

Assets API

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Based on simple REST principles, the TrendMiner Assets API endpoints return JSON metadata about assets and attributes in the TrendMiner platform.

Chapter 1. Authentication

All requests to the web API require authentication. This is achieved by sending a valid Bearer access token in the request headers. Request tokens are obtained using OAuth2.0.

Requests to the API can be done authenticated as your client or authenticated as a specific user. In both cases, you will first need to create a client and request a token.

When performing actions authenticated as a client, they will belong to **service-account-CLIENTID**.

Make sure you are calling our services over HTTPS when retrieving an access token.

1.1. Creating a new client

A new client can be created in ConfigHub: Security → Clients → Add client

1.2. Retrieving an access token

To retrieve a token to authenticate as your client, you will need:

- Your client ID
- Your client secret (can be obtained in ConfigHub)

A token is requested from the token endpoint of the authentication service:

Request

```
curl --request POST \  
  --url 'https://YOUR_DOMAIN/auth/realms/trendminer/protocol/openid-connect/token' \  
  --header 'content-type: application/x-www-form-urlencoded' \  
  --data grant_type=client_credentials \  
  --data client_id=YOUR_CLIENT_ID \  
  --data client_secret=YOUR_CLIENT_SECRET
```

Upon valid authentication, the response will contain an access token.

Response

```
200 OK  
{  
  "access_token": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpXZWQ0aXBzIiwiaWF0Ij0iMTUxMjM0MDAwMCJ9", ①  
  "expires_in": 300,  
  "refresh_expires_in": 0,  
  "token_type": "Bearer",  
  "not-before-policy": 1571391000,  
  "scope": "email profile"  
}
```

- ① The access token is to be used in every request towards our services (see example below). A new token needs to be fetched when the token expires after 5 minutes.

1.3. Doing a request with an access token

Example request with access token

```
curl --request GET \  
  --url 'https://YOUR_DOMAIN/af/asset' \  
  --header 'Authorization: Bearer ACCESS_TOKEN'
```

Chapter 2. Assets

The base object in the Assets universe is the asset. An asset represents a piece of equipment in a plant, ranging from the plant itself to the smallest sensor inside. An asset has a name and a description, along with some other properties.

There are two main types: **ASSET** and **ATTRIBUTE**: while an **ASSET** would be defined as a component of the installation, an **ATTRIBUTE** would be defined as a property on that asset. Those properties are usually pointers to certain tags containing timeseries data.

To define the asset structure of a (part of a) plant, we need a way to define the parent-child relationships between the different assets. This is done in the form of long paths. An asset has a list of (long) paths over which it can be reached. The long path is built with the identifiers of the parent and ancestor assets of the asset, all the way up to the root of the tree.

Next to the long paths array, a simpler and short paths array is present as well. The shorter paths refer to the same parents and ancestors, but simply with shorter identifiers.

An asset can have multiple paths because it can occur in more than one location in an asset tree.

Paths and long paths can be used interchangeable in the API. Within the same request using paths, all provided paths need to either be long paths or short paths.

Apart from the **ASSET** and **ATTRIBUTE** type, a special type called **ASSET_ROOT** is available. For every asset tree, one asset of this type is generated. It has the same name as the source in which it is defined, and is the highest ancestor of every asset in the tree.

Chapter 3. Access rules

To restrict access to certain assets, access rules can be assigned to assets and attributes. For simplicity, both assets and attributes will be called assets.

There are three different permissions defined:

ASSET_BROWSE	user can see the asset, but can't read its context items
ASSET_READ_CONTEXT_ITEM	user can see the asset and read its context items
ASSET_NO_PERMISSIONS	user explicitly has no access to the asset

For clarity, the prefix **ASSET_** will be omitted in the remainder of this documentation, unless needed or specified otherwise.

The above permissions can be granted to subjects, the subject types:

GUEST	unauthenticated users
EVERYONE	all authenticated users
GROUP	all users in a given group
USER	a given user

In the current release, the subject types **GUEST** and **GROUP** cannot be used yet.

When defining an access rule on an asset, a combination of a subject and a set of permissions needs to be provided. When using the **USER** subject type, additionally a user id needs to be provided.

3.1. Subject type priorities

Access rules are prioritized by subject type, meaning an access rule on **USER** has precedence over an access rule defined on **EVERYONE** (and so on when the other subject types will be implemented).

Example 1. Access rules priorities

The following access rules exist:

- permissions **BROWSE**, **READ_CONTEXT_ITEM** on asset Pump A for subject type **EVERYONE**,
- permissions **BROWSE** on asset Pump A for subject type **USER** for user Bob.

This will result in Bob having the permission **BROWSE** for that asset, while other users also have the **READ_CONTEXT_ITEM** permission.

3.2. Inheritance of permissions

When no permissions that apply to the user are defined on an asset, there are still asset permissions that can come from child or parent assets in the tree.

Firstly, all its ancestors will be checked to see if any of them have permissions that apply to the user. If there are, the asset will have the same permissions (e.g. if the parent has READ permissions, the asset will also have READ permissions). This is what is referred to as "inheritance".

If no inherited permissions are found, then its children are checked. If any of its children have permissions, then the asset will automatically get the BROWSE permission. This is done so a user can always navigate to any asset it has permissions on. This is what is referred to as "pull-up permissions".

Finally, when there are no pull-up permissions, the current user does not have access to the requested asset.

NOTE | Users with administrator rights will always have all possible permissions available.

3.3. No Permission

Due to the inheritance of the permissions, an additional permission type has been foreseen to stop propagation of permissions and to explicitly deny access to an asset. When an access rule is defined with the **NO_PERMISSION** permission, the user explicitly is revoked access.

Example 2. Stopped permission propagation

Observe the below defined asset tree and the access rules on them.

Asset tree

- Plant
 - Reactor 1
 - Pump A
 - Reactor 2
 - Pump B

Access rules

- **BROWSE** and **READ_CONTEXT_ITEM** on Plant
- **NO_PERMISSION** on Reactor 2

The user will have **BROWSE** and **READ_CONTEXT_ITEM** on the asset Plant. Due to inheritance, Reactor 1 and Pump A will receive those same permissions. Reactor 2 has an explicitly defined **NO_PERMISSION**, causing the inheritance to stop there. As a result, the user will have access to neither Reactor 2 and Pump B.

Chapter 4. Resources

4.1. Asset

4.1.1. Browse Asset tree on path

GET /asset/browse

Parameters

Type	Name	Description	Schema
Query <i>optional</i>	parentPath	the ltree path to the asset's parent.	
Query <i>optional</i>	useTimeSeriesIdentifier	Indicates if the Asset data reference should be resolved to a TimeSeriesIdentifier UUID or not.	
Query <i>optional</i>	resolveTimeSeriesData	Indicates if the timeseries data should be resolved for attributes of type DATAREFERENCE. Default is true	
Query <i>optional</i>	page	Zero-based page index (0..N)	
Query <i>optional</i>	size	The size of the page to be returned	
Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc	desc). Default sort order is ascending. Multiple sort criteria are supported.

