
AtlasX with Omnia Programming and Service Manual

Computer Programs and Documentation

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Federal Communications Commission (FCC) Warning

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

Approvals

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

Underwriters Laboratories (UL):

UL File#	Products listed with UL
MH66252	All AtlasX dispensers and self-contained pumping units.

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

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

CoC#	Product	Model #
24-005	AtlasX	8800G, 9100G, 9800G

Trademarks

Registered trademarks

Gasboy®
Gilbarco®

Non-registered trademarks

AtlasX
Ultra-Hi™

Additional US and foreign trademarks pending.

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1 – Introduction

Purpose

This manual provides instructions for programming Omnia in AtlasX units, which includes configuring the Omnia board for forecourt connectivity and registering with Insite360 forecourt. This manual also includes common troubleshooting and verification steps to ensure the network connectivity of dispensers. Omnia enables remote communications of an AtlasX dispenser to Insite360.

Intended Audience

This manual is intended for Gasboy® AtlasX Authorized Service Contractors (ASCs) who have been trained and certified on AtlasX, and have completed the Gasboy Amazon Web Services (AWS) Internet of Things (IoT) Registration Secure Password Generator or AWS IoT Gateway and Omnia/SSoM update online modules. These ASCs must be aware of the safety requirements and basic troubleshooting techniques, such as reading a volt/ohmmeter, reading pressure, and so on, and understanding the differences between various Gasboy AtlasX products, options, and functionalities.

If you have not completed the Gasboy training, contact the Gasboy Training Department. For contact information, refer to [“Gasboy Contact Information”](#) on [page 1-2](#).

Service Protocol

A Service Technician requesting technical assistance must do the following:

- 1 Be available at the site.
- 2 When placing the call, ensure that the following are available:
 - Unit model and serial number
 - Site name and telephone number
 - Your technician number
 - Problem description and history
 - All required recommended spare parts
 - Manuals available for reference
- 3 Call the Technical Support Department at 1-800-444-5529. Refer to the Customer Service Report (CSR) number, if previously assigned.

Using Replacement Parts

Use only genuine Gasboy AtlasX replacement parts. Use of other parts will void warranty and could affect unit conformance to various national, local or state codes.

Gasboy Contact Information

Information Required	Contact Details
Schedule training	Contact your Gasboy Certified Trainer or Distributor.
Logging into SABA or enrolling into training courses.	Technical Training Department at: 1-336-547-5743 or technicaltraining@gilbarco.com .
Technical Assistance	Gasboy Technical Support at: 1-800-444-5529 or Gso.Ser.gasboysupportquestion@gilbarco.com .
Warranty Service/Claims information	Warranty Department at: 1-888-800-7498 or warranty@gilbarco.com
Equipment commissioning issues	Registration Team at: 1-888-800-7498 or gvr.gso.ser.commissionings@gilbarco.com
Gasboy Solutions, Products, and Services	Gasboy Sales at: sales@gasboy.com
Technical literature, parts manuals, and other documents	Refer to GOLD and Technician Resources on the Extranet.
Insite360 Forecourt registration and feature testing	Contact the Insite360 Forecourt Help Desk at 877-503-4971.

Related Documents

The following documents may be helpful when servicing the Gasboy AtlasX equipment:

Document Number	Description	GOLD Library
FE-371	Field Wiring Diagram AtlasX	Gasboy Parts List and Wiring Diagrams
MDE-3860	Programming Quick Reference Card	Gasboy Atlas Pumps/Dispensers
MDE-3921	Laptop Tool User Reference Guide	• Encore and Eclipse • Encore and Eclipse Installers
MDE-5265	BRCM2.x Installation and Upgrade Instructions	• Advantage & Legacy Models • Encore and Eclipse • Flexpay Connect
MDE-5374	Atlas Startup and Commissioning Check List	Gasboy AtlasX Pumps/Dispensers
MDE-5692	AtlasX Fuel Systems Installation Manual	Gasboy AtlasX Pumps/Dispensers
MDE-5693	AtlasX Fuel Systems Site Preparation Manual	Gasboy AtlasX Pumps/Dispensers
MDE-5694	AtlasX Fuel Systems Start-up/Service Manual	Gasboy AtlasX Pumps/Dispensers
MDE-5695	AtlasX Fuel Systems Owner's Manual	Gasboy AtlasX Pumps/Dispensers
MDE-5694	AtlasX Fuel Systems Start-up/Service Manual	Gasboy AtlasX Pumps/Dispensers
MDE-5793	AtlasX Startup and Commissioning Checklist (V 06/24) (Form A)	Gasboy AtlasX Pumps/Dispensers
MDE-5802	Atlas PRIME Upgrade Kits	Gasboy AtlasX Pumps/Dispensers
MDE-5803	AtlasX PRIME Installation and Startup Manual	Gasboy AtlasX Pumps/Dispensers
MDE-5818	AtlasX Omnia Kits (M20500K00X) Installation Instructions	Gasboy AtlasX Pumps/Dispensers
PT-1973	AtlasX Recommended Spare Parts List	Gasboy AtlasX Pumps/Dispensers
PT-1974	AtlasX Pump and Dispenser Illustrated Parts Manual	• Gasboy AtlasX Pumps/Dispensers • Parts Manual

Note: In addition to these documents, Gasboy AtlasX marketing and information sheets are sources of information.

Abbreviations and Acronyms

Term	Description
ASC	Authorized Service Contractor
AWS	Amazon Web Services
CAT5	Category 5
CEC	Canadian Electrical Code
CFR	Code of Federal Regulations
CoC	Certificate of Conformance
CPU	Central Processing Unit
CSR	Customer Service Report
DEF	Diesel Exhaust Fluid
EC	Error Code
ESD	Electrostatic Discharge
FMS	Fuel Management System
GOLD	Gilbarco Online Documentation
IoT	Internet of Things
I.S.	Intrinsic Safety
LAN	Local Area Network
LED	Light Emitting Diode
NEC®	National Electrical Code
NFPA	National Fire Protection Association
OSHA	Occupational Safety and Health Administration
PCA	Printed Circuit Assembly
PCB	Printed Circuit Board
PCN	Pump Control Node
POS	Point of Sale
PPU	Price Per Unit
SSoM	Secure Systems on Module
STP	Submersible Turbine Pump
TCP/IP	Transmission Control Protocol/Internet Protocol
UL®	Underwriters' Laboratories
W&M	Weights and Measures

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2 – Important Safety Information

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

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

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

Preliminary Precautions

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

Emergency Total Electrical Shut-Off

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

⚠ WARNING




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

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

Total Electrical Shut-Off Before Access

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

Evacuating, Barricading, and Shutting Off

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



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

Read the Manual

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

Follow the Regulations

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

Replacement Parts

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

Federal Communications Commission (FCC) Warning

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

Safety Symbols and Warning Words

This section provides important information about warning symbols and boxes.

Alert Symbol



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

Signal Words

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



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



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



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

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

Working With Fuels and Electrical Energy Prevent Explosions and Fires

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

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

Important Safety Information

No Open Fire



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

No Sparks - No Smoking



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

Working Alone

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

Working With Electricity Safely

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

Hazardous Materials

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

WARNING

In the event of inclement weather, including snow, ice, or flooding that makes driving conditions dangerous, please avoid servicing units. Always use available door stops to secure upper doors against unwanted/unexpected movement, especially during high winds. If necessary, reschedule service to avoid damage to the equipment. Weather may change unexpectedly; be aware of local weather conditions. During service, if conditions develop making service unsafe, close the unit(s) and proceed to a safe location.

WARNING

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

WARNING

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



Gilbarco Veeder-Root encourages the recycling of our products. Some products contain electronics, batteries, or other materials that may require special management practices depending on your location. Please refer to your local, state, or country regulations for these requirements.

In an Emergency

Inform Emergency Personnel

Compile the following information and inform emergency personnel:

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

WARNING



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

WARNING

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

WARNING



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

WARNING



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

WARNING



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

WARNING

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

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

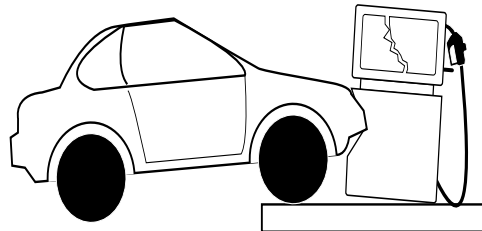
Lockout/Tagout

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

Hazards and Actions

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

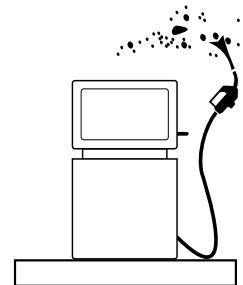
The following actions are recommended regarding these hazards:



Collision of a Vehicle with Unit



Fire at Island



Fuel Spill

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

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3 – Omnia Configuration Checklist

Note: Site network rules MUST be updated to allow access to AWS IoT servers (customer IT personnel or supporting ASC technician for site) prior to any Omnia software upgrades and AWS IoT registration attempt. This has to be done in advance as network approval can take time. Contact the customer IT department to ensure that this has been completed.

Omnia Configuration Checklist

- ☐ Ensure that you have identified all relevant network parameters:

Backroom Router IP address (Default Gateway)

_____ . _____ . _____ . _____

Primary DNS IP address

_____ . _____ . _____ . _____

Secondary DNS IP address

_____ . _____ . _____ . _____

External IP addresses for the dispensers for each fueling position

_____ . _____ . _____ . _____

Subnet mask

_____ . _____ . _____ . _____

Refer to [“Configuring General and Network Settings”](#) on [page 4-8](#) for more details.

- ☐ The AWS IoT URLs must be set up prior to software upgrades and any attempt to register with Insite360 through AWS. Ensure that network rules are done by the customer IT department or MNSP provider. Registration will fail if the network rules are not set up.

The following URLs are used for Insite360 Forecourt through AWS IoT Gateway:

URLs

- aatnf1k6u65sn-ats.iot.us-east-1.amazonaws.com
- cfvuav3n0omj9.credentials.iot.us-east-1.amazonaws.com
- s3.amazonaws.com/prod.i360.device.fileupload/*
- omnia-checkin.prod.insite360.gilbarco.com (required for auto registration)
- device-download-prod.s3.amazonaws.com

Notes:

- 1 All these endpoints need access to three TCP ports: 443, 8443, 8883.
- 2 Access to UDP is not necessary.
- 3 Omnia must be connected to NTP Servers to sync time.
- 4 Some customer networks do not allow wildcards (*) in the URL white-listing. You can also identify the URL host name without the wildcard path. Consult the network IT team.

Omnia Configuration Checklist

- | | |
|---|---|
| ☐ If a custom NTP server is not used, access must be allowed to the following NTP Servers for AWS IoT to enable devices (Omnia) to synchronize clock timing. | NTP Servers destinations:
0.debian.pool.ntp.org
1.debian.pool.ntp.org
2.debian.pool.ntp.org
3.debian.pool.ntp.org
Destination Port = 123
Protocol = UDP |
|---|---|
-

4 - Configuring Omnia PCB

Verifying the Software Versions

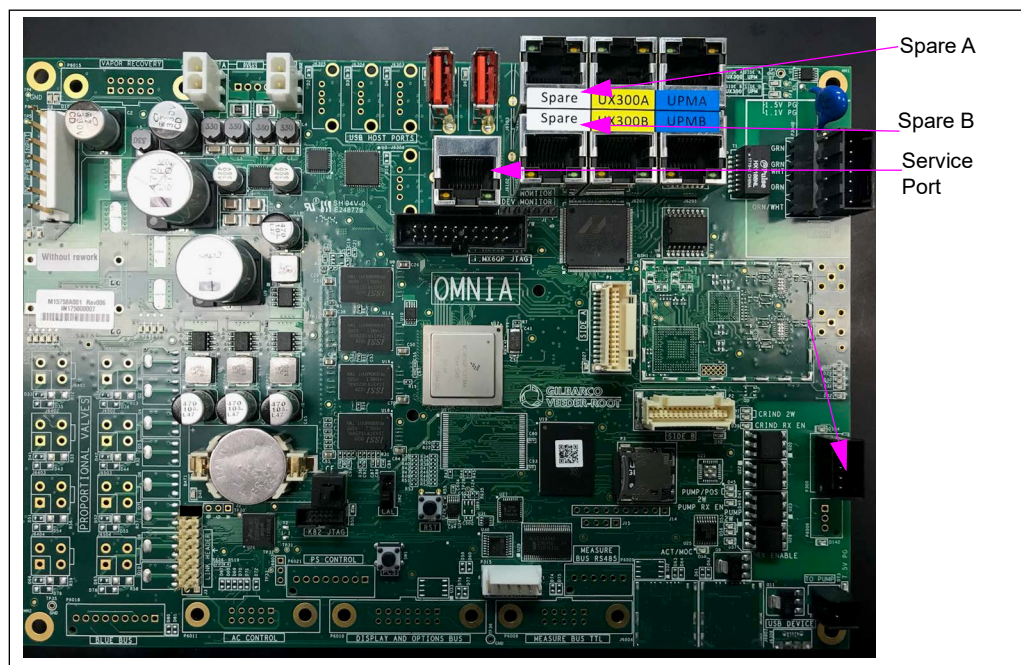
Before configuring the Omnia PCB, verify the software version and upgrade to the latest approved version on the extranet. If there is an existing Omnia already registered to the Cloud, de-register before installing software and configuring. If this is the first time that an Omnia has been installed in this dispenser, you must use the Service Port to access the Omnia Web page. After the Omnia is configured, the Omnia Web page can be accessed from the back room via the external IP address (for example, 10.5.55.71:3000).

Logging In to Omnia

To configure the Omnia PCB, proceed as follows:

- 1 Using a laptop, set laptop static IP address to 172.20.100.15 and the subnet mask to 255.255.255.0.

Figure 4-1: Service Port Location



- 2 Connect the laptop to the Service Port on the Omnia PCB using a standard CAT5 cable.

- 3 Open the Chrome web browser and type `http://172.20.100.254:2000` in the address field.

Note: This is the default IP address. If a different IP address was assigned, take note of the address and type it here to access the correct location.

Figure 4-2: Entering IP Address



- 4 To accept the https certificate, click **ADVANCED**.

Figure 4-3: Extending ADVANCED Security Settings of the Browser

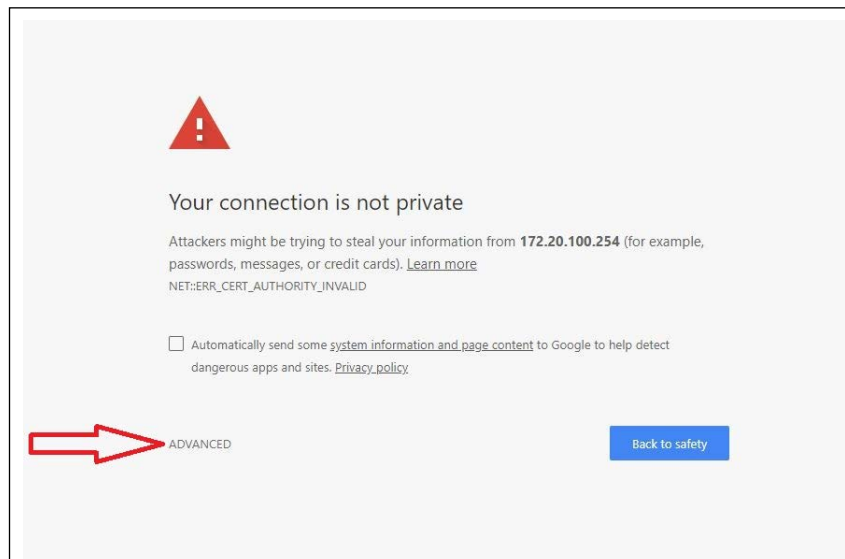
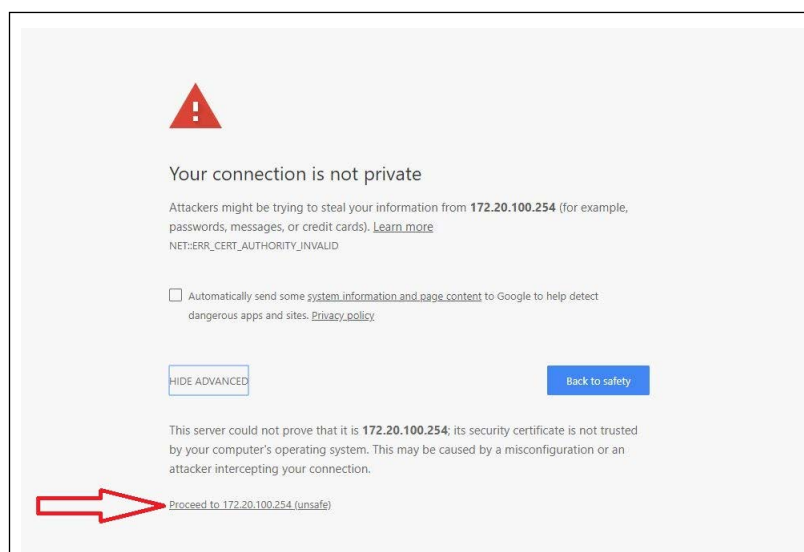


Figure 4-4: Accepting https Certificate



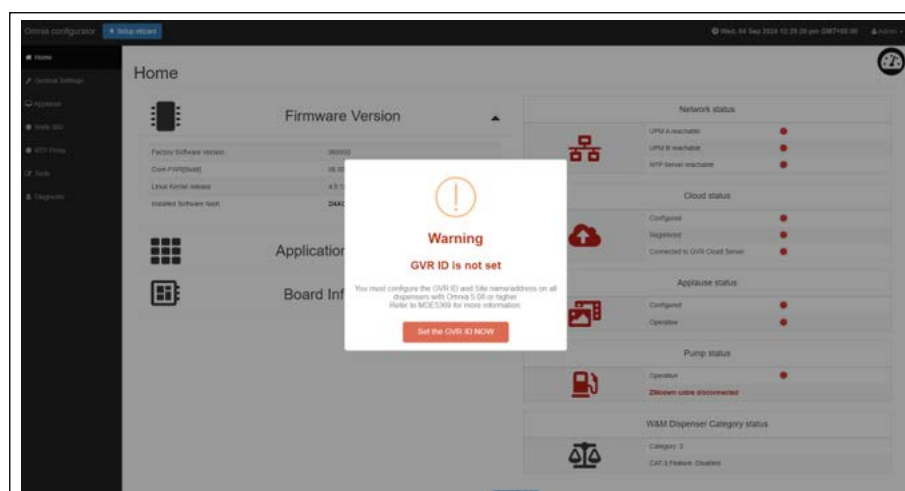
- 5 Click **Proceed to 172.20.100.254 (unsafe)**.
- 6 Depending on the configured login mode, the Omnia login page opens (see [Figure 4-5](#)).

