



Gasboy® Fleet PLUS

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# Installation and Implementation Guide to Passport® Authorization Server (PAS)

## Computer Programs and Documentation

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This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

## Approvals

Gasboy, Greensboro, is an ISO 9001:2000 registered facility.

### Underwriters Laboratories (UL):

UL File#	Products listed with UL
MH4314	All dispensers and self-contained pumping units
MH10581	Key control unit, Model GKE-B Series Card reader terminals, Models 1000, 1000P Site Controller, Model 2000S CFN Series Data entry terminals, Model TPK-900 Series Fuel Point Reader System

### California Air Resources Board (CARB):

Executive Order #	Product
G-70-52-AM	Balance Vapor Recovery
G-70-150-AE	VaporVac

## National Conference of Weights and Measures (NCWM) - Certificate of Compliance (CoC):

Gasboy pumps and dispensers are evaluated by NCWM under the National Type Evaluation Program (NTEP). NCWM has issued the following CoC:

CoC#	Product	Model #	CoC#	Product	Model #	CoC#	Product	Model #
95-179	Dispenser	9100 Retail Series, 8700 Series, 9700 Series	91-019	Dispenser	9100 Commercial Series	05-002	Atlas	8700K, 8800K, 9100K, 9200K, 9800K
95-136	Dispenser	9800 Series	91-057	Controller	1000 Series FMS, 2000S-CFN Series			

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# 1 – Introduction

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## Purpose

This manual is intended for end users to help them convert their existing Cash Flow Network (CFN®) systems to Gasboy® Fleet PLUS.

This manual covers common aspects of installation and implementation. For more information, refer to *MDE-4821 Fleet Head Office System Installation and User's Manual* at <http://www.gasboy.com/us/content/technical-documentation>.

The intention of this manual is to guide customers through a setup that allows them to continue doing business with the PLUS system the same way that they currently do business. To adjust the methods of doing business, contact your Gasboy Authorized Service Contractor (ASC).

## Fleet Head Office (FHO)/Server/PC Hardware and Software Requirements

### PC Configuration

#### Minimum PC Hardware Configuration

Following table lists the PC configuration for the KS612K001 - Single Site FHO PC hardware configuration:

Description	Specification
CPU	Intel® Core Duo 2200 MHz
Memory	2 GB
Hard Disk	1 X 1220 GB Integrated Drive Electronics (IDE)/Serial Advance Technology Attachment (SATA)
Network Card	10/100 Mbps
Display	SVGA 1024 X 768 pixels
Network	10/100 Ethernet® Interface Card
Operating System	Windows® XP SP3/Windows 7 32/64 bit
Ports	1 X Universal Serial Bus (USB) Port
Applications	<ul style="list-style-type: none"> <li>• Internet Explorer (IE) 7, 8, or 9 (in compatibility mode)</li> <li>• Adobe® Flash Player 9 or later</li> <li>• .Net Framework 3.5 or later</li> <li>• Java™ - Current Version</li> <li>• Windows® Installer 3.5 or later</li> </ul>

## Medium PC Hardware Configuration

Following table lists the PC configuration for KS612K002 - Up to 5 sites FHO and KS612K003 - Up to 10 sites FHO:

Description	Specification
CPU	Intel Core Duo 3000 MHz
Memory	4 GB
Hard Disk	1 X 120 GB IDE/SATA (10000 RPM)
Network Card	10/100 Mbps
Display	SVGA 1024 X 768 pixels
Network	10/100 Ethernet Interface Card
Operating System	Windows Server® 2003 SP2 32 bit Windows Server 2008 SP1 32/64 bit
Database	<ul style="list-style-type: none"> <li>MS Structured Query Language (SQL) Server 2005/2008/R2 Standard Edition (if running more than five stations)</li> <li>Client License per user</li> </ul>
Applications	<ul style="list-style-type: none"> <li>IE7, 8, or 9 (in compatibility mode)</li> <li>Adobe Flash Player 9 or later</li> <li>.Net Framework 3.5 or later</li> <li>Java - Current Version</li> <li>Windows Installer 3.5 or later</li> </ul>
Backup	As defined by Client IT Management

## Server Hardware Configuration

### FHO and FMS Server Configuration

Following table lists the PC configuration for the KS612K004 - Up to 20 sites FHO, KS612K015 - Up to 35 sites FHO, and KS612K005 - Up to 50 sites FHO:

Description	Specification
CPU	2.66 GHz High performance server or any other server with equivalent performance
Memory	4 GB
Hard Disk	2 X 146 GB IDE/SATA (10000 RPM)
Network Card	10/100 Mbps
Display	SVGA 1024 X 768 pixels
Network	10/100 Ethernet Interface Card
Operating System*	Windows Server 2003 SP2 32 bit Windows Server SP1 32/64 bit
Database	<ul style="list-style-type: none"> <li>MS SQL Server 2005/2008/R2 Standard Edition</li> <li>Client License per user</li> </ul>
Applications	<ul style="list-style-type: none"> <li>IE7, 8, or 9 (in compatibility mode)</li> <li>Adobe Flash Player - Current Version</li> <li>.Net Framework 3.5 or later</li> <li>Java - Current Version</li> <li>Windows Installer 3.5 or later</li> </ul>
Backup	As defined by client IT management
Virtual Machine	The applications can be installed on a Virtual Machine. Nevertheless, due to Hardware Against Software Policy (HASP) limitations, one copy of the software may be installed on a single server.

*Note: 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.*

### **VMware®**

Virtual Servers may be used. However, the customer's virtual hosting solution must facilitate USB Passthrough. In Gasboy's experience, VMware 5.0 and later does facilitate USB Passthrough, although a Digi® Anywhere USB® may be used as well and is recommended for many scenarios. A number of software solutions are available that allow a HASP to be plugged into a PC somewhere on the network and mapped to FHO. However, Gasboy does not yet recommend a specific vendor, so it is up to the customers to vet the appropriate solution for their environment.

### **HASP Key**

Either in Server or PC configuration, the hardware equipment must include a HASP (dongle) provided for proper operation. A dongle or security device is a small piece of hardware that connects to a computer via the USB connection.

### **Anywhere USB**

Customers may use the Anywhere USB solution, available online. This is a box that has USB ports that can be mapped over your network to your server. It requires a static IP Address. This device can be used when an ESX Host cannot support the USB key or the version of VMware does not facilitate USB Passthrough, or a customer would like to place the HASP key at a remote location for disaster recovery purposes (<https://www.digi.com/products/usb/anywhereusb#overview>).

### **SQL Connections**

The Gasboy PLUS system runs on an SQL Database. Five (5) and fewer stations (controllers) may run on SQL Express. If a customer has more than five stations (controllers), a full version of SQL Server 2005 or 2008/R2 will be needed. Gasboy can connect to a global SQL Database on another machine as long as the path is known, and it has a user ID and password with System Administrator privileges to create the database and read/write privileges to maintain and update the database.

### **Networking**

A static IP address should be assigned for both the FHO server and each SiteOmat/Passport® Authorization Server (PAS). If you have three sites, you will need one for the server and three for the sites if only one controller is present at each site. The technician will need the assigned IP address when installing the equipment.

The Gasboy system communicates over ports 8090, 80, 2443, 2444, 2445, 2446, and 443. Ensure that these are open between the FHO and stations.

Other software requirements are to install the latest versions of Java, .Net, Adobe Reader, and Flash for optimal performance. You may also want a way for the Gasboy Helpdesk to remotely connect to your server to help troubleshoot or support any unexpected future issues. Gasboy recommends TeamViewer 7.

## Related Documents

Document Number	Title	GOLD <sup>SM</sup> Library
MDE-4821	Fleet Head Office System Installation and User's Manual	Gasboy Fleet PLUS System

## Abbreviations and Acronyms

Term	Description
ASC	Authorized Service Contractor
CFN	Cash Flow Network
CPU	Central Processing Unit
FHO	Fleet Head Office
GOLD	Gilbarco Online Documentation
GUI	Graphic User Interface
HASP	Hardware Against Software Policy
HO	Head Office
IDE	Integrated Drive Electronics
IE	Internet Explorer®
IIS	Internet Information Services
ODBC	Open Database Connectivity
OrCU	Orpak™ Controller Unit
PAS	Passport Authorization Server
PC	Personal Computer
SATA	Serial Advance Technology Attachment
SQL	Structured Query Language
USB	Universal Serial Bus
VIU	Vehicle Identifying Unit
VM	Virtual Machine

# 2 – Important Safety Information

**Notes: 1) Save this Important Safety Information section in a readily accessible location.**

**2) Although DEF is non-flammable, diesel is flammable. Therefore, for DEF cabinets that are attached to diesel dispensers, follow all the notes in this section that pertain to flammable fuels.**

This section introduces the hazards and safety precautions associated with installing, inspecting, maintaining or servicing this product. Before performing any task on this product, read this safety information and the applicable sections in this manual, where additional hazards and safety precautions for your task will be found. Fire, explosion, electrical shock or pressure release could occur and cause death or serious injury, if these safe service procedures are not followed.

### Preliminary Precautions

You are working in a potentially dangerous environment of flammable fuels, vapors, and high voltage or pressures. Only trained or authorized individuals knowledgeable in the related procedures should install, inspect, maintain or service this equipment.

### Emergency Total Electrical Shut-Off

The first and most important information you must know is how to stop all fuel flow to the pump/dispenser and island. Locate the switch or circuit breakers that shut off all power to all fueling equipment, dispensing devices, and Submerged Turbine Pumps (STPs).

**⚠ WARNING**

 The EMERGENCY STOP, ALL STOP, and PUMP STOP buttons at the cashier's station WILL NOT shut off electrical power to the pump/dispenser. This means that even if you activate these stops, fuel may continue to flow uncontrolled.

 You must use the TOTAL ELECTRICAL SHUT-OFF in the case of an emergency and not the console's ALL STOP and PUMP STOP or similar keys.

### Total Electrical Shut-Off Before Access

Any procedure that requires access to electrical components or the electronics of the dispenser requires total electrical shut off of that unit. Understand the function and location of this switch or circuit breaker before inspecting, installing, maintaining, or servicing Gasboy equipment.

### Evacuating, Barricading and Shutting Off

Any procedure that requires access to the pump/dispenser or STPs requires the following actions:



- An evacuation of all unauthorized persons and vehicles from the work area
- Use of safety tape, cones or barricades at the affected unit(s)
- A total electrical shut-off of the affected unit(s)

### Read the Manual

Read, understand and follow this manual and any other labels or related materials supplied with this equipment. If you do not understand a procedure, call a Gasboy Authorized Service Contractor or call the Gasboy Support Center at 1-800-444-5529. It is imperative to your safety and the safety of others to understand the procedures before beginning work.

### Follow the Regulations

Applicable information is available in National Fire Protection Association (NFPA) 30A; *Code for Motor Fuel Dispensing Facilities and Repair Garages*, NFPA 70; *National Electrical Code (NEC)*, Occupational Safety and Health Administration (OSHA) regulations and federal, state, and local codes. All these regulations must be followed. Failure to install, inspect, maintain or service this equipment in accordance with these codes, regulations and standards may lead to legal citations with penalties or affect the safe use and operation of the equipment.

### Replacement Parts

Use only genuine Gasboy replacement parts and retrofit kits on your pump/dispenser. Using parts other than genuine Gasboy replacement parts could create a safety hazard and violate local regulations.

### Safety Symbols and Warning Words

This section provides important information about warning symbols and boxes.

#### Alert Symbol

 This safety alert symbol is used in this manual and on warning labels to alert you to a precaution which must be followed to prevent potential personal safety hazards. Obey safety directives that follow this symbol to avoid possible injury or death.

#### Signal Words

These signal words used in this manual and on warning labels tell you the seriousness of particular safety hazards. The precautions below must be followed to prevent death, injury or damage to the equipment:

 **DANGER:** Alerts you to a hazard or unsafe practice which will result in death or serious injury.

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

 **CAUTION with Alert symbol:** Designates a hazard or unsafe practice which may result in minor injury.

**CAUTION without Alert symbol:** Designates a hazard or unsafe practice which may result in property or equipment damage.

### Working With Fuels and Electrical Energy Prevent Explosions and Fires

Fuels and their vapors will explode or burn, if ignited. Spilled or leaking fuels cause vapors. Even filling customer tanks will cause potentially dangerous vapors in the vicinity of the dispenser or island.

DEF is non-flammable. Therefore, explosion and fire safety warnings do not apply to DEF fluid lines.

## Important Safety Information

### No Open Fire



Open flames from matches, lighters, welding torches or other sources can ignite fuels and their vapors.

### No Sparks - No Smoking



Sparks from starting vehicles, starting or using power tools, burning cigarettes, cigars or pipes can also ignite fuels and their vapors. Static electricity, including an electrostatic charge on your body, can cause a spark sufficient to ignite fuel vapors. Every time you get out of a vehicle, touch the metal of your vehicle, to discharge any electrostatic charge before you approach the dispenser island.

### Working Alone

It is highly recommended that someone who is capable of rendering first aid be present during servicing. Familiarize yourself with Cardiopulmonary Resuscitation (CPR) methods, if you work with or around high voltages. This information is available from the American Red Cross. Always advise the station personnel about where you will be working, and caution them not to activate power while you are working on the equipment. Use the OSHA Lockout/Tagout procedures. If you are not familiar with this requirement, refer to this information in the service manual and OSHA documentation.

### Working With Electricity Safely

Ensure that you use safe and established practices in working with electrical devices. Poorly wired devices may cause a fire, explosion or electrical shock. Ensure that grounding connections are properly made. Take care that sealing devices and compounds are in place. Ensure that you do not pinch wires when replacing covers. Follow OSHA Lockout/Tagout requirements. Station employees and service contractors need to understand and comply with this program completely to ensure safety while the equipment is down.

### Hazardous Materials

Some materials present inside electronic enclosures may present a health hazard if not handled correctly. Ensure that you clean hands after handling equipment. Do not place any equipment in the mouth.

#### WARNING

The pump/dispenser contains a chemical known to the State of California to cause cancer.

#### WARNING

The pump/dispenser contains a chemical known to the State of California to cause birth defects or other reproductive harm.

## In an Emergency

### Inform Emergency Personnel

Compile the following information and inform emergency personnel:

- Location of accident (for example, address, front/back of building, and so on)
- Nature of accident (for example, possible heart attack, run over by car, burns, and so on)
- Age of victim (for example, baby, teenager, middle-age, elderly)
- Whether or not victim has received first aid (for example, stopped bleeding by pressure, and so on)
- Whether or not a victim has vomited (for example, if swallowed or inhaled something, and so on)

#### WARNING



Gasoline/DEF ingested may cause unconsciousness and burns to internal organs. Do not induce vomiting. Keep airway open. Oxygen may be needed at scene. Seek medical advice immediately.

#### WARNING

DEF generates ammonia gas at higher temperatures. When opening enclosed panels, allow the unit to air out to avoid breathing vapors. If respiratory difficulties develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention.

#### WARNING



Gasoline inhaled may cause unconsciousness and burns to lips, mouth and lungs. Keep airway open. Seek medical advice immediately.

#### WARNING



Gasoline/DEF spilled in eyes may cause burns to eye tissue. Irrigate eyes with water for approximately 15 minutes. Seek medical advice immediately.

#### WARNING



Gasoline/DEF spilled on skin may cause burns. Wash area thoroughly with clear water. Seek medical advice immediately.

#### WARNING

DEF is mildly corrosive. Avoid contact with eyes, skin, and clothing. Ensure that eyewash stations and safety showers are close to the work location. Seek medical advice/recommended treatment if DEF spills into eyes.

**IMPORTANT:** Oxygen may be needed at scene if gasoline has been ingested or inhaled. Seek medical advice immediately.

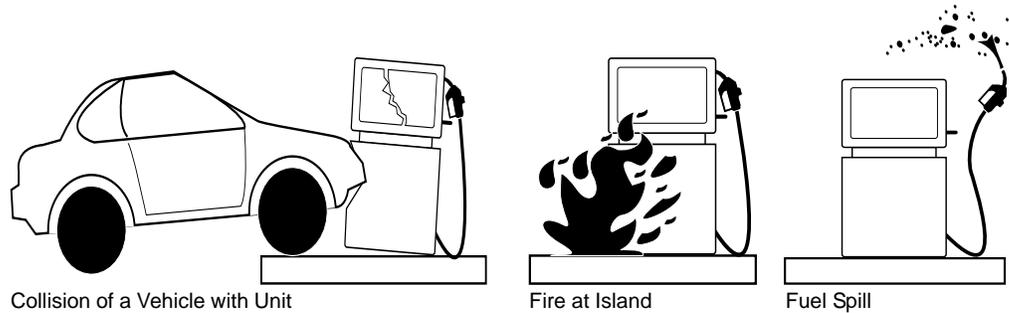
### Lockout/Tagout

Lockout/Tagout covers servicing and maintenance of machines and equipment in which the unexpected energization or start-up of the machine(s) or equipment or release of stored energy could cause injury to employees or personnel. Lockout/Tagout applies to all mechanical, hydraulic, chemical, or other energy, but does not cover electrical hazards. Subpart S of 29 CFR Part 1910 - Electrical Hazards, 29 CFR Part 1910.333 contains specific Lockout/Tagout provision for electrical hazards.

## Hazards and Actions

 <b>WARNING</b>	
	Spilled fuels, accidents involving pumps/dispensers, or uncontrolled fuel flow create a serious hazard.
	Fire or explosion may result, causing serious injury or death.
	Follow established emergency procedures.
	DEF is non-flammable. However it can create a slip hazard. Clean up spills promptly.

The following actions are recommended regarding these hazards:



- Do not go near a fuel spill or allow anyone else in the area.
- Use station EMERGENCY CUTOFF immediately. Turn off all system circuit breakers to the island(s).
- Do not use console E-STOP, ALL STOP, and PUMP STOP to shut off power. These keys do not remove AC power and do not always stop product flow.
- Take precautions to avoid igniting fuel. Do not allow starting of vehicles in the area. Do not allow open flames, smoking or power tools in the area.
- Do not expose yourself to hazardous conditions such as fire, spilled fuel or exposed wiring.
- Call emergency numbers.

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## 3 – Installing FHO Software

### Server Database

Companies managing more than five stations are required to install the MS SQL Server 2005 or 2008/2008R2 Standard Edition. After SQL Server installation and before the FHO installation, restart the PC/Server.

### Medium PC Database

MS SQL Express database solution is provided with the installation pack, in the Platform Support Library described below for companies managing up to five stations.

Windows Installer is required for FHO installation which includes SQL Express.

Verify that Windows Installer 4.5 or later is installed on the PC/server or download the software from

<http://www.microsoft.com/downloads/details.aspx?FamilyID=5a58b56f-60b6-4412-95b9-54d056d6f9f4&displaylang=en>

### Before You Begin

Before beginning the installation, proceed as follows:

Time Before Install	Task	Description and Reference
6 Weeks	FHO software and site hardware has been ordered from Gasboy/Gilbarco® Distributor.	Part numbers may be found in "Fleet Head Office (FHO)/Server/PC Hardware and Software Requirements" on page 1-1 with the Hardware requirements.
2-4 Weeks	Contact third-party provider or back office vendor to find out what they need in their export string to process transactions.	You will need a sample of what you are importing today. Understand what the positions in the string represent and where your fillers are positioned.
2-4 Weeks	Verify server availability, confirm that it meets minimum requirements.	Refer to "Fleet Head Office (FHO)/Server/PC Hardware and Software Requirements" on page 1-1
2-4 Weeks	<ul style="list-style-type: none"> <li>Is it a virtual server?</li> <li>Do you need a device to connect the HASP?</li> </ul>	Virtual Machine's (VM)'s may require a Digi Anywhere USB device to map the HASP to a server over the network. Whatever solution a customer may use, USB Passthrough must be achieved to the HASP.
2-4 Weeks	How many sites? Do you need full SQL or SQL Express?	If you already have SQL 2005 or 2008, this installation is compatible. If you have less than five sites, SQL Express may be used in the package provided from Gasboy. If you have more than five sites, SQL 2005 or 2008 (not Express) is required. Your database administrator should be able to provide a system administrator credential for database creation at the time of FHO installation.

*Note: An invalid card file may only be found on the day of installation and may result in having to roll back the Passport System if cards cannot be accepted.*

Time Before Install	Task	Description and Reference
2-4 Weeks	Do you have another solution to access your server other than Remote Desktop?	The software cannot be installed via remote desktop and access by remote desktop may interfere with the HASP's ability to pass the license keys. Therefore, solutions such as VMware viewer, TeamViewer, or VNC should be employed.
2-4 Weeks	Ensure Passport Requirements are met for PAS installations.	Passport version must be 8.02 or later and have the Enhanced Loyalty Feature Bundle activated.
2-4 Weeks	Network Connectivity between the site and FHO?	Network connectivity between the PAS and FHO must be present on the day of install.
2-4 Weeks	Have static IP addresses have been assigned for the FHO and site equipment?	Each PAS or SiteOmat must have an assigned static IP address.
2-4 Weeks	Do you have all the PIN codes for your customers?	PIN codes can be entered from a list or can be generated by Gasboy if you know your card numbers.
2-4 Weeks	Do you have an electronic card file?	If you have more than 150 devices, you may find it easiest to import your card file rather than manually entering it.
1-2 Weeks	Is your card file complete?	Have you compiled the card/driver/vehicle/limit codes/ product codes/authorization codes you will need to load into the FHO?
1-2 Weeks	Is the FHO Installed?	Has the software been obtained from the Gasboy FTP server and installed on the FHO server?
1-2 Weeks	Have you created the template for your import file?	Have you entered few devices through the Graphic User Interface (GUI) that represent each of your group rules and price lists?
1-2 Weeks	Is Gilbarco ASC is scheduled to do the site install?	Do you have an installation date?
1-2 Weeks	Is IT staff scheduled to be available on the day/time of install?	You will need someone who can troubleshoot any network and SQL issues.
1-2 Weeks	Is fleet staff is scheduled to be available to conduct polling/period/ historical reporting before removing the old system?	The person managing your current system should be present on the day of install to gather all transactions before the old system is removed (if a retrofit).
1-2 Weeks	Review operation documentation.	<i>MDE-4821 Fleet Head Office System Installation and User's Manual</i> <a href="http://www.gasboy.com/us/content/technical-documentation">http://www.gasboy.com/us/content/technical-documentation</a> ).
Day of install	IT staff representative is available.	Prepared to connect to the site and troubleshoot as needed.
Day of install	Information is provided to the installing technician at the site.	Static IP address, Subnet, Gateway, Site Number, and Site Name.
Day of install	All items on day of install checklist are completed.	"Glossary" on <a href="#">Glossary-1</a> .
Day of install	Polling site/running period and historical reporting that may be needed.	The person managing your current system should be present on the day of install to gather all transactions before the old system is removed (if a retrofit).

*Note: An invalid card file may only be found on the day of installation and may result in having to roll back the Passport System if cards cannot be accepted.*

# SQL Express Installation

To install the FHO software using SQL Express installation, proceed as follows:

*Note: The package includes the FHO application, FHO database, and MS SQL Server Express.*

The installation file (HeadOffice\_yy\_mm\_dd\_X\_X\_X\_XX\_XXX.exe - with the correct date and version number in the file name) and the Platform Support Library are both provided on Gasboy's FTP site. Download the entire FHO Software folder to the server. A postcard containing the URL, username and password is included in the box with your HASP key.

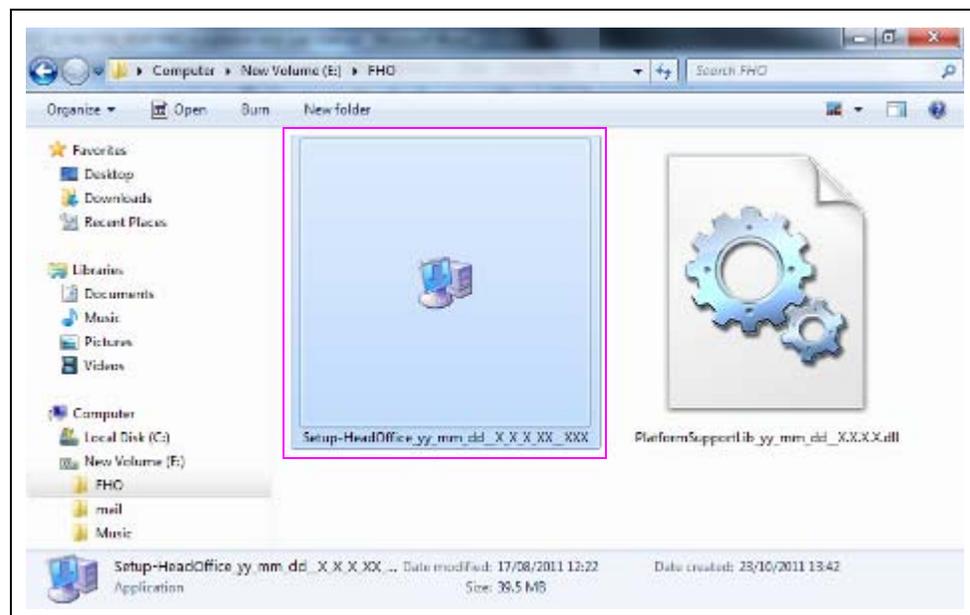
*Notes: 1) If you are using a Digi Anywhere USB Device, it must be set up and configured with your FHO server before beginning the FHO software installation. Do **NOT** insert the HASP key.*

*2) Do not attempt to install this software via remote desktop. A physical connection or viewer such as VNC, VMware Viewer or TeamViewer must be used. No Microsoft® Remote Desktop Connection can be open to the server.*

- 1 Start the installation by double-clicking the local copy of the Setup-Head Office executable installation file that you downloaded from the FTP site (see [Figure 3-1](#)). Welcome screen appears (see [Figure 3-2](#) on [page 3-4](#)).

