

# P4 Resource Functions

## Description

The P4 Resource Functions view addresses resource (human and non-human) functions – i.e. the activities performed by Resources.

The primary purposes of the P4 view 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 (i.e. that a resource's required inputs are all satisfied).
- Ensure that the functional decomposition reaches an appropriate level of detail.
- Provide implementation-specific realizations of the operational activities specified in the [L4 - Logical Activities](#) view.

The Functionality Description provides detailed information regarding the:

- Allocation of functions to resources.
- Flow of data between functions.

The P4 view is the systems view counterpart to the Activity Model ([L4](#)) of the operational view.

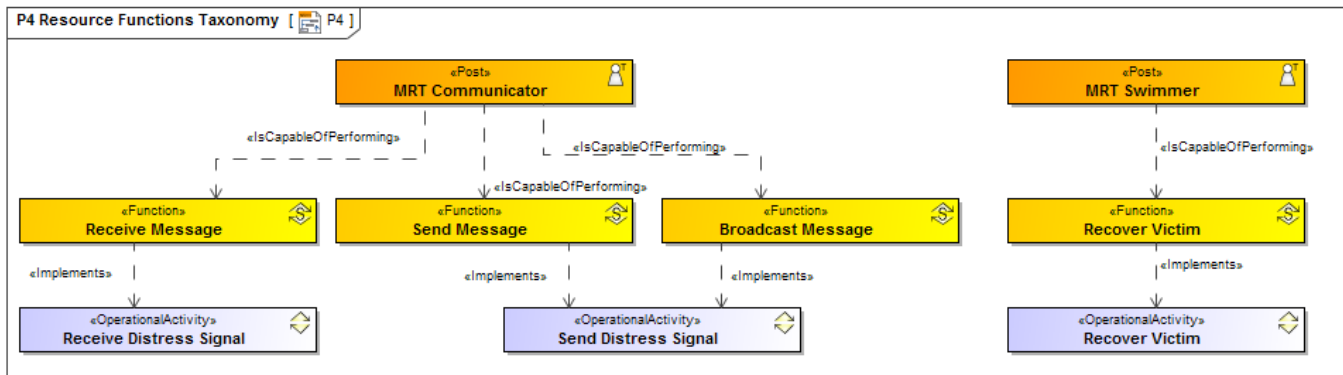
The P4 view may be used for:

- Description of task workflow.
- Identification of functional system requirements.
- Functional decomposition of systems.
- Relate human and system functions.

