

## I can see HSMM-MESH with my laptop wireless, but I can't connect to it. What gives?

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We are all familiar with access points and wireless routers. A wireless router is simply a combination of an access point, an ethernet switch, and an internet router. They allow us to connect wirelessly to our home networks and to the internet. When you bought your WRT54G it was a wireless router, and it acted just like every other wireless router you may have used before.

However, you made the wise decision to install the HSMM-MESH™ firmware on it and now you can't connect with it anymore. Believe it or not, that is what is supposed to happen. Why? Because a WRT54G running the mesh firmware **is NOT an access point**, it is a mesh node operating in Ad-Hoc mode. In the same way that your HF rig cannot be in both SSB and FM modes at the same time, a WiFi radio cannot be in both Ad-Hoc and Access Point mode at the same time - they are separate and incompatible modes of operation. Before, the purpose of the radio in the WRT54G was to connect client devices like your laptop to the network. Now, the purpose of the radio is to connect mesh nodes with each other - not to client devices. Since there is only one radio in a WRT54G it can serve only one purpose at a time, and that purpose is not what you are used to.

How then do I connect my laptop to a mesh node? The optimal method is to use an ethernet cable to connect to the LAN port of a mesh node. This gives you full access to the mesh and to whatever network the WAN port is connect to - usually an internet connection. If a cabled connection is inconvenient or for some reason not possible, you can still connect wirelessly to a mesh node - but since the mesh node radio is busy doing mesh node business it will require a separate access point. As of firmware release 0.3.2, mesh nodes come with a pre-configured mode to act as a mesh access point. Details of how to use this mode are covered in a separate article.