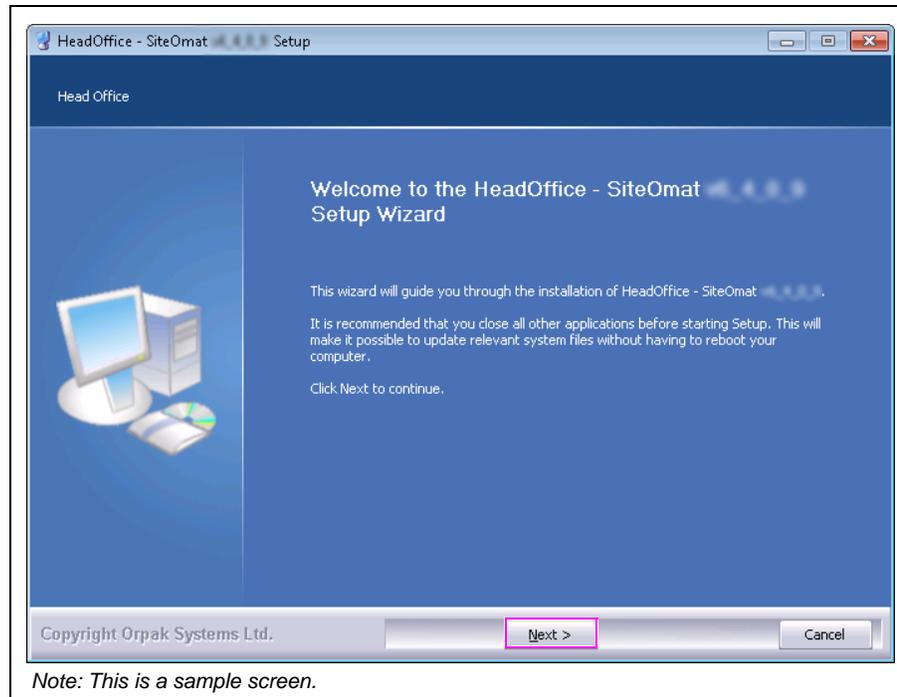
*Note: Setup.exe and Platform Support library.exe files must be run from the root directory (C:/Drive).*

**Figure 3-1: Installation File Icon**



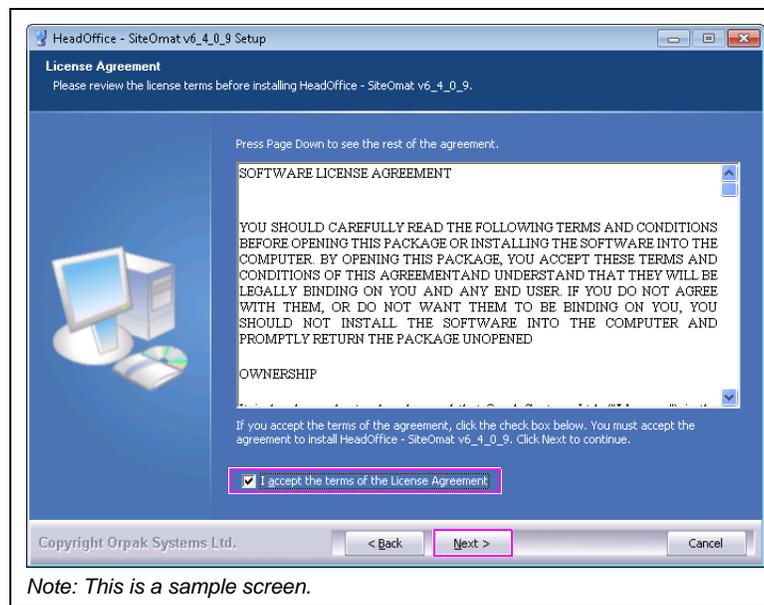
The Following screens are examples. Your version numbers may differ. The following Welcome Screen appears (see [Figure 3-2](#)).

**Figure 3-2: Head Office Setup Wizard Welcome Screen**



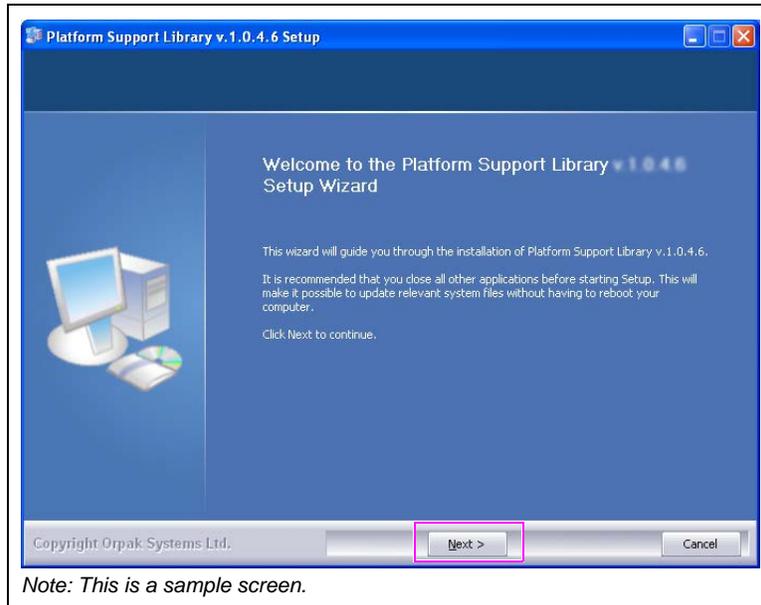
- 2 Click **Next** (see [Figure 3-2](#)). The License Agreement screen appears (see [Figure 3-3](#)).

**Figure 3-3: License Agreement Screen**



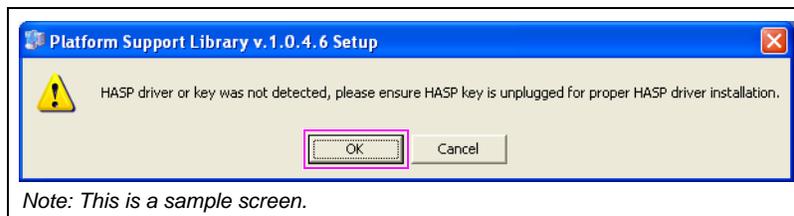
- 3 Select the I accept the terms of the License Agreement check box and click **Next** (see [Figure 3-3](#) on [page 3-4](#)). The Platform Support Library Welcome screen appears (see [Figure 3-4](#)).

**Figure 3-4: Platform Support Library Wizard Welcome Screen**



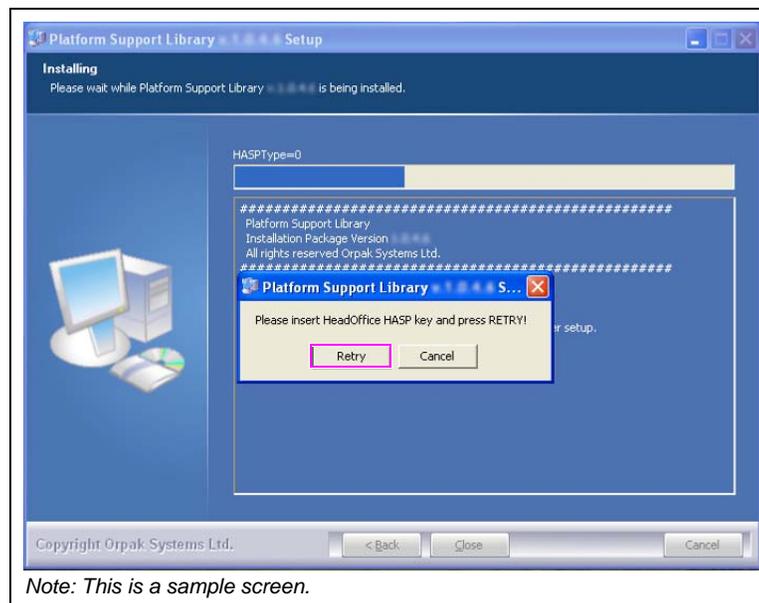
- 4 Click **Next**. The HASP driver installation message appears (see [Figure 3-5](#)).

**Figure 3-5: HASP Driver Installation Message**



- 5 Ensure that the provided HASP key is **NOT** plugged in, as required for installing the device driver and then click **OK** (see [Figure 3-5](#) on [page 3-5](#)). The installation process begins. The HASP insertion message appears (see [Figure 3-6](#)).

**Figure 3-6: HASP Insertion Message**



- 6 Plug the provided HASP into a free USB port and then click **Retry**. If you are using a Digi Anywhere USB device, it must be plugged into the mapped port (see [Figure 3-6](#)).

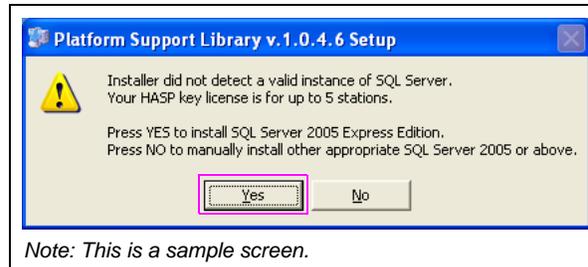
**Figure 3-7: SQL Server Check Message**



The SQL Server check message appears, the Support Library checks for the presence of the software on the computer (see [Figure 3-7](#)).

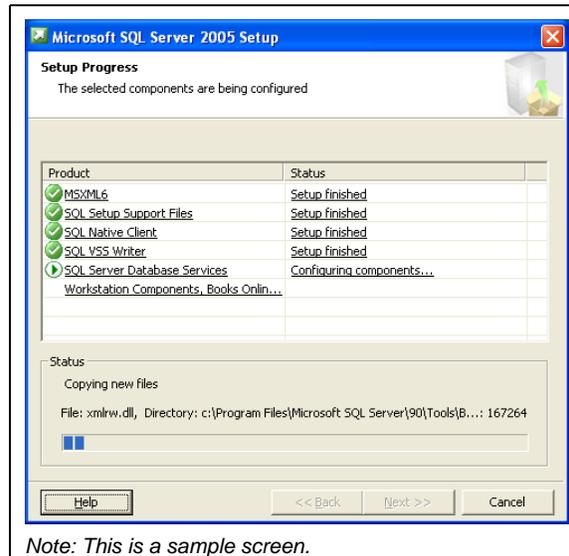
- 7 Click **Yes**, if the FHO database is to be installed on the computer using SQL Express. The screen shown in [Figure 3-8](#) appears. Click **No**, if you want to install the databases using an already purchased version of SQL. If you select **No**, go to step 14 on [page 3-10](#).

**Figure 3-8: SQL Server Express Installation Message**



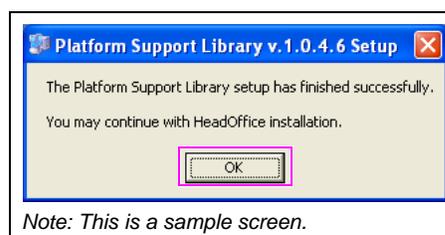
- 8 Click **Yes** to proceed with SQL Server 2005 Express Edition installation.

**Figure 3-9: MS SQL Server Setup Progress Screen**



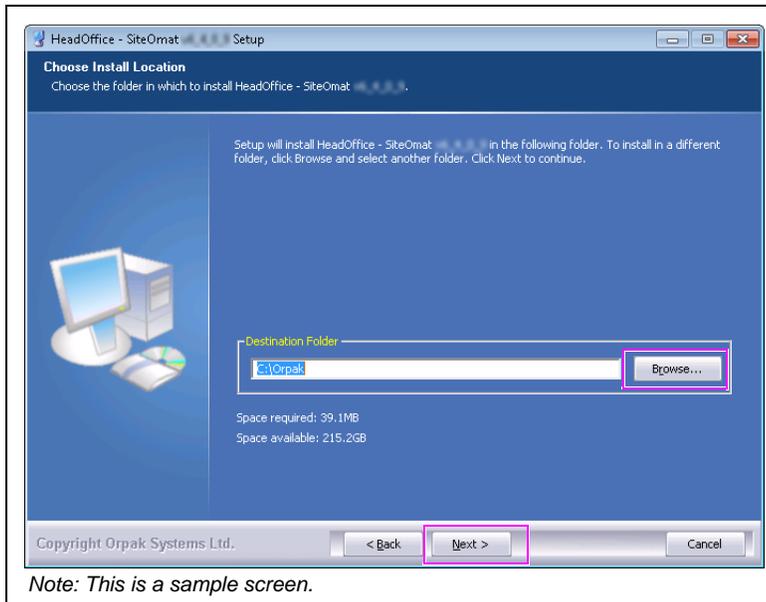
- 9 Wait until the process completes (see [Figure 3-9](#)). After the installation is complete, a successful installation notification message appears (see [Figure 3-10](#)).
- 10 Click **OK** (see [Figure 3-10](#)). The choose install location screen appears (see [Figure 3-11](#) on [page 3-8](#)).

**Figure 3-10: Platform Support Library Setup Completed Successfully Message**



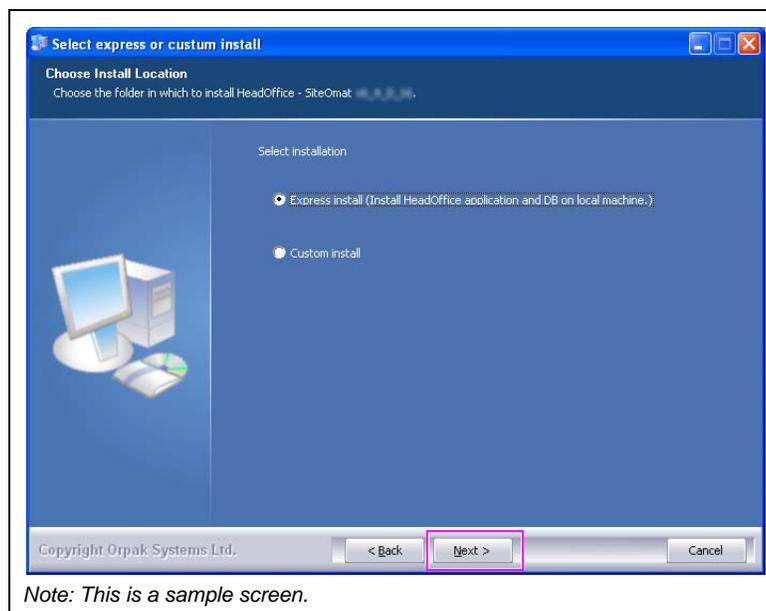
- 11 Click **Next** to install the files in the default folder (C:\Orpak), or click **Browse** to select another destination drive and then click **Next** (see [Figure 3-11](#)). Select installation mode screen appears (see [Figure 3-12](#)).

**Figure 3-11: Choose Install Location Screen**



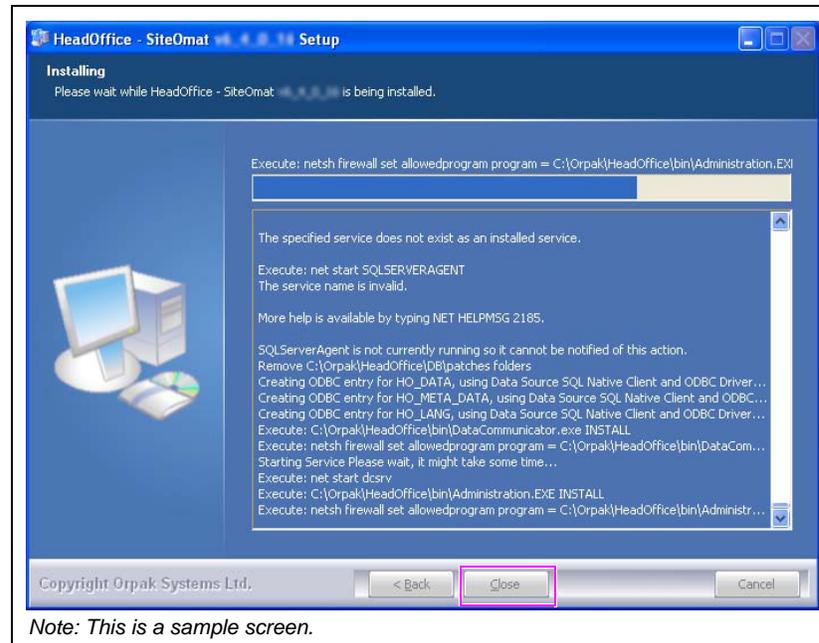
- 12 Select the **Express install** radio button and click **Next** (see [Figure 3-12](#)).

**Figure 3-12: Select Installation Mode Screen - Express Installation**



The installation process is fully automated. The Installing screen displays process messages and possible error messages see [Figure 3-13](#).

**Figure 3-13: Installing Screen - Express Installation**

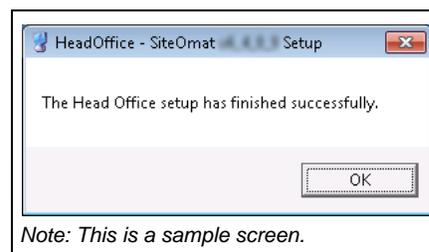


*Note: This is a sample screen.*

After the installation is complete, a successful installation notification message appears. (see [Figure 3-14](#)).

- 13 Click **OK** (see [Figure 3-14](#)) and then click **Close** to exit the wizard.

**Figure 3-14: Setup Complete Message**



*Note: This is a sample screen.*

*Note: Restart the system a few minutes after completing the installation process.*

For general configuration of FHO, refer to [“Connecting to Site”](#) on [page 7-1](#).

Installing the FHO software using SQL Express is now complete.

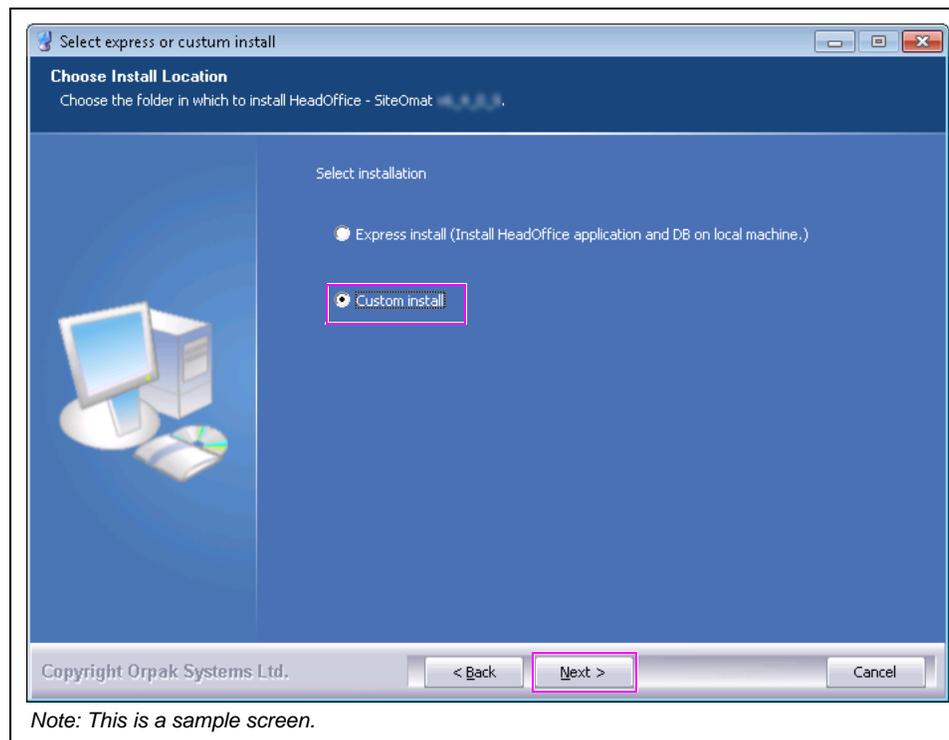
## Installing FHO Using Full SQL Versions 2005 or 2008

To install the FHO software using full SQL versions 2005 or 2008 (see [Figure 3-15](#)), proceed as follows. Full version SQL users begin here after selecting **No** at step 7 on [page 3-7](#).

*Notes:* 1) Even with a full SQL install, the platform support library is still needed to be in the same directory as the Setup.exe to set up the HASP and installer. All other software requirements such as .NET, Java, and Flash remain the same as well.  
2) Before installing HO, verify that MS SQL Server 2005 or 2008/R2 Standard Edition has been previously installed.

- 14** Select **Custom install** and click **Next**. The installation mode screen appears (see [Figure 3-16](#) on [page 3-11](#)).

**Figure 3-15: Select Installation Mode Screen - Custom Install**



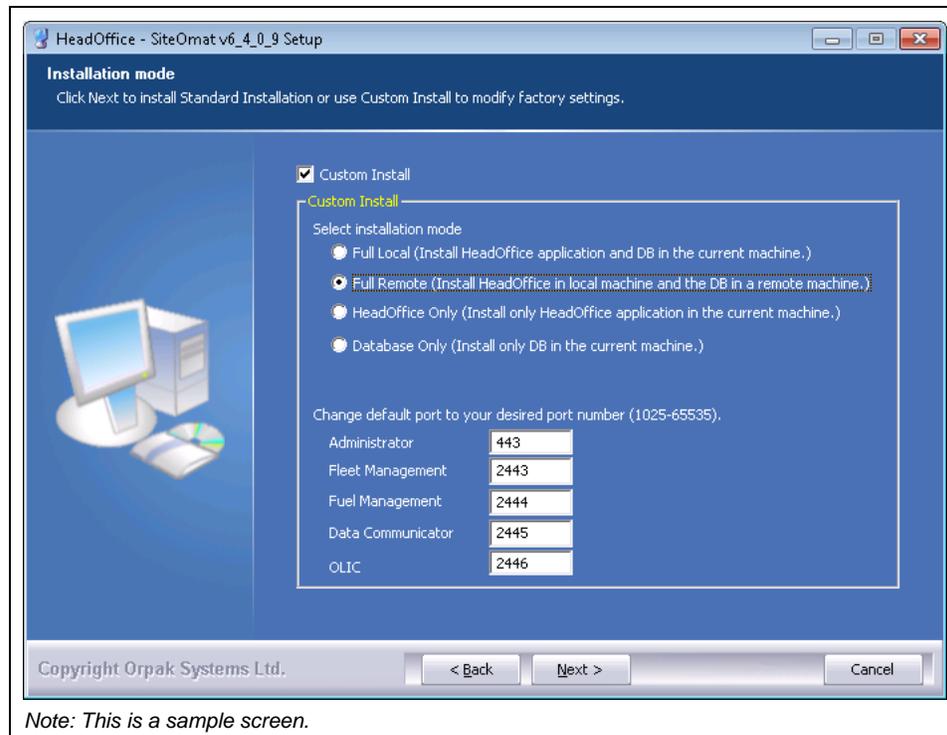
- 15** To activate the fields on the screen, select the **Custom Install** check box.

This screen allows selection of the installation mode and modification of port numbers assigned to the Head Office (HO) services.

*Note:* Internet Information Services (IIS) should not be running on the server. Also, ensure that the indicated ports in [Figure 3-16](#) on [page 3-11](#) are open to facilitate data transfer.

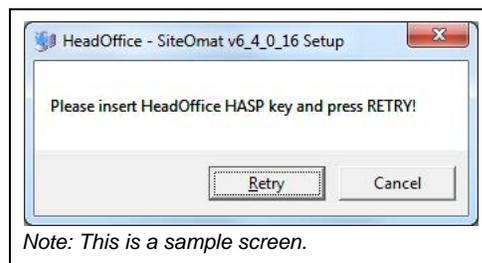
- 16 Select the type of installation, **Full Local** installation is selected by default. Click **Next** to continue. The HASP insertion message appears (see [Figure 3-17](#)).

**Figure 3-16: Installation Mode Screen**



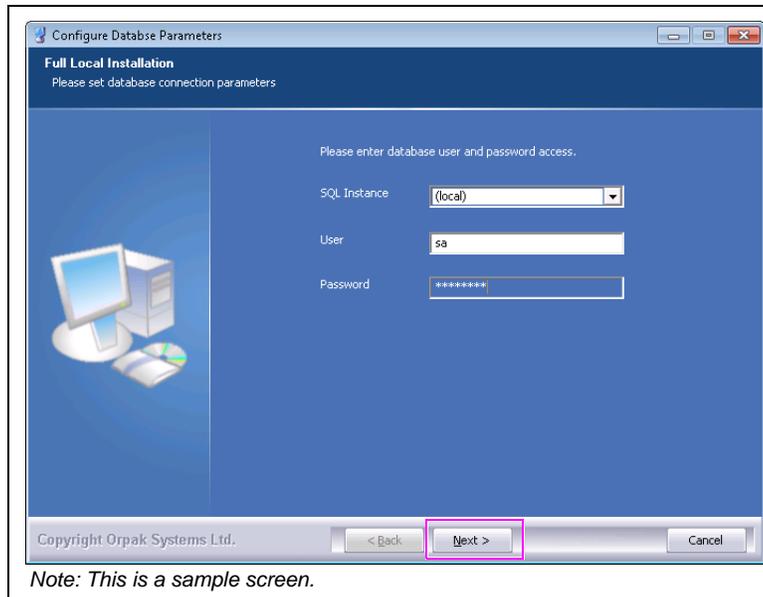
- 17 Plug the provided HASP into a free USB port and then click **Retry**. The Configure Database Parameters screen appears (see [Figure 3-18](#) on [page 3-12](#)).

