

Example - API Client in Python

<https://campus.barracuda.com/doc/96023067/>

The following is an example of how you can use the Email Gateway Defense API written in Python.

Before invoking the Python script, you must export the following variables with the Client ID and Client Secret that you obtained from the Barracuda Token Service. If you have not already registered your application using the Barracuda Token Service to obtain a Client ID and Client Secret, see [Register your Application in the Barracuda Token Service](#).

```
export API_CLIENT_ID=xxxx
```

```
export API_CLIENT_SECRET=xxx
```

```
import requests
import json
import os
import time

class essAPI():
    host = None
    client_id = None
    client_secret = None
    access_token = None
    access_token_expiration = None
    def __init__(self, host, client_id, client_secret):
        self.host = host
        self.client_id = client_id
        self.client_secret = client_secret

        try:
            self.access_token = self.getAccessToken()
            if self.access_token is None:
                raise Exception("Request for access token
failed")
        except Exception as e:
            print(e)
        else:
            self.access_token_expiration = int(time.time()) +
3500

    def getAccessToken(self):
        try:
```

```

        data = {
            'grant_type':
'client_credentials',
            'scope': 'ess:account:read'
        }
        req = requests.post(self.host, data=data,
auth=(self.client_id, self.client_secret))
        req.raise_for_status()
    except Exception as e:
        print(e)
        return None
    else:
        return req.json()['access_token']

    def __str__(self):
        return "host: {} client_id: {} client_secret: {}
access_token_expiration: {}".format(self.host, self.client_id,
self.client_secret, self.access_token_expiration)

def refreshToken(decorated):
    def wrapper(api, *args, **kwargs):
        if int(time.time()) > api.access_token_expiration:
            api.getAccessToken()
        return decorated(api, *args, **kwargs)
    return wrapper

@refreshToken
def callEssApi(api, path):
    try:
        print('----- %s -----'
        -----', path)

        api_headers = {}
        api_headers['Authorization'] = 'Bearer ' + api.access_token
        # print(api_headers)
        r = requests.get('https://api.barracudanetworks.com/beta' +
path, headers=api_headers)
        r.raise_for_status()
    except Exception as e:
        print("ESS API call failed for {}: {}".format(path, e))
    else:
        print(json.dumps(r.json(), indent=4))

# End of boilerplate code

host = os.environ.get('TOKEN_URL') or

```

```
'https://login.bts.barracudanetworks.com/token'
client_id = os.environ.get('API_CLIENT_ID')
client_secret = os.environ.get('API_CLIENT_SECRET')

def lookupAccount(account_id):
    api = essAPI(host, client_id, client_secret)
    # print(api)
    callEssApi(api, '/accounts/ess')
    callEssApi(api, '/accounts/{}/ess/domains'.format(account_id))
    callEssApi(api,
'/accounts/{}/ess/domains/address.com'.format(account_id))
    callEssApi(api, '/accounts/{}/ess/statistics'.format(account_id))

# Replace the below with your account_id
lookupAccount('xxxxxxx')
```

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