COMANCHE®

DATA CENTER

USER MANUAL

Borin Manufacturing, Inc.

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1.0 Introduction

All of ***BORIN Manufacturing, Inc.'s*** equipment can be integrated together seamlessly to encompass all the requirements of an integrated company: from production wells through the gathering system, to the pipeline, into the refinery and onto the service stations; every type of communication system working together, including the internet.

2.0 How To Set Up Your System

2 .1 Set Up your Company's Account

If you have purchased any of the **COMANCHE Remote Monitoring & Control System** units with an interface to the **COMANCHE Data Center** please have the Account Manager contact the customer service department at ***BORIN Manufacturing, Inc.*** to create an account at:

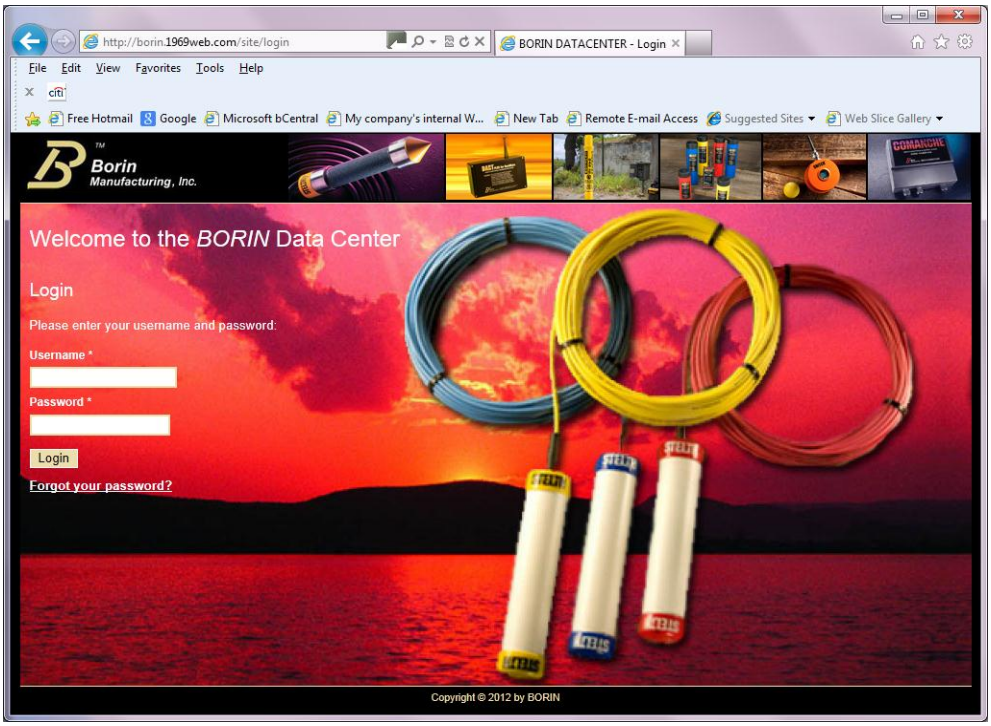
datacenter@borin.com

The Account Manager will receive an e-mail with:

User ID: example
Password: example

The Account Manager can create and manage the **COMANCHE Data Center users** at the **My Users** tab.

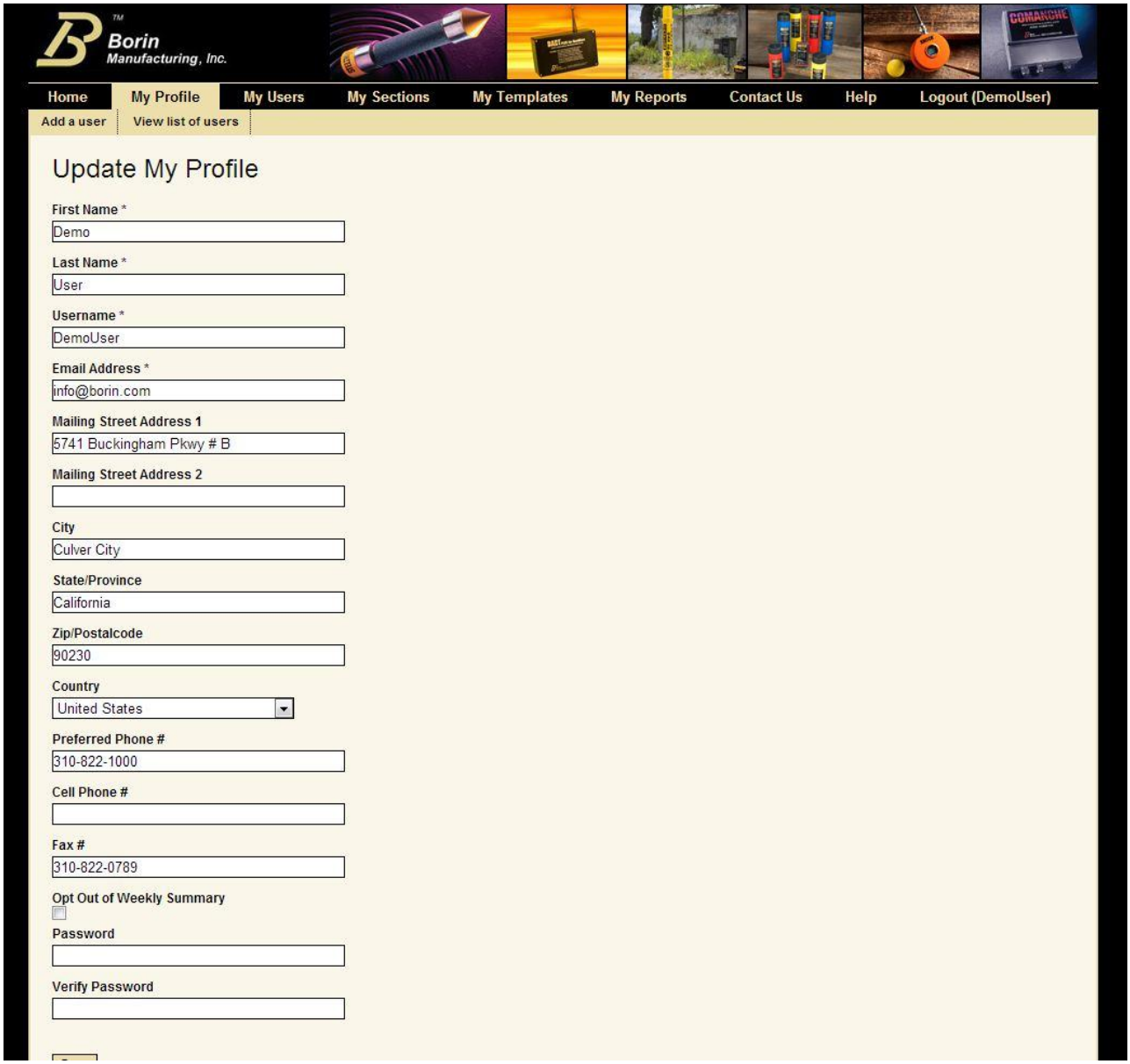
After logging in for the first time it is recommended to set a new password.



Once you log into the system, you access the Home page with tabs to the different sections of the Data Center as well as a Welcome summary that displays your latest messages, alarms and a list of your projects.

2 .2 Configure your User Profile and Password

After logging in for the first time it is recommended to set a new password, you can change the password, configure and save your profile in the **My Profile** tab.



The account manager can **Add a User** to the **COMANCHE Data Center** from this screen and can manage or add users from the **My Users** tab.

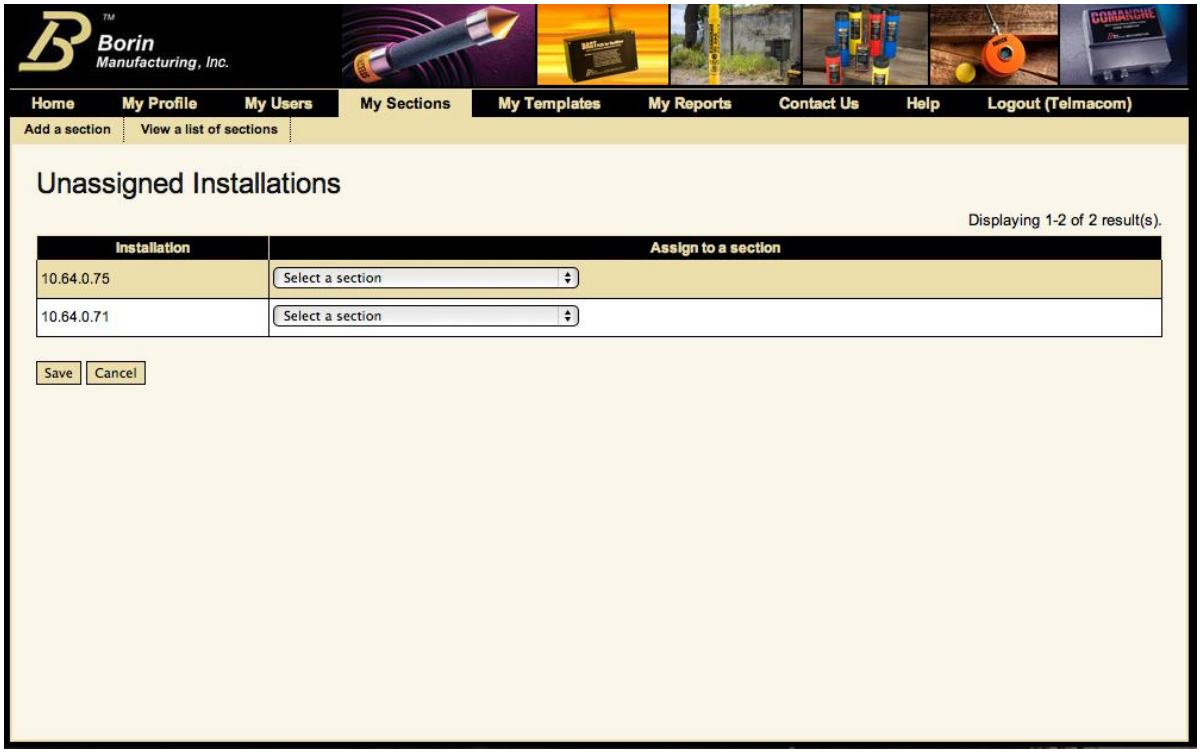
3.0 How To Set Up Your Installation

3 .1 Register your COMANCHE RMU in the Data Center

Your newly installed **COMANCHE RMU** will automatically report to the **COMANCHE Data Center** as soon as it has been powered and has been connected to the Data Center via the GSM network or a TCP/IP network. For installation instructions follow the **COMANCHE** Installation Manual.

