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An OS to build, deploy and securely manage billions of devices

Latest News:

Apache Mynewt 1.10.0, Apache NimBLE 1.5.0 (/download) released (May 6, 2022)

Edit on GitHub (https://github.com/apache/mynewt-core/edit/master/docs/os/core_os/porting/port_mcu.rst)

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Porting Mynewt to a new MCU

Porting Mynewt to a new MCU is not a difficult task if the core CPU architectures is already supported.

The depth of work depends on the amount of HAL (Hardware Abstraction Layer) support you need and provide in your port.

To get started:

- Create a `hw/mcu/mymcu` directory where `mymcu` is the MCU you are porting to. Replace the name `mymcu` with a description of the MCU you are using.
- Create a `hw/mcu/mymcu/variant` directory where the variant is the specific variant of the part you are usuing. Many MCU parts have variants with different capabilities (RAM, FLASH etc) or different pinouts. Replace `variant` with a description of the variant of the part you are using.
- Create a `hw/mcu/mymcu/variant/pkg.yml` file. Copy from another mcu and fill out the relevant information
- Create `hw/mcu/mymcu/variant/include`, `hw/mcu/mymcu/variant/include/mcu`, and `hw/mcu/mymcu/variant/src` directories to contain the code for your mcu.

At this point there are two main tasks to complete.

- Implement any OS-specific code required by the OS
- Implement the HAL functionality that you are looking for

Please contact the Mynewt development list for help and advice porting to new MCU.

Previous: BSP Porting (port_bsp.html) Next: Porting Mynewt to a new CPU Architecture (port_cpu.html)