IoT: Client Devices

Other Tools

Radare (optional)

Disassembler

- Allows disassembly of multiple instruction sets

Reverse Engineering Toolset

- Very complex though

GUI and CLI

- Bokken, WebUI
- http://radare.org for more info

Git

You need a version control system

- Rollback to working versions
- Tracking changes
- Configuration files, source code, other

Github

- http://www.github.com
- We'll use it for assignment evaluation too
- Register for an account, it's free

Gnu Binutils

Tools for Binary Analysis, Debugging

- readelf, objdump, strip, strings, nm and more
- Visibility into binary files

READELF

- -a (use less, this does everything) others

OBJDUMP

- -h, -f, -x, -d, -D, -t

Gnu Cross-Compilers

Compile on x86 Linux for other Architectures

- Sorcery Workbench (https://www.mentor.com/embedded-software/sourcery-tools/sourcery-codebench/editions/lite-edition/)
- Ubuntu distros (ARM has best support out of the box)

How to install?

GNU BINUTILS

- $ sudo apt install binutils-mips-linux-gnu binutils-mipsel-linux-gnu binutils-arm-linux-gnueabi

GNU CROSS-COMPILERS

- $ sudo apt install gcc-arm-linux-gnueabi

Summary

So what do we have?

- Linux VM
- Version Control System
- Buildroot
- Binwalk
- Binutils for various architectures
- Cross compiler
- QEMU (and qemu-user-static)