Using the Meshtastic Network Map

Before deploying a repeater, check a network map to understand where existing coverage exists and where gaps are most significant. This helps you choose a placement that adds the most value to the network. Note that these maps are third-party tools and only show nodes reporting to the public MQTT server, so they are an incomplete, not authoritative, picture of the mesh.

Available map tools

- **meshmap.net** - community-run map showing nodes that report to the public MQTT server. Third-party and unofficial; coverage is incomplete because it only includes nodes with an internet-connected MQTT gateway.
- **Meshtastic Site Planner** - a coverage-prediction tool for estimating signal reach from candidate locations using terrain data.
- **HeyWhatsThat** - a line-of-sight / viewshed tool useful for checking what a high point can "see" before you commit to a repeater site.

What the maps show

Nodes appear on the map if they have GPS enabled, are configured to share their location, and their data has reached the internet via an MQTT gateway node. Clicking a node shows its ID, name, hardware, and last activity time. Some maps display estimated coverage radius or known links between nodes.

The network map depends on nodes reaching the internet via an MQTT gateway. During internet or grid outages - i.e. during the very emergencies you would most want it - the map can be stale or blank and does **not** reflect live mesh state. Do not rely on it for real-time situational awareness during an incident; verify coverage on the radios themselves rather than trusting the map.

How to use the map for planning

1. Find your area and identify where existing nodes and repeaters are concentrated
2. Identify gaps in coverage - areas with no nearby nodes, or areas that would benefit from a relay between two clusters
3. Look for natural high points near the gap that could serve as a relay location
4. Check whether your planned location already has a node - placing a repeater very close to an existing one adds little value and increases network traffic

Making your repeater appear on the map

A REPEATER-role node suppresses all of its own broadcasts (NodeInfo, position, and telemetry) and is hidden from node lists, so it will not appear on the map. A ROUTER-role node does broadcast its NodeInfo and position by default and will appear on map services that collect MQTT data. If map visibility matters, you can use ROUTER role instead of REPEATER - but choose ROUTER only for genuinely well-positioned infrastructure nodes, and do not switch to ROUTER merely for map visibility, since it also changes power behavior (ROUTER forces power-saving sleep), turns BLE/WiFi/Serial off by default, and affects routing.

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