External Interface/Public API Document

PreTUPS7.7

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Document History

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Version Number | Created/Modified On: | Description of Changes | Author | Reviewer | Comments |
| 1.0 | 26-05-2016 | XML APIs added | Product Engineering | PuneetRawal |  |
| 1.1 | 17-06-2016 | View User API added | Product Engineering | PuneetRawal |  |
| 1.2 | 16-05-2019 | Voucher Pin Expiry Extension API added | Product Engineering |  |  |

Document Information

This chapter gives a brief introduction to the scope and organization of this document.

## Purpose& Scope of this document

The purpose of this document is to describe the interface between PreTUPS and External Gateway Interface. This document covers RP2P Services as offered to operator for interfacing PreTUPS with 3rd parties.

The scope of this document is limited to the methodology being envisaged for PreTUPS service specific APIs, which could be used by External systems to interface with PreTUPS.

## Definitions, Acronyms and Abbreviations

|  |  |
| --- | --- |
| Term | Full Form |
| EXTGW | External Gateway / System |
| HTTP | Hypertext Transfer Protocol |
| API | Application Program Interface |
| XML | Extensible Markup Language |
| O | Optional |
| M | Mandatory |
| N | Numeric |
| A | Alpha Numeric |
| D | Date |
| C | Characters. |

**Field Type: <Type of Field> (<Maximum length of field>) for e.g.**

**A (10)** means the field has alphanumeric value and the maximum length of field can be 10

## Audience

* Mahindra Comviva team

## References

NA

External Gateway (3rd Party/Public) API

The details of the External Gateway (EXTGW) APIsare explained in the subsequent sections.

## Architecture



* **External system**: The system, which sends the request to PreTUPS System in XML over HTTP format.
* **PreTUPS System**: The PreTUPS System includes PreTUPS Application and PreTUPS Database. The Interaction between PreTUPS Application and Database is internal.

## Communication

The communication between External system and PreTUPS would be XML over HTTP. The External system would make the HTTP connection with PreTUPS and send the request content as XML. Response of each request would also be sent as XML.

## Authentication

To authenticate the External system, PreTUPS will define a Gateway for External system. PreTUPS will give the defined gateway information details to External system users. External system will send this gateway information while making HTTP connection with PreTUPS for each request. Authentication information will be send by URL. Details of authentication information are as follows

* LOGIN
* PASSWORD
* REQUEST\_GATEWAY\_CODE
* REQUEST\_GATEWAY\_TYPE
* SERVICE\_PORT
* SOURCE\_TYPE
* Details of above-mentioned field are described in Connection procedure section.

## Connection Procedure

The External system calls the specific URL to make the HTTP Connection with PreTUPS. The details of HTTP Header and URL are mentioned below.

HTTP Header Information

POST <URL> HTTP

Content-type: xml

Connection: close

URL

[http://PreTUPShost/PreTUPSReceiever?LOGIN=<Login>&Password=<Password>&Request\_Gateway\_Code=<RequestGatewayCode>&Request\_Gateway\_Type=<RequestGatewayType>&Service\_Port=<ServicePort>&Source\_Type=<SourceType](http://Pretupshost/PretupsReceiever?LOGIN=%3cLogin%3e&Password=%3cPassword%3e&Request_Gateway_Code=%3cRequestGatewayCode%3e&Request_Gateway_Type=%3cRequestGatewayType%3e&Service_Port=%3cServicePort%3e&Source_Type=%3cSourceType)>

Example

http://PreTUPShost/PreTUPSReceiever?LOGIN=123&Password=123&Request\_Gateway\_Code=EXT0011&Request\_Gateway\_Type=EXTGW&Service\_Port=190&Source\_Type=EXT

