

Type: object

Data structure of a serialized SDM4FZI project.

alternatives Required

root → alternatives

Type: array

List of alternatives

Each item of this array must be:

root → alternatives → Sdm4FziSerializedSerializedAlternative

Type: object

model Required

root → alternatives → Sdm4FziSerializedSerializedAlternative → model

Type: object

Model containing the nodes and links of the diagram

nodeDataArray Required

root → alternatives → Sdm4FziSerializedSerializedAlternative → model → nodeDataArray

Type: array

List of nodes in this model

Each item of this array must be:

root → alternatives → Sdm4FziSerializedSerializedAlternative → model → nodeDataArray → nodeDataArray items

Any of

DiagramIconNodeData DiagramTextNodeData Sdm4FziDiagramItem

root → alternatives → Sdm4FziSerializedSerializedAlternative → model → nodeDataArray → nodeDataArray items → anyOf → DiagramIconNodeData

Type: object

Data of a diagram icon node.

category Required

root → alternatives → Sdm4FziSerializedSerializedAlternative → model → nodeDataArray → nodeDataArray items → anyOf → DiagramIconNodeData → category

Type: enum (of string)

Specifies the category, used for determining the visual template to use.

Must be one of:

"icon"

text

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [nodeDataArray](#) → [nodeDataArray_items](#) → [anyOf](#) → [DiagramIconNodeData](#) → [text](#)

Type: string

key

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [nodeDataArray](#) → [nodeDataArray_items](#) → [anyOf](#) → [DiagramIconNodeData](#) → [key](#)

Type: number

The unique key of the node

class

Required

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [nodeDataArray](#) → [nodeDataArray_items](#) → [anyOf](#) → [DiagramIconNodeData](#) → [class](#)

Type: string

Specifies a unique identifier which describes the current node type (e.g. process, store or customer).

loc

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [nodeDataArray](#) → [nodeDataArray_items](#) → [anyOf](#) → [DiagramIconNodeData](#) → [loc](#)

Type: string

The location of the node in the diagram.
Format of this property is the x-coordinate, a space, and then the y-coordinate (e.g. "0 0" or "-200 400").
Increasing values of x are going rightwards and increasing values of y are going downwards.

photoNames **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [nodeDataArray](#) → [nodeDataArray_items](#) → [anyOf](#) → [DiagramIconNodeData](#) → [photoNames](#)

Type: array of string

File names of the attached photos

Each item of this array must be:

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [nodeDataArray](#) → [nodeDataArray_items](#) → [anyOf](#) → [DiagramIconNodeData](#) → [photoNames](#) → [photoNames_items](#)

Type: string

class **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [class](#)

Type: enum (of string)

Internal: Class of the model

Must be one of:

"GraphLinksModel"

copiesArrays **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [copiesArrays](#)

Type: enum (of boolean)

Internal: Makes copies of property values that are Arrays

Must be one of:

true

copiesArrayObjects **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [copiesArrayObjects](#)

Type: enum (of boolean)

Internal: When copying Arrays also copies array items that are Objects

Must be one of:

true

linkFromPortIdProperty **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [linkFromPortIdProperty](#)

Type: enum (of string)

Internal: Name of the property which describes the source port

Must be one of:

"fromPort"

linkToPortIdProperty **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [linkToPortIdProperty](#)

Type: enum (of string)

Internal: Name of the property which describes the target port

Must be one of:

"toPort"

modelData **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [modelData](#)

Type: object

Data associated with this model

viewState

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [modelData](#) → [viewState](#)

Type: object

Maintains state of the diagram view.

scale **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [modelData](#) → [viewState](#) → [scale](#)

Type: number

Scale / Zoom factor of the diagram

position **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [modelData](#) → [viewState](#) → [position](#)

Type: object

The position of the diagram in the viewport

x **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [modelData](#) → [viewState](#) → [position](#) → x

Type: number

y **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [modelData](#) → [viewState](#) → [position](#) → y

Type: number

linkdataArray **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [linkdataArray](#)

Type: array

List of links in this model

Each item of this array must be:

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [linkdataArray](#) → [linkdataArray items](#)

Any of

[DiagramLink](#) [DiagramItemLink](#)

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [linkdataArray](#) → [linkdataArray items](#) → [anyOf](#) → [DiagramLink](#)

Type: object

The data properties of generic link.

category **Required**

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [linkdataArray](#) → [linkdataArray items](#) → [anyOf](#) → [DiagramLink](#) → [category](#)

Type: string

The category of the link

class

Required

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [linkDataArray](#) → [linkDataArray.items](#) → [anyOf](#) → [DiagramLink](#) → [class](#)

