lists are correlated, the content displayed changes according to previous selection (i.e. only the related Models are displayed after selecting a specific Make). Multiple selection is allowed by using the corresponding combo boxes.

Sort the report by Fleet/Department **Name** or Fleet/Department **Code** using the corresponding radio buttons.

All selected criteria are displayed on the report header. The vehicle list is classified by departments and it includes several fields as described in [Table 28](#):

Table 28: Vehicle List Report Fields

Field Name	Description
Vehicle Name	Unique name identifying the vehicle in the fleet
Plate	Vehicle plate number
Card Number	Device number
Type	Device type
Make	Vehicle Manufacturer
Model	Vehicle Model
Year	Vehicle Year
Fuel Type	The fuel type allowed for the vehicle as defined by a Fuel rule, if any
Issued Date	Device issue date and time
Update Date	Device update date and time
Last Used	Date and time of the last transaction performed by the vehicle
Status	Device status (Active/Blocked)

Click **Preview** to display the report on a new screen (see [Figure 175](#) on [page 187](#)).

Click **Print** (refer to “[8.3 Printing a Report](#)” on [page 174](#)) to send the report to a printer, or click **To File** (refer to “[8.4 Saving a Report](#)” on [page 174](#)) to save the report.

Figure 174: Vehicle List Report Section

Figure 175: Vehicle List Report – Example

SiteOmat - Vehicle List Report - Windows Internet Explorer

User: Admin
Printed on: 02/27/2011 16:33:09

Selected Criteria: Vehicle Mounted, Hand Held Devices, Active, Blocked, Deleted

Vehicle List Report

Fleet Name: BANKING DEPARTMENT
Fleet Code: 20720000
Contact Person: Phone:

Department Name: BANKING DEPARTMENT
Contact Person: KATHY WHEELER
Department Code: 20720100
Phone: 271-3561

Vehicle Name	Plate	Card Number	Device Type	Make	Model	Year	Fuel Type	Issued Date	Update Date	Last Used	Status
2072MISC10	2072MISC10	115195	Fuel Card	CHEVROLET	MALIBU	1900	UL_DS	01/01/1900 00:00:00	10/06/2009 07:46:27	01/01/1900 00:00:00	Active
B1	B1	8501028606347324	Tag	CHEVROLET	MALIBU	2005	UL	01/01/1900 00:00:00	07/01/2010 08:55:58	11/19/2010 06:35:27	Active
B2	B2	102926	Fuel Card	CHEVROLET	MALIBU	1999	UL	01/01/1900 00:00:00	06/18/2009 02:07:56	11/23/2010 16:58:52	Active
B2	B2	8501028607444443	Tag	CHEVROLET	MALIBU	1999	UL	01/01/1900 00:00:00	07/22/2010 12:59:39	01/01/1900 00:00:00	Active
B3	B3	8501028606167169	Tag	CHEVROLET	MALIBU	1999	UL	01/01/1900 00:00:00	07/22/2010 13:00:54	01/01/1900 00:00:00	Active
B3	B3	102921	Fuel Card	CHEVROLET	MALIBU	1999	UL	01/01/1900 00:00:00	06/11/2009 02:07:59	11/23/2010 17:03:32	Active
B4	B4	111189	Fuel Card			1900	UL	01/01/1900 00:00:00	02/25/2009 10:22:52	01/01/1900 00:00:00	Deleted
B5	B5	105243	Fuel Card	DODGE	UNKNOWN4	2005	UL	01/01/1900 00:00:00	06/13/2009 02:08:36	11/08/2010 17:02:22	Active
B5	B5	8501028607580287	Tag	DODGE	UNKNOWN4	2005	UL	01/01/1900 00:00:00	07/22/2010 13:02:13	01/01/1900 00:00:00	Active
B6	B6	8501028605943800	Tag	FORD	TAURUS	1999	UL	01/01/1900 00:00:00	07/22/2010 13:04:10	01/01/1900 00:00:00	Active
B6	B6	103877	Fuel Card	FORD	TAURUS	1999	UL	01/01/1900 00:00:00	02/25/2009 16:17:16	01/01/1900 00:00:00	Active
B7	B7	104125	Fuel Card	CHEVROLET	MALIBU	1999	UL	01/01/1900 00:00:00	06/18/2009 02:08:31	10/04/2010 16:45:09	Active
B7	B7	8501028601384804	Tag	CHEVROLET	MALIBU	1999	UL	01/01/1900 00:00:00	07/22/2010 13:05:30	01/01/1900 00:00:00	Active

Total cards for department: 13

Total cards for fleet: 13

***** END *****

Done Local intranet | Protected Mode: Off 90%

8.5.3.3 Department List Report

This report enables the user to view a list of the selected fleet departments (see [Figure 176](#) on [page 188](#)). To filter the departments to be included in the report, proceed as follows:

- 1 Select **Fleets&Departments** or **Billing Agencies** radio button to choose the filter mode.
- 2 Select the check box next to the required fleets/departments/agencies.
- 3 To select specific departments, expand the branch by clicking on the plus (+) sign next to the fleet and select the departments.
- 4 To select all the fleets, click **Select All** button, to reset the selection click **Unselect All** button.

Sort the report by Fleet/Department **Name** or Fleet/Department **Code** using the corresponding radio buttons.

The department list includes several fields as described in [Table 29](#):

Table 29: Department List Report Fields

Field Name	Description
Department Name	Unique name identifying the department in the fleet
Department Code	Unique code identifying the department in the fleet
Contact Person	Contact person name
Phone	Contact person phone

Click **Preview** to display the report on a new screen (see [Figure 177](#)).

Click **Print** (refer to “[8.3 Printing a Report](#)” on [page 174](#)) to send the report to a printer, or click **To File** (refer to “[8.4 Saving a Report](#)” on [page 174](#)) to save the report.

Figure 176: Department List Report Section

Fleets & Departments List

☒ Fleets&Departments ☐ Billing agencies

☒ 1234
☒ 2STAGEbug
☒ 3434
☒ fff
☒ fleeeeeeeet
☒ FLEET_001
☒ FLEET_002
☒ FLEET_003
☒ FLEET_004
☒ FLEET_005
☒ FLEET_006
☒ FLEET_007
☒ FLEET_008

Select the desired items from the list
 Click to select/unselect the items

Select All UnSelect All

Sort by name (selected)
 Sort by code

Preview... To File... Print...

Figure 177: Department List Report – Example

Department List Report			
Fleet Name: DEPARTMENT OF AGRICULTURE		Fleet Code: 20180000	
Contact Person: VICTORIA SMITH		Phone: 71-3685	
Department Name	Department Code	Contact Person	Phone
AGRICULTURE ANIMAL INDUSTRY	20182700		271-3685
AGRICULTURE BUREAU REGULATORY S	20182600		271-3685
AGRICULTURE COMMISSIONER	20182500	VICTORIA SMITH / JOAN	271-3685
AGRICULTURE DEVELOPMENT	20183400	VICTORIA SMITH	271-3685
AGRICULTURE PESTICIDES	20183700		271-3685
AGRICULTURE PLANT INDUSTRY	20183500		271-3685
AGRICULTURE WEIGHTS & MEASURES	20183300		271-3685
Default	1		
Total departments in fleet: 8			

8.5.3.4 Department Usage Report

This report enables the user to produce a usage report per billing agency, as defined for each department (refer to “[7.9.4 New Department – Information Tab](#)” on [page 155](#)).

The report is classified by billing agencies and includes total summaries for each Billing Agency:

- Total volume and amount
- Percentage represented by the billing agency out of the total volume and amount for all billing agencies.

The Billing Agencies List is displayed on the bottom part of the screen (see [Figure 178](#) on [page 190](#)). To filter the billing agencies to be included in the report, proceed as follows:

- 1 Select the check box next to the required Billing Agency. To select all the agencies, click **Select All** button, to reset the selection click **Unselect All** button.
- 2 Filter the report by time range, utilizing the **From Date** and **To Date** menus or using the **Time Period** drop-down list to select a specific period of time (Current/Last Month, Current/Last Quarter, Current/Last Year, Current/Last Fiscal Year). Selection of a Time Period auto-populates the From Date and To Date boxes accordingly.
- 3 If required, filter the report by fuel types, using the **Products** list. Multiple-selection is allowed by clicking **CTRL** key while selecting the products. In cases where this filter is applied, the report is sorted by products and percentage is calculated out of the specific product total volume and amount.

The department usage report includes several fields as described in Table 8-4:

Table 30: Department Usage Report Fields

Field Name	Description
Department Name	Unique name identifying the department in the fleet
Department Code	Unique code identifying the department in the fleet
Volume	Volume of all transactions performed by the department during the selected time range
Amount	Amount of all transactions performed by the department during the selected time range

Click **Preview** to display the report on a new screen (see [Figure 179](#) on [page 190](#)).

Click **Print** (refer to “[8.3 Printing a Report](#)” on [page 174](#)) to send the report to a printer, or click **To File** (refer to “[8.4 Saving a Report](#)” on [page 174](#)) to save the report.

Figure 178: Department Usage Report Section

Billing Agencies

1
☒ 2
☐ 3
☐ 4
☐ 5

Select the desired billing agencies.
Click to select/unselect the billing agencies.

Select All UnSelect All

Time Period: Last Month

From Date: 01/01/2011 00:00:00 To Date: 01/31/2011 23:59:00

Products: All
 Biodiesel
 Compressed Gas

Preview To File Print

Figure 179: Department Usage Report – Example

SiteOmat - Department Usage Report - Windows Internet Explorer

User: Admin
 Printed on: 02/27/2011 17:54:27

Department Usage Report

Report period: 2011-01-01 00:00:00 To 2011-01-31 23:59:00

Product: Diesel
 Billing Agency: 2

Department Code	Department Name	Volume (gal)	Amount (USD)
20142040	GENERAL SVCS STATE HOUSE	36.050	19.90
20142042	ADMIN SVC FACILITIES & ASSETS M	62.920	138.11
20142045	ADMIN SVCS COURT FACILITY	39.770	21.95
20148000	ADMIN SVCS SURPLUS DIST	16.720	92.29
20232320	SAFETY EQUIPMENT CONTROL	18.060	9.97
20750920	FISH & GAME LAW ENFORCEMENT	326.730	851.34
20750930	FISH & GAME FISHERIES	192.120	657.66
20750933	FISH & GAME MARINERINE	17.350	9.58
20750940	FISH & GAME WILDLIFE	157.320	345.16
20750950	FISH & GAME PUBLIC AFFAIRS	13.670	75.45
20750960	FISH & GAME ACCESS ENGINEERING	137.590	137.40
20830100	LOTTERY COMMISSION	15.430	85.17
Total for billing agency:		1033.730	2443.69
Percent of total:		6.57%	6.51%

***** END *****

Done Local intranet | Protected Mode: Off 90%

8.5.3.5 Vehicle Usage Report

This report enables the user to produce a usage report per vehicle (see [Figure 180](#) on [page 192](#)).

The report is classified by Fleets and Departments/Billing Agencies and includes total volume and amount summaries for each. To filter the fleets/departments/agencies to be included in the report, proceed as follows:

- 1 Select **Fleets&Departments** or **Billing Agencies** radio button to choose the filter mode.
- 2 Select the check box next to the required fleets/departments/agencies.
- 3 To select specific departments, expand the branch by clicking on the plus (+) sign next to the fleet and select the departments. To select all the fleets, click **Select All** button, to reset the selection click **Unselect All** button.
- 4 Filter the report by time range, utilizing the **From Date** and **To Date** menus or using the **Time Period** drop-down list to select a specific period of time (Current/Last Month, Current/Last Quarter, Current/Last Year, Current/Last Fiscal Year). Selection of a Time Period auto-populates the From Date and To Date boxes accordingly.

The Vehicle Usage report includes several fields as described in Table 8-6:

Table 31: Vehicle Usage Report Fields

Field Name	Description
Device Name	Unique device name
Vehicle Number	The license plate or unique number of the vehicle.
No. of Trans.	Number of transactions performed by the vehicle.
Fuel Quantity	Volume of all transactions performed by the vehicle during the selected time range.
Fuel Amount	Amount of money of all transactions performed by the vehicle during the selected time range.

Click **Preview** to display the report on a new screen (see [Figure 181](#) on [page 192](#)).

Click **Print** (refer to “[8.3 Printing a Report](#)” on [page 174](#)) to send the report to a printer, or click **To File** (refer to “[8.4 Saving a Report](#)” on [page 174](#)) to save the report.

Figure 180: Vehicle Usage Report Section

Figure 181: Vehicle Usage Report – Example

SiteOmat - Vehicle Usage Report - Windows Internet Explorer

User: Admin

Printed on: 03/01/2011 15:21:03

Vehicle Usage Report

Report period: 2010-01-01 00:00:00 To 2010-12-31 23:59:00

Fleet Name: ARCHIVES & RECORDS		Fleet Code: 20320000		
=====				
Department Name: ARCHIVES & RECORDS		Department Code: 20321000		
Device Name	Vehicle Number	No. of Trans.	Fuel Quantity	Fuel Amount
M105	113670	14	164.320	420.52
M176	112100	24	500.120	1241.37
M180	103228	19	227.220	596.46
M184	102284	16	173.130	451.91
M40	8501028600414203	23	229.620	596.55
Total for department: 20321000		96	1294.410	3306.82
=====				
Total for fleet: 20320000		96	1294.410	3306.82
=====				
Fleet Name: ATTORNEY GENERALS OFFICE		Fleet Code: 20200000		
=====				
Department Name: ATTORNEY GENERALS OFFICE		Department Code: 20202614		
Device Name	Vehicle Number	No. of Trans.	Fuel Quantity	Fuel Amount
2107991	8501028601371162	47	525.110	1264.82
2107992	104900	52	534.250	1290.93
2107995	112604	5	68.550	154.13
2107996	113665	7	57.690	111.92

Done

Local intranet | Protected Mode: Off

90%

8.5.3.6 Obligo Report

This report enables the user to produce an obligor (credit) status report of a fleet. This report is most applicable if account limits are enabled and it includes Deposits, Withdrawals, Transactions Total and Balance.

To filter the data to be included in the report (see [Figure 182](#)), proceed as follows:

- 1 Filter the report by time range, utilizing the **From Date** and **To Date** menus.
- 2 Select the required fleet by clicking on its row in the fleets' box. To select multiple fleets, press the **CTRL** key while selecting the requested fleets.
- 3 To include all Deposits and Withdrawals executed during the selected time range, select the **Show Details** check box.

Click **Preview** to display the report on a new screen (see [Figure 183](#)).

Click **Print** (refer to “[8.3 Printing a Report](#)” on [page 174](#)) to send the report to a printer, or click **To File** (refer to “[8.4 Saving a Report](#)” on [page 174](#)) to save the report.

Figure 182: Obligo Report Section

Figure 183: Obligo Report – Example

8.5.3.7 Payment Reject Report

This report enables the user to produce a report on settlement errors received from the payment processor. Payment Reject report comprises the following fields (see [Table 32](#)):

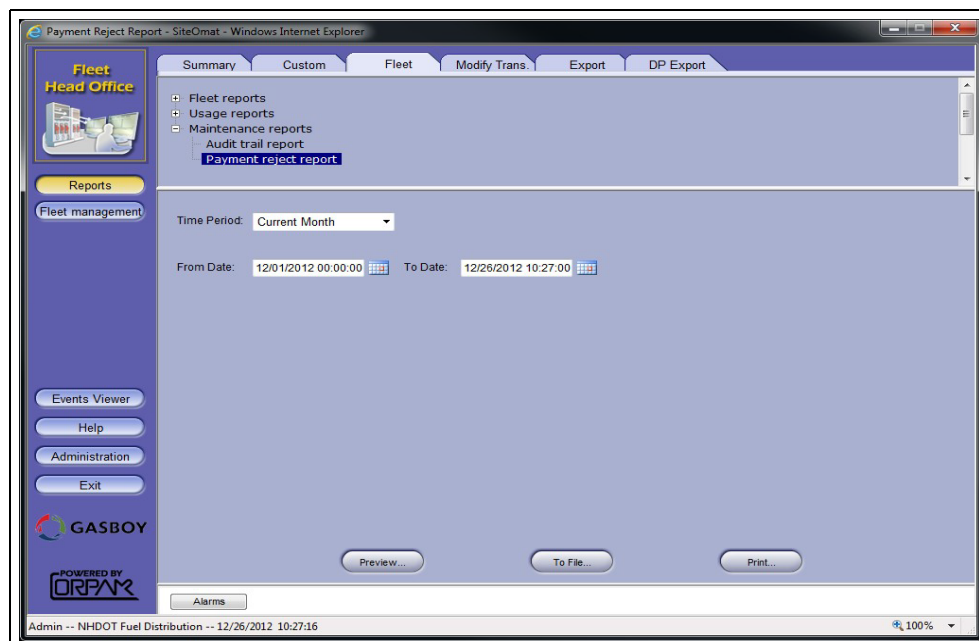
Table 32: Payment Reject Report Fields

Field Name	Description
Date	Date of the transaction
Station Name	Station at which the transaction took place
Amount	Amount of the transaction
Quantity	Fuel quantity dispensed in the transaction
Reject Message	Rejection message as received from payment processor
Auth Reference	Pre-authorization code sent by payment processor

To produce the report (see [Figure 184](#)), proceed as follows:

- 1 Filter the report by time range, utilizing the **From Date** and **To Date** menus or using the **Time Period** drop-down list to select a specific period of time (**Current/Last Month, Current/Last Quarter, Current/Last Year, Current/Last Fiscal Year**). Selection of a Time Period auto-populates the From Date and To Date boxes accordingly.
- 2 Click **Preview** to display the report on a new screen.
- 3 Click **Print** (refer to “[8.3 Printing a Report](#)” on [page 174](#)) to send the report to a printer, or click **To File** (refer to “[8.4 Saving a Report](#)” on [page 174](#)) to save the report.

Figure 184: Payment Reject Report Screen



8.5.4 Modify Transactions

The grid appearing in the Modify Transactions screen enables users to view transactions from all stations (see [Figure 185](#)).

The users can filter transactions using filter controls available on the grid header.

Figure 185: Modify Transactions Screen

Summary Custom Fleet Modify Trans Export DP Export

This grid allows you to view transactions from all stations. You can filter transactions using filter controls available in the grid header. Authorized users can edit the fields marked in gray color. To enter edit mode, double click on a field.

Station	Date	Device Name	Ci
Desk CFN Lab	03/03/17 00:47:24	Admin	Admin

Save Print Import Report Properties Add Transaction

Admin -> None -> 06/16/17 10:07:57

The Print button prints a report containing the selected lines from the screen.

8.5.4.1 Override Transaction

Authorized users can override transaction data as follows:

- a** Edit the fields marked in gray color from the main screen. To enter the edit mode, double-click the field. Click the **Save** button to save and apply changes.
- b** Select the required row by clicking on it. Click **Properties** button. The Edit Transactions dialog box opens (see [Figure 185](#) on [page 195](#)). Edit the relevant fields and click **Save** to save the changes.

Figure 186: Edit Transaction Dialog Box

When a row is changed, Changed Trans. Flag is set to Yes.

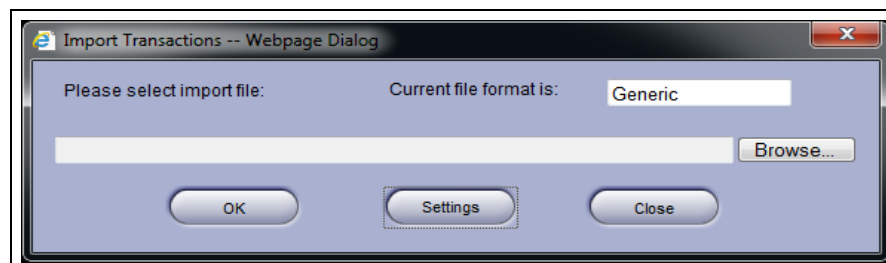
The **Report...** button allows the user to view only the overridden transactions after selecting station and dates.

8.5.4.2 Import Transactions

The import process allows the user to import transaction files (text files) from external systems into the FHO database. The import process can be a one-time process when upgrading a station that has old equipment to Gasboy's PLUS Systems or on a daily basis for companies using Gasboy's PLUS System in part of the stations while the others still use old equipment.

Clicking on the Import button opens a popup dialog box allowing the user to start the import process (see [Figure 187](#)). The import dialog box opens the current file format and three buttons: OK, Close, and Settings.

Figure 187: Import Transactions Dialog Box

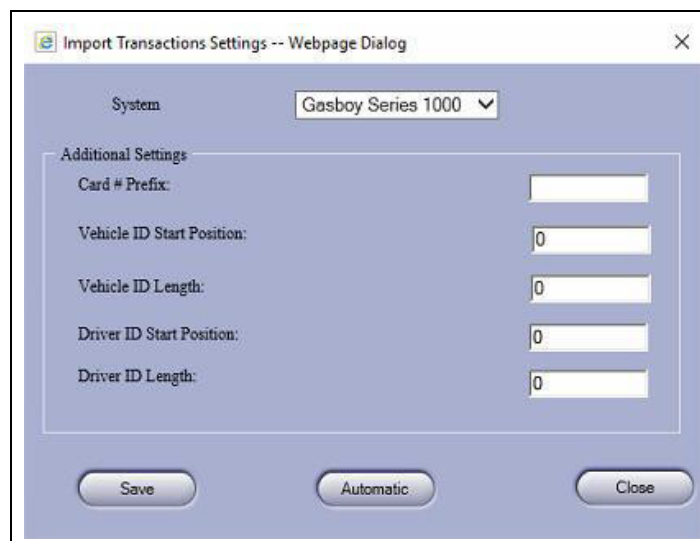


The Browse button opens a standard MS Windows screen for file selection. After selecting the relevant file, click **OK** to start the import process.

8.5.4.3 Setting the Import Process

The Settings button is available for users authorized as administrators only. Clicking Settings opens the Import Transactions Setting screen (see [Figure 188](#)).

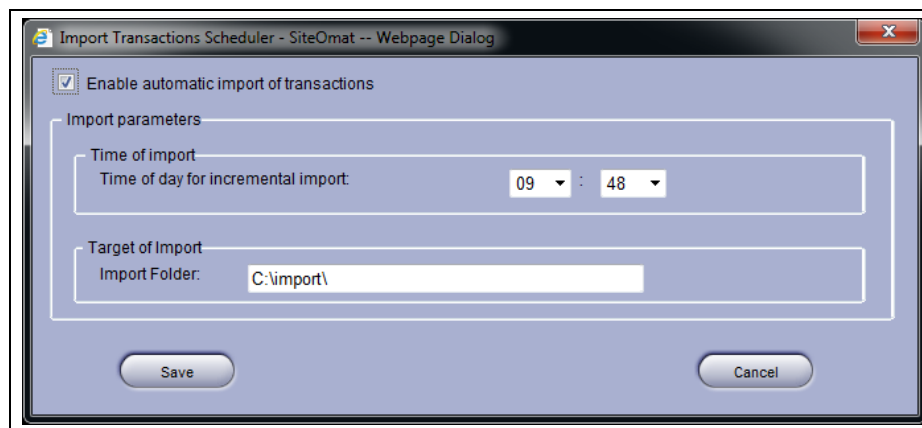
Figure 188: Import Transaction Settings Dialog Box



Proceed as follows:

- 1 In the System drop-down, select the file format. The following options are available:
 - Gasboy Series 1000
 - Gasboy TopKAT
 - Gasboy CFN
 - Generic (see below)
- 2 In accordance with the selected system, edit the Additional Settings fields (not all fields are presented for all system types):
 - a Card # Prefix: Is updated in cases where the card number in the text file misses the card prefix existing in the database.
 - b Vehicle ID Start Position: The exact position of the Vehicle number field in the transaction record.
 - c Vehicle IDLength
 - d Driver ID Start position: The exact position of the Driver number field in the transaction record (Optional).
 - e Driver ID Length (Optional)
- 3 (Optional) Click Automatic to schedule an automatic import process; define the Target of Import and the Time of Import (see [Figure 189](#)).

Figure 189: Import Transaction Scheduler Dialog Box



Before the system starts the import process, it runs verification processes to validate the file; in cases where any of the verification processes fails the file is rejected and the user is informed. The user may save the error log file on the local machine.

In cases where only part of the lines were rejected the process continues with the approved files and the error log file contains only the problematic lines.

Existing transactions are not overridden by the import process and relevant error (warning) lines are added to the log file regarding duplicate transactions.

8.5.4.3.1 Generic Import File Format

Note: This format is supported from version 6.4.45.34 and up.

FHO Generic Import file should meet the following requirements:

- File format is CSV, comma separated values
- The field separator is ‘,’ – comma
- Each line is one transaction. Lines should be ended with CR/LF.
- If date or time fields are empty the current date/time is taken.
- If a field does not have a value, it can be left empty but a comma should be added. FHO will insert a proper default value – zero for numeric values.
- Station Code field is mandatory.
- One of the following fields is mandatory: Vehicle Number or Card Number must be included. Otherwise, transaction is imported without relation to any vehicle.

Table 33 lists the fields included in the generic import format.

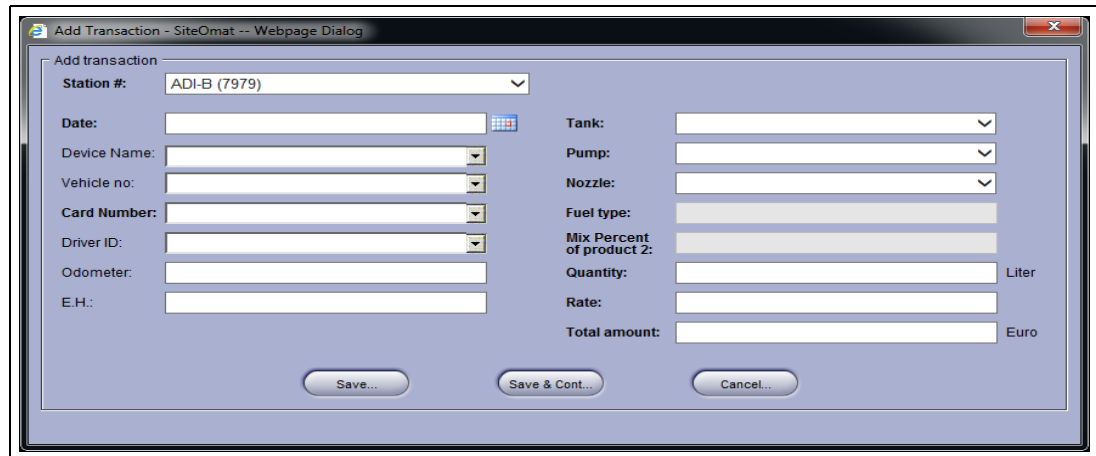
Table 33: Generic Import Fields

Name	Type	Format
Transaction Date	Date	YYYY-MM-DD
Transaction Time	Time	
Volume/Quantity	Float	
Amount/total sale (money)	Float	
PPV – Price per volume	Float	
Vehicle number (plate)	String	
Card number	String	
Station Code	Integer	
Pump number	Integer	
Hose (nozzle) number	Integer	
Product Code	Integer	
Odometer	Float	
Engine Hours	Float	

8.5.4.4 Add New Transaction

To add a new transaction, click Add Transaction button. The Add Transaction screen opens (see [Figure 190](#)). Fill in the required information in the fields and click **Save**.

Figure 190: Add Transaction Dialog Box



The dialog box is titled "Add Transaction - SiteOmat -- Webpage Dialog". It contains the following fields and controls:

- Station #:** A dropdown menu with "ADI-B (7979)" selected.
- Date:** A text field with a calendar icon.
- Device Name:** A dropdown menu.
- Vehicle no:** A dropdown menu.
- Card Number:** A dropdown menu.
- Driver ID:** A dropdown menu.
- Odometer:** A text field.
- E.H.:** A text field.
- Tank:** A dropdown menu.
- Pump:** A dropdown menu.
- Nozzle:** A dropdown menu.
- Fuel type:** A text field.
- Mix Percent of product 2:** A text field.
- Quantity:** A text field with a "Liter" unit label.
- Rate:** A text field.
- Total amount:** A text field with a "Euro" unit label.

At the bottom, there are three buttons: "Save...", "Save & Cont...", and "Cancel...".

If vehicle identification is not recognized, the following error message is displayed (see [Figure 191](#)):

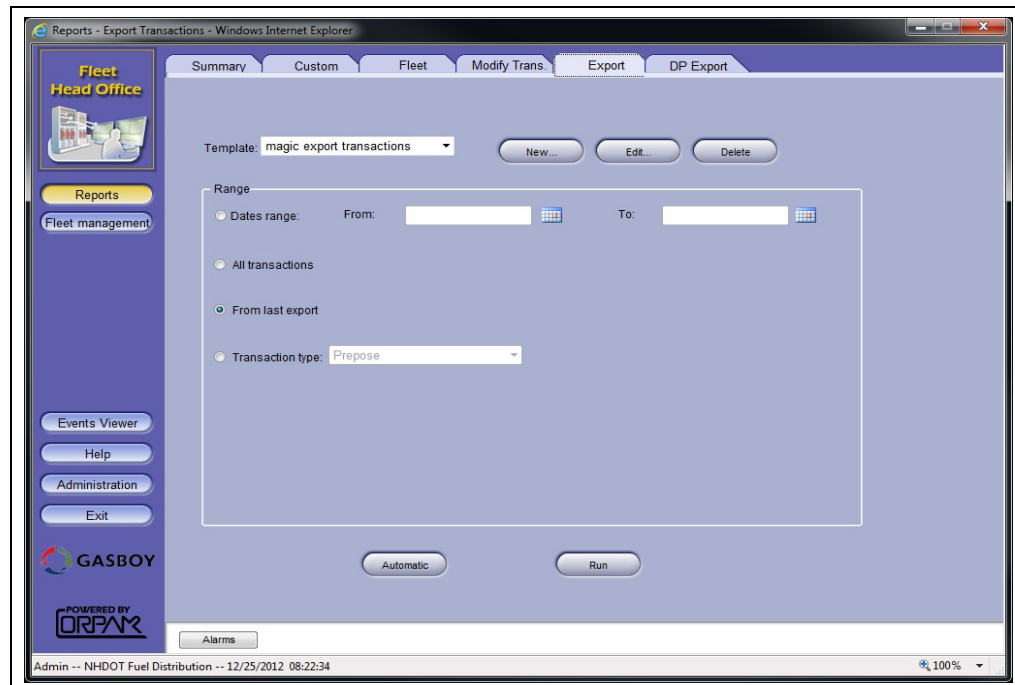
Figure 191: Vehicle ID Error Message



8.5.5 Export Screen

The Export feature (see [Figure 192](#)) enables the user to export records of the transactions performed in the gas station in various profiles into CSV, XML or plain text formats to an FTP or a local directory.

Figure 192: Reports – Export Transactions Screen



8.5.5.1 Defining Templates

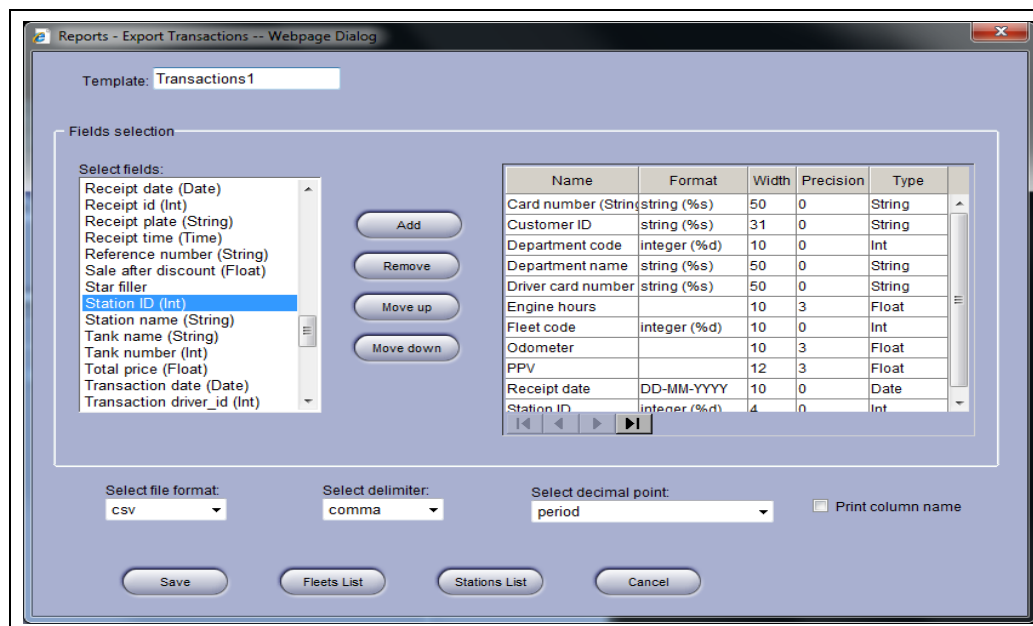
A Template enables the user to define the fields to be included in the export, their order of appearance as well as output options. Several templates may be defined.

The following options are available:

- Selecting a previously defined template from the Template drop-down menu.
- Clicking New to create a new template.
- Selecting a template from the drop-down and then clicking Modify to change its properties.

The last two options open the Reports-Export Transactions dialog box (see [Figure 193](#)).

Figure 193: Reports – Export Transactions Dialog Box



Proceed as follows:

- 1 Select the required fields (see [Table 34](#) on [page 204](#)) by clicking on the field row and then clicking Add. The field is added to the grid on the right-side.
- 2 (Optional) Click a row in the right-side grid and:
 - a Click Move up or Move down to change the field's order of appearance in the report.
 - b Double-click Name field to rename the field.
 - c Double-click Format field to select a different format from a list of available formats (.csv or .txt output only, (see [Table 35](#) on [page 207](#)) for a description of the available formats).
 - d Double-click Width field and enter a new value to change the width of the field (for .csv or .txt output only).
 - e Double-click Precision field to select a different number of decimal digits of precision from a list (for .csv or .txt output only).

- 3 Select the output type from the Format drop-down: csv, txt or xml.
 - 4 (Optional) Select the field delimiter character from the Select Delimiter drop-down (for .csv output only).
 - 5 (Optional) Select the Decimal Point notation from the drop-down (default: Period).
- Note: Do not select a comma as a decimal point notation, if commas were selected as field delimiters.*
- 6 (Optional) Select the Print column name check box to include the field Name in the export file.
 - 7 (Optional) Filter the export by Fleet/Station by clicking Fleet List (which opens the Fleet List dialog box, see [Figure 194](#)) and Station List (which opens the Station List dialog box, see [Figure 195](#) on [page 204](#)). Select the check box next to the required fleets/stations. To select all the fleets/stations, click Select All button, to reset the selection click Unselect All button. Click **OK** to save changes and close the dialog box, or Cancel to close the dialog box without saving the changes.

Figure 194: Fleet List Dialog Box

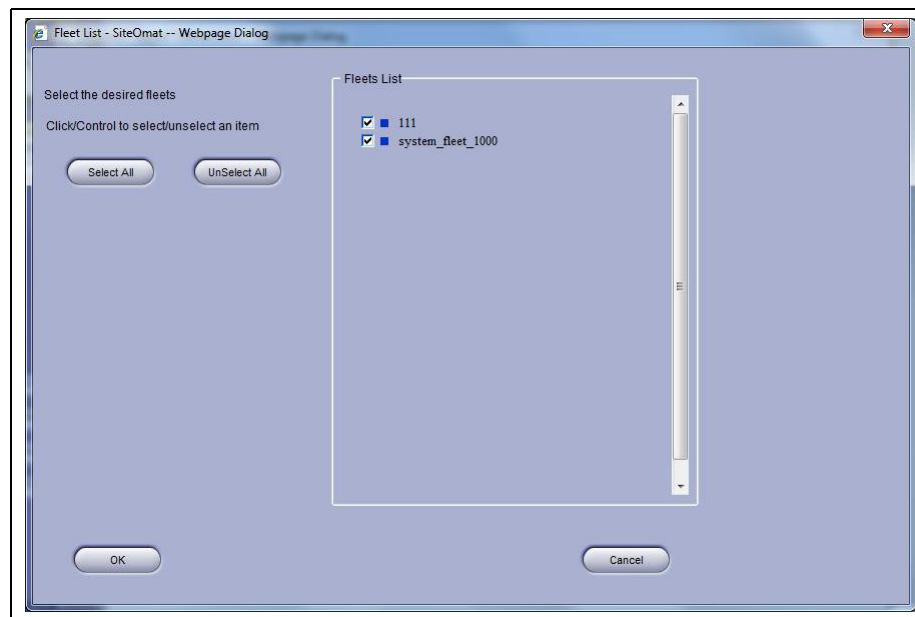
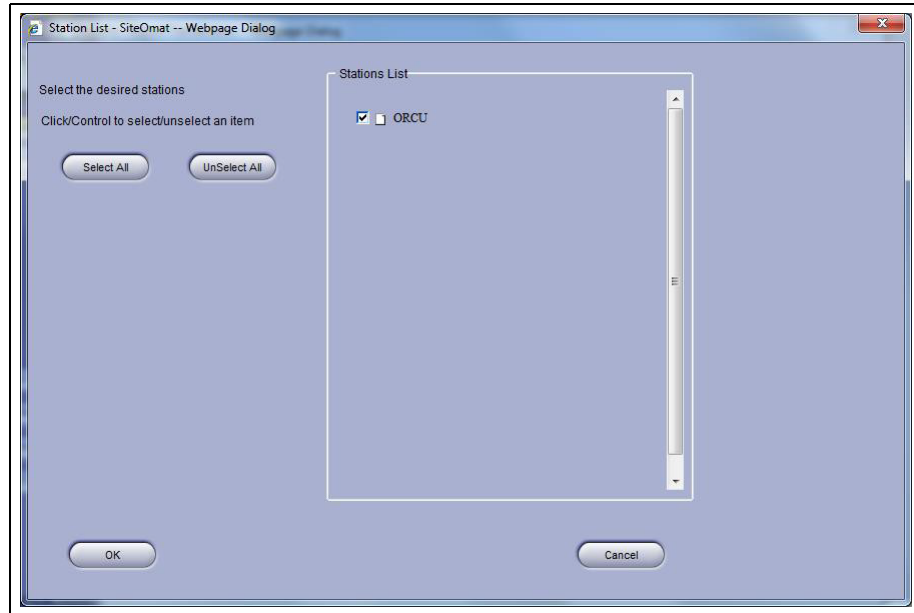


Figure 195: Station List Dialog Box

- 8 Click **Save** to save the settings.

To remove a field from the report, click the row in the right-side grid and then click Remove.

Table 34: Export Fields

Field Name	Description
Application ID	The ID of the manual transaction app that the transaction was reported from
Authorization Mode	Auto Authorize/Need Authorize operation modes. In Auto-Authorize mode, the pump is authorized as soon as the nozzle is lifted. The Need Authorize mode blocks the pump until authorization is given by attendants or by means of authorization devices.
Authorized User	CNG/LPG authorized user
Aux 1	Utility Engine #1 EH current reading
Aux 2	Utility Engine #2 EH current reading
Base Price	Product base price
Billing Sale	Transaction amount in cases where the PPV was changed after the transaction has already been made
Card Number	A unique ordinal ID number given by the system to each device
Credit Card Code	Currently not in use
Credit Card	Credit card Primary Account Number protected and masked complying with PCI standards
Credit Company	Credit card company details
Customer ID	ID number of the customer
Department Address 1	First line of department physical address
Department Address 2	Second line of department address
Department Billing Agency	Department billing agency name
Department Billing Number	Department billing agency number

Field Name	Description
Department City	City of the department's location
Department Code	Unique code identifying the department in the fleet
Department Contact	Name of personnel responsible for the running of the FHO/FMS
Department Email	E-mail address of Contact personnel
Department Name	Name identifying the department in the fleet
Department Phone	Telephone number of Contact personnel
Department State	State/Province of the department's location
Department Zip	Zip code
Device Name	Unique device name
Double Zero Filler	00 filler characters
Driver Card Number	String from the driver's card (Track 2)
Driver Customer ID	Customer ID number of the driver
Driver Name	Driver name entered for identification
Driver User Data 1- 5	Additional driver card data
Driver Vehicle no.	Unique ID number of the vehicle
Empty Filler	Empty filler character
Engine Hours	Number of engine hours of the vehicle
Fleet Code	Numeric code identifying the fleet
Fleet Name	Name identifying the fleet
Four Zero Filler	0000 filler characters
Hose	Number of the hose used to supply the fuel in the transaction
Job Code	The number entered in the manual transaction app and saved as part of transaction
Model Class	Additional vehicles' classification
Model Description	Vehicle model name
Nozzle	Number of the nozzle used to supply the fuel in the transaction
Odometer	Odometer reading from the vehicle
One Filler	1 filler character
Payment Type – Code	Code of the pay mode used in the transaction: • CASH • CASHCU • COUPON • CREDIT • CSTMR • FPOS • NONE • OTHERS • OWN • REDEMP • SAMPLE • SCREEN • TEST • VIT

Field Name	Description
Payment Type	Description of paymode code: • CASH: Cash • CASHCU: Cash Customer • COUPON: Coupon • CREDIT: Credit • CSTMR: Customer tag • FPOS: Axalto • NONE • OTHERS • OWN: Own use • REDEMP: Redemption • SAMPLE: Sample • SCREEN: Screen • TEST: Testing • VIT: VIT
PPV	Price Per Volume
Price List	Price List associated to the device
Product Alternate Name/Code	Product short name
Product Code	Code identifying the product in the system
Product Name	Name identifying the product in the system
Proxy Device	Proxy device used to authorize the transaction
Pump	Number of the pump head, from which the transaction was performed
Receipt Date	Date of issue of the receipt
Receipt ID	Ordinal unique number assigned by the system to each receipt as included in each printed receipt
Receipt Plate	License plate of the fueling vehicle
Receipt Time	Time of issue of the receipt
Reference Number	Pre-authorization code sent by payment processor
Refund	Refund transaction flag
Reject Code	Rejection message code
Reject Text	Text message sent by payment processor for rejected credit card transactions
Sale after Discount	The sum of money collected in the transaction after discount
Star Filler	* filler character
Station ID	Identification code of the station
Station Name	Identification name of the station
Tail ID	The plan number – read from the card and validated
Tank Name	Identification of the tank connected to the pump
Tank Number	Identification code of the tank connected to the pump
Total Price	The sum of money collected in the transaction
Totalizer original	Pump totalizer as recorded at the end of the transaction
Totalizer	Offset-compensated pump totalizer as recorded at the end of the transaction
Transaction Date	Date of the transaction
Transaction Driver ID	Driver ID entered for identification
Transaction ID	Unique ordinal ID number given by the system to each transaction
Transaction Time	Time of the transaction
Transaction Timer 2-3	Currently not in use

Field Name	Description
Transaction Type - Code	Identification code of the type of transaction carried out: ATDNT AUTO CSTMR FPOS
Transaction Type	Description of transaction type code: ATDNT: Attendant AUTO: Auto-Authorize CSTMR: Customer FPOS: Axalto FPOS
Truckstop Invoice Number	Invoice reference code sent by payment processor
Vehicle Company Name	Vehicle's manufacturer
Vehicle Model	Vehicle's model
Vehicle No.	The license plate number or unique number of the vehicle
Vehicle User Data 1-5	Currently not in use
Vehicle Year	Manufacturing year of the vehicle
Volume/Quantity	Fuel volume supplied in the transaction
YYYY+ Transaction ID	Year and unique ordinal ID number given by the system to each transaction
Zero Filler	0 filler character

Table 35: Export Field Formats

Format Name	Description
Empty/Default	Default field format
Float (%f)	Decimal floating point numbers
Float 0-pad (%0*. *f)	Decimal floating point numbers with zero padding to the required width
Integer (%d)	Decimal numbers
Hex (%x)	Hexadecimal numbers
Int/ 0-pad	Decimal numbers with zero padding out to the required width
Hex/ 0-pad	Hexadecimal numbers with zero padding out to the required width
Int/exact/0-pad	Decimal numbers with zero padding out to the required width
Hex/exact/0-pad	Hexadecimal numbers with zero padding out to the required width
Int/ 0-pad/LJ	Decimal numbers with zero padding out to the required width, left justified
Hex/ 0-pad/LJ	Hexadecimal numbers with zero padding out to the required width, left justified
String (%s)	Alphanumeric characters
Right Part of String	Right characters in the string, according out to the required width
Date Formats	Available formats: YYYY-MM-DD YYYYMMDD DD-MM-YYYY MM-DD-YYYY DD/MM/YYYY MM/DD/YYYY DD/MM/YY MM/DD/YY DDMMYYYY MMDDYYYY

Format Name	Description
Time Formats	Available formats: hh:mm:ss hhmmss hh:mm hhmm

8.5.5.2 Setting Export Range

The range options are:

- a** Date range: Sets a specific time range. Use the From and To date and time menus.
- b** All transactions: Exports a record that includes all the transactions, without filtering.
- c** From last export: This report refers to the transactions that took place since the last All Transactions export.
- d** Transaction type: The export record includes all the transactions performed filtered by the selected transaction type and selected template settings.

Note: A transaction is exported only once. Already exported records will not be included in later exports.

Range settings do not enable selection of multiple parameters. Only one of the above options may be selected.

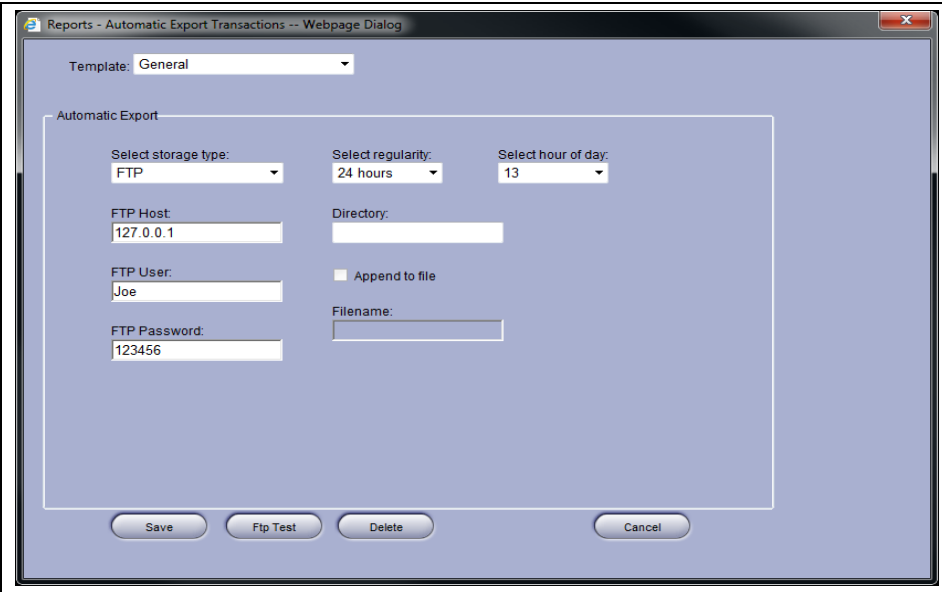
8.5.5.3 Scheduling Automatic Exports

Transactions export can be scheduled to run automatically at predefined time intervals. Exports with different templates or the same template filtered by different fleets can be programmed.

