Acquiring applications  
Structure of file and web-service

SmartVista Standard

April 2015

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Overview

Change log

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Revision | Date | Author | | Details |
| 0.1 | 2013-03-15 | | A. Filimonov | The initial version is created. | |
| 0.2 | 2014-04-09 | I. Necheukhin | | Adding mod\_condition, mod\_name, mod\_id. |
| 0.3 | 2014-04-23 | A. Alalykin | | Comment for tag account\_scheme has been added. |
| 0.4 | 2014-04-29 | Necheukhin.I. | | Tag length\_type\_algorithm has been added. |
| 0.5 | 2014-05-26 | A. Alalykin | | Description of tag limit\_sum\_value has been modified. |
| 0.6 | 2014-10-02 | A. Kondratyev | | Element place\_code has been added into the block address. |
| 0.7 | 2014-10-22 | A. Alalykin | | Elements customer\_ext\_type and customer\_ext\_id have been added. |
| 0.7 | 2014-11-12 | Y. Kolodkina | | Added complex element tcp\_ip into the parent block terminal. |
| 0.8 | 2015-02-04 | I. Maslov | | Add address\_id as optional upload tag |
| 0.9 | 2015-02-11 | N. Glushkova | | Added description of response when validating and processing of application via a WEB service is unsuccessful |
| 1.0 | 2015-03-11 | A. Kondratyev | | Added description of business flow (2010, 2011, 2012) |
| 1.1 | 2015-04-30 | 1. Filimonov | | Added fields terminal\_profile and pin\_block\_format |
| 1.2 | 2015-06-03 | 1. Kolodkina | | Added new complex element fee\_tier into block attribute\_fee. |
| 1.3 | 2015-07-13 | Y. Kolodkina | | Added new simple element fee\_base\_calc into block attribute\_fee. |
| 1.4 | 2015-08-31 | 1. Kondratyev | | Added complex element cycle into block attribute\_fee. |
| 1.5 | 2015-09-29 | 1. Kondratyev | | Length of elements (available\_network, available\_operation, available\_currency) raised to 8 digits. |
| 1.6 | 2015-11-19 | 1. Kolodkina | | Added description of business flow (2013, 2014, 2015) |
| 1.7 | 2015-12-29 | 1. Kolodkina | | Added complex element acquiring\_redefinition into complex element terminal. |
| 1.8 | 2016-03-16 | 1. Kolodkina | | Added complex element service into complex elements merchant and terminal. |
| 1.9 | 2016-03-24 | 1. Gyumyush | | Tags fee\_min\_value and fee\_max\_value were added into complex element fee\_tier. |
| 2.0 | 2016-05-27 | 1. Gyumyush | | Tags fee\_min\_value and fee\_max\_value were added into complex element attribute\_fee. |
| 2.1 | 2016-06-21 | 1. Gyumyush | | Tag instalment\_support was added into complex element terminal. |
| 2.2 | 2016-06-24 | Y. Kolodkina | | Tag cycle\_length\_type was added into complex element attribute\_fee. |
| 2.3 | 2016-07-25 | D. Gyumyush | | Tag pos\_batch\_support was added into complex element terminal. |
| 2.4 | 2016-08-01 | A. Alalykin | | Some changes to provide compatibility with processes of merchants and terminals unloading. |
| 2.5 | 2016-08-01 | A. Alalykin | | New tags agent\_number and agent\_name. |
| 2.6 | 2016-08-19 | D. Gyumyush | | A new complex element shift has been added into complex element attribute\_cycle. |
| 2.7 | 2016-09-09 | Y. Kolodkina | | Added elements start\_date, end\_date into complex element ‘contact\_data’ |
| 2.8 | 2016-09-14 | A. Kondratyev | | In element commun\_method added new available values CMNM0011 – Telex and CMNM0012 - Landline phone |
| 2.9 | 2017-03-31 | Y. Kolodkina | | Added tags Label, Description, template\_status, attempt\_count into tag Payment order |
| 3.0 | 2017-06-02 | I. Gogolev | | Added element “counter\_algorithm” into tag ATTRIBUTE\_LIMIT |
| 3.1 | 2017-06-20 | I. Gogolev | | Added element “counter\_algorithm” into list of tags table |
| 3.2 | 2017-07-17 | 1. Fomichev | | Added description of business flow (2018) |
| 3.3 | 2017-10-23 | 1. Kondratyev | | Added elements “commun\_plugin” and “device\_name”. Added block “tcp\_ip\_protocol” |
| 3.4 | 2017-12-27 | A.Zabrodin | | Added description for the ERROR tag and a list of acquiring error messages. They were absent by mistake. |
| 3.5 | 2018-02-20 | Y. Kolodkina | | Added complex tag ‘merchant\_card’ into tag Merchant. |
| 3.6 | 2018-03-23 | Y. Kolodkina | | Amended part of References. Added svap.wsdl. |
| 3.7 | 2018-04-10 | Y. Kolodkina | | Added elements ‘card\_product’, ‘Card\_type’ into complex tag ‘Merchant\_card’ |
| 3.8 | 2018-04-13 | A.Fomichev | | Added element ‘partner\_id\_code’ into complex tag ‘Merchant’ |
| 3.9 | 2018-05-22 | D. Gyumyush | | Added risk indicator value into merchant block |
| 4.0 | 2018-08-01 | Y. Kolodkina | | Added element ‘mc\_assigned\_id’ into complex tag ‘Merchant’ |
| 4.1 | 2018-08-02 | A. Alalykin | | Support of flexible fields and notes for some entities |
| 4.2 | 2018-09-03 | Y. Kolodkina | | Added element ‘country’ into complex tag ‘identity\_card’ |

Purpose of this document

The document aims at describing contents and structure of APIs for the developers who carry out an integration that relates to the registration of bank acquiring structure.

References

References to external documents

SVAP Web Services schema and its underlying components are required for SmartVista.  
The following are the locations of the WSDL and XSD files.

SVAP WSDL: svap.wsdl

SVAP XSD: svap\_acquiring.xsd

Example of xml document for different flow provided in file:

app\_flow.example.2001.xml

app\_flow.example.2002.xml

app\_flow.example.2003.xml

app\_flow.example.2004.xml

app\_flow.example.2005.xml

app\_flow.example.2006.xml

app\_flow.example.2007.xml

app\_flow.example.2008.xml

app\_flow.example.2009.xml

app\_flow.example.2010.xml

app\_flow.example.2011.xml

app\_flow.example.2012.xml

app\_flow.example.2013.xml

app\_flow.example.2014.xml

app\_flow.example.2015.xml

app\_flow.example.2016.xml

app\_flow.example.2018.xml

XML document structure

Introduction

An application to change the acquiring structure of a bank is an XML document that contains all the necessary information (customers, merchants, terminals, accounts, enabled/disabled services, etc.) to perform respective modifications. The application may be passed to the Smart Vista system either offline, as a file, or online — by means of a web service. A data structure is the same for both cases. A number of applications may be passed within a file at once. The APPLICATIONS root tag and its APPLICATION sub-tags are used for this purpose. As for a web service, a single application is passed per a request, that’s why the APPLICATION tag is the root one in such a case.

The same structure with additional fields is returned as a response to the application processing request. If processing is unsuccessful, these fields are error tags. An error tag is linked to the tag that caused the respective error on processing. If processing is successful, tags that contain auto-generated IDs (terminal number, account number, etc.) are added to the structure of an application.

If on-line validating and processing of application via a WEB service is unsuccessful, field <faultstring> in response contains human-readable description of error, block <detail> may contain field <details> with additional information for error clarification. Example of response is given in file svap\_error.example.xml

This document describes the full structure of an acquiring application, all tags are mentioned. However, the final structure of an application (set of mandatory tags) depends on a particular purpose of the application (see description of the APPLICATION\_FLOW\_ID tag).

Each tag of the COMPLEX type contains the ID attribute. It is a tag unique ID within the scope of an application. It is not a mandatory attribute. This attribute is used to link tags, if there is a need to refer from one tag to another. The REF\_ID attribute is used to refer to another tag of an application. Such a relationship may be used, for instance, when a merchant and a terminal (described by different tags) are linked with each other. If a complex tag should contain a value in addition to the child tags, the VALUE attribute is used to specify it.

It is necessary to set the language of contents for some text and complex tags. To do that the LANGUAGE attribute that should contain a value from the LANG dictionary is specified for such a tag. If a number of multilingual tags are needed to use then only one tag is added for each of languages.

