AquaReporter™

Best Practice • Water Treatment Control • Data Acquisition • Reporting

User Manual

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1 AquaReporter

AquaReporter has been developed based on years of experience about the requirements of water treatment companies. It has been designed to be intuitive and easy to use.

1.1 Initialisation

When first setting up your AquaReporter account, you will receive a

- Company ID
- Corporate User account name
- Corporate account password.

Proceed to

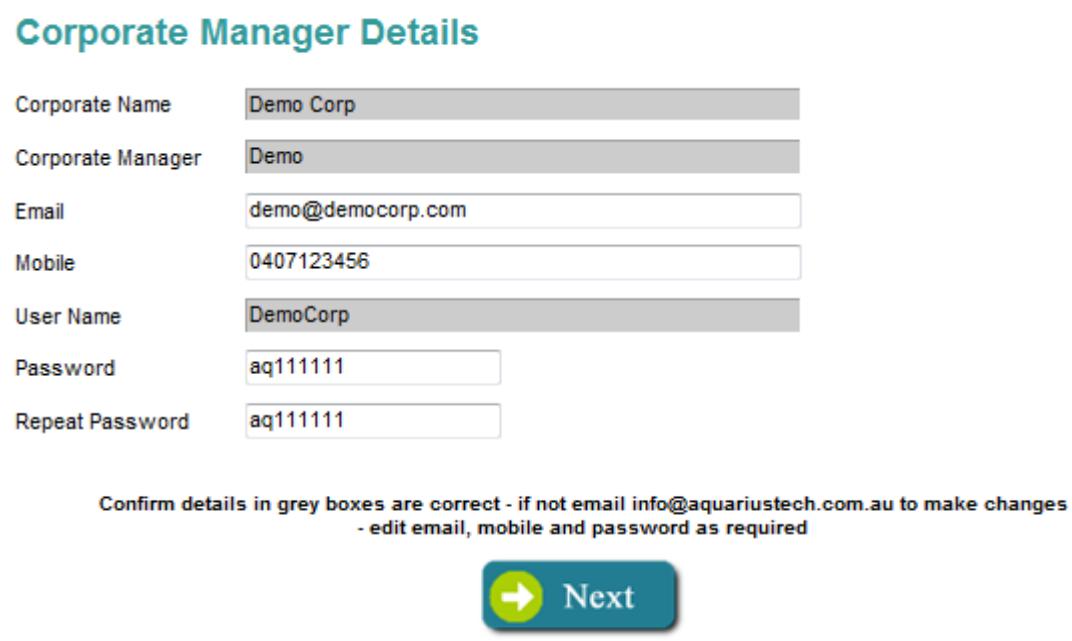
http://www.aquareporter.com.au

The following page will be displayed.

Pressing the start button will launch the new window requesting the login details be entered.

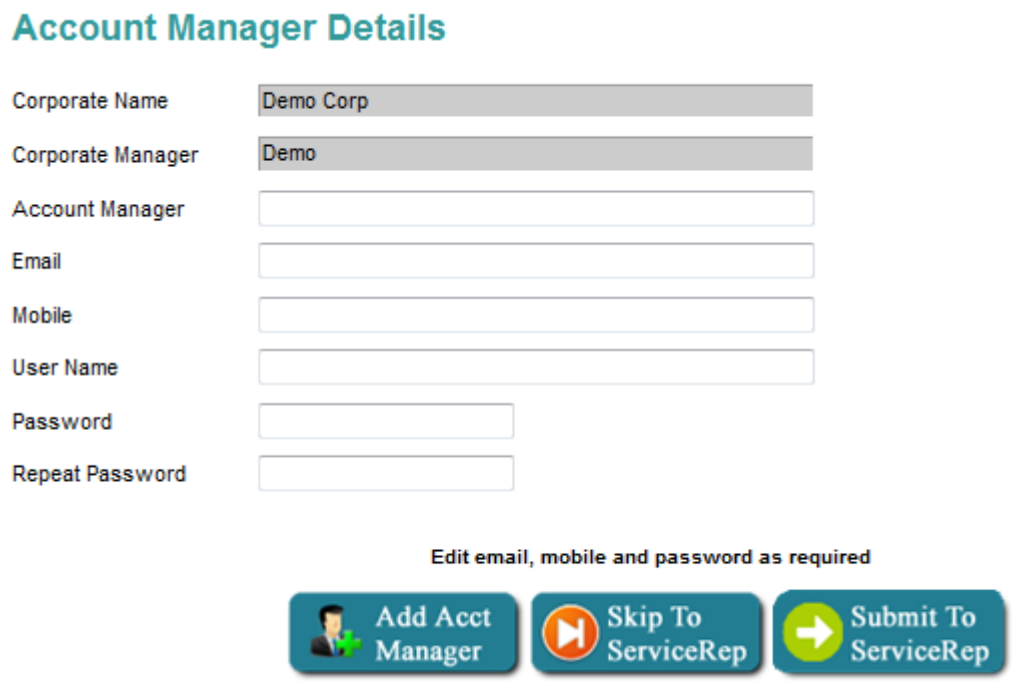
Login in using the login information provided.

When logging in for the first time, the first page that will be displayed is the setup user details. As follows:-

