




SAF User Documentation : System Requirement Traceability Viewpoint

Domain	Aspect	Maturity
Functional	Traceability & Mapping	 released

Example

Legend

- SAF_SystemFunctionalRequirementRefinement
- SAF_SystemRequirementDerivation

The diagram illustrates the structure of the FFDS_Requirement model, showing a hierarchy of requirements and their associated data and analysis processes. The requirements are organized into four main categories: Fire Detection, Fire Monitoring, Fire Prediction, and a fourth unnamed category. Each category contains a specific requirement node, which is linked to a corresponding data or analysis process. The diagram is annotated with various symbols and arrows indicating relationships and data flow.

Requirement	Request sensor data (context FFDS Cont-...)	Analyze FF data (context FFDS Cont-...)	StakeholderRequirement [CONOPS_...]	Capability [CEO FFDS Vendor_...]	CPBLTY-11 Fire Detection	CPBLTY-12 Fire Monitoring	Capability [Fire Operations Expe...]	CPBLTY-25 Propagation Estimati...
FFDS_Requirement	1	2			1	1		1
Fire Detection	1				1			
... SYS-REQ-002 Forest Fire Detection	1		1	1				
Fire Monitoring		1				1		
... SYS-REQ-003 Forest Fire Evolution Monitoring	1		1	1				
Fire Prediction		1						1
... SYS-REQ-004 Forest Fire Spread Prediction	1		1				1	

Purpose

The System Requirement Traceability Viewpoint specifies for every System Requirement the traceability to the functional domain level

- System Use Case
- System Capability
- System Context Definition
- System Context Exchange
- System Context Interaction
- System Process

- [System State](#)

Applicability

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

Stakeholder

- [Project Manager](#)

Concern

- What is the rationale for this system requirement?
- Which Stakeholder Requirements are addressed by System Requirements?
- Which system interface is addressed by a system requirement?

Presentation

A dependency matrix featuring relationships for every System Requirement to the functional domain level

- System Use Case
- System Capability
- System Context Definition
- System Context Exchange
- System Context Interaction
- System Process
- System State

Profile Model Reference

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

- [SAF_SFV08b_View](#)
- [SAF_SystemFunctionalRequirement](#)
- [SAF_SystemFunctionalRequirementConstraint](#)
- [SAF_SystemFunctionalRequirementRefinement](#)
- [SAF_SystemNonFunctionalRequirement](#)
- [SAF_SystemRequirement](#)
- [SAF_SystemRequirementDerivation](#)
- [SAF_SystemRequirementDerivation](#)
- [SAF_SystemRequirementRefinement](#)

- [SAF_SystemRequirementRefinement](#)
- [SAF_SystemRequirementRefinement](#)

Input from other Viewpoints

Required Viewpoints

- [Stakeholder Requirement Viewpoint](#)
- [System Requirement Viewpoint](#)

Recommended Viewpoints

- [System Use Case Viewpoint](#)
- [System Capability Viewpoint](#)
- [System Context Exchange Viewpoint](#)
- [System Context Interaction Viewpoint](#)
- [System Process Viewpoint](#)
- [System Functional Refinement Viewpoint](#)
- [System State Viewpoint](#)