List of tags

| Tag name | Data type | | Length | | Is mandatory | | Description | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| application | | | | | | | | | |
| application\_number | string | | 200 | | 0-1 | | A unique number of applications generated by an external system. | | |
| application\_date | date | |  | | 0-1 | | Date when an application was created via an external system. | | |
| application\_flow\_id | int | | 4 | | 1-1 | | Describes a purpose of an application (creation of a new merchant or terminal, modification of personal data, etc.). It is selected by means of the drop-down box. | | |
| application\_type | string | | 8 | | 1-1 | | An application type. The ‘APTPACQA’ constant indicates the registration of acquiring structure. | | |
| application\_status | string | | 8 | | 1-1 | | An application status to assign to a newly created application. | | |
| operator\_id | string | | 200 | | 0-1 | | A system name of a user who created the application. | | |
| institution\_id | int | | 4 | | 1-1 | | An institution ID | | |
| agent\_id | int | | 8 | | 0-1 | | An ID of an agent a contract is going to be associated with. | | |
| agent\_number | string | | 200 | | 0-1 | | Agent number | | |
| agent\_name | string | | 200 | | 0-1 | | Agent name | | |
| customer\_type | string | | 8 | | 0-1 | | A customer type: person or company. Values are taken from the dictionary. | | |
| flexible\_field | complex | |  | | 0-\* | | Flexible field block | | |
| note | complex | |  | | 0-\* | | Note field block | | |
| customer | complex | |  | | 1-1 | | Combines parameters that describe a customer. | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| customer | | | | | | | | | |
| command | string | | 8 | | 1-1 | | An action to perform over an object. | | |
| customer\_number | string | | 200 | | 0-1 | | 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. | | |
| customer\_ext\_type | string | | 8 | | 0-1 | | Customer extended type – agent, institute or Service provider. Value from dictionary ENTT. | | |
| customer\_ext\_id | long | | 16 | | 0-1 | | Customer extended identifier | | |
| customer\_relation | string | | 8 | | 0-1 | | A type of relationship between a customer and a bank: affiliate, employee, insider, no relationship. Values are taken from the dictionary. | | |
| account\_scheme | int | | 4 | | 0-1 | | An account scheme ID. Defines rules of performing the operations that associated with a merchant’s accounts.  This tag is required for flow #2001 (creation new acquiring customer). | | |
| resident | int | | 1 | | 0-1 | | The resident indicator. 1 – resident, 0 – nonresident. | | |
| nationality | string | | 3 | | 0-1 | | A country of a customer (persons only). A numeric ISO country code. | | |
| credit\_rating | string | | 8 | | 0-1 | | A customer’s creditworthiness. Values are taken from the dictionary. | | |
| money\_laundry\_risk | string | | 8 | | 0-1 | | Risk of customer’s taking part in money laundering: high or low. Values are taken from the dictionary. | | |
| money\_laundry\_reason | string | | 8 | | 0-1 | | A reason for money laundering risk. Values are taken from the dictionary. | | |
| flexible\_field | complex | |  | | 0-\* | | Flexible field block | | |
| note | complex | |  | | 0-\* | | Note field block | | |
| company | complex | |  | | 0-1 | | A block to describe an incorporated person if the Company customer type has been chosen. | | |
| contact | complex | |  | | 0-\* | | A customer’s contact information. | | |
| address | complex | |  | | 0-\* | | A customer’s address. | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| company | | | | | | | | | |
| command | string | | 8 | | 1-1 | | An action to perform over an object. | | |
| company\_embossed\_name | string | | 200 | | 0-1 | | A company name that will be embossed on a card. | | |
| incorp\_form | string | | 8 | | 0-1 | | A type of an incorporated person: LLC, OJSC, UE, etc. Values are taken from the dictionary. | | |
| presence\_on\_location | int | | 1 | | 0-1 | | Indicates that the physical location of a company is the address as specified. | | |
| authorized\_capital | float | | 18 | | 0-1 | | Amount of the authorized capital. | | |
| authorized\_capital\_currency | string | | 3 | | 0-1 | | Currency of the authorized capital. A numeric ISO code. | | |
| 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. | | |
| identity\_card | complex | |  | | 0-\* | | Company’s ID documents. | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| 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. | | |
| identity\_card | | | | | | | | | |
| command | string | | 8 | | 1-1 | | An action to perform over an object. | | |
| id\_type | string | | 8 | | 1-1 | | A type of an ID document: passport, driving license, etc. Values are taken from the dictionary. | | |
| id\_series | string | | 200 | | 0-1 | | A series of an ID document. | | |
| id\_number | string | | 200 | | 1-1 | | A number of an ID document. | | |
| country | string | | 3 | | 0-1 | | Numeric ISO country code. ISO Dictionary value. | | |
| id\_issuer | string | | 200 | | 0-1 | | Authorities that issued an ID document. | | |
| id\_issue\_date | date | |  | | 0-1 | | The valid from date of an ID document. | | |
| id\_expire\_date | date | |  | | 0-1 | | Expiration date of an ID document. | | |
| id\_desc | string | | 2000 | | 0-1 | | Description for an ID document. | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| contact | | | | | | | | | |
| command | string | | 8 | | 1-1 | | An action to perform over an object. | | |
| contact\_type | string | | 8 | | 1-1 | | A purpose of a contact. Values are taken from the dictionary. | | |
| job\_title | string | | 8 | | 0-1 | | A position of a contact person. Values are taken from the dictionary. | | |
| preferred\_lang | string | | 8 | | 0-1 | | Preferred language of communication. | | |
| person | complex | |  | | 0-1 | | A contact person. | | |
| contact\_data | complex | |  | | 1-\* | | Contact information. | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| person | | | | | | | | | |
| command | string | | 8 | | 1-1 | | An action to perform over an object | | | | |
| person\_title | string | | 8 | | 0-1 | | A person title: Mr., Mrs., Miss, etc. Values are taken from the dictionary. | | | | |
| 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. | | | | |
| 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. | | | | |
| flexible\_field | complex | |  | | 0-\* | | Flexible field block | | |
| note | complex | |  | | 0-\* | | Note field block | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| 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. | | | | |
| contact\_data | | | | | | | | | |
| commun\_method | string | | 8 | | 1-1 | | A communication method. | | |
| commun\_address | string | | 200 | | 1-1 | | A communication ID: phone number, email, Skype, etc. | | |
| start\_date | date | |  | | 0-1 | | Start date | | |
| end\_date | date | |  | | 0-1 | | End date | | |
| address | | | | | | | | | |
| command | string | | 8 | | 1-1 | | An action to perform over an object. | | |
| address\_type | string | | 8 | | 1-1 | | A purpose of an address: Home address, Business address, Statement delivery address. Values are taken from the dictionary. | | |
| 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 | | |
| latitude | long | | 8 | | 0-1 | | Location coordinates – latitude (N). | | |
| longitude | long | | 8 | | 0-1 | | Location coordinates – longitude (W). | | |
| flexible\_field | complex | |  | | 0-\* | | Flexible field block | | |
| note | complex | |  | | 0-\* | | Note field block | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing of the parent element. | | |
| address\_id | long | | 8 | | 0-1 | | Address identificator | | |
| address\_name | | | | | | | | | |
| region | string | | 200 | | 0-1 | | Country region (region, state, republic). | | |
| city | string | | 200 | | 1-1 | | City. | | |
| street | string | | 200 | | 1-1 | | Street. | | |
| flexible\_field |  | |  | |  | |  | | |
| flexible\_field\_name | string | | 200 | | 1-1 | | Unique flexible field name | | |
| flexible\_field\_value | string | | 200 | | 1-1 | | Flexible field value | | |
| note |  | |  | |  | |  | | |
| note\_type | string | | 8 | | 1-1 | | Note type:  NTTPUSER – user comment;  NTTPRSTR - Notes for registry of opened and closed accounts;  NTTPDLVR – Delivery notes;  NTTP5001 – Travel Notification. | | |
| note\_content | complex | |  | | 1-\* | | Content of the note. Have attribute language. | | |
| note\_content |  | |  | |  | |  | | |
| note\_header | string | | 4000 | | 0-1 | | Header of the note | | |
| note\_text | string | | 4000 | | 0-1 | | Text of the note | | |
| start\_date | date | |  | | 0-1 | | Start date | | |
| end\_date | date | |  | | 0-1 | | End date | | |
| contract | | | | | | | | | |
| command | string | | 8 | | 1-1 | | An action to perform over an object. | | |
| contract\_number | string | | 200 | | 0-1 | | A contract number. | | |
| contract\_type | string | | 8 | | 0-1 | | A contract type: Merchant registration, Terminal installation, etc. Values are taken from the dictionary. | | |
| product\_id | int | | 8 | | 0-1 | | A product ID that defines service terms for a contract. | | |
| start\_date | date | |  | | 0-1 | | Start date of contract validity. | | |
| end\_date | date | |  | | 0-1 | | End date of contract validity. | | |
| merchant | complex | |  | | 0-\* | | Merchant related parameters. | | |
| terminal | complex | |  | | 0-\* | | Terminal related parameters. | | |
| service | complex | |  | | 0-\* | | A service provided by a bank (institution) with binding to an entity. For instance, the credit service associated with an account. A value is specified via the VALUE attribute of the tag. | | |
| account | complex | |  | | 0-\* | | A customer’s personal account. | | |
| flexible\_field | complex | |  | | 0-\* | | Flexible field block | | |
| note | complex | |  | | 0-\* | | Note field block | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| merchant | | | | | | | | | |
| command | string | | 8 | | 1-1 | | An action to perform over an object. | | |
| merchant\_number | string | | 15 | | 0-1 | | A merchant number to pass to the IPS. | | |
| 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-\* | | A merchant name for general use. It may be in different languages. | | |
| merchant\_type | string | | 8 | | 0-1 | | A merchant type. Defines a merchant position in the merchant hierarchy. Values are taken from the dictionary. | | |
| mcc | string | | 4 | | 0-1 | | Merchant category code. Values are taken from the dictionaries. | | |
| merchant\_status | string | | 8 | | 0-1 | | A merchant status. Values are taken from the dictionary. | | |
| status\_reason | string | | 8 | | 0-1 | | Last status change reason | | |
| risk\_indicator | string | | 8 | | 0-1 | | Risk indicator value. Dictionary FMRI | | |
| merchant\_desc | string | | 2000 | | 0-\* | | Extended description of a merchant in different languages. | | |
| partner\_id\_code | string | | 6 | | 0-1 | | MIR Loyalty Program Partner ID | | |
| mc\_assigned\_id | string | | 6 | | 0-1 | | MasterCard Assigned ID | | |
| contact | complex | |  | | 0-\* | | Contact information. | | |
| address | complex | |  | | 0-\* | | Location address. | | |
| merchant | complex | |  | | 0-\* | | A subordinate merchant in the merchant hierarchy. | | |
| terminal | complex | |  | | 0-\* | | Terminal related parameters. | | |
| notification | complex | |  | | 0-\* | | Parameters of merchant notification rules. | | |
| service | complex | |  | | 0-\* | | Services of merchant | | |
| merchant\_card | complex | |  | | 0-\* | | Merchants PANs for mVisa and MC QR. | | |
| flexible\_field | complex | |  | | 0-\* | | Flexible field block | | |
| note | complex | |  | | 0-\* | | Note field block | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| merchant\_card | | | | | | | | | |
| card\_product\_id | int | | 8 | | 0-1 | | A product ID that defines service terms for a merchant card. | | |
| card\_type | int | | 4 | | 0-1 | | Card type of merchant card: Visa Gold, Visa Classic etc. Dictionary value. | | |
| card\_number | string | | 26 | | 1-1 | | Card number linked with merchant | | |
| service | | | | | | | | | |
| service\_type | string | | 8 | | 1-1 | | Service type | | |
| service\_type\_name | string | | 200 | | 1-1 | | Service name | | |
| service\_external\_code | string | | 200 | | 0-1 | | Service external code | | |
| service\_number | string | | 200 | | 0-1 | | Service number | | |
| is\_active | int | | 1 | | 1-1 | | Sign of service activity | | |
| service\_attribute | complex | |  | | 0-\* | | Attribute of service | | |
| service\_attribute | | | | | | | | | |
| service\_attribute\_name | string | | 200 | | 1-1 | | Service attribute name (only for type DTTPCHAR) | | |
| service\_attribute\_value | string | | 200 | | 0-1 | | Service attribute value | | |
| notification | | | | | | | | | |
| command | string | | 8 | | 1-1 | | An action to perform over an object | | |
| notification\_event | string | | 8 | | 0-1 | | A notification event the settings passed relate to. | | |
| delivery\_channel | int | | 4 | | 0-1 | | A method of notification delivery. Values are taken from dictionary. | | |
| delivery\_address | string | | 200 | | 0-1 | | An address of notification delivery according to a method. | | |
| is\_active | int | | 1 | | 0-1 | | Indicates whether a notification is active or not. | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| terminal | | | | | | | | | |
| command | string | | 8 | | 1-1 | | An action to perform over an object. | | |
| terminal\_number | string | | 8 | | 0-1 | | A terminal number. | | |
| terminal\_type | string | | 8 | | 0-1 | | A terminal type. Values are taken from the dictionary. | | |
| standard\_id | int | | 4 | | 0-1 | | A communication standard. Values are taken from the dictionary. | | |
| version\_id | int | | 4 | | 0-1 | | A communication standard version. | | |
| mcc | string | | 4 | | 0-1 | | Merchant category code. Values are taken from the dictionary. | | |
| terminal\_template | int | | 8 | | 0-1 | | A reference to a terminal template. | | |
| plastic\_number | string | | 16-19 | | 0-1 | | An imprinter number. | | |
| card\_data\_input\_cap | string | | 8 | | 0-1 | | Available methods of reading the card data. | | |
| crdh\_auth\_cap | string | | 8 | | 0-1 | | Available methods of cardholder authentication. | | |
| card\_capture\_cap | string | | 8 | | 0-1 | | Available methods of card capture. | | |
| term\_operating\_env | string | | 8 | | 0-1 | | Terminal environment. | | |
| crdh\_data\_present | string | | 8 | | 0-1 | | Cardholder presence. | | |
| card\_data\_present | string | | 8 | | 0-1 | | Card data presence. | | |
| card\_data\_input\_mode | string | | 8 | | 0-1 | | Card data input mode. | | |
| crdh\_auth\_method | string | | 8 | | 0-1 | | A method of cardholder authentication. | | |
| crdh\_auth\_entity | string | | 8 | | 0-1 | | An entity to use for cardholder authentication. | | |
| card\_data\_output\_cap | string | | 8 | | 0-1 | | Available methods of card data output. | | |
| term\_data\_output\_cap | string | | 8 | | 0-1 | | Available methods of terminal data output. | | |
| pin\_capture\_cap | string | | 8 | | 0-1 | | PIN input capability. | | |
| cat\_level | string | | 8 | | 0-1 | | A terminal category. | | |
| terminal\_status | string | | 8 | | 0-1 | | A terminal status. | | |
| status\_reason | string | | 8 | | 0-1 | | Last status change reason | | |
| device\_id | int | | 8 | | 0-1 | | An ID of a communication device used by a terminal. | | |
| gmt\_offset | int | | 2 | | 0-1 | | Time zone offset. | | |
| is\_mac | int | | 1 | | 0-1 | |  | | |
| cash\_dispenser\_present | int | | 1 | | 0-1 | | Indicates the cash withdrawal capability. | | |
| payment\_possibility | int | | 1 | | 0-1 | | Indicates the payment capability. | | |
| use\_card\_possibility | int | | 1 | | 0-1 | | Indicates the card use capability. | | |
| cash\_in\_present | int | | 1 | | 0-1 | | Indicates the cash-in capability. | | |
| available\_network | int | | 8 | | 0-1 | | A reference to the list of available payment networks. | | |
| available\_operation | int | | 8 | | 0-1 | | A reference to the list of available operations. | | |
| available\_currency | int | | 8 | | 0-1 | | A reference to the list of available currencies. | | |
| terminal\_quantity | int | | 4 | | 0-1 | | Number of the same type terminals to create on the basis of respective parameters. | | |
| mcc\_template\_id | long | | 12 | | 0-1 | | A reference to an MCC redefinition group depending on operation parameters. | | |
| instalment\_support | int | | 1 | | 0-1 | | Indicates the instalment support of POS terminal | | |
| pos\_batch\_support | int | | 1 | | 0-1 | | Indicates the POS batch support of POS terminal | | |
| terminal\_profile | int | | 9 | | 0-1 | | FE terminal profile identifier | | |
| pin\_block\_format | string | | 8 | | 0-1 | | PIN-block encryption format | | |
| commun\_plugin | string | | 8 | | 0-1 | | Communication plugin | | |
| device\_name | string | | 200 | | 0-1 | | Device name | | |
| tcp\_ip\_protocol | complex | |  | | 0-1 | | TCP/IP protocol connection parameters. | | |
| contact | complex | |  | | 0-\* | | Contact information. | | |
