

Getting measurements from Efento Cloud through API

Log in

Sending requests to the Efento API requires a token that has to be put in the request's header. In order to receive a token you need to log in to your Efento Cloud account by sending the following request:

Method: POST

Endpoint: <https://cloud.efento.io/api/v2/login>

Headers:

X-USER-LOGIN: *your Efento Cloud login (email)*

X-USER-PASSWORD: *your Efento Cloud password*

In the response from Efento API, you will receive JSON that contains your access token. Put this token (Bearer) in headers of all the requests sent to Efento API:

```
{
  "accessToken":
  "eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiI5IiwiaXNjaXhwaXoxNjU1Mjk1NTE5fQ.1Ga4jQWPIqStLiHbdWvzLWz0tUW5EBGB0
  Llnv30bqA4",
  [...]
}
```

Get lists of organisations

Check the IDs of the organisations, to which you have access, by sending the following request to Efento API:

Method: GET

Endpoint: <https://cloud.efento.io/api/v2/organizations>

Headers:

Authorization: *Bearer accessToken you received after logging in to Efento Cloud (e.g. "Bearer adsFcdc34rf...")*

In the response from Efento API, you will receive JSON that contains the list of all the organisations to which you have access along with their IDs and names:

```
{
  "totalCount": 1,
  "organizations": [
    {
      "id": 2881,
```

```
    "name": "Organisation 1",
    "createdAt": "2022-05-25 11:09:27",
    "updatedAt": "2022-05-25 11:09:27",
    "token": "hf04gb0e-bsd3-440c-9fb9-ad0daad420e0",
    "smsSent": 0,
    "smsLeft": 0,
    "licensesLeft": 0,
    "measurementPointsCount": 1
  },
]
}
```

You will need the ID of the organisation in the next request (`"id": 2881`).

Get list of all locations in your organisation

Sensors in organisations are grouped by locations. To receive the list of all locations in your organisation use the following request:

Method: GET

Endpoint: <https://cloud.efento.io/api/v2/locations?organization-id=ID-OF-YOUR-ORGANISATION> (e.g. <https://cloud.efento.io/api/v2/locations?organization-id=2881>)

Headers:

Authorization: Bearer *accessToken you received after logging in to Efento Cloud* (e.g. "Bearer *adsFcdc34rf...*")

In the response from Efento API, you will receive JSON that contains the list of all the locations to which you have access along with their IDs and names:

```
{
  "locations": [
    {
      "id": 5655,
      "name": "TOP",
      "organizationId": 2881,
      "createdAt": "2022-05-25 11:09:27",
      "parentId": 0
    }
  ],
  "totalCount": 1
}
```

You will need the ID of the location in the next request ("id": 5655).

Get list of the measurement points with their most recent measurements

To receive the list of all measurement points in the selected location use the following request:

Method: GET

Endpoint: <https://cloud.efento.io/api/v2/measurement-points?location-ids=ID-OF-THE-LOCATION> (e.g. <https://cloud.efento.io/api/v2/measurement-points?location-ids=5655>)

Headers:

Authorization: Bearer *accessToken you received after logging in to Efento Cloud* (e.g. "Bearer adsFcdc34rf...")

IMPORTANT! By default, the API returns the first 20 measurement points assigned to the organisation. If your organisation contains more than 20 measurement points, you need to use pagination to retrieve the information about all the devices.

<https://cloud.efento.io/api/v2/measurement-points?location-ids=ID-OF-THE-LOCATION&limit=20&offset=0> (e.g. <https://cloud.efento.io/api/v2/measurement-points?location-ids=5655&limit=20&offset=0>)

Limit - number of the measurement points you want to retrieve (min. 20, max.100)

offset - offset used to shift the measurement points retrieved by the request (e.g. to retrieve first 100 measurement points use "...&limit=100&offset=0", to retrieve second 100 measurement points use "...&limit=100&offset=100", to retrieve third 100 measurement points, use "...&limit=100&offset=200", etc.)

In the response from Efento API, you will receive JSON that contains the list of all the measurement points assigned to the selected location along with their IDs and names and the value of the most recent measurement:

```
{
  "measurementPoints": [
    {
      "id": 989330,
      "locationId": 5655,
      "createdAt": "2022-05-25 12:17:22",
      "name": "40EBEC",
      "unconfirmedAlertsCount": 358,
      "activeAlertsCount": 0,
      "status": "OPERATIONAL",
      "measurements": {
```

```
    "measuredAt": "2022-06-15 12:15:00",
    "period": 5,
    "channels": [
      {
        "number": 1,
        "name": "40EBEC",
        "type": "ALARM",
        "value": 0,
        "status": "OK"
      }
    ]
  },
  "device": {
    "id": 1128025,
    "serialNumber": "282C0240EBEC",
    "powerStatus": "BATTERY_OK",
    "signal": 37,
    "nextCommunicationAt": "2022-06-15 13:21:03"
  }
},
"totalCount": 1
}
```

You will need the ID of the measurement point for the next request (`"id": 989330`)

Get measurements from the selected time period

To receive the the measurement from the selected time period use the following request:

Method: GET

Endpoint: <https://cloud.efento.io/api/v2/measurement-points/ID-OF-THE-MEASUREMENT-POINT/measurements?from=DATE-OF-THE-FIRST-MEASUREMENT-IN-UTC&to=DATE-OF-THE-LAST-MEASUREMENT-IN-UTC> (e.g.

<https://cloud.efento.io/api/v2/measurement-points/989330/measurements?from=2022-06-14 22:00:00&to=2022-06-15 21:59:59>)

Headers:

Authorization: Bearer *accessToken you received after logging in to Efento Cloud* (e.g. "Bearer adsFcdc34rf...")

In the response from Efento API, you will receive JSON that contains the list of all the measurements taken in the selected time period.