To schedule an automatic export, proceed as follows:

- 1 Click Automatic. The Automatic Export dialog box opens (see [Figure 196](#)).

Figure 196: Export – Automatic Export Transaction Dialog Box



- 2 Select a Template from the drop-down list.
- 3 Select the Storage Type from the drop-down: FTP Site/Local Directory
- 4 If exporting to an FTP:
 - a Enter the FTP Host (Address)
 - b Enter FTP access User and Password
 - c (Optional) After setting the above parameters, click FTP Test to check the connection to the FTP server. A success message should appear.

If exporting to a local directory:

- a Enter the path to the Directory field
 - b (Optional) Select the Append to file check box to add the exported records as a supplement to the existing export file and enter the export Filename
- 5 Select the time interval from the Regularity (15' to 24 hrs.) and the Hour of Day drop-down lists.
 - 6 Click Save to save the automatic export.

8.5.5.4 Executing Manual Exports

To manually run the Transactions Export, proceed as follows:

- 1 Select a Template from the drop-down list.
- 2 Select a Range.
- 3 Click Run. Open or save the file.

8.5.6 DP Export

The DP Export feature (see [Figure 197](#)) enables the user to export DataPass PLUS records in various profiles into CSV, XML or plain text formats to an FTP or a local directory.

Note: This feature is available for fleets equipped with OrData system. Parameters are reported according to their availability in the different vehicle models/ diagnostic interfaces. This screen opens only in cases where the only Support OrData Systems check box was selected in Administration ?General ?Setup screen (refer to “6.4.1 General Tab” on [page 57](#)).

Figure 197: Reports – DP Export Screen

The screenshot displays the 'DP Export' screen within the 'Fleet Head Office' application. The interface is divided into a sidebar on the left and a main content area. The sidebar contains navigation buttons: 'Reports', 'Fleet management', 'Events Viewer', 'Help', 'Administration', and 'Exit'. The main content area has a top navigation bar with tabs: 'Summary', 'Custom', 'Fleet', 'Modify Trans.', 'Export', and 'DP Export'. The 'DP Export' tab is selected, showing a 'Manual Export' section with a 'Template' dropdown, a 'Range' radio button, and 'From'/'To' date pickers. Below this is an 'Automatic Exports' section with a table. The table has columns: 'Name', 'Active', 'Template', 'Target', 'FTP Host', 'Port', and 'User Name'. At the bottom of the table are 'New', 'Modify', and 'Delete' buttons. A large 'Export Now' button is also present. The bottom status bar shows 'Admin -- None -- 06/16/17 10:46:48' and a log of events: 'Alarms 04/05/17 12:55:58 Urgent Communication Failed with OPT CRIND5 System Desk CFN Lab'.

8.5.6.1 Defining Templates

A Template enables the user to define the fields to be included in the report, their order of appearance, and output options. Several templates may be defined.

The following options are available:

- Selecting a previously defined template from the Template drop-down menu.
- Clicking New to create a new template.
- Selecting a template from the drop-down and then clicking Modify to change its properties.

The last two options open the Edit DP Export Template dialog box (see [Figure 198](#)).

Figure 198: Edit DP Export Template Dialog Box

Template: ☒ For ALL User

Fields selection

Select fields:

- FleetCode (String)
- Fuel Consumed (Float)
- Fuel Level (Float)
- Fuel Level 2 (Float)
- ID (Int)
- Idle Time Events (Int)
- Idle Time (Int)
- Odometer (Int)
- Over RPM Events (Int)
- Over Speeding Duration (Int)
- PTO (Int)
- Timestamp (Timestamp)
- Vehicle Id (String)
- Interface Type (Int)
- Interface Description (String)
- ECU Address (Int)
- Error Code (String)

Add Remove Move up Move down

Name	Format	Width	Precision	Type
FleetCode	string (%s)	10	0	String
Fuel Consumed		10	3	Float
Idle Time	integer (%d)	10	0	Int
Odometer	integer (%d)	10	0	Int
Over RPM Events	integer (%d)	10	0	Int
Over Speeding Duration	integer (%d)	10	0	Int
Vehicle Id	string (%s)	50	0	String

Select file format: Select delimiter: Select decimal point: ☒ Print column name

Save Cancel

Proceed as follows:

- 1 Select the required fields (see [Table 36](#) on [page 212](#)) by clicking on the field row and then clicking Add. The field is added to the grid on the right-side.
- 2 (Optional) Click a row in the right-side grid and:
 - a Click Move up or Move down to change the field's order of appearance in the report.
 - b Double-click the Name field to rename the field.
 - c Double-click the Format field to select a different format from a list of available formats (for .csv or .txt output only, refer to [Table 36](#) on [page 212](#)).
 - d Double-click the Width field and enter a new value to change the width of the field (for .csv or .txt output only).
 - e Double-click the Precision field to select a different number of decimal digits of precision from a list (for .csv or .txt output only).

- 3 Select the output type from the Format drop-down: csv, txt or xml.
- 4 (Optional) Select the field delimiter character from the Select Delimiter drop-down (for .csv output only).
- 5 (Optional) Select the Decimal Point notation from the drop-down list.
- 6 (Optional) Select the Print column name check box to include the field Name in the export file.
- 7 Click Save to save the settings.

To remove a field from the report, click the row in the right-side grid and then click Remove.

Table 36: DP Export Fields

Field Name	Description
Auxiliary1	Utility Engine #1 EH current reading
Auxiliary2	Utility Engine #2 EH current reading
DP ID	Record ID
DP Timestamp	Timestamp of the reading
EngineHours	Current number of engine hours
FleetCode	4 digits fleet code programmed into the DP
Fuel Consumed	Fuel consumption delta between current and previous readings
Fuel Level	Current reading of fuel level
Idle Time Events	Number of times the vehicle was idle between current and previous readings
Idle Time	Accumulated idle time between current and previous readings. Idle time counter starts whenever the speed is zero while the vehicle's engine is running for a period longer than X consecutive minutes, as programmed into the DP.
Odometer	Current odometer reading
Over RPM Events	Number of times the vehicle crossed the RPM limit as programmed into the DP. The Delta between current and previous readings.
Over Speeding Duration	Accumulated time that the driver drove over the speed limit as set for the DP. The Delta between current and previous readings.
PTO	Current number of Power take-off operating hours
Vehicle ID	License plate number
Interface Type	Diagnostics interface type
Interface Description	Diagnostics interface description
ECU Address	Address of the Electronic Control Unit that reported the error
Error Code	Error ID as reported by vehicle diagnostics
Fault Status	Error status: Active/Inactive
FMI	Failure Mode Identifier code (heavy vehicles)
Occurrence Count	Number of errors reported for the vehicle. Note: In txt/csv outputs, if more than one error was reported, the export will generate duplicate lines for each error.
Error Code Description	Error description as provided by vehicle diagnostics
ECU Address Description	Description of the Electronic Control Unit that reported the error
FMI Description	Failure Mode Identifier description (heavy vehicles)

8.5.6.2 Scheduling Automatic Exports

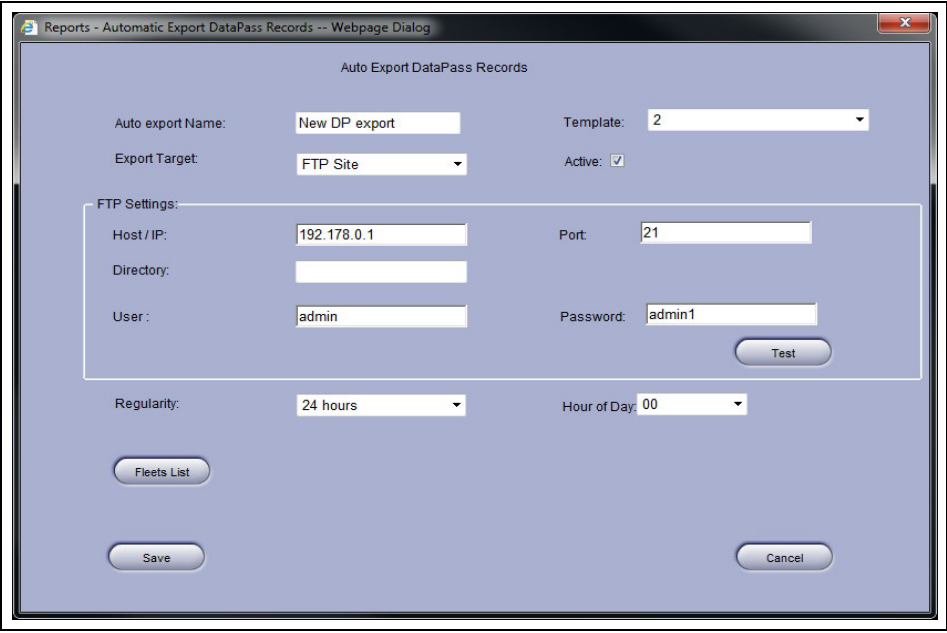
DP Export can be scheduled to run automatically at predefined time intervals. Exports with different templates or the same template filtered by different fleets can be programmed.

The Automatic Export grid displays all defined exports, along with their status, the template used, the target and target properties.

To schedule an automatic export, proceed as follows:

- 1 In the Automatic Exports section, click **New**. The Automatic Export dialog box opens (see [Figure 199](#)).

Figure 199: Automatic Export DataPass Records Dialog Box



- 2 Enter the **Auto Export Name**.
- 3 Select a **Template** from the drop-down list.
- 4 Leave the **Active** check box selected to run the export at the predefined time.
- 5 Select the **Export Target** from the drop-down: FTP Site/Local Directory.
- 6 If exporting to an FTP:
 - a Enter the **FTP Host** (Address).
 - b Enter the **FTP Port**.
 - c Enter FTP access **User** and **Password**.
 - d (Optional) After setting the above parameters, click **Test** to check the connection to the FTP server. A success message should appear.

If exporting to a local directory, enter the path to the **Directory** field.

- 7 Select the time interval from the **Regularity** (15' to 24 hrs.) and the **Hour of Day** drop- down lists.
- 8 (Optional) Filter the export by fleet by clicking **Fleet List** (refer to “[8.2.2 Fleet Filter](#)” on [page 172](#)).
- 9 Click **Save** to save the automatic export. The scheduled export is added to the grid.

To modify an automatic Export, select it from the grid and then click the **Modify** button. Change export properties in the dialog box described above.

To remove an automatic report from the list, select it and then click **Delete**. A confirmation message is displayed to prevent accidental deletion.

8.5.6.3 Executing Manual Exports

To manually run the DP Export, proceed as follows:

- 1 Select a **Template** from the drop-down list.
- 2 In the Manual Export section:
 - Select the **Range** radio button and select the start and end time, or
 - Select the **All** radio button to export all records
- 3 (Optional) Filter the export by fleet by clicking Fleet List (refer to “[8.2.2 Fleet Filter](#)” on [page 172](#)).
- 4 Click **Export Now**. Open or save the file.

8.6 FHO Fleet Manager Reports

The fleet manager can produce reports regarding the transactions made by his or her own fleet, in several cross sections. The following reports are available to the fleet manager in different tabs:

- a Summary Reports
- b Vehicle Reports
- c Exception Reports
- d Custom Reports
- e Fleet Reports
- f Modify Transactions
- g Export DP

When fleet managers log in, the first page of the summary report is displayed, indicating the fleet status.

Click **Print** at the bottom of the screens to print the relevant report.

Note: For Administrator reports, refer to “[8.5 FHO Administrator Reports](#)” on [page 174](#).

8.6.1 Summary Reports

The Summary Report enables the fleet manager to view/print/download a summarized transaction report of his or her fleet vehicles in three available cross sections: Summary (see [Figure 200](#)), Department (see [Figure 201](#) on [page 217](#)) or Volume (see [Figure 202](#) on [page 217](#)).

Figure 200: Summary Report Screen (Fleet Manager)



8.6.1.1 Summary Report

This report allows the user to view a summary status report on the managed devices for the selected fleet and time range including:

- a** Total Sales: The total sum of money collected in all transactions per product is graphically displayed in a bar diagram on the lower right corner of the screen.
- b** Total Devices/ Used Devices: The total number of managed devices and the number of managed devices used at the selected time range are graphically displayed in a bar diagram on the upper right corner of the screen.
- c** Monthly Summary Report: Displays Fuel, Vehicle Usage and Maintenance Data from the selected month and the previous month for all the fleet's vehicles. The grid also shows the percentage of change between the monthly values, enabling the Fleet Manager to get a comprehensive view of the fleet in one click. The Summary Report fields are described in [Table 37](#).

Note: Vehicle Usage and Maintenance data is available in version 6.3.2 or later for fleets equipped with DataPass PLUS system.

Table 37: Monthly Summary Report Fields

Field Name	Description
Fuel Related	
Total Fuel Consumption	Total fuel consumption
Total Fuel Cost	Sum of money collected in all fuel transactions
Average Consumption	Average fuel consumption per driving distance calculated for all the devices in the fleet
Total Driving Distance	Total driving distance accumulated by all vehicles in the fleet
Vehicle Usage	
Total Driving Time (EH)	Total number of engine hours of all the devices in the fleet
Total Idle Time	Accumulated idle time
Total Vehicles Not Used	Total number of not-used vehicles
Auxiliary Engine-Hours 1	Total Utility Engine #1 EH
Auxiliary Engine-Hours 2	Total Utility Engine #2 EH
Total Over-Speeding Duration	Total over-speeding time accumulated by all vehicles in the fleet
Total Over-RPM Events	Total over-RPM events accumulated by all vehicles in the fleet
Total Vehicles per Class	Total number of vehicles per class (a row for each defined class, as set in Model screen, see paragraph 7.5.3)
Maintenance	
Critical Error Codes	Total OBD errors reported for all vehicles

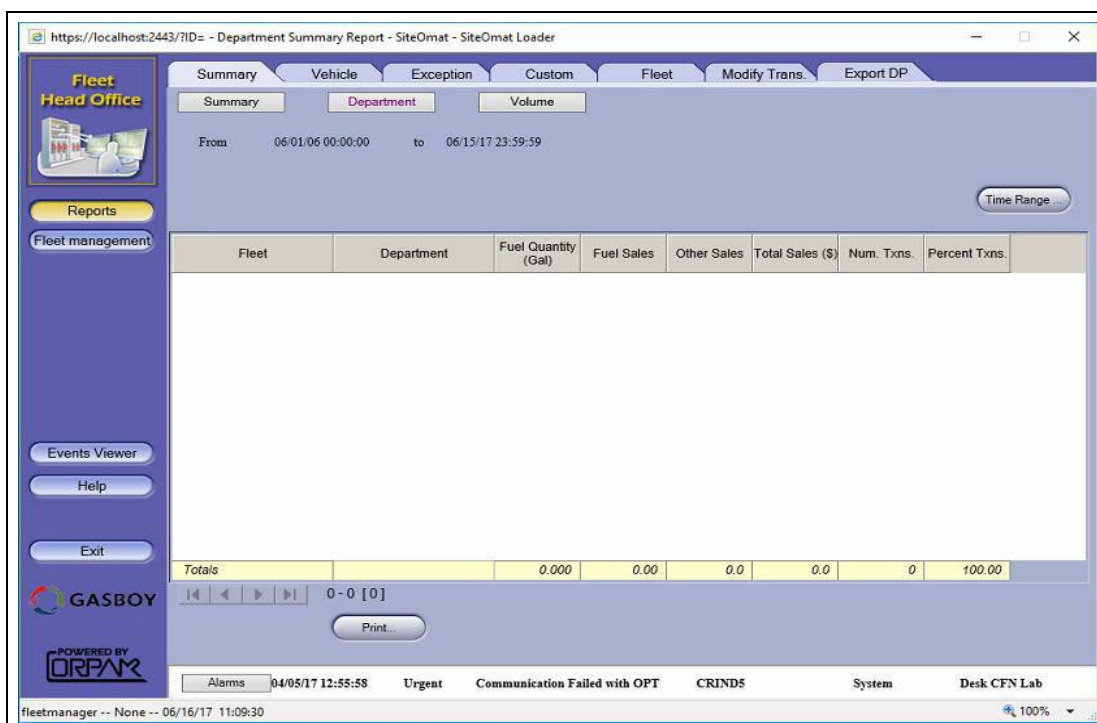
8.6.1.2 Summary - Department

This report allows the user to view a grid containing summary information per department including:

- a** Fleet: The name identifying the fleet.
- b** Department: The name identifying the department.
- c** Fuel Quantity: The fuel volume supplied in the transactions.
- d** Fuel Sales: The sum of money collected in all fuel transactions.
- e** Other Sales: The sum of money collected in dry product (such as oils) transactions.
- f** Total Sales: The sum of money collected in all transactions.
- g** Num. Txns.: The number of transactions completed.
- h** Percent Txns.: The percentage of the department in total sales.

The bottom line displays the total for all sales.

Figure 201: Department Report



Click **Print** to obtain a printable version of the grid.

8.6.1.3 Summary- Volume

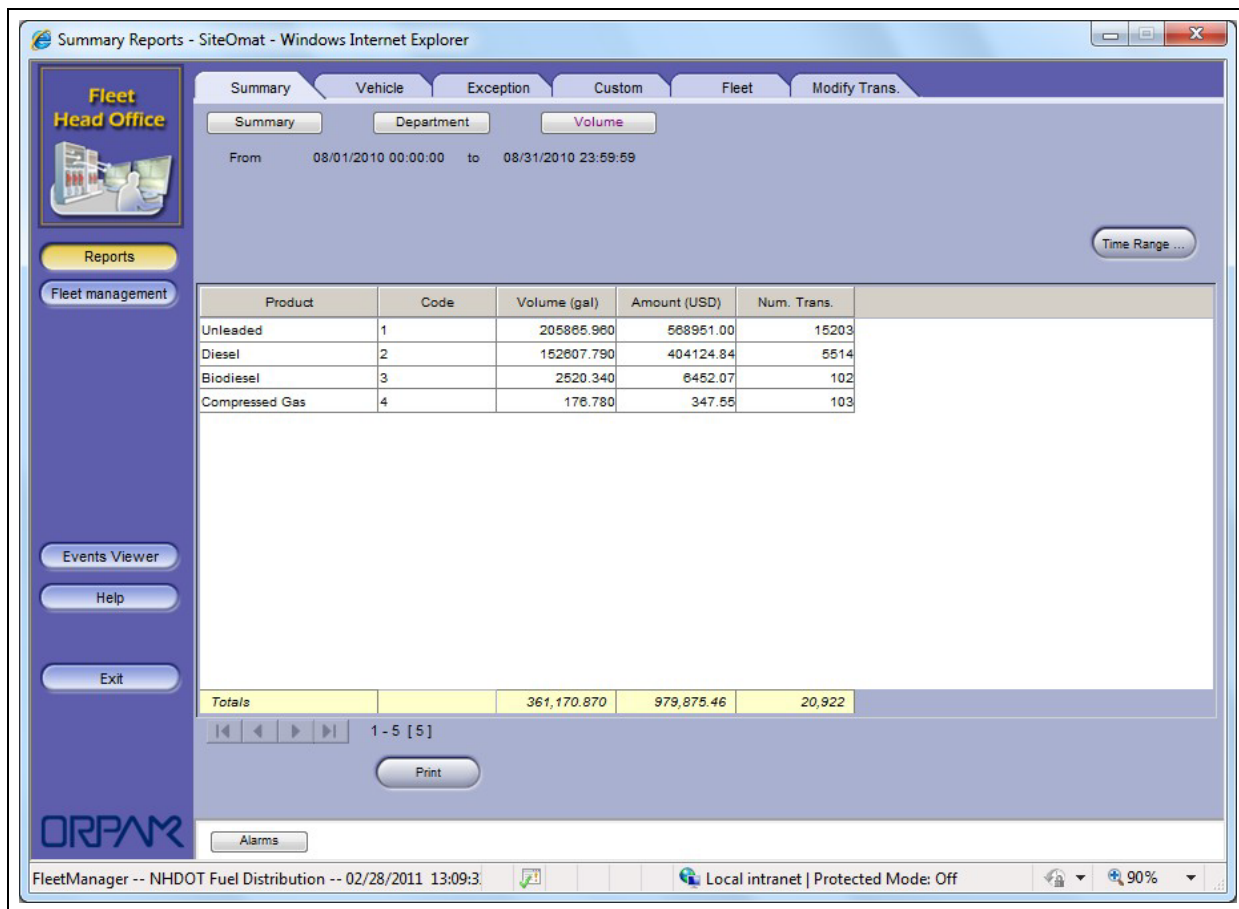
This screen displays a grid containing specification of all sales on the defined date range by product.

The grid contains the following fields:

- a** Product: Types of products consumed.
- b** Code: A code identifying the product.
- c** Volume: The fuel volume dispensed in the transactions per product.
- d** Amount: The sum of money collected in all transactions per product.
- e** Num. Trans: The number of transactions completed per product.

Click **Print** to obtain a printable version of the screens.

Figure 202: Volume Report (Fleet Manager)



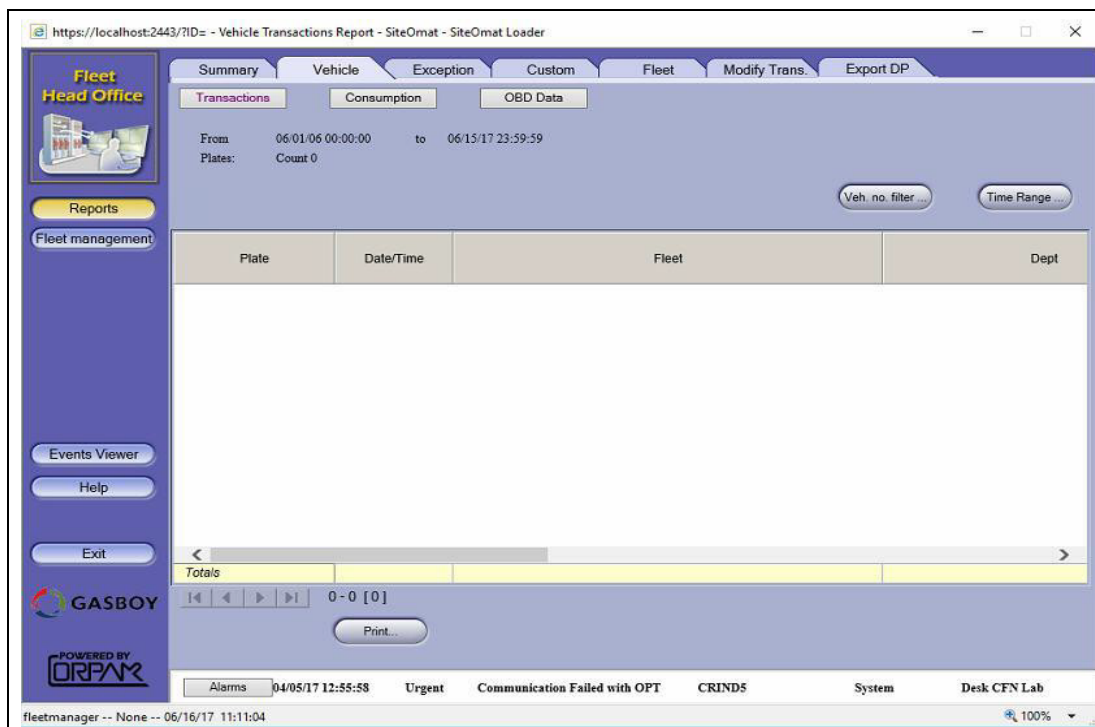
8.6.2 Vehicle Reports

This tab provides vehicle based reports. The Vehicle Reports offer the fleet manager a detailed transaction report of the vehicles pertaining to his or her fleet in the specified time frame, in three cross sections: Transactions (refer to “[8.6.2.1 Transactions Report](#)”) and Consumption (refer to “[8.6.2.2 Consumption Report](#)” on [page 220](#)) and Errors (refer to “[8.6.2.3 OBD Data Report](#)” on [page 221](#)). Vehicle Reports display all the transactions (and optional errors) related to the selected fleets or vehicles.

8.6.2.1 Transactions Report

This screen (see [Figure 203](#) on [page 220](#)) displays a grid providing detailed information on each transaction in each row, including the following fields:

- a** Plate: The license plate number or vehicle ID.
- b** Date/Time: The date and time of the transaction.
- c** Fleet: The fleet, to which the fueling vehicle belongs.
- d** Dept: The department, to which the fueling vehicles belong.
- e** Station: The gas station from which the transaction is performed.
- f** Last Odometer: The odometer reading entered in the previous fueling visit.
- g** Distance: The elapsed driving distance of the vehicle.
- h** Last Engine Hrs: The number of engine hours of the vehicle, as reported in the last refueling visit.
- i** Engine Hrs: The current number of engine hours of the vehicle.
- j** Product: The type of product fueled.
- k** Volume: The volume supplied in the transaction.
- l** Odometer Consumption: Distance per fuel consumption.
- m** EH Consumption: Engine Hours per fuel consumption.
- n** Sale: The sum of money collected in the transaction.
- o** Stn-ID: Txn-ID: The transaction and station ID.

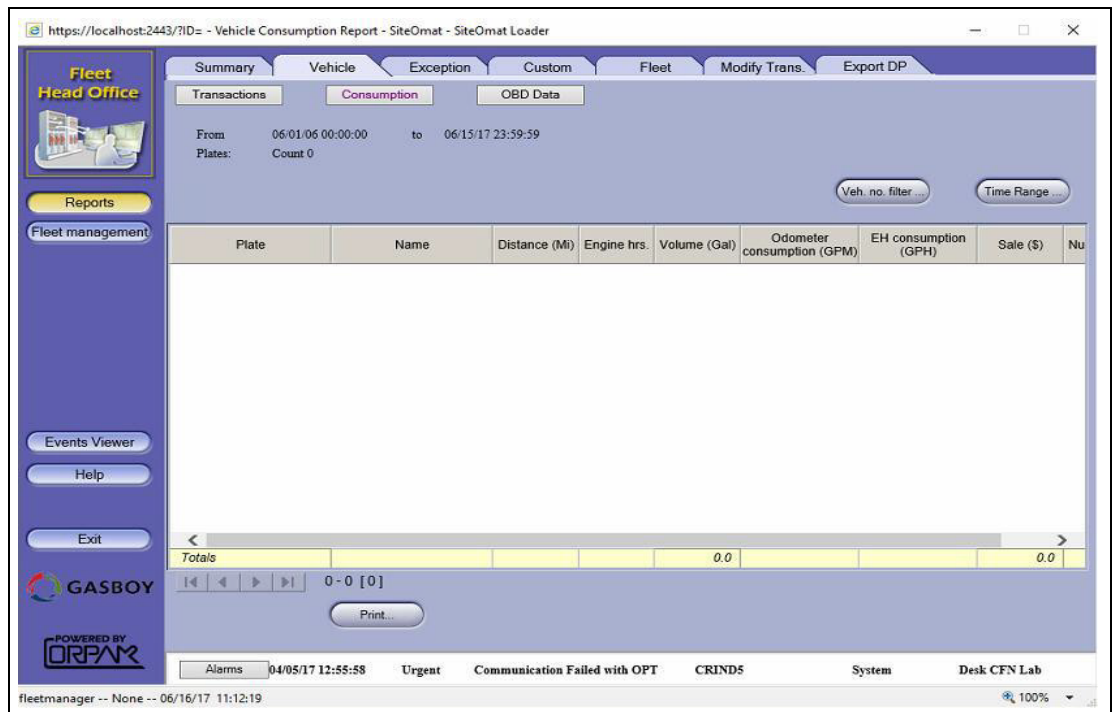
Figure 203: Vehicle Report Screen - Transactions

8.6.2.2 Consumption Report

This screen (see [Figure 204](#) on [page 221](#)) displays a grid providing summarized information on each vehicle (device) in each row, including the following fields:

- a** Plate: The license plate number or vehicle ID.
- b** Name: The name identifying the specific device.
- c** Distance: The elapsed driving distance of the vehicle.
- d** Engine Hrs.: The current number of engine hours of the vehicle.
- e** Volume: The volume dispensed in the transaction.
- f** Odometer Consumption: Kilometers per liter.
- g** EH Consumption: Engine Hours per liter.
- h** Num. Txns.: The summarized transactions per vehicle.

Figure 204: Vehicle Report Screen - Consumption



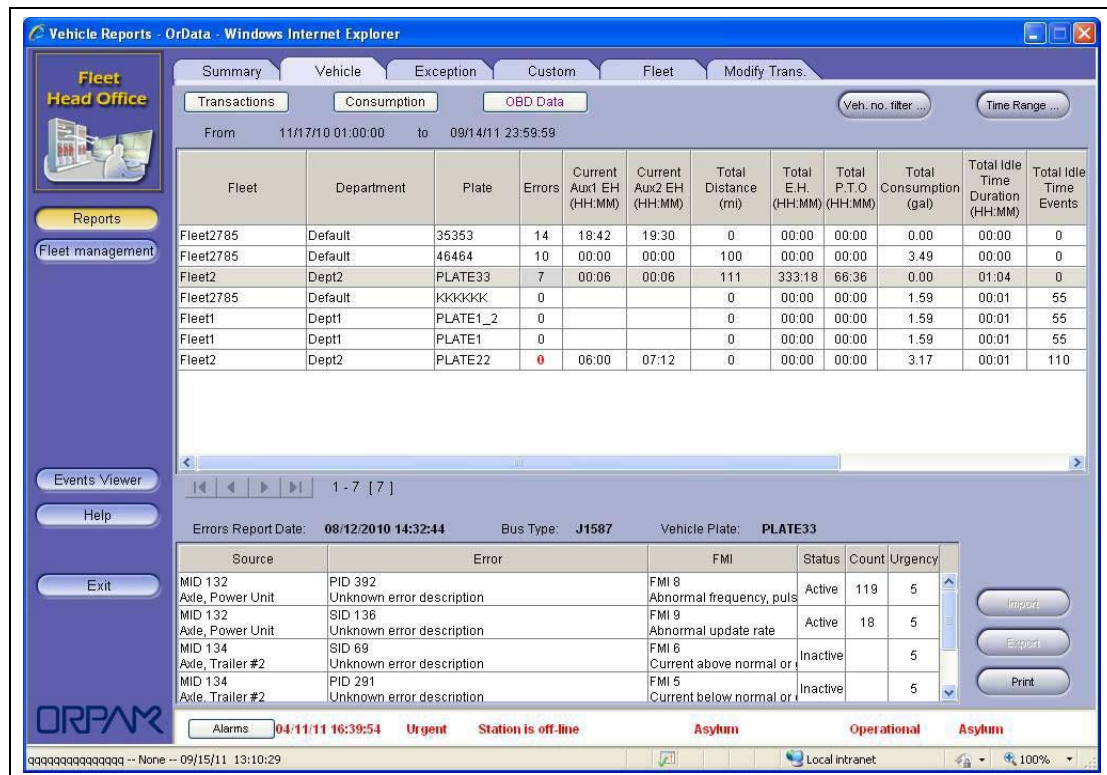
8.6.2.3 OBD Data Report

This screen (see [Figure 205](#) on [page 222](#)) displays On-Board Diagnostics error codes for DataPass PLUS vehicles.

The DataPass PLUS Vehicle Unit collects Odometer, Engine Hour and On-Board Diagnostics errors. As it is recognized by the Wireless Terminal (WGT), the data is received and stored in the FHO database, whether the vehicle has performed a transaction or not, enabling Fleet and Department Managers to receive an updated picture of the vehicles, current status for maintenance purposes.

Furthermore, WGT units can be also installed at the fleet facilities (i.e. fleet parking lot), for tight tracking of vehicle condition.

Figure 205: Vehicle Report Screen – OBD Data



The screen contains two filters (Time Range, refer to “8.2.1 Set Time Range” on page 171 and Vehicle, refer to “8.2.4 Vehicle Filter (Authorization Mean)” on page 173) and two grids:

Vehicles, accumulative data: The upper grid displays the vehicles that reported errors within the selected time range and all the vehicles currently presenting error codes. The report presents the delta between the selected period values. For example, if odometer reading on 28.2 was 1000, on 1.3 was 1100 and on 10.3 was 1300, the report for March displays the difference: 300.

The time range depends on data collection time, i.e.: if data was received on 28/3, 5/4, 15/4, 28/4 and 2/5 and the selected period is between 1/4 and 30/4, the report presents the delta between 5/4 and 28/4.

In cases where no errors were found within the selected time range, the last report (up to six months ago) is presented. A zero “0” is displayed for unavailable values (non-active interfaces).

Note: If errors or fuel level reported values are erroneous or unavailable, the last correct value is presented highlighted in red color.

Current readings (not deltas) are displayed for the following parameters:

- Error Codes
- Fuel Level
- Auxiliary Engines E.H.

The report includes the following fields:

- a** Fleet Name: Name of the fleet, to which the device is associated.
- b** Department Name: Department, to which the device is associated, within the selected fleet.
- c** Plate: License plate number or unique number of the vehicle, on which the DataPass PLUS device is mounted.
- d** Errors: Number of OBD errors reported for the vehicle.
- e** Current AUX1 EH: Utility Engine #1 EH current reading (HH:MM).
- f** Current AUX2 EH: Utility Engine #2 EH current reading (HH:MM).
- g** Total distance: Odometer reading of the vehicle within the selected time range.
- h** Total EH: Number of engine hours of the vehicle within the selected time range (HH:MM).
- i** Total PTO: Number of Power take-off operating hours within the selected time range (HH:MM).
- j** Total Consumption: Fuel consumption for the selected time range (Gal.).
- k** Total Idle Time Duration: Accumulated idle time. Idle time counter starts whenever the speed is zero while the vehicle's engine is running for a period longer than X consecutive minutes as defined for the vehicle (HH:MM).
- l** Total Idle Time Events: Number of times the vehicle's engine was idled.
- m** Total RPM Events: Number of times the vehicle crossed the RPM limit as set for the vehicle.
- n** Total Over-Speeding Duration: Accumulated time that the driver was driving over the speed limit as set for the vehicle (HH:MM).
- o** Tank1 Fuel Level %: Tank #1 last reading of fuel level in percentage. This value is available only in cases where the vehicle's tank capacity value was specified when defining the vehicle/vehicle model.
- p** Tanks1 Fuel Level (gal): Tank #1 last reading of fuel volume.

In order to receive further data on a vehicle, click the required vehicle row in the upper grid.

Error Codes Detailed Report: the bottom grid displays detailed data on the errors presented by the vehicle selected from the Vehicle Accumulative Data grid, including the following fields:

- a** Source: Error reporting source unit. The source represents the diagnostics connector interface type, as follows:
 - ECU stands for OBD II
 - MID stands for J1587
 - SA stands for J1939

- b** Error Code: Error description and error code as received from the vehicle's diagnostics.
- c** FMI: Failure Mode Identifier. Additional code and description of the error. Included in heavy vehicles only.
- d** Status: Heavy vehicles error reports status: 0=Active/ 1=Inactive. Not available for OBD II.
- e** Count: Error occurrence count.
- f** Urgency: Error urgency level, as defined by the user (1 to 5, when 5 represents the lowest and default priority).

8.6.2.4 OBD Data Functional Buttons

The OBD Data screen includes additional features that can be activated by clicking on the relevant buttons located on the bottom part of the screen.

These include:

- a** Print: This button enables users to print the Errors report. The report includes the vehicles, accumulative data.
- b** Export/ Import: Currently N/A

8.6.3 Exception Reports

The Exception Report is a very helpful tool for the fleet manager to detect abnormal incidents concerning the vehicles of his or her fleet: these reports display only particular transactions or vehicles that require fleet manager intervention. The following exception reports, described in the next paragraphs, are available:

- a** Exception Volume Report
- b** Mileage Exception Report
- c** Consumption Exception Report
- d** Not Used Exception Report
- e** OBD Report

To view the Exception Reports, select the Exception tab and click the corresponding button on the top of the screen: Volume, Mileage, Exception, Not Used, or ODB.

All exception reports may be filtered by Fleet and Department using the drop-down lists in the corresponding column headers, and by Time Range, refer to [“8.2.1 Set Time Range”](#) on [page 171](#) and Vehicle, refer to [“8.2.4 Vehicle Filter \(Authorization Mean\)”](#) on [page 173](#).

To print an exception report, click the Print button on the corresponding report screen.

8.6.3.1 Exception Volume Report

The volume exception report (see [Figure 206](#)) lists the exceptions related to the fuel tank volume of the vehicle and the volume consumed in the transactions. For example, if the volume of a transaction exceeds the fuel tank's capacity of the refueling vehicle, the transaction appears in this report.

The A/B% exceeds parameter is the filter for the report. To change the A/B%, enter the required exception percentage in the adjacent number box and click Refresh to obtain the report.

For example, a tank size is 20 Gal and the driver dispensed 22 Gal. The difference is 10% (the report displays only records presenting a deviation higher than 5%).

Figure 206: Exception Report Screen - Volume

8.6.3.2 Mileage Exception Report

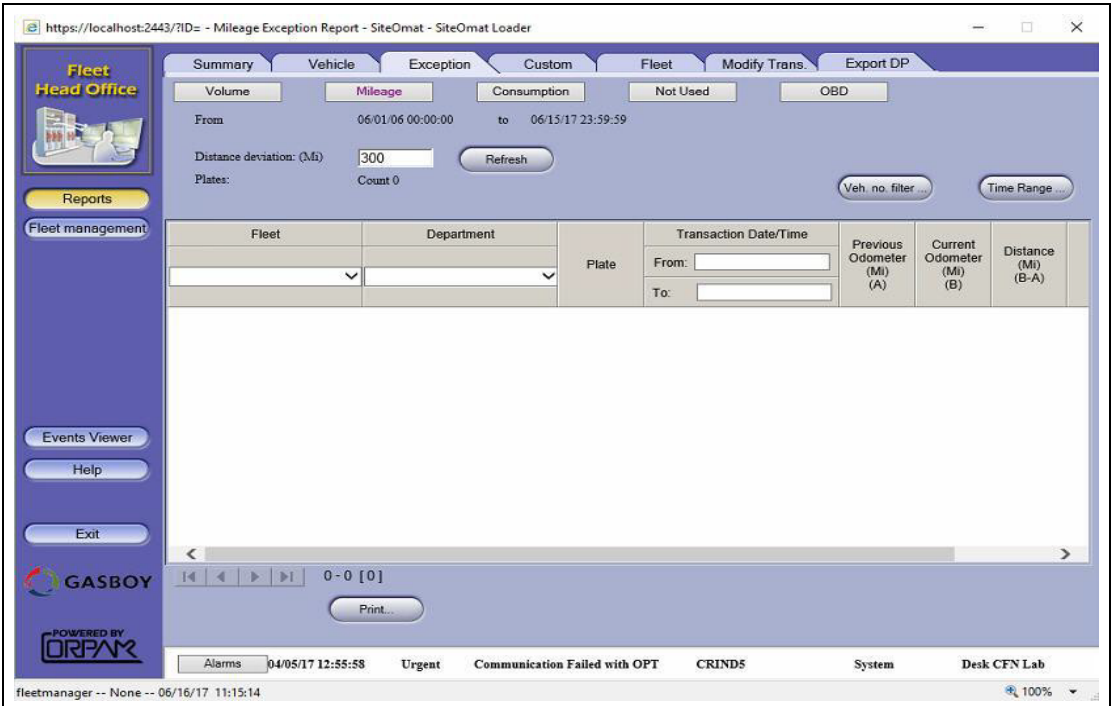
The mileage exception report (see [Figure 207](#) on [page 226](#)) lists the exceptions related to the elapsed distance of the vehicles, according to odometer readings. For example, if a previous odometer reading shows a larger distance than a more recent reading, the mileage exception report detects and displays this incident.

There are two types of exceptions with respect to the odometer reading:

- New odometer reading less than the previous one.
- The vehicle traveled farther than the system parameters set for the vehicle since the last fueling. The driver may have refueled outside the network of stations.

The Distance deviation parameter is the filter for the report. To change the parameter, input the required distance in the adjacent number box and click Refresh to obtain the report.

Figure 207: Exception Report Screen Mileage



8.6.3.3 Consumption Exception Report

The consumption exception report (see [Figure 208](#) on [page 227](#)) lists the exceptions related to the fuel consumption of the vehicles, according to odometer readings and the specified fuel consumption ratio of the vehicle. In other words, if the calculated consumption ratio (using the odometer reading and the consumed fuel) of a vehicle does not settle with the specified consumption ratio for that vehicle within a reasonable deviation, the consumption exception report detects and display this incident.

The A/B (Odometer consumption/ Standard odometer consumption) or C/D (EH consumption/ Standard EH consumption) deviation from 100% parameter is the filter for the report. To change the parameter, input the required percentage in the adjacent number box and click Refresh to obtain the report.

In the following example the system presents records of +/- deviation of 15%.

Figure 208: Exception Report Screen – Consumption

8.6.3.4 Not Used Exception Report

The Not Used exception report (see [Figure 209](#)) lists vehicles that did not take part in any transaction in the specified time frame. The report includes the license plate number, the odometer reading and the date and time of the last transaction performed by the vehicles.

Figure 209: Exception Report Screen - Not Used

8.6.3.5 OBD Exception Report

The OBD exception report (see [Figure 210](#) on [page 229](#)) lists vehicles that crossed the over speed, RPM or idling limits specified for the device, according to OBD readings.

The limit criteria are selected using the Select Data Item drop-down list, which includes:

- Idle Time – Total Time
- Over Speeding – Total Time
- Over RPM – Count
- Idle Time – Count

Total Time Exception

Idle and Over Speeding Total Time reports can be filtered by the following parameters:

- Percentage out of the total engine hours, by selecting the More than radio button and entering the required percentage.
- Total duration, by selecting the Bigger than radio button and entering the required lapse of time.

After entering the parameters, click the Refresh button. The report is displayed in a grid containing the following fields:

- Fleet
- Department
- Plate
- Idle/Over Speeding Total Time
- Engine Hours (for percentage reports)
- Percentage (for percentage reports)

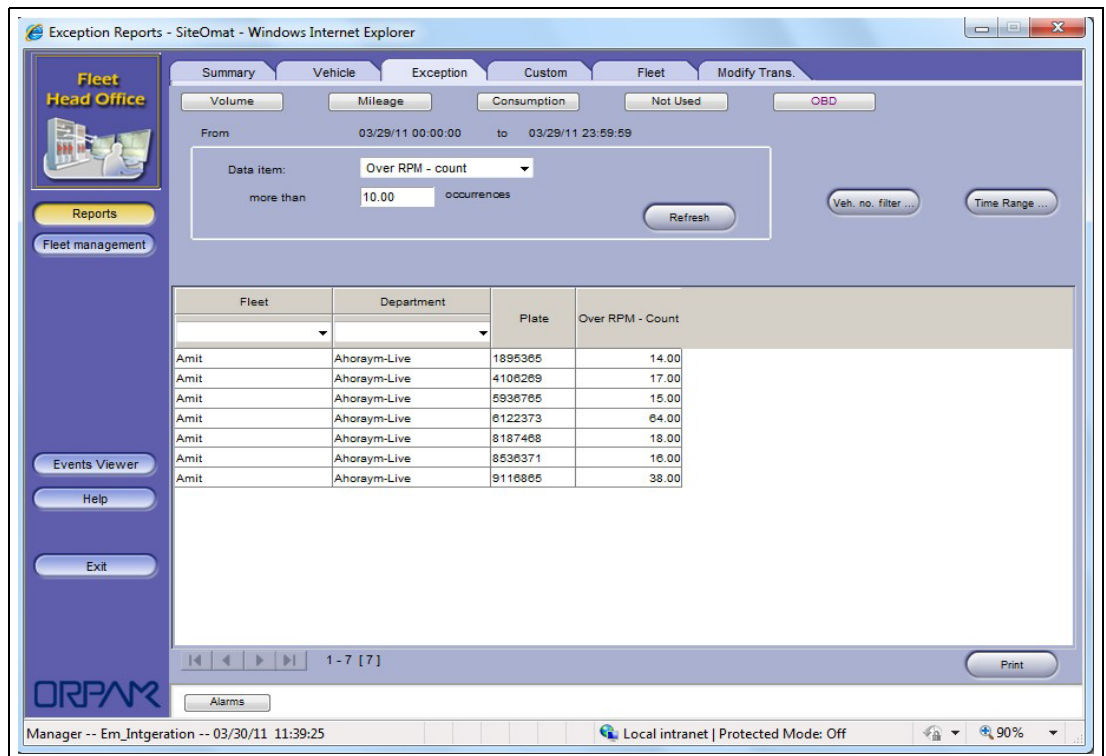
Events Count Exception

Idle and Over RPM count reports are filtered by entering the required number of occurrences in the More than textbox.

After entering the parameter, click the Refresh button. The report is displayed in a grid containing the following fields:

- Fleet
- Department
- Plate
- Idle/Over RPM Events

Figure 210: Exception Report Screen - OBD



8.6.4 Custom Reports

Custom Reports are similar for both FHO Administrators and Fleet Managers, refer to [“8.5.2 Custom Reports”](#) on page 177.

8.6.5 Fleet Reports

The Fleet Reports are similar for both FHO Administrators and Fleet Managers, refer to [“8.5.3 Fleet Reports”](#) on page 183.

8.6.5.1 Fleet Manager Obligo Report

Obligo Reports generated by Fleet Managers provide opening balance details (see [Figure 211](#) on [page 230](#)), in addition to the data presented to Administrators (refer to [“8.5.3.6 Obligo Report”](#) on [page 193](#)), as follows:

- Base Transaction: Last Obligo report balance
- Transactions until start date: Total amount of money charged for the transactions executed between the last report and the current report start date and time as selected.
- Opening balance: the balance as for the current report start date and time (Base Transaction minus Transactions until start date).

Figure 211: Obligo Report (Fleet Managers)

Obligo Report			
Report period: 05/10/2011 16:32:00 To 18/10/2011 16:32:00			
Fleet: Bourbon Cofee			
Base transaction 26/09/2011 10:51:15 User: celestin Balance: 450000.00			
Transactions until 05/10/2011 16:32:00 420115.00			
Opening balance for 05/10/2011 16:32:00 29885.00			
Timestamp	User	Deposit	Withdrawal Reference
Deposits: 1000000.00			
Withdrawals: 0.00			
=====			
Transactions: 416125.00			
=====			
Balance for:18/10/2011 16:32:00 613760.00			
=====			

8.6.6 Modify Transactions

The Modify Transactions screen is similar for both FHO Administrators and Fleet Managers; refer to [“8.5.4 Modify Transactions”](#) on [page 195](#).

8.6.7 DP Export

The DP Export screen is similar for both FHO Administrators and Fleet Managers; refer to [“8.5.6 DP Export”](#) on [page 210](#).

9 – Fuel Management Software Application

9.1 General

This section provides the Fuel and Station Managers instructions to access the various capabilities of the FMS Application, such as the effective Fuel Inventory and Alarms List features and additional options offered by the System to manage and handle the data.

