



MDE-5414A

ForeHB SiteOmat

Setup and Maintenance Manual

This document is based on Orpak's ForeHB SiteOmat360 User Manual,
P/N 817423748.



SAFETY CONSIDERATIONS

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

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

WARNING - EXPLOSION HAZARD

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

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

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

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

CAUTION - SHOCK HAZARD

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

WARNING - PASSING VEHICLES

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

WARNING

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

CAUTION

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

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FCC COMPLIANCE STATEMENT

The FCC Wants You to Know:

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

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

FCC WARNING

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

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1 – General Description

1.1 Introduction

This manual provides the setup instructions for the SiteOmat360 software application. This software is the heart of Gasboy®'s solution for close monitoring, tight control, and successful operation of Homebase Fueling Stations and vehicle fleets.

The SiteOmat360 automation software, which runs on an embedded operating system on the Gasboy Controller Unit (OrCU) embedded platform, is designed to survive the harsh gas station environment. SiteOmat360 performs as a fuel control and data acquisition system, and is part of Gilbarco family of solutions for Homebase Fueling Stations.

SiteOmat30 software can be installed in the following Island Controllers:

- **Islander PLUS** - A self-contained pedestal that provides a complete island solution in a forecourt compatible and weather-resistant cabinet. Islander PLUS is equipped with the Outdoor Payment Terminal (OPT), a Payment Panel with an alphanumeric LCD (graphic LCD, optional), and a keyboard to interface with the client. This enables the Islander PLUS to support all common refueling identification devices such as: Vehicle/Driver Identification/Fuel Point PLUS Unit, Point PLUS, magnetic cards, contactless Radio Frequency Identifier Device (RFID) tags, keypad entry, and others.

Figure 1: Islander™ PLUS



- **CFN® PLUS** - A sealed wall-mount, complete station automation system in one compact, durable box for internal or external installations. It interfaces with the forecourt devices including dispensers, Tank Level Gauge (TLG), payment terminals, and Nozzle Readers (for optional vehicle identification).

Figure 2: CFN PLUS



- **Fuel Truck Controller** - A sealed metal box installed on mobile tanker trucks. Fuel Truck Controller has been especially designed to address the heavy or stationary equipment refueling needs at the site. Fuel Truck Controller is connected to the nozzle equipment on the tanker truck and controls the tanker's electric valve. The heavy or stationary equipment is identified by the Fuel Ring (Vehicle Identification Unit) component of Fuel Point PLUS or a contactless tag.

Figure 3: Fuel Truck Controller



- **TopKAT™ PLUS** - A standalone fleet and fuel management system that can be mounted directly onto the dispenser or pedestal. It can handle up to 50,000 devices and 25,000 transactions and works in unattended fueling, remote fueling, automated fueling, and other applications. In addition, TopKAT PLUS maintains all devices and transactional information in the embedded controller designed for the fleet fueling environment.

Figure 4: TopKAT PLUS



This manual is aimed for the certified technician responsible for setup and/or servicing the software in the site. For fuel control and data acquisition systems installation, refer the product installation manual.

For operational instructions of SiteOmat360 Station Controller application, refer to *MDE-4818 SiteOmat360 Station Controller User Manual*.

1.2 SiteOmat360

1.2.1 Overview

Island Controllers are innovative products that enable refueling in Homebase Fueling Stations for fleets authorized vehicles or drivers. They electronically lock all dispensers and pumps thereby ensuring that only appropriately authorized vehicles and personnel receive the required fuel. These fuel control and data acquisition systems also ensure accurate recording of each transaction (see [Figure 5](#) on [page 5](#)).

The heart of the Homebase Station solution is the SiteOmat automation software. SiteOmat runs on an embedded operating system on the Orpak Controller Unit (OrCU). This controller uses a solid state flash disk and Real Time Clock (RTC) with back-up, along with surge suppressors for transient and noise immunity. It also includes power fail recovery mechanisms.

SiteOmat360 ensures accurate recording of each transaction. The dispenser is authorized to refuel after a positive identification of the vehicle or the driver. All transaction information, including the vehicle's odometer or engine hour, is automatically recorded. A combined vehicle and driver identification is also possible for a tight tracking.

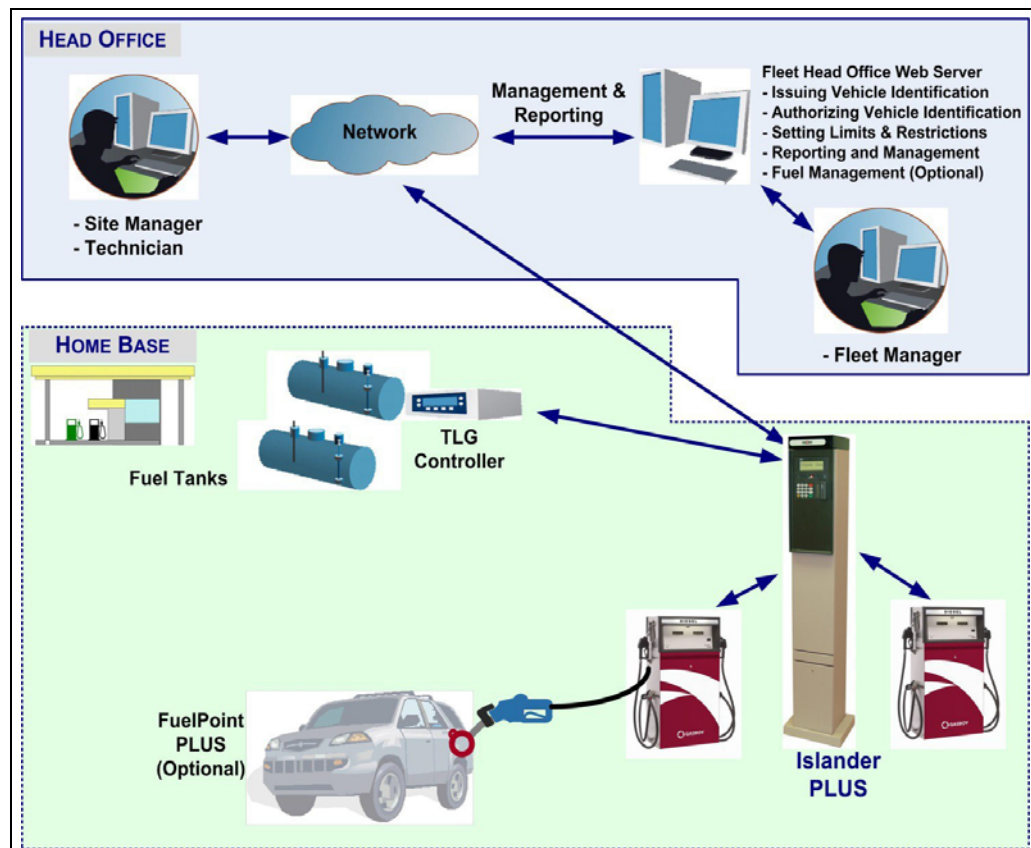
SiteOmat360 features a comprehensive set of setup screens for easy and fast configuration and modification in accordance with the client's changing needs.

1.2.2 Interfaces

SiteOmat360 Station Controller provides the following operational features for a comprehensive Homebase Station management:

- Supports over 50 different types of dispensers.
- Advanced electronic support of electronic and mechanical dispensers.
- Tank Level Gauging System (TLG) available for several brands.
- OPT
- Contactless Tag Reader (OrTR)
- Vehicle Identification Terminals (Wireless Gateway)
- Support for a large variety of communication links: cellular dial-in modem, VPN, satellite, ADSL, and more.
- Interface to Head Office Systems - The system has an interface for authorization and for sending transaction to third-party head office/SiteOmat Fleet Head Office using a single export format (Web Services).

Figure 5: Islander PLUS in Homebase Station - General Configuration Diagram



1.2.3 Internal Communication Alternatives

OrCU can communicate with the other modules in the Island Controller system over:

- Transmission Control Protocol/Internet Protocol (TCP/IP) Ethernet® over Category 5E (CAT5E) wires (some modules require the CommVerter Module as the interface).
- RS-485 links (segmentation to several links is available)
- 8-Port CommVerter system

1.2.4 External Communication Alternatives

Communication with external management and data processing systems, for reports and clearinghouse, can be provided by:

- Direct - Ethernet or RS-232
- ADSL/ISDN Modem
- Dial-Up Modem (not recommended)
- GPRS, Cellular modem

The communication equipment depends on the station configuration.

1.2. Data Access Methods

OrCU is a web server over an SQL transaction database. It uses a secured link with several levels of authentication. Logging into the SiteOmat360 is done with a standard browser from any PC and a static IP address. Data is available in real-time using pre-defined active forms.

Real-time data is available via an on-line connection, a dedicated line or Internet/Intranet (secured) link. The Station Controller system with SiteOmat360 enables real-time monitoring of a vehicle refueling process including volume, price, and all vehicle details.

The SiteOmat360 Station Controller supports exporting (transactions) and importing (negative/positive lists) data using a pre-defined format.

1.3 OrCU

Gasboy Controller Unit (OrCU) is a complete forecourt controller with its own embedded operating system. The unit consists of an embedded hardware platform with a solid state flash hard disk, RTC with back up, along with surge suppressors for transient and noise immunity. It also includes power fail recovery mechanisms.

OrCU features two separate and isolated networks (TCP/IP over Ethernet). One network links the Islander PLUS system components. The second network is intended for external remote communication (Head Office, third-party systems). This network is protected by Secure Socket Layer (SSL) security.

OrCU includes a Security Access Module (SAM) for enhanced data protection and safe security key storage (Triple DES encryption). OrCU includes a built-in server for web access through Internet Explorer® 7.0 or later.

OrCU includes the following communication ports:

- LAN 1/LAN 2 for TCP/IP over Ethernet.
- RS-232 (DB9-female) for serial communication.
- The other ports (CAN, USB) are currently not in use.

Note: This note is relevant for the Islander PLUS system only. The connection (RS-485) to the optional printer is done through the OPT device. OPT is connected to the OrCU via LAN.

Figure 6: OrCU - General View

1.4 System Workflow – Examples

1.4.1 General

This section provides examples of different operational workflow, refueling, scenarios for self-service at the Homebase Station. These examples are a function of the payment and transaction devices available in each Station Controller system.

1.4.2 Refueling Scenario with Fuel Point PLUS

A motorist stops for fuel at the station. His authorization device for the fueling transaction is a Vehicle Identification Unit (VIU) mounted in his car. The client lifts the nozzle and inserts it into the car's fuel inlet.

The VIU information is automatically read and sent to the Site Controller (OrCU) for authentication and approval. Upon approval, the fueling transaction starts. Once re-fueling is completed, the motorist replaces the nozzle back to pump. At this point, the transaction data is kept internally. Data is periodically transferred to the Fleet Head Office (FHO) for future billing.

1.4.3 Refueling Scenario with Magnetic Cards

A motorist stops for fuel at the station. His authorization device for the fueling transaction is a magnetic card. The client swipes the card through the magnetic card reader on the payment terminal.

The magnetic card information is read and sent to the Site Controller (OrCU) for authentication and approval. The client lifts the nozzle and inserts it into the car's fuel inlet. Upon approval, the fueling transaction starts. Once the refueling is completed, the motorist replaces the nozzle back to the pump. At this point, the transaction data is kept internally. Data is periodically transferred to the FHO for future billing.

During the authorization process, the motorist may be prompted to enter more data to the transaction (PIN code, odometer, vehicle no., etc.). This is done by manually entering the information using the payment terminal keypad.

1.4.4 Refueling Scenario with Two Devices (Two-Stage Authorization)

A motorist stops for refueling at the gas station. His authorization devices for the refueling transaction include any two devices. One represents the vehicle and the other represent the driver (e.g. two cards, two tags, card and tag, card and manual entry, etc.). The refueling scenario for each device is the same as with magnetic cards, refer to “[1.4.3 Refueling Scenario with Magnetic Cards](#)” on [page 7](#). For each device, the motorist may be requested to add more relevant data to the transaction (PIN for the driver, Odometer recording for the vehicle, etc.). The OrCU opens the dispenser for refueling only after successful authorization of the two devices.

For all options above, the motorist may print a transaction ticket from the Islander PLUS printer (optional).

1.5 Manual Structure

This manual comprises of the following sections:

Section 1: General Description: This section provides a general description of the Fleet fueling system in general and the SiteOmat360 Station Controller in particular. It also provides examples of the system’s workflows.

Section 2: Getting Started: This section provides the initial setup guidelines needed to start using SiteOmat360 application, including default IP’s and HEX addresses.

Section 3: Admin: This section provides instructions for managing users, setting the password policy, and running system commands.

Section 4: Setup Wizard: This section provides instructions for running the SiteOmat360 Setup Wizard.

Section 5: Global Settings: This section provides instructions for setting up station information, general and regional settings, customizing receipts, alarms, communication properties, and more.

Section 6: Forecourt Setup: This section provides setup instructions for Forecourt Controller peripherals and devices.

Section 7: Maintenance: This section provides general maintenance and troubleshooting guidelines, including system files location and logs collection.

Appendix A: Camel Endpoint Configuration: This section describes the Camel feature and provides configuration instructions.

1.6 Using this Manual

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

WARNING



Contain information that, unless strictly observed, could result in injury or loss of life.

CAUTION



Contain information that, unless strictly observed, could result in damage or destruction of the equipment or long-term health hazards to personnel.

NOTES



Contain helpful comments or references to material not covered in the manual.

BEST PRACTICE



Contain helpful suggestions.

EXAMPLE



Contain additional information to illustrate a concept/procedure.

1.7 References

For additional and complementary information regarding Gasboy's home base solution, refer to the following manuals:

- *MDE-4811 Islander PLUS and ICR PLUS Installation Manual*
- *MDE-4813 CFN PLUS Installation Manual*
- *MDE-4814 Fuel Truck Controller Installation Manual*
- *MDE-4815 WGT Outdoor Unit Installation Manual*
- *MDE-4818 SiteOmat360 Station Controller User Manual*
- *MDE-4819 OrPT Gasboy's Payment Terminal Installation, Setup, and Operation manual for Homebase Stations*
- *MDE-4820 8-Port CommVerter Operation and Installation Manual*
- *MDE-4821 Fleet Head Office System Installation and Setup Guide*
- *MDE-4851 GASBOY Fuel Point PLUS Station Equipment Manual*

2 – Getting Started

2.1 General

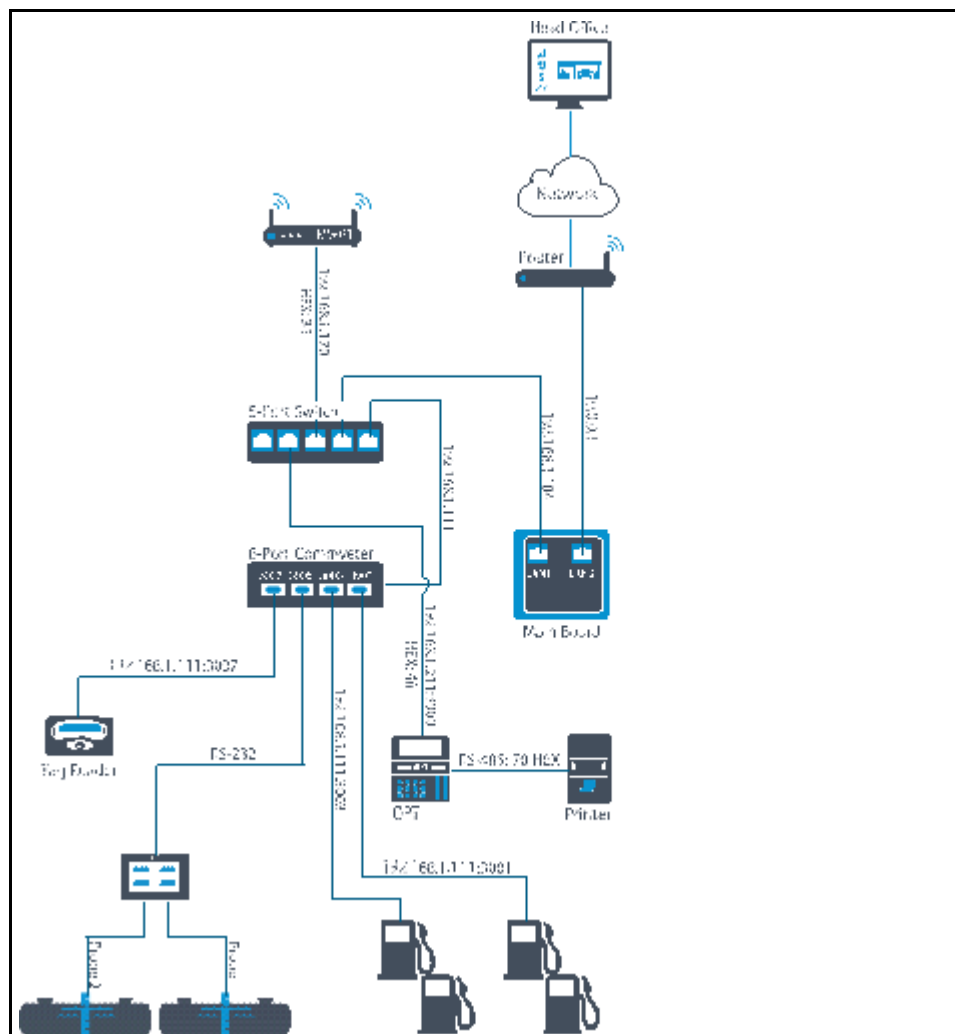
This section provides the initial setup guidelines, including default IP's and HEX addresses.

The OrCU 3000 GB Controller system is provided with the SiteOmat360 software already installed. SiteOmat360 supports several communication protocols. Thus, the communication channels between the Forecourt Controller and the station's components is the initial step in setting up the system. Then when defining the different station devices, you will link them to the relevant bus.

For security measures, it is highly advised that the external network will be using a VPN (Virtual Private Network), so it will not be exposed to the Internet.

An example of address configuration is provided below (see [Figure 7](#) on [page 11](#)).

Figure 7: Station Settings - Example



2.1.1 Default IP Addresses

The following table lists the IP addresses for the internal devices in the Controller system (see [Table 1](#)):

Table 1: Default IP Addresses

Device	Default IP Address	Starting IP Address	Ending IP Address	TCP Ports
Ethernet 0 (FCC)	192.168.1.104	192.168.1.104		
8 Port CommVerter	192.168.1.111	192.168.1.111	192.168.1.130	3001-3008
Wireless Gateway Master	192.168.1.170	192.168.1.170	N/A	N/A
Wireless Gateway	192.168.1.171	192.168.1.171	192.168.1.190	3001-3008
OPT	192.168.1.211	192.168.1.211	192.168.1.230	3000
Receipt Printer	192.168.1.211	192.168.1.211	192.168.1.230	3485

Where:

- Default IP is the IP addresses defined prior to delivery.
- Starting IP Address is the first IP number in the range allocated for the device.
- Ending IP Address is the last IP number in the range allocated for the device.

For example, the range to the OPT is 211 to 230 or a maximum of 20 OPT devices in the station.

Note: IP addresses can be modified according to local network requirements.

2.1.2 Default Serial Addresses

The following lists the IP addresses for the internal devices in the Controller system (see [Table 2](#)):

Table 2: Default Serial (HEX) Addresses

Device	Default Address	Starting Serial Address	Ending Serial Address
OrTR (Gasboy Tag Reader)	0x61	0x61	0x69
OPT (Gasboy Payment Terminal)	0x46	0x46	N/A
Receipt Printer	0x70	0x70	0x74
Wireless Gateway (Wireless Gateway Terminal)	N/A	0x31	N/A

Note: The HEX address configured in the controller must match the device HEX address. Otherwise, the device is not loaded.

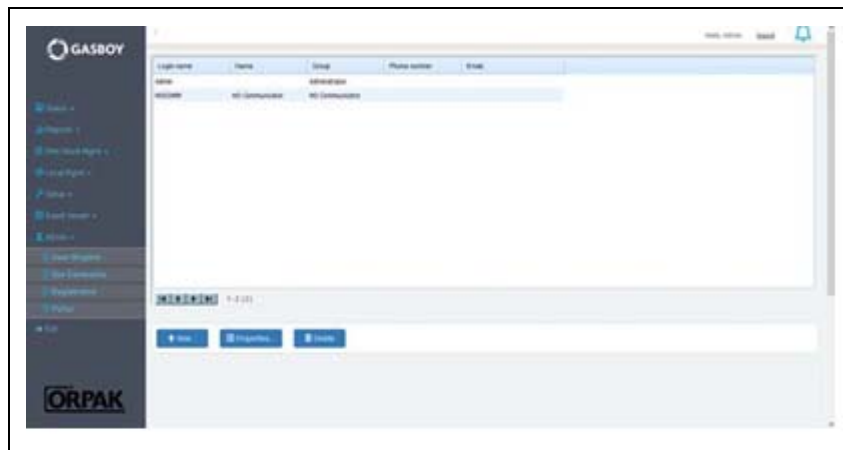
3 – Admin

3.1 General

This section provides instructions for administration tasks, such as managing users, setting password policy, registering Wireless Programmer systems, and running system commands.

To access the User Management page, click **Admin** in the navigation bar on the left-hand side of the SiteOmat360 application (see [Figure 8](#)).

Figure 8: Administration - User Management Page



Note: The Registration page is currently unavailable.

3.2 User Management

The SiteOmat360 Forecourt Controller is designed to provide access to content in accordance with the user's access level.

Upon login request into the SiteOmat360 application, SiteOmat360 checks whether the user with these login credentials (username and password) exists. If the login credentials are not found in the user list, access to the SiteOmat360 application is denied.

If these login credentials are validated, the SiteOmat360 application opens with content suitable to the user's access level.

Note: The Administration section in the SiteOmat360 Forecourt Controller is only accessible by users with administrator access level.

The Administration link will only be displayed if you have administrator rights.

3.2.1 Access Levels

One of the following access levels can be associated to each user (see [Table 3](#)):

Table 3: Access Levels

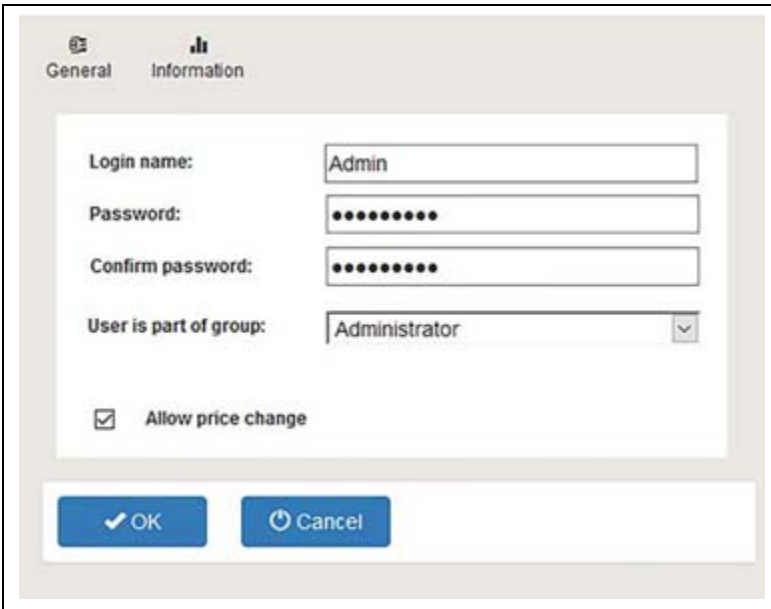
Access Level	Access Rights
Administrator	The Administrator access level is meant for the system developers and administrative staff. Users with Admin access level have access to all data, including setup pages, user management, and model design.
External User	The External User access level enables the users to view SiteOmat360's Custom Reports and Status pages only.
Station Manager	The Station Manager access level provides all privileges except for the Setup and Admin pages.
Station Administrator	The Station Administrator access level provides all privileges except for the Setup page. The user cannot add an Admin group user.
HO Communicator	The HO Communicator access level is meant for a specific user required by the Head Office to communicate with the station. This user must be defined prior to connecting the Head Office to the station.
Administrator Translator	This access level is intended to enable the user to modify the translation of the GUI into the language that was previously set in the Global Parameters page in Setup.

