

Leica ConX ONE API

Pagination

On endpoints that support pagination there are two variables in the response called `next` and `previous`.

Repeating the request using the URL will return the next or previous page of results. If no more pages are available they will contain a `null` value.

```
{
  "count": 10,
  "next": "https://conx.leica-geosystems.com/api/one/v1/projects/?page=3",
  "previous": "https://conx.leica-geosystems.com/api/one/v1/projects/?page=1",
  "results": [
    /* ... */
  ]
}
```

Authentication

CURRENT LOGIN

Manage the current login.

GET

/api/one/v1/me/

[Get my Profile](#)

Get information about the currently logged in user or device. This will return a JSON object with the following schema:

- username - user name of the current login
- uuid - ID of the current login
- parent - account to which the current login belongs
 - type - type of account
 - uuid - ID of the account
 - name - name of the account
- parent_unit - parent unit account to which the current login belongs
 - uuid - unit uuid
 - name - unit name
- parent_project - parent project account to which the current login belongs
 - uuid - project uuid
 - name - project name
- parent_company - parent company account to which the current login belongs
 - uuid - company uuid
 - name - company name
 - company_type - company type

Example URI

GET <https://conx.leica-geosystems.com/api/one/v1/me/>

Request

[Show](#)

Response `200`

[Show](#)

DELETE

/api/one/v1/me/

[Delete my Login](#)

Delete the user along with its connection. After calling this the user and with the token will be revoked and access to APIs will be denied.

When *all* connections to a project are removed, **all files** in the project will be untracked and remain as unmanaged files not visible through any API, even if a new connection is established at a later time.

Example URI

DELETE <https://conx.leica-geosystems.com/api/one/v1/me/>

Response `204`

MASTER USER LIST

GET `/api/one/v1/master/users/` **Get Users**

Get a list of users.

Example URI

GET <https://conx.leica-geosystems.com/api/one/v1/master/users/>

Request **Show**

Response `200` **Show**

POST `/api/one/v1/master/users/` **Create New User**

Create a new user.

Example URI

POST <https://conx.leica-geosystems.com/api/one/v1/master/users/>

Request **Show**

Response `201`

GROUP USER LIST

GET `/api/one/v1/{group}/{uuid}/users/` **Get Users**

Get a list of users.

Example URI

GET <https://conx.leica-geosystems.com/api/one/v1/dealers/3d6a0b58695e4436ad5dd2f241d3843c/users/>

URI Parameters **Hide**

group `string` (required) **Example:** dealers

Parent type: `dealers`, `builders`, `workspaces` or `projects`

uuid `string` (required) **Example:** 3d6a0b58695e4436ad5dd2f241d3843c

The parent ID

Request **Show**

Response `200` **Show**

POST `/api/one/v1/{group}/{uuid}/users/` **Create New User**

Create a new user.

Example URI

POST https://conx.leica-geosystems.com/api/one/v1/dealers/3d6a0b58695e4436ad5dd2f241d3843c/users/

URI Parameters

Hide

group

string (required) Example: dealers

Parent type: dealers , builders , workspaces or projects

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c

The parent ID

Request

Show

Response

201

USER

Manage a single user.

GET

/api/one/v1/users/{uuid}/

Get a User

Retrieve a user by its *uuid*.

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/users/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c

The user ID

Request

Show

Response

200

Show

PUT

/api/one/v1/users/{uuid}/

Update a User

Update a single user.

Example URI

PUT https://conx.leica-geosystems.com/api/one/v1/users/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c

The user ID

Request

Show

Response

200

DELETE

/api/one/v1/users/{uuid}/

Delete a User

Delete a single user.

Example URI

DELETE https://conx.leica-geosystems.com/api/one/v1/users/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid `string` (required) **Example:** 3d6a0b58695e4436ad5dd2f241d3843c
The user ID

Request

Show

Response `204`

Integration

INTEGRATING WEB SERVICES

Request authorization to access a Leica ConX project by third-party applications. This authorization should be used when a construction project is managed by Leica ConX as well as a third-party application, and there is a need to synchronize information between both. To be able to use this service, the third-party application must have a *service token* provided by Leica ConX.

