

A new firmware upgrade to 1.0.0 has been released. This eliminates problems with byte ordering between different families of processors. Although the 1.0.0 version is now compatible with Ubiquiti and others, actual firmware loads for these families don't yet exist. You can create a hand load and include OLSR and the proper DNS and IP settings and interact with current firmware.

If you have other hardware working, drop a note to the webmaster or post on the forums. The benefit to all is obvious.

Here is an update sent to the mail list on 6/27/2012. The firmware release notice is on the front page and links to other articles elsewhere on the web site.

Development is underway to support multiple platforms, WRT54G and Ubiquiti included, using the OpenWrt Backfire release. The eventual goal would be to support every platform that OpenWrt does, but the two named will be the initial focus.

I believe in a principle I call the "conservation of complexity". A self-configuring network of this type has numerous complex details that need to be worked out. This complexity has been mostly removed from the usage model and that is what makes HSMM-MESH so easy to configure and use. Set a node name and a password and you are on the air and ready to go. Do this only once and you can participate in any other HSMM-MESH network immediately. No centralized administration is needed nor do prior agreements need to be made. Contrast this with ANY other network implementation and the advantages will be strikingly clear.

But due to the conservation of complexity this means that the configuration burden does not disappear - it just gets transferred to the development side, and the fact that everything is automatic just multiplies that burden. In the current state, only the WRT54G and directly compatible devices are supported. This eases the burden because there is only one platform to support and we know exactly what its characteristics are. Supporting multiple platforms with different characteristics requires an entirely new configuration infrastructure within the firmware as hardware assumptions can no longer be made and all differences must be accounted for and handled properly.

If it was up to each user to make this happen the firmware development would be a lot easier.

Porting HSMM-MESH™ to other hardware

Written by Rick Kirchhof, NG5V - Last Updated Saturday, 10 August 2013 19:47

In fact, it would be unnecessary because it has already been done. Every one of you can install OpenWrt on any supported device and manually set it up to act the way you want it to, at least in theory. In reality, only a very small fraction of the current user base would be able to do this. It would take an expert with a large chunk of free time to recreate the functionality and feature set that HSMM-MESH has today. If you want to configure everything yourself and automatic interoperability is not a concern, then you have no need for HSMM-MESH. If instead you want to get on with the business of using the network without having to muck about in the details of setting it up, then welcome home, friend. You are in the right place.

As it stands, the new firmware architecture is still being worked out. Some work has been done to update the firmware, but most of it needs to wait until the definition of what it needs to be exists. Once that happens, the work of rewriting the firmware can move forward. I will try to break it down into separate pieces that can be handled by those who are willing and able. So please be patient, coming up with the new architecture is time consuming, mind bending, and mistake prone work. We've created a monster that now needs a makeover and a manicure, but it will be a beautiful beast in the end.

73
ad5oo