Product applications   
File and WEB service structure

SmartVista Standard

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Introduction

History

|  |  |  |  |
| --- | --- | --- | --- |
| Revision | Date | Author | Details |
| 0.1 | 27.03.2017 | Kolodkina Y. | First version of document |
| 0.2 | 26.04.2017 | Gyumyush D. | Changed minimal count of product name block |
| 0.3 | 02.06.2017 | Gogolev I. | Added element “counter\_algorithm” into tag ATTRIBUTE\_LIMIT |
| 0.4 | 20.06.2017 | Gogolev I. | Added element "counter\_algorithm" into list of tags table |
| 0.5 | 07.09.2017 | Pestryakov.D | Added tag “conditional\_group” |
| 0.6 | 23.03.2018 | Kolodkina Y. | Amended part of References. Added svap.wsdl. |

Document purpose

The document is intended for developers of interface with the SmartVista system in terms of the registration of bank issuing structure. The document describes the content and structure of the interface.

References

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\_product.xsd

Example of xml document for different flow provided in file:

app\_flow.example.1701.xml

XML document structure

General

Application to change the issuing structure of the bank are XML document containing all the necessary information to perform changes (new clients registration, issuing cards/accounts , personal data change, services activation/deactivation, etc.) . The application may be sent into SmartVista off-line in a file or on-line via a WEB service. In both cases, the data structure is identical. In file can be transferred several applications at once. Therefore, XML document in the file contains additional root tag APPLICATIONS, which contains several tags APPLICATION. In case of a web service in a single call sent only one application and the root tag is APPLICATION.

As a result of the application processing system returns the same structure with additional fields. In the case of unsuccessful processing of this tag will be errors. Tag error tied to the tag, the processing of which it originated. In case of successful processing in the application structure will be added tags with automatically generated identifiers (card number, account number, contract number, etc.).

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 overall structure of issuing application and lists of all possible tags. However, the final structure of the application (a set of mandatory tags) depends on the application destination (see the description of the tag APPLICATION\_FLOW\_ID).

Each tag type COMPLEX may contain an attribute ID. This is a unique identifier tag within a single application. It is not mandatory. This attribute is used to link the tags if one tag is referring to another. To link one tag to another using the tag attribute REF\_ID. This relationship can be used, for example, when it is necessary to establish a connection between a card and an account that the application describes the different tags. In the case when a complex tag should contain a value, it is given in the attribute VALUE.  
  
For some text or a complex tags are needed to define language that provided the information contained in the tag. For that purpose is added attribute LANGUAGE, which must contain the value from the dictionary of languages. If a particular tag is a multilingual and can be added several of these tags, it can be added in same language only one time.