3.2.2 Adding a User

To add a new user to the list of authorized users, proceed as follows:

- 1 Click **Admin** in the navigation bar and then select **User Mngmnt** provided you have an Administrator access level.
- 2 Click **New**. The **User Properties** dialog box opens (see [Figure 9](#)).

Figure 9: User Properties Dialog Box



- 3 In the **Login name** text box, enter a username.
Note: A user must be given a unique login name and it must be at least 4 characters long. The username is case-sensitive.
- 4 In the **Password** text box, enter a password, which the user must enter in every login.
Note: The password must be at least 6 characters long. The password is case-sensitive.
- 5 Type the password again in the **Confirm Password** box for confirmation.
Note: The password cannot be recovered if forgotten.
- 6 In the **User is part of group** drop-down list, select the appropriate group to associate the user with. The content that will be available to this user depends on the user group (see [Table 3](#)).
- 7 (Optional) If this user needs to change prices, select the **Allow price change** check box.
- 8 Click the **Information** tab.
- 9 Enter the user's additional info.
- 10 Click **OK**.

3.2.3 Deleting a User

To remove a user from the user list, proceed as follows:

- 1 Select the user from the **User List** in the User Mngmnt page.
- 2 Click **Delete**. A confirmation message is displayed.
- 3 Click **OK**.

The user is removed from the user list. Logging in using this user is no longer possible.

Note: The default Admin user cannot be deleted.

3.2.4 Updating a User

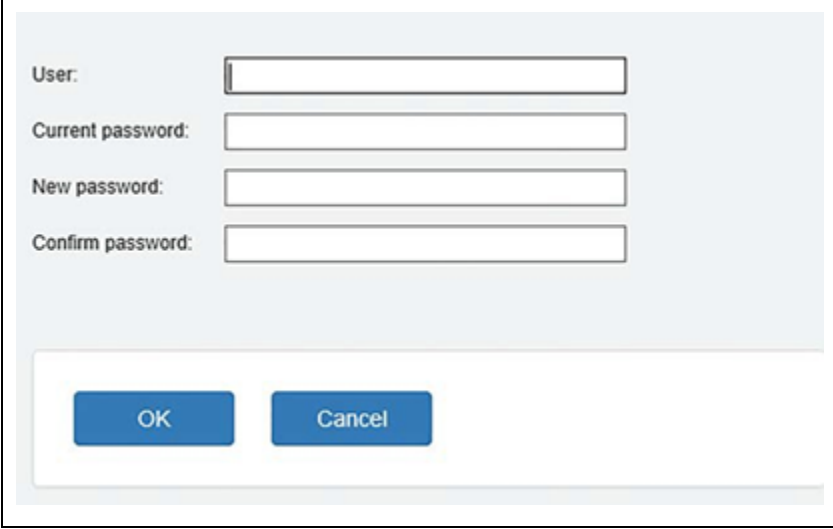
To update the credentials of an existing user, proceed as follows:

- 1 Select the user from the User List in the User Mngmnt page.
- 2 Click **Properties**. The **User Properties** dialog box (see [Figure 9](#) on [page 14](#)) opens with the user's current information in the **General** and **Information** tab.
- 3 Change the user's information as necessary.
*Note: In cases where the password is changed, re-enter the password in the **Confirm** text box.*
- 4 Click **OK**.

3.2.5 Changing Password

To change the current user's password, click **Change Pass** in the login page. The **Change a Password** dialog box opens (see [Figure 10](#)).

Figure 10: Change Password Dialog Box

A screenshot of a 'Change Password' dialog box. It has a light blue header area. Below the header, there are four text input fields stacked vertically. The labels for these fields are 'User:', 'Current password:', 'New password:', and 'Confirm password:'. At the bottom of the dialog box, there are two blue buttons: 'OK' and 'Cancel'.

Enter the information in the User, Current Password, New Password, and Confirm Password field boxes. Click **OK** to save the new password.

3.3 System Commands

The SiteOmat360 Sys Commands page includes several commands for controlling and operating the BOS and the FCC. This section describes the various administrative commands available on the SiteOmat360's Sys Command page.

To access the Sys Command page, click **Admin** in the navigation bar and select **Sys Commands** (see [Figure 11](#), [Table 4](#)).

Figure 11: Sys Command Page



Table 4: System Commands

Command	Description
Start	Starts the FCC operation. Click Start to start FCC that was in stop state. <i>Note: If during the reload operation the power failed, the FCC may be in stop state after the power is back, click Start to start communication.</i>
Stop	Stops the operation of the FCC and all communication to peripheral devices. After using this command, the FCC does not start until either the Start or the Reload commands are run, even if the FCC computer is rebooted, it remains in stopped state.
Reload	Performs the functions Stop followed by Start and Reload.
Sys Init	Saves station setup changes, for instance: <ul style="list-style-type: none"> • Installation of a new station, and definition of equipment setup. • Setup modification (e.g. defining a new pump or nozzle). • Operation. The Reload command must also run subsequently.
Log Settings	Sets the log policy (see "3.3.1 Logging Settings" on page 18).
Reset Pumps	Resets the states of all pumps.
Reset Pump	Resets the state of a specific pump.
Sync FCC	This command must run after Sys Init in a recovery operation. The Reload command must be executed after the procedure.
End of day	Activates the EOD process (collects both tank levels and dispensers meters).
Activate	Launches the Activate License dialog box used to upload and activate a license file.

CAUTION



Reset pumps commands should only be used in extreme cases where there are communications or other serious state problems between the FCC and the pump.

3.3.1 Logging Settings

Logger, the Log Server application provided by Gasboy, listens in on the UDP port, captures log information provided by SiteOmat360, and writes the log messages to files.

To define the log server and the log policy, click **Log Settings** in the Sys Commands page. The **Logging Settings** dialog box opens (see [Figure 12](#)).

Figure 12: Logging Settings Dialog Box

Enter the remote Log Server PC IP address and Port in the Log Collector text boxes, to enable downloading log files from the Forecourt Controller to the remote PC. The system automatically starts sending UDP log messages to the specified port.

Set the log policy by selecting one of the following radio buttons:

- Disable All Logs
- Enable All Logs
- Specific Logs

In cases where the last option was selected, the following filters are available:

a SiteOmat360 logs: Application logs (see [Table 5](#) on [page 19](#)). SiteOmat360 logs may also be filtered by Log Level (see [Table 6](#) on [page 19](#)).

b Web Comm Logs:

- All types: Web Communication logs without extra filtering
- Only Web Services: Web Services Client-Server communication logs

c Database Logs:

- All queries: Database logs without extra filtering
- Only DB changes: Logs on Insert, Update, and Delete actions

d BUS Logs: Communication to the peripheral devices

The following describes each of the Application Logs (see [Table 5](#)):

Table 5: SiteOmat360 Logs

Log	Description
FCC – System	System startup, configuration reading, cleanup, etc.
FCC – External	Commands from BOS, setup, stop, start, reload, log level change.
FCC – Shift	Shift close/open related operations, including: totalizers reading, attendant management, batch receipt generation.
FCC – Wet Stock	Tank and ATG related operations, such as deliveries.
FCC – Fueling	All operations related to fueling transactions, authorization, price update.
BOS – System	System startup, cleanup, etc.
BOS – External	Communication with HO.
BOS – Forecourt Controller (FCC)	Communication with FCC, including data reception and requests authorization.
BOS – User Related	All user actions, reports generation, import/export.

The following describes each of the Log Levels (see [Table 6](#)):

Table 6: Log Levels

Level	Description
Critical	Information required for reconstructing transactions data, including authorizer and quantities.
Error	Abnormal system events causing wrong behavior (e.g. Failed to open shift, Error writing transaction to DB).
Warning	Events that do not affect system functionality but point out a problem (e.g. transaction already written which may indicate slowness of the system).
Information	Additional information which may help in clarifying the data flow or operational scenarios, without details on the specific operation.
Debugging	Information which may help in identifying relevant code segments to understand the logic of the system (e.g. print variable content of IF clauses, print result of a function, print system error code).
Trace	Very detailed debug level to be used in cases where the total flow of code is required to analyze a problem (e.g. enter and exit of each function).

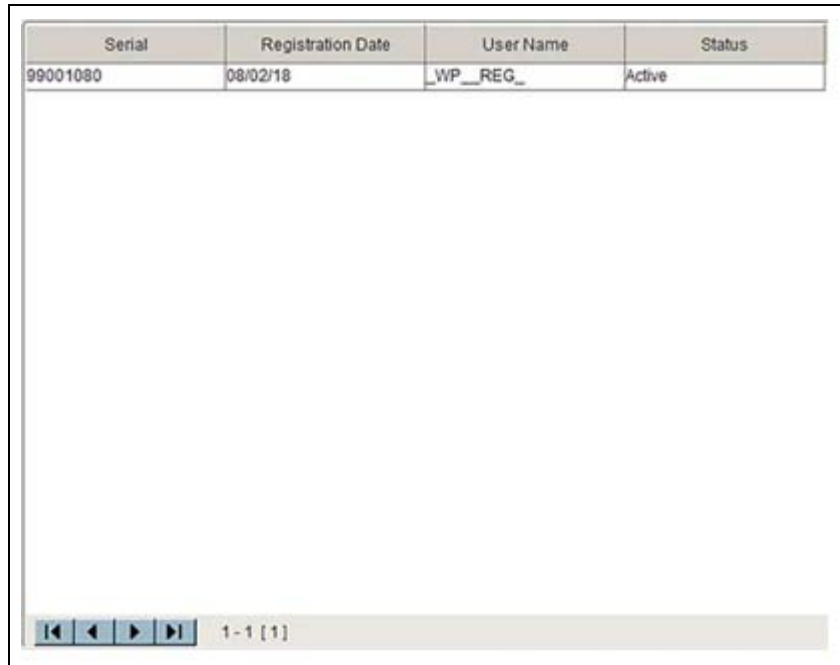
Note: Log levels are arranged in ascending order. Any high level automatically includes all lower levels.

3.4 Registration

This page is intended for registration of the Wireless Programmer system, which is part of the Fuel Point PLUS solution.

To access the Registration page, click **Admin** in the navigation bar and then select **Registration**. The **Registration Page** opens (see [Figure 13](#)).

Figure 13: Registration Page



Serial	Registration Date	User Name	Status
99001080	08/02/18	_WP_REG_	Active

The screenshot shows a web interface with a table containing registration data. The table has four columns: Serial, Registration Date, User Name, and Status. Below the table is a large empty space and a pagination bar at the bottom showing '1-1 [1]'.

The installer establishes the appropriate communication between the Wireless Programmer and the SiteOmat360 to allow the flow of data between the vehicles installed units and the FCC.

Note: If an FHO session is running, then registration should be performed in the FHO. It is highly recommended that Fuel Point PLUS runs with FHO.

3.4.1 Setting Up the System

Setting up the home-based system requires the installer to perform the following three procedures:

- 1 Install the Wireless Programmer Tunnel software.
- 2 Set up the communication between the Wireless Programmer and the FCC.
- 3 Program and configure the vehicle units.

For more details, refer to *MDE-4851 Fuel Point PLUS Installation and Configuration Manual for Homebase*.

3.5 Policy

The system enables the Administrator to set the password policy properties.

To access the Policy page, click **Admin** in the navigation bar and then select **Policy** (see [Figure 14](#)).

Figure 14: Policy Page

3.5.1 Password Policy Fields

The following password complexity requirements may be defined to meet the customer's security needs (see [Table 7](#)):

Table 7: Policy Fields

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

Field	Description
Minimum user ID length	Defines the least number of characters that a User ID for a user account may contain.
Force user to change password every X months	If this option is selected, the system forces the user to change the password after the defined time interval has elapsed. The time interval is measured from the last time the password was changed.
Force	By clicking this button, the system forces all users to modify their password at the next login.

Click **Save** to apply the changes.

4 – Setup Wizard

4.1 General

The Setup Wizard helps the technician to set up the station, guiding the user through the process and initializing most of the system's setup parameters automatically. Once the Wizard is finished, most standard stations are ready for fueling and no additional settings are required.

The wizard also allows selection of predefined templates for fully configuring the system according to stations with similar characteristics. If a predefined template is selected, the wizard consists of pages that contain specific station data only.

After the Wizard is finished, the Forecourt Setup screen opens, enabling the user to complete the process, or to change to the Advanced Mode to define more complex forecourt configurations.

Re-running of the wizard is allowed; however, the existing setup data is overwritten (fueling data such as transactions are not deleted). In such cases, the user is provided with a proper warning.

The **Cancel** button in each screen enables the user to cancel the process and return to the main Forecourt Setup screen. In this case, no data is saved, and no changes are made to the system. The user is alerted that all changes are lost if the process is canceled in the middle.

In cases where the configuration is done without the wizard, first define the Global Settings (see “[Global Settings](#)” on [page 41](#)) and then define the Forecourt Setup according to the process order detailed in “[Forecourt Setup](#)” on [page 61](#)).

Note: In cases where the wizard is re-run after the settings were changed from SiteOmat Setup screens, the wizard may not reflect the changes made (i.e., settings not supported by the wizard).

The Setup Wizard process includes the following:

- “[4.2 Welcome](#)” on [page 24](#)
- “[4.3 Global](#)” on [page 25](#)
- “[4.4 Forecourt Controller Type](#)” on [page 26](#)
- “[4.5 Forecourt Settings](#)” on [page 27](#)
- “[4.6 Products](#)” on [page 28](#)
- “[4.7 TLG and Tanks](#)” on [page 29](#)
- “[4.8 Pumps](#)” on [page 31](#)
- “[4.9 Payment](#)” on [page 33](#)
- “[4.10 Printer](#)” on [page 35](#)
- “[4.11 Series 1000 Upgrade](#)” on [page 36](#) (optional)
- “[4.12 Backup](#)” on [page 38](#)
- “[4.13 Finalizing the Wizard](#)” on [page 39](#)

4.1.1 Software Requirements

The following software is required to run the Setup Wizard:

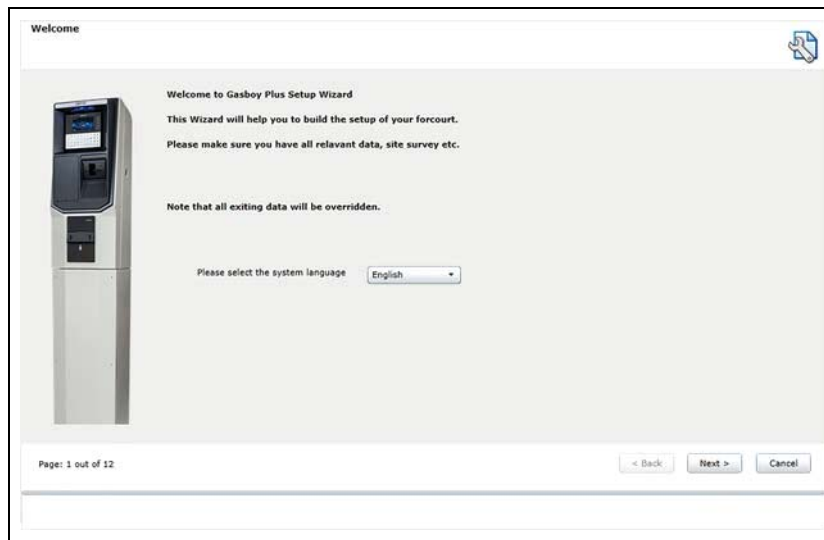
- Internet Explorer 7.0 or higher
- Microsoft Silverlight plug-in

Note: If Microsoft Silverlight is not installed, the wizard will provide an installation link and prompt users to install it.

4.2 Welcome

To launch the Setup Wizard, navigate to the Forecourt Setup page in the SiteOmat360 application and click **Wizard** in the lower-left corner of the screen. The Welcome screen opens (see [Figure 15](#)):

Figure 15: Setup Wizard: Welcome Screen



To configure the wizard, proceed as follows:

- 1 Select the system language to use from the drop-down list.
- 2 Click **Next** to continue.

4.3 Global

In this page, enter station and regional data (see [Figure 16](#)).

Figure 16: Setup Wizard: Global Screen

Global parameters
Enter station data, select your region and parameters

Station Code: 60407 Station Name: TestStation

Station Address: Sample St. City: NY

Regional Settings

Measurement System: Not metric (USA) Currency: Dollars

Date/Time

Date Format: MM/DD/YY Date: 08/14/18

Time: 15 : 10 Time Zone: EST

Page: 2 out of 12

< Back Next > Cancel

To configure the Global page, proceed as follows:

- 1 Enter the Station Code, Station Name, Address, and City.
Note: If the station is part of a network, Station Code must be unique across the network. This code is used to uniquely identify the station in the Head Office.
- 2 Select the **Measurement System** and the **Currency** to be used from the corresponding drop-down lists.
- 3 Select the **Date**, **Date Format**, **Time**, and **Time Zone**.
- 4 Click **Next** to continue.

4.4 Forecourt Controller Type

In this page, the user can define the forecourt controller type as well as additional peripherals (Extension Boxes or ICR+ units). Users can also define if a printer is available for each selected pedestal (see [Figure 17](#)).

Figure 17: Setup Wizard: Forecourt Controller Type Screen



To configure the ForeCourt Controller page, proceed as follows:

- 1 Select the Controller model using the radio button.
- 2 Select the **Printer Available** check box if the pedestal includes a printer.
- 3 In the Peripherals panel, select the number of Extension Boxes or ICR+ units (if any) and select the **Printer Available** check box if the ICR PLUS pedestal includes a printer.

Notes: 1) The system supports a maximum of ten peripherals. If a higher number is entered, the text box is marked in red and the Wizard displays the following error notification: "Controller numbers cannot exceed 10".

2) In cases where more than one peripheral is in use, configure the peripherals IP (Extension Box and ICR PLUS factory set default IP is 192.168.1.212).

3) For more information, refer to MDE-4820 8-port CommVerter Operation and Installation Manual.

- 4 Click **Next** to continue.

In cases where the station architecture is identical to an already created template, select the **Other, load from file** radio button and click **Browse** to load the predefined xml file. If no template is selected, the wizard displays the following error notification: "Must select setup file".

4.5 Forecourt Settings

In this page, the user can select the station's settings as shown in the following image (see [Figure 18](#)):

Figure 18: Setup Wizard: Forecourt Settings Screen

Forecourt setting
Set station configuration and settings

General
Number of isles: 1
Number of pumps: 4
☒ Fuel point controller
☒ This station is connected to Head Office
Disable pump after: 0 zero transactions

Manual entry
Select the manual entry mode:
☒ None
☐ First entry screen only
☐ Second entry screen only
☐ Both entry screens

Upgrade information
☐ This station is an upgrade from older system.
Series 3000

OPT Beeps
☒ Allow beeps # of beeps: 1

Status Screen Beeps
☒ Allow beeps # of beeps: 3

Page: 4 out of 12
< Back Next > Cancel

To configure the Forecourt Settings page, proceed as follows:

- 1 Select the number of fueling islands at the station using the **Number of isles** drop-down list. This parameter is for informational purposes only.
- 2 Select the **Number of pumps** from the drop-down list. The pumps number is limited according to the Controller type and the peripheral controllers in use (if any). The system supports up to 64 pumps.
- 3 Select the **Fuel Point Controller** check box in cases where the station is equipped with a vehicle identification system (Fuel Point PLUS).
- 4 Select **This station is connected to Head Office** if the system interfaces with third-party head office/SiteOmat360 FHO for authorization and data sending.
- 5 A **Zero Transaction** is defined as an authorized transaction (fuel is being dispensed) but the volume retrieved remains zero. Set the allowed number of Zero Transactions before blocking the pump.

- 6 Companies can allow drivers to manually enter their device number in the OPT by using the F3 option. Select the Manual entry mode using the following radio buttons:
 - a **None**: Disables manual entry.
 - b **First entry screen only**: Allows manual entry only in the first screen of the authorization process.
 - c **Second entry screen only**: Allows manual entry only in the second stage of the two-stage authorization process.
 - d **Both entry screens**: Allows manual entry in both stages.
- 7 Select **This station is an upgrade from older system** check box in cases where SiteOmat replaces the **Series 1000** legacy system.
- 8 OPT Beeps function provides sound feedback each time a device is detected. Select the **Allow beeps** check box to activate the feature and enter the required # of beeps. In cases where more than one OPT is installed at the station, it is required to associate the dispenser to a specific OPT terminal (see OPT).
- 9 Status Screen Beeps function provides sound feedback on Status Screen each time a nozzle is lifted. Select the **Allow beeps** check box to activate the feature and enter the required # of beeps.
- 10 Click **Next** to continue.

4.6 Products

In this page the user can edit station products to fit to local requirements. The system skips this page if the user has selected a template (see [Figure 19](#)).

Figure 19: Setup Wizard: Products Screen

Used	Code	Name	Short Name	Price per unit
<input checked="" type="checkbox"/>	1	Regular		2
<input checked="" type="checkbox"/>	2	Diesel		3
<input checked="" type="checkbox"/>	3	Super		1
<input checked="" type="checkbox"/>	4	cng		1.5
<input checked="" type="checkbox"/>	5	lpg		0
<input checked="" type="checkbox"/>	6	CNG	CNG	1
<input checked="" type="checkbox"/>	10	23fgef	21df	0

Page: 5 out of 12

< Back Next > Cancel

The screen displays a grid with the predefined products. The grid fields are:

- a** Code
- b** Name
- c** Short Name (Used for reports or export to external systems)
- d** Price per unit

All fields in the grid are editable. Nevertheless, the parameters set must be able to cross-reference with the products in the FHO station configuration.

Note: Name and Short Name must be unique.

To choose the relevant products for the station, select the **Used** check box (at least one product must be selected to continue, otherwise the wizard displays the following error notification: “At least one product must be selected”). Deselected products are not displayed on SiteOmat’s screens after the setup is finished.

Click **Next** to continue.

4.7 TLG and Tanks

In this page, the user can define the tanks and the external TLG system providing fuel tank information. The system skips this page if the user has selected a template (see [Figure 20](#)).

Figure 20: Setup Wizard: TLG and Tanks Screen

Number	Name	Product	Capacity	TLG Tank Number	
4	Tank 4 LHC	Super	9996	4	<input type="checkbox"/>
3	Tank 3 Super	Super	9996	3	<input type="checkbox"/>
3	Tank 3 CHG	CHG	9996	3	<input type="checkbox"/>
2	Tank 2 Diesel	Diesel	9996	2	<input type="checkbox"/>
1	Tank 1 Regular	Regular	9996	1	<input type="checkbox"/>

To configure the TLG and Tanks page, proceed as follows:

- 1 Select the **TLG type** from the drop-down-list. TLG 350/450 is currently available.
- 2 Select the **Number of tanks** from the drop-down list. For each tank, the system opens a line in the grid.
- 3 Select the Communication Type between the TLG console and the Controller using the following radio buttons:
 - a **Serial (RS-232 via 8-port)**: For RS-232 communication via 8-port CommVerters IP - using last slot (port 3007) RS-232 card.
 - b **TCP/IP**: For Ethernet connection via external convertor or direct TCP/IP. Enter IP and Port.
- 4 Edit the required fields in the tanks grid. The tanks grid includes the following fields:
 - a Number (read-only)
 - b Name
 - c Product (selected from the drop-down list including all products previously defined)
 - d Capacity (must be higher than zero)
 - e TLG Tank Number (by default is equal to the tank number, must be less than or equal to 16)
- 5 Click **Next** to continue.