The New **COMANCHE RMU** will be listed as an Unassigned Installation. Go to **My Sections** tab and click on **View unassigned installation**s to verify that your RMU has registered in the network. You can assign the installation to an existing section or if you have not created a section, please review the **Create a Section** part of this manual. Sometimes, from the factory we create a **Test Section** for you, this section would include all of your new **COMANCHE** installations.

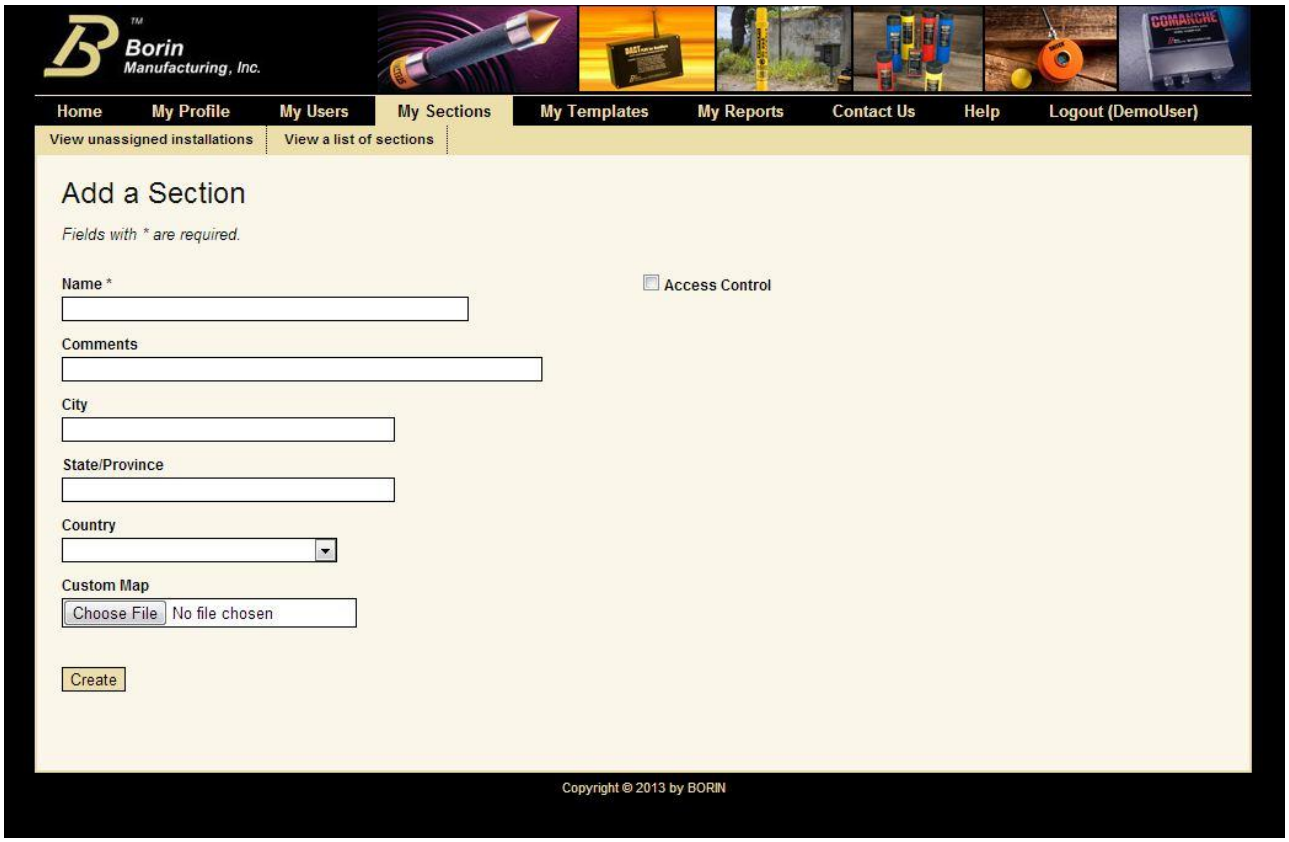
If you can not find your **COMANCHE RMU** on the Unassigned Installation list, double check the power and GSM signal indicators in your **COMANCHE** unit and accessories as per the **COMANCHE** Installation Manual. If everything appears to be in order and the RMU is still not listed in the Data Center, please call the **COMANCHE Data Center** support at +1 310-822-1000.



3 .2 Create a Section

A Section in the **COMANCHE Data Center** is a group of **COMANCHE** RMCS Installations as defined by the Company or System Manager, for example: by zone, by region, by manager, by facility, etc.

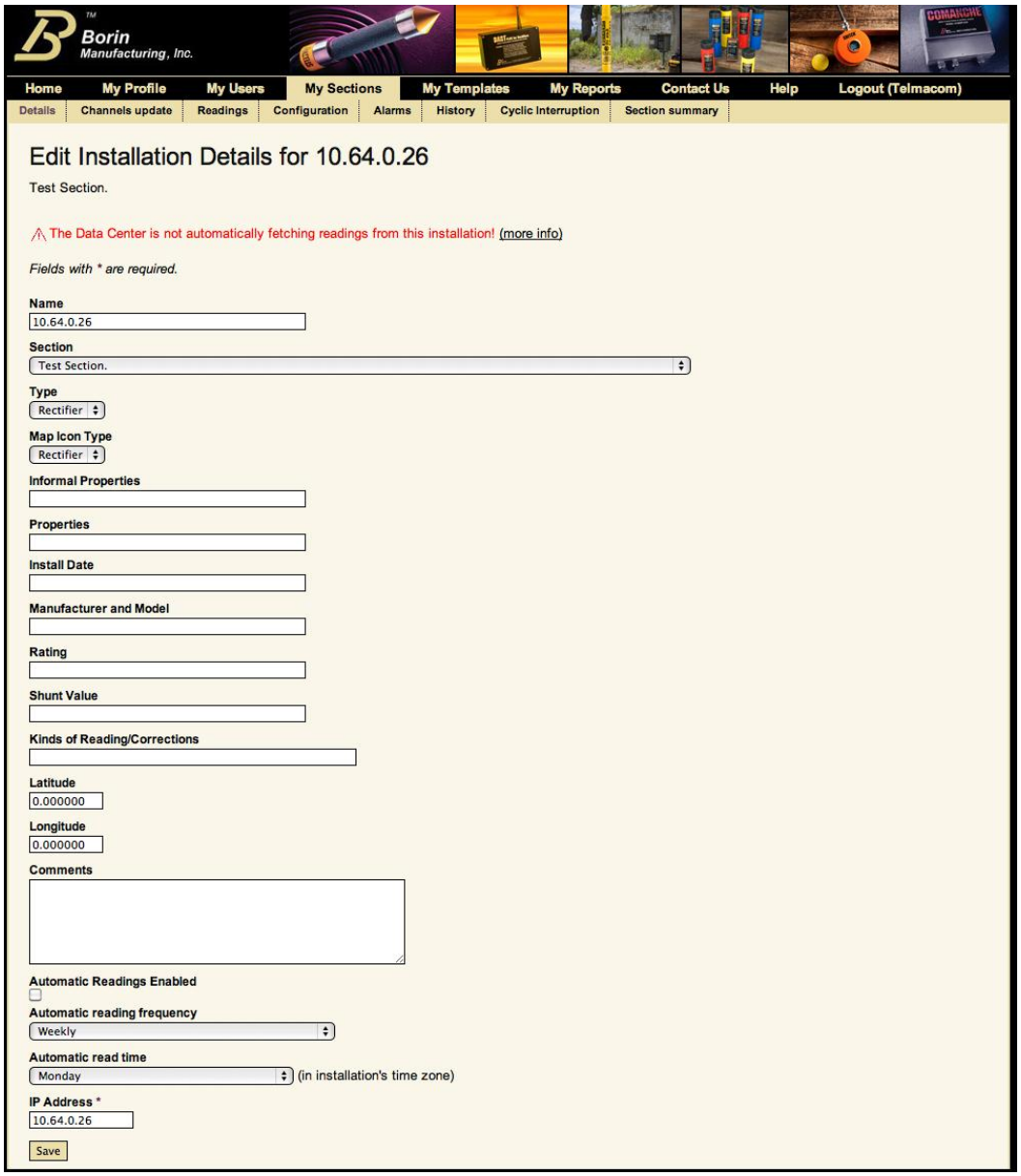
To create a new project, go to the **My Sections** tab and click on **Add a Section**. Fill out the project information and click on **Create**.



Now you can assign installations to this section as described in **COMANCHE RMU** registration in the Data Center portion of this manual, and continue to Configure your Installation.

