

ASUSWRT-MERLIN



3rd Party open source firmware for ASUS routers.

Use cases

- Configure your router through SSH!
- Enhance your router (such as adblocking, dns filters)
- Entware software repo (2500 packages)
- Security patches like **fragattack**
- Open Source router with latest features / maintained!
- Schedule tasks using cron
- More secure and flexible guest networks (**yazfi**)
- Logs to syslog-ng (**scribe**)

Pros

- Easy to install
- Retain nice interface & original features
- Extend through packages & scripts and extra options
- Better security & performance
- Good value for money (ASUS RT-AC66U B1 802.11ac \$130)
- Reboot a router from the CLI!

Cons

- Only works with ASUS routers

Installing

EG: ASUS RT-AC5300

1. Download **RT-AC5300_{386.26}.zip** & unzip
2. Backup settings
3. Reboot router to free mem
4. Go to firmware upgrade & upload the trx file
5. Wait 3 minutes

Enable SSH

1. Administration -> System
2. Enable ssh on lan only, without password and paste in my `id_rsa.pub` contents
3. Reboot router
4. Test logging in

```
ssh admin@192.168.200.10
```

Asuswrt-Merlin Terminal Menu (AMTM)

- Pre-installed as part of Merlin
- Configure router
- Install extra components such as Entware, adblocker, DNSCrypt, etc

Scripts worth running

Swap space	sw	Use 2GB on the USB drive
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Entware	ep	install many packages
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Vnstat	vn	Usage stats
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scMerlin	j3	Control services from WebUI & CLI
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spdMerlin	j4	Speedtest
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Entware

Lots of command line applications, mainly;

- networking tools
- editors
- programming languages
- system monitoring services
- web servers, etc

Entware: Installing 1/3

1. Connect via ssh

```
ssh admin@192.168.200.10
```

Entware: Installing 2/3

Entware: Installing 3/3

1. Run install

1. Run amtm in ssh session on the WIFI AP

```
amtm
```

2. Select theme, I choose 6

3. Hit 'i' to look at what we can install

4. Enter 'ep' to install Entware

5. Select the USB drive to install and continue.

6. Exit amtm

Entware: Using

- List packages

```
opkg list
```

- Install fav packages

```
opkg install mg screen htop
```

Demo

From my notebook

```
ssh -t ltsp ssh wifi
```

Programs to run

```
htop  
atm  
opkg install nmap
```

References

- <https://www.asuswrt-merlin.net/>

Questions

Email map7@fastmail.com

Twitter [@map7](https://twitter.com/map7)

Github [github: map7](https://github.com/map7)
