

# Ladu20 API

## API structure

Ladu20 API is REST based, queries are processed via CURL POST requests.

**API base URL:** henceforth **BASEURL**, will be provided by KMA.

**API key:** henceforth **APIKEY**, will be provided by KMA

**Request data** is posted in CURLOPT\_POSTFIELDS as JSON.

**Response** data is JSON formatted and returns request status, request type, result data and rowcount.

HTTP header Content-Type needs to be set to application/json

### PHP sample request

```
<?php
$curl = curl_init();
curl_setopt_array($curl, array(
    CURLOPT_URL => 'https://baseurl/product',
    CURLOPT_RETURNTRANSFER => true,
    CURLOPT_ENCODING => '',
    CURLOPT_MAXREDIRS => 10,
    CURLOPT_TIMEOUT => 0,
    CURLOPT_FOLLOWLOCATION => true,
    CURLOPT_HTTP_VERSION => CURL_HTTP_VERSION_1_1,
    CURLOPT_CUSTOMREQUEST => 'POST',
    CURLOPT_POSTFIELDS => '{"id":"21161"}',
    CURLOPT_HTTPHEADER => array(
        'Content-Type: application/json',
        'x-api-key: APIKEY'
    ),
));
$response = curl_exec($curl);
curl_close($curl);
echo $response;
```

### Result handling

Query success or failure is defined in the boolean response field "ok". Response data and error descriptions are available in the field "data".

#### Successful response with results:

```
{
  "timestamp": "2023-10-13T10:00:35.133",
  "ok": true,
  "query": "customer",
  "row_count": 1,
  "data": [
    {
      "customer_code": "1234",
      "main_customer_code": "1234",
      "receiving_customer_code": "1234",
      "last_update": "2023-10-06T10:35:56.177",
      "name": "TEST OÜ",
      "reg_code": "1234568",
      "vat_in_use": 1,
      "vat_no": "EE1234567",
      "is_private_person": 0,
      "is_customer": 1,
      "is_supplier": 0,
      "is_producer": 0,
      "is_transporter": 0,
      "is_owner": 0,
      "phone": "555555555",
      "address1": "Mustamäe tee 46",
      "address2": "Harjumaa",
      "address3": "Tallinn",
      "postcode": "10612",
      "country": "EE",
      "language": "et",
      "email": "info@kma.ee",
      "currency": "EUR",
      "ref_no": "0",
      "old": 0,
      "rowno": 1
    }
  ]
}
```

#### Successful response with no results:

```
{
  "timestamp": "2023-10-13T09:54:22.303",
  "ok": true,
  "query": "customer",
  "row_count": 0
}
```

#### Unsuccessful request:

```
{
  "timestamp": "2023-10-13T09:56:54.410",
  "ok": false,
  "query": "customer",
  "data": {
    "message": "Technical error occurred"
  }
}
```

## Data output requests

API requests serve data from Ladu20 by predefined filterable POST requests. Filter parameters are defined per request and are not mandatory.

Currently the following standard outputs are available:

- Customer data
- Product data
- Stock levels
- Order
- Dispatch
- Invoice

## Customer data

**URL:** *BASEURL*/customer

Returns customer data from Ladu20 database. Ladu20 defines customers as one collection of data with several statuses. The latter means the customer cards for suppliers, customers, producers etc are the same data unit, with several statuses defining the customer state (eg is\_supplier=1 means that the customer is also regarded a supplier in Ladu20).