3 .3 Reassign an Installation to the Appropriate Section

If your installations are already in the Data Center from the factory it is simple to move each to their appropriate section. To reassign an installation to the appropriate section go to **My Sections**, click on **Test Section** then click on the name of the installation that you want to move. Select the **Details** menu and go to **Edit Details**. Select the desired section from the **Section** dropdown list and click on **Save**.

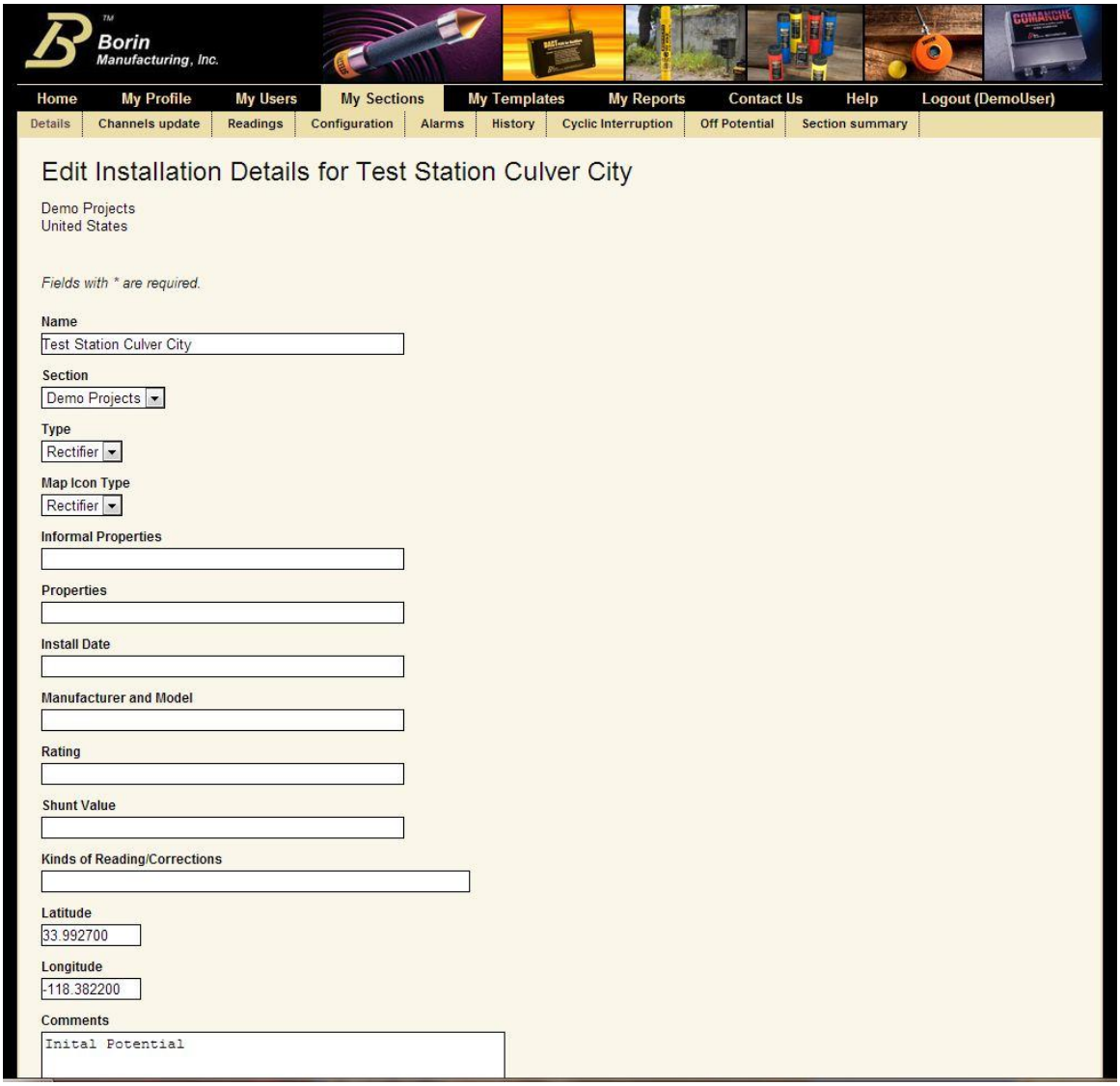


3 .4 Configure your Installations

In this section you will enter all the information related to one **COMANCHE RMU** installation as well as its channel configuration.

Note: If you will be configuring several installations with the same parameters, you can create a template under **My Templates** and then push this template to all or some of the installations in a project.

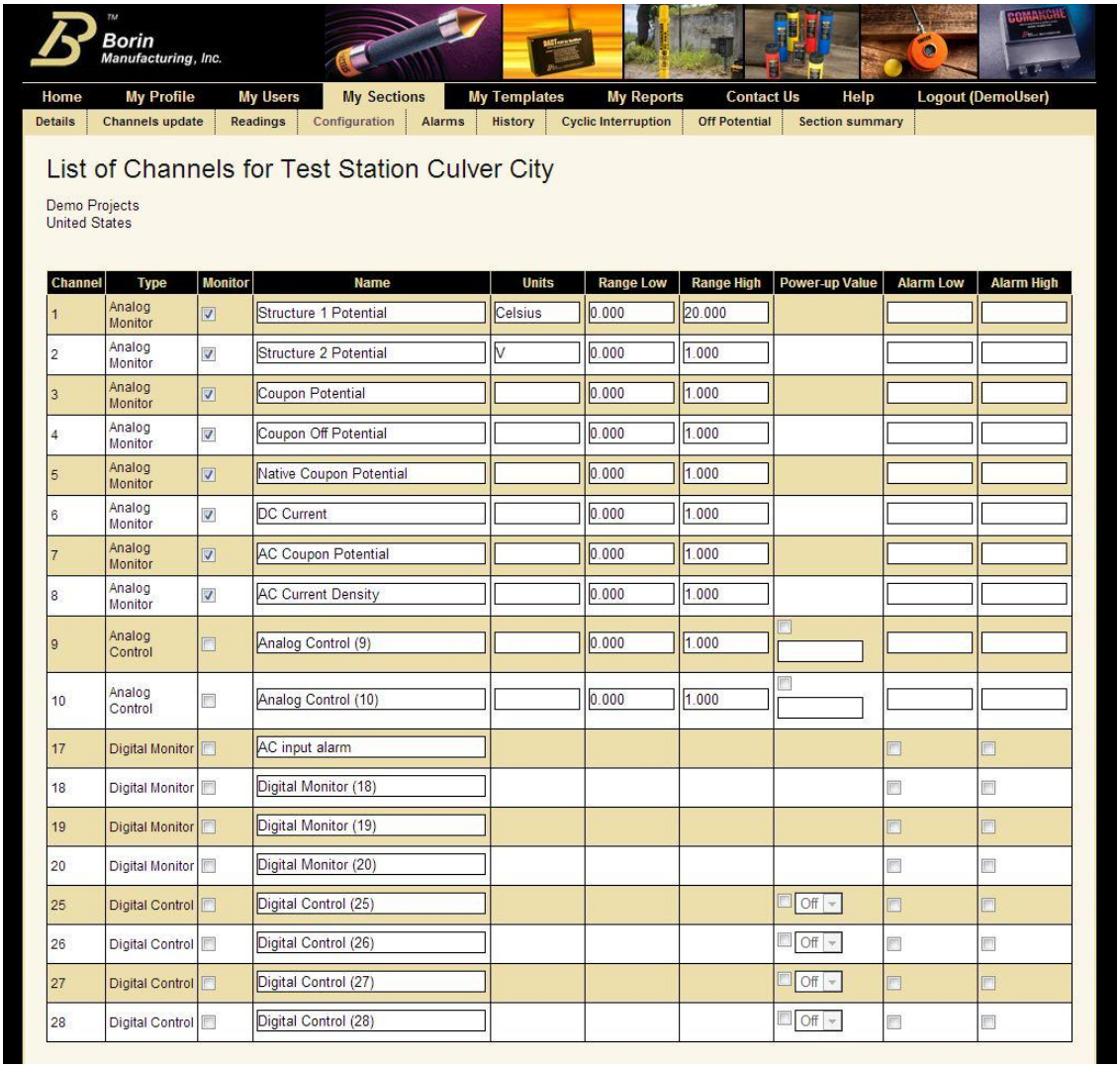
To start configuring your installation, go to **My Sections** click on the desired project, then click on the desired installation. Go to **Details**, then **Edit Details**, fill out the information and click on **Save**.



3 .5 Configure your Channels

In this section you will configure the channels of a **COMANCHE RMU** installation, e.g. assign names to each channel, channel ranges and alarm parameters.