9.2 FMS Application Start Screen for Typical User

After successful login of fuel manager (Not Administrator or Fleet Manager), the FMS Application screen opens. This screen includes three parts (see [Figure 212](#)):

- 1 Navigation Bar for the FMS Application (located on the left side of the screen).
- 2 Upper grid presenting all stations (according to the user's access level) with updated tanks inventory data. Data that creates alarms (Low level, leak detection, bad communication, Etc.) creates colored line with relevant color.
- 3 Lower grid presenting the latest alarms derived from all stations (according to the user's access level).

Figure 212: FMS Application Start Screen

The screenshot displays the 'Status - Fuel Management System - Windows Internet Explorer' window. On the left is a navigation bar with buttons: Status, Orders, Station Data, Reports, Events viewer, Help, Administration, and Exit. The main area contains two tables.

Upper Grid: Station Inventory Data

Station #	Name	Alarms	Diesel		Regular		Premium		Super		Last update
			Stock	%	Stock	%	Stock	%	Stock	%	
33	stn_33	108	239.06	2.4	21901.79	87.6	11012.01	73.4	1670.38	6.7	02/11/2008 12:3
32	stn_32	38	5155.87	51.6	13801.71	92.0					02/11/2008 12:3
31	stn_31	106	23102.72	92.4	549.04	2.2					02/11/2008 12:3
34	stn_34	102	15048.07	60.2							02/11/2008 12:3
35	stn_35	32	12532.26	62.7	5715.53	28.6	2455.06	24.6			02/11/2008 12:3
36	stn_36	104	15217.97	76.1							02/11/2008 12:3
37	stn_37	108	8575.19	42.9							02/11/2008 12:3
38	stn_38	32	5823.49	58.2	11276.21	75.2	16274.98	81.4	1366.72	13.7	02/11/2008 12:3
39	stn_39	112	3495.46	23.3	8094.00	80.9	22583.20	90.3	1764.56	17.6	02/11/2008 12:3
40	stn_40	114	12369.62	49.5	18456.50	92.3					02/11/2008 12:3

Below the table are navigation controls: 1 - 10 [10]

Lower Grid: Last alarms for all stations

Station	Type	Priority	Start Date	Description	Device	Status	Ack by	A
stn_222	Operatio	High	06/09/2005 23:58:32	Station mapping is broken	stn_222	End and Not Ack		
stn_132	Operatio	High	06/09/2005 23:57:42	Station mapping is broken	stn_132	End and Not Ack		
stn_430	Operatio	High	06/09/2005 23:56:44	Station mapping is broken	stn_430	End and Not Ack		
stn_650	Operatio	High	06/09/2005 23:54:06	Station mapping is broken	stn_650	End and Not Ack		

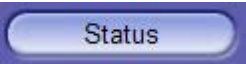
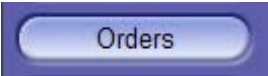
Navigation controls: 1 - 50 [75163]

At the bottom, there is a status bar with 'Alarms' (06/01/2009 09:57:36), 'Urgent', 'Security plug not found', 'System', and 'High'. The footer shows 'Admin -- GasBoy -- 05/02/09 14:50:43' and 'Local intranet'.

9.3 Navigating Through The FMS Application

Accessing the various capabilities of the FMS Application is done using the Navigation Bar on the left-side of the screen. The Navigation Bar is displayed throughout the FMS application and contains buttons that lead to the various screens of the application, within the boundaries of the user's access level. The objective of each button in the Navigation Bar is as follows (see [Table 38](#)):

Table 38: FMS Navigation Bar

Button	Description
	Upper grid presenting all stations with updated tanks inventory data, and lower grid presenting the latest alarms from all stations (according to the user's access level).
	This section enables to handle, prepare, and send fuel orders for gas stations/sites. Allows the user to reconcile data by connecting order to delivery.
	This section enables visual inspection of the current fuel level in each tank at a particular station, monitor fuel inventory, view and edit work shifts, and update fuel price.
	Set of inventory and reconciliation reports and also a report generator tool, which produces a wide variety of reports related to data in the FMS application.
	Interface to view system events.
	Currently not in use.
	Closes the current window and opens the login dialog box - Used for exiting the FMS Application.

After logging into the FMS application (refer to [“5.3 Login”](#) on [page 52](#)), the Status screen or “dashboard” is displayed (see [Figure 212](#) on [page 231](#)).

The main screen is divided into two main sections:

- a** Fuel inventory and status: The upper section enables the user to monitor fuel inventory and status in each station. The user gets indication of the current fuel quantity in all tanks, percentage of the current quantity from the full capacity of the station and urgency colors defining the number of days the existing fuel inventory in the tanks will remain. (For more information, refer to [“9.4 Fuel Inventory And Status Grid Fields”](#) on [page 233](#).)
- b** Fuel alarms - The lower section presents the latest alarms from all stations. (refer to [“9.5. Alarms Grid”](#) on [page 235](#) for more details.)

9.4 Fuel Inventory And Status Grid Fields

The upper grid contains the following fields:

- a** Station #
- b** Station name
- c** Alarms indication (if there is any active alarm)
- d** Fuel inventory - Stock & percentage for the various fuel types (for example, Diesel, Regular, etc.).
- e** Latest update date and time.

9.4.1 Alarms Indication Field

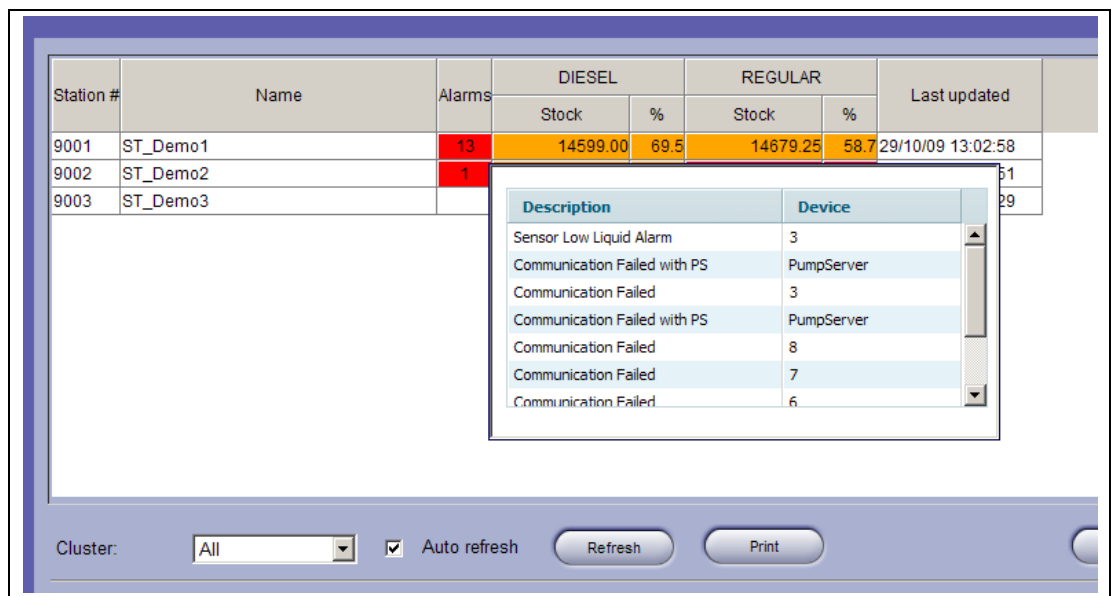
The general alarms field turns red if any alarm is received from a station or from FHO diagnostic process that is still active (the status remains red until the alarm is acknowledged and ended).

The number of open alarms in the alarm cell for this station is also displayed.

For further details on alarms, refer to the Alarm Section (refer to “9.5. Alarms Grid” on page 235 and “13.3 Alarms” on page 303).

Pointing the mouse to the relevant alarm cell displays the list of all open alarms on a popup screen (see Figure 213).

Figure 213: Alarm Description Pop-up Screen



9.4.2 Fuel Inventory Field

Each field displaying a fuel type in a specific station has three displayed parameters:

- a** Current quantity in all tanks that hold a specific fuel type (in liters or gallons) according to the latest reading from the station.
- b** Percentage of the current quantity from full capacity of all specific fuel tanks in a certain station.
- c** Urgency colors: The colors are changed and displayed as a result of a calculation of three parameters:
 - 1**Current stock in tanks
 - 2**Percentage of this tank from the whole station full quantity (of a specific fuel type)
 - 3**Daily forecast sales for tanks of this fuel type in a specific station

The formula used for calculating the fuel volume in tanks is based on days left for each tank of a specific fuel type; days left are calculated according to the current stock in tanks and the sales forecast per day. In cases where there is more than one tank for the same product - the indication colors change according to the tank with the minimum days left.

For example: assuming that the fuel level of a particular type goes down to 20% (i.e. 10000 gallons) and the forecast predicts selling of 1000 gallons per day: no color should be set as the station still has 10 'selling' days. If the same 20% in another station represents 10000 gallons but the forecast is to sell 5000 gallons a day, the color turns red as there is fuel for two days only.

The 'Days left' algorithm is calculated in a nightly process in all stations. The system calculates the expected volume that each tank is supposed to sell in the next seven days. Each day is calculated according to the average sales in the same week day (Sunday, Monday,...) in the past four weeks. The expected sales-per-tank volume is saved in the database. Days left are calculated according to the volume left in the tank and the volume the station expects to sell. When a user opens the Status screen or clicks the Refresh button, the system runs the 'Days left' calculation based on the seven days stored in the database and the current volume in tanks.

The Days left calculation depends on the current time of the day. Before noon (AM), the system takes into account the current day for the calculation. After noon (PM), the system skips the current day and calculates the remaining days starting from the next day.

The urgency colors and the number of days each color represents can be defined via the administration module (refer to [“6.4.7 FMS Screen”](#) on [page 80](#)).

Hovering the mouse on a specific Stock field for few seconds displays the stock details grouped by tanks on a popup screen.

For companies that do not work with forecasting or for companies for which the 'Days left' logic is not suitable, the Low Order Level for each tank is defined in the tank setup screen (refer to [“6.5.2.7 Tanks Tab”](#) on [page 96](#)). The red highlight enables when this level is exceeded. If there is more than one tank of the same product, the light turns red in cases where one of the tanks reaches the Low Order Level. In this case the yellow and orange colors are not utilized.

9.4.3 Status Grid Options

On the Status grid screen, the user has multiple options to access and filter the information, as depicted below:

- The user can filter the list according to predefined clusters in order to display part of the stations.
- Clicking on each column header sorts the grid in an ascending order. A second click sorts the grid in a descending order. The default value is the station number.
- The Refresh button refreshes the screen with the latest data in the FHO database. By default, the screen is automatically refreshed every several minutes (Default 1).
- Selecting the **Auto refresh** check box enables refreshing of the screen, or disables refreshing if cleared.
- Clicking the **Print** button previews the current status in all stations and allows the user to print it.
- Selecting one line and clicking the Order button opens an order form for the specific stations. See section 10 for more details.
- Double-clicking one of the lines opens a detailed screen of a specific station.

9.5. Alarms Grid

A grid with the latest alarms from all stations is displayed at the bottom of the screen. The fields are similar to the fields in the Alarm screen. The alarms are displayed in a chronological order (Latest alarms on top), the user can change the sort order by clicking on any title. For more details on alarms, refer to [“13.3 Alarms”](#) on [page 303](#)).

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10 – FMS Orders and Deliveries

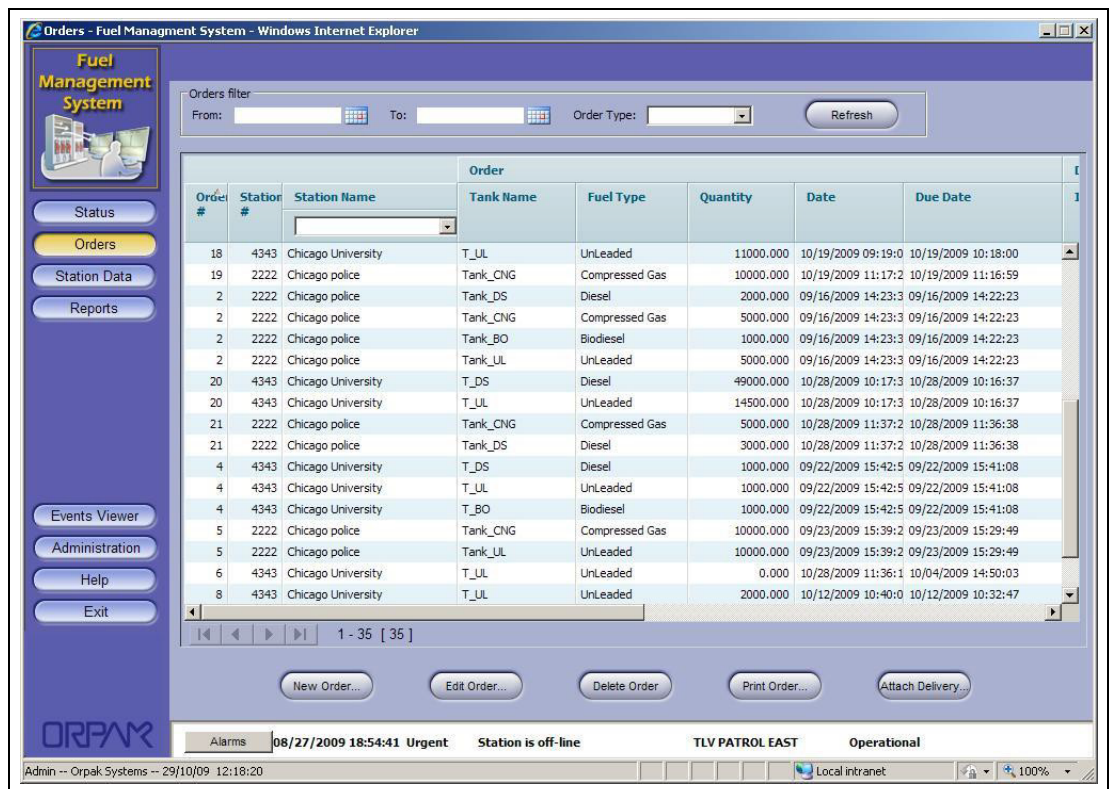
10.1 General

This section describes how to handle, prepare, send, and reconcile fuel orders for stations.

To open the orders list screen, click the **Orders** button on the navigation bar on the left side of the main FMS application screen. The Order screen opens (see [Figure 214](#)).

This screen appears as default to enable managing Deliveries and Orders. For managing deliveries only, you may change FMS setup settings (refer to [“6.4.7.6 Deliveries Screen Selection”](#) on [page 82](#)).

Figure 214: Fuel Management Orders Screen



10.2 Orders Screen

All orders can be viewed via the Orders screen. The user views a read-only grid with all the orders. Orders can be sorted and filtered (opened orders, closed orders, orders by dates, order for a specific station and such). A default grid lists the latest orders on top.

The fields in this screen are:

- a** Order # - System's order number (unique, sequential, starts from '1')
- b** Site #
- c** Site name
- d** Ordered tank name
- e** Ordered fuel type name
- f** Ordered quantity
- g** Ordered creation date and time
- h** Ordered due date and time
- i** Delivery invoice number
- j** Delivery fuel type name
- k** Delivery quantity from TLG (Tank Level Gauging)
- l** Delivery manual quantity (Dip stick)
- m** Delivery invoice (Bill of Loading, BOL) quantity
- n** Diff percentage – Percentage of deviation from the invoice amount and the actual TLG amount. If there is no TLG in the station, it displays the difference from the manual gauging.

See more details on the order related fields in [“10.3 Preparing New Orders”](#) on [page 239](#) and on the delivery related fields in [“10.4 Delivery”](#) on [page 241](#).

The user can perform several activities, using the buttons at the bottom of the screen (see [Table 39](#)):

Table 39: Order Screen Buttons

Button	Description
New Order	Opens the new order screen (refer to "10.3 Preparing New Orders").
Edit order	Opens the current order in edit mode and allows the user to change or update data. In cases where the user had already attached a delivery to the order, some of the changes are unavailable.
Delete order	Allows the user to delete an order. The system checks if the order is attached to a delivery and notifies the user accordingly.
Print order	Prints the order in a predefined form.
Attach delivery	Opens the Delivery screen. Instead of using this button, the user can double-click one of the orders as well.

If the user creates an order containing more than one line (i.e., more than one tank), the order is presented in two (or more) lines in this screen.

10.3 Preparing New Orders

To open a recommended fuel order for one of the stations (based on an alarm or on a regular procedure), proceed as follows:

- Select a station from the main status grid and click **Order**.
- Alternatively, click **New order** in the Orders screen.

The System opens a new screen, divided into several parts (see [Figure 215](#) on [page 240](#)):

- a Suggested order for station:** if the order screen is opened via the status screen, station name and data is already filled up; if it is opened via 'new order' a station should be selected from Station Name drop-down list.
- b Current Station Status:** a read-only grid consisting of several lines presenting all tanks in the station (tank name, fuel type, ullage, capacity, current volume, last order, days left). |

Tanks with low fuel level are indicated with the same colors used in the Status screen. Tanks are ordered by urgency colors (red on top), and the user can change the order by clicking on any title.

To add a tank to the order lines, double-click the required tank, or select the tank and click the Add to Order button.

- c Order information header data:** the user needs to enter the following data in the order header combo and text boxes:
 - Supplier: The supplier that delivers fuel to the station. The user can select a supplier from the supplier list. The field is filled automatically in cases where the user defined default supplier for this station.
 - Depot: The Depot that supplies fuel to the station. The user can select a depot from a depot list. The field is filled automatically in cases where the user defined default supplier for this station. This is a non-mandatory field.

Note: The user can add any free text to the order (Up to 200 characters).

-Order #: Read only field storing the order number after saving the order

d Order lines data: The user should enter the specific data required for each tank's order.

Lines representing low level tanks are added automatically to this grid; more lines can be added by double-clicking the relevant tank in the Current Station Status section, or by selecting one line in this grid and clicking Add to Order. To delete a line, select a line and click Delete Line. The fields in this grid are:

- **Tank Name:** Filled automatically for tanks reaching low level, or selected by user.
- **Order Fuel Type:** Filled automatically for tanks reaching low level, or selected by user.
- **Order Volume:** The user must insert this number. Filled automatically in cases where the user defined the order amount volume for the specific tank. The system checks and does not allow the user to approve an order with an amount larger than tank ullage.
- **Due date:** The user can select the requested delivery date and time.
- **Urgency:** Normal or Urgent. The user can select this definition from a list.
- **Delivery Fuel Type:** Read only field, available for the user only after saving the order and is to be completed after the delivery is received.
- **Delivery Volume:** Read only field, available for the user only after saving the order and is to be completed after the delivery is received.

When the user finalizes the order details, he clicks on the Save button and the order is created in the database. The screen remains open and the Print and Send buttons are enabled.

The system automatically generates an order number.

When the user clicks Print, he can print the order and send it by fax or e-mail to the supplier or to an internal ERP purchasing system. Parts of the order form are predefined by the administrator (refer to “6.4.7 FMS Screen” on [page 80](#)).

The Send button enables the user to send orders directly to suppliers by e-mail (as defined in the supplier setup screen).

Figure 215: Station Order – Fuel Management Screen

Suggested order for station:

Current Station Status
To add a tank to order lines, double click on the relevant tank or select a line and press "Add To Order" button. Colored line was added automatically.

Tank Name	Fuel Type	Ullage	Capacity	Current Volume	Last Order	Days Left
Tank_CNG	Compressed Gas	793.452	10000.000	9206.548	10/29/2009 12:39:3	3
Tank_DS	Diesel	4486.344	21000.000	16513.656	10/29/2009 12:39:3	5
Tank_BO	Biodiesel	7386.394	21000.000	13613.606	09/16/2009 14:23:3	>9
Tank_UL	UnLeaded	79.850	21000.000	20920.150	09/23/2009 15:39:2	>9

Add To Order

Order Information
Supplier: Depot: Order #:
Note:

Order lines

Tank Name	Order Fuel Type	Order Volume	Due date/time	Urgency	Delivery Fuel Type	Delivery Volume
Tank_CNG	Compressed Gas	2000.000	10/29/2009 12:38:5	Normal		0.000
Tank_DS	Diesel	2000.000	10/29/2009 12:38:5	Normal		0.000

Delete Line

Save Print... Send... Close

10.4 Delivery

The user can select an order via the Orders screen and link the delivery record to each line. The deliveries can be based on TLG reading or manual readings from the station.

Note: Delivery process can be done in Station level or in FHO level. It is not allowed for companies to perform the process for two levels. Companies are required to determine in which level the delivery process is handled.

To link the delivery, open the order by double-clicking on it, or by clicking the Attach Delivery button. The Station Delivery screen opens (see [Figure 216](#)). For each delivery, the following data is displayed:

- a** Station name and original Order details data in read-only mode.
- b** Invoice details to be entered manually by the user.
- c** Order lines data in read-only mode.

Figure 216: Station Delivery Screen

Station Delivery - Fuel Management -- Webpage Dialog

Delivery for station:

Order details

Supplier: Depot: Order #:

Note:

Invoice details

Invoice #: Date:

BOL #: Truck #:

Order lines

Order # 22					Delivery	
Tank Name	Fuel Type	Volume	Due date/time	Urgency	Fuel Type	Volume
Tank_CNG	Compressed Gas	2000.000	10/29/2009 12:38:5	Normal		0.000
Tank_DS	Diesel	2000.000	10/29/2009 12:38:5	Normal		0.000

Buttons: Add Delivery..., Edit Delivery..., UnLink Delivery..., Save, Close

The user first enters the invoice details:

- a** Invoice #: Number of supplier invoice form
- b** Date: Actual delivery date.
- c** BOL #: Number of refinery BOL
- d** Truck #: Number of the fuel delivery truck

Then the user selects the relevant order line and has three options:

- a** Add delivery – Link delivery to a specific order line.
- b** Edit delivery - View and edit existing linked delivery.
- c** Unlink delivery - Delete and disconnect delivery from the order. This process does not delete the order line but only the delivery connection to the order.

10.4.1 Delivery Detailed Data Screen

When the user clicks Add delivery, a dialog box for selecting or entering detailed delivery data opens. The system can recognize and open the screen in several options:

- a** In cases where the system recognizes only one TLG delivery record in the database, matching the station and the tank, the delivery details dialog box data is filled automatically with all TLG data. The user is able to add manual readings and invoice data. See [Figure 218](#) on [page 244](#) for screen example.
- b** In cases where the system recognizes more than one TLG delivery records in the database matching the station and the tank, the Wet Delivery TLG reading details screen appears automatically and allows the user to select one delivery. See [Figure 219](#) on [page 244](#) for screen example.
- c** In cases where the system does not recognize any TLG delivery record in the database matching the station and the tank, the user is notified that the system cannot find any matching TLG records and he has the option to continue with manual delivery process, or wait for additional data from the station.
- d** Manual station – In manual stations (i.e. stations that don't have Orpak's site system installed) a screen appears with the relevant tank data derived from the order; the user enters the relevant data manually. See [Figure 217](#) on [page 243](#) for screen example.

The fields that the user should fill in this screen are (see [Table 40](#)):

Table 40: Delivery Detailed Based on Manual Reading Fields

Field	Description
Tank	Selects the relevant tank from a list.
Product	Selects the actual delivered product type from a list. The user may change the actual delivered fuel type, even if it is not the fuel type connected to this tank and even if it is not the ordered fuel type.
Source	The user can determine whether the source for the delivery is TLG reading, or manual reading. If the TLG is checked the Read TLG button should be clicked on in order to open the available list of TLG readings relevant to this station and to this tank; the list holds deliveries of the past 14 days. See Figure 219 on page 244 for screen example.

Field	Description
Delivery Data	For TLG deliveries, all fields are filled automatically and the Manual Data fields are optional. For manual deliveries, the user needs to enter all fields manually. Entering the data manually can be done by two options: Enter Start and End readings (i.e., the user checks the fuel levels using a dip stick before and after the delivery.) The system calculates the delivery volume according to the two values. The user enters only the delivery volume according to his or her measurements. The check box defining whether the system works according to the first or the second option is located in the FMS tab: Manual delivery input fields (refer to “6.4.7.4 Fuel Order and Delivery” on page 81). When entering the data manually, the user enters only the dip stick recorded levels. When the user clicks either Save or Save & Close, the system calculates the manual volumes based on strapping tables for each tank.
Invoice amount	Amount from the invoice (BOL).
Invoice volume	Volume from the invoice (BOL).

Figure 217: Delivery Detailed Screen Based on Manual Reading

Wet Delivery Detailed Data - Fuel Management -- Webpage Dialog

Tank: Product:

Source:
☐ TLG
☒ Manual

Delivery Data

		Start	End
Date:		10/29/2009 16:03:39	10/29/2009 16:03:39
Volume:	gallon	0	5000
TC Volume:	gallon	0	
Fuel Height:	inch	0	34
Water Volume:	gallon	0	0
Temperature:	°F	0	26

Invoice Data

Amount: Dollars

Invoice Volume: gallon

Figure 218: Delivery Detailed Screen Based on Manual Reading

Wet Delivery Detailed Data - Fuel Management -- Webpage Dialog

Tank: T_DS Product: Diesel

Source

☒ TLG ☐ Manual

Delivery Data

TLG Data

	Start	End	
Date:	10/28/2009 10:17:00	10/28/2009 10:17:00	
Volume:	38.081	49038.078	gallon
TC Volume:	38.461	49528.461	gallon
Fuel Height:	0.00	2.97	inch
Water Volume:	0.000	10.000	gallon
Temperature:	32.69	32.69	°F

Invoice Data

Amount: Dollars

Invoice Volume: gallon

Figure 219: Delivery Lines Obtained from TLG

Wet Delivery TLS Reading - SiteOmat -- Webpage Dialog

Tank	Volume (Ltr)	Start Date	Start Time	RUI
T1 - 95 Oktan	3252.586	07/02/2008	12:09:00	2000000002
T1 - 95 Oktan	678.000	21/07/2007	10:54:00	2000000002
T1 - 95 Oktan	678.000	21/07/2007	10:54:00	2000000002
T1 - 95 Oktan	678.000	21/07/2007	10:54:00	2000000002
T1 - 95 Oktan	123.000	21/07/2007	00:10:00	2000000002
T1 - 95 Oktan	123.000	21/07/2007	00:10:00	2000000002
T1 - 95 Oktan	123.000	21/07/2007	00:10:00	2000000002
T1 - 95 Oktan	123.000	21/07/2007	00:10:00	2000000002
T1 - 95 Oktan	123.000	21/07/2007	00:10:00	2000000002
T1 - 95 Oktan	123.000	21/07/2007	00:10:00	2000000002

0 - 0 []

10.5 Deliveries Screen

The following paragraphs describe the Deliveries screens, for systems managing deliveries only, as set on the Administration Application FMS screen (refer to “6.4.7.6 Deliveries Screen Selection” on page 82).

To open the Deliveries screen, click the Deliveries button on the navigation bar on the left side of the main FMS application screen. The Deliveries screen opens (see Figure 220).

Figure 220: Deliveries Screen

The screenshot shows the 'Fuel Management System' interface. On the left is a vertical navigation bar with buttons: Status, Deliveries (highlighted), Station Data, Reports, Events Viewer, Help, and Exit. Below these are logos for 'GASBOY' and 'POWERED BY ORPAR'. The main content area features a table with the following headers: Station, Invoice Number, Date, Terminal Code, and Type. The 'Station' header has a dropdown menu currently showing 'Desk CFN Lab (1631)'. The 'Date' header has 'From:' and 'To:' input fields. Below the table is a status bar with navigation icons and the text '0 - 0 [0]'. At the bottom of the main area are three buttons: 'New...', 'Modify...', and 'Delete'. The very bottom of the screen shows an 'Alarms' section with the text '04/05/17 12:55:58 Urgent Communication Failed with OPT CRIND5 System Desk CFN Lab'. The footer of the browser window shows 'fuelmanager -- None -- 06/16/17 11:23:42' and a 100% zoom level.

The screen displays all deliveries received in a grid containing the following fields:

- a** Station
- b** Invoice Number
- c** Date
- d** Terminal Code
- e** Type

Records may be filtered by station using the drop-down list and by date and time using the menu in the corresponding column headers.

The Deliveries screen includes the following functional buttons, activated by clicking on the relevant button located on the bottom part of the screen:

f New (refer to paragraph10.5.1)

g Modify (refer to paragraph10.5.2)

h Delete (refer to paragraph10.5.3)

10.5.1 Adding a New Delivery

To add a new delivery, proceed as follows:

- 1 Click New button on the Delivery screen.
- 2 The Wet Delivery Details dialog box opens (see [Figure 221](#)).

Figure 221: Wet Delivery Details Dialog Box

Tank	Invoice Amount (Dollars)	Invoice Volume (gallon)	Measured Volume (gallon)	Source
Tank 1-Unleaded	0.000	3000.000	3021.000	MANUAL

The screen includes the following applicable fields:

a Station: Destination station, selected using the adjacent drop-down list.

b Invoice Number: Number of supplier invoice form.

c Terminal Code: Unique code identifying the depot.

d Date: Actual delivery date.

e Document Date: BOL date.

f Type: Delivery type, selected using the adjacent drop-down list.

g Document num: BOL number

h Document code: Unique code identifying the document type.

All deliveries entered for the selected station are displayed in the Details grid, which comprehends the following fields:

- a Tank
 - b Invoice Amount
 - c InvoiceVolume
 - d Measured Volume
 - e Source
- 3 Fill the applicable fields and click Add. The Wet Delivery Detailed Data dialog box opens (see [Figure 222](#)), enabling the user to select or enter detailed delivery data.
 - 4 Enter the delivery data (refer to “10.5.1 Adding a New Delivery” on [page 246](#) for a description of the screen).

Figure 222: Wet Delivery Detailed Data (Deliveries Only) Dialog Box

The dialog box is titled "Wet Delivery Detailed Data - SiteOmat -- Webpage Dialog". It contains the following fields and sections:

- Tank:** A dropdown menu.
- Source:** Radio buttons for "TLG" and "Manual", with a "Read..." button.
- Start date:** A text box with a calendar icon.
- End date:** A text box with a calendar icon.
- Data:** A table with two columns: "Start" and "End".

	Start	End	
Volume:			gallon
TC Volume:			gallon
Volume Height:			inch
Water:			inch
Temperature:			°F
- Invoice data:**
 - Amount: Dollars
 - Invoice Volume: gallon
 - Document number:
 - Vehicle code:

At the bottom are "OK" and "Cancel" buttons.

Note: In Deliveries only system configuration, the Wet Delivery Detailed Data dialog box also includes the Document number and Vehicle code fields, enabling users to enter additional delivery data.

- 5 Click **OK** to save the changes and return to the Wet Delivery Details dialog box, or **Cancel** to exit without saving the changes.
- 6 Click **OK** on the Wet Delivery Details dialog box to save the delivery record.

10.5.2 Modifying a Delivery

This feature enables users to modify the attributes of an existing delivery. Proceed as follows:

- 1 Click **Modify** button in the Deliveries screen (see [Figure 220 on page 245](#)) to open a dialog box identical to the one described in “[10.5.1 Adding a New Delivery](#)” on [page 246](#).
- 2 Modify the required fields.
- 3 Click **OK** to save the changes.

10.5.3 Deleting a Delivery

To delete an existing delivery record, proceed as follows:

- 1 Click a row in the deliveries grid (see [Figure 220 on page 245](#)) to select the delivery to be deleted.
- 2 Click **Delete** button.
- 3 A confirmation message is displayed.
- 4 Click **OK**.

11 – Station Data

11.1 General

The Station data screen can be accessed by clicking on the **Station Data** navigation button, or by double-clicking the relevant station line in the main FMS Status screen.

The Station Data screens are based on the FHO DB collecting the data from the stations in a predefined sequence.

The station name appears on top of the page and the user may select another station from a drop- down list. The rest of the data can be viewed via the appropriate screen tabs as described below.

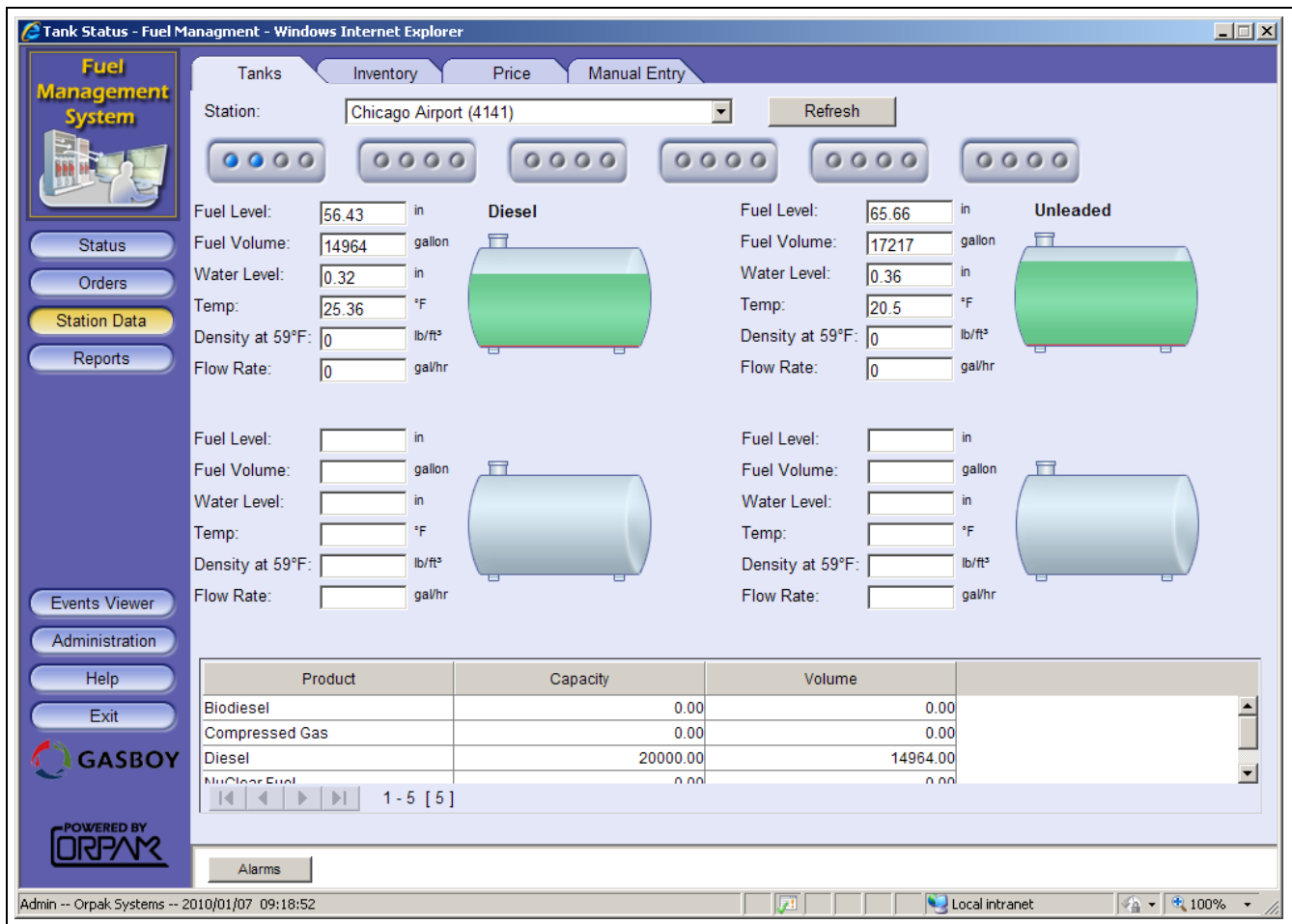
11.2 Tanks Tab

This screen enables visual inspection of the current fuel level in each tank. The visual and textual data displayed for each tank is obtained from the last inventory measurement. This data can also be provided from the TLG readout (see [Figure 223](#) on [page 250](#)). The screen is updated each time a new relevant data is received by the FHO database.

In order to display information in a readable size, the Tanks Status screen enables monitoring a group of four tanks simultaneously. Switching between groups of tanks is done by clicking on the gauges in the upper part of the screen.

Click **Refresh** to receive updated data from the tanks.

Figure 223: Station Data - Tanks Status Screen



11.2.1 Tank Status Screen Elements

The Status screen is comprised of several elements, each performing a different role in the gas station, monitoring process as follows:

- Tanks Gauge × 6
- Tanks Online Data × 4 for each group (total of 24)
- Capacity Transactions History Log

Tanks Gauge



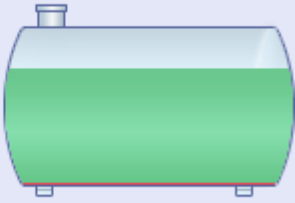
The four-tank Gauges (see Figure 223) have two functions:

- a Switching between the six groups of four tanks, by clicking on the applicable gauge.
- b Indicating whether a fuel tank is currently specified. Each gauge contains four indicators, each representing a tank (the leftmost is the first tank in the group and the rightmost is the last one). The color indications are as follows:

c Gray:  No tank is assigned to an indicator.

d Blue:  Tank is Idle.

Tank Head Online Data

Fuel Level:	56.43	in	
Fuel Volume:	14964	gallon	
Water Level:	0.32	in	
Temp:	25.36	°F	
Density at 59°F:	0	lb/ft³	
Flow Rate:	0	gal/hr	

The Tank Online Data is displayed in six text boxes and a single indicator. The tank fuel volume is displayed in real time. The textual information displayed online is as follows:

a Fuel Level: Displays the fuel level in the tank.

b Fuel Volume: The fuel volume remained so far.

c Water Level: Displays the water level in the fuel tank.

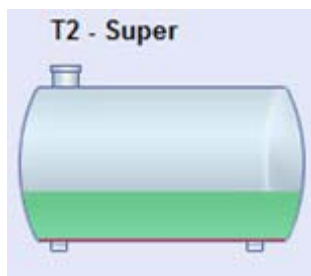
d Temp: Displays the temperature inside the fuel tank.

e Density at 15°C: Displays the fuel density in lb/ft³ at this temperature.

f Flow Rate: Flow rate calculated over a period of time as defined in the setup. The units are volume per hour and it is based on two measurement points over the defined period. A negative value indicates level drop.

Some of the data may not be available depending on the TLG type and probes (such as density). If the TLG reports on delivery status, a relevant indication is displayed.

Tank Indicator



The tank's fuel indicator indicates whether the tank fuel is currently specified. The following states are displayed by the fuel tank indicator:

- 1 Green: Displays the tank fuel volume
- 2 Red: Displays the water level in the tank. If water level is above zero, at least one red line is displayed.

Fuel Tank Transactions History Log

Product	Capacity	Volume
Diesel	10000.00	9118.28
Unleaded	10000.00	8215.64

<< < > >> 1 - 2 [2]

The Fuel Tank Transactions History Log is a grid listing all fuel tanks transactions that took place in the gas station.

The grid is sorted by product. However, the grid may be sorted by any other field. The fields appearing in the Fuel Tank Transactions History Log are described in [Table 41](#).

Table 41: Fuel Tank Transactions History Log Fields

Field Name	Description
Product	The fuel type name.
Capacity	The product capacity.
Volume	Volume of all the tanks containing a specific product in the requested gas station.

11.3 Station Inventory

The Station Inventory screen is accessed by selecting the Inventory tab (see [Figure 224](#)). This screen enables users to add and modify inventory points in the system, based on which reconciliation can be done.

There is a grid for each station displaying tank readings status in the station. Readings are based on TLG readings during end of shifts, or on occasional requests for readings.

The user can create readings manually. These readings can be based on two sources:

- 1 Complete manual readings in cases where there is no TLG or if it is defective. Readings for manual entry are based on stick readings from the station.
- 2 The user can be connected to a TLG and receive data per call in order to see the current status.

The user can sort/filter a list by tanks, dates, products or source of data (Manual or TLG). For printing, the user can filter records on the grid and use the 'Print' button to print the selected records.

Figure 224: Station Data - Inventory Screen

Station: ST_Demo1 (9001)

Tank	Product	Date	Source	Fuel Hgt (centimeter)	Fuel Vol (liter)	Water Hgt (centimeter)	Water Vol (liter)	Temp (°C)
Tank_2	REGULAR	31/08/09 00:29:12	TLG	91.849	10462.250	0.00	0.000	15
Tank_1	DIESEL	31/08/09 00:29:11	TLG	105.457	11073.003	0.00	0.000	15
Tank_2	REGULAR	31/08/09 00:29:08	TLG	91.849	10462.250	0.00	0.000	15
Tank_1	DIESEL	31/08/09 00:29:08	TLG	105.457	11073.003	0.00	0.000	15
Tank_2	REGULAR	31/08/09 00:28:25	TLG	91.849	10462.250	0.00	0.000	15
Tank_1	DIESEL	31/08/09 00:28:21	TLG	105.457	11073.003	0.00	0.000	15
Tank_2	REGULAR	31/07/09 00:27:10	TLG	93.617	10904.250	0.00	0.000	15
Tank_1	DIESEL	31/07/09 00:27:10	TLG	49.619	5210.003	0.00	0.000	15
Tank_2	REGULAR	31/07/09 00:27:06	TLG	93.617	10904.250	0.00	0.000	15
Tank_1	DIESEL	31/07/09 00:27:06	TLG	49.619	5210.003	0.00	0.000	15
Tank_2	REGULAR	31/07/09 00:26:34	TLG	93.617	10904.250	0.00	0.000	15
Tank_1	DIESEL	31/07/09 00:26:34	TLG	49.619	5210.003	0.00	0.000	15
Tank_2	REGULAR	30/08/09 00:27:33	TLG	31.306	3913.250	0.00	0.000	15

1 - 50 [722]

Buttons: New..., Modify..., Delete..., Print...

Alarms

To add a new reading, select the tank and click New. The Wet Inventory screen opens (see [Figure 225](#)). There is an optional connection to the TLG; using a similar screen, the user can modify the existing readings.

Figure 225: Wet Inventory Screen

Wet Inventory - Fuel Management -- Webpage Dialog

Tank: Diesel Product: Diesel

☒ Manual ☐ TLG Date: 2010/01/07 09:22:09

Select tank before selecting 'TLG' option

Fuel Height:	56.42	meter	Temp:	25.36	°F
Fuel Volume:	14964.0000	gallon	TC Volume:	15113.6396	gallon
Water Height:	0.32	meter	Density:	0.000	lb/ft³
Water Volume:	84.5400	gallon	Density 15°C:	0.000	lb/ft³

11.4 Price Update

The Price Update screen is accessed by selecting the Price tab. The screen displays the prices for all products in a specific station, which can be selected using the Station drop-down list (see [Figure 226](#)).

To update a price, proceed as follows:

- 1 Select a **product** from the list.
- 2 Enter the new price in the **Price Update** field.
- 3 To update a price immediately, check the **Update price now** check box before approving. To schedule a future update, select the **Effective date** by using the date and time menu.
- 4 Click **Modify**. The Cluster/Station Selection dialog box opens (see [Figure 227](#) on [page 256](#)).

Figure 226: Station Data - Price Tab

Price Update - Fuel Management - Windows Internet Explorer

Tanks Inventory **Price** Manual Entry

Station: Chicago Airport (4141)

Product	Current Rate	Effective Date	New Rate
Biodiesel	0	2009/11/15 12:00:00	2.63
Compressed Gas	0	2009/11/15 10:53:00	1.2
Diesel	1.159	2009/11/15 15:21:21	1.159
NuClear Fuel	0		0
UnLeaded	2.41	2009/11/15 10:53:17	2.41

0 - 0 []

Product: Price Update: USD

☐ Update price now.

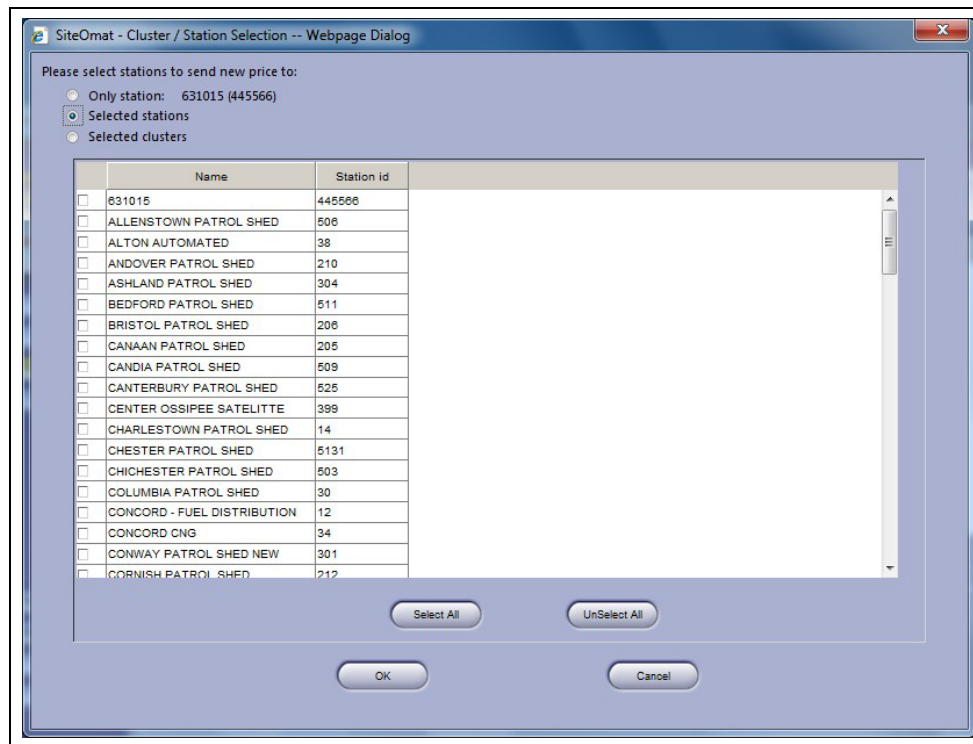
Effective date:

Modify History...

Alarms 2010/01/04 11:45:01 Urgent VIS communication error WGT1 System Chicago University

Admin -- Orpak Systems -- 2010/01/07 09:25:15

Figure 227: Cluster/Station Selection Dialog Box



- 5 Select the stations to which the price update is to be applied by selecting the following radio buttons:
 - a **Only Station:** Selects the station chosen in the Price Update Screen.
 - b **Selected Stations:** Displays a grid containing all stations. Select the check boxes for all required stations.
 - c **Selected Clusters:** Displays a grid containing all clusters. Select the check boxes for all required clusters.
- 6 To select all the stations/clusters, click the **Select All** button; to reset the selection, click the **Unselect All** button.
- 7 Click **OK** to save changes and close the dialog box, or **Cancel** to close the dialog box without saving the changes.

The user is notified via an alarm in cases where the update process has failed for any of the stations.

11.4.1 Price History

The History screen shows the price update history and changes for different products.

To view all price update history per product, select the product from the grid and click History (see [Figure 228](#)).

Figure 228: Price History Screen

Log Date	Log Time	User	Action	Start_Date	Start_Time	End_Date	End_Time	Price
2009-03-23	07:41:34	Admin	Update price	2009-03-24	07:41			2.980000
2009-03-23	07:43:09	Admin	Update price	2009-03-25	07:41			2.980000
2009-03-23	07:43:50	Admin	Update price	2009-03-25	07:41			3.980000

11.5 Manual Stations Data Entry

To access the Manual Entry screen, select the Manual Entry tab (see [Figure 229](#) on [page 258](#)).