Responses

HTTP Code	Description	Schema
200	OK	PagedModelAsset

Produces

- application/json
- application/hal+json

4.1.2. Get an asset by its identifier.

GET /asset/{identifier}

Parameters

Type	Name	Description	Schema
Path required	identifier	The identifier of the asset.	String
Query <i>optional</i>	useTimeSeriesIdentifier	Indicates if the Asset data reference should be resolved to a TimeSeriesIdentifier UUID or not.	
Query <i>optional</i>	resolveTimeSeriesData	Indicates if the timeseries data should be resolved for attributes of type DATAREFERENCE. Default is true	

Responses

HTTP Code	Description	Schema
200	OK	Asset

Produces

- application/json
- application/hal+json

4.1.3. Get an asset's attributes using the asset's identifier.

GET /asset/{identifier}/attribute

Parameters

Type	Name	Description	Schema
Path required	identifier	The identifier of the asset for which the attributes are searched.	String

Query <i>optional</i>	query	You can search on all the exposed properties of a node Available search operators: equal(&#x3D;&#x3D;), not equal(!&#x3D;), in(&#x3D;in&#x3D;), not in(&#x3D;out&#x3D;) Available logical operator; AND(;), OR(,) Wildcards &#8277 are supported Examples: search by name equal to node and description not equal to old: name&#x3D;&#x3D;&#39;node&#39;;description!&#x3D;&#39;old&#39; search by name like node or description equal to something name&#x3D;&#x3D;&#39;&#8277node&#8277&#39;;description&#x3D;&#x3D;&#39;s omething&#39;search by name equal to &#39;node&#39; and node is child of provided parent path &#39;A.B.C.D&#39; : name&#x3D;&#x3D;&#39;node&#39;;paths&#x3D;c&#x3D;&#39;A.B.C.D&#39; search by name like &#39;node&#39; and node is descendant of provided ancestor path &#39;A.B&#39; : name&#x3D;&#x3D;&#39;node&#39;;paths&#x3D;d&#x3D;&#39;A.B&#39;	
Query <i>optional</i>	useTimeSeriesIdentifier	Indicates if the Asset data reference should be resolved to a TimeSeriesIdentifier UUID or not.	
Query <i>optional</i>	resolveTimeSeriesData	Indicates if the timeseries data should be resolved for attributes of type DATAREFERENCE. Default is true	
Query <i>optional</i>	page	Zero-based page index (0..N)	
Query <i>optional</i>	size	The size of the page to be returned	

Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc desc). Default sort order is ascending. Multiple sort criteria are supported.
---------------------------------	-------------	---

Responses

HTTP Code	Description	Schema
200	OK	PagedModelAsset

Produces

- application/json
- application/hal+json

4.1.4. Get an asset by its path. Optionally include its ancestors.

GET /asset

Parameters

Type	Name	Description	Schema
Query <i>optional</i>	path	the ltree path to the asset.	
Query <i>optional</i>	includeAncestors	Flag whether to include ancestors or not.	
Query <i>optional</i>	useTimeSeriesIdentifier	Indicates if the Asset data reference should be resolved to a TimeSeriesIdentifier UUID or not.	
Query <i>optional</i>	resolveTimeSeriesData	Indicates if the timeseries data should be resolved for attributes of type DATAREFERENCE. Default is true	
Query <i>optional</i>	page	Zero-based page index (0..N)	
Query <i>optional</i>	size	The size of the page to be returned	

Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc desc). Default sort order is ascending. Multiple sort criteria are supported.
---------------------------------	-------------	---

Responses

HTTP Code	Description	Schema
200	OK	PagedModelAsset

Produces

- application/json
- application/hal+json

4.1.5. Get assets by paths

POST /asset

Parameters

Type	Name	Description	Schema
Query <i>optional</i>	useTimeSeriesIdentifier	Indicates if the Asset data reference should be resolved to a TimeSeriesIdentifier UUID or not.	
Query <i>optional</i>	resolveTimeSeriesData	Indicates if the timeseries data should be resolved for attributes of type DATAREFERENCE. Default is true	
Query <i>optional</i>	includeDeleted	Indicator whether to include the deleted assets or not. Default is false	
Body <i>required</i>	PathListModel	List of paths.	PathListModel

Responses

HTTP Code	Description	Schema
200	OK	List[Asset]

Produces

- application/json

4.1.6. Get relatives for assets by their path

POST /asset/relatives

Parameters

Type	Name	Description	Schema
Query <i>optional</i>	limit	Limit the response size, default is 10001.	
Query <i>optional</i>	useTimeSeriesIdentifier	Indicates if the Asset data reference should be resolved to a TimeSeriesIdentifier UUID or not.	
Query <i>optional</i>	resolveTimeSeriesData	Indicates if the timeseries data should be resolved for attributes of type DATAREFERENCE. Default is true	
Body <i>required</i>	RelativesByPathModel	List of relatives	RelativesByPathModel

Responses

HTTP Code	Description	Schema
200	OK	List[[UUID]]

Produces

- application/json
- application/hal+json

4.1.7. Get the timeseries data linked to an attribute, identified by its identifier.

GET /asset/{identifier}/timeseriesdata

Parameters

Type	Name	Description	Schema
Path required	identifier	The identifier of the attribute.	String
Query <i>optional</i>	useTimeSeriesIdentifier	Indicates if the Asset data reference should be resolved to a TimeSeriesIdentifier UUID or not.	

Responses

HTTP Code	Description	Schema
200	OK	AssetTimeSeriesData

Produces

- application/json
- application/hal+json

4.1.8. Search assets matching the specified query.

GET /asset/search

Parameters

Type	Name	Description	Schema
------	------	-------------	--------

Query <i>required</i>	query	You can search on all the exposed properties of a node Available search operators: equal(&#x3D;&#x3D;), not equal(!&#x3D;), in(&#x3D;in&#x3D;), not in(&#x3D;out&#x3D;) Available logical operator; AND(;), OR(,) If you want to use \\ literally, then double it as \\\\ Wildcards &#8727 are supported Examples: search by name equal to node and description not equal to old: name&#x3D;&#x3D;&#39;node&#39;;description!&#x3D;&#39;old&#39; search by name like node or description equal to something name&#x3D;&#x3D;&#39;&#8727node&#8727&#39;,d escription&#x3D;&#x3D;&#39;s omething&#39;search by name equal to &#39;node&#39; and node is child of provided parent path &#39;A.B.C.D&#39; : name&#x3D;&#x3D;&#39;node&#39;;paths&#x3D;c&#x3D;&#39;A.B.C.D&#39; search by name like &#39;node&#39; and node is descendant of provided ancestor path &#39;A.B&#39; : name&#x3D;&#x3D;&#39;node&#39;;paths&#x3D;d&#x3D;&#39;A.B&#39;	
Query <i>optional</i>	useTimeSeriesIdentifier	Indicates if the Asset data reference should be resolved to a TimeSeriesIdentifier UUID or not.	
Query <i>optional</i>	unnest	Unnest asset with multiple paths or not.	
Query <i>optional</i>	includeDeleted		
Query <i>optional</i>	resolveTimeSeriesData	Indicates if the timeseries data should be resolved for attributes of type DATAREFERENCE. Default is true	

Query <i>optional</i>	page	Zero-based page index (0..N)	
Query <i>optional</i>	size	The size of the page to be returned	
Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc	desc). Default sort order is ascending. Multiple sort criteria are supported.

