

RIOT

The Friendly Operating System for the IoT

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1. What is RIOT?

2. Why RIOT?

3. RIOT today

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What is RIOT?

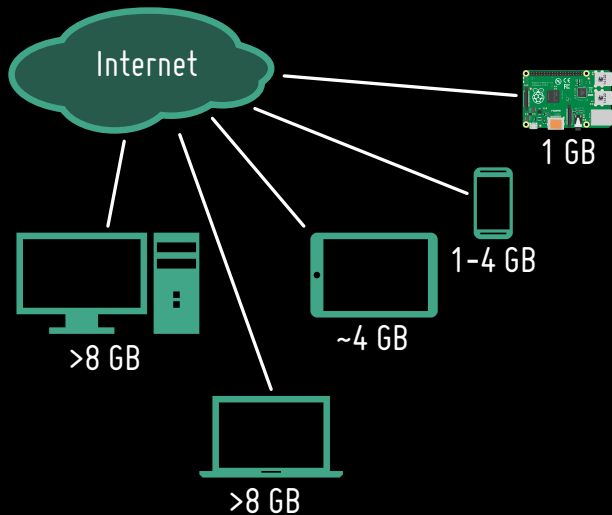
- Free operating system for
 - Embedded systems
 - The Internet of Things (IoT)
- Real-time capable micro-kernel
- Open Software, Open Standards (close ties between RIOT and IETF community)
- >98% of code-base in C
- On application level:
 - partly POSIX compliant (libc, sockets, pthreads, ...)
 - C++ support (incl. rudimentary Arduino-like API)
 - (Micro-)Python and Rust support pending

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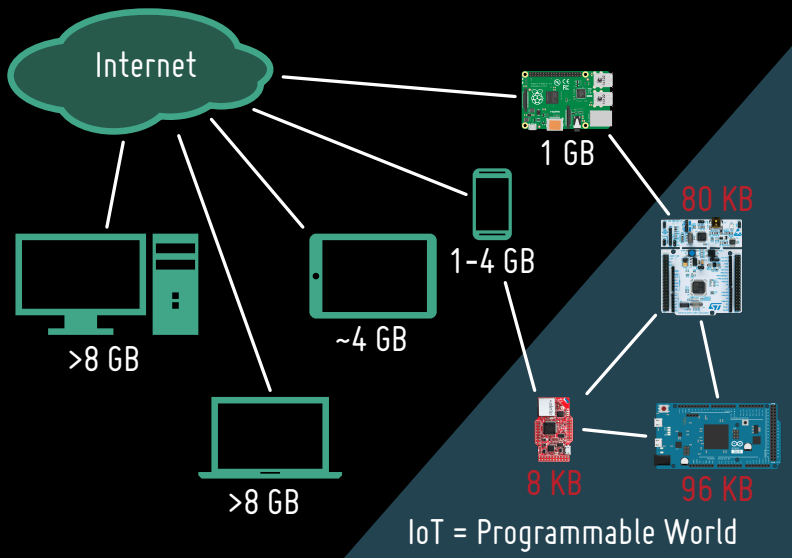
2. Why RIOT?

3. RIOT today

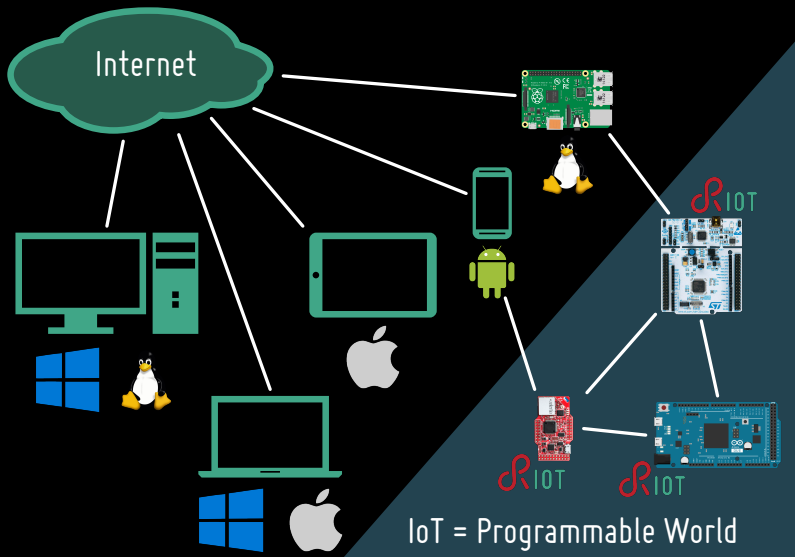
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RIOT today

- >150 contributors world-wide
- Contributions from
 - industry
 - academia
 - makers/tinkerers
- 1st RIOT community summit in June 2016, next one already planned
- Full UDP/IPv6 over IEEE 802.15.4 (aka 6LoWPAN) stack
- Support for various CPU architectures:
 - ARM Cortex-M / ARM7
 - TI MSP430
 - Atmel AVR (Arduino)
 - (x86)