Appendix B

Lab Setup

The computers used in the lab was setup with the following hardware:

- Intel Core 2 Duo 2.83 GHz processor

- 4 GB memory

- Atheros AR5413 802.11abg NIC

Further, they are setup with Ubuntu 10.4 (Linux Kernel 2.6.32-25-generic-pae) and ath5k drivers for the wireless interfaces. The network interface is configured as follows:

```
/etc/network/interfaces

auto lo
iface lo inet loopback

auto wlan0
iface wlan0 inet static
address 10.0.0.X
netmask 255.255.255.0
pre-up ifconfig wlan0 down
pre-up ifconfig wlan0 hw ether XX:XX:XX:XX:XX:XX
pre-up iwconfig wlan0 mode ad-hoc essid BATMAN channel 3

auto unicast
iface unicast inet static
address 10.0.0.X
netmask 255.255.255.0
pre-up brctl addbr unicast
pre-up brctl addif unicast wlan0
pre-down ifconfig unicast down
```

```
post-down  brctl  delif  unicast  wlan0
post-down  brctl  delbr  unicast
```

To install batmand, run the following as root user:
```
make
make install
make clean
```

To run the batman daemon on a regular test node, use the following command:

```
batmand --role authenticated -d 4 wlan0
```

To run the batman daemin on the SP node, use the following command:

```
batmand --role sp -d 4 wlan0
```