Responses

HTTP Code	Description	Schema
200	OK	PagedModelAsset

Produces

- application/json
- application/hal+json

4.1.9. Search assets matching the specified query.

POST /asset/search

Parameters

Type	Name	Description	Schema
Body <i>required</i>	NodeSearchParametersModel	Search assets matching the specified query.	NodeSearchParametersModel

Responses

HTTP Code	Description	Schema
200	OK	PagedModelAsset

Produces

- application/json
- application/hal+json

4.2. AssetAccessRules

4.2.1. Returns true if there are any other permissions then the default permissions.

GET /asset/accessrule

Parameters

Type	Name	Description	Schema
------	------	-------------	--------

Responses

HTTP Code	Description	Schema
200	OK	AccessPermissionsModifiedRepresentationModel
401	Unauthorized	AccessPermissionsModifiedRepresentationModel

Produces

- application/json
- application/hal+json

4.2.2. Create an access rule for the specified asset.

POST /asset/{path}/accessrule

Parameters

Type	Name	Description	Schema
Path required	path	The path of the asset.	String
Body required	AssetAccessRuleModel	The access rule model.	AssetAccessRuleModel

Responses

HTTP Code	Description	Schema
200	OK	AccessRule
404	The resource was not found	AccessRule
400	Validation failed	AccessRule
401	Unauthorized	AccessRule

Produces

- application/json
- application/hal+json

4.2.3. Delete the specified access rule for the specified asset.

DELETE /asset/{path}/accessrule/{accessRuleId}

Parameters

Type	Name	Description	Schema
Path required	path	The identifier of the asset.	String
Path required	accessRuleId	The identifier of the access rule.	String

Responses

HTTP Code	Description	Schema
204	Deleted	
404	The resource was not found	
401	Unauthorized	

4.2.4. Get the specified access rule for the specified asset.

GET /asset/{path}/accessrule/{accessRuleId}

Parameters

Type	Name	Description	Schema
Path required	path	The identifier of the asset.	String
Path required	accessRuleId	The identifier of the access rule.	String

Responses

HTTP Code	Description	Schema
200	OK	AccessRule
404	The resource was not found	AccessRule
401	Unauthorized	AccessRule

Produces

- application/json
- application/hal+json

4.2.5. Returns ids of access rules collection which were deleted after the given deletedAfter timestamp

GET /asset/accessrule/deleted

Parameters

Type	Name	Description	Schema
Query <i>required</i>	deletedAfter	Timestamp to filter rules deleted after	
Query <i>optional</i>	lastCheckedId	UUID of last synchronized rule to be used as tiebreaker when modified timestamps match	
Query <i>optional</i>	size	number of records returned in 1 page	

Responses

HTTP Code	Description	Schema
200	OK	PagedModelDeletedAccessRule
401	Unauthorized	PagedModelDeletedAccessRule

Produces

- application/json

4.2.6. Returns access rules collection which were modified after input

GET /asset/accessrule/modified

Parameters

Type	Name	Description	Schema
Query <i>required</i>	modifiedAfter	Timestamp to filter rules modified after the given modifiedAfter timestamp	
Query <i>optional</i>	lastCheckedId	UUID of last synchronized rule to be used as tiebreaker when modified timestamps match	
Query <i>optional</i>	size	number of records returned in 1 page	

Responses

HTTP Code	Description	Schema
200	OK	PagedModelAccessRule
401	Unauthorized	PagedModelAccessRule

Produces

- application/json

4.2.7. Get the access rule for the specified asset selected by path.

GET /asset/{path}/accessrule

Parameters

Type	Name	Description	Schema
Path required	path	The path of the asset.	String

Responses

HTTP Code	Description	Schema
200	OK	List[AccessRule]
404	The resource was not found	List[AccessRule]
401	Unauthorized	List[AccessRule]

Produces

- application/json
- application/hal+json

4.2.8. Get all inherited access rule for the specified asset.

GET /asset/{path}/accessrule/inherited

Parameters

Type	Name	Description	Schema
Path required	path	The identifier of the asset.	String

Responses

HTTP Code	Description	Schema
200	OK	List[AccessRule]
404	The resource was not found	List[AccessRule]
401	Unauthorized	List[AccessRule]

Produces

- application/json
- application/hal+json

4.2.9. Update the specified access rule for the specified asset.

PUT /asset/{path}/accessrule/{accessRuleId}

Parameters

Type	Name	Description	Schema
Path required	path	The identifier of the asset.	String
Path required	accessRuleId	The identifier of the access rule.	String
Body required	AssetAccessRuleModel	The access rule model.	AssetAccessRuleModel

Responses

HTTP Code	Description	Schema
200	OK	AccessRule
404	The resource was not found	AccessRule
400	Validation failed	AccessRule
401	Unauthorized	AccessRule

Produces

- application/json
- application/hal+json

4.3. AssetConverter

4.3.1. Converts a named path to the node identifier.

POST /asset/convert/named-path

Parameters

Type	Name	Description	Schema
Body required	NamedPathListModel	Named path list model	NamedPathListModel

Responses

HTTP Code	Description	Schema
200	OK	MappingsV2

Produces

- application/json
- application/hal+json

4.3.2. Converts a node identifier to the named path.

POST /asset/convert/identifier

Parameters

Type	Name	Description	Schema
Body <i>required</i>	IdListModel	Id list model.	IdListModel

Responses

HTTP Code	Description	Schema
200	OK	MappingsV2

Produces

- application/json
- application/hal+json

4.4. AssetPermissions

4.4.1. Get the granted permissions for the specified assets for the current user.

POST /permissions

Parameters

Type	Name	Description	Schema
Body <i>required</i>	IdListModel	The list of asset identifiers.	IdListModel

Responses

HTTP Code	Description	Schema
200	The resource was found with the provided permissions	GrantedPermissions
404	The resource was not found	GrantedPermissions

Produces

- application/json
- application/hal+json

4.4.2. Get the granted permissions for the specified nodes for the current user.

POST /node/permission

Parameters

Type	Name	Description	Schema
Body <i>required</i>	IdListModel	The list of node identifiers.	IdListModel

Responses

HTTP Code	Description	Schema
200	The resource was found with the provided permissions	GrantedPermissionMap
404	The resource was not found	GrantedPermissionMap

Produces

- application/json
- application/hal+json

4.4.3. Get the granted permissions for the specified structures for the current user.

POST /structure/permission

Parameters

Type	Name	Description	Schema
Body <i>required</i>	IdListModel	The list of structure identifiers.	IdListModel

Responses

HTTP Code	Description	Schema
200	The resource was found with the provided permissions	GrantedPermissionMap
404	The resource was not found	GrantedPermissionMap

Produces

- application/json
- application/hal+json

4.5. AssetTreeBuilder

4.5.1. Create new node.

POST /builder/{sourceIdentifier}/node

Parameters

Type	Name	Description	Schema
Path <i>required</i>	sourceIdentifier	The source identifier.	String
Query <i>optional</i>	force	Forces creation if node with same path and name exists	
Body <i>required</i>	NodeBuilderModel		NodeBuilderModel

Responses

HTTP Code	Description	Schema
200	OK	NodeBuilderRepresentationModel

Produces

- application/json
- application/hal+json

4.5.2. Create new source.

POST /builder

Parameters

Type	Name	Description	Schema
Body <i>required</i>	SourceBuilderModel		SourceBuilderModel

Responses

HTTP Code	Description	Schema
-----------	-------------	--------

200	OK	Source
-----	----	--------

Produces

- application/json
- application/hal+json

4.5.3. Delete node.

DELETE /builder/{sourceIdentifier}/node/{identifier}

Parameters

Type	Name	Description	Schema
Path required	sourceIdentifier	The source identifier.	String
Path required	identifier	The node identifier.	String
Query <i>optional</i>	recursive	Delete children as well.	

