

SAF User Documentation : D6_RATD Rationale Viewpoint

Domain	Aspect	Maturity
SAF Development	Requirement	 proposed

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 the processes and best practises of the INCOSE SE Handbook?	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 the processes and best practises of the INCOSE SE Handbook?	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 the processes and best practises of the INCOSE SE Handbook?	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?	Concept 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?	Concept Viewpoint
19	SAF Developer	I need to implement and document them for users.	#624 What are the frameworks model elements to be used.	Stereotype Overview Viewpoint
20	SAF MBSE approach planner	I need to know which modeling skills users will need.	#624 What are the frameworks model elements to be used.	Stereotype Overview Viewpoint
21	SAF System model user	I need to populate system models with them and read them from system models.	#624 What are the frameworks model elements to be used.	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?	Concept Viewpoint
23	SAF MBSE approach planner	I want to know if the information need that i anticipate for the MBSE approach will be	#625 what are the relations between systems engineering concepts covered by the framework?	Concept Viewpoint
24	SAF Developer	I want to understand the intention for the information need to select an cut set of	#623 Why does a stakeholder have this specific concern ?	Rationale 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 ?	Rationale Viewpoint

Purpose

The 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.

Applicability

The Viewpoint supports the definition of "Stakeholders and concerns", and "Specification of an architecture description framework" as defined in ISO41010:2022

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 related to the frameworks stakeholders?](#)
- [Why does a stakeholder have this specific concern ?](#)

Profile Model Reference

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

- [SCM_ConcernRationale](#)
- [SCM_D2_RATD_Table](#)
- [SCM_VPConcern](#)
- [SCM_VPStakeholder](#)

Input from other Viewpoints

Required Viewpoints

none

Recommended Viewpoints

none