Figure 4-5: Default Login Page

Note: Password is the last 6 digits of the Product Part Number (PPN) highlighted at the bottom right of [Figure 4-5](#). PPN is a GVR identifier unique to each Omnia boards derived from Ethernet MAC-address. The time shown is the board time and not the system time.

If logging in the first time for a new installation, and GVR ID is not set, the following message prompts you to set a GVR ID.

Figure 4-6: GVR ID Not Set Warning Message



- a Click **Set the GVR ID NOW** takes you to the Insite 360 Configuration page, where you can set the GVR ID.

- b Complete the Insite 360 Configuration page and click **Save**.
*Note: Without saving, the **Warning: GVR ID is not set** message is displayed again.*

Figure 4-7: Setting the GVR ID

The screenshot shows the 'Insite 360 Configuration' page. On the left is a sidebar with navigation links: Home, General Settings, Insite 360 (selected), Open Apps, RTP Proxy, Tools, and Diagnostic. The main content area is titled 'Insite 360 Configuration' and has two tabs: 'Settings' and 'Registration'. Under the 'Settings' tab, there are two sections: 'General Configuration' and 'PUMP Configuration Settings'. In the 'General Configuration' section, the 'GVR ID' field is highlighted with a red border and a red 'X' icon, indicating it is required and currently empty. Below it are 'Site Name', 'Site Address', and 'Omnia Nickname', all also highlighted with red borders and 'X' icons. There are checkboxes for 'Dormant Enabled', 'Incremental Logs', 'Serial Cable Beep Alert Enabled (Zmodem/RTP)', and 'Door Sensor Enabled (RTP)'. A 'Download Logs Every (mins)' field is set to 30. In the 'PUMP Configuration Settings' section, there are three dropdown menus: 'Two-Wire Money Mode' (set to '5 Digits Money Mode (Default)'), 'Money Decimal Position' (set to 'X.xx (Default)'), and 'PPU Decimal Position' (set to 'X.xxx (Default)'). At the bottom right are 'Cancel' and 'Save' buttons.

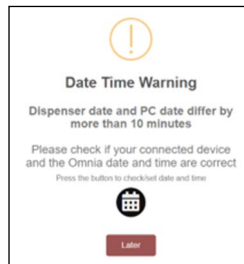
The following fields are required for Setting the GVR ID:

Field	Configuration Settings
GVR ID*	GVR ID. This must be set correctly for auto-registration to Insite360.
Site Name	Input the store's name. Confirm with the customer for proper format.
Site Address	Physical location listed in Insite360.
Omnia Nickname	Site Name. <i>Note: Use the same name for all units.</i>
*For new sites, the GVR ID is established during the provisioning or commissioning process.	

- 7 When you configure the Insite360 page and click **Save**, it will then direct you to set correct date and time.

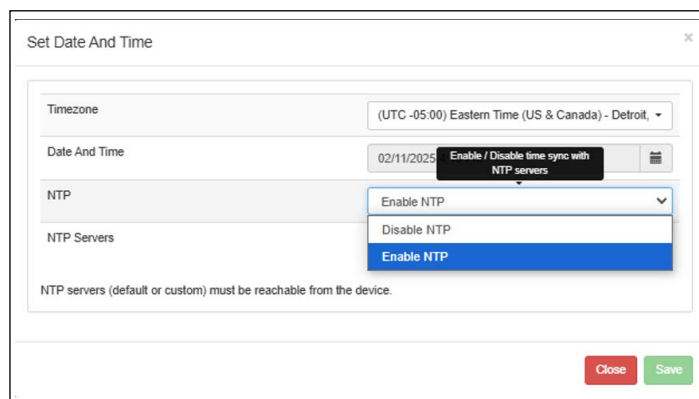
*Note: Disable NTP and click **Save** to be able to set date and time.*

Figure 4-8: Date Time Warning



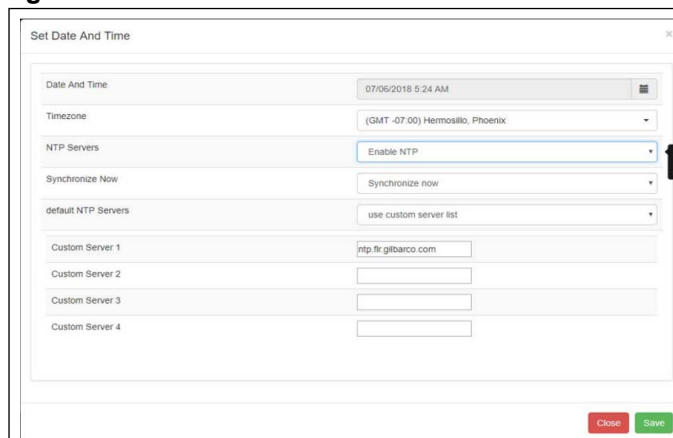
- 8 Go to **Tools** page, and select **Set Date And Time** and re-enable NTP and click **Save**.

Figure 4-9: Enable NTP



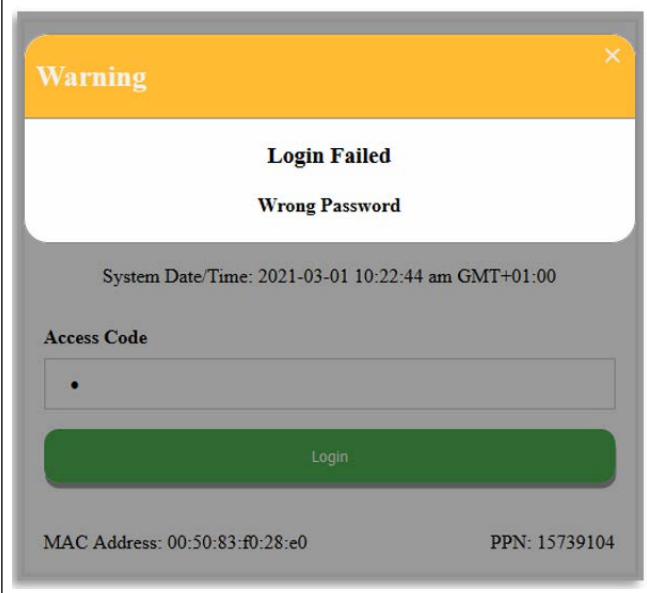
- 9 If customer has a custom NTP server, you must obtain that IP address from the customer network team. After re-enabling NTP, set custom NTP Server address in **Custom Server** field.

Figure 4-10: Custom Server



- 10 Click **Save**.
- 11 Click **General Settings** tab to program Omnia.
- 12 All Omnia IP addresses can be changed by accessing the proper sub-menu/page.
Default IP address: **172.20.100.254**

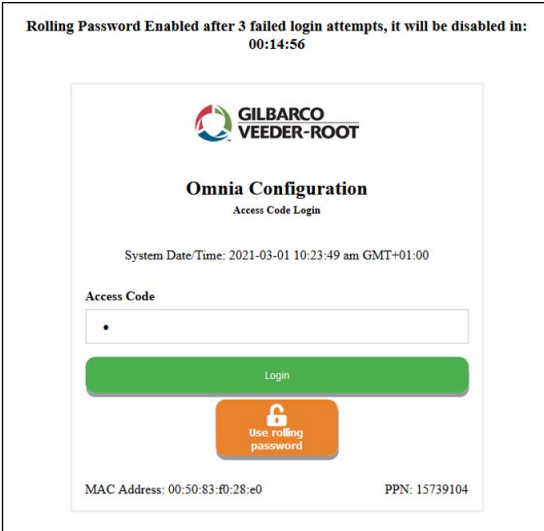
Figure 4-11: Login Page for Access Code Mode



A warning dialog box with a yellow header bar containing the word "Warning" and a close button (X). The main content area is white and displays "Login Failed" and "Wrong Password" in bold black text. Below this, the system date/time is shown: "System Date/Time: 2021-03-01 10:22:44 am GMT+01:00". The dialog also shows the "Access Code" field with a single dot, a green "Login" button, and the MAC Address "00:50:83:f0:28:e0" and PPN "15739104" at the bottom.

Note: Every failed login attempt is warned by an error popup displaying the relative error message.

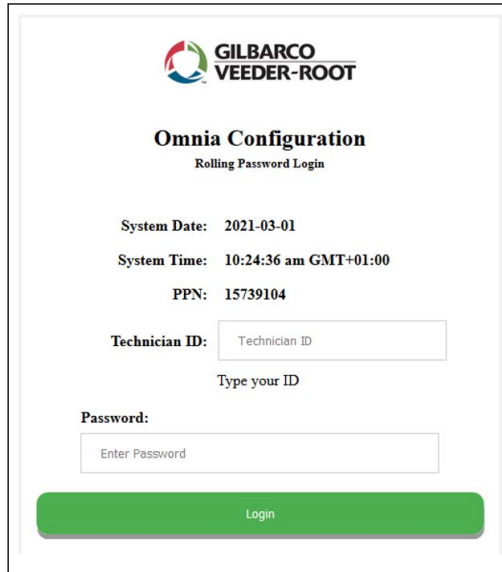
Figure 4-12: Rolling Password Fallback



A screen titled "Rolling Password Enabled after 3 failed login attempts, it will be disabled in: 00:14:56". The screen features the Gilbarco Veeder-Root logo and the text "Omnia Configuration" and "Access Code Login". The system date/time is "2021-03-01 10:23:49 am GMT+01:00". Below the "Access Code" field (containing a single dot) is a green "Login" button. Below the "Login" button is an orange button with a lock icon and the text "use rolling password". At the bottom, the MAC Address "00:50:83:f0:28:e0" and PPN "15739104" are displayed.

- Notes: 1) Access code is provided by the customer. The access code must meet the following requirements: Between 6 and 40 characters that can include lowercase and uppercase letters, numbers, and special characters, and excluding spaces.*
- 2) If the relative option is enabled (in wizard or advanced settings) the user can switch to Rolling Password authentication for 15 minutes after three failed login attempts. The countdown at the top of the page shows the remaining time.*

Figure 4-13: Login Page for Rolling Password Mode



**GILBARCO
VEEDER-ROOT**

Omnia Configuration
Rolling Password Login

System Date: 2021-03-01
System Time: 10:24:36 am GMT+01:00
PPN: 15739104

Technician ID:
Type your ID

Password:

Login

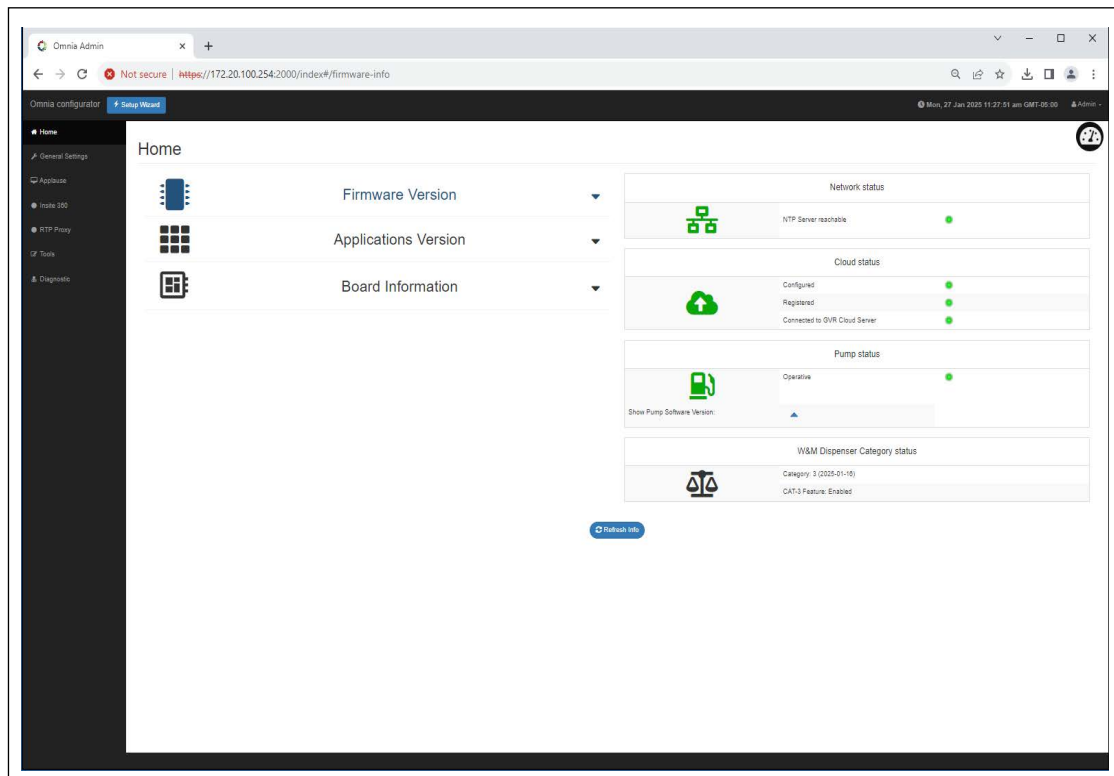
Note: Type your Technician ID. Password is provided by the ASC Online Activation Tool (Gilbarco Technicians only).

- 13** Enter the requested credentials and click **Login**.

Configuring General and Network Settings

After successful login, the Omnia home page opens.

Figure 4-14: Omnia Web Home Page



- 1 From the General Settings tab, select the Dispenser Type **AtlasX**.

- 2 The “GENERIC CRIND” option is the default setting in the **Select TwoWire Connection Type** field when the Payment Type is None.

If the dispenser is connected to Passport, then consider the entire setup as generic. The Passport software will need to be updated and wiring will need to change to support the new generic configuration. The Pump/PCN IDs will need to match fueling position as well (do not use 7/11 for your PCN fueling positions).

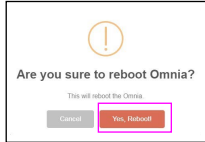
Figure 4-15: General Settings - General Configuration

General configuration	
Select Dispenser Model	AtlasX
Select Payment Type	None
Select Dispenser Type	Dual side
Select TwoWire Connection Type	GENERIC CRIND
Select Pump Baud Rate	DEFAULT (5787)
Fill in Dispenser Serial Number	AT12345678 (this is an example)
Side A Fueling Position	998
Side B Fueling Position	999
Select Pump Connection Type	Zmodem
Pump 2-Wire ID Side A (1-16)	1
Pump 2-Wire ID Side B (1-16)	2

Use the following table for General Configuration:

Field	Configuration Settings
Dispenser Model	AtlasX <i>Note: If changing dispenser model to AtlasX, a reboot is required.</i>
Payment Type	None
Site dispenser type	Dual-sided or Single-sided Unit
Select Two-wire Connection Type	Generic. Ensure that the Payment Terminal and Omnia are set to the same connection type.

If changing to Generic, a reboot is required. Reboot the Omnia board from the Tools tab or warmstart the dispenser. Wait for 10 seconds before reapplying power.



Select Pump Baud Rate	No change. Setting should remain at Default (5787).
Dispenser Serial Number	Enter the serial number given on the dispenser side label.
SIDE A fueling position	Fueling position number of Side A. Possible values are 1 - 999.
SIDE B fueling position	Fueling position number of Side B. Possible values are 1 - 999.
Pump Connection Type	Select from the following options: • RTP-Ethernet - Latitude™ units. • ZModem - For AtlasX. This is the default value. • RTP-Serial - For AtlasX (PCN5). Configure below options to set up Remote Management with Insite360:

Command Code 91 – Select Installed Options	
Function Code 47: PC Serial Communication Protocol (Only available for V04.1.17 or later.) 1 = ZMODEM Protocol* 2 = ZMODEM Protocol with alarm 3 = Real Time Protocol <i>Note: To activate W&M Category 3, set CC91 FC47 PC Serial Communication Protocol to RTP (Option 3) first, and then set CC91 FC8 Protection Method to Category 3 (Option 5). RTP must be set before Category 3 can be activated. Laptop Tool does not communicate in Real Time Protocol.</i>	Function Code 8*: Protection Method (All listed options available after V03.0.32.) 1 = Standard (NCWM/MC Category 2)* 2 = Mexico Protection (NOM-185) 3 = Reserved 4 = OIIML Protection (OIIML R117) 5 = NCWM/MC Category 3 <i>Note: First, set CC91 FC47 PC Serial Communication Protocol to RTP (Option 3), and then set CC91 FC8 Protection Method to Category 3 (Option 5). RTP must be set before Category 3 can be activated. Option 5 is allowed only if CC 91.47 = 3.</i>

(Generic) Pump 2-Wire ID Side A (1-16)	Set Side A Pump 2-Wire ID to match the A side PCN. <i>Note: When using Pulse Out, not applicable.</i>
(Generic) Pump 2-Wire ID Side B (1-16)	Set Side B Pump 2-Wire ID to match the B side PCN. <i>Note: When using Pulse Out, not applicable.</i>

Use the following table for Network Settings:

Note: Omnia External IP address, Invenco Side A External IP, and Invenco Side B External IP addresses must all be on the same subnet.

Figure 4-16: Network Settings

Network Settings	
Side A External IP Address	192.168.2.11
Side B External IP Address	192.168.2.12
Side A-B External Netmask	255.255.255.0
Backroom Router IP Address (Gateway)	192.168.2.1
Primary DNS	208.67.220.220 This field can be empty if Cloud app is disabled
Secondary DNS	208.67.222.222 This field can be empty if Cloud app is disabled

Field	Configuration Settings
Side A External IP Address	For AtlasX, this could be the external IP address for OrPAY payment terminals (if present) and used by Omnia to detect whether the payment terminals are online. In general, it is not mandatory to edit this field.
Side B External IP Address	For AtlasX, this could be the external IP address for OrPAY payment terminals (if present) and used by Omnia to detect whether the payment terminals are online. In general, it is not mandatory to edit this field.
Side A-B External Netmask	External subnet mask (default 255.255.255.0)
Backroom Router IP Address (Gateway)	Backroom Router IP address.
Primary DNS	Enter the customer-provided DNS IP address or enter 10.5.55.1 as default. Note that this field may also use non-default values. Consult the site's IT Department or the MNSP for IP Settings in the back room. <i>Note: These IP addresses may be different based on the site's IP scheme.</i>
Secondary DNS	Google Public IP 8.8.8.8. Be aware that this field may also use non-default values. Consult the site's IT Department or the MNSP for IP Settings in the back room. <i>Note: These IP addresses may be different based on the site's IP scheme.</i>

Use the following table for Login Mode Settings:

Field	Configuration Settings
Current Login Mode	Indicates if Basic Authentication, Access Code (set by customer), or Rolling Password (ASC Tool).