| encryption | complex | |  | | 0-3 | | Encryption key parameters. | | |
| atm\_terminal | complex | |  | | 0-1 | | ATM specific parameters. | | |
| address | complex | |  | | 0-1 | | An address of terminal installation. | | |
| service | complex | |  | | 0-\* | | Services of terminal | | |
| acquiring\_redefinition | complex | |  | | 0-1 | | Configuration of acquiring redefinition. | | |
| flexible\_field | complex | |  | | 0-\* | | Flexible field block | | |
| note | complex | |  | | 0-\* | | Note field block | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| service | | | | | | | | | |
| service\_type | string | | 8 | | 1-1 | | Service type | | |
| service\_type\_name | string | | 200 | | 1-1 | | Service name | | |
| service\_external\_code | string | | 200 | | 0-1 | | Service external code | | |
| service\_number | string | | 200 | | 0-1 | | Service number | | |
| is\_active | int | | 1 | | 1-1 | | Sign of service activity | | |
| service\_attribute | complex | |  | | 0-\* | | Attribute of service | | |
| service\_attribute | | | | | | | | | |
| service\_attribute\_name | string | | 200 | | 1-1 | | Service attribute name (only for type DTTPCHAR) | | |
| service\_attribute\_value | string | | 200 | | 0-1 | | Service attribute value | | |
| encryption | | | | | | | | | |
| encryption\_key\_type | string | | 8 | | 1-1 | | An encryption key type. Values are taken from the dictionary. | | |
| encryption\_key\_prefix | string | | 50 | | 0-1 | | An encryption key prefix. | | |
| encryption\_key | string | | 64 | | 1-1 | | An encryption key. | | |
| encryption\_key\_length | int | | 4 | | 1-1 | | Encryption key length. | | |
| encryption\_key\_check\_value | string | | 6 | | 1-1 | | An encryption key check value. | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing of the parent element. | | |
| tcp\_ip | | | | | | | | | |
| remote\_address | string | | 15 | | 1-1 | | Remote device address. | | |
| local\_port | string | | 5 | | 0-1 | | Local port number. | | |
| remote\_port | string | | 5 | | 0-1 | | Remote device port number. | | |
| initiator | string | | 8 | | 1-1 | | Initiator of the connection. | | |
| format | string | | 8 | | 1-1 | | Data transfer format. Define messages length and coding. | | |
| keep\_alive | int | | 1 | | 0-1 | | Keep connection alive flag. | | |
| monitor\_connection | int | | 1 | | 0-1 | | Inform the opening / closing the connection. | | |
| multiple\_connection | int | | 1 | | 0-1 | | Multiple connection allowed (1 - Yes, 0 - No). | | |
| atm\_terminal | | | | | | | | | |
| atm\_type | string | | 8 | | 0-1 | | An ATM type. Values are taken from the dictionary. | | |
| atm\_model | string | | 200 | | 0-1 | | An ATM model name. | | |
| serial\_number | string | | 200 | | 0-1 | | An ATM serial number. | | |
| placement\_type | string | | 8 | | 0-1 | | A placement type. Values are taken from the dictionary. | | |
| availability\_type | string | | 8 | | 0-1 | | An availability type. Values are taken from the dictionary. | | |
| operating\_hours | string | | 200 | | 0-1 | | Operating hours. | | |
| local\_date\_gap | int | | 4 | | 0-1 | | An offset of terminal local time. | | |
| cassette\_count | int | | 1 | | 0-1 | | A number of cassettes with banknotes. | | |
| hopper\_count | int | | 1 | | 0-1 | | A number of hoppers with coins. | | |
| key\_change\_algorithm | string | | 8 | | 0-1 | | A key change algorithm. Values are taken from the dictionary. | | |
| counter\_sync\_cond | string | | 8 | | 0-1 | | A counter synchronization condition. | | |
| reject\_disp\_warn | int | | 4 | | 0-1 | | A cassette overfill limit for rejected banknotes. | | |
| reject\_disp\_min\_warn | int | | 4 | | 0-1 | | A limit to warn of forthcoming cassette overfill for rejected banknotes. | | |
| disp\_rest\_warn | int | | 4 | | 0-1 | | A limit to warn of the rest in cassettes. | | |
| receipt\_warn | int | | 4 | | 0-1 | | A limit to warn of the rest of receipts. | | |
| card\_capture\_warn | int | | 4 | | 0-1 | | A limit to warn of captured cards. | | |
| note\_max\_count | int | | 4 | | 0-1 | | Max number of banknotes to withdraw. | | |
| scenario\_id | int | | 4 | | 0-1 | | An ATM scenario ID. | | |
| manual\_synch | string | | 8 | | 0-1 | | Indicates the possibility to synchronize counters manually. | | |
| establ\_conn\_synch | string | | 8 | | 0-1 | | Indicates the possibility to synchronize counters on establishing the connection. | | |
| counter\_mismatch\_synch | string | | 8 | | 0-1 | | Indicates the possibility to synchronize counters if counters won’t match. | | |
| online\_in\_synch | string | | 8 | | 0-1 | | Indicates the possibility to synchronize counters online. | | |
| online\_out\_synch | string | | 8 | | 0-1 | | Indicates the possibility to synchronize counters on going offline. | | |
| safe\_close\_synch | string | | 8 | | 0-1 | | Indicates the possibility to synchronize counters on closing the safe. | | |
| disp\_error\_synch | string | | 8 | | 0-1 | | Indicates the possibility to synchronize counters on dispenser error. | | |
| periodic\_synch | string | | 8 | | 0-1 | | Indicates the possibility to synchronize counters periodically. | | |
| periodic\_all\_oper | int | | 1 | | 0-1 | | Indicates whether all operations should be counted when periodic synchronization is used. | | |
| periodic\_oper\_count | int | | 4 | | 0-1 | | Number of performed operations to initiate periodic synchronization. | | |
| cash\_in\_min\_warn | int | | 4 | | 0-1 | | The lower bound to warn of cash-in cassette overfill. | | |
| cash\_in\_max\_warn | int | | 4 | | 0-1 | | The upper bound to warn of cash-in cassette overfill. | | |
| atm\_dispenser | complex | |  | | 0-\* | | Dispenser related parameters. | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing of the parent element. | | |
| atm\_dispenser | | | | | | | | | |
| disp\_number | int | | 4 | | 1-1 | | A dispenser ordinal number. | | |
| face\_value | float | |  | | 1-1 | | A face value of banknotes in a dispenser. | | |
| currency | string | | 3 | | 1-1 | | Banknote currency. | | |
| denomination\_id | string | | 1 | | 0-1 | | A denomination ID. | | |
| dispenser\_type | string | | 8 | | 1-1 | | A dispenser type. Values are taken from the dictionary. | | |
| acquiring\_redefinition | | | | | | | | | |
| purpose\_number | string | | 200 | | 0-1 | | Number of payment purpose. | | |
| oper\_type | string | | 8 | | 0-1 | | Operation type. Dictionary OPTP. | | |
| oper\_reason | string | | 8 | | 0-1 | | Operation reason. Dictionary ADJR, PMRS, BLTP, LMTP. | | |
| mcc | string | | 4 | | 0-1 | | Merchant category code. Values are taken from the dictionary. | | |
| terminal\_number | string | | 200 | | 0-1 | | A terminal number | | |
| account | | | | | | | | | |
| command | string | | 8 | | 1-1 | | An action to perform over an object. | | |
| account\_type | string | | 8 | | 0-1 | | An account type: Default, Savings, Credit, etc. Values are taken from the dictionary. | | |
| account\_number | string | | 200 | | 0-1 | | An account number. | | |
| currency | string | | 3 | | 0-1 | | Account currency. | | |
| account\_status | string | | 8 | | 0-1 | | An account status. | | |
| status\_reason | string | | 8 | | 0-1 | | Last status change reason | | |
| payment\_order | complex | |  | | 0-\* | | A payment order to associate with an account | | |
| account\_object | complex | |  | | 0-\* | | Objects associated with accounts of merchants and terminals. Contains references to the **merchant** and **terminal** elements in the same application. | | |
| flexible\_field | complex | |  | | 0-\* | | Flexible field block | | |
| note | complex | |  | | 0-\* | | Note field block | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing of the parent element. | | |
| payment\_order | | | | | | | | | |
| payment\_purpose\_id | int | | 8 | | 1-1 | | A payment purpose ID. | | |
| label | string | | 200 | | 0-99 | | Name of orders template. It must have the «language» attribute with the language constant values (LANGENG, LANGRUS, etc.). If the language is not specified then the English is used. Support this tag only if is\_payment\_order\_template is true. | | |
| description | string | | 200 | | 0-99 | | Description of orders template. It must have the «language» attribute with the language constant values (LANGENG, LANGRUS, etc.). If the language is not specified then the English is used. Support this tag only if is\_payment\_order\_template is true. | | |
| payment\_amount | float | | 22 | | 0-1 | | Payment order amount. | | |
| currency | string | | 3 | | 0-1 | | A currency code. | | |
| payment\_amount\_algo | string | | 8 | | 0-1 | | An algorithm of payment amount calculation. Values are taken from the dictionary. | | |
| payment\_date | date | |  | | 0-1 | | Date of payment order execution. | | |
| is\_payment\_order\_template | int | | 1 | | 0-1 | | Indicates the presence of a payment order template. | | |
| event\_type | string | | 8 | | 0-1 | | An event that provokes the payment order execution. Values are taken from the dictionary. | | |
| template\_status | string | | 8 | | 0-1 | | Template status. Used only when is\_payment\_order\_template is true. | | |
| attempt\_count | int | | 4 | | 0-1 | | Attempt count. Used only when is\_payment\_order\_template is true. | | |
| payment\_parameter | complex | |  | | 0-\* | | Payment order parameters. | | |
| payment\_parameter | | | | | | | | | |
| payment\_parameter\_name | string | | 200 | | 1-1 | | A system name of a parameter. | | |
| payment\_parameter\_value | string | | 400 | | 1-1 | | A payment parameter value. | | |
| account\_object | | | | | | | | | |
| account\_link\_flag | int | | 1 | | 1-1 | | Indicates relationship with an account. 0 – no relationship; 1 – relationship exists. | | |
| service | | | | | | | | | |
| service\_object | complex | |  | | 0-\* | | Contains a reference to an associated entity (**account**, **merchant**, **terminal**). The reference to a respective tag is specified as a value of the REF\_ID attribute. | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| service\_object | | | | | | | | | |
| start\_date | date | |  | | 0-1 | | Service ‘valid from’ date. | | |
| end\_date | date | |  | | 0-1 | | Service expiration date. | | |
| attribute\_num | complex | |  | | 0-\* | | Object related service terms that differ from the ones defined on a product level. | | |
| attribute\_char | complex | |  | | 0-\* | | Object related service terms that differ from the ones defined on a product level. | | |
| attribute\_date | complex | |  | | 0-\* | | Object related service terms that differ from the ones defined on a product level. | | |
| attribute\_fee | complex | |  | | 0-\* | | Object related service terms that differ from the ones defined on a product level. | | |
| attribute\_cycle | complex | |  | | 0-\* | | Object related service terms that differ from the ones defined on a product level. | | |
| attribute\_limit | complex | |  | | 0-\* | | Object related service terms that differ from the ones defined on a product level. | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing of the parent element. | | |
| attribute\_num | | | | | | | | | |
| attribute\_value\_num | int | | 22 | | 1-1 | | An attribute value, if a service term is defined numerically. | | |
| start\_date | date | |  | | 1-1 | | The ‘valid from’ date of an object related service term. | | |
| end\_date | date | |  | | 0-1 | | Expiration date of an object related service term. | | |
| mod\_condition | string | | 2000 | | 0-1 | | Condition of modifier | | |
| mod\_name | string | | 200 | | 0-1 | | Name of modifier | | |
| mod\_id | int | | 4 | | 0-1 | | Identifier of modifier | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| attribute\_char | | | | | | | | | |
| attribute\_value\_char | string | | 200 | | 1-1 | | An attribute value in case a service term is defined as chars. | | |
| start\_date | date | |  | | 1-1 | | The ‘valid from’ date of an object related service term. | | |
| end\_date | date | |  | | 0-1 | | Expiration date of an object related service term. | | |
| mod\_condition | | string | | 2000 | | 0-1 | | | Condition of modifier | | |
| mod\_name | | string | | 200 | | 0-1 | | | Name of modifier | | |
| mod\_id | | int | | 4 | | 0-1 | | | Identifier of modifier | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| attribute\_date | | | | | | | | | |
| attribute\_value\_date | date | |  | | 1-1 | | An attribute value, if a service term is defined as date. | | |
| start\_date | date | |  | | 1-1 | | The ‘valid from’ date of an object related service term. | | |
| end\_date | date | |  | | 0-1 | | Expiration date of an object related service term. | | |
| mod\_condition | | string | | 2000 | | 0-1 | | | Condition of modifier | | |
| mod\_name | | string | | 200 | | 0-1 | | | Name of modifier | | |
| mod\_id | | int | | 4 | | 0-1 | | | Identifier of modifier | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| attribute\_fee | | | | | | | | | |
| fee\_fixed\_value | long | | 22 | | 0-1 | | A fixed rate. | | |
| currency | string | | 3 | | 1-1 | | Fixed fee currency. | | |
| fee\_percent\_value | long | | 22 | | 0-1 | | An interest rate. | | |
| fee\_rate\_calc | string | | 8 | | 1-1 | | A calculation type. | | |
| fee\_base\_calc | string | | 8 | | 1-1 | | Fee base calc algorithm | | |
| fee\_min\_value | long | | 22 | | 0-1 | | Fee minimum value | | |
| fee\_max\_value | long | | 22 | | 0-1 | | Fee maximum value | | |
| start\_date | date | |  | | 1-1 | | The ‘valid from’ date of an object related service term. | | |
| end\_date | date | |  | | 0-1 | | Expiration date of an object related service term. | | |
| cycle\_length\_type | string | | 8 | | 0-1 | | Time period unit. Value from dictionary LNGT. | | |
| mod\_condition | string | | 2000 | | 0-1 | | | Condition of modifier | |
| mod\_name | string | | 200 | | 0-1 | | | Name of modifier | |
| mod\_id | int | | 4 | | 0-1 | | | Identifier of modifier | |
| Length\_type\_algorithm | string | | 8 | | 0-1 | | | Algorithm for year length calculation. Dictionary NDYR. | |
| fee\_tier | complex | |  | | 0-\* | | | Contains tiers of fee. | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| fee\_tier | | | | | | | | | |
| sum\_threshold | long | | 22 | | 1-1 | | Sum threshold | | |
| count\_threshold | int | | 4 | | 1-1 | | Count threshold | | |
| fee\_fixed\_value | long | | 22 | | 0-1 | | Fee fixed rate | | |
| fee\_percent\_value | long | | 22 | | 0-1 | | Fee percent rate | | |
| fee\_min\_value | long | | 22 | | 0-1 | | Fee minimum value | | |
| fee\_max\_value | long | | 22 | | 0-1 | | Fee maximum value | | |
| attribute\_limit | | | | | | | | | |
| limit\_sum\_value | long | | 22 | | 0-1 | | A limit bound to use for amount. | | |
| currency | string | | 3 | | 0-1 | | Currency of a limit bound. | | |
| limit\_count\_value | long | | 22 | | 0-1 | | A limit bound to use for quantity | | |
| counter\_algorithm | string | | 8 | | 0-1 | | Counter algorithm of the limit processing (value from ‘ACCL’ dictionary). | | |
| start\_date | date | |  | | 1-1 | | The ‘valid from’ date of an object related service term. | | |
| end\_date | date | |  | | 0-1 | | Expiration date of an object related service term. | | |
| mod\_condition | | string | | 2000 | | 0-1 | | | Condition of modifier | | |
| mod\_name | | string | | 200 | | 0-1 | | | Name of modifier | | |
| mod\_id | | int | | 4 | | 0-1 | | | Identifier of modifier | | |
| length\_type | | string | | 8 | | 0-1 | | | A measuring unit of a time period. | | |
| cycle\_length | | int | | 8 | | 0-1 | | | Number of time periods. | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing the parent element. | | |
| attribute\_cycle | | | | | | | | | |
| cycle\_length\_type | string | | 8 | | 1-1 | | A measuring unit of a time period. | | |
| cycle\_length | int | | 8 | | 1-1 | | Number of time periods. | | |
| shift | complex | |  | | 0-\* | | Cycle shifts | | |
| cycle\_start\_date | date | |  | | 0-1 | | Start date to begin cycle count. | | |
| start\_date | date | |  | | 1-1 | | The ‘valid from’ date of an object related service term. | | |
| end\_date | date | |  | | 0-1 | | Expiration date of an object related service term. | | |
| mod\_condition | | string | | 2000 | | 0-1 | | | Condition of modifier | | |
| mod\_name | | string | | 200 | | 0-1 | | | Name of modifier | | |
| mod\_id | | int | | 4 | | 0-1 | | | Identifier of modifier | | |
| error | complex | |  | | 0-1 | | Contains the details for an error that occurred on processing of the parent element. | | |
| **shift** | | | | | | | | | |
| shift\_type | string | | 8 | | 1-1 | | Type of cycle shit. Dictionary value. | | |
| shift\_priority | int | | 4 | | 1-1 | | Priority of shift when cycle has multiple shifts | | |
| shift\_sign | int | | 1 | | 1-1 | | 1 – forwards shift  -1 – backward shift | | |
| shift\_length\_type | string | | 8 | | 0-1 | | Type of shift length period. Use only with ***shift\_type = CSHTPERD*** – shift by period. | | |
| shift\_length | int | | 4 | | 1-1 | | Shift value | | |
| error | | | | | | | | | | |
| error\_code | string | | 200 | | 1-1 | | | Error code | |
| error\_desc | string | | 2000 | | 1-1 | | | Description | |
| error\_element | string | | 200 | | 1-1 | | | XML tag of error origin | |
| error\_details | string | | 2000 | | 0-1 | | | Additional information | |