## List of tags

| Tag name | Data type | Length | Occurs | Description |
| --- | --- | --- | --- | --- |
| application | | | | |
| application\_id | long | 16 | 0-1 | Unique Id of application in SmartVista |
| application\_number | string | 200 | 0-1 | Unique number of application generated by external system |
| application\_date | date |  | 0-1 | Created application in an external system |
| application\_type | string | 8 | 1-1 | Application type. Constant: APTPPRDT – product application. |
| application\_flow\_id | int | 4 | 1-1 | Describes an application purpose (new product registration, modify product). Choosing from a predefined list. |
| application\_status | string | 8 | 1-1 | Application status. Value from dictionary APST. |
| operator\_id | string | 200 | 0-1 | System name of the user who created the application |
| institution\_id | int | 4 | 1-1 | Institution identifier |
| product | complex |  | 1-1 | Contains product information and service terms |
| error | complex |  | 0-\* | Contains data error occurred when processing the parent element. |
| product | | | | |
| command | string | 8 | 1-1 | Command which is defines the action over the product. Dictionary value |
| parent\_product\_id | int | 8 | 0-1 | Parent product |
| product\_type | string | 8 | 0-1 | Indicates the type of product. Dictionary value |
| contract\_type | string | 8 | 0-1 | Indicates the type of contract which can be serviced by the product. Dictionary value. |
| product\_number | string | 200 | 1-1 | Unique identifier of product. |
| product\_status | string | 8 | 0-1 | Activity status of product. Dictionary value. |
| product\_name | complex |  | 1-1 | Multilingual name and description of product. Must contain attribute language |
| product\_service | complex |  | 0-\* | Combines product attributes |
| product\_account\_type | complex |  | 0-\* | List of account types on product |
| product\_card\_type | complex |  | 0-\* | List of cards types on product |
| error | complex |  | 0-\* | Contains data error occurred when processing the parent element. |
| product\_name | | | | |
| language | string | 8 | 1-1 | Language of the person name. Possible values:  LANGBUL – Bulgarian.  LANGRUS – Russian.  LANGENG – English. |
| command | string | 8 | 0-1 | Command which is defines the action over the product name |
| label | string | 200 | 1-1 | Short name of product |
| description | string | 2000 | 0-1 | Description of product |
| error | complex |  | 0-\* | Contains data error occurred when processing the parent element. |
| product\_service | | | | |
| command | string | 8 | 1-1 | Command which is defines the action over the service on product. Dictionary value |
| service\_number | string | 200 | 1-1 | Unique identifier of service connected or must be connected to product |
| initial\_service\_number | string | 200 | 0-1 | Unique number of initial service. May be set only on parent product. |
| min\_count | int | 4 | 1-1 | Minimum count of this services on product. May be set only on parent product. |
| max\_count | int | 4 | 1-1 | Maximum count of this services on product. May be set only on parent product. |
| conditional\_group | string | 8 | 0-1 | Conditional group of service. Dictionary value. |
| attribute\_value | complex |  | 0-\* | Combines attributes |
| error | complex |  | 0-\* | Contains data error occurred when processing the parent element. |
| attribute\_value | | | | |
| attribute\_name | string | 200 | 1-1 | Unique name of attribute |
| attribute\_num | complex |  | 0-1 | Decimal value of attribute defined for product or service |
| attribute\_char | complex |  | 0-1 | String value of attribute defined for product or service |
| attribute\_date | complex |  | 0-1 | Date value of attribute defined for product or service |
| attribute\_fee | complex |  | 0-1 | Parameters of fee defined for product or service |
| attribute\_limit | complex |  | 0-1 | Parameters of limit defined for product or service |
| attribute\_cycle | complex |  | 0-1 | Parameters of cycle defined for product or service |
| definition\_level | string | 8 | 0-1 | Attribute value defining level (Product or Object, Service, Object). |
| error | complex |  | 0-\* | Contains data error occurred when processing the parent element. |
| attribute\_num | | | | |
| attribute\_value\_num | long | 22 | 1-1 | The attribute value – Numeric |
| start\_date | date |  | 0-1 | Validity start date |
| end\_date | date |  | 0-1 | Expiration date |
| 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-\* | Contains data error occurred when processing the parent element. |
| attribute\_char | | | | |
| attribute\_value\_char | string | 200 | 1-1 | The attribute value – Char |
| start\_date | date |  | 0-1 | Validity start date |
| end\_date | date |  | 0-1 | Expiration date |
| 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-\* | Contains data error occurred when processing the parent element. |
