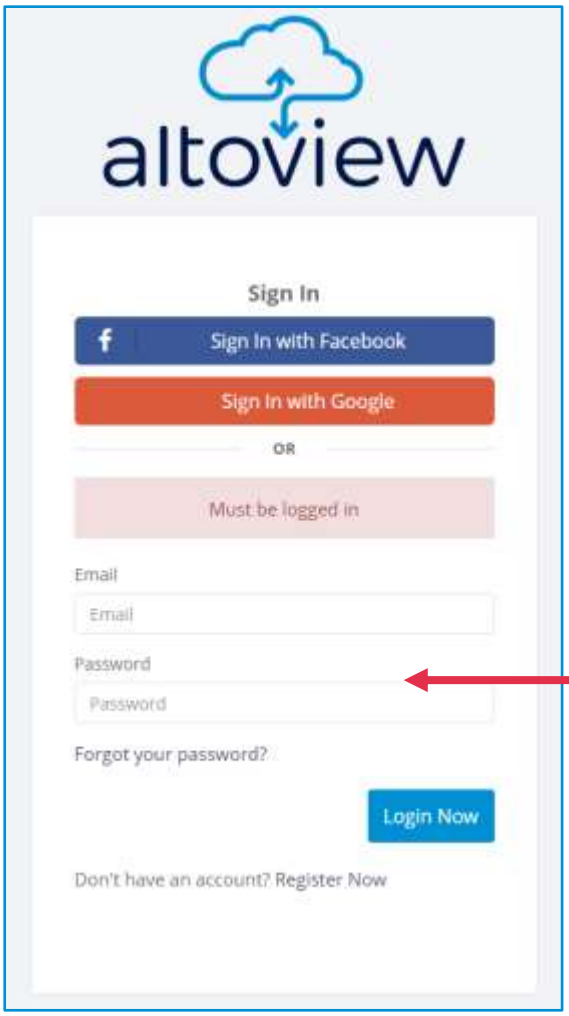
http://members.altoview.com

Introductory User Guide

CSA Student Day

27th April 2017

1. Logging In



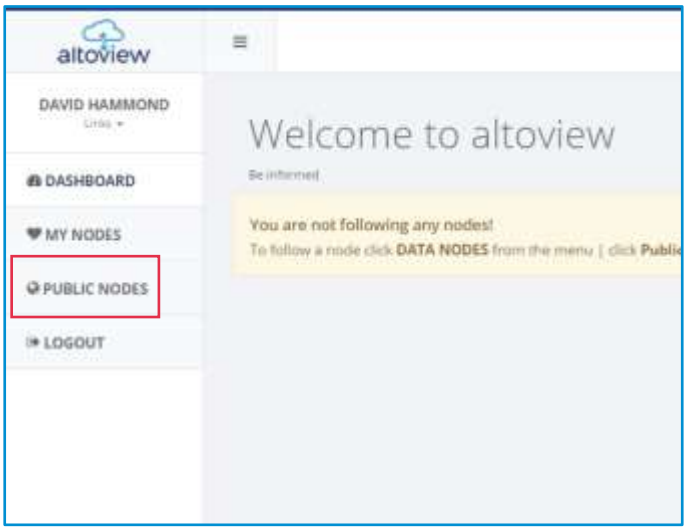
Welcome to Altoview!

Altoview has been designed from the ground up to provide an end-to-end IoT solution. This User Guide will help you get started with using the Altoview cloud based software interface.

The Altoview software interface is freely available for the citizens of Townsville to use, and we encourage you to spread the word so we have as many people in Townsville as we can using Altoview to share their data.

