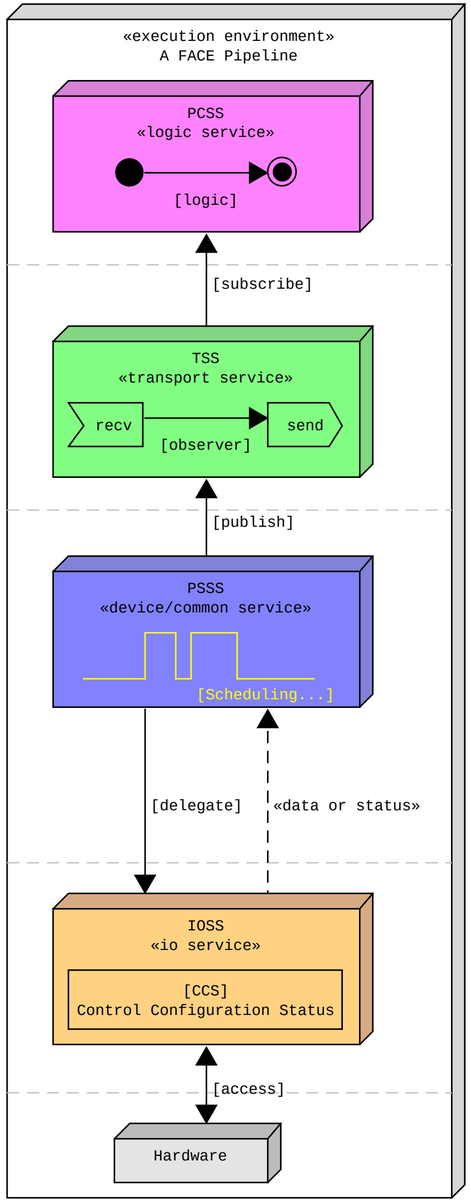

Portable Component Service Segment (PCSS)

PCSS module is logic part of pipeline inside FACE Architecture. It has just one interface, which is TSS to communicate any PCSS and PSSS module. To get refined IO data, it works as observer subscribing certain topics defined in TSS. There isn't any job scheduling for PCSS modules, the timing only depends to PSSS module that the PCSS module logically connect to. The main goal of having TSS interface is making the modules indepedent individually.

Transport Service Segment (TSS)

TSS module is data transportation module conducts data traffic between PCSS and PSSS modules. It is constructed on publish-subscribe approach (observer design pattern). In the segment, there are topics and their PCSS or PSSS user modules defined at the initialization phase. When a publisher writes data (message, status, etc.) to a topic, the topics convey the data its subscribers directly.

Platform-Specific Service Segment (PSSS)

PSSS is a module that acts like an adapter role between hardware and the remain other modules in a pipeline of FACE Architecture. It is scheduled by the developer, therefore it is like entry point of the pipeline. It includes both IOS interface and TSS interface to communicate to both IOSS and PCSS/PSSS modules respectively. It has two different categorized modules:

- Platform-Specific Common Segment modules for common services
- Platform-Specific Device Segment modules for conducting IO bus

Input/Output Service Segment (IOSS)

IOSS module is a pipeline module that configures and controls an I/O bus. Addition to configuration and control, it gets I/O bus status such as health, modes, or any failure data. An IOSS module is conducted by a PSSS module, the design target is making any IOSS module dummy, however it is thoroughly independent from any PSSS concern. In case of I/O bus or data interface changes, IOSS module fit to current requirement can be used by any PSSS module without any integration effort except work out for data content of the interface.

«artifact»
Name