| attribute\_date | | | | |
| attribute\_value\_date | date |  | 1-1 | The attribute value – Date |
| start\_date | date |  | 0-1 | Validity start date |
| end\_date | date |  | 0-1 | Expiration date |
| 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-\* | Contains data error occurred when processing the parent element. |
| attribute\_fee | | | | |
| fee\_rate\_calc | string | 8 | 1-1 | Fee calculation algorithm. Value from dictionary FEEM. |
| fee\_base\_calc | string | 8 | 1-1 | Fee basis calculation algorithms. Value from dictionary FEEB. |
| 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 |
| currency | string | 3 | 1-1 | Currency of fixed rate. |
| start\_date | date |  | 0-1 | Validity start date |
| end\_date | date |  | 0-1 | Expiration date |
| 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. Value from dictionary NDYR. |
| fee\_tier | complex |  | 0-\* | Contains tiers of fee. |
| error | complex |  | 0-\* | Contains data error occurred when 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\_count\_value | long | 16 | 0-1 | Limit value by count. |
| limit\_sum\_value | long | 22 | 0-1 | Limit value by sum. |
| limit\_check\_type | string | 8 | 0-1 | Type of limit check. Value from dictionary LCHT. |
| currency | string | 3 | 0-1 | Currency of limit value. |
| counter\_algorithm | string | 8 | 0-1 | Counter algorithm of the limit processing (value from ‘ACCL’ dictionary) |
| start\_date | date |  | 0-1 | Validity start date |
| end\_date | date |  | 0-1 | Expiration date |
| 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-\* | Contains data error occurred when processing the parent element. |
| attribute\_cycle | | | | |
| cycle\_start\_date | date |  | 0-1 | Calculation start date |
| cycle\_length\_type | string | 8 | 0-1 | Time period unit. Value from dictionary LNGT. |
| cycle\_length | int | 8 | 0-1 | Length of period in period units |
| shift | complex |  | 0-\* | Cycle shifts |
| start\_date | date |  | 0-1 | Validity start date |
| end\_date | date |  | 0-1 | Expiration date |
| 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-\* | Contains data error occurred when processing 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 |
| product\_account\_type | | | | |
| command | string | 8 | 1-1 | Command which is defines the action over the account on product. Dictionary value |
| account\_type | string | 8 | 1-1 | Indicates the type of account. Dictionary value. |
| currency | string | 3 | 1-1 | Currency code of account. |
| service\_number | string | 200 | 1-1 | Unique identifier of service connected or must be connected to product. |
| aval\_algorithm | string | 8 | 0-1 | Available balance calculation algorithm |
| error | complex |  | 0-\* | Contains data error occurred when processing the parent element. |
| product\_card\_type | | | | |
| command | string | 8 | 1-1 | Command which is defines the action over the card on product. Dictionary value |
| card\_type | int | 4 | 1-1 | Type of card. |
| seq\_number\_low | int | 4 | 1-1 | Card sequential number low |
| seq\_number\_high | int | 4 | 1-1 | Card sequential number high |
| bin | int | 8 | 1-1 | Issuing bin identifier |
| index\_range\_id | int | 8 | 1-1 | Index range identifier |
| number\_format\_id | int | 4 | 1-1 | Number format identifier |
| card\_blank\_type | int | 4 | 1-1 | Identifier of blank for card embossing |
| emv\_appl\_scheme\_id | int | 4 | 0-1 | Identifier of EMV application scheme |
| pin\_request | string | 8 | 1-1 | Requesting action about PIN generation |
| pin\_mailer\_request | string | 8 | 1-1 | Requesting action about PIN mailer printing |
| embossing\_request | string | 8 | 1-1 | Requesting action about plastic embossing |
| card\_status | string | 8 | 1-1 | Online status |
| perso\_priority | string | 8 | 1-1 | Personalization priority |
| reissue\_command | string | 8 | 1-1 | Reissuing command (RCMD) |
| reissue\_start\_date\_rule | string | 8 | 0-1 | Rule for reissuing start date generation (SDRL) |
| reissue\_expir\_date\_rule | string | 8 | 0-1 | Rule for reissuing expiration date generation (EDRL) |
| reissue\_card\_type\_id | int | 4 | 0-1 | Card type for reissued card |
| reissue\_product\_id | int | 8 | 0-1 | Product id for reissued card |
| reissue\_product\_number | string | 200 | 0-1 | Product number for reissued card |
| reissue\_bin\_id | int | 8 | 0-1 | BIN id for reissue card |
| reissue\_bin | string | 6 | 0-1 | BIN for reissue card |
| card\_state | string | 8 | 1-1 | Card instance state |
| perso\_method\_id | int | 4 | 1-1 | Personalization method identifier |
| service\_number | string | 200 | 1-1 | Unique identifier of service connected or must be connected to product |
| uid\_format\_id | int | 4 | 0-1 | UID naming format |
| error | complex |  | 0-\* | Contains data error occurred when processing the parent element. |
| 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

