



## **SMC Cloud**

### **Start-up Guide**

(Instructions for Field Installers, Support and Administrator)

#### **APPLICABILITY & EFFECTIVITY**

Explains SMC Cloud registration and use.

The instructions are effective for the above as of January 2018.

## Technical Support

Please call us for any technical support needs related to the FieldServer product.

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## **Assumptions**

The following items should be complete before moving forward with SMC Cloud registration.

- ✓ FieldServer products intended for SMC Cloud registration must already be installed and running.
- ✓ FieldServer Gateway(s) and/or Router(s) are connected to the internet.
- ✓ The manufacturer's SMC Cloud Administrator has already set up a SMC Cloud account.
- ✓ The field installer has received SMC Cloud login information from the SMC Cloud Administrator.

## A Quick Start Guide for Field Installation

### Connecting the FieldServer

- Type the FieldServer IP Address into a web browser.
- Once connected, the FS-GUI or customer applications will be displayed.

### Registering with SMC Cloud

- Obtain login details from support.
- Go to the SMC Cloud registration page and fill in ALL relevant information.
  - For **FS-GUI**, click the "FieldPoP™" button on the top right corner of the page.
  - For **customer application features**, click the "FieldPoP™" tab on the left side of the page.
  - For the BACnet Router, EZ Gateway Modbus to BACnet and EZ Gateway KNX to BACnet, click the "FieldPoP™" tab along the top of the page

### Logging into SMC Cloud

- Go to [www.fieldpop.io](http://www.fieldpop.io) and type in the appropriate login information as per registration login.
- Confirm the registered FieldServer is viewable from the Device Management tab.

### Using SMC Cloud Features

- |                                |                             |
|--------------------------------|-----------------------------|
| • Device Management            | • Reports                   |
| • User Management (Admin only) | • Audit Logging             |
| • Notifications                | • Data Logging (Admin only) |

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## 1 CONNECTING TO FIELDSEVER (FOR FIELD INSTALLERS)

Find the supplied IP Address for the FieldServer and type the IP Address into the local PC's browser address bar to move onto registering the FieldServer. (**Section 2**)

**NOTE:** The default IP Address for a ProtoAir, BACnet Explorer NG, ProtoNode, ProtoCarrier or ProtoCessor are 192.168.1.24 with a Subnet Mask of 255.255.255.0. All other FieldServer gateways have a default IP Address of 192.168.2.101 with a Subnet Mask of 255.255.255.0. If the PC and FieldServer have different Subnets, assign a static IP Address to the PC on the 192.168.1.xxx network.

If the FieldServer IP Address is unknown, follow the directions to discover an existing IP Address in the next section (**Section 1.1**).

To view or change the FieldServer network settings, follow directions in **Section 1.2**.

**NOTE:** The SMC Cloud uses TCP ports 80 and 443 by default.

### 1.1 Discover the IP Address of the FieldServer

- Check that a CAT5 Ethernet cable (straight through or cross-over) is connected between the local PC and FieldServer or the local PC is connected to the same Ethernet Network as the FieldServer.
- Ensure that FieldServer Toolbox is loaded onto the local PC. Otherwise, download the FieldServer-Toolbox.zip via the Sierra Monitor Resource Center [Software Downloads](#).
- Extract the executable file and complete the installation.
- Double click on the FS Toolbox Utility and click Discover Now on the splash page.
- Check the FieldServer IP Addresses from the device listings.

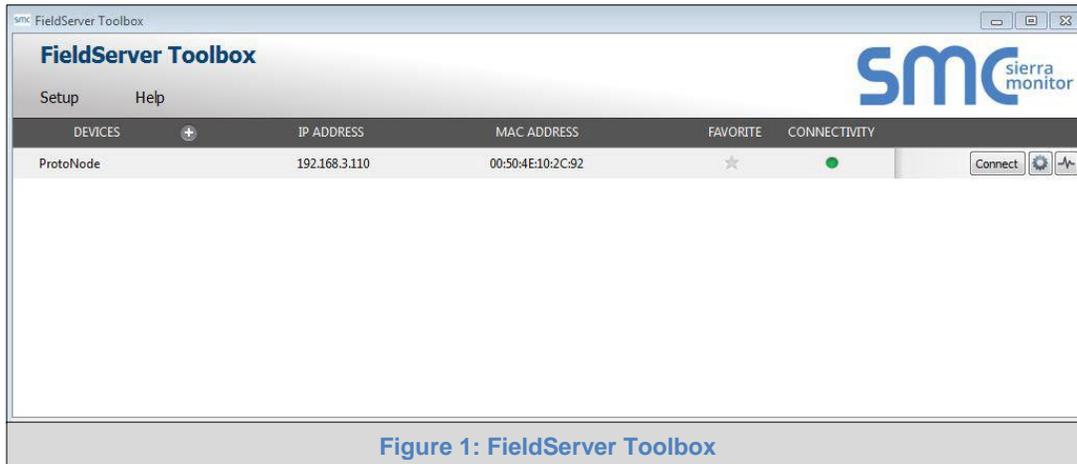


Figure 1: FieldServer Toolbox

- Type the appropriate IP Address into the browser address bar or click the Connect button to move onto registering the FieldServer (**Section 2**).

## 1.2 Change Network Settings for the FieldServer

- Follow the FieldServer Toolbox setup instructions in **Section 1.1** if needed.
- Once the FieldServer Toolbox is open, find the FieldServer that requires network setting review or changes.
- From the Toolbox main page, click on the configure icon (the gear picture).

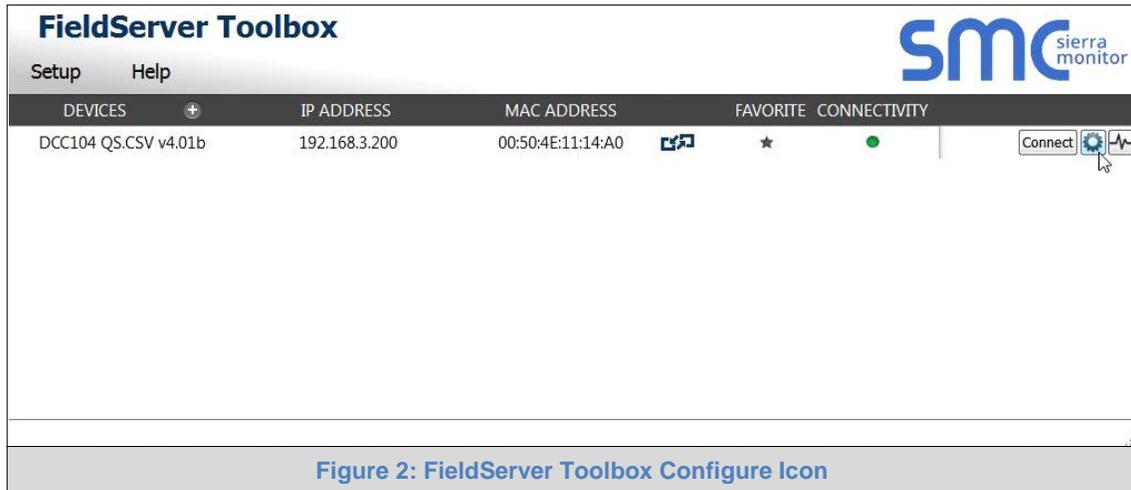


Figure 2: FieldServer Toolbox Configure Icon

- Select Network Settings.

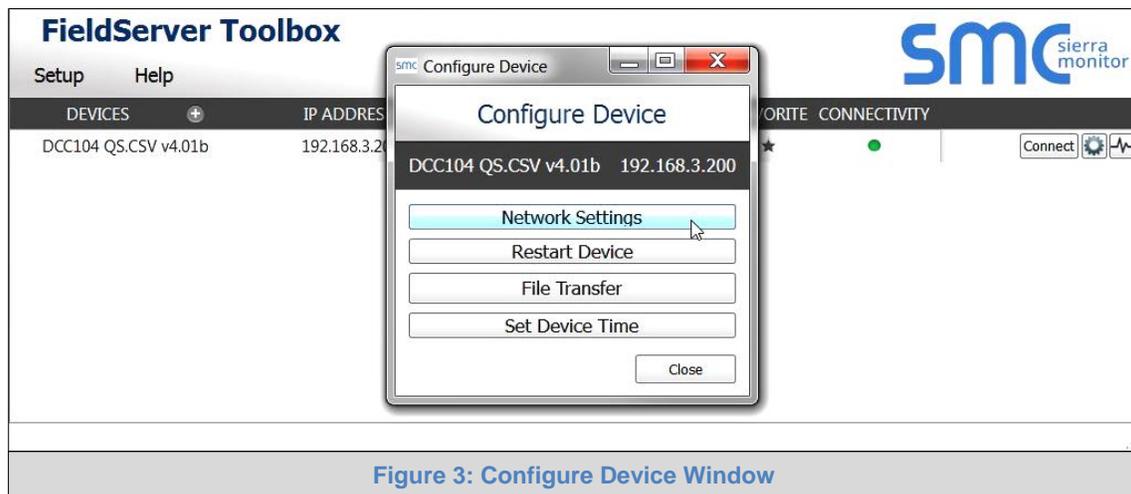


Figure 3: Configure Device Window

- Review or modify the necessary network fields.

**NOTE:** If the FieldServer is connected to a router, the IP Gateway of the FieldServer should be set to the IP Address of that router.

- The following fields may be review or changed as needed:
  - IP Address (N1 IP Address field)
  - Netmask (N1 Netmask field)
  - DHCP Client State (N1 DHCP Client State field)
  - IP Gateway (Default Gateway field)
  - DNS 1 & 2 (Domain Name Server fields) – **Ensure DNS1 is 8.8.8.8 and DNS2 is 8.8.4.4**

**NOTE:** Do not change the DHCP Server State (N1 DHCP Server State field).

- Click “Update IP Settings”, then click on “Change and Restart” to restart the FieldServer and activate the new network settings. Note that if the FieldServer was open in a browser, the browser will need to be pointed to the new IP Address to access the FieldServer.

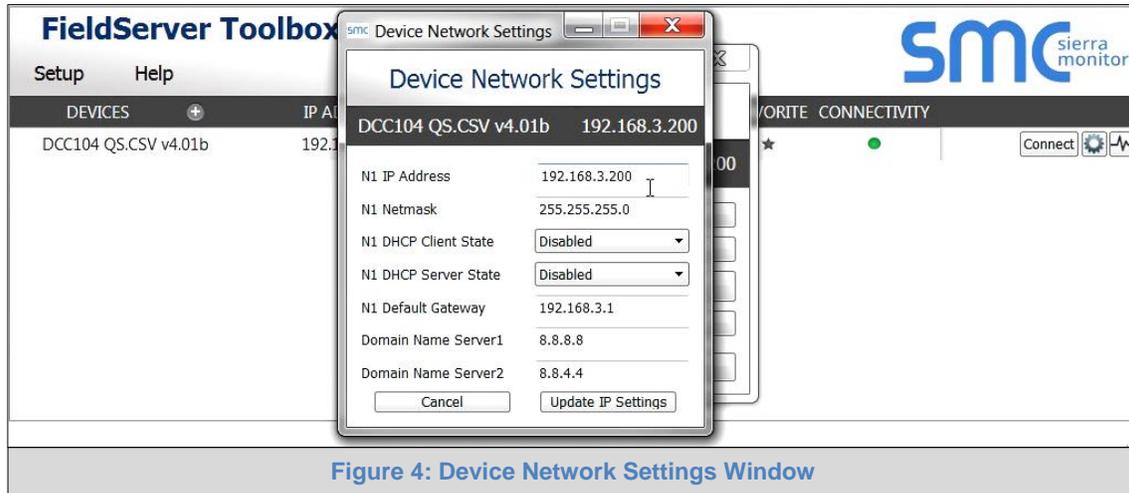


Figure 4: Device Network Settings Window

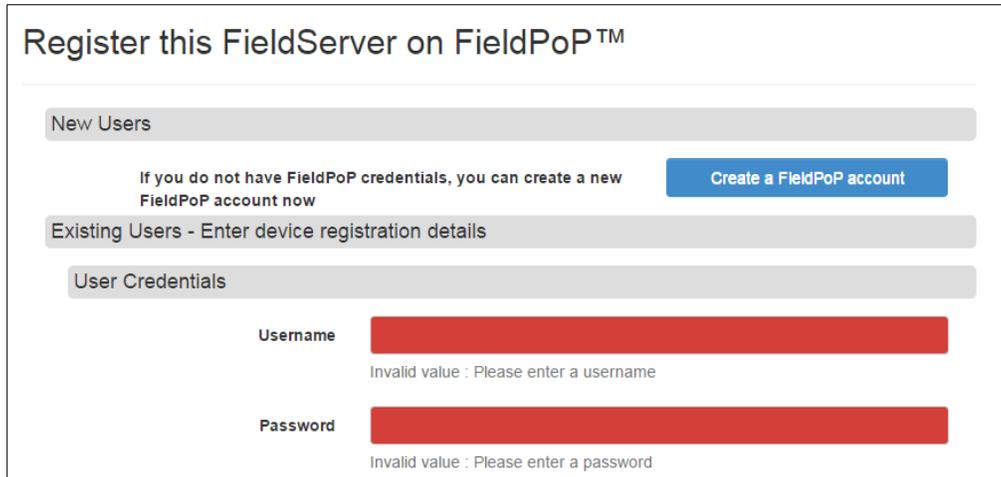
- Power cycle the FieldServer.
- Record the IP Address assigned to the ProtoNode for future reference.

## 2 REGISTERING AND LOGGING IN (FOR FIELD INSTALLERS)

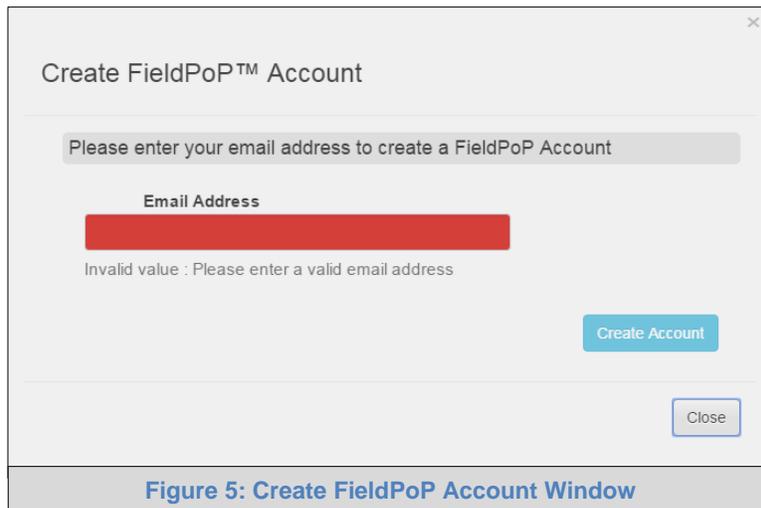
### 2.1 Create a SMC Cloud Account

An SMC Cloud account is required to register a device onto the SMC device cloud. If an SMC Cloud account has been previously setup or a “Welcome to FieldPoP” email was received, skip to **Section 2.2**.

- To create new SMC Cloud user credentials, follow the instructions in **Section 2.3** until the SMC Cloud registration page is reached (**Figure 14**) and then continue with the instructions below.



- Click the “Create a FieldPoP account” button, under the New Users heading.
- Enter the field installer’s email address into the window that appears.



- Click the “Create Account” button.
- Once this process is complete, continue to **Section 2.2.1** for new user setup instructions.

## 2.2 Login Details

If existing login details were received from the manufacturer’s support team, record the information and move on to **Section 2.3**. Otherwise continue to new user setup.

### 2.2.1 New User Setup

When a new user is generated, a “Welcome to FieldPoP” email will be automatically sent out to set up a login.

Follow the instructions below to set up login details:

- Find the “Welcome to FieldPoP” email.

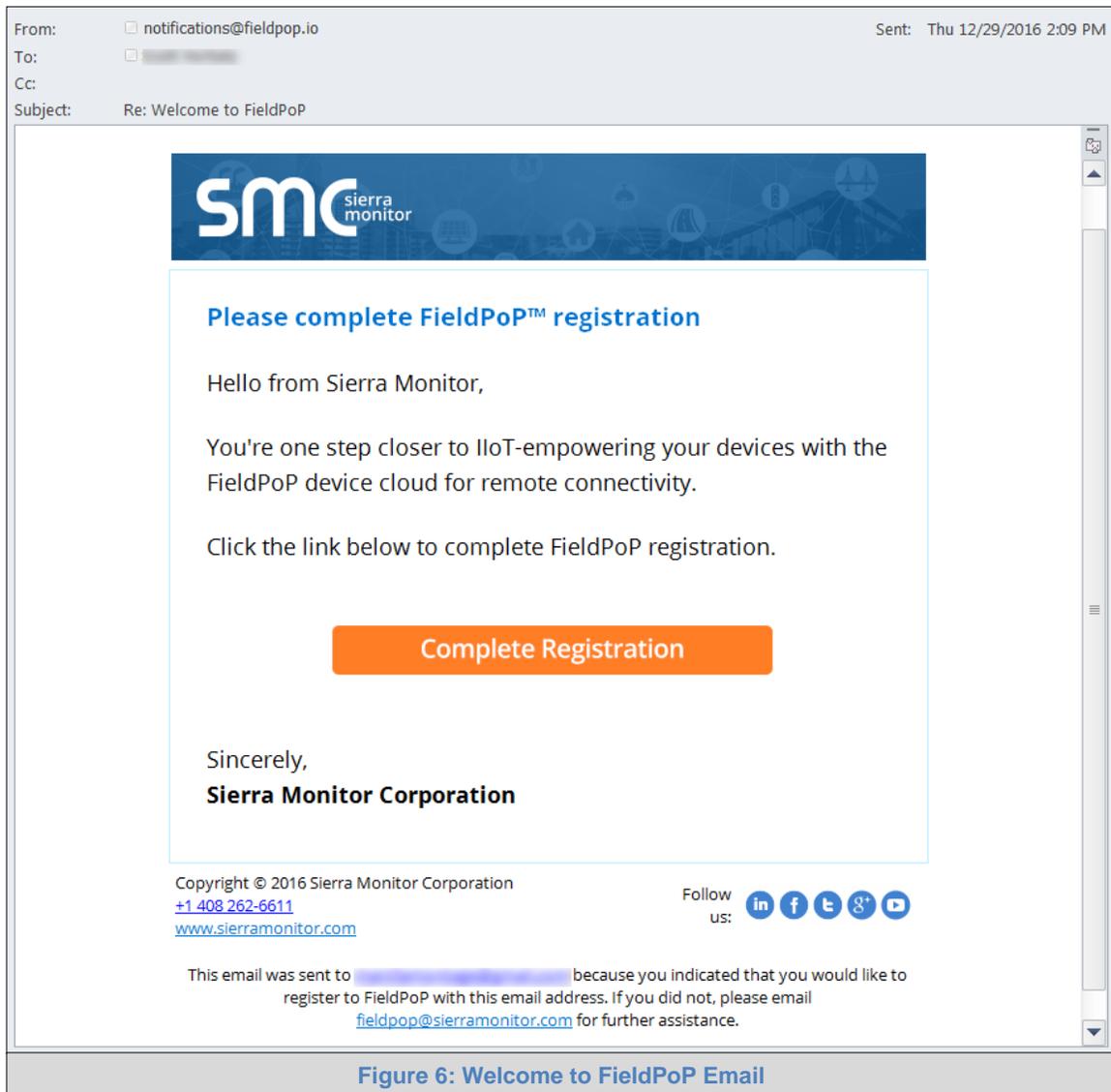
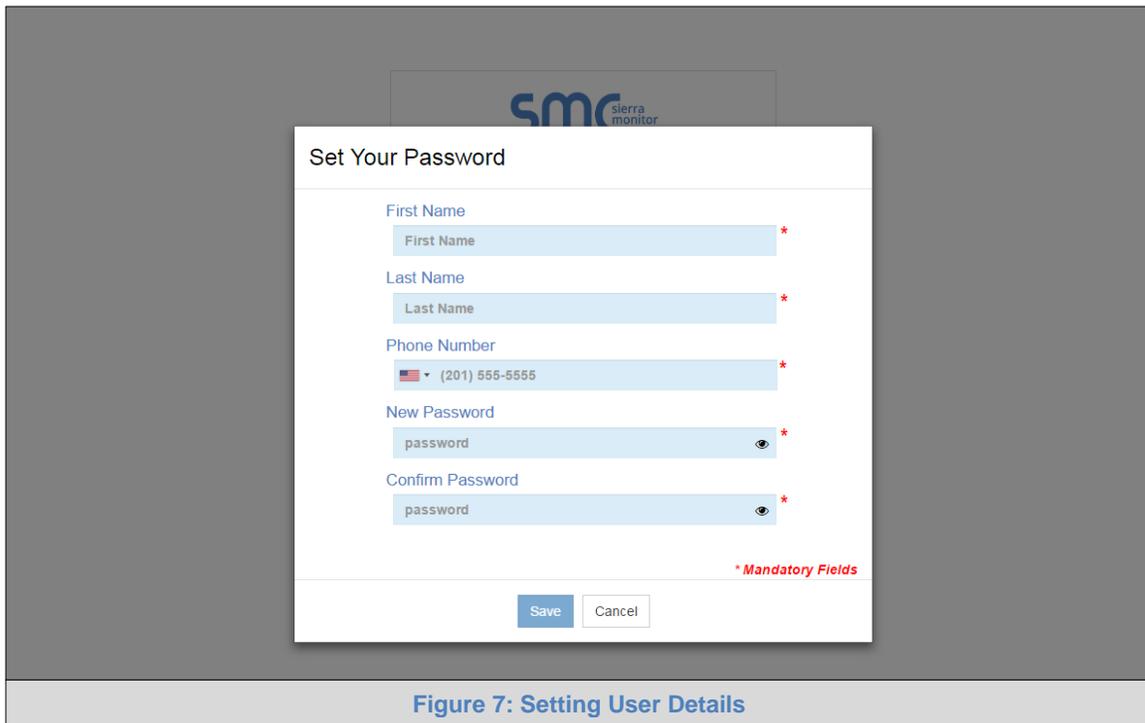


Figure 6: Welcome to FieldPoP Email

**NOTE:** If no FieldPoP email was received, check the spam/junk folder for an email from notification@fieldpop.io. Contact the manufacturer’s support team if the email cannot be found.