The Device “Invenco OPT” can refer to any Payment Terminal, if present, including OrPAY, etc.

External IP Address Scheme										
Fueling Position	Device IP Address	Side	Device	Fueling Position	Device IP Address	Side	Device	Fueling Position	Device IP Address	Device
1	10.5.55.71	A	Invenco OPT	2	10.5.55.72	B	Invenco OPT	1 and 2	10.5.55.171	Omnia External IP
3	10.5.55.73	A	Invenco OPT	4	10.5.55.74	B	Invenco OPT	3 and 4	10.5.55.173	Omnia External IP
5	10.5.55.75	A	Invenco OPT	6	10.5.55.76	B	Invenco OPT	5 and 6	10.5.55.175	Omnia External IP
7	10.5.55.77	A	Invenco OPT	8	10.5.55.78	B	Invenco OPT	7 and 8	10.5.55.177	Omnia External IP
9	10.5.55.79	A	Invenco OPT	10	10.5.55.80	B	Invenco OPT	9 and 10	10.5.55.179	Omnia External IP
11	10.5.55.81	A	Invenco OPT	12	10.5.55.82	B	Invenco OPT	11 and 12	10.5.55.181	Omnia External IP
13	10.5.55.83	A	Invenco OPT	14	10.5.55.84	B	Invenco OPT	13 and 14	10.5.55.183	Omnia External IP
15	10.5.55.85	A	Invenco OPT	16	10.5.55.86	B	Invenco OPT	15 and 16	10.5.55.185	Omnia External IP
17	10.5.55.87	A	Invenco OPT	18	10.5.55.88	B	Invenco OPT	17 and 18	10.5.55.187	Omnia External IP
19	10.5.55.89	A	Invenco OPT	20	10.5.55.90	B	Invenco OPT	19 and 20	10.5.55.189	Omnia External IP
21	10.5.55.91	A	Invenco OPT	22	10.5.55.92	B	Invenco OPT	21 and 22	10.5.55.191	Omnia External IP
23	10.5.55.93	A	Invenco OPT	24	10.5.55.94	B	Invenco OPT	23 and 24	10.5.55.193	Omnia External IP
25	10.5.55.95	A	Invenco OPT	26	10.5.55.96	B	Invenco OPT	25 and 26	10.5.55.195	Omnia External IP
27	10.5.55.97	A	Invenco OPT	28	10.5.55.98	B	Invenco OPT	27 and 28	10.5.55.197	Omnia External IP
29	10.5.55.99	A	Invenco OPT	30	10.5.55.100	B	Invenco OPT	29 and 30	10.5.55.199	Omnia External IP
31	10.5.55.101	A	Invenco OPT	32	10.5.55.102	B	Invenco OPT	31 and 32	10.5.55.201	Omnia External IP
33	10.5.55.103	A	Invenco OPT	34	10.5.55.104	B	Invenco OPT	33 and 34	10.5.55.203	Omnia External IP
35	10.5.55.105	A	Invenco OPT	36	10.5.55.106	B	Invenco OPT	35 and 36	10.5.55.205	Omnia External IP
37	10.5.55.107	A	Invenco OPT	38	10.5.55.108	B	Invenco OPT	37 and 38	10.5.55.207	Omnia External IP
39	10.5.55.109	A	Invenco OPT	40	10.5.55.110	B	Invenco OPT	39 and 40	10.5.55.209	Omnia External IP

3 When the configuration is complete, click **Save**.

- 4 System reboot is mandatory to apply the changes after saving the network settings. Click **Yes, Reboot!**

Figure 4-17: Yes, Reboot!



- 5 Once the reboot occurs, log in to Omnia.
- 6 Verify all settings on **General Settings** page.

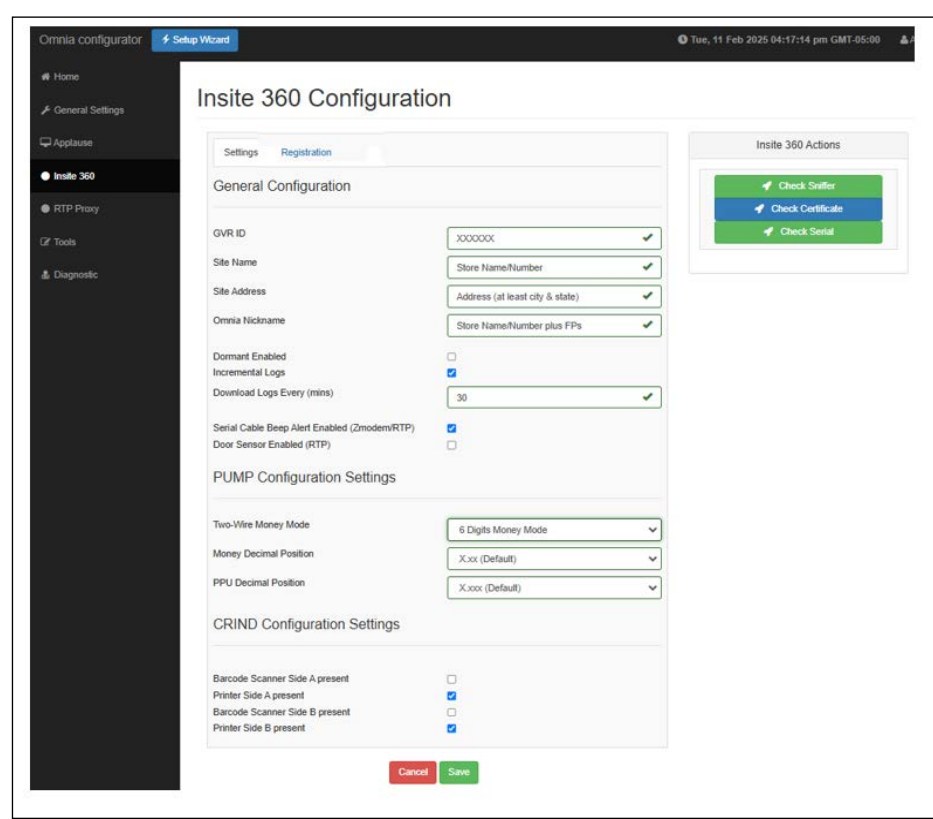
Configuring Insite360 Settings

Before attempting registration, the AWS IoT URLs must be set up prior to software upgrades and any attempt to register with Insite360 to AWS. Ensure that network rules are done by the customer IT department or MNSP provider. Registration will fail if the network rules are not set up.

Note: Omnia must be connected to NTP Servers to sync time.

- 1 Click **Insite 360** in the left navigation to open the Insite360 Configuration page as shown in [Figure 4-18](#).

Figure 4-18: Insite 360 Configuration Settings



Field	Configuration Settings
GVR ID	GVR ID. This must be set correctly for auto-registration to Insite360.
Site Name	Input the store's name. Confirm with the customer for proper format.
Site Address	Physical location listed in Insite360.
Omnia Nickname	Site name. <i>Note: Use the same name for all units.</i>

Field	Configuration Settings
Dormant Enabled	The dispenser is connected to Insite360 but no messages are exchanged between the dispenser and Insite360. The status in the Insite360 portal for the dispenser is the last one sent before getting into "Dormant Mode". Gilbarco can still "wake up" the units remotely to perform updates and log collection when needed. Default settings: - If the device is not registered to Insite360, the system will default Dormant mode to Enabled (check box is selected). - If the device is registered to Insite360, the system will default the setting to Not Enabled (check box is cleared).
Incremental logs	Ensure that the check box is selected (Download Enabled).
Download Logs Every (mins)	Leave at 30 minutes unless directed to change by Gilbarco.
Serial Cable Beep Alert Enabled	Enable/Disable the serial cable beep alert.
Door Sensor Enabled (RTP)	This option enables the Door Sensor. <i>Note: Door Sensor is not available on AtlasX.</i> Default settings when upgrading to V06.00 or higher: - If the Omnia Pump Protocol was set to RTP before the software upgrade, the door sensor option will be automatically selected (enabled). - If the Omnia Pump Protocol was not set to RTP, the door sensor option will not be enabled and the check box will be clear. <i>Note: Omnia and PCN must both have RTP selected for the door sensor feature to work.</i>
Two-Wire Money Mode	5 Digits Money Mode is the default. For PRIME, set to 6 Digits Money Mode.
Pump Configuration Settings	
Two-Wire Money Mode	This option specifies the number of digits used in Money/Volume reporting. This setting must be aligned with the actual configuration of the PCN board.
Money Decimal Position	This option specifies the number of decimal digits in Money reporting. This setting must be aligned with the actual configure of the PCN board.
PPU Decimal Position	This option specifies the number of decimal digits in PPU reporting. This setting must be aligned with the actual configuration of the PCN board.
Real-Time Volume Enabled	When RTP is enabled, this field indicates that the Pump will report Transaction volume in real time to the POS.

2 Click **Save**.

- 3** If you have not already set the date and time and timezone, click **Tools** in the left navigation and **Set Date and Time**. For more information, refer to ["Set Date and Time"](#) on page 5-11.

- 4 Reboot the Omnia board from the **Tools** tab or warmstart the dispenser.

Figure 4-19: Reboot Prompt

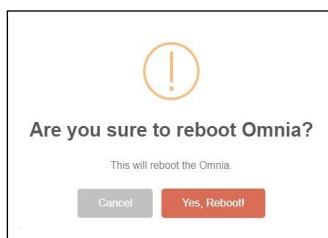
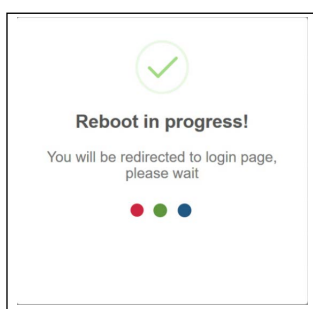


Figure 4-20: Reboot Status

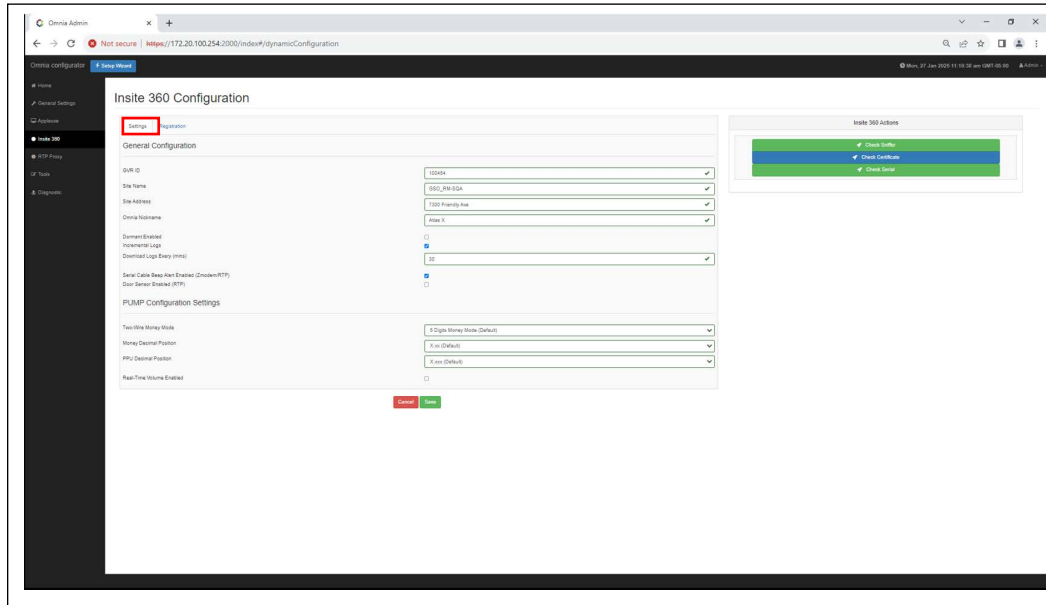


Configuring Serial Interface and Testing Sniffer

To view, modify, and test current Insite360 Settings, proceed as follows:

- 1 Select the **Insite 360** tab on the left sidebar.
Note: The Insite 360 Actions tools are not applicable for Pulse Out.

Figure 4-21: Selecting the Insite 360 Configuration

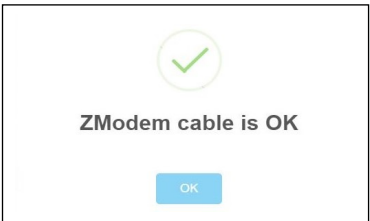


Note: If you are using Pulse Output, the Pump Two-Wire is disabled. Options flagged with arrows do not apply.

- 2 From the Settings tab, confirm the Pump Serial Interface protocol setting, and click **Save**.
- 3 Click **Save**.
- 4 Check **ZModem** connection using CLOUD Utility.

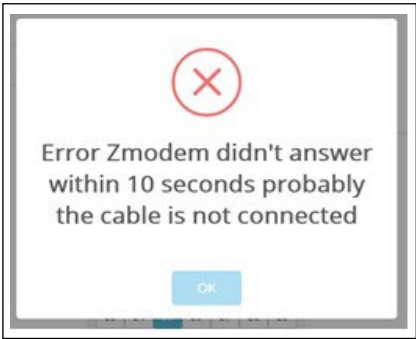
Note: The ZModem cable should always be connected whether in ZModem protocol or the RTP protocol. The Insite360 needs this connection for remote functionality. There may be instances when a technician may disconnect this cable during service (i.e. during laptop SW download). It's critical that this cable must be plugged back in after any service to the laptop port on the PCN.

Figure 4-22: Checking Serial Interface Connection



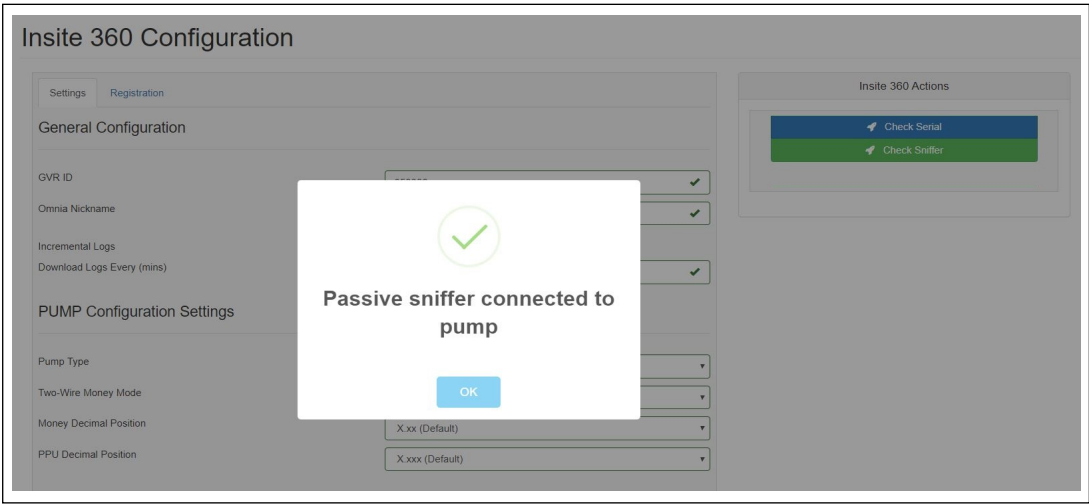
In case of failure, an error message is displayed.
Note: For troubleshooting information, refer to “[Troubleshooting](#)” on [page 6-1](#).

Figure 4-23: ZModem Failure Message



5 Check Sniffer connection using CLOUD Utility.

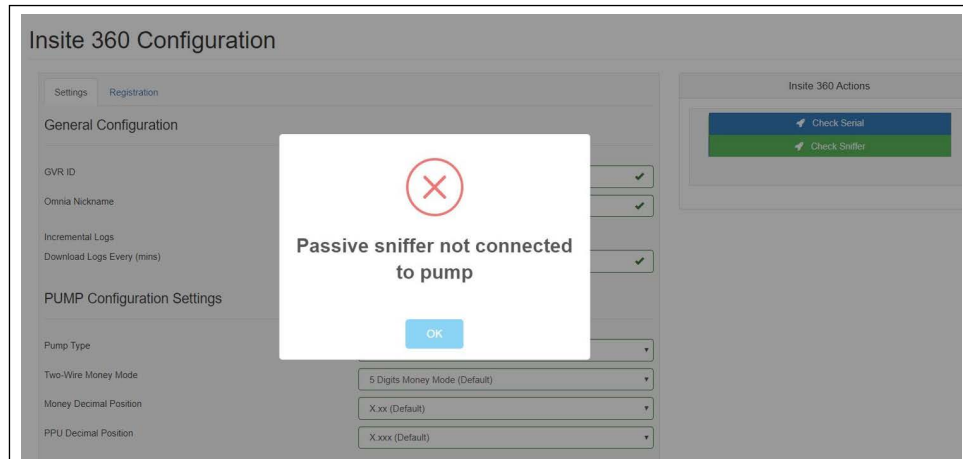
Figure 4-24: Checking Sniffer



In case of failure, an error message is displayed.

Note: For troubleshooting information, refer to refer to [“Troubleshooting”](#) on [page 6-1](#).