POST `/api/one/v1/integration/sessions/`

Create New Session

Create a new application connection session. The third-party application must provide its service token via the *ServiceToken* request header. It must also provide a JSON object with the following components:

- `external_ref` - the ID of the corresponding project in the application
- `project_name` - the name of the corresponding project in the application
- `callback_url` - application end-point to which authorization is granted
- `redirect_url` - application end-point to which the end-user is returned

Given a valid service token and JSON object, the client should receive a JSON object containing the following components:

- `session_id` - the session ID with which to track this connection session
- `url` - Leica ConX URL where the user should authorize the connection

The application should then re-direct the user agent to Leica ConX as specified in `url`.

Granting Authorization

Once in Leica ConX, the user may authorize connection to a project. Specifically, the user should select the corresponding project in Leica ConX against which the connection should be granted.

Note that, to perform these steps in Leica ConX, the user must have an account in Leica ConX and be logged in as well.

If granted, Leica ConX will make a POST request against `callback_url`, provided by the third-party application, with the same service token via the *ServiceToken* request header. A URL encoded web form with the following components will be included:

- `token` - project token
- `session_id` - the session ID with which to track this connection session
- `uuid` - the ID of the corresponding project in Leica ConX
- `project_name` - The name of the corresponding project in Leica ConX

The third-party application should securely store the `token` and use it when synchronizing related project data. To acknowledge the connection, the application should respond with HTTP status 200, otherwise the response body should include a JSON object containing the following component:

- `error` - a text describing the result of the operation

Leica ConX will then re-direct the user agent back to the third-party application as specified in `redirect_url`. A URL encoded web form with the following components will be included:

- `session_id` - the session ID with which to track this connection session
- `result` - a code indicating the result of this connection session
- `status` - HTTP status from the `callback_url` response or from Leica ConX
- `error` - description from the `callback_url` response or from Leica ConX

The result code may be one of the following:

| Result | Description |
|--------|-------------|
|--------|-------------|

| Result | Description |
|--------|--|
| OK | Connection established |
| CANCEL | End-user aborted connection process |
| CBKERR | An error was returned from <code>callback_url</code> |
| SRVERR | An error occurred in Leica ConX |

When `result` is set to `CBKERR`, the `error` and `status` attributes will match the response from `callback_url`. When set to `SRVERR`, the attributes will match the condition reported by Leica ConX to the user agent when re-directing back to the third-party application. Otherwise, `error` and `status` will be empty.

Example URI

POST `https://conx.leica-geosystems.com/api/one/v1/integration/sessions/`

Request Show

Response `200` Show

THIRD-PARTY CONNECTION LIST

Authorize access to a Leica ConX project for a third-party application. The request should be made from the Leica ConX web client by a logged in user. It must provide a JSON object with the following components:

- `project_uuid` - the ID of the Leica ConX project to authorize access to
- `session_id` - the associated connection session ID

Leica ConX will lookup the parameters applicable to the connection session, as identified by `session_id`, and attempt to authorize the connection against the third-party application. For a description of this mechanism, including the response that should be expected from this end-point, refer to [Granting Authorization](#).

When re-directing back to the third-party application, components in the response should be provided by way of a URL encoded web form. Example:

`https://example.com/icon?result=CBKERR&status=500&error=`

POST `/api/one/v1/integration/connections/` Create New Connection

Create a new connections. This will, depending on the [locking approach](#), set restrictions in place for working with the project through the UI

Example URI

POST `https://conx.leica-geosystems.com/api/one/v1/integration/connections/`

Request Show

Response `201` Show

THIRD-PARTY CONNECTION

Revoke a connection to a third-party site.

DELETE `/api/one/v1/integration/connections/{uuid}/` Delete a Connection

Example URI

DELETE `https://conx.leica-geosystems.com/api/one/v1/integration/connections/9944b09199c62bcf9418ad846dd0e4bbdfc6ee4b/`

URI Parameters Hide

uuid `string` (required) **Example:** 9944b09199c62bcf9418ad846dd0e4bbdfc6ee4b
The connection ID

Request[Show](#)**Response** `204`**LEGACY FEATURE RESTRICTIONS**

There are two different approaches to handle restrictions of legacy features when an integration connection is made.