- Click the “Complete Registration” button to go to the SMC Cloud webpage and set up user details.



The screenshot shows a registration form titled "Set Your Password" with the SMC logo at the top. The form contains the following fields:

- First Name: A text input field with a red asterisk indicating it is mandatory.
- Last Name: A text input field with a red asterisk indicating it is mandatory.
- Phone Number: A text input field with a dropdown menu for country codes (currently showing a US flag) and a red asterisk indicating it is mandatory.
- New Password: A password input field with a red asterisk and an eye icon for visibility.
- Confirm Password: A password input field with a red asterisk and an eye icon for visibility.

At the bottom right of the form, there is a red asterisk followed by the text "\* Mandatory Fields". At the bottom center, there are two buttons: "Save" and "Cancel".

**Figure 7: Setting User Details**

- Fill in the name, phone number and password fields.
- Click “Save” to save the user details.
- Record the email account used and password for future use.

## 2.3 Registration Process

- Find the “FieldPoP™” icon using one of the cases described below:
  - On the FS-GUI screen, click the “FieldPoP™” icon on the top right corner of the page

**NOTE:** If the gateway opens on the Web Configurator page, the “Diagnostics and Debugging” button in the bottom right corner of the page must to clicked to access FS-GUI.



Figure 8: FS-GUI Screen

- For FieldServers with customer application features, BACnet Explorer and the EZ Gateway M-Bus to Modbus & BACnet, click the “FieldPoP™” tab on the left side of the page

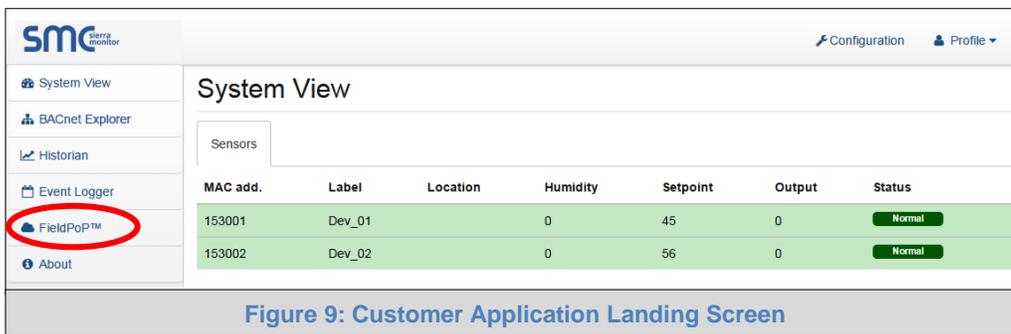


Figure 9: Customer Application Landing Screen

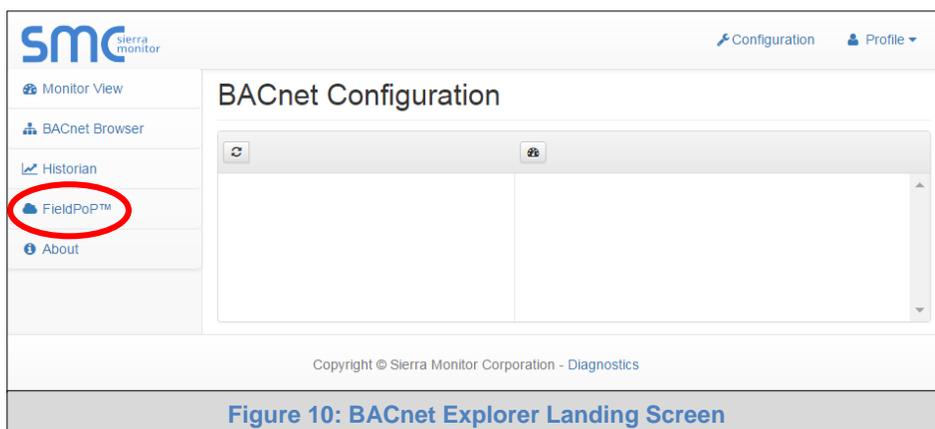


Figure 10: BACnet Explorer Landing Screen

- For the BACnet Router, EZ Gateway Modbus to BACnet and EZ Gateway KNX to BACnet, click the “FieldPoP™” tab along the top of the page

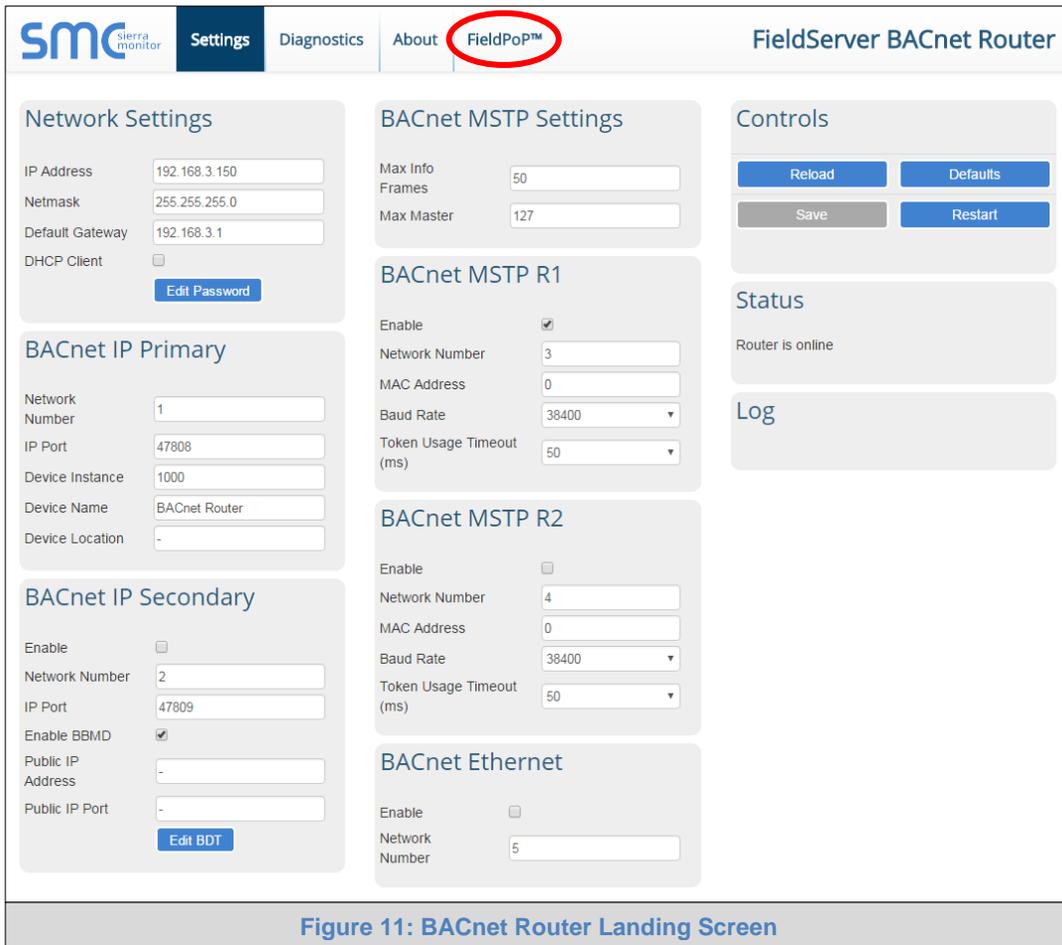


Figure 11: BACnet Router Landing Screen

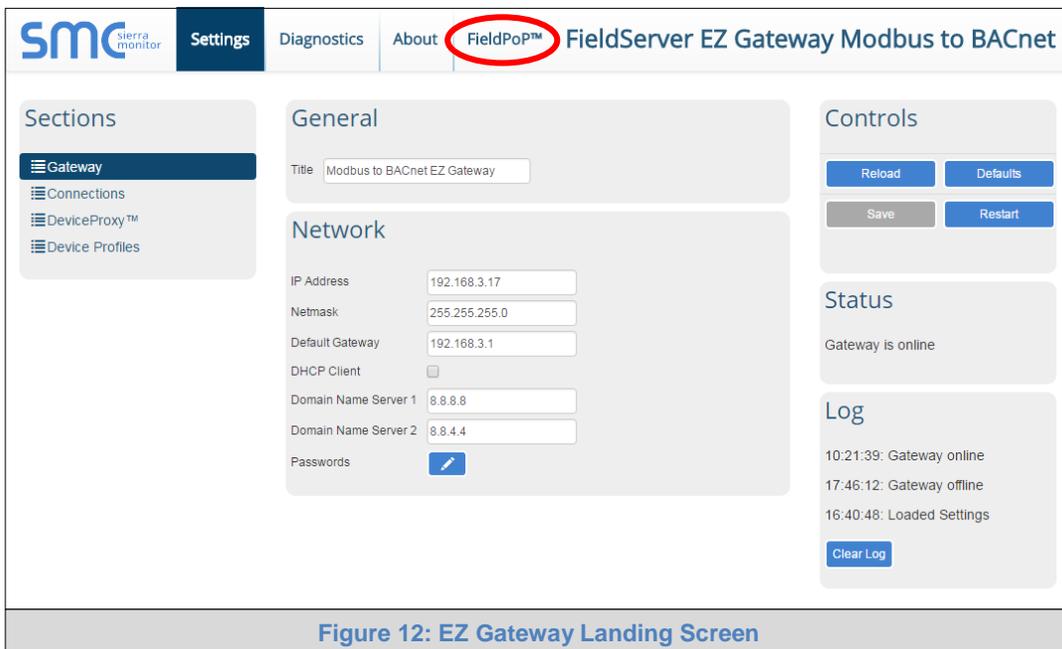
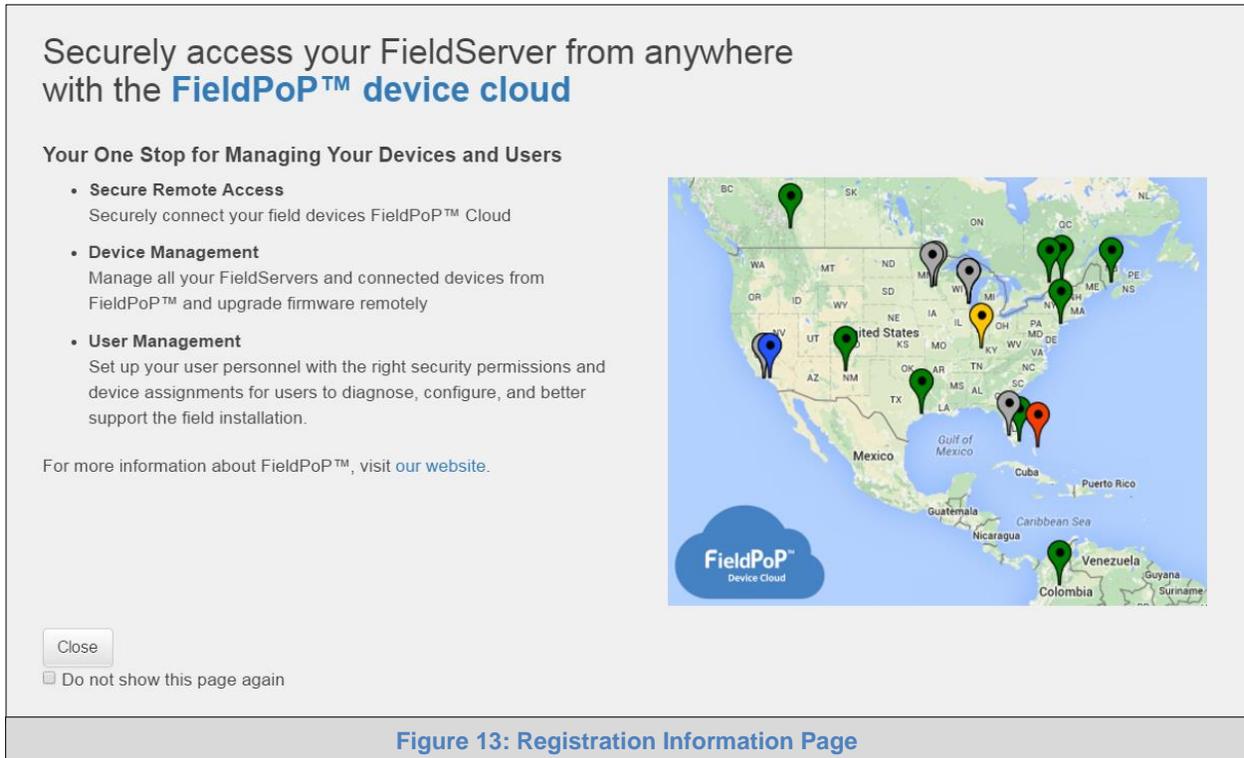


Figure 12: EZ Gateway Landing Screen

- The following informational splash page will appear, click “Close” to move on to register the device.



**NOTE:** If a warning message appears instead of the splash page, see [Appendix A.5](#).

- Fill in user credentials and all other Device information fields for registration of each individual FieldServer in the field.

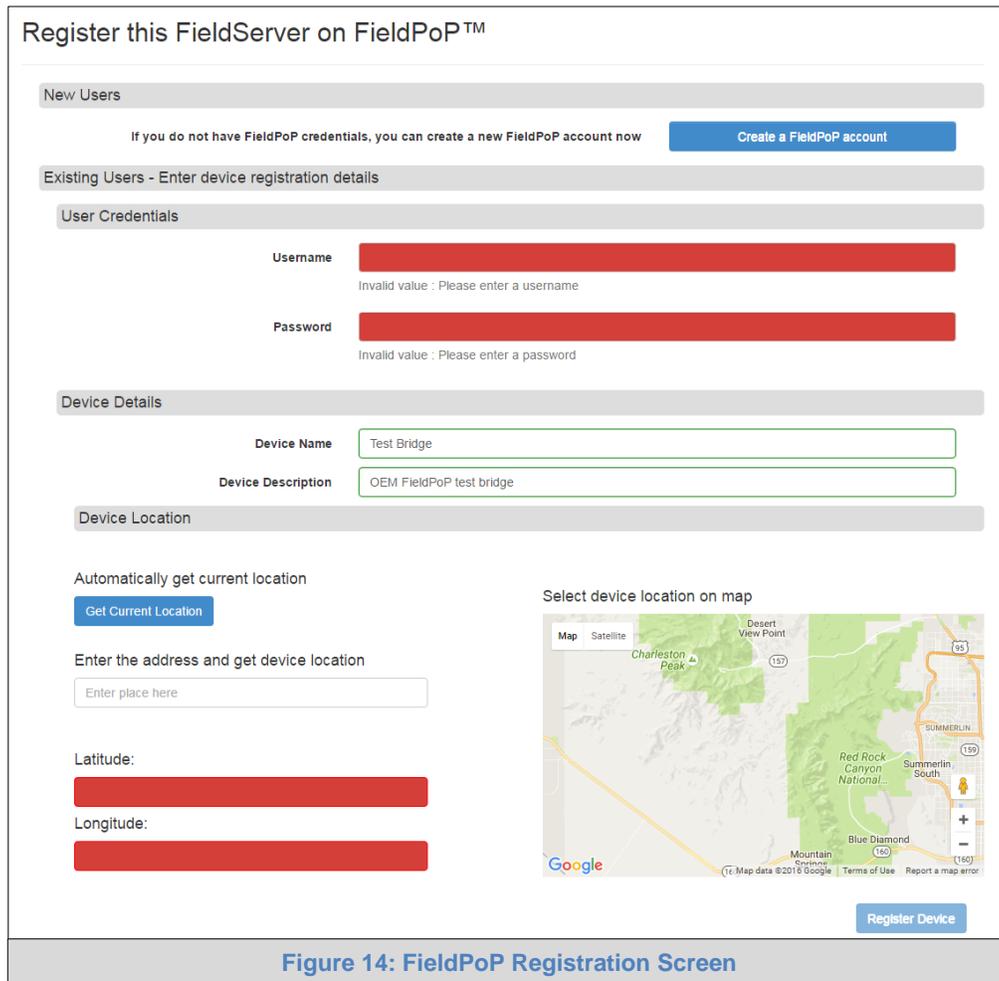


Figure 14: FieldPoP Registration Screen

- To input the FieldServer’s location do one of the following:
  - Enter the address in the address field
  - Click the “Get Current Location” button to auto-populate

**NOTE:** This button will only work if location services have been enabled on the local browser. If using the Chrome browser and connected via LAN, this method will not work.

- Drop a location directly on the google map
  - Enter the latitude and longitude manually
- Click Register Device button.

- Once you have successfully registered the device, the following screen will appear listing the device details and additional information auto-populated by the FieldServer.



## 2.4 Editing Device Details in the Field

To update device details after registration, do the following:

- In FS-GUI or customer application features, click on the FieldPoP icon to open the device's registration details (**Figure 16**).

Figure 16: Update Device Details Page

- Update Device Name and Device Description as needed.
- Update Device Location via one of four options:
  - Click the “Get Current Location” button to auto-generate location information
  - Enter an address to generate an approximate location
  - Type in the exact latitude and longitude of the device
  - Move the location (pin) directly on the google map
- Click “Update Device” to save the new settings or click “Cancel” to discard them.

## 2.5 Setting Time Zone

The time zone of the FieldServer should be set to generate accurate data.

- Navigate to the FS-GUI page using one of the following methods:
  - From Web Configurator – click the “Diagnostics and Debugging” button on the bottom right corner of the page

**NOTE:** The Web Configurator page shows the FieldServer parameters to configure. See gateway start-up guide for additional information.

- If there is no “Diagnostics and Debugging” button in the bottom right corner of the page, check for a “Diagnostics” tab along the top of the page or a “Diagnostics” link next to the Sierra Monitor Copyright statement at the bottom center of the page
- Click Setup on the navigation tree.
- Click “Time Settings”.
- Select the appropriate time zone then click Submit.

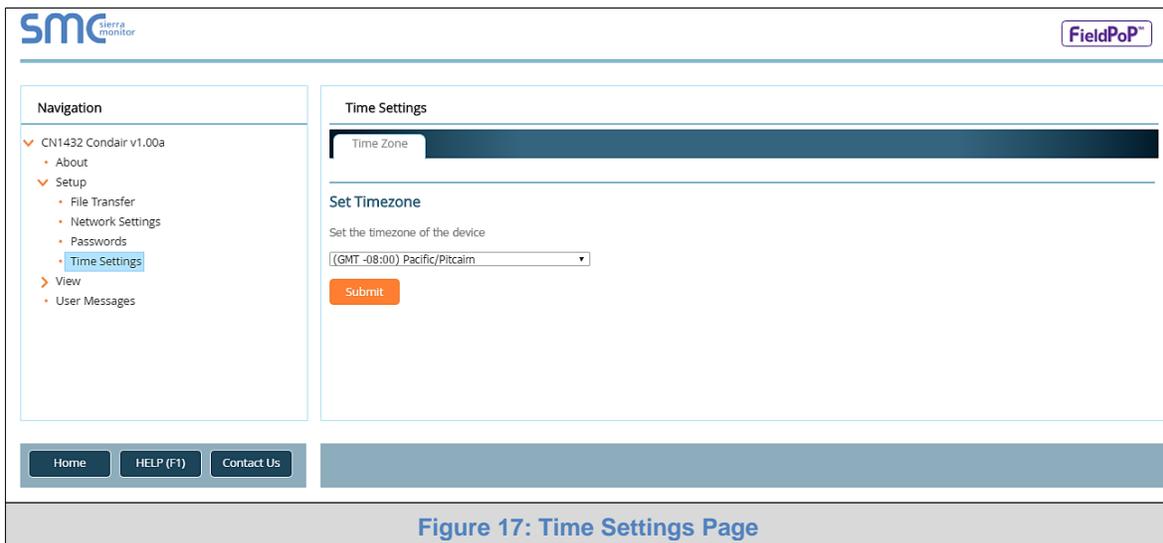


Figure 17: Time Settings Page

### 3 CUSTOMER APPLICATION FEATURES

System View, Historian and Event Logger are part of the optional Application Engine platform, which allows local applications to easily browse and manage FieldServer information or settings. These applications also have the option to supply FieldServer data to the SMC Cloud.

If the customer’s FieldServer uses these local applications, login to the FieldServer by entering the IP Address into a browser on the local PC to see the pages described below.

#### 3.1 Using System View to Generate Data Logging

- Once the device has appeared on the system view page, click on the device.

**NOTE:** A device will not appear on the system view on first login. The gateway must be configured before devices can be seen in system view. Follow the gateway configuration instructions found in the corresponding gateway start-up guide. If the start-up guide is not on hand, look up the guide online via the Sierra Monitor [Resource Center](#).

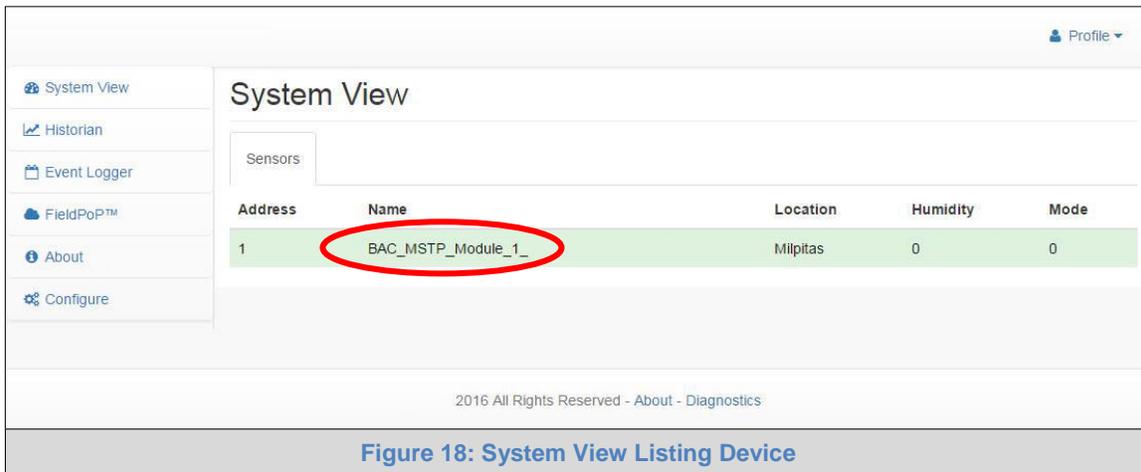


Figure 18: System View Listing Device

**NOTE:** The System View shows if a device is online or offline by highlighting the device green if online and showing no highlight if offline. See example below.