The screen is relevant for manual stations only (indicated by a flag); and it enables the user to add or view shift-related data, pump reading, tank readings, and transactions. The tab is grayed out if no manual station is configured in the system.

To create a new shift, enter the Start date; the application adds automatically the End date (24 hours) and Start and End times (Default: Midnight). The shift default parameters can be changed.

The system automatically displays all pumps and tanks for the station.

To view previous shifts, click the shifts drop-down list. A list of all shifts, including Start date and Shift name and arranged in a descending order by shift number is displayed. The user can filter the list by date.

The user should enter the data to the relevant line. The color of the read-only fields is different from the color of the regular fields and also from the title fields color.

When the user enters height data in Tank data grid, the system automatically calculates the volume data and displays it in the relevant field. The user is able to override those numbers.

The user can enter a maximum of 50 manual transactions per shift in the Transaction data grid. Some of the fields are mandatory (for example, Driver #, Vehicle #) and some of them (for example, Price per unit) are automatically calculated if the user leaves them empty.

Filling the Plate# field auto-populates the Vehicle# field. In cases where more than one Vehicle Number is associated to the plate, a pop-up dialog box opens, enabling the user to select the relevant vehicle#.

The Driver # and Vehicle # fields are checked against the system database and the user cannot save transaction data if wrong (non-existent) numbers were entered. The Time field is masked by HH:MM and is an optional field. If the user does not fill in this field, the system automatically selects the first minute of the relevant shift.

In addition, users may add free text remarks in the Comments text box.

The system calculates Tank, Pump and Transaction data totals. Verify that the sum of all Pump total meters equals to Transaction Total Quantity.

The Save All button saves all data. The 'Clear All' button clears all editable data.

Figure 229: Station Data - Manual Entry Tab

Manual Entry - Fuel Management - Windows Internet Explorer

Fuel Management System

Tanks Inventory Price **Manual Entry**

Station: 76574 (76574) ▼

Shift Data

Shift#	Start date	Start time	End date	End time	Create by
New					Admin

Pump Data

Pump#	Nozzle#	Fuel type	Start Meter	End Meter	Total Meter (Gal)
2	1	Diesel			
2	2	Diesel			
2	3	Diesel			

Tank Data

Tank#	Fuel type	Start Height (Inch)	End Height (Inch)	Start Volume (Gal)	End Volume (Gal)	Total (Gal)
diesel	Diesel					
95	95					
98	Super					

Transaction

Time	Pump#	Nozzle#	Fuel type	Driver ID	Driver Name	Vehicle ID	Vehicle# (Plate)	Quantity (Gal)	Price per unit (USD)
12:00	1	1	95						5
12:00	1	1	95						5
12:00	1	1	95						5
12:00	1	1	95						5
12:00	1	1	95						5
12:00	1	1	95						5
12:00	1	1	95						5
12:00	1	1	95						5
12:00	1	1	95						5
12:00	1	1	95						5

Total Quantity (Gal):

Comments:

Save All Clear All

Alarms 01/14/14 04:23:55 High System Started Efrat System

Admin -- Efrat -- 01/19/14 04:00:17

12 – FMS Reports

12.1 General

The Reports screen can be accessed by clicking on the **Reports** navigation button. The reports data can be viewed in four formats:

- a** Predefined reports under the Summary tab (refer to “[12.2 Summary](#)”).
- b** Customized transaction reports under the Custom tab (refer to “[8.5.2 Custom Reports](#)” on [page 177](#)).
- c** Customized transaction grid under the Modify trans tab (refer to “[12.4 Modify Transactions](#)” on [page 290](#)).
- d** Customized reports under the ATG Export tab (see “[12.5 ATG Export](#)” on [page 291](#)).

The FMS displays reports at company level (i.e., amount of fuel in all stations, alarms for all stations) and at station level.

Note: If connected to stations that have blended products (composed of two base products stored in two different tanks) FMS will include the blended products in the relevant reports. Virtual tanks defined at the station will not be displayed in FMS reports, but the amount dispensed from the blended product nozzles will be included when calculating reconciliation for each of the base tanks (transaction volume multiplied by percentage of fuel in the mixture).

12.2 Summary

The Main report screen is divided into two parts: the hierarchical tree structure located at the top of the screen and the reports criteria and buttons, located below.

The report header includes company name, logo, three lines for free text, printed date, “printed by” and relevant criteria. Company name, logo and free text lines can be defined by the administrator (refer to “[6.4.1 General Tab](#)” on [page 57](#)); criteria fields can be selected and ordered by entering numbers in the Order column.

List based reports include two summary sections:

- Product-wise: sums up all data in the report by product, containing Total transactions Amount and Quantity sold.
- Payment Mode: sums up all data in the report by pay mode. Pay mode can be Customer, Credit or Cash depending on the application settings.

All system reports can be previewed, printed and saved to XLS files, using the four functional buttons included in the bottom of the screen:

- a** Clear Fields Order: Clears all Order text boxes in the report.
- b** To File: Saves the Report into a text file.

c Preview: Displays the report in a new screen, from which report printing and saving is possible.

d Print: Opens the Printers dialog box, for sending the report to a printer.

The Summary tab displays reports in a tree view (see [Figure 230](#)). The tree has several main sections containing various reports below each section. The main sections are:

a Sales reports

b Stock data reports

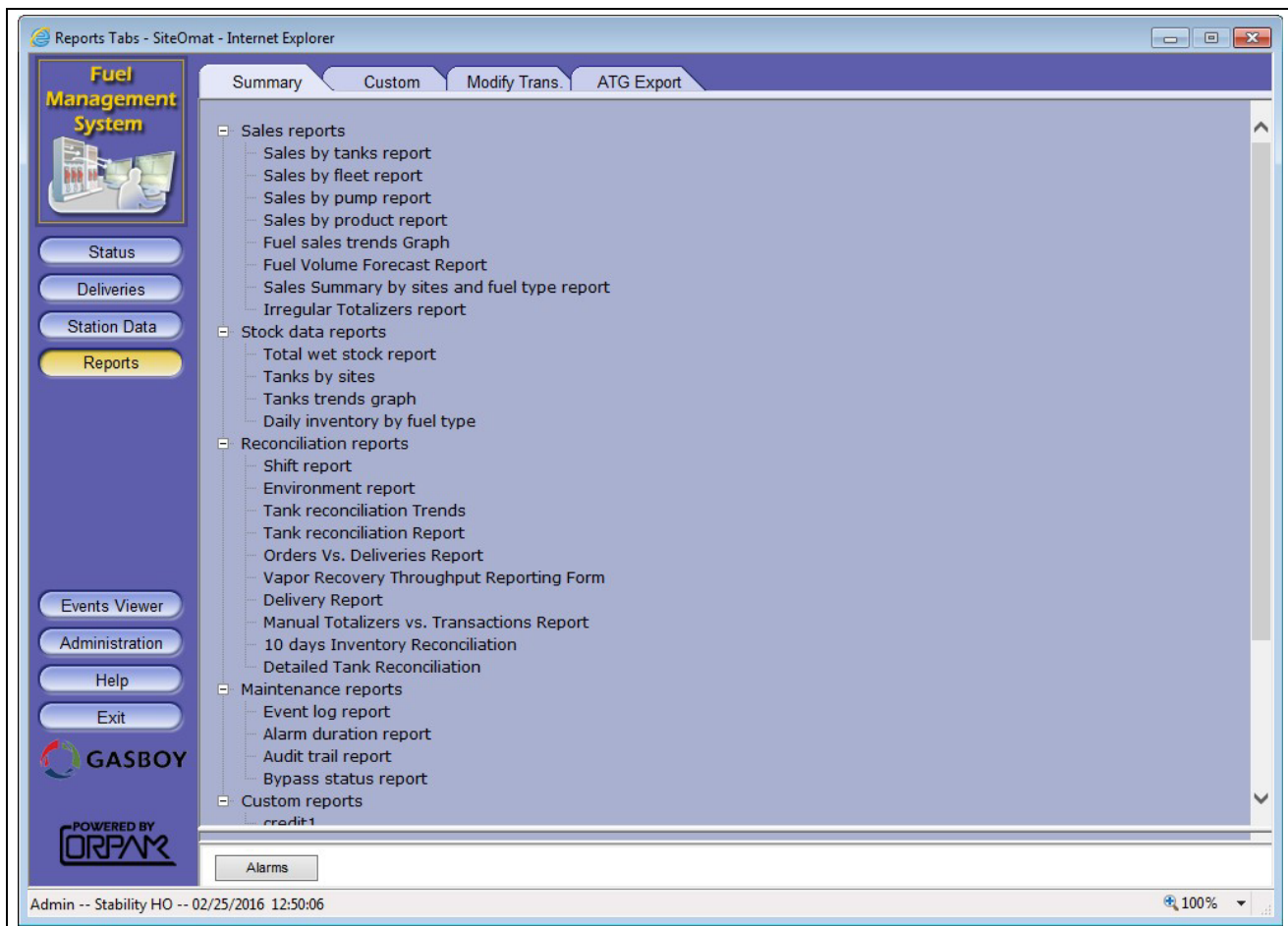
c Reconciliation reports

d Maintenance reports

e Custom reports (if previously defined)

To access a report, click the corresponding section in the tree and select the requested report. The report screen opens.

Figure 230: Summary Tab



12.2.1 Sales Reports

This section enables the user to generate various predefined sales- related reports, as described below:

- Sales by Tank report
- Sales by Fleet report
- Sales by Pump report
- Sales by Product report
- Fuel Sales Trends Graph
- Fuel Volume Forecast Report
- Sales Summary by Sites and Fuel Type

12.2.1.1 Sales by Tank Report

This report enables the user to view sales records regarding specific tanks in a particular station. The criteria predefined for this report are displayed, as depicted below (see [Table 42](#)):

Table 42: Sales by Tank Report Criteria

Field Name	Description
Station	The gas station where the transactions are performed (may be a single station or all stations).
Date	The date of the transaction.
Time	The time of the transaction.
Tank	The selected tank for the report.
Quantity	The fuel volume supplied in the transaction.
Total Sale	The sum of money collected in the transaction. This field does not include any discount given to the client.
Receipt No.	An ordinal unique number, assigned by the SiteOmat System Controller to each transaction and included in each printed receipt.
Pay Mode	The means of payment used in the transaction.
Transaction Id	A unique ordinal ID number given by the SiteOmat Station Controller to each transaction.
Nozzle	The nozzle number in the pump head, used to supply the fuel in the transaction.
Transaction Type	The type of transaction carried out.
Ref./Slip No.	The slip number (or reference number).

Click **Preview**. The relevant report is displayed, for example see [Figure 231](#).

Figure 231: Example of Sales by Tank Report

https://172.16.6.24/CustomReport.xml?ID=RLTh4nvx5C3kGVL3HW8QqFATK2K7HhnycdG9DhY7M2S1Nc&header=TankDelivery&rows_in_page=30&stationOrder=&station=100&c

TankDelivery

Report period: 02/11/2009 12:17:00 To 16/11/2009 12:17:00

Ser. No.	Date	Time	Transaction ID	Receipt	Transaction Type	Pay Mode	Nozzle	Tank	Quantity	Total Sale	Ref/Slip No.
1	05/11/2009	00:00:00	300000195	300000221	Customer	Customer tag	1	Tank 1	33.000	73.590	
2	05/11/2009	00:00:00	300000196	300000222	Customer	Customer tag	1	Tank 1	29.000	64.670	
3	05/11/2009	00:00:00	300000197	300000223	Customer	Customer tag	1	Tank 1	37.000	82.510	
4	05/11/2009	00:00:00	300000198	300000224	Customer	Customer tag	1	Tank 1	27.000	60.210	
5	05/11/2009	00:00:00	300000199	300000225	Customer	Customer tag	1	Tank 1	24.000	53.520	
6	05/11/2009	00:00:00	300000200	300000226	Customer	Customer tag	1	Tank 1	28.000	62.440	
7	05/11/2009	00:00:00	300000201	300000227	Customer	Customer tag	1	Tank 1	36.000	80.280	
8	05/11/2009	00:00:00	300000202	300000228	Customer	Customer tag	1	Tank 1	32.000	71.360	
9	05/11/2009	00:00:00	300000203	300000229	Customer	Customer tag	1	Tank 1	26.000	57.980	
10	04/11/2009	00:00:00	300000190	300000216	Customer	Night	1	Tank 1	12.000	26.760	
11	04/11/2009	00:00:00	300000191	300000217	Customer	Night	1	Tank 1	33.000	73.590	
12	04/11/2009	00:00:00	300000192	300000218	Customer	Night	1	Tank 1	29.000	64.670	
13	04/11/2009	00:00:00	300000193	300000219	Customer	Night	1	Tank 1	25.000	55.750	
14	04/11/2009	00:00:00	300000194	300000220	Customer	Night	1	Tank 1	41.000	91.430	
Tank: Tank 1									412.000	918.760	

Product-wise Summary

Fuel	Total Amount (Estonian Krooni)	Quantity (gallon)
UnLeaded	918.760	412.000

Payment Mode Summary

Mode	Amount (Estonian Krooni)
Night	312.200
Customer tag	606.560
Total Amount	918.760

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12.2.1.2 Sales by Fleet Report

This report enables the user to view sales records regarding specific fleets.

The criteria predefined for this report are displayed, as depicted below (see [Table 43](#)):

Table 43: Sales by Fleet Report Criteria

Field Name	Description
Station	The gas station where the transactions are performed (may be a single station or all stations).
Date	The date of the transaction.
Time	The time of the transaction.
Fleet	The fleet, to which the fueling vehicles belong.
Vehicle Number	The license plate number of the fueled vehicle. The vehicle number appears in the transaction only if provided from the VIU (Vehicle Identification Unit), or entered by the authorizer in the OrPT (Orpak Outdoor Payment Terminal).
Authorized By	The user who authorized the transaction.
Product	Types of products available.
Quantity	The fuel volume supplied in the transaction.
Total Sale	The sum of money collected in the transaction. This field does not include any discount given to the client.
Receipt No.	An ordinal unique number, assigned by the SiteOmat System Controller to each transaction and included in each printed receipt.
Transaction Id	A unique ordinal ID number given by the SiteOmat Station Controller to each transaction.

Click **Preview**. The relevant report is displayed, for example see [Figure 232](#).

Figure 232: Example of Sales by Fleet Report

SiteOmat - LocAccTrans - Windows Internet Explorer
 https://172.16.6.24/CustomReport.xml?ID=RLTH4nvzr5C3kGVL3HwBOqgFATKP2k7Hk3n/ycIG9Dh/7M251Nc&header=LocAccTrans&rows_in_page=30&stationOrder=6&station=8&date=

LocAccTrans
 Report period: 06/07/2009 13:39:00 To 23/11/2009 13:39:00

Ser. No.	Date	Time	Fleet	Vehicle Number	Authorized By	Product	Quantity	Total Sale	Receipt	Transaction ID
1	29/07/2009	09:28:37	default_fleet	AutoAuth	AutoAuth	Biodiesel	38.916	98.060	300019861	300019793
2	29/07/2009	09:28:48	default_fleet	AutoAuth	AutoAuth	Biodiesel	4.344	10.940	300019862	300019794
3	29/07/2009	09:28:54	default_fleet	AutoAuth	AutoAuth	Biodiesel	2.676	6.740	300019863	300019795
4	03/08/2009	13:44:32	default_fleet	AutoAuth	AutoAuth	Biodiesel	3.200	8.064	300020946	300020868
5	03/08/2009	13:44:33	default_fleet	AutoAuth	AutoAuth	Diesel	6.500	15.925	300020947	300020869
6	03/08/2009	13:44:33	default_fleet	AutoAuth	AutoAuth	Diesel	3.200	7.840	300020948	300020870
7	03/08/2009	13:44:34	default_fleet	AutoAuth	AutoAuth	Biodiesel	3.200	8.064	300020949	300020871
8	03/08/2009	14:16:47	default_fleet	AutoAuth	AutoAuth	Diesel	3.800	9.310	300020955	300020877
9	03/08/2009	14:16:48	default_fleet	AutoAuth	AutoAuth	Diesel	3.800	9.310	300020956	300020878
10	03/08/2009	14:16:51	default_fleet	AutoAuth	AutoAuth	Biodiesel	3.800	9.576	300020957	300020879
11	03/08/2009	14:16:52	default_fleet	AutoAuth	AutoAuth	Biodiesel	3.800	9.576	300020958	300020880
12	03/08/2009	14:16:53	default_fleet	AutoAuth	AutoAuth	Unleaded	3.800	8.474	300020959	300020881
13	03/08/2009	14:16:58	default_fleet	AutoAuth	AutoAuth	Compressed Gas	3.800	5.358	300020960	300020882
14	03/08/2009	14:16:58	default_fleet	AutoAuth	AutoAuth	Unleaded	3.800	8.474	300020961	300020883
15	03/08/2009	14:16:59	default_fleet	AutoAuth	AutoAuth	Compressed Gas	3.800	5.358	300020962	300020884

Product-wise Summary

Fuel	Total Amount (Estonian Krooni)	Quantity (gallon)
Biodiesel	151.020	59.936
Compressed Gas	10.716	7.600
Diesel	42.385	17.300
Unleaded	16.948	7.600

Payment Mode Summary

Mode	Amount (Estonian Krooni)
Cash	221.069
Total Amount	221.069

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12.2.1.3 Sales by Pump Report

This report enables the user to view sales records regarding specific Pumps in a particular station. The criteria predefined for this report are displayed, as depicted below (see [Table 44](#)):

Table 44: Sales by Pump Report Criteria

Field Name	Description
Station	The gas station where the transactions are performed (may be a single station or all stations).
Date	The date of the transaction.
Time	The time of the transaction.
Pump	Number of the pump head, from which the transaction was performed.
Quantity	The fuel volume supplied in the transaction.
Total Sale	The sum of money collected in the transaction. This field does not include any discount given to the client.
Receipt No.	An ordinal unique number, assigned by the SiteOmat System Controller to each transaction and included in each printed receipt.
Pay Mode	The means of payment used in the transaction.
Transaction Id	A unique ordinal ID number given by the SiteOmat Station Controller to each transaction.
Nozzle	The nozzle number in the pump head, used to supply the fuel in the transaction.
Transaction Type	The type of transaction carried out.
Ref./Slip No.	The slip number (or reference number).

Click **Preview**. The relevant report is displayed, for example see [Figure 233](#).

Figure 233: Example of Sales by Pump Report

PumpDelivery

Report period: 22/10/2009 13:48:00 To 24/11/2009 13:48:00

Ser. No.	Date	Time	Transaction ID	Receipt	Transaction Type	Pay Mode	Nozzle	Pump	Quantity	Total Sale	Ref/Slip No.
1	05/11/2009	00:00:00	300000195	300000221	Customer	Customer tag	1	1	33.000	73.590	
2	05/11/2009	00:00:00	300000196	300000222	Customer	Customer tag	1	1	29.000	64.670	
3	05/11/2009	00:00:00	300000197	300000223	Customer	Customer tag	1	1	37.000	82.510	
4	05/11/2009	00:00:00	300000198	300000224	Customer	Customer tag	1	1	27.000	60.210	
5	05/11/2009	00:00:00	300000199	300000225	Customer	Customer tag	1	1	24.000	53.520	
6	05/11/2009	00:00:00	300000200	300000226	Customer	Customer tag	1	1	28.000	62.440	
7	05/11/2009	00:00:00	300000201	300000227	Customer	Customer tag	1	1	36.000	80.280	
8	05/11/2009	00:00:00	300000202	300000228	Customer	Customer tag	1	1	32.000	71.360	
9	05/11/2009	00:00:00	300000203	300000229	Customer	Customer tag	1	1	26.000	57.980	
10	04/11/2009	00:00:00	300000190	300000216	Customer	Night	1	1	12.000	26.760	
11	04/11/2009	00:00:00	300000191	300000217	Customer	Night	1	1	33.000	73.590	
12	04/11/2009	00:00:00	300000192	300000218	Customer	Night	1	1	29.000	64.670	
13	04/11/2009	00:00:00	300000193	300000219	Customer	Night	1	1	25.000	55.750	
14	04/11/2009	00:00:00	300000194	300000220	Customer	Night	1	1	41.000	91.430	
Pump: 1									412.000	918.760	

Product-wise Summary

Fuel	Total Amount (Estonian Krooni)	Quantity (gallon)
UnLeaded	918.760	412.000

Payment Mode Summary

Mode	Amount (Estonian Krooni)
Night	312.200
Customer tag	606.560
Total Amount	918.760

Page : 1 out of : 1

12.2.1.4 Sales by Product Report

This report enables the user to view sales records regarding specific Products.

The criteria predefined for this report are displayed, as depicted below (see [Table 45](#)):

Table 45: Sales by Product Report Criteria

Field Name	Description
Station	The gas station where the transactions are performed (may be a single station or all stations.)
Date	The date of the transaction.
Time	The time of the transaction.
Product	Types of products available.
Quantity	The fuel volume supplied in the transaction.
Total Sale	The sum of money collected in the transaction. This field does not include any discount given to the client.
Receipt No.	An ordinal unique number, assigned by the SiteOmat System Controller to each transaction and included in each printed receipt.
Pay Mode	The means of payment used in the transaction.
Transaction Id	A unique ordinal ID number given by the SiteOmat Station Controller to each transaction.
Nozzle	The nozzle number in the pump head, used to supply the fuel in the transaction.
Transaction Type	The type of transaction carried out.
Ref./Slip No.	The slip number (or reference number).

Click **Preview**. The relevant report is displayed, for example see [Figure 234](#).

Figure 234: Example of Sales by Product Report

SiteOmat - DispDelivery - Windows Internet Explorer
 https://172.16.6.24/CustomReport.xml?ID=RLTh4mxx5C3kGVL3HlWBOQqFATkP2k7HkhnyycIG9DhY7M2S1No&header=DispDelivery&rows_in_page=30&stationOrder=&station=100&d

DispDelivery

Report period: 21/10/2009 14:00:00 To 22/10/2009 14:00:00

Ser. No.	Date	Time	Transaction ID	Receipt	Transaction Type	Pay Mode	Nozzle	Product	Quantity	Total Sale	Ref/Slip No.
1	22/10/2009	00:00:00	300000156	300000182	Customer	Night	1	Unleaded	54.000	120.420	
2	22/10/2009	00:00:00	300000157	300000183	Customer	Night	1	Unleaded	36.000	80.280	
3	22/10/2009	00:00:00	300000158	300000184	Customer	Night	1	Unleaded	45.000	100.350	
4	22/10/2009	00:00:00	300000159	300000185	Customer	Night	1	Unleaded	38.000	84.740	
5	22/10/2009	00:00:00	300000160	300000186	Customer	Night	1	Unleaded	41.000	91.430	
6	22/10/2009	00:00:00	300000161	300000187	Customer	Night	1	Unleaded	14.000	31.220	
7	22/10/2009	00:00:00	300000162	300000188	Customer	Night	1	Unleaded	42.000	93.660	
8	22/10/2009	00:00:00	300000163	300000189	Customer	Night	1	Unleaded	37.000	82.510	
9	22/10/2009	00:00:00	300000164	300000190	Customer	Night	1	Unleaded	37.000	82.510	
10	22/10/2009	00:00:00	300000165	300000191	Customer	Night	1	Unleaded	28.000	62.440	
11	22/10/2009	00:00:00	300000166	300000192	Customer	Night	1	Unleaded	22.000	49.060	
12	22/10/2009	00:00:00	300000167	300000193	Customer	Night	1	Unleaded	30.000	66.900	
13	22/10/2009	00:00:00	300000168	300000194	Customer	Night	1	Unleaded	36.000	80.280	
14	22/10/2009	00:00:00	300000169	300000195	Customer	Night	1	Unleaded	33.000	73.590	
15	22/10/2009	00:00:00	300000170	300000196	Customer	Night	1	Unleaded	39.000	86.970	
16	22/10/2009	00:00:00	300000171	300000197	Customer	Night	1	Unleaded	25.000	55.750	
17	22/10/2009	00:00:00	300000172	300000198	Customer	Night	1	Unleaded	44.000	98.120	
18	22/10/2009	00:00:00	300000173	300000199	Customer	Night	1	Unleaded	60.000	133.800	
19	22/10/2009	00:00:00	300000174	300000200	Customer	Night	1	Unleaded	44.000	98.120	
20	22/10/2009	00:00:00	300000175	300000201	Customer	Night	1	Unleaded	26.000	57.980	
21	22/10/2009	00:00:00	300000176	300000202	Customer	Night	1	Unleaded	35.000	78.050	
Product: Unleaded									766.000	1708.180	

Product-wise Summary

Fuel	Total Amount (Estonian Krooni)	Quantity (gallon)
Unleaded	1,708.180	766.000

Payment Mode Summary

12.2.1.5 Fuel Sales Trends Graph

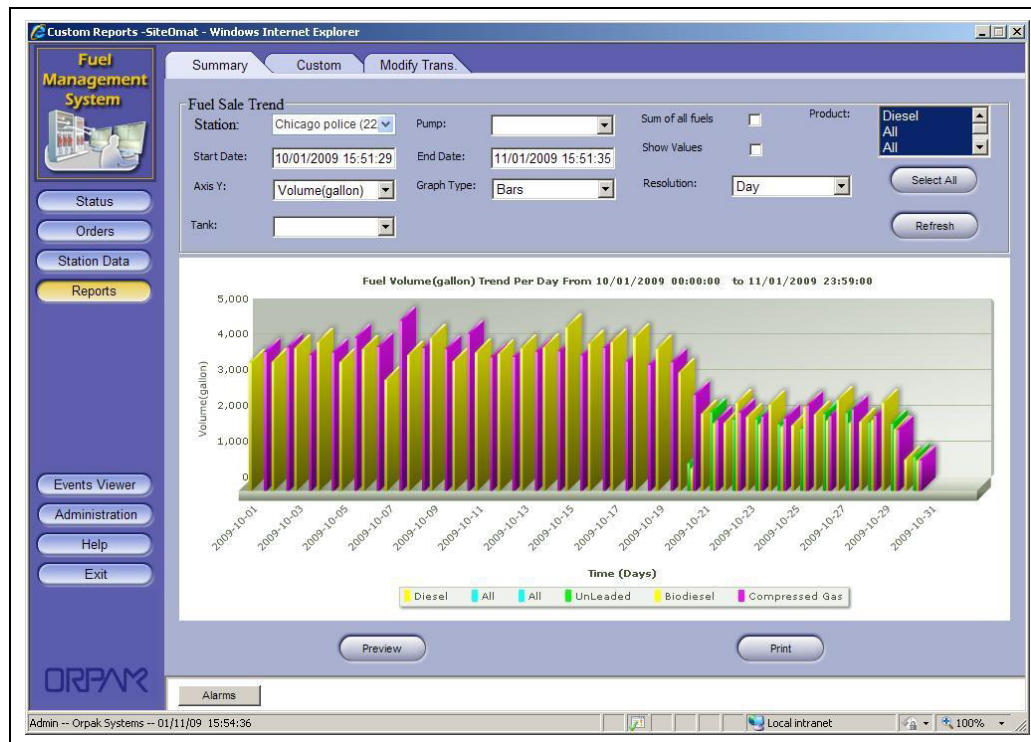
The user can set the graph as a function of Sales (Currency in use), or Volume (predefined measurement unit) and a definable date range (Start Date and End Date) for a specific station, using the drop-down menus on the upper section of the screen. The user can set specific Products, Tanks, and Pumps as well (see [Figure 235](#) on [page 266](#)).

The graph's parameters can be defined in Hours, Days and Months and can be displayed in Bars or Lines.

Checking the Sum of all fuels box displays the comparative graph between selected fuel types and the Sum of all other fuels. Marking the Show Values check box enables display of numerical quantities.

Clicking on the **Refresh** button enables the user to change the settings and produce the graph.

Figure 235: Reports, Fuel Sales Trends Graph



12.2.1.6 Fuel Volume Forecast Report

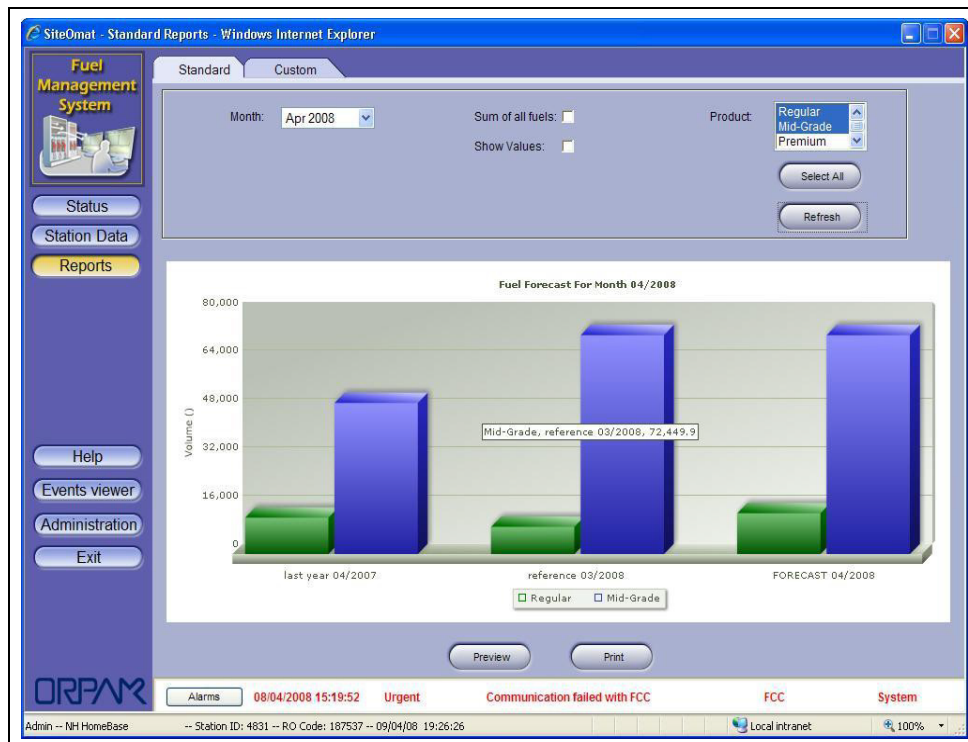
The Fuel Volume forecast Report screen provides the sales forecast of the requested fuel type.

The user can select the Month and fuel types so as to view the desired graph (see [Figure 236](#) on [page 267](#)). The forecast is based on the following formula:

- 1 The user selects the option to view forecast for next month (For example: August 2010)
- 2 The system calculates last year's percent change for the equivalent month (For example: $\text{July 2008 sales} / \text{August 2008 sales} * 100$)
- 3 The system adds the same percentage to the current month sales (For example: $\text{July 2010} + \text{diff percentage}$).

In new stations, the user can manually add the last year sales per month, per fuel type. See more details in [“6.5.2.9 History Data Tab”](#) on [page 98](#).

Figure 236: Reports, Forecast Report



12.2.1.7 Sales Summary by Sites and Fuel Type Report

This report enables the user to view sales records per station and fuel type.

The Station List is displayed on the bottom part of the screen (see [Figure 237](#) on [page 268](#)). To filter the stations to be included in the report, proceed as follows:

- 1 Select the check box next to the required Station. To select all the stations, click the **Select All** button, to reset the selection click the **Unselect All** button.
- 2 Filter the report by time range, utilizing the **From Date** and **To Date** menus or using the **Time Period** drop-down list to select a specific period of time (Today, Yesterday, Current/Last Week, Current/Last Month, Current/Last Quarter, Current/Last Year, Current/Last Fiscal Year). Selection of a Time Period auto-populates the **From Date** and **To Date** boxes accordingly.
- 3 Define the **Report type** by selecting the **Sites + Fuel Type**, **Sites Only** or **Fuel Type only** radio buttons.

The Sales Summary by Sites and Fuel Type report includes several fields as described in [Table 46](#):

Table 46: Sales Summary by Sites and Fuel Type Report Fields

Field Name	Description
Station	Unique name identifying the station.
Fuel Type	Unique code identifying the fuel type
# Transactions	Number of transactions performed during the selected time range.
Volume	Volume of all transactions performed by the department during the selected time range.
Amount	Amount of all transactions performed by the department during the selected time range.

The Products Summary section at the end of the report lists transactions, volume and amount totals by product.

Print, preview or save the report, utilizing the functional buttons described in “[12.2 Summary](#)” on [page 259](#).

Figure 237: Sales Summary by Sites and Fuel Type Report Screen

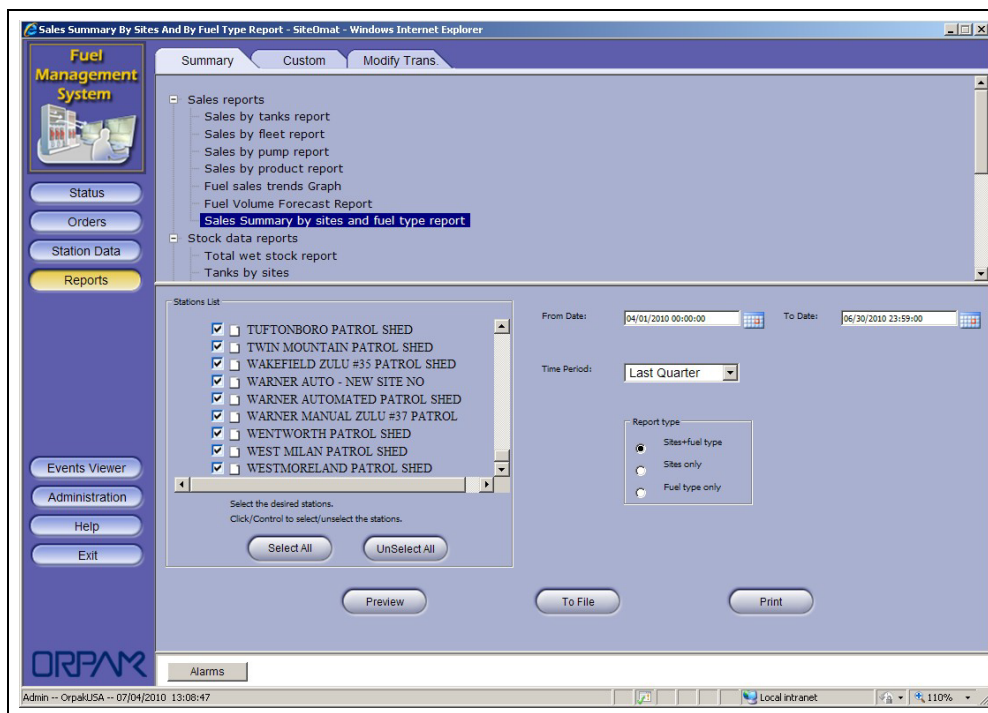


Figure 238 displays an example of the obtained report.

Figure 238: Sales Summary by Sites and Fuel Type Report – Example

Selected Criteria: Sites=fuel type				
Sales Summary By Sites And Fuel Type Report				
Report period: 2012-01-01 00:00:00 To 2012-03-31 23:59:00				
Station	Fuel Type	# Transactions	Volume (Gal)	Amount (\$)
WENTWORTH PATROL SHED	DS	233	6122.100	20159.49
WENTWORTH PATROL SHED	UL	359	5318.900	16654.87
WEST MILAN PATROL SHED	DS	73	2502.000	8195.30
WESTMORELAND PATROL SHED	DS	26	1165.300	3810.53
Products Summary				
	DS	332	9789.400	32165.32
	UL	359	5318.900	16654.87
Total:		691	15108.300	48820.19
***** END *****				

12.2.2 Stock Data Reports

This section enables the user to generate various predefined current stock data reports, as described below:

- Total Wet Stock report
- Tanks by sites
- Tanks trend Graph
- Daily Inventory by Fuel Type

12.2.2.1 Total Wet Stock Report

This report comprises the present total fuel amounts in all tanks at all stations by fuel types.

To print the report, select the stations to be included from the list located at the bottom part of the screen. To select multiple stations, press the CTRL key and select the requested stations.

The Summary only check box enables the user to produce a summary report instead of a detailed report. The detailed report displays all selected stations with the fuel type amount plus the total sum. The summary report displays only the total sum.

Click **Preview**. The relevant report is displayed; for example, see Figure 239.

Figure 239: Example of Total Wet Stock Report

SiteOmat - Total Wet Stock Report - Windows Internet Explorer

https://172.16.6.24:2444/fms_wet_stock.xml?ID=RLTh4mrvSC3kGVL3HfWBOQqFATXP2k7HnVycjG5oHy7M2S1Nc&summary_flag=0&print=0&stn_id_0=100&station=1

User: Admin

Printed on: 23/11/2009 14:52:46

Orpak Systems

Report header 1
Report header 2
Report header 3

Total Wet Stock Report

Station	UnLeaded	Diesel	Last comm.
DEMO	8500.000	2755.580	03/05/2009 16:37:06
Total	8500.000	2755.580	

Page : 1 out of : 1

***** END *****

12.2.2.2 Tanks by Sites

This section enables the user to select a group of stations or a single station from the list at the bottom part of the screen and generate a stock report detailed by tanks.

To print the report, select the stations to be included from the list located at the bottom part of the screen. To select multiple stations, press the **CTRL** key and select the requested stations.

12.2.2.3 Tanks Trends Graph

The user can set the graph as a function of Fuel Level, Density and Temperature and a definable date range (Start Date and End Date) for a specific station, using the drop-down menus on the upper section of the screen. The user can select a specific tank or select all the tanks by clicking **Select All**.

The graph's resolution can be defined in Hours, Days and Months and can be displayed in Bars or Lines.

Marking the Show Values check box enables display of numerical quantities.

Clicking the Refresh button enables the user to change the settings and produce the graph.

12.2.2.4 Daily Inventory by Fuel Type Report

This report enables the user to view the current fuel volume per fuel type in each station and each tank.

The Station List is displayed on the bottom part of the screen. To filter the stations to be included in the report, proceed as follows:

- 1 Select the check box next to the required Station.
- 2 To select all the stations, click the Select All button; to reset the selection, click the Unselect All button.

The Daily Inventory by Fuel Type report includes several fields as described in [Table 47](#):

Table 47: Daily Inventory by Fuel Type Report Fields

Field Name	Description
Station	Unique name identifying the station
Tank#	Tank number as set in the station
Volume	Current fuel volume
Last Year Usage	Expected days left base on yearly calculation
Last quarter Usage	Expected days left base on quarterly calculation
Last Month Usage	Expected days left base on monthly calculation
Percentage	Current volume percentage out of full tank volume

Print, preview or save the report, utilizing the functional buttons described in [“12.2 Summary”](#) on [page 259](#).

Figure 240 displays an example of the obtained report.

Figure 240: Daily Inventory Fuel Type Report – Example

Daily Inventory By Fuel Type Report						
Fuel type: DS						
Station	Tank #	Volume (gal)	LYR Usage	LQTR Usage	LMON Usage	Percentage
519_Ver	2	0				0.0
631_005_50	2	16750		138	44	47.9
631_005_50	3	0		0	0	0.0
631_005_50	4	0				0.0
631900UPG51	2	20		0	0	0.1
631900UPG51	3	19000		13	4	54.3
ALLENSTOWN PATROL SHED	1	0				0.0
Total for fuel type:		35770	0	151	48	
Fuel type: UL						
Station	Tank #	Volume (gal)	LYR Usage	LQTR Usage	LMON Usage	Percentage
519_Ver	1	0				0.0
631_005_50	1	11650		105	33	33.3
631900UPG51	1	5		0	0	0.0
Total for fuel type:		11655	0	105	33	

12.2.3 Reconciliation Reports

This section enables the user to generate reconciliation reports, as described below:

- Shift report
- Environment report
- Tank reconciliation trends
- Tank reconciliation report
- Order Vs. Deliveries report
- Vapor Recovery Throughput Reporting Form
- Delivery Report
- Manual Totalizers vs. Transactions Report
- 10 days Inventory Reconciliation

Note: In order to produce reconciliation and shifts reports, the automatic EOD process must be executed in the stations. See section 6.3 in MDE-4817.

12.2.3.1 Shift Report

Select a specific station from the drop-down menu, and a specific date. The report lists data on the selected shift, including Transactions number, amount and quantity, Open and Close Pump counters, Product and Payment summary.

Click **Preview**. The shift report is displayed; for example, see [Figure 241](#).

Figure 241: Example of Shift Report

Shift Report

Report period: 16/09/2009 00:00:29 To 17/09/2009 00:00:06

Transactions							Pump counters		
Pump	Nozzle	Fuel	Price	Transactions	Amount	Quantity	Open	Close	Dispensed
1	1	Unleaded	2.230	196	8,982.490	4,028.460	-	148722.250	-
1	2	Diesel	2.450	173	9,194.090	3,753.010	148459.230	152212.240	3753.010
2	3	Biodiesel	2.520	143	7,512.850	2,981.560	516086.220	519067.780	2981.560
2	4	Biodiesel	2.520	178	9,287.920	3,686.020	219590.830	223276.850	3686.020
				690	34977.350	14449.050			10420.590

Product-wise Summary

Fuel	Total Amount	Quantity
Biodiesel	16,800.770	6,667.580
Diesel	9,194.090	3,753.010
Unleaded	8,982.490	4,028.460

Payment Mode Summary

Mode	Amount
Customer tag	34,977.350
Total Amount	34,977.350

Page : 1 out of : 1

Page : 1 out of : 1

12.2.3.2 Environment Report

Select a specific station, tank, month and year to produce an EPA (Environmental Protection Agency) report containing day-by-day reconciliation data.

Fuel Reconciliation is calculated according to the following formula:

Opening Volume + Amount Delivered – Sales should be equivalent to Closing Volume, otherwise, the difference is detailed in column 9 - Daily Variance.

The reconciliation is intended to prevent leakage and other anomalies.

12.2.3.3 Tank Reconciliation Trends

Select a specific station, tank/s and date range (Start Date and End Date) using the drop-down menus on the upper section of the screen. The user can select a specific tank or select all of the tanks by clicking Select All.

The graph displays Reconciliation Trends for the requested period (an exemplary status should result in a constant zero outcome).

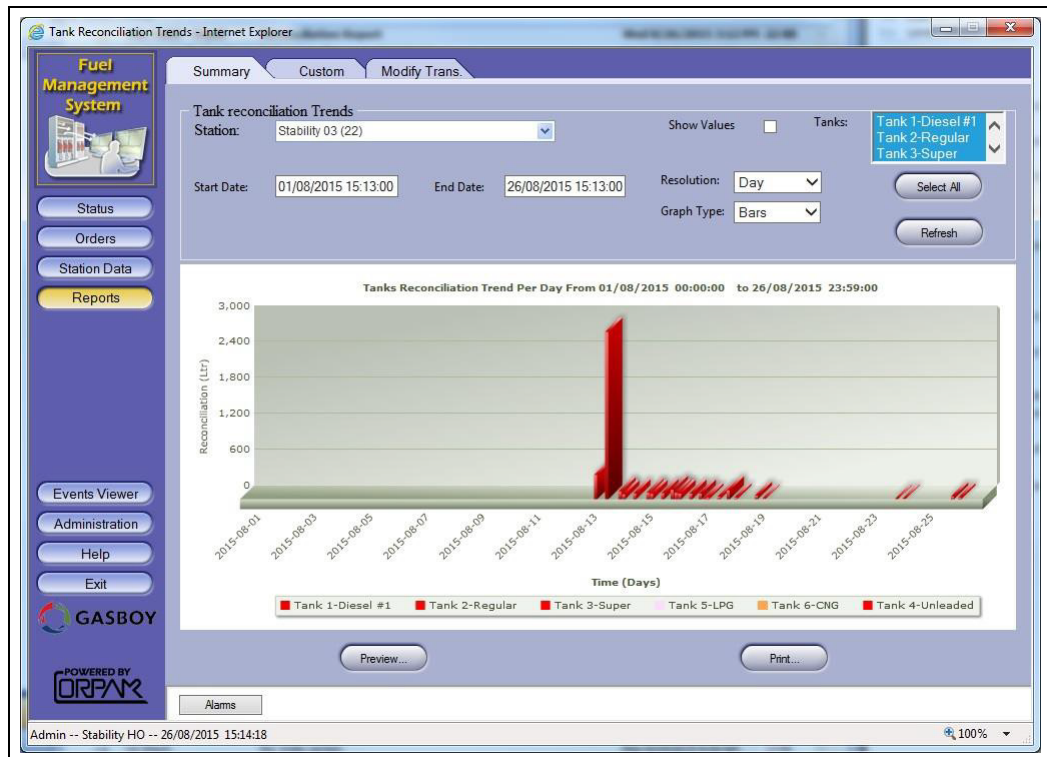
The graph's parameters can be defined in Hours, Days and Months and can be displayed in Bars or Lines.

Marking the Show Values check box enables display of numerical quantities.

Clicking the Refresh button enables the user to change the settings and produce the graph.

Click **Preview**. The Tank Reconciliation Trends report is displayed; for example, see [Figure 242](#).

Figure 242: Example of Tank Reconciliation Trends Report



12.2.3.4 Tank Reconciliation Report

Select a specific station, tank, and date range (Start Date and End Date) using the drop-down menus on the upper section of the screen, and click the Submit button.

Select two inventory points (From and To); the report enables users to view reconciliation data between the two specified points.

The report includes several fields as described in [Table 48](#):

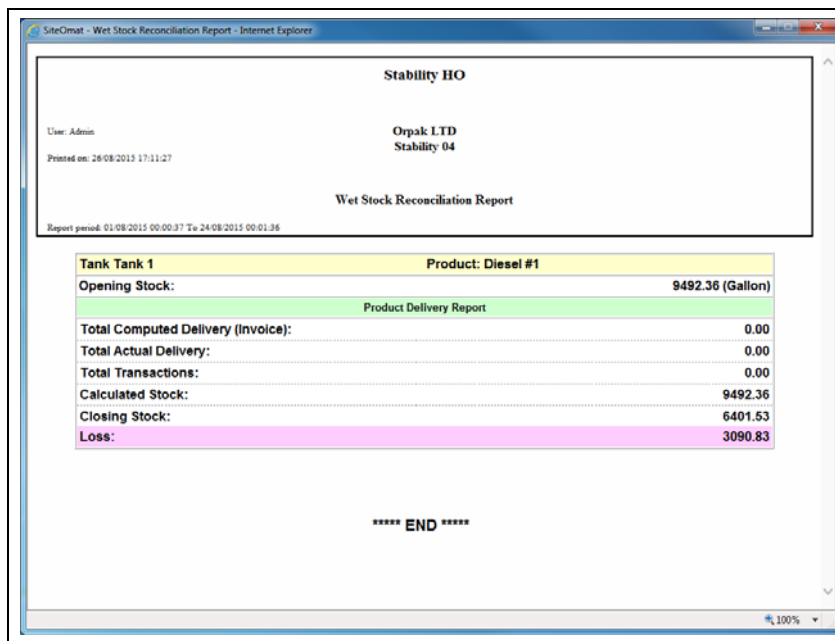
Table 48: Tank Reconciliation Report Fields

Field Name	Description
User	Name of user who generated report
Station ID	Unique ID that identifies the station
Date	Date of transaction/inventory point
Time	Date of transaction/inventory point
Product	Type of fuel
Opening Stock	Tank stock at the opening inventory point (A)
Total Computed Deliveries (invoice)	Total delivery quantity as it appears on the delivery invoice/order
Total Actual Delivery	Total quantity of fuel loaded into the tank (B)
Total Transactions	Total quantity dispensed during the time period (C)

Field Name	Description
Calculated Stock	Estimated stock based on the following calculation: A+B-C
Closing Stock	Actual tank stock at the closing inventory point
Loss	Difference between Closing Stock and Calculated Stock. For an accurate balance, this parameter should be equal or close to zero.
ID	Inventory point ID

Figure 243 displays an example of the obtained report:

Figure 243: Example of Tank Reconciliation Report



12.2.3.5 Order Vs. Deliveries Report

This section enables the user to display orders for specific dates with the actual deliveries linked to them.