- **Pessimistic:** where a user is not able to rename project, upload files, delete files, or edit files through the UI as soon as an integration connection is made to the project.
- **Optimistic:** where the restrictions is set in affect only **after** a design file is uploaded through the API.

The restrictions are:

- Rename
- Delete
- Upload
- Create new File
- Paste file

Company

Companies can be of three types: master, dealer or construction. A master company is not related *by* another company; a construction company is not related *to* another company.

MASTER COMPANY**GET** `/api/one/v1/master/`

Retrieve Master Company

Retrieve the Leica Geosystems master company.

Example URI**GET** `https://conx.leica-geosystems.com/api/one/v1/master/`**Response** `200`[Show](#)**TOP-DEALER LIST****GET** `/api/one/v1/master/dealers/`

Get Top-Dealers

Get a list of top-dealers.

Example URI**GET** `https://conx.leica-geosystems.com/api/one/v1/master/dealers/`**Response** `200`[Show](#)**POST** `/api/one/v1/master/dealers/`

Create New Top-Dealer

Create a new top-dealer.

Example URI**POST** `https://conx.leica-geosystems.com/api/one/v1/master/dealers/`**Request**[Show](#)

Response 201

DEALER

GET /api/one/v1/dealers/{uuid}/

Get a Dealer

Get a single dealer.

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/dealers/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c
The dealer ID

Response 200

Show

PUT /api/one/v1/dealers/{uuid}/

Update a Dealer

Update a single dealer.

Example URI

PUT https://conx.leica-geosystems.com/api/one/v1/dealers/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c
The dealer ID

Request

Show

Response 200

DELETE /api/one/v1/dealers/{uuid}/

Delete a Dealer

Delete a single dealer.

Example URI

DELETE https://conx.leica-geosystems.com/api/one/v1/dealers/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c
The dealer ID

Response 204

SUB-DEALER LIST

GET /api/one/v1/dealers/{uuid}/dealers/

Get Sub-Dealers

Get a list of sub-dealers.

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/dealers/3d6a0b58695e4436ad5dd2f241d3843c/dealers/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The dealer ID

Response

200

Show

POST

/api/one/v1/dealers/{uuid}/dealers/

Create New Sub-Dealer

Create a new sub-dealer.

Example URI

POST https://conx.leica-geosystems.com/api/one/v1/dealers/3d6a0b58695e4436ad5dd2f241d3843c/dealers/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The dealer ID

Request

Show

Response

201

BUILDER LIST

GET

/api/one/v1/dealers/{uuid}/builders/

Get Builders

Get a list of builders.

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/dealers/3d6a0b58695e4436ad5dd2f241d3843c/builders/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The dealer ID

Response

200

Show

POST

/api/one/v1/dealers/{uuid}/builders/

Create New Builder

Create a new builder.

Example URI

POST https://conx.leica-geosystems.com/api/one/v1/dealers/3d6a0b58695e4436ad5dd2f241d3843c/builders/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The dealer ID

Request

Show

Response

201

BUILDER

GET

/api/one/v1/builders/{uuid}/

Get a Builder

Get a single builder.

Example URI
GET https://conx.leica-geosystems.com/api/one/v1/builders/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The builder ID

Response

200

Show

PUT

/api/one/v1/builders/{uuid}/

Update a Builder

Update a single builder.

Example URI
PUT https://conx.leica-geosystems.com/api/one/v1/builders/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The builder ID

Request

Show

Response

200

DELETE

/api/one/v1/builders/{uuid}/

Delete a Builder

Delete a single builder.

Example URI
DELETE https://conx.leica-geosystems.com/api/one/v1/builders/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The builder ID

Response

204

Project

WORKSPACE PROJECT LIST

GET

/api/one/v1/workspaces/{uuid}/projects/

Get Projects

Get a list of projects.

Example URI
GET https://conx.leica-geosystems.com/api/one/v1/workspaces/3d6a0b58695e4436ad5dd2f241d3843c/projects/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The workspace ID

Request

Show

Response

200

Show

POST

/api/one/v1/workspaces/{uuid}/projects/

Create New Project

Create a new project.

