

API FUNCTIONALITY

DOCUMENTATION

Version 2.0 as of February 2019

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1 GENERAL INFORMATION

1NCE offers an Application Programming Interface (hereinafter referred to as "API") that allows users to implement the most important functions of the Customer Portal into a customer's environment. The supported functions of the 1NCE API generally enables the customer to manage, control and monitor the 1NCE SIM Cards from an external system.

2 CUSTOMIZED API USAGE

The 1NCE API can be found under the following link:

<https://api.1nce.com>

To get the 1NCE API started the customer needs to authenticate himself. This can be done by clicking on the „Authorize“-button. The customer is asked to enter his credentials, which as an "Owner" typically are the same credentials as the one for the 1NCE Customer Portal (e-mail address and password). As an "API User" these credentials are the client ID, with the account number as a prefix, and the related client secret.



Available authorizations ✕

Scopes are used to grant an application different levels of access to data on behalf of the end user. Each API may declare one or more scopes. API requires the following scopes. Select which ones you want to grant to Swagger UI.

oauth2 (OAuth2, application)

Application: 1NCE Api

Token URL: /management-api/oauth/token
Flow: application

client_id:

client_secret:

Authorize

Afterwards, you can try the different requests of the 1NCE API, which are as follows:

/orders ->Order Controller

GET/v1/orders

Get a List of Orders

POST/v1/orders

Post an order

GET/v1/orders/{order_number}

Get a single Order, identified by its order number

/products ->Product information

GET/v1/products

Get a list of products

/sims ->Manage your SIMs

GET/v1/sims

Get a List of SIM Cards

POST/v1/sims

Change a list of SIM Cards for activate, deactivate, label, IMEI lock, etc.

GET/v1/sims/{iccid}

Get status information i.e. status, label, MSISDN, IMSI, ICCID, Lifetime, for a device with an ICCID

PUT/v1/sims/{iccid}

Modification of a SIM Card to activate, deactivate, change label, change IMEI lock, etc.

GET/v1/sims/{iccid}/connectivity_info

Retrieve connectivity information and location for a SIM

GET/v1/sims/{iccid}/events

Get diagnostic/event information for a SIM Card i.e. network events

GET/v1/sims/{iccid}/quota/data

Get the data quota of a SIM

GET/v1/sims/{iccid}/quota/sms

Get the SMS quota of a SIM

POST/v1/sims/{iccid}/reset

Trigger a connectivity reset for a given SIM Card. The actual reset will be done asynchronously. A positive-response only means that the connectivity-reset has been successfully placed into the queue.