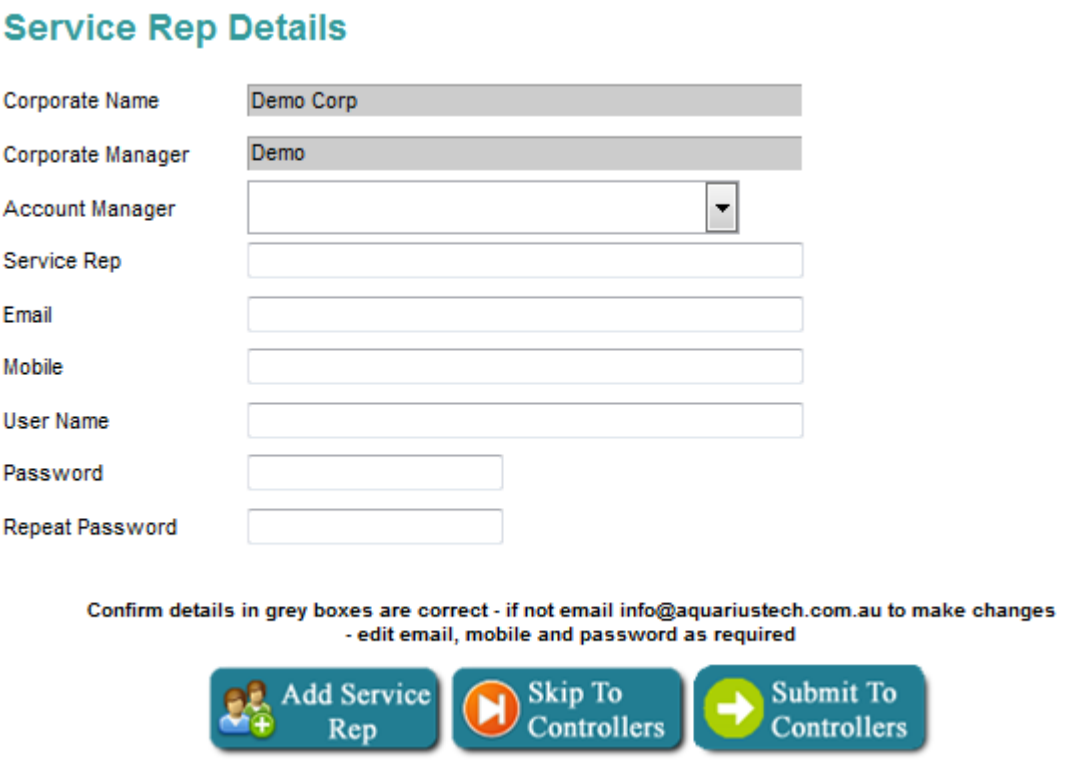


This provides the ability to make any changes to the corporate manager details. If all the information is correct, proceed with next.

The account manager details page will be displayed.



Add as many account managers as required. Once finished it is possible to then add service reps. 2 Buttons are provided to add service reps. The first "Skip to service rep" skips the account manager page and goes directly to allow the service rep details to be entered in. "Submit to Service Rep" Submits any of the account manager details entered and then goes to the service rep details page.



Add in as many service reps as required. Once finished either press the skip to controllers or submit to controller's button. The manage controller page is then displayed.

1.2 User Types

Aqua reporter has 4 main types of users.

- Corporate Manager
- Account Manager
- Service Rep
- Customer

The user permissions are defined as follows:-

	Corporate Manager	Account Manager	Service Rep	Customer
Modify Corporate details	Yes	No	No	No
Setup Accounts Manager	Yes	No	No	No
Setup Service Rep	Yes	Yes	No	No
Setup Customer	Yes	Yes	No	No
Setup/Edit Controller Details	Yes	Yes	No	No
Setup/Edit Alarms and Reports	Yes	Yes	No	No
Setup/Edit Customer Details	Yes	Yes	No	No
Setup/Edit Controller Setpoints	Yes	Yes	Yes	No
Assign –unassigned controllers	Yes	Yes	No	No
Reassign controller to a different customer	Yes	Yes	No	No
Reassign controller to a new or different service Rep	Yes	Yes	No	No
View Customer Details	Yes	Yes	Yes	Yes
View Controller Data	Yes	Yes	Yes	Yes
View Data Summary page	Yes	Yes	Yes	Yes
View Water Efficiency and Energy Reports	Yes	Yes	Yes	Yes
View Trend Charges and Print off graphs to PDF	Yes	Yes	Yes	Yes
Change Own Password	Yes	Yes	Yes	Yes

2 AquaReporter Layout

Aqua reporter has been configured to have an intuitive interface.

The page is broken into three sections.

1. Header. This provides the company logo, aqua reporter details and login information
2. Left hand side. Navigation tree
3. Right had side, Information Page.

2.1 Header

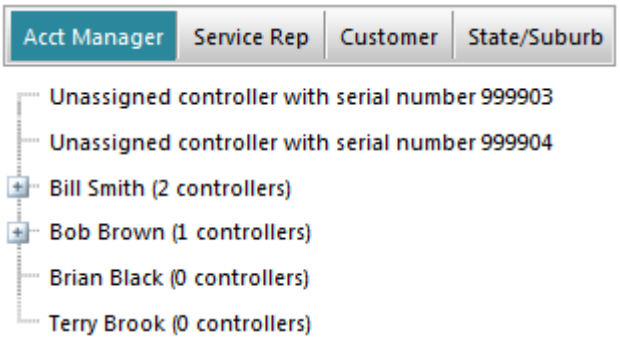
The header has the company logo, AquaReporter details, who is logged in and also the tabs indicating which functions are available to the users logged in. The header provides a means to personalise the page. Each Corporate account will have their own logo on the page.

In order to have the company logo added to the web site email the logo to info@aquareporter.com.au.

Under the header there are a number of tabs

Depending on the user privileges different tabs will be displayed.

2.2 Navigation Tree



The navigation tree provides an intuitive hierarchical method to navigate through the information provided. At the top of the navigation tree is a series of tabs. These tabs allow the navigation tree to be sorted as per the description on the tab.

The ability to sort the information makes it quick and easy to go straight to the required information.

2.3 Information Page

The information page is displayed on the right hand side. This displays the information of what has been selected in the navigation panel.

This may be the controller dashboard, controller information, user information etc. Each information page will have their own buttons associated with it.

3 AquaReporter Tabs

3.1 Manage Controllers Tab

The manage controllers tab allows you to do exactly that, manage controllers! Managing controllers has been simplified. The left hand side provides a tree view which can be sorted by a number of categories. These sort categories are

- Account manager
- Service Rep

- Customer
- State/Suburb

Depending on the user access privileges you may not have access to all of these categories.

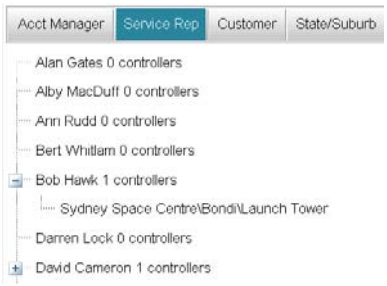
Detailed hints on each controller are provided when scrolling the mouse over the controller.

3.1.1 Account Manager Sort Tab

Provides a list of all account managers associated with the corporate account. Beside each account manager the number of controllers they manage will be displayed. By expanding the account manager, all controllers associated with that manager will be displayed as shown.

The format of the controller is:- Customer \ Site ID \ System ID

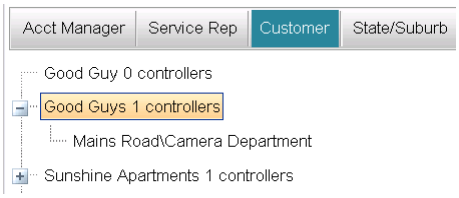
3.1.2 Service Rep Sort Tab



When the service rep sort is completed an alphabetical list of all service reps is provided. The number of controllers assigned to the service rep is listed beside their name. Expanding the service rep provides a list of all controllers the service rep is accountable for.

