

# Migration of Naming REST API

by [lars.johansson@ess.eu](mailto:lars.johansson@ess.eu), ICS Software

## Table of Contents

Migration of Naming REST API.....1

    Introduction.....1

    Getting started.....1

    Migration of Naming REST API.....2

        Endpoints.....2

            DeviceNames endpoints migrated to Names endpoints.....2

            Healthcheck endpoint migrated to Healtcheck endpoint.....4

            History endpoints migrated to Names endpoint and Structures endpoint.....4

            Parts endpoints migrated to Structures endpoints.....5

        Models.....6

            DeviceNameElement → NameElement.....6

            HistoryElement → NameElement.....7

            HistoryElement → StructureElement.....8

            PartElement → StructureElement.....9

    Examples.....10

        Retrieval of content for a name entry.....10

        Retrieval of content for a structure entry.....12

## Introduction

This document will give guide to migration of Naming REST API, from old to new.

This document is not a description of Naming REST API, neither old nor new.

It is assumed that reader has some knowledge of Naming REST API.

Example content is given in json.

## 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

## Migration of Naming REST API

Naming REST API – old

Parameters are case sensitive.  
Search endpoints allow regular expressions.

Json and Xml may be used.

Naming REST API – new

Regular expressions are not supported for searches. Regex-like behavior is available with \_ underscore, 0 or 1 occurrences of any character, % percent, any number of any character.

Exact match may be achived through no use of \_ and % characters.

Json is used.

Below are tables with old and new endpoints, and old and new models (content), and how endpoints and models are mapped. Focus is only to describe migration from this point of view.

### Endpoints

#### DeviceNames endpoints migrated to Names endpoints

List of DeviceNameElement corresponds to List of NameElement in ResponsePageNameElements.

DeviceNameElement corresponds to NameElement.

HTTP method	Path & Query string	Parameter P – path Q – query	Description	Return	Old → New	HTTP method	Path & Query string	Parameter P – path Q – query	Description	Return
GET	/deviceNames		Lists all device names  Returns a list of (all) device names.	List of DeviceNameElement		GET	api/v1/names		Find valid names (search)  Find valid names (search). Return paged array of name elements.	ResponsePageNameElements
GET	/deviceNames/devicetype/search/{devicetype}	P: devicetype	Finds all device names by device type search  Note device type (search, case sensitive, regex). Returns a list of device names.	List of DeviceNameElement		GET	api/v1/names	similar Q: devicestructure	Find valid names (search)  Find valid names (search). Return paged array of name elements.	ResponsePageNameElements

GET	/deviceNames/devicetype/{devicetype}	P: devicetype	Finds all device names by device type  Note device type (exact match, case sensitive). Returns a list of device names.	List of DeviceNameElement		GET	api/v1/names	similar Q: devicestructure	Find valid names (search)  Find valid names (search). Return paged array of name elements.	ResponsePageNameElements
GET	/deviceNames/discipline/search/{discipline}	P: discipline	Finds all device names by discipline search  Note discipline (search, case sensitive, regex). Returns a list of device names.	List of DeviceNameElement		GET	api/v1/names	similar Q: devicestructure	Find valid names (search)  Find valid names (search). Return paged array of name elements.	ResponsePageNameElements
GET	/deviceNames/discipline/{discipline}	P: discipline	Finds all device names by discipline  Note discipline (exact match, case sensitive). Returns a list of device names.	List of DeviceNameElement		GET	api/v1/names	similar Q: devicestructure	Find valid names (search)  Find valid names (search). Return paged array of name elements.	ResponsePageNameElements
GET	/deviceNames/search/{deviceName}	P: deviceName	Finds all device names by device name search  Note device name (search, case sensitive, regex). Returns a list of device names.	List of DeviceNameElement		GET	api/v1/names	Q: name	Find valid names (search)  Find valid names (search). Return paged array of name elements.	ResponsePageNameElements
GET	/deviceNames/subsystem/search/{subsystem}	P: subsystem	Finds all device names by subsystem search  Note subsystem (search, case sensitive, regex). Returns a list of device names.	List of DeviceNameElement		GET	api/v1/names	similar Q: systemstructure	Find valid names (search)  Find valid names (search). Return paged array of name elements.	ResponsePageNameElements
GET	/deviceNames/subsystem/{subsystem}	P: subsystem	Finds all devices by subsystem  Note subsystem (exact match, case sensitive). Returns a list of device names.	List of DeviceNameElement		GET	api/v1/names	similar Q: systemstructure	Find valid names (search)  Find valid names (search). Return paged array of name elements.	ResponsePageNameElements
GET	/deviceNames/system/search/{system}	P: system	Finds all devices by system search  Note system (search, case sensitive, regex). Returns a list of device names.	List of DeviceNameElement		GET	api/v1/names	similar Q: systemstructure	Find valid names (search)  Find valid names (search). Return paged array of name elements.	ResponsePageNameElements
GET	/deviceNames/system/{system}	P: system	Finds all devices by system  Note system (exact match, case sensitive). Returns a list of device names.	List of DeviceNameElement		GET	api/v1/names	similar Q: systemstructure	Find valid names (search)  Find valid names (search). Return paged array of name elements.	ResponsePageNameElements
GET	/deviceNames/{uuid}	P: uuid P: name	Finds device name by uuid or name  Note uuid or name (exact match, case sensitive). Returns a device name (most recent).	DeviceNameElement		GET	api/v1/names/{name}	Q: name Q: uuid	Find valid names by name or uuid (search)  Find valid names by name or uuid (search). Return paged array of name elements.	ResponsePageNameElements