| Fields | Description | Example | Optional/  Mandatory | Max Length | Remarks |
| --- | --- | --- | --- | --- | --- |
| PreTUPSHost | The IP, port and host name. The IP and Port on which PreTUPS application is running | 172.16.1.109:5555/PreTUPS/ | M | N.A | N.A |
| LOGIN | Login Id of the request gateway, as defined in PreTUPS | Test | M | 10 | This must be registered into PreTUPS System |
| PASSWORD | Password of the request gateway, as defined in PreTUPS | Test | M | 10 | This must be registered into PreTUPS System |
| REQUEST\_GATEWAY\_CODE | Request Gateway Code. This field is used by PreTUPS to identify request interface. | XMLGW | M | 10 | This must be defined in the PreTUPS System |
| REQUEST\_GATEWAY\_TYPE | Request Gateway Type. This field is used by PreTUPS to identify request interface. | XMLGW | M | 10 | This must be defined in the PreTUPS System |
| SERVICE\_PORT | Service port of the request gateway, as defined in PreTUPS | 190 | M | 10 | This must be defined in the PreTUPS System |
| SOURCE\_TYPE | Source Type of the request gateway, as defined in PreTUPS | XML | M | 10 | Fixed value |

* Actual values would be shared with MTM during deployment

## Transaction Enquiry

Customer care user can send the request for the enquiry of the transaction. Transaction enquiry will be of three types 1) C2S Transfer Enquiry 2) C2C Transfer Enquiry 3) O2C Transfer Enquiry

Common for 1) C2S Transfer Enquiry 2) C2C Transfer Enquiry 3) O2C Transfer Enquiry

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TYPE |  | AS specified in corresponding example |  |  | M |
| DATE | Date | Date to which the transaction Enquiry in PreTUPS system in format i.e. dd-mm-yyyy | 06-09-2006 | D (10) | M |
| EXTNWCODE | Network code | Network code of the Channel User defined in PreTUPS as External Network code | AK | A (2) | M |
| CATCODE | Category code | Category code of customer care | CCE |  | M |
| EMPCODE | Empolyee code | Employee code of CCE | 123654788 |  | M |
| LOGINID | Login ID | Login ID of the Channel user | Mo\_cce | A (20) | O  (Tag is mandatory) |
| PASSWORD | Password | Password of the Channel user | 2468 | A (10) | O  (Tag is mandatory) |
| EXTREFNUM | External Reference number | Reference number of external system. | 12345 | A (20) | O  (Tag is mandatory) |

# C2S Transfer Enquiry

In this Enquiry Customer care user can send the request for the enquiry of a transaction between a channel user and a subscriber (C2S). If we are getting the transfer ID in the request then we will send the detail response for the given Transaction ID In this case Repetition of tags will be done on the basis of entries for that transaction

# Request Syntax

The External System will send the following request for return. The request format and details of request are mentioned below.

<?xml version="1.0"?>

<COMMAND>

<TYPE>C2STRFANSFERENQ</TYPE>

<DATE><Date and time ></DATE>

<EXTNWCODE><Network External Code></EXTNWCODE>

<CATCODE><Category Code of the Operator user></CATCODE>

<EMPCODE>< Employee Code of the Operator user></EMPCODE>

<LOGINID><Login ID of the Operator user></LOGINID>

<PASSWORD><Password of the Operator user></PASSWORD>

<EXTREFNUM><Unique Reference number in the external system></EXTREFNUM>

<DATA>

<SRVTYPE><Service Type></SRVTYPE>

<FROMDATE><DD-MM-YYYY></FROMDATE>

<TODATE><DD-MM-YYYY></TODATE>

<TRANSACTIONID> R061003.1633.0001</TRANSACTIONID>

<SENDERMSISDN><Retailer MSISDN></SENDERMSISDN >

<MSISDN2>Receiver MSISDN</MSISDN2 >

</DATA>

</COMMAND>

# Fields Detail

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| **DATA** | | | | | |
| SRVTYPE | Services in the PreTUPS | Services that can be used for the Enquiry. If value not provided then ALL will be taken. | RC | A (10) | M |
| FROMDATE | From Date | Date from which the transaction enquiry in PreTUPS system in format i.e. dd-mm-yyyy | 06-09-2006 | D (10) | M |
| TODATE | To Date | Date to which the transaction Enquiry in PreTUPS system in format i.e. dd-mm-yyyy | 06-09-2006 | D (10) | M |
| SENDERMSISDN | Channel user MSISDN | All MSISDN should be in national dial format. | 9810112345 | N (15) | Any One of these is M, rest O |
| MSISDN2 | Subscriber MSISDN | All MSISDN should be in national dial format. | 9810212345 | N (15) |
| TRANSACTIONID | Unique number of the transaction | Unique transaction number generated by the PreTUPS system for the transaction. Alphanumeric | R061003.1633.0001 | A (20) |

# Response Syntax

PreTUPS system sends the acknowledgement to the External system about the transaction status. The acknowledgement will be in XML and send as response of the request. The XML response details are mentioned below. Response may be of two types 1) Summary Response 2) Detail Response.