Responses

HTTP Code	Description	Schema
200	OK	

4.5.4. Update node.

PUT /builder/{sourceIdentifier}/node/{identifier}

Parameters

Type	Name	Description	Schema
Path required	sourceIdentifier	The source identifier.	String
Path required	identifier	The node identifier.	String
Body <i>required</i>	NodeBuilderModel		NodeBuilderModel

Responses

HTTP Code	Description	Schema
200	OK	NodeBuilderRepresentationModel

Produces

- application/json

- application/hal+json

4.6. Assets

4.6.1. Browse structures based on their path in the asset tree.

GET /assets/structure/browse/{path}

Parameters

Type	Name	Description	Schema
Path required	path	the ltree path to the node.	String
Query <i>optional</i>	useTimeSeriesIdentifier		
Query <i>optional</i>	includeAncestors	Flag wether to include ancestors or not.	
Query <i>optional</i>	page	Zero-based page index (0..N)	
Query <i>optional</i>	size	The size of the page to be returned	
Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc	desc). Default sort order is ascending. Multiple sort criteria are supported.

Responses

HTTP Code	Description	Schema
200	OK	PagedModelStructure

Produces

- application/json
- application/hal+json

4.6.2. Converts a named path to the node identifier.

POST /assets/convert/named-path

Parameters

Type	Name	Description	Schema
Body <i>required</i>	NamedPathListModel	Named path list model	NamedPathListModel

Responses

HTTP Code	Description	Schema
200	OK	Mappings

Produces

- application/json
- application/hal+json

4.6.3. Converts a node identifier to the named path.

POST /assets/convert/identifier

Parameters

Type	Name	Description	Schema
Body <i>required</i>	IdListModel	Id list model.	IdListModel

Responses

HTTP Code	Description	Schema
200	OK	Mappings

Produces

- application/json
- application/hal+json

4.6.4. Exports the current nodes by their structures.

GET /assets/export

Parameters

Type	Name	Description	Schema
------	------	-------------	--------

Responses

HTTP Code	Description	Schema
200	OK	

4.6.5. Checks whether or not the current assets structure can be exported.

GET /assets/exportable

Parameters

Type	Name	Description	Schema
------	------	-------------	--------

Responses

HTTP Code	Description	Schema
200	OK	Boolean

Produces

- application/json
- application/hal+json

4.6.6. Gets the node denoted by its external id.

GET /assets/node/external/{externalId}

Parameters

Type	Name	Description	Schema
Path required	externalId		String
Query <i>optional</i>	useTimeSeriesIdentifier		

Responses

HTTP Code	Description	Schema
200	OK	Node

Produces

- application/json
- application/hal+json

4.6.7. Gets the node denoted by its UUID.

GET /assets/node/{id}

Parameters

Type	Name	Description	Schema
Path required	id		UUID
Query <i>optional</i>	useTimeSeriesIdentifier		

Responses

HTTP Code	Description	Schema
200	OK	Node

Produces

- application/json
- application/hal+json

4.6.8. Gets the structure denoted by its UUID.

GET /assets/{id}

Parameters

Type	Name	Description	Schema
Path required	id		UUID
Query <i>optional</i>	useTimeSeriesIdentifier		

Responses

HTTP Code	Description	Schema
200	OK	Structure

Produces

- application/json
- application/hal+json

4.6.9. Lists the structures that have a parent defined by parentId. If parentId is omitted, all root structures are returned.

GET /assets/browse

Parameters

Type	Name	Description	Schema
Query <i>optional</i>	parentId		
Query <i>optional</i>	useTimeSeriesIdentifier		
Query <i>optional</i>	page	Zero-based page index (0..N)	
Query <i>optional</i>	size	The size of the page to be returned	
Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc	desc). Default sort order is ascending. Multiple sort criteria are supported.

Responses

HTTP Code	Description	Schema
200	OK	PagedModelStructure

Produces

- application/json
- application/hal+json

4.6.10. Retrieve the specified list of nodes.

POST /assets/nodes

Parameters

Type	Name	Description	Schema
Query <i>optional</i>	useTimeSeriesIdentifier		

Body <i>required</i>	IdListModel	List of identifiers.	IdListModel
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Responses

HTTP Code	Description	Schema
200	OK	List[Node]

Produces

- application/json
- application/hal+json

4.6.11. Retrieve the specified list structures.

POST /assets/structures

Parameters

Type	Name	Description	Schema
Query <i>optional</i>	useTimeSeriesIdentifier		
Body <i>required</i>	PathListModel	List of paths.	PathListModel

Responses

HTTP Code	Description	Schema
200	OK	List[Structure]

Produces

- application/json
- application/hal+json

4.6.12. Checks whether or not a new assets structure can be imported.

GET /assets/importable

Parameters

Type	Name	Description	Schema
------	------	-------------	--------

Responses

HTTP Code	Description	Schema
200	OK	Boolean

Produces

- application/json
- application/hal+json

4.6.13. Search for all child attributes for a specified node that match the optional query pattern.

GET /assets/node/{id}/attributes

Parameters

Type	Name	Description	Schema
Path required	id		UUID
Query <i>optional</i>	query	You can search on all the exposed properties of a node Available search operators: equal(==), not equal(!=), in(=in=), not in(=out=) Available logical operator; AND(;), OR(,) Wildcards ∗ are supported Examples: search by name equal to node and description not equal to old: name=='node';description!='old' search by name like node or description equal to something name=='∗node∗',description=='s something'	
Query <i>optional</i>	useTimeSeriesIdentifier		
Query <i>optional</i>	parent	the uuid of the parent structure.	
Query <i>optional</i>	page	Zero-based page index (0..N)	

Query <i>optional</i>	size	The size of the page to be returned	
Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc	desc). Default sort order is ascending. Multiple sort criteria are supported.

Responses

HTTP Code	Description	Schema
200	OK	PagedModelNode

Produces

- application/json
- application/hal+json

4.6.14. Search for all structures that match the query pattern.

GET /assets/search

Parameters

Type	Name	Description	Schema
Query <i>required</i>	query	You can search on all the exposed properties of a node Available search operators: equal(==), not equal(!=), in(=in=), not in(=out=) Available logical operator; AND(;), OR(,) If you want to use \\ literally, then double it as \\\\ Wildcards ∗ are supported Examples: search by name equal to node and description not equal to old: name=='node';description!='old' search by name like node or description equal to something name=='∗node∗';description=='s something'	

Query <i>optional</i>	useTimeSeriesIdentifier		
Query <i>optional</i>	parent	the uuid of the parent structure.	
Query <i>optional</i>	page	Zero-based page index (0..N)	
Query <i>optional</i>	size	The size of the page to be returned	
Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc	desc). Default sort order is ascending. Multiple sort criteria are supported.

