Feeniks XML API

How-to Guide

Version 0.2  2017-11-08  BEL: First version for operators
Version 0.1  2017-11-06  BEL Solutions Oy: Initial DRAFT version for internal use & review
General description
This document describes usage of XML API of Feeniks system. Feeniks is a working title for the new e-invoice address catalog. API is implemented as a RPC-style XML interface.

Feeniks has separate test and production environments and appropriate service should be used as part of the urls when accessing the XML API. In this document all URLs used point to test site. Replace test server part of an url with production server when appropriate.

Service addresses:
- TEST: test.osoitteisto.bel.fi
- PRODUCTION: to be determined

Some of the services require http basic authentication with a valid operator-specific account and password. To be able to use some services properly, you'll need to know your operator prefix for eAddress AuthorizationToken. You can get both of these from TIEKE, who manages the service. For more information on eAddress, see separate eAddress documentation (https://www.apix.fi/eaddress).

Currently (this may change later) you can also use following authentication and other information on test service:
- Account: info@bel.fi
- Password: aaaBBB###
- Prefix for eAddress AuthorizationToken: EO
- OVT: 003712345671
- ServiceID for eAddress ServiceID: TESTTEST

The account and password above is used as part of the examples throughout the document. Please replace these with your operator-specific account and password.

Services
Download e-invoice addresses
This service returns all e-invoice addresses within Feeniks system in eAddress format.

- Method: GET
- URL: https://test.osoitteisto.bel.fi/server/Integration/xmlExport
- Authentication: required
- Add Accept-Encoding: gzip header to allow server to pack the response for transport.
- Returns
  o On success
    ▪ http status code 200 OK
    ▪ Content type is application/xml
    ▪ Response body follows eAddress schema.
  o On error
    ▪ some other http status code (e.g. 4xx, 5xx)
UNIX command line example:
```
curl --basic --user 'info@bel.fi:aaaBBB###' -X GET
https://test.osoitteisto.bel.fi/server/Integration/xmlExport
```

**Upload e-invoice addresses**

You may incrementally update (add, delete or replace) single or multiple e-addresses within Feeniks system by sending valid eAddress files to this interface. Please see eAddress documentation for further details. Simple examples can be found in appendix 1, 2 and 3.

Instead of incremental updates you can also replace all e-addresses associated with the operator account you are using. You should run this operation at regular intervals to ensure that e-addresses you are managing and your Feeniks e-addresses are in sync. Please see eAddress documentation for further details. Simple example can be found in appendix 4.

It is strongly encouraged that you pack this material and use **http Transport-Encoding: gzip** header. Also, your eAddress ID, ServiceID and AuthorizationToken prefixes must match operator-specific information attached to the account you are using.

- Method: PUT
- URL: `https://test.osoitteisto.bel.fi/server/Integration/xmlImport`
- Authentication: required
- Content type should be set to application/xml
- Note: Pack eAddress-file and use http Transport-Encoding: gzip header
- Returns
  - On success:
    - http status code 200 OK
    - Content type is application/xml
    - Document conforms to BatchResponse xml schema (see BatchResponse schema)
  - On error:
    - some other http status code for protocol-level error or unhandled system error
    - BatchResponse with a Status field with text content other than OK.

UNIX command line example:
```
curl --basic --user 'info@bel.fi:aaaBBB###' -X PUT -T ./EO-address-one-NEW.xml
https://test.osoitteisto.bel.fi/server/Integration/xmlImport
```

**Get BatchResponse schema**

Returns response batch schema. BatchResponses generally carry statistical information on the operations performed in the database. Status field contains the overall result, which contains “OK” when Feeniks database was updated, or some other text string when not. The Errors array contains error messages which describe the cause of the error in human readable format.

- Method: GET
- URL: `https://test.osoitteisto.bel.fi/server/Integration/xmlImportSchema`
- Authentication: not required
- Returns:
  o On success
    ▪ http status code 200 OK
    ▪ Content type is application/xml
    ▪ Content is the schema document.
  o On error:
    ▪ some other http status code.

