Useful Tools

You may find the Firmware Modification Kit useful, as it allows you to extract a firmware image (*.trx, *.bin) file, and peruse its contents. This permits you to check to see if a recent modification that you made is present in the firmware file without installing it onto a test system, and also to modify a firmware image for which you don't have the source code.

64bit build systems

On an ubuntu server amd64 build system, the following error is emitted:

In function 'open',
inlined from 'collect_execute' at .../toolchain_build_mipsel/gcc-3.4.6/gcc/collect2.c:1537:
/usr/include/bits/fcntl2.h:51: error: call to '__open_missing_mode' declared with attribute error: open with O_CREAT in second argument needs 3 arguments

The fix is

```
>       /* redir_handle = open (redir, O_WRONLY | O_TRUNC | O_CREAT); */
>       redir_handle = open (redir, O_WRONLY | O_TRUNC | O_CREAT, 0777);
```

The image builder, used by the hsmm-mesh build environment, also requires that the ia32-libs package be installed.