Figure 4-25: Passive Sniffer Failure Message



Registering Omnia to Insite360 Forecourt

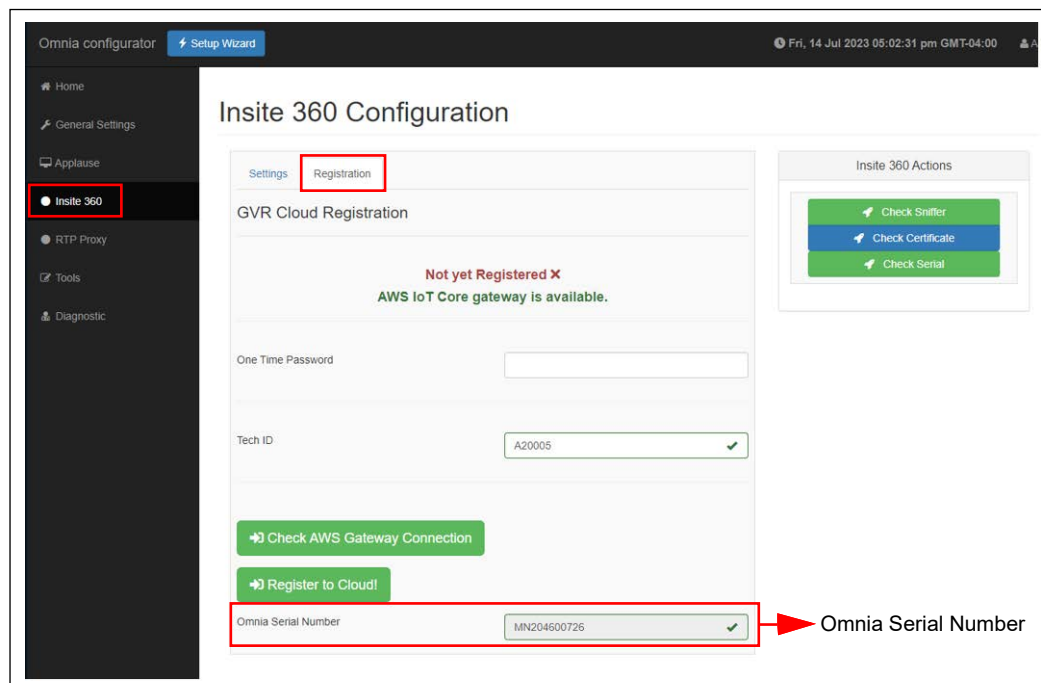
If AWS IoT Core is available (network rules in place locally), the message “AWS IoT gateway is available” is displayed in the UI.

Notes: 1) The AWS IoT URLs must be set up prior to software upgrades and any attempt to register through AWS. Ensure that network rules are done by customer IT department or MNSP provider. Registration will fail if not set up.
2) Register all Omnia devices to Insite360. If the customer does not have a contract, still register but leave Omnia in Dormant mode. Omnia must be connected to NTP Servers to sync time.

To register Omnia to Insite360 Forecourt, proceed as follows:

- 1 From the Insite 360 Configuration page, click the **Registration** Tab.

Figure 4-26: Insite 360 Configuration - Registration (AWS IoT Gateway)

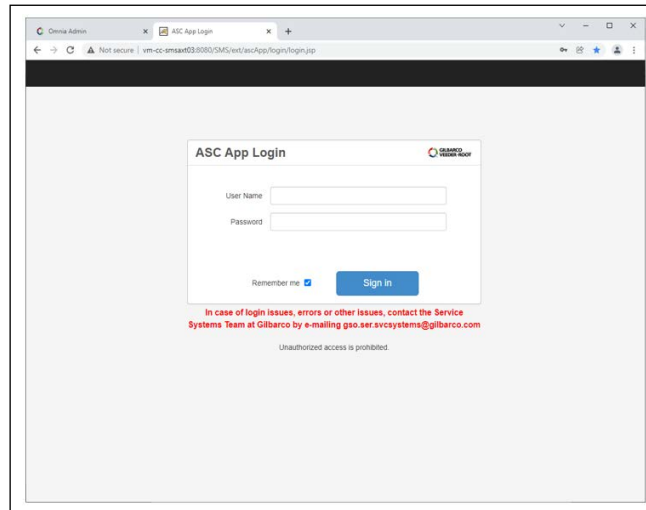


Note: To gain access to the one time password tool “I360 Device Pre-Registration” complete the mandatory tech training on “AWS OTP Registration module” or “Gasboy AWS IoT Registration Secure Password Generator module” in SABA.

- 2 Sign in to the ASC App at: <https://mymessage.gilbarco.com/SMS/ext/ascApp/login/login.jsp>.

Registration to the AWS IoT Gateway requires a generated One-time Password (OTP) to be obtained from the ASC App or Gasboy Secure Password Generator App at: <https://mymessage.gilbarco.com/SMS/ext/gasboyApp/login/login.jsp>.

Figure 4-27: ASC App Login



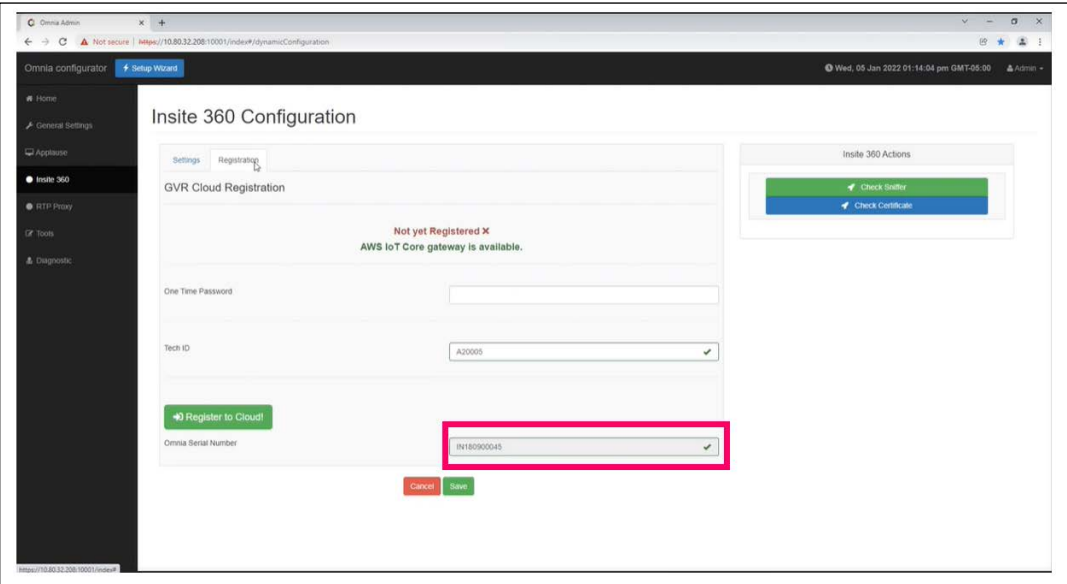
- 3 Select **I360 Device Pre-Registration** from the ASC App or Gasboy Secure Password Generator App home page.

Figure 4-28: I360 Device Pre-Registration



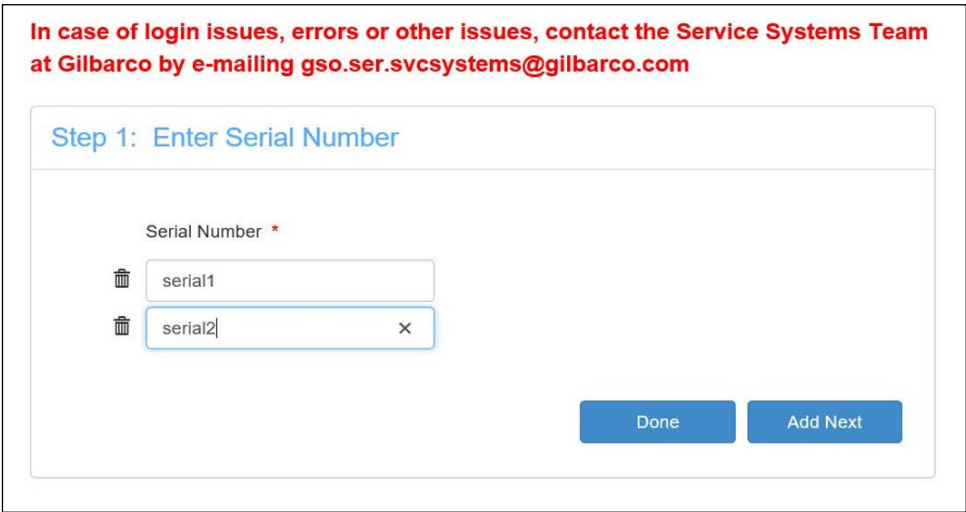
*Note: The Omnia serial number required for either apps is listed on the Insite 360 Registration page for the dispenser. It is **NOT** the Device PPN or dispenser Serial Number used to log in to the UI.*

Figure 4-29: Omnia Serial Number



- 4 Using either of the apps, fill in the Omnia serial number for the device or devices that you want to register. Click **Add Next** for additional devices.
Note: You can add up to 20 devices per OTP.

Figure 4-30: Omnia Serial Numbers for Additional Devices



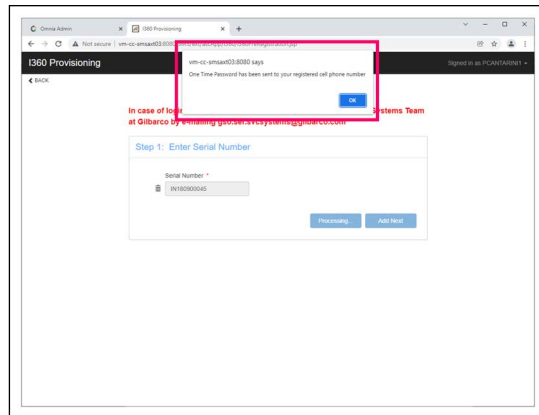
IMPORTANT INFORMATION

The Omnia serial number includes prefix letters; you **MUST** capitalize these letters when entering them into the serial number field and ensure that there are no spaces before and after the serial number or the OTP process will fail.

- 5 Ensure that you enter the correct Omnia serial number.

- 6 Click **Done** when all the serial numbers are entered.
- 7 An SMS message with the OTP is sent to the technician's registered phone number. One OTP can be used to register up to 20 devices, and the OTP is valid for 30 minutes.

Figure 4-31: SMS Message for OTP



- 8 In the Insite 360 Configuration - Registration Tab, enter the OTP into the **One Time Password** field.
- 9 Enter **Tech ID** and click **Register to Cloud!**.

Figure 4-32: GVR Cloud Registration - AWS IoT Gateway Available

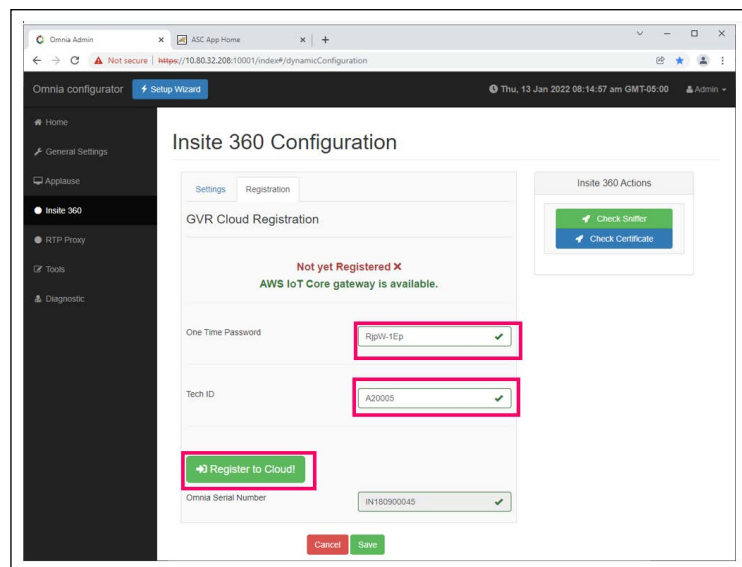
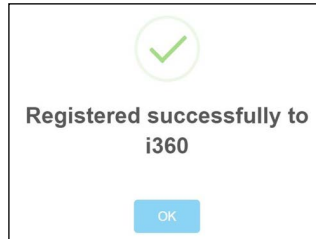
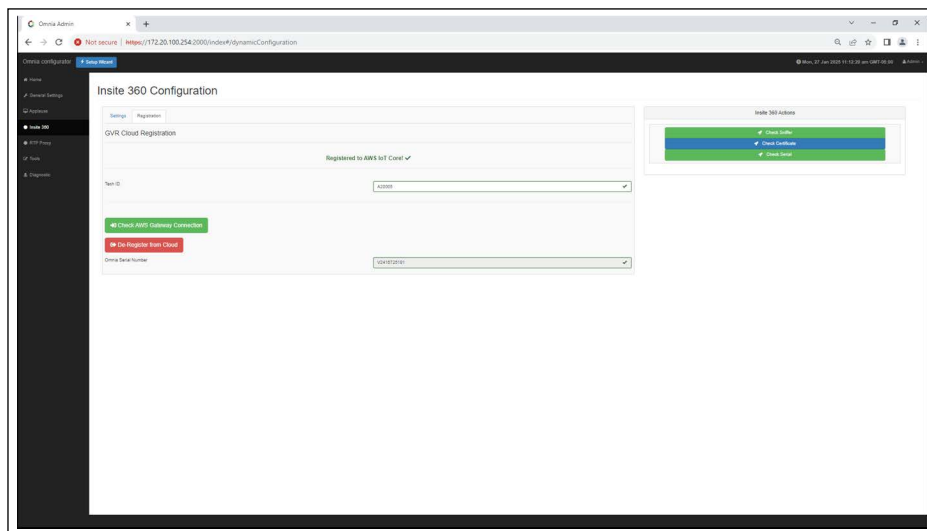


Figure 4-33: Registration Successful Message

- 10 Upon successful registration, refresh the page to update the screen. The Insite 360 Configuration page displays a green message “Registered to AWS IoT Core” and the addition of a “De-Register from Cloud” button.

Figure 4-34: GVR Cloud Registration - Registered to AWS IoT

- 11 Refresh the page to update the screen.



Omnia registration to Insite360 is complete.

Reasons for Registration Failure

In case of registration failure, address the following potential causes first:

- 1 URL rules not set up properly at the site's network.
- 2 Wrong Serial numbers or typos were entered into the ASC app or Secure Password Generator app.
- 3 Date and Time on Omnia is incorrect or not in sync.
Note: Omnia must be connected to NTP Servers to sync time.
- 4 Network Connectivity (physical, and network configuration).
- 5 If Insite360 site is not provisioned properly, registration will fail.

Figure 4-35: AWS Failed Connection Error Message



This page is intentionally left blank.

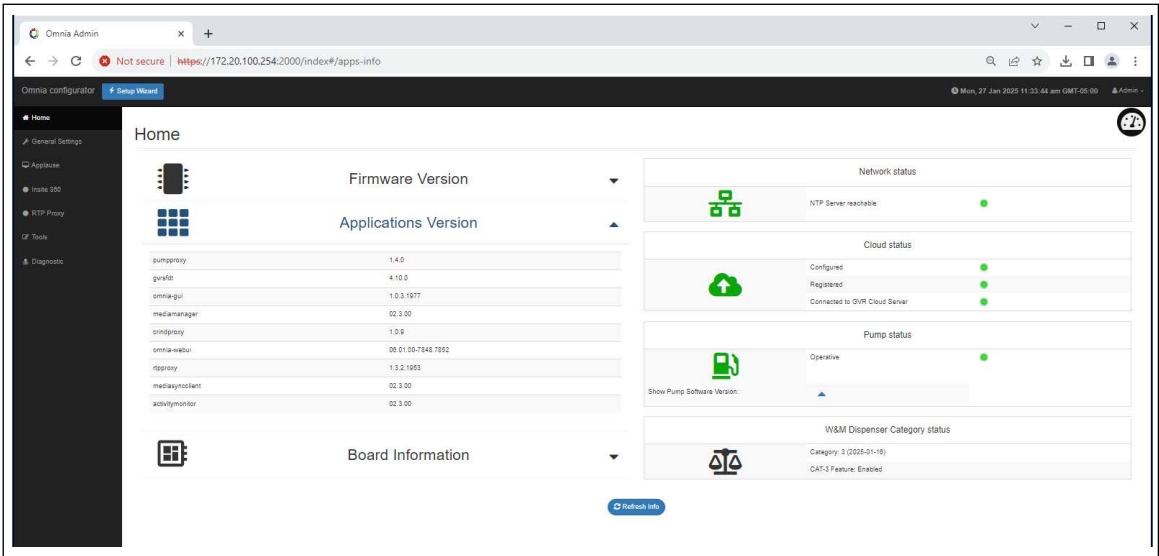
5 – Tools and Diagnostics

Omnia Tools and Diagnostics

Omnia home page provides a quick overview of the software installed, hardware version revision, date and time, Up time, Multiple Access Control (MAC) address, and PPN.

After successful login, the Omnia home page opens.

Figure 5-1: Home Page - Status Panels



Note: The Pump Status Panel is not displayed, if the “Pump Connection Type” is set to “None” in the General Settings Page.

The Omnia home page includes the following:

Section	Tabs / Button
Setup Wizard button	Used for adding new configuration or importing existing configuration.
Firmware Version	Includes the following options: • Factory Software Version • Core-FWR[Build] • Linux Kernel release • Installed software hash
Applications Version	Includes the following options: • CloudApp version • ActivityMonitor version • Pumpproxy version • Crindproxy • Mediasyncclient • Mediamanager

Section	Tabs / Button
Board Information	Includes the following options: • Board Version • Board Part Number • MAC Address • PPN • Up Time

A status images group with Networks status, CloudApp status, Pump status, and W&M Dispenser Category status is displayed.

Note: Pump status is shown when the pump is connected via RTP protocol.

The page also includes a Meters button to display self-updating meters with CPU Average Load, CPU Temperature, and Memory Load.