Responses

HTTP Code	Description	Schema
200	OK	PagedModelStructure

Produces

- application/json
- application/hal+json

4.6.15. Search structures matching the specified query.

POST /assets/search

Parameters

Type	Name	Description	Schema
Body <i>required</i>	SearchParametersV1Model	The search parameters.	SearchParametersV1Model

Responses

HTTP Code	Description	Schema
200	OK	PagedModelStructure

Produces

- application/json
- application/hal+json

4.7. AssetsAccessRulesV1Deprecated

4.7.1. Create an access rule for the specified structure.

POST /assets/{structureId}/accessrule

Parameters

Type	Name	Description	Schema
Path required	structureId	The identifier of the asset's structure.	String
Body required	AssetAccessRuleModel	The access rule model.	AssetAccessRuleModel

Responses

HTTP Code	Description	Schema
200	OK	AccessRule
404	The resource was not found	AccessRule
400	Validation failed	AccessRule
401	Unauthorized	AccessRule

Produces

- application/json
- application/hal+json

4.7.2. Delete the specified access rule for the specified structure.

DELETE /assets/{structureId}/accessrule/{accessRuleId}

Parameters

Type	Name	Description	Schema
Path required	structureId	The identifier of the asset's structure.	String
Path required	accessRuleId	The identifier of the access rule.	String

Responses

HTTP Code	Description	Schema
204	Deleted	
404	The resource was not found	
401	Unauthorized	

4.7.3. Get the specified access rule for the specified structure.

GET /assets/{structureId}/accessrule/{accessRuleId}

Parameters

Type	Name	Description	Schema
Path required	structureId	The identifier of the asset's structure.	String
Path required	accessRuleId	The identifier of the access rule.	String

Responses

HTTP Code	Description	Schema
200	OK	AccessRule
404	The resource was not found	AccessRule
401	Unauthorized	AccessRule

Produces

- application/json
- application/hal+json

4.7.4. Get the access rule for the specified structure.

GET /assets/{structureId}/accessrule

Parameters

Type	Name	Description	Schema
Path required	structureId	The identifier of the asset's structure.	String

Responses

HTTP Code	Description	Schema
200	OK	List[AccessRule]
404	The resource was not found	List[AccessRule]

401	Unauthorized	List[AccessRule]
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Produces

- application/json
- application/hal+json

4.7.5. Get all inherited access rule for the specified structure.

GET /assets/{structureId}/accessrule/inherited

Parameters

Type	Name	Description	Schema
Path required	structureId	The identifier of the asset's structure.	String

Responses

HTTP Code	Description	Schema
200	OK	List[AccessRule]
404	The resource was not found	List[AccessRule]
401	Unauthorized	List[AccessRule]

Produces

- application/json
- application/hal+json

4.7.6. Update the specified access rule for the specified structure.

PUT /assets/{structureId}/accessrule/{accessRuleId}

Parameters

Type	Name	Description	Schema
Path required	structureId	The identifier of the asset's structure.	String
Path required	accessRuleId	The identifier of the access rule.	String
Body required	AssetAccessRuleModel	The access rule model.	AssetAccessRuleModel

Responses

HTTP Code	Description	Schema
-----------	-------------	--------

200	OK	AccessRule
404	The resource was not found	AccessRule
400	Validation failed	AccessRule
401	Unauthorized	AccessRule

Produces

- application/json
- application/hal+json

4.8. GrantedAssetPermissions

4.8.1. Get all assets for which any permissions is set for the a subject.

GET /asset/granted-assets

Parameters

Type	Name	Description	Schema
Query <i>required</i>	subjectType	Subject type	
Query <i>optional</i>	subjectIdentifier	Subject identifier	

Responses

HTTP Code	Description	Schema
404	The requested subject does not exist.	GrantedAssetPermissionsRepresentationModel
204	No specific permissions for this user exist.	GrantedAssetPermissionsRepresentationModel
200	Specific permissions for this user exist.	GrantedAssetPermissionsRepresentationModel
401	Unauthorized	GrantedAssetPermissionsRepresentationModel

Produces

- application/json
- application/hal+json

4.8.2. Get all subject type/identifier pairs.

GET /asset/granted-assets/subjects

Parameters

Type	Name	Description	Schema
------	------	-------------	--------

Responses

HTTP Code	Description	Schema
200	All subject type/identifier pairs.	CollectionModelGrantedAssetPermissionsIdRepresentationModel
401	Unauthorized	CollectionModelGrantedAssetPermissionsIdRepresentationModel

Produces

- application/json
- application/hal+json

4.9. PublicDownloadGenerator

4.9.1. Generate

POST /download/generate

Parameters

Type	Name	Description	Schema
Body <i>required</i>	LinkModel	The model containing the requested link	LinkModel

Responses

HTTP Code	Description	Schema
200	Ok	DataModel

Produces

- application/json

4.10. Source

4.10.1. Create new source.

POST /source

Parameters

Type	Name	Description	Schema
Query <i>required</i>	name	The name of the source.	
Query <i>required</i>	published	Indicator whether the source is published or not.	

Responses

HTTP Code	Description	Schema
200	OK	Source

Produces

- application/json
- application/hal+json

4.10.2. Delete existing source.

DELETE /source/{identifier}

Parameters

Type	Name	Description	Schema
Path <i>required</i>	identifier	The identifier of the source.	String

Responses

HTTP Code	Description	Schema
200	OK	

4.10.3. Download error CSV file.

GET /source/{identifier}/history/{syncJobIdentifier}/error

Parameters

Type	Name	Description	Schema
------	------	-------------	--------

Path required	identifier	The identifier of the source.	String
Path required	syncJobIdentifier	The identifier of the sync job.	String

Responses

HTTP Code	Description	Schema
200	OK	

4.10.4. Download original CSV file.

GET /source/{identifier}/history/{syncJobIdentifier}/original

Parameters

Type	Name	Description	Schema
Path required	identifier	The identifier of the source.	String
Path required	syncJobIdentifier	The identifier of the sync job.	String

Responses

HTTP Code	Description	Schema
200	OK	

4.10.5. Download current version for CSV source.

GET /source/{identifier}/export

Parameters

Type	Name	Description	Schema
Path required	identifier	The identifier of the source.	String
Query <i>optional</i>	includeDeleted	Indicator whether to include the deleted assets or not.	

Responses

HTTP Code	Description	Schema
200	OK	

4.10.6. List all sources.

GET /source

Parameters

Type	Name	Description	Schema
------	------	-------------	--------

Query <i>optional</i>	query	Optional RSQL search filter.	
Query <i>optional</i>	page	Zero-based page index (0..N)	
Query <i>optional</i>	size	The size of the page to be returned	
Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc desc). Default sort order is ascending. Multiple sort criteria are supported.	