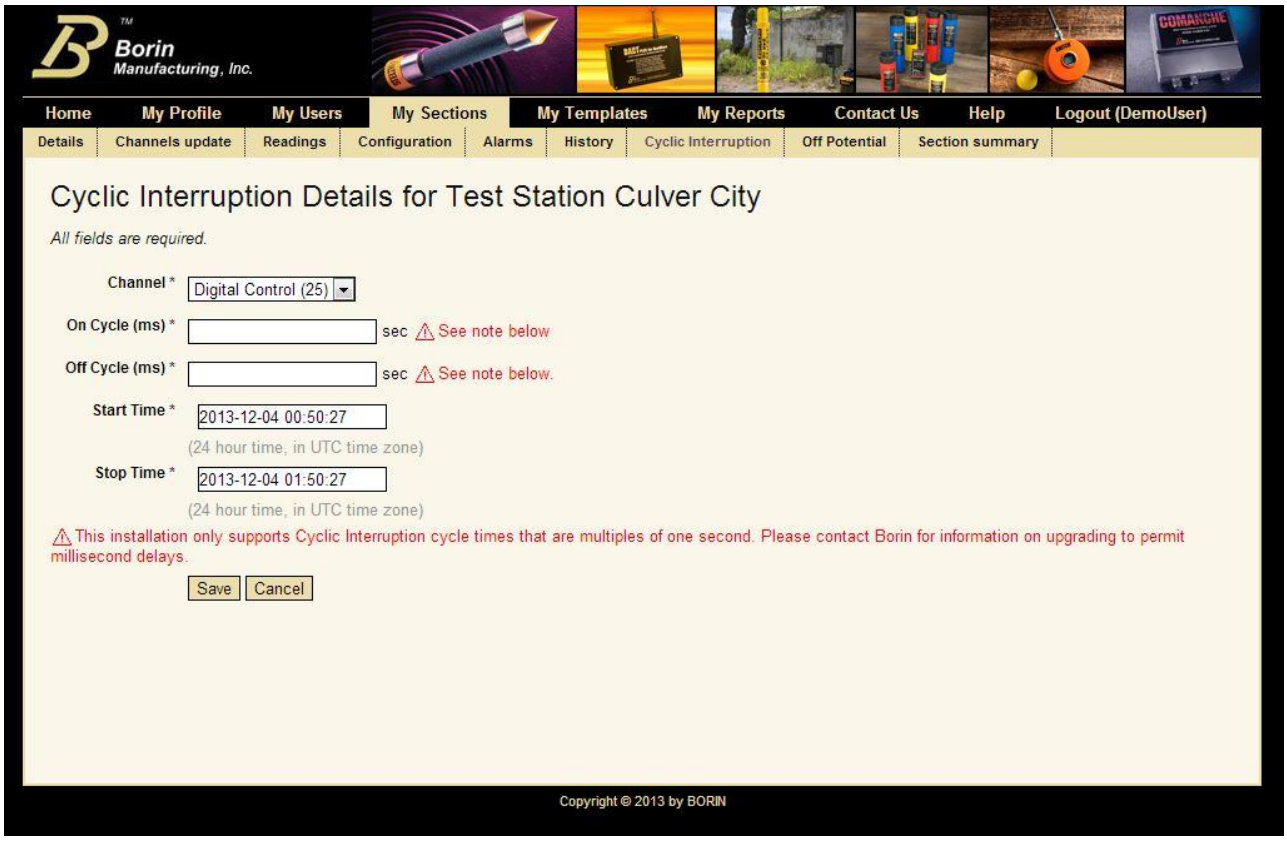
To set up your channels go to **My Sections**, click on a project and click on an installation. Go to **Channel Settings**, and fill out the information; to activate an alarm check the **Alarm Low** or **Alarm High** box for the corresponding channel. When all the channels have been configured, click on **Update Installation**.



Channel	Type	Monitor	Name	Units	Range Low	Range High	Power-up Value	Alarm Low	Alarm High
1	Analog Monitor	☑	Structure 1 Potential	Celsius	0.000	20.000			
2	Analog Monitor	☑	Structure 2 Potential	V	0.000	1.000			
3	Analog Monitor	☑	Coupon Potential		0.000	1.000			
4	Analog Monitor	☑	Coupon Off Potential		0.000	1.000			
5	Analog Monitor	☑	Native Coupon Potential		0.000	1.000			
6	Analog Monitor	☑	DC Current		0.000	1.000			
7	Analog Monitor	☑	AC Coupon Potential		0.000	1.000			
8	Analog Monitor	☑	AC Current Density		0.000	1.000			
9	Analog Control	☐	Analog Control (9)		0.000	1.000	☐		
10	Analog Control	☐	Analog Control (10)		0.000	1.000	☐		
17	Digital Monitor	☐	AC input alarm					☐	☐
18	Digital Monitor	☐	Digital Monitor (18)					☐	☐
19	Digital Monitor	☐	Digital Monitor (19)					☐	☐
20	Digital Monitor	☐	Digital Monitor (20)					☐	☐
25	Digital Control	☐	Digital Control (25)				☐ Off	☐	☐
26	Digital Control	☐	Digital Control (26)				☐ Off	☐	☐
27	Digital Control	☐	Digital Control (27)				☐ Off	☐	☐
28	Digital Control	☐	Digital Control (28)				☐ Off	☐	☐

3.6 Set up a Cyclic Interruption

To set up a cyclic interruption go to **My Sections**, select a project, select an installation and go to **Cyclic Interruption**. Click on **Add a cyclic interruption** settings; fill in the information and **Save**.

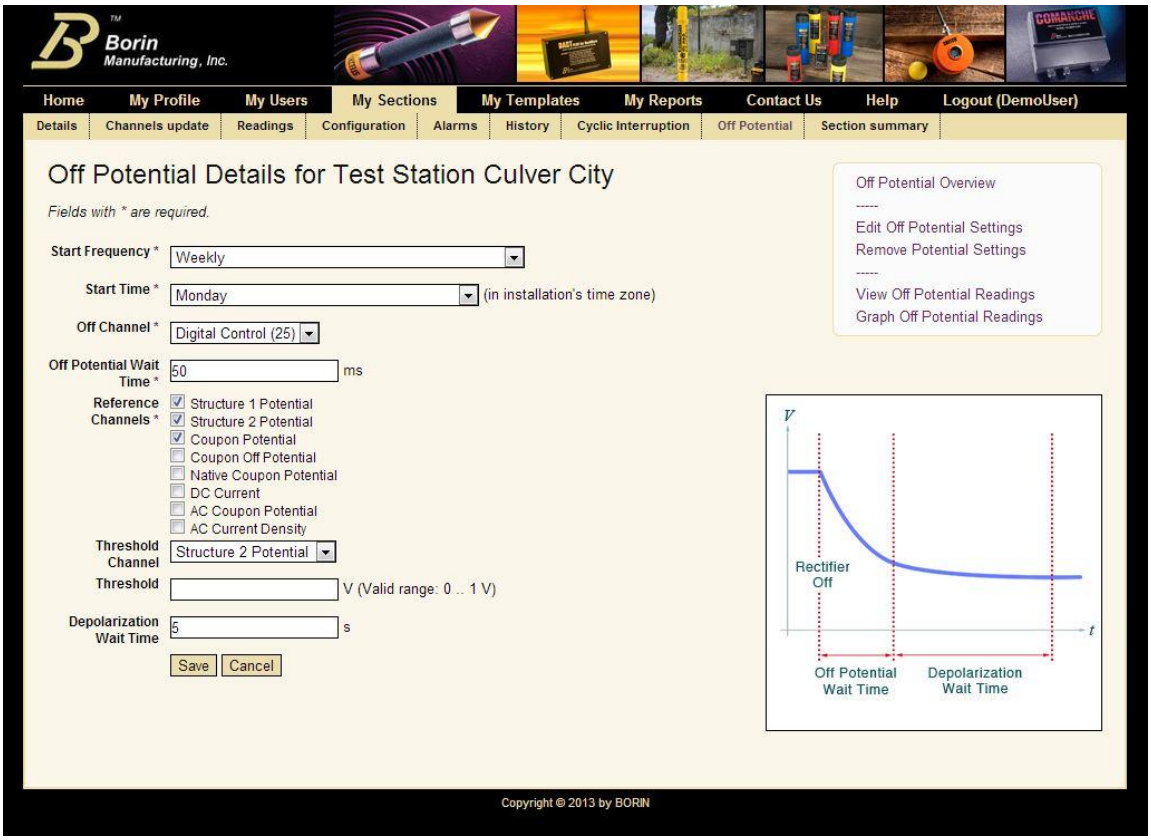


3.7 Take an Off Potential Reading

If you want to take an off potential pipe to soil reading you can program it, view the results and graph the readings as well.

To take an off potential reading on the rectifier go to **My Sections**, select a section, select an installation and go to **Off Potential**. Once there, edit the options to your conditions, review data or graph the off potential readings based on your needs.

For off potential readings for coupons you can go one step further and read the depolarization potential to verify that you meet a potential shift value (some companies use 100 mV shift criteria). To set the depolarization function, set a threshold channel (ie. Coupon potential), set a threshold value (ie. – 850 mV) and a depolarization wait time in seconds. The software will take the off potential reading and will compare it to the threshold, if the value is less negative than the threshold (ie. – 850 mV) then it will wait for the established wait time and it will take a second off potential reading. You can then compare this reading to the first and calculate if you meet your depolarization shift criteria (ie. 100 mV).



4.0 How to Use your Remote Monitoring & Control System and Navigate through your Data Center

Your **COMANCHE** RMCS will automatically get remote readings from your system at a frequency defined by the Installation Supervisor in the Installation **Details** tab (**My Sections** / click on a project / click on an installation, go to **Details**).