Figure 5-2: Meters Button

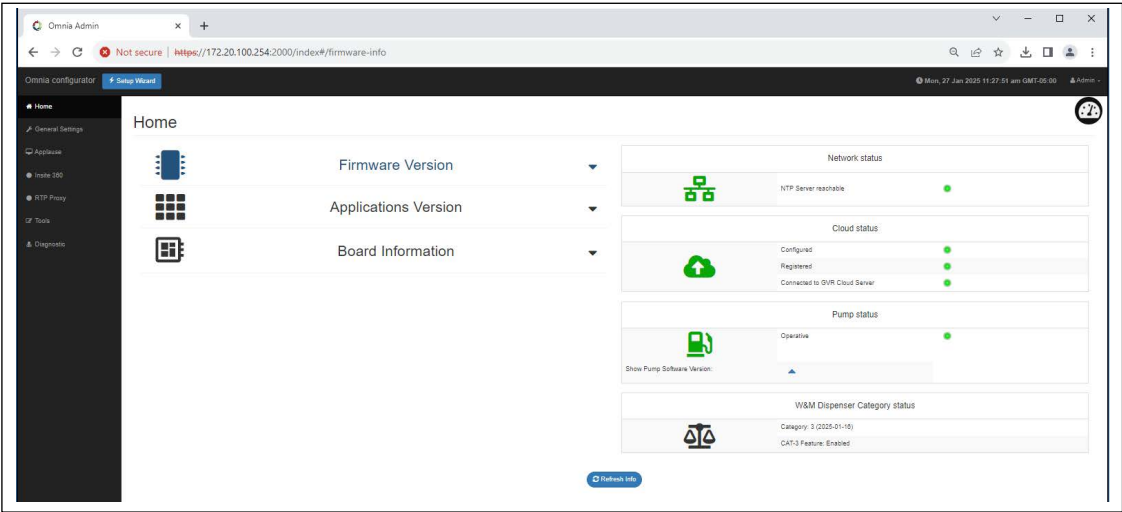
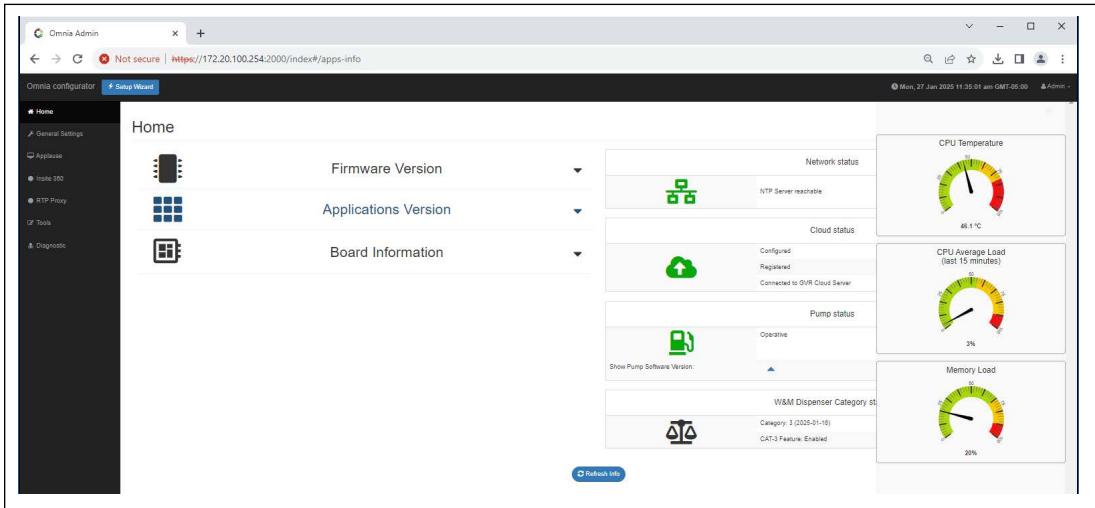


Figure 5-3: CPU Average Load, CPU Temperature, and Memory Load



Status Icons and Virtual LEDs

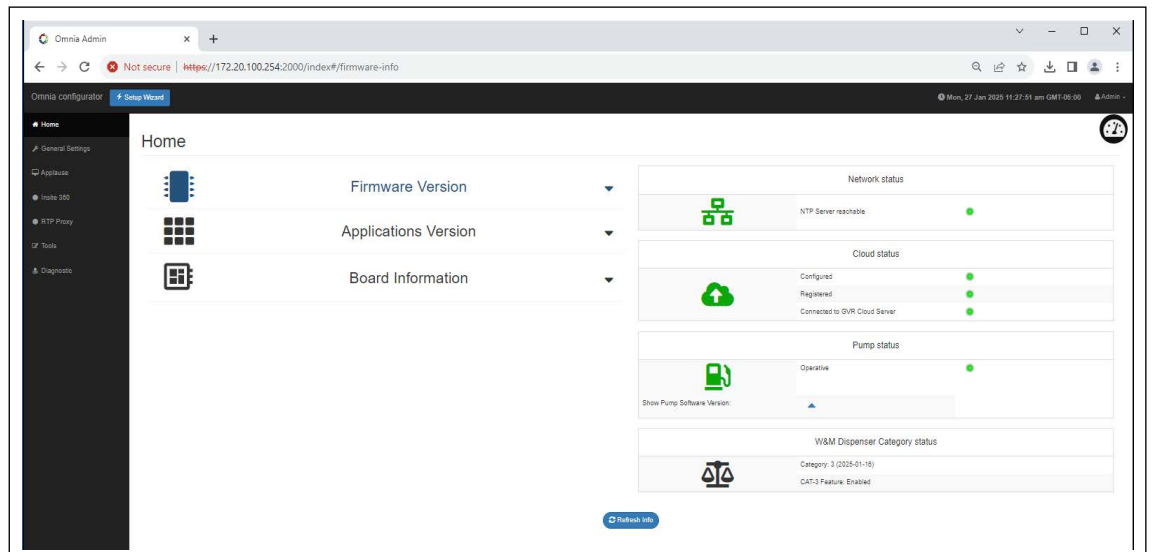
The icons and virtual LEDs indicate Network, Cloud, and Pump Status. The meaning of the icons and definitions for status colors are described in the table

“Network – Cloud – Pump Status” on page 5-4.

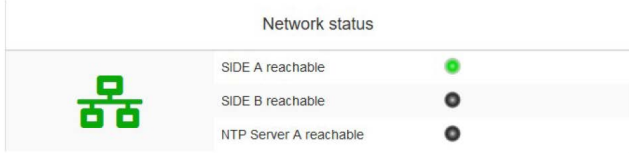
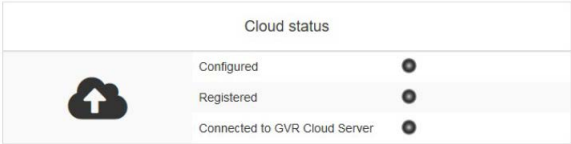
Note: Pump status is not displayed when the “Select Pump connection type” is set to “None” in the General Settings page.

In Figure 5-4 “Pump Status LEDs - RTP-Serial” the Red icon and virtual LEDs in Cloud status indicate that Omnia is not registered to Insite360.

Figure 5-4: Pump Status LEDs



Network – Cloud – Pump Status

Status Screen	Description										
	Green Network Icon = Connectivity OK. Red Network Icon = Connectivity problems. Black Network Icon = Programmed as a single-sided dispenser, showing only Side A status. Green LED = Omnia can connect to SPOT/NTP Server. Red LED = Omnia cannot connect to SPOT/NTP Server. Black LED = (Not enabled) Configured to Disable NTP, in which Set Date and Time Manually. NTP (National Time Protocol) Server A reachable. <i>Note: Omnia must be connected to NTP Servers to sync time.</i>										
	Green Cloud Icon = Cloud OK. Red Cloud Icon = Cloud problems. Black Cloud Icon = Cloud package not installed. Configured: Green LED = Cloud application is configured. Red LED: Cloud app not configured. Black LED = Cloud package not installed. Registered: Green LED = Omnia registered to Insite360. Red LED: Omnia NOT registered to Insite360. Black LED = Cloud package not installed. Connected: Green LED = Omnia is able to reach Insite360 server. Red LED: Omnia is not able to reach Insite360 server. Black LED = Cloud package not installed.										
	Green Pump Icon = Pump communication OK. Yellow Pump Icon = Communication problems that can be recovered without intervention. Red Pump Icon = Pump communication Down.										
	Operative: Green LED = Pump connection OK. Yellow LED = Connection problems that can be recovered without intervention. Red LED = Pump communication Down.										
 <table border="1"> <thead> <tr> <th colspan="2">Pump Software Version</th> </tr> </thead> <tbody> <tr> <td>CRC</td> <td>E89C</td> </tr> <tr> <td>DSS</td> <td>AE28E3 94FF27 A1B5FE E850C3 C519FF BB9B0B 5126</td> </tr> <tr> <td>Date</td> <td>1 17 2020</td> </tr> <tr> <td>Version</td> <td>05-003</td> </tr> </tbody> </table>	Pump Software Version		CRC	E89C	DSS	AE28E3 94FF27 A1B5FE E850C3 C519FF BB9B0B 5126	Date	1 17 2020	Version	05-003	If pump connection works, select the blue arrow to view the software version. In case of problems, an error message is displayed.
Pump Software Version											
CRC	E89C										
DSS	AE28E3 94FF27 A1B5FE E850C3 C519FF BB9B0B 5126										
Date	1 17 2020										
Version	05-003										
	Weights&Measures Dispenser Category Status - Indicates the date when the dispenser was changed to Category 3.										
	CAT-3 Feature: Enabled - Indicates that the Category 3 feature is enabled from Insite360. CAT-3 Feature: Disabled - Indicates that the Category 3 feature was disabled from Insite360. In this case, the dispenser is currently Category 2.										

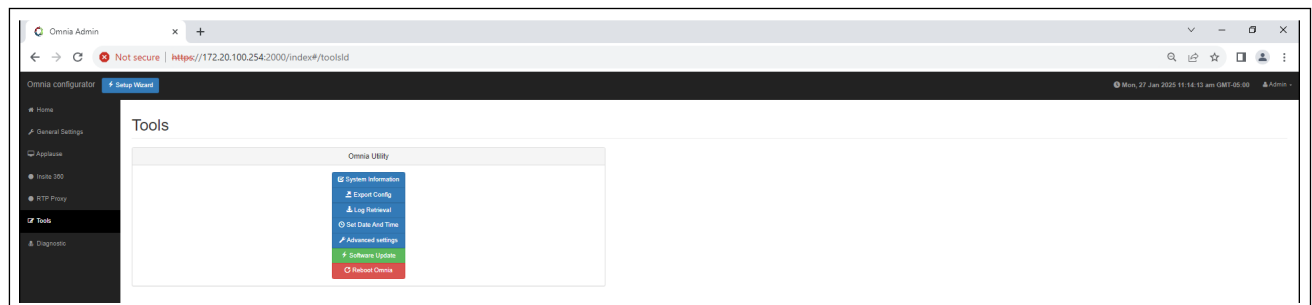
Omnia Configurator - Tools

Omnia device provides a set of utility functions to perform the following:

- Retrieve System Information
- Export Config
- Log Retrieval
- Set Date and Time
- Advanced settings
- Software Update
- Reboot Omnia

To access to the utility functions, click **Tools** on the left sidebar of the Omnia web page.

Figure 5-5: Omnia Tools Settings



Retrieve System information

Click **System Information** to the retrieve current hardware and software status of the device.

Figure 5-6: System Information

System Information

Hardware info

Board Version	OMNIA-J-DEVEL
Board Part Number	M15758A001
Board Model Name	OMNIA
Board Manufacturing Date	2024-04-20
Board Manufacturer	Venture
Board Serial Number	VQ418725191
PPN	04485439
MAC	00:50:83:44:71:3F

Pump info

ENCORE 500 PUMP - VERSION REPORT

ATCNode 01004 (01.0.04)

SHA256 Hash Code 64 ca 78 e4 7c 21 1a 68 87 3d 28 89 2f 19 82 2b 59 db 77 42 4c a9 59 4e 4b d8 98 cd 48 8b 0b 3a

Boot Loader Version	02018 (V02.0.18)
CRC	A418
Date	11 21 2024 (MM DD YYYY)
DoorNodeA	01303 (01.3.03)
DoorNodeB	01303 (01.3.03)
Serial Pulser ID (1)	0000000000
Serial Pulser ID (5)	0000000000
Version	P06028 (06.0.28P)
Version(DB)	P06028 (06.0.28P)

Software Versions

Factory Software Version	060100
Core-FWR[Build]	06.01.00-PROD.7852.1727282292
Linux Kernel release	4.9.123-sw2223-PROD
pumpproxy	1.4.0
gvstfct	4.10.0
omnia-gui	1.0.3.1977
mediamanager	02.3.00
crindproxy	1.0.9
omnia-webui	06.01.00-7848.7852
rtpproxy	1.3.2.1953
mediasyncclient	02.3.00
activitymonitor	02.3.00

Boot Loader Version	02018 (V02.0.18)
CRC	A418
Date	11 21 2024 (MM DD YYYY)
DoorNodeA	01303 (01.3.03)
DoorNodeB	01303 (01.3.03)
Serial Pulser ID (1)	0000000000
Serial Pulser ID (5)	0000000000
Version	P06028 (06.0.28P)
Version(DB)	P06028 (06.0.28P)

Software Versions

Factory Software Version	060100
Core-FWR[Build]	06.01.00-PROD.7852.1727282292
Linux Kernel release	4.9.123-sw2223-PROD
pumpproxy	1.4.0
gvstfct	4.10.0
omnia-gui	1.0.3.1977
mediamanager	02.3.00
crindproxy	1.0.9
omnia-webui	06.01.00-7848.7852
rtpproxy	1.3.2.1953
mediasyncclient	02.3.00
activitymonitor	02.3.00

installed software hash: 76BC0503

Dagnostic

Date and time	Mon, 27 Jan 2025 11:40:17 -0500
Time zone	EST -0500
Up Time	up 1 day, 23 hours, 48 minutes
Temperature sensors	48.8 °C / 31.000 °C / 31.000 °C
Memory usage	2.014G / 402M / 1.054G / 19%
Storage Main (/)	2.3G / 1.4G / 811M / 63%
Storage Data (mnt/DATA)	12G / 818M / 10G / 9%
Load average(CPU %)	0.01(2%) / 0.06(2%) / 0.06(2%)

Refresh info

Export

Close

Export system information during troubleshooting; the file contains all system versions and diagnostic information. To export system information, click **Export**. A text file is saved on the computer.

Log Retrieval

Log Retrieval page allows to retrieve logs of OmniaOS/CloudApp.

The log will be uploaded to the web page as a zip file with file name extension: ppn_dateandtime.zip.

From Log Retrieval, you can select the range of dates.

Figure 5-7: Log Retrieval

The screenshot shows a web interface titled "Log retrieval". It has a "Select applications" section with four buttons: "All Logs", "Omnia (OS + Apps)", "Media App", and "Cloud App". Below this is an "Options" section with a "Range of dates" label and two date pickers labeled "From" and "To". At the bottom right is a "Close" button. A "Download selected logs" button is located below the date pickers.

To retrieve logs, proceed as follows:

- 1 Select applications for which you want to retrieve logs.
- 2 Select the range of dates.
- 3 Press **Download** for selected logs.

Figure 5-8: Log Retrieval Successful Message

The screenshot shows the same "Log retrieval" interface as Figure 5-7, but with a success message overlay. The message box is white with a green checkmark icon and the text "Request has successfully completed". Below the message is an "OK" button. The background interface is dimmed, showing that "Omnia (OS + Apps)" is selected and the date range is set to "02/24/2021".

Advanced Settings

The Advanced Setting page includes the following options:

Figure 5-9: Advanced Settings

Advanced settings

Platform Log level

debug

Log suppression

Enabled

Log Suppression will turn on after

24 hours

Force Display Size Algorithm (LAB usage Only)

Default

Set Authentication Login Mode

Basic Authentication

Cancel

Save

Close

Figure 5-10: Log Suppression Disabled

Advanced settings

Platform Log level

debug

Log suppression

Disabled

Automatically enabled in

2:59:50

Force Display Size Algorithm (LAB usage Only)

Default

Set Authentication Login Mode

Basic Authentication

Cancel

Save

Close

Field	Description
Logging level	There are two modes: standard and debug. - Standard is the default logging level during Omnia installation and initial startup, or during an Omnia software upgrade. - The Debug setting can be requested by Engineering or Service. It can be used for field trial monitoring or troubleshooting. The log level can be set remotely using Insite360.
Log suppression	Can be set to Enabled or Disabled using the toggle button. If disabled, a countdown until timeout will be shown.
Force Display Size Algorithm	Includes the following three options: Default, ForceA, and ForceB.
Set Authentication Login Mode	Includes the following three options: - No Authentication - This is the default option. - Access Code - Access code is provided by the customer. The access code must meet the following requirements: Between 6 and 40 characters that can include lowercase and uppercase letters, numbers, and special characters, and excluding spaces. - Rolling Password is generated from "System date", "PPN" and "Technician ID", and provided by Gilbarco Help Desk through the ASC Online Activation Tool. Select "Allow Rolling password as a secondary access method" if the customer wants to fall back to Rolling password rolling mode in case Access code is lost (see Figure 5-11 on 5-9).

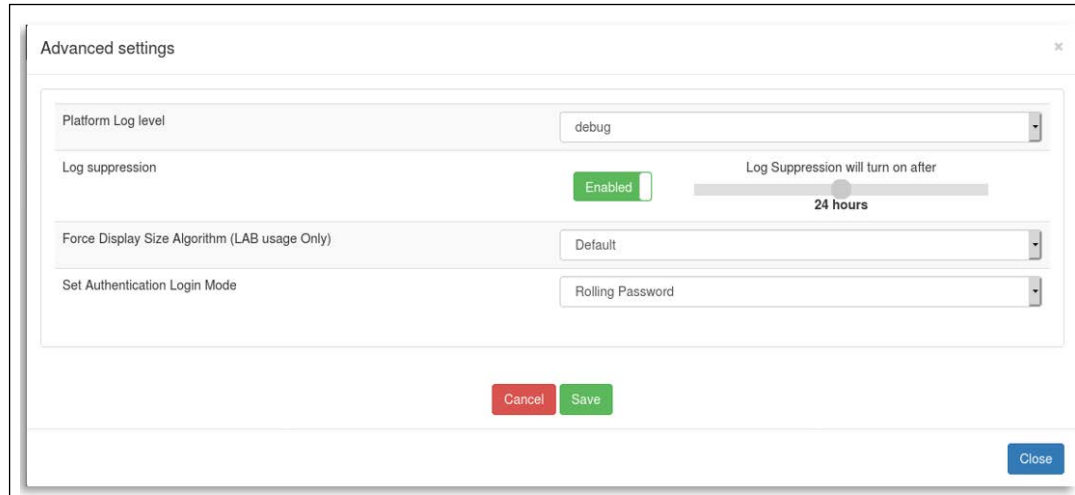
Note: If "Access code" login mode is chosen, an access code is requested and should be entered by the customer (see ["Omnia Configurator - Diagnostic"](#) on page 5-16).

In Set Authentication Login Mode, if the **Access Code** login mode is selected it will display the rolling password fallback option screen.