APPLICATIONS

It is used as the root tag, if an application is passed within a file. It may include a number of applications (the APPLICATION tag).

APPLICATION

It contains a single complete application. The tag is the root one, if an application is passed online via a web-service.

APPLICATION\_NUMBER

It is a unique external ID of an application. It serves to synchronize applications between SmartVista and an external system, which is used to form them.

APPLICATION\_DATE

Date of forming an application by means of an external system.

APPLICATION\_TYPE

It defines both an application structure and a processor, which is called to create objects in the system on the basis of the application structure.

| Code | Description |
| --- | --- |
| APTPACQA | Acquiring application. |

APPLICATION\_STATUS

A status of the created application. The status defines whether the application will be processed once it is loaded or an additional verification by the operator is required.

| Code | Description |
| --- | --- |
| APST0001 | Just created |
| APST0002 | Awaiting confirmation |
| APST0003 | Awaiting correction |
| APST0004 | Awaiting checking |
| APST0005 | Further information requested |
| APST0006 | Awaiting processing |
| APST0007 | Processed successfully |
| APST0008 | Processing failed |

APPLICATION\_FLOW\_ID

It is an ID of an application business flow. The ID is used to create an application and defines the final structure of tags (set of mandatory fields, default values, etc.). Thus, it describes a purpose of the application that is an action to perform once the application is processed.

| Code | Description |
| --- | --- |
| 2001 | Create new acquiring customer |
| 2002 | Open new acquiring account |
| 2003 | Add new merchant to acquiring hierarchy |
| 2004 | Add new terminal |
| 2005 | Activate additional service |
| 2006 | Deactivate additional service |
| 2007 | Close terminal |
| 2008 | Merchant closure |
| 2009 | Close acquiring account |
| 2010 | Banking terminals registration |
| 2011 | Banking merchant registration |
| 2012 | Add new ATM |
| 2013 | Change acquiring customer |
| 2014 | Change merchant data |
| 2015 | Change terminal data |
| 2018 | Change acquiring account status |

OPERATOR\_ID

A system name (ID) of a user who created an application. It is used as an additional description only for audit purposes.

INSTITUTION\_ID

An ID of an institution to open a service contract in.

AGENT\_ID

An ID of an agent that serves as a bank branch to open a service contract in. The default agent is used, if the bank does not deliver multiple branches for its customers.

CUSTOMER\_TYPE

An individual or incorporated person. A value of the tag defines the application structure. Depending on the value, it is necessary to fill in the information either of a company or person. Only an incorporated person is used for acquiring applications.

| Code | Description |
| --- | --- |
| ENTTCOMP | Company |

COMMAND

It describes an action to perform over an object of the current parent tag. The action depends on whether the object exists in the system or not. Each command defines an action for both cases (found or not found). Verification for the object existence is made by various parameters (it is unique IDs of objects mainly). The list of actions is fixed and defined in the dictionary.

| Code | Description |
| --- | --- |
| CMMDCREX | Create or except |
| CMMDCRPR | Create or proceed |
| CMMDCRUP | Create or update |
| CMMDEXPR | Except or proceed |
| CMMDEXRE | Except or remove |
| CMMDEXUP | Except or update |
| CMMDIGNR | |  |  | | --- | --- | |  | Ignore | |

CUSTOMER

A complex tag that contains the customer related parameters.

CUSTOMER\_NUMBER

A unique ID of a customer in the scope of an institution. It is an optional field. If the tag is empty then a customer number will be generated automatically according to the respective naming format adjusted in SmartVista and returned in a response to the application processing request. The tag is used to synchronize customers between SmartVista and an external system. The number is used to identify a customer, if an application to update the existing customer is created.