**Healthcheck endpoint migrated to Healtcheck endpoint**

It works in the same way.

HTTP method	Path & Query string	Parameter P – path Q – query	Description	Return	Old → New	HTTP method	Path & Query string	Parameter P – path Q – query	Description	Return
GET	/healthcheck		Performs healthcheck of Naming application  Note HTTP response code. Returns server timestamp.			GET	/healthcheck		perform healthcheck for Naming application  Perform healthcheck for Naming application in general and healthcheck endpoint in particular. To be used mainly for checking HTTP response code, in particular HTTP STATUS OK - 200.	

**History endpoints migrated to Names endpoint and Structures endpoint**

List of DeviceNameElement corresponds to List of NameElement in ResponsePageNameElements.

List of PartElement corresponds to List of StructureElement in ResponsePageStructureElements.

DeviceNameElement corresponds to NameElement.

PartElement corresponds to StructureElement.

HTTP method	Path & Query string	Parameter P – path Q – query	Description	Return	Old → New	HTTP method	Path & Query string	Parameter P – path Q – query	Description	Return
GET	/history/deviceNames/uuid/{uuid}	P: uuid	Finds history for ESS name by uuid  Note uuid (exact match). Returns a list of entries for history of ESS name.	List of HistoryElement		GET	/api/v1/names/history/{uuid}	P: uuid	Find history for name by uuid (exact match)  Find history for name by uuid (exact match). History consists of line of uuid. Return paged array of name elements.	ResponsePageNameElements
	/history/parts/uuid/{uuid}	P: uuid	Finds history for name part by uuid  Note uuid (exact match). Returns a list of entries for history of name part.	List of HistoryElement			/api/v1/structures/history/{uuid}	P: uuid	Find history for structure by uuid (exact match)  Find history for structure by uuid (exact match). History consists of line of uuid. Return paged array of structure elements.	ResponsePageStructureElements

Parts endpoints migrated to Structures endpoints

List of PartElement corresponds to List of StructureElement in ResponsePageStructureElements.

PartElement corresponds to StructureElement.

HTTP method	Path & Query string	Parameter P – path Q – query	Description	Return	Old → New	HTTP method	Path & Query string	Parameter P – path Q – query	Description	Return
GET	/parts/mnemonic/search/{mnemonic}	P: mnemonic	Finds all name parts by mnemonic search  Note mnemonic (search, case sensitive, regex). Returns a list of name parts.	List of PartElement		GET	/api/v1/structures/mnemonic/{mnemonic}	P: mnemonic	Find valid structures by mnemonic (search)  Find valid structures by mnemonic (search). Return paged array of structure elements.	ResponsePageStructureElements
GET	/parts/mnemonic/{mnemonic}	P: mnemonic	Finds all name parts by mnemonic  Note mnemonic (exact match, case sensitive). Returns a list of name parts.	List of PartElement		GET	/api/v1/structures/mnemonic/{mnemonic}	P: mnemonic	Find valid structures by mnemonic (search)  Find valid structures by mnemonic (search). Return paged array of structure elements.	ResponsePageStructureElements
GET	/parts/mnemonicPath/search/{mnemonicPath}	P: mnemonicPath	Finds all name parts by mnemonic path search  Note mnemonic path (search, case sensitive, regex). Returns a list of name parts.	List of PartElement		GET	/api/v1/structures/mnemonicPath/{mnemonicPath}	P: mnemonic	Find valid structures by mnemonic path (search)  Find valid structures by mnemonic path (search). Return paged array of structure elements.	ResponsePageStructureElements