GET/v1/sims/{iccid}/sms

Get the list of SMS sent and received by this SIM Card

POST /v1/sims/{iccid}/sms

Submit SMS to specific SIM Card

GET /v1/sims/{iccid}/sms/{id}

Get details about the SMS

DELETE /v1/sims/{iccid}/sms/{id}

Cancel SMS that is buffered for SIM Card and not yet delivered

POST /v1/sims/{iccid}/topup

Top up the data volume of a specific SIM Card

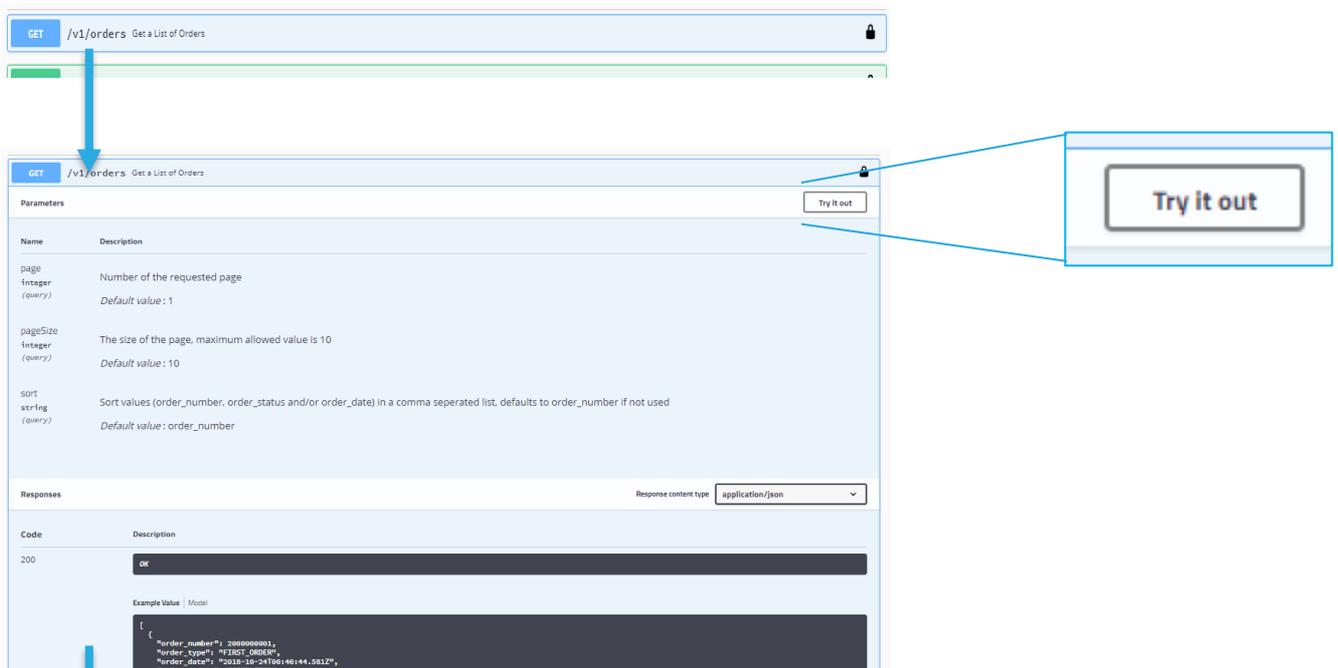
GET /v1/sims/{iccid}/usage

Get the daily usage generated by a SIM Card

POST /v1/sims/topup

Top up the data volume of specific SIM Cards

You get a detailed description of how to use each request by clicking on the specific request bar. To unfold an overview of the specific instructions and parameters you need to click on the button "Try it out".



The screenshot shows the API documentation for the `GET /v1/orders` endpoint. The interface includes a header with the endpoint name and a lock icon. Below the header, there is a 'Parameters' section with a table of query parameters:

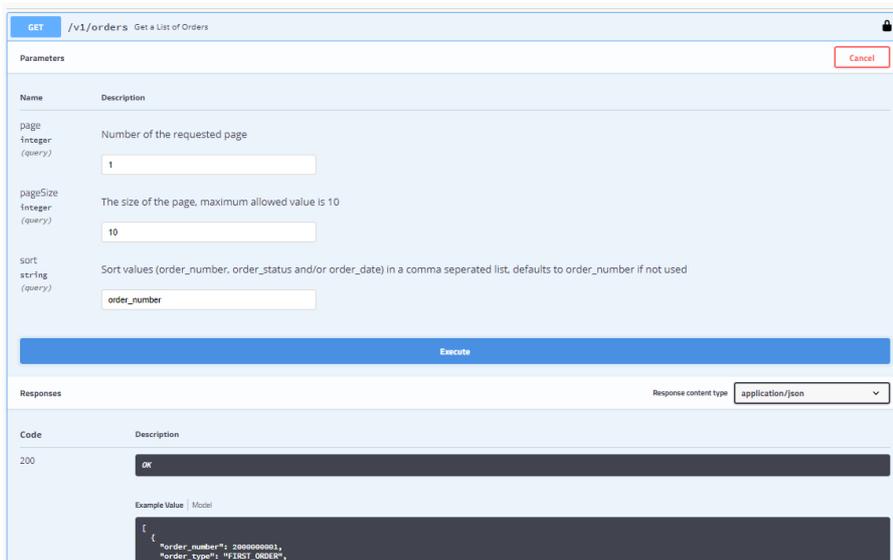
| Name | Description |
|--------------------------------|---|
| page integer (query) | Number of the requested page Default value: 1 |
| pageSize integer (query) | The size of the page, maximum allowed value is 10 Default value: 10 |
| sort string (query) | Sort values (order_number, order_status and/or order_date) in a comma separated list, defaults to order_number if not used Default value: order_number |

Below the parameters, there is a 'Responses' section with a dropdown menu for 'Response content type' set to 'application/json'. The response table shows a 200 status code with a description 'OK' and an example JSON response:

```
[
  {
    "order_number": "2000000001",
    "order_type": "FIRST_ORDER",
    "order_date": "2020-05-20T10:05:44.581Z",
    "order_status": "MOBILETOP"
  }
]
```

A callout box highlights the 'Try it out' button in the top right corner of the parameters section.