CUSTOMER\_CATEGORY

It defines a customer’s class of service, that is either he is an ordinary or privileged customer. The set of the tag values is defined in the expandable dictionary.

| Code | Description |
| --- | --- |
| CCTGORDN | Ordinary customer |
| CCTGPRVG | |  |  | | --- | --- | |  | Privileged customer | |

CUSTOMER\_EXT\_TYPE

Customer extended type. Dictionary ENTT.

CUSTOMER\_EXT\_ID

Customer extended identifier. It is actually an entity object’s identifier.

CUSTOMER\_RELATION

It defines how a customer relates to a bank: affiliate, insider, employee, etc. The set of the tag values is defined in the expandable dictionary.

| Code | Description |
| --- | --- |
| RSCBAFLT | |  |  | | --- | --- | |  | Affiliate | |
| RSCBEMPL | Employee |
| RSCBEXTR | External |
| RSCBINSD | Insider |

RESIDENT

It indicates whether a customer is a resident of the country where a bank performs its operating activities. 1 – resident, 0 –nonresident. It is an optional parameter. The default value is 1.

NATIONALITY

A nationality of a customer. It contains an ISO code of a country. In case of an incorporated person, the country where the company is legally registered in is used as a value.

CREDIT\_RATING

A trustworthiness rating of a customer. It defines the customer’s solvency and may impact on calculation of the bank reserve associated with the customer’s credit debt.

| Code | Description |
| --- | --- |
| CRDR0001 | Category I |
| CRDR0002 | Category II |
| CRDR0003 | Category III |
| CRDR0004 | Category IV |
| CRDR0005 | Category V |

MONEY\_LAUNDRY\_RISK

It indicates whether a customer might take part in money laundering. The parameter is set to ‘Low’ for the ordinary customer. If any suspicions of a customer’s taking part in illegible operations are raised, the parameter is set to ‘High’.

| Code | Description |
| --- | --- |
| MOLR0001 | Low |
| MOLR0002 | High |

MONEY\_LAUNDRY\_REASON

It is filled in, if a customer is under suspicions of taking part in money laundering. If the MONEY\_LAUNDRY\_RISK parameter is set to ‘Low’, the ‘No reasons’ value is set for the field.

| Code | Description |
| --- | --- |
| MLRS0001 | No reasons |

**FLEXIBLE\_FIELD**

It describes a flexible field (system name and value) associated with entity type of parent block. For example, if block *flexible\_field* locates in block *customer*, a flexible field value will be intended for some entity *customer* that is described by this block.

FLEXIBLE\_FIELD\_NAME

Unique flexible field name (system name).

FLEXIBLE\_FIELD\_VALUE

Flexible field value.

**NOTE**

It describes a note associated with entity type of parent block. For example, if block *note* locates in block *customer*, note value will be intended for some entity *customer* that is described by this block.

NOTE\_TYPE

This element contains type of note.

|  |  |
| --- | --- |
| **Code** | **Description** |
| NTTPUSER | User comment |
| NTTPRSTR | Notes for registry of opened and closed accounts |
| NTTPDLVR | Delivery notes |

NOTE\_CONTENT

It is a block with content of the note.

**NOTE\_CONTENT**

It contains content of note block.

NOTE\_HEADER

Header of the note.

NOTE\_TEXT

Text of the note.

START\_DATE

Starting date of note content data.

END\_DATE

Ending date of note content data.

CONTRACT

It is a complex tag that contains the contract related parameters.

CONTRACT\_TYPE

It defines a business area where a bank and its customer interact. A value is defined in the expandable dictionary. The list of available contract types is limited by a chosen customer type.

| Code | Description |
| --- | --- |
| CNTPMRCM | Merchant acquiring |

PRODUCT\_ID

An ID of a product in the SmartVista system. It defines a product used by a contact. The list of products is limited by a contract type. It is an optional field, if the contract already exists.

CONTRACT\_NUMBER

It is an optional parameter. If a contract number is not specified in an application explicitly, it may be generated automatically according to a naming format adjusted in SmartVista. The generated number is returned in a response to the application processing request. The number will be used to identify a contract and must be unique in the scope of an institution.

START\_DATE

Start date a contract is valid from. If date is not specified explicitly, application processing date is used.

END\_DATE

Expiration date of a contract. If not specified, a contract is meant to be permanent. Date may be specified later on in an application for contract modification.

IDENTITY\_CARD

|  |
| --- |
| It is a complex tag that contains parameters of ID documents. As for an incorporated person  , such documents are TIN, OGRN (PSRN, primary state registration number), BIC, etc. |

These parameters are used to identify a company and verify it for duplicate entries and, for instance, criminal involvement.

ID\_TYPE

It is a type of an ID document. The list of available types is limited by a customer type. Values are defined in the expandable dictionary.

| Code | Description |
| --- | --- |
| IDTP0001 | Passport |
| IDTP0002 | Foreign passport |
| IDTP0003 | Military certificate |
| IDTP0004 | Sailor certificate |
| IDTP0005 | Army officer certificate |
| IDTP0006 | Citizen temporary certificate |
| IDTP0010 | Taxpayer identification number |
| IDTP0011 | Main state registration number |
| IDTP0012 | Bank Identification Code |
| IDTP0013 | Foreign Organization Code |
| IDTP0014 | License |
| IDTP0020 | Driver license |
| IDTP0030 | Social insurance |
| IDTP0040 | Passport (Foreign citizen) |
| IDTP0041 | Migratory card (Foreign citizen) |
| IDTP0042 | Permanent resident card (Foreign citizen) |
| IDTP0043 | Temporary residence permit (Foreign citizen) |
| IDTP0044 | Visa (Foreign citizen) |

ID\_SERIES

A series of an ID document.

ID\_NUMBER

A number of an ID document. Type, series, and number are used to verify a document for uniqueness.

ID\_ISSUER

Official authorities that issued an ID document.

ID\_ISSUE\_DATE

Date when an ID document was issued.

ID\_EXPIRE\_DATE

Expiration date of an ID document.

ID\_DESC

Comments on an ID document.

COMPANY

It is a complex tag. It contains parameters that describe an incorporated person.

COMPANY\_EMBOSSED\_NAME

A company name that will be embossed on a card issued.

INCORP\_FORM

A type of a company.

| Code | Description |
| --- | --- |
| INCF0041 | Unitary enterprise, based on operational management |
| INCF0042 | Unitary enterprise, based on the right of business |
| INCF0047 | Public corporation |
| INCF0051 | General partnership |
| INCF0064 | Limited partnership |
| INCF0065 | Limited liability company |
| INCF0066 | Additional liability |
| INCF0067 | Closed joint stock company |
| INCF0071 | Private institution |
| INCF0072 | State-financed organization |
| INCF0073 | Autonomous institution |
| INCF0076 | Gardening, horticulture or country house non-profit partnership |
| INCF0077 | Union of the peasant farm |
| INCF0078 | Authorities of public initiative |
| INCF0080 | Territorial public self-government |
| INCF0082 | State corporation |
| INCF0083 | Social and religious organizations (associations) |
| INCF0084 | Public movement |
| INCF0085 | Consumers' cooperative |
| INCF0088 | Fund |
| INCF0089 | Other non-profit organizations |
| INCF0091 | Individual businessman |
| INCF0093 | Association of legal entities (association or union) |
| INCF0094 | Homeowners |
| INCF0096 | Non-profit partnership |
| INCF0097 | |  |  | | --- | --- | |  | Autonomous non-profit organization | |

PRESENCE\_ON\_LOCATION

Indicates that the physical location of the company’s executives is the address specified in founding documents.

AUTHORIZED\_CAPITAL

An amount of the company authorized capital. It is used as additional information to analyze the solvency of a company.

AUTHORIZED\_CAPITAL\_CURRENCY

Currency of the company authorized capital. It is an ISO code of three digits.

COMPANY\_NAME

It is a complex and multilingual tag that contains parameters of the full and short company name. The COMPANY parent tag may contain a number of such tags in various languages. The LANGUAGE attribute must be specified for this tag with possible values:

| Code | Description |
| --- | --- |
| LANGENG | English |
| LANGRUS | Russian |

COMPANY\_SHORT\_NAME

A short name of a company. It must be specified in the language set for the COMPANY\_NAME parent tag.

COMPANY\_FULL\_NAME

The full name of a company. It must be specified in the language set for the COMPANY\_NAME parent tag.

CONTACT

It is a complex tag that contains parameters of the customer’s contact information. It may be specified as a child of the CUSTOMER and CARDHOLDER tags. Thus, it defines contact information of a customer and a cardholder respectively. In turn, the tag may contain the PERSON and ADDRESS child tags to describe a contact in more details (name of a contact person, his/her postal address).

CONTACT\_TYPE

This either defines a purpose of a contact (sending the notifications, account delivery) or just describes it (home or business). Values are defined in the expandable dictionary.

| Code | Description |
| --- | --- |
| CNTTCEOC | Chief Executive Officer contact |
| CNTTCFEO | |  |  | | --- | --- | |  | Chief Financial Officer contact | |
| CNTTPRMC | Primary contact |
| CNTTSCNC | Secondary contact |

PREFERRED\_LANG

Preferred language for communication. It is used to form notification messages in the desirable language or just as supplemental information.

| Code | Description |
| --- | --- |
| LANGENG | English |
| LANGRUS | Russian |

JOB\_TITLE

A position of a contact person. It is used for an incorporated person only. Both the contact person’s position (director, chief accountant, etc.) and department title (accounting, sales) may be used as values of the tag.

The PERSON tag may be used additionally to specify the contact person’s full name.

| Code | Description |
| --- | --- |
| JTTLDRCT | Director |
| JTTLHDDP | Head of department |
| JTTLMNGR | |  |  | | --- | --- | |  | Manager | |
| JTTLOFMN | Office manager |
| JTTLCHFA | Chief accountant |
| JTTLACNT | Accounter |

CONTACT\_DATA

It is a complex tag that contains parameters of communication.

COMMUN\_METHOD

A communication method. It defines a method to communicate with a customer by.

| Code | Description |
| --- | --- |
| CMNM0001 | Mobile phone |
| CMNM0002 | E-mail |
| CMNM0003 | Post |
| CMNM0004 | Fax |
| CMNM0005 | Skype |
| CMNM0006 | AOL Aim |
| CMNM0007 | Windows Live Messenger |
| CMNM0008 | ICQ Corp |
| CMNM0009 | Yahoo! Messenger |
| CMNM0010 | Jabber |
| CMNM0011 | Telex |
| CMNM0012 | Landline phone |

COMMUN\_ADDRESS

An ID to use for communication with a person by a chosen method (phone number, E-mail address, postal address, etc.)

START\_DATE

Starting date of validity of contact data.

END\_DATE

Ending date of validity of contact data.

ADDRESS

It is a complex tag that contains parameters of postal address.

ADDRESS\_TYPE

It describes a purpose of address. Values are defined in the expandable dictionary.

| Code | Description |
| --- | --- |
| ADTPBSNA | Business address |
| ADTPHOME | Home address |
| ADTPLGLA | Legal address |
| ADTPSTDL | Statement delivery address |

COUNTRY

A numeric ISO code of a country.

ADDRESS\_NAME

It is a complex and multilingual tag that contains parameters of address in various languages. A number of such tags may be used in the scope of the same address in various languages. The LANGUAGE attribute must be specified for this tag with possible values:

| Code | Description |
| --- | --- |
| LANGENG | English |
| LANGRUS | Russian |

REGION

A name of a region in address (state, region, country, republic, etc.). The language specified as an attribute of the ADDRESS\_NAME parent tag is used.

CITY

A name of a city. The language specified as an attribute of the ADDRESS\_NAME parent tag is used.

STREET

A name of a street. The language specified as an attribute of the ADDRESS\_NAME parent tag is used.

HOUSE

A number of a house.

APARTMENT

A number of an apartment.