The user can select date range, and Orders Type, as depicted as follows:

- 1 All orders
- 2 Orders without delivery
- 3 Orders with high difference (a high deviation from the Invoice Volume and the actual TLG/ Manual measurement).
- 4 The report comprises Order Volume, Delivery Volume, and Difference Percent among other values.
- 5 The Difference Percentage is highlighted with a red line in cases where the percentage exceeds the allowable definitions (system parameter, see section 6.4.7).

Click **Preview**. The Orders Vs. Deliveries report is displayed; for example, see [Figure 244](#).

Figure 244: Example of Orders Vs. Deliveries Report

Station #	Station Name	Order #	Order Volume	Tank #	Order Product	Delivery Product	Delivery Date	Delivery Volume	Difference Percent
99	Adi 6.4.8	2	100.000	0	Diesel_a				
21		3	100.000	0	Diesel #1	Diesel #1	08/02/2015 09:39:53	70.000	30.0%
21		4	7500.000	0	Diesel #1	Diesel #1	08/02/2015 08:30:31	77.000	98.0%
21		5	13.000	0	Diesel #1				
21		6	20.000	0	Diesel #1	Diesel #1	09/02/2015 14:06:29	26.420	32.1%
21		7	20.000	0	Diesel #1	Diesel #1	09/02/2015 13:01:54	70.000	250.0%
21		8	100.000	0	Diesel #1	Diesel #1	09/02/2015 14:11:04	109.110	9.1%
22	Stability 03	9	1250.000	3	Diesel #1	Diesel #1	27/07/2015 17:10:05	1150.000	8.0%

***** **END** *****

12.2.3.6 Vapor Recovery Throughput Reporting Form

This feature enables users to produce the Vapor Recovery Throughput Reporting Form, complying with the Department of Environmental Services requirements.

The Station List is displayed on the bottom part of the screen (see [Figure 245](#) on [page 276](#)). To filter the data to be included in the report, proceed as follows:

Select the check box next to the required Station. To select all the stations, click the Select All button; to reset the selection click the Unselect All button.

Select the product, year and month (optional), utilizing the Products, Year and Month drop-down lists.

Print, preview, or save the report, utilizing the functional buttons described in “[12.2 Summary](#)” on [page 259](#). [Figure 246](#) on [page 276](#) displays an example of the obtained report.

Figure 245: Vapor Recovery Throughput Reporting Form Screen

https://localhost:2444/?ID= - Vapor Recovery Throughput Reporting Form - SiteOmat - SiteOmat Loader

Fuel Management System

Summary Custom Modify Trans. ATG Export

- Sales reports
- Stock data reports
- Reconciliation reports
 - Shift report
 - Environment report
 - Tank reconciliation Trends
 - Tank reconciliation Report
 - Orders Vs. Deliveries Report
 - Vapor Recovery Throughput Reporting Form**
 - Delivery Report
 - Manual Totalizers vs. Transactions Report
 - 10 days Inventory Reconciliation
 - Detailed Tank Reconciliation

Stations List

☒ Desk CFN Lab

Year: 2017 Month:

Products: Aviation Fuel 4

Select the desired stations.
Click to select/unselect the stations.

Select All UnSelect All

Preview... To File... Print...

Alarms 04/05/17 12:55:58 Urgent Communication Failed with OPT CRIND5 System Desk CFN Lab

fuelmanager -- None -- 06/16/17 11:31:52

Figure 246: Vapor Recovery Throughput Reporting Form – Example

VAPOR RECOVERY THROUGHPUT REPORTING FORM

FACILITY

Name: **Chicago police**
Physical Address:
City:
Gasoline Brand: **Biodiesel**
Phone:
Contact at Facility:

OWNER OF GASOLINE STORAGE TANKS

Company Name: **Orpak Systems**
Owner Name:
Address: **New York**
City, State, Zip:
Phone: **1234567**
Contact Name:

Total # of dispensers: **1**
Number of gasoline tanks: **1**

Total # of nozzles: **1**
Grades of gas in tanks: **Biodiesel**

DISTRIBUTORS DELIVERING FUEL TO FACILITY

2010 ANNUAL GASOLINE GALLONS THROUGHPUT

Gasoline only (All grades): **140019.0000 gal**
(Commercial information submitted only to determine compliance with N.H. Env-A 1205..)

certify that the above information is true and correct _____
(Signature of Owner)

Please return to: **N.H. Air Resources Division**
Vapor Recovery Program
P.O. Box 95
6 Hazen Drive
CONTOOSUCK, NH 03302

Done Local intranet 110%

12.2.3.7 Delivery Report

This report enables the user to view all deliveries received within the selected time range.

The Station List is displayed on the bottom part of the screen (see [Figure 247](#) on [page 278](#)). To filter the stations to be included in the report, proceed as follows:

- 1 Select the check box next to the required Station. To select all the stations, click **Select All** button; to reset the selection click **Unselect All** button.
- 2 Filter the report by time range, utilizing the **From Date** and **To Date** menus or using the Time Period drop-down list to select a specific period of time (Today, Yesterday, Current/Last Week, Current/Last Month, Current/Last Quarter, Current/Last Year, Current/Last Fiscal Year). Selection of a Time Period auto-populates the **From Date** and **To Date** boxes accordingly.

The Delivery report includes several fields as described in [Table 49](#):

Table 49: Delivery Report Fields

Field Name	Description
Station Name	Unique name identifying the station
Delivery Date	Actual delivery date and time
Invoice Number	Invoice (BOL) form number
Employee Name	Name of the employee who received the delivery, for cases where the fuel delivery was accepted through OrPT using a Delivery tag
Tank Name	Tank filled
Invoice Volume	Volume as specified in the invoice (BOL)
Delivery Volume	Actual delivery volume

Print, preview, or save the report, utilizing the functional buttons described in [“12.2 Summary”](#) on [page 259](#). [Figure 248](#) on [page 278](#) displays an example of the obtained report.

Figure 247: Delivery Report Screen

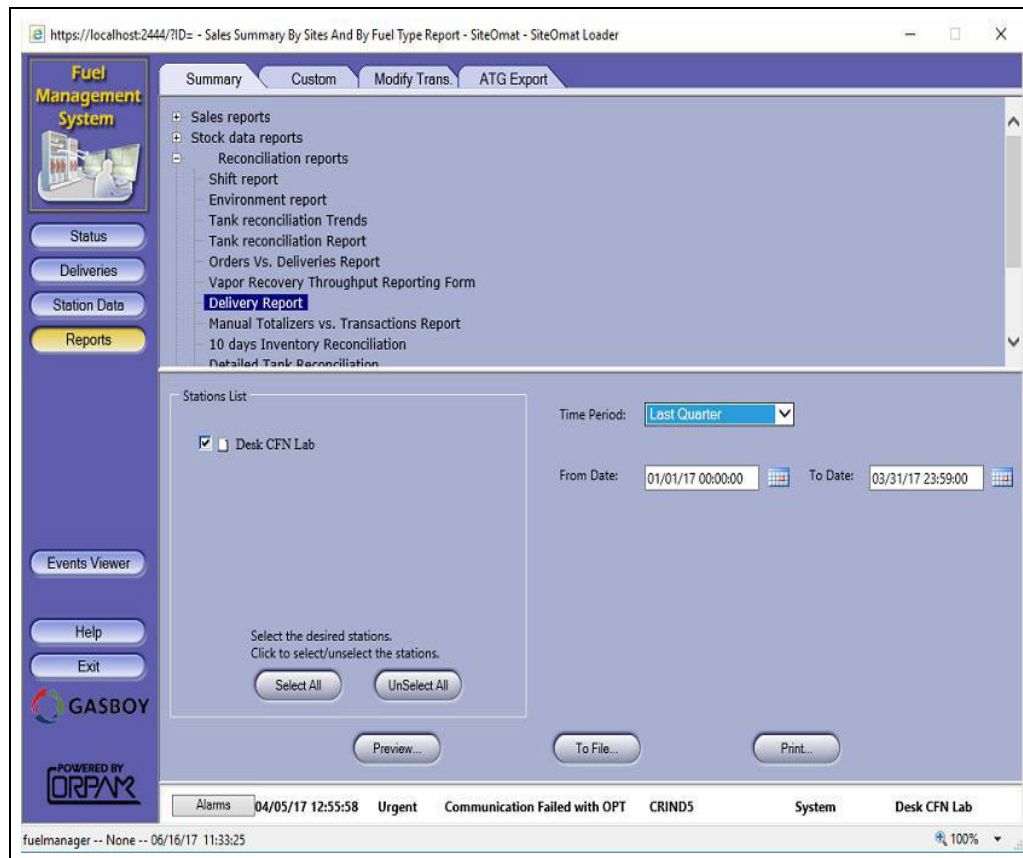


Figure 248: Delivery Report – Example

User: Admin
Printed on: 03/01/2011 14:33:40

Delivery Report

Report period: 2010-10-01 00:00:00 To 2010-12-31 23:59:00

Station Name	Delivery Date	Invoice Number	Employee Name	Tank Name	Invoice Volume (gal)	Delivery Volume (gal)
DOVER TURNPIKE MAINT.	10/08/2010 10:52:00	000910420	-	Tank 1	3499.000	3507.00
DOVER TURNPIKE MAINT.	10/12/2010 16:23:00	000911820	-	Tank 1	3000.000	3001.00
DOVER TURNPIKE MAINT.	10/12/2010 16:24:00	000911818	-	Tank 2	2000.000	1975.00
DOVER TURNPIKE MAINT.	10/21/2010 14:35:00	000914656	-	Tank 1	3001.000	3017.00
DOVER TURNPIKE MAINT.	10/27/2010 10:55:00	000916731	-	Tank 1	3000.000	3012.00
DOVER TURNPIKE MAINT.	11/03/2010 14:16:00	000918507	-	Tank 1	3000.000	3027.00
DOVER TURNPIKE MAINT.	11/06/2010 09:05:00	000919970	-	Tank 2	3000.000	2952.00
DOVER TURNPIKE MAINT.	11/06/2010 09:16:00	000919971	-	Tank 1	2000.000	2007.00
DOVER TURNPIKE MAINT.	11/13/2010 14:20:00	000921137	-	Tank 1	3000.000	3021.00

***** END *****

12.2.3.8 Manual Totalizers vs. Transactions Report

This report enables the user to perform reconciliation of mechanical pump totalizers manually entered by the user against volume dispensed in transactions.

The Station List is displayed on the bottom part of the screen (see [Figure 249](#) on [page 280](#)). To filter the stations to be included in the report, proceed as follows:

- 1 Select the check box next to the required Station. To select all the stations, click Select All button; to reset the selection click Unselect All button.
- 2 Filter the report by time range, utilizing the From Date and To Date menus or using the Time Period drop-down list to select a specific period of time (Today, Yesterday, Current/Last Week, Current/Last Month, Current/Last Quarter, Current/Last Year, Current/Last Fiscal Year). Selection of a Time Period auto-populates the From Date and To Date boxes accordingly.

The report is sorted by station and pump/nozzle. It includes a row per and each pair of totalizer readings taken during the selected period and the total volume dispensed between the timestamps of those readings. For example, if five readings were taken in the range, then four lines are displayed representing the difference between 1-2, 2-3, 3-4, 4-5.

[Table 50](#) provides a description of the report fields.

Table 50: Manual Totalizers vs. Transactions Report Fields

Field Name	Description
Station Name	Unique name identifying the station.
Pump	Number of pump head.
Nozzle	Number of nozzle.
Totalizer	The last totalizer reading (the second reading of a pair of readings).
Issued	Total volume of fuel dispensed from the pump/nozzle between the two readings.
Diff	Difference between the two totalizer readings.
Variance	Difference between Diff and Issue values. For an accurate balance, this parameter should be equal or close to zero.
Emp.	User that entered the manual reading.
Timestamp	Timestamp of manual reading entry.

Print, preview, or save the report, utilizing the functional buttons described in [“12.2 Summary”](#) on [page 259](#).

[Figure 250](#) on [page 280](#) displays an example of the obtained report.

Figure 249: Manual Totalizers vs. Transactions Report Screen

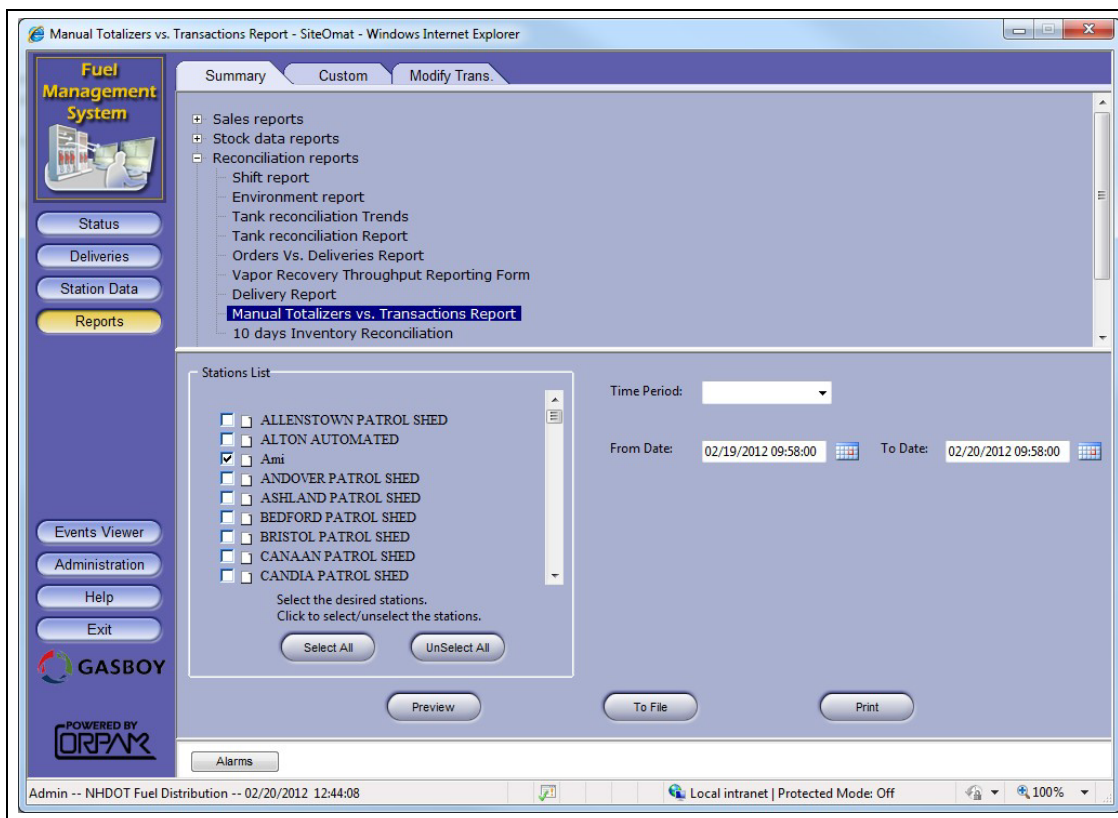


Figure 250: Manual Totalizers Report – Example

Manual Totalizers Report									
Report period: 05/01/2012 00:00:00 To 05/07/2012 23:59:00									
Station # 77777: Adi									
Pump	Nozzle	Totalizer	Issued	Diff	Variance	Tank	Fuel	Emp	Timestamp
1	1	1.000	349.030	-1869.000	-2218.030	Tank_1	Diesel	Shift	05/03/2012 14:23
1	1	15897.000	1045.370	15896.000	14850.630	Tank_1	Diesel	Admin	05/06/2012 17:17
2	1	2.000	0.000	1.000	1.000	Tank_5	Diesel	Shift	05/06/2012 19:36
2	2	3.000	0.000	0.000	0.000	Tank_3	Super	Shift	05/06/2012 19:36
2	3	4.000	0.000	0.000	0.000	Tank_4	Unleaded	Shift	05/06/2012 19:36
3	1	5.000	70.340	-2.000	-72.340	Tank_3	Super	Shift	05/06/2012 19:36
3	2	6.000	0.000	1.000	1.000	Tank_1	Diesel	Shift	05/06/2012 19:36
4	1	7.000	213.880	6.000	-207.880	Tank_4	Unleaded	Shift	05/06/2012 19:36
4	2	8.000	0.000	0.000	0.000	Tank_2	Regular	Shift	05/06/2012 19:36
4	3	9.000	0.000	0.000	0.000	Tank_3	Super	Shift	05/06/2012 19:36
9	1	1.000	0.000	-8.000	-8.000	Tank_1	Diesel	Shift	05/06/2012 19:36
***** END *****									

12.2.3.9 10 Days Inventory Reconciliation Report

The 10 Days Inventory Reconciliation Report displays wet stock balance data per tank and per day for the ten days preceding the selected date.

To produce the report (see [Figure 251](#) on [page 282](#)), proceed as follows:

- 1 Select the Station from the drop-down list.
- 2 Select the Start Date using the date and Time box.

[Table 51](#) provides a description of the report fields.

Table 51: 10 Days Inventory Reconciliation Report Fields

Field Name	Description
Open Date/Time	EOD starting date and time.
Close Date/Time	EOD closing date and time.
Opening Volume	Tank stock at the opening inventory point (A) as reported by TLG.
Deliveries	Total deliveries as reported by TLG (B).
Metered Sales	Total volume dispensed in transactions (C).
Manual Adjust	Total sum of deliveries (positive values) and transactions (negative values) manually entered to the system (D).
Calculated Inventory	Estimated stock based on the following calculation: A+B-C +D.
Physical Inventory	Tank stock at the closing inventory point as reported by TLG.
Water Height	Height of fuel in the tank at the closing inventory point as reported by TLG.
Variance	Difference between Physical Inventory and Calculated Inventory. For an accurate balance, this parameter should be equal or close to zero.

The obtained report (see [Figure 250](#) on [page 280](#)) indicates whether the inventory reconciliation is found to be Within/Outside the allowable variance threshold (0.75%) and enables the user to enter Cause of Exceedance and Date of Required Action in the corresponding text boxes in cases where the Variance exceeded the threshold.

The Report may be saved or previewed using the functional buttons described in “[12.2 Summary](#)” on [page 259](#). To send the report to a printer, click **Print** button in the Report preview.

Click **Close** to exit the report preview.

Figure 251: 10 Days Inventory Reconciliation Report Screen

10 days Inventory Reconciliation - SiteOmat - Windows Internet Explorer

Fuel Management System

Status
Deliveries
Station Data
Reports

Events Viewer
Administration
Help
Exit

GASBOY
POWERED BY ORFAM

Summary Custom Modify Trans.

- Sales reports
- Stock data reports
- Reconciliation reports
 - Shift report
 - Environment report
 - Tank reconciliation Trends
 - Tank reconciliation Report
 - Orders Vs. Deliveries Report
 - Vapor Recovery Throughput Reporting Form
 - Delivery Report
 - Manual Totalizers vs. Transactions Report
 - 10 days Inventory Reconciliation**

Station: Ami (2222)
Start Date: 07/04/2011

Preview To File

Admin -- NHDOT Fuel Distribution -- 02/20/2012 14:20:40 Local intranet | Protected Mode: Off

Figure 252: 10 Days Inventory Reconciliation Report – Example

Report period: 07/04/2011 00:00:00 To 07/13/2011 23:59:00

Open Date/Time	Close Date/Time	Opening Volume (Gallon)	Deliveries (Gallon)	Metered Sales (Gallon)	Manual Adjust (Gallon)	Calculated Inventory (Gallon)	Physical Inventory (Gallon)	Water Height (Inch)	Variance (Gallon)
07/04/2011 00:01	07/05/2011 00:00	1697.00	0.00	59.58	0.00	1637.42	1635.00	0.00	-2.42
07/05/2011 00:00	07/06/2011 00:00	1635.00	0.00	143.95	0.00	1491.05	1493.00	0.75	1.95
07/06/2011 00:00	07/07/2011 00:00	1493.00	3498.00	151.55	0.00	4839.45	4833.00	0.00	-6.45
07/07/2011 00:00	07/08/2011 00:00	4833.00	0.00	155.43	0.00	4677.57	4667.00	0.00	-10.57
07/08/2011 00:00	07/09/2011 00:00	4667.00	0.00	147.42	0.00	4519.58	4516.00	0.00	-3.58
07/09/2011 00:00	07/10/2011 00:00	4516.00	0.00	33.22	0.00	4482.78	4481.00	0.00	-1.78
07/10/2011 00:00	07/11/2011 00:00	4481.00	0.00	43.33	0.00	4437.67	4436.00	0.00	-1.67
07/11/2011 00:00	07/12/2011 00:00	4436.00	0.00	135.96	0.00	4300.04	4300.00	0.00	-0.04
07/12/2011 00:00	07/13/2011 00:01	4300.00	0.00	205.26	0.00	4094.74	4094.00	0.00	-0.74
07/13/2011 00:01	07/14/2011 00:00	4094.00	0.00	190.68	0.00	3903.32	3903.00	0.00	-0.32
Tank Total:			3498.00	1266.38	0.00				-25.62

Explanation of Exceedance of Allowable Variance

Status: Within Allowable Variance Threshold: 75% Offset: 0 +/- 30

Cause determined to be:

Required Action (Inspection/Repairs/Tests etc.) on / / (Date)

Print Close

Done Local intranet | Protected Mode: Off

12.2.4 Maintenance Reports

This section enables the user to generate reports on a specific station status and to conduct a database audit, as described below:

- Event log report
- Alarm duration report
- Bypass Status report

12.2.4.1 Event Log Report

This report enables the user to view logs of events related to the stations (i.e. Shift Start and End operations).

The Station List is displayed on the bottom part of the screen (see [Figure 253](#) on [page 284](#)). To filter the data to be included in the report, proceed as follows:

- 1 Select the check box next to the required Station. To select all the stations, click **Select All** button, to reset the selection click **Unselect All** button.
- 2 Filter the report by time range, utilizing the From Date and To Date menus or using the Time Period drop-down list to select a specific period of time (Today, Yesterday, Current/Last Week, Current/Last Month, Current/Last Quarter, Current/Last Year, Current/Last Fiscal Year). Selection of a Time Period auto-populates the From Date and To Date boxes accordingly.

The Event Log report includes several fields as described in [Table 52](#):

Table 52: Event Log Report Fields

Field Name	Description
Station	Unique name identifying the station
Date	Date of the event
Time	Time of the event
Event Type	Type of the event (see section 13.2)
Event Source	Event source
Event Description	Brief description of the event

Print, preview or save the report, utilizing the functional buttons described in “[12.2 Summary](#)” on [page 259](#). [Figure 254](#) on [page 284](#) displays an example of the obtained report.

Figure 253: Event Log Report Screen

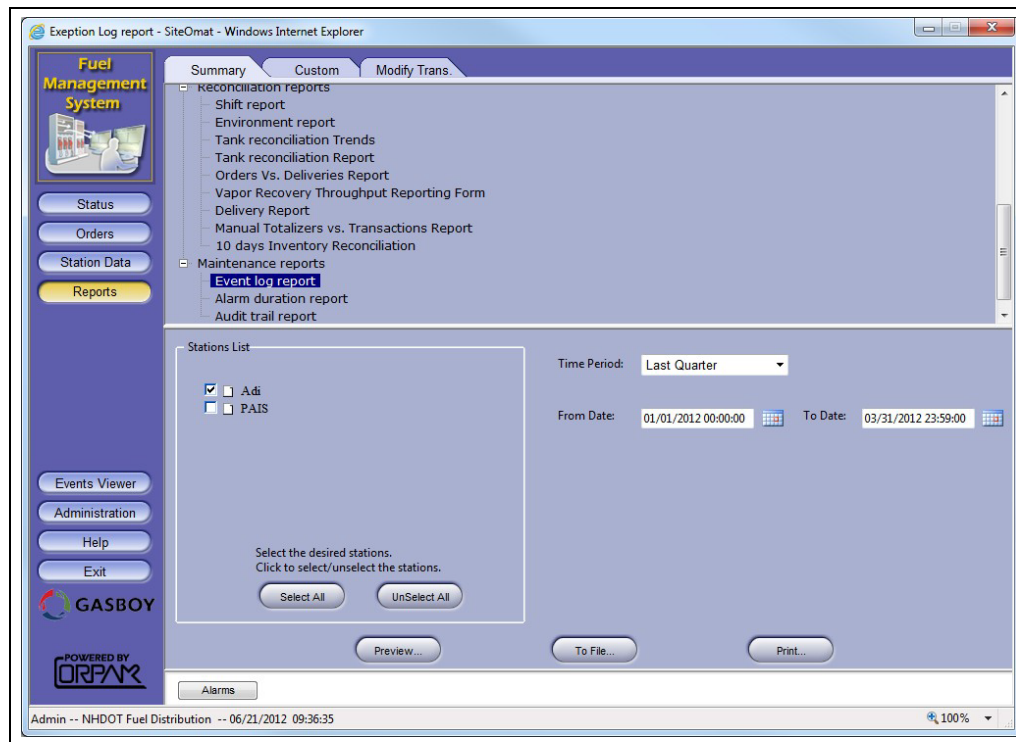


Figure 254: Event Log Report – Example

Exception Log Report						
Report period: 01/01/2010 15:13:00 To 07/04/2010 15:13:00						
Selected Criteria						
Station						
631900UPG51						
ALLENSTOWN PATROL SHED						
ALTON AUTOMATED						
Ser. No.	Station	Date	Time	Event Type	Event Source	Event Description
1	631900UPG51	2010-06-07	16:04:59	Inform	Authorization	Unrecognized string 8012107673093722 in device
***** END *****						

12.2.4.2 Alarm Duration Reports

The Alarm Duration Report provides detailed description of alarms duration (i.e., Starting date and time of the alarm, Normalized date and time of the alarm, Acknowledged date and time of the alarm, Priority and Type of alarm. It also provides the details of the device causing the alarm and the alarm description (see [Figure 256](#) on [page 285](#)).

The Station List is displayed on the bottom part of the screen (see [Figure 257](#) on [page 286](#)). To filter the data to be included in the report, proceed as follows:

Select the check box next to the required Station. To select all the stations, click **Select All** button; to reset the selection, click **Unselect All** button.

Filter the report by time range, utilizing the From Date and To Date menus or using the Time Period drop-down list to select a specific period of time (Today, Yesterday, Current/Last Week, Current/Last Month, Current/Last Quarter, Current/Last Year, Current/Last Fiscal Year). Selection of a Time Period auto-populates the From Date and To Date boxes accordingly.

Print, preview or save the report, utilizing the functional buttons described in “12.2 Summary” on page 259.

Figure 255: Alarm Duration Report Screen

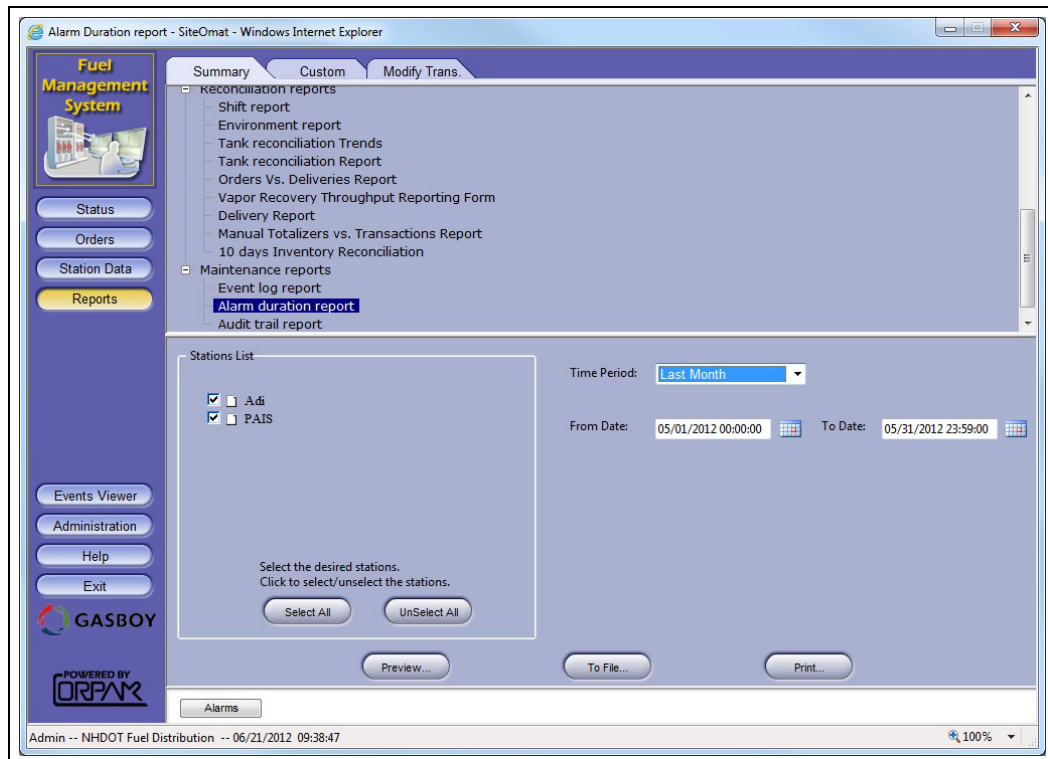


Figure 256: Alarm Duration Report

Alarm Duration Report											
Report period: 2009/10/04 11:08:00 To 2010/01/07 11:08:00											
Ser.	Occurrence		Normalized		Acknowledged			Priority	Type	Device	Description
No.	Date	Time	Date	Time	Date	Time	User				
24	2009/12/27	00:23:04	2009/12/27	00:23:04	2010/01/07	09:17:27	Admin	Journal	System	ORPT	Unauthorized Tag Presented
25	2009/12/26	23:05:19	2009/12/26	23:05:19	2010/01/07	09:17:27	Admin	Journal	System	ORPT	Unauthorized Tag Presented
26	2009/12/26	02:53:17	2009/12/26	02:53:17	2010/01/07	09:17:27	Admin	Journal	System	ORPT	Unauthorized Tag Presented
27	2009/12/21	12:31:30	2009/12/21	12:31:30	2009/12/22	15:20:48	Admin	High	System	Chicago Airport	System Started
28	2009/12/21	12:29:11	2009/12/21	12:36:32	2009/12/22	15:20:48	Admin	Urgent	Operational	Chicago Airport	Station is off-line
29	2009/12/20	21:11:00	2009/12/20	21:11:00	2009/12/22	15:20:48	Admin	Journal	System	ORPT	Unauthorized Tag Presented
30	2009/12/20	17:01:34	2009/12/20	17:01:34	2009/12/22	15:20:48	Admin	Journal	System	ORPT	Unauthorized Tag Presented
31	2009/12/19	17:48:16	2009/12/19	17:48:16	2009/12/22	15:20:48	Admin	Journal	System	ORPT	Unauthorized Tag Presented

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***** END *****

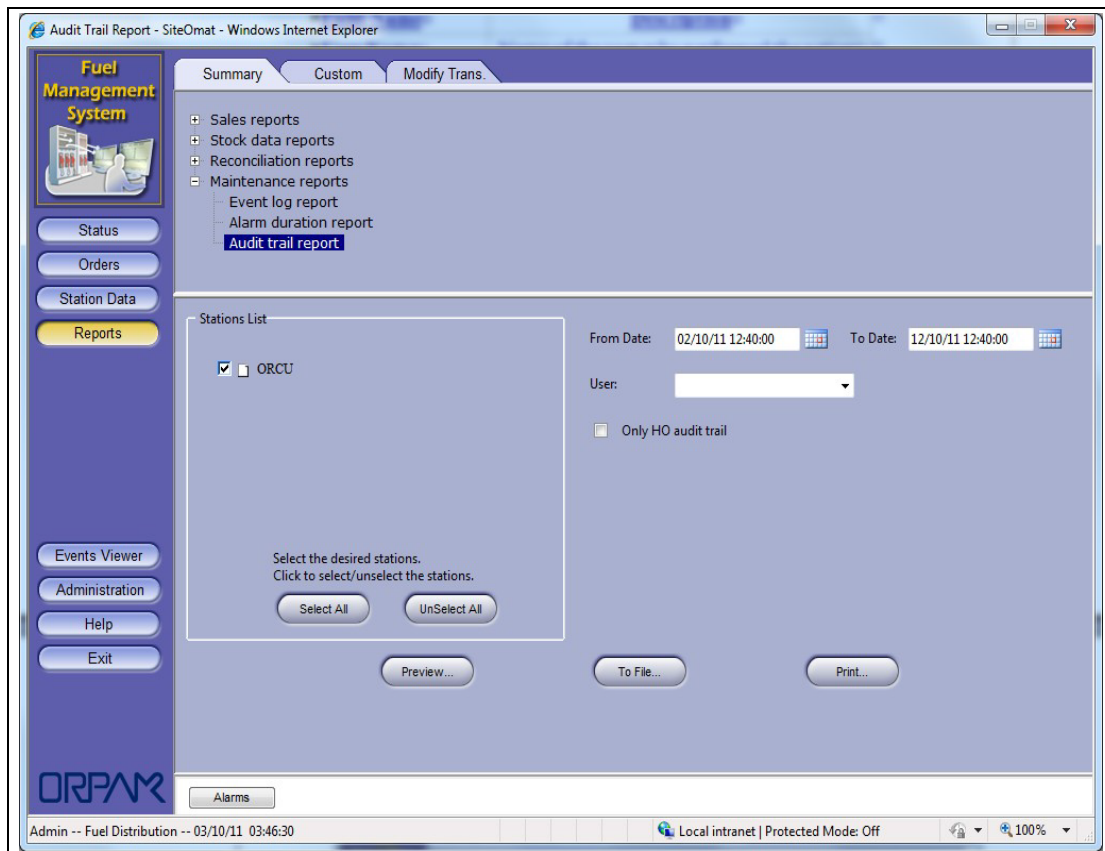
12.2.4.3 Audit Trail Report

This report enables the user to conduct a database audit, which keeps track of all Add/Delete/Update actions performed on the database within a specified period of time. The Audit Trail comprises the following fields (see Table 53):

Table 53: Audit Trail Report Fields

Field Name	Description
User Name	Name of the user who performed the action.
Table Name	Name of the modified table.
Field Name	Name of the modified field.
Old Value	Previous value of the field.
New Value	New value of the field.
Stn. ID	Reserved for future use.
Audit Time	Time at which the action was performed.
Action	Action type (Update, Insert, Delete)
Via Method	Manual: Action performed by the user from the GUI. W: Action performed by other applications via Web Services.
Origin Station	The Station which reported the action (zero in cases where the action was performed directly on FHO database).
Activity	Brief description of the action.

Figure 257: Audit Trail Report Screen



To filter the data to be included in the report (see [Figure 257](#) on [page 286](#)), proceed as follows:

- 1 Select the check box next to the required Station in the Stations List. To select all the stations, click **Select All** button; to reset the selection, click **Unselect All** button.
- 2 Filter the report by time range, utilizing the **From Date** and **To Date** combo boxes.
- 3 If needed, filter the report by User from the drop-down list, to obtain a report on actions performed by this specific user only.
- 4 Select the Only HO audit trail check box to obtain a report an action performed on HEAD OFFICE database only (not including SiteOmat).

Print, preview or save the report, utilizing the functional buttons described in “12.2 Summary” on [page 259](#).

[Figure 259](#) on [page 288](#) displays an example of the obtained report.

Figure 258: Audit Trail Report Screen

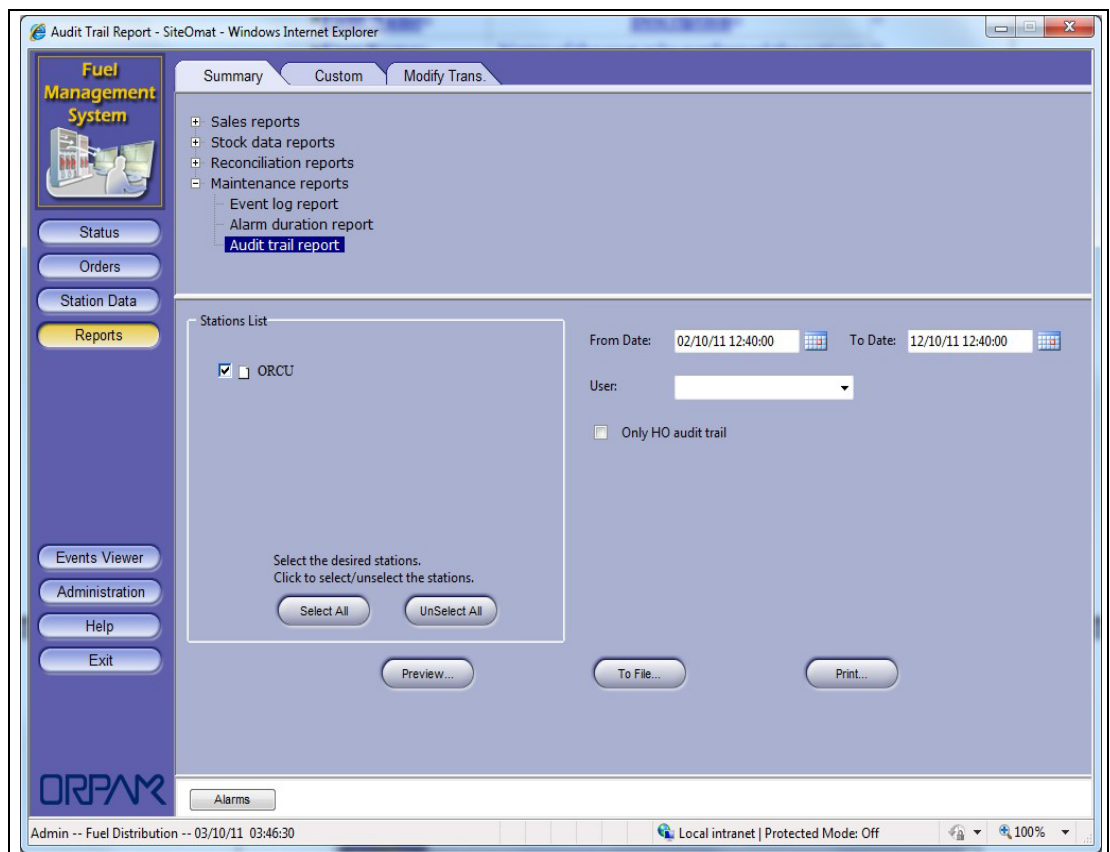


Figure 259: Audit Trail Report – Example

SiteOmat - Audit Trail Report - Windows Internet Explorer

Fuel Distribution

User: Admin

Printed on: 08/09/11 04:14:39

Audit Trail Report

Report period: 2011-08-15 17:00 To 2011-08-15 20:57

User Name	Table Name	Field Name	Old Value	New Value	Stn Id	Audit Time	Action	Via Method	Origin Station	Activity
Admin	users	start_date_time	2011-08-13 00:00:00	2011-08-14 00:00:00	0	15/08/11 17:15:30	Update	Manual	1001	Update of a User
Admin	users	end_date_time	2011-08-13 23:59:59	2011-08-14 23:59:59	0	15/08/11 17:15:30	Update	Manual	1001	Update of a User
Admin	device_params	using_idd	0	1	0	15/08/11 18:58:14	Update	Manual	1001	Update Global Communication Params
Admin	users	password	PANMmuM2fmuxQ	AALxbVacYVEyc	0	15/08/11 20:49:15	Update	Manual	1001	Update of a User
Admin	features_t	value	0	1	0	15/08/11 20:56:02	Update	Manual	1001	Update a Station Global Parameters
Admin	features_t	value	0	1	0	15/08/11 20:56:03	Update	Manual	1001	Update a Station Global Parameters
Admin	features_t	value	0	1	0	15/08/11 20:56:03	Update	Manual	1001	Update a Station Global Parameters

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***** END *****

Done

Local intranet | Protected Mode: Off

12.2.4.4 Bypass Status Report

Site Controllers configuration for mechanical pumps include bypass switches – a switch per dispenser. These should be used in cases of system malfunction to enable refueling. The switch is also connected to the controller so as to provide indication on bypass state.

While the system is in Bypass state, SiteOmat keeps capturing the total dispensed from the pumps and generates an event displayed in Event Viewer screen.

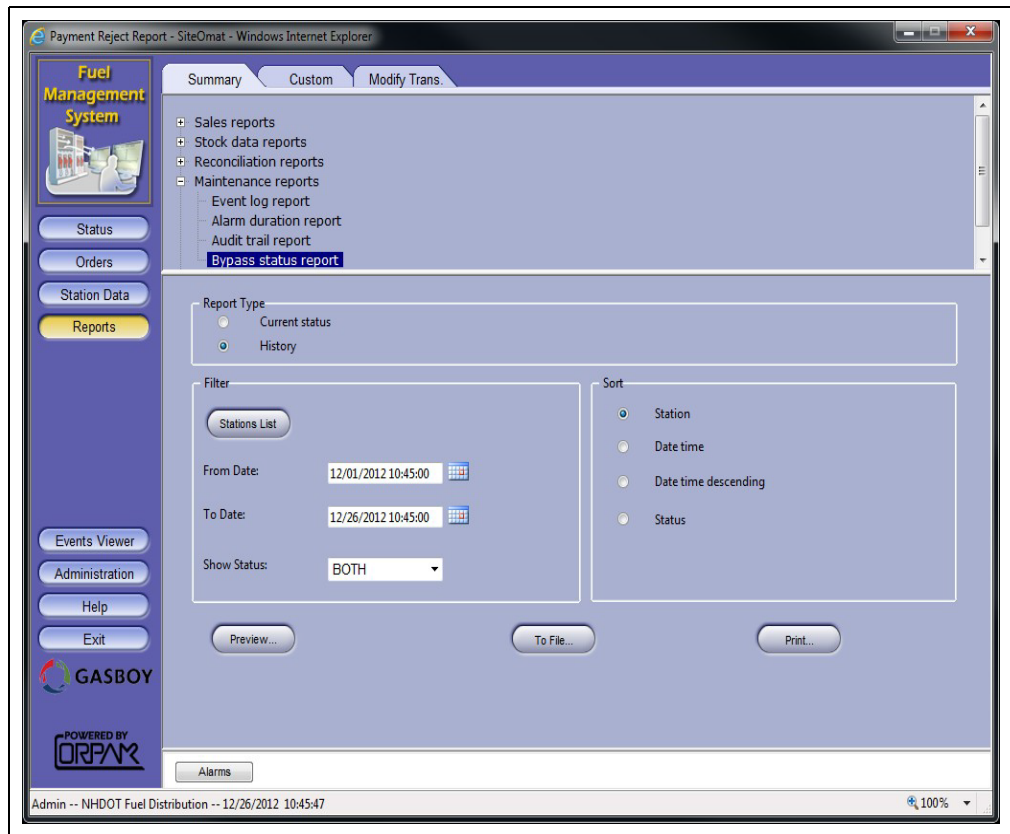
This report enables the user to monitor the status of each station and pump, including data and time of the event, station name and pump number and totalizer reading.

Two types of report are available:

- **Current Status:** Displays current status of bypass, based on the last bypass event. If there was not such an event, then the bypass reported status is OFF.
- **History:** Displays all bypass events within the selected time range.

To filter the data to be included in the report (see [Figure 260](#)), proceed as follows:

Figure 260: Bypass Status Report Screen



- 1 Select the Report Type: Current Status or History
- 2 History Report only: Filter the report by time range, using the From Date and To Date menus.
- 3 Select the stations to be included in the report: click Station List to open the Station List dialog box. Select the check box next to the required Station. To select all the stations, click Select All, to reset the selection click Unselect All. Click OK to apply the filter and close the dialog box.
- 4 Select the statuses to be displayed from the Show Status drop-down: OFF, ON, or BOTH.
- 5 Sort the report by Station, Status or Date Time/Date Time Descending (History report only).

Print, Preview, or Save the report, using the functional buttons described in [“12.2 Summary”](#) on [page 259](#). [Figure 261](#) displays an example of the obtained report.

Figure 261: Bypass Status Report – Example

Bypass Status Report						
Report period: 11/01/2012 10:45:00 To 12/26/2012 10:45:00						
Ser. No.	Date	Time	Station	Pump	Status	Totalizer
1	11/12/2012	11:43:10	COLUMBIA PATROL SHED	4	ON	55.030
2	11/12/2012	11:43:14	COLUMBIA PATROL SHED	3	ON	32.750
3	11/12/2012	11:58:13	COLUMBIA PATROL SHED	3	OFF	34.750
4	11/12/2012	11:58:17	COLUMBIA PATROL SHED	4	OFF	60.920
5	11/15/2012	10:19:57	COLUMBIA PATROL SHED	3	ON	34.750
6	11/15/2012	10:20:00	COLUMBIA PATROL SHED	4	ON	60.920
7	11/15/2012	17:06:08	COLUMBIA PATROL SHED	4	OFF	86.540
8	11/15/2012	17:06:10	COLUMBIA PATROL SHED	3	OFF	43.790
9	11/27/2012	07:26:50	DERRY PATROL SHED	1	ON	0.340
10	11/27/2012	07:31:27	DERRY PATROL SHED	2	ON	1.940
11	11/27/2012	07:32:43	DERRY PATROL SHED	2	OFF	6.960
12	11/05/2012	09:00:46	GORHAM PATROL SHED	1	ON	20.270
13	11/05/2012	09:01:11	GORHAM PATROL SHED	1	OFF	20.270
14	11/05/2012	09:08:19	GORHAM PATROL SHED	1	ON	20.270
15	11/05/2012	09:20:03	GORHAM PATROL SHED	2	ON	19.620
16	11/05/2012	09:20:04	GORHAM PATROL SHED	1	OFF	40.260
17	11/05/2012	09:29:09	GORHAM PATROL SHED	2	OFF	39.620
18	11/05/2012	09:39:57	GORHAM PATROL SHED	3	ON	25.740
19	11/05/2012	10:01:08	GORHAM PATROL SHED	3	OFF	55.730
20	11/05/2012	10:01:09	GORHAM PATROL SHED	4	ON	55.660
21	11/05/2012	10:22:20	GORHAM PATROL SHED	4	OFF	95.660

12.2.5 Custom Reports

This section contains all custom reports saved by the user as templates. See more custom reports details in [“12.3 Custom Reports Tab”](#) on [page 290](#).

