SAF User Documentation : System Interface Definition Viewpoint

Domain	Aspect	Maturity
Functional	Interface	✅ released

Example

System-Interface-Definition-Viewpoint-primary-example.svg

Purpose

The System Interface Definition Viewpoint captures system wide concepts defining functional interfaces. It allows to adopt long-lived standards and to harmonize the functional interface definitions to improve interchangeability, interoperability, and portability.

Applicability

The System Interface Definition Viewpoint supports the "Prepare for Interface Requirement Definition" activity included in "System Requirements Definition Process" activities of the INCOSE SYSTEMS ENGINEERING HANDBOOK 2015 [§ 4.3] and contributes to the System Interface definition.

Presentation

A block definition diagram (BDD) featuring System Interface blocks with ports, and flow properties. Note: When ports are used these shall be proxy ports and be typed by interface blocks.

A tabular format listing System Interface blocks, their ports, and flow properties.

Stakeholder

Concern

Profile Model Reference

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

- Attribute "realizing connector" of ItemFlow referencing Connector
- Connector [UML_Standard_Profile]
- FlowProperty contained in SAF_ConceptualInterfaceDefinition
- FlowProperty typed by SAF_DomainKind
- FlowProperty [SysML Profile]
- ItemFlow typed by SAF_DomainKind
- ItemFlow [SysML Profile]
- ProxyPort typed by InterfaceBlock
- ProxyPort [SysML Profile]
- SAF_ConceptualInterfaceDefinition
- SAF_DomainKind
- SAF_SFV05a_View

Input from other Viewpoints

Required Viewpoints

none

Recommended Viewpoints

none