Tag is used as the root tag in a file for off-line mode. It contains the one or more applications (tag APPLICATION).

APPLICATION

Tag contains a complete one application. It is the root tag of the transfer application online through a web service.

APPLICATION\_ID

The unique identifier of the application in SmartVista.

APPLICATION\_NUMBER

The unique identifier of the external application. For synchronization between SmartVista and the external system which is original system for application.

APPLICATION\_DATE

Created application in external system.

APPLICATION\_TYPE

Type of application. Tag defines the structure of application, as well as application handler that is invoked to create objects in the system, based on the structure of the application.

| Code | Description |
| --- | --- |
| APTPISSA | Issuing application |
| APTPACQA | Acquiring application |
| APTPDSPT | Dispute application |
| APTPFREQ | Financial request |
| APTPPMNO | Payment orders |
| APTPUMGT | User management |
| APTPPRDT | Product application |

APPLICATION\_FLOW\_ID

Business process that is used for application registration. It defines the final structure of tags (set of mandatory fields, default values, etc.). So it describes the application destination – action that will be executed as a result of the application processing

| Code | Description |
| --- | --- |
| 1701 | Default product application |

APPLICATION\_STATUS

Status of application in which it is created in the system. Depends on the status of whether the application has been processed immediately after download, or it requires additional verification by the operator.

|  |  |
| --- | --- |
| 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 |

OPERATOR\_ID

System name (identifier) of the user who created the application. It is used as an additional description for the audit.

INSTITUTION\_ID

Institution (bank, processing center) identifier in SmartVista. Within the institution the application will be processed. That is the institution in which the open (open) a contract to customer service is/was opened.

PRODUCT

Block combines all information about one product and a lot of child products.

COMMAND

Description of the action that should be done over the described in parent tag object. It depends on the object presence in the system. Each command defines the actions for both cases (found/ not found). Objects are searching by different parameters (basically it is the unique identification number of objects). The list of actions is fixed and determined by the Dictionary value. They are the following: to create or continue processing, create or update, create or cause an error, update or cause an error, remove or cause an error, cause an error or continue processing.

| Code | Description |
| --- | --- |
| CMMDCREX | Create or cause an error |
| CMMDCRPR | Create or continue processing |
| CMMDCRUP | Create of update |
| CMMDEXPR | Cause an error or continue processing |
| CMMDEXRE | Cause an error or remove (close, deactivate) |
| CMMDEXUP | Cause an error or update |

PRODUCT\_TYPE

Tag indicates the type of product.

| Code | Description |
| --- | --- |
| PRDT0100 | Issuing product |
| PRDT0200 | Acquiring product |
| PRDT0300 | Institutions product |

CONTRACT\_TYPE

Contract of only this type could be connected to this product.

| Code | Description |
| --- | --- |
| CNTPBANK | Banking service for individuals |
| CNTPBNKC | Banking service for companies |
| CNTPCRCR | Corporate cards |
| CNTPCUSR | Customer servicing |
| CNTPINIC | Instant issuing cards |
| CNTPINSR | Insurance company |
| CNTPMRCB | Banking acquring |
| CNTPMRCM | Merchant acquring |
| CNTPPMAG | Payment aggregator settlement |
| CNTPPMPR | Payment partner settlement |
| CNTPPMTT | Payment terminals acquiring |
| CNTPPRCR | Payroll cards |
| CNTPSLPR | Payroll plan |
| CNTPSRVP | Service provider settlement |
| CNTPTRCO | Terminal co-owning |

PRODUCT\_NUMBER

It is unique number of product for referring to it.

