

MODAF. SV-4 Functionality Description

Description

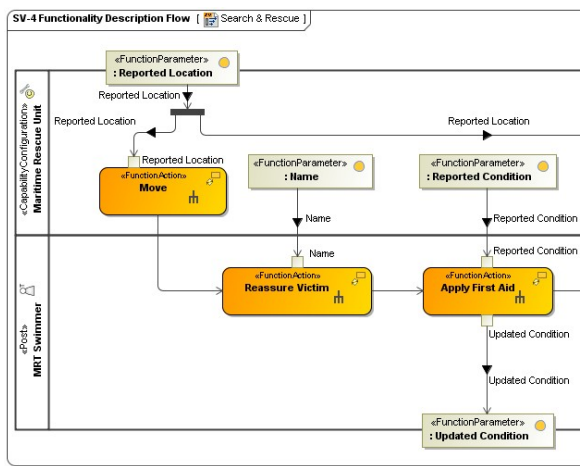
The Functionality Descriptions (SV-4) address human and system functionality. The primary purposes of SV-4 are to develop a clear description of the necessary data flows that are input (consumed) by and output (produced) by each resource, ensure that the functional connectivity is complete, and ensure that the functional decomposition reaches an appropriate level of detail. The Functionality Description provides detailed information regarding the allocation of functions to resources and flow of data between functions. The SV-4 is the systems view counterpart.

Implementation

SV-4 can be represented using:

- A SV-4 diagram for Function hierarchies. This diagram is based on the UML Class diagram.
- An SV-4 diagram for Function flows. This diagram is based on the UML Activity diagram.
- A UML Class diagram.
- A UML Activity diagram.
- A SysML Block diagram.
- A SysML Activity diagram.

Sample



Fragment of SV-4 Functionality Description Flow



You can also create SV-4 Business Process Diagram (BPD). In order to do that, use the Cameo Business Modeler plugin. For more information on how to model the business process diagram, see [BPMN Process Diagram](#).

Related views

An SV-4 is the behavioral counterpart to the SV-1 (in the same way that OV-5 is the behavioral counterpart to OV2).

The functions are likely to be related to Operational Activities captured in an OV-5. Although there is a correlation between the Operational Activity Model (OV-5) and the functional hierarchy of SV-4, it need not be a one-to-one mapping, hence, the need for a Function to Operational Activity Traceability Matrix (SV-5), which provides that mapping.

Related elements

- Function
- Operational Activity
- Standard Operational Activity
- Resource Artifact
- Software
- Capability Configuration
- Organization
- Post
- Is Capable Of Performing
- Function Action
- Function Edge
- Function Parameter
- Resource Interaction
- Exchange Element
- Energy
- Materiel

Related procedures

- Creating SV-4 Functionality Description diagram
- Creating SV-4 Functionality Description Flow diagram

Related references

- Resource Interaction Creation Wizard
- Resource Interaction Manager Dialog