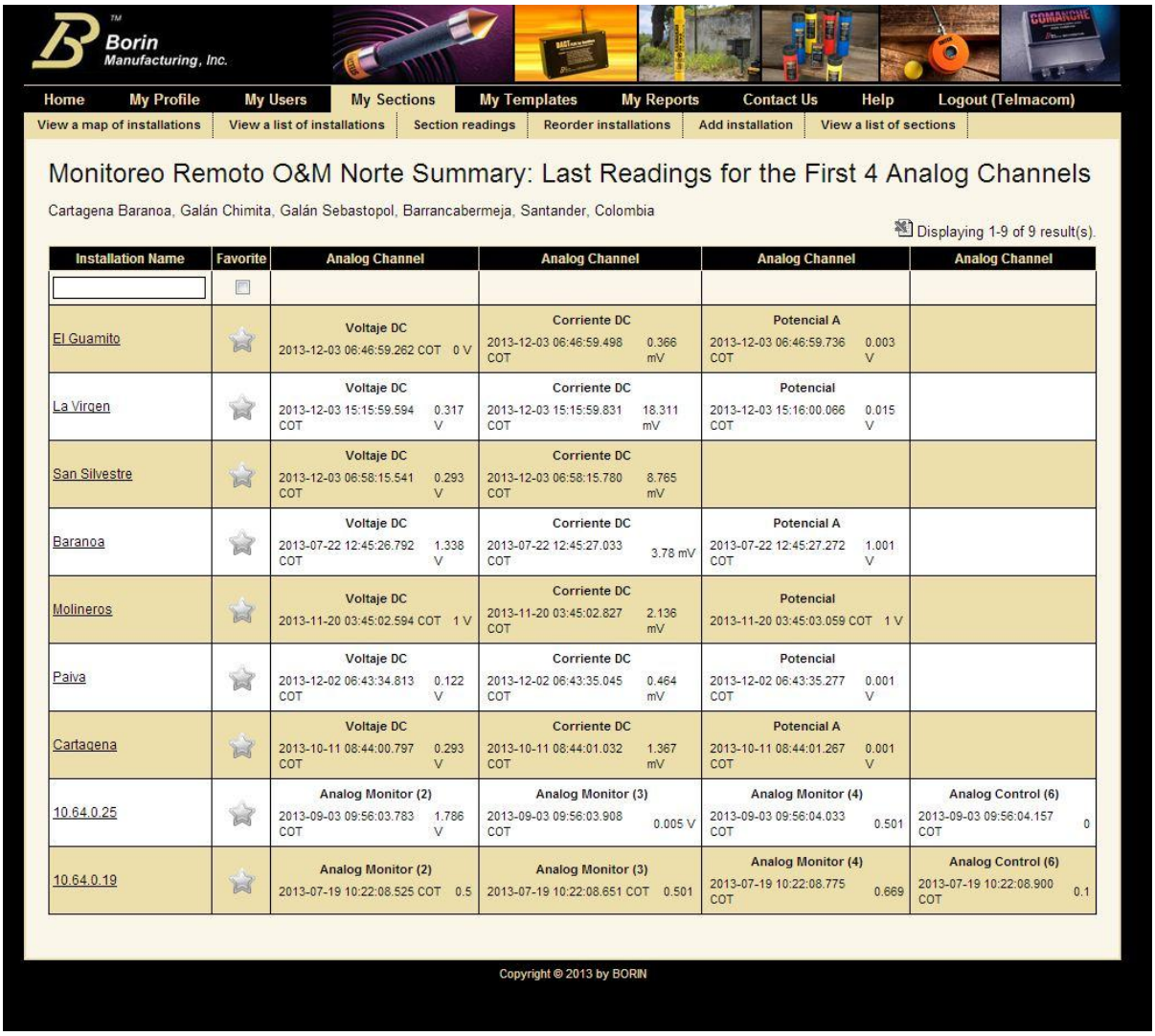
The **COMANCHE Data Center** is a powerful tool that allows you to view, organize, sort, manage and report your readings. Here are some examples of how you can access your readings:

4 .1 Section Summary

➢ View multiple installations readings in one screen

The section summary gives you a screen shot of the latest **automatic** readings of **all** the installations in one project (usually taken within the last 24 hours or the frequency set by the Installation Supervisor). This screen will display up to 4 channels for each installation, for example, all the rectifiers assigned to a pipeline project. The readings will be date and time stamped.

To view one of your project summaries go to the **My Sections** tab and select the project.



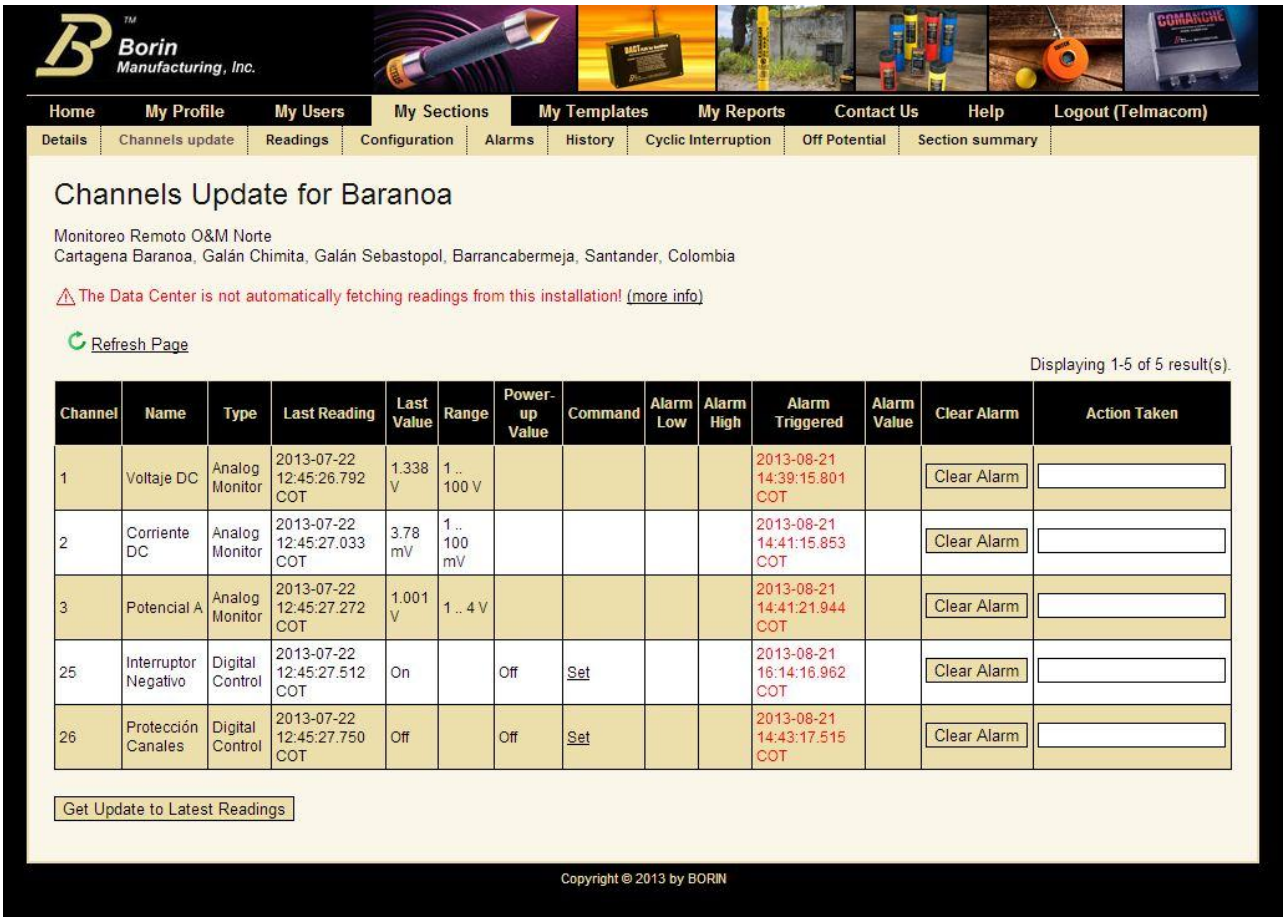
4 .2 Installation Channels Update

The **Installation Channels Update** gives you the latest **automatic** readings of **all** the channels in **one** installation (usually taken within the last 24 hours or the frequency set by the Installation Supervisor) with the option to get a **live readings update**. This screen will display all the channels, channel ranges, alarm parameters and alarm status. The readings will be date and time stamped.

To view one of your section summaries go to the **My Sections** tab, select the project and select the installation.

To get live readings just click on the **Get Update to Latest Readings** button.

Alarms can be cleared from this screen, for instructions on how to clear alarms go to the alarms section of this manual (p. 22).