PRODUCT\_STATUS

This is a status of product.

| Code | Description |
| --- | --- |
| PRDS0100 | Active |
| PRDS0200 | Inactive |

PRODUCT\_NAME

Block encapsulates label and description of product. It could be multilingual. It must be marked by attribute language with value from dictionary.

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

COMMAND

Command defines action for manipulate of product name.

LABEL

It is short description of product or product name.

DESCRIPTION

It’s long description of product

PRODUCT\_SERVICE

This block encapsulates attributes (with or without values) defines on product. One product can contain more than one service. Services must exist in SmartVista.

COMMAND

Command which is defines the action over the service on product.

| 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 |
| CMMDPRRE | Proceed or remove |

SERVICE\_NUMBER

This is unique number or existing service.

INITIAL\_SERVICE\_NUMBER

It’s a service number of initial service for this service. Used if this services is not initial.

MIN\_COUNT

Minimum count of this service on one object

MAX\_COUNT

Maximum count of this service on one object

CONDITIONAL\_GROUP

Check of services in group

| Code | Description |
| --- | --- |
| CNDSMANY | At least one from group |
| CNDSONE | Strictly one from group |
| CNDSNOMO | Not more than one |

ATTRIBUTE\_VALUE

Block encapsulates all information about one attribute on product. Attribute must exist in SmartVista. Only one of value\_\* (value\_char, value\_num, value\_date, value\_cycle, value\_limit, value\_fee) tags should be used in block. Type of value in block must correspond to data type of attribute.

ATTRIBUTE\_NAME

Unique name of product attribute

ATTRIBUTE\_NUM

This tag contains a service configuration of a numeric type. It is added when necessary to define service terms via the attributes other than stated in the product settings. In this case, the object will have its own unique terms. In the VALUE tag attribute you must specify the identity of the service term registered in SmartVista.

ATTRIBUTE\_VALUE\_NUM

The tag contains a numeric value of the service term of the appropriate type. This value will be used as a unique business object setting.

START\_DATE

Starting date of the given service term value.

END\_DATE

Date of expiry of the given 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

This tag contains a service configuration of a string type. It is added when necessary to define service terms via the attributes other than stated in the product settings. In this case, the object will have its own unique terms. In the VALUE tag attribute you must specify the identity of the service term registered in SmartVista.

ATTRIBUTE\_VALUE\_CHAR

The tag contains a string value of the service term of the appropriate type. This value will be used as a unique business object setting.

START\_DATE

Starting date of the given service term value.

END\_DATE

Date of expiry of the given 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

This tag contains a service configuration of a date type. It is added when necessary to define service terms via the attributes other than stated in the product settings. In this case, the object will have its own unique terms. In the VALUE tag attribute you must specify the identity of the service term registered in SmartVista.

ATTRIBUTE\_VALUE\_DATE

The tag contains a date value of the service term of the appropriate type. This value will be used as a unique business object setting.

START\_DATE

Starting date of the given service term value.

END\_DATE

Date of expiry of the given 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\_FEE

This tag contains a service configuration of a fee type. It is added when necessary to define service terms via the attributes other than stated in the product settings. In this case, the object will have its own unique terms. In the VALUE tag attribute you must specify the identity of the service term registered in SmartVista.