## Filter parameters

| PARAMETER NAME | TYPE   | DESCRIPTION   | Default value  |
|----------------|--------|---|----------------|
| last_update    | string | returns data which is update later than the timestamp;<br>format: 2023-10-11T00:00:00 | last 240 hours |
| old            | bool   | returns results marked as old in Ladu20;  | false          |
| id             | string | customer id in Ladu20   |                |
| page           | int    | Range 1-n   | 1              |
| rowcount       | int    | Range 1-1000  | 300            |

## Sample request data

'{"last\_update":"2023-10-11T00:00:00","rowcount":2,"page":1}'

## Response data

| FIELD NAME              | TYPE    | DESCRIPTION                                  |
|-------------------------|---------|--|
| customer_code           | int     |  |
| main_customer_code      | int     | payer customer code                          |
| receiving_customer_code | int     |  |
| last_update             | date    | format: 2023-10-11T00:00:00,<br>created date |
| name                    | string  |  |
| reg_code                | string  |  |
| vat_in_use              | int     |  |
| vat_no                  | string  |  |
| is_private_person       | boolean |  |
| customer                | boolean | customer status                              |

|                 |         |                 |
|-----------------|---------|-----------------|
| supplier        | boolean | customer status |
| producer        | boolean | customer status |
| transporter     | boolean | customer status |
| owner           | string  |                 |
| info            | string  |                 |
| phone           | string  |                 |
| address1        | string  | street          |
| address2        | string  | city            |
| address3        | string  | county          |
| postcode        | string  |                 |
| country         | string  |                 |
| language        | string  |                 |
| email           | string  |                 |
| currency        | decimal |                 |
| bank            | string  | bank name       |
| bankaccount     | string  |                 |
| ref_no          | int     | reference no    |
| glncode         | int     |                 |
| lat             | int     | latitude        |
| long            | int     | longitude       |
| credit_limit    | decimal |                 |
| debt_min_amount | decimal |                 |
| debt_from       | int     | debt from days  |

|                |        |  |
|----------------|--------|--|
| owner_customer | string |  |
|----------------|--------|--|

# Product data

**URL:** *BASEURL*/product

Returns product data from Ladu20 database. Ladu20 defines all product information with prices, replacements, parameters, lots, images and price agreements. In addition, the current state of the products, ordered and reserved quantities.

The price of the products ("price excluding VAT") is usually the main selling price. To classify products more easily, we have created groups of products. You can also add subgroups to item groups. For example product group1 no is 1 and, code V1 and description vegetables then subgroup for group1 may be V12(apples), V13 (citrus) etc.

## Filter parameters

| PARAMETER NAME | TYPE   | DESCRIPTION   | Default value  |
|----------------|--------|---|----------------|
| last_update    | string | returns data which is update later than the timestamp;<br>format: 2023-10-11T00:00:00 | last 240 hours |
| old            | bool   | returns results marked as old in Ladu20;  | false          |
| id             | string | customer id in Ladu20   |                |
| page           | int    | Range 1-n   | 1              |
| rowcount       | int    | Range 1-1000  | 300            |
| group1         | string |   |                |
| group2         | string |   |                |
| group3         | string |   |                |
| group4         | string |   |                |

## Sample request data

'{"last\_update":"2023-10-11T00:00:00","rowcount":10,"page":4}'

## Response data

| FIELD NAME            | TYPE    | DESCRIPTION                       |
|-----------------------|---------|-----------------------------------|
| product_id            | int     | product code                      |
| product_code          | int     | siffer                            |
| barcode               | string  |                                   |
| product_name          | string  |                                   |
| baseunit              | string  |                                   |
| large_unit            | string  |                                   |
| large_unit_multiplier | string  |                                   |
| aidunit               | string  |                                   |
| aidunit_multiplier    | string  | aidunits in one package           |
| min_sales_qty         | decimal | minimum quantity on sale          |
| sales_qty_step        | decimal | minimum quantity step on sale     |
| is_expireable         | boolean | product is expirable or not (1,0) |
| product_shelf_life    | string  |                                   |
| cn8                   | string  | cn8 code                          |
| coo                   | string  | country of origin                 |
| min_temp              | string  | minimum temperature               |
| max_temp              | string  | maximum temperature               |
| stock_qty             | decimal | stock quantity                    |
| ordered_qty           | decimal | ordered quantity                  |
| reserved_qty          | decimal | reserved quantity                 |
| netweight             | int     |                                   |
| brutweight            | int     |                                   |
| volume                | int     |                                   |
| price                 | decimal |                                   |
| vat                   | int     | vat on sale                       |
| group1                | boolean | product group                     |
| group2                | boolean | product group                     |
| group3                | boolean | product group                     |
| group4                | boolean | product group                     |
| group5                | boolean | product group                     |
| last_update           | date    | format: 2023-10-11T00:00:00       |

