

Korttivarasto API

vastuu group

Interface for verifying authorised personal identity cards.

Record of amendments

Date	Amended by	Amendment
26 Sep 2022	Marko Vähänen	Removed old documentation, new API urls. Removed modifiedBy and added cardVerificationStatus to response.
10 Mar 2021	Marko Vähänen	Updated terminology
20 Mar 2015	Lari Iso-Anttila	Added country code support to Valtti--cards URI changes
26 Jun 2013	Suomen Tilaajavastuu Oy	First version

Environments

Environment	URL
Beta	https://api.staging-vastuugroup.fi/korttivarasto/v1.2/...
Production	https://api.vastuugroup.fi/korttivarasto/v1.2/...

General description of interface

Vastuu Group's Employee Management and Valtti card services are intended for employer companies in the construction and shipbuilding industry to transmit employer and employee information in electronic form to the buyer of the work, the general contractor of the construction site, the employer with primary decision-making power in the shipyard area or someone else as the site administrator.

In the construction industry, the service can be used to collect and forward personal data to main contractors who use the Työmaarekisteri service or a similar third-party information system to submit the employee reports required by the Tax Administration to the Tax Administration. In the shipbuilding industry, the Employee Management service is used to collect and transfer information to the employer who exercises primary decision-making power at the shipyard, so that they can prepare the personnel lists of the people working at the shipyard required for occupational safety.

The Valtti card is a photo ID card in accordance with the Occupational Safety and Health Act, which can be used, for example, as a personal photo ID card as referred to in the Occupational Safety and Health Act (2002/738) at a construction site or shipyard. Valtti cards can only be issued to persons who, at the time of ordering the card, are in the Tax Administration's tax number registers for the construction and/or shipbuilding sector.

The Korttivarasto API service and user interface maintain information about the cards in use. Card and tax number information can be checked on a computer using the user interface described in this document.

Korttivarasto in brief

The data in the cards supplied by Vastuu Group is stored in the Korttivarasto service.

The Korttivarasto data is used for verifying an employee's individual tax number at the worksite, specifically at the time the employee is introduced to the construction work. Typically, the check of the personal identity card will be made by machine reading the card's barcode. The worksite system will then send a request to the Korttivarasto for retrieving the tax number and other card data.

Card data can be retrieved from the Korttivarasto using the following keys:

- Barcode ID (BID): sequence of numbers on the card (the numeric value of the barcode)
- ID generated by producer (UID): card identifier
- Tax number and business identity code (TaxNumber and BusinessId)

Immediately after the card is checked, the customer application can verify the card's authenticity.

Korttivarasto API can be used to retrieve a list of closed cards and can itself terminate cards.

Form of interface

The interface consists of HTTP requests and it adheres to REST principles.

The presentation is mainly XML (UTF8). The request's "Content-Type" for XML messages is application/xml, the response "application/xml; charset=utf-8". The PDF copy of the card and the personal photograph are embedded in the data types (Base64 encoded). The interface returns 200 OK to HTTP requests, or an appropriate error code:

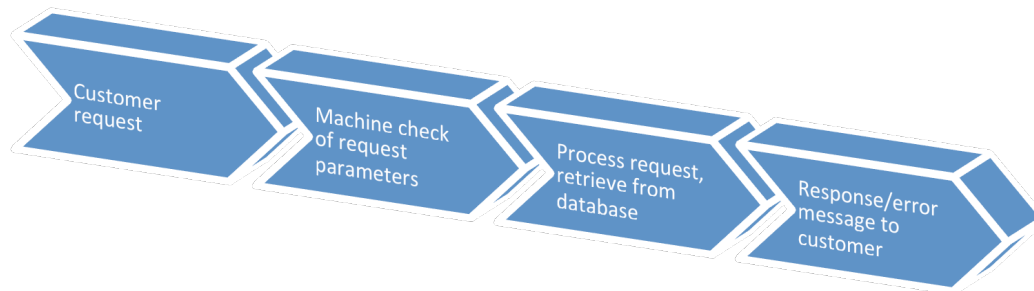
- 400 Bad request ("InvalidRequest", "SchemaFailure", "IllegalCard", "InvalidStatusChange")
- 401 Unauthorized
- 404 Not found ("NotFound")
- 409 Conflict ("AlreadyExists")
- 415 Unsupported media type ("InvalidMediaType")
- 503 Service unavailable ("Error")

Information security

Traffic is managed via the HTTPS protocol and **users are identified** using the HTTP Basic authentication method.

Processing a request

The **validity of parameters** checked by machine is always **verified** before processing the request.



Data content

Korttivarasto incorporates two types of data: data visible on the card and data not visible on the card. The card below shows all the data that is visible on the card.

New Valtti 2.0 card



Previous Valtti card



The visible and invisible card data stored in the Korttivarasto are:

- Card identifier (BarcodeId --BID)
- Person's first name (Firstname)
- Person's surname (Surname)
- Person's tax number (TaxNumber)
- Person's date of birth (Birthday) – *not obligatory*
- Employer's name (Employer name)
- Employer's business identity code (Employer BusinessId)
- Card's validity period (Valid Until) – *not obligatory*
- Personal identity card holder's photograph in PNG form (Photo)
- Card in PDF form (PDFCopy)
- ID generated by card producer (UID)

In addition to the above data, the card has status information. The status information may include:

- Enumerated status (status):
 - Unconfirmed ("NotConfirmed")
 - Active ("Active")
 - Closed ("Closed")
 - Expired ("Expired")
- Date of modification (ModifiedDate)
- Reason for modification (Reason):
 - Card closed ("CardClosed")
 - Card lost ("CardLost")
 - Other error ("CardError")
- Additional information (Description)

Both the card's UID and BID are unique data items in the databank.