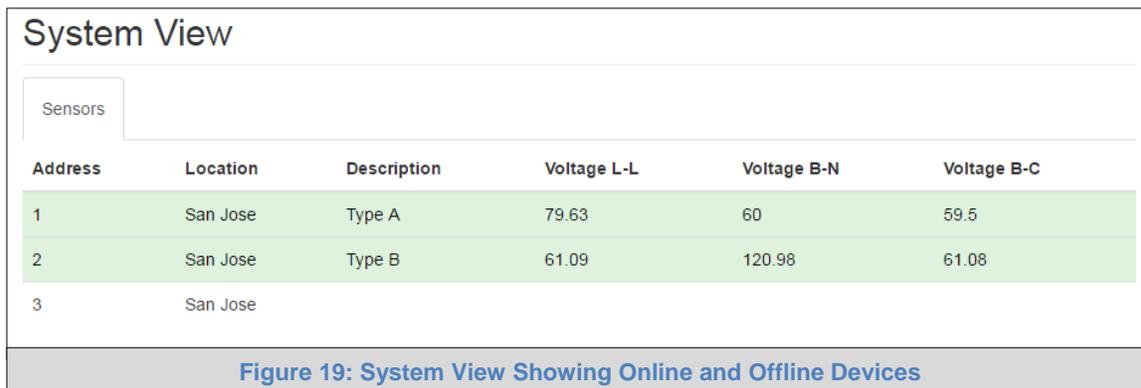


Figure 19: System View Showing Online and Offline Devices

- Clicking on the device will open the device view page, which shows all the data elements that can be gathered from the device, location and status

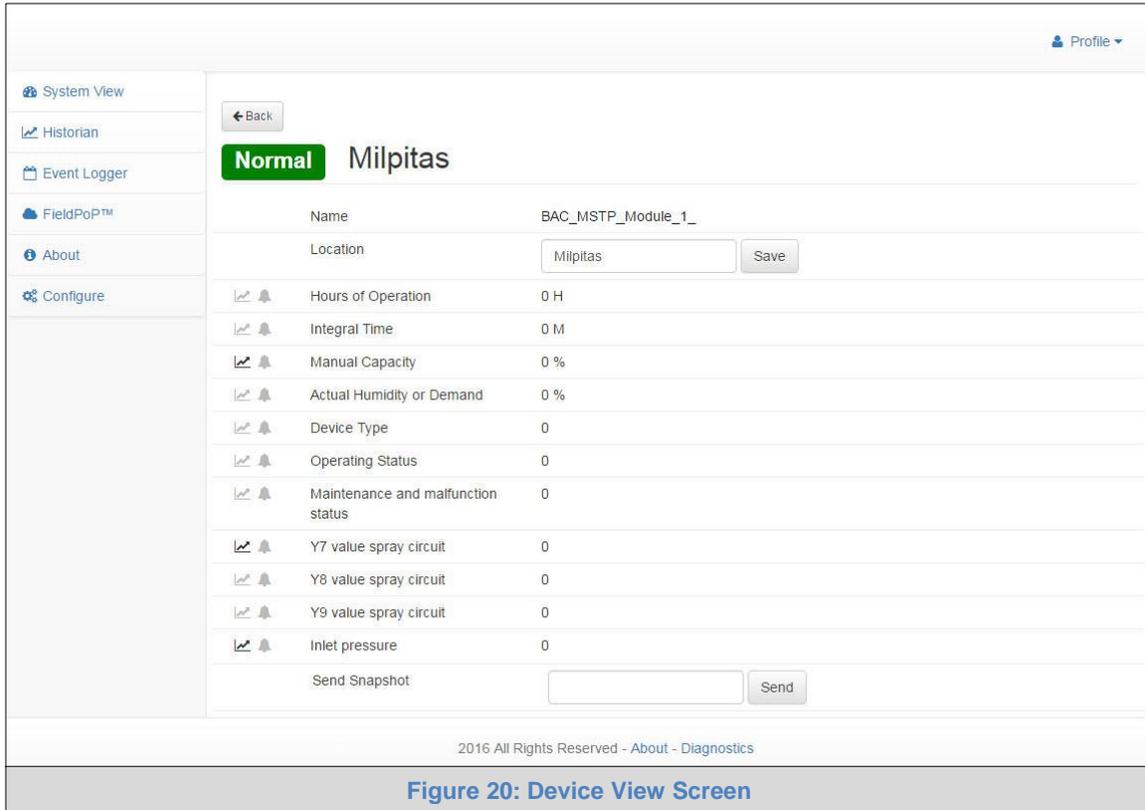


Figure 20: Device View Screen

- Click on the graph icon (  ) to the left of the listed data elements to open the Data Logging window.

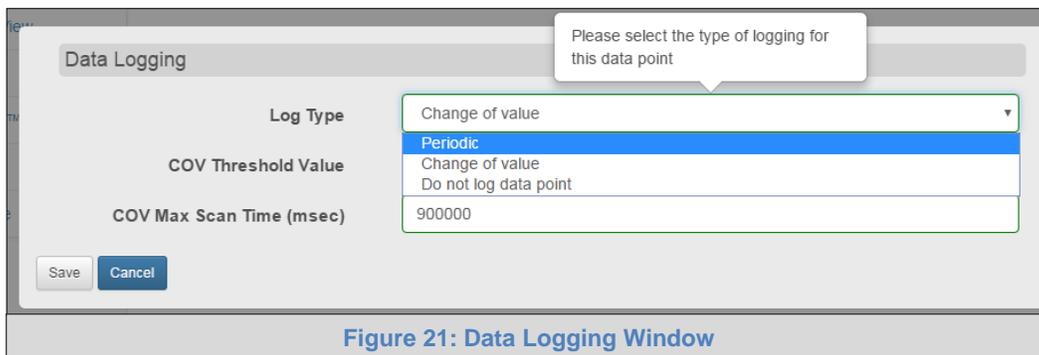


Figure 21: Data Logging Window

- Select the type of logging for the data point and set the logging interval, COV threshold value or COV max scan time as they apply.

The screenshot shows a 'Data Logging' configuration window. The 'Log Type' dropdown menu is set to 'Periodic'. Below it, the 'Logging Interval (msec)' text input field contains the number '900000'. At the bottom left of the window, there are two buttons: 'Save' and 'Cancel'.

Figure 22: Periodic Log Type

The screenshot shows a 'Data Logging' configuration window. The 'Log Type' dropdown menu is set to 'Change of value'. Below it, the 'COV Threshold Value' text input field contains the number '10', and the 'COV Max Scan Time (msec)' text input field contains the number '900000'. At the bottom left of the window, there are two buttons: 'Save' and 'Cancel'.

Figure 23: Change of Value Log Type

- Click Save to set the data logging settings and move on to **Section 3.2**.

**NOTE:** Data is recorded for up to 30 days.

### 3.2 Using Historian to View Data Logging Information

**NOTE:** The Historian can log up to 8,000 values per data point.

- Click the Historian tab on the left side of the page.

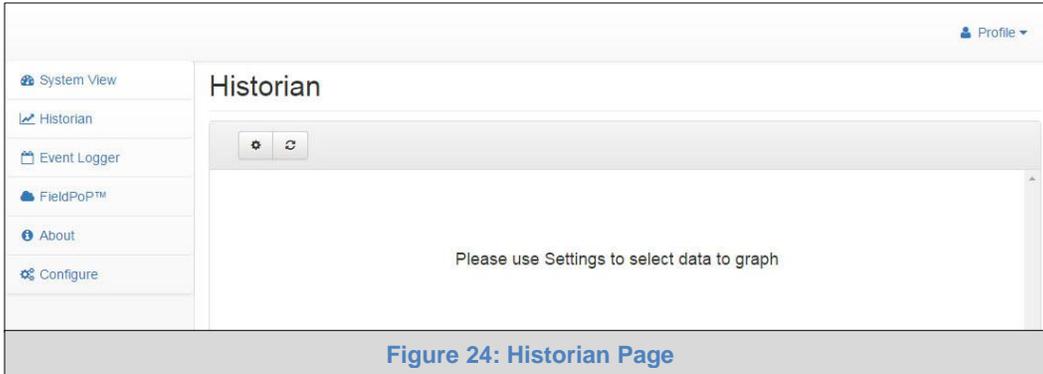


Figure 24: Historian Page

- Click on the Settings button (gear icon) to set up data to graph.

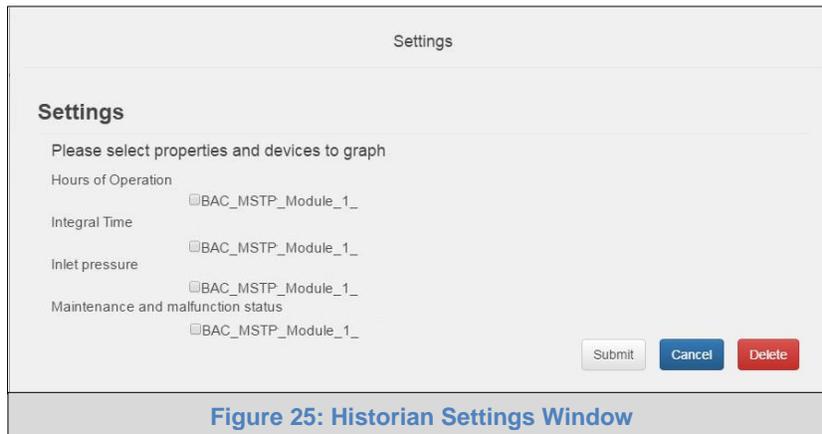


Figure 25: Historian Settings Window

- Click the checkbox next to the data element to graph.
  - Any combination of elements can be selected

**NOTE:** A data element is only visible when it is set for data logging as shown in **Section 3.1**.

- Click Submit to generate a graph for each element selected.

- After a few seconds, the graph should appear

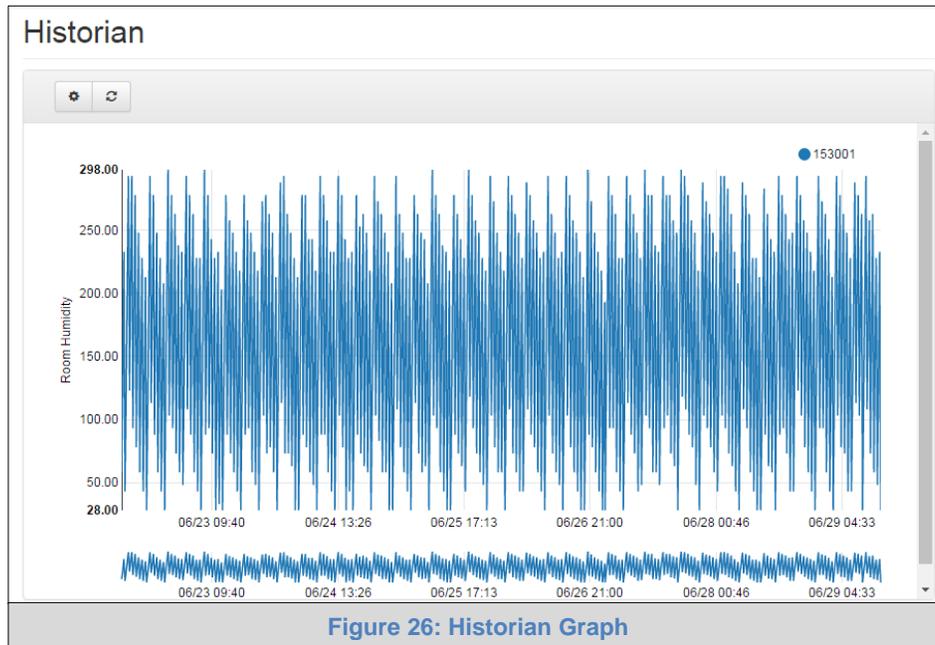
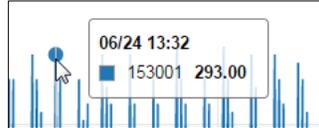


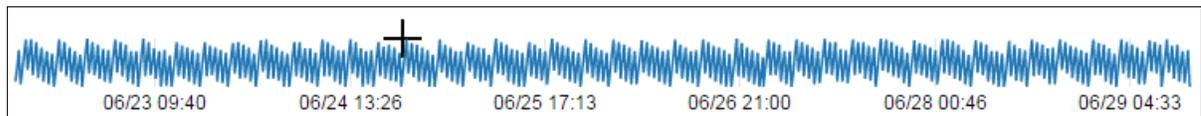
Figure 26: Historian Graph

- See below for instructions on controlling graphs:

**To view individual values of data**, scroll across the graph to show a text box that states each exact point and the location of that point on the graph via a blue dot.



**To view a graph of only select dates/time frames**, move the cursor towards the miniature version of the graph that is shown just below the full size graph. Hover the cursor over the miniature graph so that the cursor becomes a crosshair ( + ).



Click and hold near the beginning or ending time frame desired, then drag the crosshair towards the ending or beginning time frame; all within the confines of the miniature graph.

The full size version of the graph will populate accordingly.

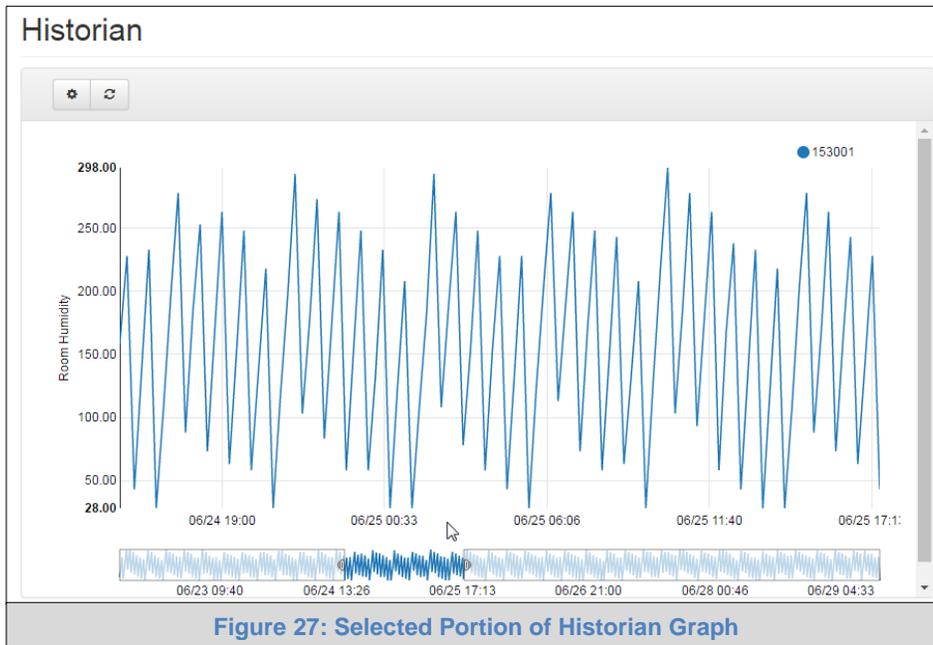
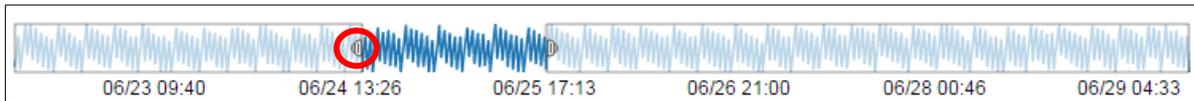


Figure 27: Selected Portion of Historian Graph

Any additional edits to the time frame can be adjusted by clicking and dragging the wedge markers on either side of the highlighted portion of the miniature graph.



To go back to the full graph, click on any faded portion of the miniature graph.

- To delete a log and its resulting graph, check the boxes next to the properties to remove (Figure 25) and click the delete button. Once the confirmation window appears, click “Yes” to confirm.

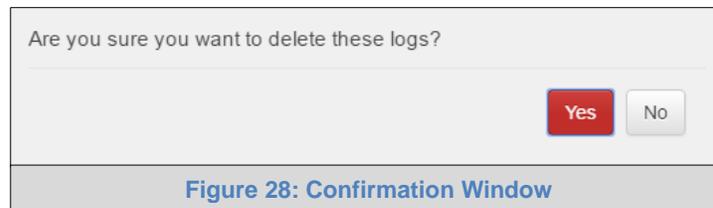


Figure 28: Confirmation Window

### 3.3 Using Device View to Send a Snapshot of the Device Data

To get a snapshot of the summarized device data, follow the instructions below.

- **Ensure that the FieldServer is registered to the SMC Cloud (Section 2.3)**
- Connect to the FieldServer via browser.
- Enter the Device View page via System View.
- Scroll to the bottom of the page to find the “Send Snapshot” field, enter an email address and click “Send” to receive the data summary from the device.

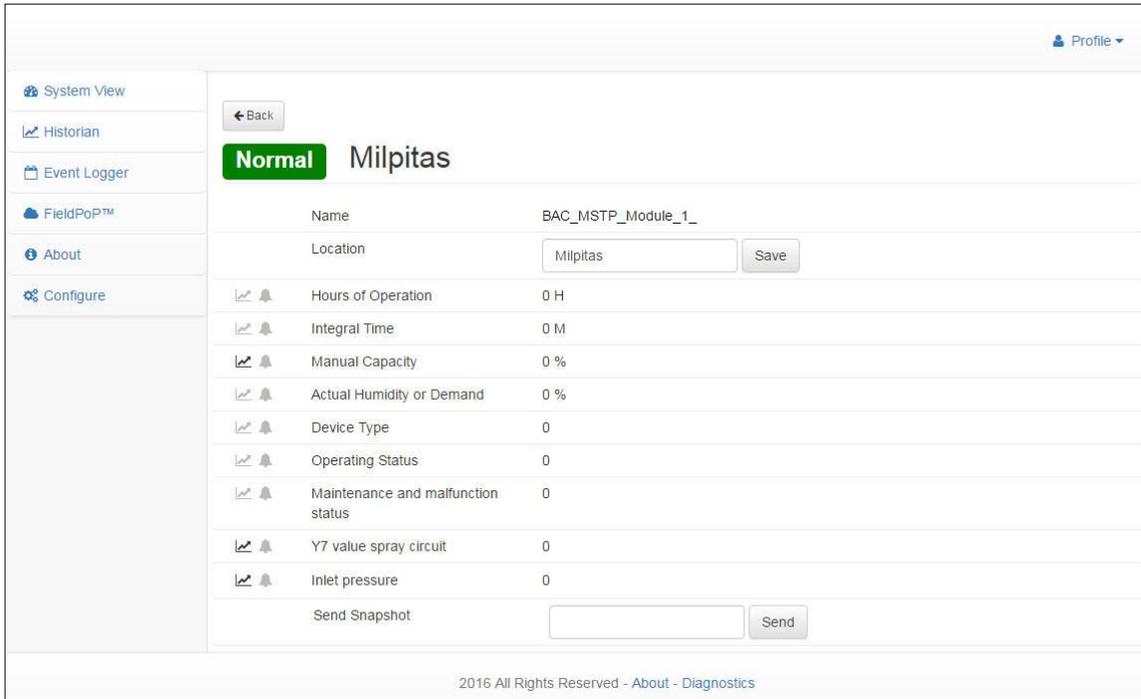


Figure 29: Device View Screen Showing Send Snapshot Field

- An email with the snapshot as an attached .txt file will appear in the previously referenced inbox.

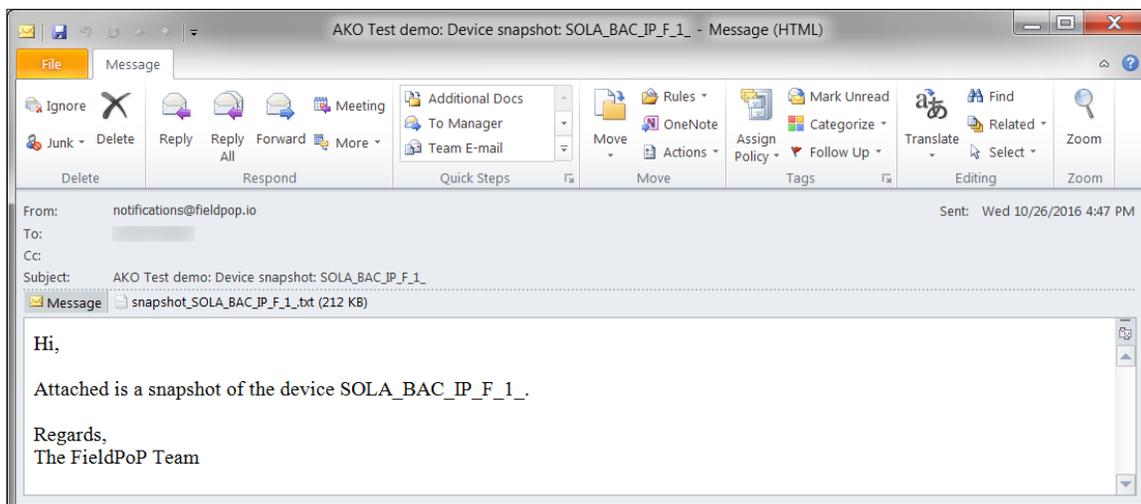


Figure 30: Email with Snapshot Attachment

## 4 LOGGING INTO AND USING THE SMC CLOUD (FOR SUPPORT)

After the FieldServer is registered, go to [www.fieldpop.io](http://www.fieldpop.io) and type in the appropriate login information as per registration credentials.

