

NSV-1 System Interface Description

Description

System interface description (NSV-1) addresses the composition and interaction of resources. For NMM, NSV-1 incorporates the human elements Posts, Organizations, and Roles.

A resource interaction is a simplified representation of a pathway or network, usually depicted graphically as a connector (for example, a line with possible amplifying information).

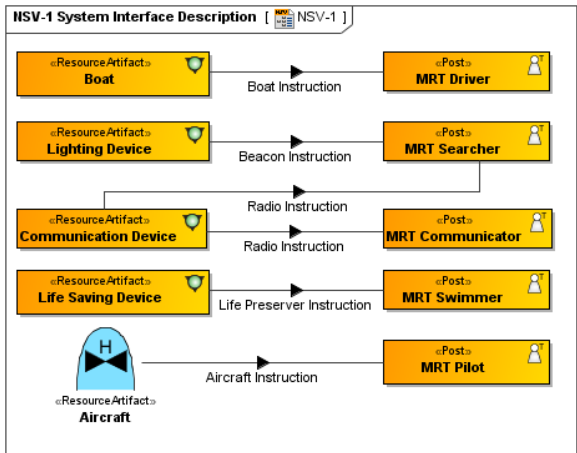
In addition, the Capability Configuration concept is used as a wrapper to bring together resources to satisfy a Capability.

Implementation

NSV-1 can be represented using:

- A NSV-1 diagram which is based on the UML Class diagram.
- A NSV-1 diagram which is based on the UML Composite Structure diagram.
- A UML Class diagram.
- A UML Composite Structure diagram.
- A SysML Block Definition diagram.
- A SysML Internal Block diagram.

Sample



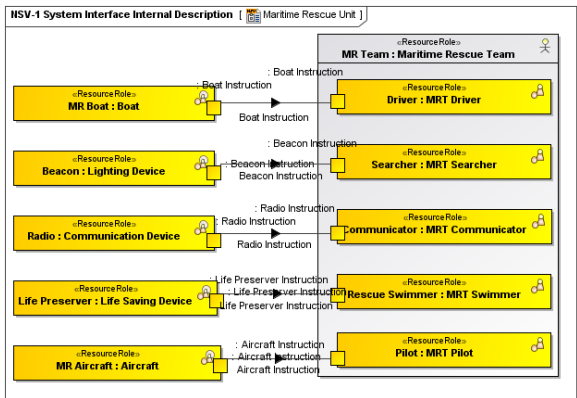
Related elements

- Resource Artifact
- Software
- Capability Configuration
- Organization
- Post
- Resource Role
- Resource Interface
- Resource Port
- Resource Connector
- Capability
- Exhibits
- Fielded Capability
- Service
- Request
- Resource Interaction
- Control
- Exchange Element
- Energy
- Materiel
- System

- Creating NSV-1 diagram
- Creating Resource Interaction in NSV-1 diagram

- Resource Interaction Creation Wizard
- Resource Interaction Manager Dialog

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NSV-1 System Interface Internal Description

Related views

An NSV-1 can optionally be adorned with nodes originally specified in an NOV-2. In this way, traceability can be established from the logical NOV structure to the physical NSV structure.

An interaction, as depicted in the NSV-1, is an indicator that information passes from one resource to another. In the case of systems, this can be expanded into further detail in an NSV-2. Resource Interactions are summarized in a Resource Interactions Matrix (NSV-3).

The functions performed by the resources are specified in an NSV-4 Resource Functionality Description, but may optionally be overlaid on the Resources in the NSV-1.

An Operational View (NOV) suite may specify a set of requirements – either as a specific operational plan, or a scenario for procurement. As NOV-2 and NOV-5 specify the logical structure and behavior, NSV-1 and NSV-4 specify the physical structure and behavior (to the level of detail required by the architectural stakeholders).