<?xml version="1.0"?>

<COMMAND>

<TYPE>C2STRFANSFERENQ</TYPE>

<TXNSTATUS><Transaction Status></TXNSTATUS>

<ERRORKEY><Error key></ERRORKEY>

<DATE><Date and time ></DATE>

<EXTREFNUM><Unique Reference number in the external system></ EXTREFNUM>

<DATA>

<RECORDTYPE>SUMMARY</RECORDTYPE>

<RECORD>

<TRANSACTIONID><Transaction ID></TRANSACTIONID>

<NETWORK>Network Name</NETWORK>

<TXNDATE><Date and time of the Transfer></TXNDATE>

<SENDERMSISDN ><Sender Mobile No></SENDERMSISDN>

<MSISDN2><Receiver Mobile number></MSISDN2>

<SUBSERVICE><Selector 1></SUBSERVICE>

<TRFVALUE><Transferred Value for Transfer></TRFVALUE>

<PRODUCTCODE><Product code in PreTUPS></PRODUCTCODE>

<REQSOURCE><source of the request></REQSOURCE>

<STATUS><Transaction Status></STATUS>

<ERRORCODE><Transaction Status></ERRORCODE>

<RECORD>

<RECORD>

<TRANSACTIONID><Transaction ID></TRANSACTIONID>

<NETWORK>Network Name</NETWORK>

<TXNDATE><Date and time of the Transfer></TXNDATE>

<SENDERMSISDN ><Sender Mobile number></SENDERMSISDN >

<MSISDN2><Receiver Mobile number></MSISDN2>

<SUBSERVICE><Selector 1></SUBSERVICE>

<TRFVALUE>< Transferred Value for Transfer></TRFVALUE>

<PRODUCTCODE><Product code in PreTUPS></PRODUCTCODE>

<REQSOURCE><source of the request></REQSOURCE>

<STATUS><Transaction Status></STATUS >

<ERRORCODE><Transaction Status></ERRORCODE >

<RECORD>

</DATA>

</COMMAND>

# Fields Detail

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| RECORDTYPE | Types of Records |  | SUMMARY Or DETAIL | A (20) | M |
| **RECORD - tag will be repeated in case of the multiple transactions** | | | | | |
| TRANSACTIONID | PreTUPS Transaction ID | Transaction ID for C2S transfer generated by PreTUPS System. | R061117.1235.0001 | A (20) | M |
| NETWORK | Network Name | Network Name | Jordan | A (50) | M |
| TXNDATE | Date and Time of Transaction | DD-MM-YYYY HH:MI:SS , HH in 24 Hour format |  | D(20) | M |
| SENDERMSISDN | Channel user MSISDN | Channel User MSISDN who has initiated the request | 9810112345 | N (15) | M |
| MSISDN2 | Subscriber MSISDN | Subscriber MSISDN who has received the request. | 9810212345 | N (15) | M |
| SUBSERVICE | Sub Service | Sub service used for this transaction | Selector 1 | A (10) | M |
| TRFVALUE | Transfer value | Transferred value that has been transferred to Receiver , In Actual Amount format | 20 | N (20) | M |
| PRODUCTCODE | Product short code | Unique short code associated with the product. | 101 | A (10) | M |
| REQSOURCE | Source of Request | Source of the Request | Web, STK | A (15) | M |
| STATUS | Transaction Status | Status of the C2S transfer request   * Transaction Status = 200 means Success, * Transaction Status Other than 200 means failed | 200 | A (10) | M |
| ERRORCODE | Error code as to why transaction failed | Only for cases where TXN status is Not 200 | 9898 | A(10) | O |

