

XetaNET V3.1.16506.31361 is the first official beta release that is available for testing and includes a fix for pre 2.12 uTasker compatibility. Initial discovery goes deeper. It also reads the uTasker config file (if present in the device) to eliminate many individual queries.

Known limitations...

1. Element manager is not allowing selection of an item twice. This is likely due to deselection not purging all existing priority refresh jobs
2. not populated in the UDP protocol which causes 0 values to show up in the history. Each response is an overlay over the previous and 0's for voltage and other non-populated variables should be ignored and not trigger a change event
3. Replace protocol buckets with individual socket containers from the pool. This will reduce the dependence on clunky async aggregations and timers
4. Occasionally Linux radios will take a long time to respond. They are probably dropping the request and I need to add better connection detection
5. True repeater radios are showing both their upstream and downstream peers. This is due to the logic of the tree not knowing if a peer which is a repeater is the parent or child.
6. The first 10-15 seconds that XetaNET is running it consumes >50% of a single cpu core. This is likely related to the initialization of different components and I probably need to run a lock profile to see if there is too much thread or lock contention early on.
7. Map icons for Radios aren't being shown
8. Chart Zoom needs to default to the right/latest data
9. Refresh Stats is displaying two pings for every one attempt. latency statistic is just being added to the UI component twice due to realtime statistics monitoring from element registry and also the protocol adapter both signaling a change event for the one event.
10. Database journal is getting written to every 2-3 seconds after XetaNET has been running for a few days. I may have fixed this but I need to verify it.
11. Margin is using super basic calculation and needs to be updated to reflect modulations
12. Devices which are https only (no redirects) currently are not being polled unless they have discovery server turned on (discovery server announces which tcp port the web server is running on)
13. There is a long delay to starting XetaNET when you are completely offline without an Ethernet cable connected to anything
14. When a radio's slot has not been identified, radio specific response packets get discarded to eliminate bad future polls which would cause the device to reboot. These should instead be queued up and replayed once the slot has been identified
15. Finish UDP Channel statistics query
16. On the statistics grid, the data export button shows a small overlay box which keeps refreshing to the top of the list making it difficult to scroll to the bottom
17. Occasionally high cpu usage causing laptop fan to come on and off for a bit
18. Changing the IP address on a device causes XetaNET to toggle between the old IP and the new IP while all of its neighbors update their arp and neighbor tables. This means it eventually settles on the correct ip but it can take up to 120 seconds
 - a. Currently when one of the radios reports its neighbors, XetaNET trusts that info which then finds the device with that serial number and updates the IP address with what we now know is a potentially stale IP. This is an awesome find and not covered by my unit tests (it soon will be though). I believe I can fix this by using a "known addresses" list for each device and a weighted trust level for each address relative to which source is providing that address.

Desired Features for future development...

1. Show Radio Settings.
2. User defined and automatic grouping of radios and devices.
3. Sync device list between XetaNet pcs to eliminate extra polling.
4. Data partitions so that a device or radio can exist more than once in potentially different states in XetaNET.
5. Add device Ethernet ports and serial ports to the device model.
6. Support for accessing a serial only radio via its diagnostic serial port (no IP address).
7. User needs the ability to cancel a current poll if they deem it is taking too long.
8. Update and show the settings display again (not on the critical path so it was temporarily hidden till time allows for fixing it to reflect new settings model).
9. Update Radio Model to include model specific modulation sensitivities and characteristics.
10. Add modulations to settings display.
11. Add terminal server / serial port specific statistics.
12. Simplify field names and optionally show field descriptions as hover overs so that users know what the fields actually are.
13. Add mass firmware update management.
14. Username and password management.
15. Easier log import/export.
16. Support for KML import/export.
17. An indicator to show a job is waiting in line to run.
18. Deep Scan Now needs to be parallelized.
19. Incompatible settings audit (compare across an entire radio network, not just a single radio).
20. Show XbyX repeaters in the treeview
21. User needs an easy way to delete radios from the list