


SAF User Documentation : D6_RATD Framework

Rationale Definition Viewpoint

Domain	Aspect	Maturity
SAF Development	Requirement	 under construction

Example

#	Client	Documentation	Supplier	Framed By Viewpoint
1	System Architect	In my role, I need to know this in order to be able to further design the system in an appropriate way.	#577 For what purpose is the system developed or adapted?	System Use Case Viewpoint
2	Project Manager	In my role, I need to check whether the project order is implemented correctly.	#577 For what purpose is the system developed or adapted?	System Use Case Viewpoint
3	Acquirer	In my role, I need to check whether the overall system purpose is supported.	#577 For what purpose is the system developed or adapted?	System Use Case Viewpoint
4	System Architect	In my role, I need to orchestrate interface agreements between the system internal interface partners.	#400 How do physical system elements interact to provide system functions?	Physical Internal Exchange Viewpoint
5	Software Developer	In my role, I need to implement the interfaces in my SW subsystem, if necessary.	#400 How do physical system elements interact to provide system functions?	Physical Internal Exchange Viewpoint
6	Hardware Developer	In my role, I need to implement the interfaces in my HW subsystem, if necessary.	#400 How do physical system elements interact to provide system functions?	Physical Internal Exchange Viewpoint
7	IV&V Engineer	In my role, I need to integrate and test the interfaces.	#400 How do physical system elements interact to provide system functions?	Physical Internal Exchange Viewpoint
8	Security Expert	In my role, I need to assess if internal interfaces conform to security separation concepts.	#400 How do physical system elements interact to provide system functions?	Physical Internal Exchange Viewpoint
9	Safety Expert	In my role, I use them as basis for understanding interfaces on logical level.	#544 How do the logical system elements interact to provide the system functions?	Logical Internal Interaction Viewpoint
10	Security Expert	In my role, I use them as basis for understanding interfaces on logical level.	#544 How do the logical system elements interact to provide the system functions?	Logical Internal Interaction Viewpoint
11	System Architect	In my role, I need to coordinate internal interfaces with internal subsystem partners.	#544 How do the logical system elements interact to provide the system functions?	Logical Internal Interaction Viewpoint
12	IV&V Engineer	In my role, I need to perform the integration of the system into its deployment environment.	#422 How does a system function interact with its environment?	System Process Viewpoint
13	System Architect	In my role, I need to delegate the implementation of interfaces in subsystems.	#422 How does a system function interact with its environment?	System Process Viewpoint
14	SAF Developer	I need to cover the processes and best practises by a suitable set of viewpoints.	#621 How does a viewpoint of the framework support the processes and best practises of the INCOSE SE Handbook or other system engineering standards?	Framework Viewpoint Definition Viewpoint
15	SAF MBSE approach planner	I want to know how the INCOSE HB processes and best practises are supported by the frameworks viewpoints, because I want to plan a MBSE approach.	#621 How does a viewpoint of the framework support the processes and best practises of the INCOSE SE Handbook or other system engineering standards?	Framework Viewpoint Definition Viewpoint
16	SAF System model user	I want to know how the INCOSE HB processes and best practises are supported by the frameworks viewpoints, because I want to use the viewpoints suitable for the work I am doing.	#621 How does a viewpoint of the framework support the processes and best practises of the INCOSE SE Handbook or other system engineering standards?	Framework Viewpoint Definition Viewpoint
17	SAF Developer	I need to know them in order select an appropriate presentation, implementation, and to implement model checks.	#626 what are the constraints related to se concepts covered by the framework?	Framework Concept Definition Viewpoint
18	SAF MBSE approach planner	I want to validate the assumptions made in the framework against the anticipated information need of the MBSE approach.	#626 what are the constraints related to se concepts covered by the framework?	Framework Concept Definition Viewpoint
19	SAF Developer	I need to implement and document them for users	#634 What are the frameworks model elements to be used in system models?	Framework Stereotype Overview Viewpoint
20	SAF MBSE approach planner	I need to know which modeling skills users will need.	#634 What are the frameworks model elements to be used in system models?	Framework Stereotype Overview Viewpoint
21	SAF System model user	I need to populate system models with them and read them from system models.	#634 What are the frameworks model elements to be used in system models?	Framework Stereotype Overview Viewpoint
22	SAF Developer	I need to make sure they can answer the information need described by concerns.	#625 what are the relations between systems engineering concepts covered by the framework?	Framework Concept Definition Viewpoint
23	SAF MBSE approach planner	I want to know if the information need that I anticipate for the MBSE approach will be satisfied by the framework.	#625 what are the relations between systems engineering concepts covered by the framework?	Framework Concept Definition Viewpoint
24	SAF Developer	I want to understand the intention for the information need to select an cut set of viewpoints and then an appropriate representation for the information	#623 Why does a stakeholder have this specific concern ?	Framework Rationale Definition Viewpoint
25	SAF MBSE approach planner	I want to know what might happen if the concern cannot be fulfilled.	#623 Why does a stakeholder have this specific concern ?	Framework Rationale Definition Viewpoint

Purpose

The Framework Rationale Viewpoint defines the relationship between Stakeholders and their Concerns in the context of Development of SAF. The Rationale formulates why a Stakeholder has a certain concern.

The viewpoint is intended to be used for development or extension of the SAF.

Applicability

The Viewpoint supports the definition of "Stakeholders and concerns", and "Specification of an architecture description framework" as defined in ISO42010:2022

Presentation

A matrix featuring SCM_VPStakeholder elements and SCM_VPConcern elements as rows and columns, and a marking in cells where a SCM_ConcernRationale connects a stakeholder with a concern.

A table featuring the SCM_ConcernRationales that connect SCM_VPStakeholders and SCM_VPConcerns, and the rationales documentation.

Stakeholder

- [SAF Developer](#)
- [SAF MBSE approach planer](#)

Concern

- [Which concerns are does an architecture framework stakeholder have?](#)
- [Why does a stakeholder have this specific concern ?](#)

Profile Model Reference

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

- [SCM_ConcernRationale](#)
- [SCM_D6_RATD_Table](#)
- [SCM_VPConcern](#)
- [SCM_VPStakeholder](#)

Input from other Viewpoints

Required Viewpoints

none

Recommended Viewpoints

none