



# Accessing the Cleura Cloud REST API

Cleura Cloud provides a REST API, which you can take advantage of with a tool like `curl`. But before you do, you must create a token for the current session. For that, you only need to have an [account in Cleura Cloud](#).

## Creating a token

Cleura Cloud REST API calls use token authentication. The process of obtaining a valid token works slightly differently, based on whether your account has two-factor authentication (2FA) enabled or not.

### Without 2FA      With 2FA

If you do not have 2FA enabled for your account, to create a token, have your username ( `your_cc_username` ) and password ( `your_cc_password` ) to the Cleura Cloud handy and type:

```
curl -d '{"auth": {"login":  
  "your_cc_username", "password":  
  "your_cc_password"}}' \  
  https://rest.cleura.cloud/auth/v1/  
tokens
```

Provided you typed your username and password correctly and that there were no connection issues to the remote endpoint, you will get a JSON object with a string ( `token` ) that holds your session token:

```
{  
  "result": "login_ok",  
  "token":  
  "vahkie7EiDaij7chegaitee2zohsh1oh"  
}
```

If your Cleura Cloud account has 2FA enabled, you **must** configure it with SMS as a second-factor option. Accounts with only WebAuthn as their second factor cannot be used for Cleura Cloud REST API operations.

First, initiate a token request giving your Cleura Cloud username and password, and setting the `twofa_method` option to `sms` :

```
curl -d '{"auth": {"login":  
  "your_cc_username", "password":  
  "your_cc_password", "twofa_method":  
  "sms"}}' \  
  https://rest.cleura.cloud/auth/v1/  
tokens
```

Instead of a token, you will get a verification code (look at `verification`):

```
{
  "result": "twofactor_required",
  "type": "sms",
  "verification": "ahb4en3cho"
}
```

This verification code is required for requesting a 2FA code:

```
curl -d '{"request2fa": {"login":
"your_cc_username", "verification":
"ahb4en3cho"}}' \
  https://rest.cleura.cloud/auth/v1/
tokens/request2facode
```

You will now receive your 6-digit second-factor code via an SMS message. This enables you to request your REST API token like this:

```
curl -d '{"verify2fa": {"login":
"your_cc_username", "verification":
"ahb4en3cho", "code": 123456}}' \
  https://rest.cleura.cloud/auth/v1/
tokens/verify2fa
```

Make sure *not* to put the code in quotes, for it is of type integer and Cloud REST API calls.

that fact should be reflected during the assignment to `code`. You will get

Testing the token

```
{
  "result": "login_ok",
  "token":
"fiushood9oraTiNa4ban3eemeezoeDae"
}
```

lid is by getting a list of all supported to provide your username

nect to the `https://rest.cleura.cloud/accesscontrol/`

```
curl -H "X-AUTH-LOGIN: your_cc_username" \
  -H "X-AUTH-TOKEN: vahkie7EiDaij7chegaitee2zohsh1oh" \
  https://rest.cleura.cloud/accesscontrol/v1/openstack/domains
```

All supported regions should be returned as objects in a JSON array:

```
[
  {
    "area": {
      "id": "6",
      "name": "Sweden V Stockholm",
      "tag": "SE_STO2",
      "regions": [
        {
          "zone_id": "2",
          "name": "Stockholm V Sweden",
          "status": "active",
          "region": "Sto2"
        }
      ]
    },
    "id": "79b0cef45b504586ad0bf057dc4cb8b8",
    "status": "provisioned",
    "name": "CCP_Domain_43597",
    "enabled": true
  },
  {
    "area": {
      "id": "3",
      "name": "Japan",
      "tag": "JP",
      "regions": [
        {
          "zone_id": "7",
          "name": "Tokyo V Japan",
          "status": "active",
          "region": "tky1"
        }
      ]
    },
    "status": "available"
  },
  {
    "area": {
      "id": "7",
      "name": "Germany V Frankfurt",
      "tag": "DE",
      "regions": [
        {
          "zone_id": "6",
          "name": "Frankfurt V Germany",
          "status": "active",
          "region": "Fra1"
        }
      ]
    },
    "id": "08db589d04f442e19c272f2cd1a02906",
    "status": "provisioned",
    "name": "CCP_Domain_43597",
    "enabled": true
  },
  {
    "area": {
```

```

    "id": "2",
    "name": "United Arab Emirates",
    "tag": "AE",
    "regions": [
      {
        "zone_id": "8",
        "name": "Dubai \ UAE",
        "status": "active",
        "region": "dx1"
      }
    ]
  },
  "status": "available"
},
{
  "area": {
    "id": "1",
    "name": "Europe",
    "tag": "EU",
    "regions": [
      {
        "zone_id": "1",
        "name": "Karlskrona \ Sweden",
        "status": "active",
        "region": "Kna1"
      }
    ]
  },
  "id": "a018123218f5428ba96d7fb212d90cf2",
  "status": "provisioned",
  "name": "CCP_Domain_43597",
  "enabled": true
}
]

```

Last update: 2023-01-04

Created: 2023-01-02

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