

# **Integration - API**

## **General information**

## 1 Introduction

This document describes how a customer shall adapt a server-to-server solution with Syna's XML products. The aim is to facilitate the integration of Syna's information with our customers' internal systems.

Each product is described in detail in a separate document.

## 2 Calls

- All XML requests are made on [URL]
- XML calls are coded in accordance with ISO-8859-1
- A call is made only via HTTP POST, GET is not allowed
- Content-Type: text/xml

## 3 Security

- Only encrypted transmissions via https (port 443) are allowed externally
- Allowed protocols are TLS 1.2 and TLS 1.3
- Authorization is made with the sending IP address
- Alternatively with API-keys. Self managed by and admin or developer user via syna.se

## 4 API-account

- Syna needs the following information to set up an API account
  - Customer number
  - IP address from which the call will be made (if IP white list is the preferred way for authorization)
  - User name
  - Contact person responsible
  - Contact's e-mail address

Important information about changes in the API-service and occasional downtime will be sent to this e-mail address. It is an advantage if the e-mail address is a functional mailbox that can be read by several persons. This in order to avoid problems when employees change or quit their employment.

### 5 Question

The basic element of this XML structure is **Fraga (Question)**.

```
<?xml version="1.0" encoding="iso-8859-1" ?>
  <Fraga>
    <Produkt id="xxxxxxx" ver="1.1">
      <Objektlista antal="1">
        <Objekt>
          <Idnr>12314567890</Idnr>
        </Objekt>
      </Objektlista>
    </Produkt>
    <Process timestamp="" timeout="" />
    <Kund language="EN" nr="7777777" anv="xxxxxxxxxx" />
  </Fraga>
```

#### 5.1 The Question Element (Fraga)

The element contains sufficient element to be able to make a structured question to Syna.

#### 5.2 The Product Element (Produkt)

Required element that contains the following required attributes:

- **"id"** Product ID, 7 positions character
- **"ver"** version number. Version stated as: 'major, minor'

#### 5.3 The Process Element (Process)

Non-required element that contains the following non-required attributes:

- **"timestamp"** Timestamp
- **"timeout"** Time for timeout

#### 5.4 The Customer Element (Kund)

Required element that contains the following attributes:

- **"language"** "EN" for English
- **"nr"** Customer number, 7 positions integer
- **"anv"** Username, 10 character positions

The data from this element is used to check if the user has authorisation to perform the requested task. The data must therefore be stored with Syna.

## 5.5 The Item List Element (Objektlista)

The XML structure allows multi-processing, i.e., a larger amount of ID numbers can be packaged in one and the same question.

required element that contains the attribute

- **"antal"** Number of items

## 5.6 The Item Element (Objekt)

Required element containing the question's search term, in most cases an organisation number or a civic registration number, **ID number**. **Observe that organisation numbers and SSN should always be sent to us with 10 digits, numbers only.**

## 6 The response

The basic element of this XML structure is **Response**.

### 6.1 The Response Element (Svar)

Required element that contains the attribute

- **"ec"** that can assume the following values:
  - **"OK"** All is well
  - **"E"** The call is interrupted - see the **Error Element**
  - **"W"** Warning - see the **Error Element**

The **Product** and **Process** elements are returned from the question.

The remaining elements in **Svar** are product specific and are described in detail for each product.

### 6.2 The Error Element

Non-required element that contains one or more error messages, **Msg**

### 6.3 The Msg Element

Contains the following attributes:

- **"id"** The ID of the error
- **"sev"** The type of error; **E = Error, W = Warning, I = Information**
- **"runid"** Refers to Item Number (see Quantity in Items List)

The value of the element is the error message text.

```
<Error>
  <Msg id="XML8001" sev="E" runid="1" >XML internal error: Error "E" severity prohibited xml output for
runid: 1!</Msg>
  <Msg id="STD0001" sev="E" runid="1">There is no person registered in Sweden, 16 years or older, with civic
registration number 123456-7890</Msg>
</Error>
```

## 7 Other

- elements are case-sensitive
- negative values are preceded by a minus sign
- Timeout is set to 120 seconds

## 8 Products that can generate a copy

- |                                       |                                      |
|---------------------------------------|--------------------------------------|
| • Anmärkningar *                      | - Credit remarks                     |
| • Anmärkningar PDF *                  | - Credit remarks PDF                 |
| • Klassning *                         | - Credit class (1-5)                 |
| • Kreditupplysning Företagare *       | - Credit report Entrepreneur         |
| • Kreditupplysning PDF *              | - Credit report PDF                  |
| • Kreditupplysning Person *           | - Credit report Person               |
| • Kreditupplysning Övriga Juridiker * | - Credit report Other Legal Entities |

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