4.8 Pumps

In this page, the user can define the pumps and configure the connection of the pumps to the controller, printer and Fuel Point PLUS system. The screen displays a grid with a row for every pump, according to the number of pumps defined in “4.5 Forecourt Settings” on page 27 (see Figure 21).

Figure 21: Setup Wizard: Pumps Screen

Pump #	Pump Type	Connected to Controller	Head	Connected to GFT	Tank	Product	Rate	R/R Plus	Satellite
1	Wayne Dart	ISL Prime ELECTRONIC	1	ISL Prime ELECTRONIC	Tank 1 Regular	Regular	1		
2	Wayne Dart	ISL Prime ELECTRONIC	2	ISL Prime ELECTRONIC	Tank 2 Diesel	Diesel	2		
3	Gasboy	ISL Prime ELECTRONIC	3	ISL Prime ELECTRONIC	Tank 3 Super	Super	3		
4	Gasboy	ISL Prime ELECTRONIC	4	ISL Prime ELECTRONIC	Tank 4 LPG	Lpg	4		

To configure the Pumps page, as follows:

- 1 Select the **Pump Type** from the drop-down list containing all supported pump types.
- 2 Select the Controller to which the pump is connected from the **Connected to Controller** drop-down list containing the available controllers or peripherals as set on Page 3. The wizard checks for compatibility between Controller and pump types selected and notifies the user on the following mismatches:
 - a You connected MPI pump to controller that do not have MPI slots.
 - b You connected more MPI than can be on a specific controller.
 - c Not all pumps are connected to controller.
 - d You connected more electronic pumps than can be on a specific controller.
- 3 Enter the Head number, namely the communication protocol address of the pump head, as defined in the dispenser setup and acquired by the technician (must be less than 64).
Note: Pumps with identical Head number cannot be connected to the same Cluster (IP and Port) on an 8-Port Module Card.

- 4 Select the **OPT** terminal to be linked to the pump for prompts display from the **Connected to OPT** drop-down list (this setting is optional, the wizard displays a warning notification in cases where not all pumps were connected to an OPT but does generate a validation error).
- 5 Set the pump to the Tank the pump is actually connected to (Mandatory setting, if not set the Wizard displays the following error notification: “Select tank for all pumps”).
- 6 Select the **Product** from the drop-down list containing all products in use as defined in “4.6 Products” on page 28. This field is auto-populated based on tank selection.
- 7 Select the **Rate**, namely the number of pulses per Liter/Gallon as required for mechanic pumps setup only, using the drop-down list (10,100,1000).
- 8 Enter the F.P. Plus logical channel for communication with the controller (if F.P. Plus is in use, as defined in “4.5 Forecourt Settings” on page 27). Enter a different channel (between 1 and 16) for each pump. The Wizard provides the user with the following error notifications in cases where an incorrect value was entered:
 - a VIS Channel must be less than 16.
 - b You connected same VIS channel to two pumps.
- 9 For pumps that support Satellite linked nozzles (two nozzles connected to the same pump head allowing simultaneous refuel from both sides of a truck), enter the second nozzle F.P. Plus channel (between 1 and 16 and not previously used).
- 10 Click **Next** to continue.

Note: The Setup Wizard supports one-grade dispensers only. For other configurations, run the Wizard and then set up the nozzles on the Forecourt Setup screen.

4.9 Payment

In this page, the user can set the SiteOmat connection to a third-party clearing system (see [Figure 22](#)).

Figure 22: Setup Wizard: Payment Screen

Set the parameters described in [Table 8](#) and click **Next** to continue.

Table 8: Payment Fields

Field	Description
Credit Processor	Payment processor in use, selected from the drop-down list.
PAIS IP & PAIS Port	IP address and port for communication between the internal payment application and the Controller (read-only).
PAIS Tasks	Number of tasks to be simultaneously handled by the processor (namely, the number of payment terminals in use in the station).
App Log enabled	Enables application logging. Select the App Log enabled check box and enter the destination Port .
Comm. log enabled	Enables Controller – Processor communication logging. Select the Comm. log enabled check box and enter the destination Port .
Timeout	Defines the waiting time for response from the processor.
Card may not be used within	Defines the waiting time for refueling with the same bank card within the selected time frame.
Pre-auth amount	Pre-authorizes the card prior to the transaction to the defined amount.
End of day	Activates the End of Day process - the payment application returns a list of totals (Total amount, Amounts per card type). The controller saves the data in the EOD summary. Select the Daily run enabled check box to automatically run the process on a daily base and set the Time to run daily drop-down list.
Specific - Processor IP & Port	IP address and port for communication between the internal payment application and the processor.
Product Map	See “4.9.1. Product Map” on page 34 .

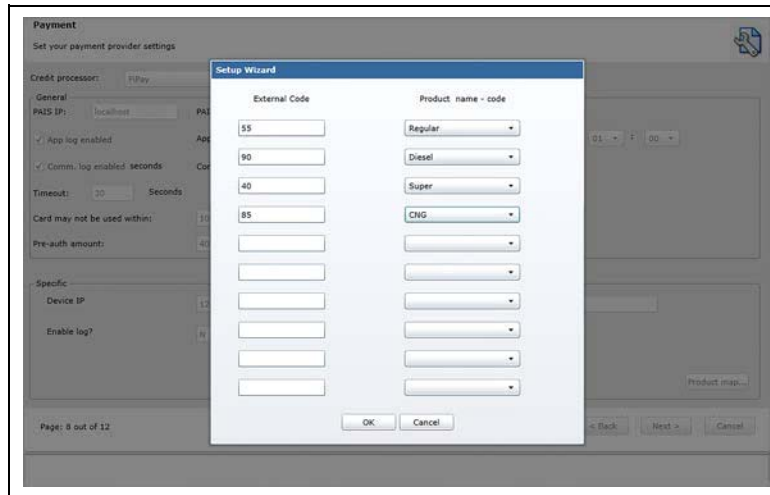
4.9.1. Product Map

This feature enables users to associate the products defined in SiteOmat to the external payment processor.

To configure the Product Map, proceed as follows:

- 1 Click **Product Map** to open the Product Mapping dialog box (see [Figure 23](#)).

Figure 23: Setup Wizard: Product Map Dialog Box



- 2 Select the product from the **Product name - code** drop-down list containing all products in use as defined in Products.
- 3 Enter the processor's code for the product in the **External Code** text box.
- 4 Repeat steps 2 through 3 for each product in use.
- 5 Click **Save** to save changes or **Cancel** to close the dialog box without saving changes.

4.10 Printer

In this page, the user can define receipts. This page is displayed only in cases where at least one printer was selected in “4.5 Forecourt Settings” on page 27 (see Figure 24).

Figure 24: Setup Wizard: Printer Screen

Printer
Define receipt header, footer and logo

Header

Footer

Logo

Select Receipt Template

- Full Service A receipt
- Full Service B receipt
- Home Base A receipt
- Home Base B receipt
- Home Base C receipt
- Home Base D receipt

Logofile is black and white (1 Bit) PCX format.
Max size 1K, recommended dimensions 120x120 pixels.

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< Back Next > Cancel

To configure the Printer page, proceed as follows:

- 1 Select the receipt template from the list.
- 2 Enter a Header and Footer to be added as is to the receipt.
- 3 Click **Browse** to load a PCX file for a logo printout at the top of the receipt. The logo should be a monochrome (black and white) PCX file, with a maximum size of 1 KB.
- 4 Click **Next** to continue.

4.11 Series 1000 Upgrade

This page enables the user to define Series 1000 cards/keys authorization parameters, including Fuel and Limit rules settings. This page is displayed only in cases where the Series 1000 upgrade option was selected in “4.5 Forecourt Settings” on page 27 (see Figure 25).

Figure 25: Setup Wizard: Series 1000 Upgrade Screen

Series 1000 Upgrade

Select product limit amounts and authorization codes

System ID: 1234

PIN Key: 5678

Product limit table

Limitation code	Limit Cut off Quantity
0	0
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90

Product Authorization table

Code	Product code allowed
1	
2	
3	
4	
5	
6	
7	
8	
9	

Page: 10 out of 12

Back Next Cancel

To configure the Series 1000 Upgrade page, proceed as follows:

- 1 Enter the Series 1000 station System ID. This parameter serves as Fleet Code for all Series 1000 devices added to the database. The PIN Key is currently not applicable.
- 2 Edit the Limit Cut Off Quantity column in the Product limit table. Enter the fuel quantity allowed per transaction to match Series 1000 Limitation codes. These constitute a single Limit Rule added to the database and applied to the Fleet devices.
- 3 Edit the Product Authorization table, selecting the **Product Code allowed** drop-down lists which contain the product codes defined in “4.6 Products” on page 28. Select all products permitted (each row in the table defines a specific code) to match Series 1000 definitions. These constitute a single Fuel Rule added to the database and applied to the Fleet devices.
- 4 Click **Next** to continue.

4.11.1 Series 1000 Upgrade - Card/Key Formats

In this page, enter existing Series 1000 card/key formats required to enable automatic identification and authorization. This page is displayed only in cases where the Series 1000 upgrade option was selected in “4.5 Forecourt Settings” on page 27 (see Figure 26).

Figure 26: Setup Wizard: Series 1000 Upgrade Card/Key Formats Screen

To configure the Series 1000 Upgrade - Card/Key Formats page, proceed as follows:

- 1 Edit the Card format definition table, defining the following parameters for each field:
 - a Select the Field Types using the drop-down lists containing the following options: **CARD**, **EMP**, **VEH**, **DEPT**.
 - b Enter the Field Size (maximum 12 digits).
- 2 Edit the Fleetkey Format definition table, defining the following parameters for each field:
 - a Select the **Field Types** using the drop-down lists containing the following options: **EMP**, **VEH**, **DEPT**, **ACCT**.
 - b Enter the Field Size (maximum 20 digits).
- 3 Click **Next** to continue.

4.12 Backup

In this page, select the backup mechanism for the SiteOmat360 database. SiteOmat360 backup is only done through FTP. Contact the network administrator if backup is necessary (see [Figure 27](#)).

Figure 27: Setup Wizard: Backup Screen

The screenshot shows the 'Backup' configuration screen. It includes a checkbox for 'Enable automatic backup of database' which is checked. Below this, the 'Time of backup' section allows setting the 'Time of day for incremental backup' (00:00) and selecting a 'full backup schedule' (Weekly on Sunday). The 'Backup target' section contains fields for FTP server details: URL (FTP://Server_IP), Port (21), User (john), and Password (password). At the bottom, there are navigation buttons: '< Back', 'Finish', and 'Cancel'. The page indicator 'Page: 12 out of 12' is visible in the bottom left corner.

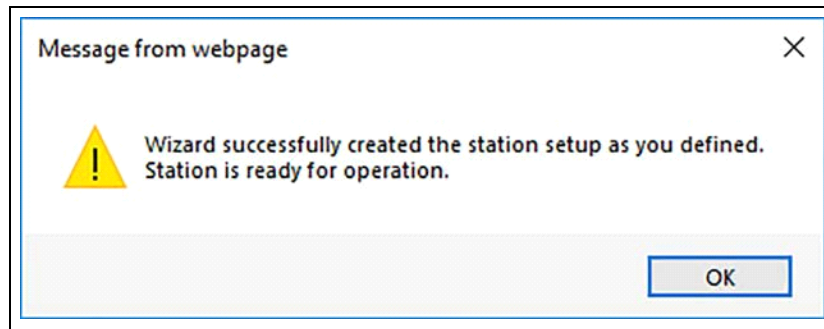
To configure the Backup screen, proceed as follows:

- 1 Enable backup by selecting the **Enable automatic backup of database** check box.
- 2 Select the Time of Backup for the following backup modes:
 - a Time of the day for incremental backup: Saves the changes made from the last backup. If the **Enable automatic backup of database** check box is selected, the system creates a delta or incremental backup at the intervals determined in the **Time of day for incremental backup** drop-down list.
 - b Select full backup schedule: Saves the entire database. Full backup can be defined on a **Weekly** or **Monthly** basis by selecting the corresponding radio buttons. In both cases, the backup day is selected from the drop-down list.
- 3 Enter Backup Target properties: **FTP server location - URL** and the **Port**, the **User**, and the **Password**.

4.13 Finalizing the Wizard

Backup is the last page of the Installation Wizard. Click **Finish** to finalize the process and build the setup. When the process is completed, the following dialog box opens (see [Figure 28](#)):

Figure 28: Setup Wizard: Finalizing Confirmation Dialog Box



After clicking **Finish**, the setup process starts. At this stage, the **Cancel** button is still enabled, but it only closes the Wizard GUI without stopping the process.

Note: The setup process may take up to three minutes, depending on the complexity of the settings.

In cases where an error was found, the system provides the user with a proper error message. At this stage, errors are most likely to be caused by complex mismatched settings (i.e. between pump, pump head number, and controller types) that were not found during the process of validation on each page. Recheck and correct the settings.

This page is intentionally left blank.

5 – Global Settings

5.1 General

This section provides instructions for setting up station information, general and regional settings, customizing receipts, alarms, communication properties, backups, and more.

These procedures consist of:

- “5.3 Advanced Station Settings” on page 43
- “5.4 Receipts” on page 50
- “5.5 Alarms” on page 55
- “5.6 Comm (FCC)” on page 56
- “5.7 Backup” on page 58

In the Global page, there are two mandatory fields that must be set as they identify the station: Description (station name) and Code.

To access the Global page, click **Setup** in the navigation bar and then select **Global** (see Figure 29).

Figure 29: Global Parameters Page

GASBOY

Station

Description: Code:

E-Mail: Language:

Address: City:

Regional Settings

Date format: Time format:

Volume measurement: Odometer consumption:

Currency measurement: EMI consumption:

Density: Temperature:

Height (measurement): Height (display):

Flow Rate:

General

VAT: % Zero transactions:

Inactivity timeout (secs): OPT: MTag: Alarm refresh rate: seconds

Auto-Name: Vlimit: Authorization Timeout:

Authorized Location code (Magic): Employee fleet name:

Department color: Employee fleet code:

ORPAK

5.2 Global Parameters

The Global page enables you to set various station definitions (see [Table 9](#)):

Table 9: Global Tab Parameters

Parameter	Description
Station Section	
Description	Description of the station.
E-mail	E-mail address of contact personnel.
Address	Physical address of the station.
Code	Code (identification) number of the station. The Code is defined during setup and it is highly recommended not to change it after the station becomes operational. <i>Note: If a station is part of a network of stations, this code must be unique across the network. This code is used to uniquely identify the station in the Head Office.</i>
Language	Language selection which affects the software interface and the receipt printing. Select the language from the drop-down list.
City	City of the station.
Regional Settings Section (Select the units from the adjacent drop-down list)	
Date format	Date format used in the application (Default: MM/DD/YY).
Volume measurement	Volume measurement (Default: Gallons).
Currency measurement	Currency in use (Default: US Dollars).
Density	Fuel density at a certain temperature (Default: lb/ft³).
Height (measurement)	Measurement of tank height level (Default: inches).
Flow Rate	Volume of fuel which passes per unit time (Default: gallons per hour).
Time format	Time format used in the application (Default: HH:MM:SS).
Odometer consumption	Distance per fuel consumption measurement (Default: miles per gallon).
EH consumption	Engine hours per fuel consumption measurement (Default: hours per gallon).
Temperature	Temperature display inside the fuel tank (Default: °F).
Height (display)	Height of the tank displayed on pages and reports (Default: inches).
General Section	
VAT (percent)	Sets the VAT rates. Currently not in use.
Inactivity timeout	Sets the time that the OPT displays the same message when waiting for the user's input (in seconds).
Auto-Authorised Name	Defines the 'name' assigned to the device in Auto-Authorized transactions. In cases where a pump is set in the no need for authorization mode (normally open or hot pumping) the pump is authorized as soon as the handle is lifted without additional authorization device.
Location Code (Magic)	This is only relevant for customers using a Magic Head Office System. Otherwise, set value to 0.
Department Color	This is only relevant for systems using a Magic Head Office System. It defines the device lists downloaded from Magic to OrCU as either positive or negative lists.

Parameter	Description
General Section	
Zero transactions	Sets the allowed number of transactions whose volume equals to zero before blocking the dispenser.
Alarm refresh rate	Defines the time frequency for refreshing the Alarms page.
Authorization Timeout	Defines the maximum allowed waiting time after pump is authorized and before the handle is lifted up.
Employee fleet name	Defines the fleet name and code given for the specific fleet.
Employee fleet code	

Click **Save** to save the changes.

5.3 Advanced Station Settings

To set additional station parameters, click **Advanced**. The Station Parameters dialog box opens (see [Figure 30](#)).

Figure 30: Advanced Station Settings

The screenshot shows the 'Advanced Station Settings' dialog box. It is organized into multiple panels. The 'Configure Screen' panel includes options for enabling pump authorization through screens, prompting for coupon information, requiring confirmation to authorize a pump, and allowing pump authorization with or without a limit. The 'Enable keypad entry for authorization (F2)' panel has radio buttons for 'Disabled', 'Enabled on 1st entry only', 'Enabled on 2nd entry only', and 'Enabled on both entries'. The 'EOD (automatic end-of-day shifts)' panel includes a checkbox for 'Enabled', a 'Time to reopen' dropdown, a 'Wait for pumps (seconds)' input, and a checkbox for 'Only get totalizer readings'. The 'Shift Details' panel has two columns: 'Attendee Shift Report' and 'Fuel Shift Report', each with checkboxes for 'Show MOP details', 'Show fuel sales details', 'Show dry stock details', and 'Show totalizer details'. The 'General' panel includes checkboxes for 'Prompt for plate', 'Allow fueling when shift is closed', 'Update OPT on pump status changes', 'Enable manual totalizers', 'Card number automatically generated', 'Allow auto authorize pump from OPT', 'Record fuel start and end flow time', 'Display messages while fueling', 'Adjust delivery volume as a result of sales during delivery', 'Turn on support for LPG & CNG', 'Turner Truck (DTC) Station', and 'Display balance while fueling'. The 'Payment Terminal' panel has a 'Setup...' button. The 'Authorization' panel has a checkbox for 'All customers authorization requires attn.'. The 'Auto Calibration' panel has a 'Time to check if done' dropdown. The 'TLG Update Intervals' panel has input fields for 'Delivery' (00 min), 'Inventory' (00 min), and 'Alarms' (1 min). The 'Enclosure door open detection' panel has a checkbox for 'Enabled', an 'IP' field (192.168.1.151), and a 'Port' field (4000). The 'Discovery Mode' panel has a checkbox for 'Allow station to dynamically add devices during fuel authorization'. The 'OPT Beeps' panel has a checkbox for 'Allow beeps' and a '# of beeps' input (9). The 'Status Screen Beeps' panel has a checkbox for 'Allow beeps' and a '# of beeps' input (9). The 'Activate Manager Tag' panel has a checkbox for 'Activate'. The 'Customize OPT messages' panel has a 'Setup...' button. The 'Job Code from OPT' panel has a 'Setup...' button. At the bottom, there are 'Modify' and 'Close' buttons.

The advanced parameters are described in the following table (see [Table 10](#)):

<<Please provide description for Delivery Mode and Activate Manager Tag.>>

Table 10: Station Parameters Dialog Panels

Panel	Description
Configure Screen	Sets options for authorizing pumps operation. Select the relevant check boxes to enable the features. Limit Types can be set per Money, Volume, or Both.
Formats	Sets the display of the decimal point precision for currency, PPU (Price Per Unit), volume, density, and height values used in reports and printed on receipts.
Payment Terminal	Sets the connection between SiteOmat360 and any clearing system for use with regular credit cards (see "5.3.2 Payment Terminal Setup" on page 48).
Auto Calibration	Schedules the daily check for auto calibration completion for all probes actively executing the process, by using the Time to check if done drop-down list (HH:MM).
Enable keypad entry for authorization (F3)	Companies can allow drivers to manually enter their device number in the OPT by using the F3 option. The radio buttons in this section define whether to disable manual entry at all, to allow manual entry only in the first stage of the two-stage authorization process, only in the second stage of the two-stage authorization process, or to allow manual entry in both stages. Note that the maximum number of characters for manual entry into OPT is 20.
Shift Details	Defines which sections are to be included in the attendant reports (X report and Z report), produced at the end of each attendant shift and at the end of global shifts. This section is in-use in stations where there are attendants.
General	<p>Sets general parameters as follows:</p> <ul style="list-style-type: none"> • Prompt for plate after transaction: Select this check box to enable inserting vehicle plate number at the end of the transaction. • Allow fueling when shift is closed: Select this check box to enable users self-service fueling after the working shift (relevant for regular service stations). • Update OPT on pump Status changes: Select from this drop-down list whether to display a message (display. or display and sound message) on the OPT when pumps status changes. • Enable manual totalizers: Select this check box to manually enter mechanical pump totalizers. For more information, refer to Chapters 5-8 of the <i>MDE-5415 ForeHB SiteOmat360 User Manual</i>. • Card number automatically generated: Select this check box to enable Card Numbers generation for devices not burned. The vehicle is identified by its plate number and automatically receives a device number after the first refueling. • Allow auto authorize pump from OPT: Select this check box to allow Shift Managers to switch the pump operation modes from Need Authorize to Auto-Authorize mode through OPT. • Record fuel start flow time: Select this check box to include in transaction record the time stamp when the pump started to supply fuel, namely changed to IN_USE state. • Display messages while fueling: Select this check box to display currently dispensed volume on OPT screen during the transaction. • Adjust delivery volume as a result of sales during delivery: Select this check box to compensate delivery data received from ATG by adding the volume of transactions performed during delivery. • Turn on support for LPG & CNG: Select this check box for stations that include CNG/LPG dispensers. The system will require an additional authorization device to prevent untrained personnel from operating these types of dispensers.
TLG Update Intervals	Sets the intervals for receiving Delivery, Inventory, and Alarm updates from the TLG system.
Enclosure door open detection	N/A
OPT Beeps	Provides sound feedback each time a device is detected. Select the Allow beeps check box to activate the feature and enter the required # of beeps. In cases where more than one OPT is installed at the station, it is required to associate the dispenser to a specific OPT terminal (see "6.2 Dispensers" on page 62).
Status Screen Beeps	Provides sound feedback in the Status page each time a nozzle is lifted. Select the Allow beeps check box to activate the feature and enter the required # of beeps.
Customize OPT Messages	See "5.3.1 Customize OPT Messages" on page 45 .
Job Code from OPT	See "5.3.3 Job Code from OPT" on page 49 .

Click **Modify** to save the selections and **Close** to close the dialog box and return to the Global page; or click **Close** to exit the dialog box without saving the changes.

