

Reed Bros Security - Node Mount

- Trello: <https://trello.com/c/K4Vlgqdh/33-reed-brothers-security>
- Map: <https://goo.gl/maps/PcFQtTexQ3m>
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Objectives

1. Link roofs of Omni Commons and Reed Bros with point to point connection
2. Survey roof of Reed Bros to determine line of sight to Paxio (who is willing to donate 1 Gigabit of bandwidth if we can get to LOS)
3. Spread peoplesopen.net wireless to area around Reed Bros

Contacts

Sudomesh Contact: Lesley Bell

- Lesley has been maintaining contact with:
 - Randy - brother of owner, maybe Vice President

Property Owner:

- Name
- Contact Info

Node Mount Log

- July 5
 - Team: Lesley, Ben Elam, bengo
 - Flash home node - n600
 - s/n: WNM43050
 - Nanobridges:
 - RBros Client - 1034T00156D5E991A
 - RBros AP - 1045T00156D8AEA15

Open Questions

- From Trello
 - Will
 - “Need to figure out power - do they have power on the roof?”
 - “Should we do a strut mast?”
- Is there line of sight from Reed Bros to Paxio? What do we need to know for next trip to set that up?
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Architecture

- Wireless link from Nanobridge on roof of Omni Commons to roof of Reed Bros
- Roof of Reed Bros
 - Receive wireless p2p link from Omni Commons in Nanobridge
 - Ethernet from Nanobridge to n600 home node WAN port
 - Ethernet from Nanobridge LAN port to Nanostation
 - Nanostation spreads wifi around Reed Bros

Along the Way - Issues/Learnings

Setting up home node - couldn't access web page to upload flashed firmware.

- Make sure wifi on your laptop is off so networking goes over ethernet to 192.168.1.1 (instead of trying WiFi, which will not work)

Line of sight from Omni Commons roof to Reed Brothers is bad. Maybe can't make it.

Need supplies

- Weighted base
- Mast

Ideas

- Re-canvas the the immediate vicinity of Omni Commons to gauge interest in hosting nodes. Increase coverage consistency near Omni

Makenode:

- Would be nice to have default value for private ssid
 - And if you hit enter, nothing happens. Then enter a value, hit enter again. Program hangs.
 - Better yet - allow me to just provide a config file to makenode

N600 home node for reed bros:

Pw: meshtheplanet

Makenode on node v10 resulted in "callback is undefined"

Private SSID: reedbros

Pass: meshtheplanet

After flashing a node with autoconf firmware, then running makenode, a cronjob will eventually overwrite the makenode config, which is confusing and not desirable

- Firmware bug 140

Link to /helpwanted from <https://peoplesopen.net/how-to-help/>

Post-mount documentation

Template from: <https://github.com/sudomesh/mounting>

- Property Owner and their contact info
 - See above
- Node mount team, who went along, helped, and learned
 - See above
- Approximate height and nature of roof mount (e.g. attached to vent pipe, chimney mount, weighted base, etc.)
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- Model(s) of node(s) (also firmware version? this is larger problem related to version control and our release system)
 - N600
 - <https://github.com/sudomesh/sudowrt-firmware/releases/tag/0.3.0>
 - Downloaded via 'latest' link on [Walkthrough](#) page:
- General direction that the antenna was pointed and any connection made
- Location and nature of cable run (e.g. zip tied to gutter, run under eave, etc.) and hole/entry point for cable run
- Current IP address of home node (re-makenoding will change this, unless you manually reset the IP, this should be fixed in zeroconf development) and/or extender node (this is always the home node IP +1 or +2)
- Current bandwidth sharing limit, both up and down
- Status of internet access at property and speedtests of peopleopen SSIDs
- Any successful meshing, record the IPs of meshed nodes
- Any bugs that were discovered
- Any items we borrowed, equipment we broke, or parts we ran out of (so we can purchase replacements)