Figure 5-11: Login Mode with Access Code

The screenshot shows the 'Advanced settings' window with the following configuration:

- Platform Log level:** debug
- Log suppression:** Enabled (toggle), with a note 'Log Suppression will turn on after 24 hours'.
- Force Display Size Algorithm (LAB usage Only):** Default
- Set Authentication Login Mode:** Access Code
- Current Code:** [Input field]
- New Code:** [Input field]
- Confirm New Code:** [Input field] (with subtext 'Type the new code again')
- Allow Rolling Password as Secondary Access Method:** Yes (toggle)
- Buttons:** Cancel, Save, Close

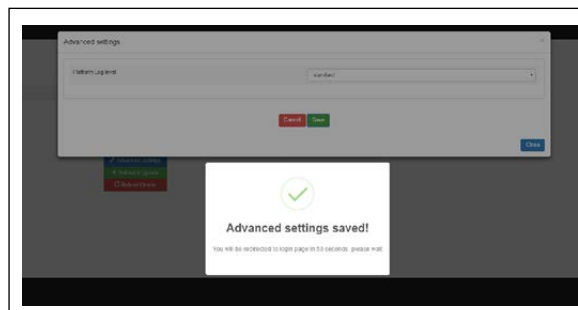
Figure 5-12: Login Mode with Rolling Password Selected

The screenshot shows the 'Advanced settings' dialog box with the following configuration:

- Platform Log level: debug
- Log suppression: Enabled (with a slider set to 24 hours)
- Force Display Size Algorithm (LAB usage Only): Default
- Set Authentication Login Mode: Rolling Password

At the bottom of the dialog are 'Cancel' and 'Save' buttons, and a 'Close' button in the bottom right corner.

After setting the desired values, click **Save**. Advanced settings will be saved.

Figure 5-13: Saving Advanced Settings

Set Date and Time

The Set Date and Time page allows to set the date, time and time zone of the Omnia system. From the Set Date and Time page, you can configure the NTP server settings and disable, if not required.

Note: If the device is connected to Internet and the public NTP URLs are reachable, then the date and time are automatically synchronized.

Figure 5-14: Setting Date And Time (if Enabling NTP)

Set Date And Time

Timezone

(UTC -05:00) Eastern Time (US & Canada) - Detroit, Montreal, New York, Toronto

Date And Time

01/27/2025 11:42 AM

NTP

Enable NTP

NTP Servers

Use defaults

NTP servers (default or custom) must be reachable from the device.

Close

Save

Field	Configuration Settings
Date And Time	Current time (not available if NTP is enabled because the time is synced with NTP Server).
Timezone	Region of the globe that observes a uniform standard time.
NTP	• ENABLE NTP (Omnia automatically syncs date and time with configured NTP server/s). • DISABLE NTP (Omnia uses system clock configured).
NTP Servers	Configure this parameter following customer IT requirement: use default server list or configure customer specific NTP servers IP address.

Notes: 1) If NTP servers are not available at the time of registration, manually set the date and time, and then re-enable NTP for future sync.
2) Verify that the LED on the homepage is green after setting the date and time.

 **WARNING**

If LED is not lit green, the Insite360 functionality will be impacted.

Software Update

From the Software Update page, you can update the Omnia software: Core-Firmware, TW Proxy, CloudApp, and RTP Proxy.

Accessing Omnia from the Backroom

After the Omnia is configured and if it is on a site LAN, it can be accessed from the backroom. To access the Omnia, use the external IP of A or B side OPT, followed by “:3000”. For example, 10.5.55.71:3000. From there, you can perform Omnia maintenance functions that do not require opening the dispenser, such as software upgrades, and log retrieval. Ensure that you cone off the dispenser that is impacted.

IMPORTANT INFORMATION



Rebooting or power cycling the Omnia while a software update is in progress could potentially make the Omnia inoperative, and a PCB replacement might be required.

Requirements for Software Update

The software update page allows you to upload a zip file (zipped) that contains multiple debian signed packages. The software must be uploaded in a zipped format. Only use the zip file provided by Gilbarco to update the software (extranet). The zip file must not be extracted and should be uploaded as it is.

Expectations for the Software Update Process

- 1 The software upgrade process takes approximately 20-25 minutes.
- 2 After 12 minutes has passed, the dispenser goes offline from the forecourt. The pump flashes an error code 50. After 8-10 more minutes, the dispenser comes back online.
- 3 [Figure 5-17](#) on [page 5-14](#) shows the message that indicates when the software update is completed. Reboot to continue.



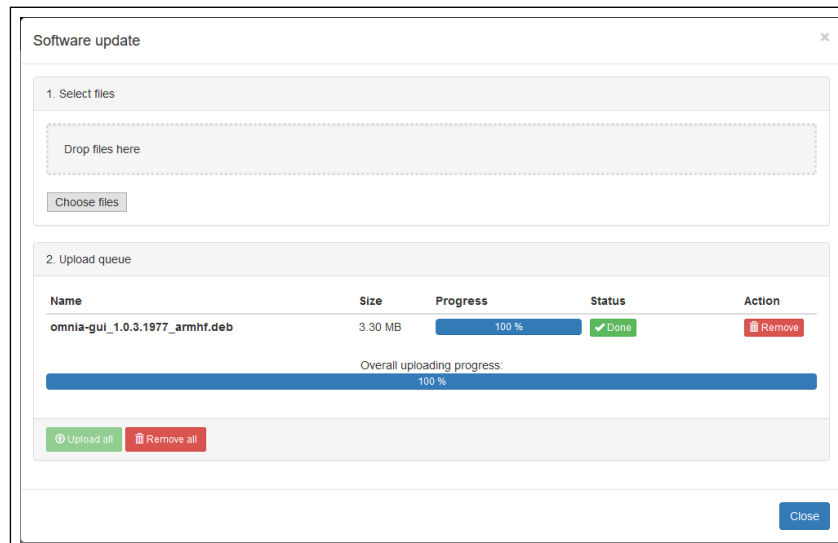
WARNING

1. Do not drag and drop entire folders.
2. Do not drag and drop files from archive explorer applications, which can cause installation failures.

To update the software, proceed as follows:

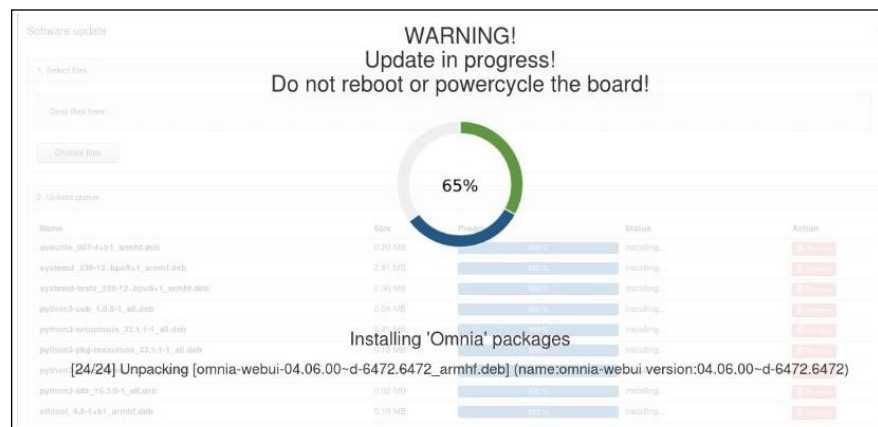
- 1 Select zip file.

Figure 5-15: Software Update - Upload Queue



- 2 Wait until the Omnia packages are installed.

Figure 5-16: Software Update – Waiting Screen



Note: From this point, the upgrade process takes approximately 20-22 minutes.

- 3 After 12 minutes has passed, the dispenser goes offline from the forecourt.
- 4 If an Error Code 50 is displayed, wait. It should clear when communication is re-established with the POS.

- 5 After 8-10 more minutes, the dispenser comes back online. [Figure 5-17](#) shows the message that indicates when the software update is completed. Reboot to continue.

Figure 5-17: Software Update Successful Completion Message

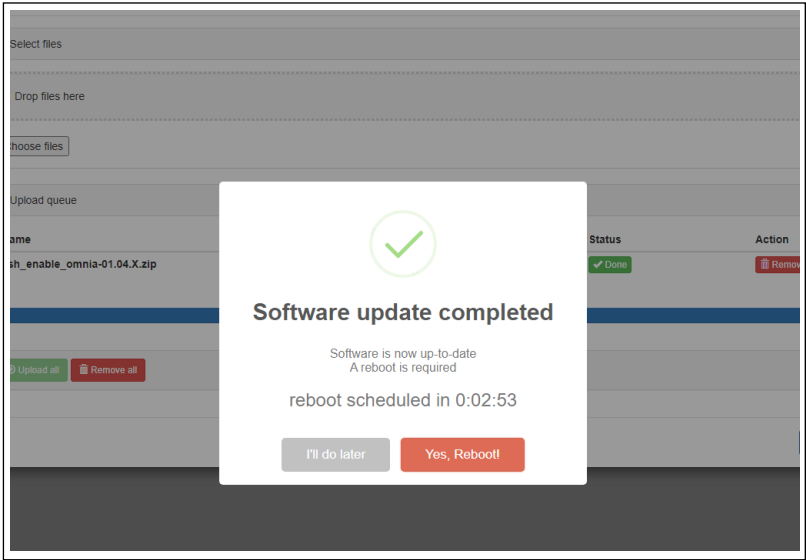
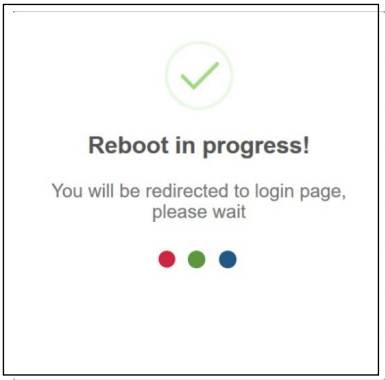


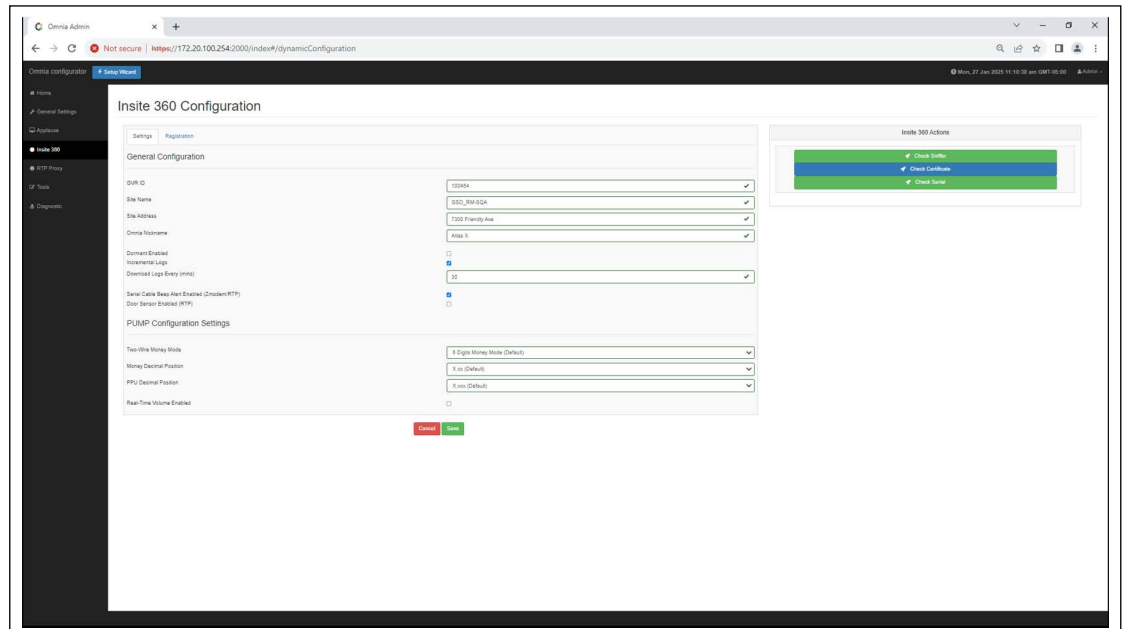
Figure 5-18: Initiating Reboot Message



- 6 After the Omnia reboots, you are prompted to log in.

- On the Insite 360 Configuration page, verify the status of the **Dormant Enabled** check box and configure according to the customer's preference when registering the device to Insite360. If preference is unknown, set the **Dormant Enabled** check box to **clear** (not enabled).

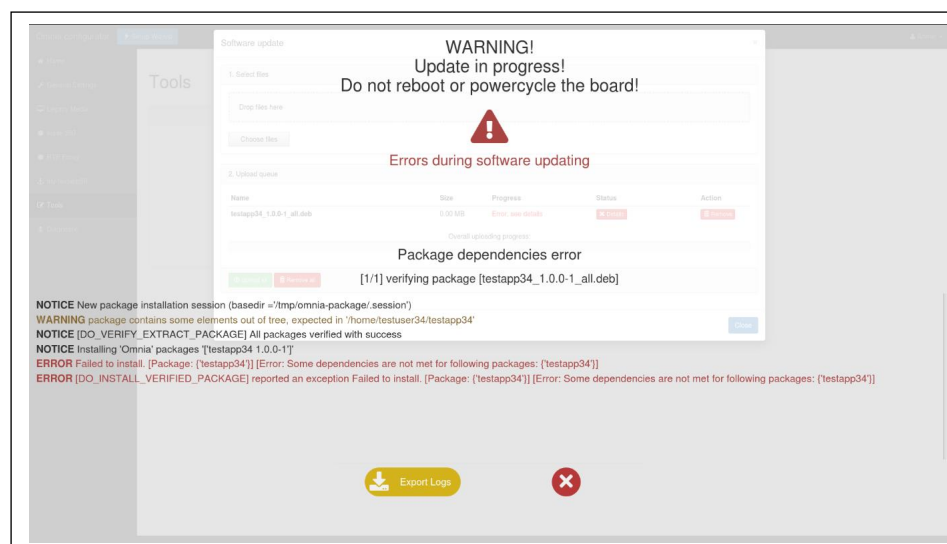
Figure 5-19: Insite 360 Configuration



Troubleshooting Software Update Error Messages

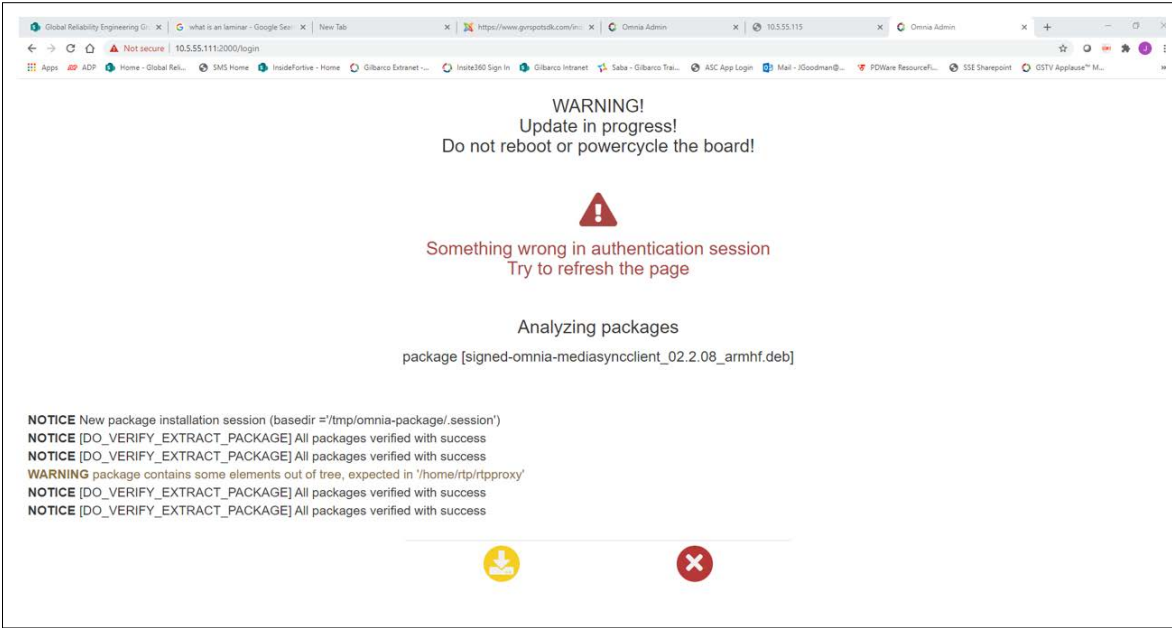
In case of errors in the software update, the progress indicator stops and an error message is displayed. Export the installation logs using the Export Logs button and close the page.

Figure 5-20: Software Update Error



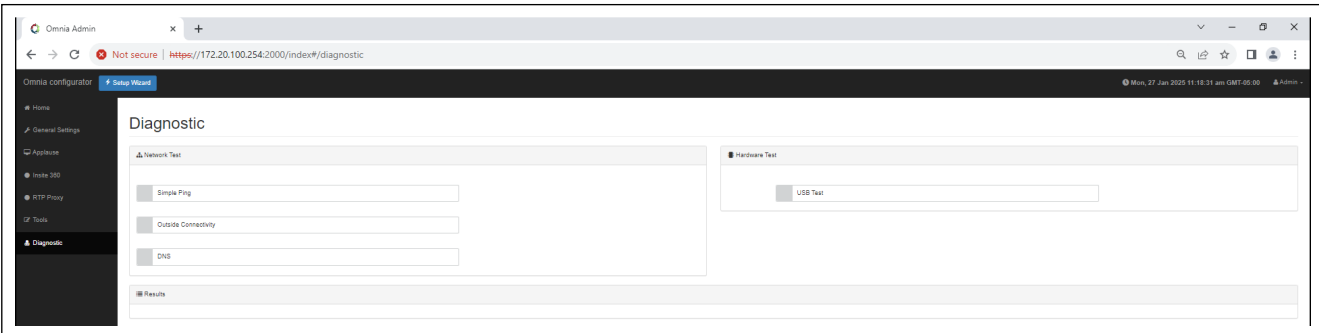
Note: A warning could be issued sometimes due to loss of synchronization between WebUI and installing process (see [Figure 5-21](#)). Updates in background continue even if the error is present. Refresh the page to restore the installation information.