The format is Customer \ Site ID \ System ID

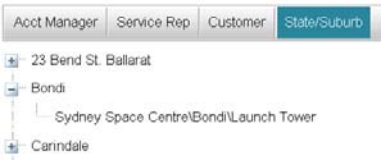
3.1.3 Customer Sort Tab



When sorting by customer, the customer names will be displayed with the number of controllers each customer has installed. When expanding the customer a list of the installed controllers will be displayed.

The format is:- Site ID \ System ID

3.1.4 State/Suburb Sort Tab



When sorting by State/Suburb an alphabetical tree list of the State/Suburb is created. Select the State/Suburb provides a list of the controllers at that location.

The format is:- Customer ID\System ID

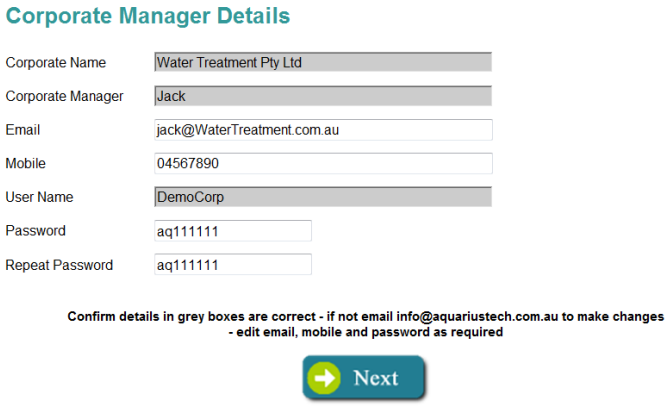
3.1.5 Unassigned Controllers.

Controllers that have not been assigned to an account manager or service rep will be shown at the top of the tree no matter which sort has been selected.

To assign a controller see the section on assigning controllers.

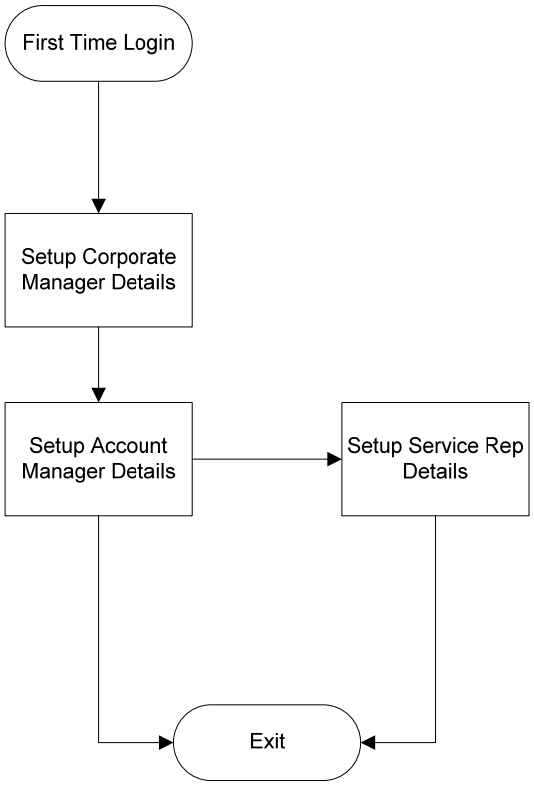
3.2 Initial Setup

The first time a new Corporate Manager logs into the account, the first page displayed is the Corporate Manager Details. As shown below



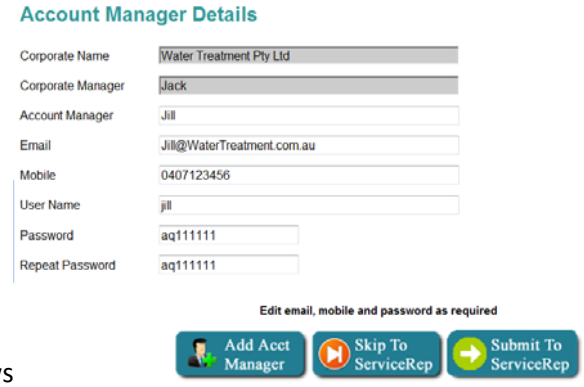
Check all the information is correct and change anything as needed and proceed by clicking next.

The following flow diagram shows the steps that will be followed the first time a corporate manager logs in.



Once the Corporate Managers details are confirmed, the web will go to the setup manager details page. This is the same page that will be seen when selecting the "Setup Manager Details" button. This is the standard process to manager users. Users can be either account managers or service reps.

3 Buttons are provided at the bottom of the page. They are defined follows



Add Account Manager	This adds an account manager and remains on the same page so another account manager can be added. Note there can be more than one account manager.
Skip to Service Rep	This skips the process of adding an account manager and allows service reps to be added.
Submit to Service Rep	This saves the account manager information and then goes straight to allowing service reps to be added to the account.

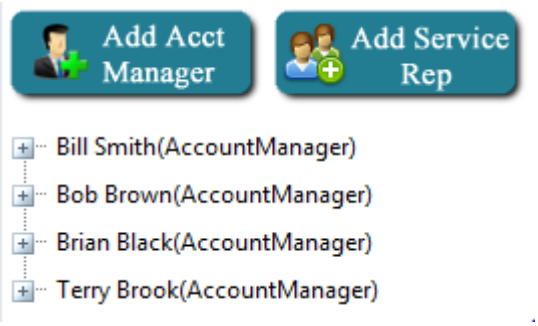
3.3 Managing Users

There are 2 types of users

- Account managers
- Service Representatives

To maintain or add new users select the Setup Manager Details button.

One the left had side a list of all the account managers available.



3.3.1 Account Managers

The account manager is the person who is responsible for managing a team of service representatives. Each of these service representatives are then responsible for the controllers assigned to them.

A corporate account can have more than one account manager.

To add an account manager, select the “Setup Manager Details” button.

In the left hand window a list of the existing account managers will be displayed. Above this list 2 buttons are provided

1. Hit the Add Account Manager button. This will add the account manager and then allow another account manager to be added.
2. Hit the Submit to Service Rep. This saves the account manager information and the goes straight to allowing service reps to be added in.

3.3.2 Service Representatives

The service rep is the person responsible to servicing the controllers in the field. They will have a controller assigned to them.

