SMARTVISTA EXCHANGE PROTOCOL WITH OMNICHANNEL (SVXP OMNI ACQ)

API developer reference

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1. PREFACE
   1. Revision history

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Revision | Date | Author | | Details |
| 1.0 | 10.04.2018 | | Kolodkina Y. | Initial version |

* 1. Document purpose

SVXP OMNI is a reference manual for developers who are implementing API of the SmartVista solution. This document is written for internal use of BPC. The document describes the content and the structure of the API.

It is supposed document users to be familiar with financial transactions, communications and XML data format.

1. SMARTVISTA INTEGRATION SERVICES OVERVIEW
   1. General concepts

SmartVista exchange protocol with OmniChannel (SVXP OMNI hereafter) provides a description of the file formats of information upload into OmniChannel (OMNI) from SmartVista. File format xml. For each format will be described in this document, XML Schema Definition language (XSD) and provided examples.

* 1. Data types, Occurrence, Dictionaries

For SVXP OMNI methods the standard XML data types are used. Those are fully described in the following document**XML Schema Part 2: Datatypes Second Edition and** t can be found here: [***http://www.w3.org/TR/xmlschema-2/***](http://www.w3.org/TR/xmlschema-2/)

Within the current document all the SVXP OMNI messages are described in the table structure below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Tag name | Data type | Length | Occurrence (min-max) | Description |
| merchant | | | | |
| merchant\_number | string | 15 | 1-1 | A merchant number |
| inst\_id | long | 4 | 1-1 | Institution identifier |
| merchant\_name | string | 200 | 0-1 | A merchant name that is used in an operation description. It must be specified in English only |
| merchant\_status | string | 8 | 1-1 | Merchant status. Please refer to MRCS dictionary |
| merchant\_type | string | 8 | 1-1 | Merchant type. Please refer to MRCT dictionary |
| Lang | string | 7 | 0-1 | Language. Please refer to LANG dictionary |

**Data Type:** SVXP OMNI tags can be of Primitive XML Data Types (string, long, boolean, etc ) or Complex Data Types (Aggregates).

**Occurrence**: This field defines if the field is mandatory or optional (first number) as well as maximum number occurrences of this tag in the message (last digit)

e.g. 1-1 = minOccurs="1" maxOccurs="1"

Documentation is provided along with Examples of the Request messages for all of the methods described below.

1. CUSTOMER FILE STRUCTURE
   1. Overview

The file contains information on acquiring customers. Including contract data, company data, contact data, address data of customers. The information about customers is synchronized between the SmartVista and OmniChannel.

The direction of the file may be only OUTGOING.

Tag CUSTOMERS is root tag and it include itself one or more tags CUSTOMER.

* 1. References

Format of customer file described by XSD file.

SVXP OMNI XSD: svxp\_omni\_acq\_customer.xsd

Example of xml document:

svxp\_omni\_acq\_customer.xml – customers information.