5.3.1 Customize OPT Messages

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

Click **Setup** in the Customize OPT messages section. The following dialog box opens (see [Figure 31](#)):

Figure 31: OPT - Screens and Prompts Customization

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

Screen state: **Auth failed: day limit**

4x20 2x16 PAIS

Factory Settings

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
1	A	u	t	h		f	a	i	l	e										
2	d	a	y																	
3																				
4																				

Customization

Clear

	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
1	A	u	t	h		f	a	i	l	e										
2	d	a	y																	
3																				
4																				

Factory Settings

Save Cancel

The dialog box includes three OPT tabs:

- **4x20:** for OPT, CRIND®, and CAT displays
- **2x16:** for OrTR displays
- **PAIS** for setting third party clearing system prompts

OPT message tabs includes two panes:

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

To edit the OPT tab parameters, proceed as follows:

- 1 Select the display resolution tab according to the OPT you'd like to modify.
- 2 In the **Screen state** drop-down list, select a message (see [Table 12](#) on [page 48](#)).

- 3 In the Customization pane, double-click a cell to start editing the message.
- 4 (Optional) Click **Clear** to delete all the text.
- 5 (Optional) Click **Factory Settings** to return to the factory settings of the message.
- 6 Click **Save** to close the dialog box and save the changes, or click **Cancel** to exit it without saving.

The PAIS tab contains one pane where the PAIS tab parameters can be edited.

To edit the PAIS tab parameters, proceed as follows:

- 1 Double-click a cell to edit the values. The following parameters can be edited:
 - **Type**: Select numeric, alphanumeric, or swipe card
 - **Minimum** and **Maximum** length
 - **Masked**: Select this to mask user input, which will be replaced by asterisks (*) on the OPT screen
- 2 Set the prompts in use and then click **Save**.

Notes: 1) You cannot change the location and length of prompts (for user input). Prompt cells are read-only and grayed.

2) You can modify OPT messages at the network level via Head Office or at the station level (SiteOmat360).

To overwrite local changes with Head Office messages, proceed as follows:

1 Select a message.

*2 Click **Factory Settings**.*

*3 Click **Save**.*

4 Edit the message.

*5 Click **Save**.*

3) Not all messages are available in 2x16 resolution.

4) Special characters are not supported.

Table 11: OPT Messages

Message	Description
Auth failed: day limit	Authorization failed because the day limit has exceeded.
Auth failed: day visit	Authorization failed because the number of allowed daily visits (fueling) has exceeded.
Auth failed: fleet is blocked	Authorization failed because the fleet is blocked.
Auth failed: month visit	Authorization failed because the number of allowed monthly visits (fueling) has exceeded.
Auth failed: time range	Authorization failed because the time is not in the allowed range.
Auth failed: week limit	Authorization failed because the weekly limit has exceeded.
Auth failed: week visit	Authorization failed because the number of allowed weekly visits (fueling) has exceeded.
Auth failed: year limit	Authorization failed because the yearly limit has exceeded.
Authorized user	User is authorized.
Blocked Pump	Selected pump is blocked.
Card/Tag not authorized	Device is not authorized.
Checking Card	Card is being checked.
Device in negative list	Authorization failed because device is in negative list.
Device not found	Device is not found in database.

Message	Description
Enter device ID	Swipe card/tag, enter device ID using OPT keypad.
Checking Card	Card is being checked.
Device in negative list	Authorization failed because device is in negative list.
Device not found	Device is not found in database.
Enter device ID	Swipe card/tag, enter device ID using OPT keypad.
Enter driver (2-stage)	Enter driver ID at second stage of two-stage authorization.
Enter Driver ID	Swipe card/tag, enter driver ID using OPT keypad.
Enter Engine Hours	Enter Engine Hours.
Enter Odometer	Enter Odometer reading.
Enter PIN	Enter PIN code.
Enter Plate	Enter license plate number.
Enter Plate (receipt)	Enter license plate number to be added to receipt.
Enter Receipt Number	Enter/select receipt number.
Enter Reference Number	Enter reference number of a receipt to be printed.
Enter vehicle (2-stage)	Enter vehicle ID at second stage of two-stage authorization.
Enter vehicle ID	Swipe card/tag, enter vehicle ID using OPT keypad.
Entry too short	User input is below the minimum length defined for the prompt.
Fueling Suspended	Fueling is suspended after the nozzle was removed from fuel filler.
Idle messages	Idle messages displayed between transactions according to OPT keypad configuration as set in SiteOmat360.
Invalid number	Invalid E.H./Odometer reading entered (as a result of reasonability check).
Invalid PIN Code	Invalid PIN code.
Invalid Vehicle	Invalid Vehicle ID.
No pump allowed	Selected pump is not connected to OPT.
Not authorized	Device is not authorized.
Nozzle out of service	Nozzle is unserviceable.
Ongoing fueling	Message displayed during transaction.
Present Credit Card	Swipe credit card.
Present driver (2-stage)	Present driver ID at second stage of two-stage authorization.
Present vehicle (2-stage)	Present vehicle ID at second stage of two-stage authorization.
Printing receipt	Message displayed during printing.
Pump is busy	Selected pump is busy.
Pump not found	Pump number is invalid.
Receipt not found	No receipts for the selected pump.
Re-enter PIN (CAT/CRIND only)	The entered PIN was not correct, request to re-enter.
Remove nozzle (CAT/CRIND only)	User is instructed to take the nozzle out.
Set nozzle back	Return nozzle to holster.
Start Refuel	Start refueling.
Swipe Card	Swipe card.
Tag is blocked	Presented tag is blocked.
Wrong Fuel Type	Selected fuel type is not authorized.
Wrong fuel type for this card	The selected fuel type (product) is not in allowed for the card swiped.

5.3.2 Payment Terminal Setup

This feature enables you to set up a connection to a third-party authorization system.

Click **Setup** in the Payment Terminal section. The following dialog box opens (see [Figure 32](#), [Table 12](#) on [page 48](#)):

Figure 32: PAIS Setup Dialog Box

Table 12: PAIS Setup Fields

Parameter	Description
PAIS IP & Port	IP address and port for the communication between the internal payment application and the controller (read-only).
PAIS tasks	Number of tasks that are to be handled simultaneously by the processor.
App log	Enables application logging. To do this, use the App Port field to set a destination port.
Comm log	Enables Controller - Processor communication logging. To do this, use the Comm Port field to set a destination port.
Timeout	Defines the waiting time for a response from the processor.
Card may not be reused within	Prevents refueling using the same bank card occurring within the defined time interval.
Pre-authorized amount	Pre-authorizes the card for the define amount prior to the transaction.
Only show Declined Card on any credit card rejects	Sets whether to show the rejection message as received from the payment processor on the OPT display or as a generic Declined Credit Card message.
Use Bank Limit only for pre-authorized amount	Presets the pump amount based on the bank limit. This lowers the amount requested of the customer's available credit. This setting overrides the pre-authorized amount parameter.

Parameter	Description
End of Days	Activates the End of Day (EOD) process. The payment application returns a list of totals (Total amount, Amounts per card type) and saves the data in the EOD summary <ul style="list-style-type: none"> Daily run enabled - runs the process automatically on a daily basis. To run daily, set the Run every value to 24 and set the time to start the process. Or to run more frequently, select a different time interval in the Run every drop-down list. Run EOD Now - use this button to manually activate the EOD process.
Credit Processor	Selects the payment processor to use.
Specific	Sets the communication parameters to use for communication between the internal payment application and the processor.
Product Map	This opens a new dialog where it is possible to associate the products defined in the SiteOmat360 with the external payment processor.

5.3.3 Job Code from OPT

The **Job Code from OPT** dialog box enables you to prompt drivers to enter a job number during authorization (see [Figure 33](#)).

Figure 33: Job Code from OPT Dialog Box

The dialog box includes the following fields (see [Table 13](#)):

Table 13: Job Code from OPT Fields

Field	Description
Enabled for all devices	Check to require all devices to provide a job code
Data type	Alphabetic/Numeric
Allow empty	TBD
Length	Job code length

Note: Job Code from OPT is not supported in CRIND payment terminals.

5.4 Receipts

Click **Receipt** to display the Select Receipt Format dialog box. This feature enables selecting a format from a list of fully customizable templates, as well as creating new receipt formats to better meet your needs (see [Figure 34](#)).

Figure 34: Receipt Format Selection Dialog Box

General

Print only receipt copy:

Cut: ☒ Item ☐ Full ☐ No [Change logs...](#)

Only print log reader receipts within this many seconds: [Headset folder](#)

Receipt copies limit:

Receipt format

Select receipt format: Full Service A receipt [+ New](#) [Delete](#)

Available fields:

- A line code
- Abandonment (String)
- Credit Card
- Customer ID (Int)
- Driver name (String)
- Dry PPU
- Dry price
- Product name
- Dry quantity
- Duplicate number
- Empty line
- Engine hours (Float)
- Expiration (String)
- Fuel Code
- Fuel class
- HABIR
- Note (id)
- Jab Code (String)
- Night charge
- Nozzle (int)
- Colometer (float)
- PPV (float)
- Purchase
- Personal message
- Product name (String)
- Pump (int)

+ Add
Homeov
Move up
Move Down

☒ Cash ☐ Customer ☐ Credit

Name	Format	Units	Precision	Type	Style
Duplicate number	%s	0	0	String	Normal
Transaction date	NNMMCOYY	10	0	Date	Normal
Transaction time	HH:MM:SS	8	0	Date	Normal
Paymode	%d	10	0	String	Normal
Pump	%d	10	0	int	Normal
Nozzle	%d	10	0	int	Normal
Product name	%s	10	0	String	Normal
Volumenquantity	%f	8	2	Float	Normal
PPV	%f	8	2	Float	Normal
Invoicage	%f	8	2	Float	Normal
Night charge	%f	8	2	Float	Normal
Abandonment	%s	12	0	String	Normal
Total price	%f	8	2	Float	Normal
Vehicle no.	%d	15	0	String	Normal
Receipt ID	%d	10	0	int	Normal

Printer

```

Originalno:
Date: 06/15/18
Time: 01:54:49
Segment Motor: GMR
Temp : -100007000
Pressure : -100007000
Product : 121000700012100070
Quantity : 12100070.11
PUMP : 00.00
Night charge: 01.00
Authorized by: 121000700012
Total Order: $70.10
Vehicle No: 121000700012100
Receipt No: -100007000
    
```

[Save](#) [Cancel](#)

5.4.1 General Settings

The General panel includes the following settings (see [Table 14](#)):

Table 14: Select Receipt Format - General Fields

Field	Description
Change logo	Enables loading a PCX file for a logo printout at the top of the receipt. The logo should be a monochrome (black and white) PCX file, with a maximum size of 1 KB.
Header/Footer	Click Header/Footer to define up to 10 lines for the header and footer. The Receipt Format dialog box opens (see Figure 35 on page 51). The typed text is added as is to the receipt. Click Save to save the changes, and Close to close the dialog box and return to the Select Receipt Format dialog box.
Print only receipt copy	Select this check box to print only one copy of each receipt.
Cut	Enables defining printer cut modes: <ul style="list-style-type: none"> • Semi: partial cut; end-user must lift the printer lid to take the receipt • Full: full cut; receipt is cut and ejected from the printer • No: Receipt is not cut; end user must tear off the receipt
Only print tag reader receipts within this many seconds	Enter the time limit for the user/attendant to present the tag and automatically print a receipt. Receipts won't be issued past this limit.
Receipt copies limit	Enter the maximum number of receipt copies that the customer or the attendants are allowed to withdraw for each transaction.

Figure 35: Receipt Format - Header/Footer Dialog Box

Header

Welcome

Footer

Have a nice day

Save

Close

5.4.2 Receipt Format Settings

The Receipt format panel enables you to define the fields to include in the receipt, their order of appearance, and more. Several templates may be defined.

The following options are available:

- Select a previously defined format from the menu.
- Select a format from the menu and then modify its properties.
- Enter a name in the menu and then click **New** to create a new format.

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

- 1 Click the field row in the **Available fields** list to select it, and then click **Add** (see [Table 15](#)). The field is added to the grid in the center.
- 2 (Optional) Click a row in the grid, and do one of the following:
 - a Click **Move up** or **Move down** to change the field's order of appearance in the receipt.
 - b Double-click the **Name** field to rename the field.
Note: The Format, Width, Precision, and Style columns are read only. See the table below for a description of the different formats.
- 3 (Optional) Select the **Cash/Customer/Credit** radio buttons to specify formats for the different types of transactions and repeat steps 1 and 2.
- 4 Click **Save** to save the settings. A Preview of the format is displayed on the right-hand side pane.

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

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

Table 15: Receipt Fields

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

Field	Description
Fleet Code	Numeric code identifying the fleet
Fleet name	Name identifying the fleet
HASH	N/A
Hose	Number of the hose used to supply the fuel in the transaction
Night charge	Night charge added to a transaction performed at night shifts
Nozzle	Number of the nozzle used to supply the fuel in the transaction
Odometer	Odometer reading from the vehicle
PPV	Price Per Volume
Paymode	Means of payment used in the transaction
Personal message	Free-text message
Product name	Name identifying the product in the system
Pump	Number of the pump head, from which the transaction was performed
Receipt ID	Ordinal unique number assigned by the system to each receipt as included in each printed receipt
Reference Number	Pre-authorization code sent by payment processor
Sale after Discount	Sum collected in the transaction after discount
Signature	Space provided for customer's signature
Station Name	Gas station name
Terminal	Payment terminal used to perform the transaction
Totalizer	Pump totalizer
Total pre VAT	Total sum before VAT
Total Price	Total sum collected in the transaction (including taxes)
Totalizer	Pump totalizer
Transaction Date	Date of the transaction
Transaction Driver ID	ID of the driver
Transaction ID	Unique transaction ID
Transaction Time	Time of the transaction
VAT	Value Added Tax percentage
Vehicle No.	License plate number or unique number of the vehicle
Volume/Quantity	Fuel volume supplied in the transaction
Wetsale	Sum of money collected for wet products
Empty/Default	Default field format
Float (%f)	Decimal floating point numbers
Float 0-pad (%0*.f)	Decimal floating point numbers with zero padding to the required width
Integer (%d)	Decimal numbers
Hex (%x)	Hexadecimal numbers
Int/ 0-pad	Decimal numbers with zero padding out to the required width
Hex/ 0-pad	Hexadecimal numbers with zero padding out to the required width
Int/exact/0-pad	Decimal numbers with zero padding out to the required width
Hex/exact/0-pad	Hexadecimal numbers with zero padding out to the required width
Int/ 0-pad/LJ	Decimal numbers with zero padding out to the required width, left justified

Field	Description
Hex/ 0-pad/LJ	Hexadecimal numbers with zero padding out to the required width, left justified
String (%s)	Alphanumeric characters
Right Part of String	Right characters in the string, according out to the required width
Date Formats	Available formats: <ul style="list-style-type: none">• YYYY-MM-DD• YYYYMMDD• DD-MM-YYYY• MM-DD-YYYY• DD/MM/YYYY• MM/DD/YYYY• DD/MM/YY• MM/DD/YY• DDMMYYYY• MMDDYY
Time Formats	Available formats: <ul style="list-style-type: none">• hh:mm:ss• hhmmss• hh:mm• hhmm

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

5.5 Alarms

Click **Alarms** to display the Alarm Management dialog box, which enables you to define the alarm properties (see [Figure 36](#)). The types of alarms are predetermined in the system, and they are listed in the Alarm Code column by ascending number. The administrator can only change their properties.

Figure 36: Alarm Management Dialog Box

Alarm Code	Priority	Type	Description	Device	Enabled	Audio
101	Urgent	High High	Tank Level High-High	Tank	Yes	No audio
102	High	Low Low	Tank Level Low Low	Tank	Yes	No audio
103	High	High	Tank Level High	Tank	Yes	No audio
104	Normal	Low	Tank Level Low	Tank	Yes	No audio
105	High	High	Tank Density High	Tank	Yes	No audio
106	Journal	Low	Tank Density Low	Tank	Yes	No audio
107	High	High	Water level High	Tank	Yes	No audio
108	Normal	High High	Water level High High	Tank	Yes	No audio
109	Urgent	High	Temperature High	Tank	Yes	No audio
110	exceptional	System	Invalid Data Received	Tank	Yes	No audio
111	High	System	Tank Communication Failed	Tank	Yes	No audio
112	High	Operational	Printer Out of Paper	Printer	Yes	No audio
113	exceptional	Operational	Printer Low on Paper	Printer	Yes	No audio
114	High	System	Printer Communication Failed	Printer	Yes	No audio
115	exceptional	System	Invalid Data Received	Printer	Yes	No audio

1 - 226 [226]

Description: Priority: **Journal** Enable: **Yes** Audio: **No audio**

Update **Close**

To change an alarm's properties, select the alarm by clicking the corresponding row. The selected alarm name is shown in the Description field, and its properties are shown in the selection boxes. Set the properties from drop-down lists:

- **Priority:** Select the alarm's priority from lowest to highest (**Journal/Exceptional/Normal/High/Urgent**).
- **Enable:** Select whether the alarm is enabled (**Yes/No**).
- **Audio:** Select the type of audio the alarm will generate (**No Audio/Beep/Loudalarm/Buzzer/Wawa/Attention**).

Click **Update** to save the selections. Verify that the new properties are displayed in the alarm's corresponding row.

Click **Close** to exit the dialog box without saving changes and return to the Station Parameters page.

5.6 Comm (FCC)

Click **Comm** to display the Comms Setup dialog box, which contains the communication properties of the SiteOmat360 as described in the table below (see [Table 16](#), [Figure 37](#)).

Note: Most of the parameters in the Comms Setup screen are read-only and are used for informational purposes only.

Figure 37: Comms Setup Dialog Box

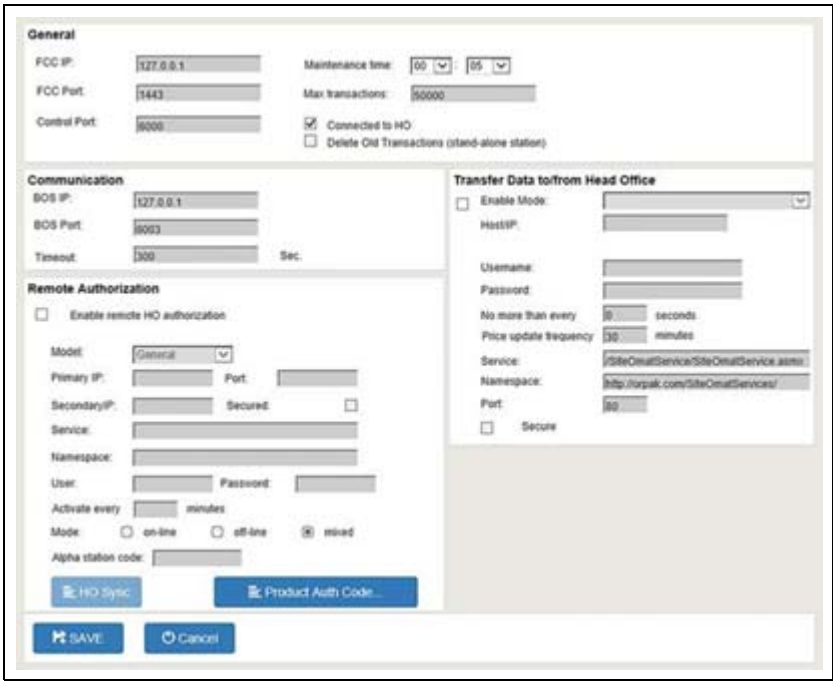


Table 16: Comms Setup Fields

Panel	Description
General	<p>The General panel defines communication properties of the Forecourt Controller.</p> <ul style="list-style-type: none">• FCC IP: Identifies the IP address of the Forecourt Controller in the network for view. only. The connection is identified at the FCC Port box (LAN1 or LAN2) and the Control Port box.• Maintenance time: Sets the time of the day, hours and minutes after midnight, at which the SiteOmat360 performs clean-up operations of the database and other activities. The duration of the maintenance procedure depends on the workload of the system, which is the number of transactions not passed to the Head Office. This process may take a few minutes, during which the system may experience a delay in authorizing and other operations. Therefore, it is highly recommended to select a time where no activity or minor activity is expected in the station. Default procedure time is five minutes after midnight.• Max transactions: Sets the Forecourt Controller’s transactions capacity• Connected to HO: Deletes transactions only after data was transferred to HO (in cases where overriding is selected).• Delete Old Transactions: Enables overriding of transactions in FIFO method if the number of transactions is over the set maximum.
Communication	<p>This panel displays read-only information.</p>
Transfer Data to/from Head Office	<p>See “5.6.2 Transfer Data to/from Head Office” on page 58.</p>
Remote Authorization	<p>See “5.6.1 Remote Authorization” on page 57.</p>

Click **Save** to save the selections and return to the Global page or click **Cancel** to exit the dialog box without saving the changes.

5.6.1 Remote Authorization

The fields in this panel are defined in cases where the Head Office application provides web services in a predefined format for authentication. Specific settings are provided for these applications only.

Define the following parameters:

- Model/Primary IP/Port/Secondary IP/Secured/Service/Namespace: Remote Authorization server parameters.
- User/Password: Remote authorization server credentials.
- Activate every [x] minutes: Rate of communication with the remote authorization server.
- Mode:
 - online**: Authorize all transactions via the remote server.
 - offline**: Authorize all transactions at the local station.
 - mixed**: Attempt to authorize all transactions via the remote server, and if communication is unavailable authorize transactions at the local station.
- Alpha station code: Station code set in “Global Settings” on page 41.
- HO Sync: Triggers the sync process with the HO server.

5.6.1.1 Product Auth Code

The Product Auth Code dialog box is used to associate the products defined in the SiteOmat360 with the external payment processor (see [Figure 38](#)).

Figure 38: Product Auth Code Dialog Box

Name	Code	Authorization Code
Diesel	1	
Regular	2	
Super	3	
UnLeaded	4	
LPG	5	
CNG	6	
RIN	7	

Save Close

5.6.2 Transfer Data to/from Head Office

The fields in this panel are defined in cases where the Head Office is implemented. It requires a message from SiteOmat360 through Web Services, to activate the Head Office and update the system. The feature is disabled by default. As these are very specific settings, additional information is provided for developers of Head Office on demand.

Define the following parameters:

- Enable mode: When enabled, station initiates communication with HO, rather than HO initiating communication.
- Host IP/Service/Namespace/Port/Secure: HO server communication parameters.
- Username/Password: HO Credentials.
- No more than every [x] seconds: Rate of communication with the HO server.
- Price update frequency [x] minutes: Interval at which station checks HO server to update product prices.

5.7 Backup

Click **Backup** to display the Backup setup dialog box, which enables users to define the database backup (see [Figure 39](#)).

Backup can be enabled by clicking the **Enable automatic backup of database** check box, or disabled by leaving it blank.

Figure 39: Setup Backup Dialog Box

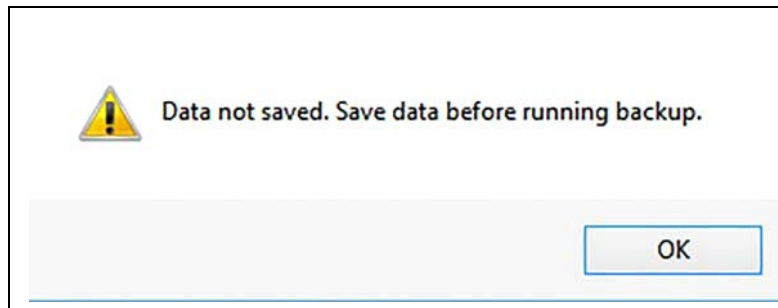
There are two types of backup:

- **Delta backup:** Only saves the changes made following the previous backup. If the **Enable automatic backup of database** check box is selected, the system creates a delta or incremental backup at the intervals determined in the Time of backup section
- **Full backup:** Backs up the entire database. This type of backup must be performed manually by the user.