12.3 Custom Reports Tab

The Custom Report section enables the user to generate customized reports of the transactions performed in the gas station in various profiles. Custom reports open a specific custom report screen containing predefined criteria selection only.

Custom Reports are similar for both FHO and FMS applications and are detailed in [“8.5.2 Custom Reports”](#) on [page 177](#).

12.4 Modify Transactions

The Modify Transactions screen is similar for both FHO and FMS applications refer to [“8.5.4 Modify Transactions”](#) on [page 195](#).

12.5 ATG Export

This report enables you to export all ATG data, such as Product Volume, Product Temperature, Water Level, Ullage, etc. This option also enables you to define the fields to be included in the report, their order of appearance, and more. Several templates can be defined.

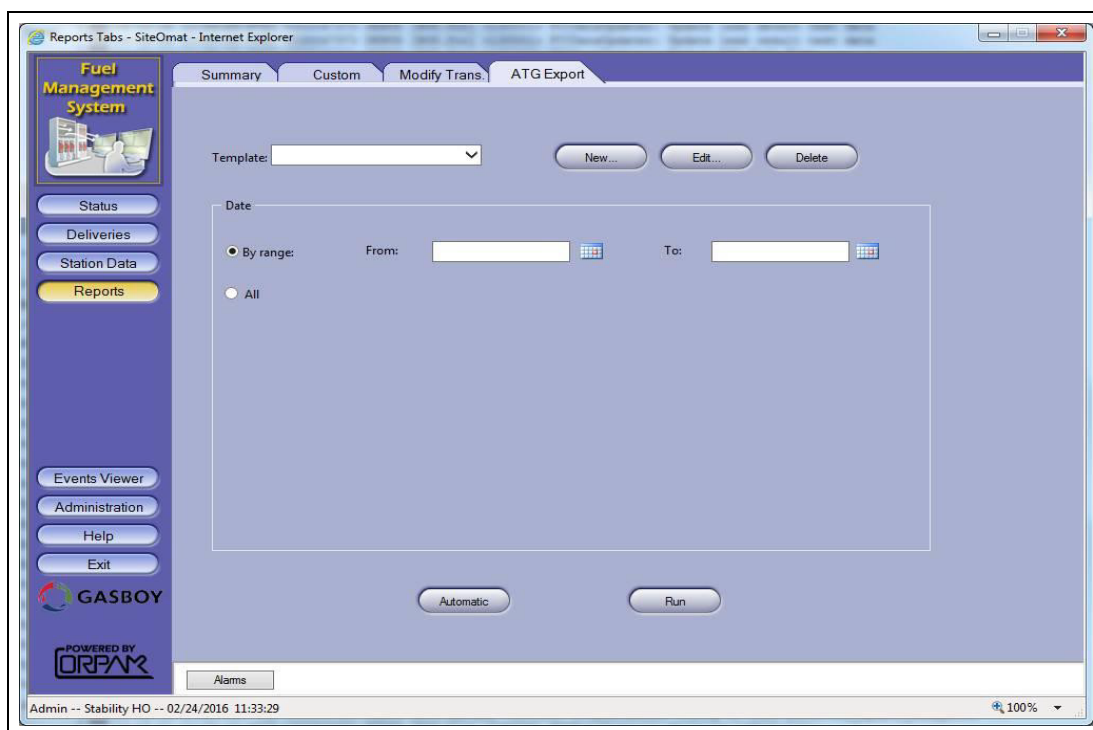
The following options are available:

- Selecting a previously defined template from the Template drop-down menu.
- Clicking New to create a new template.
- Selecting a template from the drop-down list and clicking Edit to change its properties.

To create a template, proceed as follows:

- 1 Click **ATG Export** tab (see [Figure 262](#)).

Figure 262: Report Screen – ATG Export Tab



- 2 Click **New** to define the template. The following dialog box opens (see [Figure 263](#)).

Figure 263: ATG Export Dialog Box

Reports - ATG Export -- Webpage Dialog

Template: Type:

Fields selection

Select fields:

- End date (Date)
- End gross volume (Float)
- End net volume (Float)
- End time (Time)
- Gross quantity delivered
- Net quantity delivered
- Site ID number (Int)
- Site tank number (Int)
- Start date (Date)
- Start gross volume (Float)
- Start net volume (Float)
- Start time (Time)

Add

Remove

Move up

Move down

Name	Format	Width	Precision	Type	Justify
------	--------	-------	-----------	------	---------

Select file format:

Select delimiter:

Select decimal point:

☐ Print column name

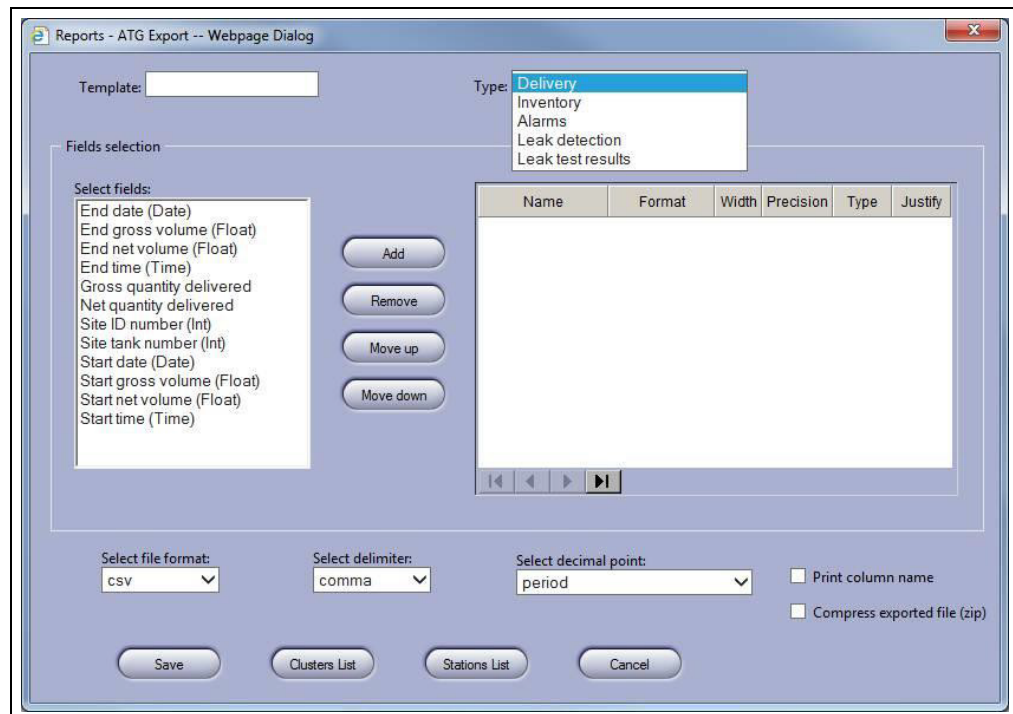
☐ Compress exported file (zip)

Save Clusters List Stations List Cancel

- 3 In the Template field, enter a descriptive name for the report.
- 4 In the Type drop-down, select the type of report (see [Figure 264](#) on [page 293](#)). The following types are available:
- Delivery
 - Inventory
 - Alarms
 - Leak Detection
 - Leak Test Results

The list of fields on the left will change accordingly (see [Table 54](#) on [page 295](#)).

Figure 264: ATG Export Types



- 5 Select the required fields by clicking on the field row in the Select Fields list and then clicking Add. The field is added to the grid on the right.

- 6 (Optional) Click a row in the grid, and:
 - a Click Move up or Move down to change the field's order of appearance in the report.
 - b Double-click the Name field to rename the field.
 - c Double-click the Format field to select a different format from a list of available formats (for .csv or .txt output only, refer to [Table 35](#) on [page 207](#)).
 - d Double-click the Width field and enter a new value to change the width of the field (for .csv or .txt output only).
 - e Double-click the Precision field to select a different number of decimal digits of precision from a list (for .csv or .txt output only).

Note: Format, Width, Precision and Style columns are for view-only. See [Table 10](#) on [page 62](#) for a description of the different formats.

- 7 Select the output type from the Format drop-down: csv, txt or xml.
- 8 (Optional) Select the field delimiter character from the Select Delimiter drop-down (for .csv output only).
- 9 (Optional) Select the Decimal Point notation from the drop-down list.

Note: Do not select a comma as a decimal point notation, if commas were selected as field delimiters.

- 10 (Optional) Select the Print column name check box to include the field Name in the export file.
 - 11 (Optional) Select the Compress exported file (zip) check box to compress the exported file into a .Zip file.
 - 12 (Optional) Filter the export by one of the following:
 - Clusters
 - Stations
- a Click Clusters List (which opens the Clusters List dialog box, see [Figure 265](#)) or Station List (which opens the Station List dialog box, see [Figure 266](#) on [page 295](#)).
- b Select the check box next to the required clusters/stations. To select all of the clusters/stations, click **Select All** button, to reset the selection click **Unselect All** button.
- c Click **OK** to save changes and close the dialog box, or Cancel to close the dialog box without saving the changes.

Figure 265: Cluster List

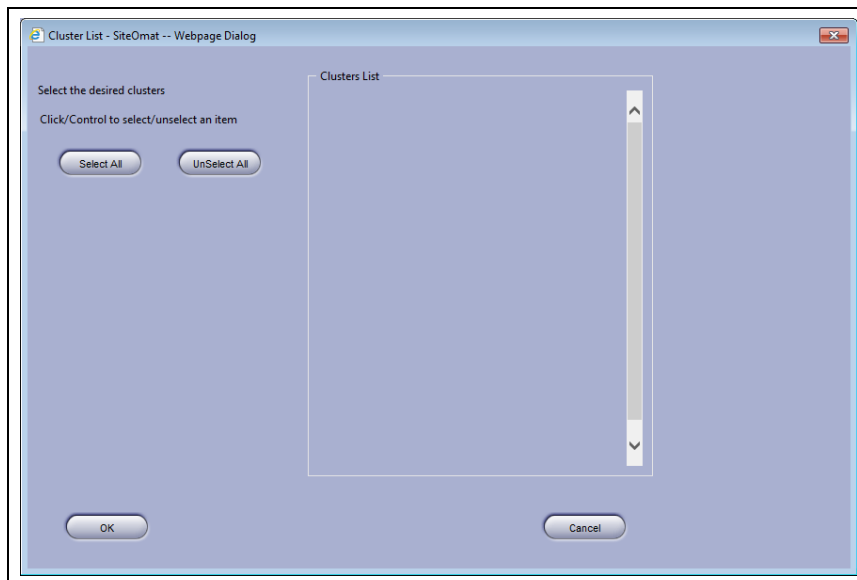
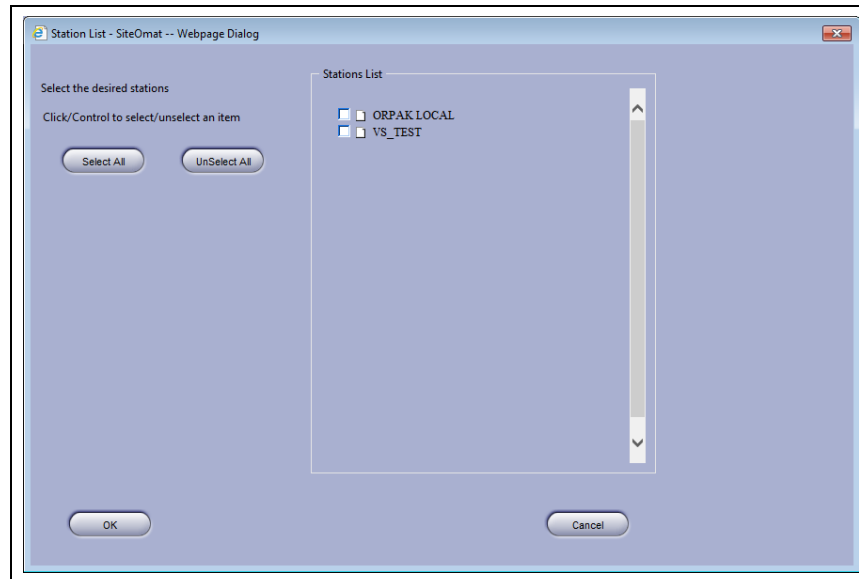


Figure 266: Station List

13 Click **Save** to save the settings.

To remove a field from the report, click the row in the right-side grid and then click **Remove**.

To remove a template from the system, select the template from the **Template** the drop-down list on the **ATG Export** tab, and then click **Delete**.

Table 54: ATG Export Fields

Report Type	Field Name	Description
Delivery	End date	The end date of delivery.
	End gross volume	The total gross volume of fuel after delivery.
	End net volume	The total net volume of fuel after delivery.
	End time	The end time of delivery.
	Gross quantity delivered	The gross quantity of fuel delivered.
	Net quantity delivered	The net quantity of fuel delivered.
	Site ID number	The unique ID that identifies the site.
	Site tank number	The number of tank at the site
	Start date	The start date of delivery.
	Start gross volume	The gross volume of fuel before delivery.
	Start net volume	The net volume of fuel before delivery.
	Start time	The start time of delivery.
Inventory	Date taken	The date that the inventory was taken.
	Gross volume	The gross volume of inventory.
	Level	The level of fuel in the tank.
	Net Volume	The net volume of inventory.
	Product temperature	The temperature of the fuel in the tank.
	Site ID number	The unique ID that identifies the site.

Report Type	Field Name	Description
Inventory	Site tank number	The number of tank at the site.
	Time taken	The time that the inventory was taken.
	Ullage	The amount of unfilled space in the fuel tank.
	Unique record number	The unique number of the report.
	Water level	The level of water in the tank.
	Water volume	The volume of water in the tank.
Alarms	Acknowledged by	The user that the alarm was acknowledged by.
	Acknowledged text	The text that was input by the user regarding the alarm.
	Alarm category	The category of alarm.
	Alarm code	The unique code of the alarm.
	Alarm state changing date	The date that the alarm changed states.
	Alarm state	The current state of the alarm.
	Alarm type number	The number of the alarm type.
	Sensor category	The category of the sensor.
	Site ID number	The unique ID that identifies the site.
	Site tank number	The number of tank at the site.
	Start date	The start date of the alarm.
	Start time	The start time of the alarm.
	Unique record number	The unique number of the report.
Leak detection	Device ID	The unique ID that identifies the tank.
	Ending (leak) rate	The leak rate at the end of the leak detection.
	Ending temperature	The temperature at the end of the leak detection.
	Hourly volume changes	The hourly changes of the tank volume.
	Number of points	The number of sample points.
	Product code	The unique code of the product.
	Starting datetime	The date and time at the start of the leak detection.
	Starting temperature	The temperature at the start of the leak detection.
	Starting volume	The volume at the start of the leak detection.
	Test duration	The duration of the leak detection test.
	Timestamp	The timestamp of the leak detection.
	Unique record number	The unique number of the report.
Leak test results	Device ID	The unique ID that identifies the device.
	Hours	The duration of the leak test.
	Leak test status	The status of the leak test: Passed, Failed, Invalid.
	Leak test type	The type of the leak test: Annual, Periodic, Gross.
	Previous test datetime	The date and time of the previous leak test.
	Previous test result	The result of the previous leak test
	Rate	The flow rate of the leak test.
	Start datetime	The date and time at the start of the leak TEST.
	Timestamp	The timestamp of the leak test.
	Unique record number	The unique number of the report.
	Volume	The current volume of the tank.

12.5.1.1 Scheduling Automatic ATG Exports

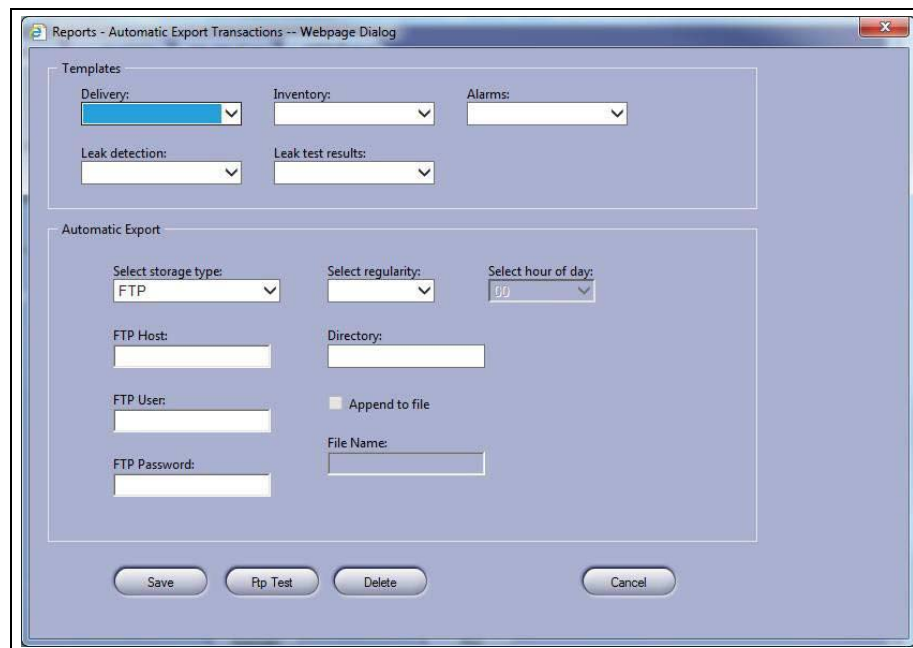
ATG Export can be scheduled to run automatically at predefined time intervals. Exports with different types of templates can be programmed.

The Automatic Export dialog box opens all defined exports, along with the template used for each type, the target of the export and its properties.

To schedule an automatic ATG export, proceed as follows:

- 1 Click **Automatic** button. The following dialog box opens (see [Figure 267](#)).

Figure 267: Automatic ATG Export Dialog Box



- 2 In the Templates section, choose the templates to automatically export from each type of report.
- 3 In the Select storage type drop-down, select export target: FTP Site/Local Directory
- 4 If exporting to an FTP:
 - a Enter the FTP Host (Address)
 - b Enter FTP User and Password
 - c (Optional) After setting the above parameters, click FTP Test to check the connection to the FTP server. A success message is displayed.
- 5 If exporting to a local directory, enter its path in the Directory field
- 6 In the Select regularity and Hour of Day drop-down lists, select the exporting time intervals.
- 7 Click Save to save the automatic export.

12.5.1.2 Manually Generating ATG Exports

To manually generate an ATG report, proceed as follows:

- 1 Select a Template from the drop-down (see [Figure 262](#) on [page 291](#)).
- 2 In the Date section:
 - Select the By Range radio button and select the start and end time, or
 - Select the All radio button to export all records.
- 3 Click Run. Open or save the file.

13 – Event Viewer and Alarms

13.1 General

This section describes the event viewer feature of the FHO application, which enables viewing system warnings and logins and the alarms screen, which enables users to view and acknowledge alarms.

Alarms are generated for urgent incidents that require immediate attention. Most of the alarms apply to fuel inventory (Low volume in tanks, No communication to station, etc.) The last significant alarm is displayed on the bottom part of each screen requiring user acknowledgement.

Events register common incidents for record purposes. Most events apply to devices, behavior and are for viewing only.

13.2 Event Viewer

This paragraph describes the event viewer feature of the Administration application, which enables viewing system warnings and logins. The Event Viewer provides a list of system messages, warning and alerts. The content of the alert is related to all the connected stations.

To open the Event Viewer screen (see [Figure 268](#) on [page 300](#)), click the **Event Viewer** navigation button.

The Event Type Filter check boxes enable users to narrow the messages to a specific type. The predefined available options are:

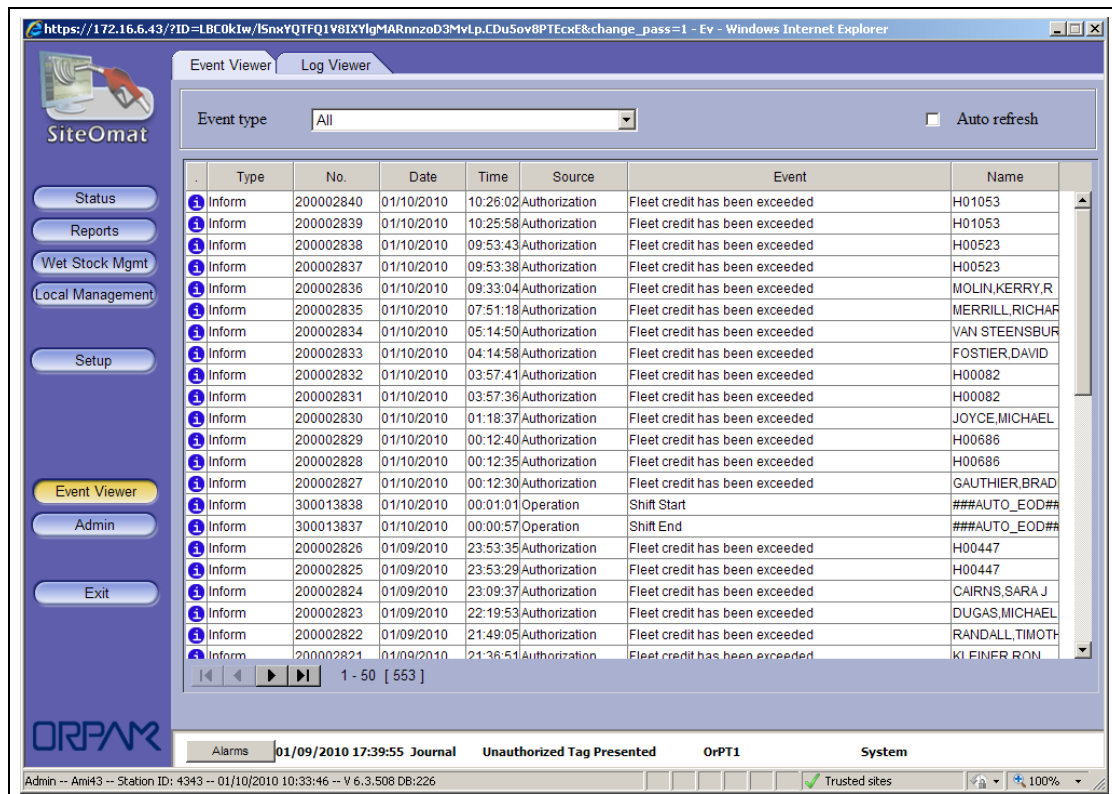
- Authorization
- Communication
- Screens
- Operation
- System

Events may also be filtered by time range (from HH:MM to HH:MM) using the date and time dialog boxes; by fleet or station using the drop-down lists in the corresponding column headers.

The Auto Refresh check box indicates whether the list should be refreshed automatically to include new messages.

Click **Refresh** to manually refresh the screen.

Figure 268: Event Viewer Screen



13.2.1 List of Events

The events available in the system are listed in [Table 55](#):

Table 55: Events

Event	Type	Notes
Communication error with device	Communication	
Communication restored with device	Communication	
System online	System	
System offline	System	
Failed To Authorize string #1#. Reason: #2#	Authorization	Where #1# represents the device number and #2# the reason for the failure.
Shift Start	Operation	
Shift End	Operation	
Open connection	Communication	
Close connection	Communication	
Close and open connection	Communication	
User Inactivity Timeout	Operation	
Refuel ratio error	System	
Failed to authorize on fuel type check. approved #1#, requested #2#	Authorization	Where #1# is the appropriate fuel type for this vehicle and #2# is the requested type.
Device limit exceeded for day, week or month	Authorization	
Pump #1# initialized (previous status=#2#; process=#3#)	Operation	Where #1# is the pump number, #2# the previous status and #3# the current process.

Event	Type	Notes
Device visits exceeded for day, week or month	Authorization	
Pump #1# price update failed.	Operation	Where #1# is the pump number.
Fueling card authorization fail Card #1# Client #2# Reason #3#	Authorization	Where #1# is the Card number, #2# the Client number and #3# the reason.
Price sent to - Pump no. #1# Head #2# Nozzle #3# Price #4#	Operation	Where #1# is the pump number, #2# the pump head, #3# the nozzle and #4# the price.
Pump #1# Head #2# Ack new price	Operation	Where #1# is the pump number and #2# the pump head.
Pump #1# Head #2# Ack new price	Operation	Where #1# is the pump number and #2# the pump head.
Pump #1# Price #2# Should be #3#	Operation	Where #1# is the pump number, #2# the previous price and #3# the current price.
Pump #1# Authorize command failed After #2# retries	Authorization	Where #1# is the pump number and #2# the number of retries.
Pump #1# incorrect nozzle #4# was lifted. correct nozzle was not lifted after #2# seconds, transaction #3# canceled	Operation	Where #1# is the pump number, #4# the nozzle, #2# the waiting time and #3# the transaction number.
Pump has not started dispensing for more than #1# seconds, refueling canceled	Operation	Where #1# is the waiting time.
Fleet Head Office service started	System	
Station #1#: #2# in host #3# was added to the HeadOffice	Communication	
Station #1# : #2# in host #3# was deleted from the HeadOffice	Communication	
Station no comm	Communication	
Station no auth	Authorization	
Station bad data	System	
Station version mismatch	System	
Station #1# : #2# in host #3# changed properties	Communication	
Fleet credit has been exceeded	Authorization	
Vehicle Blocked or not found. Card number #4#	Authorization	Where #4# represents the Card number.
Not allowed to fuel in this time range	Authorization	
Fleet Blocked or not found. Fleet code - #3#	Authorization	Where #3# represents the Fleet code.
Number of allowed visits has been exceeded	Authorization	
#4# is not allowed to fuel in this station	Authorization	Where #4# represents the device.
Device #4# credit has exceeded	Authorization	Where #4# represents the device.
Fleet head office offline	System	
Too Many Digits from Pump #1#	Operation	Where #1# represents the pump number.
Pump #1# No nozzle was lifted #2# seconds, transaction #3# canceled	Authorization	Where #1# is the pump number, #2# the waiting time #3# the transaction number.
Multiple Nozzles Lifted	Operation	
No Nozzle Lifted	Operation	
Pump Not in Open Shift	Operation	
Pump Not Available for Fueling	Operation	
Attendant Tag not in Shift	Operation	
Pump Not in Open Shift	Operation	
Product Not Authorized	Authorization	
Fueling not Authorized	Authorization	
No Pump Assigned	Operation	

Event	Type	Notes
Assigned Pump Not On Tag Reader	Operation	
Multiple Fueling Not Allowed	Authorization	
Unrecognized string in device #1#	Authorization	Where #1# represents the device number.
Bad Tag Format	Authorization	
Preset fueling incomplete. Pump #1# Preset #2#	Operation	
Device in negative list #1#	Authorization	Where #1# represents the list number.
Blocked mean #1#	Authorization	Where #1# represents the device number.
Blocked fleet #1#	Authorization	Where #1# represents the fleet number.
Transaction rejected by flow rate #1#	Operation	Where #1# represents the flow rate.
Wrong PIN #1# for tag #2# entered	Authorization	Where #1# represents the PIN number and #2# the tag number.
Tag #2# blocked after wrong PIN #1# entered	Authorization	Where #1# represents the PIN number and #2# the tag number.
Can not authorize: pump #1# is busy	Operation	Where #1# represents the pump number.
Day visits exceeded	Authorization	
Week visits exceeded	Authorization	
Month visits exceeded	Authorization	
Day limits exceeded	Authorization	
Week limits exceeded	Authorization	
Month limits exceeded	Authorization	
Bypass On - Totalizer: #1#	System	Where #1# represents the pump totalizer when bypass mode starts.
Bypass Off - Totalizer: #1#	System	Where #1# represents the pump totalizer when bypass mode stops.
Blocked department #1#	Authorization	Where #1# represents the department number.
Sysinit called	System	
Device added	Operation	
Device updated	Operation	
Device deleted	Operation	
Nozzle updated	Operation	
Probe updated	Operation	
WP registered	Operation	
WP reset approved	Operation	
Organization ID not found	Authorization	
Device ID change not permitted	Authorization	
Pump #1# was blocked due to #2# consecutive zero transactions	Operation	Where #1# represents the pump number and #2# the number of zero transactions.

13.3 Alarms

The user has the option to view all alarms, open alarms, filter alarms by station (from a title or a new filter screen), by type, by device, by date or according to a specific urgency level. To open the Alarms screen, click **Alarms** button on the alarm status line (see [Figure 269](#)).

The user also has the option to add acknowledgment on each alarm, or on a group of alarms; adding an acknowledgment is considered as closing the alarm.

The Print button enables the user to print the selected records. The user may filter records on the grid. Only records from the viewed page are printed.

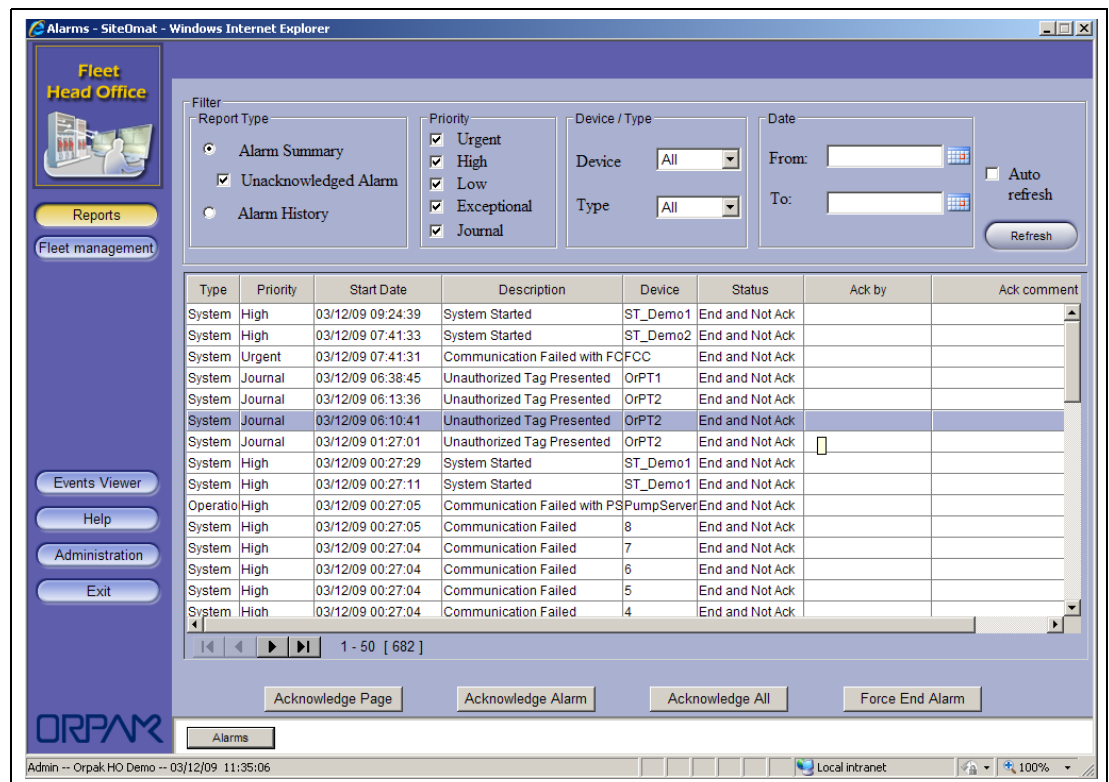
The Send button enables the user to select an alarm and send it by mail or SMS to one or more users.

Alarms have four states:

- Started (Active)
- Started and acknowledged (Active)
- Ended and not acknowledged
- Ended (History)

Note: The system activates a single alarm per event.

Figure 269: Alarm Screen

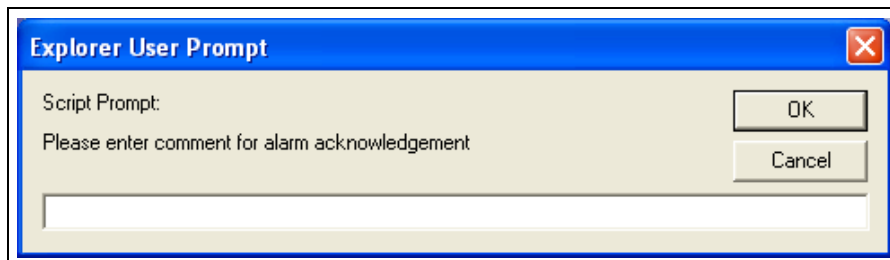


The upper part allows filtering the alarm list by various parameters:

- Click **Unacknowledged Alarm** to display a summary of currently active alarms – any alarm that is not ended or ended and was not acknowledged is listed in the grid.
- Check **Alarm History** to see alarms that are both ended and acknowledged.

When an alarm is acknowledged (by clicking on it), user prompt box opens, enabling the user to enter a free comment that explains the act (see [Figure 270](#)). The comment and the user who performed the operation are saved in the database.

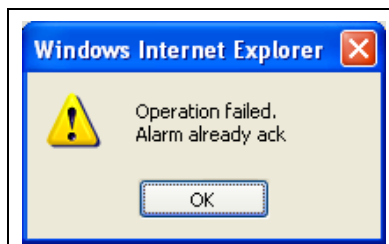
Figure 270: Alarm Comment Entry Screen



It is possible to acknowledge a specific alarm, the page displayed, or all alarms.

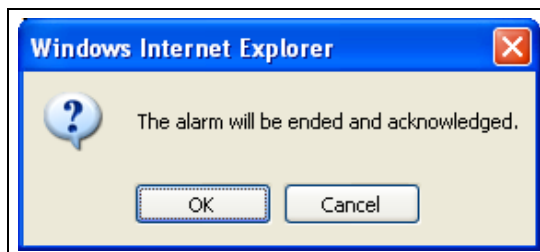
Users cannot acknowledge an alarm that it is already acknowledged (see [Figure 271](#)).

Figure 271: Alarm Already Acknowledge Message



Occasionally, it is required to force end alarm. For example, a communication error with a station that is no longer in the system. Select the alarm and click the Force End Alarm button. The alarm is acknowledged and forced to end (see [Figure 272](#)).

Figure 272: Alarm will be Ended and Acknowledged Message



13.3.1 List of Alarms

The types of alarms available in the system are (see [Table 56](#)):

- a** System Alarms: such as technical failure with site (for example, no communication) or technical failure in the site (for example, bad device, OrPT, no paper in printer, TLG errors, Etc.)
- b** TLG alarms - (leak detection, TLG alarms, Low level, Etc.)
- c** Alarms created in FHO by periodic DB checks.

Table 56: Alarms

System Alarms	TLG Alarms
Communication Failed (Device name)	Tank Setup Data Warning
Printer Out of Paper	Tank Leak Alarm
Printer Low on Paper	Tank High Water Alarm
Price Update Failed	Pump Blocked After Zero Transactions
Pump Out of Order	Tank Overfill Alarm
Pump Price Incorrect	Tank Low Product Alarm
Blocked Fleet Tag Presented	Tank Sudden Loss Alarm
Fleet Fuel Type Mismatch	Tank High Product Alarm
Fleet Credit Limit Exceeded	Tank Invalid Fuel Level Alarm
Unauthorized Tag Presented	Tank Probe Out Alarm
Communication Failed with Pump Server	Tank High Water Warning
System Stopped	Tank Delivery Needed Warning
System Started	Tank Maximum Product Alarm
Communication Failed with FCC	Tank Gross Leak Test Fail Alarm
No communication with TLS	Tank Periodic Leak Test Fail Alarm
Security plug not found	Tank Annual Leak Test Fail Alarm
FCC hard disk almost full	Tank Cold Temperature Warning
FCC hard disk full - old logs purged	Tank Periodic Test Needed Warning
UPI communication error	Tank Annual Test Needed Warning
VIT communication error	Tank Periodic Test Needed Alarm
Backup failed	Tank Annual Test Needed Alarm
	Tank Leak Test Active
	Tank No CSLD Idle Time Warning
	Tank Siphon Break Active Warning
	Tank CSLD Rate Increase Warning
	Tank AccuChart Calibration Warning
	Tank HRM Reconciliation Warning
	Tank HRM Reconciliation Alarm
	Tank Cold Temperature Warning
	Tank Missing Delivery Ticket Warning
	Tank/Line Gross Leak Alarm
	Printer out of Paper

System Alarms	TLG Alarms
	Printer Error
	EEPROM Configuration Error
	Too Many Tanks
	System Security Warning
	ROM Revision Warning
	Remote Display Communications Error
	Autodial Error
	Software Module Warning
	Tank Test Shutdown Warning
	Protective Cover Alarm
	BIR Shift Close Pending
	BIR Daily Close Pending
	PC(H8) Revision Warning
	System Self Test Error
	System Clock Incorrect Warning
	System Device Poll Timeout
	Sensor Setup Data Warning
	Sensor Fuel Alarm
	Sensor Out Alarm
	Sensor Short Alarm
	Sensor Water Alarm
	Sensor Water Out Alarm
	Sensor High Liquid Alarm
	Sensor Low Liquid Alarm
	Sensor Liquid Warning
	Input Setup Data Warning
	Input Normal
	Input Alarm

14 – Glossary

14.1 SiteOmat Glossary

Term	Description
ADMIN	Administrator
BOS	Back Office system
BSP	Board Support Package
CommVerter	LAN/232/485/422/C.L./Tokheim Communication Converter
DataPass	Vehicle Data Transceiver
EFT	Electronic Funds Transfer
FCC	Forecourt Controller
FHO	Fleet and Fuel Head Office
IP	Internet Protocol
LAN	Local Area Network
Mag	Magnetic card
MIFARE®	Industry standard for contactless and dual interface smart card schemes
MPI	Mechanical Pump Interface
MPI-C	Mechanical pumps Interface Card
OPOS	OLE for Point Of Sale (OrPT display)
OrCU	Orpak Controller unit (embedded)
OrCU 3000 (CFN Plus)	Orpak Controller unit (Controller box)
Islander PLUS	Island Controller
ICR PLUS	Orpak Island Terminal
OrPT	Orpak Outdoor Payment Terminal
FTC	Fuel Truck Controller
OrTR	Orpak Outdoor Tag Reader
PIN	Personal Identification Number
PPL	Price Per Liter
PPV	Price Per Volume
SAM	Security Application Module (security card in the VIT/UPI)
Sundries	All non-fuel products
VIU	Vehicle Identification Unit

14.2 Communication Glossary

Term	Description
Access Point	An internet working device that seamlessly connects wired and wireless networks together.
Ad Hoc	A peer- to-peer wireless network without Access Point. A group of wireless clients consistent an independent wireless LAN.
Backbone	The core infrastructure of a network, the portion of the network that transports information from one central location to another central location. The information is then offloaded onto a local system.
BSS	Basic Service Set. An Access Point associated with several wireless stations.
DES	LANs with high level of security. A method of data encryption.
DHCP	Dynamic Host Configuration Protocol.
ESS	Extended Service Set. More than one BSS can be configured as an Extended Service Set. An ESS is basically a roaming domain.
ESSID	Extended Service Set Identifier. The length of the ESSID information is between 0 and 32 octets. A zero-length identifier indicates the broadcast SSID.
Ethernet	A popular local area data communications network, originally developed by Xerox Corp., which accepts transmission from computers and terminals. Ethernet operates on 10/100 Mbps transmission rate overshielded coaxial cable or overshielded twisted pair telephone wire.
Infrastructure	An integrated wireless and wired LAN is called an infrastructure configuration.
LAN	Local Area Network
Roaming	A function that allows one to travel with a mobile end system (wireless LAN mobile station, for example) through the territory of a domain (an ESS, for example) while continuously connecting to the infrastructure.
TCP/IP	Communication protocol used in Ethernet/Internet.
Triple DES	A method of data encryption.
WAN	Wide Area Network
WEP	Wired Equivalent Privacy. The optional cryptographic confidentiality algorithm specified by IEEE 802.11 used to provide data confidentiality that is subjectively equivalent to the confidentiality of a wired local area network (LAN) medium that does not employ cryptographic techniques to enhance privacy.
WG	Wireless Gateway

Appendix A: General Guide for Web Client User

A.1 Printing Graphic Reports

To print FHO graphic reports (for example, Fuel Volume Forecast, Tank Reconciliation Trends), proceed as follows:

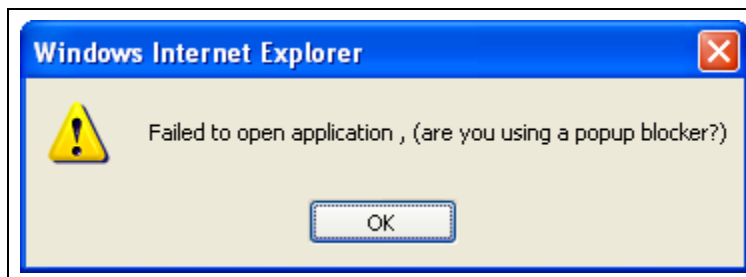
- 1 Update Flash version to version 9 or up, or install from www.adobe.com.
- 2 The Print dialog box opens. Select the Options tab, and mark the Print all linked documents check box.

A.2 Accessing From Web

A.2.1 Pop ups Blockers

If a popup blocker is enabled, the following message is displayed (see [Figure 273](#)):

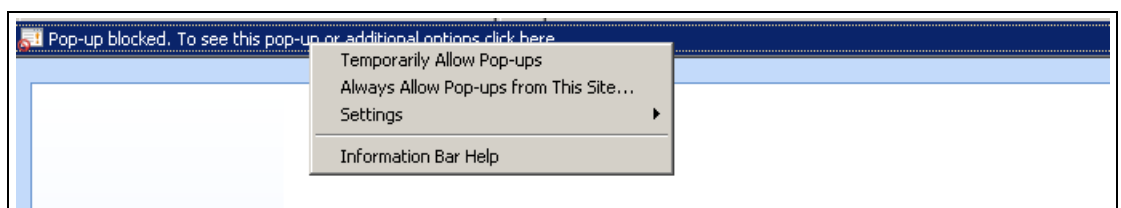
Figure 273: Failed to Open Application Message



Allow the pop ups for this site (IP). Note that Google or Yahoo toolbars may have their own pop up blockers. Allow popups from this site in all blockers. Proceed as follows:

- 1 Click **Information Bar** (see [Figure 274](#)).
- 2 Select **Always Allow Pop-ups from this site**. A confirmation message is displayed.
- 3 Click **Yes**.

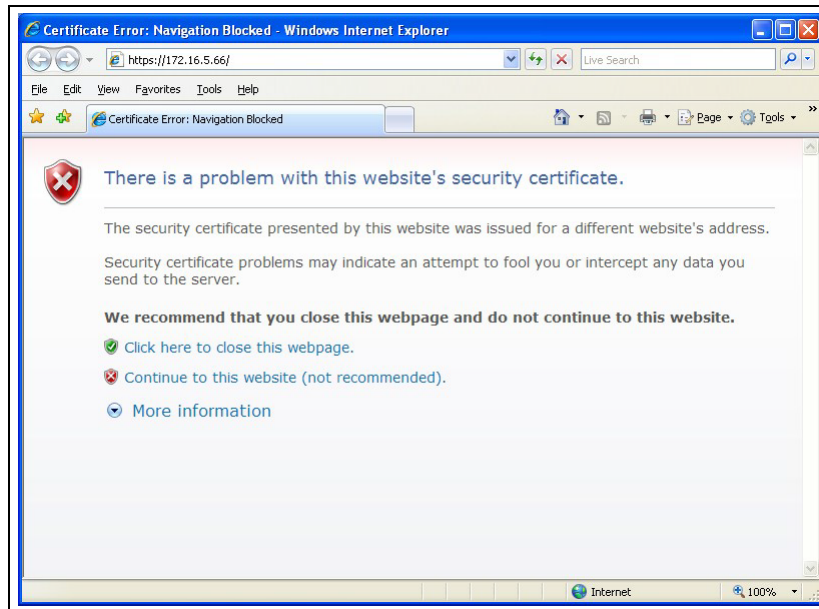
Figure 274: Information Bar



A.2.2 Avoiding Certificate Errors

Since the FHO uses SSL and Certificate, the following screen (see [Figure 275](#)) is displayed.

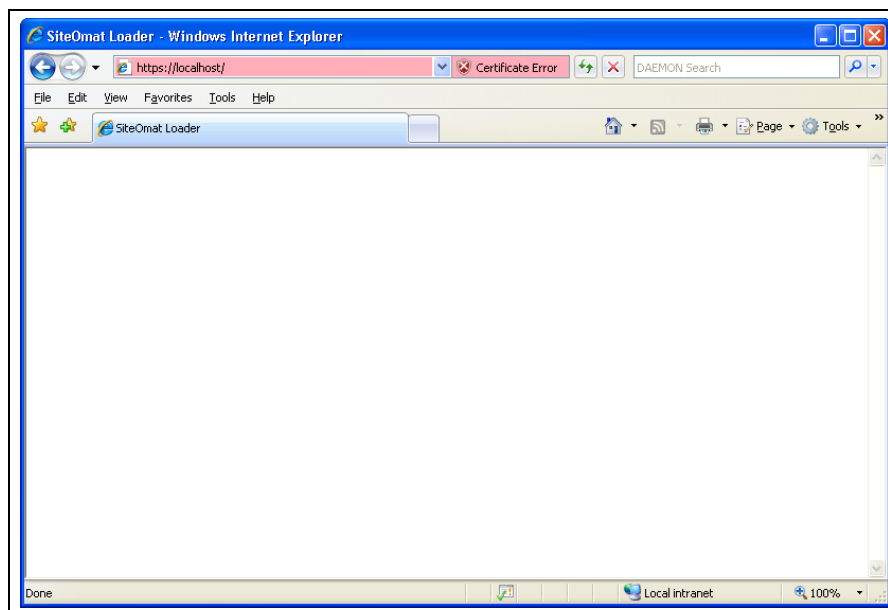
Figure 275: Certificate Error: Navigation Blocked Screen



To avoid this message, proceed as follows (in each browser from which the FHO is to be accessed):

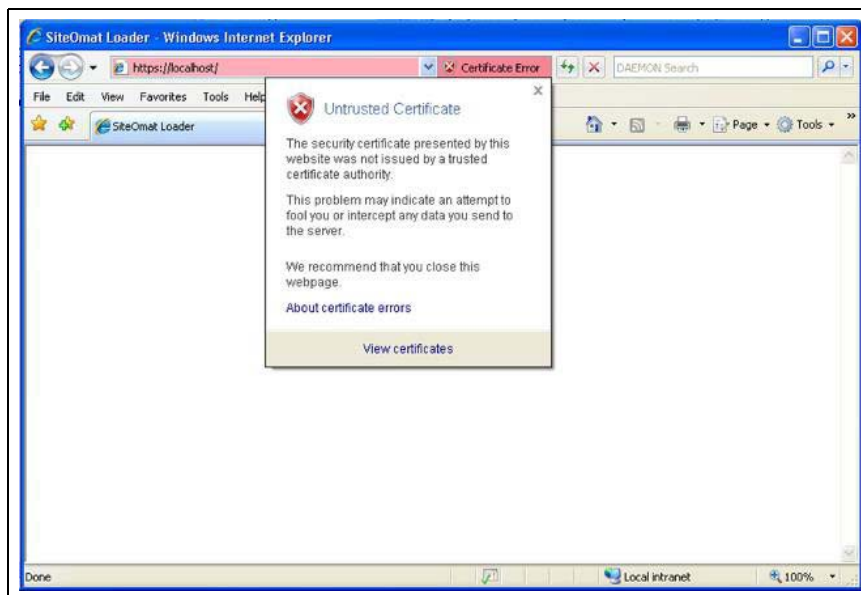
- 1 Click **Continue** to this website.
- 2 Click Certificate Error displayed by the browser (see [Figure 276](#)).