**Response Syntax for Detail Response**

<? Xml version="1.0"?>

<COMMAND>

<TYPE>C2SENQRESP</TYPE>

<TXNSTATUS><Transaction Status></TXNSTATUS>

<ERRORKEY><Error key></ERRORKEY>

<DATE><Date and time ></DATE>

<EXTREFNUM><Unique Reference number in the external system></ EXTREFNUM>

<DATA>

<RECORDTYPE>DETAIL</RECORDTYPE>

<TRANSACTIONID ><Transaction ID></TRANSACTIONID>

<NETWORK>Network Name</NETWORK>

<TXNDATE><Date and time of the Transfer></TXNDATE>

<SENDERMSISDN ><Sender Mobile number></SENDERMSISDN>

<MSISDN2><Receiver Mobile number></MSISDN2>

<SUBSERVICE><Sub service i.e. Selector 1></SUBSERVICE>

<TRFVALUE><Transferred Value for Transfer></TRFVALUE>

<PRODUCTCODE ><Product Name></PRODUCTCODE>

<SACCFEE><Sender Access Fee></SACCFEE>

<RACCFEE><Receiver Access Fee></RACCFEE>

<REQSOURCE><source of the request></REQSOURCE>

<STATUS><Transaction Status></ TXNSTATUS>

<ERRORCODE><Error code></ERRORCODE>

<RECORD>

<MSISDN><Mobile number></MSISDN>

<USRTYPE><Type of User></USRTYPE>

<ENTRYTYPE><Entry Type ></ENTRYTYPE>

<TRANSVALUE><Transfer Value></TRANSVALUE>

<TRFDATE><Transfer Date></TRFDATE>

<PRVBAL><Previous balance before transaction></PRVBAL>

<POSTBAL><Balance after Transaction></POSTBAL>

<SUBTYPE><Subscriber type></SUBTYPE>

<ENTRYDATE><Entry Date></ENTRYDATE>

<SRVCLCODE><Service Class Code></SRVCLCODE>

<TRFSTATUS><Transfer Status></TRFSTATUS>

<ACCSTATUS><Account Status></ACCSTATUS>

<REFID><Reference ID></REFID>

</RECORD>

</DATA>

</COMMAND>

# Fields Detail

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| Common Response TAGS Refer 3.1.2 | | | | | |
| **DATA** | | | | | |
| RECORDTYPE | Types of Records |  | DETAIL | A (20) | M |
| TRANSACTIONID | PreTUPS Transaction ID | Transaction ID for C2S transfer generated by PreTUPS System. | R061117.1235.0001 | A (20) | M |
| NETWORK | Network Name | Network Name | Jordan | A (50) | M |
| TXNDATE | Date and Time of Transaction | DD-MM-YYYY HH:MM:SS, HH in 24 Hour format |  | D(20) | M |
| SENDERMSISDN | Channel user MSISDN | Channel User MSISDN who has initiated the request | 9810112345 | N (15) | M |
| MSISDN2 | Subscriber MSISDN | Subscriber MSISDN who has received the request. | 9810212345 | N (15) | M |
| SUBSERVICE | Sub Service | Sub service used for this transaction | Selector 1 | A (10) | M |
| TRFVALUE | Transfer value | Transferred value that has been transferred to Receiver , In Actual Amount format | 20 | N (20) | M |
| PRODUCTCODE | Product short code | Unique short code associated with the product. | 101 | A (10) | M |
| SACCFEE | Sender Access Fee | Access fee for sender for this transaction |  |  |  |
| RACCFEE | Receiver Access Fee | Access fee for receiver for this transaction |  |  |  |
| REQSOURCE | Source of Request | Source of the Request | STK, EXTGW | A (15) | M |
| STATUS | Transaction Status | Status of the C2S transfer request   * Transaction Status = 200 means Success, * Transaction Status Other than 200 means failed | 200 | A (10) | M |
| ERRORCODE | Error code as to why transaction failed | Only for cases where TXN status is Not 200 | 9898 | A(10) | O |
| RECORD - Sub tags of this RECORD tag will be repeated.. |  |  |  |  |  |
| MSISDN | Mobile number | Mobile number will be for a sender and as well as a receiver. | 777500104 |  | M |
| USRTYPE | User type | User type will be based on the user involvement in the transaction | SENDER |  | M |
| ENTRYTYPE | DR | Entry type of transaction | DR |  | M |
| TRANSVALUE | Transferred value | Transfer value | 25 |  | M |
| TRFDATE | Transfer Date | Transfer Date | 10/08/06 12:18:48 |  | M |
| PRVBAL | Previous balance | Balance before the transaction | 1400 |  | O |
| POSTBAL | Post balance | Balance after the transaction | 1375 |  | O |
| SUBTYPE | Subscriber type | Subscriber type involved in the transaction if this field is not valid then this field will be blank |  |  | O |
| ENTRYDATE | Entry Date | Entry Date | 10/08/06 |  | M |
| SRVCLCODE | Service class code | Service class code if this is not valid then this field will be blank |  |  | O |
|  |  |  |  |  |  |
| TRFSTATUS | Transfer Status | Transfer status | 200 |  | M |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| ACCSTATUS | Account status | Account Status | Y |  | O |
| REFID | Reference ID | Reference ID this will be generally PreTUPS Transaction ID | R060810.1218.0001 | A (20) | O |