As long as you are authorized you can hit the "Try it out"-button on the right to enter your own ICCID and you then can start a test run by clicking on the button "Execute".



3 AUTHENTICATION

The usage of 1NCE REST API via the customer’s external system demands for an authentication first. Therefore, the authentication via OAuth2 with the same credentials being used as for the 1NCE Customer Portal (e-mail address and password) is required. As an “API User” the authentication method with client_id and client_secret is required.

The OAuth2 authentication is necessary to get a token with credentials of the 1NCE Customer Portal with the following workflow:

- Send your credential base64 encoded to the authentication server.
- Get a response including an UUID for authentication.
- Use the UUID to authenticate REST requests.

The UUID for authentication has a validity period of 240 minutes. Notice: If the 240 minutes have expired the authentication process needs to be repeated. Send the authentication request via POST to

```

...
https://api.1nce.com/management-api/oauth/token
...

```

3.1 REQUEST:

```
**Header**
```json
{
'Content-Type': 'application/x-www-form-urlencoded',
'authorization': 'Basic <base64 encoded username:password>'
}
...

Body
```json
{
'grant_type': 'client_credentials'
}
...

```

3.2 RESPONSE:

```
```json
{
"access_token":"6ba7b810-9dad-11d1-80b4-00c04fd43XXX", // this is the
UUID token you want to use for authentication
"token_type":"bearer",
"expires_in":3599,
"scope":"all",
"appToken":"<application_token>", // not relevant in this context
"userId":<id>,
"orgId":4321 // example
}
...

```

Note: Only when you are authenticated you can send requests and receive the responses.

## 4 API DOC

1NCE also offers a comfortable overview of all API requests in an API doc which you can access with link <https://api.1nce.com/management-api/api-docs> at the top of the page.

(This page might not be fully functional with every browser, preferred: Firefox 63.0 or higher)

### 1NCE API <sup>v1</sup>

[ Base URL: [api.1nce.com/management-api](https://api.1nce.com/management-api) ]

<https://api.1nce.com/management-api/api-docs>

| JSON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Rohdaten                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Kopfzeilen |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <span>Speichern</span> <span>Kopieren</span> <span>Alle einklappen</span> <span>Alle ausklappen</span> <span style="float: right;">JSON durchsuchen</span>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |            |
| <pre> swagger:   info:     host:     basePath:   tags:     - name:       description:     - name:       description:     - name:       description:   paths:     /v1/orders:       get:         tags:           - name:             description:         summary:         operationId:         produces:           - type:             format:             allowEmptyValue:         parameters:           - name:             in:             description:             required:             type:             default:             exclusiveMaximum:             minimum:             exclusiveMinimum:             format:             allowEmptyValue:           - name:             in:             description:             required:             type:             default:             maximum:             exclusiveMaximum:             minimum:             exclusiveMinimum:             format:             allowEmptyValue:           - name:             in:             description:             required:             type:             default:             allowEmptyValue:             x-example: </pre> | <pre> "2.0" {} "api.1nce.com" "/management-api" "/orders" "Order Controller" "/products" "Product information" "/sims" "Manage your SIMs" "/orders" "Get a List of Orders" "getOrdersusingGET" "application/json" "application/json;charset=UTF-8" "page" "query" "Number of the requested page" false "integer" 1 false 1 false "int64" false "pageSize" "query" "The size of the page, maximum allowed value is 10" false "integer" 10 10 false 1 false "int32" false "sort" "query" "Sort values (order_number, order_status and/or order_date) in a comma seperated list, defaults to order_number if not used" false "string" "order_number" false "order_status.order_date" </pre> |            |