Type: string

The class of the link

from

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [linkDataArray](#) → [linkDataArray.items](#) → [anyOf](#) → [DiagramLink](#) → [from](#)

Type: string or number

The ID of the source node

to

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [linkDataArray](#) → [linkDataArray.items](#) → [anyOf](#) → [DiagramLink](#) → [to](#)

Type: string or number

The ID of the target node

fromPort

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [linkDataArray](#) → [linkDataArray.items](#) → [anyOf](#) → [DiagramLink](#) → [fromPort](#)

Type: string

The port on the source node

toPort

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [model](#) → [linkDataArray](#) → [linkDataArray.items](#) → [anyOf](#) → [DiagramLink](#) → [toPort](#)

Type: string

The port on the target node

name

Required

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [name](#)

Type: string

Name of the alternative

modificationTime

Required

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [modificationTime](#)

Type: string

Last date and time (ISO 8601 format) this alternative had been modified.

resultData

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [resultData](#)

Type: array

Result data of the last simulation run

Each item of this array must be:

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [resultData](#) → [ResultData](#)

Type: object

Simulation result data.

category

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [resultData](#) → [ResultData](#) → [category](#)

Type: string

Category of the data

nodeName

Required

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [resultData](#) → [ResultData](#) → [nodeName](#)

Type: string

Identifier of the data for mapping from ResultView

values

Required

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [resultData](#) → [ResultData](#) → [values](#)

Type: array

The actual result values, an array of objects with arbitrary properties or in case of an error, the HTML-formatted error message

Each item of this array must be:

root → alternatives → Sdm4FziSerializedSerializedAlternative → resultData → ResultData → values → values items

Any of

Record

Option 2

root → alternatives → Sdm4FziSerializedSerializedAlternative → resultData → ResultData → values → values items → anyOf → Record

Type: object

simulationRun

root → alternatives → Sdm4FziSerializedSerializedAlternative → simulationRun

Type: object

Information about the lastest simulation run which has been executed for this alternative

state

Required

root → alternatives → Sdm4FziSerializedSerializedAlternative → simulationRun → state

Type: string

State of the simulation run

sentDate

Required

root → alternatives → Sdm4FziSerializedSerializedAlternative → simulationRun → sentDate

Type: string

Date and time (ISO 8601 format) this simulation run has been sent

requestId

root → alternatives → Sdm4FziSerializedSerializedAlternative → simulationRun → requestId

Type: null or number

ID of the simulation request

resultsReceivedDate

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [simulationRun](#) → [resultsReceivedDate](#)

Type: string

Date and time (ISO 8601 format) when the results for this run have been received

details

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [simulationRun](#) → [details](#)

Type: null or string

lastOpenDate

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [lastOpenDate](#)

Type: null or string

Last date and time (ISO 8601 format) this alternative had been opened

isMain

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [isMain](#)

Type: boolean

Defines if this is the main alternative

extensions

root → [alternatives](#) → [Sdm4FziSerializedSerializedAlternative](#) → [extensions](#)

Type: object

Extension point for subprojects

[Same definition as Record](#)

name **Required**

root → [name](#)

Type: string

Name of the project

description

root → [description](#)

Type: string

Description of the project

settings **Required**

root → [settings](#)

Type: object

Settings of the project

shiftCalendars **Required**

root → [settings](#) → [shiftCalendars](#)

Type: array

Unused in SimUI. For now, an empty array should be assigned to this property.

Each item of this array must be:

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#)

Type: object

id **Required**

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [id](#)

Type: number

name **Required**

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [name](#)

Type: string

shifts

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#)

Type: array

Each item of this array must be:

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#)

Type: object

id **Required**

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#) → [id](#)

Type: string

name **Required**

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#) → [name](#)

Type: string

startTime **Required**

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#) → [startTime](#)

Type: string

endTime **Required**

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#) → [endTime](#)

Type: string

pauses **Required**

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#) → [pauses](#)

Type: array

Each item of this array must be:

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#) → [pauses](#) → [SerializedShiftPause](#)

Type: object

startTime **Required**

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#) → [pauses](#) → [SerializedShiftPause](#) → [startTime](#)

