Naming REST API – Excel guide

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Introduction

This document will give guide to use of Excel in Naming REST API.

Excel files may be used to upload names and structures to Naming and download names and structures from Naming. However, there are no endpoints for create, update, delete, etc. content by uploading Excel file and there are no endpoints to search for names and structures and download Excel file. Instead, Excel file to upload content is converted to json that then is used for upload. And conversely, for download, json is retrieved from an endpoint and then converted to Excel file that may be downloaded.

This guide will describe

- endpoints to convert Excel to json, and json to Excel

- what Excel files should look like if intention is to convert to json and then use for upload

This guide will describe endpoints to convert Excel to Json and Json to Excel. Other endpoints are not in focus. However some explanation is given by describing what Excel should look like in order to be converted to Json and what Excel will look like after Json has been converted.

When upload is mentioned, it should be understood as what Excel should look like in order for endpoints to convert and upload to run as expected. E.g. upload to create names is about what Excel file should look like in order for convert Excel to Json and create names with converted Json to work.

When download is mentioned, it should be understood as what Excel will look like after endpoints to download and convert content have been run.

Upload and download include names and structures. Endpoints include Read and Create Update Delete.

Examples are available for upload and download of names and structures.

Getting started

In various places are framed boxes with information that is noteworthy and may help understanding

Note!

Text that is noteworthy, summary, help & more

It is assumed that

- reader is familiar with   or willing to learn!
  - Naming backend
    - Swagger UI
  - Documents
    - Introduction to Naming REST API, Cheat Sheet
  - Templates
    - names   *NameElementCommand.xlsx*
    - structures   *StructureElementCommand.xlsx*

Mentioned templates are used to encapsulate information for upload operations that are sent to Naming. Such operations are Create Update Delete.

There are no templates for Excel files that are sent from Naming. Such operations are Read for which files are generated by server. However, templates and received files share columns. Received files contain additional information that is not needed for operation or it is generated by server.

Upload operations rely on uuid for which names and structures that are affected and referred. Uuid may be found by REST API read operations.

Excel to Json – Excel to Server

Names

Endpoints

/api/v1/convert/excel2Json/names

Convert names data in Excel file, according to template for names, to json. Expected columns as in Excel template for names. This endpoint is for conversion of name element commands, not name elements.

Template

File

NameElementCommand.xlsx

Columns & Descriptions

Left-to-right

Uuid	Identity (uuid) of the name entry. Value is created server-side.
Parentsystemstructure	Identity (uuid) for the system structure parent.
Parentdevicestructure	Identity (uuid) for the device structure parent (if the name entry refers to device structure).
Index	Index (instance) of the name entry (if the name entry refers to device structure).
Description	Description of the name entry.

Operations & Columns

Kind of upload operation and which columns that required, optional or not considered.

Operation	Columns		Comment
	Required	Optional	
Create	`Parentsystemstructure` `Description`	`Parentdevicestructure` `Index`	`Uuid` is created server-side
Update	`Uuid` `Parentsystemstructure` `Description`	`Parentdevicestructure` `Index`	
Delete	`Uuid`		Other attributes are not considered

Examples

	A	B	C	D	E
1	**Uuid**	**Parentsystemstructure**	**Parentdevicestructure**	**Index**	**Description**
2		e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	070	Test 070
3		e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	071	Test 071
4		e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	072	Test 072
5		e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	073	Test 073
6		e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	074	Test 074
7		e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	075	Test 075
8		e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	076	Test 076
9		e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	077	Test 077
10		e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	078	Test 078
11		e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	079	Test 079

Figure 1:

Create names through upload of json after convert Excel template to json

	A	B	C	D	E
1	**Uuid**	**Parentsystemstructure**	**Parentdevicestructure**	**Index**	**Description**
2	c0aa32ea-e3dc-4f28-a71b-f15220842e29	e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	070	Test 070
3	88c37c44-a0c0-44b2-9c64-d5c0d4f80388	e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	071	Test 071
4	6c363f4d-1650-4451-948c-40cb12b9a1f5	e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	072	Test 072
5	ce2a37a9-bda4-43d4-8986-8a92051c1aa3	e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	073	Test 073
6	58170328-8e80-4002-9b21-efa3ccfc7ac1	e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	074	Test 074
7	8686accd-fb9d-4918-aa26-07116594c649	e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	075	Test 075
8	fe2f6045-2d06-43ca-b373-66acbc60bcca	e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	076	Test 076
9	7bffcbcc-11f1-4b91-a77c-f2defa5c1166	e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	077	Test 077
10	79ae8e5a-1d5d-4fb5-99d5-0bcc28fd4302	e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	078	Test 078
11	de01a5c6-fe85-4ce0-a85f-a45eebd70780	e67a497c-9c55-4942-97fc-700c8ec56031	bb1e68a6-e233-4595-ae88-f9186b6760c6	079	Test 079

Figure 2:

Update names through upload of json after convert Excel template to json

	A	B	C	D	E
1	**Uuid**	**Parentsystemstructure**	**Parentdevicestructure**	**Index**	**Description**
2	c0aa32ea-e3dc-4f28-a71b-f15220842e29				
3	88c37c44-a0c0-44b2-9c64-d5c0d4f80388				
4	6c363f4d-1650-4451-948c-40cb12b9a1f5				
5	ce2a37a9-bda4-43d4-8986-8a92051c1aa3				
6	58170328-8e80-4002-9b21-efa3ccfc7ac1				
7	8686accd-fb9d-4918-aa26-07116594c649				
8	fe2f6045-2d06-43ca-b373-66acbc60bcca				
9	7bffcbcc-11f1-4b91-a77c-f2defa5c1166				
10	79ae8e5a-1d5d-4fb5-99d5-0bcc28fd4302				
11	de01a5c6-fe85-4ce0-a85f-a45eebd70780				

Figure 3:

Delete names through upload of json after convert Excel template to json

Structures

Endpoints

/api/v1/convert/excel2Json/structures

Convert structures data in Excel file, according to template for structures, to json. Expected columns as in Excel template for structures. This endpoint is for conversion of structure element commands, not structure elements.

Template

File

StructureElementCommand.xlsx

Columns & Descriptions

Left-to-right

Uuid	Identity (uuid) of the structure entry. Value is created server-side.
Type	Type of the structure entry. Valid values – SYSTEMGROUP, SYSTEM, SUBSYSTEM, DISCIPLINE, DEVICEGROUP, DEVICETYPE.
Parent	Identity (uuid) for the structure entry parent (if the structure entry has a parent).
Mnemonic	Mnemonic of the structure entry.
Ordering	Ordering of the structure entry.
Description	Description (verbose) of the structure entry.

Operations & Columns

Kind of upload operation and which columns that required, optional or not considered.

Operation	Columns		Comment
	Required	Optional	
Create	Type Parent Mnemonic Ordering Description		Uuid is created server-side
Update	Uuid Type Parent Mnemonic Ordering Description		
Delete	Uuid Type		Other attributes are not considered

Examples

	A	B	C	D	E	F
1	Uuid	Type	Parent	Name	Mnemonic	Ordering
2		SUBSYSTEM	b8fe4cf8-bc05-4d13-9177-85a02f523be2	DmpL-TST1	TST1	1
3		SUBSYSTEM	b8fe4cf8-bc05-4d13-9177-85a02f523be2	DmpL-TST2	TST2	2
4		SUBSYSTEM	b8fe4cf8-bc05-4d13-9177-85a02f523be2	DmpL-TST3	TST3	3
5		SUBSYSTEM	b8fe4cf8-bc05-4d13-9177-85a02f523be2	DmpL-TST4	TST4	4
6		SUBSYSTEM	b8fe4cf8-bc05-4d13-9177-85a02f523be2	DmpL-TST5	TST5	5

Figure 4:

Create structures through upload of json after convert Excel template to json

	A	B	C	D	E	F
1	Uuid	Type	Parent	Name	Mnemonic	Ordering
2	1449584e-101f-47f3-81c6-ec95ea12640a	SUBSYSTEM	b8fe4cf8-bc05-4d13-9177-85a02f523be2	DmpL-TST1	TST1	1
3	ac128608-cdef-4be5-abca-5e4f138db7fd	SUBSYSTEM	b8fe4cf8-bc05-4d13-9177-85a02f523be2	DmpL-TST2	TST2	2
4	fbf50603-4809-4915-9961-1141e1699c1c	SUBSYSTEM	b8fe4cf8-bc05-4d13-9177-85a02f523be2	DmpL-TST3	TST3	3
5	be5883e6-ff0b-4a31-ae4c-6f73e5cbca1f	SUBSYSTEM	b8fe4cf8-bc05-4d13-9177-85a02f523be2	DmpL-TST4	TST4	4
6	e70c3dd9-586d-43d9-9b32-2153f5ebefa8	SUBSYSTEM	b8fe4cf8-bc05-4d13-9177-85a02f523be2	DmpL-TST5	TST5	5

Figure 5:

Update structures through upload of json after convert Excel template to json

	A	B	C	D	E	F
1	Uuid	Type	Parent	Name	Mnemonic	Ordering
2	1449584e-101f-47f3-81c6-ec95ea12640a	SUBSYSTEM				
3	ac128608-cdef-4be5-abca-5e4f138db7fd	SUBSYSTEM				
4	fbf50603-4809-4915-9961-1141e1699c1c	SUBSYSTEM				
5	be5883e6-ff0b-4a31-ae4c-6f73e5cbca1f	SUBSYSTEM				
6	e70c3dd9-586d-43d9-9b32-2153f5ebefa8	SUBSYSTEM				

Figure 6:

Delete structures through upload of json after convert Excel template to json

Excel from Json – Excel from Server

Names

No template is available.

Endpoints

/api/v1/convert/json2Excel/names

Convert names data in json, according to array of name elements, to Excel file. Expected content for json like result for names query. This endpoint is for conversion of name elements, not name element commands.

Columns & Descriptions

> Starts with same columns as NameElementCommand.
> Can also be used for upload.

Left-to-right

Uuid	Identity (uuid) of the name entry. Value is created server-side.
Parentsystemstructure	Identity (uuid) for the system structure parent.
Parentdevicestructure	Identity (uuid) for the device structure parent (if the name entry refers to device structure).
Index	Index (instance) of the name entry (if the name entry refers to device structure).
Description	Description of the name entry.
Systemstructure	Mnemonic path for for the system structure.
Devicestructure	Mnemonic path for for the device structure.
Name	Name (verbose) of the name entry.
Status	Status of the name entry.
Deleted	If the name entry is deleted.
When	Date and time when the name entry was created.
Who	Name (user) of who created the name entry.
Comment	Comment of the name entry command.

Example

Figure 7:

Get names through download of Excel file after convert of json to Excel

Structures

No template is available.

Endpoints

/api/v1/convert/json2Excel/structures

Convert structures data in json, according to array of structure elements, to Excel file. Expected content for json like result for structures query. This endpoint is for conversion of structure elements, not structure element commands.

Columns & Descriptions

> Starts with same columns as StructureElementCommand.
> Can also be used for upload.

Left-to-right

Uuid	Identity (uuid) of the structure entry. Value is created server-side.
Type	Type of the structure entry. Valid values — SYSTEMGROUP, SYSTEM, SUBSYSTEM, DISCIPLINE, DEVICEGROUP, DEVICETYPE.
Parent	Identity (uuid) for the structure entry parent (if the structure entry has a parent).
Mnemonic	Mnemonic of the structure entry.
Ordering	Ordering of the structure entry.
Description	Description (verbose) of the structure entry.
Mnemonicpath	Mnemonic path of the structure entry.
Level	Level of the structure entry.
Status	Status of the structure entry.
Deleted	If the structure entry is deleted.
When	Date and time when the structure entry was created.
Who	Name (user) of who created the structure entry.
Comment	Comment of the structure entry command.

Example

Figure 8:

Get structures through download of Excel file after convert of json to Excel

Reference

Naming convention

- https://chess.esss.lu.se/enovia/link/ESS-0000757/21308.51166.45568.45993/valid