**Figure 3-17: HASP Insertion Message**



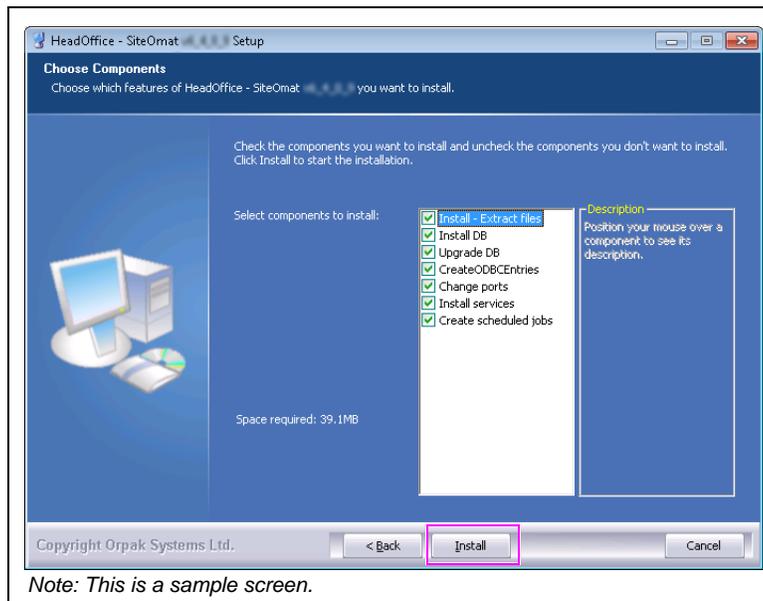
- 18 Select the SQL Instance, enter User, Password, then click **Next**. The Choose Components screen appears (see [Figure 3-19](#)) allowing selection of the components to be installed.

**Figure 3-18: Configure Database Parameters Screen**



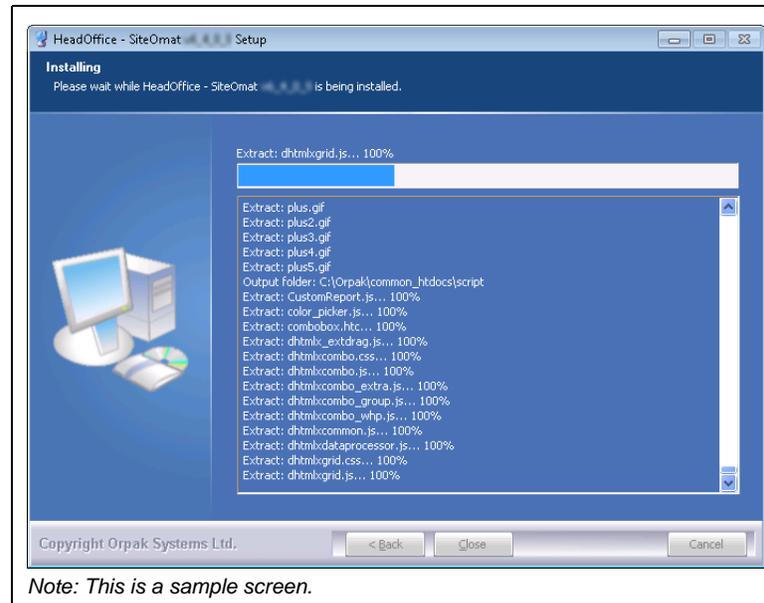
- 19 Unless otherwise specified leave as it is and click **Install** (see [Figure 3-19](#)).

**Figure 3-19: Choose Components Screen**



The installation process is fully automated (see [Figure 3-20](#)). The Installing screen displays process messages and possible error messages.

**Figure 3-20: Installing Screen - Custom Installation**

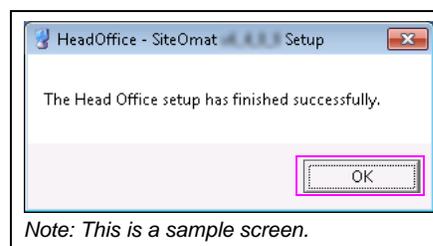


The Head Office is installed as a Windows Service; therefore it performs specific functions, without requiring user intervention.

After the installation is complete, a successful installation notification message appears (see [Figure 3-21](#)).

**20** Click **OK** and then click **Close** to exit the Wizard (see [Figure 3-21](#)).

**Figure 3-21: Setup Complete Message**



*Note: Restart the system a few minutes after completing the installation process.*

For general configuration of FHO, refer to “[Connecting to Site](#)” on [page 7-1](#).

*This page is intentionally left blank.*

## 4 – Converting Local Account Card File

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When customers are using cards, manual entry or fleetkeys (not available for PAS), they must assemble their local or proprietary list of cards, also known as a card file. Restrictions and verifications are also part of the card file.

### Card/User Data

Customers are responsible for assembling their driver and vehicle information, known as a card file. A card file should include the following:

- Driver/vehicle name.
- Driver/vehicle number.
- Any restrictions (limits and authorizations) to be added to the driver/vehicle (for example, diesel fuel only or a \$50 limit per transaction).
- Price lists (i.e., special pricing for specific customers).
- Whether there should be prompting for an odometer reading.
- Whether a reasonability check (maximum delta between fuelings) should be performed.
- Whether PIN numbers are used and if used and which records they are associated with.
- Whether to prompt for a vehicle number.
- Card number.

*Notes: 1) On a Magnetic Card, the PLUS System will read up to 26 digits or up to the third field separator in the card number (whichever comes first).*

*2) While other systems may recognize that a position in the card number is a check digit to determine fuel type or another rule, this system views it only as a card number, and restrictions are set in the FHO application.*

# Card File Conversion Essentials

## Standard Gasboy Club Card Format

Following are the card file conversion essentials for the standard Gasboy Club Card format:

The standard Gasboy Club Card format is -SSSSSS-AAAAAAAAAAAAAAAAAAAAA-EEEE LL AU PP C. Following table lists the field code and description:

Field Code	Description
- (hyphen)	Field Separator
S	SYSTEM ID
A	CARD/ACCT/VEHICLE UPTO 19 DIGITS - This can be broken up into many combinations of card, acct, and vehicle. Suggested is CCCCCCAAAAAAAAAAVVVV, where as C = CARD, A = ACCT, and V = VEHICLE
E	EXPIRATION DATE
L	LIMIT CODE
AU	AUTHORIZATION
P	PRICE CODE
C	CHECK DIGIT*

\*Refer to "Prompt Information".

## CFN Commands

Following table lists CFN commands:

CFN Command	Card Field	FHO Element	Import Field	Export Field
P LI	Limit code	Limit rule 1 of X Group rule	Group rule	N/A
P PRI	Price code	Price list	Price list	N/A
P AU	Auth code	Fuel rule 1 of X Group rule	Group rule	N/A
PR TR	CARD/ACCT/ VEHICLE	Device Format tab Card # field	String	Card # This can be exported multiple times with a mask to create: • CARD field • ACCT field. • VEH field.
N/A	Exp date	Expiration date	EXP?	N/A

## Prompt Information

Following table lists the prompt information:

Check Digit	Description
0	None
1	Odometer - check box on
2	Vehicle # - Proxy setting - In the validation screen, the option to prompt for a vehicle information with or without validating against the vehicle number value in the database is available

Check Digit	Description
3	Vehicle (PROXY) + Odometer
4	PIN - check box on
5	PIN + Odometer
6	PIN + Vehicle (PROXY)
7	All (PROXY)

### Examples

Figure 4-1 is an example of converting the local account card file.

### Standard Recommended Gasboy Card Layout from Previous Systems

Figure 4-1: Single Card Layout

#### Single Card Layout

Third Field Separator

The card layout for a single card is `-sssss- ccccccaaaaaaa -ymmllaappr`, where:

- “-” is a field separator. In case of a dual card, the first two characters would be field separators.
- *Note:* Field separators are used on Mag Cards only.
- “sssss” is a two- to six-digit system ID number.
- “-” is a field separator.
- “cccccccccccccccc” contains 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 split into sub-fields (maximum of three fields on Site Controller I), the total of which cannot exceed 19 digits. For example, if you use 19 digits for a card number, you cannot define any other fields. Usually this 19-digit area is split as follows:
  - The first field is a four- to six-digit card number.
  - Fields after the first field are broken down into vehicle, employee, account number, department, or whatever you specified when you ordered for the system.

“ymmllaappr” implies any optional information.

- “-” is a field separator.
- “ymm” is a four-digit expiration date with **yy** being the two-digit year and **mm** being the two-digit month. This field could also use only two digits (**yy**).
- “ll” is a 0, or a one or two-digit limitation code.
- “aa” is a 0, or a one or two-digit authorization code.
- “pp” is a 0, or a one or two-digit price level.
- “rr” is a 0, or a one or two-digit restriction code. Depending on its value, the dollar amount, odometer, vehicle number, PIN, or a combination of these must be entered by the cardholder.

Now Setup in the FHO software

No longer read from card string

**Field Codes**

Following table lists the field code:

Field Code	Description
S	System ID - four to six digit number that represents the customer's system ID.
A	Card/Acct/Vehicle - up to 19 digits. This can be broken up into many combinations of card, account, and vehicle. Suggested is CCCCCCAAAAAAAAAAVVVV, where C = Card, A = Account, and V = Vehicle.
E	Expiration Date
L	Limit Code
AU	Authorization
P	Price Code
C	Check Digit* or Restriction Code

\*Refer to "Prompt Information" on page 4-2.

**Figure 4-2: CFN MAG Card Layout**

CFN MAG CARD LAYOUT															
Single Card															
FIELD NAME	FS	SYSTEM ID	FS	CARD	DRIVER	VEH	Not Used	Not Used	FS	EXP Date	Limit Code	Auth. Code	Price Code	Rest. Code	
# Digits/Field	1	9999	1	4	4	4	0	0	1	4	1	1	1	1	
Single Card	-	9999	-	xxxx	xxxx	xxxx			-	YYMM	x	x	x	x	
Dual Card															
FIELD NAME	FS	SYSTEM ID	FS	CARD	DRIVER	VEH	Not Used	Not Used	FS	EXP Date	Limit Code	Auth. Code	Price Code	Rest. Code	
# Digits/Field	2	9999	1	4	4	4	0	0	1	4	1	1	1	1	
Dual Card #1/Driver	-	9999	--	xxxx	xxxx	----			-	YYMM	-	-	-	-	
Dual Card #2/Vehicle	-	9999	--	----	----	xxxx			-	----	x	x	x	x	

- Notes:
- 1) The check digit on dual cards can apply more than one restriction.
  - 2) Certain configurations for dual card layouts will not work with the PLUS system because each card will not have a unique number before the third field separator. If configured according to the Gasboy recommendation, dual cards should work without issue.
  - 3) Parameters such as fuel restrictions, limits, expiration date, and price levels can still be configured and applied to a card, but this information is not present on the card. It is linked to the card number in the setup of the device. Dual card setups also work, just in a different way.
  - 4) Each driver and/or vehicle card number MUST be unique before the third field separator and/or the 26<sup>th</sup> digit of the card number for use in the PLUS system. If numbers are not unique before the first one of those to occur in the number, it will be necessary to re-encode cards.

# Assembling Your Card Data

You should be able to get your card format and much of your needed data from you card provider and/or from your files and existing CFN3 System.

Figure 4-3, Figure 4-4, Figure 4-5 (on page 4-6), and Figure 4-6 (on page 4-7) show how your existing card data fits into the import format of the PLUS system, as well as (for certain fields) where to get that information from the CFN3 System.

**Figure 4-3: Card Data**

	A	B	C	D	E	F	G	H	I
	System ID	Current CARD#	ACCOUNT#	VEH#	ExpDat	GAL LIMI T	CARD AUT	PRICE LEVE	CHECK DIGI
2	5039	103679	257911001	4439	9912	9	1	0	2
3	5039	0439	257911461	0324	9912	9	1	0	2
4	5039	0977	257911461	0189	9912	9	1	0	2
5	5039	0978	257911461	0190	9912	9	1	0	2
6	5039	0979	257911461	0191	9912	9	1	0	2
7	5039	0980	257911461	0192	9912	9	1	0	2
8	5039	1180	257911461	0560	9912	9	1	0	2
9	5039	1354	257911461	0179	9912	9	1	0	2
10	5039	0440	257911461	1461	9912	9	3	0	2
11	5039	0171	257911431	0446	9912	9	1	0	0
12	5039	0599	257911401	4099	9912	9	3	0	0
13	5039	0323	257912051	0123	9912	9	1	0	2
14	5039	1015	257911401	0253	9912	9	1	0	2
15	5039	0957	257911401	0693	9912	9	2	0	2
16	5039	0206	257911431	0670	9912	9	1	0	2
17	5039	0366	257911501	0310	9912	9	3	0	0

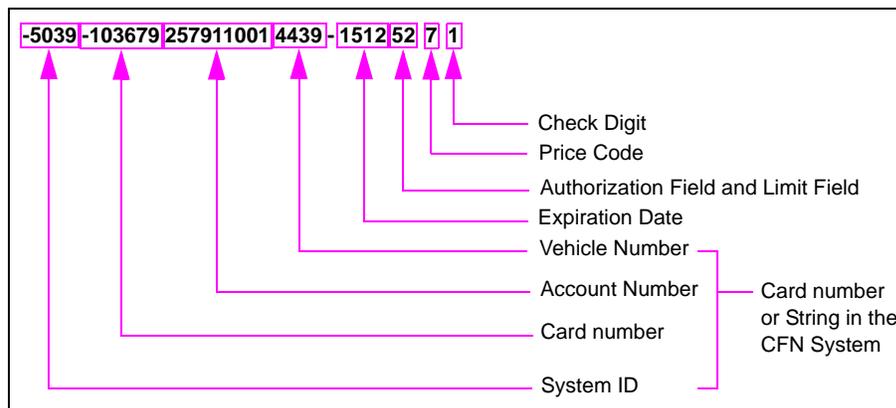
PLUS System Import File											
	A	B	C	D	E	F	G	H	I	J	
	// Action	Record_type	Name	Status	Type	Hardware	Auth-type	Employee_type	Vehicle_no	String	
2	R	Mean	Gasboy Car	4439	2	2	1	14	1	4439	5039136792579001114439
3											
4											

These fields comprise the string field for import

## New Card Number

Card Number or String in the CFN System is the new card number (see Figure 4-4) in the PLUS System. It corresponds to your System ID, Card Number, Account Number, and Vehicle Number.

**Figure 4-4: Assembling Card Number**



### Expiration Date

The expiration date is in YYMM format, where YY refers to expiration year, and MM refers to expiration month. The expiration date cannot be imported, but it can be manually entered for each device without issues (see Figure 4-4 on page 4-5).

### Limit and Authorization Fields

The limit and authorization fields are combined to make up the group rules, later applied to the card in your setup and import file (see Figure 4-4 on page 4-5).

- In the CFN System, run a P LI command, which gives the type limits.
- In the CFN System, run a P AU command, which gives the fuel amount authorization types.

Figure 4-5: CFN3 Commands

Print Authorization Command in CFN3

Print Limit Command in CFN3, the old CFN Limits and Authorization amounts combine to make this group rule.

H	I	J	K	L	M	N
Employee_tyt	Vehicle_no	String	Fleet_name	Department_name	Rule_name	Driver_id_tyt
1	00000000012541		5.03914E+17 Gasboy	Default	25_dol_Gas_Only	0

### Price Code

The Price Code list the price lists you are using. Fixed pricing may be used in the FHO. If you use a fixed price on a device, you may transfer that to your PAS device. You may get your currently loaded prices by running a PR PRI or print price command on the CFN unit.

Following command prints the price lists from the CFN3 System:

```
[P:]* PR PRI
Pc PI Price
1 0 3.779 1 3.779 2 3.779 3 2.719
11 0.000
2 0 4.179 1 4.129 2 4.179 3 2.000
3 0 3.879 1 3.839 2 3.879 3 2.779
4 0 0.990 1 0.990 2 0.990
5 0 4.379 1 4.379 2 4.379
7 0 3.859 1 3.689 2 3.719 3 3.759
4 3.559 5 3.859
[P:]*
```

Fixed prices may be specified through a price list.

**Figure 4-6: Fixed Price List**

	M	N	O	P	Q	R
1	Rule_name	Driver_id_type	Price_list_name	Model_name	Pump_name	Year
2	20 Gal Gas Only	0	Gasboy_Price			1900

↑  
Fixed Price List

### Check Digit

This field (see [Figure 4-4](#) on [page 4-5](#)) prompts for additional information, such as odometer, engine hours and/or PIN in the CFN3 System. The standard matrix of check digits and fields in the import file are as follows:

Check Digit in CFN3 System	What the Check Digit Means in the CFN3 System	What should be populated in the PLUS Import File	What should happen in the Fleet PLUS GUI (Validation Screen)
0	None	None	None
1	Prompt for Odometer	OrPT prompt for odometer = 1	Odometer box should be checked.
2	Prompt for Vehicle Number	OrPT_prompt_for_plate = 2	Prompt for vehicle Info Box should be checked and the "Verify as valid vehicle number and authorize for fueling (by proxy)" radio button should be selected.
3	Prompt for Vehicle Number and Odometer	<ul style="list-style-type: none"> <li>OrPT prompt for odometer = 1</li> <li>OrPT_prompt_for_plate = 2</li> </ul>	<ul style="list-style-type: none"> <li>Odometer box should be checked.</li> <li>Prompt for Vehicle Information Box should be checked and the "Verify as valid vehicle number, and authorize for fueling (by proxy)" radio button should be selected.</li> </ul>
4	Prompt for PIN	Use_pin_code = 1 (populate the PIN in the Pin_code field)	The prompt for PIN box should be checked and the PIN entered.
5	Prompt for PIN and Odometer	<ul style="list-style-type: none"> <li>OrPT prompt for odometer = 1</li> <li>Use_pin_code = 1 (populate the PIN in the Pin_code field)</li> </ul>	<ul style="list-style-type: none"> <li>Odometer box should be checked.</li> <li>The Prompt for PIN box should be checked and the PIN entered.</li> </ul>
6	Prompt for PIN and Vehicle Number	<ul style="list-style-type: none"> <li>OrPT_prompt_for_plate = 2</li> <li>Use_pin_code = 1 (populate the PIN in the Pin_code field)</li> </ul>	<ul style="list-style-type: none"> <li>Prompt for Vehicle Info Box should be checked and the "Verify as valid vehicle number and authorize for fueling (by proxy)" radio button should be selected.</li> <li>The prompt for PIN box should be checked and the PIN entered.</li> </ul>
7	Prompt for PIN, Odometer, and Vehicle Number	OrPT prompt for odometer = 1 OrPT_prompt_for_plate = 2 Use_pin_code = 1 (populate the PIN in the Pin_code field)	<ul style="list-style-type: none"> <li>Odometer box should be checked.</li> <li>Prompt for vehicle info box should be checked and the "Verify as valid Vehicle number, and authorize for fueling (by proxy)" radio button should be selected.</li> <li>The prompt for PIN box should be checked and the PIN entered.</li> </ul>

# Creating Rules

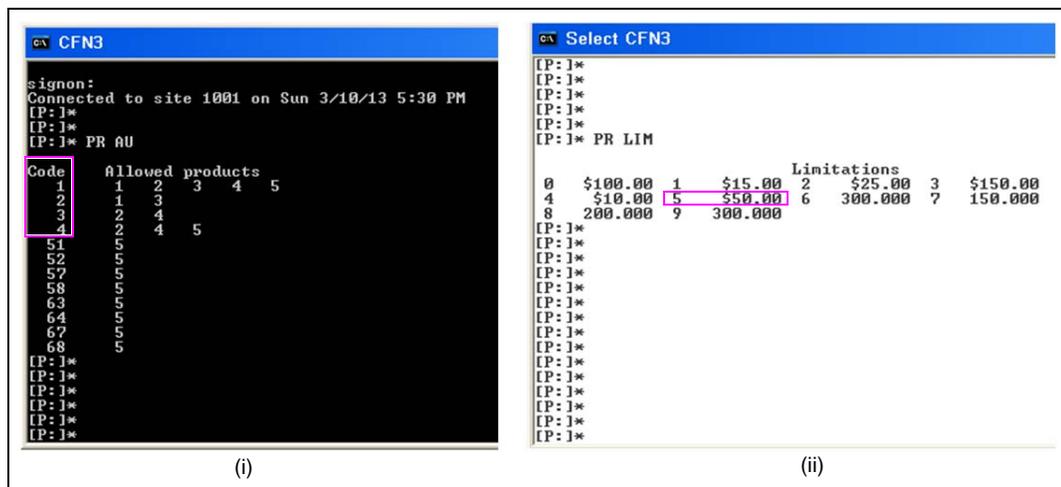
To create the rules in CFN System, proceed as follows:

- 1 Run a PR LIM command, which will give you your limits.
- 2 Run a PR AU command, which will give you your fuel authorization.

Following are examples of CFN System command execution:

The codes 1 to 4 [see [Figure 4-7 \(i\)](#)] are used and each product corresponds to a number. Product 1 may be diesel [see [Figure 4-7 \(ii\)](#)]. In this example, Limit 5 equals a limit of \$50.

**Figure 4-7: CFN System Command Prompt**

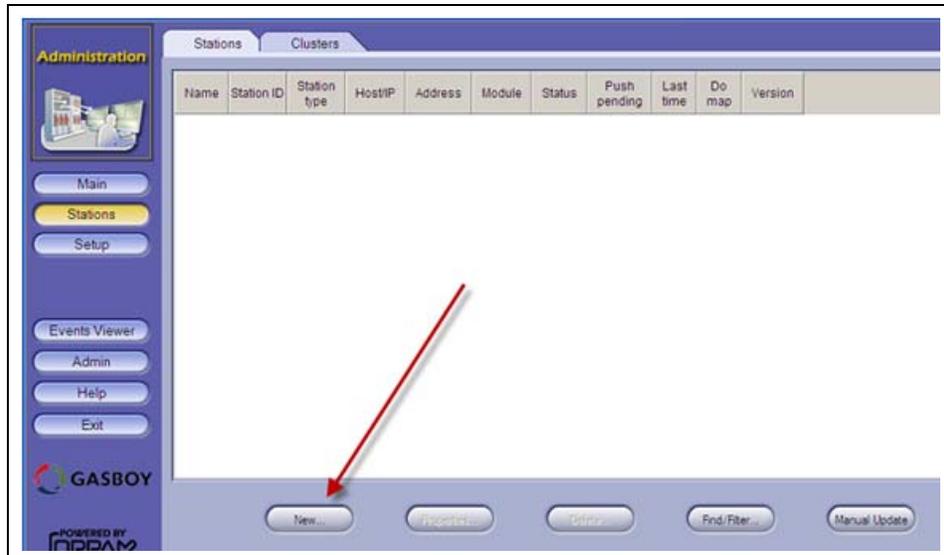


In our sample card number -5039-1036792579110014439-15125271, this card would be limited product numbers 1 and 3 (maybe diesel and unleaded) and \$50 per transaction.

Therefore, we would apply a group rule of \$50 of diesel and unleaded only.

- 3 In the FHO, click **New** on the rules tab (**Main Screen > Fleet Management > Rules**).

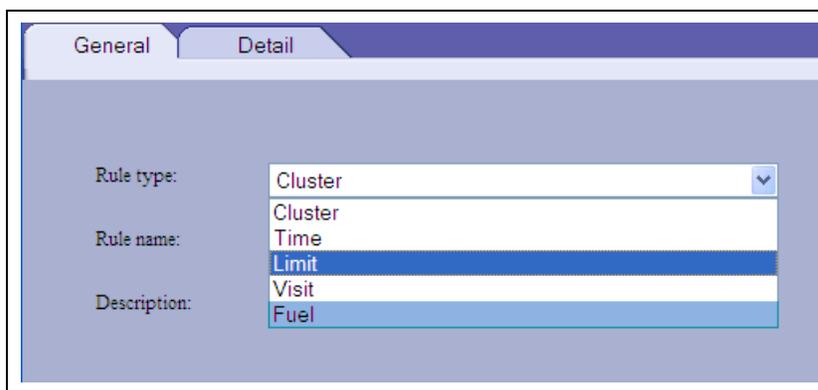
**Figure 4-8: FHO Screen**



The screen appears with an option to configure the Fuel Rule.

- 4 Select either **Limit** or **Fuel** Rule.
  - **Limit rule:** limits the dollar amount of fuel purchased, refer to [“Creating Limit Rule”](#) on [page 4-10](#).
  - **Fuel rule:** limits the type of fuel allowed, refer to [“Creating Fuel Rule”](#) on [page 4-11](#).

**Figure 4-9: Selecting Limit Rule**



## Creating Limit Rule

To create a Limit Rule, proceed as follows:

- a Enter the name and description (see [Figure 4-10](#)).

**Figure 4-10: Naming Rule**

The screenshot shows a software window with two tabs: 'General' and 'Detail'. The 'Detail' tab is active. It contains three input fields: 'Rule type' (a dropdown menu showing 'Limit'), 'Rule name' (a text box containing '50 dollars only'), and 'Description' (a text box containing '50 dollars only'). Two red arrows point to the 'Rule name' and 'Description' text boxes.

- b Specify the amount (in dollars) that you would like to limit some or all vehicles to (see [Figure 4-11](#)).

- c Click **OK**.

**Figure 4-11: Specifying Amount**

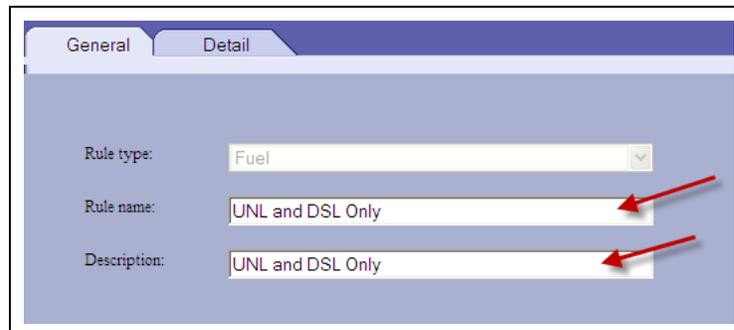
The screenshot shows the 'Detail' tab of the software window. It features four text input fields: 'Single refuel' (containing '50.00'), 'Day amount', 'Week amount', and 'Month amount'. Below these are two radio button options: 'Money (Dollars)' (which is selected) and 'Volume (gallon)'. A note at the bottom reads: 'Note: Restrictions only apply to devices in Positive-list departments.' At the bottom of the window, there are three buttons: 'OK & New', 'OK' (highlighted with a pink box), and 'Cancel'.