POSTAL\_CODE

Postal code.

PLACE\_CODE

Place code.

REGION\_CODE

A region code or address classification code.

ADDRESS\_ID

Address identificator. Use only for upload. This tag ignored in incoming file.

MERCHANT

It describes parameters of a merchant. The tag may be nested, if a hierarchy of merchants is used.

MERCHANT\_NUMBER

A unique number of a merchant in the scope of an institution. The number is passed to the IPS as a unique ID of the merchant together with a BIN of the institution. If the number is not specified in an application explicitly, it may be generated automatically according to a naming format adjusted in the system.

MERCHANT\_NAME

A name of a merchant in English that is used in reports and receipts.

MERCHANT\_LABEL

It is a multilingual name of a merchant. The name may be presented in various languages at the same time. It is the full official name of the merchant.

MERCHANT\_TYPE

It defines a position of a merchant in a hierarchy. The hierarchy is configured in the system preliminarily. Each merchant intended to be created must adhere to the pre-configured structure of types. Merchant types may be configured for any institution separately, no limits for quantity of values or combinations.

MCC

Merchant category code. It defines a business sphere of a merchant as well as goods and services it provides. The MMC is used as a parameter to process operations, calculate fees, adjust fraud rules, etc.

MERCHANT\_STATUS

It defines whether a merchant is active or not to accept cards.

RISK\_INDICATOR

Merchant risk indicator value has values from FMRI dictionary.

MERCHANT\_DESC

Merchant’s description. It may be specified in a number of languages.

PARTNER\_ID\_CODE

MIR Loyalty Program Partner ID.

NOTIFICATION

It describes parameters that define rules to notify a merchant of various events generated by the system. These parameters re-define the system-wide settings, if specific configuration is required for a particular merchant.

NOTIFICATION\_EVENT

A type of an event generated by the system to re-define the system-wide notification settings for. If the tag is empty, changes will be applied to all the events in the system.

DELIVERY\_CHANNEL

A delivery channel of messages to use for event notification. The list of available channels is defined during initial configuration of the system. If a new channel is needed to use (besides the ones pre-defined in the system), an additional functionality is implemented.

| Code | Description |
| --- | --- |
| 1 | E-mail |
| 2 | Hard copy |
| 3 | SMS |

DELIVERY\_ADDRESS

Address to deliver to by means of a chosen delivery channel. The tag should be used, if delivery address differs from the address specified in contact information of a merchant.

IS\_ACTIVE

It indicates whether a merchant should be notified of an event or not. 1 – notification enabled, 0 – notification disabled.

TERMINAL

The tag contains parameters of terminal types. Terminals are associated with merchants according to a merchant hierarchy that is each terminal should be linked to a merchant type, which is configured to have subordinate terminals in the merchant hierarchy.

TERMINAL\_NUMBER

A unique number of a terminal in the scope of an institution. The terminal number may be generated automatically according to a naming format adjusted in the system, if it is not specified explicitly.

TERMINAL\_TYPE

It defines a type of the device registered as a terminal. Some of terminal types, for instance ATM, require specifying the supplementary parameters in additional blocks.

| Code | Description |
| --- | --- |
| TRMT0001 | Imprinter |
| TRMT0002 | |  |  | | --- | --- | |  | ATM | |
| TRMT0003 | POS |
| TRMT0004 | ePOS |
| TRMT0005 | Mobile |
| TRMT0006 | Internet |
| TRMT0007 | Mobile POS |
| TRMT0008 | Info-kiosk |

STANDARD\_ID

A communication standard is used to interact with a terminal. It describes the application layer to interchange messages with a device.

| Code | Description |
| --- | --- |
| 1001 | SVIP-IFX standard |
| 1003 | NCR ATM standard |
| 1006 | Diebold 912 ATM standard |
| 1009 | Wincor Nixdorf NDC standard |
| 1010 | BPC ISO8583 POS |
| 1012 | E-Pay ISO8583 |

VERSION\_ID

The current version of a communication standard that is used by a terminal. The list of versions depends both on a chosen standard and the system-wide settings.

MCC

Merchant category code. It should be specified, if operations run via a terminal must be routed to the network that has an MMC other than the MCC defined on the merchant level.

TERMINAL\_TEMPLATE

An ID of a terminal template. On the terminal being created its parameters without values are filled in with the values defined in the template. The list of templates and their IDs is formed when the system is being configured.

PLASTIC\_NUMBER

An imprinter number printed on the slip. It is meaningful only if an imprinter is used.

CARD\_DATA\_INPUT\_CAP

Available methods to input card data via a terminal:

| Code | Description |
| --- | --- |
| F221000A | |  |  | | --- | --- | |  | PAN auto-entry via contactless magnetic stripe | |
| F221000B | Magnetic stripe reader and key entry capability |
| F221000C | Magnetic stripe reader, ICC, and key entry capability |
| F221000D | Magnetic stripe reader and ICC capability |
| F221000E | ICC and key entry capability |
| F221000M | PAN auto-entry via contactless M/Chip |
| F221000V | |  |  | | --- | --- | |  | Other capability | |
| F2210000 | Unknown; data not available |
| F2210001 | Manual; no terminal |
| F2210002 | Magnetic stripe reader capability |
| F2210003 | Barcode reader |
| F2210004 | Optical character reader (OCR) capability |
| F2210005 | Integrated circuit card (ICC) capability |
| F2210006 | Key entry-only capability |

CRDH\_AUTH\_CAP

Available methods to authenticate a cardholder via a terminal:

| Code | Description |
| --- | --- |
| F2220000 | No electronic authentication capability |
| F2220001 | PIN entry capability |
| F2220002 | Electronic signature analysis capability |
| F2220005 | Electronic authentication capability is inoperative |
| F2220006 | Other |
| F2220009 | Unknown; data unavailable |

CARD\_CAPTURE\_CAP

Available methods to capture a card:

| Code | Description |
| --- | --- |
| F2230000 | No capture capability |
| F2230001 | Card capture capability |
| F2230002 | Unknown; data unavailable |

TERM\_OPERATING\_ENV

Operating environment of a terminal:

| Code | Description |
| --- | --- |
| F2240000 | |  |  | | --- | --- | |  | No terminal used | |
| F2240001 | On card acceptor premises; attended terminal |
| F2240002 | On card acceptor premises; unattended terminal |
| F2240003 | Off card acceptor premises; attended |
| F2240004 | |  |  | | --- | --- | |  | Off card acceptor premises; unattended | |
| F2240005 | On cardholder premises; unattended |
| F2240006 | Off cardholder premises; unattended |
| F2240007 | Private use (Future use) |
| F2240009 | Unknown; data unavailable |

CRDH\_DATA\_PRESENT

Indicator of the cardholder presence:

| Code | Description |
| --- | --- |
| F2250000 | Cardholder present |
| F2250001 | |  |  | | --- | --- | |  | Cardholder not present (unspecified) | |
| F2250002 | Cardholder not present (mail/facsimile transaction) |
| F2250003 | Cardholder not present (phone order or from automated response unit [ARU]) |
| F2250004 | Cardholder not present (standing order/recurring transaction) |
| F2250005 | Cardholder not present (electronic order [PC, Internet, mobile phone or PDA]) |
| F2250009 | |  |  | | --- | --- | |  | Unknown; data unavailable | |

CARD\_DATA\_PRESENT

An indicator of the card presence:

| Code | Description |
| --- | --- |
| F2260000 | Card present |
| F2260001 | Card not present |
| F2260009 | Unknown; data unavailable |

CARD\_DATA\_INPUT\_MODE

A preferred method to input card data via a terminal:

| Code | Description |
| --- | --- |
| F227000A | PAN auto-entry via contactless magnetic stripe |
| F227000B | Magnetic stripe reader input; track data captured and passed unaltered |
| F227000C | Online chip |
| F227000F | Offline chip |
| F227000M | PAN auto-entry via contactless M/Chip |
| F227000N | Contactless input, PayPass mapping service applied |
| F227000S | |  |  | | --- | --- | |  | Electronic commerce | |
| F2270000 | Unspecified; data unavailable |
| F2270001 | Manual input; no terminal |
| F2270002 | |  |  | | --- | --- | |  | Magnetic stripe reader input | |
| F2270003 | Barcode reader |
| F2270005 | Secured electronic commerce, 3D-security |
| F2270006 | Key entered input |
| F2270007 | |  |  | | --- | --- | |  | Electronic commerce, channel encryption | |
| F2270009 | |  |  | | --- | --- | |  | Electronic commerce, cardholder does not participate in security programm | |

CRDH\_AUTH\_METHOD

A preferred method to authenticate a cardholder:

| Code | Description |
| --- | --- |
| F228000S | Other systematic verification |
| F2280000 | Not authenticated |
| F2280001 | PIN |
| F2280002 | Electronic signature analysis |
| F2280005 | Manual signature verification |
| F2280006 | Other manual verification (such as driver's license number) |
| F2280009 | Unknown; data unavailable |

CRDH\_AUTH\_ENTITY

An entity used to authenticate a cardholder:

| Code | Description |
| --- | --- |
| F2290000 | Not authenticated |
| F2290001 | |  |  | | --- | --- | |  | ICC - offline PIN | |
| F2290002 | Card acceptance device (CAD) |
| F2290003 | Authorizing agent - online PIN |
| F2290004 | Merchant/card acceptor - signature |
| F2290005 | |  |  | | --- | --- | |  | Other | |
| F2290006 | Merchant is suspicious |
| F2290009 | Unknown; data unavailable |

CARD\_DATA\_OUTPUT\_CAP

Methods to write card output data.

| Code | Description |
| --- | --- |
| F22A000S | Other |
| F22A0000 | Unknown; data unavailable |
| F22A0001 | None |
| F22A0002 | |  |  | | --- | --- | |  | Magnetic stripe write | |
| F22A0003 | ICC |

TERM\_DATA\_OUTPUT\_CAP

Methods to output data via a terminal.

| Code | Description |
| --- | --- |
| F22B0000 | Unknown; data unavailable |
| F22B0001 | None |
| F22B0002 | Printing capability only |
| F22B0003 | Display capability only |
| F22B0004 | Printing and display capability |

PIN\_CAPTURE\_CAP

Terminal capability to obtain PIN.

| Code | Description |
| --- | --- |
| F22C000A | PIN capture capability 10 characters maximum |
| F22C000B | |  |  | | --- | --- | |  | PIN capture capability 11 characters maximum | |
| F22C000C | |  |  | | --- | --- | |  | PIN capture capability 12 characters maximum | |
| F22C0000 | |  |  | | --- | --- | |  | No PIN capture capability | |
| F22C0001 | |  |  | | --- | --- | |  | Unknown; data unavailable | |
| F22C0002 | |  |  | | --- | --- | |  | Reserved | |
| F22C0003 | |  |  | | --- | --- | |  | Reserved | |
| F22C0004 | PIN capture capability 4 characters maximum |
| F22C0005 | PIN capture capability 5 characters maximum |
| F22C0006 | PIN capture capability 6 characters maximum |
| F22C0007 | |  |  | | --- | --- | |  | PIN capture capability 7 characters maximum | |
| F22C0008 | PIN capture capability 8 characters maximum |
| F22C0009 | PIN capture capability 9 characters maximum |

CAT\_LEVEL

A terminal category.

| Code | Description |
| --- | --- |
| F22D0000 | Transaction is not CAT transaction |
| F22D0001 | Authomated dispensing machine with PIN capture possibility |
| F22D0002 | |  |  | | --- | --- | |  | Self-service terminal | |
| F22D0003 | Terminal with payment amount restriction |
| F22D0004 | |  |  | | --- | --- | |  | Purchasing of good in flight | |
| F22D0005 | |  |  | | --- | --- | |  | Reserved for future usage | |
| F22D0006 | |  |  | | --- | --- | |  | Electronic commerce terminal | |
| F22D0007 | Transponder transaction |
| F22D0009 | Mobile terminal |

TERMINAL\_STATUS

A terminal status.

| Code | Description |
| --- | --- |
| TRMS0001 | Active |
| TRMS0002 | |  |  | | --- | --- | |  | Inactive | |
| TRMS0009 | Terminal closed |

DEVICE\_ID

An ID of a physical network device attached to a terminal. The list of devices is defined when the initial configuration of the system is being performed.

