Naming Conventions and Network Hygiene

Good naming conventions make the network easier to use, debug, and grow. Establish them early - renaming nodes later requires coordinating with the host.

Node naming conventions

Community networks that work well use consistent, descriptive names. The goal: someone who has never seen the network should be able to understand what each node is and roughly where it is, just from the name.

Recommended format

```
LOCATION-TYPE or LOCATION-DESCRIPTOR


Examples:
OAKHILL-RPTR (Oak Hill, repeater)
DOWNTOWN-RTR (downtown area, router)
SMITH-FARM (Smith Farm, named location)
I90-MP45 (Interstate 90, mile post 45)
N-COUNTY-TOWER (North County tower site)
```

What to avoid

- Personal names ("Bob's Node") - doesn't convey location information
- Generic names ("Repeater 1", "Node A") - ambiguous when you have many nodes
- Emoji or special characters - may not display on all devices
- All lowercase or all uppercase inconsistently - pick a convention and stick to it
- Overly long names - Meshtastic nodes have a Long Name (up to ~37 bytes) and a Short Name (4 bytes, used on space-constrained displays). There is no "20-character" limit, but keep the long name concise and make the 4-byte short name meaningful, since the short name is what shows where display space is tight.

Network hygiene practices

Document every node

Maintain a simple spreadsheet or wiki page tracking each node:

- Node name and ID
- Physical location (general description, not exact address if security is a concern)
- GPS coordinates (for the network map)
- Hardware: board type, firmware version, antenna, power system
- Host name and contact
- Installation date and last maintenance
- Known issues

Monitor for dead nodes

Nodes that go offline and stay offline silently degrade coverage. Set up a monitoring system:

- Use a room server with MQTT output + a monitoring script to alert when a node stops advertising
- Or simply check the network map weekly and follow up on nodes whose "last heard" time shows they haven't been seen recently (the "last heard" value reflects when a node was last directly received, i.e. its presence, not a usage count)

Keep firmware updated

Firmware updates fix bugs and improve performance. For each significant release, update your permanent infrastructure nodes. This requires either physical access (USB) or an OTA update mechanism if your firmware supports it.

Channel and frequency discipline

Every node on your community network must use the same channel and preset. A mismatched modem preset (or region/frequency slot) is a **symmetric** failure: neither node can decode the other, so a misconfigured node can neither hear nor be heard by the rest of the network - it is not a one-way "can hear but not be heard" situation. Provide new participants with:

- Exact preset name or frequency settings
- Channel name and PSK (if using a private channel)

- Recommended role settings (Client for personal devices, Router/Repeater for infrastructure)

Revision #3
Created 2026-05-03 03:44:42 UTC by Mesh America Admin
Updated 2026-06-10 04:30:06 UTC by Mesh America Admin