Responses

HTTP Code	Description	Schema
200	OK	PagedModelSource

Produces

- application/json
- application/hal+json

4.10.7. Get specific source by its identifier.

GET /source/{identifier}

Parameters

Type	Name	Description	Schema
Path required	identifier	The identifier of the source.	String

Responses

HTTP Code	Description	Schema
200	OK	Source

Produces

- application/json
- application/hal+json

4.10.8. List all imports for an existing source.

GET /source/{identifier}/history

Parameters

Type	Name	Description	Schema
Path <i>required</i>	identifier	The identifier of the source.	String
Query <i>optional</i>	page	Zero-based page index (0..N)	
Query <i>optional</i>	size	The size of the page to be returned	
Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc	desc). Default sort order is ascending. Multiple sort criteria are supported.

Responses

HTTP Code	Description	Schema
200	OK	PagedModelSyncJob

Produces

- application/json
- application/hal+json

4.10.9. List all imports for an existing source.

POST /source/history

Parameters

Type	Name	Description	Schema
Body <i>required</i>	UUID	List of source identifiers.	[UUID]

Responses

HTTP Code	Description	Schema
200	OK	List[SourceSyncJob]

Produces

- application/json
- application/hal+json

4.10.10. Get the sync job details.

GET /source/{identifier}/history/{syncJobIdentifier}

Parameters

Type	Name	Description	Schema
Path required	identifier	The identifier of the source.	String
Path required	syncJobIdentifier	The identifier of the sync job.	String

Responses

HTTP Code	Description	Schema
200	OK	SyncJob

Produces

- application/json
- application/hal+json

4.10.11. Reorder source's root.

POST /source/{identifier}/move

Parameters

Type	Name	Description	Schema
Path required	identifier	The identifier of the source.	String
Body required	SourceReorderingModel	Operation to be applied on the order.	SourceReorderingModel

Responses

HTTP Code	Description	Schema
200	OK	Source

Produces

- application/json
- application/hal+json

4.10.12. Update existing source.

PUT /source/{identifier}

Parameters

Type	Name	Description	Schema
Path <i>required</i>	identifier	The identifier of the source.	String
Query <i>required</i>	name	The name of the source.	
Query <i>required</i>	published	Indicator whether the source is published or not.	

Responses

HTTP Code	Description	Schema
200	OK	Source

Produces

- application/json
- application/hal+json

4.11. Sync

4.11.1. Cancel execution of a specific sync job.

DELETE /sync/{identifier}

Parameters

Type	Name	Description	Schema
Path <i>required</i>	identifier	The sync job's identifier.	String

Responses

HTTP Code	Description	Schema
200	OK	SyncJob

Produces

- application/json
- application/hal+json

4.11.2. Get sync history for a specific datasource.

GET /sync

Parameters

Type	Name	Description	Schema
Query <i>required</i>	datasourceId	The datasource identifier.	
Query <i>optional</i>	page	Zero-based page index (0..N)	
Query <i>optional</i>	size	The size of the page to be returned	
Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc	desc). Default sort order is ascending. Multiple sort criteria are supported.

Responses

HTTP Code	Description	Schema
200	OK	PagedModelSyncJob

Produces

- application/json
- application/hal+json

4.11.3. Get status for a specific sync job.

GET /sync/{identifier}

Parameters

Type	Name	Description	Schema
Path <i>required</i>	identifier	The sync job's identifier.	String

Responses

HTTP Code	Description	Schema
200	OK	SyncJob

Produces

- application/json
- application/hal+json

4.11.4. Get status for the latest sync job per datasource in bulk.

POST /sync/status

Parameters

Type	Name	Description	Schema
Body <i>required</i>	UUID	List of datasource identifiers.	[UUID]

Responses

HTTP Code	Description	Schema
200	OK	List[SourceSyncJob]

Produces

- application/json
- application/hal+json

4.11.5. Sync a specific datasource.

POST /sync

Parameters

Type	Name	Description	Schema
Query <i>required</i>	datasourceId	The datasource identifier.	

Responses

HTTP Code	Description	Schema
200	OK	String

Produces

- application/json
- application/hal+json

4.11.6. Search for sync histories.

GET /sync/search

Parameters

Type	Name	Description	Schema
Query <i>required</i>	query	You can search on all the exposed properties of a sync job Available search operators: equal(==), not equal(!=), in(=in=), not in(=out=) Available logical operator; AND(;), OR(,) If you want to use \\ literally, then double it as \\\\ Wildcards ∗ are supported	
Query <i>optional</i>	page	Zero-based page index (0..N)	
Query <i>optional</i>	size	The size of the page to be returned	
Query <i>optional</i>	sort	Sorting criteria in the format: property,(asc	desc). Default sort order is ascending. Multiple sort criteria are supported.

Responses

HTTP Code	Description	Schema
200	OK	PagedModelSyncJob

Produces

- application/json
- application/hal+json

Chapter 5. Models

5.1. *AccessPermissionsModifiedRepresentationModel*

Field Name	Required	Type	Description	Format
modified		Boolean		

5.2. *AccessRule*

Represents an access rule definition

Field Name	Required	Type	Description	Format
identifier		String	The identifier of the access rule.	
objectId	X	String	The identifier of the object.	
paths	X	List of [string]	An array of paths towards the object.	
subjectId	X	String	The identifier of the subject.	
subjectType	X	String	The type of the subject: USER, GROUP, EVERYBODY, GUEST.	<i>Enum:</i> GUEST, EVERYONE, GROUP, USER,
permissions	X	Set of [string]	A set of permissions the subject has on the specified object. Can be an empty set.	<i>Enum:</i>
userDetailsResource		UserDetails		
structureResource		Structure		
assetResource		Asset		
createdDate		Date	Access rule creation date	date-time
lastModifiedDate		Date	Access rule last modified date	date-time
links		List of Link		

5.3. *Asset*

Represents an asset

Field Name	Required	Type	Description	Format
identifier		UUID	The asset's identifier.	uuid
paths		List of [string]	The paths towards this asset starting from the root.	
longPaths		List of [string]	The old longer paths towards this asset starting from the root.	
parentNames		List of [string]	The names of the parents, in the same order as the paths.	
name		String	The asset's name.	
description		String	The asset's description.	
type		String	The asset's type.	
dataType		String	The asset's data type, if the Asset is an ATTRIBUTE.	
data		String	The asset's data, if the Asset is an ATTRIBUTE. (tagName or UUID)	
timeSeriesDefinition		TimeSeriesDefinitionRepresentation		
deleted		Boolean	Indication whether this asset is deleted or not.	
externalId		String	The asset's identifier in the external system.	
template		String	The asset's template.	
templateId		String	The asset's template identifier.	
source		Source		
permissions		Set of [string]	The asset's permissions.	<i>Enum:</i>
createdDate		Date	The asset's creation date	date-time
lastModifiedDate		Date	The asset's last modified date	date-time
links		List of Link		

5.4. AssetAccessRuleModel

Object used for creating and updating an access rule

Field Name	Required	Type	Description	Format
identifier		String	The identifier of the access rule.	
subjectId	X	String	The identifier of the subject.	