## Models

***DeviceNameElement* → *NameElement***

DeviceNameElement			Old → New	NameElement		
Field	Type	Description		Field	Type	Description
uuid	string UUID			uuid	string UUID	Identity (uuid) of the name entry. Value is created server-side.
systemGroup	string			systemStructure	string	Mnemonic path for for the system structure.
system	string			systemStructure	string	Mnemonic path for for the system structure.
subsystem	string			systemStructure	string	Mnemonic path for for the system structure.
discipline	string			deviceStructure	string	Mnemonic path for for the device structure.
deviceType	string			deviceStructure	string	Mnemonic path for for the device structure.
instanceIndex	string			index	string	Index (instance) of the name entry (if the name entry refers to device structure).
name	string			name	string	Name (verbose) of the name entry.
description	string			description	string	Description of the name entry.
status	string Enum  [ DELETED, ACTIVE, OBSOLETE ]			status	string Enum  [ APPROVED, ARCHIVED, CANCELLED, PENDING, REJECTED ]	A collection of values for status of a name and structure entry. It is used to show where in its lifecycle that a name and structure entry is located.
				latest	boolean	If the structure entry is latest (with status APPROVED) in its line of entries.
				deleted	boolean	If the structure entry is deleted.
No exact match for <i>systemGroup</i> , <i>system</i> , <i>subsystem</i> , <i>discipline</i> , <i>deviceType</i> . Instead system structure and device structure mnemonic paths are available. <i>DeviceNameElement</i> status is not same as <i>NameElement</i> status. It corresponds to fields <i>status</i> , <i>latest</i> , <i>deleted</i> .						

### *HistoryElement* → *NameElement*

HistoryElement			Old → New	NameElement		
Field	Type	Description		Field	Type	Description
uuid	string UUID			uuid	string UUID	Identity (uuid) of the name entry. Value is created server-side.
fullName	string			name	string	Name (verbose) of the name entry.
mnemonic	string			index	string	Index (instance) of the name entry (if the name entry refers to device structure).
description	string			description	string	Description of the name entry.
status	string Enum  [ Archived, Pending, Approved, Rejected, Cancelled, an empty string ]			status	string Enum  [ APPROVED, ARCHIVED, CANCELLED, PENDING, REJECTED ]	A collection of values for status of a name and structure entry. It is used to show where in its lifecycle that a name and structure entry is located.
				latest	boolean	If the name entry is latest (with status APPROVED) in its line of entries.
				deleted	boolean	If the name entry is deleted.
date	string			when	string date-time	Date and time when the name entry was created.
user	string			who	string	Name (user) of who created the name entry.
message	string			comment	string	Comment of the name entry command.
HistoryElement status is not same as NameElement status. It corresponds to fields status, latest, deleted.						

## HistoryElement → StructureElement

HistoryElement			Old → New	StructureElement		
Field	Type	Description		Field	Type	Description
uuid	string UUID			uuid	string UUID	Identity (uuid) of the name entry. Value is created server-side.
fullName	string			name	string	Name (verbose) of the name entry.
mnemonic	string			mnemonic	string	Mnemonic of the structure entry.
description	string			description	string	Description of the name entry.
status	string Enum  [ Archived, Pending, Approved, Rejected, Cancelled, an empty string ]			status	string Enum  [ APPROVED, ARCHIVED, CANCELLED, PENDING, REJECTED ]	A collection of values for status of a name and structure entry. It is used to show where in its lifecycle that a name and structure entry is located.
				latest	boolean	If the structure entry is latest (with status APPROVED) in its line of entries.
				deleted	boolean	If the structure entry is deleted.
date	string			when	string date-time	Date and time when the name entry was created.
user	string			who	string	Name (user) of who created the name entry.
message	string			comment	string	Comment of the name entry command.
HistoryElement status is not same as StructureElement status. It corresponds to fields status, latest, deleted.						



## PartElement → StructureElement

PartElement			Old → New	StructureElement		
Field	Type	Description		Field	Type	Description
type	string			type	string Enum  [ SYSTEMGROUP, SYSTEM, SUBSYSTEM, DISCIPLINE, DEVICEGROUP, DEVICETYPE ]	string A collection of values for type of structure entry. It is used to show what kind of entry and which level in parent / child hierarchy for system structure and device structure.
uuid	string UUID			uuid	string UUID	Identity (uuid) of the structure entry. Value is created server-side.
level	string			level	string	Level of the structure entry.
name	string			name	string	Name of the structure entry.
mnemonic	string			mnemonic	string	Mnemonic of the structure entry.
description	string			description	string	Description of the structure entry.
status	string			status	string Enum  [ APPROVED, ARCHIVED, CANCELLED, PENDING, REJECTED ]	A collection of values for status of a name and structure entry. It is used to show where in its lifecycle that a name and structure entry is located.
				latest	boolean	If the structure entry is latest (with status APPROVED) in its line of entries.
				deleted	boolean	If the structure entry is deleted.
namePath	string					
mnemonicPath	string			mnemonicPath	string	Mnemonic path of the structure entry.
No correspondence for <i>namePath</i> in <i>StructureElement</i> . <i>PartElement</i> <i>status</i> is not same as <i>StructureElement</i> <i>status</i> . It corresponds to fields <i>status</i> , <i>latest</i> , <i>deleted</i> .						

