



# CUSTOM FIRMWARE

## Advanced Labs

### Custom Firmware

Custom-compiled OpenWRT firmware is used by pentesters to create sniffer or hacking/pentesting platforms. The labs in this section teach you how to compile OpenWRT firmware and interact with emulated OpenWRT machines.

#### What will you learn?

- Compiling OpenWRT firmware for an off the shelf router
- Customizing packages and tools for firmware
- Interacting with emulated OpenWRT setup

#### References:

1. Make your own Hacker gadget (<https://www.pentesteracademy.com/course?id=15>)
2. Image building guide (<https://openwrt.org/docs/guide-developer/quickstart-build-images>)
3. Compiling firmware from source (<https://openwrt.org/docs/guide-user/additional-software/beginners-build-guide>)

#### Labs Covered:

- [OpenWRT Compilation Setup](#)  
In this lab, you will learn to compile/build OpenWRT firmware. A non-exhaustive list of activities to be covered includes:
  - Select an appropriate target, packages in the build menu
  - Clean previously created image files, building new images
  - Appropriate use of the created firmware files
- [Emulated OpenWRT System](#)  
In this lab, you will learn to interact with the emulated OpenWRT router device. A non-exhaustive list of activities to be covered includes:
  - Interact with an emulated router using console access CLI
  - Check filesystem and running processes
  - Use commands to interact with WiFi interfaces



Emulated OpenWRT System

⚡ Starting..



OpenWRT Compilation Setup

⚡ Starting..