* 1. List of elements

| Tag name | Data type | Length | Is mandatory | Description |
| --- | --- | --- | --- | --- |
| customers | | | | It is root tag and it include itself one or more tags customer |
| file\_id | long | 16 | 0-1 | Unique identifier of outgoing file |
| file\_type | string | 8 | 1-1 | Type of outgoing file. Describe the purpose of data in file. Dictionary FLTP. Value FLTPCUST |
| inst\_id | int | 4 | 0-1 | An institution ID |
| customer | complex |  | 0-\* | Customer data |
| customer | | | | |
| **customer\_id** | long | 12 | 1-1 | Unique identifier of customer in SVBO. It can be used for search and update/insert data it OMNI |
| inst\_id | int | 4 | 1-1 | An institution ID |
| customer\_number | string | 200 | 1-1 | An external ID of a customer. It must be unique in the scope of an institution |
| customer\_category | string | 8 | 0-1 | A customer category: ordinary, privileged, VIP, etc. Values are taken from the dictionary CCTG |
| company | complex |  | 0-1 | A block to describe an incorporated person if the Company customer type has been chosen |
| contract | complex |  | 1-\* | Combines parameters that describe a contract |
| contact | complex |  | 0-\* | A customer’s contact information |
| address | complex |  | 0-\* | A customer’s address |
| company | | | | |
| incorp\_form | string | 8 | 0-1 | A type of an incorporated person: LLC, OJSC, UE, etc. Values are taken from the dictionary INCF |
| presence\_on\_location | int | 1 | 0-1 | Indicates that the physical location of a company is the address as specified |
| company\_name | complex |  | 1-1 | A name of a company. It may be presented in different languages at once. This tag must contain the LANGUAGE attribute to display the name in the proper language |
| company\_name | | | | |
| company\_short\_name | string | 200 | 1-1 | A contracted name of a company |
| company\_full\_name | string | 200 | 0-1 | The full name of a company |
| contract | | | | |
| **contract\_id** | int | 8 | 1-1 | Unique identifier of contract in SVBO. It can be used for search and update/insert data it OMNI |
| agent\_id | int | 8 | 1-1 | An ID of an agent a contract is going to be associated with |
| agent\_number | string | 200 | 1-1 | Agent number |
| contract\_number | string | 200 | 1-1 | A contract number. It must be unique in the scope of an institution |
| contract\_type | string | 8 | 1-1 | A contract type: Merchant registration, Terminal installation, etc. Values are taken from the dictionary CNTP |
| start\_date | date |  | 1-1 | Start date of contract validity |
| end\_date | date |  | 0-1 | End date of contract validity |
| contact | | | | |
| contact\_type | string | 8 | 1-1 | A purpose of a contact. Values are taken from the dictionary CNTT |
| job\_title | string | 8 | 0-1 | A position of a contact person. Values are taken from the dictionary JTTL |
| preferred\_lang | string | 8 | 0-1 | Preferred language of communication. Values are taken from the dictionary LANG |
| contact\_data | complex |  | 1-\* | Contact information |
| person | complex |  | 0-1 | A contact person |
| contact\_data | | | | |
| commun\_method | string | 8 | 1-1 | A communication method. Values are taken from the dictionary CMNM |
| commun\_address | string | 200 | 1-1 | A communication ID: phone number, email, Skype, etc. |
| person |  |  |  |  |
| person\_title | string | 8 | 0-1 | A person title: Mr., Mrs., Miss, etc. Values are taken from the dictionary PTTL |
| person\_name | complex |  | 1-\* | A person’s name. It may be presented in a number of languages |
| suffix | string | 8 | 0-1 | A name suffix: Jr., Sr., etc. Values are taken from the dictionary PSFX |
| birthday | date |  | 0-1 | Date of birth |
| place\_of\_birth | string | 200 | 0-1 | Place of birth |
| gender | string | 8 | 0-1 | A contact person’s gender. Values are taken from the dictionary GNDR |
| person\_name |  |  |  |  |
| surname | string | 200 | 1-1 | A person’s surname |
| first\_name | string | 200 | 1-1 | A person’s first name |
| second\_name | string | 200 | 0-1 | A person’s second name |
| address | | | | |
| address\_id | long | 12 | 1-1 | Unique identifier of address in SVBO. It can be used for search and update/insert data it OMNI |
| address\_type | string | 8 | 1-1 | A purpose of an address: Home address, Business address, Statement delivery address. Values are taken from the dictionary ADTP |
| country | string | 3 | 1-1 | A numeric ISO country code. Values are taken from the dictionary (table com\_country) |
| address\_name | complex |  | 1-1 | Address parameters that may be presented in different languages at once. This tag must contain the LANGUAGE attribute to display them in the proper language |
| house | string | 200 | 1-1 | House number |
| apartment | string | 200 | 0-1 | Apartment number |
| postal\_code | string | 10 | 0-1 | Postal code |
| place\_code | string | 200 | 0-1 | Place code |
| region\_code | string | 11 | 0-1 | Region code |
| address\_name | | | | |
| region | string | 200 | 0-1 | Country region (region, state, republic) |
| city | string | 200 | 1-1 | City |
| street | string | 200 | 1-1 | Street |

1. MERCHANT FILE STRUCTURE
   1. Overview

The file contains information on merchants. Including contact data, address data, cards of merchants. The information about merchants is synchronized between the SmartVista and OmniChannel.

The direction of the file may be only OUTGOING.

Tag MERCHANTS is root tag and it include itself one or more tags MERCHANTS.

* 1. References

Format of merchant file described by XSD file.

SVXP OMNI XSD: svxp\_omni\_acq\_merchant.xsd

Example of xml document:

svxp\_omni\_acq\_merchant.xml – merchants information.