Example URI

POST

https://conx.leica-geosystems.com/api/one/v1/workspaces/3d6a0b58695e4436ad5dd2f241d3843c/projects/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The workspace ID

Request

Show

Response

201

BUILDER PROJECT LIST

GET

/api/one/v1/builders/{uuid}/projects/?recursive={recursive}

Get Projects

Get a list of projects.

Example URI

GET

https://conx.leica-geosystems.com/api/one/v1/builders/3d6a0b58695e4436ad5dd2f241d3843c/projects/?recursive=1

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The builder ID

recursive

boolean (optional)

Example: 1

To indicate if workspaces should be included as well.

Request

Show

Response

200

Show

POST

/api/one/v1/builders/{uuid}/projects/?recursive={recursive}

Create New Project

Create a new project.

Example URI

POST

https://conx.leica-geosystems.com/api/one/v1/builders/3d6a0b58695e4436ad5dd2f241d3843c/projects/?recursive=1

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The builder ID

recursive `boolean` (optional) **Example:** 1

To indicate if workspaces should be included as well.

Request

Show

Response `201`

Unit

Additional unit metadata available include:

- status - last seen, last position and reference model
- equipment - available equipment on unit
- include_discarded - include discarded units and equipments
- with_files - include units that have uploaded a file to managed storage
- features - waffle flags
- vm_neighbor_data - visual machine neighbour data

Access the additional metadata by appending `?meta=status,equipment` etc to the URL.

Example of metadata:

```
"status": {
  "last_seen": "2015-10-14T10:06:32Z",
  "last_position": {
    "lat": 12.345,
    "lon": 6.789,
    "altitude": 3.234
  },
  "reference_model": "example.trm",
  "coordinate_system": "example.lok"
},
"equipment": [
  {
    "uuid": "3d6a0b58695e4436ad5dd2f241d3843c",
    "type": "ICON-3D"
  }
]
```

UNIT LIST

GET `/api/one/v1/projects/{uuid}/units/` Get Units

Get a list of units

Example URI

GET `https://conx.leica-geosystems.com/api/one/v1/projects/3d6a0b58695e4436ad5dd2f241d3843c/units/`

URI Parameters

Hide

uuid `string` (required) **Example:** 3d6a0b58695e4436ad5dd2f241d3843c

The project ID

Request

Show

Response `200`

Show

POST `/api/one/v1/projects/{uuid}/units/` Create New Unit

Create a new unit.

Example URI

POST https://conx.leica-geosystems.com/api/one/v1/projects/3d6a0b58695e4436ad5dd2f241d3843c/units/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The project ID

Request

Show

Response

201

UNIT

Manage a single unit.

GET

/api/one/v1/units/{uuid}/

Get a Unit

Retrieve a unit by its *uuid*.

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/units/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The unit ID

Request

Show

Response

200

Show

PUT

/api/one/v1/units/{uuid}/

Update a Unit

Update a single unit.

Example URI

PUT https://conx.leica-geosystems.com/api/one/v1/units/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid

string (required)

Example: 3d6a0b58695e4436ad5dd2f241d3843c

The unit ID

Request

Show

Response

200

DELETE

/api/one/v1/units/{uuid}/

Delete a Unit

Delete a single unit.

Example URI

DELETE https://conx.leica-geosystems.com/api/one/v1/units/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c

The unit ID

Response

204

Equipment

If an equipment in a project is paired once then it can select another project without having to re-pair again. This project selection by the equipment will happen seamlessly and it will start to report sensor data and/or upload/download files from the newly selected project. The following are the steps the equipment has to perform.

PROJECT LIST

Get project list for the equipment.

GET

/api/one/v1/equipment/{uuid}/project_list/

Get project list

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/equipment/3d6a0b58695e4436ad5dd2f241d3843c/project_list/

URI Parameters

Hide

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c

The equipment uuid

Request

Show

Response

200

Show

PROJECT SELECT

Select project to seamlessly connect to.

Please note that after the equipment selects a new project, its uuid will no longer be the same. It will have a new uuid which can be obtained from the "/api/one/v1/me/ endpoint". See Authentication section above for details. Therefore, for subsequent selections of new projects, the equipment uuid have to be re-fetched. However, the equipment token remains the same.