Type: string

<div>endTime<div>Required</div></div>
<div><div>root → settings → shiftCalendars → SerializedShiftCalendar → shifts → SerializedShiftCalendarShift → pauses → SerializedShiftPause → endTime</div><div>Type: string</div></div>
<div>type<div>Required</div></div>
<div><div>root → settings → shiftCalendars → SerializedShiftCalendar → shifts → SerializedShiftCalendarShift → pauses → SerializedShiftPause → type</div><div>Type: string</div></div>
<div>name</div>
<div><div>root → settings → shiftCalendars → SerializedShiftCalendar → shifts → SerializedShiftCalendarShift → pauses → SerializedShiftPause → name</div><div>Type: string</div></div>

<div>activeOnMonday<div>Required</div></div>
<div><div>root → settings → shiftCalendars → SerializedShiftCalendar → shifts → SerializedShiftCalendarShift → activeOnMonday</div><div>Type: boolean</div></div>
<div>activeOnTuesday<div>Required</div></div>
<div><div>root → settings → shiftCalendars → SerializedShiftCalendar → shifts → SerializedShiftCalendarShift → activeOnTuesday</div><div>Type: boolean</div></div>
<div>activeOnWednesday<div>Required</div></div>
<div><div>root → settings → shiftCalendars → SerializedShiftCalendar → shifts → SerializedShiftCalendarShift → activeOnWednesday</div><div>Type: boolean</div></div>

activeOnThursday

Required

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#) → [activeOnThursday](#)

Type: boolean

activeOnFriday

Required

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#) → [activeOnFriday](#)

Type: boolean

activeOnSaturday

Required

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#) → [activeOnSaturday](#)

Type: boolean

activeOnSunday

Required

root → [settings](#) → [shiftCalendars](#) → [SerializedShiftCalendar](#) → [shifts](#) → [SerializedShiftCalendarShift](#) → [activeOnSunday](#)

Type: boolean

modelling

root → [settings](#) → [modelling](#)

Type: object

Project-wide modelling settings.

gridSnapEnabled

root → [settings](#) → [modelling](#) → [gridSnapEnabled](#)

Type: boolean

gridVisible

root → [settings](#) → [modelling](#) → [gridVisible](#)

<div>Type: boolean</div>
<div>guidedDragging</div>
<div>root → settings → modelling → guidedDragging</div> <div>Type: boolean</div>
<div>linkValidationEnabled</div>
<div>root → settings → modelling → linkValidationEnabled</div> <div>Type: boolean</div> <div>Indicates if links should be validated against the predefined rules or if all links are allowed by default.</div>

simulation

<div>root → settings → simulation</div> <div>Type: object</div> <div>Project-wide simulation settings.</div>
<div>randomNumbersVariant<div>Required</div></div>
<div>root → settings → simulation → randomNumbersVariant</div> <div>Type: number</div>
<div>simulationStartDate<div>Required</div></div>
<div>root → settings → simulation → simulationStartDate</div> <div>Type: string</div>
<div>simulationEndDate<div>Required</div></div>
<div>root → settings → simulation → simulationEndDate</div> <div>Type: string</div>
<div>initialStatsOffsetInHours<div>Required</div></div>
<div>root → settings → simulation → initialStatsOffsetInHours</div> <div>Type: number</div>

The initial offset in hours after which the recording of the statistics should be started by the simulator.

createdWithVersion Required

root → [createdWithVersion](#)

Type: string

Latest SimUI framework version the project is compatible with

mainVersion Required

root → [mainVersion](#)

Type: string

Latest main application version the project is compatible with.

resultView

root → [resultView](#)

Type: object

Definition of the view to display the simulation results.

sections Required

root → [resultView](#) → [sections](#)

Type: array

List of sections to be displayed in the result view.

Each item of this array must be:

root → [resultView](#) → [sections](#) → [ResultSection](#)

Type: object

A section within the result view.

class Required

root → [resultView](#) → [sections](#) → [ResultSection](#) → [class](#)

Type: string

Unique identifier for the section.

i18nTitle **Required**

root → [resultView](#) → [sections](#) → [ResultSection](#) → [i18nTitle](#)

Type: object

Translations for the title of the section.

[en](#)

root → [resultView](#) → [sections](#) → [ResultSection](#) → [i18nTitle](#) → [en](#)

Type: string or object

Specifies the English translation.

Additional Properties

Each additional property must conform to the following schema

root → [resultView](#) → [sections](#) → [ResultSection](#) → [i18nTitle](#) → [additionalProperties](#)

Type: string or object

showFromBeginning

root → [resultView](#) → [sections](#) → [ResultSection](#) → [showFromBeginning](#)

Type: boolean

Flag if the section should be visible initially. Default: false

i18nText

root → [resultView](#) → [sections](#) → [ResultSection](#) → [i18nText](#)

Type: object

Translations for the text of a section.