4 .3 Readings Archive

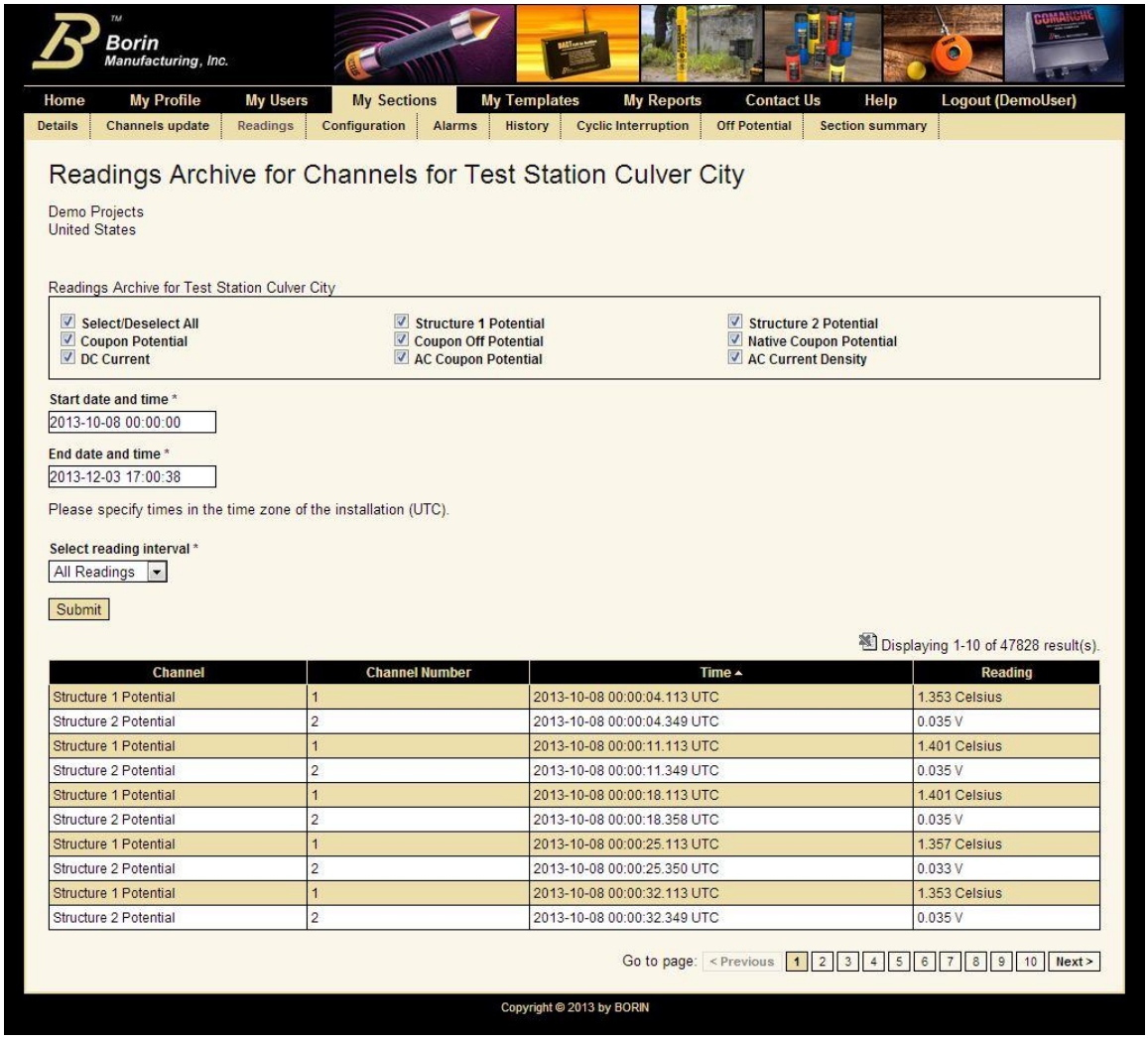
➢ Access your historical readings

The **Readings Archive** gives you access to the automatic readings stored in the Data Center, for example daily readings per channel per installation. You can select all channels or specific channels of the installation and define a period of time by setting the start and end time. You can also set the frequency of the readings, for example daily, weekly, monthly, etc.

The highest frequency in most cases must coincide with the automatic reading frequency, unless an authorized user has generated an advanced logging function.

The information retrieved can also be exported into Excel by clicking on the Excel logo on the right hand side of the screen.

To retrieve historic readings go to **My Sections**, select a project, select an installation, go to **Readings Archive**, define the settings and click on **Submit**.

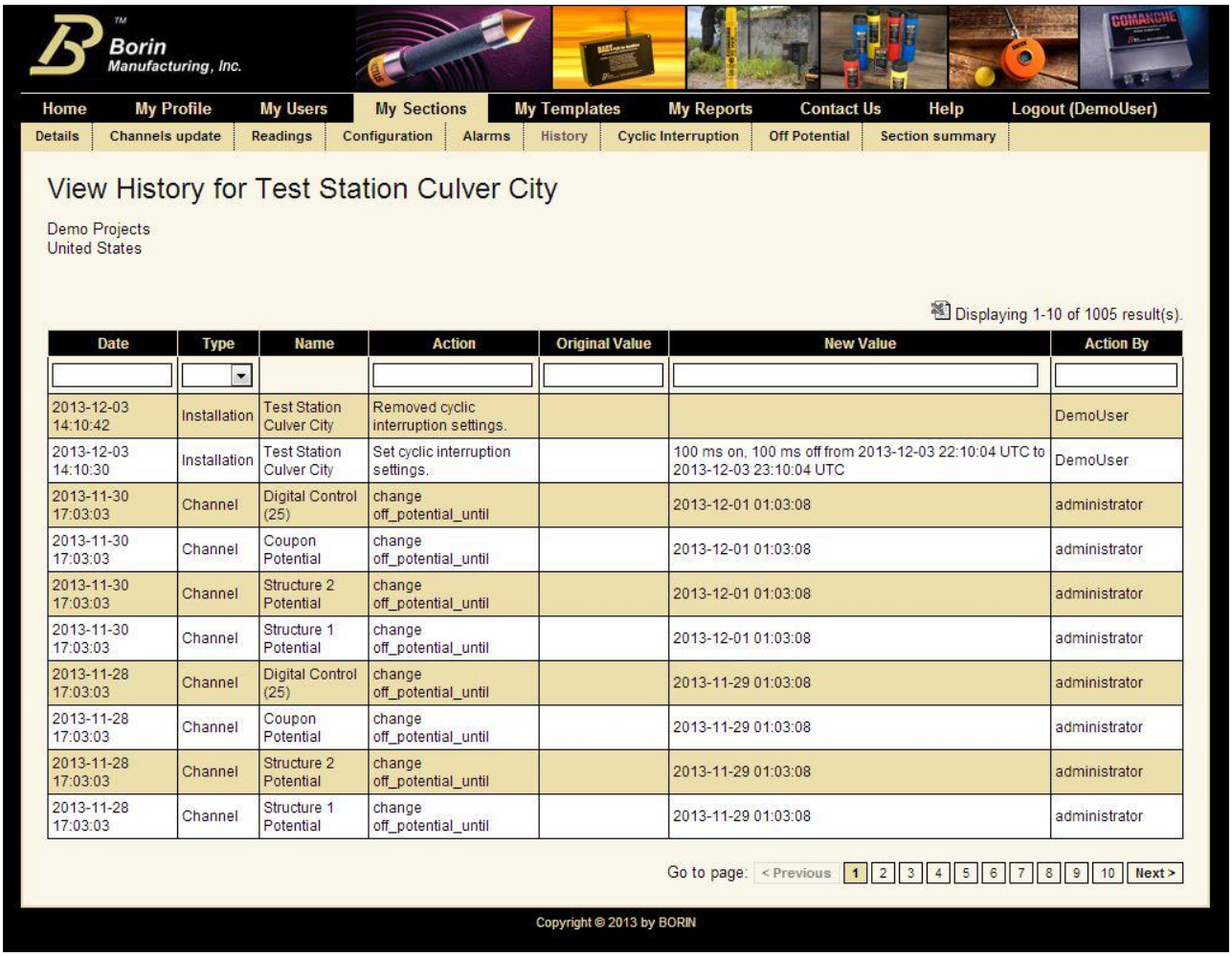


4.4 History of Actions

The **History** tab gives you a list of all the actions that have occurred on the system including what type of action, when and who it was performed by. You can sort through the actions based on date, type, action, original value, new value and action by. This narrowing down of data allows you see specific changes over the course of a channel or installation and by whom.

Any of this data can be retrieved and exported to Excel by clicking on the Excel logo in the upper right hand corner of the screen.

To view a history of the actions taken on the system you go to **My Sections**, choose a project, select an installation and click on **History**.



4.5 Graph Readings

The **Graph Readings** option will display a graph of historic readings from up to 4 channels in an installation for a selected period of time.

The graphic can be downloaded and saved as an image.

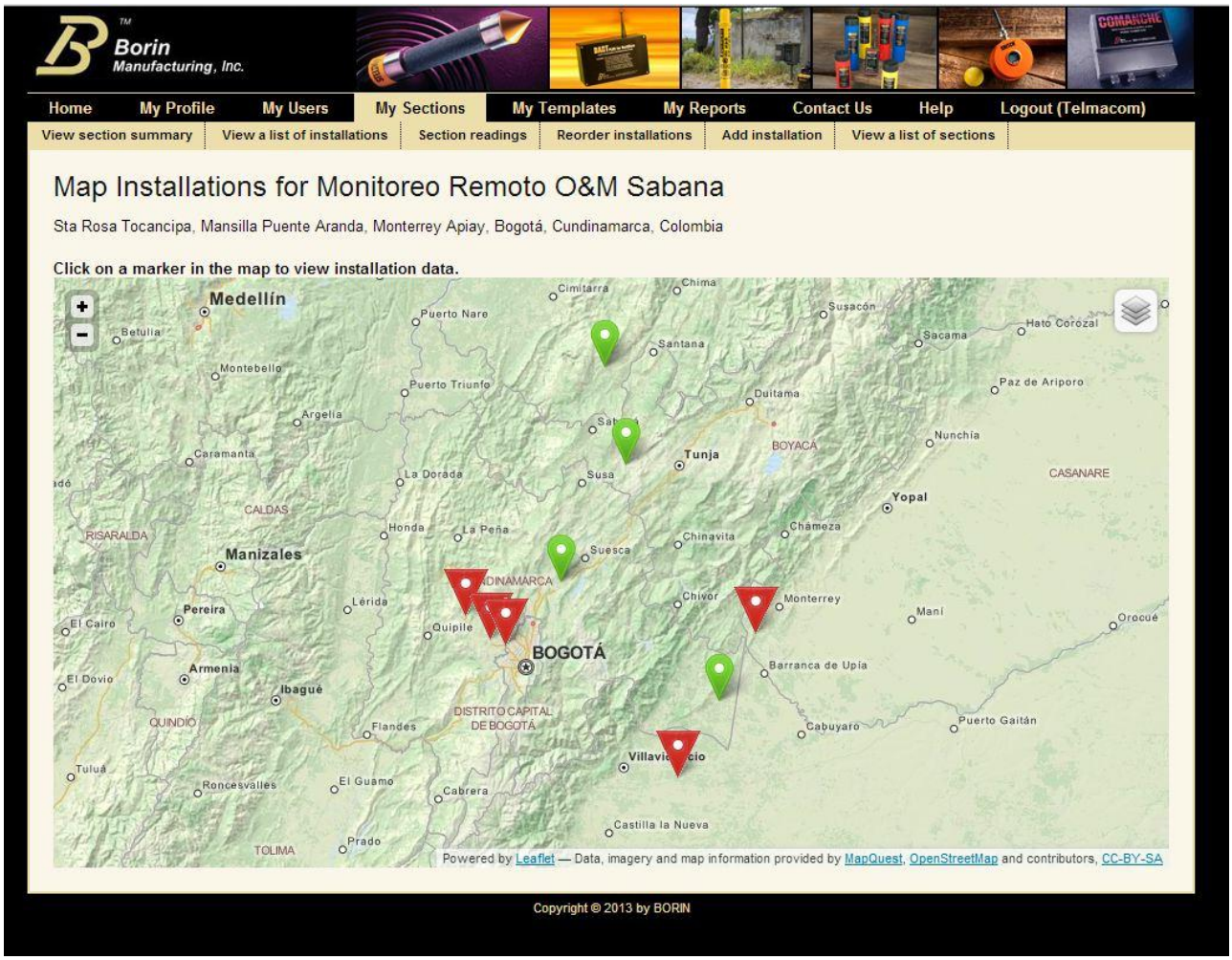
To build a graph, go to **My Sections**, select a project, select an installation, under **Readings**, go to **Graph Readings**, define the settings and click on **Graph**.