POST

/api/one/v1/equipment/{uuid}/select_project/{project_uuid}/

Select project

Example URI

POST https://conx.leica-geosystems.com/api/one/v1/equipment/3d6a0b58695e4436ad5dd2f241d3843c/select_project/1342f45537e84e28a3e301244ed47523/

URI Parameters

Hide

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c

The equipment uuid

project_uuid

string (required) Example: 1342f45537e84e28a3e301244ed47523

The project uuid

Request

Show

Response

200

Show

http://docs.hxgntech.com/telematics/production/blueprint/conx.html

13/22

DeviceState

DEVICESTATE CREATE

A DeviceState entry is a snapshot of the current state of a device.

The DeviceState POST request payload should two keys, a timestamp (`observed_at`) of when the state was observed on the device, by the device, and a list of currently active files on the device (`active_files`). What should be considered an active/inactive file is **[insert definition here]**. The key `active_files` in the payload must be a JSON array, empty or not.

Source files

Each object in `active_files` can optionally contain a `source_file` key/value that can be used to describe a chain of file conversions conducted on the device side. In order for the Leica ConX application to keep track of state, these conversions should be communicated through these endpoints when applicable. Note the nested structure in the below example that ends with `"source_file": null` to indicate the actual source file.

Primary files

Each `active_files` entry also contains a `primary` key (of type boolean) that should be used to indicate whether or not a particular file should be considered the "main" file in a collection of used files. This piece of data will be used primarily for frontend display purposes. If this key is not supplied then its value will default to `false`. A `DeviceState` entry with a collection of `active_files` can contain 1 single primary file - attempting to POST a payload containing multiple `primary` files will return an error response.

MD5 checksum

The `md5_checksum` key should be an MD5 hash representation of the contents of a given file.

POST `/api/one/v1/device-state/`

Create New DeviceState Entry

Create a new DeviceState entry.

Example URI

POST `https://conx.leica-geosystems.com/api/one/v1/device-state/`

Request

Show

Response `201`

Data files

The following data file types are supported:

- Reference Model
- Asbuilt
- Localization (Deprecated)
- Coordinate System (New type deprecating Localization)
- Control Points
- Code List
- Background Image
- Project
- Report
- Miscellaneous

The permissions attribute of a data file object is a list containing uuids of equipment that should have access to the specific data file

DATA FILE LIST

Add url parameter `type` to list only a certain data file type. The value can be REFMODEL, ASBUILT, LOCALIZATION(!DEPRECATED), COORDINATESYSTEM, CONTROLPOINTS, CODELIST, BACKGROUNDIMAGE, PROJECT, REPORT or MISCELLANEOUS To get all reference models, use: `/api/one/v1/projects/{uuid}/data/?type=REFMODEL`

GET

/api/one/v1/projects/{uuid}/data/

Get Data Files

Get a list of Data files.

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/projects/3d6a0b58695e4436ad5dd2f241d3843c/data/

URI Parameters Hide

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c

The project ID

Request Show

Response 200 Show

POST

/api/one/v1/projects/{uuid}/data/

Create New Data Files

Creating a new file is a two-step process. First you define the metadata and then you upload the file itself. Once you've **POST**'ed the metadata you'll get a `resource_url` in return to which you can **POST** the file contents using the standard `multipart/form-data` encoding.

Be sure to include the `Authorization` and `Content-Length` headers when posting the file contents.

The type value has to be set to either of:

- REFMODEL
- ASBUILT
- LOCALIZATION (!DEPRECATED)
- COORDINATESYSTEM
- CONTROLPOINTS
- CODELIST
- BACKGROUNDIMAGE
- PROJECT
- REPORT
- MISCELLANEOUS

Resource URLs are valid for 15 minutes

This will set restrictions in place for legacy features on the project. See [Legacy Feature Restrictions](#)

Example URI

POST https://conx.leica-geosystems.com/api/one/v1/projects/3d6a0b58695e4436ad5dd2f241d3843c/data/

URI Parameters Hide

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c

The project ID

Request Show

Response 200 Show

FILE

Manage a single data file.