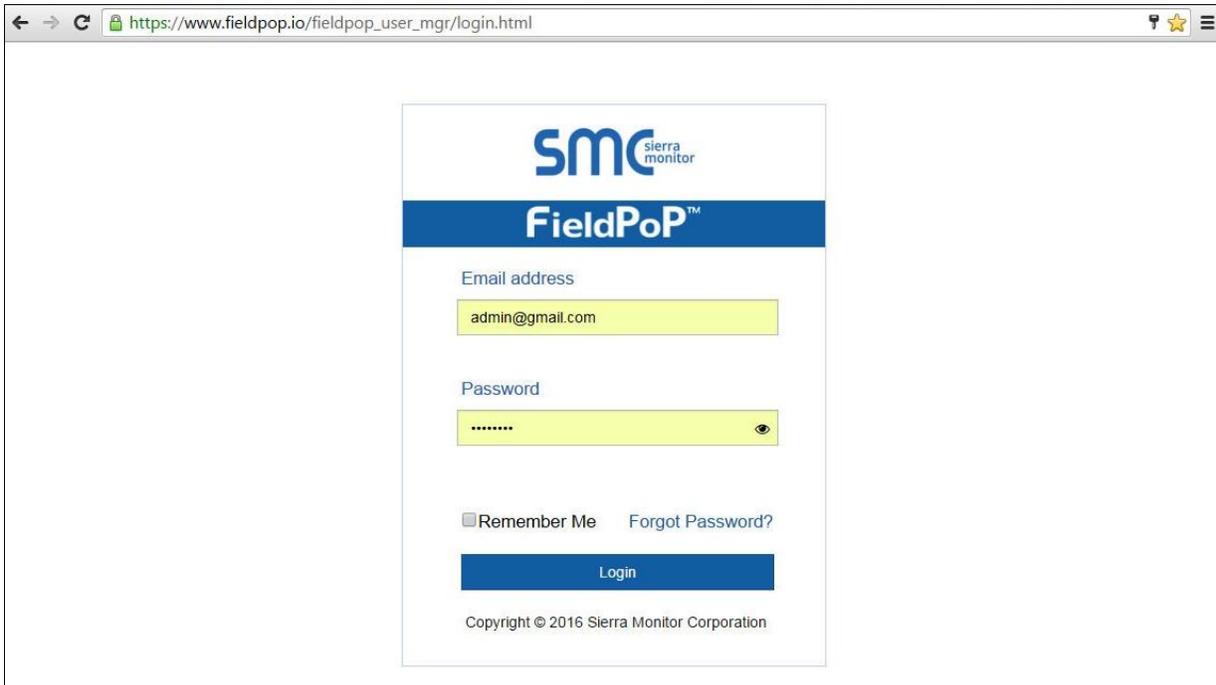


Figure 31: SMC Cloud Login Screen

For new users, the instructions for login and password setup are shown in Section 2.2.1.

If the login password is lost, see Appendix A.2 for recovery instructions.

**NOTE:** Sections 4.2 – 4.4 represent each of the tabs that appear at the top of the page once logged into SMC Cloud and describe their functions.

## 4.1 Account Management

Account management can be done on any screen by simply clicking on the user icon in the top right corner of the page.



Figure 32: User Account Dropdown Menu

Once the icon has been clicked, the dropdown menu with options to Edit Profile, Change Password, Notifications and Logout will appear.

See the subsections that follow for Account Management features and instructions.

### 4.1.1 Editing the Profile

- Click “Edit Profile” in the dropdown menu.
- Enter or alter the profile details as needed.

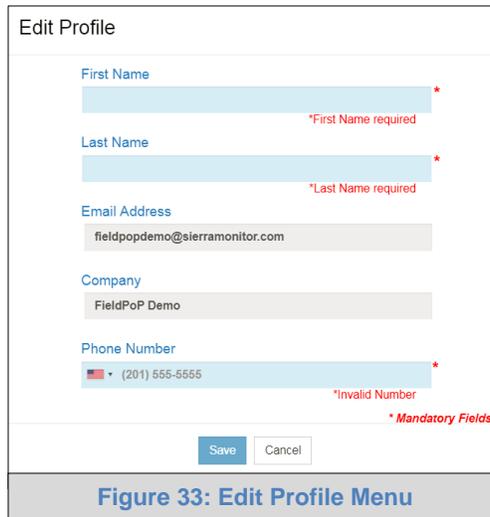


Figure 33: Edit Profile Menu

- Then click “Save” to update the new profile information.

### 4.1.2 Changing the Password

To change the password, fill in the password information as needed.

**NOTE:** Hover over the password strength to see comments related to the entered password.

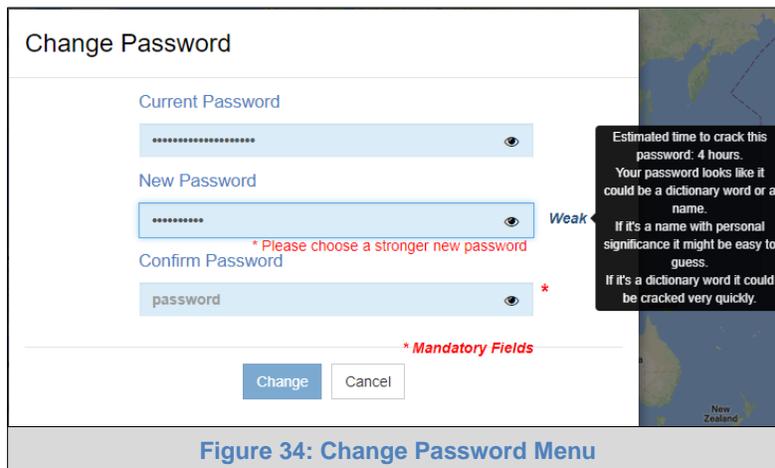


Figure 34: Change Password Menu

### 4.1.3 Enabling/Disabling Notification Audio Alerts

Notification audio alerts can be turned on or off by clicking “Notifications” in the dropdown menu. When audio alerts are enabled, the local computer will make a ‘ping’ sound. This is the sound that will occur when any notification type takes place in real-time.

The status of notification audio alerts can be viewed in the dropdown menu by looking at the speaker icon to the right of the “Notifications” text.

Audio alerts Enabled:

Audio alerts Disabled:

## 4.2 Device Management

Gives an overview of devices registered to SMC Cloud. This page includes the following features:

### 4.2.1 Map Elements

The map shows the location of all the devices registered on SMC Cloud using Google Maps pins.



Figure 35: SMC Cloud Device Management Page

Each pin is color-coded to show the device status. The table shows which device status each color represents.

Color	Status
Grey	Offline
Green	Normal
Yellow	Warning
Red	Alarm
Blue	Trouble

**NOTE:** See [Appendix B.3](#) for details on map navigation.

## 4.2.2 Connecting to a Device

- Click on a pin on the map to bring up registered device details. This shows pertinent device information.

The screenshot shows the SMC FieldPoP web interface. At the top, there are navigation tabs: Device Management, User Management, Notifications, Reports, Audit Logs, and Data Logging. A map of the world is displayed with several green location pins. A 'Device Details' popup window is open over a pin in Europe, showing the following information:

- Name: The Boiler List
- Description: FieldPoP Demo - The Boiler List
- MAC address: 00:50:4E:11:81:B0
- Device ID: sunsethand\_EJ5
- Secure Tunnel: Connect
- Share with others: Get shareable link

Below the map, there is an 'OEM's Summary' section with the following details:

- OEM: Sierra Monitor Corporation
- Enterprise Customer: Sierra Monitor Corporation
- Name: The Boiler List[00:50:4E:11:1B:51]
- Model: fieldpop\_test
- Verion :0.1.0
- Deregister Device button

Copyright © 2016 Sierra Monitor Corporation. About Us link is visible at the bottom right.

Figure 36: Connecting Remotely to a Device

- Click on "Connect" to remotely access a device via HTTPS.

The left screenshot shows the device's File System (FS) GUI. It features a navigation pane on the left with options like 'About', 'File Transfer', 'Network Settings', 'Permissions', 'View', 'Connections', 'Data-Access', 'Routes', 'Map Descriptors', and 'User Messages'. The main area displays a table of system parameters for 'FieldPoP Demo - Boiler List'.

Name	Value
Driver_Configuration	00CC004
DTIC_Version	18.09 (3)
Kernel_Version	18.02 (2)
Package_Status	Normal
Build_Version	244
Build_Date	Mon Nov 30 13:48:52 2015 +1000
BIOS_Version	2.3.2
Firmware_Identifier	01-09-2015
Carrier_Type	232 Carrier
Data_Plane_Used	66
Data_Plane_Speed	3000
Application_Memory_Used	10.53%
Memory_Used	32448
Memory_Available	76,209 KB
App_Cycle_Time	3
Min_Cycle_Time	0
Max_Cycle_Time	1000

The right screenshot shows the Customer Application's System View. It includes a 'System View' section with a 'Sensors' table:

MAC add.	Label	Location	Humidity	Setpoint	Output	Status
153001	Dev_01		0	45	0	Normal
153002	Dev_02		0	56	0	Normal

Figure 37: Device FS-GUI (left) or Customer Application (right)

### 4.2.3 Customer Side Bar and OEM Summary

The Customer Side Bar shows a list of Admin, Managers, Users and enterprise customers' devices that are currently registered on a SMC Cloud account based on the permission level of the person logged into the SMC Cloud. The list is revealed by clicking the left-facing arrow on the top right side of the screen (Figure 35).

Once the list has been opened, all of the SMC Cloud registered customers are shown on the right side of the screen with the corresponding device names grouped beneath – click the plus sign (+) to the left of a customer to see the associated device names grouped beneath (Figure 38). Individual customers or devices (by device name) can be found quickly by using the search bar at the top of the list.



Figure 38: Customer Side Bar

The OEM Summary Field is shown on the bottom of the Device Management Page when a device or customer is selected.



Figure 39: OEM Summary Field Accessed by Selecting Device

Here the following information can be viewed:

- **OEM** – OEM name
- **Enterprise Customer** – enterprise customer name
- **Devices** – number of devices under that customer (only visible when a customer is selected in the Customer Side Bar)
- **Name** – device name (only visible when a specific device is selected)
- **Model** – device model (only visible when a specific device is selected)
- **Version** – SMC Cloud firmware version (only visible when a specific device is selected)

To limit devices to those under a single customer organization, click on an organization in the Customer Side Bar and the OEM Summary Field will populate underneath the device map.

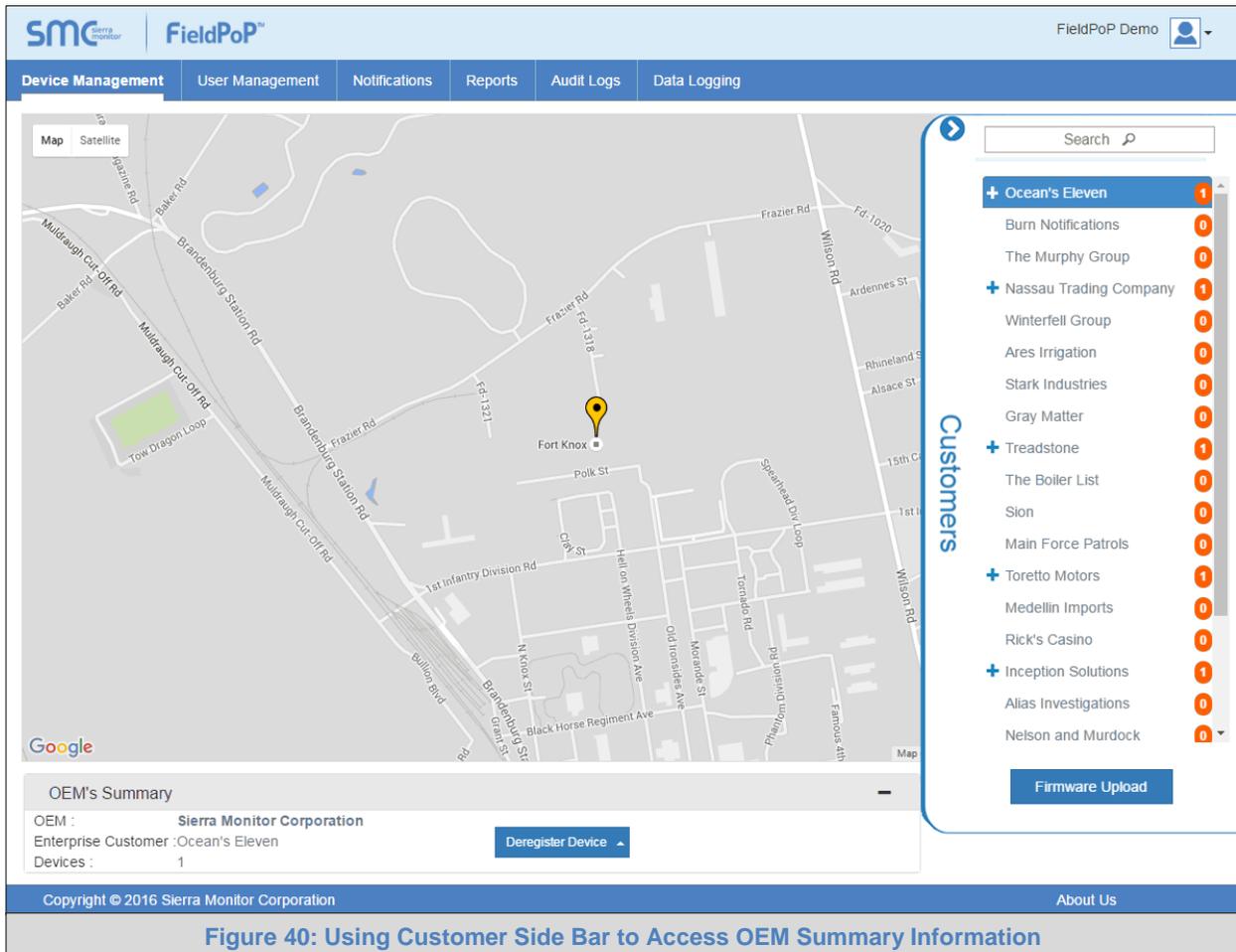


Figure 40: Using Customer Side Bar to Access OEM Summary Information

### 4.3 Notifications

This page shows the notifications for all devices.

Notification Type	Notification Message	Device Name	MAC Address	Date
Device Online	FieldPoP Connection Established	Medellin Imports	00:50:4E:11:1B:45	2016/08/19, 00:53:46
Device Offline	FieldPoP Connection Lost	Medellin Imports	00:50:4E:11:1B:45	2016/08/19, 00:51:51
Device Online	FieldPoP Connection Established	Medellin Imports	00:50:4E:11:1B:45	2016/08/18, 11:56:59
Device Offline	FieldPoP Connection Lost	Medellin Imports	00:50:4E:11:1B:45	2016/08/18, 11:56:35
Device Offline	FieldPoP Connection Lost	Aruba Demo	00:50:4E:11:46:87	2016/08/18, 07:45:24
Device Online	FieldPoP Connection Established	Aruba Demo	00:50:4E:11:46:87	2016/08/17, 16:54:02
Device Offline	FieldPoP Connection Lost	Aruba Demo	00:50:4E:11:46:87	2016/08/17, 16:50:26
Firmware Status	Firmware update complete. Please restart t...	Aruba Demo	00:50:4E:11:46:87	2016/08/17, 16:47:10
Firmware Status	Firmware update in progress. Do not powe...	Aruba Demo	00:50:4E:11:46:87	2016/08/17, 16:47:08
Device Online	FieldPoP Connection Established	Aruba Demo	00:50:4E:11:46:87	2016/08/17, 11:29:41

Figure 41: Notifications Page

The following fields are displayed and can be used as filters to find a specific notification:

- Notification Type
- Notification Message
- Device Name
- MAC Address
- Company
- Date

**NOTE:** If certain fields are not present, they may be hidden. To make them viewable follow the Data Table Dropdown Menu instructions in [Appendix B.2](#).

### 4.3.1 Configure a Notification Delivery

Notifications can be configured to be sent via email and/or SMS.

- Click the “Configuration” icon (⚙️) on the bottom right side of the page.

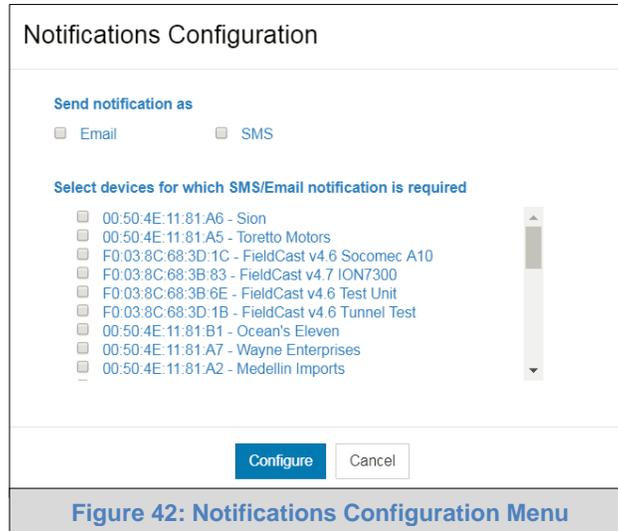


Figure 42: Notifications Configuration Menu

- Click the corresponding checkbox to have notifications sent as email or SMS.
- Browse and select the device(s) for notification.
- Click “Configure” to save settings.

### 4.3.2 Using System View Events to Generate Notifications

System View and Event Logger are part of the optional Application Engine platform, which allows local applications to easily browse and manage FieldServer information or settings. **In the near future, these applications will also have the option to supply FieldServer data to SMC Cloud.**

If the customer’s FieldServer uses these local applications, login to the FieldServer by entering the IP Address into a browser on the local PC to see the pages described below.

#### 4.3.2.1 Creating Events

- Once the device has appeared on the system view page, click on the device.



Figure 43: System View Listing Device

**NOTE: The System View shows if a device is online or offline by highlighting the device a color based on its status if online and showing no highlight if offline. See example below.**

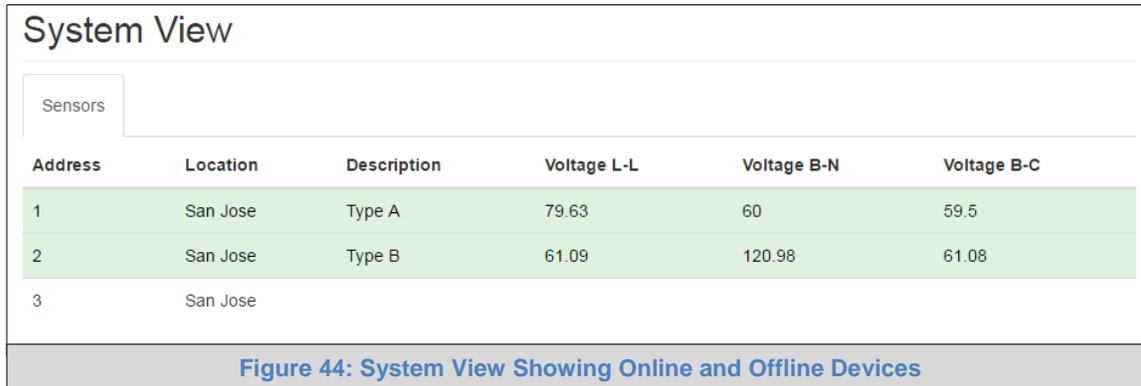


Figure 44: System View Showing Online and Offline Devices

- Clicking on the device will open the device view page, which shows all the data elements that can be gathered from the device, location and status.

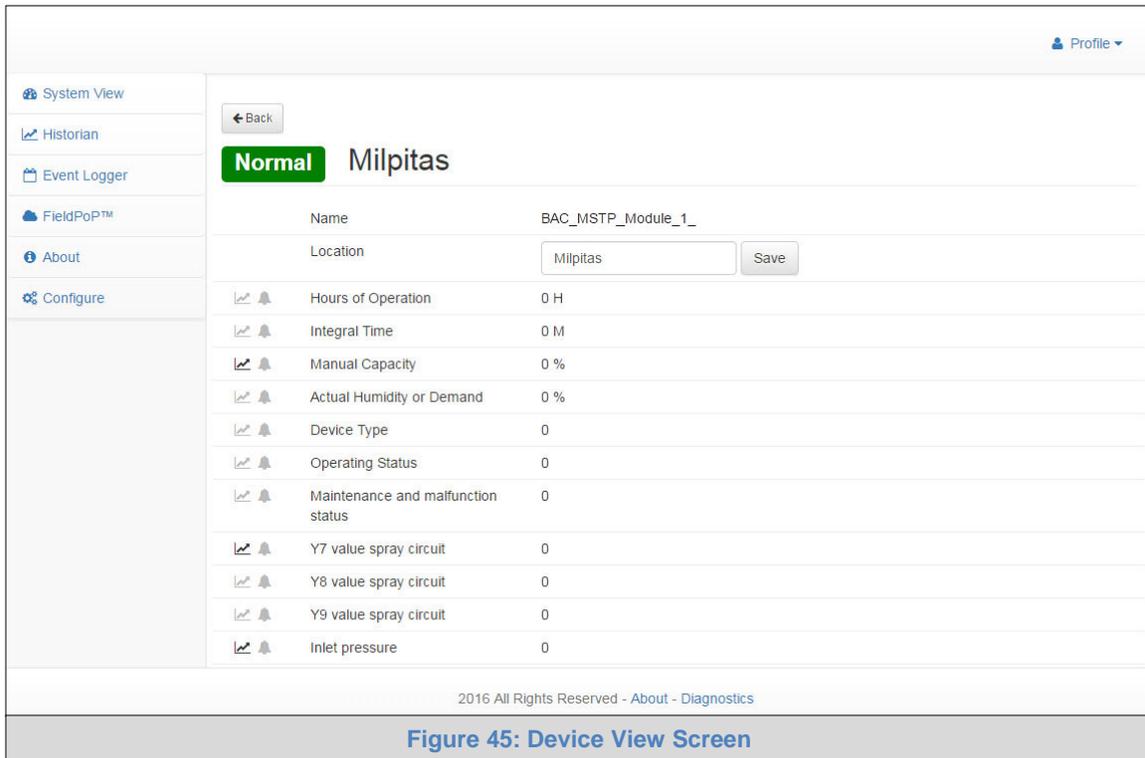


Figure 45: Device View Screen

- Click on the bell icon (🔔) next to an element to attach an event and open the Event Settings window.

**NOTE:** Event Settings allow the FieldServer to go into Trouble, Warning or Alarm status based on the settings entered. These events appear on the FieldServer Event Logger page and populate onto the SMC Cloud Notifications page if the FieldServer is registered.

- Select the desired event type to open up additional parameters to customize when events occur.

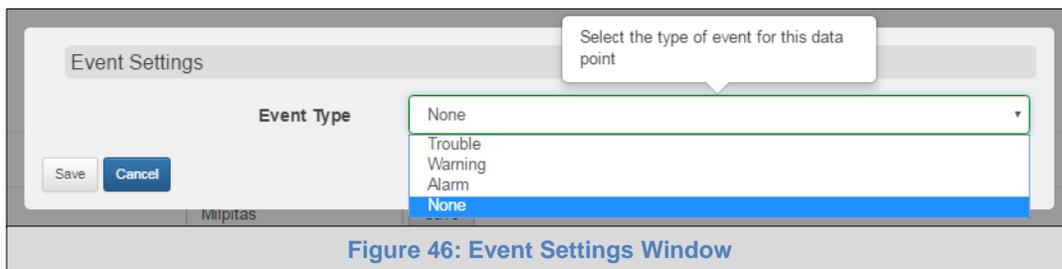


Figure 46: Event Settings Window

- The following parameters are available for configuration:
  - Set Point – point at which an event will trigger
  - Falling Value – click the checkbox if the event should trigger if values fall below the set point; leave unchecked if event should trigger above the set point
  - Deadband – the difference above or below the set point before the event is cleared.