GMT\_OFFSET

A time zone a terminal is physically located in. Possible values are from -13 to +12. The zero values is the GMT*+*0 time zone.

IS\_MAC

It indicates whether a terminal is the MAC device or not. 1 – yes, 0 –no.

CASH\_DISPENSER\_PRESENT

It indicates whether a terminal has cash dispenser or not. 1 – yes, 0 – no. The parameter is used to generalize the device classification and generate reports.

PAYMENT\_POSSIBILITY

It indicates possibility to pay for goods and services via a terminal. 1 – yes, 0 – no. The parameter is used to generalize the device classification and generate reports.

USE\_CARD\_POSSIBILITY

It indicates possibility to use cards via a terminal. 1 – yes, 0 – no. The parameter is used to generalize the device classification and generate reports.

CASH\_IN\_PRESENT

It indicates possibility to accept money via a terminal. 1 – yes, 0 – no. The parameter is used to generalize the device classification and generate reports.

AVAILABLE\_NETWORK

A reference to available payment networks, a terminal may work with. The list of networks is defined when the initial configuration of the system is being performed.

AVAILABLE\_OPERATION

A reference to available operation types, a terminal may work with. The list of operations is defined when the initial configuration of the system is being performed.

AVAILABLE\_CURRENCY

A reference to available currencies, a terminal may work with. The list of currencies is defined when the initial configuration of the system is being performed.

TERMINAL\_QUANTITY

Quantity of the same type terminals to create on the base of terminal-related parameters. If more than one terminal should be created, the respective number of the TERMINAL\_NUMBER parameters may be specified explicitly or left empty to generate terminal numbers automatically.

MCC\_TEMPLATE\_ID

An ID of an MMC redefinition group. The group is created when the initial configuration of the system is being performed.

INSTALMENT\_SUPPORT

Indicates the instalment support of POS terminal.

POS\_BATCH\_SUPPORT

Indicates the POS batch support of POS terminal.

TERMINAL\_PROFILE

Identifier of terminal setting profile in FrontEnd.

PIN\_BLOCK\_FORMAT

Format used on terminal to encrypt PIN-block in oline PIN checking.

| Code | Description |
| --- | --- |
| PNBFANSI | ANSI |
| PNBFDOCL | Docutel |
| PNBFISO1 | ISO 9564-1 format 1 |

ENCRYPTION

It describes parameters of an encryption key configured on the terminal. Depending on a type of a terminal, a number of encryption keys may be adjusted, thus, a number of the ENCRYPTION complex parameters may exist.

ENCRYPTION\_KEY\_TYPE

A type of an encryption key

| Code | Description |
| --- | --- |
| ENKTTAK | Terminal MAC Session Key |
| ENKTTMK | Terminal Master Key |
| ENKTTMKA | Terminal MAC Master Key |
| ENKTTMKP | |  |  | | --- | --- | |  | Terminal PIN Master Key | |
| ENKTTPK | Terminal PIN Session Key |

ENCRYPTION\_KEY\_PREFIX

An encryption key prefix.

ENCRYPTION\_KEY

An encryption key value.

ENCRYPTION\_KEY\_LENGTH

Encryption key length.

ENCRYPTION\_KEY\_CHECK\_VALUE

An encryption key check value.

COMMUN\_PLUGIN

Communication plugin.

| Code | Description |
| --- | --- |
| CMPLTCIP | TCP/IP |
| CMPLHTTP | HTTP |
| CMPLWSRV | Web service |

DEVICE\_NAME

Device name.

TCP\_IP\_PROTOCOL

It describes TCP/IP protocol connection parameters.

REMOTE\_ADDRESS

Remote device address.

LOCAL\_PORT

Local port number.

REMOTE\_PORT

Remote device port number.

INITIATOR

Initiator of the connection.

| Code | Description |
| --- | --- |
| TCPIREMT | Remote initiator |
| TCPIHOST | Host initiator |

FORMAT

Data transfer format. Define messages length and coding.

| Code | Description |
| --- | --- |
| TCPFVISA | VISA communication format |
| TCPFL14S | Link Level 1 |
| TCPFIBIC | 2 bytes length binary (including length of the message) |
| TCPF2L4B | 4 bytes binary length with first 2 bytes only considered |
| TCPF006S | 6 bytes length |
| TCPF004S | 4 bytes length |
| TCPF004B | 4 bytes length binary |
| TCPF002C | Like 002B, but length includes header |
| TCPF002B | 2 bytes length binary |
| TCPF001B | 1 byte binary length |

KEEP\_ALIVE

Keep connection alive flag.

MONITOR\_CONNECTION

Inform the opening / closing the connection.

MULTIPLE\_CONNECTION

Multiple connection allowed (1 - Yes, 0 - No).

ATM\_TERMINAL

The ATM specific parameters. It must be specified only if the terminal type is set to ATM.

ATM\_TYPE

It describes a manufacturer of an ATM as well as communication and configuration standards used by the ATM.

| Code | Description |
| --- | --- |
| ATMT0001 | NCR |
| ATMT0002 | Diebold |
| ATMT0003 | Wincor Nixdorf |
| ATMT0004 | Triton |
| ATMT0005 | Banquit |

ATM\_MODEL

An ATM model.

SERIAL\_NUMBER

A manufacturer serial number.

PLACEMENT\_TYPE

A type of ATM placement.

| Code | Description |
| --- | --- |
| ATMP0001 | Street |
| ATMP0002 | Indoors |

AVAILABILITY\_TYPE

An ATM availability type.

| Code | Description |
| --- | --- |
| ATMA0001 | Public |
| ATMA0002 | VIP |

OPERATING\_HOURS

ATM operating hours. Hours of ATM availability. The parameter is specified in free form.

LOCAL\_DATE\_GAP

A local time gap as compared to time of a processing center server.

CASSETTE\_COUNT

Number of cassettes (dispensers with banknotes) placed into an ATM.

HOPPER\_COUNT

Number of hoppers (dispensers with coins) placed into an ATM.

KEY\_CHANGE\_ALGORITHM

An algorithm of key change.

| Code | Description |
| --- | --- |
| KCHA0001 | |  |  | | --- | --- | |  | Use locally entered B key as master key and current session PIN key | |
| KCHA0002 | |  |  | | --- | --- | |  | Use locally-entered key A as master key for session MAC-key. Use locally-entered key B as master key for session PIN key. | |
| KCHA0003 | Use locally-entered key A as master key for session MAC key and for session PIN key. B is not used. |

COUNTER\_SYNC\_COND

A counter synchronization condition.

REJECT\_DISP\_WARN

A cassette overfill limit to warn of rejected banknotes.

REJECT\_DISP\_MIN\_WARN

A limit to warn of forthcoming cassette overfill for rejected banknotes.

DISP\_REST\_WARN

A limit to warn of the rest in cassettes.

RECEIPT\_WARN

A limit to warn of the rest of receipts.

CARD\_CAPTURE\_WARN

A limit to warn of captured cards.

NOTE\_MAX\_COUNT

Max number of banknotes to withdraw.

SCENARIO\_ID

An ATM scenario ID. Scenarios are defined when the initial configuration of the system is being performed.

MANUAL\_SYNCH

It indicates the possibility to synchronize counters manually. The same dictionary is used for all synchronization methods.

| Code | Description |
| --- | --- |
| ATMS0001 | Not permitted |
| ATMS0002 | |  |  | | --- | --- | |  | Permitted | |
| ATMS0003 | Only verification |

ESTABL\_CONN\_SYNCH

It indicates the possibility to synchronize counters on establishing the connection with an ATM.

COUNTER\_MISMATCH\_SYNCH

It indicates the possibility to synchronize counters if they won’t match.

ONLINE\_IN\_SYNCH

It indicates the possibility to synchronize counters on going online.

ONLINE\_OUT\_SYNCH

It indicates the possibility to synchronize counters on going offline.

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SAFE\_CLOSE\_SYNCH

It indicates the possibility to synchronize counters on closing the safe.

DISP\_ERROR\_SYNCH

It indicates the possibility to synchronize counters on dispenser error.

PERIODIC\_SYNCH

It indicates the possibility to synchronize counters periodically on the base of performed operation counter.

PERIODIC\_ALL\_OPER

It indicates whether all operations should be counted when periodic synchronization is used: 1 – all, 0 – financial only.

PERIODIC\_OPER\_COUNT

Number of operations performed to force the periodic synchronization of ATM counters.

CASH\_IN\_MIN\_WARN

The lower bound to warn of the cash-in cassette overfill.

CASH\_IN\_MAX\_WARN

The upper bound to warn of the cash-in cassette overfill.

ATM\_DISPENSER

It contains the ATM dispenser related parameters. Number of such blocks must coincide with that of dispensers specified in the ATM\_TERMINAL block.

DISP\_NUMBER

A dispenser ordinal number: 1, 2, ... n.

FACE\_VALUE

A face value of banknotes or coins in a dispenser. A value is specified in min units, for instance, cents.

CURRENCY

Currency of banknotes or coins in the dispenser. It is a three digit ISO code.

DENOMINATION\_ID

It is an ID of currency denomination.

DISPENSER\_TYPE

A type of a dispenser:

| Code | Description |
| --- | --- |
| DSTPCASS | |  |  | | --- | --- | |  | Cassette | |
| DSTPHOPP | Hopper |

SERVICE

The tag related to a service which has been pre-configured in the system earlier. It must contain an ID of the service. The service ID is specified in the VALUE attribute of the tag.

SERVICE\_OBJECT

The tag describes relationship between a service that has been specified in the SERVICE tag and a business-object of the SmartVista system such as customer, account, merchant, and terminal. To link an object with a service, it is necessary to specify an ID of the block where the respective object is described in the REF\_ID attribute of the tag.

If an associated service should be connected to an object, the tag is added to the object inside its parent tag.

START\_DATE

The valid from date of a service related to an object.

END\_DATE

Expiration date of a service related to an object.

ATTRIBUTE\_NUM

The tag that contains a service term of numeric type. It is used, if a service term defined via an attribute that has the value other than the one set in product should be specified. The object has a unique service term in this case. An ID of the service term registered in the system is specified in the VALUE attribute.

ATTRIBUTE\_VALUE\_NUM

The tag that contains a numeric value for the attribute of the corresponding type. The value is used as a unique parameter of a business object.

START\_DATE

The valid from date of a service term value.

END\_DATE

Expiration date of a service term value.

MOD\_CONDITION

Condition of modifier should be used for find and create modifier.

MOD\_NAME

Name of new modifier should be used to create new modifier only.

MOD\_ID

Identifier of existence modifier. Error should be raised if there are no modifier with this id, or modifier has different scale.

ATTRIBUTE\_CHAR

The tag that contains a service term of char type. It is used, if a service term defined via an attribute that has the value other than the one set in product should be specified. The object has a unique service term in this case. An ID of the service term registered in the system is specified in the VALUE attribute.

ATTRIBUTE\_VALUE\_CHAR

The tag that contains a char value for the attribute of the corresponding type. The value is used as a unique parameter of the business object.

START\_DATE

The valid from date of a service term value.

END\_DATE

Expiration date of a service term value.

MOD\_CONDITION

Condition of modifier should be used for find and create modifier.

MOD\_NAME

Name of new modifier should be used to create new modifier only.

MOD\_ID

Identifier of existence modifier. Error should be raised if there are no modifier with this id, or modifier has different scale.