4.6 View a Map of your Installations

You can locate all the installations of a project on a map using the coordinates set in the **Installation Details**.

To access the map go to **My Sections**, select the project and go to **View a map of installations**.

You can click on the icon to see installation details.

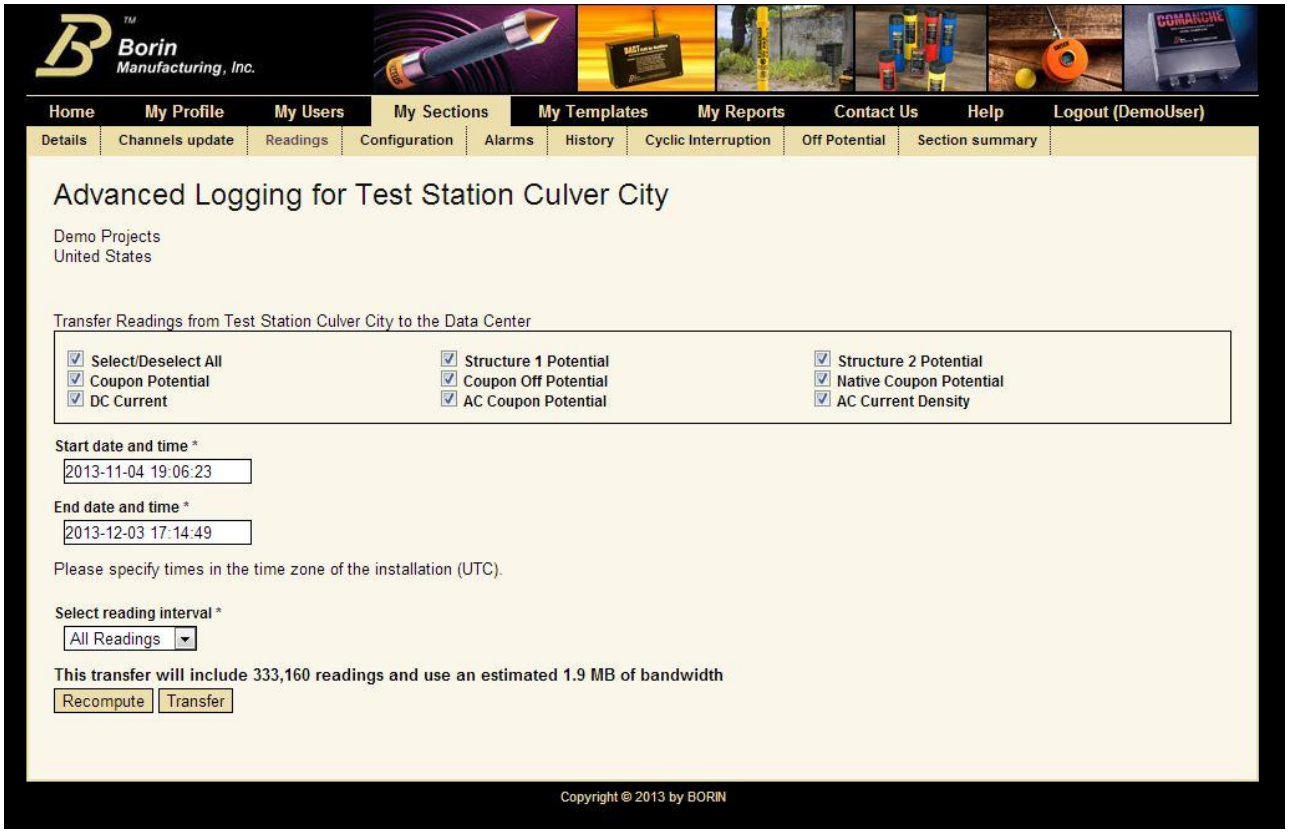


4.7 Advanced Logging

To do any **Advanced logging** within the Data Center go to **My Sections**, select a project, select an installation, under **Readings** and click on **Advanced logging**. Once there you can transfer any of the readings you would like to the **Data Center Readings Archive**. You can also set the frequency of the readings, for example daily, weekly, monthly, etc.

The highest frequency in most cases must coincide with the automatic reading frequency, unless an authorized user has generated an advanced logging function.

CAUTION! Some transfers will incur in high volume bandwidth.



5.0 Alarms Handling

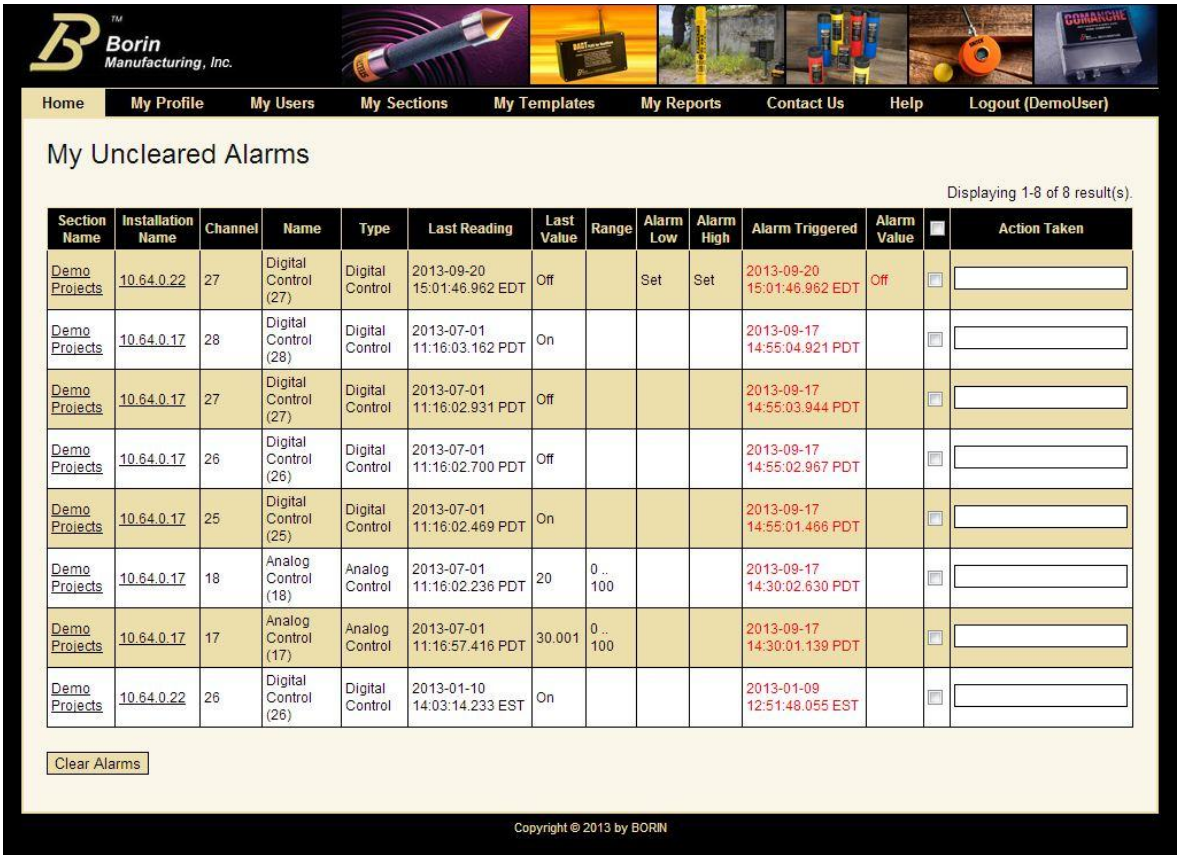
5 .1 Alarms in Data Center

You can see your alarm messages in 3 windows:

1. **Home page** includes the alarm messages for all the installations of all the projects.
2. **Channels Update** includes the alarm messages for the selected installation.
3. **Installation Alarms Log** includes the history of alarm messages for the selected installation.

Alarms should be cleared only when an action has been taken to correct the alarm state. A note of the action taken has to be entered in the system to enable alarm clear, for example “power is on after maintenance”. If the alarm is cleared but the variable is still in alarm status a new alarm will be generated.

To clear alarms go to **Home**, click on **You have X un-cleared alarms**, write actions taken and click on **Clear Alarms**.