The figure shows a configuration window titled "Event Settings". It contains four main input fields: "Event Type" is a dropdown menu set to "Alarm"; "Set Point" is a text input field containing "0"; "Falling Value" is a checkbox that is currently unchecked; and "Deadband" is a text input field containing "0". At the bottom left of the form are two buttons: "Save" and "Cancel".

Figure 47: Event Setting Parameters

- Click Save to set the Event Settings.

#### 4.3.2.2 Viewing FieldServer Events

- Events can be viewed on the device by clicking on the Event Logger tab to open the Event Logger Page.

The figure shows the "Event Logger" page in the SMC Cloud interface. On the left is a navigation sidebar with options: System View, Historian, Event Logger (selected), FieldPoP™, About, and Configure. The main area displays a table of events with the following data:

Time	Component	Type	Message
Jul 20, 2016 6:25:33 PM	Application	Alarm	BAC_MSTP_Module_1_went into an alarm state
Jul 20, 2016 7:43:42 AM	Application	Alarm	BAC_IP_RS_Module_1_went into an alarm state

At the bottom of the page, there is a footer that reads "2016 All Rights Reserved - About - Diagnostics".

Figure 48: Event Logger Page

- In SMC Cloud, this information can be viewed on the Notifications Page if the device is registered (Figure 41).
- Additionally, device status information will populate on the Device Management page via color coded icons (Section 4.2.1).

## 4.4 Dashboards

- Click the **+ New Dashboard** button on the bottom right corner of the screen.
- Add a Dashboard Name and choose the Dashboard Type from the template options shown.

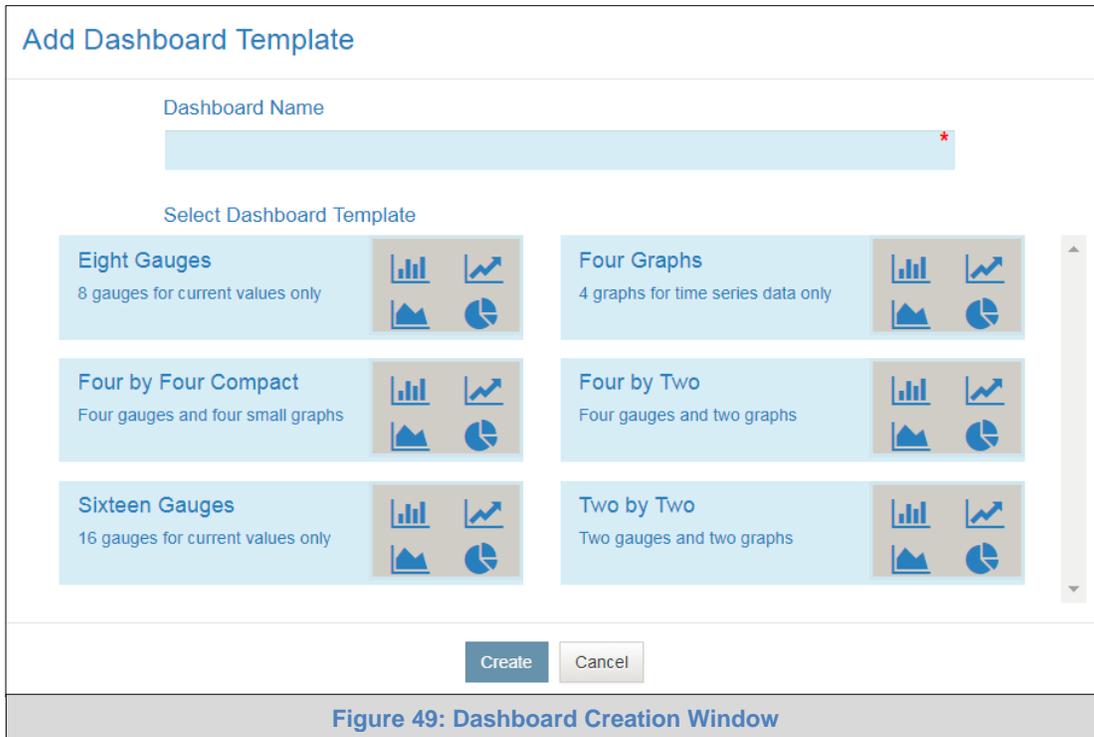
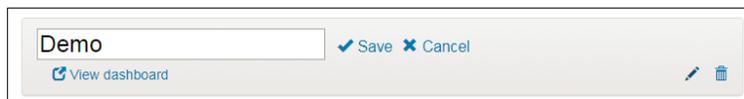


Figure 49: Dashboard Creation Window

- Click Create and a message will appear declaring that the new Dashboard was successfully created.
- Click the OK button.

### 4.4.1 Rename a Dashboard

- Click the edit icon (✎) on the right side of the desired dashboard entry to rename (Figure 81).
- The Dashboard name is now editable, rename and click save.



### 4.4.2 Setup Dashboard

- Click [View dashboard](#) on the desired dashboard entry (Figure 81) to open the dashboard proper.

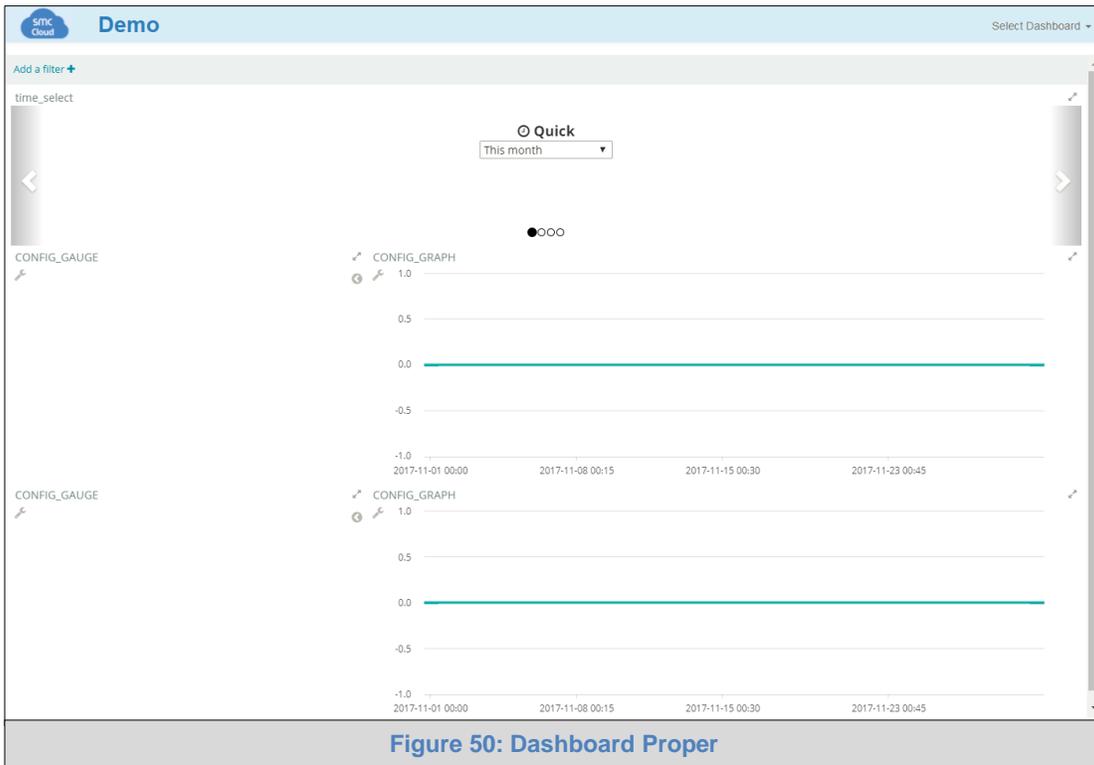


Figure 50: Dashboard Proper

- Click on the wrench icon ( ) next to either gauges or graphs for data configuration.
- Select the data for visualization via gauge or graph by clicking the grey checkbox to the left of the desired value.
  - Gateway Names, Device or Value can be filtered by entering desired search information in the search box above the listed data sources
  - For gauges, only one data source can be selected
  - For graphs, multiple data sources can be selected

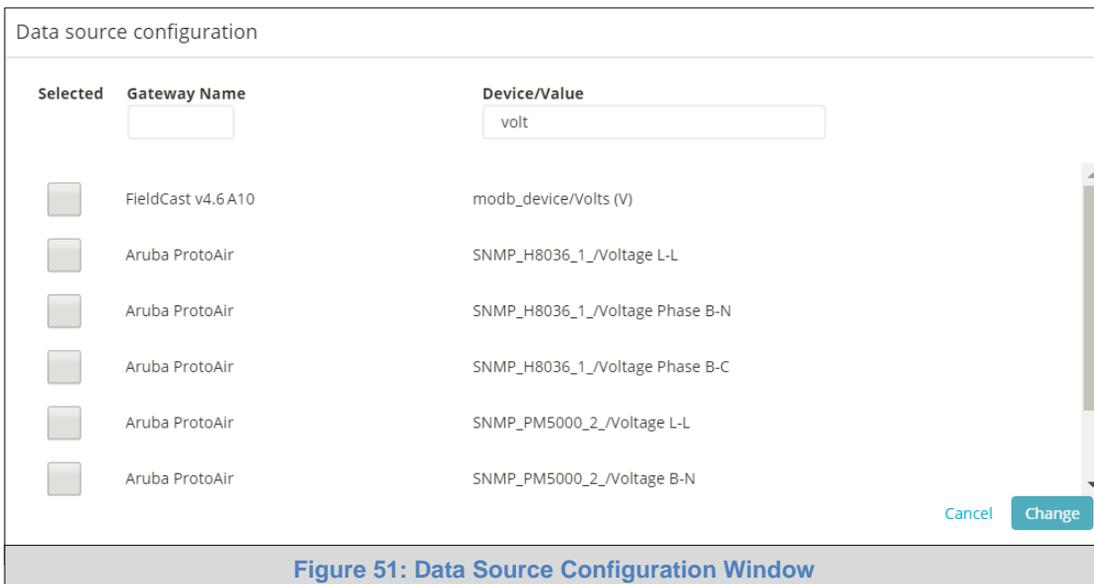
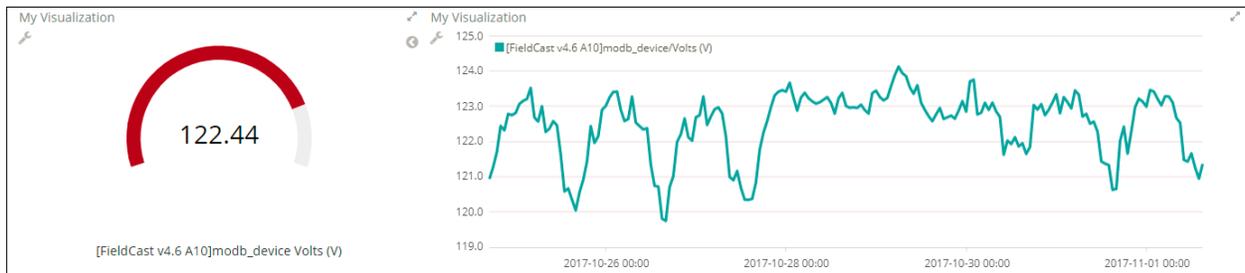


Figure 51: Data Source Configuration Window

- Once selected data points appear at the bottom of the Data source configuration window, modify the Title (name of gauge or graph), label (name for the specific data point) or Max Range (gauge only) as desired.

- Click Change once configuration is complete to generate the gauge or graph.



**NOTE:** For gauges, to change what color a range of values represents, click the left pointing arrow icon (←) to the right of the gauge. Click the range to modify and then choose the new color.

**NOTE:** For graphs, values can be hidden by click the data point item where the label is written out next to a square of its representative color.

### 4.4.3 Change the Dashboard Time Range

- To change the time range of the presented data (x-axis for graphs and average calculation for gauges), select from the four representation types under the time\_select parameter near the top of the page.

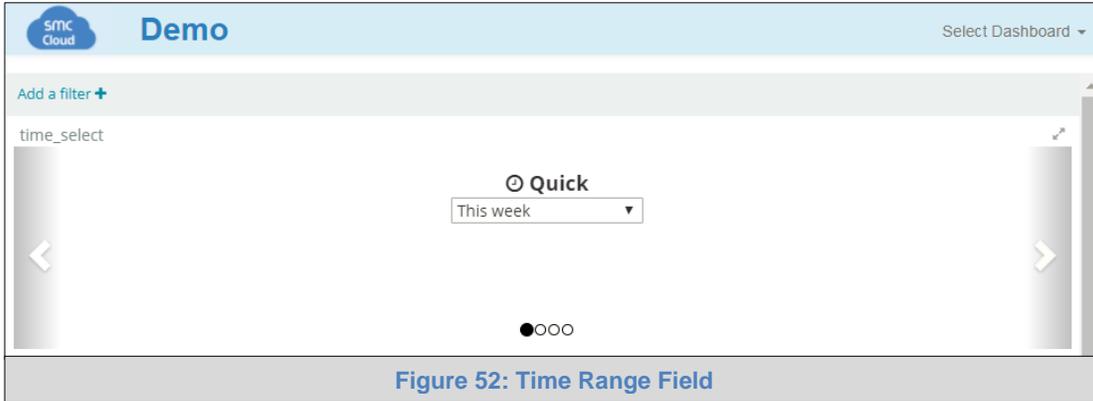


Figure 52: Time Range Field

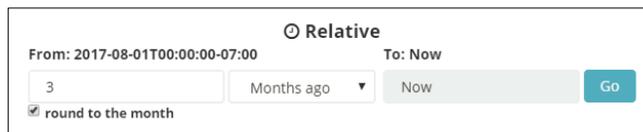
- Select a type of time range representation by clicking any of the four circles under the dropdown menu or clicking on the white arrows pointing left or right on the left and right edges of the screen.

There are four ways to visualize the selected data in terms of time range. These include:

**Quick** – Offers straightforward time selections such as ‘this week’, ‘previous month’, ‘last 12 hours’, etc.



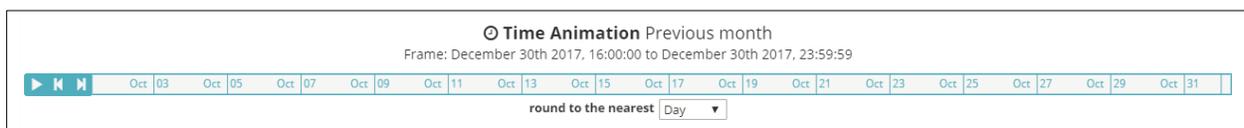
**Relative** – Allows representation of data from the current time to a chosen number of minutes, weeks, months, etc. in the past. Click the Go button to update graphs and gauges.



**Absolute** – An explicit range of year, month, day, hour, minute, second, and fraction of a second is selectable (YYYY-MM-DD HH:mm:ss:SSS). Click the Go button to update graphs and gauges.

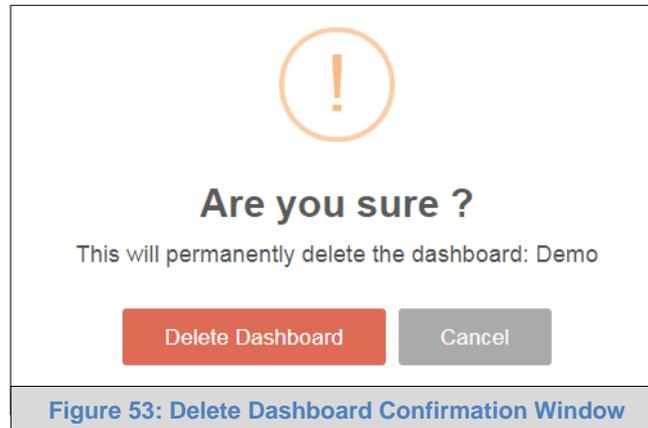


**Time Animation** – This selection allows viewing of graphical data as it occurred in consecutive aggregates of minute, hour, day, month, etc. Select the total time frame using one of the previously described representation methods, change the ‘round to the nearest’ dropdown menu for the desired time frame jumps and click the play icon (▶) to start the graphical visualization. Hit pause (⏸) and click the skip forward (⏭) or skip backward (⏮) arrows to move the time frame manually.



#### 4.4.4 Delete a Dashboard

- Click the trash icon (  ) on the right side of the desired dashboard entry to delete ( [Figure 81](#) ).
- A message will appear to confirm, click “Delete Dashboard”.



- Another message will appear stating that the dashboard was deleted successfully, click the OK button.

#### 4.5 General Notes for Using SMC Cloud

- See Data Table Features ([Appendix B.2](#)) for information on how to filter or export data for the sections that follow.
- See [Appendix B.4](#) for SMC Cloud Session Time Out details.

**5 LOGGING INTO AND USING SMC CLOUD (FOR ADMINISTRATOR)**

Go to [www.fieldpop.io](http://www.fieldpop.io) and type in the appropriate login information as per administration login details.

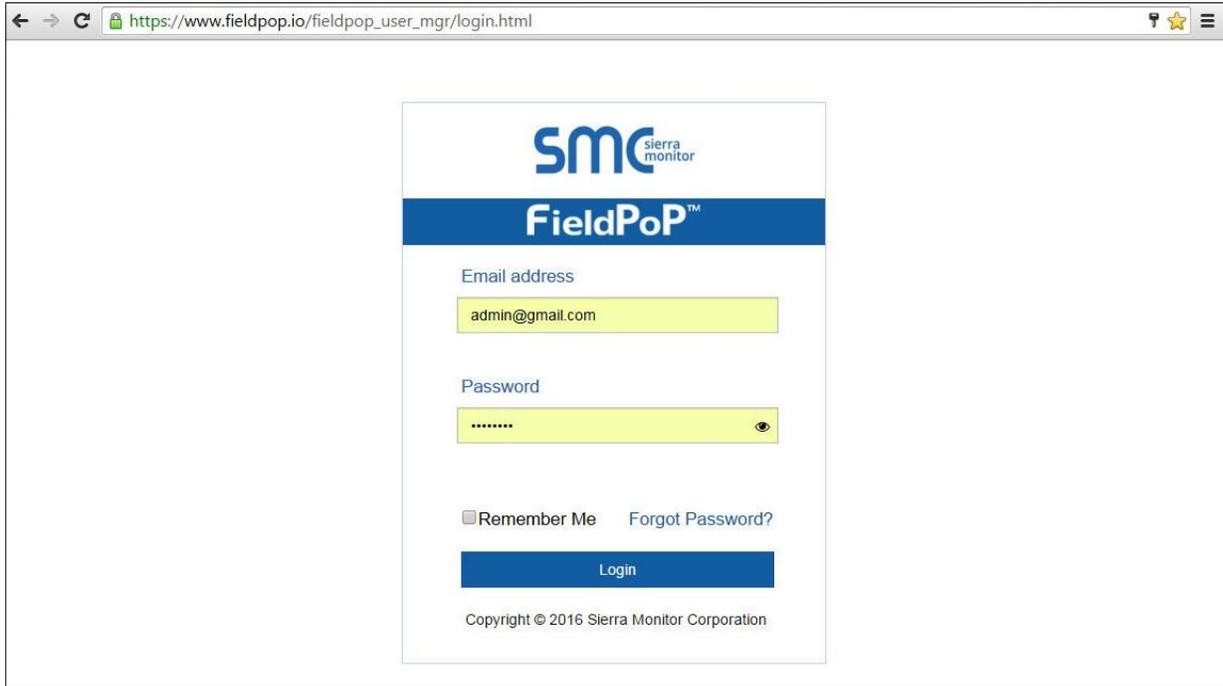


Figure 54: SMC Cloud Login Screen

For new users, the instructions for login and password setup are shown in Section 2.2.1.

If the login password is lost, see Appendix A.2 for recovery instructions.

**NOTE:** Sections 5.2 – 5.7 represent each of the tabs that appear at the top of the page once logged into SMC Cloud and describe their functions.

## 5.1 Account Management

Account management can be done on any screen by simply clicking on the user icon in the top right corner of the page.



Figure 55: User Account Dropdown Menu

Once the icon has been clicked, the dropdown menu with options to Edit Profile, Change Password, Customize UI, Notifications, Privacy Settings and Logout will appear.

See the subsections that follow for Account Management features and instructions.

### 5.1.1 Editing the Profile

- Click “Edit Profile” in the dropdown menu.
- Enter or alter the profile details as needed.

**Figure 56: Edit Profile Menu**

- Then click “Save” to update the new profile information.

### 5.1.2 Changing the Password

To change the password, fill in the password information as needed.

**NOTE:** Hover over the password strength to see comments related to the entered password.

**Figure 57: Change Password Menu**

### 5.1.3 Customizing the UI

The UI can be customized by uploading a new company logo or changing the company name.

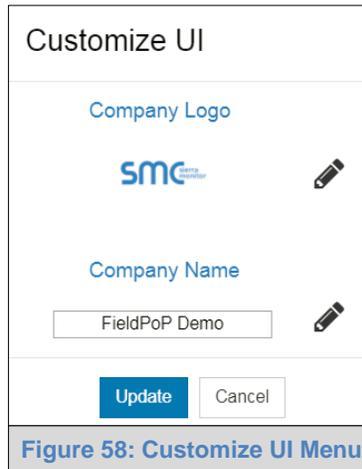


Figure 58: Customize UI Menu

To upload a new company logo:

- Click the pencil icon to open up a browser window.
- Select the image to upload.
- Click “Upload” to make changes or “X” to cancel.

To change the company name:

- Click the pencil icon next to the Company Name field.
- Click inside the Company Name field and type in the appropriate information.
- Click “Upload” to make changes or “X” to cancel.

### 5.1.4 Enabling/Disabling Notification Audio Alerts

Notification audio alerts can be turned on or off by clicking “Notifications” in the dropdown menu. When audio alerts are enabled, the local computer will make a ‘ping’ sound. This is the sound that will occur when any notification type takes place in real-time.