GET

/api/one/v1/data/{uuid}/

Get a Data file

Retrieve a data file by its *uuid*.

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/data/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid

string

 (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c
The data file ID

Request

Show

Response

200

Show

PUT

/api/one/v1/data/{uuid}/

Update a Data file

Update a data file. The permissions key must include *all* permissions or they will be removed.

Example URI

PUT https://conx.leica-geosystems.com/api/one/v1/data/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid

string

 (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c
The data file ID

Request

Show

Response

200

Show

DELETE

/api/one/v1/data/{uuid}/

Delete a Data file

Delete a single data file.

Example URI

DELETE https://conx.leica-geosystems.com/api/one/v1/data/3d6a0b58695e4436ad5dd2f241d3843c/

URI Parameters

Hide

uuid

string

 (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c
The data file ID

Response

204

FILE DEPENDANTS

GET

/api/one/v1/data/{uuid}/dependants/

Get dependant files

Retrieve a list of dependant files for the provided file *uuid*. Also includes missing filenames that were not found in the data library.

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/data/3d6a0b58695e4436ad5dd2f241d3843c/dependants/

URI Parameters

Hide

uuid `string` (required) **Example:** 3d6a0b58695e4436ad5dd2f241d3843c
The data file ID to retrieve dependants for

Request

Show

Response `200`

Show

FILE EXPORT / CONVERSION

GET

`/api/one/v1/export/gvl2cgt/{uuid}/`

Export a GVL file as CGT file

Export a provided GVL file *uuid* into CGT file format.

This API endpoint is temporary until we decide how to best utilize the gvl2cgt conversion tool.

Example URI

GET <https://conx.leica-geosystems.com/api/one/v1/export/gvl2cgt/032f99bc92704c23920ff2e43242ce1a/>

URI Parameters

Hide

uuid `string` (required) **Example:** 032f99bc92704c23920ff2e43242ce1a
The data file UUID to be exported

Request

Show

Response `200`

Show

Design

The Design endpoints are deprecated. Please use Data File instead.

The following object classes are being considered:

- Reference Designs
- Overlays
- Center line
- Control points
- Avoidance zones

The permissions attribute of a design object is a list containing uuids of equipment that should have access to the specific design file

Optional linking to designs available in other GeoJSON objects via the *link* attribute:

- id - ID of the design
- rel - relationship between this survey point and the linked data
- type - content type of the linked data
- name - suggested persistent storage name for the linked data

Example of link:

```
"link": {
  "rel": "original",
  "id": "fe3e58c529c74150a84e1f508bd02271",
  "name": "p37.dxf",
  "type": "application/dxf"
}
```

The **state** field of the Design object (obtained in the Response JSON) has the following values:

- 0 - Waiting for the file content to be uploaded
- 1 - The file is uploaded successfully
- 2 - The file is deleted

DESIGN LIST

GET

/api/one/v1/projects/{uuid}/designs/

Get Designs

Get a list of designs.

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/projects/3d6a0b58695e4436ad5dd2f241d3843c/designs/

URI Parameters Hide

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c

The project ID

Request Show

Response 200 Show

POST

/api/one/v1/projects/{uuid}/designs/

Create New Design

Creating a new design is a two-step process. First you define the metadata and then you upload the file itself. Once you've **POST**ed the metadata you'll get a `resource_url` in return to which you can **POST** the file contents using the standard `multipart/form-data` encoding.

Be sure to include the `Authorization` and `Content-Length` headers when posting the file contents.

Resource URLs are valid for 15 minutes

This will set restrictions in place for legacy features on the project. See [Legacy Feature Restrictions](#)

Example URI

POST https://conx.leica-geosystems.com/api/one/v1/projects/3d6a0b58695e4436ad5dd2f241d3843c/designs/

URI Parameters Hide

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c

The project ID

Request Show

Response 200 Show

DESIGN

Manage a single design.

GET

/api/one/v1/designs/{uuid}/

Get a Design

Retrieve a design by its *uuid*.