# Business Rules

* Type tag will identify the type of Enquiry.
* RECORD TYPE tag having value as DETAIL will only be there when TRANSACTION ID Is specified in XML.
* Service Type can have values as RC, PPB. By default ALL will be used for service type if no value is there.
* If No value of From Date is there then by default Configurable Number of days will be subtracted from current date and it will be taken as From Date.
* If No value of To Date is there current date and it will be taken as To Date.
* Date range should be between in Configurable No of Days.
* Transfer value present in the TRFVALUE tag will be actual amount transferred to subscriber.
* If Transaction ID then record loading will be done only on the basis of it, For rest all other combinations will be used for record loading.

# C2C Transfer Enquiry

In this Enquiry Customer care user can send the request for the enquiry of a transaction between the channel users (C2C). Customer care user can send the MSISDN of a retailer who was involved in the transaction.

# Request Syntax

The External System will send the following request for C2C transfer enquiry. The request format and details of request are mentioned below. If we get the transaction id in the request then we give the details of the transaction else we will give the summary of configurable number (system preferences)of transactions.

<?xml version="1.0"?>

<COMMAND>

<TYPE>< C2CTRFENQ></TYPE>

<DATE><Date and time ></DATE>

<EXTNWCODE><Network External Code></EXTNWCODE>

<CATCODE><Category Code of the Operator user></CATCODE>

<EMPCODE>< Employee Code of the Operator user></EMPCODE>

<LOGINID><Login ID of the Operator user></LOGINID>

<PASSWORD><Password of the Operator user></PASSWORD>

<EXTREFNUM><Unique Reference number in the external system></EXTREFNUM>

<DATA>

<MSISDN><Retailer MSISDN></MSISDN>

<TRFSTYPE><T or R or W></TRFSTYPE>

<FROMDATE><DD-MM-YYYY></FROMDATE>

<TODATE><DD-MM-YYYY></TODATE>

<TRANSACTIONID> CT060810.1640.0001</TRANSACTIONID>

</DATA>

</COMMAND>

**Fields Detail**

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| Common TAGS refer Section 3.1.1 | | | | | |
| **DATA** | | | | | |
| MSISDN | Channel user MSISDN | All MSISDN should be in national dial format. | 9810112345 | N (15) | Either Transaction ID value is M or the MSISDN and TRFTYPE are M. |
| TRFTYPE | Transfer Type | Type of Transfer . If no values is there then ALL will be taken. | T or R or W | A (10) |
| FROMDATE | From Date | Date from which the transaction enquiry in PreTUPS system in format i.e. dd-mm-yyyy | 06-09-2006 | D (10) |
| TODATE | To Date | Date to which the transaction Enquiry in PreTUPS system in format i.e. dd-mm-yyyy | 06-09-2006 | D (10) |
| TRANSACTIONID | Unique number of the transaction | Unique transaction number generated by the PreTUPS system for the transaction. Alphanumeric | R061003.1633.0001 | A (20) |

# Response Syntax

PreTUPS system sends the acknowledgement to the External system about the transaction status. The acknowledgement will be in XML and send as response of the request. The XML response details are mentioned below. Response may be of two types based on the input details 1) Summary Response 2) Detail Response.