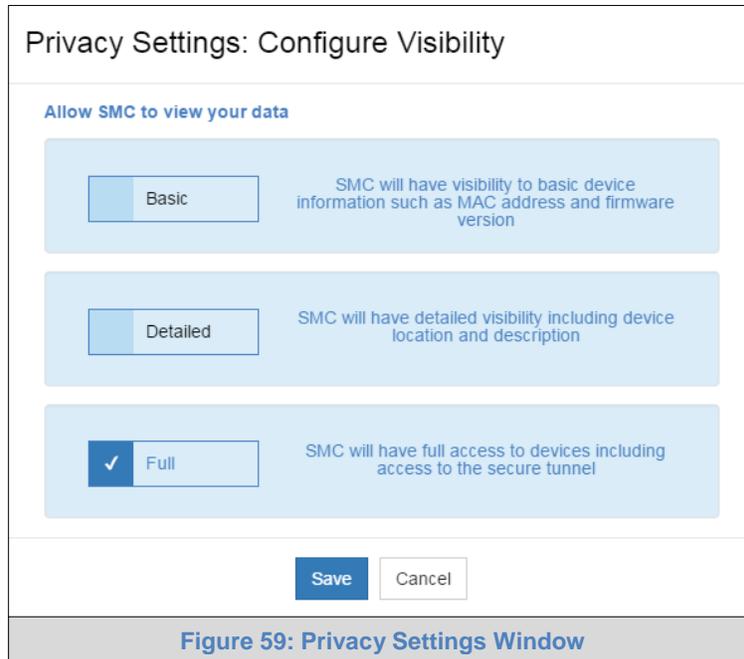
The status of notification audio alerts can be viewed in the dropdown menu by looking at the speaker icon to the right of the “Notifications” text.

Audio alerts Enabled: 

Audio alerts Disabled: 

### 5.1.5 Privacy Settings: Configure Visibility

The following setting options allow Sierra Monitor basic to full access to devices connected to SMC Cloud.



**NOTE:** If support is needed, Sierra Monitor Technical Support may require that these settings are changed to assist in the troubleshooting process.

## 5.2 Device Management

This page gives an overview of devices registered to SMC Cloud with a global map view.

### 5.2.1 Map Elements

The map shows the location of all the devices registered on SMC Cloud using Google Maps pins.



Figure 60: SMC Cloud Device Management Page

Each pin is color-coded to show the device status. The table shows which device status each color represents.

Color	Status
Grey	Offline
Green	Normal
Yellow	Warning
Red	Alarm
Blue	Trouble

**NOTE:** See [Appendix B.3](#) for details on map navigation.

### 5.2.2 Customer Side Bar and OEM Summary

The Customer Side Bar shows a list of all enterprise customers' devices that are currently registered on a SMC Cloud account. The list is revealed by clicking the left-facing arrow on the top right side of the screen (Figure 35).

Once the list has been opened, all of the SMC Cloud registered customers are shown on the right side of the screen with the corresponding device names grouped beneath – click the plus sign ( + ) to the left of a customer to see the associated device names (Figure 61). Individual customers or devices (by device name) can be found quickly by using the search bar at the top of the list.



Figure 61: Customer Side Bar

The OEM Summary Field is shown on the bottom of the Device Management Page when a device or customer is selected.



Figure 62: OEM Summary Field Accessed by Selecting Device

Here the following information can be viewed:

- **OEM** – OEM name
- **Enterprise Customer** – enterprise customer name
- **Devices** – number of devices under that customer (only visible when a customer is selected in the Customer Side Bar)
- **Name** – device name (only visible when a specific device is selected)
- **Model** – device model (only visible when a specific device is selected)
- **Version** – SMC Cloud firmware version (only visible when a specific device is selected)

To limit devices to those under a single customer organization, click on an organization in the Customer Side Bar and the OEM Summary Field will populate underneath the device map.

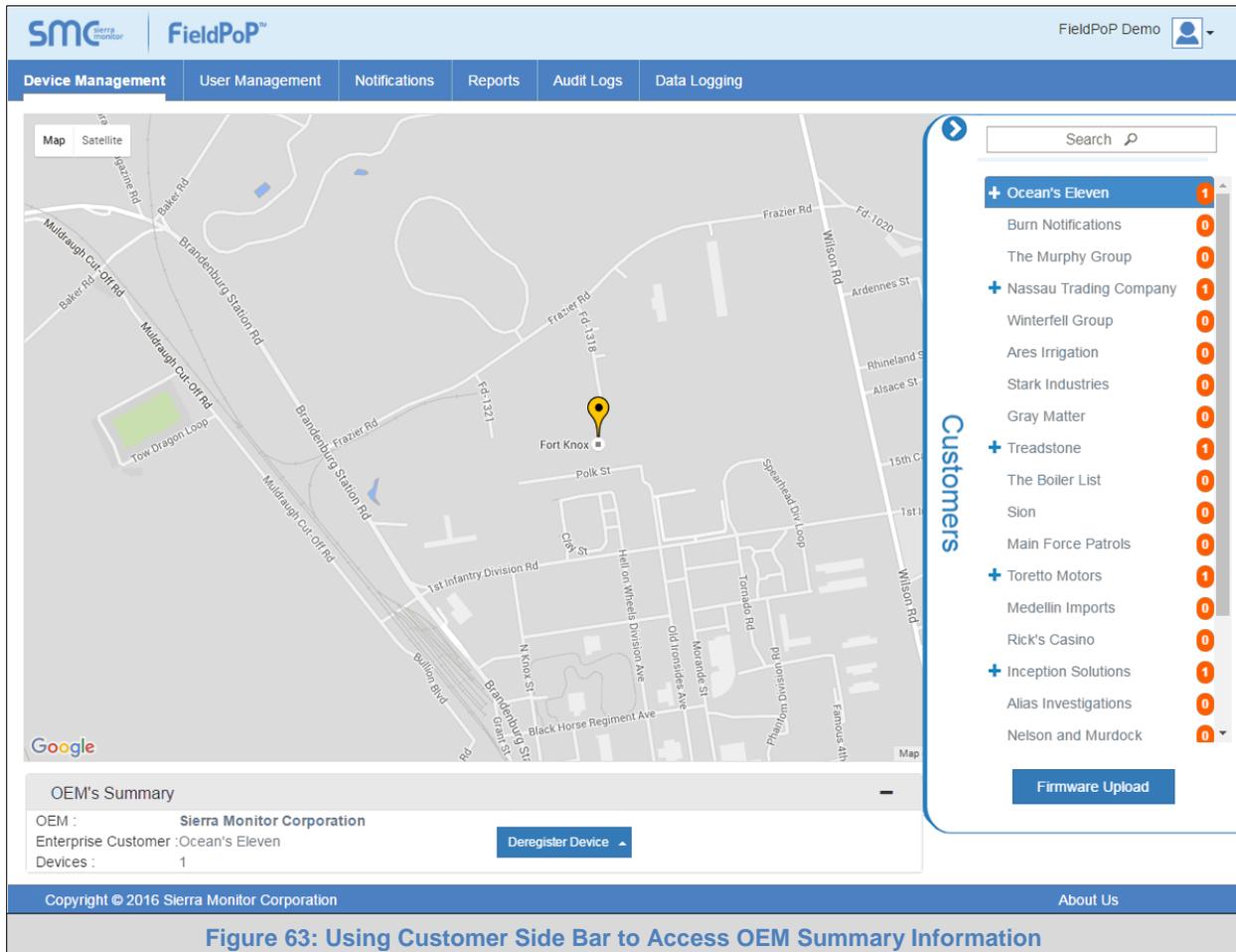


Figure 63: Using Customer Side Bar to Access OEM Summary Information

5.2.2.1 Firmware Update

The Firmware update process is as follows:

1. **SMC** sends the OEM a new firmware version for testing.
2. The **OEM Admin** uploads a new firmware version once they have qualified it. The firmware is uploaded by clicking the Firmware Upload button located in the Customer Side Bar (**Figure 61**), selecting the .img or .bin file (supplied by SMC) and clicking the Upload button.

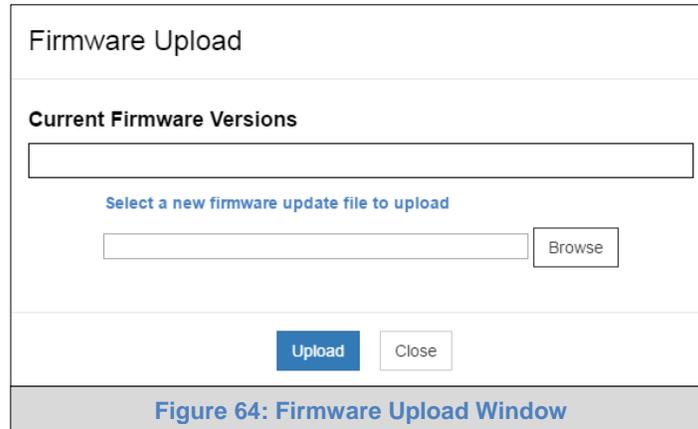


Figure 64: Firmware Upload Window

3. When the **Enterprise Administrator** logs in and selects a device, they will see a Firmware Upgrade button in the OEM Summary section of the screen.

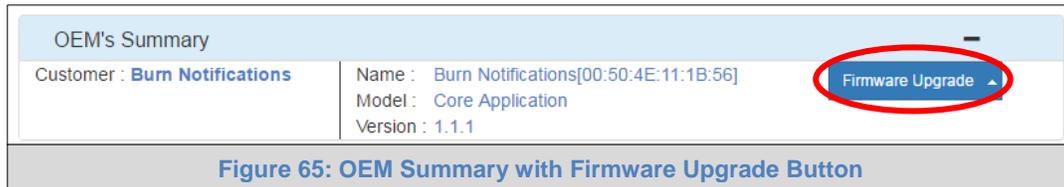


Figure 65: OEM Summary with Firmware Upgrade Button

Clicking on this button will show a list of firmware versions that have been uploaded by the OEM Administrator.

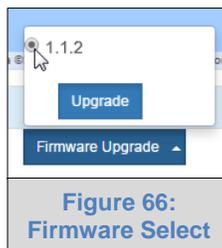
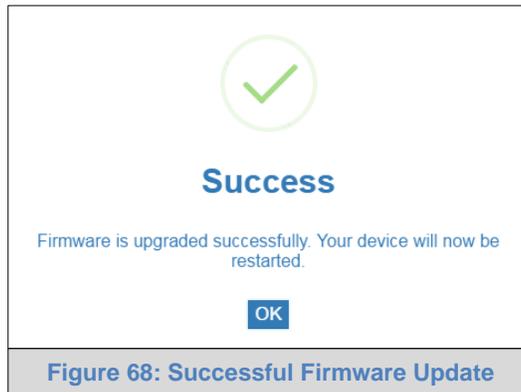


Figure 66: Firmware Select

- After selecting the version and clicking the Upgrade button, confirm the update by clicking the Submit button in the next window. The device will be updated and restarted.



**NOTE: Only an Enterprise Administrator can upgrade the firmware.**

### 5.3 User Management

This page shows all user details for any registered users.

The screenshot displays the 'User Management' interface. At the top, there are navigation tabs: Device Management, **User Management**, Notifications, Reports, Audit Logs, and Data Logs. Below these are filter sections for 'OEM' (Admin, Manager, User) and 'Enterprise Customer' (Admin, User). The main area is a table titled 'Registered Users' with the following data:

First Name	Last Name	Company	Role	Email	Devices	Customers	Options
Clark	Kent	FieldPoP Demo	OEM Manager	c.kent@dailyplanet.com	2	2	[Edit] [Delete]
Charlie	Peterson	FieldPoP Demo	OEM Admin	cpeterson@protocessor.com	28	N/A	[Edit] [Delete]
		FieldPoP Demo	OEM Admin	cpeterson@sierramonitor.com	28	N/A	[Edit] [Delete]
Daniel	Ocean	Ocean's Eleven	Enterprise Customer Admin	d.ocean@oceanseleven.com	0	N/A	[Edit] [Delete]
Dominick	Cobb	Inception Solutions	Enterprise Customer Admin	dom@inceptionsolutions.com	0	N/A	[Edit] [Delete]
Gordon	Arnold	FieldPoP Demo	OEM Admin	garnold@sierramonitor.com	28	N/A	[Edit] [Delete]
Han	Seoul-Oh	Toretto Motors	Enterprise Customer Admin	han@toretto.com	0	N/A	[Edit] [Delete]
Jason	Bourne	Treadstone	Enterprise Customer Admin	j.bourne@treadstone.com	0	N/A	[Edit] [Delete]
James	Clint	Nacaeu Trading	Enterprise Customer Admin	jclint@nacaeu.com	0	N/A	[Edit] [Delete]

At the bottom of the table, there is a pagination control showing '1 - 10 of 25 items' and an 'Add User' button.

Figure 69: User Management Page

The following fields are viewable and can be used as filters:

- Company
- First Name
- Last Name
- OEM
- Role
- Email
- Devices
- Customers

**NOTE:** If certain fields are not present, they may be hidden. To make them viewable follow the Data Table Dropdown Menu instructions in [Appendix B.2](#).

### 5.3.1 Managing Registered Users

The User Management page also allows the following functions:

#### 5.3.1.1 Add a New User

- Click the “Add User” icon (  ) on the bottom right side of the page.

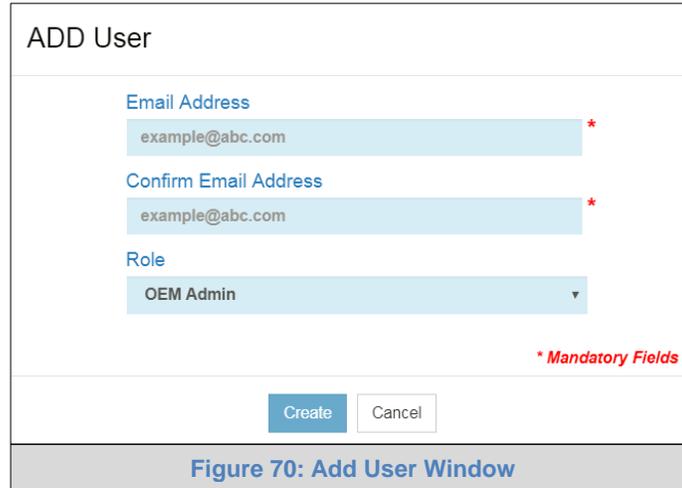


Figure 70: Add User Window

- Fill in the new user’s email and role.

**NOTE:** For additional information about roles see [Appendix B.5](#).

**NOTE:** If the “Role” field is set to “Enterprise Customer Admin” the “Company” field will appear. This allows selection of an existing company on the system (via dropdown menu) or creating a new company name by clicking the “+” sign and typing in the company name desired.

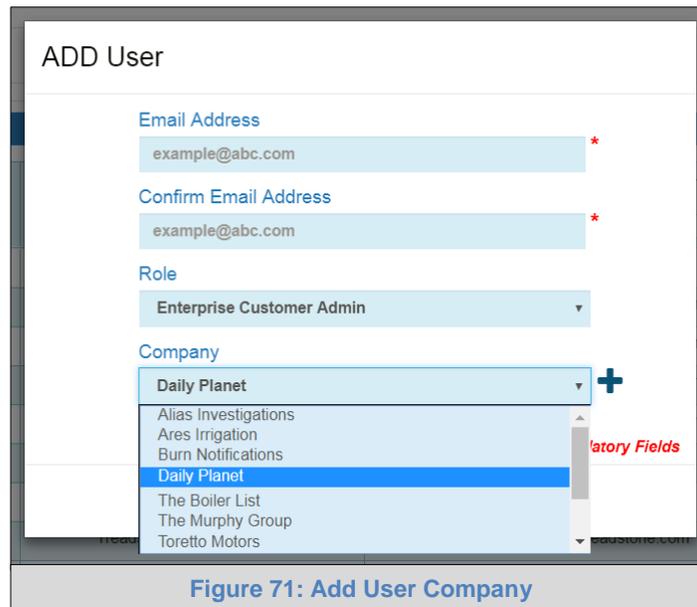


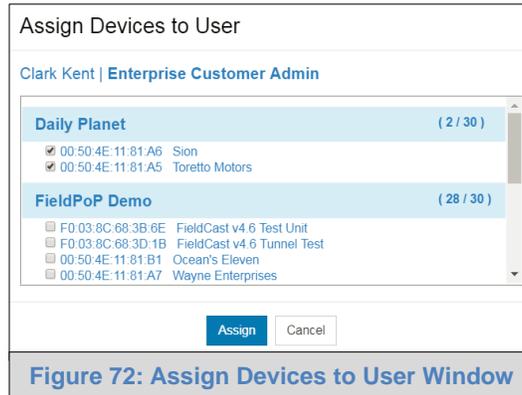
Figure 71: Add User Company

- Click “Create” to generate the new user and send out a SMC Cloud welcome email.

**NOTE:** SMC Cloud will automatically send an email to the newly created user for account setup. See [Section 2.2.1](#) for walkthrough instructions.

5.3.1.2 Assign or Remove Devices for an Existing User

- Click the bold number in the Devices column in any user row to edit the details for that user.



- Fill in the listed checkboxes to assign devices or deselect checkboxes already ticked to remove.
- Click “Assign” to record the details.

5.3.1.3 Assign or Remove Customers for an Existing OEM Manager

- Click the bold number in the Customers column in any OEM manager user row to edit the details for that user.



- Fill in the listed checkboxes to assign organizations or deselect checkboxes already ticked to remove.
- Click “Assign” to record the details.

5.3.1.4 Edit an Existing User

- Click the Edit icon (✎) under the options column of any user row to edit the details for that user.

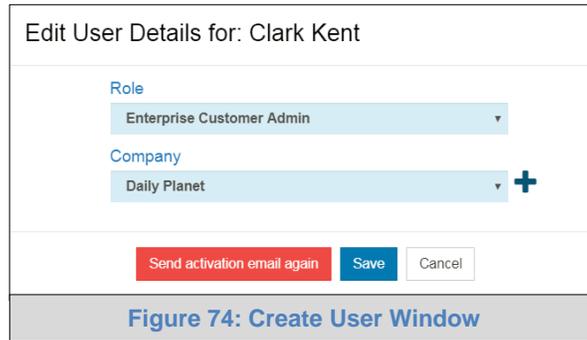


Figure 74: Create User Window

- Change all necessary fields.
- Click “Save” to record the updated details.

5.3.1.5 Delete a User

- Click the Trash Can icon (🗑️) under the options column of the user row to delete.

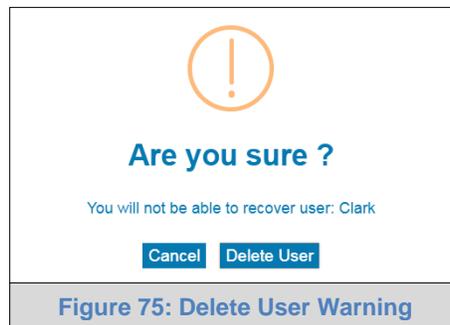


Figure 75: Delete User Warning

- Click “Delete User” on the warning screen to confirm deletion.

## 5.4 Reports

There are two pages under the Reports tab: Registered Assets and Permissions.

### 5.4.1 Registered Assets

This page lists each of the devices registered to SMC Cloud and shows all of the device details.

The screenshot displays the 'Registered Assets' page in the SMC FieldPoP interface. The page features a navigation menu with 'Reports' selected. Below the menu, there are tabs for 'Registered Assets' and 'Permissions'. The main content area contains a table with the following data:

Company	MAC Address	Device Name	Location	Total Devices
Alias Investigations	00:50:4E:11:1B:49	Elco	45.466083, 9.184254	1
Ares Irrigation	00:50:4E:11:1B:4D	Ares Irrigation	29.550546, -95.096969	1
Baxi SpA	00:50:4E:11:0E:D0	FS_ZA_121	-26.0675, 27.9434699999999934	1
Burn Notifications	00:50:4E:11:1B:56	Burn Notifications	25.790150, -80.137441	1
Gray Matter	00:50:4E:11:1B:4E	Gray Matter	35.082329, -106.627734	1
Inception Solutions	00:50:4E:11:1B:46	Inception Solutions	50.829387, -115.210696	1
Main Force Patrols	00:50:4E:11:1B:4F	Main Force Patrols	-33.634901, 150.440239	1
Medellin Imports	00:50:4E:11:1B:45	Medellin Imports	4.706454, -74.067303	1
Nassau Trading Company	00:50:4E:11:1B:57	Nassau Trading Company	25.047400, -77.350829	1
Nelson and Murdock	00:50:4E:11:1C:9D	Neptronic	45.526368, -73.659992	1

At the bottom of the table, there are navigation controls showing '1 / 2' items per page and '1 - 10 of 20 items'. An 'Export Options' button is also visible.

Figure 76: Registered Assets Page

The following fields are viewable and can be used as filters:

- Company
- MAC Address
- Device Name
- Description
- Location
- Device ID
- Total

**NOTE:** If certain fields are not present, they may be hidden. To make them viewable follow the Data Table Dropdown Menu instructions in [Appendix B.2](#).

### 5.4.2 Permissions

This page shows each MAC Address and which user(s) have permissions to access them.

The screenshot displays the 'Permissions' page in the SMC FieldPoP interface. The page header includes the SMC logo, 'FieldPoP' branding, and a user profile icon. A navigation bar contains tabs for 'Device Management', 'User Management', 'Notifications', 'Reports', 'Audit Logs', and 'Data Logging'. Below this, there are sub-tabs for 'Registered Assets' and 'Permissions'. The main content area features a table with the following data:

MAC Address	User
00:50:4E:11:1B:49	Alias Investigations
00:50:4E:11:1B:4D	Ares Irrigation
00:50:4E:11:0E:D0	Baxi SpA
00:50:4E:11:1B:56	Burn Notifications
00:50:4E:11:1B:4E	Gray Matter
00:50:4E:11:1B:46	Inception Solutions
00:50:4E:11:1B:4F	Main Force Patrols
00:50:4E:11:1B:45	Medellin Imports
00:50:4E:11:1B:57	Nassau Trading Company
00:50:4E:11:1C:9D	Nelson and Murdock

At the bottom of the table, there are navigation controls showing '1 / 2' items, '10' items per page, and '1 - 10 of 20 items'. An 'Export Options' button is located in the bottom right corner of the table area. The footer of the page contains 'Copyright © 2016 Sierra Monitor Corporation' and an 'About Us' link.

