Opticon Module Compilation - For 15.05.1 - Kernel version 3.18.23 - Lawrence Billson

These instructions are written for "Future Lawrence" - they are what I used to build an opticon module so I could read barcodes with my little OpenWRT router. I hope nobody ever has to follow them.

- Download the OpenWRT prerequisites
    - **sudo apt-get update**
    - **sudo apt-get install** git-core build-essential libssl-dev libncurses5-dev **unzip gawk**
    - **sudo apt-get install** subversion mercurial
- Compile the kernel module package
    - Be a NON-ROOT user!
    - mkdir parkrunportale
    - cd parkrunportable
    - git clone http://git.openwrt.org/15.05/openwrt.git
    - cd openwrt
    - git reset --hard df520761523ad7e6d91841b6b8ea368e255c0baa
    - ./scripts/feeds update -a
      ./scripts/feeds **install** -a
    - **make** defconfig
    - **make** prereq
    - Edit the openwrt/package/kernel/linux/modules/usb.mk
    - Copy the PL2303 section
    - Substitute 'opticon' for pl2303
- Make menuconfig
    - Select the target system (probably Ralink), select the subtarget system MT7620
    - Select Kernel Modules, USB support, USB-serial,
        - Chose PL2303 and Opticon
        - Select Save
- make ; or make V=s if you need debug
- If it's all gone right, the Kernel module will be here: ./bin/ramips/packages/base/kmod-usb-serial-opticon_3.18.23-1_ramips_24kec.ipk