SMARTVISTA MAPPING DESCRIPTION

SVXP to Merchant and Terminal file

December 2014

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1. PREFACE
   1. Revision history

| Revision | Date | Author | Details |
| --- | --- | --- | --- |
| 1.0 | 17.12.2014 | Maslov I. | Initial version |
| 1.1 | 23.07.2015 | Maslov | Add terminal account mapping |
| 1.2 | 25.06.2018 | Gyumyush D. | Added block FF8009 and installments tags |

* 1. Document purpose

This document describe mapping of filed form svxp standard to svfe Merchant and Terminal standard. This document developed for internal use of BPC.

* 1. Fundamental documents

“SMARTVISTA FRONT END MRC PROCESSING INTERFACE SPECIFICATION” version 2R39 form 15.04.2011

“Acquiring applications Structure of file and web-service SmartVista Standard” version 0.5 from 26.05.2014

“STANDARD SMARTVISTA COMMON ALGORITHMS” version 2R321 from 13.01.2012

1. Rules for BER-TLV Data Objects

All exchange files due to contain Applications FF45 – File Header and FF46 – File Trailer.

DF805D tags contain consistent and unique values. DF805D uniqueness within a single application (lines).

* 1. FF45 – Application File Header

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Length** | **Description** | **Optional / mandatory** | **SVXP/comment** |
| DF805D | Sequence | X | M |  |
| FF49 | File Header Block | X | M |  |

* + 1. FF49 – File Header Block

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Length** | **Description** | **Optional / mandatory** | **SVXP/comment** |
| DF807D | File Type | X | M | “FTYPACQ” |
| DF807C | File Date | X | M | Terminal - terminals/file\_date  Merchant - merchants/file\_date |
| DF8079 | Institution Number | X | M | Terminal - terminals/inst\_id  Merchant - merchants/inst\_id |
| DF807A | Agent Code | X | O |  |
| DF8566 | Encoding Name | X | O |  |

* 1. FF46 – Application File Trailer

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Length** | **Description** | **Optional / mandatory** | **SVXP/comment** |
| DF805D | Sequence | X | M |  |
| FF4A | File Trailer Block | X | M |  |

* + 1. FF4A – File Trailer Block

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Length** | **Description** | **Optional / mandatory** | **SVXP/comment** |
| DF807E | Number of records | X | M | Count record with header and trailer |
| DF8060 | CRC | X | O |  |

1. Merchant Detail

Merchant detail file consists of records header (FF45), trailer(FF46) and several body(FFFF14).

Some body record may have link to other merchant detail record by tag DF8122(PARENT\_MERCHANT\_ID). In SVAP format link parent-child represented like hierarchy (merchant/merchant/merchant).

* 1. FFFF14 – Application FE MRC 01 – Merchant Detail

|  |  |  |  |
| --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** |
| FF8016 | Front End Merchant Detail Block | X | M |
| FF806D | Front End Merchant Limit Block | X | O |
| FF8013 | Front End MRC Address Block | X | M |
| FF804F | External Payment Attributes Block | X | O |

* + 1. FF8016 – Front End Merchant Detail Block

This block fill from tag applications/application/customer/contract/merchant and all deeper tag like applications/application/customer/contract/merchant/merchant, applications/application/customer/contract/merchant/merchant and e.t.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF8117 | MERCHANT\_ID | X | M | applications/application/customer/contract/merchant/merchant\_number |
| DF8079 | INST\_ID | X | M | inst\_id |
| DF8118 | MERCHANT REG. NAME | X | M | applications/application/customer/contract/merchant/merchant\_name |
| DF801D | ADDRESS ID | X | M | Address\_id |
| DF811A | MCC CODE | 9 | M | applications/application/customer/contract/merchant/mcc |
| DF8122 | PARENT\_MERCHANT\_ID | X | O | applications/application/customer/contract/merchant/merchant\_number  if current merchant from deeper level (applications/application/customer/contract/merchant/merchant) |

* + 1. FF8013 – Front End MRC Address Block

Base tag for get address information is : applications/application/customer/contract/merchant

