

HIP enabled OpenWRT Linux Distro for mobile routers

Installing OpenWRT on La Fonera routers

The OpenWRT installation should be as simple as couple of steps that one should attempt to enable his/hers router with HIP.

First of all we need to hack La Fonera wireless router, so that we can flash it with a kernel of our choice. To hack it download (hacking howto) and follow instructions.

Shall you need to your own distro download and compile Kamikaze from [here](#). But before compiling please apply patches kamikaze_7.09-hipl.patch and kamikaze_7.09-kernel.patch:

- `cd /path/to/kamikaze;`
- `patch -p1 < /path/to/kamikaze_7.09-hipl.patch;`
- `patch -p1 < /path/to/kamikaze_7.09-kernel.patch`

Having the kamikaze patch do:

- `cd /path/to/kamikaze_7.09`
- `make menuconfig`
- And select hipl, libxml2 and anything else you wish to have in your system

If one need to have a precompiled pick them from here:

- [openwrt-atheros-2.6-vmlinux.lzma](#)
- [openwrt-atheros-2.6-root.squashfs](#)

You can find needed kernel modules from here: modules. To install them, untar them first then `scp /path/to/modules/folder root@<fonera_ip>:/lib/modules /<kernel>`

After then copy this [script](#) to `scp /path/to/hipdservice root@<fonera_ip>:/etc /init.d/`

That should be sufficient to start the service by.: `/etc/init.d/hipdservice start` (it might take a while because modules are tested and in case of miss inserted)

Installing OpenWRT on Buffalo routers

- Download firmware image (openwrt-brcm-2.6-squashfs.trx)
- Plug the ethernet cable directly into lan port #1 on the router

- Assume you are doing this from linux. Start the **tfpt 192.168.11.1** client.
 - tftp > binary
 - tftp > rexmt 1
 - tftp > trace
 - tftp > timeout 180
 - tftp > put openwrt-brcm-2.6-squashfs.trx
 - Hit enter key
- Now quickly restart the Buffalo router (unplug and plug back again the power cabel)
- The flashing should start after that. The output in success case should look something like this:
 - tftp > put openwrt-brcm-2.4-squashfs.trx
 - sent WRQ <file=open2.trx, mode=octet>
 - received ACK <block=0>
 - sent DATA <block=1, 512 bytes>
 - received ACK <block=1>
 - ...

More detailed instructions can be found in:

- Installing Open-WRT on Buffalo
- Open-WRT wiki for Buffalo
- DD-WRT another distro