**Response Syntax for Summary Response**

<?xml version="1.0"?>

<COMMAND>

<TYPE>< C2CTRFENQRESP ></TYPE>

<TXNSTATUS><Transaction Status></TXNSTATUS>

<ERRORKEY><Error key></ERRORKEY>

<DATE><Date and time ></DATE>

<EXTREFNUM><Unique Reference number in the external system></ EXTREFNUM>

<DATA>

<RECORDTYPE>SUMMARY</RECORDTYPE>

<RECORD>

<TRANSACTIONID ><Transaction ID></TRANSACTIONID>

<TXNDATE><Date and time of the Transfer></TXNDATE>

<NETWORK><Network></NETWORK>

<TRFSTYPE><Transfer Sub Type></TRFSTYPE>

< REQVALUE><Requested quantity></REQVALUE>

<AMOUNT><Amount ></AMOUNT>

<MSISDN1><Channel user who has been initiated the Transfer></MSISDN1>

<MSISDN2><Channel user who has been received the Transfer></MSISDN2>

<TRFCATEGORY><Transfer Category></TRFCATEGORY>

<REQSOURCE><source of the request></REQSOURCE>

<CONTROLLED>Y</CONTROLLED>

</RECORD>

<RECORD>

<TRANSACTIONID ><Transaction ID></TRANSACTIONID >

<TXNDATE><Date and time of the Transfer></TXNDATE>

<NETWORK><Network></NETWORK>

<TRFSTYPE><Transfer Sub Type></TRFSTYPE>

< REQVALUE><Requested quantity></REQVALUE >

<AMOUNT><Amount ></AMOUNT>

<MSISDN1><Channel user who has been initiated the Transfer></MSISDN1>

<MSISDN2><Channel user who has been received the Transfer></MSISDN2>

<TRFCATEGORY><Transfer Category></TRFCATEGORY>

<REQSOURCE><source of the request></REQSOURCE>

<TXNCTRLTYPE><Controlled></TXNCTRLTYPE>

</RECORD>

</DATA>

</COMMAND>

**Fields Detail**

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| Common Response TAGS, Refer Section 3.1.2 | | | | | |
| **DATA** | | | | | |
| **SUMMARY-Summary sub tags will be repeated if we get multiple transactions for the specified criteria.** | | | | | |
| TRANSACTIONID | PreTUPS Transaction ID | Transaction ID for O2C transfer generated by PreTUPS System. | OR061005.1658.0001 | A (20) | M |
| TXNDATE | Date and Time of Transaction | DD-MM-YYYY HH:MI:SS , HH in 24 Hour format |  | D(20) | M |
| NETWORK | Network Name | Network Name | Jordan | A (50) | M |
| TRFSTYPE | Transfer Sub type | Transfer sub type | R | A (10) | M |
| REQVALUE | Requested Value | Quantity requested | 100 | N (20) | M |
| AMOUNT | Amount | Amount to be paid | 500 | N (20) | M |
| MSISDN1 | Channel user MSISDN | Channel User MSISDN who has initiated the request | 9810112345 | N (15) | M |
| MSISDN2 | Channel user MSISDN | Channel User MSISDN who has received the request. | 9810212345 | N (15) | M |
| TRFCATEGORY | Transfer category | Category of the transfer | Sale | A(10) | M |
| REQSOURCE | Source of Request | Source of the Request | Web, STK | A (15) | M |
| CONTROLLED | Transaction Controlling type | Transaction Controlling type Controlled or uncontrolled  If Transaction is controlled then Y else N | Y | A (1) | M |

