

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" ref="test" />
  </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 positions character. **NOTE – must be an API-user**
- **"ref"** Own reference, 30 positions character, optional

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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