To define the backup parameters, proceed as follows:

- 1 Define the settings in the Time of backup panel:
 - **Time of day for incremental backup:** Set the time of day to perform the **Delta backup** (HH:MM in 24-hour format).
 - **Select full backup schedule:** Select the **Weekly on/Monthly on** radio buttons to define how often and when to perform a **Full backup**.
 - Weekly on:** Performs a Full backup once per week. Select the day of the week from the drop-down list.
 - Monthly on:** Performs a Full backup once per month. Select the day of the month from the drop-down list.
- 2 Define the backup's save location in the Target of backup panel:
 - **FTP (ftp://HOST/):** This radio button is auto-selected and cannot be changed.
 - **URL/Port:** Set the URL and port of the target FTP server where the backup will be saved
 - **User/Password:** Login credentials for the target FTP server.
- 3 Click **Save** to save the settings. Otherwise, the following message is displayed (see [Figure 40](#)):

Figure 40: Save Data Message



- 4 Click **Backup Now** to test the backup settings. This procedure performs an immediate and full backup to the defined target.

Note: A binary file is created in the FTP server; in cases where using the delta mode, TXT files are created. Those files can be accessed in the restore process only, do not open them with other applications. To restore a backup, contact Gasboy support.

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6 – Forecourt Setup

6.1 General

This section provides setup instructions for Forecourt Controller peripherals and devices. The Forecourt setup is used to define all system components.

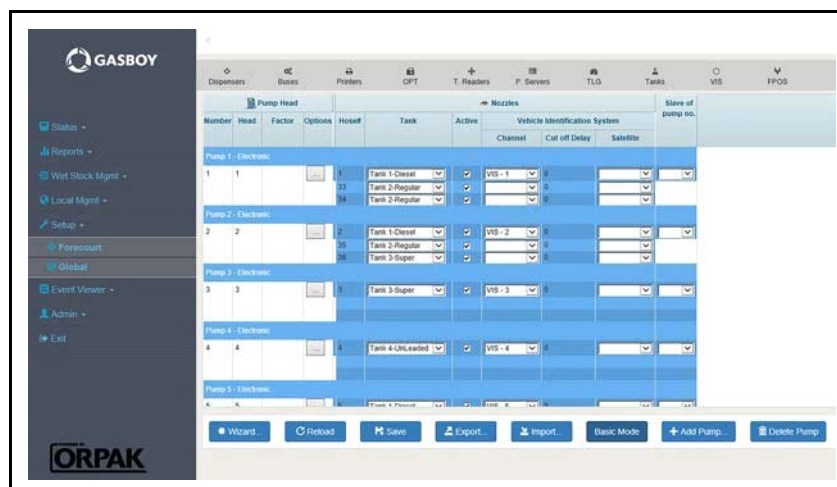
Perform the setup process in the following order:

- 1 “6.3 Buses” on page 67
- 2 “6.4 Printers” on page 70
- 3 “6.5 OPT” on page 71
- 4 “6.6 Tag Readers” on page 73
- 5 “6.8 Tank Level Gauge” on page 77 (optional)
- 6 “6.9 Tanks” on page 87
- 7 “6.10 AVI (VIS)” on page 90 (optional)
- 8 “6.7 Pump Servers” on page 74
- 9 “6.2 Dispensers” on page 62 (main page)

After defining all of the parameters, click **Save** and then **Reload** to implement the setup parameters. To define all station peripherals, you will need to access the Advanced Mode.

The Advanced Mode page is accessed by clicking **Advanced Mode** in the Setup page (see Figure 41).

Figure 41: Setup Page - Advanced Mode



6.2 Dispensers

The Setup Pump Settings dialog box enables defining the dispensers linked to the Forecourt Controller (see [Figure 42](#)).

To define a new pump, click **Add Pump** in the Advanced Settings page and fill the corresponding parameters in the General section of the dialog box (see [Table 17](#)).

Figure 42: Setup Pump Settings Dialog Box

Table 17: General Section Parameters

Parameter	Description
Pump Number	Identification number of the pump. The logical number defining the pumps.
Pump Head	Address of the pump head as defined in the dispenser setup, acquired by technician.
Number of nozzles	Number of nozzles connected to the pump head.
Mode	A pump can operate in two fueling Modes. In Auto Authorize mode, the pump is authorized as soon as the nozzle is lifted. This mode is used only when monitoring of fueling is required. The Need Authorize mode blocks the pump until an authorization device is used in any of the available fueling scenarios.
Pump server	Select the Pump Server from the drop-down list, or click ellipsis (...) to open the Setup Pump Server dialog box (see "6.7 Pump Servers" on page 74).
Cluster	According to the selected Pump Server, select the Cluster from the drop-down list.
Printer	Select the Printer to be linked to the pump from the drop-down list, or click ellipsis (...) to open the Printers dialog box (see "6.4 Printers" on page 70).
Reader	Select the device Reader to be linked to the pump from the drop-down list, or click ellipsis (...) to open the Setup Tag Reader dialog box (see "6.6 Tag Readers" on page 73).
OPT	Select the OPT terminal to be linked to the pump for prompts display from the drop-down list, or click ellipsis (...) to open the OPT dialog box (see "6.5 OPT" on page 71). This association applies for this function only; the terminal can serve and be linked to several pumps in the station.
Add the totalizer value to new transactions	Includes totalizer reading after transaction to each transaction record.

6.2.1 Message Factors

The Message Factors define the format of the data displayed to the customer and the operator. The location of the decimal point in the string of digits that make up the data can be set.

To select a format, click the drop-down list. The message factors are (see [Table 18](#)):

Table 18: Message Factors

Factor	Description
Volume	Volume of the pumped fuel in this transaction.
Totalizer Volume	Accumulative volume pumped in all transactions.
Preset Volume	Preset volume for pump authorization.
Price Per Unit (PPU)	Price Per Unit (PPU) for all transactions.
Amount	Payment (value) in this transaction.
Totalizer Amount	Accumulative payment pumped in all transactions.
Preset Amount	Preset amount for pump authorization.

6.2.2 Specific Pumps

Each dispenser type has specific parameters that need to be defined per the pump manufacturer's specifications.

6.2.3 More Pump Options

Additional settings can be set using **More Options**, and the corresponding dialog box (see [Figure 43](#)).

Figure 43: Setup Pump Settings (more) Dialog Box

The dialog box is titled "Setup Pump Settings (more)". It contains the following sections:

- Grade Type:** Radio buttons for "Single grade" and "Multi grade".
- Nozzle State For Authorization Policy:** Radio buttons for "Must always be lifted before authorization", "Must be lifted for preset authorization only", and "Authorization does not check nozzle state".
- Price Update Policy:**
 - Checkboxes: "Do not allow fuelling if price was not updated" (checked), "Update price if PPU in transaction do not match" (checked), "Update price after connection lost" (checked), "Update price before any transaction" (unchecked).
 - Radio buttons: "As soon as price needed" (selected), "After all retries failed" (unchecked).
 - Text input: "Number of retries" with value "5".
- Flow Rate:**
 - Checkbox: "Enable flow rate control" (unchecked).
 - Text input: "Pump flow rate" with value "0".
- Authorization Parameters:**
 - Text inputs: "Number of retries" (2), "Delay between retries" (2) Sec, "Force pump check every" (2) Sec.
- External EFT:**
 - Checkbox: "Use Extern Auth - VIT/mVIT Only" (unchecked).
 - Dropdown menu: "EFT".
 - Checkbox: "Vehicle Must Be Defined in SiteOmat" (unchecked).

At the bottom are two buttons: "+ Save" and "Cancel".

Note: Changing the default settings in this dialog box should be done only by an advanced technician. When adding a new pump, you cannot access the advanced options until the pump has been saved.

To access more options, proceed as follows:

- 1 Click ellipsis (...) adjacent to the desired pump. The Setup Pump Settings dialog box opens (see [Figure 42](#) on [page 62](#)).
- 2 Click **More Options**. The Setup Pump Settings (more) dialog box opens (see [Figure 43](#)).
- 3 Set the pump parameters described in the table (see [Table 19](#) on [page 65](#)).
- 4 Complete one of the following:
 - Click **Save** to save changes.
 - Click **Cancel** to return to the Setup Pump Settings dialog box.

To delete a pump from the system, first select it by clicking its row on the **Dispensers** tab. Then click **Delete Pump**. If the pump is currently in use, it cannot be deleted.

Table 19: Setup Pump Settings (more) Sections

Section	Description
Grade Type	Sets the station level of service (Single or Multiple).
Nozzle State for Authorization Policy	Defines the nozzle state for authorization. This parameter selection must match the fueling Method defined in the main Dispensers page. The default (must always be lifted before authorization) should not be changed for common dispensers.
Price Update Policy	Allows defining when a new price is set at the pump. The selections are: <ul style="list-style-type: none"> • Do not allow fueling if price was not updated: Do not allow fueling if the price update did not succeed, as soon as the new price is entered or after a number of retries for the update that failed. Accordingly, set the Number of retries. • Update price if PPU in transaction do not match: Update the price if the Price Per Unit (PPU) in the current transaction does not match the newly set price. • Update price after connection lost: Update price whenever a connection between the pump and the Forecourt Controller was lost. • Update Price before any transaction: This option is disabled.
Flow Rate	Verifies that the flow is not larger than x gallons / liters per minute for mechanical pumps only. The default is disabled and the flow rate is defined as zero. In cases where the option is enabled and the flow exceeds the predetermined value (i.e. actual flow is 100 gallon/min, defined flow rate is 60 gallon /min), the Forecourt Controller stops the fueling.
Authorization Parameters	Defines the Number of Retries allowed for the customer and the maximum delay between retries before the pump shuts off for the customer. You can also Force a pump check of its authorization definitions by defining its rate in seconds.
External EFT	(Optional) Requires integration with third-party applications. Defines system with external Electronic Funds Transfer capability (e.g. the authorization process is done in an external system and not in the SiteOmat360 system). Define the type of EFT available in the system from the drop-down list. Vehicle Must Be Defined In SiteOmat360: Vehicles must also be defined in a list in the SiteOmat360 if this check box is selected.

6.2.4 Totalizer Offset

The system enables matching up mechanical totalizers to the automation totalizer readings by adding offset values.

Note: In cases of mismatch, totalizer offset should be added to each pump nozzle. Negative offset values are not accepted. It is highly recommended to set totalizer offset once at station initial setup.

To set Totalizer Offset, proceed as follows:

- 1 In the Setup Pump Settings dialog box, click **Total Offset**. The following dialog box opens (see [Figure 44](#)):

Figure 44: Setup Totalizers Offset Dialog Box

Nozzle #	Product	Current Totalizer	Required Totalizer	Offset
1	95	6610	6610	0
2	96	7382	7382	0

- 2 Select the **Use Totalizer Offset for this pump** check box.
- 3 (Optional) Click **Refresh** to view updated totalizer readings.
- 4 Complete one of the following:
 - Double-click the **Required Totalizer** field and enter the compensated totalizer value (Offset is calculated accordingly).
 - Double-click the **Offset** field and enter the offset value (compensated totalizer is calculated accordingly).
- 5 Repeat step 4 for each nozzle.
- 6 Complete one of the following:
 - Click **Save** to save changes.
 - Click **Cancel** to return to the Setup Pump Settings dialog box.

6.3 Buses

To access the Buses dialog box, select the Buses tab in the Setup page (see [Figure 45](#)).

Figure 45: Buses Dialog Box

Name	Type	Frame	IP	Port	Serial Device	Baud
BUS_ORPAY	TCP/IP	Orpak	10.4.177.52	3000		
BUS_ORPT	TCP/IP	Orpak	10.4.177.51	3000		
BUS_ORTR	TCP/IP	Orpak	10.4.177.49	3001		
BUS_TLG	TCP/IP	Veederroot	10.4.139.102	10300		
BUS_VIS	TCP/IP	Orpak	10.4.139.102	10401		
BUS_Wayne Dart	TCP/IP	Pump Server	127.0.0.1	2501		

1 - 6 [6]

Name: Frame:

☐ Serial Serial COM: BAUD:
 Parity: Data bits: Stop bits:

☒ TCP/IP IP: Port:

☐ Clear host 'read buffer' on connect ☐ Echo

This dialog box enables setting the communication channels to the peripheral devices in use in the Forecourt Controller. Regularly, these are TCP/IP buses in use in the 8-Port CommVerter for communication with pumps and RS-485 linked devices.

To define a bus, you need to:

- Name it
- Select its protocol (frame)
- Set its communication parameters (TCP or serial)

The communication channels between the Forecourt Controller and the station's components is the initial step in setting up the system. Then when defining the different station devices, you will link them to the relevant bus.

In most cases, you may use the system and device's default communication parameters. These can be modified according to local network requirements.

For example, an OPT with default IP address 192.168.1.211 and port 3000 requires defining an OPT Bus channel identified by IP and port 192.168.1.211:3000.

When defining an OPT device in SiteOmat360, that OPT is linked to the predefined OPT Bus.

In the example below (see [Table 20](#) on [page 68](#)), each OPT device is linked to a dedicated Bus channel. The TLG console is linked to a dedicated Bus channel, and the dispensers (pumps) to another dedicated Bus channel.

Table 20: Bus Definition Example

Device	IP #	Port
OPT1	192.168.1.211	3000
OPT2	192.168.1.212	3000
Printer1	192.168.1.211	3485
Printer2	192.168.1.212	3485
TLG	192.168.1.111	3005
Pump Server	127.0.0.1	2502
Wireless Gateway	192.168.1.170	3000

Note: When configuring a Pump Server, which is an internal process in the system, set the communication parameters of the SiteOmat360 and the Pump Server and not the communication between the Pump Server and the target pump connected through an 8 Port CommVerter port. This Bus communication is “localhost” and uses the IP address 127.0.0.1 and a unique port number starting with 2501 and ending with 2509.

6.3.1 Bus Settings

To define communication channels, proceed as follows:

- 1 In the Name field, enter the Bus name.
Note: It is recommended to have a convention of buses names (related to the device name). Each bus name should have a unique name and continue with the target device name.
- 2 Select the protocol from the **Frame** drop-down list. Only devices that use the same protocol can be defined to link to this bus. Select the frame in accordance with the devices connected to it, as listed in the following table (see [Table 21](#)):

Table 21: Protocol Settings

Frame	Devices
Gasboy	Printer, OPT, Wireless Gateway, OrTR
Pump Server	Pump server
Axalto	Axalto payment terminals (FPOS)
Hectronic	Hectronic TLG
Veeder-Root	Veeder-Root TLS 350 or 450
EECO	EECO TLG
OPW PV4	OPW PV4 TLG
Start Italiana	Start Italiana TLG probe
OrTC	N/A
DIGIO	Digital Enclosure door device
CRIND	CRIND type OPT
CAT	CAT type OPT
URD	N/A (Universal DALKAN)
ATG Server	Data communication between PSS 5000 and TLG
AFS Probe	N/A
Modbus RTU	MIPROBE TLG

3 For TCP/IP communication:

- a** Verify that the **TCP/IP** radio button is selected.
- b** In the IP field, enter the device IP address.
- c** In the Port field, enter the device port. For more information, refer to “[2.1.2 Default Serial Addresses](#)” on [page 12](#).

For serial communication, select the **Serial** radio button, and define the following according to the serial device parameters:

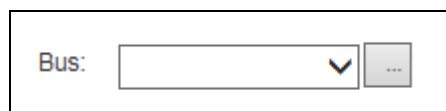
- a** Serial COM: The physical connection to the Forecourt Controller. Currently only COM2 for the TLG direct connection to the Forecourt Controller serial port - RS-232 is supported.
- b** BAUD: Communication speed.
- c** Parity: Sets the parity of transmitted data for the purpose of error detection (NONE, ODD, or EVEN).
- d** Data bits: The string length.
- e** Stop bits: Number of stop bits at the end of the string.

Note: The serial port is currently in use for TLG connection only.

- 4** (Optional) Select the **Clear host “read buffer” on connect** check box to reset external devices (e.g. TLG) communication buffer whenever the communication with the device is established.
- 5** Complete one of the following:
 - Click **New** to add the new channel. The bus is added to grid at the top of the dialog box.
 - Click **Modify** if you changed the settings of an existing channel.

Throughout peripherals setup, you will need to link a device to its bus from a drop-down list (for example, see [Figure 46](#)). If the bus is not yet defined, an ellipsis (...) selection is available on the right. Click this button to return to the Buses setup dialog box and define a new bus for the device.

Figure 46: Bus Selection



To delete a bus from the system, first select it by clicking its row in the grid. Verify that the bus properties are displayed in the text boxes, and then click **Delete**. If the bus is already in use (any device linked to it), the bus cannot be deleted.

6.4 Printers

To access the Printers dialog box, select the **Printers** tab in the Setup page (see [Figure 47](#)).

Figure 47: Printers Dialog Box

Name	Address	Bus	Model	Bypass
ORPAY_Printer	70H	BUS_ORPT	Pump Printer	On
ORTR_Printer	70H	BUS_ORTR	Pump Printer	On

1 - 2 [2]

Name: Bus:

☐ Automatically print receipts without opening door

Model:

Address: ☒ Hex ☐ Dec

A Printer definition is simple, requiring only a bus and an RS-485 address.

To define a printer, proceed as follows:

- 1 In the Name field, enter the Printer name.
- 2 In the **Bus** drop-down list, select the bus you've previously defined. All printers supported in SiteOmat360 communicate in Gasboy frame, therefore the **Bus** selection is restricted.
- 3 In the **Model** drop-down list, select a model from the supported models list:
 - Pump Printer and OPT Printer (both used for receipts)
 - Journal Printer (used for journaling important operations, such as all transactions, on hard copy)
- 4 In the Address field, define its **Hex** Address/**Dec** Address. For Pump Printer and OPT Printer, the default Hex address is 70, and for Journal Printer it is 1 (For more information, refer to ["2.1.2 Default Serial Addresses"](#) on [page 12](#)).
- 5 (Optional) Select the **Automatically print receipts without opening door** check box to print the receipt without lifting the printer's lid.
- 6 Complete one of the following:
 - Click **New** to add the new printer. The printer is added to grid at the top of the dialog box.
 - Click **Modify** if you changed the settings of an existing printer.
 - Click **Close** to return to the Setup page.

6.5 OPT

To access the OPT dialog box, select the **OPT** tab in the Setup page (see [Figure 48](#)).

Figure 48: OPT Dialog Box

Name	Address	Bus	Model	Work mode
ORPT	3EH	BUS_ORPT	OPOS	Home Base (Extended)
Orpay 1000	3AH	BUS_ORPAY	OrPay 1000	Home Base (Extended)

1 - 2 [2]

Name: Bus:

Model:

Address

☒ Hex

☐ Dec

The OPT definition has several options. First, it requires a bus and an RS-485 address. Then, additional features can be defined.

To define an OPT, proceed as follows:

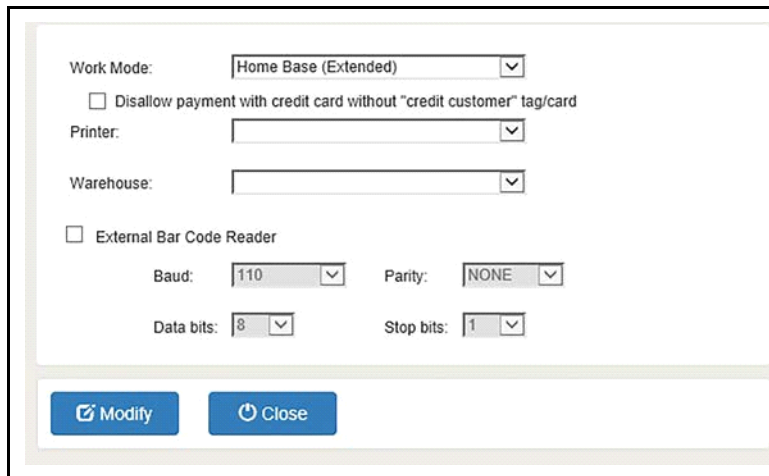
- 1 In the Name field, enter a descriptive name.
- 2 In the **Bus** drop-down list, select the bus you've previously defined. All OPT's supported in SiteOmat360 communicate in Gasboy frame, therefore the Bus selection is restricted.
- 3 In the **Model** drop-down list, select a model from the supported models list. The default Model is OPO.
- 4 In the **Address** field, define its Hex Address/Dec Address
(For more information, refer to [“2.1.2 Default Serial Addresses”](#) on [page 12](#)).
- 5 (Optional) Click **Addtl. Features** to define additional features.
- 6 Complete one of the following:
 - Click **New** to add the new OPT. The OPT is added to grid at the top of the dialog box.
 - Click **Modify** if you changed the settings of an existing OPT.
 - Click **Close** to return to the Setup page without saving changes.

6.5.1 Additional Features

To define additional features dialog box, proceed as follows:

- 1 Click **Addtl. Features**. A **OPT Features** dialog box opens (see [Figure 49](#)).

Figure 49: OPT Features Dialog Box



Work Mode: Home Base (Extended)

☐ Disallow payment with credit card without "credit customer" tag/card

Printer:

Warehouse:

☐ External Bar Code Reader

Baud: 110 Parity: NONE

Data bits: 8 Stop bits: 1

Modify Close

- 2 Work Mode: Select **Home Base (Extended)**.
- 3 **Disallow payment with credit card without "credit customer" tag/card**: TBD.
- 4 Printer: Select a printer that the OPT uses for printing receipts from the drop-down list (select the name of the pump printer you've defined previously).
- 5 Warehouse: N/A for Gasboy.
- 6 (Optional) If using an external barcode reader connected to the terminal, check the **External Barcode Reader** check box and set the serial communication parameters.

Note: Currently, SiteOmat360 supports Motorola Symbol DS3508 Digital Scanner protocol. For this model, use the settings shown above (see [Figure 49](#)). For other models, contact Customer Support.

6.6 Tag Readers

To access the Setup Tag Readers dialog box, select the T. Readers tab in the Setup page (see [Figure 50](#)).

Figure 50: Setup Tag Reader Dialog Box

Name	Address	Bus	Model
ORTR	3AH	BUS_ORTR	ORTR

Navigation: [Previous] [First] [Last] [Next] 1 - 1 [1]

Name: Bus: Address: ☒ Hex ☐ Dec

Model: Association Model: ☐ Has keyboard: ☐ Printer:

Buttons: + New... Modify... Delete Close

To define a tag reader, proceed as follows:

- 1 In the **Name** field, enter a descriptive name.
- 2 In the **Bus** drop-down list, select the bus you've previously defined or click ellipsis (...) for a prompt display of the Buses dialog box with a selection of the bus. All readers supported in SiteOmat360 communicate in Gasboy frame.
- 3 In the **Model** drop-down list, select a model from the supported models list. It includes the following:
 - **Tag reader**: RFID tag reading device.
 - **OrTR**: MiTag tags reading device, including an LCD screen.
 - **UPI**: Reading device that accepts old Fuel Ring (AVI) tags only.
- 4 In the Address field, define its **Hex** Address/**Dec** Address (For more information, refer to ["2.1.2 Default Serial Addresses"](#) on [page 12](#)).
- 5 (Optional) Select the **Association Model** check box to use the Tag Reader for reading tag strings that define a fleet. This setup is necessary for Fleet Management. In this mode, the Tag Reader serves for fleet authorization, and cannot be used for fueling authorization.
- 6 (Optional) Select the **Has keyboard** check box if the tag reader is equipped with one.
- 7 Complete one of the following:
 - Click **New** to add the new Tag Reader. The Tag Reader is added to grid at the top of the dialog box.
 - Click **Modify** if you changed the settings of an existing Tag Reader.
 - Click **Close** to return to the Setup page.