Figure 77: Permissions Page

The following fields are viewable and can be used as filters:

- MAC Address
- User

## 5.5 Audit Logs

This page shows the events for each user on SMC Cloud and lists the relevant details.

The screenshot displays the SMC Cloud interface for the 'Audit Logs' section. The top navigation bar includes 'Device Management', 'User Management', 'Notifications', 'Reports', 'Audit Logs', and 'Data Logging'. The 'Audit Logs' page features a filter section with checkboxes for 'OEM' and 'Enterprise Customer', and sub-checkboxes for 'Admin' and 'User'. A date range filter is set to '2016-04-14 - 2016-04-15'. The main table, titled 'Audit Logs', has the following data:

User	Role	Message	Time
c.kent@dailypplanet.com	Enterprise Customer Admin	Logged out	2016/03/24, 11:26:15
c.kent@dailypplanet.com	Enterprise Customer Admin	Logged in	2016/03/24, 11:25:47
w.wilson@smsfc.org	Enterprise Customer Admin	Logged out	2016/03/18, 22:10:41
w.wilson@smsfc.org	Enterprise Customer Admin	Logged in	2016/03/18, 22:10:36
luca@sierramonitor.com	OEM Admin	Logged in	2016/03/23, 04:09:44
luca@sierramonitor.com	OEM Admin	Created new user giulio.tessaroto@baxi.it	2016/03/23, 03:40:10
luca@sierramonitor.com	OEM Admin	Logged in	2016/03/23, 03:38:21
luca@sierramonitor.com	OEM Admin	Logged out	2016/03/22, 06:26:21
luca@sierramonitor.com	OEM Admin	Logged in	2016/03/22, 05:48:04
luca@sierramonitor.com	OEM Admin	Updated Notification Configurations for ...	2016/03/22, 05:37:45

The bottom of the page shows a pagination control with '1' of '15' items per page, and a total of '1 - 10 of 148 items'. An 'Export Options' button is also visible.

Figure 78: Audit Logs Page

The following fields are viewable and can be used as filters:

- User
- Role
- Message
- Time

Additionally, a “From Date” and “To Date” search bar is included on the top right section of the page. This allows viewing a specific time frame of events based on the dates entered.

**NOTE:** If certain fields are not present, they may be hidden. To make them viewable follow the Data Table Dropdown Menu instructions in [Appendix B.2](#).

## 5.6 Data Logging

This page lists the data available for download to a local PC.

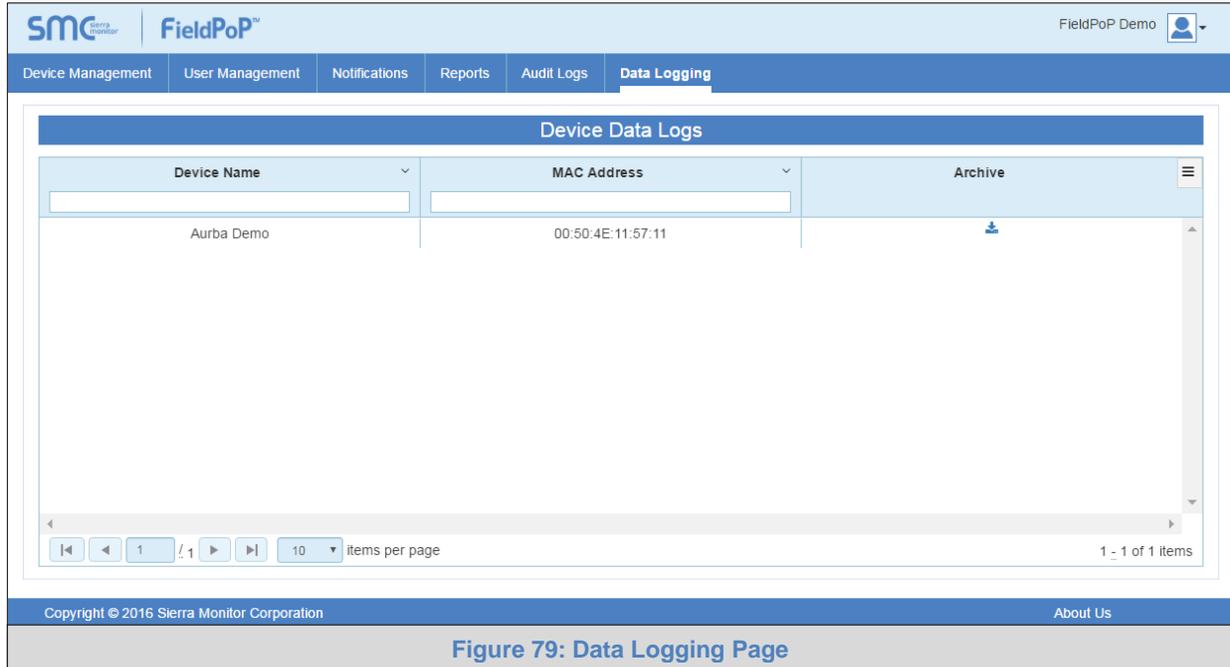


Figure 79: Data Logging Page

The following fields are viewable and can be used as filters:

- Device Name
- MAC Address

### 5.6.1 Downloading Data Logs

- Find the appropriate data using the device name and MAC Address.
- Click the hard drive icon under the Archive column to open the Generate Historian Archive Window.



Figure 80: Generate Historian Archive Window

- Fill in the information as needed, selecting the data's date range, format (JSON or CSV) and whether the file is generated as a zip file.
- Click Download to generate and download the file to the local PC.

**NOTE:** Data Logs are time stamped in seconds form January 1<sup>st</sup>, 1970.

## 5.7 Dashboards

This page lists the dashboards that have been created by the user.

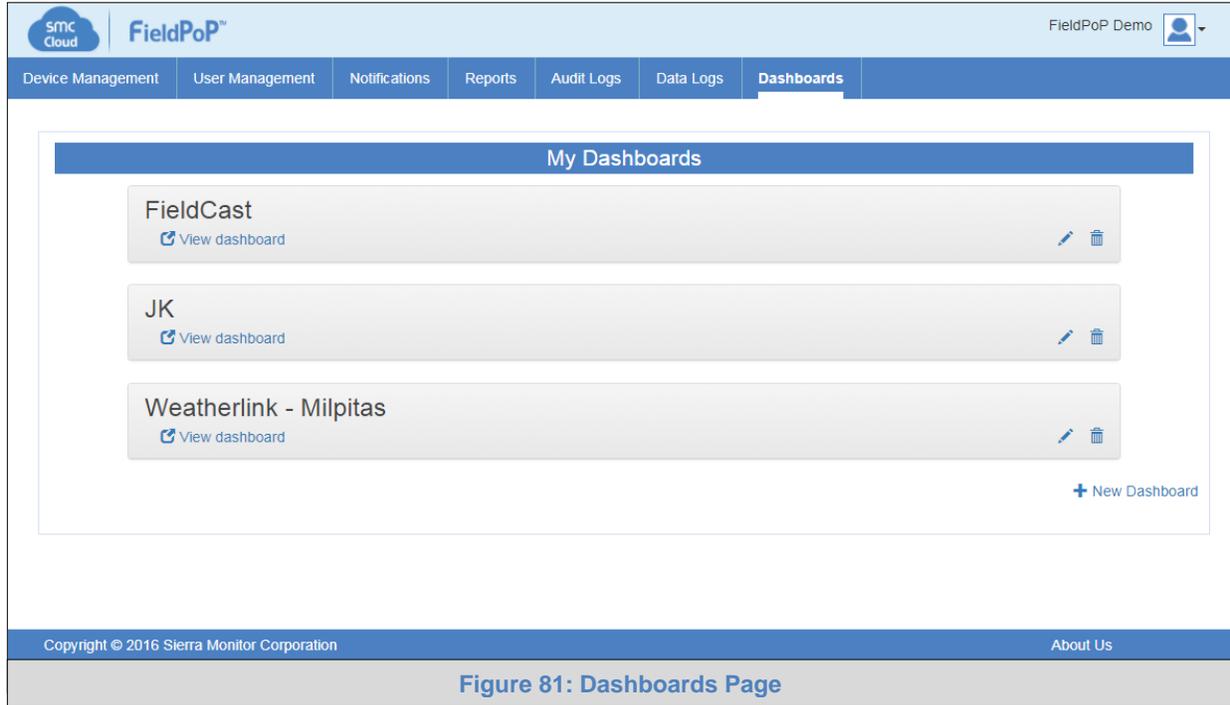


Figure 81: Dashboards Page

### 5.7.1 Create a Dashboard

- Click the **+** [New Dashboard](#) button on the bottom right corner of the screen.
- Add a Dashboard Name and choose the Dashboard Type from the template options shown.

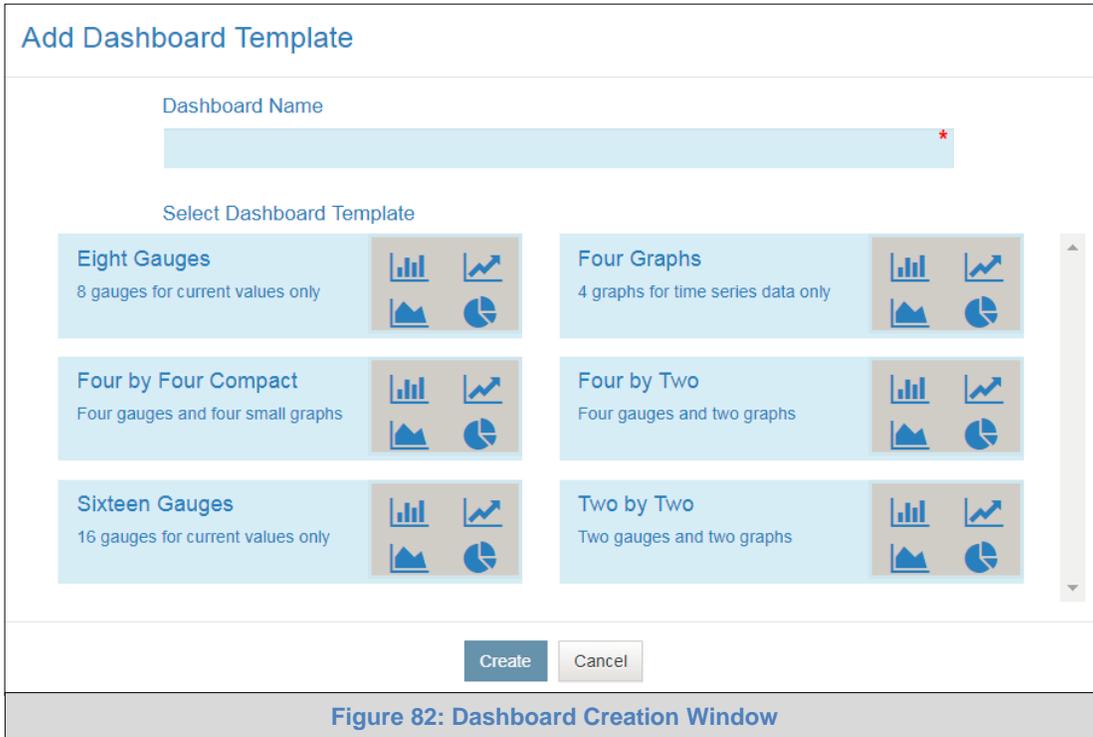


Figure 82: Dashboard Creation Window

- Click Create and a message will appear declaring that the new Dashboard was successfully created.
- Click the OK button.

### 5.7.2 Rename a Dashboard

- Click the edit icon (✎) on the right side of the desired dashboard entry to rename (Figure 81).
- The Dashboard name is now editable, rename and click save.



### 5.7.3 Setup Dashboard

- Click [View dashboard](#) on the desired dashboard entry (Figure 81) to open the dashboard proper.

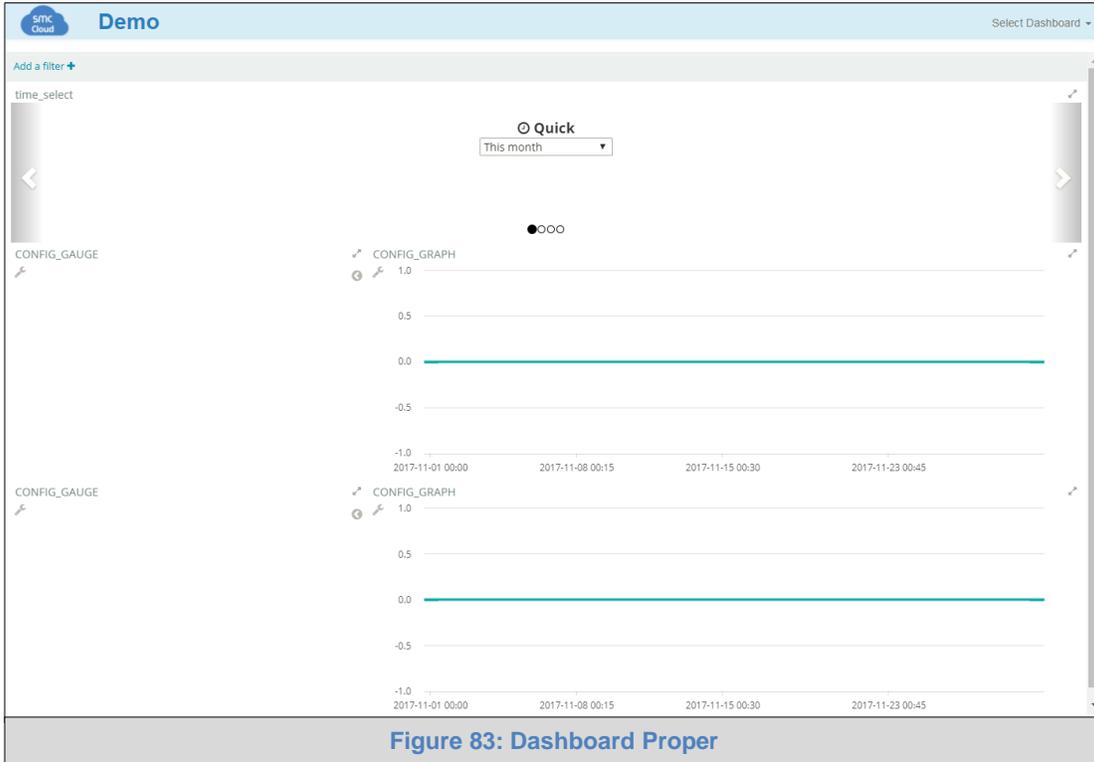


Figure 83: Dashboard Proper

- Click on the wrench icon ( ) next to either gauges or graphs for data configuration.
- Select the data for visualization via gauge or graph by clicking the grey checkbox to the left of the desired value.
  - Gateway Names, Device or Value can be filtered by entering desired search information in the search box above the listed data sources
  - For gauges, only one data source can be selected
  - For graphs, multiple data sources can be selected

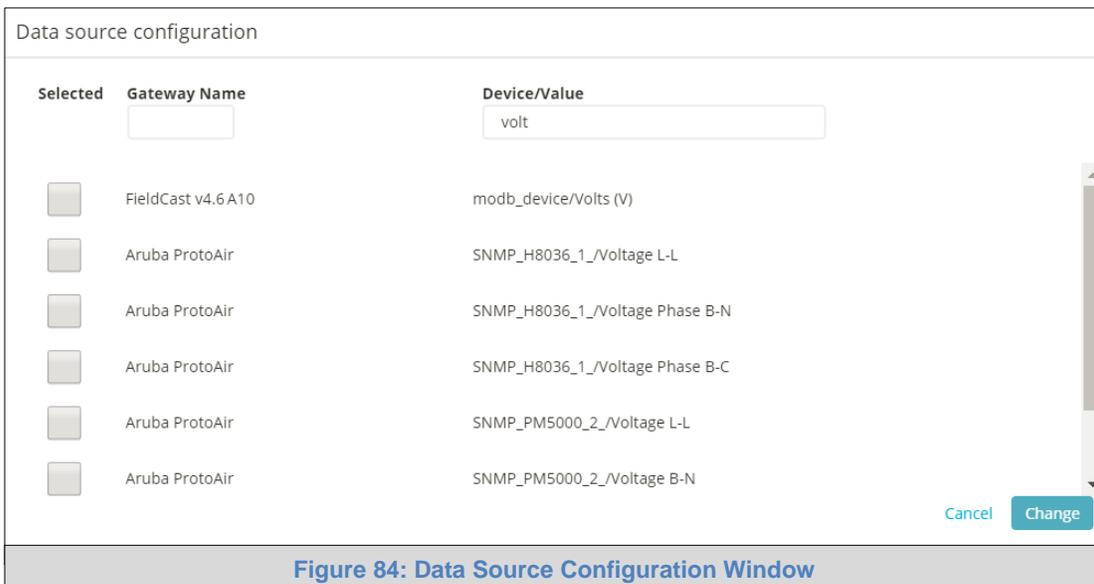
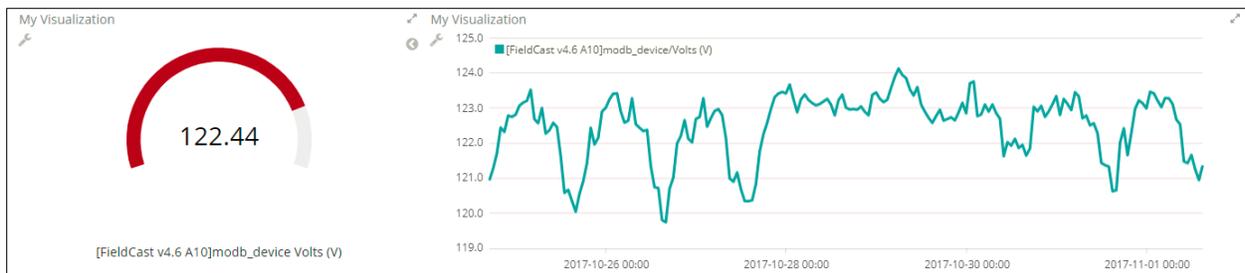


Figure 84: Data Source Configuration Window

- Once selected data points appear at the bottom of the Data source configuration window, modify the Title (name of gauge or graph), Label (name for the specific data point), Unit (gauge only – custom “units” text field), Ranges (gauge only), or Graph color (graph only – defines color of each set of data in the graph) as desired.

- Click Change once configuration is complete to generate the gauge or graph.



**NOTE:** For gauges, to change what color a range of values represents, click the left pointing arrow icon (↶) to the right of the gauge. Click the range to modify and then choose the new color.

**NOTE:** For graphs, values can be hidden by click the data point item where the label is written out next to a square of its representative color.

### 5.7.4 Change the Dashboard Time Range

- To change the time range of the presented data (x-axis for graphs and average calculation for gauges), select from the four representation types under the time\_select parameter near the top of the page.

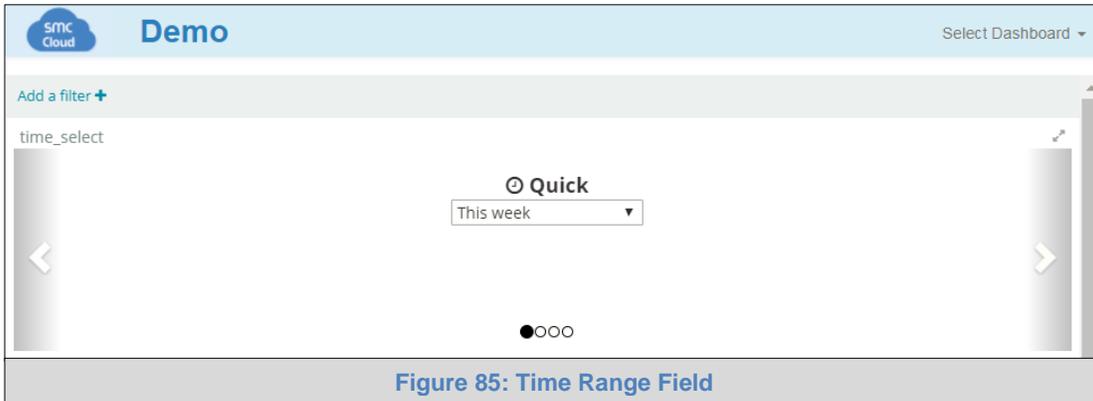


Figure 85: Time Range Field

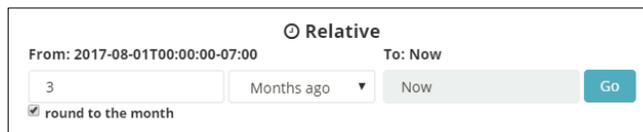
- Select a type of time range representation by clicking any of the four circles under the dropdown menu or clicking on the white arrows pointing left or right on the left and right edges of the screen.

There are four ways to visualize the selected data in terms of time range. These include:

**Quick** – Offers straightforward time selections such as ‘this week’, ‘previous month’, ‘last 12 hours’, etc.



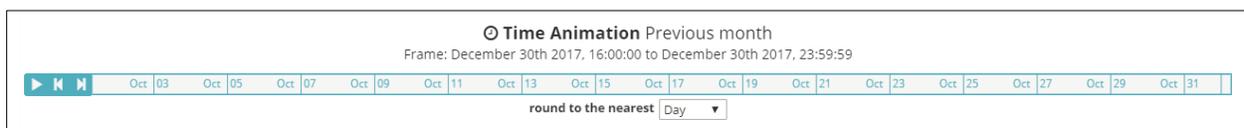
**Relative** – Allows representation of data from the current time to a chosen number of minutes, weeks, months, etc. in the past. Click the Go button to update graphs and gauges.



**Absolute** – An explicit range of year, month, day, hour, minute, second, and fraction of a second is selectable (YYYY-MM-DD HH:mm:ss:SSS). Click the Go button to update graphs and gauges.

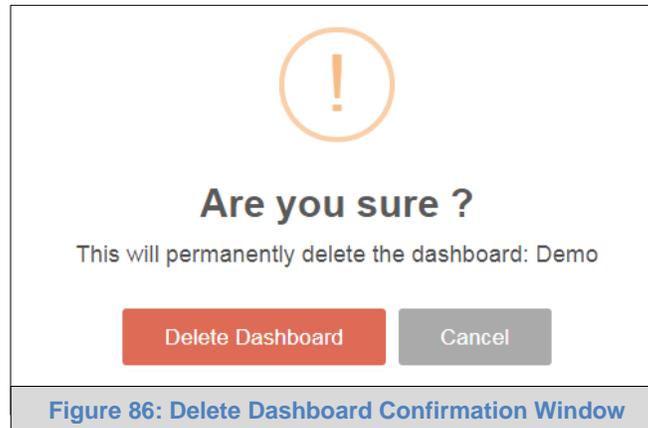


**Time Animation** – This selection allows viewing of graphical data as it occurred in consecutive aggregates of minute, hour, day, month, etc. Select the total time frame using one of the previously described representation methods, change the ‘round to the nearest’ dropdown menu for the desired time frame jumps and click the play icon (▶) to start the graphical visualization. Hit pause (⏸) and click the skip forward (⏭) or skip backward (⏮) arrows to move the time frame manually.



