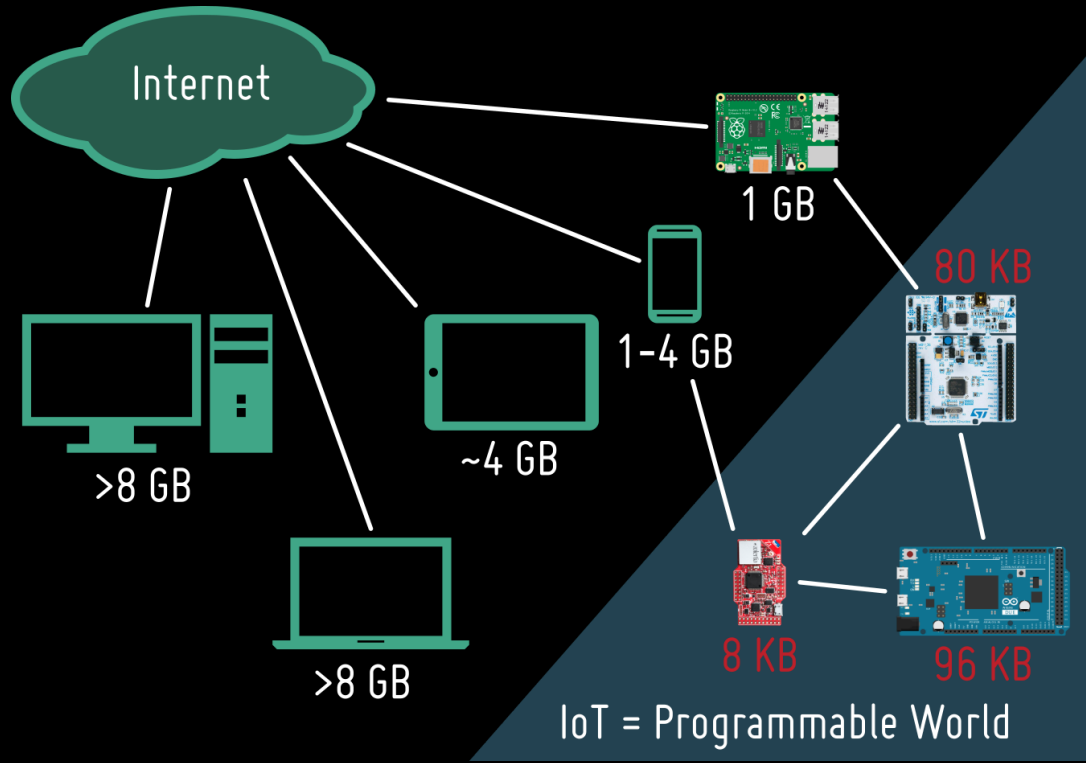




The friendly IoT OS

Martine Lenders

Why?



RIOT in a Nutshell

“If your device cannot run Linux, run RIOT!”

- Requires only a few kB of RAM/ROM
- Code once & run on heterogeneous IoT hardware
 - 8-bit (e.g. AVR)
 - 16-bit (e.g. MSP430)
 - 32-bit (e.g. ARM Cortex-M, MIPS)

RIOT Fact Sheet

- μ -kernel-like architecture (for **robustness**)
- Modular design (for **adaptivity**)
- Tickless scheduler (for **energy efficiency**)
- Deterministic $O(1)$ scheduling (for **real-time capabilities**)
- Low latency interrupt handling (for **reactivity**)
- Preemptive multi-threading & powerful IPC
- Efficient hardware abstraction
- Full featured, extendable network-stacks
- Peer-reviewed, LGPLv2.1-licensed code

Getting started

- <https://api.riot-os.org/>
- <https://github.com/RIOT-OS/Tutorials>

