How to use the AREDN World Map

For years AREDN has provided a map that was dependent on users uploading their node information manually. Updating data or removing outdated information has always been problematic; hence the map isn't very accurate.   Something better was needed.

There have been various mesh mapping apps developed over the last few years. They all gather data about nodes, put them in a database and if possible plot them on a map. They all have their features, but they all are limited, naturally enough by the scope of the network they can reach.

With the advent of supernodes and the supernode network, a mapper that knows about the supernode network can traverse that network to the various mesh "islands" it links together. In that way a much wider view of the AREDN network can be obtained, yet zooming into a specific mesh network can be done (assuming there's a supernode on that network).

That mapper now exists as the AREDN World Map. It's available on the MAPS dropdown at arednmesh.org, or directly at https://worldmap.arednmesh.org/#1.5/35/-14.

It has a number of nifty features, and this article discusses them in some detail.

Navigating

Zooming in or out can be done with the +/- in the lower right hand corner, or with the mouse wheel.

Holding the right mouse button down and moving the mouse rotates the map (changes the bearing). Clicking on the map point in the lower RH corner restores the map bearing to north.

In the upper left-hand corner of the map is 'find'. Clicking on it opens a data entry field. You can type a node name, building address, city, country or anything else the map knows about. The map will center on that location and zoom in. Wildcards obviously aren't supported.

Network Characteristics/Displays

In the upper LH corner of the map is the "map" label. The dropdown will show several different types of background. It defaults on standard, but "buildings", "topology" and "satellite" are also available.

In the upper RH corner of the map are icons labeled with bands plus a few others. Clicking on one of them will filter the rest of the nodes on the map. For example, clicking on the Supernode icon will show only the supernodes and their links.

Another filtering tool is in the upper LH corner of the map, labeled "channel".   Clicking it yields a dropdown showing all channels available to AREDN devices. Selecting a particular channel will remove all other nodes from the displayed map. Scrolling up to the top and selecting all will restore the normal display.

If you want to know the bearing and distance between two locations, click on "measure" in the upper LH corner. Then click on one location of interest, and move your mouse to the second location. A red line will show between the two, and the bearing and distance will be displayed in the upper LH corner.   Use Esc to exit the measuring mode.

If you want a data dump of the database, it's available in several different formats under "data" in the upper LH corner.

If you'd like to view it on a smartphone, click on "phone" in the upper LH corner.

There's a mountain icon bottom right.   If you enable it on certain maps, various mouse gestures will let you tilt the map to see mountains, etc.

If you click on a node's icon, you'll get a pop-up window containing all that node's vital data.

If you click on a tunnel, you'll get a pop-up window listing the node at each end of the link, the distance between the nodes, and what type of link it is.