## Creating Fuel Rule

To create a Fuel Rule, proceed as follows:

- a Enter the Rule name and Description (see [Figure 4-12](#)).

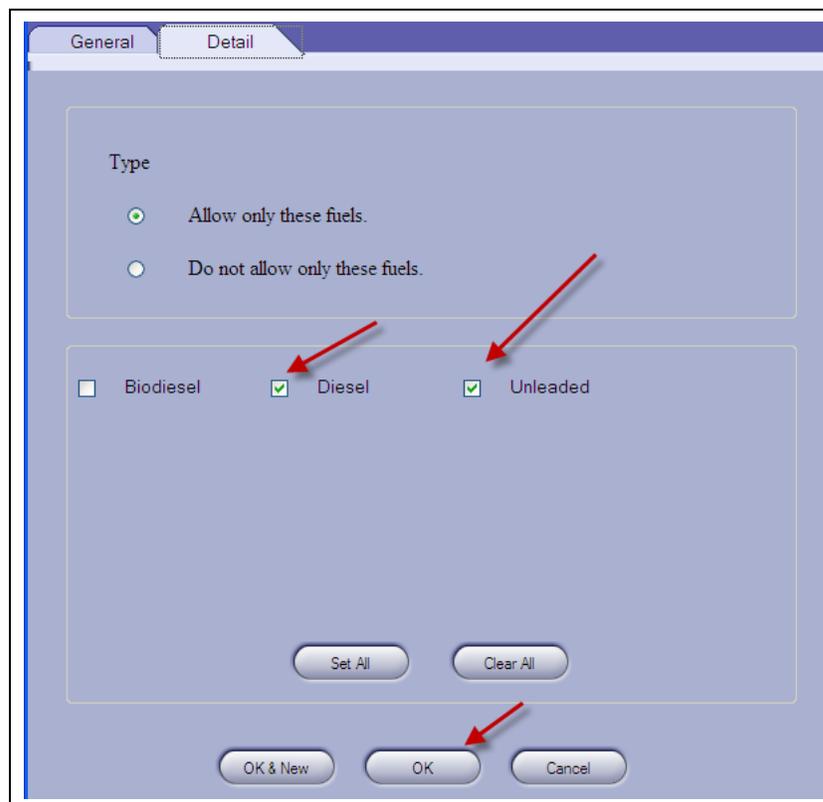
**Figure 4-12: Naming Fuel Rule**



The screenshot shows a software window with two tabs: 'General' and 'Detail'. The 'General' tab is active. It contains three input fields: 'Rule type' with a dropdown menu showing 'Fuel', 'Rule name' with a text box containing 'UNL and DSL Only', and 'Description' with a text box containing 'UNL and DSL Only'. Two red arrows point to the 'Rule name' and 'Description' text boxes.

- b Select the **Detail** tab and input the fuel type you would like to accept or restrict, then Click **OK** (see [Figure 4-13](#)).

**Figure 4-13: Specifying Amount**



The screenshot shows the 'Detail' tab of the software window. Under the 'Type' section, the radio button for 'Allow only these fuels.' is selected. Below this, there are three checkboxes: 'Biodiesel' (unchecked), 'Diesel' (checked), and 'Unleaded' (checked). Two red arrows point to the 'Diesel' and 'Unleaded' checkboxes. At the bottom of the window, there are three buttons: 'OK & New', 'OK', and 'Cancel'. A red arrow points to the 'OK' button.

*Notes: 1) For limit rules, determine how much fuel you would like to create a limit for (in dollars). For fuel rules, determine what fuel types you would like to limit (one fueling per day). To disable the purchase of some or all dry goods at a PAS site, select a Dry Goods Rule.*

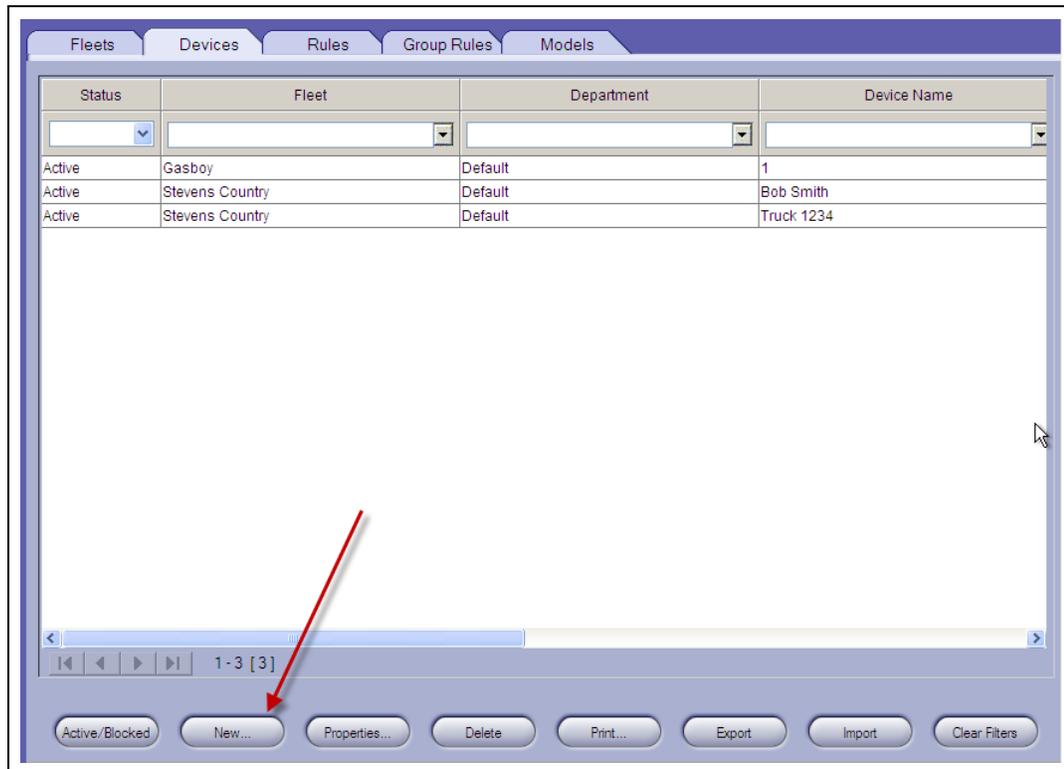
*2) Other types of rules are configurable. Explanation of these can be found in MDE-4821 Fleet Head Office System Installation and User's Manual.*

## Creating Group Rules

To create the group rules, proceed as follows:

- 1 Click **New** on the Group Rules Screen [see [Figure 4-14 \(Main Screen > Fleet Management > Group Rules\)](#)].

**Figure 4-14: Group Rules Screen**



The Group Rule Properties - SiteOmat screen appears.

- 2 Enter the Name and Description of the Group Rule (see [Figure 4-15](#)).

**Figure 4-15: Naming Group Rule**



- 3 Click the **Detail** tab and select the rules to be applied (see [Figure 4-16](#)). In this example, select \$50 rule, and diesel and unleaded only rule.

*Note: When creating Group Rules, it is best to keep their names short so they can be easily and quickly selected from the GUI or input into an import file.*

**Figure 4-16: Configuring Group Rule**

The screenshot shows a software window with two tabs: 'General' and 'Detail'. The 'Detail' tab is active. Below the tabs, there is a heading: 'Select the specific Rules that will make up the Group Rule definition.' Below this heading are five dropdown menus:

- Clusters: No Restriction
- Time range: No Restriction
- Limits: 50 dollars only
- Visits: No Restriction
- Fuel: UNL and DSL Only

At the bottom of the window are three buttons: 'OK & New', 'OK', and 'Cancel'. Red arrows point to the 'Limits' and 'Fuel' dropdowns, and another red arrow points to the 'OK' button.

- 4 After clicking **OK**, the new rule is ready to apply to devices.

Creating group rule is now complete.

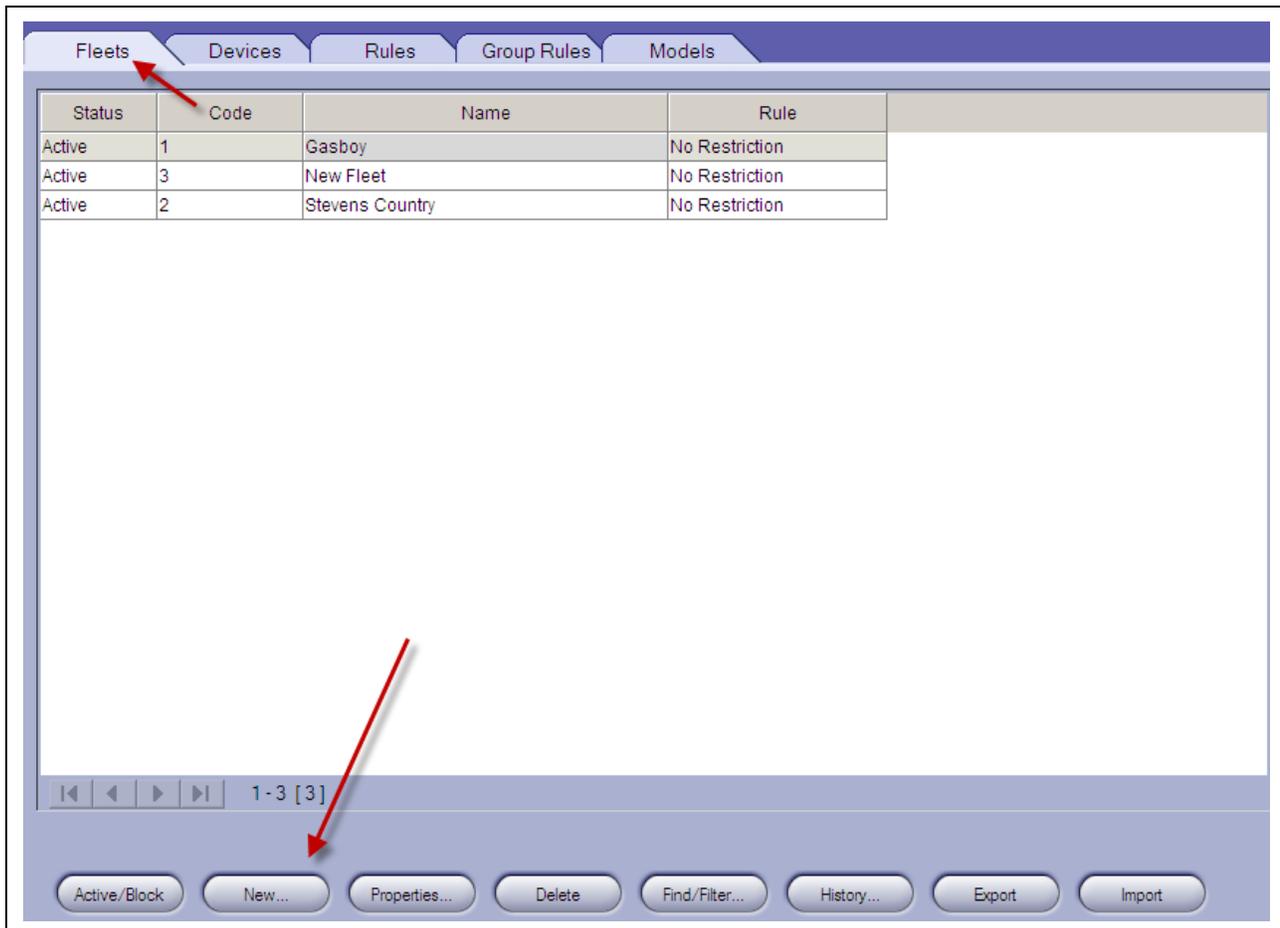
## Adding Fleet

While not present in the CFN3 System, at least one fleet must be added to the Fleet PLUS System before devices may be added.

To add a Fleet, proceed as follows:

- 1 To add a Fleet, go to the **Fleets** tab and click **New** [see [Figure 4-17 \(Main Screen > Fleet Management > Fleets\)](#)].

**Figure 4-17: Adding Fleet**



- 2 Name the fleet and assign a Fleet code of 1 (see [Figure 4-18](#)), then click **OK**.

**Figure 4-18: Naming and Assigning Fleet Code**

The screenshot shows a dialog box with four tabs: General, Information, Account, and Validation. The 'Information' tab is selected. The 'Fleet name' field is filled with 'Gasboy Fleet' and the 'Fleet code' field is filled with '1'. Below these fields is a dropdown menu labeled 'Rule to use when creating new Departments in this Fleet:' with 'No Restriction' selected. A note below the dropdown states: 'A default Positive-list department will automatically be created for a fleet. Please use the Departments button to modify their Negative/Positive setting.' There is a 'Departments...' button below the note. At the bottom of the dialog are three buttons: 'OK & New', 'OK', and 'Cancel'. A red arrow points to the 'OK' button.

For the purpose of this example, one fleet is added. To add multiple fleets, refer to *MDE-4821 Fleet Head Office System Installation and User's Manual*.

## Creating Price List

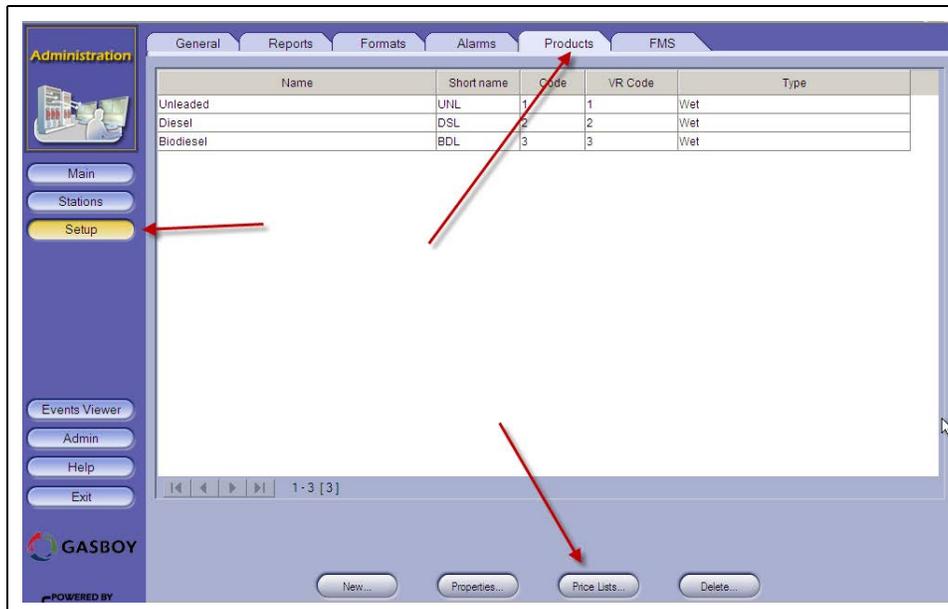
Creating a price list allows you to apply a set price to a vehicle’s fuel.

*Note: Limit rules will be enforced on the street price and not on any discounted prices.*

To create a price list, proceed as follows:

- 1 Click **Setup** and click the **Products** tab, then click **Price Lists** (see [Figure 4-19](#)).

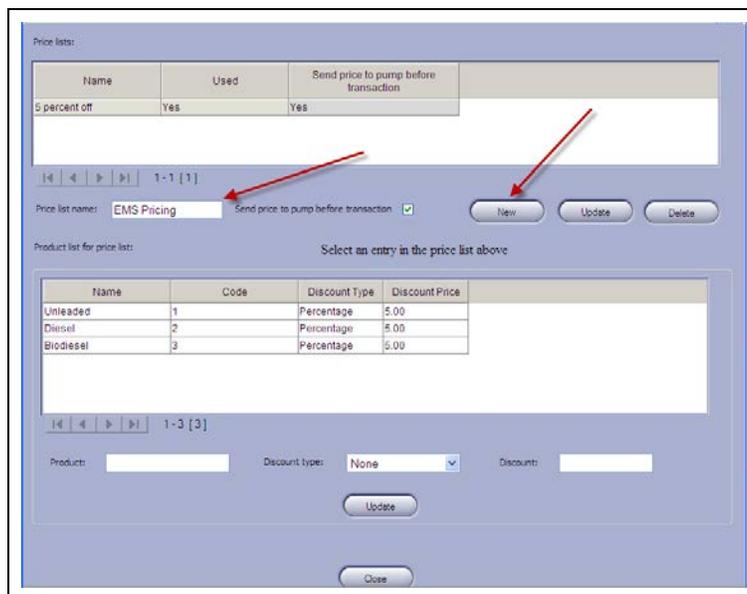
**Figure 4-19: Navigation to Price List**



The screen for creating price list appears (see [Figure 4-20](#)).

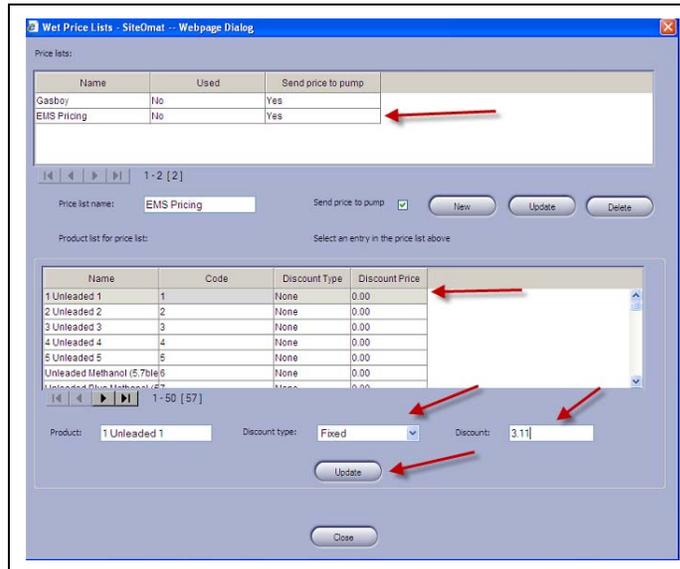
- 2 Name the price list and then click **New** in the top section of the page.

**Figure 4-20: Creating Price List**



- 3 Select the price list (see [Figure 4-21](#)).  
*Note: For discounted price list, select the Discount Type as Fixed and input the price you would like to charge per unit for that product. After setting the price for each product, click the Update button. You may also add Percent or Absolute (cents off) discounts as well.*

**Figure 4-21: Configuring Price List**



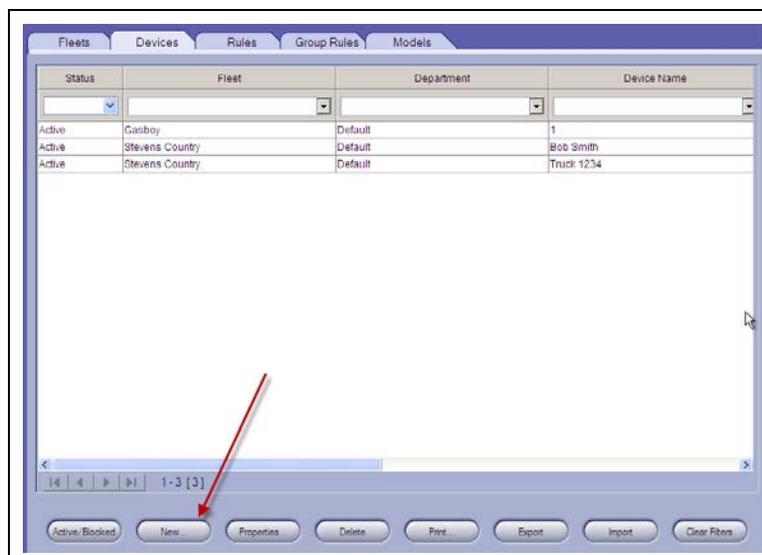
Creating Price List is now complete.

## Creating Devices

Add few devices that cover each of your group rules and price lists. Export your list of devices as a template for your import. To create devices, proceed as follows:

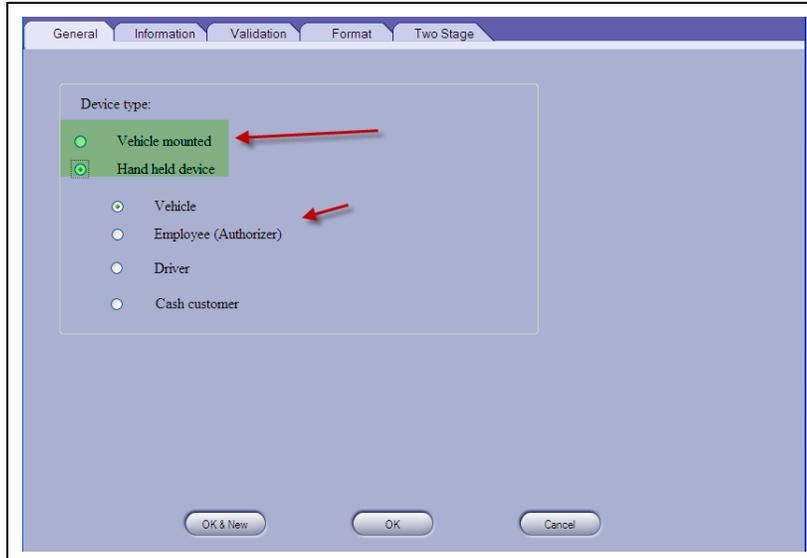
- 1 Click **New** [see [Figure 4-22](#) (**Main Screen > Fleet Management > Devices**)].

**Figure 4-22: Creating New Devices**



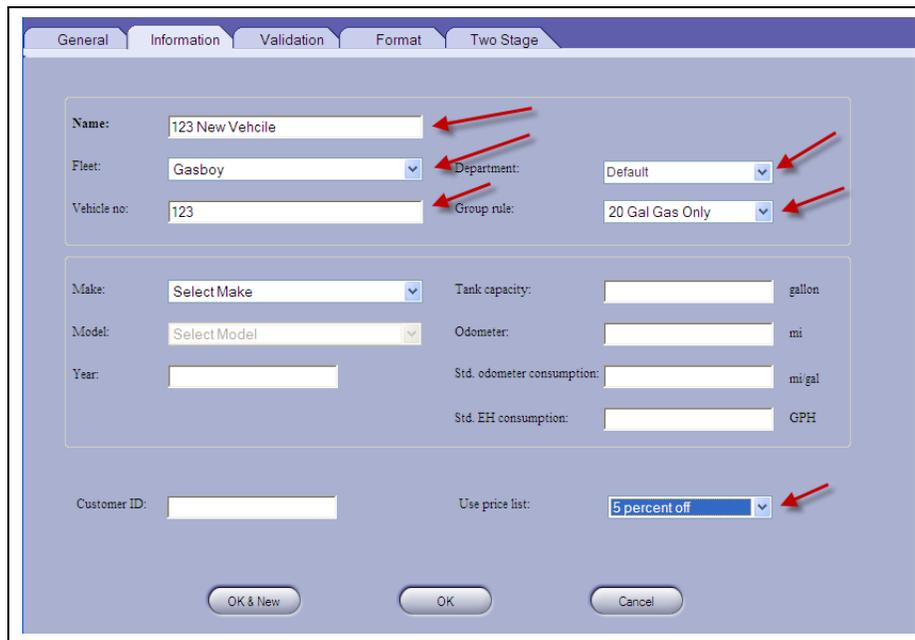
- 2 Select **Handheld Device** and whether the device belongs to a driver or vehicle (see [Figure 4-23](#)).

**Figure 4-23: Configuring Device Type**



- 3 Select the **Information** tab. Input the Vehicle name and number. Select the department's fleet, department, and group rule (restriction). Select a price list (if any) for the device (see [Figure 4-24](#)).

**Figure 4-24: Entering Information**



- 4 Select the validation tab and select to require the input of a PIN, odometer or engine hours (see [Figure 4-25](#)).

*Notes: 1) Fueling by proxy device can also be defined in this screen.*

*2) These settings are set based on the check digit of the card in the CFN System.*

For example:

- If you check the PIN box, it will prompt for a PIN.
- If you select the odometer box, it will prompt for odometer.

**Figure 4-25: Validating Device**

- 5 Select the **Format** tab. Enter the device's card number, and select the Hardware Type (see [Figure 4-26](#)).

The “[Assembling Your Card Data](#)” on [page 4-5](#) describes how your card numbers should be assembled from the data on your existing cards.

**Figure 4-26: Formatting Device**

The screenshot shows a software window with five tabs: General, Information, Validation, Format, and Two Stage. The 'Format' tab is active. The 'Card number' field contains the text '50391036792579110014439', with a red arrow pointing to it. To the right of this field is an 'Acquire' button. Below these are several input fields: 'Vehicle ID' with a dropdown menu showing 'Select Model', 'Fuel code', 'Expiration date', 'Hardware type' with a dropdown menu showing 'Fuel Card', and 'Device format' with a dropdown menu. At the bottom of the window are three buttons: 'OK & New', 'OK', and 'Cancel'.

