SAF User Documentation : System Requirement Viewpoint

Domain	Aspect	Maturity
Functional	Requirement	Released released

Example

System-Requirement-Viewpoint-example.svg

Purpose

The System Requirement Viewpoint specifies functions, non-functional properties, or constraints of the System. System Requirements are captured, the interrelationships between Functional and Non-Functional Requirements on the same level of abstraction and the traceability to Stakeholder Requirements are depicted.

Applicability

The System Requirement Viewpoint supports the "System Requirements Definition Process" activities of the INCOSE SYSTEMS ENGINEERING HANDBOOK 2015 [§4.3] and contributes to the System Requirements Verification and Traceability Matrix (RVTM).

Stakeholder

- Hardware Developer
- IV&V Engineer
- Project Manager
- Software Developer
- System Architect

Concern

- What are the Interface Requirements imposed on the system?
- What are the exchange requirements imposed on the system?

- What are the functional requirements imposed on the system?

- What are the non-functional requirements imposed on the system?

- What are the requirements of environmental conditions imposed on the system?

- What is the range of acceptable system performance, i.e. the critical, top-level performance requirements derived from the operational needs?

- Which Stakeholder Requirements are addressed by System Requirements?

Presentation

A tabular format listing

- unique requirement ID, text, and attributes,

- traceability reference to Stakeholder Requirements,

- traceability reference to depended Requirements on the same level of abstraction.

Profile Model Reference

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

- SAF_SFV06a_View

- SAF_StakeholderRequirement

- SAF_SystemFunctionalRequirement

- SAF_SystemFunctionalRequirementConstraint

- SAF_SystemNonFunctionalRequirement

- SAF_SystemRequirement

- SAF_SystemRequirementDerivation

- SAF_SystemRequirementDerivation

Input from other Viewpoints

Required Viewpoints

- Stakeholder Requirement Viewpoint

Recommended Viewpoints

- Operational Story Viewpoint

- Operational Context Exchange Viewpoint

- Operational Capability Viewpoint

- Operational Process Viewpoint

- Operational Interaction Viewpoint

- Operational Capability Mapping Viewpoint

- Operational Process Mapping Viewpoint