6.7 Pump Servers

The Forecourt Controller's communication with a pump is performed only through a Pump Server component, which is an internal process within the SiteOmat360.

To access the Pump Server dialog box, select the **P. Servers** tab (see [Figure 51](#)).

Figure 51: - Setup Pump Server Dialog Box

Name	Bus	Model
ps_wayne_dart	BUS_Wayne Dart Pump server	

1 - 1 [1]

Name: Bus: Model:

+ New... Modify... Delete Addtl. Features Close

To define a Pump Server, proceed as follows:

- 1 In the Name field, enter a descriptive name.
- 2 In the **Bus** drop-down list, select the bus you've previously defined or click ellipsis (...) for a prompt display of the Buses dialog box. All servers supported in SiteOmat360 communicate in Pump Server frame (protocol) only (For more information, refer to [“6.3 Buses”](#) on [page 67](#)).
Note: The Model field is inactive, and the default selection is always Pump Server.
- 3 Complete one of the following:
 - Click **New** to add the new Pump Server. The Pump Server is added to grid at the top of the dialog box.
 - Click **Modify** if you changed the settings of an existing Pump Server.
- 4 After defining a new pump server, the specific features of that Pump Server must be defined. Click **Addtl. Features**.

To delete a Pump Server from the system, first select it by clicking its row in the grid. Verify that the Pump Server properties are displayed in the text boxes, and then click **Delete**.

6.7.1 Additional Features

To define the Pump Server's Additional Features, proceed as follows:

- 1 Click **Addtl. Features**. The Pump Server Settings dialog box opens (see [Figure 52](#)):

Figure 52: Pump Server Settings Dialog Box

General - ps_wayne_dart

Type: Wayne Dart

Authorization Timeout: 60 Sec

Logging

Pump communication: ☐ Enabled

FCC communication: ☐ Enabled Port:

Application: ☐ Enabled Port:

Clusters

Num	Type	IP	Port	Serial Device	Baud	Enable Echo	Log Port	Timeout
1	TCP/IP	10.4.139.102	10600	0	0	No	9011	250
2	TCP/IP	10.4.139.102	10601	0	0	No	9012	250
3	TCP/IP	10.4.139.102	10602	0	0	No	9013	250

1 - 4 [4]

Serial

☐ Serial: Serial COM: BAUD: 110

☐ USB: Parity: NONE Data bits: 8 Stop bits: 1

TCP/IP

☒ TCP/IP: IP: Port:

☐ Enable Echo Timeout: milli sec Log Port:

+ New Modify Delete

Save Cancel

- 2 In the **Type** drop-down list, select the pump type (protocol).
- 3 In the Authorization Timeout field, enter the time in seconds that will stop the pump when it is authorized but there is no fuel flow.
- 4 In the Logging section, you may set the Pump - Pump Server - Forecourt Controller logs parameters (see [Table 22](#) on [page 77](#)).

*Note: It is highly recommended not to define the **Logging** section parameters. Only Gasboy certified technicians should enable this feature. Logging enables data transfer between the pump and the pump server.*

- 5 Define the Pump Server clusters as needed. Clusters bundle several pumps to a pump server through a common physical link. The physical link is a port in the 8 Port CommVerter, connected to the pump. Ports are usually defined with TCP/IP parameters: 8 Port CommVerter IP and Port (3001 to 3008):

a First, define the communication parameters:

For TCP/IP communication:

- i Verify that the **TCP/IP** radio button is selected.
- ii In the IP field, enter the 8 Port CommVerter IP address (Default: 192.168.1.111).
- iii In the Port field, enter the number of the 8 Port CommVerter's port to which the cluster of pumps is connected (3001 to 3008). For more information, refer to [“Default IP Addresses”](#) on [page 12](#).

For serial communication, select the **Serial** radio button, and define the following according to the serial pump protocol:

- i** Serial COM: The physical connection to the Forecourt Controller.
- ii** BAUD: Communication speed.
- iii** Parity: Sets the parity of transmitted data for the purpose of error detection (NONE, ODD, or EVEN).
- iv** Data bits: The string length.
- v** Stop bits: Number of stop bits at the end of the string.

Note: For IFSF pumps, define Serial connection parameters. The pump is connected directly to OrCU 3000 GB COM2 port through serial to LON pump interface board.

- b** (Optional) Select the **Enable Echo** check box to enable echo communication with the pump (this feature is applicable in specific cases; consult Customer Care for further details).
- c** In the Timeout field, define the waiting time for response from the pump. It is recommended to enter a value in the range of 250 to 300 milliseconds.
- d** In the Log Port field, enter the port number for collecting communication logs between the Pumps in the cluster and the Pump Server.
- e** Complete one of the following:

 - Click **New** to add the new Cluster. The Cluster is added to grid at the top of the Cluster section.
 - Click **Modify** if you changed the settings of an existing Cluster.
 - You may delete a previously defined cluster: select a Cluster by clicking its row in the grid and then click **Delete**.
- 6** Click **Save** to apply the changes, or click **Cancel** to exit the dialog box without saving the changes.

Table 22: - Logging Section Parameters

Parameter	Description
Pump Communication	Enables generation of Pump - Pump Server communication logs.
Comm (FCC) Communication	Enables generation of Forecourt Controller - Pump Server communication logs. The connection Port must be defined.
Application	Enables application logs generation on the Pump Server. The connection Port must be defined.

Note: Set Ports to enable monitoring with a Telnet terminal without storing the logs.

6.8 Tank Level Gauge

The TLG dialog box enables technicians to define external Automatic Tank Gauging systems that read fuel tank information using probes.

To access the TLG dialog box, select the **TLG** tab in the Setup page (see [Figure 53](#)).

Figure 53: Tank Level Gauge Dialog Box

Before defining any new ATG in the system, define a bus for the ATG in the Buses dialog box (For more information, refer to “[6.3 Buses](#)” on [page 67](#)). Proceed as follows:

- 1 In the **Name** field, enter a descriptive name.
- 2 In the **Bus** drop-down list, select the bus you’ve previously defined.
- 3 In the **Model** drop-down list, select a model from the supported models list. It includes the following:
 - Veeder-Root TLS 350 and 450 (For all TLG systems using VR TLS protocol).
 - OPW
 - Hectronic
 - Start Italiana
 - Omntec
 - DOMS
 - ATS Probe
 - Miprobe
 - IB-Box

- 4 (Optional) Select the **Leak Detection** check box to use the external ATG Leak Detection mechanism.
- 5 In the Password field, enter the password required for communication between SiteOmat360 and the ATG, as set in the ATG console.
- 6 Click **Probes** to define the probes connected to the system (see “6.8.1 Probes” on page 79).
- 7 Click **Sensors** to set up the ATG leak sensors (see “6.8.2 Sensors” on page 83).
- 8 Complete one of the following:
 - Click **New** to add the new ATG. The ATG is added to grid at the top of the dialog box.
 - Click **Modify** if you changed the settings of an existing channel.

To delete an ATG from the system, first select it by clicking its row in the grid. Verify that the ATG properties are displayed in the text boxes, and then click **Delete**. If the ATG is already in use (a tank is linked to it), the ATG cannot be deleted.

6.8.1 Probes

To define the ATG's physical probes, proceed as follows:

- 1 Click **Probes**. The Probes dialog box opens (see [Figure 54](#)).

Figure 54: Probes Dialog Box

Name	Address
TLG-Probe-1	1
TLG-Probe-2	2
TLG-Probe-3	3
TLG-Probe-4	4

Navigation: 1 - 4 [4]

Left Section:

Address:

Capacity:

Water offset: mm

Fuel offset: mm

☐ Is separator

Right Section:

Diameter:

Min level for calibration done alarm: %

Max level for calibration done alarm: %

Camber Radius:

Tank Length:

Is Divide: ☐

Bottom Buttons:

- 2 In the Address field, enter the probe address as defined in the ATG.
- 3 In the Capacity field, enter the tank's volume. The volume is set in liters/gallons.
- 4 (Optional: for Start Italiana probes connected directly to the Forecourt Controller only): In the Water Offset and Fuel Offset fields, set the actual height of water and fuel. For example, if a tank is empty and the probe reads 3 cm. of water, enter the probe reading to the Water Offset text box. The Forecourt Controller will compensate the value.
- 5 (Optional: for Oil/Water Separators Tanks probes only): Select the **Is separator** check box and click **Setup Separator** to setup the Oil/Water Separator probe settings.
- 6 (Optional: if using the auto-calibration feature):
 - a In the Diameter field, enter the tank's diameter.
 - b In the Min. level for calibration done alarm field, enter the minimum volume level to be covered so that the auto-calibration process will be completed, set in percentage of tank capacity.
 - c In the Max. level for calibration done alarm field, enter the maximum volume level to be covered so that the auto-calibration process will be completed, set in percentage of tank capacity.

- d** In the Camber Radius field, enter the radius of the tank dished ends.
- e** In the Tank Length field, enter the length of the tank from side to side, not including the dished ends.
- f** Select the Is Divide check box if the tank has two compartments.

Notes: 1) In addition to the above coverage parameters, the auto calibration is completed if the following condition is met: Maximum volume difference between two sampling points should not be higher than the tank capacity divided by the number of points as required for the specific ATG.

2) Since the system checks for auto-calibration completion on a daily base, the alarm is generated again each day until auto calibration is stopped for this probe (OFF).

- 3** Complete one of the following:
 - Click **New** to add the new probe. The probe is added to grid at the top of the dialog box.
 - Click **Modify** if you changed the settings of an existing probe.

To delete a probe from the system, first select it by clicking on its row in the grid. Verify that the probe properties are displayed in the text boxes, and then click **Delete**. If the probe is still in use (a tank/ATG linked to it), the probe cannot be deleted.

6.8.1.1 Strapping

If Hectronic or Start Italiana probes are used without an ATG controller, they do not provide volume (only height), click **Strapping** (otherwise the button remains disabled). The Strapping dialog box opens (see [Figure 55](#)):

Figure 55: Strapping Table Dialog Box

volume	diff	height	volume	diff	height	volume	diff	height	volume	diff	height
14.75	1.475	1	27.25	0.542	21	235.55	0.277	41	4552.34	15.45	81
29.5	2.950	2	54.09	1.121	22	269.32	0.249	42	4697.38	15.64	82
44.25	2.950	3	83.54	1.117	23	272.77	0.245	43	4752.9	15.64	83
59	3.461	4	118.11	1.261	24	288.23	0.403	44	4868.43	15.64	84
73.75	3.461	5	149.52	1.261	25	299.25	0.403	45	4974.99	15.64	85
88.5	4.007	6	178.97	1.641	26	309.74	0.103	46	5081.52	15.741	86
103.25	4.007	7	197.48	1.641	27	314.92	0.103	47	5188.01	15.741	87
118	4.007	8	214.08	1.641	28	324.41	0.103	48	5294.45	15.838	88
132.75	4.007	9	228.13	1.641	29	334.41	0.103	49	5400.87	15.838	89
147.5	4.007	10	240.2	1.641	30	344.41	0.103	50	5507.28	15.838	90
162.25	4.007	11	250.2	1.641	31	354.41	0.103	51	5613.67	15.838	91
177	4.007	12	259.2	1.641	32	364.41	0.103	52	5720.04	15.838	92
191.75	4.007	13	267.2	1.641	33	374.41	0.103	53	5826.39	15.838	93
206.5	4.007	14	274.2	1.641	34	384.41	0.103	54	5932.72	15.838	94
221.25	4.007	15	280.2	1.641	35	394.41	0.103	55	6039.03	15.838	95
236	4.007	16	285.2	1.641	36	404.41	0.103	56	6145.32	15.838	96
250.75	4.007	17	289.2	1.641	37	414.41	0.103	57	6251.59	15.838	97
265.5	4.007	18	292.2	1.641	38	424.41	0.103	58	6357.84	15.838	98
280.25	4.007	19	295.2	1.641	39	434.41	0.103	59	6464.07	15.838	99
295	4.007	20	298.2	1.641	40	444.41	0.103	60	6570.28	15.838	100

This dialog box contains a strapping definition table that allows calculating the volume of product in a tank according to given depths/levels.

Type the following values in the strapping table:

- Volume: Expected volume in tank
- Diff: The difference between two measurement points. Utilized to find out the volume in a specific point in the range. For example: if you define points at each 10 inches, the formula uses the diff field in cases where the probe informs height of 35 inch. When building the table, calculate the diff for point B as follows:

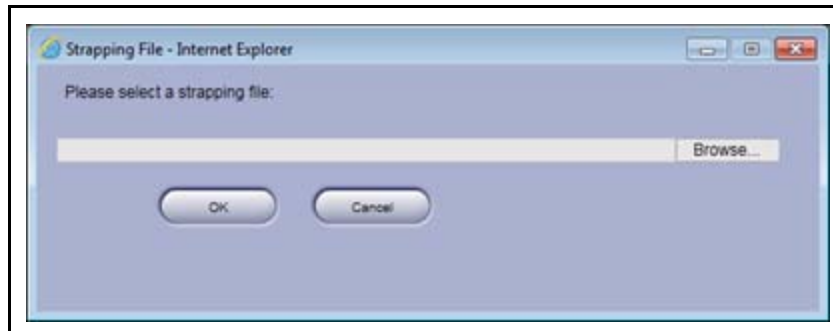
$$(\text{Volume B} - \text{Volume A}) / (\text{Height B} - \text{Height A}) / 10$$

- Height: The actual fuel height measurement in the tank.

Click **Modify** to record the values in the table.

A strapping table can also be loaded from a CSV file by clicking **Load**. The Strapping File dialog box opens enabling you to browse the system for the compatible CSV file (see [Figure 56](#)):

Figure 56: Strapping File Dialog Box



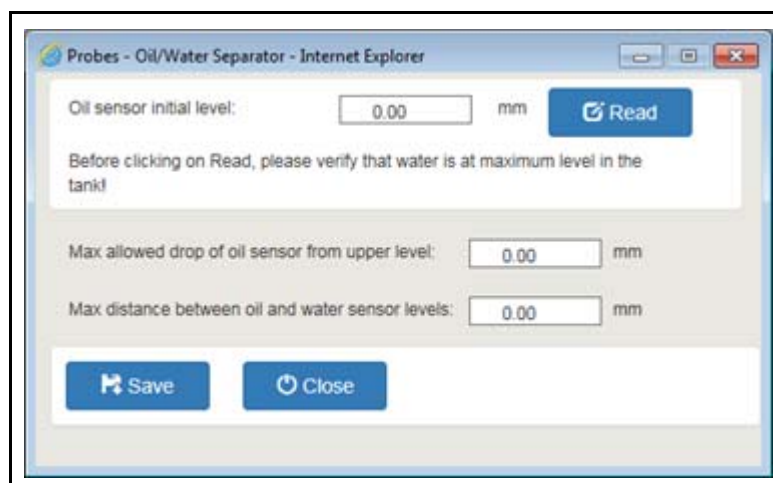
6.8.1.2 Oil/Water Separator Probe Setting

SiteOmat360 includes a specific configuration for probes used as a level sensor in Oil/Water Separators Tanks, which receive oily wastewater generated during fueling processes.

To define a probe as a water/oil separator sensor, proceed as follows:

- 1 Select the **Is Separator** check box in the Probes dialog box (see [Figure 54](#) on [page 79](#)).
- 2 Click **Setup Separator**. The Probes Oil/Water Separator dialog box opens (see [Figure 57](#)).

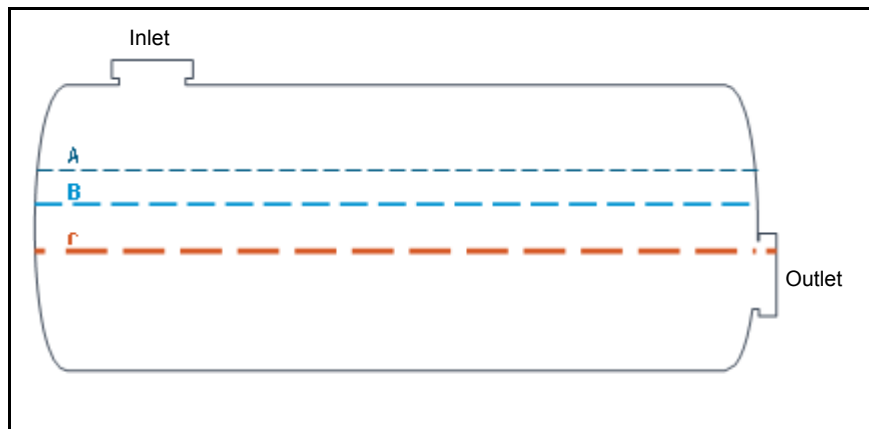
Figure 57: Probes Oil/Water Separator Dialog Box



- 3 Verify that water is at maximum level and click **Read** to receive and enter the initial level (A in [Figure 58](#) on [page 83](#)).

- 4 Define the maximum drop of the sensor from the initial level. In cases where this threshold is passed and the tank should be filled, the system generates an alarm (B in [Figure 58](#)).
- 5 Define the maximum distance between oil and water level sensors. In cases where this threshold is passed, the system generates an alarm to prevent waste from leaking through the tank outlet (C in [Figure 58](#)).
- 6 Click **Save** to apply the changes and close the dialog box.

Figure 58: Oil/Water Separator Initial and Alarm Levels



6.8.2 Sensors

Once the ATG is defined, define the ATG's leak sensors.

To define the ATG's leak sensors, proceed as follows:

- 1 Click **Sensors**. The Sensors dialog box opens (see [Figure 59](#)).

Figure 59: Sensors Dialog Box

The screenshot shows a software dialog box titled 'Sensors'. It features a table with three columns: 'Number', 'Description', and 'Type'. Below the table is a list of sensors, currently showing '0 - 0 [0]'. At the bottom of the dialog, there are four buttons: '+ New', 'Modify', 'Delete', and 'Close'. The 'Type' dropdown menu is set to 'Liquid Sensor'.

- 2 In the Number field, enter a number for the sensor.
- 3 In the Description field, enter a description for the sensor.
- 4 In the **Type** drop-down list, select the type of sensor from the supported types list. It includes the following:
 - **Liquid**: for liquid level detection sensors.
 - **Input**: for any 0/1 switch sensor.
 - **Vapor**
 - **Groundwater**
 - **Type A**
 - **Type B**
 - **Universal**
- 5 Complete one of the following:
 - Click **New** to add the new sensor. The sensor is added to grid at the top of the dialog box.
 - Click **Modify** if you changed the settings of an existing channel.

To delete a sensor from the system, first select it by clicking its row in the grid. Verify that the sensor properties are displayed in the text boxes, and then click **Delete**. If the sensor is in use (a tank is linked to it), the sensor cannot be deleted.

6.8.3 Auto Calibration

The Auto Calibration process provides an accurate strapping table providing the volume for different levels in the actual tank structure.

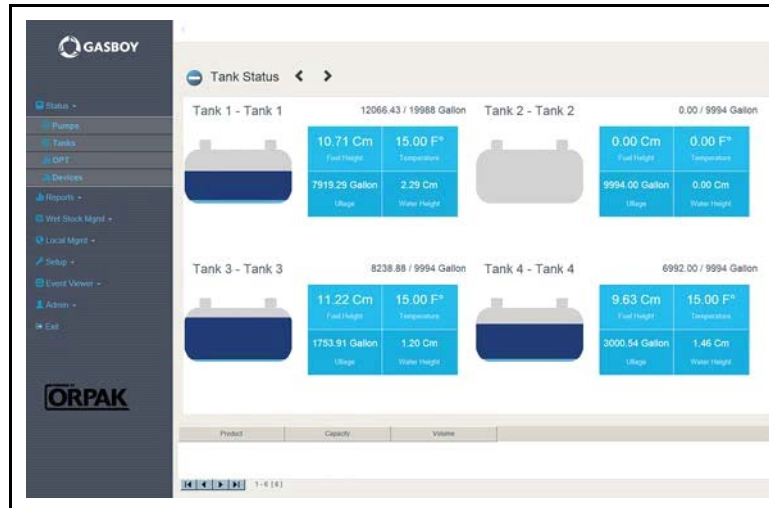
The process utilizes the combined pump data and probe level to build a strapping table, based on samples taken over time, in cycles between deliveries.

It is recommended to perform Auto Calibration at setup, and once every six months thereafter.

To start the Auto Calibration, proceed as follows:

- 1 Click **Status** in the navigation bar.
- 2 Select **Tanks**. The Tank Status page opens (see [Figure 60](#) on [page 85](#)).

Figure 60: Tank Status Page



- Click the required tank indicator. The Auto Calibration Data dialog box opens (see Figure 61).

Figure 61: Auto Calibration Data Dialog Box

The screenshot shows the 'Auto Calibration Data' dialog box. It includes a 'Probe' dropdown menu set to 'TLG-Probe-1', an 'Auto Calibration' toggle set to 'OFF', and a 'Start' button. Below these are two tables: 'Cycle Table' and 'Cycle Points Table'. The 'Cycle Table' has columns for ID, Start Time, End Time, From Level, To Level, From Volume, and To Volume. The 'Cycle Points Table' has columns for ID, Cycle ID, Sample Time, Sample Level, Ideal Volume, Diff Volume, and Volume. At the bottom, there are buttons for 'Generate Strip Table', 'Number of points' (set to 20), 'Send to Device', 'Graphs...', 'Refresh', 'Settings...', and 'Close'.

- Select the required probe from the drop-down list.
- Click **Start** to start the Auto Calibration process. Once this feature has been enabled, the **Start** changes to **Stop**.

The dialog box contains three tables:

- a** Cycle Table: Displays an entry for each cycle of samplings.
- b** Cycle Points Table: Displays all sampling points for all cycles.
- c** Strapping chart: The calculated charts based on the sampled data.

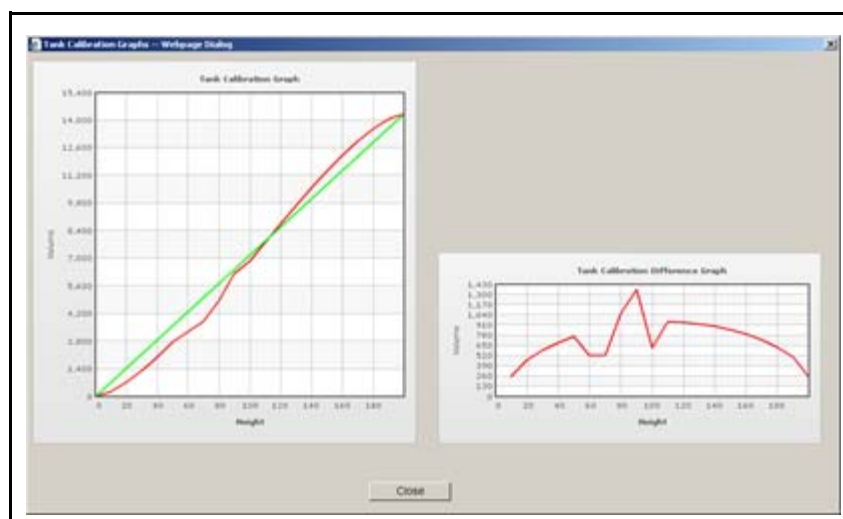
In addition, it includes the following functional buttons:

- a Clear Sample Data:** Clears all data in both Cycle Table and Cycle Points Table.
- b Generate Strap Table:** Calculates the strapping chart based on the sampling data. The Number of points text box enables setting the measurement points required (e.g. Veeder Root requires 20 and OPW requires 45).
- c Send to Device:** Sends the strapping table to the ATG. It is highly recommended to inspect the results and then update the device.
- d Refresh:** Updates the data displayed in the dialog box.
- e Graphs:** See “6.8.3.1 Tank Calibration Graphs” on page 86.
- f Settings:** Defines advanced setting parameters.
- g Close:** Closes the dialog box.