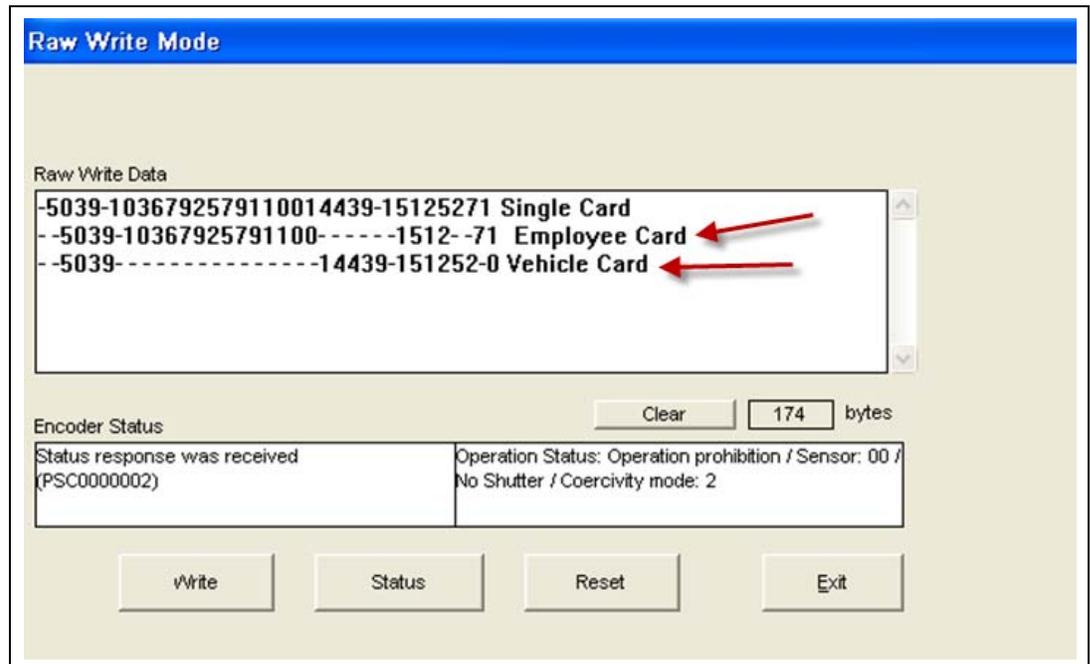
*Note: The card number depicted above is the same card number used at the beginning of “[Assembling Your Card Data](#)” on [page 4-5](#) in the string field of your import file. Note how it is comprised using the material at the beginning of this section.*

## Dual Card Setup

In the CFN system a dual card is set up the same as a single card except it begins with two field separators (see [Figure 4-27](#)).

*Note: The second separator does not count against your count of three that limit the number of digits that can be read by the PLUS System.*

**Figure 4-27: Raw Write Mode**



You may associate a vehicle card with a driver or group of drivers in the PLUS System, similarly to how you did it in the CFN System. Note the single card, employee card (known as a driver card in the PLUS System) and the vehicle card depicted above. The CFN System could process the sample number as a single card, or it could handle that card data split into a driver and vehicle card.

Single Card No. in the CFN System = -5039-1036792579110014439-15125271  
 Single Card No. in the PLUS System = -5039-103679252579110014439

Dual Cards Nos. in the CFN System  
 Employee/Driver Card = -5039-1036792525791100-1512-71  
 Vehicle Card = -5039-14439-151252-0

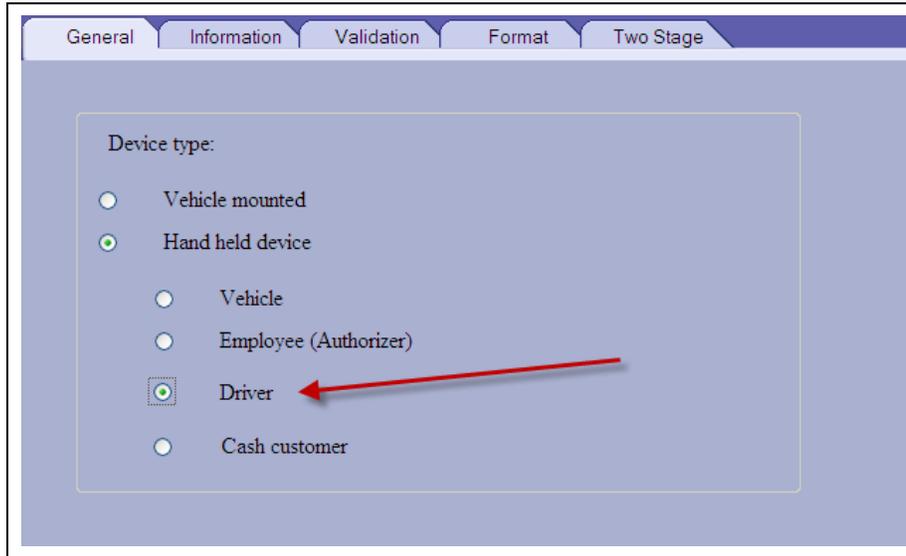
Dual Card Nos. in the PLUS System  
 Employee/Driver Card = -5039-1036792525791100-  
 Vehicle Card = -5039-14439-

*Note: PLUS System card numbers stop in this example because of the third field separator.*

In the PLUS system, if you wanted to make our sample card number both a driver card and a vehicle card, we could create a set of cards that says that only our sample driver can drive our sample vehicle. This can be done easily through an import (refer to [“Important Safety Information”](#) on [page 2-1](#)) or using the following steps:

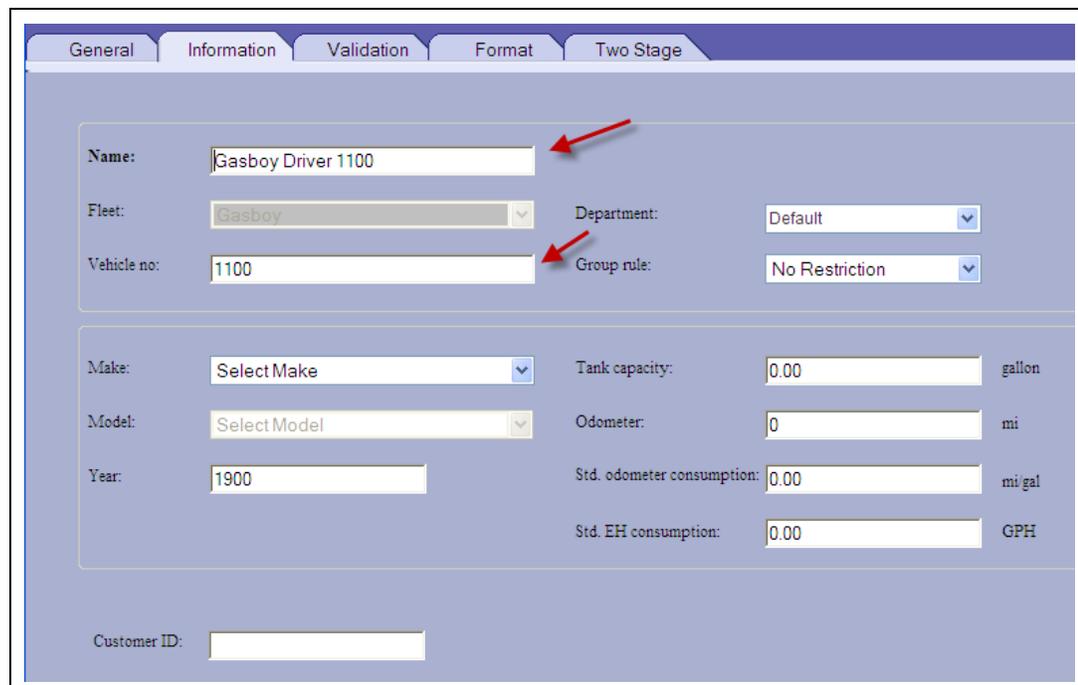
Our sample “Driver” card is set as a driver (see [Figure 4-28](#)).

**Figure 4-28: Configuring Device**



- 1 The Name and Vehicle Number (employee number or card number) should be populated in the Vehicle Number field (see [Figure 4-29](#)).

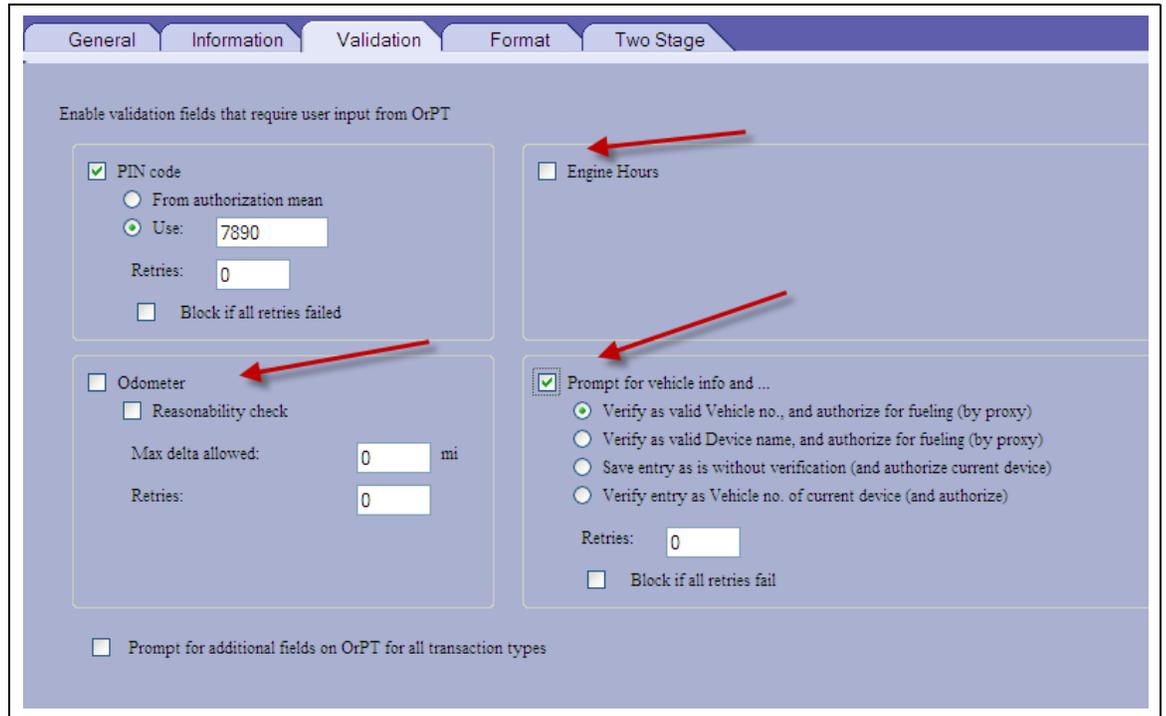
**Figure 4-29: Entering Card Information**



A PIN may be required for a driver. It is not recommended to ask for Odometer or Engine Hours for a driver (see [Figure 4-30](#)).

*Note: Prompting for PIN was previously determined by your check digit in the CFN System. Consult the card's check digit to determine whether PIN prompting is required.*

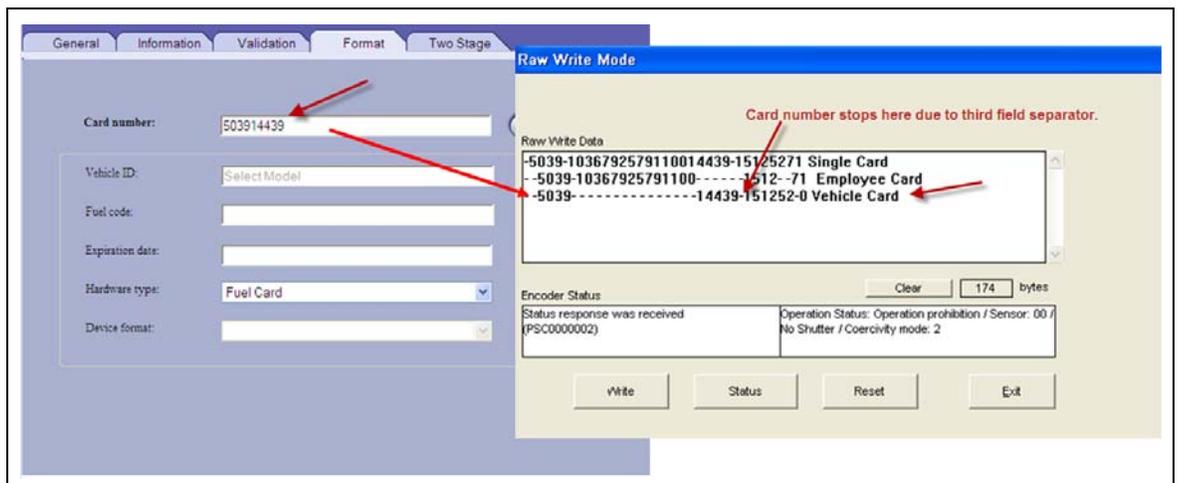
**Figure 4-30: Configuring Validation**



- 2 The card number is entered, and the Two Stage tab is not accessible for a Driver. After Clicking **OK** to save a device, you may associate this device with a Vehicle.

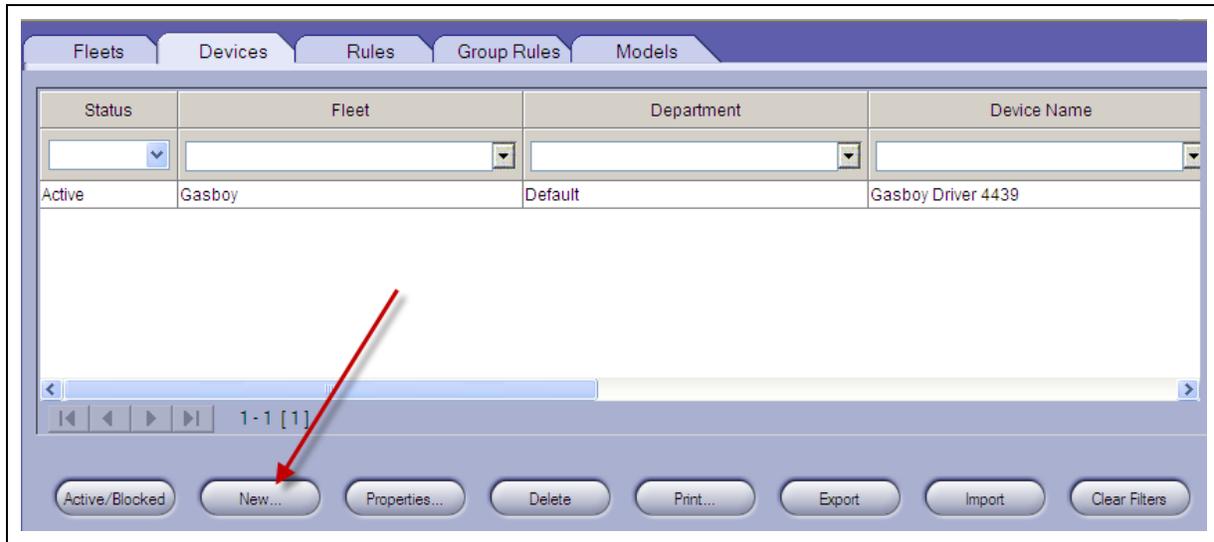
Driver card number was obtained from the Raw Write Mode Screen in the CFN System (see [Figure 4-31](#)).

**Figure 4-31: Configuring Format**



- 3 Click **New** to create a new device (see [Figure 4-32](#)).

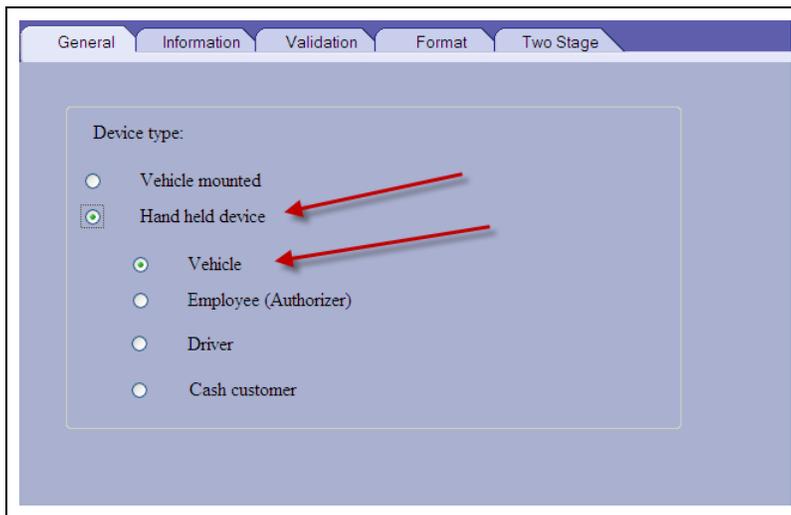
**Figure 4-32: Creating New Device**



The Device Properties - SiteOmat screen appears (see [Figure 4-33](#)).

- 4 Select **Hand held device** and **Vehicle** in the General tab (see [Figure 4-33](#)).

**Figure 4-33: Configuring General Tab**



- 5 Name the vehicle and input the vehicle number. If desired, populate a group rule that governs the amount and/or type of fuel the customer can get.

**Figure 4-34: Entering Vehicle Information**

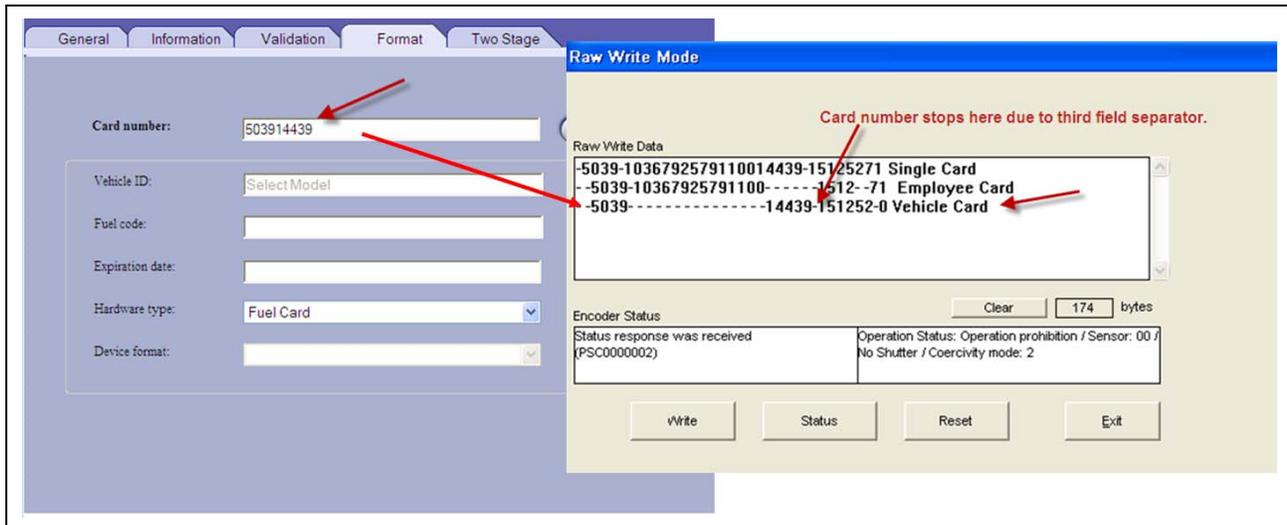
- 6 Check Odometer or Engine Hours and/or prompting for vehicle ID, if desired.  
*Notes: 1) This information is determined by the check digits in your CFN System Card Number.  
 2) Consult your vehicle card's check digits to determine what inputs should be prompted.*

**Figure 4-35: Configuring Validation**

- Input the card number and click **OK** to save the device.  
*Note: The Vehicle card number was obtained from the Raw Write Mode Screen in the CFN system (see Figure 4-36).*

- Reopen the vehicle record and click the **Two Stage** tab.

**Figure 4-36: Entering Card Number**

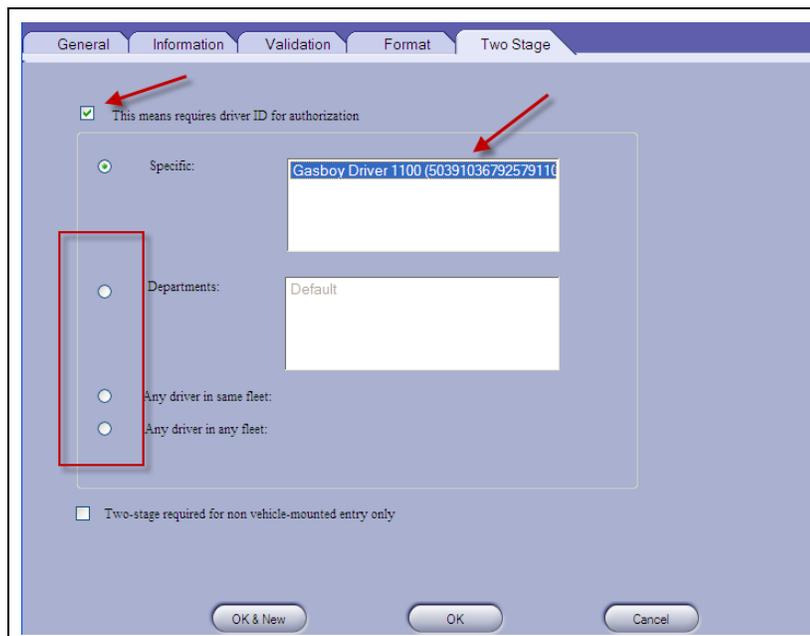


- On the Two Stage tab, select the “This means requires driver ID for authorization” check box.

In this example, our sample driver is the only one who can fuel our sample vehicle (multiple drivers can be selected by holding down the **Ctrl** key while clicking drivers). If you want to allow a broader spectrum of drivers to fuel the vehicle or for additional information, refer to *MDE-4821 Fleet Head Office System Installation and User’s Manual*.

- Click **OK** to save.

**Figure 4-37: Two Stage Tab**



## 5 – Performing Device Import (Cards, Keys, Tags, or Manual Entries)

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This section shows how to transfer information from existing Gasboy systems to Orpak systems.

### Required Information

A Microsoft Excel or Text file that has the basic information about the card/key/code data you want to enter into the Orpak system:

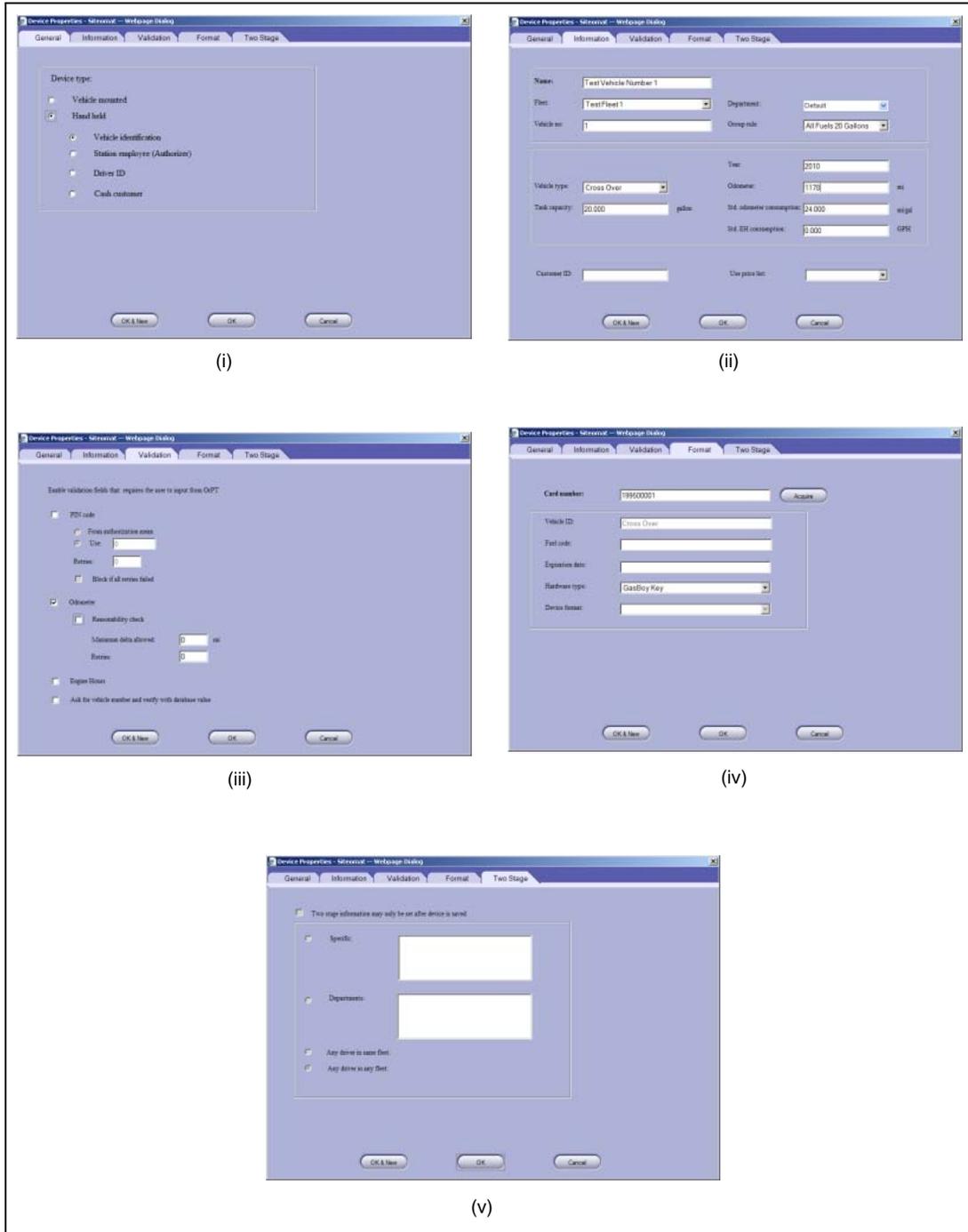
- Card/Key/Code Number
- System ID
- Fuel Type for each Device (Card/Key/Code/and so on)
- Fuel Limit for each Device (Card/Key/Code/and so on)
- Department
- Optional information:
  - Device Description (Vehicle or Driver ID)
  - Odometer Prompting
  - PIN Number and PIN Prompting

### Performing Device Import (Example)

Following is a basic real life example. Customer has 10 keys assigned to Vehicles and is using a Gasboy Fleet key 1000 system. Customer has the required information in an Excel file, along with some optional information. To perform a device import, proceed as follows:

- 1 Create your Fleets, Department, Rules, and Group Rules as necessary in the FHO software using the supplied menus in Fleet Management.
- 2 Create one device setup exactly as you want it to be for Vehicle Number, Rules, and Card/Key/Code numbers.