**Response Syntax for Detail Response**

<?xml version="1.0"?>

<COMMAND>

<TYPE>< C2CTRFENQRESP ></TYPE>

<TXNSTATUS><Transaction Status></TXNSTATUS>

<ERRORKEY><Error key></ERRORKEY>

<DATE><Date and time ></DATE>

<EXTREFNUM><Unique Reference number in the external system></ EXTREFNUM>

<DATA>

<RECORDTYPE>DETAIL</RECORDTYPE>

<TRANSACTIONID><Transaction ID></TRANSACTIONID >

<TXNDATE><Date and time of the Transfer></TXNDATE>

<MSISDN1><Sender Mobile number></MSISDN1>

<MSISDN2><Receiver Mobile number></MSISDN2>

<USERNAME1><Sender user name></USERNAME1>

<USERNAME2><Receiver user name></USERNAME2>

<NETWORK><Network></NETWORK>

<TRFCATEGORY><Transfer Category></TRFCATEGORY>

<TRFSTYPE><Transfer Sub Type></TRFSTYPE>

<GEONAME1><sender geographical code></GEONAME1>

<GEONAME2><receiver geographical code></GEONAME2>

<DOMNAME1><sender domain code></DOMNAME1>

<DOMNAME2><Receiver domain Code></DOMNAME2>

<CATEGORY1><sender category></CATEGORY1>

<CATEGORY2><Receiver category></CATEGORY2>

<GRADE1><sender grade></GRADE1>

<GRADE2><Receiver grade></GRADE2>

<USERID1><sender user ID></USERID1>

<USERID2><Receiver user ID></USERID2>

<REQSOURCE><source of the request></REQSOURCE>

<CONTROLLED>Y</CONTROLLED>

<RECORD>

<PRODCODE><Product short code></PRODCODE>

<REQVALUE>Requested Value</REQVALUE>

<TAX1R><Tax 1 Rate></TAX1R>

<TAX1A><Tax 1 amount></TAX1A>

<TAX2R><Tax 2 Rate ></TAX2R>

<TAX2A><Tax 2 Amount></TAX2A>

<TAX3R><Tax 2 Rate ></TAX3R>

<TAX3A><Tax 2 Amount></TAX3A>

<COMMR><Commission Rate></COMMR>

<COMMA><Commission Amount></COMMA>

<AMOUNT><Amount to be paid></AMOUNT>

<NETAMT><Net amount to be paid></NETAMT>

</RECORD>

</DATA>

</COMMAND>

**Fields Detail**

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| Common Response TAGS refer section 3.1.2 | | | | | |
| **DATA** | | | | | |
| TRANSACTIONID | PreTUPS Transaction ID | Transaction ID for O2C transfer generated by PreTUPS System. | OR061005.1658.0001 | A (20) | M |
| TXNDATE | Date and Time of Transaction | DD-MM-YYYY HH:MI:SS , HH in 24 Hour format |  | D(20) | M |
| MSISDN1 | Sender user MSISDN | Channel User MSISDN who has initiated the request | 9810112345 | N (15) | M |
| MSISDN2 | Receiver user MSISDN | Channel User MSISDN who has received the request. | 9810212345 | N (15) | M |
| USERNAME1 | Sender user name | User name who has initiated the request | XYZ | A (80) | M |
| USERNAME2 | Receiver user name | User name who has received the request | ABC | A (80) | M |
| NETWORK | Network | Network of the users | Jordan | A(50) | M |
| TRFCATEGORY | Transfer category | Category of the transfer | Sale | A(10) | M |
| TRFSTYPE | Transfer sub type | Sub type of the transfer | R | A(10) | M |
| GEONAME1 | Sender geographical Name | Geographical domain name of the sender |  | A(50) | M |
| GEONAME2 | Receiver geographical Name | Geographical domain name of the receiver |  | A(50) | M |
| DOMNAME1 | Sender Domain Name | Domain name of the sender |  | A(40) | M |
| DOMNAME2 | Receiver Domain Code | Domain name of the receiver |  | A(40) | M |
| CATEGORY1 | Sender Category | Category of the sender |  | A(40) | M |
| CATEGORY2 | Receiver Category | Category of the receiver |  | A(40) | M |
| GRADE1 | Sender Grade | Grade of the sender |  | A(40) | M |
| GRADE2 | Receiver Grade | Grade of the receiver |  | A(40) | M |
| USERID1 | Sender User ID | User ID of the sender |  | A(20) | M |
| USERID2 | Receiver user ID | User ID of the receiver |  | A(20) | M |
| REQSOURCE | Source of Request | Source of the Request | Web, STK | A (15) | M |
| CONTROLLED | Transaction Controlling type | Controlling type defined for the transaction |  | A(5) | M |
| **RECORD Tag will be repeated in case of Multiple products** | | | | | |
| PRODCODE | Product short code | Unique code associated with the product. | 101 | A (10) | M |
| REQVALUE | Quantity | Quantity | 100 | N(20) | M |
| TAX1R | Tax 1 Rate | Rate at which tax1 has to be calculated |  | N(20) | M |
| TAX1A | Tax 1 Amount | Tax 1 Amount to be deducted |  | N(20) | M |
| TAX2R | Tax 2 Rate | Rate at which tax 2 has to be calculated |  | N(20) | M |
| TAX2A | Tax 2 Amount | Tax 2 Amount to be deducted |  | N(20) | M |
| TAX3R | Tax 3 Rate | Rate at which tax 3 has to be calculated |  | N(20) | M |
| TAX3A | Tax 3 Amount | Tax 3 Amount to be deducted |  | N(20) | M |
| COMMR | Commission Rate | Rate at which commission has to be calculated |  | N(20) | M |
| COMMA | Commission Amount | Amount applicable for commission |  | N(20) | M |
| AMOUNT | Amount | Amount for the total stock |  | N(20) | M |
| NETAMT | Net Amount | Net Amount for the total stock |  | N(20) | M |