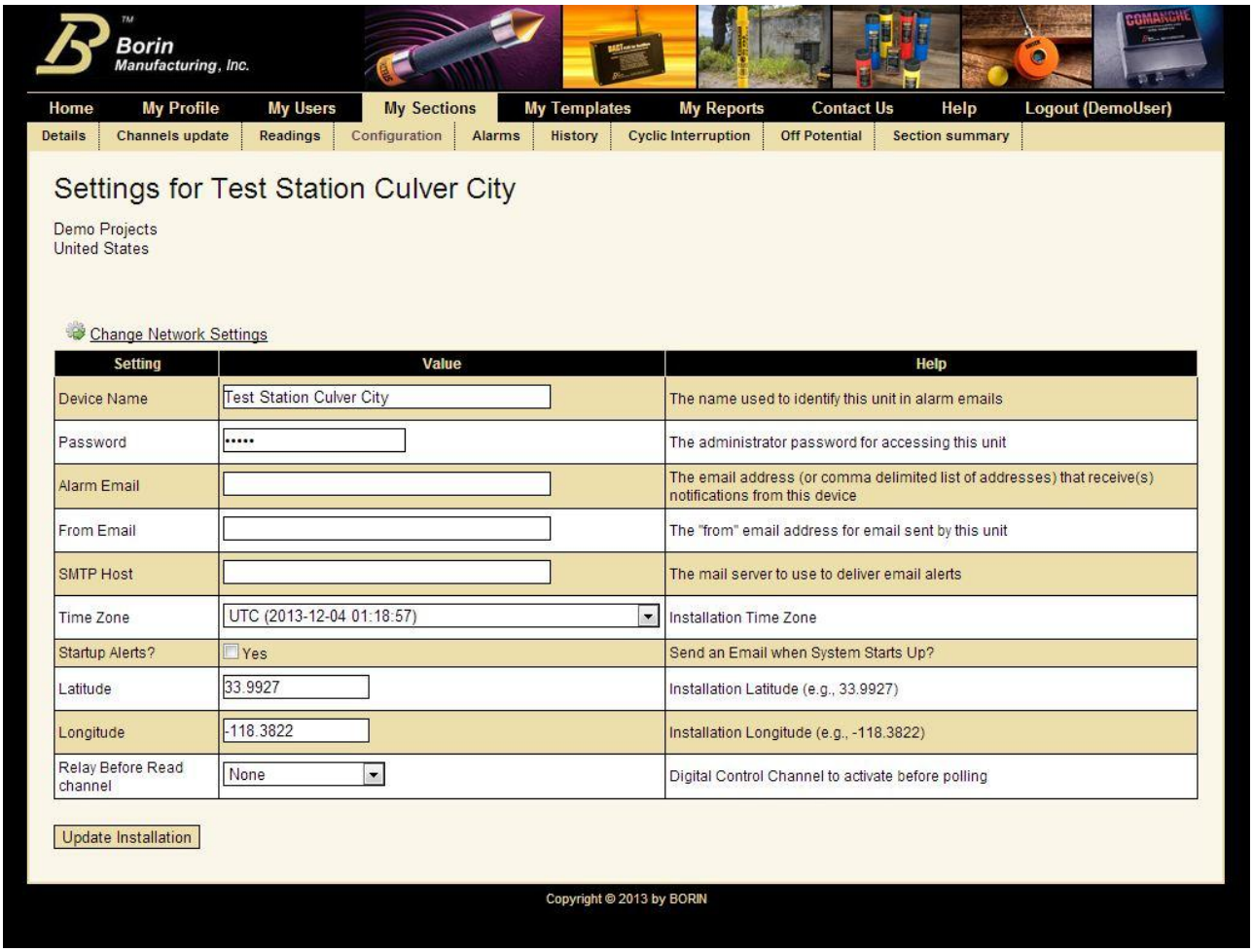


Section Name	Installation Name	Channel	Name	Type	Last Reading	Last Value	Range	Alarm Low	Alarm High	Alarm Triggered	Alarm Value		Action Taken
Demo Projects	10.64.0.22	27	Digital Control (27)	Digital Control	2013-09-20 15:01:46.962 EDT	Off		Set	Set	2013-09-20 15:01:46.962 EDT	Off		
Demo Projects	10.64.0.17	28	Digital Control (28)	Digital Control	2013-07-01 11:16:03.162 PDT	On				2013-09-17 14:55:04.921 PDT			
Demo Projects	10.64.0.17	27	Digital Control (27)	Digital Control	2013-07-01 11:16:02.931 PDT	Off				2013-09-17 14:55:03.944 PDT			
Demo Projects	10.64.0.17	26	Digital Control (26)	Digital Control	2013-07-01 11:16:02.700 PDT	Off				2013-09-17 14:55:02.967 PDT			
Demo Projects	10.64.0.17	25	Digital Control (25)	Digital Control	2013-07-01 11:16:02.469 PDT	On				2013-09-17 14:55:01.466 PDT			
Demo Projects	10.64.0.17	18	Analog Control (18)	Analog Control	2013-07-01 11:16:02.236 PDT	20	0 .. 100			2013-09-17 14:30:02.630 PDT			
Demo Projects	10.64.0.17	17	Analog Control (17)	Analog Control	2013-07-01 11:16:57.416 PDT	30.001	0 .. 100			2013-09-17 14:30:01.139 PDT			
Demo Projects	10.64.0.22	26	Digital Control (26)	Digital Control	2013-01-10 14:03:14.233 EST	On				2013-01-09 12:51:48.055 EST			

5 .2 E-mail Alarms

Alarms will be sent by e-mail as per the parameters set at the **Device Settings** window.

To set e-mail configuration go to **My Sections**, select project, select installation, go to **Device settings**. Fill out the information and **Update Installation**.

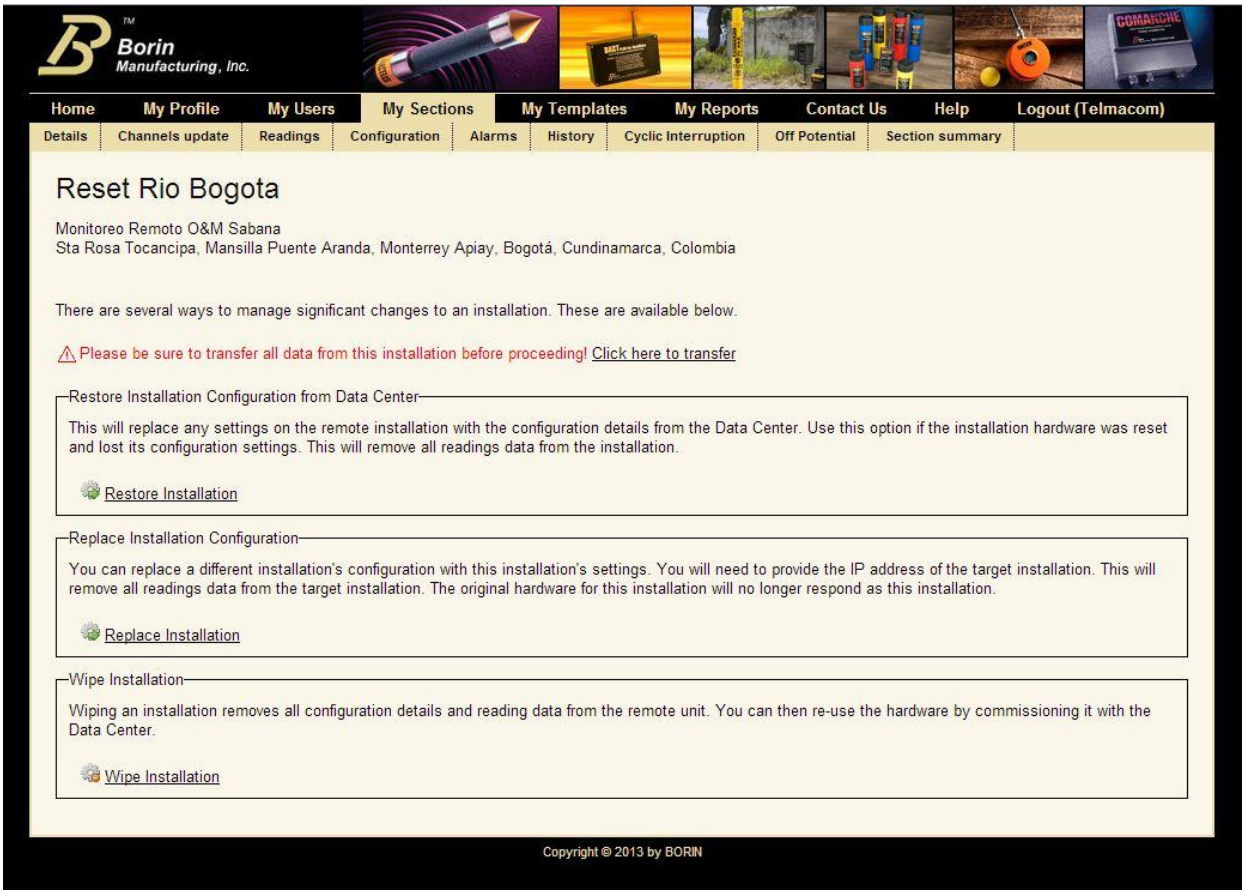


5.3 Manage Hardware

CAUTION! Before you **Manage Hardware** make sure you understand the function you are attempting. Some of these management tools will delete historical data.

The **Manage Hardware** division allows you to run diagnostics on your **COMANCHE**, detect any updates or changes to the **COMANCHE** hardware or reset the software for that installation. By running diagnostics you can check to make sure your **COMANCHE** is connected accurately and transferring data as it should.

If for some reason you need to replace part of the **COMANCHE** unit you can update the hardware within the data center in order to get the new readings.

There are also a variety of reset options for the **COMANCHE** unit if you ever lose the configuration settings, and need to return the unit to its past form.

To manage your hardware go to **My Sections**, **Configuration** and select **Manage Hardware**.