6.8.3.1 Tank Calibration Graphs

Clicking **Graphs** opens the following dialog box (see Figure 62).

Figure 62: Tank Calibration Graphs Dialog Box



The Tank Calibration Graph on the left side displays the strapping table volume as a function of high, in red, over a green reference line.

The Tank Calibration Difference Graph displays the difference in volume between two points as a function of height, based on the strapping table.

Click **Close** to close this dialog box and return to the Auto Calibration Data dialog box.

6.9 Tanks

To access the Setup Tanks dialog box, click the **Tanks** tab (see [Figure 63](#)).

This dialog box enables technicians to provide a full definition of the tank properties and operational characteristics, as well as define the sensors attached to it that provide information for monitoring.

Figure 63: Setup Tanks Dialog Box

Description	Number	Capacity	Fuel Type	Assumed Volume	Probes
Tank 2	2	9994.00	Regular	0.00	
Tank 3	3	9994.00	Super	0.00	TLG-Probe-3
Tank 4	4	9994.00	UnLeaded	0.00	TLG-Probe-4
Tank 1	1	19985.00	Diesel	0.00	Manifold
Tank 5	5	20000.00	CNG	0.00	

1 - 6 (6)

Tank Properties

Description: Number:

Capacity: Gallon

Fuel Type: Tank 1: Tank 2:

Fuel Volume

Very Low: Dead band: %

Low: Dead band: %

High: Dead band: %

Very High: Dead band: %

Ultra Rise: Dead band: %

Ultra Drop: Dead band: %

Fuel Leak

Leak rate: hr Dead band: %

Quiet time: min Warn after: days

Fuel Density

Low: Kg/m³ Dead band: %

Fuel Temperature

High: F° Dead band: %

Water Level

High: mm Dead band: %

Very High: mm Dead band: %

+ New Modify Delete Probes Close

6.9.1 Tank Settings

To define a tank, proceed as follows:

- 1 In the Description field, enter a descriptive name.
- 2 In the Number field, enter a unique identification number as defined in the station.
- 3 In the Capacity field, enter the storage capacity of the tank.
- 4 Select the product stored in the tank from the **Fuel Type** drop-down list.

- 5 (Optional: if the Forecourt Controller is connected directly to probes, or if you would like to receive alarms in parallel to those generated by an external ATG) Set the Tank Alarms parameters as described in [Table 23](#).
- 6 Click **Probes** to link the tank to the probe monitoring.
- 7 Complete one of the following:
 - Click **New** to add the new Tank. The Tank is added to grid at the top of the dialog box.
 - Click **Modify** if you changed the settings of an existing Tank.
 - Click **Close** to return to the Setup page.

To delete a tank from the system, first select it by clicking on its row in the grid. Verify that the tank properties are displayed in the text boxes, and then click **Delete**. If the tank is still in use (connected to a nozzle), the tank cannot be deleted.

Table 23: Tank Alarm Settings

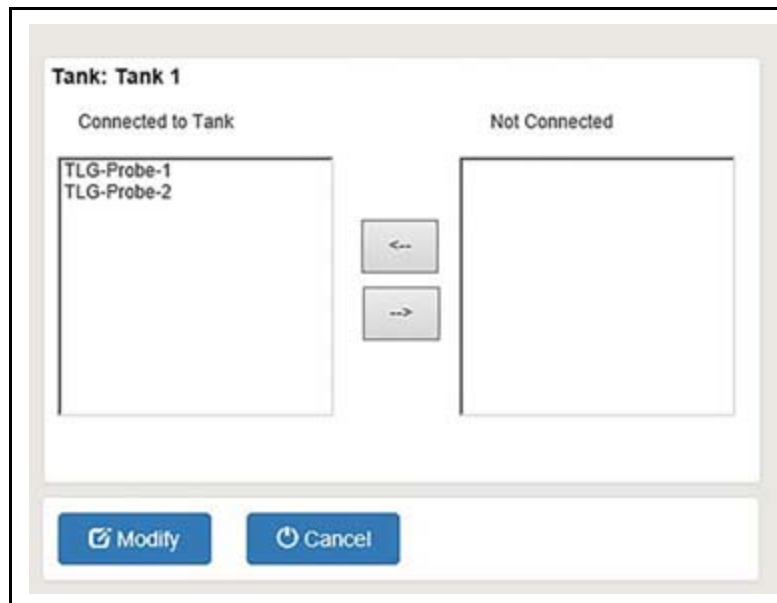
Parameter	Description
Fuel Leak	This section enables defining the alarm settings in cases where a fuel leak from the tank is detected.
Leak rate	Threshold for alarm activation
Dead band	This parameter is used to eliminate noise when generating alarms. Each alarm defined by an analog threshold value also has a dead band defined in percentage. The alarm is not activated or stopped at the nominal value, but at the addition of the +/- percentage value of the dead band. For example, if the alarm value was set to 100 with a dead band of 5%, the alarm will be triggered when the value is higher than 105, and will stop when the value is lower than 95.
Quiet time	Sets the minimum quiet time required for calculating the leak rate (in minutes). A quiet time is defined as idle time with no pump activity or fuel delivery. The system calculates the difference in fuel level between the start and the end of this quiet time (only when idle time is larger than this parameter). The system then normalizes it to quantity per hour. If the value is higher than the Leak Rate value, the alarm is triggered.
Warn after X days	Sets the time (in days) for warning that a leak test has not been performed as a result of not finding quiet time.
Fuel Volume	This section enables defining the level of fuel in the tank to be considered as alarm triggers for the upper and lower levels of fuel, including: <ul style="list-style-type: none"> • Very Low • Low • High • Very High You may set the above level thresholds and their corresponding dead bands. In addition, you may also set thresholds for Unexpected Rise and Unexpected Drop in tank level. The system monitors this parameter at the end of shifts.
Fuel Density	Sets Low Density alarm threshold and dead band. Requires a density probe.
Fuel Temperature	High temperature alarm threshold and dead band.
Water Level	High and very high water level alarm thresholds and dead bands.

6.9.2 Linking Probes

To link a probe to the tank, proceed as follows:

- 1 Click **Probes**. The **Tanks Probes** dialog box opens (see [Figure 64](#)).

Figure 64: Tanks Probes Dialog Box



- 2 Click a probe in the Not Connected list and click the <-- arrow. The Probe moves to the Connected to Tank list and is linked to the tank.
- 3 Complete one of the following:
 - Click **Modify** to apply the changes.
 - Click **Cancel** to exit the dialog box without saving.

You may select one or more probes to connect them to the tank. Manifold tanks are defined by connecting all the probes to the same tank. The system sums up the volume for all connected probes to obtain the tank volume.

To unlink a probe, select it from the Connected to Tank list and then click --> arrow.

6.10 AVI (VIS)

This dialog box is intended for stations that include Fuel Point PLUS Automatic Vehicle Identification (AVI) solution and enables setting up the Wireless Gateway (Master), the Wireless Network Gateway access point.

To access the VIS dialog box, select the **VIS** tab in the Setup page (see [Figure 65](#)).

Figure 65: Processing Message

Name	Address	Bus	Model
wgt	32H	WGT	WGT

1-1 [1]

Name: Bus: Address: Hex ☒ Dec ☐

Model:

+ New... Modify... Delete... Close... Groups...

To setup the Wireless Gateway (Master), proceed as follows:

- 1 In the Name field, enter the name of the device.
- 2 In the **Bus** drop-down list, select the bus you've previously defined or click ellipsis (...) for a prompt display of the Buses dialog box.
- 3 In the **Model** drop-down list, select Wireless Gateway. The other models are not available.
- 4 In the Address field, define its Hex address (For more information, refer to [Table 2](#) on [page 12](#)) for further details.
- 5 Complete one of the following:
 - Click **New** to add the Wireless Gateway (Master). It is added to grid at the top of the dialog box.
 - Click **Modify** if you changed the settings of an existing device.
 - Click **Close** to return to the Setup page.

To delete a device from the system, first select it by clicking its row in the grid. Verify that the device properties are displayed in the text boxes, and then click **Delete**. If the Wireless Gateway (Master) is already in use (an operating nozzle is linked to it), the Wireless Gateway (Master) cannot be deleted.

6.11 Export/Import

All the settings defined in the Setup can be saved by exporting, or loaded into the system by importing. The procedures are performed using the buttons in the Setup page - dispensers tab (see [Figure 66](#)).

6.11.1 Exporting/Saving Setup

Save or Export all the definitions defined in the setup procedures to a file in xml format, to be used later as backup or for quick loading of the station's setup.

Figure 66: Setup Page - Application Buttons



To export or save the setup, proceed as follows:

- 1 Click **Export** in the Setup page. A Processing message is displayed and then a File Download dialog box enables you to save the export setup file. The file name is automatically defined and consists of the station name and its ID (code) number (see [Figure 67](#)).

Figure 67: Open or Save File Message

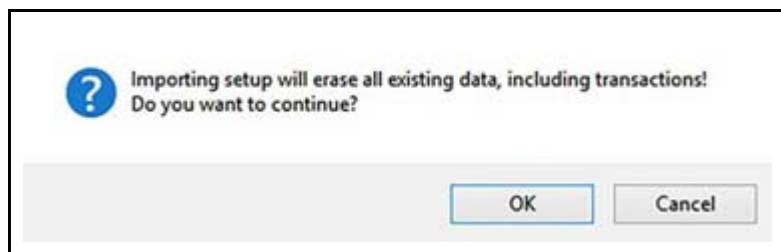


To **Load** or **Import** all the definitions saved in previous setup procedures in an XML file format, proceed as follows:

Note: All the existing settings and data in the SiteOmat360 are erased and replaced. This procedure is intended only for a new station at the setup stage, or for a restored system.

- 1 Click **Import** in the Setup page. A confirmation message is displayed (see [Figure 68](#)).

Figure 68: Setup Confirmation Message



- 2 Click **OK**. The Setup Import dialog box opens, enabling you to browse the system for the compatible XML file (see [Figure 69](#)).

Figure 69: Setup Import Dialog Box



6.12 Applying Setup Settings

After completing or changing the SiteOmat360 setup, save the data by clicking **Save**. To completely finish the process, click **Reload**.

Note: It is highly recommended to export the setup data at this stage. Save the data as a recovery backup file.

A processing message opens, displaying the various steps of the configuration procedure starting from clearing the existing setup and ending with writing INI files for the pump server (see [Figure 70](#)):

Figure 70: Processing Message



Once the processing has successfully completed, an Operation Successful message is displayed.

*Note: If the power fails during the reload process, the system may be left in Stop mode: click **Start** to restart it when power returns.*

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7 – Maintenance

7.1 General

This section provides general maintenance and troubleshooting guidelines, including system files location and logs collection.

Note: This section contains instructions for advanced users only.

The hardware platform to run SiteOmat360 is OrCU 3000 GB Controller, which runs on an embedded Linux Operating system.

The SiteOmat360 software is divided into the following modules, each runs as a separate process inside the system, with different log files names and database locations:

- FCC: Forecourt Controller module is responsible for all communication to the forecourt devices. It controls the pump (via pump server), authorizes transactions, and records them into the database.
- BOS: Back Office System module is responsible for all interfaces to the network. This includes browsing to the SiteOmat360 for setup, operation and reports. It is also the module that communicates with the Head Office.
- FCC Loader: Watchdog process responsible for starting and monitoring all other processes including pump servers. The watchdog verifies that all processes are running and reruns them if needed.
- Pump Servers: Internal component responsible for communication between FCC and the pumps (or cluster of pumps).

7.2 Tools and Utilities

In order to access SiteOmat360 files and logs, the following are needed:

- Logger: SiteOmat360 log collection tool that supports both TCP/IP and UDP protocols.
- A log file monitoring tool, such as BareTail for real-time monitoring or NotePad++.
- An FTP solution to browse SiteOmat360 files in the Linux environment for analysis purposes, such as FileZilla.
- An SSH and telnet client, such as PuTTY, for access to the platform software.

7.3 IP Addresses and Ports

The following ports must be opened to allow communication with the SiteOmat360:

- 22
- 443
- 80

SiteOmat360 connects over a secure link HTTPS (SSL) communications layer.

To access the unit use Internet Explorer and navigate to <https://SiteOmatIP> (e.g. <https://192.168.1.104>).

The system comes with two ports with the following defaults:

- LAN1 - 192.168.1.104 Mask 255.255.255.0. Used for communication with station devices.
- LAN2 - 10.0.0.1 Mask 255.255.255.0. Used for communication with the network (Head Office, remote host).

7.4 Files Location

7.4.1 BIOS Files Location

The following BOS files may be accessed for maintenance purposes, as instructed by Customer Services:

- **/usr/local/Gasboy/BOS/bin**: Contains several components needed in the BOS process.
- **/usr/local/Gasboy/BOS/bin/log**: Contains all BOS log files.
- **/Gasboy/BOS/DB/patches**: Contains patches for upgrades to latest database versions.
- **/Gasboy/BOS/htdocs/***: Contains the files necessary to operate the SiteOmat360 BOS screens.
- **/Gasboy/BOS/reports**: Contains any CSV-format data files generated in the report screens.

7.4.2 FCC Files Location

The following FCC files may be accessed for maintenance purposes, as instructed by Customer Services:

- **/usr/local/Gasboy/bin/log**: Contains the FCC log files.

7.4.3 Disk Usage Thresholds

When the SiteOmat360 detects that disk usage exceeds 60%, the FCC Hard Disk Almost Full alarm is generated and the system tries to clean and free disk space automatically.

When the disk usage exceeds 70%, the FCC Hard Disk Full alarm is generated, and the station is stopped. All communication to devices is stopped and new transactions are not allowed.

In addition, if the database size exceeds 5MB in the FCC module or 100 MB in the BOS module, the station is stopped.

Disk sent to the Head Office.

7.5 Pump Server

The Pump Server is an internal component that communicates between FCC and the pumps.

If no data is received from a pump server, the watchdog checks status of the first pump in each cluster.

7.5.1 Pump Server INI Files

The Pump Server INI files are created by the SiteOmat360 based on the settings defined through the BOS screens. The INI files are located in: **/usr/local/Gasboy/FCC/bin**.

The following table describes the Pump Server INI file logging properties (see [Table 24](#)):

Table 24: Pump Server INI Files

Property	Description	Logging Parameters	Type	Remarks	Default
log_spec_output_dir	Common Output Directory	Full path to the common log files and runtime backup directory.	String	'/' (slash) character at the end of the string Unique: Dir name + File name	Process working dir.
log_stat_output_dir	Status File Output Directory	Full path to the runtime backup directory.	String	'/' (slash) character at the end of the string	log_spec_output_dir
start_up_log_name	Startup Log File Name	Start up log file name.	String	Following the log filenames convention...	
log_app	Update System Log In File?	Enable system (Pump Server) log file output?	String	Y/N	Y
app_log_name	System Log File Name	System log file name.	String	Following the log filenames convention...	
log_app_size	System Log File Size	System log file maximal size.	Integer	-1 – unlimited > 0	200000
log_app_port	System Log File Port	Port number for run-time debug of the system log.	Integer	> 1023 Unique within 'localhost' 0 – not used	0
log_scucomm	Update SCU Log In File?	Enable log file output for the communication with the SCU?	Boolean	Y/N	N
scu_log_name	SCU Log File Name	SCU log file name.	String	Following the log filenames convention...	
log_scucomm_size	SCU Log File Size	SCU log file maximal size.	Integer	-1 – unlimited > 0	100000
log_scu_comm_port	SCU Log File Port	Port number for run-time debug of the SCU log.	Integer	> 1023 Unique within 'localhost' 0 – not used	0
log_cluster_comm	Update Cluster Log In File?	Enable log file output for the communication with each cluster?	Boolean	Y/N	N

Property	Description	Logging Parameters	Type	Remarks	Default
log_cluster_comm_size	Cluster Log File Size	Cluster log file maximal size	Integer	-1 – unlimited > 0	2000000
log_clusterfiltercomm	ApplyFilter On Cluster Log?	Apply filter on log? Yes – the log will contain verbose only; No – the log will contain full information (including code strings).	Boolean	Y/N	N
[cluster_xx]		Cluster parameters Appears as many times as total number of clusters.		'00' ≤ xx ≤ '99'	
Cluster_log_name	Cluster Log File Name	Cluster log file name.	String	Following the log filenames convention...	
log_cluster_port	Cluster Log Port No.	Port number for run-time debug of the cluster log.	Integer	> 1023 Unique within 'localhost' 0 – not used	0

7.5.2 Pump Server Factor Settings

The following table displays the Pump Server factor settings for the various types of pumps (see [Table 25](#)):

The numbers reflect pumps whose default display format configuration is two digits after the decimal point. Verify that the pump settings in the SiteOmat360 match the format at the pump display.

Table 25: Pump Server Factor Settings

PumpServer INI file	Aplab	Avery	Gilbarco	Midco	L&T	NP	NP	Tatsuno	Wayne	
price_factor	100	100	100	100	100	100	100	100	100	
volume_factor	100	100	1000	100	100	100	100	100	100	
total_factor	100	100	100	100	1000	100	100	100	100	
totalizer_vol_factor	100	100	100	100	1000	100	100	100	100	
totalizer_money_factor	100	100	100	100	1000	100	100	100	100	
preset_volume_factor	100	10	1000	100	100	100	100	100	100	Identical to the volume factor except of Avery
preset_amount_factor	100	1	100	100	1000	100	100	100	100	Identical to the total factor except of Avery

7.6 Log Files

Notes: 1) This section is for advanced users only.

2) Log files are limited on the embedded platform. Only critical logs are written locally, all other logs are written on remote host using log server utility.

Both the BOS and the FCC make use of several types of log files to record information when the system runs.

To keep the size of the log files manageable, all log files in the log folder are “rotated” on a daily basis. This means that an active log file is “moved aside” by renaming it to include a sequence number, and a new active log file is opened using the standard name for the log file (an active log file has no sequence number in its name).

For example, old debug.log files are named debug.log.1, debug.log.2, etc. The lower the sequence number is, the more recent the file.

Old (non-active) log files are kept for a period of 14 days.

Note: Every line in the log files includes a date. When sending a log file to Gasboy for troubleshooting purposes, the date should always be checked inside the file to verify that this is the correct file.

7.6.1 BOS Log Files

The following table describes the different types of log files that are generated by the BOS (see [Table 26](#)):

All BOS log files are stored in: c:\Gasboy\BOS\bin\log.

Table 26: BOS Log Files

Type	Name	Description
BOS Traffic	BOS_REMOTE_ HO.log	Records all outbound and inbound traffic of BOS with a remote Head Office. This is similar to WEB_COMM, but in this case it is a client of Head Office.
Database Logs	DATA.log, META_ DATA.log, LANG.log	For each database used by the system, there is a log file that records all queries sent to it. The database log files include both SELECT queries, as well as queries that modify the database in any way.
Web Server Access Logs	WebAccessxxxx.log	Records any attempt to establish a SiteOmat360 session with a name and password. The port number is included in the name of the log file.
Web Server Communications Logs	WebCommxxxx.log	Records all HTTP requests made to the web server. SOAP requests from the FCC are also logged into this file. The port number is included in the name of the log file.
Debug Log	debug.log	Records all actions performed in the system.

7.6.2 FCC Log Files

The following table describes the different types of log files that are generated by the FCC (see [Table 27](#)):

All log files are stored in: /usr/local/Gasboy/FCC/bin/log.

Table 27: FCC Log Files

Type	Name	Description
FCC Authorization Logs	FCC_AUTH.log	Logs all authorization calls from FCC to BOS – same information found in BOS_WEB_COMM log – this log is from the FCC side
Database Logs	DATA.DB.log, META_DATA.DB.log	For each database used by the system, there is a log file that records all queries sent to it. The database log files include both SELECT queries, as well as queries that modify the database in any way.
Bus Logs	BUS_XXX.log	Records buses communications. There is a separate log file for each bus defined during setup, which includes the name of the bus in the log's name. The log entries are in Hex format for buses that use the Gasboy protocol, and in XML format for buses used by Pump Servers.
Web Server Access Logs	WebAccessXXXX.log	Records SOAP login sessions from the BOS.
Web Server Communications Logs	WebCommXXXX.log	Records SOAP requests from the BOS. It includes all HTTP / Web Services communications data, including HTTP headers.

7.6.3 Pump Server Log Files

The following table describes the different types of log files that are generated by the Pump Server components (see [Table 28](#)):

Table 28: Pump Server Log Files

Type	Name	Description
Startup Log	start_up_XXXXXXX.log	Records startup times.
Application Log	app_XXXXXXX.log	System log that records software problems, such as invalid pump behavior.
Cluster Log	cluster_log_XXXXXXX.log	Records communication between the pumps and their Pump Server.
Forecourt Controller Log	scu_XXXXXXX.log	Records communication between FCC and the Pump Server.

7.6.4 FCC Loader and Watchdog Log Files

The following table describes the different types of log files that are generated by the FCC Loader module (see [Table 29](#)):

Table 29: FCC Loader and Watchdog Log Files

Type	Name	Description
FCC Loader Log	fccloader.log	Records FCC Loader activity Note that this log file is located in the /usr/local/Gasboy/directory, one level up from the other log files.
Web Server Watchdog Log	WebAccess6001.log, WebComm6001.log	Records watchdog service activity.

