


# SAF User Documentation : Logical Functional Mapping Viewpoint

Domain	Aspect	Maturity
Logical	Traceability & Mapping	 Released released

## Example

 Logical-Functional-Mapping-Viewpoint-example.svg

## Purpose

The Logical Functional Mapping Viewpoint captures the assignment of the System Functions and the System Partial Functions to the Logical SOI and the Logical SOI Elements.

## Applicability

The Logical Function Mapping Viewpoint supports the "System Architecture Definition process" activities of the INCOSE SYSTEMS ENGINEERING HANDBOOK 2015 [§ 4.4] and contributes to the System Architecture description.

## Stakeholder

- [Hardware Developer](#)
- [Software Developer](#)
- [System Architect](#)

## Concern

- Which (system and system partial) functions are assigned to a logical item and logical item components?  
Note: if allocation of usage is used, then allocation of definition is a derived relationship XOR.

## Presentation

A dependency matrix featuring

- the call behavior action representing usage of System Functions or System Partial Functions,
- the part properties representing usage of Logical SOI Elements,
- the allocation relationship between above mentioned elements.

## Profile Model Reference

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

- Allocate [SysML Profile]
- [SAF\\_FunctionAction](#)
- [SAF\\_LogicalElement](#)
- [SAF\\_LogicalInternalRole](#)
- [SAF\\_LogicalSOI](#)
- [SAF\\_SLV08a\\_View](#)
- [SAF\\_SystemFunction](#)
- [SAF\\_SystemPartialFunction](#)

## Input from other Viewpoints

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### Required Viewpoints

- [Logical Structure Viewpoint](#)
- [System Process Viewpoint](#)
- [System Functional Refinement Viewpoint](#)

### Recommended Viewpoints

- [System Domain Item Kind Viewpoint](#)