

SAF User Documentation : System Requirement Traceability Viewpoint

Domain	Aspect	Maturity
Functional	Traceability & Mapping	 released

Example

Legend											
<div><div>↗</div> SAF_SystemFunctionalRequirementRefinement</div> <div><div>↘</div> SAF_SystemRequirementDerivation</div>		<div><div>📁</div> Detect and Report Fire (context FFDS)</div> <div><div>🔍</div> Request sensor data (context FFDS)</div> <div><div>🔍</div> Analyze FF data (context FFDS Context)</div> <div><div>🔍</div> Alert fire (context FFDS Context)</div> <div><div>🔍</div> Retrieve sensor data (context FFDS)</div> <div><div>🔍</div> Provide Sensor Data (context FFDS)</div> <div><div>📁</div> StakeholderRequirement [CONOPS_</div> <div><div>📁</div> Capability [CEO FFDS Vendor]</div> <div><div>🔍</div> CPBLTY-11 Fire Detection</div> <div><div>🔍</div> CPBLTY-12 Fire Monitoring</div> <div><div>📁</div> Capability [Fire Dept. Operations]</div> <div><div>🔍</div> CPBLTY-25 Propagation Estimation</div>									
📁	FFDS_Requirement										
📁	Fire Detection										
🔍	○ SYS-REQ-002 Forest Fire Detection	3	↗			↗	↗	1	1	↘	
...	○ SYS-REQ-002.1 Smoke and Fire Detection	1					↗				
...	○ SYS-REQ-002.2 Smoke and Fire Alert	1			↗						
📁	Fire Monitoring			1							
...	○ SYS-REQ-003 Forest Fire Evolution Monitoring	1	↗					1	1	↘	
📁	Fire Prediction			1							
...	○ SYS-REQ-004 Forest Fire Spread Prediction	1	↗					1			↘

SYS-REQ-004 Forest Fire Spread Prediction

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).

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

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?](#)

Profile Model Reference

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

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

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](#)