

Exporting Data Using the REST Web API

The chapter describes the process for extracting data from your VIZOR system using the REST Web API.

In this context, the data is the assets, the software licenses, the tickets, the purchases and any other information you manage and track in VIZOR. The process documented here is programmatic and suited for scenarios in which having an automated, potentially scheduled way is required.

Another scenario suited for this approach is for performing regular backups of specific data sets in a neutral format, as opposed to the default backups of the Microsoft SQL Server databases.

If the export does not have to be automated or on a regular basis, there are several ways to export data interactively in VIZOR that are faster to execute, such as the single click export from the Summary List.

Requirements

To use the Web API described here, you will need a VIZOR server with the Web API enabled and configured. You will also need some programming skills for writing a script or a tool that does the Web call. Vector Networks does not offer guidance on the use of these tools and technologies.

Process

The current Web API uses OAuth 2.0 as the authorization hence it's a two-step process to access the data; your script needs to get a security token first, before making calls to the export function.

The data will be returned in the HTTP response as JSON. The default JSON will generate property names using the Caption of the VIZOR field (as defined in the Field Editor).

Get Token

Generate Bearer token using a username and key provided by Vector Networks. The Bearer Token is valid for 24 hrs by default.

HTTP **POST** Method ; URI : <https://YourServer/connectapi/token>

requestBody:

`client_id` = **your client id provided by Vector**

client_secret = **your secret key provided by Vector**

grant_type = client_credentials

Content-Type = application/x-www-form-urlencoded

The returned token will have this JSON structure:

```
{  
  "access_token": "Oy...4A",  
  "token_type": "bearer"  
}
```

Once you get the access token, add it to the header in subsequent calls. The header must be of this form:

Header:

Authorization = **Bearer** token

Get a List with the Data

Call the following method to export the data from VIZOR:

HTTP **GET** Method ;

URI : <https://YourServer/connectapi/vzc/<project name>/GetList?QueryID=<query>&LayoutID=<layout>&SortID=<sort>&Offset=<offset>&Limit=<limit>>

Where :

Project name: the name of the project you are extracting the data from. See the table of common default projects below.

Query: the numeric ID of the named query or data set to export.

Layout: the numeric ID of the named layout that defines what VIZOR fields to export.

Sort: the numeric ID of the named sort that defines which VIZOR fields to sort by.

Offset: Which position to start from. This will change with each call to get the next set of data based on the limit (described below).

Limit: How many rows of data to get at one time.

For example, for assets:

URI :

<https://YourServer/connectapi/vzc/Resources/GetList?QueryID=9&LayoutID=2&SortID=1&Offset=0&Limit=100>

The response is a JSON structure like this (the properties depend on the project and fields being exported):

```
[
  {
    "Name": "SP AL 2016",
    "Model": "SSM98",
    "Purchased Date": "2016-10-01T04:00:00Z",
    "Asset Tag": "JAH0097",
    "Serial Number": "HM-3D01",
    "Status": "Assigned",
    "Allocated to Person": "Martin Green"
  },
  ...
  { another asset },
  { asset N }
]
```