Figure 276: Certificate Error



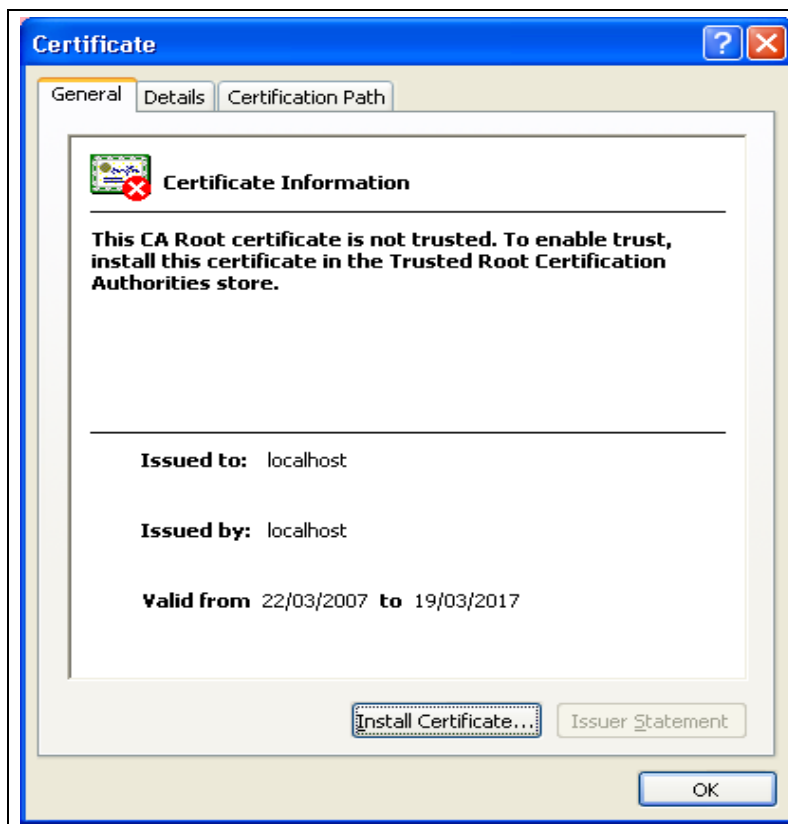
- 3 A popup window opens (see [Figure 277](#)). Click **View certificates**.

Figure 277: Untrusted Certificate Pop-up



The following dialog box opens (see [Figure 278](#)):

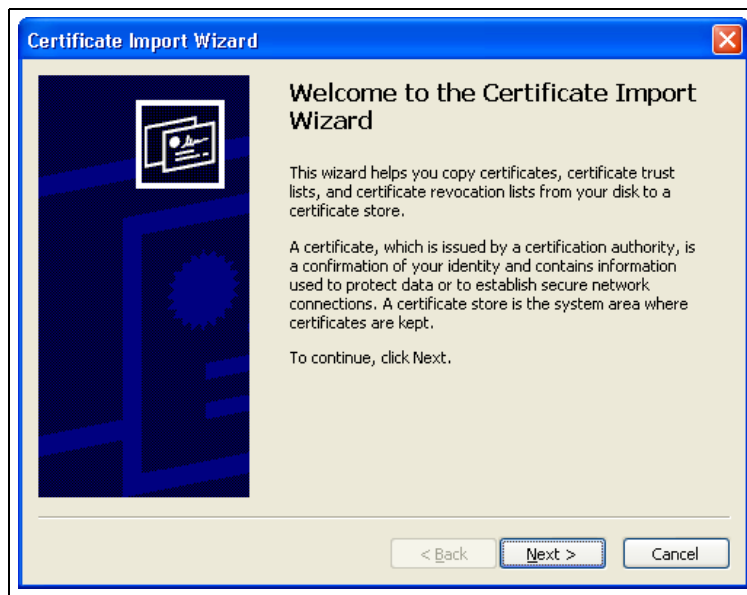
Figure 278: Certificate Dialog Box



- 4 Click **Install Certificate**.

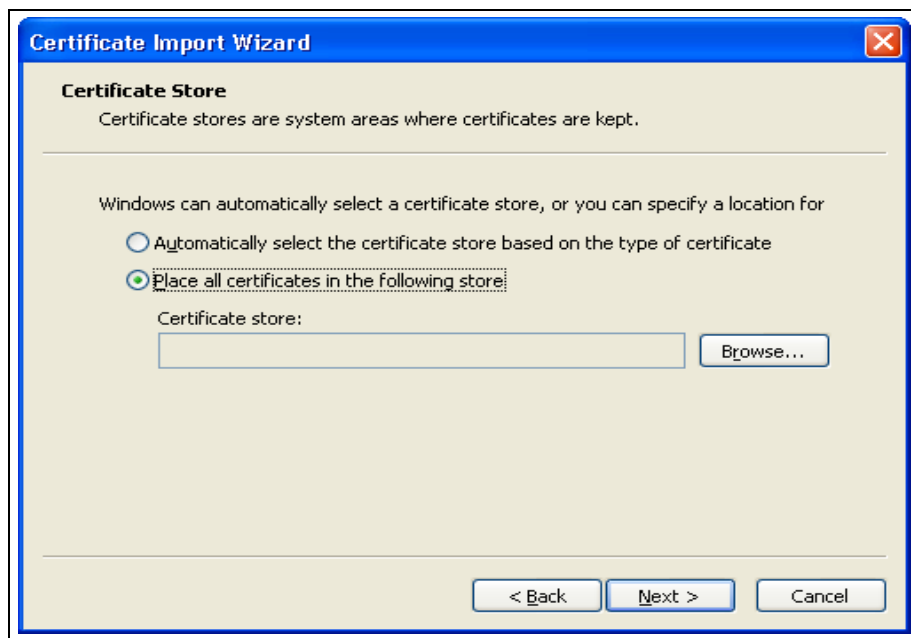
- 5 The Certificate Import Wizard is displayed (see [Figure 279](#)). Click **Next**.

Figure 279: Certificate Import Wizard Screen



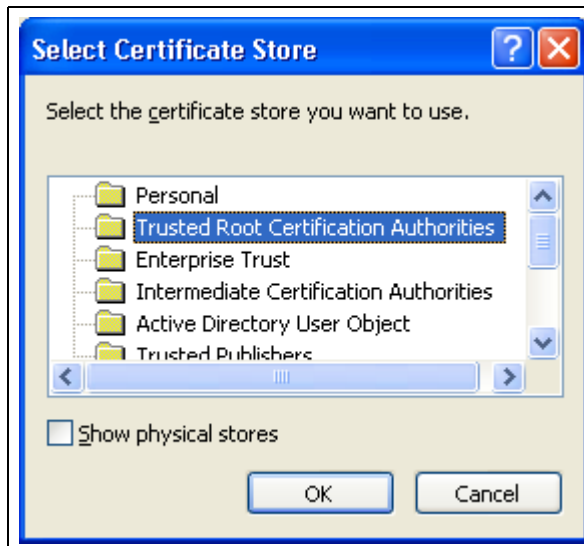
- 6 Select the second radio button: Place all certificates in the following store (see [Figure 280](#)).

Figure 280: Certificate Store Screen



- 7 Click **Browse**. A file selection box is displayed (see [Figure 281](#)).

Figure 281: Select Certificate Store Box



- 8 Select **Trusted Root Certification Authorities**.
- 9 Click **OK**.
- 10 Click **Next** on the Wizard screen (see [Figure 282](#)).

Figure 282: Certificate Import Wizard Screen



- 11 Click **Finish** on the Completing the Certificate Import Wizard screen (see [Figure 283](#)).
- 12 A Security Warning box is displayed (See [Figure 284](#)). Click **Yes**.
- 13 A Successful import message is displayed (see [Figure 285](#)). Click **OK**.

Figure 283: Completing the Certificate Import Wizard Screen

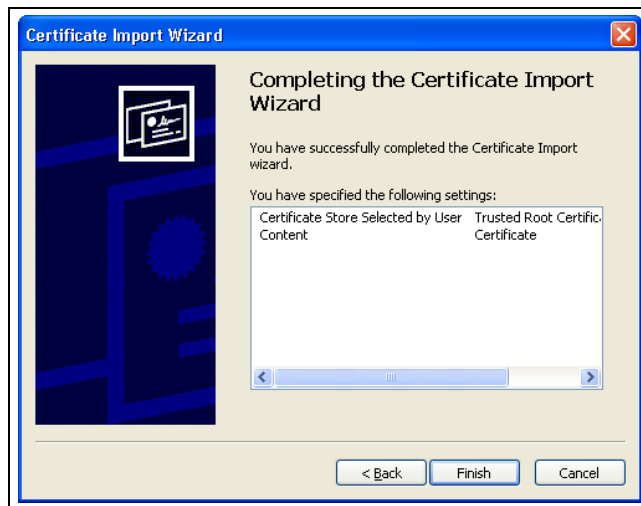
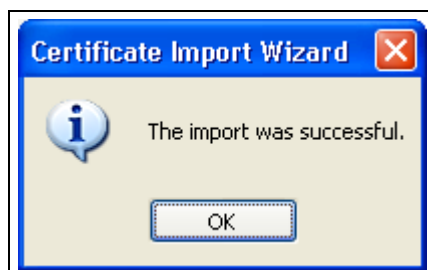


Figure 284: Security Warning Box



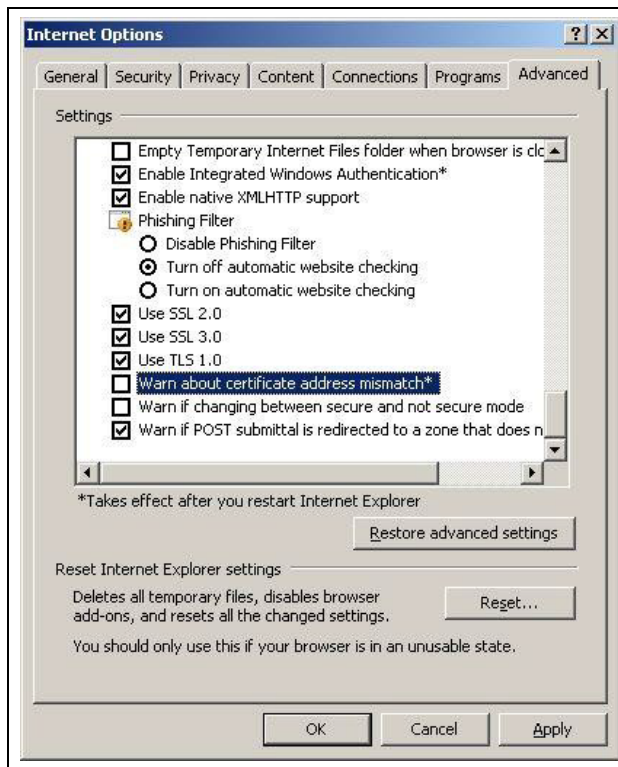
Figure 285: Successful Import Message



- 14 Click **Tools** in the menu bar.

- 15 Select **Internet Options**.
- 16 Select **Security**.
- 17 Clear the option **Warn about certificate address mismatch** in the Settings section (see [Figure 286](#)).

Figure 286: Warn About Certificate Address Mismatch Option



The procedure is completed. There will be no security certificate error on any future occasion.

A.2.3 Removing Full URL Display

If accessing the FHO via the Internet, the full URL is displayed on the browser caption bar, as shown in [Figure 287](#).

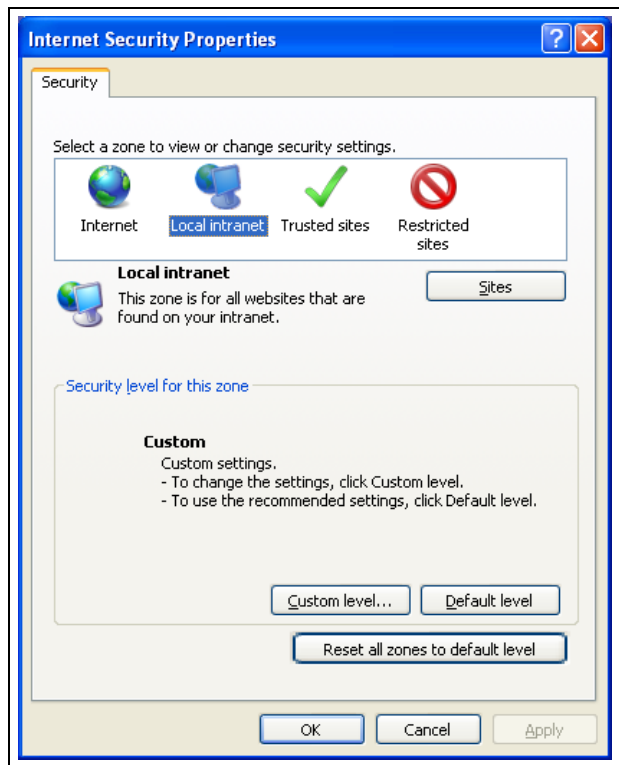
Figure 287: Full URL Display



In order to reduce the full URL display each time the user accesses the FHO, change the following browser settings:

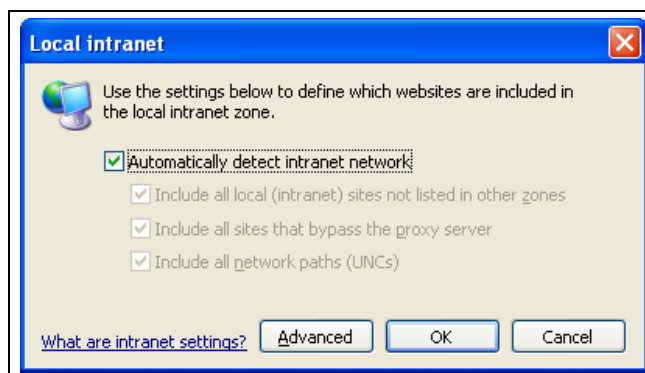
- 1 Click **Tools** in the menu bar.
- 2 Select **Internet Options**.
- 3 Select **Security**. The Internet Security Properties screen opens (see [Figure 288](#)):

Figure 288: Internet Security Properties



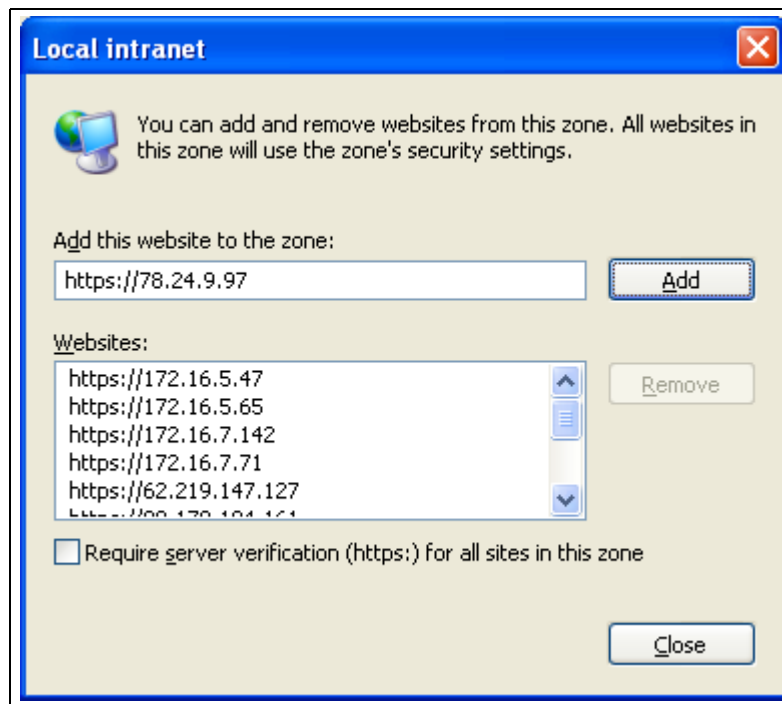
- 4 Select **Local Intranet** as the zone.
- 5 Click **Sites**. The Local Intranet screen opens (see [Figure 289](#)):

Figure 289: Local Intranet Dialog Box



- 6 Click **Advanced**. The following screen opens (see [Figure 290](#)).

Figure 290: Local Intranet Dialog Box - 1



- 7 The FHO URL appears in the https display; click **Add**.
- 8 Close the Internet Explorer window and reopen it.

As a result, the browser regards this site as one on your local network. It does not display the long URL.

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Appendix B: Import Devices File Format

B.1 Introduction

This appendix is intended to simplify the use of the FHO Import module for fleet entities lists (Fleets, Departments, Devices, Models, Rules, Group Rules), by giving a full description of all the required fields in the imported files.

B.2 General

Imported files format is Microsoft Office Excel ASCII Comma Separated Values (CSV) file. (Not a binary file).

Import process imports the following entities from 3rd party HO or ERP into our FHO:

- Models
- Rules
- Group Rules
- Fleets
- Departments
- Devices

All entities can be recorded into one CSV file or separate files, one for each entity. Each customer should define one import method:

- **Import done from one file** - entities should be written according to the following priorities: Models, Rules, Group Rules, Fleets, Departments and Devices. The file name should be: **Data_YYYYMMDD_hhmm.CSV**
- **Import done from separate files** – FHO automatically orders the files. Refer to the following sections for the specific file names.

Files should be created in a predefined directory.

B.3 File Fields

The first three fields in all lines in every file should be as follows:

a Action – The type of action intended on the line in the list:

- The letter “A”: to add a new entity, line will be rejected in case the entity already exists.
- The letter “U”: to update an existing entity, line will be rejected in case the entity doesn’t exist.
- The letter “R”: to add a new entity or update an existing one (Recommended).
- The letter “D”: to delete an existing entity. When sending a delete command, only the unique keys are to be used and only in the order described below. The following sample record layouts show the required fields for each record type:

Mean: D,Mean,name,string
Department: D,Dept,fleet-name,dept-name
Fleet: D,Fleet,name
Group Rule: D,GroupRule,name
Rule: D,Rule,name
Model: D,Model,name

- The letter “P”: To update an existing device (mean). The vehicle number (license plate number) is used as the key of the current record for this line only.

Note: The option to rename an existing unique key is currently not available (see list of unique keys in each table).

b Record_Type – Type of entity, need to be typed exactly.

c Name – Entity Name, need to be typed exactly.

All fields should be typed exactly and in the correct order, as described below. Not all fields are mandatory; nevertheless, in order for the system to recognize the fields, a comma or an empty cell should be inserted for any empty field. For example, a device line containing only mandatory fields should look as follows in a text file format:

```
name,status,type,hardware_type,auttyp,employee_type,plate,string,,department_name,,,Price_
list_name,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,num_ofstrings,,,,,,,,,
```

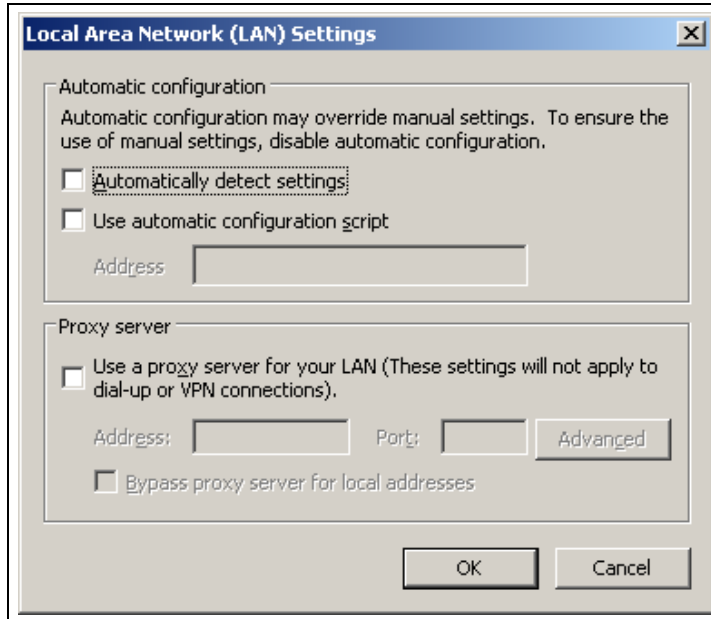
Note: In cases where a string field includes a comma, the field text should be put between double quotation marks.

B.4 FHO Capabilities

Orpak's FHO enables users to export the FHO data into CSV files, helping to create sample files and test the import process.

Note: If a problem arises when attempting to export/import a CSV file, clear the Proxy Server check box in the LAN Settings dialog box (see [Figure 291](#)) and restart IE.

Figure 291: Local Area Network (LAN) Settings Dialog Box



Note: The notes in italics contained in the following tables refer to field's definition in the FHO application and are relevant when working with FHO GUI only.

B.5 Model File

Defining vehicle models is not a mandatory stage in the vehicle management process, yet it is meant to ease the task of defining the vehicles at a later stage. When defining vehicle models, the type and manufacturer are provided. Also their tank capacity and standard fuel consumption are specified. Later, when defining a vehicle, selecting its model from a list automatically fills in this information.

Model file name: Model_YYYYMMDD_hhmm.CSV

The Model File comprises the following fields (see [Table 57](#)):

Table 57: Model File Fields

No.	Field Name	FHO Field Type	Description	Mandatory
1	Action	String (1)	The type of action to be performed on the line in the list (refer to “ B.3 File Fields ” on page 320)	√
2	Record_Type-Model	String (5)	The word “Model”	√
3	Name	String (80)	Model name (Unique Key)	√
4	Company_name	String (80)	Vehicle manufacturer	√
5	Capacity	Number	Model fuel tank capacity	
6	Consumption	Number	Model standard consumption	
7	EH_consumption	Number	Model standard fuel consumption per engine hour	
8	Description	String (255)	Model description	
9	Class description	String (255)	Additional description	

[Figure 292](#) displays an example of an imported Model file.

Note: Lines starting with two slashes (//) are notes ignored by the system.

Figure 292: Example of Imported Model File

// Action	Record_type-Model	Name	Company_name	Capacity	Consumption	EH_consumption	Description	Class description
R	Model	LEAF VAC	VAC	18	15	0		
R	Model	SPREADER	AIR FLOW	25	1	0		UNKNOWN
R	Model	LADDER 1	AM.LAFRANCE	40	15	0		UNKNOWN
R	Model	SUBURBAN CAR	CHEVY	18	15	0		UNKNOWN
R	Model	STOCKING TRUC	CHEVY	18	15	0		UNKNOWN
R	Model	2500 PICK-UP	CHEVY	35	15	0		UNKNOWN
R	Model	TRUCK-3/4 TON	CHEVY	18	15	0		UNKNOWN
R	Model	1996 PICKUP	CHEVY	18	15	0		UNKNOWN
R	Model	CAR 1	CHEVY	25	15	0		UNKNOWN
R	Model	1/2 TON	DODGE	18	15	0	1/2 TON PICKU	55008
R	Model	2000 DODGE VAN	DODGE	19	18	0	1 TON VAN	UNKNOWN
R	Model	CALIBUR	DODGE	15	15	0		SEDAN
R	Model	1 TON SERVICE	DODGE	25	10	0		UNKNOWN
R	Model	ENGINE 2	E-ONE	75	15	0		UNKNOWN
R	Model	12 TON PICKUP	FORD	22	18	0		UNKNOWN

B.6 Rule File

The rules, defined in this file, are the means by which the vehicle refueling is limited. The FHO System offers a comprehensive mechanism of limit definition. By defining the rules, users can set virtually any desired combination of rules.

The rules defined in this section are individual units, which, in effect, are not applied directly to a fleet/department/vehicle. Instead, once defining the rules, the fleet manager creates group rules consisting of a number of rules. These group rules are then imposed on the fleet/department/vehicle to limit refueling.

The following rule types are available:

- a Cluster:** If the gas stations are bundled in clusters. This limit type defines in which clusters the vehicle may refuel.
- b Limits:** Defines fuel limits per day/week/month/year, set in money/volume, for the device.
- c Visits:** Specifies the maximum number of visits to fuel stations allowed for the vehicle per day/week/month.
- d Fuel:** Limits the refueling vehicle to certain types of fuel.
Rule file name: Rule_YYYYMMDD_hhmm.CSV

All rules can be imported from one file or separate files for each rule type. Rule file fields vary depending on the rule type. The following tables describe each rule type fields.

Table 58: Limit Rule File Fields

No.	Field Name	FHO Field Type	Description	Mandatory
1	Action	String (1)	The type of action to be performed on the line in the list (refer to "B.3 File Fields" on page 320)	√
2	Record_type-Limit_rule	String (4)	The word "Rule"	√
3	Name	String (32)	Rule name (<i>Rule Properties – General Tab</i>) (Unique Key)	√
4	Rule_type	String (5)	The word "Limit"	√
5	Description	String (128)	Optional description of the rule (<i>Rule Properties – General Tab</i>)	√
6	Content_summary	String (256)	Summary of the rule conditions (<i>as defined in Rule Properties – Detail Tab</i>)	
7	Fleet_list	String (100)	The fleet/s having access rights to the rule.	
8	Limit_type	String (6)	Condition type: the word "Money" or the word "Volume"	√
9	Single	Number	Single refuel amount limit (<i>as defined in Rule Properties – Detail Tab</i>)	
10	Day	Number	Daily amount limit (<i>as defined in Rule Properties – Detail Tab</i>)	
11	Week	Number	Weekly amount limit (<i>as defined in Rule Properties – Detail Tab</i>)	
12	Month	Number	Monthly amount limit (<i>as defined in Rule Properties – Detail Tab</i>)	
13	Year	Number	Yearly amount limit (<i>as defined in Rule Properties – Detail Tab</i>)	

Table 59: Visit Rule File Fields

No.	Field Name	FHO Field Type	Description	Mandatory
1	Action	String (1)	The type of action to be performed on the line in the list (refer to “B.3 File Fields” on page 320)	√
2	Record_type-Visit_rule	String (4)	The word “Rule”	√
3	Name	String (32)	Rule name (<i>Rule Properties – General Tab</i>) (Unique Key)	√
4	Rule_type	String (5)	The word “Visit”	√
5	Description	String (128)	Optional description of the rule (<i>Rule Properties – General Tab</i>)	√
6	Content_summary	String (256)	Summary of the rule conditions (<i>as defined in Rule Properties – Detail Tab</i>).	
7	Fleet_list	String (100)	The fleet/s having access rights to the rule.	
8	Day	Number	Maximum visits per day (<i>as defined in Rule Properties – Detail Tab</i>)	
9	Week	Number	Maximum visits per week (<i>as defined in Rule Properties – Detail Tab</i>)	
10	Month	Number	Maximum visits per month (<i>as defined in Rule Properties – Detail Tab</i>)	

Table 60: Fuel Rule File Fields

No.	Field Name	FHO Field Type	Description	Mandatory
1	Action	String (1)	The type of action to be performed on the line in the list (refer to “B.3 File Fields” on page 320)	√
2	Record_type-Fuel_rule	String (4)	The word “Rule”	√
3	Name	String (32)	Rule name (<i>Rule Properties – General Tab</i>) (Unique Key)	√
4	Rule_type	String (4)	The word “Fuel”	√
5	Description	String (128)	Optional description of the rule (<i>Rule Properties – General Tab</i>)	√
6	Content_summary	String (256)	Summary of the rule conditions (<i>as defined in Rule Properties – Detail Tab</i>).	
7	Fleet_list	String (10)	The fleet/s having access rights to the rule.	
8	Allow_type	String (8)	Condition type: The word “Allow” or the word “Disallow”	√
9	Product	String (50)	The product/s to be allowed/disallowed for refueling (<i>as defined in Rule Properties – Detail Tab</i>)	√

Table 61: Cluster Rule File Fields

No.	Field Name	FHO Field Type	Description	Mandatory
1	Action	String (1)	The type of action to be performed on the line in the list (refer to “B.3 File Fields” on page 320)	√
2	Record_type-Cluster_rule	String (4)	The word “Rule”	√
3	Name	String (32)	Rule name (<i>Rule Properties – General Tab</i>) (Unique Key)	√
4	Rule_type	String (7)	The word “Cluster”	√
5	Description	String (128)	Optional description of the rule (<i>Rule Properties – General Tab</i>)	√
6	Content_summary	String (256)	Summary of the rule conditions (<i>as defined in Rule Properties – Detail Tab</i>).	
7	Fleet_list	String (100)	The fleet/s having access rights to the rule.	
8	Allow_type	String (8)	Condition type: The words “Allow” or “Disallow”	√
9	Cluster	String (100)	The cluster/s in which refueling is allowed/disallowed (<i>as defined in Rule Properties – Detail Tab</i>)	√

Figure 293 displays an example of an imported Rule file.

Figure 293: Example of Imported Rule File

// Action	Record_type-Time_rule	Name	Rule_type	Description	Content_summary	Fleet_list	Allow_type	Weekday	From	To	
// Action	Record_type-Limit_rule	Name	Rule_type	Description	Content_summary	Fleet_list	Limit_type	Single	Day	Week	Month
// Action	Record_type-Visit_rule	Name	Rule_type	Description	Content_summary	Fleet_list	Day	Week	Month		
// Action	Record_type-Fuel_rule	Name	Rule_type	Description	Content_summary	Fleet_list	Allow_type	Product			
// Action	Record_type-Cluster_rule	Name	Rule_type	Description	Content_summary	Fleet_list	Allow_type	Cluster			
R	Rule	RULE_UL	Fuel	RULE_UL	Fuel: Allow: Unleaded	Allow	Unleaded				
R	Rule	RULE_FC	Fuel	RULE_FC	Fuel: Allow: Compressed Gas	Allow	Compressed Gas				
R	Rule	RULE_UL_FC	Fuel	RULE_UL_FC	Fuel: Allow: Unleaded, Compressed Gas	Allow	Unleaded, Compressed Gas				
R	Rule	RULE_BO	Fuel	RULE_BO	Fuel: Allow: Biodiesel	Allow	Biodiesel				
R	Rule	RULE_DS	Fuel	RULE_DS	Fuel: Allow: Diesel	Allow	Diesel				
R	Rule	RULE_UL_DS	Fuel	RULE_UL_DS	Fuel: Allow: Unleaded, Diesel	Allow	Unleaded, Diesel				
R	Rule	RULE_BO_DS	Fuel	RULE_BO_DS	Fuel: Allow: Biodiesel, Diesel	Allow	Biodiesel, Diesel				
R	Rule	RULE_AL	Fuel	RULE_AL	Fuel: Allow: All	Allow	All				
R	Rule	1 Gallon	Limit	1 Gallon limit	Limit: Type: Volume; Single: 1.	Volume		1	0	0	0

B.7 Group Rule File

Rules are not directly applied to a vehicle (device). Once rules are defined, group rules combining the required rules should be created and then imposed on the vehicle to limit refueling. The group rules associated to fleets and departments are only used on the GUI screens to choose initial defaults for newly created devices. Only the group rules applied to the device are relevant operationally.

Group rule file name: Group-Rule_YYYYMMDD_hhmm.CSV

The Group Rule File comprises the following fields (see Table 62):

Table 62: Group Rule File Fields

No.	Field Name	FHO Field Type	Description	Mandatory
1	Action	String (1)	The type of action to be performed on the line in the list (refer to "B.3 File Fields" on page 320)	√
2	Record_type-Group_rule	String (9)	The word "GroupRule"	√
3	Name	String (32)	Group rule name (<i>Group Rule Properties – General Tab</i>) (Unique Key)	√
4	Description	String (128)	Optional description of the group rule (<i>Group Rule Properties – General Tab</i>)	√
5	Limit_rule	String (32)	The exact name of the limit rule forming part of the group rule, if any. If a limit rule is not included, leave empty.	
6	Visit_rule	String (32)	The exact name of the visit rule forming part of the group rule, if any. If a visit rule is not included, leave empty.	
7	Time_rule	String (32)	The exact name of the time rule forming part of the group rule, if any. If a time rule is not included, leave empty.	
8	Fuel_rule	String (32)	The exact name of the fuel rule forming part of the group rule, if any. If a fuel rule is not included, leave empty.	
9	Cluster_rule	String (32)	The exact name of the cluster rule forming part of the group rule, if any. If a cluster rule is not included, leave empty.	
10	Content_summary	String (256)	Summary of the rules included in the group rule (<i>as defined in Group Rule Properties – Detail Tab</i>).	
11	Fleet_list	String (100)	The fleet/s having access rights to the group rule.	

Figure 294 displays an example of an imported Group Rule file.

Figure 294: Example of Imported Group Rule File

// Action	Record_type-Group_rule	Name	Description	Limit_rule	Visit_rule	Time_rule	Fuel_rule	Cluster_rule	Content_summary	Fleet_list
R	GroupRule	RULE_UL	RULE_UL				RULE_UL		Fuel:RULE_UL;	
R	GroupRule	RULE_FC	RULE_FC				RULE_FC		Fuel:RULE_FC;	
R	GroupRule	RULE_UL	RULE_UL_FC				RULE_UL_FC		Fuel:RULE_UL_FC;	
R	GroupRule	RULE_BO	RULE_BO				RULE_BO		Fuel:RULE_BO;	
R	GroupRule	RULE_DS	RULE_DS				RULE_DS		Fuel:RULE_DS;	
R	GroupRule	RULE_UL	RULE_UL_DS				RULE_UL_DS		Fuel:RULE_UL_DS;	
R	GroupRule	RULE_BO	RULE_BO_DS				RULE_BO_DS		Fuel:RULE_BO_DS;	
R	GroupRule	RULE_AL	RULE_AL				RULE_AL		Fuel:RULE_AL;	
R	GroupRule	Orpak Tes	1 Gallon res	1 Gallon			RULE_UL		Limit:1 Gallon; Fuel:RULE_UL;	
R	GroupRule	Orpak Tes	1 Gallon res	1 Gallon			RULE_DS		Limit:1 Gallon; Fuel:RULE_DS;	

B.8 Fleet File

Fleet file name: Fleet_YYYYMMDD_hhmm.CSV

The Fleet File comprises the following fields (see [Table 63](#)):

Table 63: Fleet File Fields

No.	Field Name	FHO Field Type	Description	Mandatory
1	Action	String (1)	The type of action to be performed on the line in the list (refer to "B.3 File Fields" on page 320)	√
2	Record_type-Fleet	String (5)	The word "Fleet"	√
3	Name	String (80)	Fleet Name (<i>Fleet Properties – General Tab</i>) (Unique Key)	√
4	Status	Integer (1)	Fleet status: 2 for Active, 1 for Blocked (<i>Local Management Fleets – Active/Blocked button</i>)	√
5	Code	Number	Fleet unique number (<i>Fleet Properties – General Tab</i>)	√
6	Group_rule_name	String (32)	Exact name of the Group Rule that applies to the fleet. If empty, enter "No Restriction" (<i>Fleet Properties – General Tab</i>).	√
7	Price_list_name	String (50)	Exact name of the predefined Price List to which the fleet is associated (<i>Fleet Properties – Information Tab</i>).	
8	Address	String (80)	Fleet Address (Street + num) (<i>Fleet Properties – Information Tab</i>)	
9	Phone	String (80)	Fleet phone number (<i>Fleet Properties – Information Tab</i>)	
10	Fax	String (80)	Fleet fax number (<i>Fleet Properties – Information Tab</i>)	
11	Email	String (80)	Fleet/ contact person email address (<i>Fleet Properties – Information Tab</i>)	
12	Contact	String (80)	Name of the fleet contact person	
13	Contact2		N/A (Leave empty)	
14	Contact3		N/A (Leave empty)	
15	Acctyp	Integer (1)	Account type: 0 for Credit, 1 for Debit. This field is for information only and has no effect on credit limitation (0, if the company does not work with accounts).	
16	Available_amount	Number	Fleet current available amount (0, if the company does not work with accounts)	
17	Min_allowed	Number	Fleet financial information (0, if the company does not work with accounts)	
18	Line_of_credit	Number	Fleet financial information (0, if the company does not work with accounts)	
19	Use_pin_code	Integer (1)	PIN code validation option: 0 for inactive, 1 for active (<i>Fleet Properties – Validation Tab</i>)	
20	Auth_pin_from	Integer (1)	PIN code location: 2 in the device "From authorization mean", 1 in the DB "Use" (only in cases the previous value is defined, <i>Fleet Properties – Validation Tab</i>)	

No.	Field Name	FHO Field Type	Description	Mandatory
21	Nr_pin_retries	Integer (1)	Number of allowed PIN code entry retries, 0 for unlimited (<i>Fleet – Validation Tab</i>)	
22	Block_if_pin_retries_fail	Integer (1)	Enables device blocking if all PIN code entry allowed retries fail: 0 for disabled, 1 for enabled (<i>Fleet Properties – Validation Tab</i>)	
23	OrPT_prompt_for_plate	Integer (1)	Prompting for vehicle number entry and verification option: 0 for disabled, 1 for enabled (<i>Fleet Properties – Validation Tab</i>)	
24	OrPT_prompt_for_odometer	Integer (1)	Prompting for odometer reading entry option: 0 for disabled, 1 for enabled (<i>Fleet Properties – Validation Tab</i>)	
25	Do_odometer_reasonability_check	Integer (1)	Odometer reasonability check option: 0 for disabled, 1 for enabled (<i>Fleet Properties – Validation Tab</i>)	
26	Max_odometer_delta_allowed	Integer (1)	Maximum difference between the previous and the current odometer reading (<i>Fleet Properties – Validation Tab</i>)	
27	Nr_odometer_retries	Integer (1)	Amount of retries before odometer entry fails the reasonability check: 0 for unlimited (<i>Fleet Properties – Validation Tab</i>)	
28	OrPT_prompt_for_engine_hours	Integer (1)	Prompting for engine hours entry option: 0 for disabled, 1 for enabled (<i>Fleet Properties – Validation Tab</i>)	
29	Use_rule_limit		N/A (Leave empty)	
30	Max_rules		N/A (Leave empty)	
31	Max_group_rules		N/A (Leave empty)	
32	City	String (150)	Fleet city	
33	State	String (150)	Fleet state	
34	Zip	String (150)	Fleet Zip code	
35	Sales_person		N/A (Leave empty)	
36	Eft_id		N/A (Leave empty)	
37	Wex_renewal_fee		N/A (Leave empty)	
38	Wex_billing_fee_56		N/A (Leave empty)	
39	On_line_fee_68		N/A (Leave empty)	
40	Address2	String (80)	Secondary address	
41	User_data1		N/A (Leave empty)	
42	User_data2		N/A (Leave empty)	
43	User_data3		N/A (Leave empty)	
44	User_data4		N/A (Leave empty)	
45	User_data5		N/A (Leave empty)	

Figure 295 displays an example of an imported Fleet file.

Figure 295: Example of Imported Fleet File (Fragment)

// Action	Record_type	Name	Status	Code	Group_rule	Price_list	Address	Phone	Fax	Email	Contact	Contact2	Contact3	Acctyp	Available	Min_allowed
R	Fleet	US FORE	2	11000000	No Restriction		719 N MA	528-8721			GEORGE ANTHONY			0	0	0
R	Fleet	US FORE	2	12000000	No Restriction		PO BOX 6	868-7602			YVONNE M. CHAINEY			0	0	0
R	Fleet	GSA FLEE	2	12250000	No Restriction		1604 HOO	666-7958			ARTHUR LEMAY			0	0	0
R	Fleet	US MARS	2	15000000	No Restriction									0	0	0
R	Fleet	EXECUTIV	2	20020000	No Restriction		STATE HOUSE							0	-1637.85	0
R	Fleet	OFFICE O	2	20030000	No Restriction						RICH BAILEY			0	-3548.41	0
R	Fleet	ADMINIST	2	20100000	No Restriction									0	0	0
R	Fleet	GENERAL	2	20140000	No Restriction									0	-72484.8	0
R	Fleet	DEPT OF	2	20180000	No Restriction									0	-46624	0
R	Fleet	ATTORNE	2	20200000	No Restriction									0	-6019.78	0
R	Fleet	DEPT OF	2	20230000	No Restriction									0	-1190431	0
R	Fleet	INSURANC	2	20240000	No Restriction									0	-3019.75	0
R	Fleet	HIGHWAY	2	20250000	No Restriction									0	-2152.51	0
R	Fleet	DEPT OF	2	20260000	No Restriction									0	-30048.8	0

B.9 Department File

A department is a sub-division of the fleet. This hierarchy enables defining limits more easily. For example, vehicles pertaining to the management are likely to have different limits than vehicles of the sales agents. By creating departments, the fleet manager can apply limits to a department, instead of to each vehicle separately.

Consequently, a fleet must have at least one department. FHO automatically creates a default department when a new fleet is created. Therefore, before defining or modifying departments, the fleet must be saved.

Department file name: Department_YYYYMMDD_hhmm.CSV

The Department File comprises the following fields (see [Table 64](#)):

Table 64: Department File Fields

No.	Field Name	FHO Field Type	Description	Mandatory
1	Action	String (1)	The type of action to be performed on the line in the list (refer to "B.3 File Fields" on page 320)	√
2	Record_type-Dept	String (4)	The word "Dept"	√
3	Fleet_name	String (80)	Name of the fleet to which the department belongs (Unique Key)	√
4	Name	String (80)	Department Name (<i>Department Properties – General Tab</i>) (Unique Key)	√
5	Status	Integer (1)	Department status: 2 for Active, 1 for Blocked (<i>Departments List – Active/Blocked button</i>)	√
6	Code	Number	Department unique number (<i>Department Properties – General Tab</i>)	√
7	Group_rule_name	String (32)	Exact name of the Group Rule that applies to the department (<i>Department Properties – General Tab</i>)	√
8	Positive_negative_type	Integer (1)	1 for a positive list department (vehicles are allowed to refuel), 2 for a negative list department (vehicles are not allowed to refuel by default)	
9	Price_list_name	String (50)	Exact name of the predefined Price List, to which the department is associated (<i>Department Properties – Information Tab</i>)	
10	Address	String (80)	Department Address (Street + num) (<i>Department Properties – Information Tab</i>)	
11	Phone	String (80)	Department phone number (<i>Department Properties – Information Tab</i>)	
12	Fax	String (80)	Department fax number (<i>Department Properties – Information Tab</i>)	
13	Email	String (80)	Department/ contact person email address (<i>Department Properties – Information Tab</i>)	
14	Contact	String (80)	Name of the Department contact person	
15	Use_pin_code	Integer (1)	PIN code validation option: 0 for inactive, 1 for active (<i>Department Properties – Validation Tab</i>)	
16	Auth_pin_from	Integer (1)	PIN code location: 2 in the device "From authorization mean", 1 in the DB "Use" (only in cases the previous value is defined, <i>Department Properties – Validation Tab</i>)	
17	Nr_pin_retries	Integer (1)	Number of allowed PIN code entry retries, 0 for unlimited (<i>Department Properties – Validation Tab</i>)	
18	Block_if_pin_retries_fail	Integer (1)	Enables device blocking if all PIN code entry allowed retries fail: 0 for disabled, 1 for enabled (<i>Department Properties – Validation Tab</i>)	
19	OrPT_prompt_for_plate	Integer (1)	Prompting for vehicle number entry and verification option: 0 for disabled, 1 for enabled (<i>Department Properties – Validation Tab</i>)	

No.	Field Name	FHO Field Type	Description	Mandatory
20	OrPT_prompt_for_odo meter	Integer (1)	Prompting for odometer reading entry option: 0 for disabled, 1 for enabled (Department Properties – Validation Tab)	
20	Do_odometer_reasona bility _check	Integer (1)	Odometer reasonability check option: 0 for disabled, 1 for enabled (Department – Validation Tab)	
21	Max_odometer_delta_a llo wed	Integer (1)	Maximum difference between the previous and the current odometer reading (Department Properties – Validation Tab)	
22	Nr_odometer_retries	Integer (1)	Amount of retries before odometer entry fails the reasonability check: 0 for unlimited (Department Properties – Validation Tab)	
23	OrPT_prompt_for_engi ne_ hours	Integer (1)	Prompting for engine hours entry option: 0 for disabled, 1 for enabled (Department Properties – Validation Tab)	
24	Address2	String (80)	Secondary address	
25	City	String (150)	Department city	
26	State	String (150)	Department state	
27	Zip	String (150)	Department Zip code	
28	User_data1		N/A (Leave empty)	
29	User_data2		N/A (Leave empty)	
30	User_data3		N/A (Leave empty)	
31	User_data4		N/A (Leave empty)	
32	User_data5		N/A (Leave empty)	

Figure 296 displays an example of an imported Department file.

Figure 296: Example of Imported Department File

(Fragment)

// Action	Record_ty	Fleet_nam	Name	Status	Code	Group_rule	Positive_n	Price_list	Address	Phone	Fax	Email	Contact	Use_pin_c	Auth_pin_f	Nr_pin_reti	Block_if_p
R	Dept	ADMINIST	Default		2	1	No Restrict	1						0	1	0	0
R	Dept	ADMINIST	ADMINIST		2	20101000	No Restrict	1		513-5421		Chussey@	CLAIRE HI	0	1	0	0

B.10 Means File (Device)

The term Device or Means refers to the entity actually defined as the authorizing device, which may be a VIU (Vehicle Identifying Unit), smart tag, key or magnetic card.

Normally, fleets contain vehicles and each vehicle is associated with an authorization device. However, an attendant or a driver can also use an authorizer device, which, in this case, is not vehicle mounted (i.e. card, key, tag or keypad entry).

In order to make the definition simple and logical, authorizer devices and vehicles are defined in the same entity.