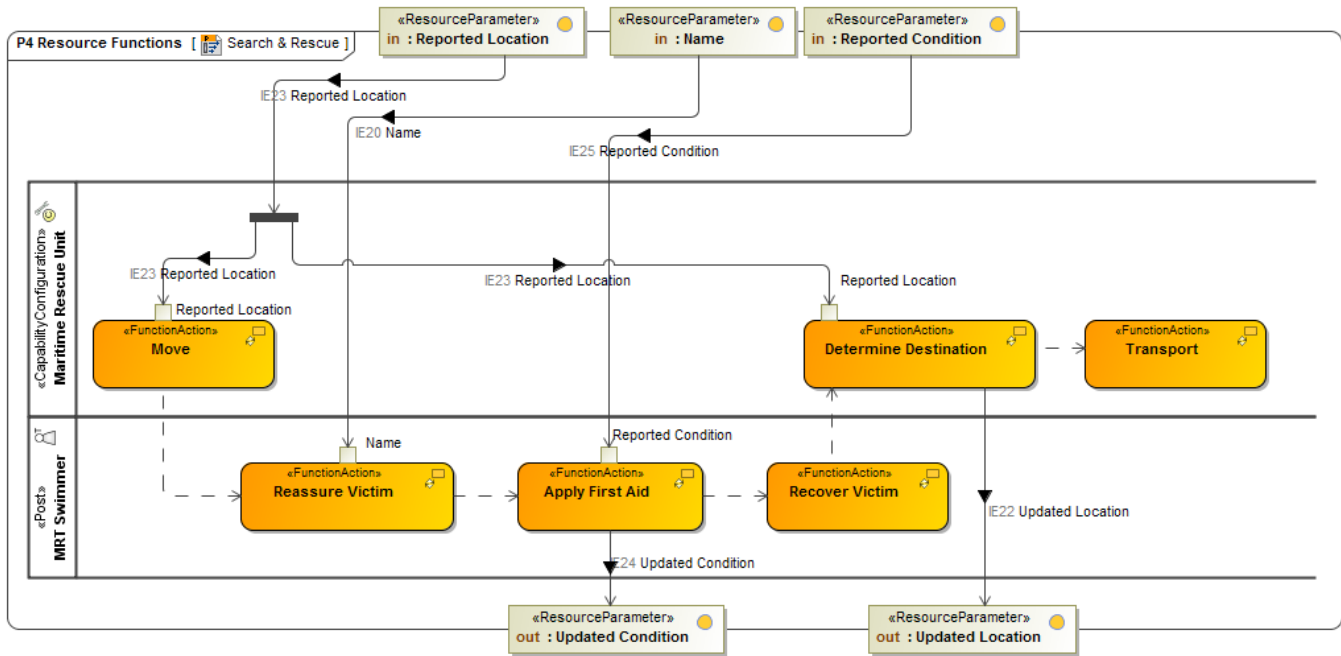
## Implementation

The P4 view can be represented using:

- P4 Resource Functions Taxonomy diagram for Function hierarchies. This diagram is based on the UML Class diagram.



- P4 Resource Functions diagram for Function flows. This diagram is based on the UML Activity diagram.



- L4-P4 Systems Function to Operational Activity Traceability Matrix.

Criteria

Select Row Scope: P4

Select Column Scope: L4

		Coordinate Other Agencies [Logical: L4]	Find Victim [Logical: L4]	Firefight [Logical: L4]	Investigate Reports Of Missing Persons [Logical: L4]	Monitor Health [Logical: L4]	Process Warning Order [Logical: L4]	Provide continuous radar surveillance [Logical: L4]	Provide emergency towing cover in high risk... [Logical: L4]	Provide Medical Assistance [Logical: L4]	Receive Distress Signal [Logical: L4]	Recover Victim [Logical: L4]	Rescue [Logical: L4]	Search [Logical: L4]	Search & Rescue : Medical Condition, : Up... [Logical: L4]	Send Distress Signal [Logical: L4]	Send Warning Order [Logical: L4]	Solve incident involving chemicals [Logical: L4]	Solve incidents in all areas of inhospitable ter... [Logical: L4]	Treat To S&P Operation [Logical: L4]	Transport Patient [Logical: L4]
P4	Apply First Aid( Reported Condition : Reported Condition )	1							1	2					2						
	Broadcast Message																				
	Determine Destination( Reported Location : Reported Location )																				
	Interact in the marine environment																				
	Move( Reported Location : Reported Location )																				
	Reassure Victim( Name : Name )																				
	Receive Distress Signal																				
	Receive Message																				
	Receive TDM																				
	Receive Track Information																				
	Recover Victim																				
	Search & Rescue( : Reported Location, : Name, : Reported Condition, : Updated Condition, : Updated Location )																				
	Send Message																				
	Send TDM																				
	Send Track Information																				
	Transmit Distress Signal																				
	Transport																				

- UML Class diagram.
- UML Activity diagram.
- SysML Block diagram.
- SysML Activity diagram.

#### Related elements

- Function
- Operational Activity
- Standard Operational Activity
- Resource Artifact
- Software
- Capability Configuration
- Organization
- Post
- Is Capable To Perform
- Function Action
- Function Control Flow
- Function Object Flow
- Resource Exchange
- Data Element

- [Natural Resource](#)

#### Related procedures



Unknown macro: 'list-children'

- [Using Implied Relations](#)