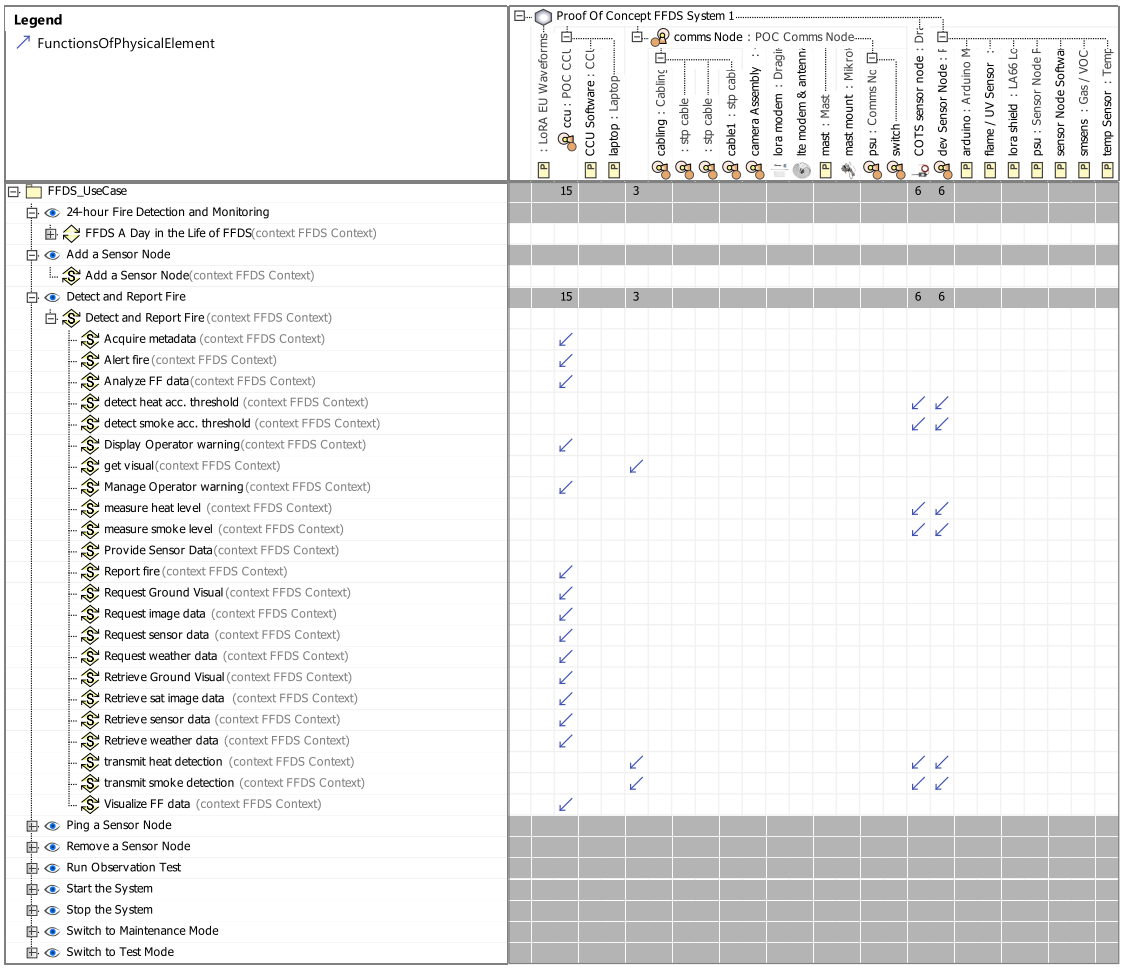
SAF User Documentation : Physical Functional Mapping Viewpoint

Domain	Aspect	Maturity
Physical	Traceability & Mapping	released

Example



Purpose

The Physical Functional Mapping Viewpoint analyses the assignment of the System Functions and the System Partial Functions to the Physical SOI Elements.

Applicability

The Physical Functional Mapping Viewpoint supports the "System Architecture Definition process" activities of the INCOSE SYSTEMS ENGINEERING HANDBOOK 2015 .

Presentation

A Physical Functional Mapping Matrix featuring

- the call behavior action representing usage of System Functions
- Physical SOI Elements or Physical SOI
- a derived relationship

Stakeholder

- Hardware Developer
- IV&V Engineer
- Mechanic Developer
- Software Developer
- System Architect

Concern

- What is the allocation of functions to the Physical Elements in the physical architecture?
- Which funcions need to be tested in IV&V activities

Profile Model Reference

The following Stereotypes / Model Elements are used in the Viewpoint:

- Allocate [SysML Profile]
- Attribute "function" of SAF_PhysicalItem referencing SAF_SystemFunction
- SAF_FunctionAction
- SAF_PhysicalElement
- SAF_PhysicalHardwareElement
- SAF_PhysicalSoftwareElement
- SAF_SPV08b_View
- SAF_SystemFunction
- SAF_SystemPartialFunction

Input from other Viewpoints

Required Viewpoints

- Physical Structure Viewpoint
- Logical Functional Mapping Viewpoint
- Logical Structure Viewpoint

Recommended Viewpoints

- System Process Viewpoint
- System Functional Refinement Viewpoint