Using Blackout Comms Location

The default behavior of Blackout Comms is to share locations privately & encrypted within the cluster, and without using internet in any way. If you want your device positions to be *public*, you can enable location publishing.

Location Sharing

[Enabled by Default]

Private Cluster: Devices regularly share location and movement information (unless disabled).

Unless you enable location publishing, ***location data is only visible to other on-cluster devices****, it is not public.*

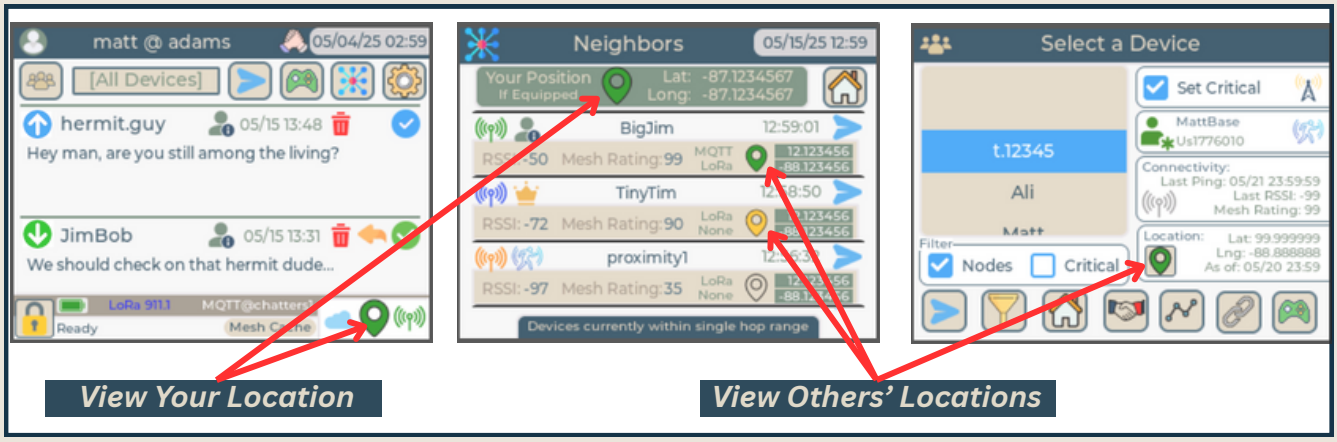
Open Channels: you can decide whether to include location in any broadcast you send. Anyone nearby with the channel encryption settings may receive your position.

Location Publishing

[Disabled by Default]

- **Maps cluster locations online**
- **Anyone can view** a live (or delayed) map of your device positions
- **This data is public** via chatters.io website
- Especially useful for sharing your location info & mapping coverage
- Since this data is public, you may not want to *leave* it enabled.
- You can delete your data any time.
- Individual device can remain hidden by disabling location sharing

Viewing Locations



Live GNSS *Fresh Location*

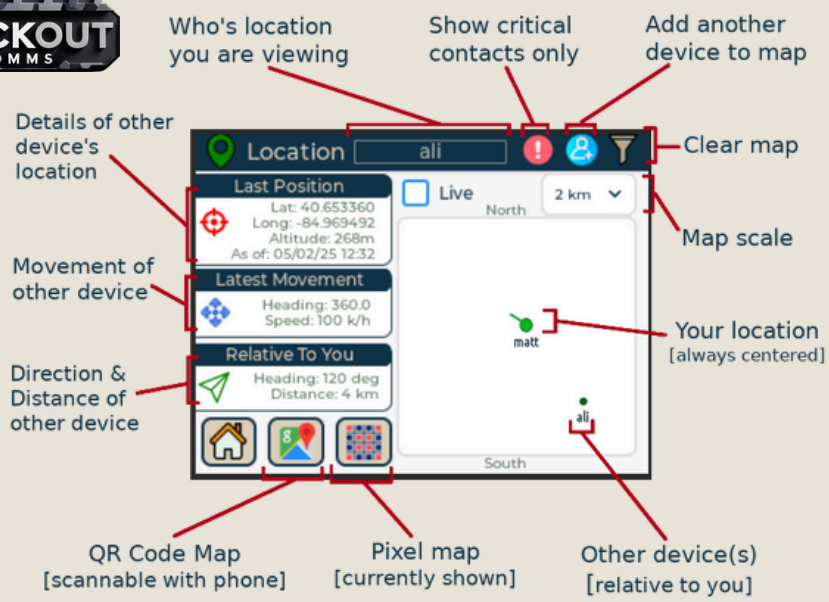
Stale Location

No GNSS *No location*

On a ChatterBox communicator, view location data by touching a green or yellow GPS icon.