* 1. List of elements

| Tag name | Data type | Length | Is mandatory | Description |
| --- | --- | --- | --- | --- |
| merchants | | | | It is root tag and it include itself one or more tags merchant |
| file\_id | long | 16 | 0-1 | Unique identifier of outgoing file |
| file\_type | string | 8 | 1-1 | Type of outgoing file. Describe the purpose of data in file. Dictionary FLTP. Value FLTPMRCH |
| inst\_id | int | 4 | 0-1 | An institution ID |
| merchant | complex |  | 0-\* | Merchant data |
| merchant | | | | |
| **merchant\_id** | int | 8 | 1-1 | Unique identifier of merchant in SVBO. It can be used for search and update/insert data it OMNI |
| inst\_id | int | 4 | 1-1 | An institution ID |
| agent\_id | int | 8 | 1-1 | An ID of an agent a contract is going to be associated with |
| agent\_number | string | 200 | 1-1 | Agent number |
| merchant\_number | string | 15 | 1-1 | A merchant number. It must be unique in the scope of an institution |
| merchant\_name | string | 200 | 0-1 | A merchant name that is used in an operation description. It must be specified in English only |
| merchant\_label | string | 200 | 0-1 | A name of a merchant. It may be presented in different languages at once. This tag must contain the LANGUAGE attribute to display the name in the proper language |
| merchant\_type | string | 8 | 1-1 | A merchant type. Defines a merchant position in the merchant hierarchy. Values are taken from the dictionary MRCT |
| mcc | string | 4 | 0-1 | Merchant category code. Values are taken from the dictionary (table com\_mcc) |
| merchant\_status | string | 8 | 1-1 | A merchant status. Values are taken from the dictionary MRCS |
| parent\_id | int | 8 | 0-1 | Reference to parent merchant level in accordance with acquiring hierarchy |
| customer | complex |  | 1-1 | Customer-owner of merchant |
| contract | complex |  | 1-1 | Contract by which merchant was registered |
| contact | complex |  | 0-\* | Contact information |
| address | complex |  | 0-\* | Location address |
| merchant\_card | complex |  | 1-\* | Merchants PANs for mVisa and MC QR, etc. |
| customer | | | | |
| customer\_id | long | 12 | 1-1 | Unique identifier of customer in SVBO. It can be used for search and update/insert data it OMNI |
| customer\_number | string | 200 | 1-1 | An external ID of a customer. It must be unique in the scope of an institution |
| contract | | | | |
| contract\_id | long | 12 | 1-1 | Unique identifier of contract in SVBO. It can be used for search and update/insert data it OMNI |
| contract\_number | string | 200 | 1-1 | A contract number. It must be unique in the scope of an institution |
| contact | | | | |
| contact\_type | string | 8 | 1-1 | A purpose of a contact. Values are taken from the dictionary CNTT |
| contact\_data | complex |  | 1-\* | Contact information |
| contact\_data | | | | |
| commun\_method | string | 8 | 1-1 | A communication method. Values are taken from the dictionary CMNM |
| commun\_address | string | 200 | 1-1 | A communication ID: phone number, email, Skype, etc. |
| address | | | | |
| address\_type | string | 8 | 1-1 | A purpose of an address: Home address, Business address, Statement delivery address. Values are taken from the dictionary. Dictionary ADTP |
| country | string | 3 | 1-1 | A numeric ISO country code. Values are taken from the dictionary |
| address\_name | complex |  | 1-1 | Address parameters that may be presented in different languages at once. This tag must contain the LANGUAGE attribute to display them in the proper language |
| house | string | 200 | 1-1 | House number |
| apartment | string | 200 | 0-1 | Apartment number |
| postal\_code | string | 10 | 0-1 | Postal code |
| place\_code | string | 200 | 0-1 | Place code |
| region\_code | string | 11 | 0-1 | Region code |
| address\_name | | | | |
| region | string | 200 | 0-1 | Country region (region, state, republic) |
| city | string | 200 | 1-1 | City |
| street | string | 200 | 1-1 | Street |
| merchant\_card | | | | |
| card\_number | string | 26 | 1-1 | Card number linked with merchant |

1. DICTIONARIES

For several fields from formats are used dictionaries data. The format for unloading dictionaries data is described in specification \Dictionaries\svxp\_dict\_interfaces\_eng.docx.

The list of used dictionaries:

| Code | Description |
| --- | --- |
| FLTP | File type |
| CCTG | Category of customer |
| INCF | Incorporation forms |
| CNTP | Contract Types |
| CNTT | Contact types |
| JTTL | Job title |
| LANG | Language |
| CMNM | Communication method |
| PTTL | Person title |
| PSFX | Person name suffix |
| GNDR | Gender |
| ADTP | Address types |
| MRCT | Merchant type |
| MRCS | Merchant status |