Figure 5-21: Warning Authentication Session



Omnia Configurator - Diagnostic

Figure 5-22: Omnia Configurator - Diagnostic



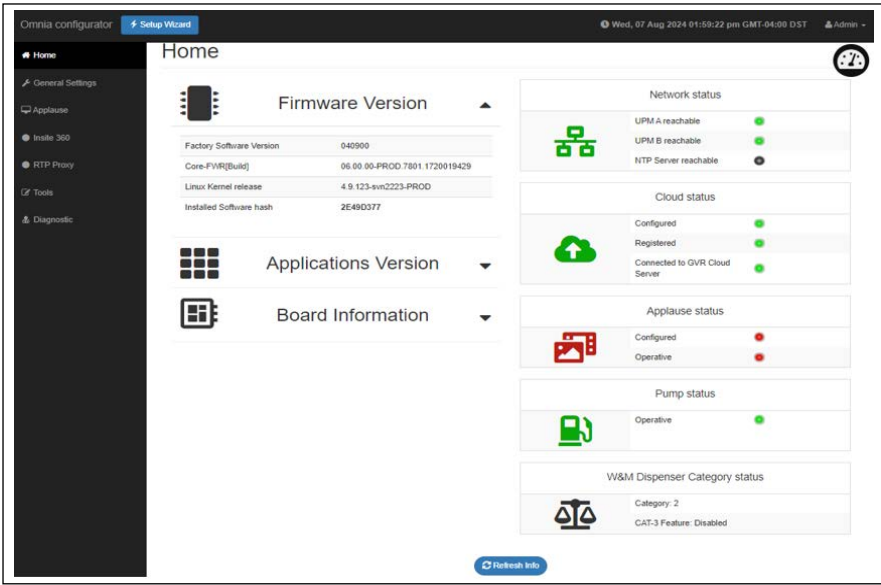
The Omnia Configurator - Diagnostic page includes the following:

Section	Tabs / Button
Simple Ping	Ping Test. Select Manual Gateway or Applause server.
Outside Connectivity	Connectivity test to AWS Server.
DNS	DNS test for - device.sandbox.gilbarco.com - registration.sandbox.gilbarco.com - transfer.sandbox.gilbarco.com
USB Test	Perform Omnia USB Test with flash drive.

6 – Troubleshooting

Open the Omnia Home page to view the status of all connections at the bottom of the page.

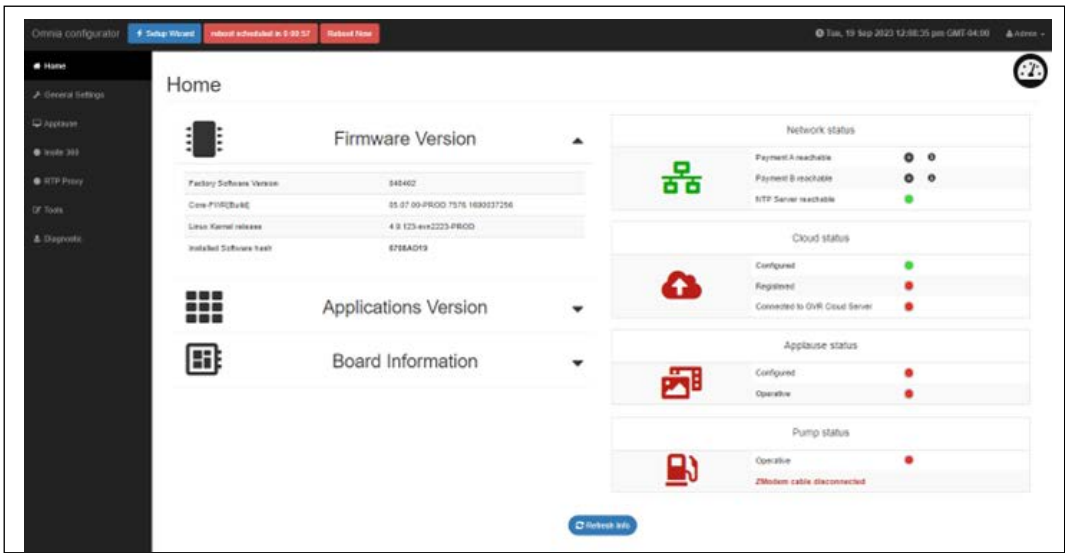
Figure 6-1: Omnia Home Page



Reboot Banner Status

If a reboot is scheduled, a button shows the remaining time to reboot and enables the user to reboot the board immediately. The label refreshing time is 1 min.

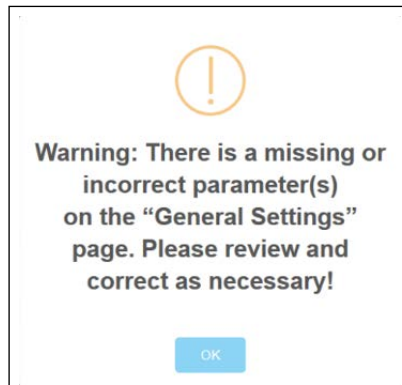
Figure 6-2: Status with Reboot Banner



General Settings Warning

If there is something wrong in the configuration file (due to a corruption or an incorrectly configured parameter) a popup will be displayed advising the user about the problem; a related banner is displayed on top of all pages until the problem is solved.

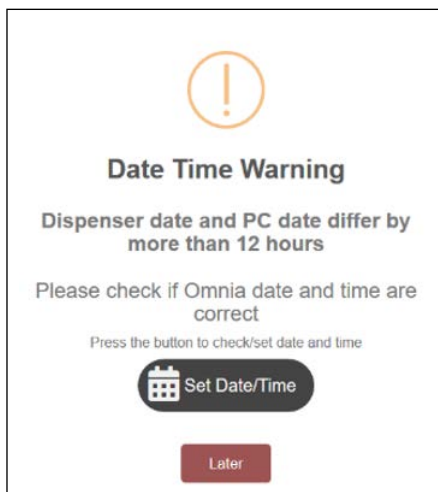
Figure 6-3: General Settings: Warning



Date Time Warning

At every login, the system compares the date/time on Omnia board with the local (user logged in computer) time. If the date/time information differs by more than 12 hours, a popup is displayed that redirects the user to the date/time configuration form. User can skip the date/time check and configure these controls later from the Tools page or by clicking the time banner on the top right of all pages.

Figure 6-4: Date Time Warning



Note: The warning is displayed in case of a mismatch between local date/time and Omnia date/time. If this banner appears, check the date and time on the PC that is connected.

Enabling and Disabling the Beeper Alarm from the Web UI

To enable or disable the beeper alarm from the Web UI, proceed as follows:

- 1 Log in to the Web UI.
- 2 Click **Insite 360** on the left menu.
- 3 Select or clear the check box for **Serial Cable Beep Alert Enabled**.
Note: If you try to disable the alarm with the cable connected, the beep alert will re-enable automatically after approximately 5 seconds.
- 4 Click **Save**.

Figure 6-5: Enabling or Disabling the Beeper Alarm

The screenshot displays the 'Insite 360 Configuration' web interface. The left sidebar shows a navigation menu with 'Insite 360' selected. The main content area is titled 'Insite 360 Configuration' and has two tabs: 'Settings' and 'Registration'. The 'Settings' tab is active, showing various configuration sections. In the 'General Configuration' section, the 'Serial Cable Beep Alert Enabled (Zmodem/RTF)' checkbox is checked. Other sections include 'PUMP Configuration Settings' and 'CRIND Configuration Settings'. On the right side, there is a panel titled 'Insite 360 Actions' with three buttons: 'Check Sniffer', 'Check Certificate', and 'Check Serial'. A red banner at the top of the interface indicates 'Serial cable is disconnected!'. The bottom of the page has 'Cancel' and 'Save' buttons.

Pump Serial Cable Disconnect Alarm

This section explains the Pump serial cable disconnect alarm designed to diagnose and report the disconnection of the serial cable to the pump. Omnia has an alarm that gives an audible and visible feedback in case the serial cable to the pump is left disconnected.

The system will report a disconnected pump serial cable in case:

- Omnia is registered to Insite360
- Pump type is rtp-serial or ZModem

The system reports the disconnection of the serial cable by:

- Audible beep
- Banner on Web UI
- Event sent to Insite360

The beep alarm is a repeated sequence of 3-second beep followed by 5 second of silence.

ASC can disable the audible feedback both from the Web UI and Insite360 by setting the “Serial Cable Beep Alert Enabled” parameter to false. The default value for the parameter is true. After the cable is connected, the beeper alarm is re-enabled automatically after approximately 5 seconds.

When the beep is disabled, the banner on the Web UI and Insite360 events remains visible to alert the ASC about the wrong serial connection.

Serial Cable Disconnected Banner Error

If the Z-modem (serial) cable to the pump is disconnected, a banner is displayed on the top of all pages in the Omnia Web UI.

Insite360 Forecourt Dispenser Troubleshooting

Insite360 Forecourt Dispenser Troubleshooting			
Component	Symptom	Probable Cause	Steps to Resolve
	Registration KO- "Error: Exec Error (1)	Internal devices not communicating to Omnia. Wrong IP addresses programmed either on the Omnia or device itself, Physical connection to devices.	Check the virtual LEDs on the "Home" tab at the bottom of the page of the Omnia Web UI to see which device is not communicating with Omnia. If all device LEDs are green, then it could be a network connectivity issue. Ensure that all Gilbarco Host names are whitelisted (transfer.gilbarco.com, registration.gilbarco.com, and device.gilbarco.com). Ensure that the DNS settings are correct. Use Telnet and/or TraceRT troubleshooting tools to confirm internet connectivity. If Telnet passes, possible bad Omnia. Replace hardware.
	Registration error "Cannot update registration information. Contact support- Registration cannot be completed. Try unregistering and register back again"	Duplicate IP Addresses, Local IDs or fueling positions	Check Omnia configuration and verify no duplicated local IDs, IP addresses or fueling positions on the site.
	Pre-Registration KO- Device type was not found in SMS- error=get_phantom_device_from_fms. Unable to find phantom serial for the device.	Site is not set up properly in SMS	Call TAC to escalate to provisioning team to resolve issue.
	Dispenser was successfully registered but it is not showing on Portal	Dispenser registered to wrong site; check GVR ID. Delay in devices populating to portal dashboard - View site devices from the Device tab; if not showing, check site details and GVR ID used to register. Possible registration server glitch.	Call TAC.
	Registration Failure: "Duplicate Record"	Insite360 Database Issue	Call TAC to escalate to Gilbarco Cloud engineering.
			
	After registering Omnia to Insite360 successfully, all the devices go into a "not connected" state on IS360 (orange status)	Omnia- Either date and time is programmed wrong or device server is not whitelisted.	Check date and time of Omnia. Ensure that the device.gilbarco.com is whitelisted in the site's network router.
	Omnia registration error "Org.freesdesktop.Dbus.error.noreply"	Database error	Reload Omnia software.

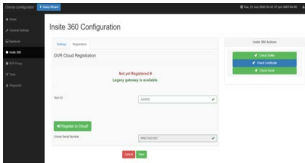
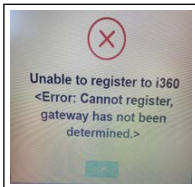
Insite360 Forecourt Dispenser Troubleshooting			
Component	Symptom	Probable Cause	Steps to Resolve
De-Registration	De-Registration Fails from the Web UI.	Cloud connectivity issues	Resolve any site connectivity issues and try again; call the Gilbarco Helpdesk to deregister device, if the issue is related to hardware problems.
zModem	"Check zModem" test failed.	zModem cable (defective, not seated properly, not connected) PCN software doesn't meet minimum requirements 3.3.19 Bad PCN or serial port.	Ensure the zModem cable is properly connected to the Omnia (P315) and on the PCN P1111. Try new zModem cable. Update PCN software (meets minimum requirements). <i>Note: If you service the PCN and the zModem cable is removed, ensure that you reconnect zModem cable or else many Remote Management features will not work. This will include replacing the PCN or using the laptop port (P1111) for pulling logs or downloading software, etc.</i>
Omnia	All Omnia boards unknown/ not connected in Cloud.	Site's Internet Service Provider offline. Recent changes to firewall rules and settings. BRCM2 or site router Issue. Direct Ethernet switch or router issue. Certificate within Omnia expired. If this occurs immediately after registration, check date and time on Omnia UI.	Check access to Internet from other devices at the site. Check functionality of BRCM2 and system routers and ensure connections are good. If site has direct Ethernet to dispensers, then check main network switch or router. If this occurs immediately after registration, check date and time on Omnia UI. Escalate to PSS if certificate expiration is suspected.
PCN	The PCN is not responding to Insite360 commands.		Verify ZMODEM cable is connected at P315 and on P1111 at the PCN.

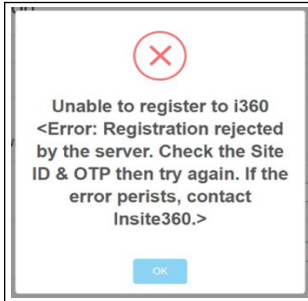
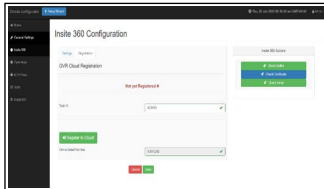
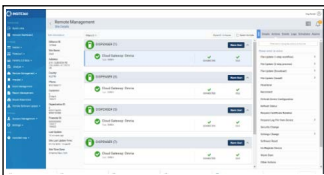
Omnia AtlasX Dispenser Troubleshooting

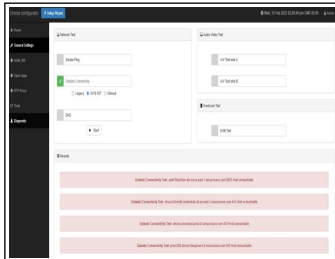
AWS IoT Registration Troubleshooting

Omnia AtlasX Dispenser Troubleshooting			
Component	Symptom	Probable Cause	Steps to Resolve
Omnia	- Cannot update software on Omnia. - Omnia time and date is lost (This could become a problem parsing logs to investigate problems).	- Battery jumper on Omnia PCB not installed properly. - Bad battery.	- The battery jumper on the Omnia PCB should be installed from the factory on crates and kits in the J3 (pins 17 and 18 position - top jumper in the J3 bank). - Set date and time on the board.
Insite360 Units	Cannot register the unit to GVR Cloud, but the Internet connectivity passes test.	Firewall blockers within the site network.	- Check for firewall blockers within the site's network (may require Site IT assistance). - Verify all 3 Gilbarco URLs can be hit from the back room. - To register Omnia to Insite360 Forecourt, the site must allow access to the 3 URLs (device.gilbarco.com, registration.gilbarco.com, and transfer.gilbarco.com) for registration to occur. Ensure that these websites are white-listed. - Verify proper site connectivity in the back room (router configurations, etc.). <i>Note: You can connect your laptop to the BRCM2 or BRCM2.1 or connect at Service Port on Omnia PCB. Ensure to make proper settings to your laptop. For example, the Default Gateway to back room, etc. must be set.</i>
	Internet connectivity test does not pass.	Site connectivity issues.	- Check high-speed connection to the back room. - If the connectivity LEDs appear correct, double-check the gateway settings and primary DNS. - Move laptop to back room switch or to a free BRCM or BRCM2 port and try to connect to the Internet (example Google). - If everything fails, ensure that the site is allowing the required external Internet connections.
Pump Control Node	PCN not reachable on Insite360 Forecourt. Cannot remotely perform PCN resets, pull logs, etc. from the pump portion of Insite360.	ZMODEM connection improper.	Verify the ZMODEM connection from Omnia P315 to PCN Laptop Port P1111. This cable must be connected and reconnected after any service is performed on the unit.

Omnia AtlasX Dispenser Troubleshooting			
Component	Symptom	Probable Cause	Steps to Resolve
Omnia PCB	Omnia PCB not able to register.	Firewall access.	Verify that the MAC addresses of each device have been provided to the site IT personnel to allow them through the firewall.
	Can't Reach the Omnia programming web page from the BRCM 2.X (Back Room).		Default settings use 10.5.55.171:3000 to get to the Omnia Configuration Page (173, 175, 177, etc.) from the BRCM2 or BRCM2.1. <i>Note: The External IP Address could be customer specified, and not the recommended default 10.5.55.XX value. Two-wire Over IP must be enabled in Omnia General settings page.</i>
Remote Management	Cannot warm start dispenser remotely.	ZMODEM cable connection.	Check if the ZMODEM cable is properly connected.
	Omnia date and time is not automatically updated via Cloud.	Firewall access.	1 Check for firewall blockers within the site's network (may require Site IT assistance). 2 Verify that all of the NTP URLs can be reached from the back room: • 0.debian.pool.ntp.org • 1.debian.pool.ntp.org • 2.debian.pool.ntp.org • 3.debian.pool.ntp.org
	Alarms for remote door sensors are not visible in Insite360.	1 ZMODEM cable connection. 2 Pump connection type set incorrectly.	1 Ensure that the ZMODEM cable is properly connected. 2 From Insite360 Configuration page, ensure that Pump Serial Interface is set to RTP - Serial.

AWS IoT Registration Troubleshooting			
Component	Symptom	Probable Cause	Steps to Resolve
Registration from Omnia WebUI	AWS Registration failure (not available)	 	Due to no URLs or whitelisting issue or connectivity issue (from Omnia UI) If the message on the Insite360 Registration page shows "Legacy Gateway is available" or "No Gateway available" then there is a AWS URL issue or connectivity issue. Test connectivity by running ping test on the Diagnostic Page. Check with site's IT dept to confirm URLs are in place and set properly.

AWS IoT Registration Troubleshooting			
Component	Symptom	Probable Cause	Steps to Resolve
Registration from Omnia WebUI	Registration failure (From Omnia UI) AWS Gateway is available, but fails to register.		Due to provisioning issue, wrong GVR ID used, or OTP entered incorrectly (capital letters must be used). Ensure that the Omnia serial number prefix is capitalized and contains no spaces when entering into the ASC App. Verify that One Time Password is entered properly (ensure Caps Lock key is not on). Get another OTP, and verify that site was provisioned properly (Gilbarco must confirm this; check the Site Management to verify that site is in Insite360; verify provisioning via test links; verify GVR ID). Finally, verify that the GVR ID was entered correctly in WebUI.
Registration from Omnia WebUI	Registration to AWS is not available (no Gateway available message option)		Due to wrong Omnia Software, Registration Page message shows "Not yet registered", AWS compatible SW is not loaded. Install the Omnia 05.07 or higher to gain access to the AWS servers.
Registration from Omnia WebUI	Registration failure.	• Message returns "Device already registered in the Cloud". • Gilbarco did not remove old device from AWS IoT dashboard in Insite360. • Duplicate fueling positions are detected.	De-register the device from Insite360 and try again. Also, check if using the same FP of another device that is already registered. Verify using the correct GVR ID.
Registration from Omnia WebUI	Registering in Dormant Mode does not show any devices besides Omnia.		Disable the dormant mode, and then re-enable it after the device is updated on the dashboard.
Failure to register from AWS IoT Gateway.	"Unable to register to Insite360. Registration rejected by server" message is displayed.	Dispenser de-registration process must occur at both the dispenser and Insite360. De-register action at the dispenser only removes the communication certificates.	Contact Gilbarco TAC to de-register the dispenser on Insite360. Wrong GVR ID - Ensure that the correct GVR ID is being used; remove the old GVR ID, re-enter and then save configuration, and try to register again. OTP wrong - OTP entered incorrectly, Retry OTP at least 3 times, get new OTP, and ensure that the prefix letters in serial are in all caps when entering in the OTP tool. If device was previously registered to AWS - Contact Gilbarco to de-register the device from Insite360. Site Provisioning is not complete - Contact Gilbarco and request to check the Provisioning status.