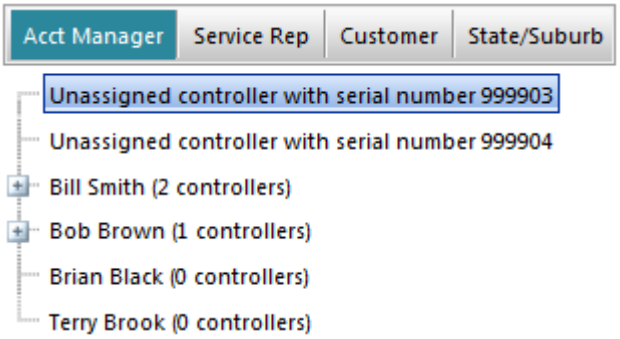
To add a service rep, go to setup manager details. Then select the skip to service rep button.

Once finished adding the account managers, press “submit to service Rep” button to submit the data and then go to the page to add “Skip to Service Rep” button

4 Assigning Unassigned Controllers

When a controller is shipped from the factory, it is assigned to a corporate account. It is up to the corporate account manager to then assign that controller to the appropriate account manager and service rep if applicable.

To manage any unassigned controllers go to manage controllers. The navigation panel will look as follows:-



The unassigned controllers are always shown at the top of the navigation list.

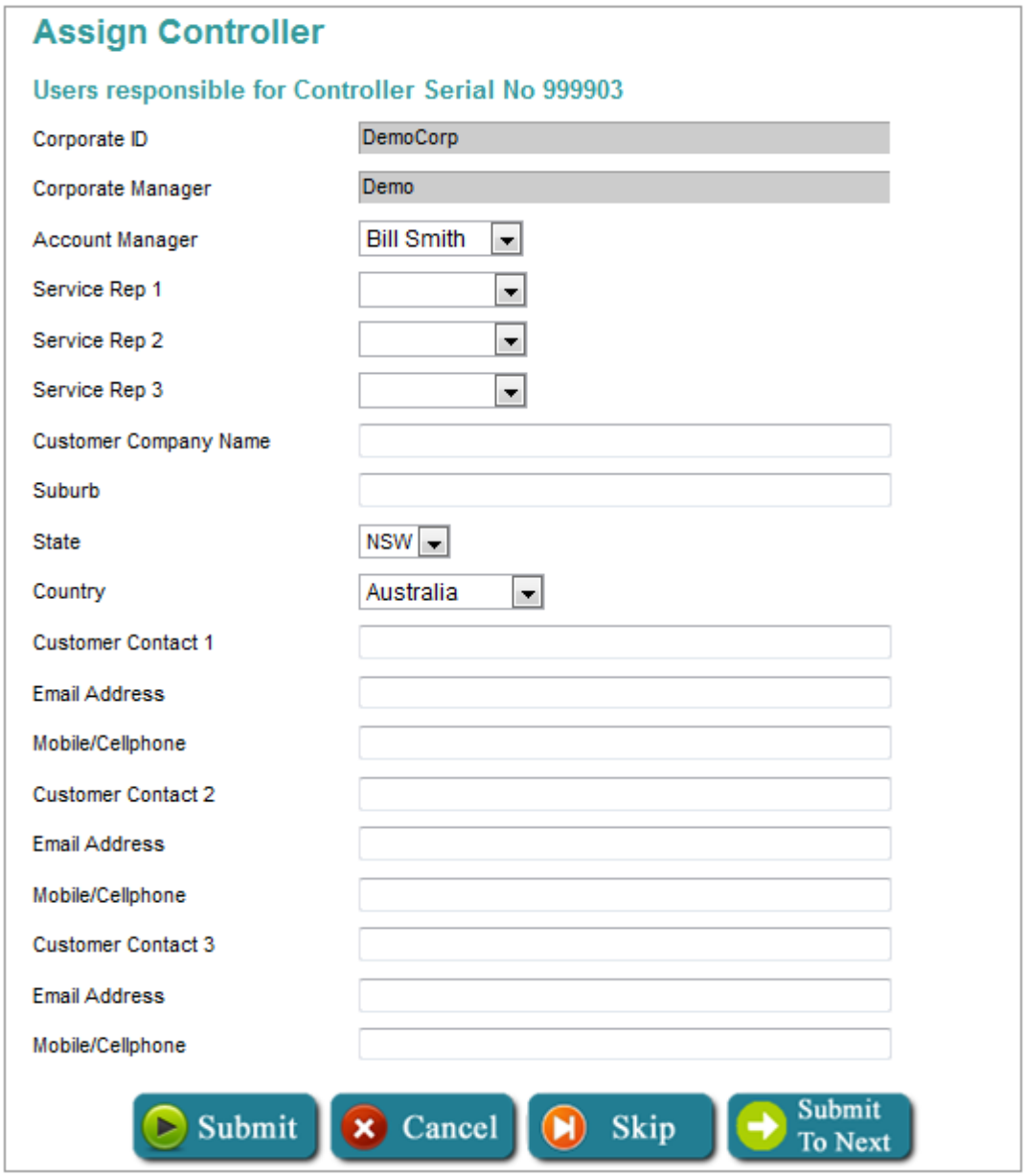
Select the controller that is to be assigned. The information page will display the assign controller page. Follow the steps as defined in the section setup or changing controller details.

5 Setup or Changing Controller Details

There are 2 ways to get into the controller details

1. Assigning an unassigned controller will automatically force the controller details to be displayed.
2. From the controller dash board select

The first page to be displayed is the Assign controller page. This allows the controller to be assigned to an account manager and the required service reps. These can also be changed through this page.



