Shiawassee BBHN-MESH Standard Configuration

REV Alpha 1.2 -24-Aug-2014

1. Firmware is currently the 1.1.2 Broadband-Hamnet firmware. See http://www.hsmm-mesh.org .
   {Note: This level has a bug effecting OLSR at this time (8-24-2014, so an update is imminent.}

2. The **NODE login** should be set as follows:
   a. Username: root
   b. Password: mesh

3. Nodes should be set for "channel 1" ~ default channel and in "5 host direct mode" (Other modes may work but are not the common to our area). Direct mode puts the devices on the LAN of a mesh node directly on to the mesh, so *no port forwarding is required* to access any of the services that those devices may provide. (For old MESH users this is the "DMZ mode".)

4. The advertised services (applications) provided by any node are to be configured by the node provider (owner). Services should be 'one-click' to use and simple to access via the MESH network. In a fully operational network, some services may be asked to be shut off to avoid 'duplicate services', which can have issues & confuse users. Examples : Web cams, IP phones, email client, etc. are typical 'advertised services' that you may find on a MESH network.

5. **Node Naming Convention:**
   a. Standard Node   *Hamcall*-NODE-100 [Starting with 100 and then increment up]
   b. Access Point   *Hamcall*-AP-200 [Increment up]
   c. Bridge   *Hamcall*-BRIDGE-300 [Increment up]
   d. Gateway   *Hamcall*-NODE-900-GATEWAY
           Example: *WB8GUS-NODE-100* and *WB8GUS-NODE-101* are two of my standard nodes.

6. WIFI Access Points – Any Node acting with/or used as a WIFI Access Point will use WEP Login Authentication. The WIFI AP should be set to channel 6 (or higher) to lesson amount of RF on the MESH channel. The initial default password should be set to:
   a. Node PW: **scmesh** standing for "Shiawassee County MESH"
   [You may change on an event-by-event basis, but allows easy reconfiguration via network.]

7. *All mesh peer-to-peer connections must share the same SSID* (network name).
   That name is: **BroadbandHamnet-v1**.

Some Other Operational Hints:

To open the router's internal web page to display the Basic Mesh Configuration screen, use the instructions on :   http://www.broadband-hamnet.org/documentation/68-firmware-installation-instructions.html {step 4}. Then, see the standard naming convention in step 2 above for the actual text to use for 'node name '.

   Example:
      nodeWB8GUS-NODE-100:8080 works for one of my units. Depending on your web browser configuration, there are other variations of these page addresses.

Once configured, on the Basic MESH Configuration router's web page, the WIFI, LAN & WAN sections should be left alone and "common" across the entire MESH.

The 'only' exception is the Mesh Gateway check box, set it to the correct condition for the node. & insure node name is modified (per our Standard step 5).

For completeness, the SSID: BroadbandHamnet-v1 and WIFI Mode: Ad-Hoc should be the same on each unit. The **'Active Settings'** area on the 'Basic BBHN MESH Configuration' page needs to be set for the operational characteristics for your physical node.

Antenna changes can be very different on a mode by mode basis.

Remember to hit the "Apply" button once these settings are changed to the correct value, which saves them to the router. If you do not hit the button, the changes are not permanent in the router and will become a usage issue later.

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