

How to use Product-Availability API

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1. Preamble

This document describes how to use Schneider Electric Product-Availability v. 1.0

2. Overview

Product Delivery Date Request (or, shortly speaking, Product Availability) is a RESTful API service providing the date when a desired product in requested amount can be delivered to the defined address.

Consequently, when using the service with your business process, you should know the so-called Product Reference (Schneider Electric Product ID – you probably know it if you're working with Schneider Electric), the amount of this product you want Schneider Electric to deliver, and – it is important – a delivery address ID (ShipTo). Please go through this document to know what's that and where to get one.

3. Getting Started

What you will need

The service is oriented to the distributors, having partner contracts with Schneider Electric. Most of our partners work with us using the mySE web-application (order management platform).

Generally you'll need:

- A ShipTo (stock ID – one or several);
- A Client ID (login);
- A Client Secret (password).

The account in mySE and all the other credentials except of the token can be obtained via your account manager in Schneider Electric in your country, please reach your Schneider Electric contact to get ones.

After you receive your mySE account, you will have one or several addresses listed in the application. The identity of these addresses are the "ShipTo"s you need to work with the service. Technically they are just the IDs of your company's shipping addresses.

These are usually 10-digit IDs. The full list of "ShipTo"s available for your account can be found in "Price and Availability" section of mySE in the "Delivery Address" list.

On the other hand, for each of the API calls you'll need a temporary token. This token can be easily obtained by authentication, described in the "Access token" section, common for all Schneider Electric Global APIs. Having the Client ID and Client Secret you will get the token immediately.

The Client ID and Client Secret process is also described in Access token section, but generally you can request it of your local Schneider Electric contact.

If you're a little bit confused with all the info provided at one time – please don't hesitate to ask your Schneider Electric contact for any help.

4. API Endpoint (Base URL)

Token URLs

Environment	Token URL
Production	https://api.se.com/token

Environment	API URL
Production	https://api.se.com/v1/productavailability/1.0

5. Authentication

Bearer authentication is a security scheme of http type and bearer scheme. Please visit the “Authorization” section in the getting started for more information.

Token Generation Sample using Postman:

1. Select POST and enter the Token URL.
2. From the Body tab, click on radio button x-www-form-urlencoded.
3. Manually enter Key and Value, “grant_type” and “client_credentials”.
4. From the Authorization tab, select Type “Basic Auth”.
5. Set Username to the **client key** (provided to you by the APIFIRST team offline).
6. Set Password to the **client secret** (provided to you by the APIFIRST team offline).
7. Send request and retrieve value of **access_token** from the response message.

Sample curl for Token

```
curl -X POST \
  https://api.se.com/token \
  -H 'Accept: */*' \
  -H 'Authorization: Basic
OFNkWlFqTVVgbWthNG1tVVhvTGUxajcxY2VHQUxBczY6YzQ0Mj10a1VMS3FRQkJDMA==' \
  -d grant_type=client_credentials
```

6. Requests

The request should match the following structure:

URL:

<https://api.se.com/productavailability/1.0/products/<ProductReference>?quantity=<Int>&shipTo=<10-digit-ID>>

HTTP Method: GET

HTTP Headers:

Authorization: Bearer <token>

Accept: application/json

As you can see, following the REST structure, the product reference is defined as part of URI, the quantity and ShipTo are defined as the http parameters, and the token is passed through the http header.

7. Responses

The response will be in JSON data format and follow the following structure:

HTTP Status Code: 200 OK

Response Body:

```
{
  "productRef": "LXM28AU01M3X",
  "quantity": 40,
  "shipTo": 1000033834,
  "availabilities": [
    {
      "quantity": 12,
      "deliveryDate": "2018-08-04T21:00:00Z"
    },
    {
      "quantity": 10,
      "deliveryDate": "2018-05-04T21:00:00Z"
    },
    {
      "quantity": 18,
      "deliveryDate": "2018-02-03T21:00:00Z"
    }
  ]
}
```

Note: if the order staging is not implemented by Schneider Electric in your country, only one element of "availabilities" section will be available.

Note: The required quantity will be rounded to the higher amount, divisible to the minimum amount of order. The minimum amount of order is defined for each of the products. For example, if you request the amount of 13 for the product with a minimum amount of 10, the delivery date for the amount of 20 will be returned.

8. Status Codes

The API uses the following response status codes:

STATUS CODE	DESCRIPTION
200	OK. The request has succeeded. Please proceed with parsing the response
400	Bad Request. Something went wrong and the server cannot recognize the request. Please check if the call is corresponding the described structure and try once more.
401	Invalid token. It might be that your token has expired; please request a new one (link to the Authorization page) and try once again.
404	Not found. The call structure is correct, but this set of the inputs cannot be found. Please check the Error Message for more info. Possible error codes (all are string): " Empty_OrderNumber": Applicable for Order Details and Shipping Schedule methods. Please check if you have provided the Order Number parameter as it's mandatory. " Invalid_Input": One of the inputs provided is wrong. Please check the parameters. " Invalid_OrderNumber": The Order Number is provided, but we cannot find anything related to it. Please provide another Order Number. " Empty_ItemNumber": Applicable for Shipment Schedule method. Please check if you've provided the Item Number.
500	Fault from server. Seems like we're having some issues with the server. Please try again later, it won't take long.