# Examples

## Retrieval of content for a name entry

Name: A2T-010PRL:RFS-PRLTap-054

What	URL	JSON
Retrieve name in old Naming REST API	/deviceNames/A2T-010PRL%3ARFS-PRLTap-054	{ "uuid": "07bce0ae-0947-47c8-941e-cc76678fd29a", "systemGroup": "Acc", "system": "A2T", "subsystem": "010PRL", "discipline": "RFS", "deviceType": "PRLTap", "instanceIndex": "054", "name": "A2T-010PRL:RFS-PRLTap-054", "description": null, "status": "ACTIVE" }
Retrieve name in new Naming REST API	/api/v1/names/A2T-010PRL%3ARFS-PRLTap-054?page=0&pageSize=100	{ "message": "", "details": "", "field": "", "totalCount": 1, "listSize": 1, "page": 0, "pageSize": 100, "list": [ { "uuid": "07bce0ae-0947-47c8-941e-cc76678fd29a", "parentSystemStructure": "c2fce615-ed5d-40f9-8fb5-0b91502536e5", "parentDeviceStructure": "bb1e68a6-e233-4595-ae88-f9186b6760c6", "index": "054", "description": null, "comment": null, "systemStructure": "A2T-010PRL", "deviceStructure": "RFS-PRLTap", "name": "A2T-010PRL:RFS-PRLTap-054", "status": "APPROVED", "latest": true, "deleted": false, "when": "2017-10-20T12:53:27.229+00:00", "who": "johannorin" } ] }
Retrieve history for name in old Naming REST API	/history/deviceNames/uuid/07bce0ae-0947-47c8-941e-cc76678fd29a	[ { "uuid": "07bce0ae-0947-47c8-941e-cc76678fd29a", "fullName": "A2T-050PRL:RFS-PRLTAP-054", "mnemonic": "054", "description": "", "status": "Approved", "date": "2016-11-07", "user": "johannorin", "message": null }, { "uuid": "07bce0ae-0947-47c8-941e-cc76678fd29a", "fullName": "A2T-050PRL:RFS-PRLTap-054", "mnemonic": "054", "description": "", "status": "Approved", "date": "2016-11-07", "user": "johannorin", "message": null } ]

		<pre> "status": "Approved", "date": "2017-05-16", "user": "danielpisofernandez", "message": null }, {   "uuid": "07bce0ae-0947-47c8-941e-cc76678fd29a",   "fullName": "A2T-010PRL:RFS-PRLTap-054",   "mnemonic": "054",   "description": "",   "status": "Approved",   "date": "2017-10-20",   "user": "johannorin",   "message": null } ] </pre>
Retrieve history for name in new Naming REST API	<pre> /api/v1/names/history/07bce0ae-0947-47c8-941e-cc76678fd29a? orderBy=WHEN&amp;isAsc=true&amp;page=0&amp;pageSize=100 </pre>	<pre> {   "message": "",   "details": "",   "field": "",   "totalCount": 3,   "listSize": 3,   "page": 0,   "pageSize": 100,   "list": [     {       "uuid": "07bce0ae-0947-47c8-941e-cc76678fd29a",       "parentSystemStructure": "3a46aabf-68ba-402c-9086-d290550c15a6",       "parentDeviceStructure": "bb1e68a6-e233-4595-ae88-f9186b6760c6",       "index": "054",       "description": null,       "comment": null,       "systemStructure": "A2T-050PRL",       "deviceStructure": "RFS-PRLTAP",       "name": "A2T-050PRL:RFS-PRLTAP-054",       "status": "APPROVED",       "latest": false,       "deleted": false,       "when": "2016-11-07T11:48:38.435+00:00",       "who": "johannorin"     },     {       "uuid": "07bce0ae-0947-47c8-941e-cc76678fd29a",       "parentSystemStructure": "3a46aabf-68ba-402c-9086-d290550c15a6",       "parentDeviceStructure": "bb1e68a6-e233-4595-ae88-f9186b6760c6",       "index": "054",       "description": null,       "comment": null,       "systemStructure": "A2T-050PRL",       "deviceStructure": "RFS-PRLTap",       "name": "A2T-050PRL:RFS-PRLTap-054",       "status": "APPROVED",       "latest": false,       "deleted": false,       "when": "2017-05-16T08:18:00.690+00:00",       "who": "danielpisofernandez"     },     {       "uuid": "07bce0ae-0947-47c8-941e-cc76678fd29a",       "parentSystemStructure": "c2fce615-ed5d-40f9-8fb5-0b91502536e5",       "parentDeviceStructure": "bb1e68a6-e233-4595-ae88-f9186b6760c6",       "index": "054",       "description": null,       "comment": null,       "systemStructure": "A2T-010PRL",       "deviceStructure": "RFS-PRLTap", </pre>