Device file name: Device_YYYYMMDD_hhmm.CSV

The Device File comprises the following fields (see [Table 65](#)):

Table 65: Device File Fields

No.	Field Name	FHO Field Type	Description	Mandatory
1	Action	String (1)	The type of action to be performed on the line in the list (refer to “ B.3 File Fields ” on page 320)	√
2	Record_type-Mean	String (4)	The word “Mean”	√
3	Name	String (80)	A name identifying the specific device (<i>Device Properties – Information Tab</i>) (Unique Key)	√
4	Status	Integer (1)	Device status: 2 for Active, 1 for Blocked (<i>Local Management Devices – Active/Blocked button</i>)	√
5	Type	Integer (1)	Device type: 3 for Vehicle Mounted 2 for Hand Held – Vehicle 1 for Hand Held – Employee 4 for Hand Held – Driver 5 for Hand Held – Customer (<i>Device Properties – General Tab</i>)	√
6	Hardware_type	Integer (1)	Hardware type: 1 for Handheld, 6 for Vehicle Mounted (<i>Device Properties – General Tab</i>)	√
7	Auth_type	Integer (1)	Authorization hardware type: 1 for FuelOpass 10 for TRU 2 for VIU3	√
8	Auth_type	Integer (1)	for VIU4 for VIU45 9 for VIU35 14 for Fuel Card 20 for Gasboy Key 21 for Manual Entry 5 for Electronic Key 6 for Tag for Authorizer for Master Authorizer (<i>Device Properties – Format Tab</i>)	√
9	Employee_type	Integer (1)	1 (this value must not be modified)	√
10	Vehicle_no	String (80)	License plate number or unique number of the vehicle (<i>Device Properties – Information Tab</i>)	√
11	String	String (50)	Device card number (<i>Device Properties – Format Tab</i>) (Unique Key)	√
12	Fleet_name	String (80)	Exact name of the fleet, to which the device is associated, as it appears in the Fleets List (<i>Device Properties – Information Tab</i>)	√
13	Department_name	String (80)	Exact name of the department, to which the device is associated, as it appears in the Departments List (<i>Device Properties – Information Tab</i>)	√

No.	Field Name	FHO Field Type	Description	Mandatory
14	Rule_name	String (32)	Exact name of the Group Rule that applies to the device, as it appears in the Group Rules List (<i>Device Properties – Information Tab</i>)	
15	Driver_id_type	Integer (1)	Two stage authorization activation: 0 for inactive; 2 for Driver Specific; 3 for Department Specific; 4 for Fleet Specific; 5 for Any Fleet (<i>Device Properties – Two Stage Tab</i>).	
16	Price_list_name	String (100)	Exact name of the predefined Price List, to which the device is associated (<i>Device Properties – Information Tab</i>)	
17	Model_name	String (80)	Exact model name of the vehicle, as it appears in the Model List (<i>Device Properties – Information Tab</i>)	
18	Pump_name		N/A (Leave empty)	
19	Year	Number (4)	Manufacturing year of the vehicle (<i>Device Properties – Information Tab</i>)	
20	Capacity	Number	Vehicle fuel tank capacity, as defined for the specific model in the Model List (<i>Device Properties – Information Tab</i>)	
21	Consumption	Number	Vehicle average fuel consumption, as defined for the specific model in the Model List (<i>Device Properties – Information Tab</i>)	
22	Odometer	String (80)	Initial odometer reading value of the vehicle (<i>Device Properties – Information Tab</i>)	
23	Cust_id	String (80)	The ID number of the customer (<i>Device Properties – Information Tab</i>)	
24	Address		N/A (Leave empty)	
25	Account-type	Integer (1)	0 (this value must not be modified)	
26	Available_amount	Number	Device current available amount (0, if the company does not work with accounts)	
27	Use_pin_code	Integer (1)	PIN code validation option: 0 for inactive, 1 for active (<i>Device Properties – Validation Tab</i>)	
28	Pin_code	Integer (1)	Device PIN code, maximum 5 digits (<i>as defined in Device Properties – Validation Tab</i>)	
29	Auth_pin_from	Integer (1)	PIN code location: 2 in the device “From authorization mean”, 3 in the DB “Use” (only in cases the previous value is defined, <i>Device Properties – Validation Tab</i>)	
30	Nr_pin_retries	Integer (1)	Number of allowed PIN code entry retries, 0 for unlimited (<i>Device Properties – Validation Tab</i>)	
31	Block_if_pin_retries_fail	Integer (1)	Enables device blocking if all PIN code entry allowed retries fail: 0 for disabled, 1 for enabled (<i>Device Properties – Validation Tab</i>)	
32	OrPT_prompt_for_plate	Integer (1)	Prompting for vehicle number entry and verification option: 0 for disabled, 1 for enabled (<i>Device Properties – Validation Tab</i>)	
33	OrPT_prompt_for_odometer	Integer (1)	Prompting for odometer reading entry option: 0 for disabled, 1 for enabled (<i>Device Properties – Validation Tab</i>)	
34	Do_odometer_reasonability_check	Integer (1)	Odometer reasonability check option: 0 for disabled, 1 for enabled (<i>Device Properties – Validation Tab</i>)	
35	Max_odometer_difference_allowed	Integer (1)	Maximum difference between the previous and the current odometer reading (<i>Device Properties – Validation Tab</i>)	
36	Nr_odometer_retries	Integer (1)	Amount of retries before odometer entry fails the reasonability check: 0 for unlimited (<i>Device Properties – Validation Tab</i>)	
37	Engine_hours		N/A (the current value of the Engine Hour is entered through the OrPT)	
38	Original_engine_hours	Integer (1)	0 (this value must not be modified)	
39	Target_engine_hours	Integer (1)	0 (this value must not be modified)	
40	Two-stage_list	String	In cases where Two-Stage option was enabled and the device is using a specific list (Driver_id_type 2 for Driver Specific, 3 for Department Specific), this field contains all the allowable values for the device, separated by a semi-colon “;” (<i>Device Properties – Two Stage Tab</i>). Applicable for vehicle mounted devices only.	

No.	Field Name	FHO Field Type	Description	Mandatory
41	OrPT_prompt_for_engine_hours	Integer (1)	Prompting for engine hours entry option: 0 for disabled, 1 for enabled (<i>Device Properties – Validation Tab</i>)	
42	Address2		N/A (Leave empty)	
43	City		N/A (Leave empty)	
44	State		N/A (Leave empty)	
45	Zip		N/A (Leave empty)	
46	Phone		N/A (Leave empty)	
47	UserData1		N/A (Leave empty)	
48	UserData2		N/A (Leave empty)	
49	UserData3		N/A (Leave empty)	
50	UserData4		N/A (Leave empty)	
51	UserData5		N/A (Leave empty)	
52	Start_odometer	Integer (1)	N/A (Leave empty)	
53	EH_consumption	Number	Vehicle standard engine hours fuel consumption, as defined for the specific model in the Model List (<i>Device Properties – Information Tab</i>)	
54	Allow_ID_replacement	Integer (1)	Enables devices to automatically receive a card number after the first refueling. The system recognizes the device Vehicle No. and associates the new Card No. to the device. (0 for disabled, 1 for enabled, <i>Devices Properties – Format Tab</i>)	
55	Number_of_strings	Integer (1)	Specifies the number of devices having the same Vehicle No. Each device is assigned with a unique Card Number. This field is relevant for trucks having more than a single tank (fuel or others) and more than a single device attached to the truck.	√
56	String2	String (50)	Additional device card number	
57	String3	String (50)	Additional device card number	
58	String4	String (50)	Additional device card number	
59	String5	String (50)	Additional device card number	
60	Plate_check_type	Integer (1)	Plate number entry validation option: 0 for inactive, 1 for active	
61	Nr_plate_retries	Integer (1)	Number of allowed plate number entry retries, 0 for unlimited	
62	Block_if_plate_retries_fail	Integer (1)	Enables device blocking if all plate number entry allowed retries fail: 0 for disabled, 1 for enabled	
63	Chassis_number	String (32)	Vehicle chassis number	

Figure 297 displays an example of an imported Device file.

Figure 297: Example of Imported Device File (Fragment)

44	// Action	Record_type	Name	Status	Type	Hardware	Auth-type	Employee	Vehicle	String	Fleet_name	Department	Rule_name	Driver_id	Price_list	Model_name	Pump_name	Year
45	R	Mean	BRODE	2	4	1	14	1	BRODE	601434	ATTORNE NH DEPA	No Restr	5					1900
46	R	Mean	VALENT	2	4	1	14	1	VALENT	601444	ATTORNE NH DEPA	No Restr	5					1900
47	R	Mean	PETELL	2	4	1	14	1	PETELL	614008	ATTORNE NH DEPA	No Restr	5					1900
48	R	Mean	FORTIE	2	4	1	14	1	FORTIE	614599	ATTORNE NH DEPA	No Restr	5					1900
49	R	Mean	TRACY	2	4	1	14	1	TRACY	614604	ATTORNE NH DEPA	No Restr	5					1900
50	R	Mean	2E+06	2	2	1	14	1	2E+06	112596	ATTORNE NH DEPA	RULE_UL	4			IMPALA		1900
51	R	Mean	FLANAG	2	4	1	14	1	FLANAG	615545	ATTORNE NH DEPA	No Restr	0					0
52	R	Mean	BROWN	2	4	1	14	1	BROWN	612177	ATTORNE ATTORNE	No Restr	5					1900
53	R	Mean	VACHOI	2	4	1	14	1	VACHOI	613333	ATTORNE ATTORNE	No Restr	5					1900
54	R	Mean	2E+06	2	2	1	14	1	2E+06	104900	ATTORNE ATTORNE	RULE_UL	4			CLASSIC		1900
55	R	Mean	2E+06	2	2	1	14	1	2E+06	112604	ATTORNE ATTORNE	RULE_UL	4			IMPALA		1900
56	R	Mean	2E+06	2	2	1	6	1	2E+06	8.5E+15	ATTORNE ATTORNE	RULE_UL	4			TAURUS		1900
57	R	Mean	2E+06	2	2	1	14	1	2E+06	113609	ATTORNE ATTORNE	RULE_UL	4			IMPALA		1900
58	R	Mean	2E+06	2	2	1	14	1	2E+06	113665	ATTORNE ATTORNE	RULE_UL	4			STRATUS		1900

B.11 Import Response File

Once a file was imported, the system retrieves a detailed log of the process.

If a line does not match the expected format/value detailed above, only this record is rejected, while all valid records in the same file are accepted. In these cases, the log contains an error description (see [Figure 298](#)).

Figure 298: Example of Import Log (Fragment)

// Mean					
// Action	Record_type-Mean	Name	Status	Type	Hardware_type
// Model					
// Action	Record_type-Model	Name	Company_name	Capacity	Consumption
// Dept					
// Action	Record_type-Dept	Fleet_name	Name	Status	Code
// Fleet					
// Action	Record_type-Fleet	Name	Status	Code	Group_rule_name
// Rule					
// Action	Record_type-Time_rule	Name	Rule_type	Description	Content_summary
// Action					
// Action	Record_type-Limit_rule	Name	Rule_type	Description	Content_summary
// Action					
// Action	Record_type-Visit_rule	Name	Rule_type	Description	Content_summary
// Action					
// Action	Record_type-Fuel_rule	Name	Rule_type	Description	Content_summary
// Action					
// Action	Record_type-Cluster_rule	Name	Rule_type	Description	Content_summary
// GroupRule					
// Action	Record_type-Group_rule	Name	Description	Limit_rule	Visit_rule

Line Number	Field	Value	Description		
R	2 Vehicle_no	AA	Name and Vehicle must be the same for employees	2	1
	Mean	AAA			1
Line Number	Field	Value	Description		
R	3 Fleet_name	AA	No such fleet		
	Mean	sssss		2	2
					1
Line Number	Field	Value	Description		
	5 Vehicle_no		Required field empty		
	5 String		Required field empty		
R	Mean	test		2	2
					1
Lines read: 5; skipped: 1; processed: 4; rejected: 3; accepted: 1 (changed: 0; unchanged: 1)					

The import log will include the following lines:

a Import file template: Shows field headers of all file types to ease the reading of the report:

- Models
- Rules
- Group Rules
- Fleets
- Departments
- Devices

b Error Log Header: The error log is displayed only if records were rejected.

c Error description:

- Line Number: Number of the line in the original import file.
- Field and Value: Name of the field in which the error was found and erroneous value entered (a line per error).
- Description: Description of the error (see below).

d Record: Record as it appears in the original import file.

e Summary: Displays a resume of the import process: number of records processed, rejected, accepted as well as the number of records actually modified after import.

For example, in [Figure 298](#) the second error, which is in line 3 of the import file, is indicating that there was a reference to a non-existent fleet (AA).

B.11.1. Import Process Errors

A list of possible import errors is provided in [Table 66](#):

Table 66: Import Process Errors

No.	Error Description	No.	Error Description
1	Invalid Record Type	2	Mean cannot be deleted while referenced by 2-stage means
3	Invalid Action	4	Mean cannot be deleted while referenced by shift Mean cannot be deleted while referenced by shift
5	Field too wide (max: %d)	6	Cash customer mean needs price list
7	Field too narrow (min: %d)	8	Too many two-stage elements
9	Required field empty	10	Two-stage element list should be empty
11	Value out of range (low:%d; high:%d)	12	Two-stage dept unknown
13	Value must be only digits	14	Two-stage driver unknown
15	Value must be float number	16	Two-stage element is not type driver
17	Illegal characters in field	18	HEAD OFFICE error queueing changes to station queue
19	Illegal value	20	Dept change between positive and negative illegal
21	Database error	22	At most one negative-list department allowed
23	No such fleet	24	Group Rule must include at least one Rule
25	No such department in fleet	26	Not authorized to modify or delete this object
27	No such price_list	28	Group rule referenced by fleet
29	No such group rule	30	Group rule referenced by department
31	No such model	32	Group rule referenced by mean/device
33	No such pump	34	Rule referenced by Group Rule
35	Auth-type illegal for this Type	36	No such Limit Rule
37	Hardware-type illegal for this Auth-type	38	No such Visit Rule
39	Name and Vehicle must be the same for employees	40	No such Time Rule
41	Field value already exists	42	No such Fuel Rule
43	Field value not found	44	No such Cluster Rule
45	Rename to same name not allowed	46	Not allowed to change Rule Type
47	Available amount less than minimum (%.4f)	48	Invalid Rule Type
49	Modification or deletion of default fleet not allowed	50	Invalid Limit Type
51	Modification or deletion of default dept not allowed	52	Invalid Allow Type
53	Modification or deletion of default group rule not allowed	54	Too many products
55	Employee must be in default dept and fleet	56	Too many clusters
57	Non-employee may not be in default dept or fleet	58	No products specified

No.	Error Description	No.	Error Description
59	Fleet cannot be deleted while it still has depts	60	No clusters specified
61	Dept cannot be deleted while it still has means	62	Unknown product
63	Dept cannot be deleted while referenced by 2-stage means	64	Unknown cluster
65	Day Amount should not be less than Single Refuel	66	Not enough identified strings
67	Week Amount should not be less than Single Refuel	68	Value not unique
69	Month Amount should not be less than Single Refuel	70	Strings not empty
71	Week Amount should not be less than Day Amount	72	Wrong number of identified strings
73	Month Amount should not be less than Day Amount	74	Number of actual strings not consistent with allow_id_replacement
75	Month Amount should not be less than Week Amount	76	Plate prompt not allowed for this device type
77	Week Visits should not be less than Day Visits	78	Proxy tag cannot require driver
79	Month Visits should not be less than Week Visits	80	Illegal weekday
81	Month Visits should not be less than Day Visits	82	Duplicate day
83	Fleet may not be changed	84	Too many ranges
85	Model still referenced by at least one mean	86	Incomplete range
87	No such department (code)	88	Illegal time
89	Not allowed to specify fleet list	90	Range overlap - ranges must be in order
91	Multiple strings not allowed for this device type, or disabled	92	No days defined
93	All strings must be already identified	94	No ranges defined
95	Illegal range	96	Plate not unique within fleet

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Appendix C: WP Registration and Setup

C.1 General

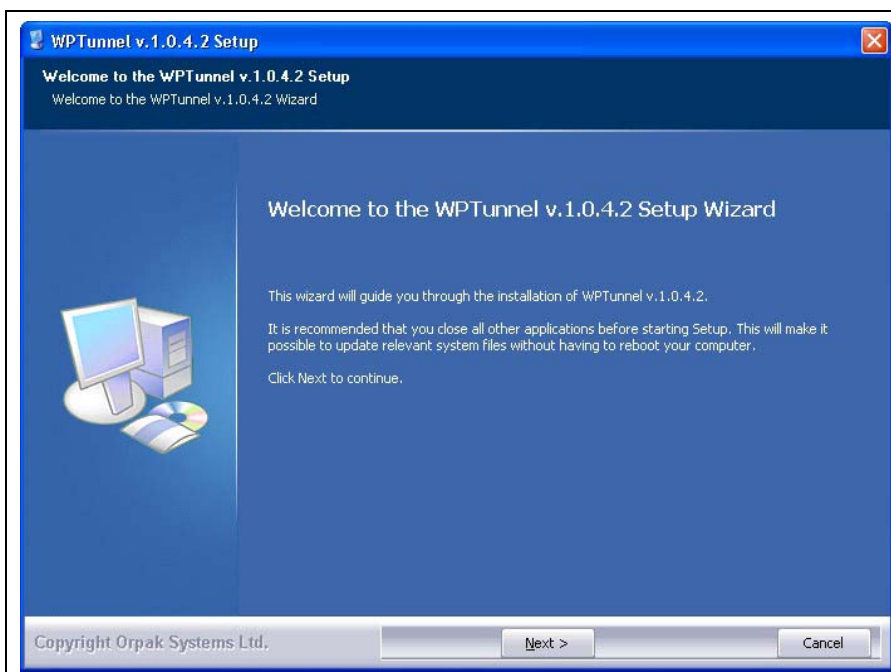
This appendix provides instructions for registering a Wireless Programmer device in the organization's FHO, as required prior to programming Fuel Point PLUS wireless vehicle identification units.

C.2 WP Tunnel Installation

The WP Tunnel application is required for WP registration. Proceed as follows:

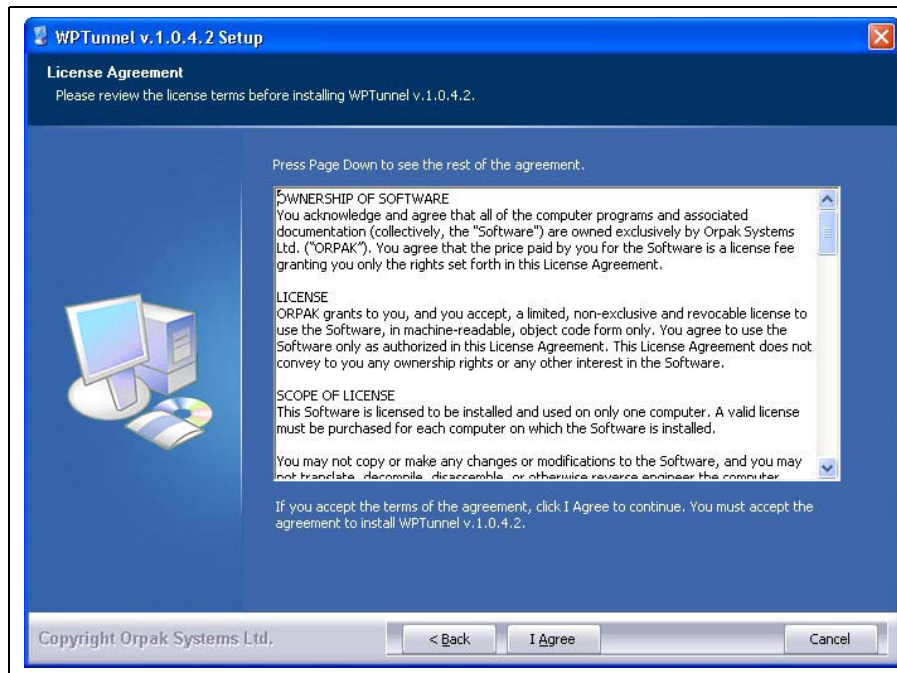
- 1 Double-click the **WP Tunnel.exe** file. The following Setup Wizard opens (see [Figure 299](#)).

Figure 299: WP Tunnel Setup Wizard Welcome Screen



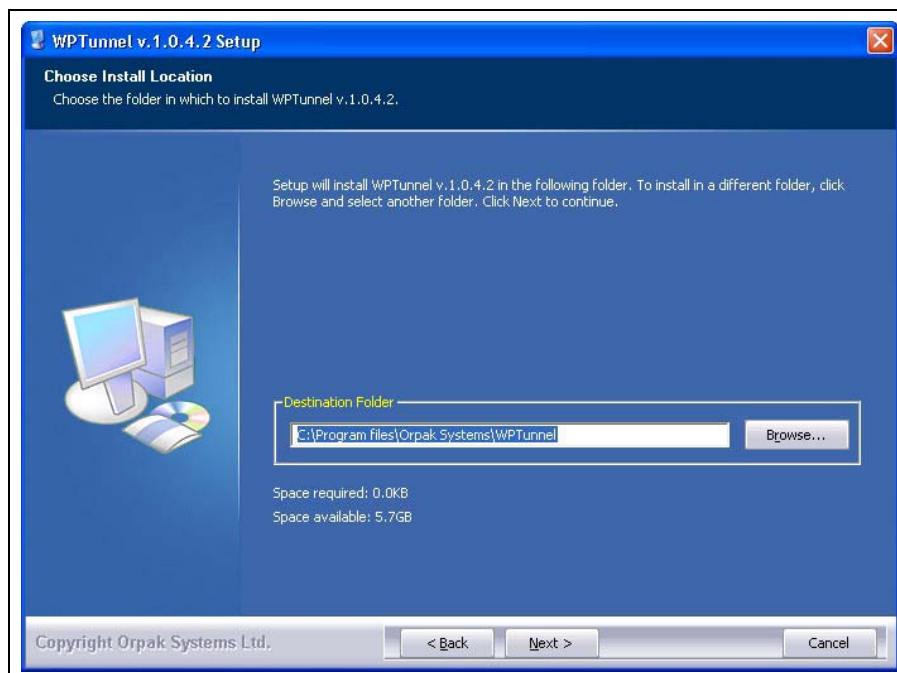
- 2 Click **Next**. The License Agreement screen opens (see [Figure 300](#)).

Figure 300: WP Tunnel Setup Wizard License Agreement Screen



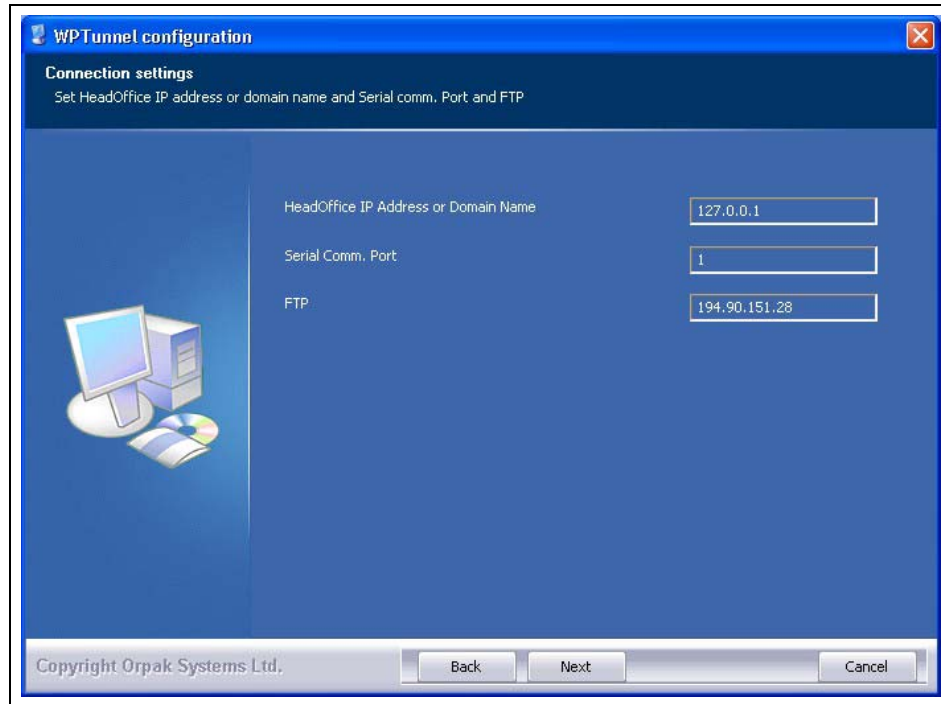
- 3 Click **I Agree**. The following screen opens (see [Figure 301](#)).

Figure 301: WP Tunnel Setup Wizard Choose Install Location Screen



- 4 Click **Next** to install the files in the default folder, or click Browse to choose another destination folder and then click **Next**. The Connection settings screen opens (see [Figure 302](#)).

Figure 302: WP Tunnel Setup Wizard Connection Settings Screen



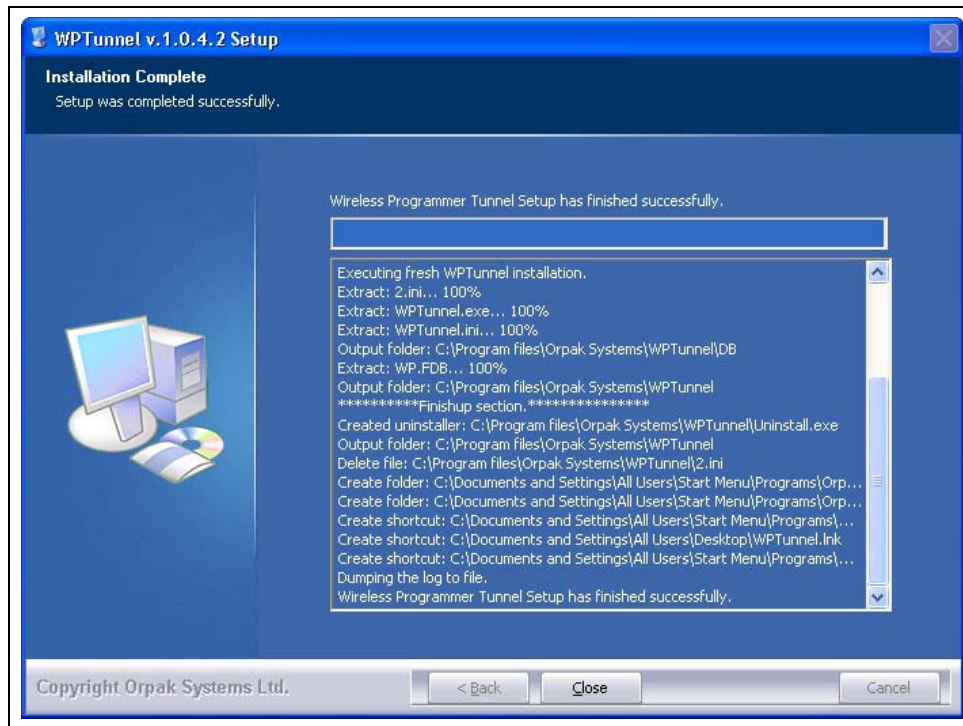
- 5 Enter the Head Office IP Address. In the example above, WP Tunnel is installed in FHO PC, so the local Host IP address (127.0.0.1) is entered.

Note: The FTP stores updated vehicle lists required for WP proper functioning. Default FTP address: 194.90.151.28 should not be changed.

- 6 Enter the **Serial Com port** to which the WP device is to be connected. Click **Next**.

- 7 The installation process is fully automated. The Installing screen displays process messages, as well as possible error messages. At the end of the process, click **Close** to exit the Wizard (see [Figure 303](#)).

Figure 303: WP Tunnel Setup Wizard Installation Complete Screen



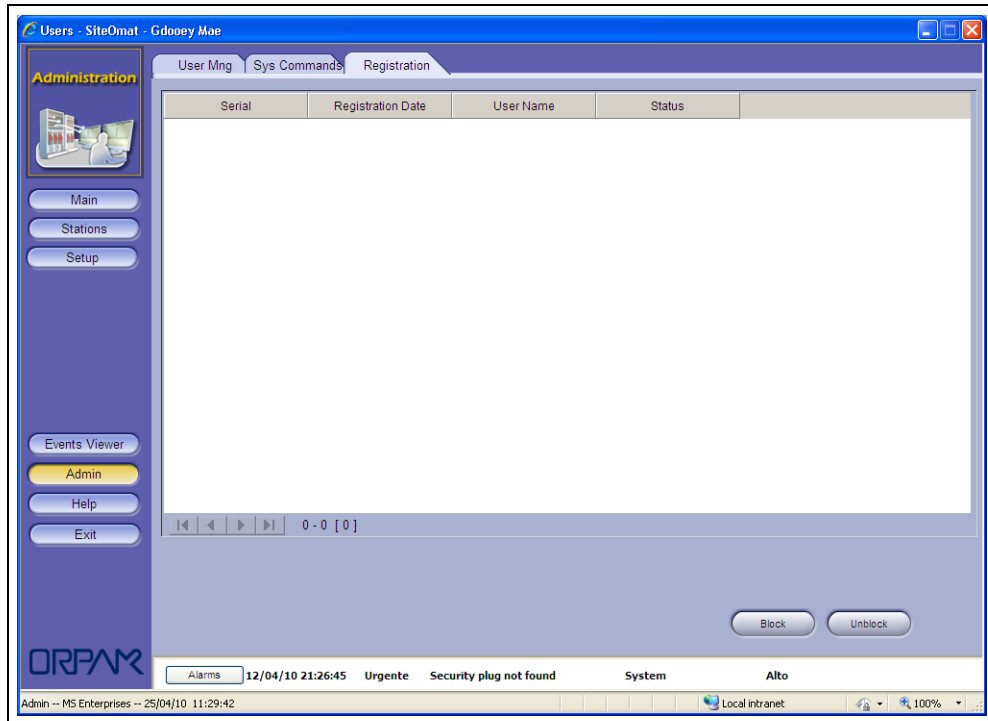
- 8 An icon  is created on the desktop.

C.3 Establishing WP - Head Office Communication

In order to establish communication between the WP and the Head Office, proceed as follows:

- 1 Access the FHO application and click **Admin**.
- 2 Select the Registration tab. The following screen opens:

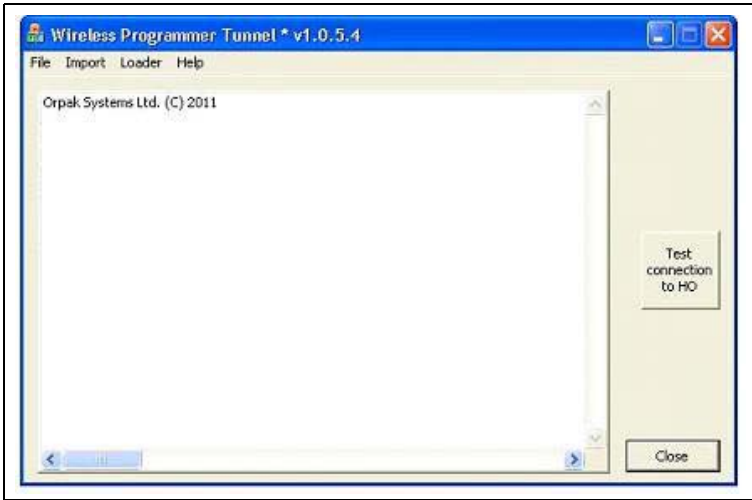
Figure 304: Admin Screen – Registration Tab



Note: Prior to registering the WP, remove all certificate errors. For further information, refer to [“Appendix A: General Guide for Web Client User”](#) on page 309.

- 3
- Launch the WP Tunnel application by clicking on the  icon; the following screen is displayed (see [Figure 305](#)).

Figure 305: WP Tunnel Main Screen

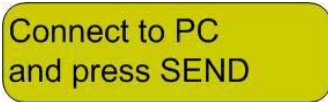
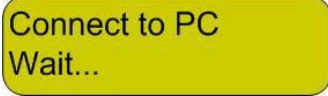


- 4
- Connect the WP to the PC using a RS-232 serial cable.
- 5
- Turn on the WP; follow the instructions appearing on the WP display, described in [Table 67](#).

Note: When operating the WP for the first time, enter factory defaults user name and password: “admin”, the device will prompt the user for a new username and password.

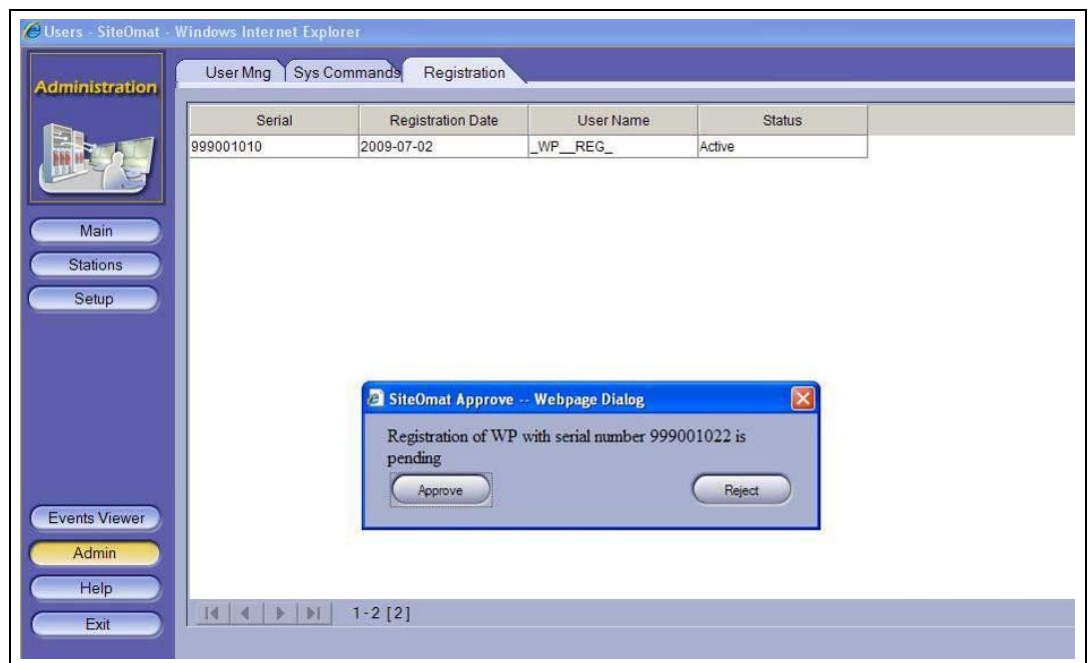
Table 67: WP Registration Sequence

Step	Display	Description/Action
1	Enter User ID	Enter User ID and press ENTER .
	Enter Password	Enter password and press ENTER . Press the BCK key.
2	>WP Functions Sys Functions	The System menu is displayed.
3	>Sys Functions Services	Use the DOWN arrow key to move the pointer (>) to the Sys Functions menu and press ENTER .
4	>WP Registration Remove Registr.	Press ENTER .

Step	Display	Description/Action
5		Press SEND .
6		Wait while the PC connects to the FHO.

- 6 The WP tunnel displays the session details. After the WP is successfully recognized by the FHO, the application registers the device serial number and the currently logged user name and sends to the WP the organization's name (company name). A confirmation message is displayed (see [Figure 306](#)).

Figure 306: Approving WP Registration



- 7 Close the WP Tunnel.

The organization name is recorded in the WP memory and the device is now ready for programming the vehicle units.

The Block button blocks the WP device (selected from the grid) for future use, and the Unblock button activates previously blocked WP units.

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Appendix D: WEX and Voyager Fleet Card Format Support

D.1 General

This appendix describes the steps required for enabling support of WEX and Voyager fleet cards as well as the different refueling scenarios.

WEX and Voyager fleet cards can be accepted and authorized without being entered into the system, still all transaction and user input data will be stored in the system database.

D.2 Setup

To enable support of these fleet card formats, proceed as follows:

- 1 Define new fleets as needed (refer to [“7.8 Managing Fleets”](#) on [page 143](#)). Fleet Code should be extracted from the cards as follows:
 - For **WEX**: The field **Fleet number** at positions 14-19 on Track 2.
 - For **Voyager**: The field **Account number** at positions 6-13 on Track2.
- 2 Do one of the following:
 - Define a Negative List department for each of these fleets (refer to [“7.9.3 New Department – General Tab”](#) on [page 154](#)). As a result of authorization logics, all cards that pertain to a fleet with a Negative List department but are not part of this department will be authorized.

Note: Since the cards are not actually defined in the system, they are subject to the following limitations: Limits are not applicable. Reports cannot be filtered by card number/plate.

From Version 6.4.49, you may also define these cards as a Positive list:

- If the card is found in the system database, it will be used and authorized as a local card and will not require authorization through the network (WEX, Voyager).
- If the card is not found in the database, it will be authorized through WEX/Voyager network.

Note: When defining the cards in the system, define prompt code and expiration date for each device.

D.3 Refueling Scenarios

D.3.1 Wex Fleet Cards

- 1 The system identifies the card as a WEX fleet card by the **ISO** and **WEX identifier code** (690046 or 690047) fields.
- 2 The system search for a valid **Expiration Date** field.
- 3 **Fleet Number** field is read. The system verifies that the fleet was defined and that it contains a Negative list department.
- 4 **Vehicle Number** field is checked against the Negative List of the fleet to verify the card is not in the list.
- 5 If **Prompt code (product ID)** field is “00” the driver is prompted for Driver ID and Odometer. If it is “01” then no prompt will be presented.

Once the inputs (if required) are entered, then the card is accepted and transaction is approved.

Note: Driver ID does not refer to Driver ID defined in the system (i.e. for two-stage validation).

- 6 Once the transaction has been completed, transaction data including any user input and the card number are stored in the system database.

D.3.2 Voyager Fleet Cards

- 1 The system identifies the card as a Voyager fleet card by the **ISO** and **WEX identifier code** (690046 or 690047) fields.
- 2 The system search for a valid **Expiration Date** field.
- 3 **Account Number** field is read. The system verifies that the fleet was defined and that it contains a Negative list department.
- 4 **Card Identifier (vehicle number)** field is checked against the Negative List of the fleet to verify the card is not in the list.
- 5 According to **Product Restriction Code** field value, the driver is prompted for Driver ID (ID Number) and/or Odometer.
- 6 Once the inputs (if required) are entered, then the card is accepted and transaction is approved.
- 7 Once the transaction has been completed, transaction data including any user input and the card number are stored in the system database.

Appendix E: Obtaining an SSL Certificate

E.1 General

This appendix provides instructions for obtaining and installing an SSL Certificate for the FHO/FMS Server (hereafter referred to as FHO Server).

FHO and FMS Applications can be logged into using a standard browser from any PC. The application is launched from the FHO Server and may be accessed from any networked computer (directly connected to the FHO via the LAN) or from a remote computer with an Internet browser (MS Internet Explorer 7 and up) over the Internet. It uses a secured SSL connection (HTTPS).

The SSL (Secure Sockets Layer) is a cryptographic protocol that establishes a secure session link between the remote computer and the FHO Server.

When a user connects to the secured FHO Server, SSL authenticates both server and user and establishes an encryption method and a unique session key. The SSL protocol contains a public key and a private key. Messages are encrypted with the server's public key and can only be decrypted with the corresponding private key (which is kept secret).

The SSL Certificate is an electronic document issued by a third-party Certification Authority which uses a digital signature to bind together a public key with an identity, verifying the identity the FHO Server.

The procedure for obtaining an SSL Certificate for the FHO Server consists of the following stages, described in the subsequent paragraphs:

- Registering a Domain Name
- Generating a Certificate Signing Request
- Purchasing an SSL Certificate from a Trusted Root Certification Authority
- Installing the Certificate

E.2 Registering a Domain Name

SSL Certification requires the assignment of a domain name to the FHO Web Server.

While generating a CSR, users are required to enter a Common Name, namely the Host Name (i.e.: www.mydomain.com, mydomain.com).

The certification applies to the precise Common Name specified during this process and the posterior enrollment to the Certification Authority. For example, a certificate issued for the domain “mydomain.com” does not certifies a site named “www.mydomain.com”.

The reservation and registration of Domain Names is managed by Domain Name Registrars, licensed by the Internet Corporation for Assigned Names and Numbers (ICANN) or by a national authority.

The list of ICANN accredited registrars is provided for reference below:
<http://www.iana.org/domains/root/db/>

E.3 Generating a Certificate Signing Request

In order to purchase an SSL Certificate from a Certification Authority, a certificate signing request (CSR) has to be generated.

The CSR contains information identifying the FHO server and the public key. The corresponding private key is not included in the CSR, but is used to digitally sign the entire request.

The utility OpenSSL is used to generate the key and CSR. This utility comes with the OpenSSL package and is usually installed under /usr/local/ssl/bin.

Proceed as follows:

- 1 Generate the Key utilizing the following command:
`$ openssl genrsa -des3 -out CommonName.key 1024`
This command generates a 1024 bit RSA Private Key and stores it in the file **CommonName.key**.
- 2 Enter a pass phrase. Omit the -des3 option above for not to include a pass phrase to protect the key, or in cases where running Apache on Windows as this option does not work on Windows.

Note: If including a passphrase, the same passphrase has to be entered after restarting the server.

- 3 Back up the **CommonName.key** file and make a note of the passphrase, if any.

- 4 Generate the CSR utilizing the following command:
\$ openssl req -new -key **CommonName.key** -out **CommonName.csr**
This command prompts for the attributes of the certificate: Country Name (two-letter code):
State or Province Name (full name): Locality Name:
Organization Name: Organizational Unit Name:
Common Name: (i.e.: www.mydomain.com)
Email Address: (i.e.: webmaster@mydomain.com)
- 5 An RSA Private Key is generated in CommonName.key and a Certificate Signing Request in CommonName.csr. Copy and paste the information in CommonName.csr into the Certification Authority enrollment form, by opening the file in a text editor that does not add extra characters (i.e. Notepad).

E.4 Purchasing an SSL Certificate

Trusted Root Certification Authorities are entities licensed to issue digital certificates automatically trusted by most web browsers, for use by other parties. A Root Certificate identifies the Root Certificate Authority (CA) by means of a digital signature. Subsequent to the generation of the CSR, select a Trusted Root Certification Authority and proceed with the chosen authority enrollment process.

Since FHO is accessed via IE, a CA trusted by Microsoft should be applied. A list of CAs whose root certificates are distributed via the Windows Root Certificate Program is provided below:

[http://download.microsoft.com/download/1/4/F/14F7067B-69D3-473A-BA5E-70D04AEA5929/Windows Root Certificate Program Members November 2009.pdf](http://download.microsoft.com/download/1/4/F/14F7067B-69D3-473A-BA5E-70D04AEA5929/Windows%20Root%20Certificate%20Program%20Members%20November%202009.pdf)

Note: The enrollment process may vary for different Certification Authorities, therefore it is not provided in this document.

In addition to the CSR, the following information is needed:

- a** The period of time for the certificate
- b** The server platform
- c** The Organization, Organizational Unit, Locality/City, State and Country
- d** Payment information and a contact for invoicing
- e** The Common Name
- f** An email address, phone number, fax number for validating the information

Upon completion of the enrollment process, the Certification Authority proceeds with the authentication process.

Once the information is validated, the SSL Certificate is issued, according to the selected CA policy.

E.5 Installing the Certificate

To install the obtained Certificate in the FHO Server, the file should be converted into .pem format. Proceed as follows:

- 1 Open a Windows command prompt and navigate to \Openssl\bin
- 2 Type openssl.exe and press ENTER. The OpenSSL prompt opens.
- 3 Execute the following command:
`pkcs12 -in <cert.pfx> -out <cert.pem> -nodes`
 Where <cert.pfx> is the name of the PFX file (the path and quotes may be included) and <cert.pem> is the name of the file that OpenSSL is to generate, for example, type:
`pkcs12 -in "C:\FHO\cert.pfx" -out cert.pem -nodes`
- 4 The command converts the data in the <cert.pfx> file to PEM format in the <cert.pem> file. The PEM file contains all of the certificates that were in the PFX file:
 - Private key
 - Identity certificate
 - Root certificate
 - Intermediate certificate

Each of the certificates (Private Key, Identity certificate, Root certificate, Intermediate certificate) are wrapped within headers, and these headers are part of the certificates. The PEM file looks similar to the following (see [Figure 307](#)).

Figure 307: Example of the Obtained .PEM File

```

1 Bag Attributes
2   localKeyID: 01 00 00 00
3   friendlyName: 633438695139008599
4   Microsoft CSP Name: Microsoft Base Cryptographic Provider v1.0
5 Key Attributes
6   X509v3 Key Usage: 10
7   -----BEGIN RSA PRIVATE KEY-----
8   MIICXQIBAAKBgQC2izwuMKf1SVlks3KNcEN5oagzvGnwjLL9H0pBaqd9gkczMc
9   TlG1LreKwa0xbR2BMEHkYC2GzVjBcQUSz/Q0YY0Brbg+hoBvrCt547cPSqSBQdL
10  B1ebYWEqua7R25R80yiMfTwZwQB0+DHD+pD1XAB9AN/ENjGyc4VPU+A6/QIDAQAB
11  AoGBAKGJZzEM16T1StklP2rQfLWHC7z0r98x8zax2Nk404zqm4bZN2Uuf/QANUVx
12  27ym7aMkV8ppdTgxrbW6JYE78fQH2kx5D3RtJYpGUlWYkp2MHG1gfufVtMVRs+R
13  JuXP47ysQVR0GhwUftgANpov9Mx/1GU36CF/oiG7cjIyMpELAkEA4sDjQFvK0fGF
14  M0sUCUOL2A+RRjKNQ3bTgt5o8LNU6uRh3ztbsKB+J+FvNArRWU4Ftgm3U7q7BwT9
15  Aabte2pnRwJBAM4WsaKsnvTEM/oByMbFJ0360AbL3x7e3q44z19xAt1WwxPh/mn7
16  Rd6oKdhf61ML+KfGGFzHV99UCrca9aFeNZsCQQDg8m5bhcv11bMTJ3J2CjtW0YNe
17  BlJapiwIP0qQF4GmPrBtW56HZ4AfoiXG1CDBHoTN5a81si50NWW1W0tpLcKLAKBq
18  jYkyXkWhd4BAFoQUIQL9U1wT5y/juh8vvLcWqXtrm2wo74N2kC7spkyFOTIRlf0F
19  AGrALWDFWtJfcVtmJatZakBGg3Uk6sT0jdw0NBkG57DRITMnrHjJ2xuL00DefjS
20  e3EumP0iaY7m6c/2EqvB+wRD1/2HUaBIdOu2woDis30T
21  -----END RSA PRIVATE KEY-----
22 Bag Attributes
23   localKeyID: 01 00 00 00
24   subject=/CN=EDI Connector Cert
25   issuer=/CN=EDI Connector Cert
26   -----BEGIN CERTIFICATE-----
27   MIIBrjCCARegAwIBAgIBATANBgkqhkiG9w0BAQUFADAdMRswGQYDVQQDEXJFREKq
28   Q29ubmVjdG9yIEN1cnQwHhcNMMDgwNDElMjAxODM0WmcNMDEOMjAxODM0WjAd
29   MRswGQYDVQQDEXJFREKqQ29ubmVjdG9yIEN1cnQwZ8wDQYJKoZIhvcNAQEBBQAD
30   gY0AMIGJAoGBALaLPC4wp/VJWWSzc0lwQ3mhqD08afCMsv0fSkFqp32CRwfNmZxP
31   UaIut4pZo7FtHYEQeRgLYbNWMFxBRLP9A5hg4GtuD6GgG+sK3njtw9KpIFB0sE
32   t5thYSq5r+hblHw7Klx9PBnBAE74McP6kPVcAH0A38Q2MbJzhU9T4Dr9AgMBAAEw
33   DQYJKoZIhvcNAQEFBQADgYEALdwDjY/epA6t63cAcLfDvhw+hRSh+wqkX6x4IPA
34   jL0JyxOrTPKEcq1Md8NMxi0hGNuHR5hl4IpSvQ1W92Xeq5WmMfik1fDh0BczgBjX
35   KplhndxyWF6Jo/9xmSKr0ctNPi+/n/Y9ADNaP2iz+sgD0gicLaPaljGMDgxEUN
36   MLY=
37   -----END CERTIFICATE-----

```

- 5 Save the file as SO.pem and under the FHO bin folder, replacing the existing file.

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