### 5.7.5 Delete a Dashboard

- Click the trash icon (  ) on the right side of the desired dashboard entry to delete ( [Figure 81](#) ).
- A message will appear to confirm, click “Delete Dashboard”.



- Another message will appear stating that the dashboard was deleted successfully, click the OK button.

## 5.8 General Notes for Using SMC Cloud

- See Data Table Features ([Appendix B.2](#)) for information on how to filter or export data for the sections that follow.
- See [Appendix B.4](#) for SMC Cloud Session Time Out details.

**Appendix A. Troubleshooting**

**Appendix A.1. Device Management Map**

**Appendix A.1.1. Device Pin Turns Gray Unexpectedly**

If a device pin turns gray on the Device Management Page:

- Check FieldServer is connected to the internet.
- Ensure power LED is lit on the FieldServer.

**Appendix A.1.2. Scroll Wheel Doesn't Change Map Magnification**

If the mouse scroll wheel is used and the Device Management Map shows the message "Use ctrl + scroll to zoom the map", hold down the Ctrl key while using the wheel to zoom in or out of the map.

**Appendix A.2. Lost SMC Cloud Login Password**

**If the password is lost, follow the below instructions:**

- Click "Forgot Password" on the SMC Cloud Login Screen (**Figure 87**).

**Figure 87: Forgot Password Window**

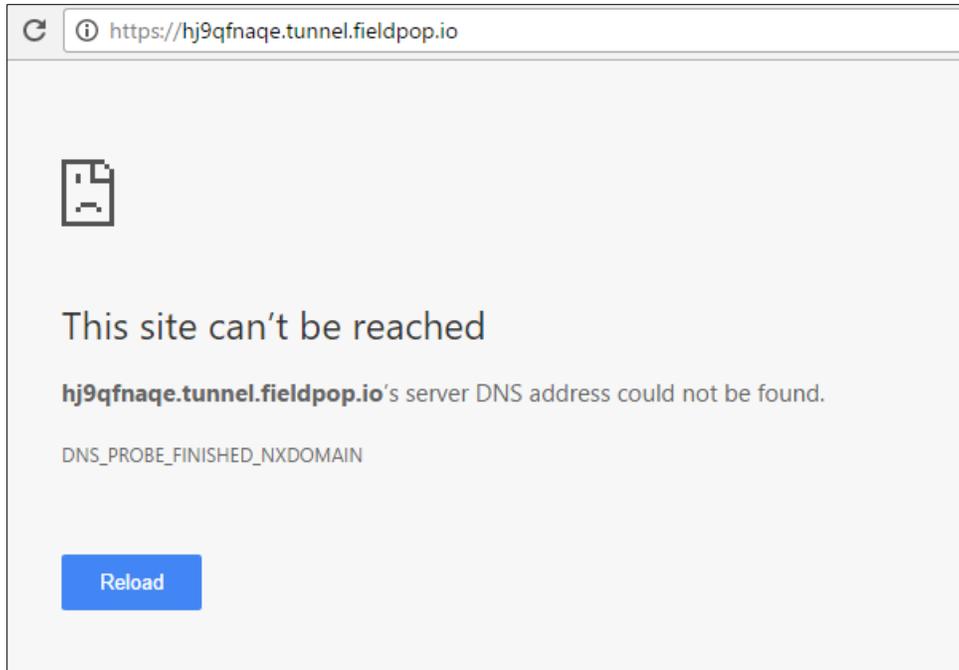
- Once the Password Reset Window appears, enter the email address of the SMC Cloud account and click Submit.
- Click on the "Reset Your Password" button in the email sent from [notification@fieldpop.io](mailto:notification@fieldpop.io) to reset the SMC Cloud password.

**Figure 88: Password Reset Window**

- Enter and confirm the new password then click Save.

### Appendix A.3. SMC Cloud Cannot Remotely Connect to a Device

Check if the screen below appears when trying to remotely connect to a device. If so, try clearing the DNS cache (in the cmd window type "ipconfig /flushdns") or validate the local computer's DNS against the network DNS settings. Contact technical support if the problem persists.



### Appendix A.4. General Connection Notes

- It is important to check that the FieldServer's network settings are set up with the following Domain Name Server (DNS) settings for proper communication:
  - DNS1 = 8.8.8.8
  - DNS2 = 8.8.4.4
- Any time changes to the network settings are done, remember to click "Update IP Settings" and then power cycle or soft reboot the FieldServer to save the new settings.
- The SMC Cloud uses TCP ports 80 and 443 by default.

Appendix A.5. SMC Cloud Connection Problems

If there is a problem with connecting to the SMC Cloud a warning will appear.



Figure 89: Registration Warning Message Example

Follow the directions presented in the warning message and check that the DNS settings meet the requirements mentioned in [Appendix A.4](#).

**Appendix B. Useful Features**

**Appendix B.1. Security**

SMC Cloud to FieldServer and FieldServer to browser connections are secured with HTTPS, which uses TLS/SSL (Transport Layer Security/Secure Sockets Layer). The HTTPS certificate is issued by SSL.com. Details are viewable via any local PC browser by following the instructions found in [Appendix B.1.3.](#)

**NOTE:** SMC Cloud keeps information private between individual OEMs and individual enterprise users. There is no bleed between different OEMs and different enterprise users.

**Appendix B.1.1. PC to SMC Cloud**

To browse SMC Cloud via PC, type the following domain into the PC's internet browser: [www.fieldpop.io](http://www.fieldpop.io) (port 80 and 443).

**Appendix B.1.2. FieldServer to SMC Cloud**

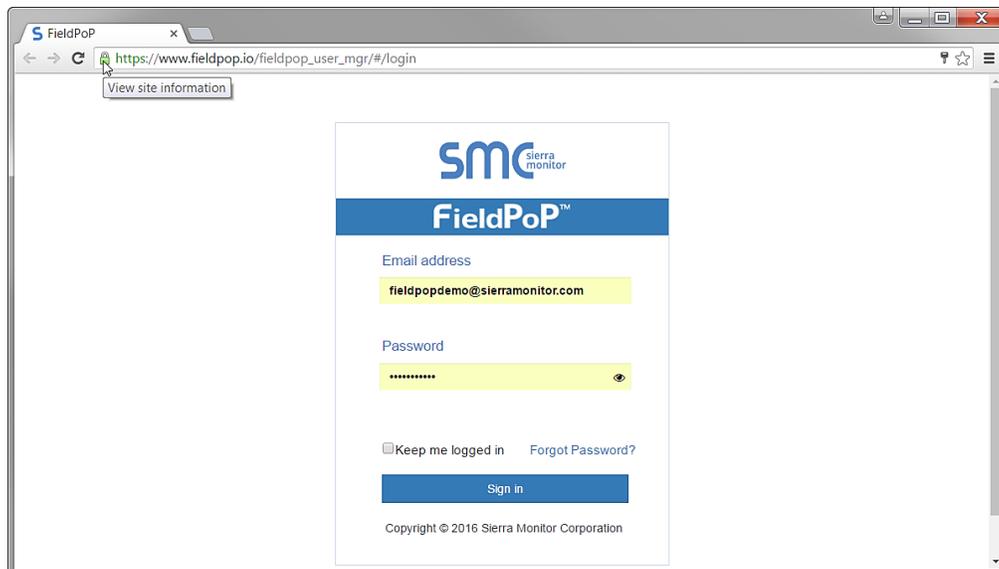
To allow the FieldServer to connect to SMC Cloud, use the following domain: [www.fieldpop.io](http://www.fieldpop.io) (port 80 and 443).

To connect to a ProtoNode via SMC Cloud, a device tunnel is created that has a unique subdomain in the URL. The best way to configure a firewall rule with this in mind is to use a wildcard domain: [\\*.tunnel.fieldpop.io](http://*.tunnel.fieldpop.io) (port 443).

Additional security can be added by allowing the FieldServer to exclusively access the [\\*.fieldpop.io](http://*.fieldpop.io). This provision can be set up in the customer's firewall.

**Appendix B.1.3. Viewing the Certificate**

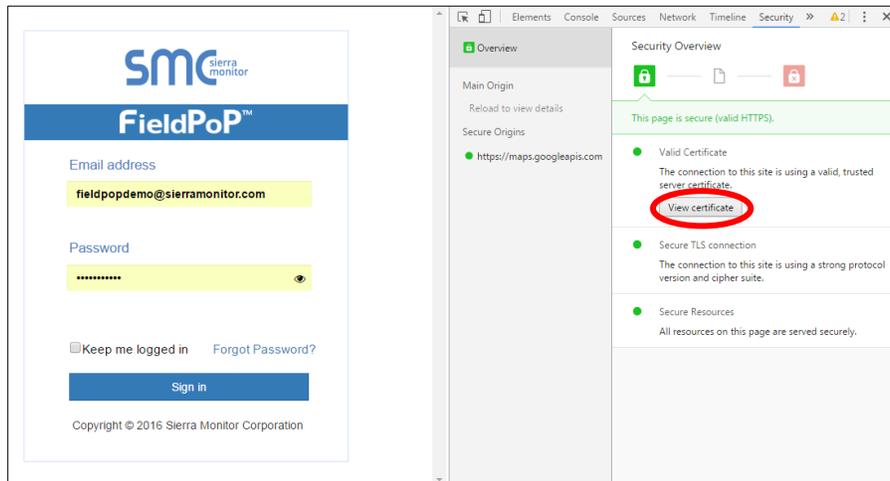
- Open a web browser on the local PC and go to <https://www.fieldpop.io>.
- Move the cursor to the padlock icon (  ) next to the website address.



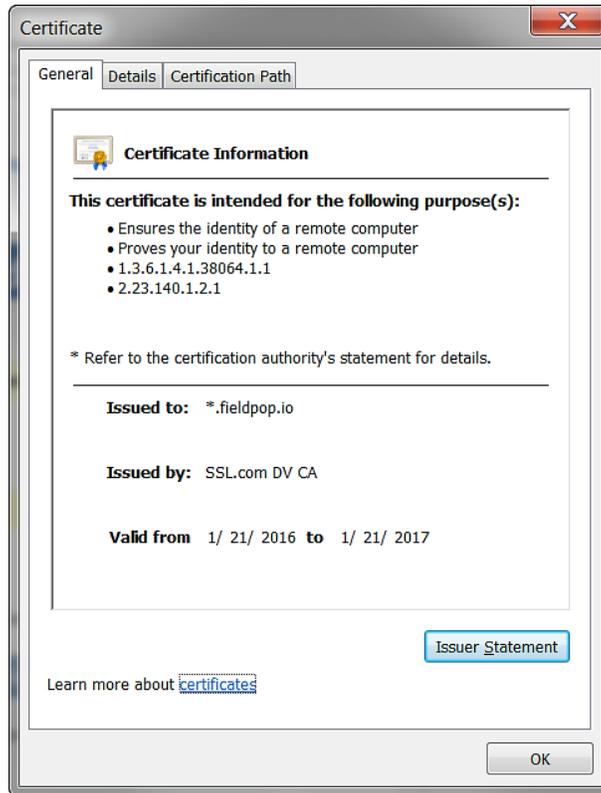
- Right-click the padlock icon to open a dropdown menu for website information and browser settings.
- Click the Details link to open the security overview information panel.



- Review the information and click the View certificate button.



- Examine the certificate as needed.



**NOTE:** To download the certificate, click the Details tab and click the 'Copy to File' button.

Appendix B.2. Data Table Features

The following features are available on any Data Table Page.

Appendix B.2.1. Additional Filter Options

**Column Field Search** – Specific details can be typed into the text box at the top of each column to locate users.



Figure 90: Filtering Using Field Search

**Column Dropdown Menu** – The downward pointing arrow to the right of each field name can be selected to sort in ascending, descending or hide the selected column. To bring a hidden column back into the table, use the Data Table Dropdown Menu.

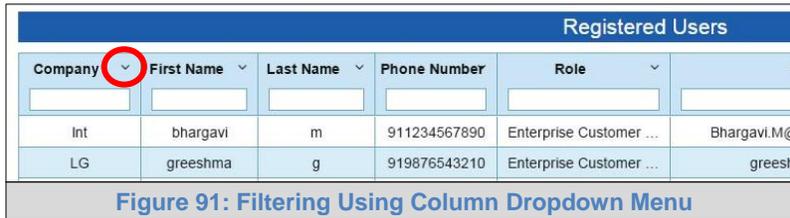


Figure 91: Filtering Using Column Dropdown Menu

**User Type Checkbox** – Additionally, the Registered Users listing and Audit Logs listing can be filtered using the user type checkboxes across the top of the page by unchecking to exclude the user types in question and checking to include those same users.



Figure 92: Filtering Using User Type Checkbox

**Data Table Dropdown Menu** – Click on the gray menu icon on the top right corner of the desired data table. This will open a dropdown list that includes the option to clear all filters and lists the columns available for this specific data set. Columns clicked will be hidden or added to the table depending on whether they are present in the table or not.



Figure 93: Clearing Filters

## Appendix B.2.2. Exporting Data

- Click on the blue “Export Options” button on the bottom right corner Data Table.

The screenshot shows the FieldPoP User Management interface. At the top, there are navigation tabs: Device Management, User Management (selected), Notifications, Reports, Audit Logs, and Data Logging. Below the tabs, there are filter sections for OEM and Enterprise Customer, each with Admin and User checkboxes. The main content is a table titled "Registered Users" with columns: First Name, Last Name, Company, Role, Email, Phone Number, Devices, Device List, and Options. The table contains 10 rows of user data. At the bottom right of the table, there is an "Add User" button and a circled "Export Options" button. The footer includes "Copyright © 2016 Sierra Monitor Corporation" and "About Us".

First Name	Last Name	Company	Role	Email	Phone Number	Devices	Device List	Options
Clark	Kent	The Daily Planet	Enterprise Customer Admin	c.kent@dailyplanet.com	14082622299	N/A	Assign	[Export] [Delete]
Cordell	Calitz	Sierra Monitor ...	OEM Admin	cordell.calitz@gmail.com	27836569025	N/A	Assign	[Export] [Delete]
Cordell	Calitz	Sierra Monitor ...	OEM Admin	cordell@sierramonitor.com	27836569025	N/A	Assign	[Export] [Delete]
Daniel	Ocean	Ocean's Eleven	Enterprise Customer Admin	d.ocean@oceanseleven.com	14082622299	N/A	Assign	[Export] [Delete]
Dominick	Cobb	Inception Solut...	Enterprise Customer Admin	dom@inceptionsolutions.com	14082622299	N/A	Assign	[Export] [Delete]
Giulio	Tessarolo	Sierra Monitor ...	OEM Admin	giulio.tessarolo@baxi.it	393471563421	N/A	Assign	[Export] [Delete]
Han	Seoul-Oh	Toretto Motors	Enterprise Customer Admin	han@torettomotors.com	14082622299	N/A	Assign	[Export] [Delete]
Jason	Bourne	Treadstone	Enterprise Customer Admin	j.bourne@treadstone.com	14082622299	N/A	Assign	[Export] [Delete]
James	Flint	Nassau Tradin...	Enterprise Customer Admin	j.flint@nassautrading.com	14082622299	N/A	Assign	[Export] [Delete]
Jessica	Jones	Alias Investiga...	Enterprise Customer Admin	jjones@aliasinvestigations....	14082622299	N/A	Assign	[Export] [Delete]

Figure 94: User Management Page – Export Options

- Choose one of the export file options below:
  - Export all data as CSV
  - Export visible data as CSV
  - Export all data as PDF
  - Export visible data as PDF

**NOTE:** If any columns have been made invisible via the additional filter options shown in [Appendix B.2.1](#) then the export options that reference “visible data” will not include those columns.

- The data file will automatically download to the local computer’s default “Downloads” folder.

## Appendix B.3. Device Management Map Controls

### Appendix B.3.1. Mouse

**NOTE:** For the mouse control descriptions below, “left” and “right” refer to the left and right mouse buttons.

- Left click and hold – This allows dragging to orient the map as desired.
- Double left click – Zoom in one interval.
- Double right click – Zoom out one interval.
- Scroll wheel – Roll forward to zoom in and roll back to zoom out.

**NOTE:** If the scroll wheel stops changing the map magnification, see [Appendix A.1.2](#).

### Appendix B.3.2. Additional Controls

The following icons are located in the bottom right corner of the Device Management Map and include their function description below:



Google Street View – Enable street level navigation from Google Maps



Zoom In – Based on current center of screen



Zoom Out – Based on current center of screen



Full Screen – Open map in full screen view

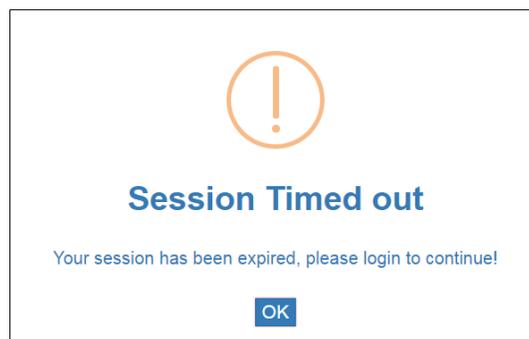


Exit Full Screen – Exit the map full screen view

## Appendix B.4. Session Time Out

If SMC Cloud is left open without any input a pop up a reminder will occur 10 min after last input and state that log out will occur in 5 minutes.

SMC Cloud will automatically show the following window if no input is received after 15 minutes:



To log back on, click OK to be sent back to the SMC Cloud Login screen and log in as normal.

## Appendix B.5. User Roles – Type and Hierarchy

The following explains what the different types of SMC Cloud user roles are and what functions they allow. There are three types of roles: **Admin**, **Manager** and **User**. There are also two levels of hierarchy: **OEM** and **Enterprise Customer**. OEM accounts are a level of hierarchy above Enterprise Customer accounts. **Only an OEM can be a manager.**

**Admin** can:

- Register or deregister devices
- Create **Admin** or **User** accounts on the same level of hierarchy
- Change the role of existing users between **Admin** and **User**
- View all devices accessible to the **Admin's organization**
- Assign a device to a **User** on the same level of hierarchy, granting access to view the device

**User** can:

- Register or deregister devices (Users can only deregister devices of which they have access)
- View and edit device(s) that are assigned to the **User's** account by an **Admin** of the same company

**OEM Admin** can:

- Change the privacy settings for their company (**Section 5.1.5**)
- Customize the SMC Cloud website UI (**Section 5.1.3**)
- Upload new firmware to SMC Cloud
- Create Enterprise Customer Admin accounts
- Add a new company to the SMC Cloud system by creating a new Enterprise Customer Admin
- Assign a device to an **Enterprise Customer Admin**, making the device visible to all of that company's Enterprise Customer Admins
- Assign organizations to an OEM Manager
- Not view, create or modify Enterprise Customer Users

**Enterprise Customer Admin** can:

- Update the firmware of a device via SMC Cloud
- View and edit device(s) that are registered to the Enterprise Customer Admin's organization
- Not view, create or modify **OEM Admins** and **OEM Users**

**OEM Manager** can:

- Create Enterprise Customer Admin or OEM User accounts
- Modify Enterprise Customer Admin or OEM User accounts within an organization that has been previously assigned to the OEM Manager
- Add a new company to the SMC Cloud system by creating a new Enterprise Customer Admin
- Assign a device to an **Enterprise Customer Admin** (in an organization assigned to or created by the OEM Manager), making the device visible to that company's Enterprise Customer Admins
- Assign a device to a **OEM User**, granting the user access to view the device
- View and edit device(s) that are registered to the organizations assigned to the OEM Manager, devices created by the OEM Manager or devices directly assigned by the OEM Admin
- Not view or modify users, devices or organizations that aren't part of the organizations assigned to the OEM Manager, created by the OEM Manager or directly assigned by the OEM Admin

On the SMC Cloud website, devices are associated with the company and hierarchy level of the account that registered it. This includes which roles will be able to view the device.

- If an **OEM User** registers a device, the device is also immediately assigned to that user. This allows all **OEM Admins** to view the device.
- If an **OEM Admin** registers a device, it is assigned to the OEM Admin's company and becomes visible to all OEM Admins of that company only. An **OEM Admin** can then assign that device to an **OEM User**, who is then allowed to view the device along with all the OEM Admins of that company. If the **OEM Admin** then assigns that device to an **Enterprise Admin**, that device will become associated with the **Enterprise Customer Admins** which means all **Enterprise Customer Admins** of that company can now also see the device.
- If an **Enterprise Customer User** registers a device, that user will automatically be assigned that device. The registering **Enterprise Customer User** and all **Enterprise Customer Admins** will be able to view the device.

## Appendix C. Warranty

Sierra Monitor Corporation warrants its products to be free from defects in workmanship or material under normal use and service for two years after date of shipment. Sierra Monitor Corporation will repair or replace any equipment found to be defective during the warranty period. Final determination of the nature and responsibility for defective or damaged equipment will be made by Sierra Monitor Corporation personnel.

All warranties hereunder are contingent upon proper use in the application for which the product was intended and do not cover products which have been modified or repaired without Sierra Monitor Corporation's approval or which have been subjected to accident, improper maintenance, installation or application, or on which original identification marks have been removed or altered. This Limited Warranty also will not apply to interconnecting cables or wires, consumables or to any damage resulting from battery leakage.

In all cases Sierra Monitor Corporation's responsibility and liability under this warranty shall be limited to the cost of the equipment. The purchaser must obtain shipping instructions for the prepaid return of any item under this warranty provision and compliance with such instruction shall be a condition of this warranty.

Except for the express warranty stated above, Sierra Monitor Corporation disclaims all warranties with regard to the products sold hereunder including all implied warranties of merchantability and fitness and the express warranties stated herein are in lieu of all obligations or liabilities on the part of Sierra Monitor Corporation for damages including, but not limited to, consequential damages arising out of/or in connection with the use or performance of the product.