|                        |        |                     |
|------------------------|--------|---------------------|
| web_groups/group_id    | int    | product webgroup id |
| web_groups/group_code  | int    | product group id    |
| web_groups/group_name  | string | product group name  |
| flex_groups/group_id   | int    | product webgroup id |
| flex_groups/group_code | int    | product group id    |
| flex_groups/group_name | string | product group name  |

# Stockbalance

**URL:** *BASEURL*/stockbalance

Returns stockbalance data from Ladu20 database - product amounts in different warehouses (balance, ordered, reserved). Owner is usually main warehouse.

Filter parameters

| PARAMETER NAME | TYPE | DESCRIPTION  | Default value |
|----------------|------|--------------|---------------|
| id             | int  | id           |               |
| page           | int  | Range 1-n    | 1             |
| rowcount       | int  | Range 1-1000 | 300           |

## Sample request data

'{"last\_update":"2023-10-11T00:00:00","rowcount":10,"page":4}'

## Response data

| FIELD NAME               | TYPE    | DESCRIPTION |
|--------------------------|---------|-------------|
| product_id               | int     |             |
| product_code             | string  | siffer      |
| stock_balance            | decimal |             |
| ordered_amount           | decimal |             |
| reserved_amount          | decimal |             |
| product_id               | int     |             |
| rows/owner               | string  |             |
| rows/owner_stock_balance | decimal |             |

# Order

**URL:** *BASEURL*/order

Returns order data from Ladu20 database. Order = sales order, which is in most cases, the primary document for the sales side for the warehouse.

## Filter parameters

| PARAMETER NAME | TYPE   | DESCRIPTION                               | Default value |
|----------------|--------|---|---------------|
| start          | string | date from,<br>format: 2023-10-11T00:00:00 |               |
| id             | int    | order id                                  |               |
| end            | date   | date until, format: 2023-10-11T00:00:00   |               |
| customer_id    | string | customer code                             |               |
| page           | int    | Range 1-n                                 | 1             |
| rowcount       | int    | Range 1-1000                              | 300           |

## Sample request data

```
'{"last_update":"2023-10-11T00:00:00","rowcount":10,"page":4}'
```

## Response data

| FIELD NAME      | TYPE    | DESCRIPTION                                |
|-----------------|---------|--|
| customer_code   | int     |  |
| doc_no          | string  | order no                                   |
| doc_date        | date    | order date, format: 2023-10-11T00:00:00    |
| del_due         | date    | delivery date, format: 2023-10-11T00:00:00 |
| status          | string  | order status                               |
| additional_info | string  |  |
| inserter        | string  |  |
| dicount_per     | decimal | discount percent                           |



|                   |         |                                       |
|-------------------|---------|---------------------------------------|
| doc_no2           | string  | customer order no                     |
| confirmed         | boolean |                                       |
| currency          | decimal |                                       |
| currency_rate     | decimal |                                       |
| customer_date     | date    | format: 2023-10-11T00:00:00           |
| pre_order         | boolean |                                       |
| payer             | string  | payer customer                        |
| warning           | string  |                                       |
| xml_done          | boolean |                                       |
| owner             | string  |                                       |
| customer          | string  | customer who placed the order         |
| phone             | string  | customer phone no                     |
| country           | string  | customer country                      |
| picking_in_prog   | boolean | picking in progress                   |
| payment_due       | date    | format: 2023-10-11T00:00:00           |
| payment_type      | string  | cash, transfer etc                    |
| weborder_id       | int     |                                       |
| customer_name     | string  | customer contact who placed the order |
| doc_sum           | decimal |                                       |
| recip_customer    | string  | recipient customer                    |
| original_quantity | decimal |                                       |
| quantity          | decimal |                                       |
| price             | decimal |                                       |
| baseprice         | decimal |                                       |

# Dispatch

**URL:** ***BASEURL***/dispatch

Returns order data from Ladu20 database - dispatch of the products from Ladu20 warehouses.