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF8020 | STREET\_NAME | X | M | Address/address\_name/street |
| DF8021 | CITY | X | M | Address/address\_name/city |
| DF8025 | COUNTRY\_CODE | X | M | Country |
| DF801F | BOX\_NO | X | C | house |
| DF8024 | REGION | X | M | region\_code |
| DF8026 | ZIP\_CODE | X | M | postal\_code |
| DF8028 | BUSINESS\_PHONE | X | C | Contact/contact\_data/commun\_address  For Contact/contact\_data/ commun\_method = CMNM0001  And  Contact/contact\_data/contact\_type = CNTTPRMC |
| DF802A | FAX | X | C | Contact/contact\_data/commun\_address  For Contact/contact\_data/ commun\_method = CMNM0004 |
| DF802B | E\_MAIL | X | C | Contact/contact\_data/commun\_address  For Contact/contact\_data/ commun\_method = CMNM0002 |
| DF856B | WEB\_ADDRESS | X | O |  |

* + 1. FF807F – Front End Merchant Card block

Base tag for get merchant cards information is: applications/application/customer/contract/merchant/merchant\_card

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF806E | Record Processing Code | 9 | M | 1 |
| DF802C | Card Number | X | M | card\_number |
| DF8074 | Card Sequence Number | X | M | sequential\_number |

* + 1. FF8017 – Front End Account Block

Base tag for Front End Account Block is application/customer/contract/account/

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF8160 | Terminal Account Number | X | M | account\_number |
| DF8034 | Currency Code | 9 | M | currency |
| DF8161 | Terminal account status | X | M | account\_status |

1. Interface File Format Record Layout Definition Application FE MRC 02 – Terminal Detail

Terminal detail file consists of records header(FF45), trailer(FF46) and several body(FFFF15).

* 1. FFFF15 Application FE MRC 02 – Terminal Detail

|  |  |  |  |
| --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** |
| FF8010 | Front End Terminal Detail Block | X | M |
| FF8011 | Front End Terminal X25 Communication Block | X | C |
| FF8012 | Front End Terminal TCP/IP Communication Block | X | C |
| FF8013 | Front End MRC Address Block | X | M |
| FF8014 | Front End ATM Spec Block | X | C |
| FF8015 | Front End POS Spec Block | X | O |
| FF8019 | Front End Acq Encryption Block | X | O |
| FF806E | Front End Terminal Limit Block | X | O |
| FF8028 | Front End Acquirer Service Block | X | O |
| FF8047 | Front End Terminal Shared ATM Block | X | O |
| DF806E | Record Processing Code | 9 | O |
| FF8054 | Additional\_parameters\_block | X | O |
| FF8030 | Front End Terminal Multi-Language Block | X | O |
| FF8017 | Front End Terminal Account Block | X | O |

Tag FF8014 mandatory for ATM devices.

* + 1. FF8010 – Front End Terminal Detail Block

Base tag for terminal detail is application/customer/contract/merchant/terminal/

Code mapping present in document “SVXP SVFE code mapping.docx”

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF8218 | PID | 9 | C |  |
| DF8125 | Terminal ID | X | M | terminal\_number |
| DF8079 | INST\_ID | X | M | application/institution\_id |
| DF8127 | Type | X | O | terminal\_type |
| DF8117 | MERCHANT\_ID | X | M | application/customer/contract/merchant/merchant\_number |
| DF811C | STATUS | X | M | terminal\_status |
| DF813B | Transaction Scheme | 9 | O |  |
| DF813C | Security Scheme | 9 | O |  |
| DF8129 | CARD DATA INPUT CAPABYLITY | X | M | card\_data\_input\_cap |
| DF812B | CARD\_CAPTURE\_CAP | X | M | card\_capture\_cap |
| DF812A | CRDHLD\_AUTH\_CAP | X | M | crdh\_auth\_cap |
| DF812C | OPER\_ENV | X | M | term\_operating\_env |
| DF8132 | CARD\_DATA\_OUT\_CAP | X | M | card\_data\_output\_cap |
| DF8133 | TERM\_OUT\_CAP | X | M | term\_data\_output\_cap |
| DF8134 | PIN\_CAPTURE\_CAP | X | M | pin\_capture\_cap |
| DF813D | ACQ\_CHECK | X | O |  |
| DF813E | COMMS\_TYPE | X | O |  |
| DF807A | BRANCH | X | C |  |
| DF816A | FE Terminal Attributes Scheme Id | 9 | O |  |
| DF816B | FE Terminal Optional 1, for AMEX POS contains merchant number | X | O |  |
| DF816C | FE Terminal Optional 2 | X | O |  |
| DF816D | FE Terminal Optional 3 | X | O |  |
| DF816E | FE Terminal Optional 4 | X | O |  |
| DF816F | FE Terminal Optional 5 | X | O |  |
| DF8170 | FE Terminal Optional 6 | X | O |  |
| DF8239 | FE Terminal Close Date | 9 | O |  |
| DF824F | Network Scheme | 9 | C |  |
| DF8302 | Terminal Parameters Profile | 9 | O |  |
| DF801D | Address\_ID | X | O | Address\_id |
| DF854C | FE Acq routing group id | 9 | O |  |
| DF8572 | System name | X | O |  |
| FF8074 | Terminal cashin bill types block | X | O |  |

