

SAF User Documentation: F6_SRQD System Requirement Definition Viewpoint

Domain	Aspect	Maturity
Functional	Requirement	released

Example



Purpose

The System Requirement Definition 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 Definition 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).

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.

Stakeholder

Hardware Developer

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

Concern

- · 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?
- · Which are the interface requirements imposed on the system?

Profile Model Reference

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

- SAF_F6_SRQD
- SAF StakeholderRequirement
- SAF SystemFunctionalRequirementConstraint
- SAF_SystemFunctionalRequirement
- SAF SystemNonFunctionalRequirement
- SAF SystemRequirementDerivation
- SAF SystemRequirement

Input from other Viewpoints

Required Viewpoints

Stakeholder Requirement Definition Viewpoint

Recommended Viewpoints

- Operational Story Viewpoint
- Operational Context Exchange Viewpoint
- · Operational Capability Definition Viewpoint
- · Operational Process Viewpoint
- Operational Context Interaction Viewpoint
- · Operational Capability Mapping Viewpoint
- Operational Process Mapping Viewpoint