## Filter parameters

| PARAMETER NAME | TYPE   | DESCRIPTION                               | Default value |
|----------------|--------|---|---------------|
| start          | string | date from,<br>format: 2023-10-11T00:00:00 | 1             |
| id             | int    | dispatch id                               |               |
| end            | date   | date until, format: 2023-10-11T00:00:00   |               |
| customer_id    | string | customer code                             |               |
| page           | int    | Range 1-n                                 | 1             |
| rowcount       | int    | Range 1-1000                              | 300           |

## Sample request data

'{"last\_update":"2023-10-11T00:00:00","rowcount":10,"page":4}'

## Response data

| FIELD NAME        | TYPE    | DESCRIPTION                 |
|-------------------|---------|-----------------------------|
| dispatch_code     | int     |                             |
| customer_id       | int     |                             |
| dispatch_type_id  | string  |                             |
| date              | date    | format: 2023-10-11T00:00:00 |
| doc_no            | string  | dispatch document no        |
| discount_per      | int     | discount percent            |
| inserter          | string  |                             |
| sum_net           | decimal |                             |
| sum_incl_vat      | decimal | sum including vat           |
| due               | string  | payment due                 |
| payer             | string  | payer customer              |
| additional_info   | string  |                             |
| currency          | decimal |                             |
| payment_type      | string  | cash, transfer etc          |
| warehouse_aadress | string  |                             |
| account           | string  | bank account                |

|                 |         |                          |
|-----------------|---------|--------------------------|
| country         | string  |                          |
| rec_customer    | string  | recipient customer       |
| needed_due      | date    |                          |
| owner           | string  |                          |
| ship_customer   | string  |                          |
| tracking_no     | string  |                          |
| paid            | decimal |                          |
| amount_of_boxes | decimal |                          |
| product_id      | string  |                          |
| batch           | int     | batch code               |
| amount          | decimal |                          |
| discount_per    | int     | discount percent         |
| price           | decimal | product price            |
| net_value       | int     |                          |
| discount_price  | decimal |                          |
| base_price      | decimal |                          |
| brut_weight     | int     |                          |
| set             | string  | set of products          |
| account         | string  | bank account             |
| row_amount      | decimal |                          |
| stockaddress    | string  |                          |
| set_amount      | decimal | how many products in set |
| pieces          | int     |                          |
| warning         | string  |                          |
| sales_id        | int     | saleorder id             |
| pricelist_id    | int     |                          |
| price_type      | string  |                          |
| vat_sale        | string  |                          |
| fix_net_value   | string  |                          |
| warehouse_agent | string  | warehouse agent name     |
| added           | boolean | dispatch added (1,0)     |
| package_id      | string  |                          |

|                 |        |                                     |
|-----------------|--------|-------------------------------------|
| picker          | string | warehouse agent who picked products |
| agent           | string | agent on sale                       |
| base_code       | string |                                     |
| batch_id        | int    |                                     |
| description     | string |                                     |
| expiration_date | date   | format: 2023-10-11T00:00:00         |

# Invoice

**URL:** *BASEURL*/invoice

Returns invoice data from Ladu20 database. Invoices are accounting outputs from dispatches.