The Home, Neighbors, and Devices screens are where you can do this.

Viewing Locations On Your Device



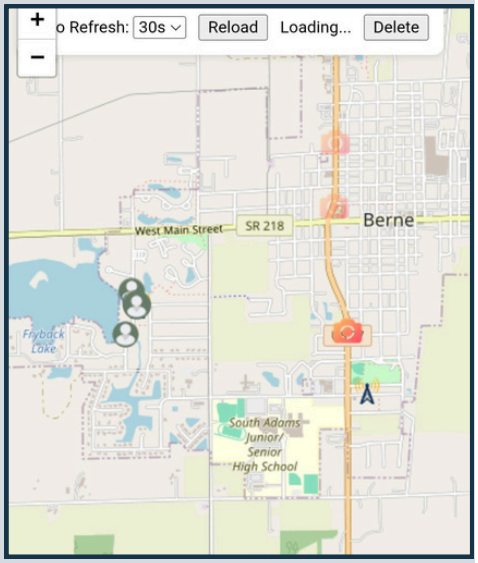
- **This is secure**
- No internet required
- Default location view
- Completely private & encrypted location sharing, *within the cluster*
- Devices can “hide” by disabling location sharing

Viewing *Published* Locations On a Browser

- Must be explicitly enabled by you, it is not enabled by default. **This is not private or secure!**
- Pushes location data to an Altware service
- Allows you (and anyone else) to view a live or delayed map of every location-enabled device in your cluster
- **Location info is public, until you delete it**
- Useful for testing purposes

Touch

Scan



See Locations

Click/touch any location for more detailed information.

To stop publishing location data, disable location publishing on the enabled device and delete stored locations on the website (delete button).

Tracking Mode

Location is typically broadcast every 2 minutes. **Tracking mode causes a device to broadcast location much more frequently (2-3 times/minute)**, enabling a more live view of a device's location. Tracking mode is disabled by default and must be explicitly enabled per-device.

Enable tracking mode via settings or by sending the *Enable Tracking* command to a node.

Enabling tracking mode on *several* devices can impact cluster performance.

Location Publishing: For Experimental Use

This feature is intended for experimental use and is disabled by default. You must explicitly enable it to use it. With location publishing enabled, your cluster's location data will be published to an Altware-hosted service. You and anyone else can then view cluster-wide location data on a browser, from anywhere.

While enabled, your cluster location information is public! You can disable this any time (via settings) and delete your data from our service (delete button).

Enabling Location Publishing

1. Add WiFi Connection

Choose:
Settings / WiFi / Add Network

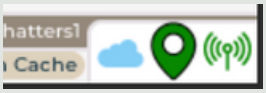
[Wait a few seconds]

- Select your network
- Type in a password
- Click "Test"
- If successful, "Save"

[Device will restart]

3. Verify Connectivity

Within a few minutes, scanning the location screen's QR code should begin to show locations.



The home screen's blue cloud indicates good connectivity.

2. Enable Location Publishing

Choose:
Settings / Location / Publish Locations

Touch the Pencil button to enable

[Device will restart]

Important Notes

- Toggle location publishing back to disabled to stop sharing
- The publishing device must remain powered on and maintain WiFi & internet connectivity or locations will not be updated.
- **Published locations are unencrypted & visible to anyone!**
- For most up-to-the-minute location publishing, choose a device with the most neighbors, or even enable on more than one device.

Location Logging

This feature activates serial/USB logging, provided you have a PC or other device connected via cable and listening at 115200 baud.

When enabled on a device, the device will stream (to USB) locations of *all* devices in your cluster that have location sharing enabled.

This is intended for streaming to a file for later analysis. When you monitor the logs via USB, you will see location pings mixed with other types of logs. Example:

```
ctrl:Mesh activity occurred
ctrl:Refreshing GPS
LOC:250701154444|UVjiM004|40.721801|-85.098476|267.5|220.6|0.1[2.5 m @ 264.5 deg]
LOC:250701154552|UVjiM012|40.721777|-85.098493|251.7|186.5|0.5
```

Time (YYMMDDhhmmss) | **Device ID** | **Lat** | **Long** | **Altitude** | **Heading** | **Speed** (km/h)

If location is enabled on the device you are logging from, you may also see (in brackets) more information on the log line as follows:

[**Distance from Self** @ **Relative Heading**]