

# **Blackout Comms Time Synchronization**

**Typically, this process is fully automatic. Note**: All devices in your cluster must agree on the current time and date. Technically the time/date doesn't *have* to be correct, they just need to agree on it.



## **Functions Dependent on Time**

- Knowing cluster's current frequency
- Signing messages/packets (non-expired)
- Validating signed messages
- Mesh packet delivery

- Knowing GPS location staleness
- Identifying neighbors
- Interpreting mesh graph data

## **Sources of Time**

#### **Secure Pings (Signed)**

The most trusted source of time is the Cluster's consensus. This is constantly being shared throughout your cluster.

#### **Onboard Realtime Clock**

If your device is equipped with a high precision RTC, this will be considered a *primary* source of time.

#### **GPS/GNSS**

If your device is equipped with GPS/GNSS, this will be considered a secondary source of time.



View startup log

Listen for time from nearby device instead of GPS

### **Other Nearby Devices**

Unless disabled, all devices broadcast time roughly every 120 seconds. Using this is a time source is considered a last resort, but it can be done. You can force any startup-stuck device to listen for nearby time broadcasts instead of using GPS or onboard RTC. To do so, tap the time sync icon on the startup screen. If the stuck device is a link, tap the time sync button once (see doc specific to your device).

**You can instantly broadcast time** from any communicator by touching the clock on the home screen or choosing "broadcast time" from the mesh settings.