7.6.5 Log File Format

The following is an example of a log generated by the system. In this case, it is part of FCC.debug log which contains all messages recorded during fueling in auto authorization mode:

```
[16-02-22 12:14:54.356] <00011922> INFO [FCC.fueling] <20353> PUMP: OID 200000009  
NUMBER 3 CPU 3
```

From IDLE To CALL Proccess IDLE

```
[16-02-22 12:14:54.356] <00011922> DEBUG [FCC.fueling] <20347> PUMP: OID  
200000009 NUMBER 3 CPU 3
```

Authorizing: No limit - Auto authorized mode

```
[16-02-22 12:14:54.357] <00011922> DEBUG [FCC.fueling] <20523> CreateAuth e5aaefb0
```

```
[16-02-22 12:14:54.357] <00011922> DEBUG [FCC.fueling] <20535> Create authorization  
object number of objects:1
```

```
[16-02-22 12:14:54.357] <00011922> INFO [FCC.fueling] <20288> PUMP 3 HEAD 3:  
sending request for authorize nozzle 1.
```

```
[16-02-22 12:14:54.827] <00011922> INFO [FCC.fueling] <20353> PUMP: OID 200000009  
NUMBER 3 CPU 3
```

From CALL To READY Proccess AUTH_DONE

```
[16-02-22 12:14:57.007] <00011922> INFO [FCC.fueling] <20353> PUMP: OID 200000009  
NUMBER 3 CPU 3
```

From READY To IN_USE Proccess AUTH_DONE

```
[16-02-22 12:15:01.581] <00011922> INFO [FCC.fueling] <20353> PUMP: OID 200000009  
NUMBER 3 CPU 3
```

From IN_USE To PAYABLE Process FUELING

[16-02-22 12:15:01.584] <00011922> INFO [FCC.fueling] <20305> PUMP: OID 200000009
NUMBER 3 CPU 3 -

got final payment message (final_payment_data_report req_id="0" auth_
tag="1||3000000034||0|0|9|0|||0|0|7|0.000|0|0.000000|0|0.000000|78970.110000|0"
pump_num="3" nozzle="1" product_id="0" volume="000002.73" sale="000006.82"
ppv="0002.50" time_and_date="2016/02/22 12:15:01" trx_seq_no="932" result="0" />)

[16-02-22 12:15:01.584] <00011922> CRITICAL [FCC.fueling] <77777> ##### Before
pPump->m_auth->trylock () for pump 3(3) -

[16-02-22 12:15:01.585] <00011922> CRITICAL [FCC.fueling] <77777> ##### After OK
pPump->m_auth-

>trylock() for pump 3(3) -

[16-02-22 12:15:01.585] <00011922> DEBUG [FCC.fueling] <77777> pump (3) with
trx_seq_no=932 -

[16-02-22 12:15:01.585] <00011922> INFO [FCC.fueling] <20580>
PushToTransactionsQueue : Pump 3, trx_seq_no=932

[16-02-22 12:15:01.591] <00011922> INFO [FCC.fueling] <20350> PUMP: OID 200000009
NUMBER 3 CPU 3

INFO: checking transaction - meanID=1 nozzle=1 mean_type=9

[16-02-22 12:15:01.591] <00011922> INFO [FCC.fueling] <20352> PUMP: OID 200000009
NUMBER 3 CPU 3

INFO: flow rate checks skipped

[16-02-22 12:15:01.592] <00011922> INFO [FCC.fueling] <20579> DoGuardChecks -
handle transaction : Pump 3, trx_seq_no=932

[16-02-22 12:15:01.601] <00011922> INFO [FCC.fueling] <20485> DB: Added transaction:
ID=300006257,

PUMP=3, Vol= 2.730 Price= 6.820 TagID=1

Each log contains the following (examples taken from the first message in the log above):

- Date and time stamp (e.g. [16-02-22 12:14:54.356]).
- Thread ID (e.g. <00011922>): A thread is a unit of code that performs a specific task. Threads run in parallel, while each thread has an ID. SiteOmat360 uses threads for various operations, we may use this ID to track task execution.
- Log Level (e.g. INFO): log severity.
- Log Type (e.g. [FCC.fueling]): type of action recorded.
- Message ID (e.g. <20353>): Number that identifies the specific message.
- Log Message (e.g. PUMP: OID 200000009 NUMBER 3 CPU 3 From IDLE To CALL Process IDLE): the message recorded to the log.

7.6.6 Collecting Log Files

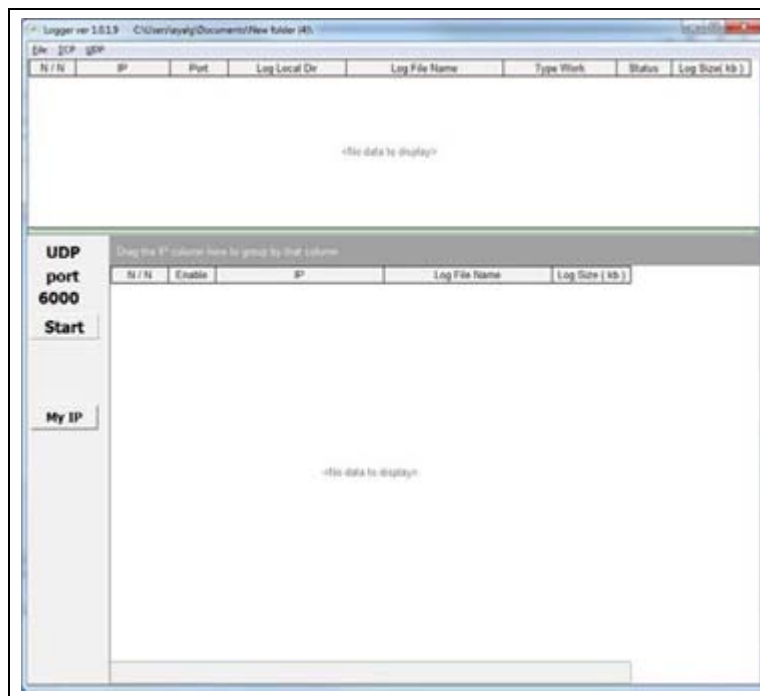
Logger, the Log Server application provided by Gasboy, listens in on both the UDP port and TCP/IP ports (for Pump Server logs), and captures and writes the log messages to a remote Log Server.

7.6.6.1 Setting up the Logger

To set up the Logger tool, proceed as follows:

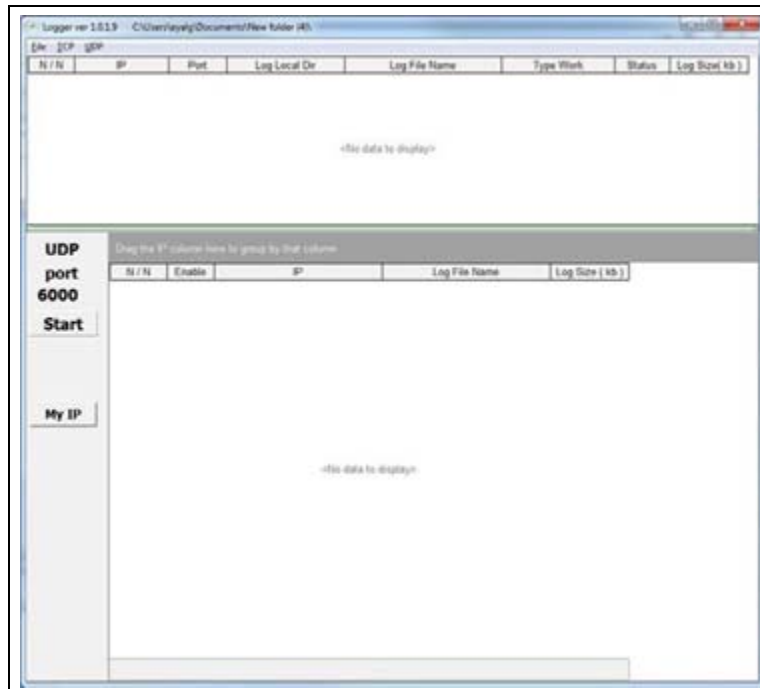
- 1 Run the Logger.exe file. Logger runs as a service in the background, no installation is required. The following screen opens (see [Figure 71](#)):

Figure 71: Logger Main Screen



- 2 In the File menu, select **Setup**. The **Config** dialog box opens (see [Figure 72](#)).

Figure 72: Config Dialog Box - Global Tab

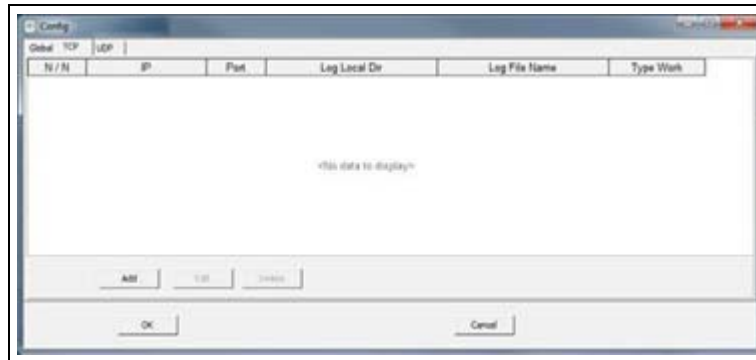


- 3 In the Global tab, set the following parameters:
- a In the Log Directory field, enter the path into which you would like to save the logs on the remote Log Server PC.
 - b In the Editor File Name field, enter the path of the log file monitoring tool utilized (e.g. BareTail, NotePad++).
 - c In the Max File Size, MB field, set the maximum size of the log file. When exceeded, the system will compress this log into a .ZIP file.

Note: There is no need to change the default values of Connect Timeout, sec and Display delta File Size, KB fields.

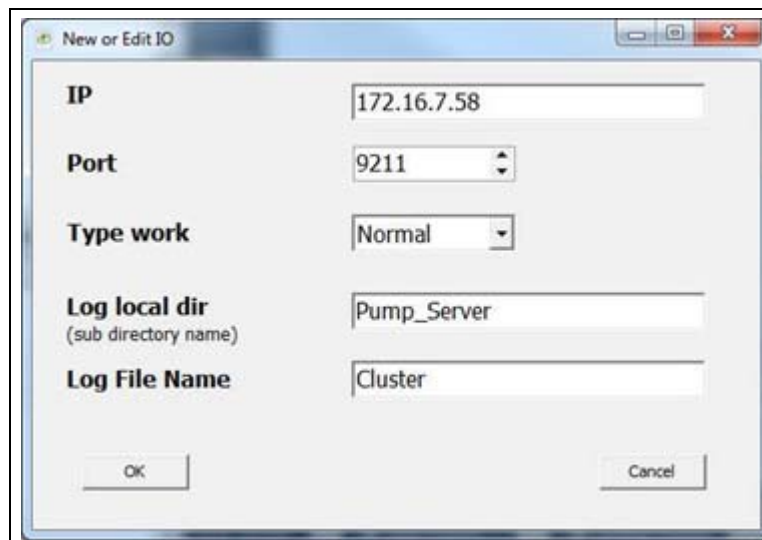
- 4 Select the **TCP** tab to set communication parameters for Pump Server logs (see [Figure 73](#)).

Figure 73: Config Dialog Box - TCP Tab



- 5 Click **Add**. The **New or Edit IO** dialog box opens (see [Figure 74](#)).

Figure 74: New or Edit IO Dialog Box



- 6 In this dialog box, set the following parameters:
 - a In the IP field, enter the system's IP address.
 - b In the Port field, set the Port you've previously defined in Pump Server Settings dialog box. For more information, refer to [“6.7.1 Additional Features”](#) on [page 75](#).
 - c In the **Type work** drop-down list, select the work mode: **Normal** or **Auto Start**, while in Auto Start the Logger automatically starts collecting logs after being run.
 - d In the Log local dir field, enter the sub directory name into which you would like to save the logs on the remote Log Server PC.

- e** In the Log File Name field, enter a descriptive name for the log file.
- f** Click **OK**. The TCP/IP port is added to the grid at the top of the Config screen.
- 7** Repeat step **6** on [page 105](#) for each Pump Server log needed, such as Cluster, Pump Communication, Comm (FCC) Communication, Application.
- 8** Select the **UDP** tab to set communication parameters for all system logs (see [Figure 75](#)):

Figure 75: Config Dialog Box - UDP Tab



- 9** In this dialog box, set the following parameters:
 - a** In the Port field, enter the port you've previously defined in the Logging Settings dialog box. For more information, refer to [“3.3.1 Logging Settings”](#) on [page 18](#).
 - b** In the **Type work** drop-down list, select the work mode: **Normal** or **Auto Start**, while in Auto Start the Logger automatically starts collecting logs after being run.

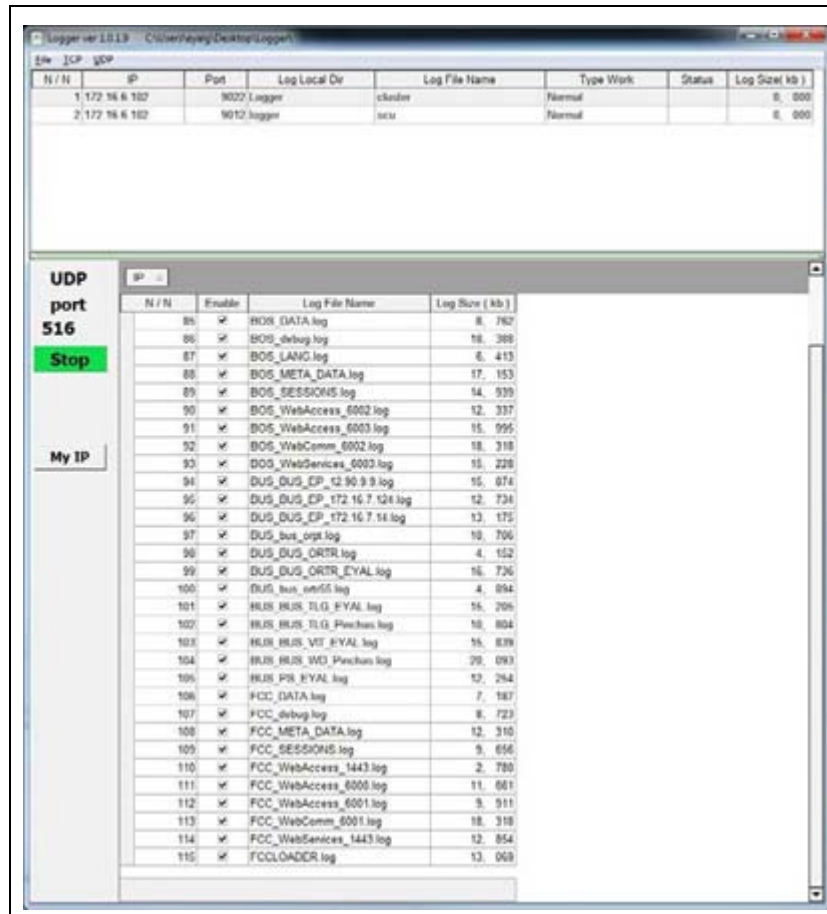
Note: There is no need to change the settings of Save Buffering Data on close and Check enable on receive check boxes.

- c** Click **OK**.

7.6.6.2 Using the Logger

After setting up the Logger, click **Start** to start collecting logs (see [Figure 76](#)).

Figure 76: Logger Main Screen



The Logger screen includes two grids:

- Upper grid: Displays the TCP/IP ports currently being listened to.
- Lower grid: Displays the log files being collected.

You may do the following:

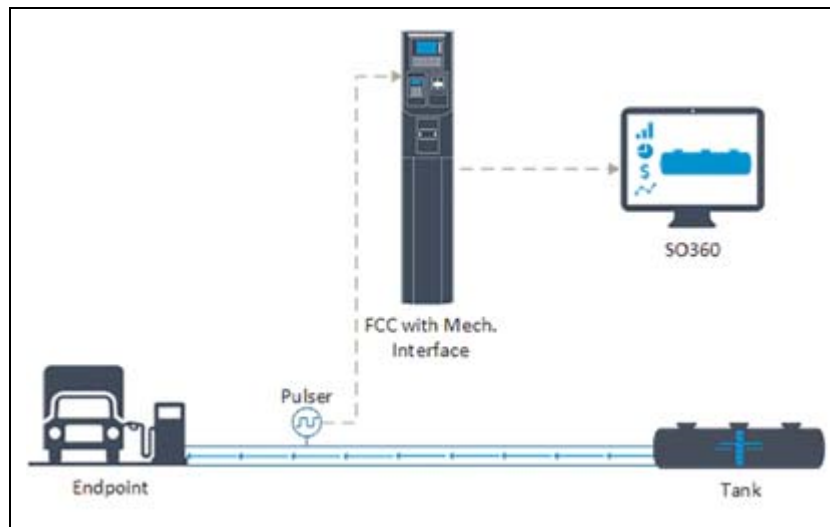
- Click **Stop** to stop collecting the logs.
- Right-click a log and select the **Open Log File** option to open it in the log monitoring tool defined in the system.

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Appendix A: Camel Endpoint Configuration

Camel configuration is used to passively track the flow of fuel between a tank and an endpoint, where no authorization mechanism or valves are in use. Camel transactions are recorded via a meter register, which transmits pulses to a mechanical interface. When a pulse is received by the mechanical interface, this triggers a new transaction in the pump server, and after a predefined timeout between pulses, the transaction is closed (see [Figure 77](#)).

Figure 77: Camel Configuration Architecture



To configure an MPI-C dispenser for a Camel installation in SiteOmat360, proceed as follows:

- 1 On the Forecourt Setup page, select the mechanical pump to configure and click ellipsis (...) to launch the Setup Pump Settings dialog box (see [Figure 78](#) on [page 110](#)).

Figure 78: Setup Pump Settings Dialog Box

General

Pump Number: 1 Pump Head: 1 Number of nozzles: 1

Mode: Auto Authorize

Pump server: pump Cluster: 2

Reader: CPE:

☐ Add the totalizer value to new transactions

Message Factors

Volume: Amount: Totalizer volume: Totalizer amount: Preset volume: Preset amount: Price per unit (PPU):

Specific:

Mechanical Pump - Card

Nozzle Polarity: Normal Pulse Factor: 10

Pulses to close fast valve: 10 Pulse Type: Half Cycle Count Pulse

Virtual In Use: Enable Single/Over Valve Mode: Over pumps one valve e/c

Flow Protection timeout (Seconds): 0 Additional flow protection timeout (seconds): 0

Maximum volume rate per minute (0 for no maximum rate): 0 Authorization delay: 0

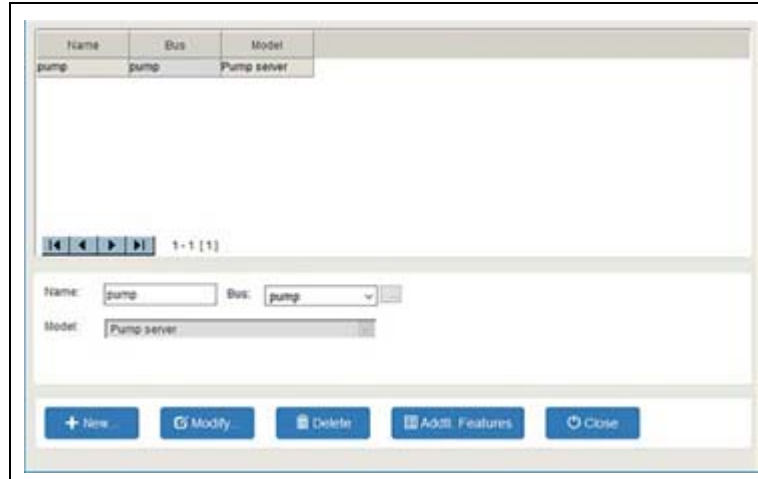
Finish transaction when no fuel flow: No Minimum volume for flow detection: 0

Buttons: Save, Cancel, More Options, Total Offset

- 2 In the General panel, set the Mode to **Auto Authorize**.
- 3 In the Specific panel, set the following parameters:
 - Virtual In Use: Enable
Note: Ensure that a pump price has been configured before setting this parameter to Enable.
 - Flow Protection Timeout (Seconds): The interval between pulses after which an open transaction is closed
 - Pulse Factor: Number of pulses per liter
 - Minimum volume for flow detection: 0
- 4 Leave all other fields as their default parameters.

- 5 In the General panel, click ellipsis (...) next to Pump server to launch the Setup Pump Server dialog box (see [Figure 79](#)):

Figure 79: Setup Pump Server Dialog Box



The dialog box displays a table with columns: Name, Bus, and Model. The table contains one entry: 'pump' on the 'pump' bus with the model 'Pump server'. Below the table is a pagination control showing '1-1 [1]'. Underneath are input fields for 'Name' (pump), 'Bus' (pump), and 'Model' (Pump server). At the bottom are five buttons: '+ New', 'Modify', 'Delete', 'Addtl. Features', and 'Close'.

Name	Bus	Model
pump	pump	Pump server

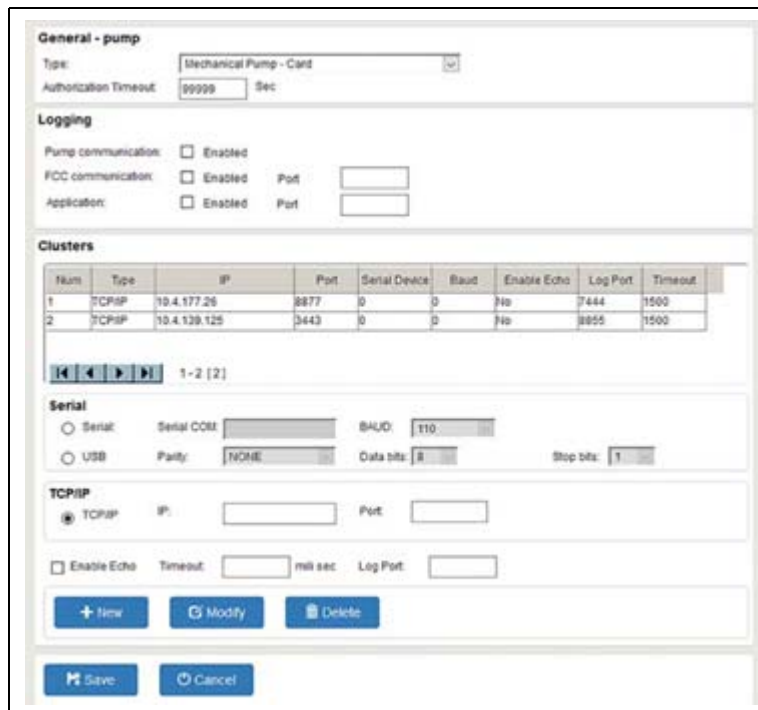
1-1 [1]

Name: pump Bus: pump Model: Pump server

+ New Modify Delete Addtl. Features Close

- 6 Select the relevant pump server and click **Addtl. Features** (see [Figure 80](#)).

Figure 80: Additional Features



The 'General - pump' dialog box shows configuration options. The 'Type' is 'Mechanical Pump - Card' and 'Authorization Timeout' is '99999' seconds. The 'Logging' section has checkboxes for 'Pump communication', 'FCC communication', and 'Application', all currently disabled. The 'Clusters' section contains a table with two entries:

Num	Type	IP	Port	Serial Device	Baud	Enable Echo	Log Port	Timeout
1	TCP/IP	10.4.177.26	8877	0	0	No	7444	1500
2	TCP/IP	10.4.129.125	3443	0	0	No	8855	1500

Below the table is a pagination control showing '1-2 [2]'. The 'Serial' section has radio buttons for 'Serial' and 'USB'. The 'Serial' option is selected, with 'Serial COM' set to 'NONE', 'BAUD' to '110', 'Data bits' to '8', and 'Stop bits' to '1'. The 'TCP/IP' section has a radio button selected, with 'IP' and 'Port' fields. At the bottom are buttons for '+ New', 'Modify', 'Delete', 'Save', and 'Cancel'.

General - pump

Type: Mechanical Pump - Card

Authorization Timeout: 99999 Sec

Logging

Pump communication: ☐ Enabled

FCC communication: ☐ Enabled Port:

Application: ☐ Enabled Port:

Clusters

Num	Type	IP	Port	Serial Device	Baud	Enable Echo	Log Port	Timeout
1	TCP/IP	10.4.177.26	8877	0	0	No	7444	1500
2	TCP/IP	10.4.129.125	3443	0	0	No	8855	1500

1-2 [2]

Serial

☐ Serial Serial COM: NONE BAUD: 110

☐ USB Parity: NONE Data bits: 8 Stop bits: 1

TCP/IP

☒ TCP/IP IP: Port:

☐ Enable Echo Timeout: mil sec Log Port:

+ New Modify Delete

Save Cancel

- 7** In the General panel, set the following parameters:

Type: Mechanical Pump - Card

Authorization Timeout: Set to the maximum possible timeout (typically 99999 seconds).

Note: If no transaction has been recorded after the Authorization Timeout has elapsed, a 0 transaction will be recorded.

- 8** Save all changes.

Note: Each MPI-C can have only one Camel configuration.

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