## Filter parameters

| PARAMETER NAME | TYPE   | DESCRIPTION   | Default value  |
|----------------|--------|---|----------------|
| last_update    | string | returns data which is update later than the timestamp;<br>format: 2023-10-11T00:00:00 | last 240 hours |
| end            | date   | format: 2023-10-11T00:00:00   |                |
| customer_id    | string | customer code   |                |
| id             | int    | invoice id  |                |
| page           | int    | Range 1-n   | 1              |
| rowcount       | int    | Range 1-1000  | 300            |

## Sample request data

'{"last\_update":"2023-10-11T00:00:00","rowcount":10,"page":4}'

## Response data

| FIELD NAME    | TYPE | DESCRIPTION |
|---------------|------|-------------|
| customer_code | int  |             |

|                 |         |                                 |
|-----------------|---------|---------------------------------|
| invoice_date    | date    | invoice (document created) date |
| invoice_no      | string  | invoice number                  |
| total           | decimal | total sum                       |
| paid            | decimal |                                 |
| paid_date       | date    | format: 2023-10-11T00:00:00     |
| fine_for_delay  | String  |                                 |
| deadline        | date    | format: 2023-10-11T00:00:00     |
| paym_meth       | string  | payment method                  |
| printed         | boolean |                                 |
| post_date       | date    | format: 2023-10-11T00:00:00     |
| partial         | string  | partial payment                 |
| cred_invoice_no | string  | credit invoice no               |
| from_stock      | string  | sent out from stock             |
| report_done     | boolean |                                 |
| warning         | string  |                                 |
| owner           | string  |                                 |
| ref_no          | string  | reference no                    |
| add_info        | string  | additional information          |
| prepaym_amount  | decimal |                                 |
| prepaym_info    | string  |                                 |
| returned        | boolean |                                 |
| product_id      | long    |                                 |

|                  |         |                          |
|------------------|---------|--------------------------|
| batch            | long    | products batch           |
| amount           | decimal |                          |
| discount_percent | int     | %                        |
| price            | decimal |                          |
| net_value        | int     |                          |
| discount_price   | decimal |                          |
| base_price       | decimal |                          |
| brut_weight      | int     |                          |
| set              | string  | set of products          |
| account          | string  |                          |
| row_amount       | decimal |                          |
| stockaddress     | string  |                          |
| set_amount       | decimal | how many products in set |
| pieces           | int     |                          |
| vat_sale         | boolean |                          |

# Importing data

## Salesorder

**URL:** ***BASEURL***/salesorder

With salesorder access point, you can import sales orders to Ladu20. Posting is identical to data output requests.

**Important notes:**

- If no customer code is defined, Ladu20 uses a generic customer code for the order.
- Delivery information blocks are used for postal services integrations;
- If you are using the API for B2B orders services, do not fill the subblocks customer and delivery;
- VAT percentages are especially important for cross border sales;
- Transportation fees should be added to document rows with product codes according to the product database.

## Input data

| FIELD NAME                | TYPE   | DESCRIPTION   | REQUIRED           |
|---------------------------|--------|---|--------------------|
| customer_code             | string | customer code in Ladu20                               |                    |
| customer/name             | string | customer name   |                    |
| customer/street           | string | delivery address street                               |                    |
| customer/city             | string | delivery address city                                 |                    |
| customer/postalcode       | string | delivery address postal code                          |                    |
| customer/county           | string | county code   |                    |
| customer/country          | string | country code  |                    |
| customer/email            | string | email   |                    |
| customer/phone            | string | address   |                    |
| customer/is_company       | bit    | yes/no  |                    |
| customer/company_name     | string | Customer company name                                 |                    |
| customer/company_regno    | string | Mandatory if is_company=1                             |                    |
| customer/company_vatno    | string |   |                    |
| delivery/type             | string | "Parcel machine", "Courier" or "Self pickup"          |                    |
| delivery/delivery_partner | string | Delivery partner name for courier and parcel machines | parcel and courier |
| delivery/name             | string | customer name   |                    |
| delivery/company_name     | string | company name  |                    |
| delivery/street           | string | delivery address street                               |                    |
| delivery/city             | string | delivery address city                                 |                    |
| delivery/postalcode       | string | delivery address postal code                          |                    |
| delivery/county           | string | county  |                    |
| delivery/country          | string | country   |                    |