UNIX command line example:
curl -X GET https://test.osoitteisto.bel.fi/server/Integration/xmlImportSchema
Appendix 1: Example of eAddress XML to update (add new) single e-invoice address

```xml
<?xml version="1.0" encoding="UTF-8"?>
<Batch Function="UPDATE" Timestamp="2017-10-06T13:17:47Z" Version="1.1"
 xsi:noNamespaceSchemaLocation="eAddress1.1.xsd"
xmns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Organization>
    <Name>TESTORGANISAATIO OY</Name>
    <Identifier TYPE="BUSINESSID">7654321-2</Identifier>
    <eAddress Context="EINVOICE" Direction="RECEIVE" Operation="NEW">
      <Name>TESTIEADDRESS (added)</Name>
      <ID IDType="OVT">003776543212</ID>
      <ServiceID IDType="BIC">TESTTEST</ServiceID>
      <PermissionToSend>true</PermissionToSend>
      <Active>true</Active>
      <AuthorizationToken>EO12345678901234567890</AuthorizationToken>
    </eAddress>
  </Organization>
</Batch>
```
Appendix 2: Example of eAddress XML to update (delete) single e-invoice address

```xml
<?xml version="1.0" encoding="UTF-8"?>
<Batch Function="UPDATE" Timestamp="2017-10-06T13:17:47Z" Version="1.1"
xsi:noNamespaceSchemaLocation="eAddress1.1.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <Organization>
        <Name>TESTIORGANISAATIO OY</Name>
        <Identifier TYPE="BUSINESSID">7654321-2</Identifier>
        <eAddress Context="EINVOICE" Direction="RECEIVE" Operation="DELETE">
            <Name>TESTIEADDRESS (deleted)</Name>
            <ID IDType="OVT">003776543212</ID>
            <ServiceID IDType="BIC">TESTTEST</ServiceID>
            <PermissionToSend>true</PermissionToSend>
            <Active>true</Active>
            <AuthorizationToken>EO12345678901234567890</AuthorizationToken>
        </eAddress>
    </Organization>
</Batch>
```
Appendix 3: Example of eAddress XML to update (replace) single e-invoice address

```xml
<?xml version="1.0" encoding="UTF-8"?>
<Batch Function="UPDATE" Timestamp="2017-10-06T13:17:47Z" Version="1.1"
xsi:noNamespaceSchemaLocation="eAddress1.1.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Organization>
    <Name>TESTORGANISAATIO OY</Name>
    <Identifier TYPE="BUSINESSID">7654321-2</Identifier>
    <eAddress Context="EINVOICE" Direction="RECEIVE" Operation="REPLACE">
      <Name>TESTIEADDRESS (replaced)</Name>
      <ID IDType="OVT">003776543212</ID>
      <ServiceID IDType="BIC">TESTTEST</ServiceID>
      <PermissionToSend>true</PermissionToSend>
      <Active>true</Active>
      <AuthorizationToken>EO12345678901234567890</AuthorizationToken>
    </eAddress>
  </Organization>
</Batch>
```
Appendix 4: Example of eAddress XML to replace all e-addresses

```xml
<?xml version="1.0" encoding="UTF-8"?>
<Batch Function="REPLACE" Timestamp="2017-10-06T13:17:47Z" Version="1.1"
xsi:noNamespaceSchemaLocation="eAddress1.1.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <Organization>
    <Name>Kuusi kertaa kuusi testi Oy</Name>
    <Identifier TYPE="BUSINESSID">6666662-2</Identifier>
    <eAddress Context="EINVOICE" Direction="RECEIVE">
      <Name>TESTIEADDRESS (added)</Name>
      <ID IDType="OVT">003766666622</ID>
      <ServiceID IDType="BIC">TESTTEST</ServiceID>
      <PermissionToSend>true</PermissionToSend>
      <Active>true</Active>
      <AuthorizationToken>EO12345678901234567890</AuthorizationToken>
    </eAddress>
  </Organization>
</Batch>
```