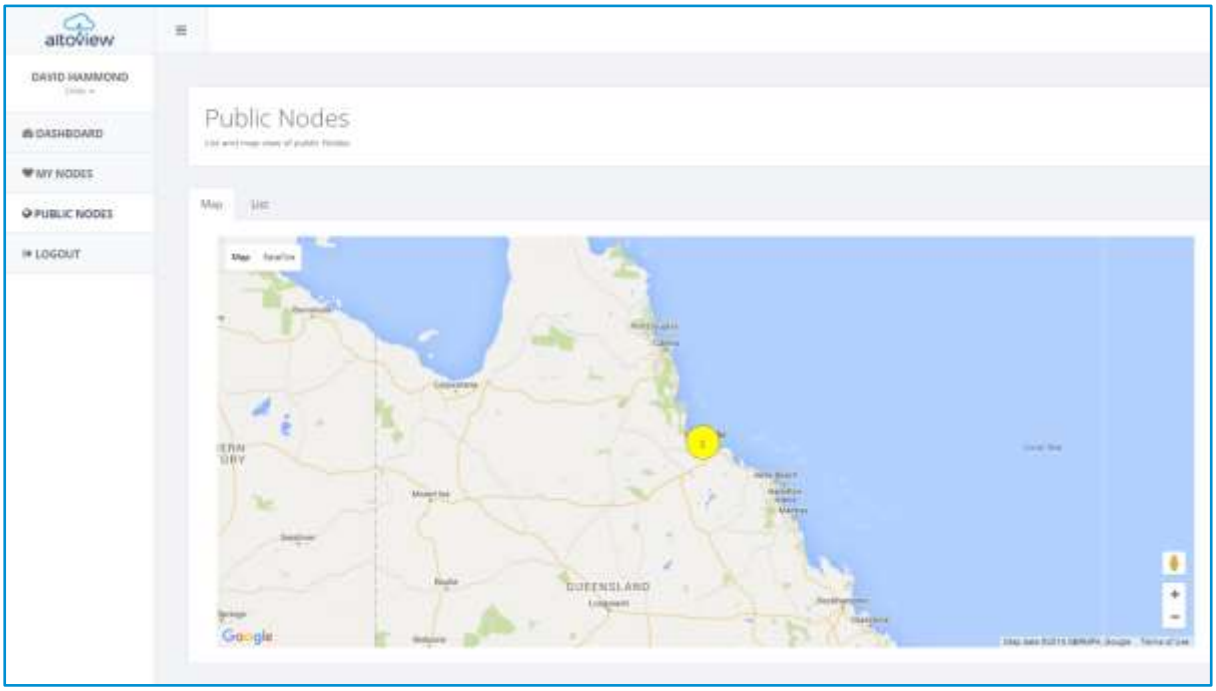
To get started with Altoview, you first need to login to the members portal. Go to the Altoview members homepage http://members.altoview.com, then login with your Facebook or Google credentials, or alternatively select “Register Now” to setup a free Altoview account.

2. Viewing Public Nodes



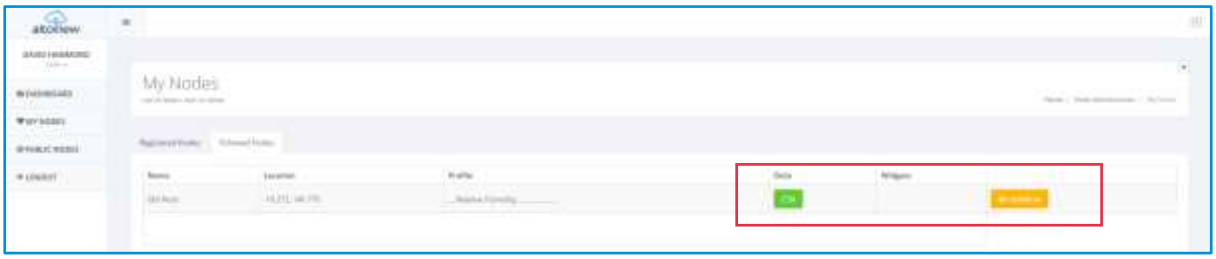
To familiarise yourself with the Altoview interface, let's start by viewing a Public Node. Select Public Nodes from the menu bar

The Public Nodes map window will be shown, showing the Public Nodes within your region. In the image below, 2 Public Nodes are available on the map, shown by the yellow marker. You can click on the yellow marker to zoom into the map until it shows the individual nodes. You can also select the List tab to list the Public Nodes.



In the Map view, you can click on individual nodes to bring up details for the Node, and you can choose to follow that node by selecting the green Follow icon. The follow options are also available in the List view.

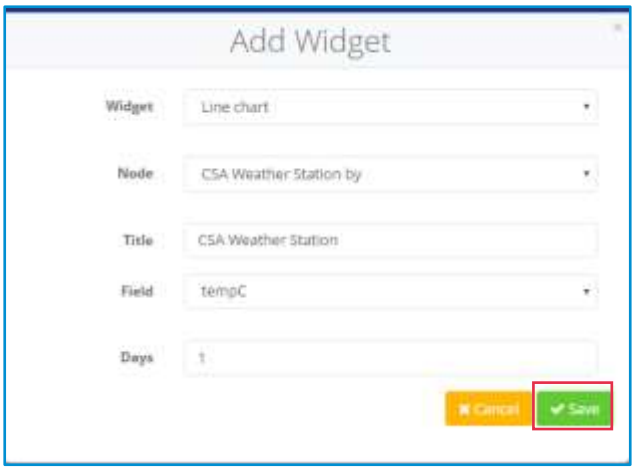
Any nodes that a user is following can be viewed by selecting My Nodes from the menu bar, and selecting the Followed Nodes tab. The user then has the option to download data from this node as a CSV file. At any time a user can stop following a node by selecting the Unfollow icon for this node. Try locating and following the CSA Weather Station node – in the next section we will then plot some data from this node.



