Agenda

- **Update status of WRSv3**

- **Pros and cons of each option**
  - Buildroot vs FEC-OS / Debian rootfs
  - Buildroot vs OpenWRT

Update status of WRSv3

- **WRSv3**
  - Is the only WRS commercially available yet
  - Will be installed and used during LS3
  - Will be used for at least 10 more years
  - Will be updated in line with WRSv4
    - → Can't give up on support and updates
- **WRSv4**
  - WRSv4 OS should be compatible with WRSv3
  - 2 different OSes: higher effort/cost to maintain and deploy new features
  - 1 OS: minimizes effort to maintain and deploy new features

Pros and cons of each option

- See Excel sheet "openwrt_pros_cons.odt"

Buildroot vs FEC-OS / Debian rootfs

- **Buildroot:**
  - Already used on WRSv3
  - Simple: set of Makefile and Kconfig
  - Very light, more adapted to embedded
  - No public repositories for packages
- **Debian rootfs**
  - More familiar to use (apt, lot of packages available)
  - Can't be used on WRSv3 (performance issues, lack of memory)
  - Hard to fit in WRSv4 internal flash
  - Not adapted for typical embedded systems

Buildroot vs OpenWRT

- **Buildroot:**
  - Already used on WRSv3
  - No public repositories for packages
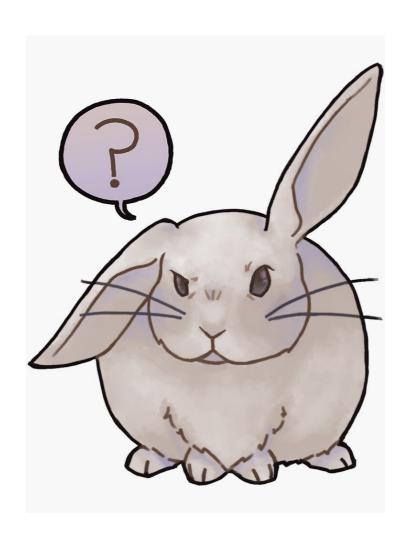 - Easy to use external kernel (able to use Xilinx kernel directly)
- **OpenWRT:**
  - Heavily modified Buildroot
  - Package manager (opkg) with public repositories
  - Could be used on WRSv3
  - Good support and security
  - Widely tested as OS for small networking devices
  - UCI / LUCI for configuration (can be used to replace current web interface)
  - More difficult to implement support for latest Xilinx kernel (currently hacked to work, needs to be upstreamed properly)

Costs & Risks

- See Excel sheet "openwrt_pros_cons.odt"

Comments / questions

Thank you for listening