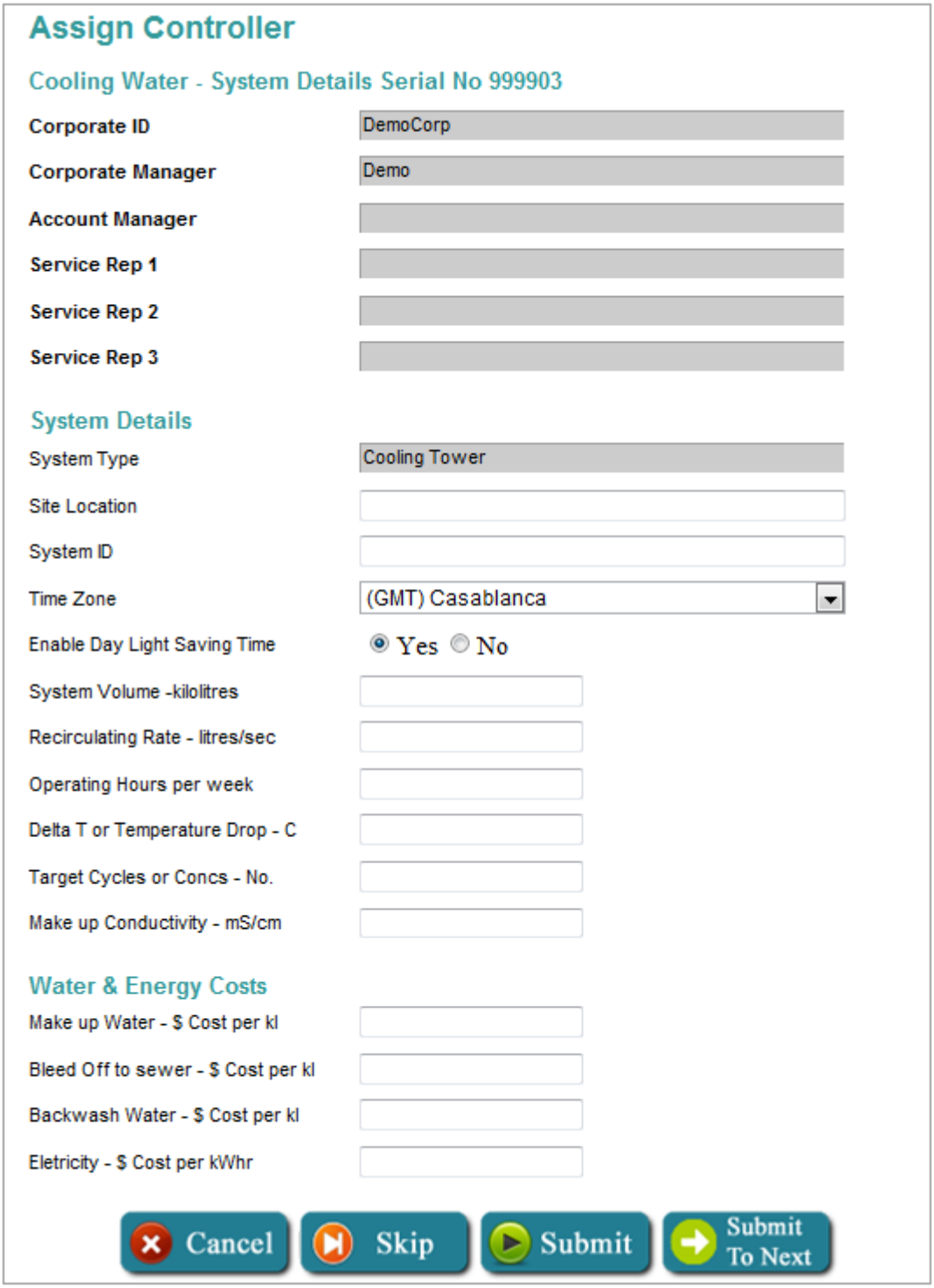
Each of the fields is self explanatory

Submit -> will submit all data entered.

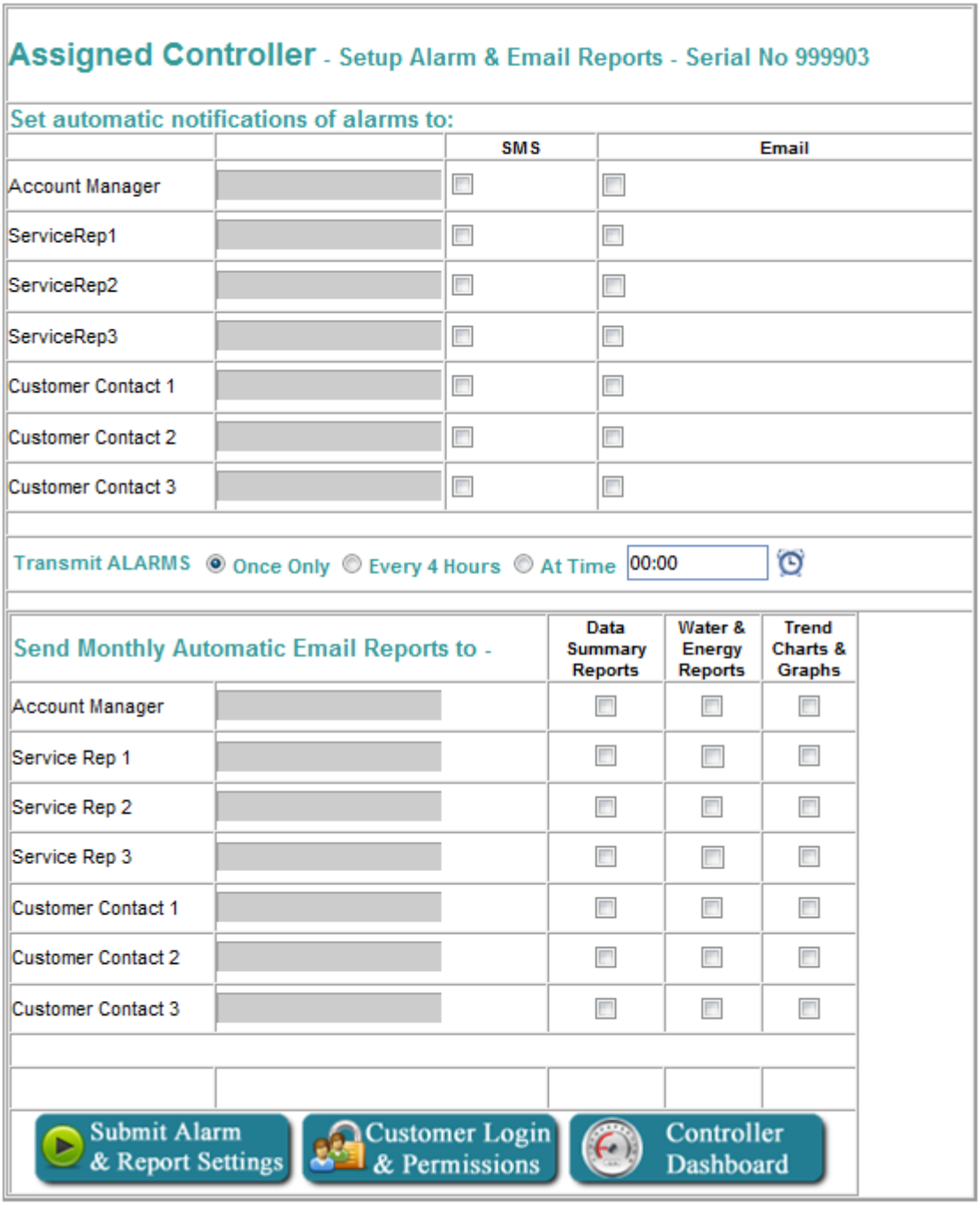
Cancel->deletes all the information entered

Skip -> will go to the next page (the cooling water details page)

Submit to next -> submit all the data to the data base then goes to (the cooling water details page).