* + 1. FF8011 – Front End Terminal X25 Communication Block

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF8140 | X25 TYPE | X | M |  |
| DF8141 | PORT | X | M |  |
| DF8142 | REMOTE\_ADDRESS | X | M |  |
| DF8143 | LOCAL\_ADDRESS | X | M |  |
| DF8144 | LCN | X | M |  |
| DF8145 | INITIATOR | X | M |  |
| DF8146 | DEPEND\_ON | X | O |  |
| DF8147 | GROUP\_ID | 9 | M |  |

* + 1. FF8012 – Front End Terminal TCP/IP Communication Block

Base tag for Front End Terminal TCP/IP Communication Block is application/customer/contract/merchant/terminal/

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF8148 | TCP REMOTE\_ADDRESS | X | M | tcp\_ip/remote\_address |
| DF814A | TCP/IP Local Port | X | M | tcp\_ip/local\_port |
| DF8149 | REMOTE\_PORT | X | M | tcp\_ip/remote\_port |
| DF814B | INITIATOR | X | M | tcp\_ip/initiator |
| DF814C | DEPEND\_ON | X | O |  |
| DF814D | FORMAT | X | M | tcp\_ip/format |
| DF814E | HEADER\_LEN | X | M | “8” |

* + 1. FF8013 – Front End MRC Address Block

Base tag for Front End MRC Address Block is application/customer/contract/merchant/terminal/

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF8020 | STREET\_NAME | X | M | Address/ address\_name/ street |
| DF8021 | CITY | X | M | Address/ address\_name/city |
| DF8025 | COUNTRY\_CODE | X | M | Address/country |
| DF801F | BOX\_NO | X | C | Address/house |
| DF8024 | REGION | X | M | Address/ address\_name/ region |
| DF8026 | ZIP\_CODE | X | M | Address/postal\_code |
| DF8028 | BUSINESS\_PHONE | X | C | Contact/contact\_data/commun\_address  For Contact/contact\_data/ commun\_method = CMNM0001  And  Contact/contact\_data/contact\_type = CNTTPRMC |
| DF802A | FAX | X | C | Contact/contact\_data/commun\_address  For Contact/contact\_data/ commun\_method = CMNM0004 |
| DF802B | E\_MAIL | X | C | Contact/contact\_data/commun\_address  For Contact/contact\_data/ commun\_method = CMNM0002 |
| DF837B | OKATO | X | O |  |
| DF856B | E\_ADDRESS | X | O |  |

* + 1. FF8014 – Front End ATM Spec Block

Base tag for Front End ATM Spec Block is application/customer/contract/merchant/terminal/