ATTRIBUTE\_DATE

The tag that contains a service term of date type. It is used, if a service term defined via an attribute that has the value other than the one set in product should be specified. The object has a unique service term in this case. An ID of the service term registered in the system is specified in the VALUE attribute.

ATTRIBUTE\_VALUE\_DATE

The tag that contains a date value for the attribute of the corresponding type. The value is used as a unique parameter of the business object.

START\_DATE

The valid from date of a service term value.

END\_DATE

Expiration date of a service term value.

ATTRIBUTE\_FEE

The tag that contains a service term used as a fee (algorithm to calculate a fee). It is used, if a service term defined via an attribute that has the value other than the one set in product should be specified. The object has a unique service term in this case. An ID of the service term registered in the system is specified in the VALUE attribute.

FEE\_FIXED\_VALUE

The tag that contains a numeric value of the attribute. It defines a fixed rate to use for fee amount calculation.

CURRENCY

A currency code of the fixed rate.

FEE\_PERCENT\_VALUE

The tag that contains a numeric value of the attribute. It defines an interest rate to use for fee amount calculation.

FEE\_RATE\_CALC

An algorithm to calculate a fee on the basis of either a fixed or an interest rate. The list of algorithms is predefined in the dictionary. Available values are: Fixed value, Percentage value, Minimum between percent and fixed value, Maximum between percent and fixed value, Sum of percent and fixed values.

FEE\_BASE\_CALC

Fee parameter describing how is base calculating.

START\_DATE

The valid from date of a service term value.

END\_DATE

Expiration date of a service term value.

CYCLE\_LENGTH\_TYPE

Cycle length type (time interval unit): year, month, week, day, hour. The value is determined by the Dictionary value.

| Code | Description |
| --- | --- |
| LNGT0001 | Hour |
| LNGT0002 | Day |
| LNGT0003 | Week |
| LNGT0004 | Month |
| LNGT0005 | Year |

MOD\_CONDITION

Condition of modifier should be used for find and create modifier.

MOD\_NAME

Name of new modifier should be used to create new modifier only.

MOD\_ID

Identifier of existence modifier. Error should be raised if there are no modifier with this id, or modifier has different scale.

LENGTH\_TYPE\_ALGORITHM

Number days in year for fee calculating. Dictionary value:

| Code | Description |
| --- | --- |
| NDYR0001 | 360 days |
| NDYR0002 | 365 days |
| NDYR0003 | The actual quantity |

FEE\_TIER

This tag contains tiers of fee.

SUM\_THRESHOLD

This is the sum of threshold.

COUNT\_THRESHOLD

This is the Count of threshold.

FEE\_FIXED\_RATE

This is the value of fixed rate of fee.

FEE\_PERCENT\_RATE

This is the value of percent rate of fee.

FEE\_MIN\_VALUE

This is the minimum value of of fee.

FEE\_MAX\_VALUE

This is the maximum value of fee.

CYCLE

This tag contains cycle of fee.

CYCLE\_START\_DATE

Cycle start date. If no date is specified, then the cycle will be calculated from the date of the application processing.

CYCLE\_LENGTH\_TYPE

Cycle length type (time interval unit): year, month, week, day, hour. The value is determined by the Dictionary value.

| Code | Description |
| --- | --- |
| LNGT0001 | Hour |
| LNGT0002 | Day |
| LNGT0003 | Week |
| LNGT0004 | Month |
| LNGT0005 | Year |

CYCLE\_LENGTH

Cycle length (number of (time interval unit).

CYCLE\_WORKDAYS\_ONLY

Flag calculation cycle in working days. 1 – calculation cycle only on working days, 0 – calculation cycle every day.

ATTRIBUTE\_LIMIT

The tag that contains a service term used as a limit. An ID of the service term registered in the system is specified in the VALUE attribute.

LIMIT\_SUM\_VALUE

The upper bound of a limit on amount. Value “-1” implies there is no limit.

CURRENCY

A currency code of the limit upper bound on amount.

LIMIT\_COUNT\_VALUE

The upper bound of a limit on quantity.

COUNTER\_ALGORITHM

Counter algorithm of the limit processing (value from ‘ACCL’ dictionary).

START\_DATE

The valid from date of a service term value.

END\_DATE

Expiration date of a service term value.

MOD\_CONDITION

Condition of modifier should be used for find and create modifier.

MOD\_NAME

Name of new modifier should be used to create new modifier only.

MOD\_ID

Identifier of existence modifier. Error should be raised if there are no modifier with this id, or modifier has different scale.

LENGTH\_TYPE

Length type of cycle for limit

CYCLE\_LENGTH

Cycle length of cycle for limit

ATTRIBUTE\_CYCLE

The tag that contains a service term used as a cycle. An ID of the service term registered in the system is specified in the VALUE attribute.

CYCLE\_LENGTH\_TYPE

A measure unit of a time period: year, month, week, day, hour. The list of values is defined in the dictionary.

CYCLE\_LENGTH

Number of time periods.

SHIFT

Block encapsulates all parameters for cycle shift.

CYCLE\_START\_DATE

Start date to begin cycle count. If date is not specified, cycle count starts from the date when an application was processed.

START\_DATE

The valid from date of a service term value.

END\_DATE

Expiration date of a service term value.

MOD\_CONDITION

Condition of modifier should be used for find and create modifier.

MOD\_NAME

Name of new modifier should be used to create new modifier only.

MOD\_ID

Identifier of existence modifier. Error should be raised if there are no modifier with this id, or modifier has different scale.

**SHIFT**

Block encapsulates all parameters for cycle shift. Cycle can have more than one shift, it’s will be calculated in shift\_priority order.

SHIFT\_TYPE

Type of cycle shift

| Code | Description |
| --- | --- |
| CSHTENDM | End of month |
| CSHTMDAY | Shift to exact day of month |
| CSHTPERD | Shift by period |
| CSHTWDAY | Shift to exact day of week |
| CSHTWRKD | Shift to certain workday |

SHIFT\_PRIORITY

Priority to calculate cycle shift when cycle has more than one shift

SHIFT\_SIGN

Forward (1) or backward (-1) shift

SHIFT\_LENGTH\_TYPE

Type of length of period for cycle with shift by period type

| Code | Description |
| --- | --- |
| LNGT0001 | Hour |
| LNGT0002 | Day |
| LNGT0003 | Week |
| LNGT0004 | Month |
| LNGT0005 | Year |
| LNGT0006 | Minute |
| LNGT0007 | Second |

SHIFT\_LENGTH

Length of shift

ACCOUNT

It is a complex tag. It combines all parameters of an account. It is mandatory for application flow 2018 - Change acquiring account status.

ACCOUNT\_TYPE

It defines a business area of an account. The list of values is defined in the expandable dictionary “ACTP – Account type”.

CURRENCY

A currency code of an account. It is a three digit ISO code.

ACCOUNT\_STATUS

A status to use for a newly created account or shift the existing one to. The list of values is defined in the expandable dictionary:

| Code | Description |
| --- | --- |
| ACSTACTV | Active |
| ACSTCLSD | Closed |
| ACSTCRED | Credits only |
| ACSTPEND | Pending |

ACCOUNT\_OBJECT

It defines relationship between an account and object (merchant, terminal). The REF\_ID attribute that contains a reference to the object tag is specified for this tag. The object tag must be declared in an application.

ACCOUNT\_LINK\_FLAG

It indicates an action to perform over an object which is referenced by the parent tag: 1 – link an object with an account, 0 –unlink an object from an account.

ERROR

ERROR\_CODE

Symbolic error code.

ERROR\_DESC

Human-readable description of error.

ERROR\_ELEMENT

XML tag being processed when error was raised.

ERROR\_DETAILS

Additional parameters and values for error clarification. Each type of error may use different set of parameters.

|  |  |
| --- | --- |
| Code | Description |
| ACCOUNT\_ALREADY\_CLOSED | Unable to perform operation. Account has status Closed. |
| ACCOUNT\_ALREADY\_EXIST | Account [#1] already exists. |
| ACCOUNT\_NOT\_FOUND | Account [#1] does not exist in institution [#2] for customer [#3]. |
| ACCOUNT\_NUMBER\_NOT\_UNIQUE | Account [#1] is not unique in institution [#2] |
| ACCOUNT\_TYPE\_NOT\_DEFINED | Account type is not defined. |
| ACCOUNT\_TYPE\_WITHOUT\_BALANCES | Unable to create account because it's account type has no balances. |
| ADDRESS\_ALREADY\_EXIST | Address [#1] already exists. |
| ADDRESS\_NOT\_FOUND | Address [#1] not found. |
| APPLICATION\_FLOW\_NOT\_FOUND | Application flow not found. |
| ATTRIBUTE\_NOT\_FOUND | Attribute [#1] not found |
| ATTRIBUTE\_VALUE\_NOT\_DEFINED | Attribute value [#1] not defined. Product ID [#2], object ID [#3], entity type [#4], effective date [#5] |
| ABSENT\_MANDATORY\_ELEMENT | Mandatory element is absent |
| ADDRESS\_IS\_MANDATORY\_FOR\_NEW\_MERCHANT | Address block is mandatory when a new merchant is created. Please check if it is created under parent merchant block. |
| AGENT\_NOT\_FOUND | Agent [#1] not found for institute [#2]. |
| BAD\_CASSETTE\_COUNT | Number of cassettes [#1] does not match with declared number [#2] |
| BAD\_HOPPER\_COUNT | Number of coin cassettes [#1] does not match with declared number [#2] |
| BAD\_TERMINAL\_NUMBER\_COUNT | Count of terminal numbers [#1] is not equal to terminals quantity [#2] |
| BUSINESS\_ADDRESS\_NOT\_DEFINED | At least one business address must be defined on terminal or merchant in English language. |
| CANNOT\_CHANGE\_CLOSED\_MERCHANT | Merchant is closed. It is prohibited to modify merchant details and status. |
| CANNOT\_CHANGE\_CLOSED\_TERMINAL | Cannot change closed terminal |
| DISPENSER\_NUMBER\_IS\_NOT\_UNIQUE | Dispenser number [#1] must be unique for ATM terminal |
| INVALID\_MERCHANT\_STATUS | Merchant status is invalid. |
| INVALID\_TERMINAL\_STATUS | Terminal status is invalid. |
| MCC\_NOT\_DEFINED | Merchant Category Code (MCC) not defined. |
| MCC\_NOT\_FOUND | Incorrect Merchant Category Code [#1]. |
| MERCHANT\_ALREADY\_EXISTS | Merchant [#1] already exist. |
| MERCHANT\_NOT\_FOUND | Merchant with identifier/number [#1]/[#2] is not found, identifier of specified institution [#3] |
| MERCHANT\_NUMBER\_IS\_NOT\_UNIQUE | Merchant number [#1] is not unique. |
| MERCHANT\_NUMBER\_IS\_TOO\_LONG | Merchant number [#1][#2] is too long. Maximal available length is [#3] |
| MERCHANT\_TYPE\_NOT\_CORRESPOND\_PARENT | Impossible to attach merchant type [#1] to parent merchant type [#2]. |
| MERCHANT\_TYPE\_NOT\_DEFINED | Merchant type not defined. |
| PLASTIC\_NUMBER\_NOT\_UNIQUE | Plastic number [#1] is not unique. |
| TEMPLATE\_NOT\_FOUND | Not found terminal template. |
| TERMINAL\_ALREADY\_EXISTS | Terminal [#1] already exist. |
| TERMINAL\_NOT\_FOUND | Terminal [#2] not found. Merchat [#1]. Originator\_refnum [#3]. |
| TERMINAL\_QUANTITY\_LESS\_THAN\_1 | Quantity of terminals [#1] must be greater or equal to 1. |
| TERMINAL\_TYPE\_NOT\_DEFINED | Terminal type not defined. |