The System Details page allows specific information about the controller to be entered. All fields must be completed before going to the next page.



The setup alarm and email reports function allows each of the people connected with the controller to be emailed alarm notifications and automatic reports.

6 Re-Assigning Controllers.

To assign the controller to a different account manager or service rep, go to the Controller Dashboard, select change setup

Once on this page, the account manager, service reps and customer details can all be changed. Refer to the section “Setup or Changing Controller Details”

7 Dash Board

The dash board provides and easy method to overview the controller status.

Controller Dashboard

Cust Company Name	Victorian Artifacts Bdg	System ID	Main Cooling Tower
Suburb	23 Bend St. Ballarat	Aquarius Model	KPI
State	VIC	Serial No.	999900
Account Manager	Bob Brown		
Service Reps	David Cameron,Jim Barnes,Jon Barham		
Customer Contacts	Jessica Topping		

Select ◉ 24 hrs ○ 7 days ○ 30 days

Time Zone: (GMT+10:00) Canberra, Melbourne, Sydney Time: 13-09-2010 15:57:00

Data Summary

Modules	Units	Reading	Set Point	Average	Maximum	Minimum	Alarm
ORP	mV	440	650	435	441	432	🔴
pH	value	9.10	8.50	9.10	9.12	9.07	🟢
Conductivity	mS/cm	2.37	2.20	2.38	2.42	2.35	🟢
Temperature	°C	20.8		18.2	21.0	16.5	
Flow Velocity	m/s	0.98	0.90	0.99	1.06	0.92	🟢
FAH	mg/l	0.60		0.52	0.60	0.46	
LSI	index	2.63		2.59	2.63	2.54	
Corrosion PR1	umpy	23	25	23	24	23	🟢
Corrosion PR1	PIT	0	25	1	1	0	🟢
Corrosion PR2	umpy	14	25	14	14	13	🟢
Corrosion PR2	PIT	0	25	0	1	0	🟢
Common Alarm							🔴
Flow Sensor		🟢					
Empty Tank							🟢
Inhibitor	mls/hr	60.00		60.00	60.00	60.00	
Dispersant	mls/hr	60.00		60.00	60.00	60.00	
Second Biocide	mls/hr	0.00		0.00	0.00	0.00	
ORP timer	mls/hr	0.00		0.00	0.00	0.00	
Oxidant Dose	mls/hr	0.00		0.00	0.00	0.00	
Acid Dose	mls/hr	1500.00		1500.00	1500.00	1500.00	
Disinfection ORP							

Trend Chart Change Setup

The details of the controller are displayed at the top.

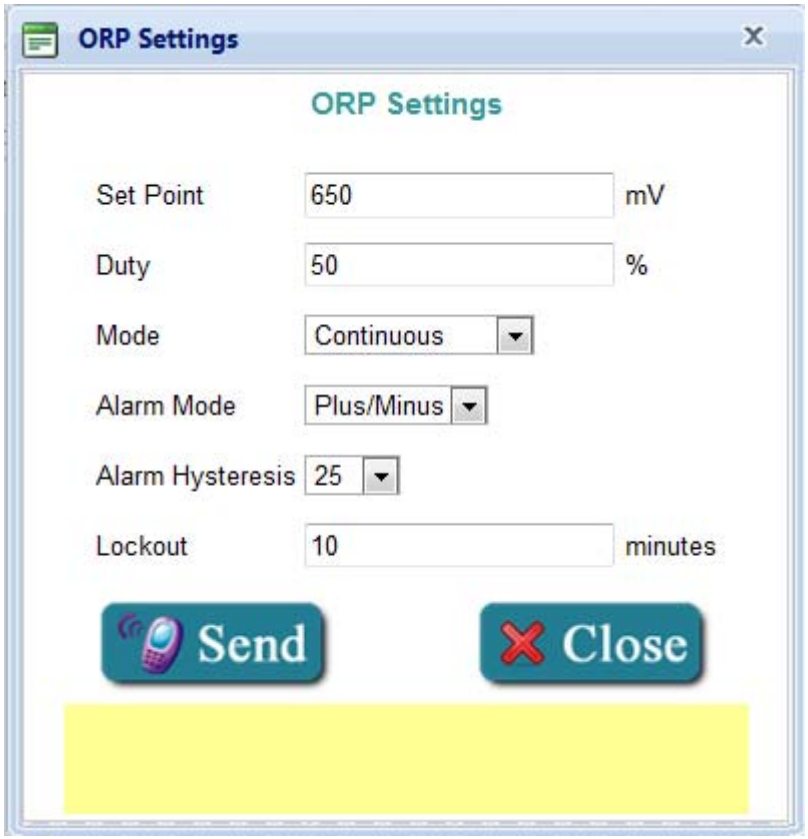
The data for each module is summarised in the data summary page. This section shows the current reading which the setpoint is trying to be maintained and whether it is in alarm or not.

The Red LED indicates an alarm

The Green LED indicates the system is healthy.

There is an option to display the average, maximum and minimum value for a specified period of time. These values can be displayed for a 24hr, 7 day or 30 day period. This can be selected through the radio buttons provided.

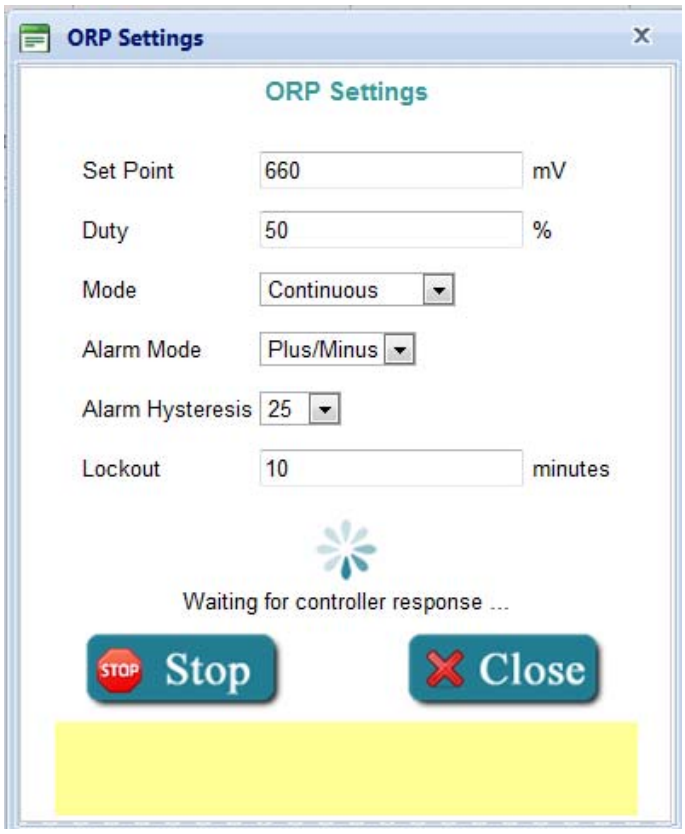
The parameters of each module can be changed by selecting the hyperlink for that module. For instance to change ORP parameters. Select ORP hyperlink