AWS IoT Registration Troubleshooting			
Component	Symptom	Probable Cause	Steps to Resolve
WebUI	During the software install/ AWS Migration, it was found that after the SW updates, the WebUI connectivity LED was showing RED indicating no connectivity to the Insite360 Portal. The LED should be green when unit is properly connected. After investigation, it was found that Insite360 was in fact connected even though LED status was Red.	The LED is labeled "Connected to GVR Cloud Server".	Refresh the browser connected to WebUI. If problem persists, restart the Omnia Device (Initiate reboot through the Tools Page of the WebUI).
WebUI	Cannot connect to Device WebUI with laptop browser.	-	Make sure Laptop is set to proper IP Scheme. Clear cache on laptop. Switch to a different browser (Problems have been seen using Microsoft Edge), Try Chrome.
Insite360 Portal	Insite360 portal shows device not connected when device is connected. WebUI was showing Green LED Status, yet site was showing not connected on the Insite360 Portal.	-	Perform a "refresh status" or "refresh device config" command on the Actions Tab on the device to re-sync Device to Insite360. Refresh Status - This command requests immediate current status of each device/component. Refresh Device Configuration - This command requests full configuration of each device and component (i.e. SW Version, Programming, etc.).
Software Downloads via Insite360	Cannot download software to device (or any resource files)	-	Potential Customer IT Issue - URL whitelisting issue or Network configuration.
Log Pull (Uploads) via Insite360	Unable to pull logs (uploads) from devices. WebUI diagnostics pass.	-	Potential Customer IT Issue - URL whitelisting issue or Network configuration. If connected to AWS, the time of the Omnia must be within 10 mins of site time; if not, it cannot retrieve logs. Ensure that the Omnia has access to NTP servers to keep the time accurate.
Diagnostics	General Migration and First Time Registrations Failures		Verify Device Configuration and run Diagnostics Test.

De-Registration from AWS IoT Gateway

De-Registration from the AWS IoT Gateway is a two-step process:

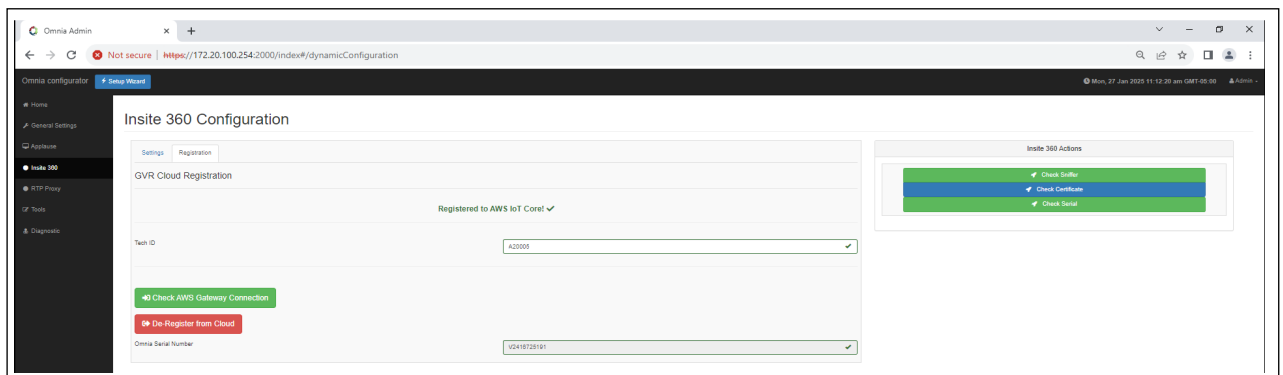
- De-Register the dispenser at the local dispenser registration screen.
- Un-Register the dispenser at the Remote Management portal.

The order of the two steps is not important, but both need to be completed. De-Registration from the dispenser removes the communication certificates inside the dispenser. The dispenser will be listed (not connected) in the Insite360 Remote Management portal. The second step is Un-Register the dispenser at the Remote Management portal (this action only removes the dispenser from the Remote Management portal). If the De-Registration locally at the dispenser was not performed, the dispenser will think that it is still registered but the AWS IoT Gateway will deny the connection. The step to Un-Register at the Remote Management portal completes the De-Registration action.

To De-Register a Dispenser from the AWS IoT Gateway:

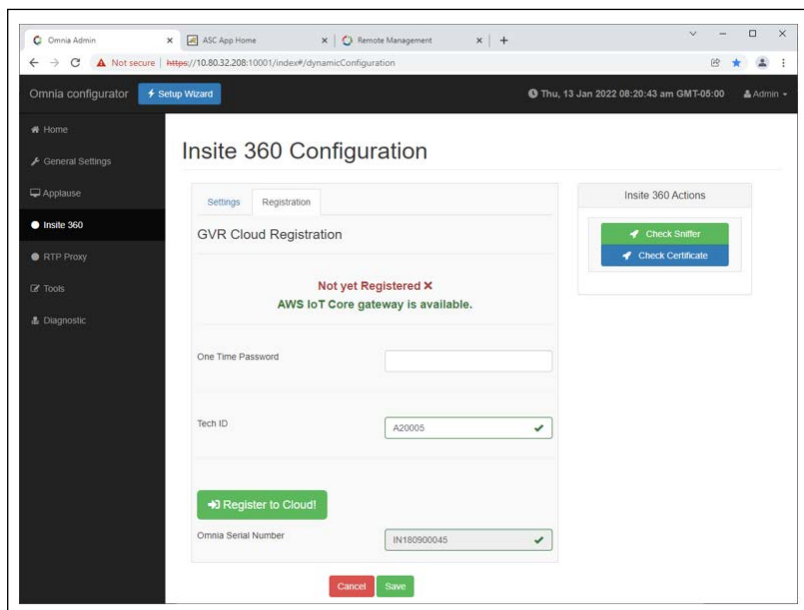
- 1 From the Insite 360 Configuration page, click **De-Register from Cloud**.

Figure 6-6: GVR Cloud Registration - De-Register from Cloud



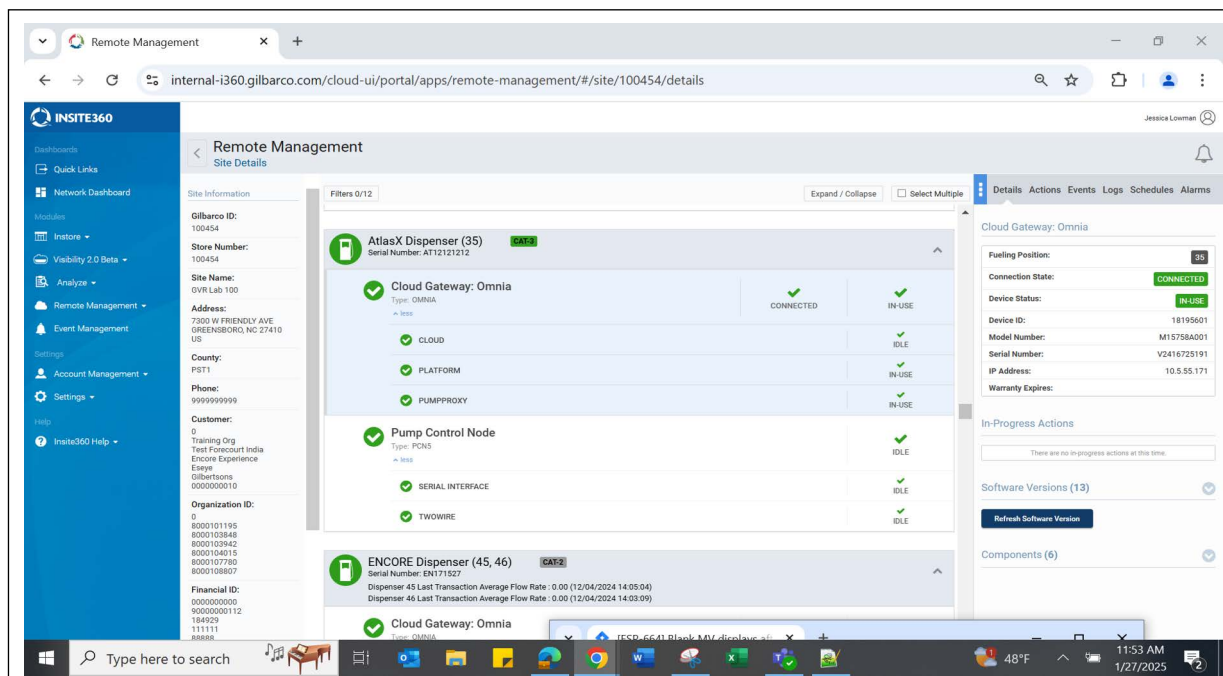
- The messages “Not Yet Registered” and “AWS IoT Core gateway is available” are displayed.

Figure 6-7: AWS IoT Core Gateway Message



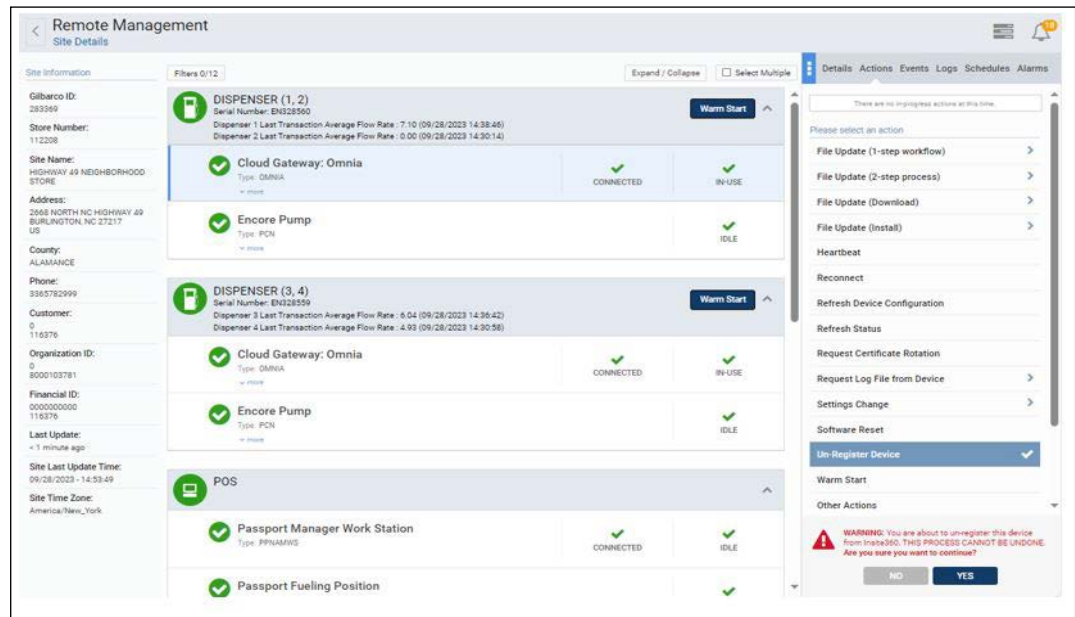
- From the Insite 360 Remote Management portal, go to the Dispenser that you want to Un-Register. The Cloud Gateway: Omnia device will display as “Not Connected” if the Omnia was de-registered from the Cloud only from the Omnia UI, but not the Insite 360 Forecourt portal.

Figure 6-8: Remote Management - Cloud Gateway: Omnia Device



- 4 In the right pane, select **Actions > Un-Register Device**, and click **Yes**.

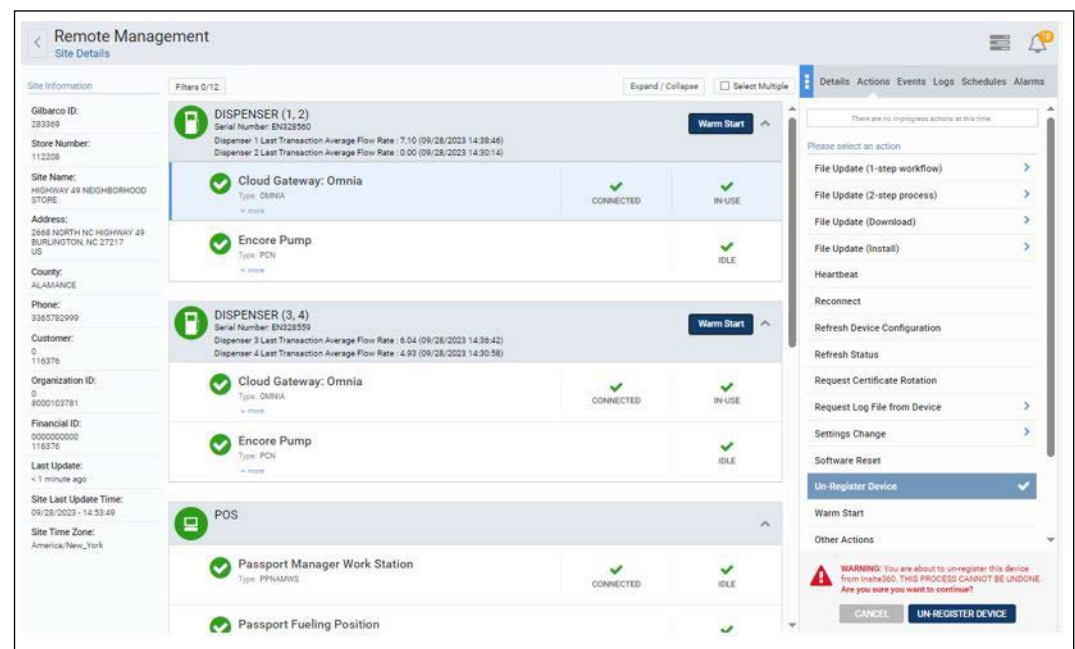
Figure 6-9: Remote Management - List of Actions



- 5 Click **UN-REGISTER DEVICE** to confirm.

Note: To register a device after de-registration, call TAC at 1-800-743-7501.

Figure 6-10: Remote Management - Un-Register Device - Confirm



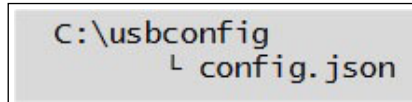
The dispenser is de-registered from the AWS Gateway and un-registered from Insite 360.

Retrieving the Omnia Network Configuration

The default IP address for the Omnia is 172.20.100.254. If it has been changed, you can use the following procedure to retrieve the current IP address:

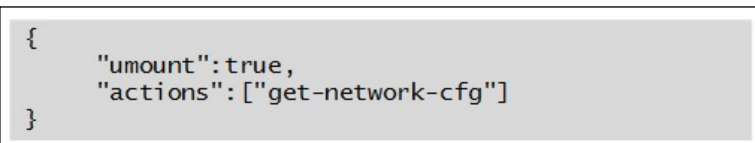
- 1 Create a folder on your Windows desktop with the name “usbconfig”. Create a sub-folder within it, with the name “config.json”.

Figure 6-11: usbconfig Folder



- 2 Using a text editor, such as Windows Notepad, type the following command exactly as shown in [Figure 6-12](#).

Figure 6-12: Command



- 3 Save the file as config.json to the Windows desktop.
- 4 Copy and paste the config.json file into the usbconfig folder.
- 5 Copy the usbconfig folder and its content to the root directory of an empty, FAT-formatted Universal Serial Bus (USB) stick.
- 6 Plug the USB stick into the USB J6301 of Omnia.

The board will automatically detect the USB storage and will create a file on it with the current networking configuration.

- 7 When the operation is completed successfully, the red LED under USB J6301 blinks. If an error is detected, the red LED turns solid ON.

Note: The results are stored in the following location: usbconfig\network-config-SERIALNUMBER.txt. The SERIALNUMBER is the serial number of the Omnia.

Resetting the Network Configuration to Factory Values

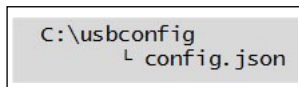
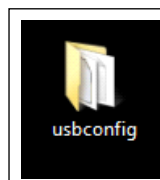
IMPORTANT INFORMATION



The procedure described below will modify the networking settings of the Omnia, potentially making the dispenser or the entire site temporarily inoperative!
Execute the procedure only under direction and supervision of Gilbarco Help Desk.

- 1 Create a folder on the Windows desktop with the name “usbconfig”. In that, create a file with the name “config.json”.

Figure 6-13: Creating Folder



- 2 Using an editor of your choice (For example, Windows Notepad), type the following command exactly as shown in [Figure 6-14](#).

Figure 6-14: Command

```
{
  "umount": true,
  "actions": ["network"]
}
```

- 3 Save the file as config.json to the Windows desktop.
- 4 Copy and paste the config.json file into the “usbconfig” folder.
- 5 Copy the usbconfig folder and its content in the root directory of an empty, FAT-formatted, USB drive.
- 6 Plug the USB drive into the USB connector of the Omnia.

The Omnia board automatically detects the file and command on the USB drive (reboot is not required) and then resets the network settings back to factory default Omnia IP address (172.20.100.254). The process takes no longer than 2 minutes. When the operation has finished, D28-D32 LEDs will be ON.

After completing the procedure, you can access the configuration web application using the default IP parameters and apply any changes to the Omnia configuration.

- 1 Reconfigure the PC network configuration as follows:
 - **IP:** 172.16.100.15
 - **Netmask:** 255.255.255.0
- 2 Connect a PC with a browser to service port.
- 3 Open a browser and type **http://172.20.100.254:3000/** in the address field.
- 4 Apply changes to the Omnia configuration as needed. Configure the Omnia network as follows:

External Omnia IP address

Address: 10.5.55.171

Netmask: 255.255.255.0

Internal Omnia IP address

Address: 172.20.100.254

Netmask: 255.255.255.0

Note: Netmask should be 255.255.255.0

Note: If the process was successful, a log file of the change will be automatically copied to the usbconfig.

- 5 Restore your PC network configuration.

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