Field Name	Required	Type	Description	Format
subjectType	X	String	The type of the subject.	Enum: GUEST, EVERYONE, GROUP, USER,
permissions	X	Set of string	A set of permissions the subject has on the specified object.	Enum:

5.5. *AssetTimeSeriesData*

Field Name	Required	Type	Description	Format
data		String		
timeseriesDefinition		TimeSeriesDefinitionRepresentation		
links		List of Link		

5.6.

CollectionModelGrantedAssetPermissionsIdRepresentationModel

Field Name	Required	Type	Description	Format
links		List of Link		
content		List of GrantedAssetPermissionsIdRepresentationModel		

5.7. *DataModel*

Field Name	Required	Type	Description	Format
data		String	the signed link data	

5.8. *DeletedAccessRule*

Represents a deleted access rule

Field Name	Required	Type	Description	Format
identifier		UUID	The identifier of the access rule.	uuid
deletedAt		Date	The date of deletion of the access rule.	date-time
links		List of Link		

5.9. *GrantedAssetPermissionsIdRepresentationModel*

Represents a granted asset permission identifier.

Field Name	Required	Type	Description	Format
subjectType		String	The subject's type.	
subjectIdentifier		String	The subject's identifier.	
links		List of Link		

5.10. *GrantedAssetPermissionsRepresentationModel*

Model holding a list of asset identifiers for which the user has any permission.

Field Name	Required	Type	Description	Format
assetIdentifiers		List of [UUID]		uuid
subjectIdentifier		String		
subjectType		String		
links		List of Link		

5.11. *GrantedPermission*

List of granted permissions

Field Name	Required	Type	Description	Format
assetIdentifier		UUID		uuid
sourceIdentifier		UUID		uuid
permissions		Set of [string]		

5.12. *GrantedPermissionMap*

Represents granted permissions for bulk permission resolving

Field Name	Required	Type	Description	Format
permissions		Map of [set]	Map of granted permissions per node/structure id.	

5.13. *GrantedPermissions*

Represents granted permissions for an Asset

Field Name	Required	Type	Description	Format
permissions		List of GrantedPermission	List of granted permissions	

5.14. *IdListModel*

Field Name	Required	Type	Description	Format
uuidList		List of [UUID]	List of asset identifiers.	uuid

5.15. *Link*

Field Name	Required	Type	Description	Format
rel		String		
href		String		
hreflang		String		
media		String		
title		String		
type		String		
deprecation		String		
profile		String		
name		String		

5.16. *LinkModel*

Field Name	Required	Type	Description	Format
link	X	String	The requested link.	
validity		Long	Validity of the requested token, in seconds.	int64

5.17. Mapping

List of mappings.

Field Name	Required	Type	Description	Format
path		String	Path of the asset.	
identifier		String	Identifier of the asset.	

5.18. MappingV2

List of mappings.

Field Name	Required	Type	Description	Format
namedPath		String	Path of the asset.	
identifier		String	Identifier of the asset.	
longPath		String	Path of identifiers to the asset.	
path		String	Path of short identifiers to the asset.	

5.19. Mappings

Field Name	Required	Type	Description	Format
mappings		List of Mapping	List of mappings.	
links		List of Link		

5.20. MappingsV2

Field Name	Required	Type	Description	Format
mappings		List of MappingV2	List of mappings.	
links		List of Link		

5.21. NamedPathListModel

Field Name	Required	Type	Description	Format
namedPathList		List of [string]	List of paths built up using asset names.	

5.22. Node

Field Name	Required	Type	Description	Format
identifier		String	The node's identifier	
sourceId		String	Deprecated notion of source.	
type		String	Node's type.	
externalId		String	Node's external identifier.	
template		String	Node's template name.	
templateId		String	Node's template identifier.	
name		String	Node's name.	
description		String	Node's description.	
dataType		String	Node's data type in case this node is an ATTRIBUTE.	
data		String	Node's data in case this node is an ATTRIBUTE.	
timeSeriesDefinition		TimeSeriesDefinitionRepresentation		
options		String	Node's options.	
deleted		Boolean	Indicates whether this node is deleted.	
permissions		Set of [string]	Node's permission for the requesting user.	<i>Enum:</i>
paths		List of [string]	The paths towards this asset starting from the root.	
longPaths		List of [string]	The old longer paths towards this asset starting from the root.	
links		List of Link		

5.23. NodeBuilderModel

Represents a model to build an asset tree

Field Name	Required	Type	Description	Format
parentPath	X	String	Parent node's short path.	
name	X	String	Node's name.	
description		String	Node's description.	
tag		String	Tag the ATTRIBUTE refers to.	

5.24. *NodeBuilderRepresentationModel*

Represents a node in the asset tree builder

Field Name	Required	Type	Description	Format
identifier		UUID	Node's identifier.	uuid
sourceIdentifier		UUID	Source's identifier.	uuid
parentPath		String	Parent node's path.	
name	X	String	Node's name.	
description	X	String	Node's description.	
tag		String	Tag the ATTRIBUTE refers to.	
links		List of Link		

5.25. *NodeSearchParametersModel*

Represents search parameters

Field Name	Required	Type	Description	Format
query	X	String	value &#x3D; &quot;You can search on all the exposed properties of an asset.\n\n&quot; + &quot;Available search operators:\n&quot; + &quot;equal(&#x3D;&#x3D;), not equal(!&#x3D;), in(&#x3D;in&#x3D;), not in(&#x3D;out&#x3D;)\n&quot; + &quot;\n&quot; + &quot;Available search operators for &#39;paths&#39; property :\n&quot; + &quot;child of (&#x3D;c&#x3D; or &#x3D;child&#x3D;), descendant of (&#x3D;d&#x3D; or &#x3D;descendant&#x3D;)\n&quot; + &quot;\n&quot; + &quot;Available logical operator:\n&quot; + &quot;AND(;), OR(,)\n&quot; + &quot;\n&quot; + &quot;Wildcards &#827 are supported\n\n&quot; + &quot;Examples:\n&quot; + &quot;search by name equal to &#39;node&#39; and description not equal to &#39;old&#39;; name&#x3D;&#x3D;&#39;node&#39;;description!&#x3D;&#39;old&#39;\n\n&quot; + &quot;search by name like &#39;node&#39; or description equal to &#39;something&#39;; name&#x3D;&#x3D;&#39;&#827 node&#827&#39;,description&#x3D;&#x3D;&#39;something&#39;\n\n&quot; + &quot;search by name equal to &#39;node&#39; and node is child of provided parent path &#39;A.B.C.D&#39; : name&#x3D;&#x3D;&#39;node&#39;;paths&#x3D;c&#x3D;&#39;A.B.C.D&#39;\n\n&quot; + &quot;search by name like &#39;node&#39; and node is descendant of provided ancestor path &#39;A.B&#39; : name&#x3D;&#x3D;&#39;node&#39;;paths&#x3D;d&#x3D;&#39;A.B&#39;&quot;	

Field Name	Required	Type	Description	Format
page		Integer		int32
size		Integer		int32
sort		List of [string]		
useTimeSeriesIdentifier		Boolean	Indicates if the Asset data reference should be resolved to a TimeSeriesIdentifier UUID or not. Default is true	
unnest		Boolean	Unnest asset with multiple paths or not.	
includeDeleted		Boolean	Defines, if deleted nodes should be shown.	
resolveTimeSeriesData		Boolean	Indicates if the timeseries data should be resolved for attributes of type DATAREFERENCE. Default is true	