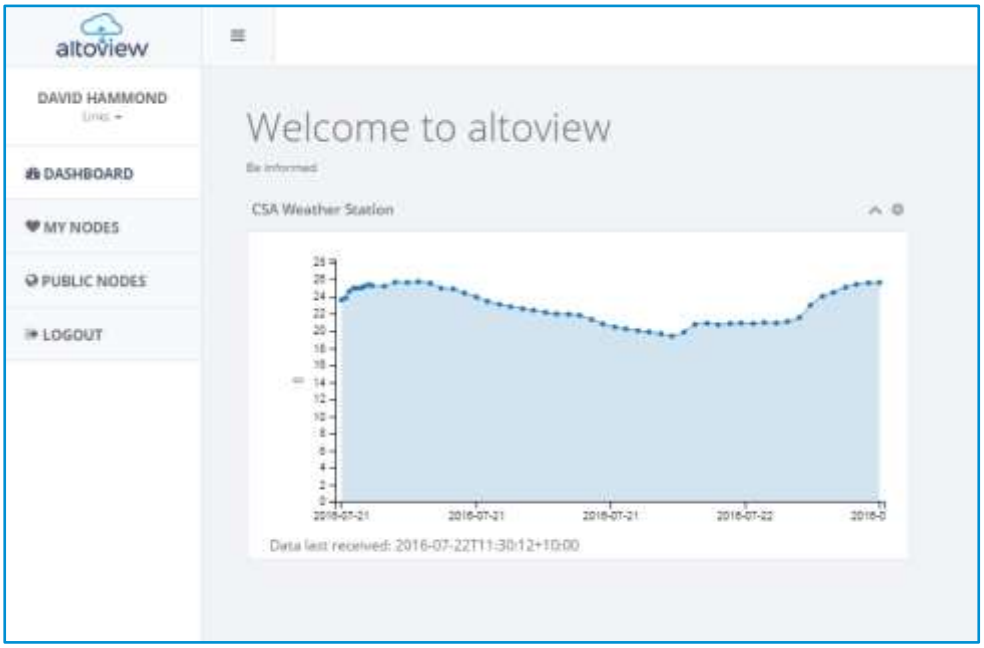
3. Plotting Data from Public Nodes

To plot some data for the CSA Weather Station node, select Dashboard from the menu bar, then select the Add a Widget button located in the top right of the screen. This will open up the Add Widget box.

Select Line chart from the drop down menu in the Add Widget box. Then select CSA Weather Station from the drop down Node list. To plot, for example, air temperature from this node, select air temperature from the drop down Field list. Air temperature is defined by the variable tempC, so select this option from the Field list. To plot, for example, 1 day worth of data from this node, type 1 into the Days field, then select Save.



Air temperature for this node will then be plotted as a line chart. You can mouse over the line chart to view data from individual readings



Now try adding a Gauge and display battery voltage from the CSA Weather Station node. You'll notice for a Gauge, you need to define a Minimum and Maximum value for the readings. Since the CSA Weather Station node operates from a 12V battery, try setting your Min value as 0 and your Max value as 15. It should look something like the image below, but will show whatever the current battery voltage is for the CSA Weather Station node.

Now try plotting some other data from the CSA Weather Station, using the different widget options. Currently the widgets available within Altoview are limited to Line chart, Gauge, Text and a Node map. Over time this will expand as additional functionality is added to the Altoview interface. If you have ideas for useful widgets to add, let us know! Try plotting some other data from the CSA Weather Station node. In the next section, we will go through how to register your own node with Altoview to allow you to start displaying data from your own Node.