[Same definition as i18nTitle](#)

widgets

dynamicExpansion

root → [dynamicExpansion](#)

Type: object

Dynamic extensions for the project.

modelling

root → [dynamicExpansion](#) → [modelling](#)

Type: object

toolbox

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#)

Type: object

Custom toolbox for the project

id

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [id](#)

Type: string

Specifies a unique ID of the toolbox.

version

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [version](#)

Type: string

Specifies the version of the toolbox.

items

Required

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [items](#)

Type: array

Specifies the node items which are provided by the toolbox.

Each item of this array must be:

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [items](#) → [items items](#)

Any of

[ToolboxNodeData](#)

[ToolboxItem](#)

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [items](#) → [items items](#) → [anyOf](#) → [ToolboxNodeData](#)

Type: object

i18n

Required

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [items](#) → [items items](#) → [anyOf](#) → [ToolboxNodeData](#) → [i18n](#)

Type: object

Specifies the translated name of this item.
This object has one key per language. The key must be the two-letter language code.

en

group

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [items](#) → [items items](#) → [anyOf](#) → [ToolboxNodeData](#) → [group](#)

Type: string

Class of the group this node belongs to.

hideInPalette

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [items](#) → [items items](#) → [anyOf](#) → [ToolboxNodeData](#) → [hideInPalette](#)

Type: boolean

Specifies whether this item should be hidden in the toolbox.
Hiding this item in the toolbox also disables copying of the item in the diagram.
Defaults to false.

key

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [items](#) → [items items](#) → [anyOf](#) → [ToolboxNodeData](#) → [key](#)

Type: number

The unique key of the node

category

Required

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [items](#) → [items items](#) → [anyOf](#) → [ToolboxNodeData](#) → [category](#)

Type: string

Specifies the category, used for determining the visual template to use.

class

Required

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [items](#) → [items items](#) → [anyOf](#) → [ToolboxNodeData](#) → [class](#)

Type: string

Specifies a unique identifier which describes the current node type (e.g. process, store or customer).

loc

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [items](#) → [items.items](#) → [anyOf](#) → [ToolboxNodeData](#) → [loc](#)

Type: string

The location of the node in the diagram.
Format of this property is the x-coordinate, a space, and then the y-coordinate (e.g. "0 0" or "-200 400").
Increasing values of x are going rightwards and increasing values of y are going downwards.

links

Required

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [links](#)

Type: array

Specifies the links which can be created between nodes.

Each item of this array must be:

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [links](#) → [ToolboxLink](#)

Type: object

A link definition for a link between items the user can draw.

category

Required

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [links](#) → [ToolboxLink](#) → [category](#)

Type: string

Specifies the category, used for determining the visual template to use.

class

Required

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [links](#) → [ToolboxLink](#) → [class](#)

Type: string

Specifies a unique identifier of this link type.

color **Required**

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [links](#) → [ToolboxLink](#) → [color](#)

Type: string

Specifies the color.

i18n **Required**

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [links](#) → [ToolboxLink](#) → [i18n](#)

Type: object

Specifies the translated name.
This object has one key per language. The key must be the two-letter language code.

[Same definition as i18n](#)

groups

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [groups](#)

Type: array

Specifies the groups into which the node items can be categorized.

Each item of this array must be:

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [groups](#) → [ToolboxGroup](#)

Type: object

Definition for groups of a toolbox.
Assigning nodes to the same group will display them grouped together in the toolbox.

class **Required**

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [groups](#) → [ToolboxGroup](#) → [class](#)

Type: string

Unique identifier of the group

i18n **Required**

root → [dynamicExpansion](#) → [modelling](#) → [toolbox](#) → [groups](#) → [ToolboxGroup](#) → [i18n](#)

Type: object

Translations of the group name

[Same definition as i18n](#)

backgroundImage

root → [dynamicExpansion](#) → [modelling](#) → [backgroundImage](#)

Type: string

Custom background image (base64-encoded) for the project

backgroundImageScale

root → [dynamicExpansion](#) → [modelling](#) → [backgroundImageScale](#)

Type: number

Custom background image scale

simulation

root → [dynamicExpansion](#) → [simulation](#)

Type: object

modelType

root → [dynamicExpansion](#) → [simulation](#) → [modelType](#)

Type: string

Name of the simulation model to execute.

modelVersion

root → [dynamicExpansion](#) → [simulation](#) → [modelVersion](#)

Type: string

Version of the simulation model

extensions

root → [extensions](#)

Type: object

Additional properties (unknown to SimUI) added by the application implementing the SimUI framework.

[Same definition as Record](#)