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF814F | D1VAL | X | O | atm\_terminal/atm\_dispenser/face\_value  where  atm\_terminal/atm\_dispenser/disp\_number = 1 |
| DF8150 | D2VAL | X | O | atm\_terminal/atm\_dispenser/face\_value  where  atm\_terminal/atm\_dispenser/disp\_number = 2 |
| DF8151 | D3VAL | X | O | atm\_terminal/atm\_dispenser/face\_value  where  atm\_terminal/atm\_dispenser/disp\_number = 3 |
| DF8152 | D4VAL | X | O | atm\_terminal/atm\_dispenser/face\_value  where  atm\_terminal/atm\_dispenser/disp\_number = 4 |
| DF8153 | D1TYPE | X | O | atm\_terminal/atm\_dispenser/currency  where  atm\_terminal/atm\_dispenser/disp\_number = 1 |
| DF8154 | D2TYPE | X | O | atm\_terminal/atm\_dispenser/currency  where  disp\_number = 2 |
| DF8155 | D3TYPE | X | O | atm\_terminal/atm\_dispenser/currency |
| DF8156 | D4TYPE | X | O | atm\_terminal/atm\_dispenser/currency  where  disp\_number = 3 |
| DF830C | ATM D5VAL | 9 | O | atm\_terminal/atm\_dispenser/face\_value  where  disp\_number = 5 |
| DF830D | ATM D6VAL | 9 | O | atm\_terminal/atm\_dispenser/face\_value  where  disp\_number = 6 |
| DF830E | ATM D7VAL | 9 | O | atm\_terminal/atm\_dispenser/face\_value  where  disp\_number = 7 |
| DF830F | ATM D8VAL | 9 | O | atm\_terminal/atm\_dispenser/face\_value  where  disp\_number = 8 |
| DF8310 | ATM D5TYPE | 9 | O | atm\_terminal/atm\_dispenser/currency  where  disp\_number = 5 |
| DF8311 | ATM D6TYPE | 9 | O | atm\_terminal/atm\_dispenser/currency  where  disp\_number = 6 |
| DF8312 | ATM D7TYPE | 9 | O | atm\_terminal/atm\_dispenser/currency  where  disp\_number = 7 |
| DF8313 | ATM D8TYPE | 9 | O | atm\_terminal/atm\_dispenser/currency  where  disp\_number = 8 |
| DF8157 | NUMDISP | 9 | O | Count of atm\_terminal/atm\_dispenser/ |
| DF8158 | ATM\_TYPE | 9 | O | atm\_terminal/ atm\_type |
| DF815A | LUNO | 9 | O |  |
| DF815B | GMT\_OFFSET | 9 | O |  |
| DF815C | MAC | 9 | O |  |
| DF8248 | ATM Encoding Id | X | O |  |
| DF824B | ATM crypto scheme | X | O |  |

* + 1. FF8015 – Front End POS Spec Block

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF815D | POS\_TYPE | 9 | O |  |
| DF815C | MAC | 9 | O |  |
| DF8166 | POS Connection Type | 9 | O |  |
| DF8167 | Store Number | X | O |  |
| DF8168 | ACQ Currency | 9 | O |  |

* + 1. FF8017 – Front End Account Block

Base tag for Front End Account Block is application/customer/contract/account/

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF8160 | Terminal Account Number | X | M | account\_number |
| DF8034 | Currency Code | 9 | M | currency |
| DF8161 | Terminal account status | X | M | account\_status |

account\_status:

|  |  |
| --- | --- |
| **SVFE** | **SVBO2** |
| FMAS00 | ACSTACTV |
| FMAS01 | All other |

* + 1. FF8019 – Front End Acq Encryption Block

Base tag for Front End Acq Encryption Block is application/customer/contract/merchant/terminal/

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF8218 | PID | 9 | M | device\_id |
| DF8164 | FE Encryption Key Type | X | M | Encryption/key\_type |
| DF8165 | FE Encryption Key | X | M | Encryption/ key\_value |
| DF8169 | FE Encryption Key Format | X | O |  |

* + 1. FF806E – Front End Terminal Limit Block

Required make mapping from application/customer/contract/service/service\_object/attribute\_limit

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF8064 | Limit type | X | M | limit\_type |
| DF8065 | Limit value | 9 | M | limit\_sum\_value or limit\_count\_value |
| DF8066 | Limit length | 9 | M | length\_type |
| DF8067 | Limit length type | X | M | cycle\_length |
| DF808E | Limit currency | 9 | M | currency |

* + 1. FF8028 – Front End Acquirer Service Block

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF805B | Service ID | X | M |  |
| DF806E | Record Processing Code | 9 | M |  |

* + 1. FF8030 – Front End Terminal Multi-Language Block

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF805D | Sequence | X | M |  |
| DF8012 | Language Code | X | M |  |
| DF8249 | Language Text | X | M |  |

* + 1. FF8047 – Front End Terminal Shared ATM Block

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF8218 | PID | 9 | M |  |
| DF8412 | Network indicator | 9 | M |  |
| DF8125 | Terminal\_ID | X | M |  |
| DF8117 | MERCHANT\_ID | X | M |  |
| DF8079 | Owning Institution ID | X | M |  |

* + 1. FF8009 – Front End Additional Services Block

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tag** | **Description** | **Picture** | **Optional / mandatory** | SVAP |
| DF8C21 | Interest rate | 9 | O |  |
| DF8C22 | First instalment date | X | O |  |
| DF8C23 | Count of instalments | 9 | O |  |
| DF8C24 | Instalment amount | 9 | O |  |
| DF8C25 | Instalment algorithm | X | O |  |