		<pre>"name": "A2T-010PRL:RFS-PRLTap-054", "status": "APPROVED", "latest": true, "deleted": false, "when": "2017-10-20T12:53:27.229+00:00", "who": "johannorin" } ] }</pre>
--	--	--

Retrieval of content for a structure entry

Mnemonic path: Spk-010RFC

What	URL	JSON
Retrieve structure entry in old Naming REST API	/parts/mnemonicPath/search/Spk-010RFC	<pre>[ {   "type": "System Structure",   "uuid": "7caafb6b-4a82-4486-aecd-ddc7fe952120",   "level": "3",   "name": "01 RF Cell",   "mnemonic": "010RFC",   "description": null,   "status": "Approved",   "namePath": "Accelerator-Spoke Linac-01 RF Cell",   "mnemonicPath": "Acc-Spk-010RFC" } ]</pre>
Retrieve structure entry in new Naming REST API	/api/v1/structures/mnemonicPath/Spk-010RFC?page=0&pageSize=100	<pre>{   "message": "",   "details": "",   "field": "",   "totalCount": 1,   "listSize": 1,   "page": 0,   "pageSize": 1,   "list": [     {       "uuid": "7caafb6b-4a82-4486-aecd-ddc7fe952120",       "type": "SUBSYSTEM",       "parent": "2854e43f-7968-4c9a-baa2-e261451941f7",       "name": "01 RF Cell",       "mnemonic": "010RFC",       "description": null,       "comment": "Approved by Daniel Piso",       "mnemonicPath": "Spk-010RFC",       "level": 3,       "status": "APPROVED",       "latest": true,       "deleted": false,       "when": "2017-08-21T15:15:50.496+00:00",       "who": "danielpisofernandez"     }   ] }</pre>

Retrieve history for structure entry in old Naming REST API	/history/parts/uuid/7caafb6b-4a82-4486-aecd-ddc7fe952120	[ { "uuid": "7caafb6b-4a82-4486-aecd-ddc7fe952120", "fullName": "01 RF Cell", "mnemonic": "010RFC", "description": "", "status": "Pending", "date": "2017-07-20", "user": "aijin", "message": "Requested on behalf of the RF group" }, { "uuid": "7caafb6b-4a82-4486-aecd-ddc7fe952120", "fullName": "01 RF Cell", "mnemonic": "010RFC", "description": "", "status": "Approved", "date": "2017-08-21", "user": "danielpisofernandez", "message": "Approved by Daniel Piso" } ]
Retrieve history for structure entry in new Naming REST API	/api/v1/structures/history/7caafb6b-4a82-4486-aecd-ddc7fe952120?orderBy=WHEN&isAsc=true&page=0&pageSize=100	{ "message": "", "details": "", "field": "", "totalCount": 2, "listSize": 2, "page": 0, "pageSize": 100, "list": [ { "uuid": "7caafb6b-4a82-4486-aecd-ddc7fe952120", "type": "SUBSYSTEM", "parent": "2854e43f-7968-4c9a-baa2-e261451941f7", "name": "01 RF Cell", "mnemonic": "010RFC", "description": null, "comment": "Requested on behalf of the RF group", "mnemonicPath": null, "level": 3, "status": "PENDING", "latest": false, "deleted": false, "when": "2017-07-20T09:24:24.527+00:00", "who": "aijin" }, { "uuid": "7caafb6b-4a82-4486-aecd-ddc7fe952120", "type": "SUBSYSTEM", "parent": "2854e43f-7968-4c9a-baa2-e261451941f7", "name": "01 RF Cell", "mnemonic": "010RFC", "description": null, "comment": "Approved by Daniel Piso", "mnemonicPath": null, "level": 3, "status": "APPROVED", "latest": true, "deleted": false, "when": "2017-08-21T15:15:50.496+00:00", "who": "danielpisofernandez" } ] }