5.26. PageMetadata

Field Name	Required	Type	Description	Format
size		Long		int64
totalElements		Long		int64
totalPages		Long		int64
number		Long		int64

5.27. PagedModelAccessRule

Field Name	Required	Type	Description	Format
links		List of Link		
content		List of AccessRule		
page		PageMetadata		

5.28. PagedModelAsset

Field Name	Required	Type	Description	Format
links		List of Link		
content		List of Asset		
page		PageMetadata		

5.29. *PagedModelDeletedAccessRule*

Field Name	Required	Type	Description	Format
links		List of Link		
content		List of DeletedAccessRule		
page		PageMetadata		

5.30. *PagedModelNode*

Field Name	Required	Type	Description	Format
links		List of Link		
content		List of Node		
page		PageMetadata		

5.31. *PagedModelSource*

Field Name	Required	Type	Description	Format
links		List of Link		
content		List of Source		
page		PageMetadata		

5.32. *PagedModelStructure*

Field Name	Required	Type	Description	Format
links		List of Link		
content		List of Structure		
page		PageMetadata		

5.33. *PagedModelSyncJob*

Field Name	Required	Type	Description	Format
links		List of Link		
content		List of SyncJob		
page		PageMetadata		

5.34. *PathListModel*

Field Name	Required	Type	Description	Format
pathList		List of [string]		

5.35. *RelativesByPathModel*

Field Name	Required	Type	Description	Format
path		String	Path of the asset	
include		String	Type to include	<i>Enum:</i> SELF, ANCESTORS, DESCENDANTS,

5.36. *SearchParametersV1Model*

Represents search parameters for assetsV1

Field Name	Required	Type	Description	Format
query	X	String	value &#x3D; &quot;You can search on all the exposed properties of an asset.\n\n&quot; + &quot;Available search operators:\n&quot; + &quot;equal(&#x3D;&#x3D;), not equal(!&#x3D;), in(&#x3D;in&#x3D;), not in(&#x3D;out&#x3D;)\n&quot; + &quot;\n&quot; + &quot;Available search operators for &#39;paths&#39; property :\n&quot; + &quot;child of (&#x3D;c&#x3D; or &#x3D;child&#x3D;), descendant of (&#x3D;d&#x3D; or &#x3D;descendant&#x3D;)\n&quot; + &quot;\n&quot; + &quot;Available logical operator;\n&quot; + &quot;AND(;), OR(,)\n&quot; + &quot;\n&quot; + &quot;Wildcards &#827 are supported\n\n&quot; + &quot;Examples:\n&quot; + &quot;search by name equal to &#39;node&#39; and description not equal to &#39;old&#39;; name&#x3D;&#x3D;&#39;node&#39;;description!&#x3D;&#39;old&#39;\n\n&quot; + &quot;search by name like &#39;node&#39; or description equal to &#39;something&#39;; name&#x3D;&#x3D;&#39;&#827 node&#827&#39;,description&#x3D;&#x3D;&#39;something&#39;\n\n&quot; + &quot;search by name equal to &#39;node&#39; and node is child of provided parent path &#39;A.B.C.D&#39; : name&#x3D;&#x3D;&#39;node&#39;;paths&#x3D;c&#x3D;&#39;A.B.C.D&#39;\n\n&quot; + &quot;search by name like &#39;node&#39; and node is descendant of provided ancestor path &#39;A.B&#39; : name&#x3D;&#x3D;&#39;node&#39;;paths&#x3D;d&#x3D;&#39;A.B&#39;&quot;	

Field Name	Required	Type	Description	Format
page		Integer		int32
size		Integer		int32
sort		List of [string]		
useTimeSeriesIdentifier		Boolean	Indicates if the Asset data reference should be resolved to a TimeSeriesIdentifier UUID or not. Default is true	
unnest		Boolean	Unnest asset with multiple paths or not.	
includeDeleted		Boolean	Defines, if deleted nodes should be shown.	
resolveTimeSeriesData		Boolean	Indicates if the timeseries data should be resolved for attributes of type DATAREFERENCE. Default is true	
parent		String	the uuid of the parent structure.	

5.37. Source

Represents a source

Field Name	Required	Type	Description	Format
identifier		UUID	The source's identifier.	uuid
name		String	The source's name.	
type		String	The source's type.	<i>Enum:</i> DATASOURCE, CSV,
externalId		String	The source's external identifier.	
ordering		Integer	The source's order in the root asset tree.	int32
published		Boolean	Indicates whether the source is published.	
lastSyncDate		Date	Indicates whether the source is published.	date-time
permissions		Set of [string]	The source's permissions for the requesting user.	<i>Enum:</i>
links		List of Link		

5.38. SourceBuilderModel

Represents a model to create an asset tree

Field Name	Required	Type	Description	Format
name	X	String	The name of the source.	
published		Boolean	Indicator whether the source is published or not.	

5.39. SourceReorderingModel

Field Name	Required	Type	Description	Format
operation		String		Enum: UP, DOWN, TOP, BOTTOM,

5.40. SourceSyncJob

Field Name	Required	Type	Description	Format
source		Source		
syncJob		SyncJob		

5.41. Structure

Structure details for enriched inherited calls.

Field Name	Required	Type	Description	Format
structureIdentifier		String		
sourceId		String		
parentStructureId		String		
nodeIdentifier		String		
type		String		
externalId		String		
template		String		
templateId		String		
name		String		

Field Name	Required	Type	Description	Format
parentName		String		
description		String		
dataType		String		
data		String		
options		String		
deleted		Boolean		
path		String		
permissions		Set of [string]		<i>Enum:</i>
links		List of Link		

5.42. SyncJob

Field Name	Required	Type	Description	Format
identifier		UUID	The sync job's identifier.	uuid
name		String	The sync job's name.	
started		Date	The moment the sync job started.	date-time
ended		Date	The moment the sync job ended.	date-time
status		String	The sync job's status.	<i>Enum:</i> SCHEDULED, RUNNING, DONE, DONE_WITH_ERRORS, CANCELLED, FAILED,
triggeredDate		Date	The moment the sync job was triggered.	date-time
triggeredBy		String	The user the sync job triggered by.	
errorMessage		String	The sync job's error message, if any.	
source		Source		
links		List of Link		

5.43. *TimeSeriesDefinitionRepresentation*

TimeSeries definition to which the data points. Can be empty, even if data is present.

Field Name	Required	Type	Description	Format
datasourceId		UUID		uuid
ownerId		String		
externalId		String		
name		String		
description		String		
type		String		
units		String		
interpolationType		String		
datasourceType		String		
deleted		Boolean		
plotDataUrl		String		
indexDataUrl		String		
links		List of Link		
id		UUID		uuid

5.44. *UserDetails*

Represents a subset of user details

Field Name	Required	Type	Description	Format
userId		String	User's id.	
userName		String	User's username.	
firstName		String	User's first name.	
lastName		String	User's last name.	
admin		Boolean	Indication whether user is an admin or not.	

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