Steak Electronics

1 Edimax WAP1750

From:

https://openwrt.org/toh/devolo/devolo_wifi_pro_1750e

 ¹ The devolo WiFi pro 1750e is a wall mountable access point with: Dual band 2.4 and 5 GHz WiFi (3 by 3 IEEE 802.11n 450Mbps, 3 by3 IEEE 802.11ac 1299Mpbs)

- 2x 1Gbit ethernet ports (with Power over Ethernet support)
- 1x USB 2.0 port
- External serial console port (Currently unsupported but internal 4-pin internal Dupont connector is functional)
- 1x GPIO attached piezo beeper

The access point is manufactured by OEM Acelink Technologies Co., Ltd. as a EW-7679WAC and was originally sold by Edimax as a WAP1750. The Edimax unit was reviewed by SmallNetBuilder.

¹Always type out full URL in links. Don't put hyperlinks. This is done, so that when you print out a webpage, the URLs are still readable.

1.1 Flashing Openwrt on to the WAP1750

At the moment, this page:

https://openwrt.org/toh/devolo/devolo_wifi_pro_1750e discusses flashing new firmware via SSH. However, the WAP1750 has a custom console, and while it's running GPLv2 GNU Linux, somehow it managed to lock down the software, so that simply shelling into it, is no longer possible. I'm sure that is a sin. GPLv2 does not mean people can take it and then abuse it for commercial use. It's a community good.

None the less, it can be turned into an upgradeable router via the following means:

- Teardown enclosure
- Remove flash chip by desoldering with hot air
- Read flash with appropriate tool (Flashrom, TL866A).
- Patch existing image sysupgrade for Devolo 1700 series.
- Write flash with new image
- Resolder chip to board
- Access board via FTDI / USB-Serial chip

Simple enough, right? It is simple. But it's not simple. At least 5 years of hobbyist electronics and I'm able to do this, but for the layman... Only with a guide. And let's also talk about the issues that arose during the above steps. It's never as easy as it should be.