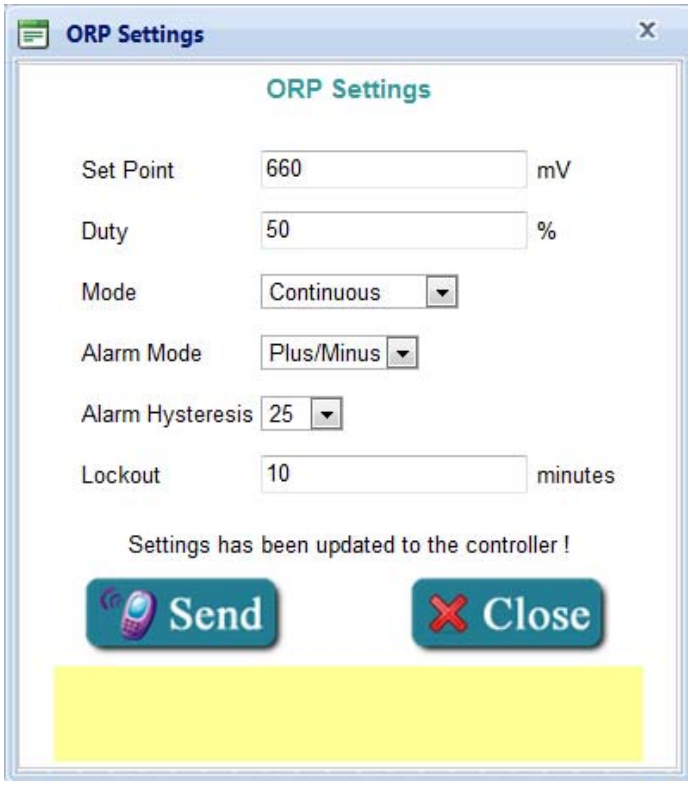
All the ORP parameters are then displayed. These are the same parameters that can be changed through the panel of the controller. In order to update the controller press the Send button. Closing the dialog box will loose all changes.

The yellow box at the bottom displays what the entry box is about. For example when the setpoint box is selected the dialog in the yellow box displays “ORP level the controller is trying to maintain”. This makes it intuitive to change parameters.

To save the parameters press the send button. A rotating flower displaying waiting for controller repsone is displayed as shown below.



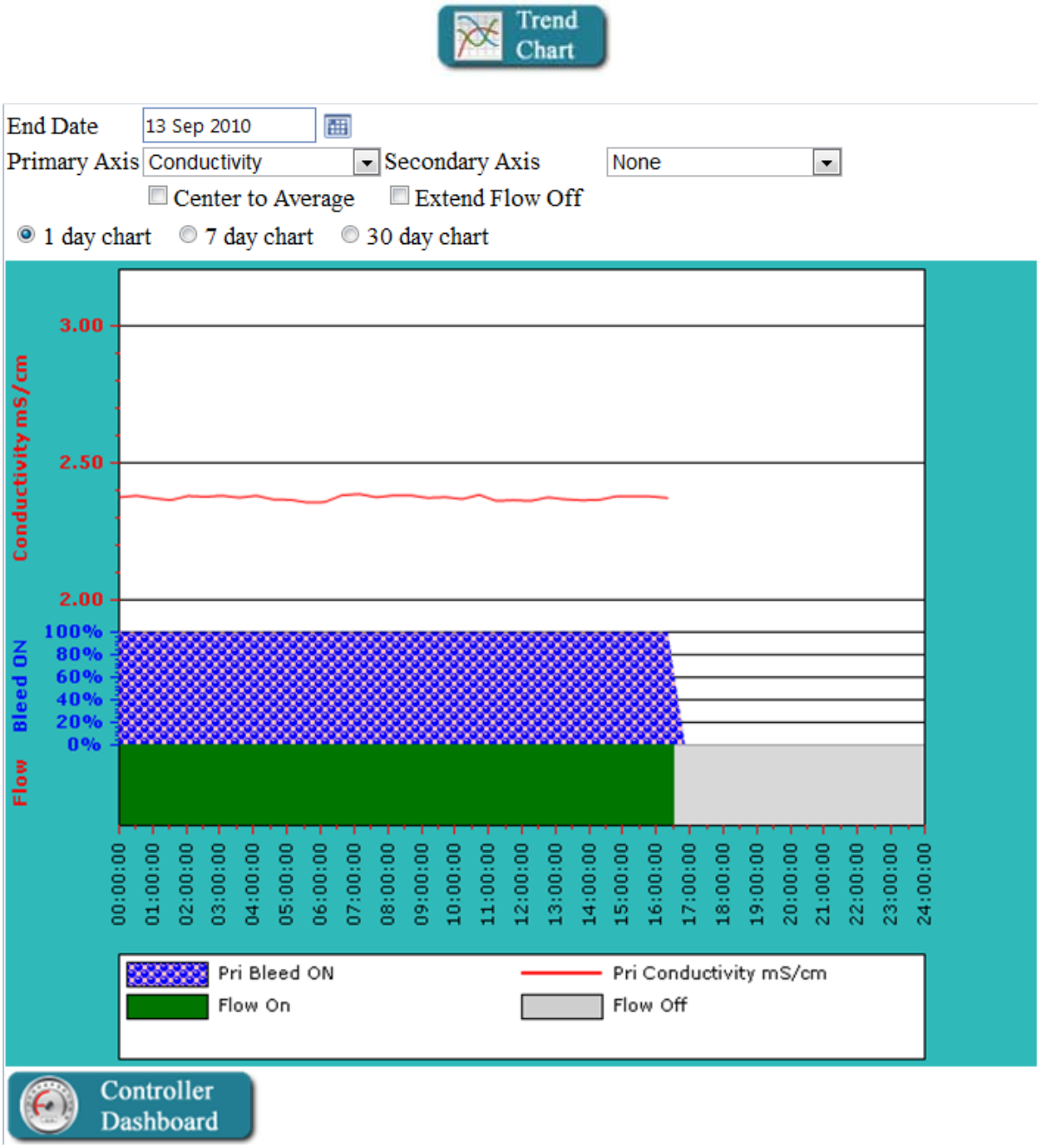
On successful completion of the update the following message is displayed. "Settings ahs been updated to the controller" as shown below.