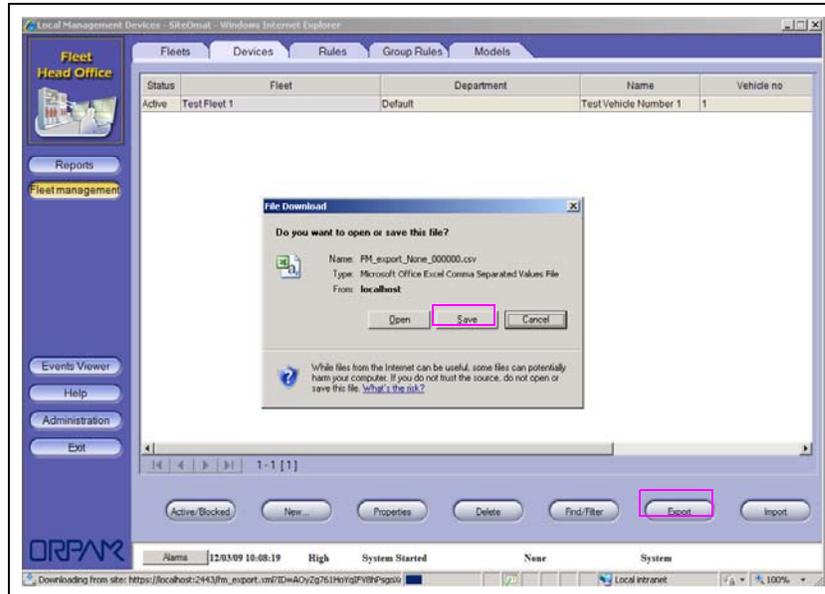
Figure 5-1: Creating New Device



- Once this device is created and saved, from the Device Tab, select **Export**, and save the data to a file on your computer (see [Figure 5-2](#)).

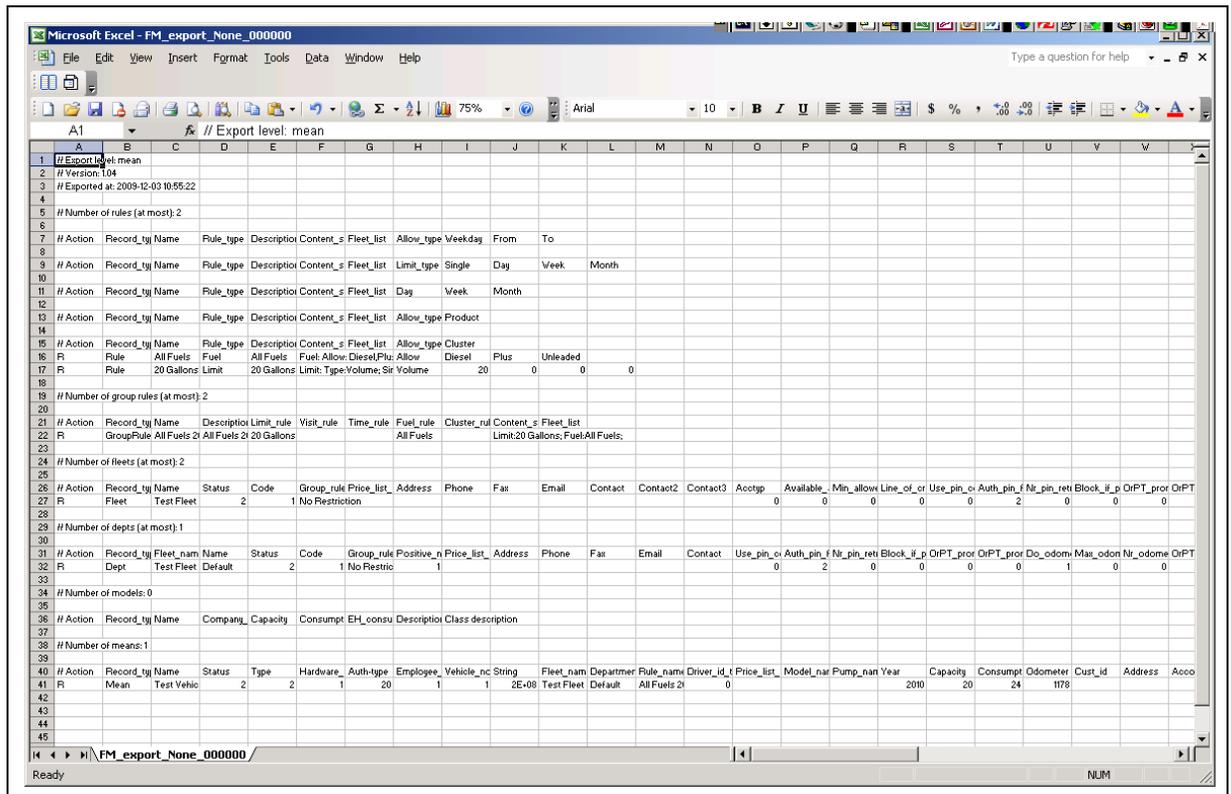
*Note: Computer must have IE7 or later.*

**Figure 5-2: Exporting Fleet Management**



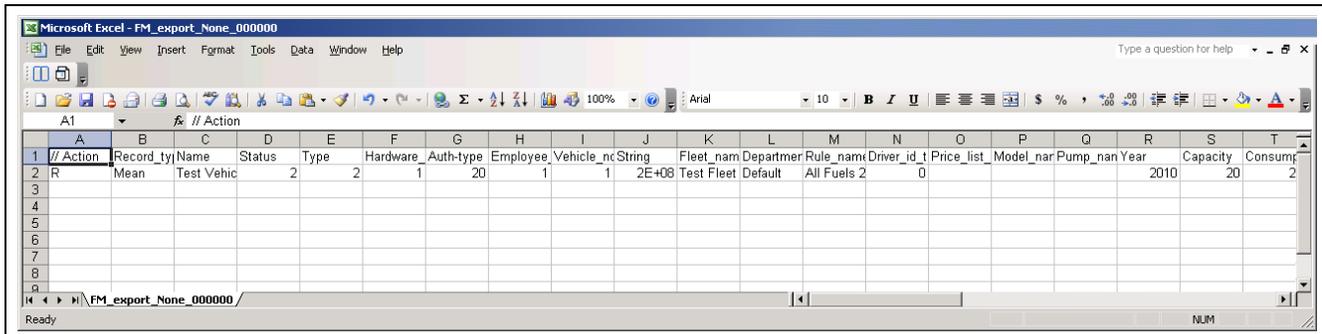
- After saving the file, open it with Excel (see [Figure 5-3](#)).

**Figure 5-3: Opening Exported File Using Excel**



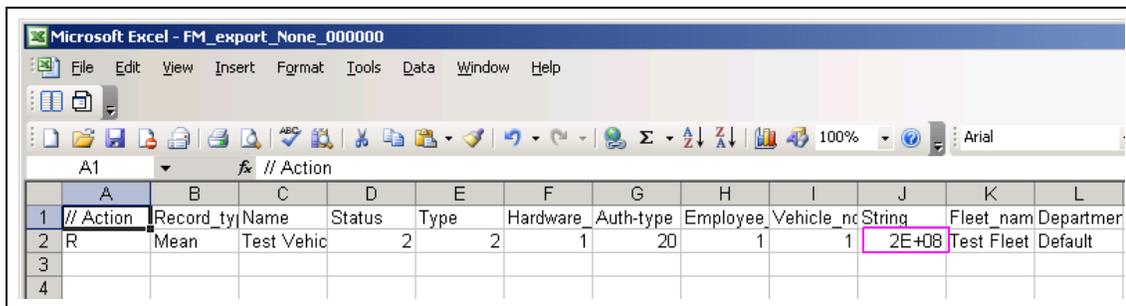
- Find the line with the exported device you just created, then find the header line above that. Select and delete all the cells above that header record. The file looks similar to [Figure 5-4](#).

**Figure 5-4: Example of Exported Device File**



Refer to **CELL J2** in [Figure 5-5](#), it has some strange data. This is the data from the card number/key number/code number and Excel does not display that correctly. To correct, highlight that cell, select **Format > Cells > Number**, from the Category list-box select **Numbers** and enter **0** in **Decimal places** (see [Figure 5-6](#)).

**Figure 5-5: Example of Exported Device File**



**Figure 5-6: Formatting Cell**

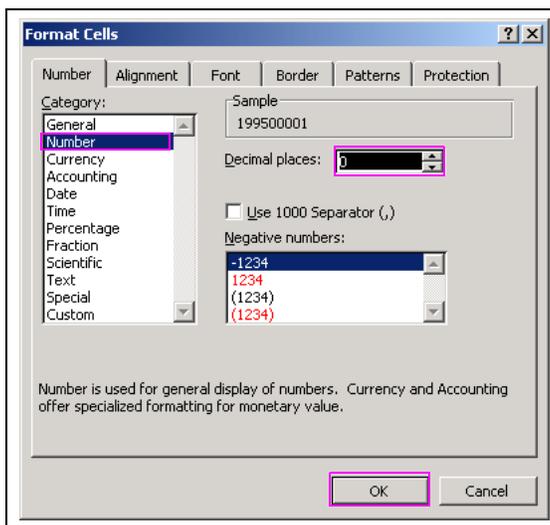


Figure 5-7 shows the data corrected.

Note: Ensure that this format is applied to all data in that column.

Figure 5-7: Formatted String Value

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	// Action	Record_ty	Name	Status	Type	Hardware	Auth-type	Employee	Vehicle_nc	String	Fleet_nam	Departmer	Rule_nam	Driver_id_t	Price_list
2	R	Mean	Test Vehic	2	2	1	20	1	1	199500001	Test Fleet	Default	All Fuels 2	0	
3															
4															
5															
6															

- 6 Edit the file and put your data from the existing Gasboy system.
  - a Highlight the entire row 2 and copy the cells.
  - b Paste them into as many cells as devices you are going to add. In this example, we are adding 10 new Fleet keys (see Figure 5-8).

Figure 5-8: Pasting New Fleet Keys

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	// Action	Record_ty	Name	Status	Type	Hardware	Auth-type	Employee	Vehicle_nc	String	Fleet_nam	Departmer	Rule_nam	Driver_id_t	Price_list	Model_nar	Pump_nan	Year	Capacity	Consum
2	R	Mean	Test Vehic	2	2	1	20	1	1	199500001	Test Fleet	Default	All Fuels 2	0				2010	20	
3	R	Mean	Test Vehic	2	2	1	20	1	1	199500001	Test Fleet	Default	All Fuels 2	0				2010	20	
4	R	Mean	Test Vehic	2	2	1	20	1	1	199500001	Test Fleet	Default	All Fuels 2	0				2010	20	
5	R	Mean	Test Vehic	2	2	1	20	1	1	199500001	Test Fleet	Default	All Fuels 2	0				2010	20	
6	R	Mean	Test Vehic	2	2	1	20	1	1	199500001	Test Fleet	Default	All Fuels 2	0				2010	20	
7	R	Mean	Test Vehic	2	2	1	20	1	1	199500001	Test Fleet	Default	All Fuels 2	0				2010	20	
8	R	Mean	Test Vehic	2	2	1	20	1	1	199500001	Test Fleet	Default	All Fuels 2	0				2010	20	
9	R	Mean	Test Vehic	2	2	1	20	1	1	199500001	Test Fleet	Default	All Fuels 2	0				2010	20	
10	R	Mean	Test Vehic	2	2	1	20	1	1	199500001	Test Fleet	Default	All Fuels 2	0				2010	20	
11	R	Mean	Test Vehic	2	2	1	20	1	1	199500001	Test Fleet	Default	All Fuels 2	0				2010	20	
12																				
13																				
14																				
15																				
16																				
17																				

- 7 Manually enter the new data into this sheet or if you have other data in an Excel file (see Figure 5-9 on page 5-6).

- Take the data from this sheet and make some changes to it using tables and formula's to prepare it for entering back into the FHO by placing it back into our **EXPORTED** file (see [Figure 5-9](#)).

**Figure 5-9: Example Exported File**

	A	B	C	D	E	F	G	H	I	J
1	System ID	Key Num	Vehicle Nu	Descriptor	Limit	Auth	Check Digit			
2	1995	00001	5234523	Vehicle 1	1	1	1			
3	1995	00002	2354254	Vehicle 2	1	1	2			
4	1995	00003	2523452	Vehicle 3	1	1	3			
5	1995	00004	2534545	Vehicle 4	2	1	2			
6	1995	00005	2523454	Vehicle 5	2	1	1			
7	1995	00006	2534525	Vehicle 6	3	2	4			
8	1995	00007	4756777	Vehicle 7	2	2	5			
9	1995	00008	4567477	Vehicle 8	2	2	6			
10	1995	00009	4564644	Vehicle 9	3	2	7			
11	1995	00010	9876924	Vehicle 10	1	2	6			

*Note: Ensure that you **FORMAT** the cells that you want to concatenate as **TEXT** if they start with leading zero's, otherwise Excel will not include them into your new column. To do this, simply highlight the entire column, and select **Format > Text**.*

- Create a column that combines the SYS\_ID and the KEY number to enter back into our **IMPORT** file. To do this use a function named “**CONCATENATE**” followed by the two cells we want to add together.

[Figure 5-10](#) shows the new column that has the new formula applied to the cells.

**Figure 5-10: Formatted Cells**

	A	B	C	D	E	F	G	H	I
1	System ID	Key Number	String Data	Vehicle Nu	Descriptor	Limit	Auth	Check Digit	
2	1995	00001	199500001	5234523	Vehicle 1	1	1	1	
3	1995	00002	199500002	2354254	Vehicle 2	1	1	2	
4	1995	00003	199500003	2523452	Vehicle 3	1	1	3	
5	1995	00004	199500004	2534545	Vehicle 4	2	1	2	
6	1995	00005	199500005	2523454	Vehicle 5	2	1	1	
7	1995	00006	199500006	2534525	Vehicle 6	3	2	4	
8	1995	00007	199500007	4756777	Vehicle 7	2	2	5	
9	1995	00008	199500008	4567477	Vehicle 8	2	2	6	
10	1995	00009	199500009	4564644	Vehicle 9	3	2	7	
11	1995	00010	199500010	9876924	Vehicle 10	1	2	6	

10 Paste the new data into the IMPORT file.

*Note: Use paste special, then select **Values** to get the data from the sheet and not the formula (see Figure 5-11).*

**Figure 5-11: Pasting Cell Values**



The screen shown in Figure 5-12 appears.

**Figure 5-12: Edited Excel File**

1	// Action	Record ty	Name	Status	Type	Hardware	Auth-type	Employee	Vehicle	nc	String	Fleet_name	Departmen	Rule_name	Driver_id	Price_list	Model_nar	Pur
2	R	Mean	Test Vehicle Number 1	2	2	1	20	1	1	1	199500001	Test Fleet 1	Default	All Fuels	2	0		
3	R	Mean	Test Vehicle Number 1	2	2	1	20	1	1	1	199500002	Test Fleet 1	Default	All Fuels	2	0		
4	R	Mean	Test Vehicle Number 1	2	2	1	20	1	1	1	199500003	Test Fleet 1	Default	All Fuels	2	0		
5	R	Mean	Test Vehicle Number 1	2	2	1	20	1	1	1	199500004	Test Fleet 1	Default	All Fuels	2	0		
6	R	Mean	Test Vehicle Number 1	2	2	1	20	1	1	1	199500005	Test Fleet 1	Default	All Fuels	2	0		
7	R	Mean	Test Vehicle Number 1	2	2	1	20	1	1	1	199500006	Test Fleet 1	Default	All Fuels	2	0		
8	R	Mean	Test Vehicle Number 1	2	2	1	20	1	1	1	199500007	Test Fleet 1	Default	All Fuels	2	0		
9	R	Mean	Test Vehicle Number 1	2	2	1	20	1	1	1	199500008	Test Fleet 1	Default	All Fuels	2	0		
10	R	Mean	Test Vehicle Number 1	2	2	1	20	1	1	1	199500009	Test Fleet 1	Default	All Fuels	2	0		
11	R	Mean	Test Vehicle Number 1	2	2	1	20	1	1	1	199500010	Test Fleet 1	Default	All Fuels	2	0		

11 Copy and paste the data for the Name Field in the Export file, from the Vehicle Number field of the original Gasboy data (see Figure 5-13).

**Figure 5-13: Editing Name and Vehicle Number Fields**

1	System ID	Key Number	String Data	Vehicle No	Descriptor	Limit	Auth	Check Digit
2	1995	00001	199500001	5234523	Vehicle 1	1	1	1
3	1995	00002	199500002	2354254	Vehicle 2	1	1	2
4	1995	00003	199500003	2523452	Vehicle 3	1	1	3
5	1995	00004	199500004	2534545	Vehicle 4	2	1	2
6	1995	00005	199500005	2523454	Vehicle 5	2	1	1
7	1995	00006	199500006	2534525	Vehicle 6	3	2	4
8	1995	00007	199500007	4752777	Vehicle 7	2	2	5
9	1995	00008	199500008	4567477	Vehicle 8	2	2	6
10	1995	00009	199500009	4564544	Vehicle 9	3	2	7
11	1995	00010	199500010	9876924	Vehicle 10	1	2	6
12								
13								
14								
15								
16								
17								

Figure 5-14 shows the result of copy/paste action.

**Figure 5-14: Edited Name and Vehicle Number Fields**

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
	// Action	Record_ty	Name	Status	Type	Hardware	Auth-type	Employee	Vehicle	ncString	Fleet_name	Departmer	Rule_name	Driver_id	Price_list	Model_nar	Pur
2	R	Mean	5234523	2	2	1	20	1	1	199500001	Test Fleet 1	Default	All Fuels 2	0			
3	R	Mean	2354254	2	2	1	20	1	1	199500002	Test Fleet 1	Default	All Fuels 2	0			
4	R	Mean	2523452	2	2	1	20	1	1	199500003	Test Fleet 1	Default	All Fuels 2	0			
5	R	Mean	2534545	2	2	1	20	1	1	199500004	Test Fleet 1	Default	All Fuels 2	0			
6	R	Mean	2523454	2	2	1	20	1	1	199500005	Test Fleet 1	Default	All Fuels 2	0			
7	R	Mean	2534525	2	2	1	20	1	1	199500006	Test Fleet 1	Default	All Fuels 2	0			
8	R	Mean	4758777	2	2	1	20	1	1	199500007	Test Fleet 1	Default	All Fuels 2	0			
9	R	Mean	4557477	2	2	1	20	1	1	199500008	Test Fleet 1	Default	All Fuels 2	0			
10	R	Mean	4554644	2	2	1	20	1	1	199500009	Test Fleet 1	Default	All Fuels 2	0			
11	R	Mean	9876924	2	2	1	20	1	1	199500010	Test Fleet 1	Default	All Fuels 2	0			
12																	
13																	
14																	
15																	
16																	
17																	

- 12 Make a group rule from the Limit and Auth fields using the LOOKUP function of Excel. See example from the Gasboy Data sheet.

*Note: The lookup vector is using “\$”s before the cells. This makes the loopkup vector table a constant so when we copy the cells down for all the vehicles, Excel keeps that lookup table as a CONSTANT and does not copy the relative values.*

- 13 Repeat the same process for the Auth-type Column, refer to step 10 to 11 on page 5-7.

- Using the **CONCATENATE** function again, put the two new Rule columns back together and add a space between them. You will see that you have a rule named "10 gal Unleaded".

**Figure 5-15: Excel Formulas**

fx=CONCATENATE(A2," ",B2)  
 fx=LOOKUP(G7,\$A\$21:\$A\$22,\$B\$21:\$B\$22)  
 fx=LOOKUP(F2,\$A\$15:\$A\$18,\$B\$15:\$B\$18)  
 fx=CONCATENATE(J11," ",K11)

System ID	Key Number	String Data	Vehicle No	Description	Limit	Auth	Check Digit	Rule 1	Rule 2	Group Rule
1995	00001	199500001	5234523	Vehicle 1	1	1	1	10 gal	Unleaded	10 gal Unleaded
1995	00002	199500002	2354254	Vehicle 2	1	1	2	10 gal	Unleaded	10 gal Unleaded
1995	00003	199500003	2523452	Vehicle 3	1	1	3	10 gal	Unleaded	10 gal Unleaded
1995	00004	199500004	2534545	Vehicle 4	2	1	2	50 gal	Unleaded	50 gal Unleaded
1995	00005	199500005	2523454	Vehicle 5	2	1	1	50 gal	Unleaded	50 gal Unleaded
1995	00006	199500006	2534525	Vehicle 6	3	2	4	100 gal	Diesel	100 gal Diesel
1995	00007	199500007	4756777	Vehicle 7	2	2	5	50 gal	Diesel	50 gal Diesel
1995	00008	199500008	4567477	Vehicle 8	2	2	6	50 gal	Diesel	50 gal Diesel
1995	00009	199500009	4564644	Vehicle 9	3	2	7	100 gal	Diesel	100 gal Diesel
1995	00010	199500010	9876924	Vehicle 10	1	2	6	10 gal	Diesel	10 gal Diesel

- Once this is all completed, return to your Original **EXPORT** file, and copy the respective fields into it for the Card number, Group Rule, and Plate (Vehicle Number).

- Go to the FHO software and select **Import** from the Devices tab.

**Figure 5-16: Importing Fleet Management File**

Status	Fleet	Department	Name	Vehicle no	Card number	Type
Active	patron	Default	test veh1	test veh1		Vehicle mountF
Active	patron	Default	test veh2	test veh2	1002 2002 3002	Vehicle mountF
Active	Test Fleet 1	Default	Test Vehicle Number 1	1	199500001	Customer tag G

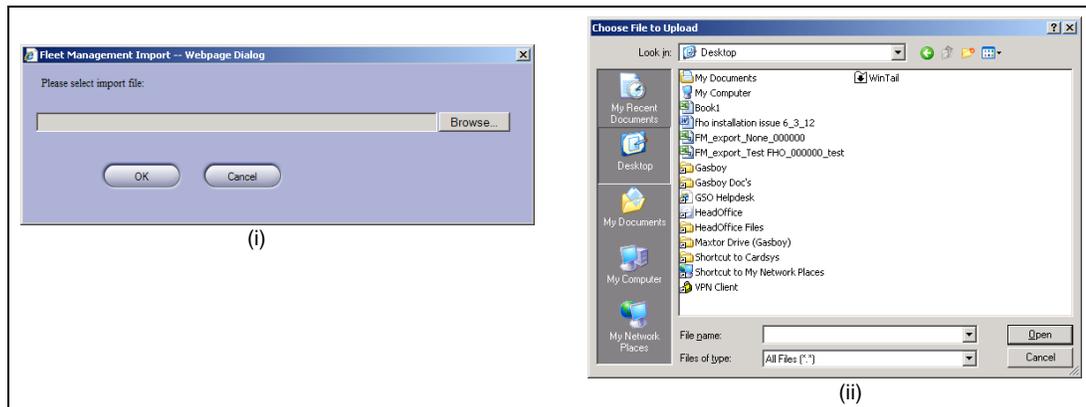
You will see a warning that you are about to replace the data in the existing database.

## CAUTION

Replacing the data will take whatever you have in your **IMPORT** file and put it into the Database, so be sure to verify your data before continuing from this point. Be especially cautious if attempting on a site with existing data.

- 17 You will be presented with a dialog box allowing you to select the file which you want to **IMPORT**.

**Figure 5-17: Browsing for Fleet Management File**



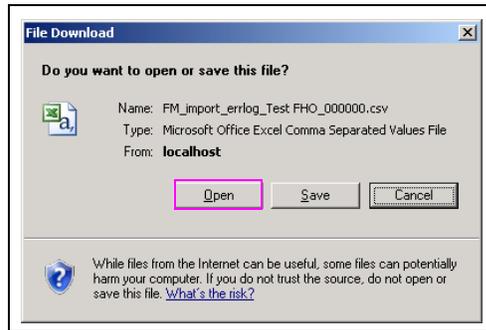
- 18 Click **Browse** to navigate to your file and then press **OK**.
- 19 If you receive this error message during the **IMPORT** it indicates that there is an issue in the file you are **IMPORTING**, and you will be presented with an option to open or save the **ERROR** log/report.
- Note: If NO error was encountered, proceed to step 20 on page 5-11.*

**Figure 5-18: Import Fail Error**



- 20 Select **Open** to see detailed information on what the error was specific to the line number in the file, and specific problem.

**Figure 5-19: Opening Imported File**



- 21 In this example, there is an issue with the data in the Rule\_Name field on **Line Number 2**. A closer look shows that there is no such Group rule in the system, because the Rule should have been “10 gal Diesel”, not “10 GALLON GAS”. Research the error, correct your **IMPORT** file, and retry.

**Figure 5-20: Editing Rule\_Name Field**

27						
28						
29						
30	Line Number	Field	Value	Description		
31		2 Rule_name	10 GALLON GAS	No such group rule		
32	R	Mean	test veh2		2	3
33						
34						
35	Lines read: 2: skipped: 1: processed: 1: rejected: 1: accepted: 0 (changed: 0: unchanged: 0)					
Ready						

- 22 If no **ERROR** message appears, then open the **ERROR** log report to see how many records imported.

In this example, 1 record was processed, 0 was rejected, and 1 was accepted.

Figure 5-21: Editing Import File

17	// Action	Record_ty	Name	Rule_type	Description	Content_si	Fleet_list	Limit_type	Single	Day	Week	Month
18												
19	// Action	Record_ty	Name	Rule_type	Description	Content_si	Fleet_list	Day	Week	Month		
20												
21	// Action	Record_ty	Name	Rule_type	Description	Content_si	Fleet_list	Allow_type	Product			
22												
23	// Action	Record_ty	Name	Rule_type	Description	Content_si	Fleet_list	Allow_type	Cluster			
24	// GroupRule											
25	// Action	Record_ty	Name	Description	Limit_rule	Visit_rule	Time_rule	Fuel_rule	Cluster_rul	Content_si	Fleet_list	
26	-----											
27												
28												
29												
30												
31	Lines read: 2; skipped: 1; processed: 1; rejected: 0; accepted: 1 (changed: 1; unchanged: 0)											
32												
33												
34												
35												

Ready

At this point you should have a fully populated database containing all the information from your Excel sheet. It is a good practice to navigate through the FHO devices, looking at a few records to verify all imported as you expected.