|                      |         |  |             |
|----------------------|---------|--|-------------|
| delivery/email       | string  | email  |             |
| delivery/phone       | string  | phone number   |             |
| delivery/parcel_code | string  | parcel machine number  | parcel only |
| doc_no               | string  | order number in external system  | *           |
| project_code         | string  | order project code for Ladu20  |             |
| doc_seller           | string  | Seller code for whole document   |             |
| doc_date             | string  | order date in external system, format "2019-12-31T11:14:25.473" defaults to now                |             |
| del_due              | string  | delivery deadline, format "2019-12-31T11:14:25.473" defaults to now+1                          |             |
| currency             | string  | order currency code  |             |
| currency_rate        | decimal | order rate   |             |
| order_sum            | decimal |  |             |
| order_sum_with_vat   | decimal |  |             |
| payment_partner      | string  | payment partner or account code. Used for accounting purposes.                                 |             |
| payment_sum          | decimal | sum of prepayment  |             |
| payment_type         | int     |  |             |
| rows/product_code    | string  | row product code in Ladu20   | *           |
| rows/product_name    | string  | product name, if required as additional info; if not filled, default product name will be used |             |
| rows/quantity        | decimal | order row quantity   | *           |
| rows/price           | decimal | netprice   | *           |
| rows/vat             | int     | vat percentage of order row  |             |
| rows/seller          | string  | row based seller code  |             |

Sample data



```
{
  "customer_code":"kaupmees#",
  "customer":{
    "name":"kaupmees nimi",
    "street":"kase 1",
    "city":"tallinn",
    "postalcode":"12345",
    "county":"harjumaa",
    "country":"ee",
    "email":"info@mail. Ee",
    "phone":"55 123 123"
  },
  "delivery":{
    "delivery_partner":"Omniva",
    "email":"info@mail.Ee",
    "phone":"55 123 123"  ,
    "name":"Name on parcel",
    "country":"ee",
    /* FOR PARCEL MACHINE */
    "type":"Parcel machine",
    "parcel_code":"444569",  ,
    /* FOR COURIER */
    "type":"Courier",
    "street":"kase 1",
    "city":"tallinn",
    "county":"harjumaa"
    "postalcode":"12345"
  },
  "doc_no":"10001",
  "project_code":"WEBSHOP_01"
  "doc_date":"2019-12-31t11:14:25.473",
  "del_due":"2019-12-31t00:00:00",
  "currency":"eur",
  "currency_rate":1,
  "order_sum":134.15,
  "order_sum_with_vat":154.15,
  "payment_type":1,
  "payment_partner":'Maksekeskus',
  "payment_sum":154.15,
```

```
"rows":[
  {
    "product_code":"digi",
    "product_name":"ajakiri digi",
    "quantity":1,
    "vat":20,
    "price":4.185
  },
  {
    "product_code":"digi-2",
    "product_name":"ajakiri digi",
    "quantity":2,
    "vat":20,
    "price":4.185
  },
  {
    "product_code":"digi-3",
    "product_name":"ajakiri digi",
    "quantity":3,
    "vat":0,
    "price":14.185
  }
]
```

# Order payment

**URL:** *BASEURL*/order\_payment

Adding a payment to an existing order.

Input data

| FIELD NAME  | TYPE    | DESCRIPTION               | REQUIRED |
|-------------|---------|---------------------------|----------|
| doc_no      | string  | Document number in Ladu20 | *        |
| order_id    | int     | Order ID in Ladu20        |          |
| payment_sum | decimal | Sum of made payment       | *        |

Sample data

```
{  
  "payment_sum":145.67,  
  "doc_no":"11145",  
  "order_id":12455  
}
```

---

Revision #34

Created 13 October 2023 06:24:54 by Mehis

Updated 2 September 2024 09:42:16 by Mehis