8 Trend Charts

Charting is an important part of the monitoring the state of the controller.

The charting features can be accessed through the controller dashboard. The following trend chart button is on the bottom of the dashboard.



There are 3 periods that the charts are provided for

- 1 day chart
- 7 day chart
- 30 day chart

2 different modules can be displayed at the same time. The percentage of on time will only be displayed for the primary axis selection.

All trend charts will display the status of flow. If there are periods of time when flow is off to make it easy to determine what is happening extend the flow off through the chart. This shows in light grey where the flow was off on the chart. Check the tick box “Extend Flow Off” at the top of the screen. This extends the time period when flow is off to the top of the graph.

The “centre to average” tick box allows the average to be moved to the centre of the chart. This is useful if there are spikes in the data and the average trend is offset to far to one extreme of the graph. In general when the controller is controlling correctly there will be little noticeable difference when selecting the option.

It is possible to move the graph to any period of time by changing the end date. The chart displayed is the period of time prior to the end date selected.

To return to the controller dashboard either select the button at the bottom of the page or click on the controller name in the navigation menu.

9 Alarms

Alarms can be sent via SMS or email to a number of contacts. To setup who is to receive the alarms, this is accessed through the controller dashboard, change setup.

Assigned Controller - Setup Alarm & Email Reports - Serial No 999980

Set automatic notifications of alarms to:

		SMS	Email
Account Manager	Bob Brown	☑ 0444444444	☑ bobb@aqua.com.au
ServiceRep1	David Cameron	☐ 0488777555	☐ davidc@aqua.com.au
ServiceRep2	Jim Barnes	☐ 0411222333	☐ Jimb@aqua.com.au
ServiceRep3	Jon Barham	☐ 0400111222	☐ Jonb@aqua.com.au
Customer Contact 1	Jessica Topping	☐ 0420111880	☑ jessicat@vicartifacts.com
Customer Contact 2		☐	☐
Customer Contact 3		☐	☐

Transmit ALARMS ◉ Once Only ○ Every 4 Hours ○ At Time 08:30

Alarms can be setup to be transmitted under the following situations

- Once Only. This transmits the alarm via SMS or email when the alarm occurs
- Every 4 Hours. The alarm is initially transmitted when the alarm occurred and it is then retransmitted every fours after at these times(12am, 4am, 8am, 12pm 4pm 8pm)
- At Time, transmits the alarm once when it occurs and then every day at the specified time.

The only way the alarms can be reset is to remove the alarm from the system.

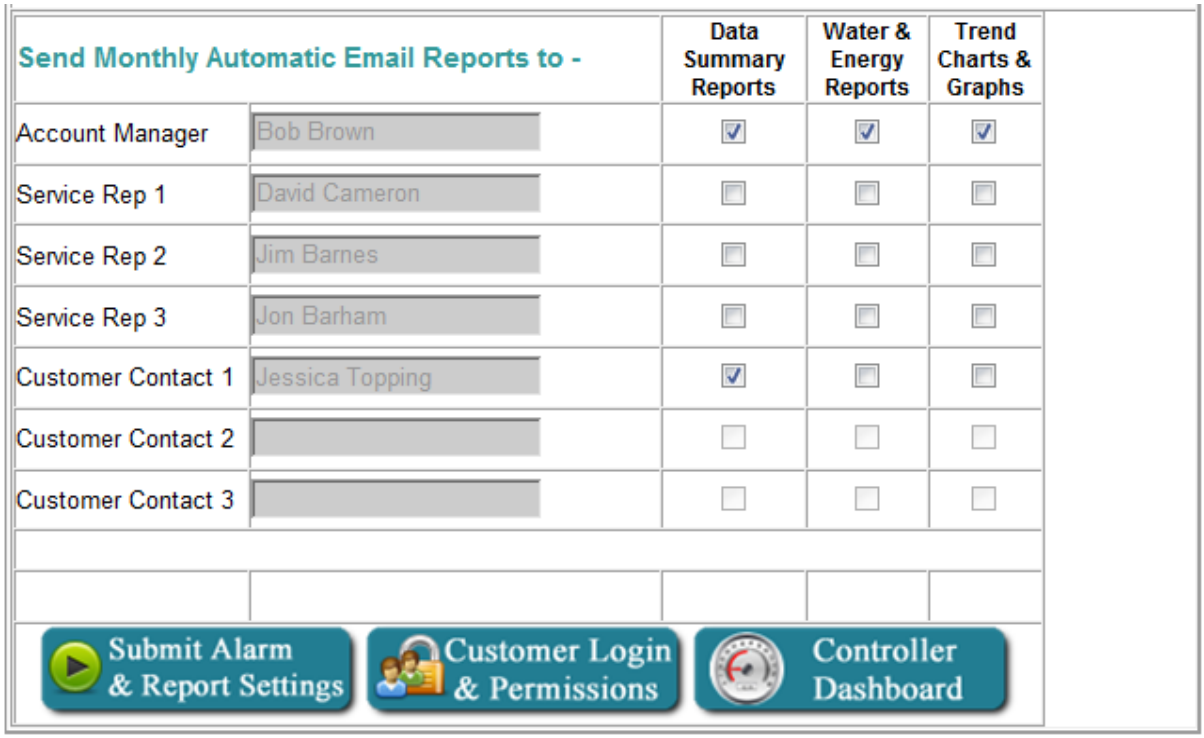
The alarm notification will be sent to those with the checkbox marked against their name.

10 Reports

At the beginning of each month a series of reports can be sent. These are

- Data Summary Reports
- Water & Energy Reports
- Trend Charts & Graphs

Each report will be a PDF that having company logo and the selected details. The advantage of this reporting system is that no longer will there be time consuming hours spent on generating and compiling reports for customers. All the information will be readily available at the beginning of each month and can automatically be sent to the customers.



There list of users who will automatically receive a report is accessed through the change setup button on the controller dashboard. Each user can be selected to receive some, all or none of the reports by selecting the appropriate check boxes beside their name.

10.1 Data Summary Reports

The Data summary reports will consist of a brief overview of the current system status and how it performed for the month.

10.2 Water & Energy Reports

The water and energy reports, will give the efficiency of the system and the calculated associated costs to run the system.

10.3 Trend Charts and Graph Reports

The monthly charts of all modules installed will be charted and sent through in a PDF.