Interface functionalities

Retrieve Card

The employee's tax number and other card data are retrieved from the centralized Korttivarasto via the interface.

The interface is intended for partner companies of Vastuu Group Oy who verify personal identity cards (at the worksite) at the time the employees are introduced to the construction work.

Requests

Card data can be retrieved from the Korttivarasto using the following keys:

- Barcode ID (BID): sequence of numbers on the card (the numeric value of the barcode)
- ID generated by producer (UID): card identifier
- Tax number and business identity code (TaxNumber and BusinessId) The following can be retrieved from the card:
- Data content (URL ends .xml)
- Card template in PDF form (URL ends .pdf)
- Person's photograph for the card (URL ends .jpg)

Example requests:

- GET https://api.vastuugroup.fi/korttivarasto/v1.2/cards/10101010101.xml
- GET https://api.vastuugroup.fi/korttivarasto/v1.2/cards/10101010101.png
- GET https://api.vastuugroup.fi/korttivarasto/v1.2/cards/uid/1234567890ABCD.pdf
- GET https://api.vastuugroup.fi/korttivarasto/v1.2/cards/businessId/1234567-8/taxNumber/02938492384.xml
- GET https://api.vastuugroup.fi/korttivarasto/v1.2/cards/businessId/1234567-8/countryCode/EE/taxNumber/1234567890.xml

Response

The response will be data in the requested form, i.e. data in XML form, a PDF document or a photograph. XML response:

Active Valtti card:

- Data content (as in the section headed *Data content*, excluding binary data).
- Card identifier (Card.barCodeId)
- Person's first name (Person.firstName)
- Person's surname (Person.surname)
- Person's tax number (Person.taxNumber)
- Person's date of birth (Person.birthDay) --*not obligatory*
- Employer's name (Employer.name)
- Employer's business identity code (Employer.businessId)
- Employer's business identity code (Employer.countryCode)
- Card's validity period (Card.validUntil) – *not obligatory*
- ID generated by producer (UID)
- Status data (CardStatus)
- Status (status, as in the section headed *'Data content'*)
 - Date of modification (modifiedDate)
 - Reason for modification (reason, as in the section headed *'Data content'*)
 - Additional information (description)

Closed or expired Valtti Card:

- Data content (as in the section headed *Data content*, excluding binary data).
- Card identifier (Card.barCodeId)
- Card's validity period (Card.validUntil) – *not obligatory*
- ID generated by producer (UID)
- Status data (CardStatus)
- Status (status, as in the section headed *'Data content'*)
 - Date of modification (modifiedDate)
 - Additional information (description)
 - Card verification status verified/unverified/not eligible (cardVerificationStatus)

PDF response:

- PDF document (card print template) PNG response:
- Person's PNG photograph

An example of an active Valtti card (XML):

```
<?xml version="1.0" encoding="UTF-8"?>
<GetCardResponse result="OK">
  <Card barCodeId="152436473459" validUntil="2014-05-30T09:30:10Z" uid="0123456789ABCD">
    <Status status="Closed" date="2013-05-30T11:22:43.000+02:00" reason="CardError" description="
Lirum larum" cardVerificationStatus="verified"/>
    <Person firstName="Matti" surname="Meikäläinen" taxNumber="12345678901" birthDay="21.7.1964"/>
    <Employer name="George Construction Service" businessId="1234567-8" countryCode="FI"/>
  </Card>
</GetCardResponse>
```

An example of an closed/expired Valtti card (XML):

```
<?xml version="1.0" encoding="UTF-8"?>
<GetCardResponse xmlns="http://www.tilaajavastuu.fi/korva.xsd" result="OK">
  <Card barCodeId="233635121411" uid="01645c02dd5d81" validUntil="2024-09-03T21:00:00.000+03:00">
    <Status status="Closed" modifiedDate="2022-09-19T14:36:45.000+03:00" cardVerificationStatus="verified"/>
  </Card>
</GetCardResponse>
```

Error situations

- If an error preventing operation is found in other parameters
- Fields of incorrect type ("InvalidRequest" – 400)
- Card not found with the key (or key pair) in question ("NotFound" – 404)

Retrieve Closed Cards

List closed cards. The system returns up to the last 10000 closed cards from the Korttivarasto. The default is to return the cards closed in the last month.

The interface is intended for partner companies of Vastuu Group Oy who verify personal identity cards (at the worksite) at the time the employees are introduced to the construction work.

Request

Example:

```
GET https://api.vastuugroup.fi/korttivarasto/v1.2/cards?status=Closed
```

The retrievable status designations are "Closed" and/or "Expired". The combination of these is expressed as "status=Closed,Expired".

The default is to return the cards expired in the last month. With the URL parameters "&start=..." and "&end=..." you can retrieve any time window (format yyyy-MM-dd).

Response

The response is a list of cards on which the following information is retrieved:

- Card identifier
- Status (status, as in the section headed 'Data content')
 - Date of modification (modifiedDate)
 - Additional information (description)
 - Card verification status verified/unverified/not eligible (cardVerificationStatus)

Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<FindCardResponse amount="2" result="OK">
  <Cards amount="2">
    <Card uid="0123456789ABCD">
      <Status modifiedDate="2013-04-01T00:00:00.000+03:00" status="Closed"
cardVerificationStatus="verified"/>
    </Card>
    <Card uid="AAAAAAAAAAAAAAAA">
      <Status modifiedDate="2013-05-05T00:12:34.567+03:00" status="Expired"
cardVerificationStatus="verified"/>
    </Card>
  </Cards>
</FindCardResponse>
```

Error situations

- Incorrect type of request parameters ("InvalidRequest" – 400)