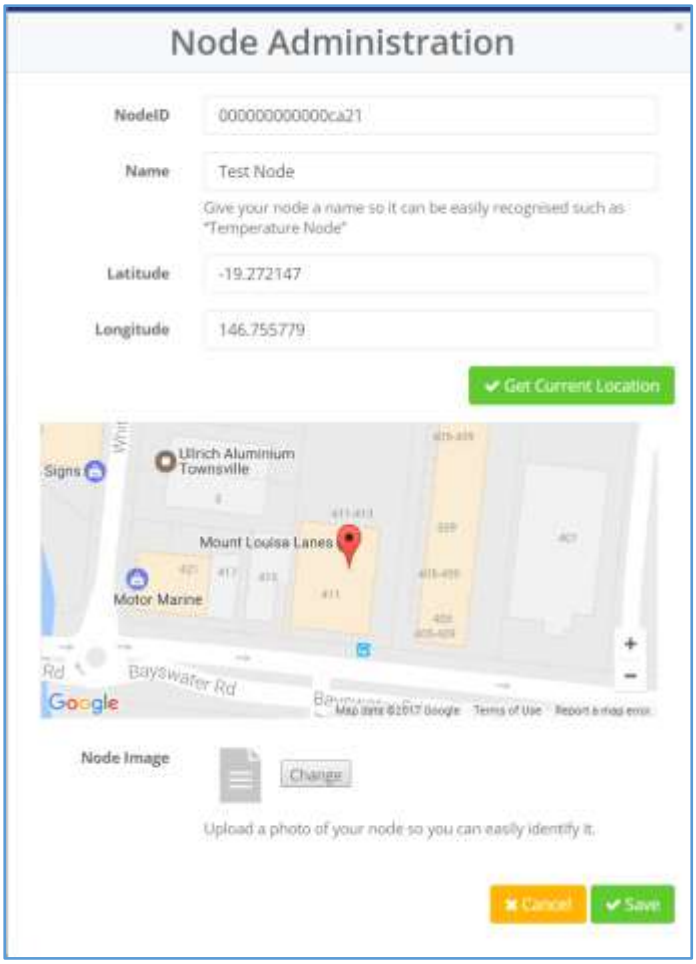
4. Registering a LoRa Node with Altoview

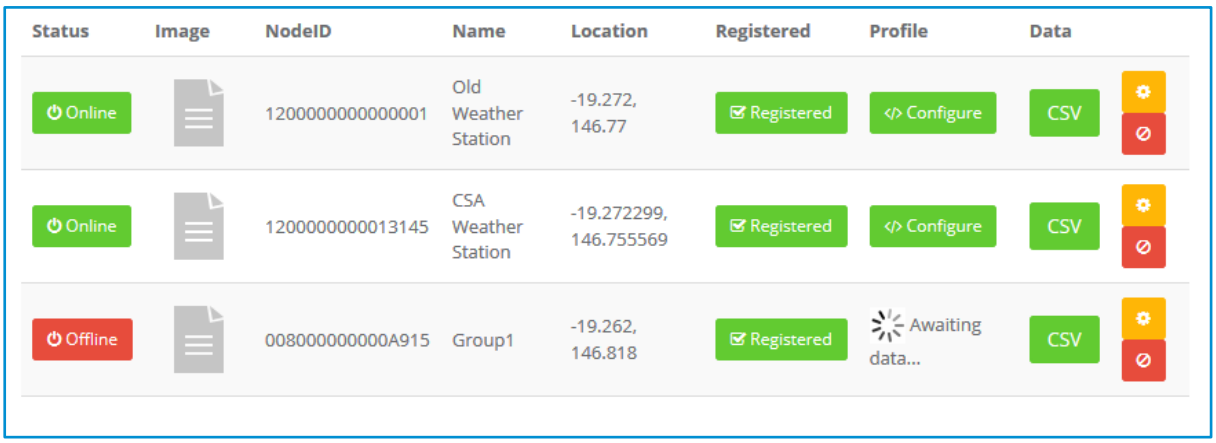
Now you are ready to have a go at registering your own node with Altoview. Firstly, click My Nodes on the menu bar, then select the Registered Nodes tab (default tab), and click the blue “Register a Node” button. This will open up the Node Administration box.

Type your Node ID into the NodeID box. You Node ID can be found printed on the LoRa radio module. Please note, you can enter this number with our without the colons.

Next, type a name for your Node in the Name box, and either enter your Latitude and Longitude, drag the map marker to the required location, or select the Get Current Location tab if you have location services activated on your browser:

Now click the green Save button to register your Node.





Status	Image	NodeID	Name	Location	Registered	Profile	Data	
Online		1200000000000001	Old Weather Station	-19.272, 146.77	Registered	Configure	CSV	
Online		1200000000013145	CSA Weather Station	-19.272299, 146.755569	Registered	Configure	CSV	
Offline		008000000000A915	Group1	-19.262, 146.818	Registered	Awaiting data...	CSV	

If you node has not yet sent any data to the Altoview server, it will be marked offline and the Profile will show Awaiting Data. Once data has been received, this will go green and you will be able to put your node online.

Now you will be able to attach widgets to your node in the Altoview dashboard as covered earlier in this document.

We hope you enjoy using Altoview to view the data you have captured, and we encourage you to be creative and think of new ideas to collect data that's important to you.