- 23** Often one may find that a few records are rejected from the import routine for a variety of reasons (often that the syntax of a rule is slightly misspelled). You may find what made the record unacceptable in the import error log that opens following an import.
- If all imported perfectly, you will see no records.
  - If there were errors, you will see a list of the rejected records and a description of why it was rejected. You may either repair those records and reimport or manually enter those devices, if it is only a few records.

Figure 5-22 shows the record on line 11 of the import file was rejected because the name field is too long (longer than 31 characters).

Shortening this field and reimporting will fix the issue.

Figure 5-22: Example of Import File

Line Num	Field	Value	Description									
11	Name	2690 UNIT 16 HUMBOLDT SHOP DODGE	Field too wide (max: 31)									
R	Msg	2690 UNIT 16 HUMBOLDT SHOP DODGE		2	2	1	14	1	162690	2.09E+17	W_H_COC	Default No Restrict 0

## 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:

- **Cluster:** If the gas stations are bundled in clusters, this limit type defines in which clusters the vehicle may refuel.
- **Limits:** Defines fuel limits per day/week/month, set in money/volume, for the device.
- **Visits:** Specifies the maximum number of visits to fuel stations allowed for the vehicle per day/week/month.
- **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. Refer to [“Limit Rule File Fields”](#), [“Visit Rule File Fields”](#) on page 5-14, [“Fuel Rule File Fields”](#), and [“Cluster Rule File Fields”](#) on page 5-15.

### Limit Rule File Fields

Following table lists the rule file fields for limit:

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.	<input checked="" type="checkbox"/>
2	Record_type-Limit_rule	String (4)	The word “Rule”.	<input checked="" type="checkbox"/>
3	Name	String (32)	Rule name (Rule Properties - General Tab) (Unique Key).	<input checked="" type="checkbox"/>
4	Rule_type	String (5)	The word “Limit”.	<input checked="" type="checkbox"/>
5	Description	String (128)	Optional description of the rule (Rule Properties - General Tab).	<input checked="" type="checkbox"/>
6	Content_summary	String (256)	Summary of the rule conditions (as defined in Rule Properties - Detail Tab).	<input type="checkbox"/>
7	Fleet_list	String (100)	The fleet/s having access rights to the rule.	<input type="checkbox"/>
8	Limit_type	String (6)	Condition type: the word “Money” or the word “Volume”.	<input checked="" type="checkbox"/>
9	Single	Number	Single refuel amount limit (as defined in Rule Properties - Detail Tab).	<input type="checkbox"/>
10	Day	Number	Daily amount limit (as defined in Rule Properties - Detail Tab).	<input type="checkbox"/>
11	Week	Number	Weekly amount limit (as defined in Rule Properties - Detail Tab).	<input type="checkbox"/>
12	Month	Number	Monthly amount limit (as defined in Rule Properties - Detail Tab).	<input type="checkbox"/>

## Visit Rule File Fields

Following table lists the rule file fields for visit:

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.	<input checked="" type="checkbox"/>
2	Record_type-Visit_rule	String (4)	The word "Rule".	<input checked="" type="checkbox"/>
3	Name	String (32)	Rule name (Rule Properties - General Tab) (Unique Key).	<input checked="" type="checkbox"/>
4	Rule_type	String (5)	The word "Limit".	<input checked="" type="checkbox"/>
5	Description	String (128)	Optional description of the rule (Rule Properties - General tab).	<input checked="" type="checkbox"/>
6	Content_summary	String (256)	Summary of the rule conditions (as defined in Rule Properties - Detail tab).	<input type="checkbox"/>
7	Fleet_list	String (100)	The fleet/s having access rights to the rule.	<input type="checkbox"/>
8	Day	Number	Maximum visits per day (as defined in Rule Properties - Detail tab).	<input type="checkbox"/>
9	Week	Number	Maximum visits per week (as defined in Rule Properties - Detail tab).	<input type="checkbox"/>
10	Month	Number	Maximum visits per month (as defined in Rule Properties - Detail tab).	<input type="checkbox"/>

## Fuel Rule File Fields

Following table lists the rule file fields for fuel:

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.	<input checked="" type="checkbox"/>
2	Record_type-Fuel_rule	String (4)	The word "Rule".	<input checked="" type="checkbox"/>
3	Name	String (32)	Rule name (Rule Properties - General Tab) (Unique Key).	<input checked="" type="checkbox"/>
4	Rule_type	String (4)	The word "Fuel".	<input checked="" type="checkbox"/>
5	Description	String (128)	Optional description of the rule (Rule Properties - General Tab).	<input checked="" type="checkbox"/>
6	Content_summary	String (256)	Summary of the rule conditions (as defined in Rule Properties - Detail Tab).	<input type="checkbox"/>
7	Fleet_list	String (10)	The fleet/s having access rights to the rule.	<input type="checkbox"/>
8	Allow_type	String (8)	Condition type: The word "Allow" or the word "Disallow".	<input checked="" type="checkbox"/>
9	Product	String (50)	The product/s to be allowed/disallowed for refueling (as defined in Rule Properties - Detail Tab).	<input checked="" type="checkbox"/>

## Cluster Rule File Fields

Following table lists the rule file fields for cluster:

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.	<input checked="" type="checkbox"/>
2	Record_type-Cluster_rule	String (4)	The word "Rule".	<input checked="" type="checkbox"/>
3	Name	String (32)	Rule name (Rule Properties - General Tab) (Unique Key).	<input checked="" type="checkbox"/>
4	Rule_type	String (7)	The word "Cluster".	<input checked="" type="checkbox"/>
5	Description	String (128)	Optional description of the rule (Rule Properties - General Tab).	<input checked="" type="checkbox"/>
6	Content_summary	String (256)	Summary of the rule conditions (as defined in Rule Properties - Detail Tab).	<input type="checkbox"/>
7	Fleet_list	String (100)	The fleet/s having access rights to the rule.	<input type="checkbox"/>
8	Allow_type	String (8)	Condition type: The words "Allow" or "Disallow".	<input checked="" type="checkbox"/>
9	Cluster	String (100)	The cluster/s in which refueling is allowed/disallowed (as defined in Rule Properties - Detail Tab).	<input checked="" type="checkbox"/>

See [Figure 5-23](#) for an example of an imported rule file.

**Figure 5-23: 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, Compr		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

# 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.

Group Rule File comprises the following 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.	<input checked="" type="checkbox"/>
2	Record_type-Group_rule	String (9)	The word "Group Rule"	<input checked="" type="checkbox"/>
3	Name	String (32)	Rule name (Group Rule Properties - General Tab) (Unique Key).	<input checked="" type="checkbox"/>
4	Description	String (128)	Optional description of the rule (Rule Properties - General Tab).	<input checked="" type="checkbox"/>
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.	<input type="checkbox"/>
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.	<input type="checkbox"/>
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.	<input type="checkbox"/>
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.	<input type="checkbox"/>
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.	<input type="checkbox"/>
10	Content_summary	String (256)	Summary of the rules included in the group rule (as defined in Group Rule Properties - Detail Tab).	<input type="checkbox"/>
11	Fleet_list	String (100)	The fleet/s having access rights to the group rule.	<input type="checkbox"/>

See [Figure 5-24](#) for an example of imported group file.

**Figure 5-24: 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;	

## Means (Device) File

The term Device or Means refers to the entity actually defined as the authorizing device, which may be a Vehicle Identifying Unit (VIU), smart tag, key or magnetic card.

Normally, fleets contain vehicles and each vehicle is associated with an authorization device. 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). To make the definition simple and logical, authorizer devices and vehicles are defined in the same entity.

Device file name: Device\_YYYYMMDD\_hhmm.CSV.

Following table lists the contents of the Device file:

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.	<input checked="" type="checkbox"/>
2	Record_type-Group_rule	String (4)	The word "Mean".	<input checked="" type="checkbox"/>
3	Name	String (80)	A name identifying the specific device (Device Properties - Information Tab) ( <b>Unique Key</b> ).	<input checked="" type="checkbox"/>
4	Status	Integer (1)	Device status: 2 for Active, 1 for Blocked (Local Management Devices - Active/Blocked button).	<input checked="" type="checkbox"/>
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 (Device Properties - General Tab)	<input checked="" type="checkbox"/>
6	Hardware_type	Integer (1)	Hardware type: 1 for Handheld, 6 for Vehicle Mounted (Device Properties - General Tab).	<input checked="" type="checkbox"/>
7	Auth_type	Integer (1)	Authorization hardware type: 1 for FuelOpass 10 for TRU 2 for VIU3 3 for VIU4 4 for VIU45 9 for VIU35 14 for Fuel Card 20 for Gasboy Key 21 for Manual Entry 5 for Electronic Key 6 for Tag 7 for Authorizer 8 for Master Authorizer (Device Properties - Format Tab)	<input checked="" type="checkbox"/>
8	Employee_type	Integer (1)	1 (this value must not be modified)	<input checked="" type="checkbox"/>
9	Vehicle_no	String (80)	License plate number or unique number of the vehicle (Device Properties - Information Tab).	<input checked="" type="checkbox"/>
10	String	String (50)	Device card number (Device Properties - Format Tab) (Unique Key).	<input checked="" type="checkbox"/>
11	Fleet_name	String (80)	Exact name of the fleet, to which the device is associated, as it appears in the Fleets List (Device Properties - Information Tab).	<input checked="" type="checkbox"/>

No.	Field Name	FHO Field Type	Description	Mandatory
12	Department_name	String (80)	Exact name of the department, to which the device is associated, as it appears in the Departments List (Device Properties - Information Tab).	<input checked="" type="checkbox"/>
13	Rule_name	String (32)	Exact name of the Group Rule that applies to the device, as it appears in the Group Rules List (Device Properties - Information Tab).	<input type="checkbox"/>
14	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 (Device Properties - Two Stage Tab).	<input checked="" type="checkbox"/>
15	Price_list_name	String (100)	Exact name of the predefined Price List, to which the device is associated (Device Properties - Information Tab).	<input type="checkbox"/>
16	Model_name	String (80)	Exact model name of the vehicle, as it appears in the Model List (Device Properties - Information Tab).	<input type="checkbox"/>
17	Pump_name		N/A (Leave empty)	<input type="checkbox"/>
18	Year	Number (4)	Manufacturing year of the vehicle (Device Properties - Information Tab).	<input type="checkbox"/>
19	Capacity	Number	Vehicle fuel tank capacity, as defined for the specific model in the Model List (Device Properties - Information Tab).	<input type="checkbox"/>
20	Consumption	Number	Vehicle average fuel consumption, as defined for the specific model in the Model List (Device Properties - Information Tab).	<input type="checkbox"/>
21	Odometer	String (80)	Initial odometer reading value of the vehicle (Device Properties - Information Tab).	<input type="checkbox"/>
22	Cust_id	String (80)	The ID number of the customer (Device Properties - Information Tab).	<input type="checkbox"/>
23	Address		N/A (Leave empty)	<input type="checkbox"/>
24	Account-type	Integer (1)	0 (this value must not be modified)	<input checked="" type="checkbox"/>
25	Available_amount	Number	Device current available amount (0, if the company does not work with accounts).	<input checked="" type="checkbox"/>
26	Use_pin_code	Integer (1)	PIN code validation option: 0 for inactive, 1 for active (Device Properties - Validation Tab).	<input checked="" type="checkbox"/>
27	Pin_code	Integer (1)	Device PIN code, maximum 5 digits (as defined in Device Properties - Validation Tab).	<input type="checkbox"/>
28	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, Device Properties - Validation Tab).	<input type="checkbox"/>
29	Nr_pin_retries	Integer (1)	Number of allowed PIN code entry retries, 0 for unlimited (Device Properties - Validation Tab).	<input type="checkbox"/>
30	Block_if_pin_retries_fail	Integer (1)	Enables device blocking if all PIN code entry allowed retries fail: 0 for disabled, 1 for enabled (Device Properties - Validation Tab).	<input type="checkbox"/>
31	OrPT_prompt_for_plate	Integer (1)	Prompting for vehicle number entry and verification option: 0 for disabled, 1 for enabled (Device Properties - Validation Tab).	<input checked="" type="checkbox"/>
32	OrPT_prompt_for_odometer	Integer (1)	Prompting for odometer reading entry option: 0 for disabled, 1 for enabled (Device Properties - Validation Tab).	<input checked="" type="checkbox"/>
33	Do_odometer_reasonability_check	Integer (1)	Odometer reasonability check option: 0 for disabled, 1 for enabled (Device Properties - Validation Tab).	<input checked="" type="checkbox"/>
34	Max_odometer_delta_allowed	Integer (1)	Maximum difference between the previous and the current odometer reading (Device Properties - Validation Tab).	<input checked="" type="checkbox"/>

No.	Field Name	FHO Field Type	Description	Mandatory
35	Nr_odometer_retries	Integer (1)	Amount of retries before odometer entry fails the reasonability check: 0 for unlimited (Device Properties - Validation Tab).	<input checked="" type="checkbox"/>
36	Engine_hours		N/A (the current value of the Engine Hour is entered through the OrPT)	<input checked="" type="checkbox"/>
37	Original_engine_hours	Integer (1)	0 (this value must not be modified)	<input checked="" type="checkbox"/>
38	Target_engine_hours	Integer (1)	0 (this value must not be modified)	<input checked="" type="checkbox"/>
39	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 ; (Device Properties - Two Stage Tab). Applicable for vehicle mounted devices only.	<input type="checkbox"/>
40	OrPT_prompt_for_engine_hours	Integer (1)	Prompting for engine hours entry option: 0 for disabled, 1 for enabled (Device Properties - Validation Tab).	<input checked="" type="checkbox"/>
41	Address2		N/A (Leave empty)	<input type="checkbox"/>
42	City		N/A (Leave empty)	<input type="checkbox"/>
43	State		N/A (Leave empty)	<input type="checkbox"/>
44	Zip		N/A (Leave empty)	<input type="checkbox"/>
45	Phone		N/A (Leave empty)	<input type="checkbox"/>
46	UserData1		N/A (Leave empty)	<input type="checkbox"/>
47	UserData2		N/A (Leave empty)	<input type="checkbox"/>
48	UserData3		N/A (Leave empty)	<input type="checkbox"/>
49	UserData4		N/A (Leave empty)	<input type="checkbox"/>
50	UserData5		N/A (Leave empty)	<input type="checkbox"/>
51	Start_odometer		N/A (Leave empty)	<input type="checkbox"/>
52	EH_consumption	Number	Vehicle standard engine hours fuel consumption, as defined for the specific model in the Model List (Device Properties - Information Tab).	<input checked="" type="checkbox"/>
53	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, Devices Properties - Format Tab).	<input checked="" type="checkbox"/>
54	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.	<input checked="" type="checkbox"/>
55	String2	String (50)	Additional device card number.	<input type="checkbox"/>
56	String3	String (50)	Additional device card number.	<input type="checkbox"/>
57	String4	String (50)	Additional device card number.	<input type="checkbox"/>
58	String5	String (50)	Additional device card number.	<input type="checkbox"/>

No.	Field Name	FHO Field Type	Description	Mandatory
59	Plate_check_type	Integer (1)	Plate number entry validation option: 0 for inactive, 1 for active.	<input checked="" type="checkbox"/>
60	Nr_plate_retries	Integer (1)	Number of allowed plate number entry retries, 0 for unlimited.	<input checked="" type="checkbox"/>
61	Block_if_plate_retries_fail	Integer (1)	Enables device blocking if all plate number entry allowed retries fail: 0 for disabled, 1 for enabled.	<input checked="" type="checkbox"/>
62	Chassis_number	String (32)	Vehicle chassis number.	<input checked="" type="checkbox"/>

Figure 5-25 shows an example of imported device file (fragment).

**Figure 5-25: Example of Imported Device File (Fragment)**

44 // Action	Record_ty	Name	Status	Type	Hardware	Auth-type	Employee	Vehicle	String	Fleet_nam	Departmer	Rule_nam	Driver_id_t	Price_list	Model_nar	Pump_nar	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

## 6 – Approximating Gasboy RAWTRANS.dat File or CFN Series RAWTRANS

You may use the Custom Export function to create a file to match your RAWTRANS file from your old Gasboy system. Every customer has a slightly different setup on what they want and what they need for processing. Here is the recommended order for approximating a standard RAWTRANS. Your file may be different and might require some adjustment.

If you work with a third-party vendor or software, they may be the best ones to help you figure out exactly what data and how many digits you will need in the string data (transaction data) you send to them. However, if you cannot gather this information from a third-party who uses it, you will be able to determine what is in the transaction string with the information below.

You can find what is in your **RAWTRANS FILE** in a CFN3 system by doing a print command of your transactions, with RAW mode disabled. The screen will display the files contents with headers at the top. Note that the Site ID also appears [you will need the Site ID for your new export from the FHO (see [Figure 6-1](#))].

**Figure 6-1: CFN3 System**

TRIN	Card	ACCI	Veh	AUTH	DATE	TIME	PH	PR	GALLONS	PRICE	\$TOTAL	ODOM	ER
8786	0173	0509	0173	SCFFFF	11/08	10:03	8	3	27.40	3.310	90.69	42511	
8787	0122	0303	0122	SCFFFF	11/08	10:04	4	2	8.90	2.970	26.43	96723	
8788	0822	0509	0822	SCFFFF	11/08	10:12	8	3	37.75	3.310	124.95	26547	
[P:] = [P:] = ^C													
[P:] = 62													
Transactions at site 1001.													
8741	0347	0111	0347	SCFFFF	11/07	21:37	2	2	3.35	2.970	9.95	3298	
8742	0598	0503	0598	SCFFFF	11/07	22:03	4	2	25.10	2.970	74.55	35394	
8743	0175	0509	0175	SCFFFF	11/07	23:09	7	3	14.30	3.310	47.33	55279	
8744	0410	0112	0410	SCFFFF	11/08	0:32	1	2	19.50	2.970	57.92	40002	
8745	0299	0303	0299	SCFFFF	11/08	1:19	3	2	7.95	2.970	23.61	28360	
8746	0848	0112	0848	SCFFFF	11/08	4:58	3	2	9.45	2.970	28.07	2155	
8747	0755	0509	0755	SCFFFF	11/08	6:24	7	3	48.95	3.310	162.02	34266	
8748	0455	0504	0455	SCFFFF	11/08	6:34	7	3	22.80	3.310	75.47	95334	
8749	0403	0509	0403	SCFFFF	11/08	6:43	8	3	71.30	3.310	236.00	37127	
8750	0501	0512	0501	SCFFFF	11/08	7:12	4	2	21.30	2.970	63.26	87547	T
lined out													
8751	0829	0509	0829	SCFFFF	11/08	7:27	5	3	35.60	3.310	117.84	22922	
8752	0180	0302	0180	SCFFFF	11/08	7:30	4	2	13.10	2.970	38.91	16483	
^C													
8753	0851	0509	0851	SCFFFF	11/08	7:35	5	3	23.75	3.310	78.61	47099	
[P:] = [P:] =													

*Note: Other data such as the number of spaces in card numbers can be found in the SYSPAR Menu.*

Figure 6-2: System Parameters

```

CFN3
*** System Parameters ***
1. Power up: Gasboy Test Lab
2. Site ID: 1001
3. System ID: 1962
4. Second System ID: 0
5. Network poll address: 1
6. Manager key permission: 10
7. PIN key: ****
8. Backup password: GASBOY
9. Lockout: Limited
10. Disk journal: Yes
11. Send generic log messages to disk journal: No
12. Locale code for site: USA

Enter parameter #, P# for page #, RETURN for next page, or Q to quit: _
    
```

Figure 6-3: Club Card Format

```

CFN3
*** Club card format - Field widths ***
13. Digits in system ID: 4
14. Digits in account #: 6
15. Digits in allocation: 4
16. Digits in vehicle #: 3
17. Digits in expiration date: 4
18. Digits in limitation code: 1
19. Digits in authorization code: 2
20. Digits in price level: 1
21. Digits in restriction code: 1
22. Digits used in PIN calculation: 4
23. Digits in checking PIN: 4
24. Digits in savings PIN: 4
25. Digits in credit PIN: 4

Enter parameter #, P# for page #, RETURN for next page, or Q to quit: _
    
```

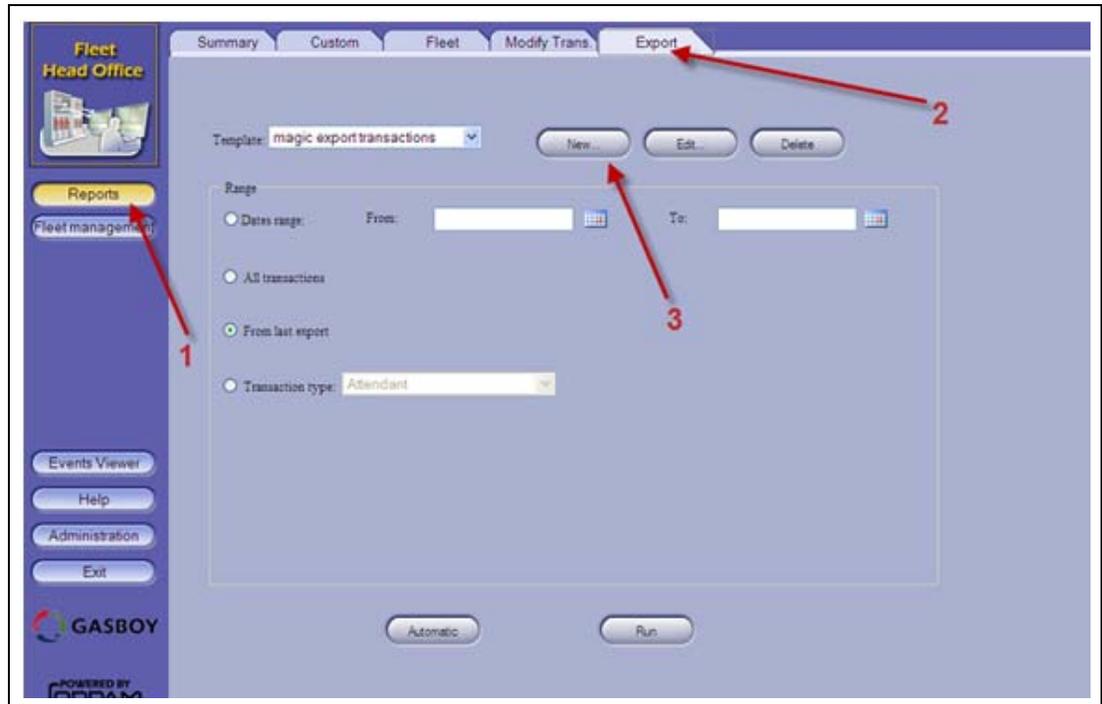
*Note: The information displayed here determines how long each field should be from the CFN System and provides information to build the RAWTRANS file. Once this information is gathered, enable RAW mode on the CFN III console and then perform another print transaction command to get the string data.*

# Setting up Standard RAWTRANS

To configure a standard RAWTRANS file export, proceed as follows:

- 1 Select **Reports**, the **Export** tab, and **New**.

**Figure 6-4: Exporting RAWTRANS File**



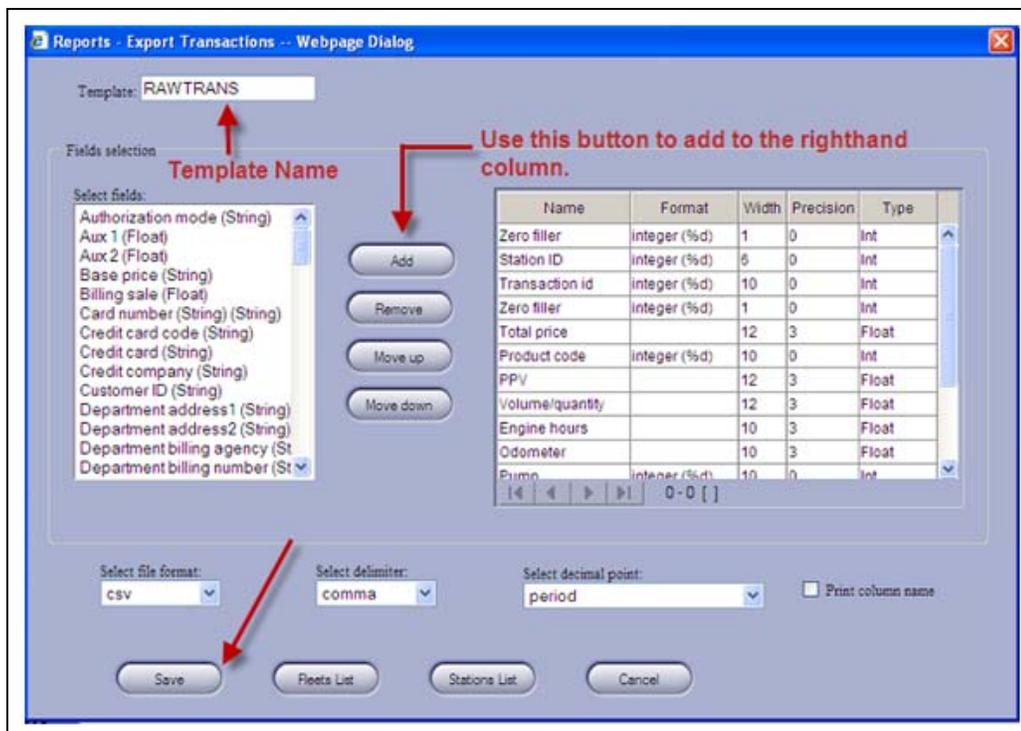
- 2 Name the Report Template and create the template by using the Add, Remove, Move Up, and Move Down options. Enter the following information in the respective columns:

Field In The Gasboy RAWTRANS File	Can The PLUS System Give Exact Data?	What To Set In PLUS System	Format (see Note 5)	Width	Precision
System Type	No	Zero Filler		1	0
Site ID (see Note 1)	Yes	Station ID		6	0
Transaction Number	Yes	Transaction ID		6	0
CFN Sequence Number	No	Zero Filler		4	0
CFN Status Code	No	Zero Filler		1	0
Total Price in Hundredths	Yes	Total Price		8	2
CFN Account to Charge	No	Zero Filler		1	0
Transaction Type	No	Zero Filler		1	0
Product Code (see Note 2)	Yes	Product Code		2	0
Unit Price in Thousandths	Yes	PPV		4	3

Field In The Gasboy RAWTRANS File	Can The PLUS System Give Exact Data?	What To Set In PLUS System	Format (see Note 5)	Width	Precision
Quantity in Thousandths	Yes	Volume/Quantity		8	3
Hours in Tenths	Yes	Engine Hours		8	1
Odometer in Tenths	Yes	Odometer		8	1
Pump Number	Yes	Pump		2	0
Date (YYYYMMDD) (see Note 3)	Yes	Transaction Date		8	0
Time (HHMM) (see Note 4)	Yes	Transaction Time		4	0
Error	No	Zero Filler		2	0
CFN Authorization Number	No	Zero Filler		6	0
Additional Required Digits	No	Zero Filler		Up to 100	0

Notes: 1) Site ID must be set as Station Code in Station Setup.  
 2) Ensure your FHO Product Codes match those that were in your CFN.  
 3) Change the format to YYYYMMDD.  
 4) Change the format to hhmm.  
 5) Use Format column to define 0 padded fields, Date/Time formats, Right and Left of string fields. For example, Total Price must be a 0 PADDED/EXACT FLOAT for its format to match RAWTRANS.