The `resource_url` accepts OPTIONS, HEAD and PATCH requests according to the [tus 1.0.0 protocol](#)

Example URI**GET** <https://conx.leica-geosystems.com/api/one/v1/designs/3d6a0b58695e4436ad5dd2f241d3843c/>**URI Parameters**[Hide](#)

uuid (required) **Example:** 3d6a0b58695e4436ad5dd2f241d3843c
The design ID

Request[Show](#)**Response** [Show](#)**PUT** [Update a Design](#)Update a design. The permissions key must include *all* permissions or they will be removed.**Example URI****PUT** <https://conx.leica-geosystems.com/api/one/v1/designs/3d6a0b58695e4436ad5dd2f241d3843c/>**URI Parameters**[Hide](#)

uuid (required) **Example:** 3d6a0b58695e4436ad5dd2f241d3843c
The design ID

Request[Show](#)**Response** [Show](#)**DELETE** [Delete a Design](#)

Delete a single design.

Example URI**DELETE** <https://conx.leica-geosystems.com/api/one/v1/designs/3d6a0b58695e4436ad5dd2f241d3843c/>**URI Parameters**[Hide](#)

uuid (required) **Example:** 3d6a0b58695e4436ad5dd2f241d3843c
The design ID

Response

Survey Point

A survey point is measured by a equipment on the field. The object schema is:

- equipment['uuid'] - ID of equipment that measured the point
- unit['uuid'] - ID of unit that measured the point
- date - time at which the point was measured
- code - selected point code when the point was measured
- tag - identifier for the measure point (need not be unique)
- dh - delta on the height-axis between the measured point and model
- n - measure at the northing-axis
- e - measure at the easting-axis
- h - measure at the height-axis
- model - the reference model used (if any)

- cq - GPS quality value
- current_file - if the point is in the current file

We have no idea what coordinate system to use at the moment. Should we convert everything to WSG84, or should we maintain the raw coordinate values?

At this time, we know that iCON 3D measures survey points using one of two methods and uploads the result via a file using rsync - the file format depend on the method used:

- stored-point - geo (xyz + some selected name)
- autologging - csv (xyz + metadata)

For autologging, the metadata include:

- part of the blade/bucket (reference point)
- timestamp
- prefix for the point name (example a machine name)

We are not guaranteed to receive a reference model along with the file - it is assumed that the office user knows the reference model used. Can/should Leica ConX make the same assumption? Or should we require a manual step to "validate" survey points?

EQUIPMENT SURVEY POINT LIST

Get list of survey points.

GET

/api/one/v1/equipment/{uuid}/points/{?since}

Get Equipment Survey Points

Get list of survey points since the given timestamp.

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/equipment/3d6a0b58695e4436ad5dd2f241d3843c/points/?since=2015-07-12T14:20:32Z

URI Parameters Hide

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c
The equipment ID

since

string (required) Example: 2015-07-12T14:20:32Z
Minimum timestamp of points

Request

Show

Response 200

Show

MODEL SURVEY POINT LIST

Get list of survey points.

GET

/api/one/v1/model/{uuid}/points/{?since}

Get Model Survey Points

Get list of survey points since the given timestamp.

Example URI

GET https://conx.leica-geosystems.com/api/one/v1/model/3d6a0b58695e4436ad5dd2f241d3843c/points/?since=2015-07-12T14:20:32Z

URI Parameters Hide

uuid

string (required) Example: 3d6a0b58695e4436ad5dd2f241d3843c
The model ID

since

string (required) Example: 2015-07-12T14:20:32Z
Minimum timestamp of points

| | |
|--------------|------|
| Request | Show |
| Response 200 | Show |

DEBUG

In order to provide some troubleshooting guide to the integrators, some debug information is provided via this endpoint. This information will only tell about the last recorded exception and its detail. User is any entity that has an auth token. Therefore, equipments and users with Leica ConX login can use their auth token information to query this endpoint.

An empty dictionary will be returned if there is no error recorded against the user.

EXCEPTION

Get exception details for the logged in user.

| | | |
|--|-------------------------|-----------------------|
| GET | /api/one/v1/user/debug/ | Get exception details |
| Example URI | | |
| GET https://conx.leica-geosystems.com/api/one/v1/user/debug/ | | |
| Request | Show | |
| Response 200 | Show | |

Generated by [aglio](#) on 07 Nov 2017