FEE\_RATE\_CALC

The algorithm for calculating the fee with a fixed and/or percent rates. List of algorithms for fixed and its value is taken from the Dictionary value. Possible values are the following: fixed rate, percent rate, minimum between the percent and fix, maximum between the percent of maximum and fix, sum of percent and fix.

| Code | Description |
| --- | --- |
| FEEM0001 | Percentage value |
| FEEM0002 | Fixed value |
| FEEM0003 | Minimum between percent and fixed value |
| FEEM0004 | Maximum between percent and fixed value |
| FEEM0005 | Sum of percent and fixed value |

FEE\_BASE\_CALC

Fee basis calculation algorithms. List of algorithms for fixed and its value is taken from the Dictionary value.

| Code | Description |
| --- | --- |
| FEEB0001 | Incoming amount |
| FEEB0002 | Difference between incoming amount and lower threshold |
| FEEB0003 | Lower threshold |
| FEEB0004 | Tired basis |
| FEEB0005 | Previous period turnover |

FEE\_FIXED\_VALUE

The tag contains a numeric value of the service term of the appropriate type. This value will be used as a unique business object setting.

FEE\_PERCENT\_VALUE

The tag contains a numeric value of the service term of the appropriate type. This value determines the percent rate to be used in calculating the fee amount.

CURRENCY

The currency code in which the amount of the fixed fee rate was set.

START\_DATE

Starting date of the given service term value.

END\_DATE

Date of expiry of the given 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 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

This tag contains a service configuration of a limit type. In the VALUE tag attribute you must specify the service term identifier in SmartVista.

LIMIT\_COUNT\_VALUE

The upper boundary the limit on the quantity.

LIMIT\_SUM\_VALUE

The upper boundary the limit on the amount. Value “-1” implies there is no limit.

LIMIT\_CHECK\_TYPE

This dictionary value defines type of limit check:

| Code | Description |
| --- | --- |
| LCHT0001 | One of thresholds is exceeded (sum or count) |
| LCHT0002 | Both thresholds are exceeded (sum and count) |

CURRENCY

Currency code in which the upper boundary the limit on the amount was set.

COUNTER\_ALGORITHM

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

START\_DATE

Starting date of the given service term value.

END\_DATE

Date of expiry of the given 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\_CYCLE

This tag contains a service configuration of a cycle type. In the VALUE tag attribute you must specify the service term identifier in SmartVista.

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).

SHIFT

Block encapsulates all parameters for cycle shift.

START\_DATE

Starting date of the given service term value.

END\_DATE

Date of expiry of the given 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

**PRODUCT\_ACCOUNT\_TYPE**

ACCOUNT\_TYPE

Indicates the type of account. Dictionary value

CURRENCY

Currency code of account.

SERVICE\_NUMBER

Unique identifier of service connected or must be connected to product

AVAL\_ALGORITHM

Available balance calculation algorithm

**PRODUCT\_CARD\_TYPE**

CARD\_TYPE\_ID

Type of card

SEQ\_NUMBER\_LOW

Card sequential number low

SEQ\_NUMBER\_HIGH

Card sequential number high

BIN

Issuing bin identifier

INDEX\_RANGE\_ID

Index range identifier

NUMBER\_FORMAT\_ID

Number format identifier

EMV\_APPL\_SCHEME\_ID

Identifier of EMV application scheme

PIN\_REQUEST

Requesting action about PIN generation

PIN\_MAILER\_REQUEST

Requesting action about PIN generation

EMBOSSING\_REQUEST

Requesting action about plastic embossing

CARD\_STATUS

Online status

PERSO\_PRIORITY

Personalization priority

REISSUE\_COMMAND

Reissuing command (RCMD)

REISSUE\_START\_DATE\_RULE

Rule for reissuing start date generation (SDRL)

REISSUE\_EXPIR\_DATE\_RULE

Rule for reissuing expiration date generation (EDRL)

REISSUE\_CARD\_TYPE\_ID

Card type for reissued card

REISSUE\_CONTRACT\_ID

Card type for reissued card

CARD\_BLANK\_TYPE

Identifier of blank for card embossing

CARD\_STATE

Card instance state

PERSO\_METHOD\_ID

Personalization method identifier

SERVICE\_NUMBER

Unique identifier of service connected or must be connected to product

**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 |
|  |  |
|  |  |