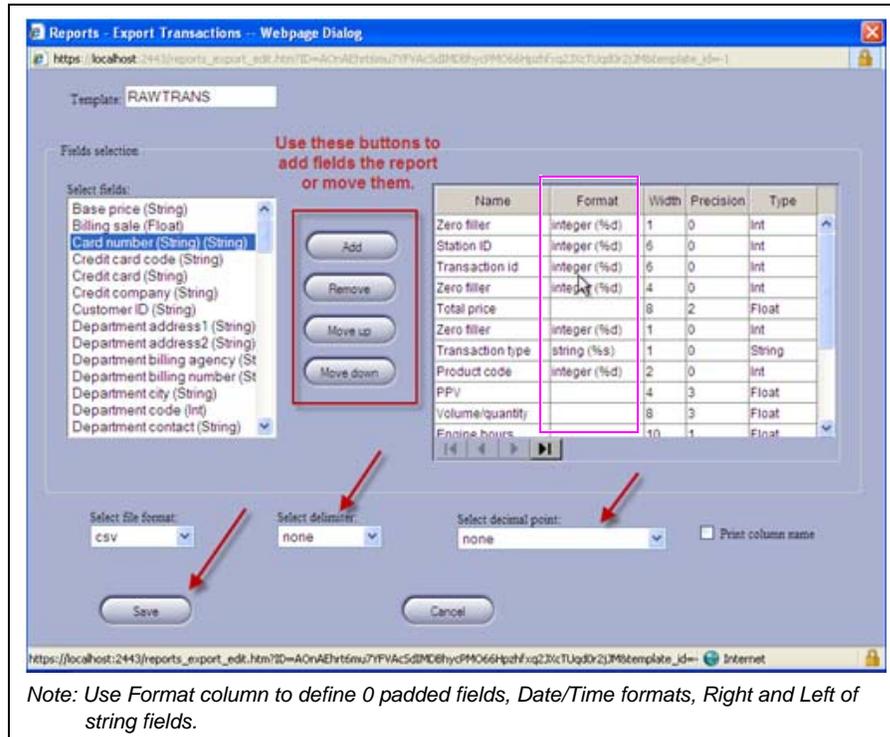
Figure 6-5: Exporting Transaction Template



- 3 Add items from the left column to the right column to approximate the contents of the RAWTRANS file.

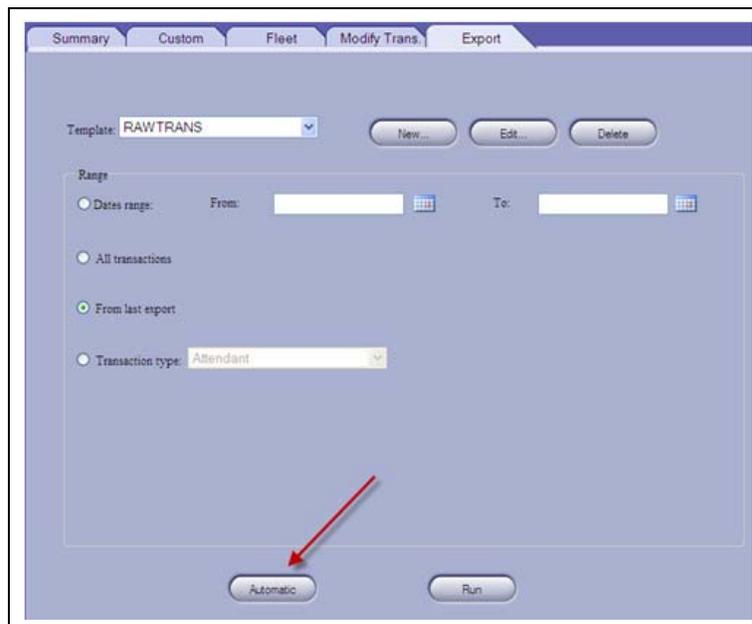
- 4 Select **None** for the delimiters and decimals, and save the document. The export will likely be formatted as text, depending on what format your processor needs to use. After creating the preferred export format, ensure that it is saved.

Figure 6-6: Configuring Export Transaction Template



- 5 After saving the template, click **Automatic** at the bottom of the screen.

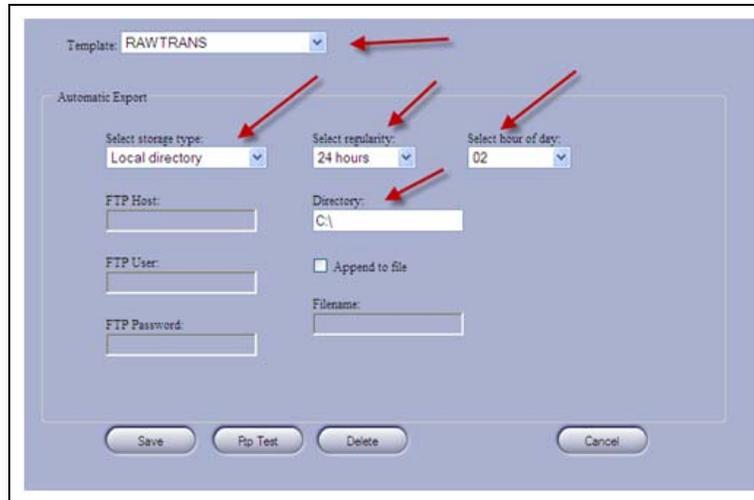
Figure 6-7: Saving Export Transaction Template



- 6 Select the template, the storage type, the regularity you want the report to run, and when you want it to run (for example: 2 am), the destination (UNC Path for network drives), and then click **Save**.

*Notes: 1) Once the RAWTRANS Report is created, create an automatic export and send it to an FTP site or a network or PC directory. Click **Automatic** at the bottom of the page.  
2) Only one export may be set to automatically run, and it will only run from the time of the last export (if someone does a manual export, it may throw off your automated export, if they use your template).*

**Figure 6-8: Automatic Export of RAWRANS Template**



*Note: The columns highlighted in yellow may be carefully changed, if needed. Only change the format tab to integer types. The width (max number of digits) and precision (places to the right of the decimal) may also be altered by clicking on the fields to match your needs.*

**Figure 6-9: RAWRANS Template Field Selection**



## 7 – Connecting to Stations (Sites)

To communicate with the newly installed sites, they should be connected first. The installing technician should be contacted to complete this connection. This allows the FHO to push the devices down to the PAS unit and for transaction to be uploaded to the FHO.

### Before You Begin

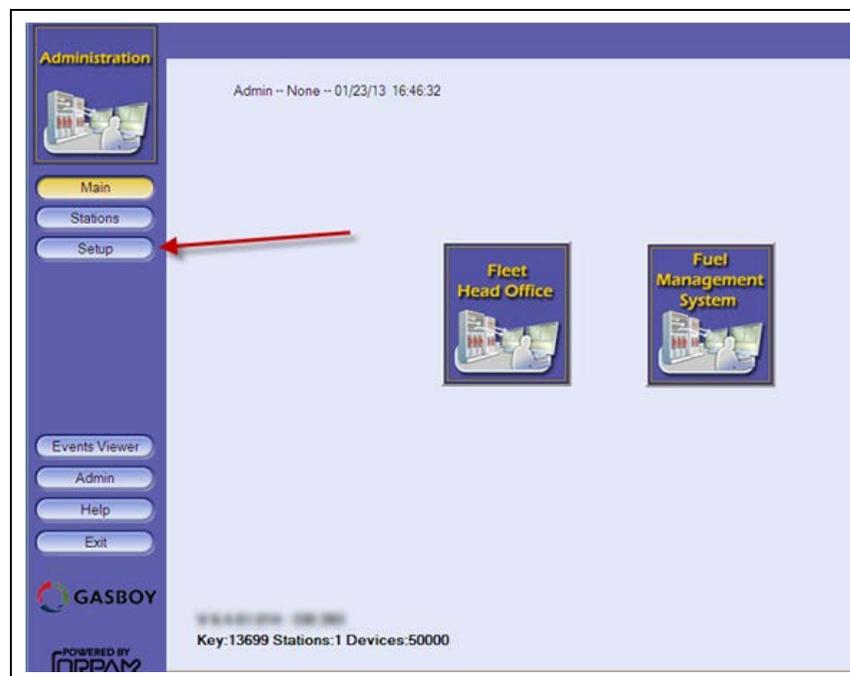
Before connecting to a site, ensure that all the products pumped at the site are defined in the FHO, as well as the FHO administrative information.

### Connecting to Site

To connect to a site, proceed as follows:

- 1 Login using administrative login credentials and click **Setup** (see [Figure 7-1](#)).

**Figure 7-1: FHO Login**



- 2 Enter the required site information and click **Save** (see [Figure 7-2](#)).

**Figure 7-2: Site Information**

- 3 Click the **Products** tab and confirm that all the fuel types are loaded (see [Figure 7-3](#)).

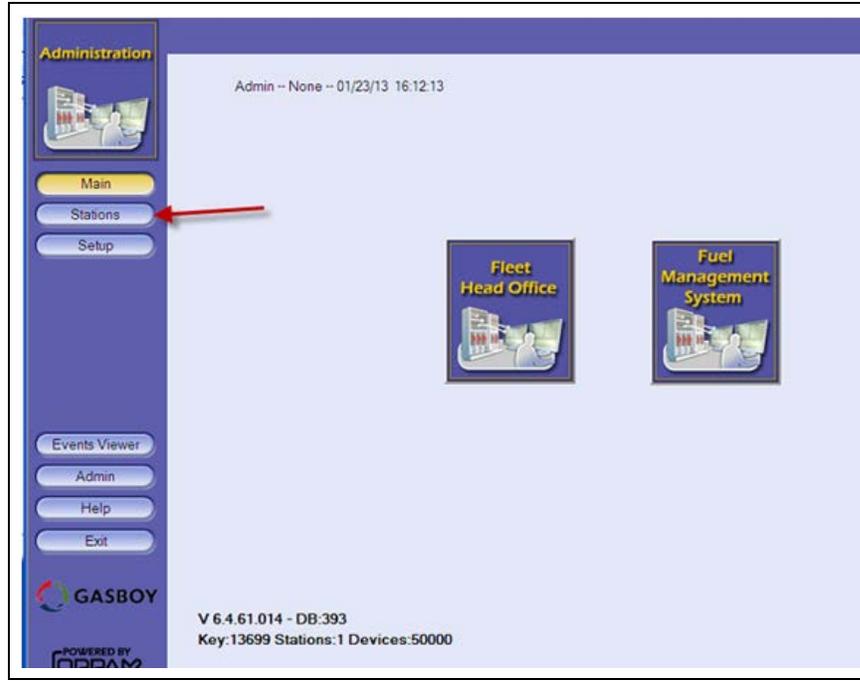
**Figure 7-3: Product Information**

Name	Short name	Code	VR Code	Type
Unleaded 1		1		Wet
Unleaded 2		2		Wet
Unleaded 3		3		Wet
Unleaded 4		4		Wet
Unleaded 5		5		Wet
Unleaded Methanol (5.7blend)		6		Wet
Unleaded Plus Methanol (5.7blen)		7		Wet
Super Unleaded Methanol (5.7ble		8		Wet
Unleaded Methanol (7.7blend)		9		Wet
Unleaded Plus Methanol (7.7blen		10		Wet
Super Unleaded Methanol (7.7ble		37		Wet
Unleaded Methanol (10blend)		38		Wet
Unleaded Plus Methanol (10blend		39		Wet
Super Unleaded Methanol (10blen		40		Wet
Unleaded Ethanol (5.7blend)		11		Wet
Unleaded Plus Ethanol (5.7blend		12		Wet
Super Unleaded Ethanol (5.7blen		13		Wet
Unleaded Ethanol (7.7blend)		14		Wet
Unleaded Plus Ethanol (7.7blend		15		Wet
Super Unleaded Ethanol (7.7blen		41		Wet
Unleaded Ethanol (10blend)		42		Wet

*Note: Once the site-based components (PAS or SiteOmat) have been installed by the technician, connect to the site and push the card file database to the site.*

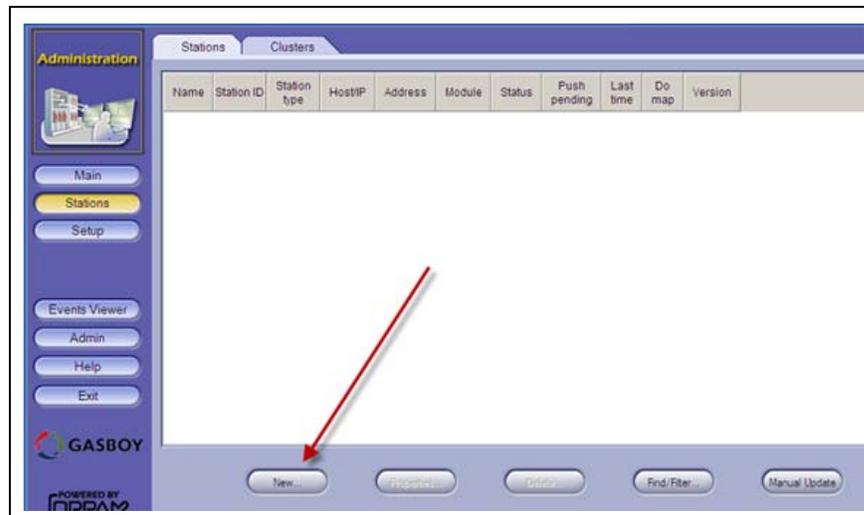
- 4 Login using administrative login credentials and click **Stations** (see [Figure 7-4](#)).

**Figure 7-4: Station Information**



- 5 Click **New** (see [Figure 7-5](#)).

**Figure 7-5: Creating New Station**



- 6 Select the correct type [for example, Passport or SiteOmat (see [Figure 7-6](#))].
- 7 Enter the Station Number (must match the information in the PAS or Orpak Controller Unit (OrCU) that the technician installed at the site), Station Name, IP address, user name for the HOCOMM user (HOCOMM), and the password (123456).
- 8 Update the Frequency (generally 1 minute for only a few sites, 5 minutes for more than 15 sites) and the Outage Tolerance (most will set it for at least one week and some for one month).
- 9 Check the **Synchronize station clock with Head Office** box and click **Connect** (see [Figure 7-6](#)).

**Figure 7-6: Station Properties**

- Notes: 1) A SiteOmat site contains a box to map products (double-click each line in the FHO Column. Match Diesel to Diesel and Unleaded to Unleaded, and so on).*
- 2) The amount of time that is required for the PAS to be able to accept cards depends on how long the download takes. Downloading the entire list of devices/card file to the PAS is dependent on server resources, bandwidth and size of the card file.*

## 8 – Troubleshooting

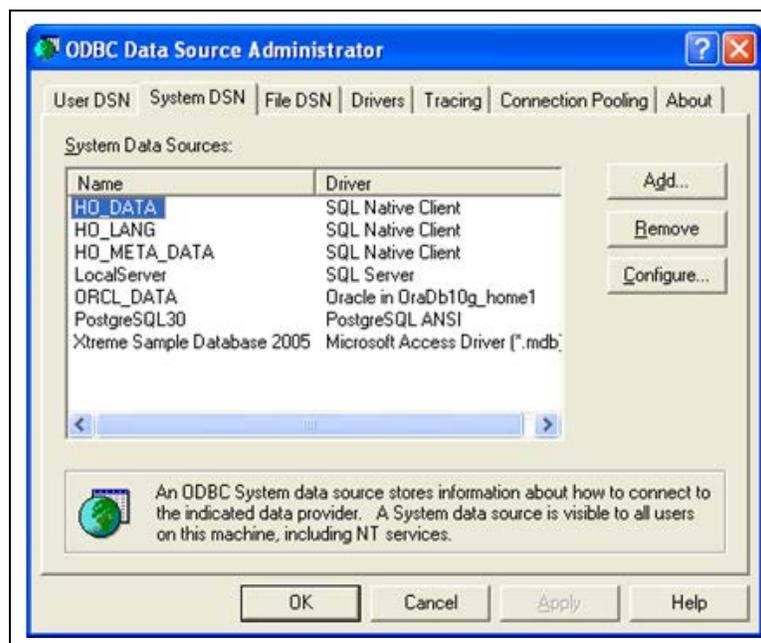
### Failure to Run/Install FHO Program

Possible causes for the failure are:

- No HASP protection key. Verify that the HASP is connected to the USB port. You may use the HASP Viewer Application to determine whether a HASP is being detected by the PC. It is not certain that USB Passthrough has been achieved since it shows up in the Device Manager.
- .Net 3.5 or Windows Installer 4.0 are not installed.
- The server Web Port 443 is being used by another application. Verify that no other Web server, such as IIS, is running. Some programs such as Skype™ may also use this port, and cause failure. Port 443 must be available. In cases where it is occupied by other applications, define another port for them.
- A Remote Desktop session is active on the server (this will sometimes interfere with the FHO's ability to see the HASP through USB Passthrough. Ensure that all remote desktop sessions are closed (connections using vSphere, VNC or TeamViewer usually do not have this issue).
- Open Database Connectivity (ODBC) connection to database does not work. Go to ODBC connection window, select Control Panel, Administrative Tools and then Data Sources.

*Note: These instructions are for advanced users only.*

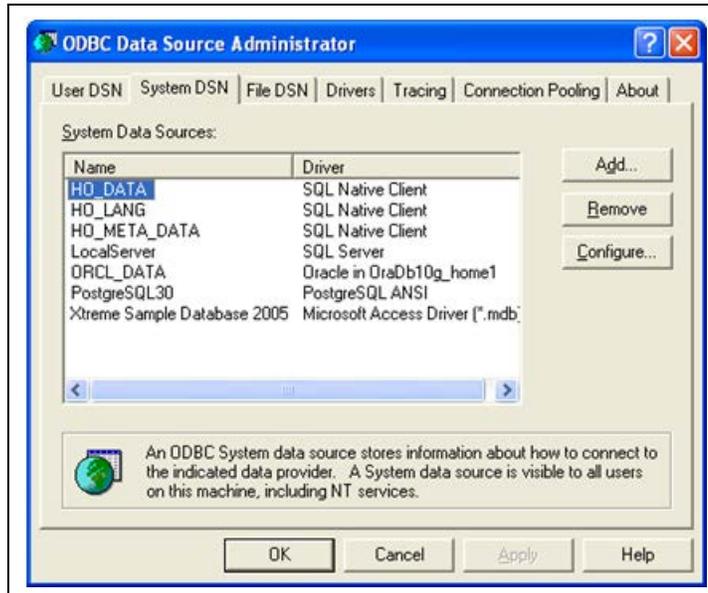
**Figure 8-1: ODBC Connection Dialog Screen**



To connect to the ODBC dialog screen, proceed as follows:

- 1 Select the **System DSN** tab.

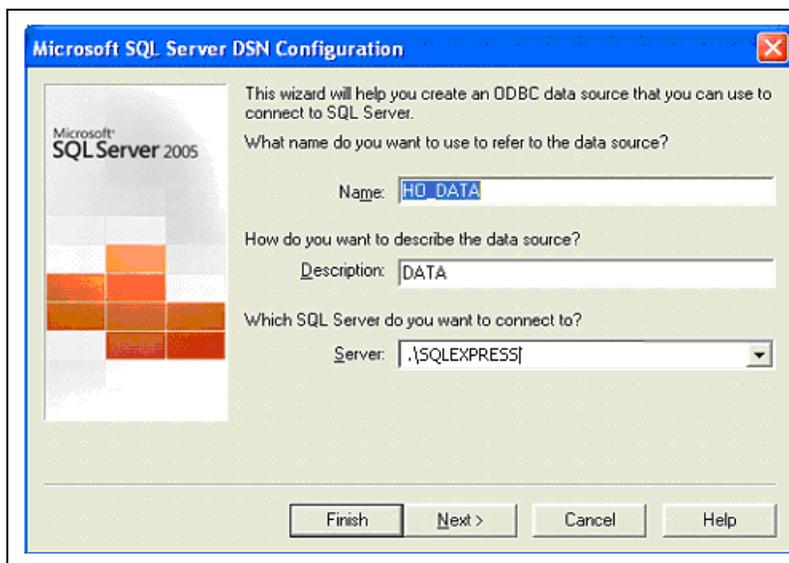
**Figure 8-2: ODBC Connection Dialog Screen**



- 2 Select **HO\_DATA** and click **Configure**.

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

**Figure 8-3: SQL Server DSN Configuration**



- 3 If the user manages a small fleet using SQL Express software, ensure 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**.

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 do not appear, open SQL Studio and run the following scripts in **C:\Orpak\HeadOffice\DB\mssql: LANG\_drop.sql**, followed by **LANG.sql**, and then **META\_DATA\_drop.sql** followed by **META\_DATA.sql**.

*Notes: 1) Database collection needs to be set correctly (requires a highly trained technician).  
2) Database is case sensitive (requires a highly trained technician).*

- 6 If the Head Office does not start, ensure that all the four Orpak services are running.
- 7 If the install does not complete, ensure that the installer is being run with administrative permission.
- 8 If the Head Office does not run, ensure that all the four Orpak services are being run as by an administrative user.

## Connection Issues to PAS

To resolve connection issues to the PAS, consider these questions:

- Can you ping the PAS IP from the FHO server? If not, network connectivity has not been achieved.
- Is the PAS powered on? If not, power the PAS on.
- Is the PAS connected to a live network jack that is on the same network as the FHO server? If not, make the connection.

### IMPORTANT INFORMATION

If the reports do not load/display properly, consider which version of Internet Explorer (IE) is being used. Only IE 8 and below are supported. IE 9 may be used in compatibility mode. Browsers other than Internet Explorer are not yet supported.

## Installation Files

The installation of the HO installs the following files:

- Under **C:\Orpak\HeadOffice**
  - History.log - history of HO 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 - HO uninstall program
  - VERSION - contains the full version of the current installed HO
- Under **C:\Orpak\HeadOffice\bin**
  - HO\_Serv\_start.bat - starts all services at once
  - HO\_Serv\_stop.bat - stops all services at once
- Under **C:\Orpak\backup**, all the automatic backup DB files are placed.

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---

# Appendix A: PAS Versus SiteOmat Installations

---

Following table lists the PAS versus SiteOmat installation differences:

PAS versus SiteOmat Installation	
PAS	SiteOmat
Can process dollar limits only.	Can process both dollar and gallon limits.
Cannot currently perform odometer reasonability check.	Can perform odometer reasonability checks.
Can process and restrict the sales of merchandise.	Cannot process sales of merchandise.

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# Appendix B: Cenex Local Cards

## Cenex Local Card Format

Cenex local cards use a format that is different from the standard Gasboy Club Card format.

Cenex card format is 00ssssssnnnnnnnnnncccc#yymm#taallrp00.

Field Code	Description
00	Non-bank card (encoded as zeros)
ssssss	Six-digit system ID
nnnnnnnnnn	10-digit customer number
cccc	Four-digit card number
yymm	Expiration date
yy	Last two digits of the year
mm	Two digits of the month
#	Field separator
t	Cenex card type indicator
0	Local card
aa	Two-digit authorization code
ll	Two-digit limitation code
r	Restriction Code
p	Price Level
0	Cenex Regional convenience card price
1	Local retail price
2	Local price
00	Two digits for future expansion (encoded as zeros)

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# Glossary

Following table lists some of the terms and their descriptions used across this manual:

<b>Term</b>	<b>Description</b>
Card File	List of devices that should be able to authorize fueling. Can be a mag stripe card, fleet key, MiFare tag, manual entry, an HID tag, or Fuel Point PLUS fuel ring.
Controller	PAS device, Islander PLUS, TopKAT™ PLUS.
FHO	Fleet Head Office. The application that interfaces with controllers at the site to collect and report on data for one or more sites. Requires licensing using a HASP Key.
HO	Fleet Head Office (FHO).
PAS	Controls local card authorization at a Passport site.
Site	A controller. When calculating the number of sites needed for licensing, calculate the number of controllers (SiteOmats, PAS Devices, and TopKAT PLUS units).
SO	SiteOmat
Station	A controller. When calculating the number of stations needed for licensing, calculate the number of controllers (SiteOmats, PAS Devices, and TopKAT PLUS units).
TopKAT PLUS	A pump-mounted or pedestal-mounted unit that controls one or more commercial pumps.

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Greensboro, North Carolina 27420

Phone 1-800-444-5529 · <http://www.gasboy.com> · Printed in the U.S.A.

MDE-5079 Gasboy Fleet PLUS Installation and Implementation Guide to Passport Authorization  
Server (PAS) · December 2013