# Business Rules

* Type tag will identify the type of Enquiry.
* TRFTYPE tag will identify the type of transfer like T for Transfer, R for Return and W for Withdraw. In each request only one TRFTYPE tag has to be present.
* To date given in the TODATE tag must be always greater than or equal to From date given in the FROMDATE tag.
* If No value of From Date is there then by default Configurable Number of days will be subtracted from current date and it will be taken as From Date.
* If No value of To Date is there current date and it will be taken as To Date.
* Date range should be between in Configurable No of Days.
* Transfer value present in the TRFVALUE tag will be actual amount transferred to subscriber.
* If Transaction ID then record loading will be done only on the basis of it, For rest all other combinations will be used for record loading.

# O2C Transfer Enquiry

In this Enquiry Customer care user can send the request for the enquiry of a transaction between operator and channel user (O2C).

# Request Syntax

The External System will send the following request for O2C transfer enquiry. The request format and details of request are mentioned below.

**Request Syntax**

<?xml version="1.0"?>

<COMMAND>

<TYPE>VIEWTRF</TYPE>

<DATE><Date and time ></DATE>

<EXTNWCODE><Network External Code></EXTNWCODE>

<CATCODE><Category Code of the Operator user></CATCODE>

<EMPCODE>< Employee Code of the Operator user></EMPCODE>

<LOGINID><Login ID of the Operator user></LOGINID>

<PASSWORD><Password of the Operator user></PASSWORD>

<EXTREFNUM><Unique Reference number in the external system></EXTREFNUM>

<DATA>

<MSISDN><Retailer MSISDN></MSISDN>

<TRFCATEGORY><TRF or SALE></TRFCATEGORY>

<FROMDATE><DD-MM-YYYY></FROMDATE>

<TODATE><DD-MM-YYYY></TODATE>

<TRANSACTIONID>OT060825.1002.0001</TRANSACTIONID>

</DATA>

</COMMAND>

**Fields Detail**

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| Common Response TAGS refer section 3.1.1 | | | | | |
|  | | | | | |
| MSISDN | Channel user MSISDN | All MSISDN should be in national dial format. | 9810112345 | N (15) | TransactionID and MSISDN are Mandatory |
| TRFCATEGORY | Transfer Category | Category of the Transfer | TRF or SALE | N (15) |
| FROMDATE | From Date | Date from which the transaction enquiry in PreTUPS system in format i.e. dd-mm-yyyy | 06-09-2006 | D (10) |
| TODATE | To Date | Date to which the transaction Enquiry in PreTUPS system in format i.e. dd-mm-yyyy | 06-09-2006 | D (10) |
| TRANSACTIONID | Unique number of the transaction | Unique transaction number generated by the PreTUPS system for the transaction. Alphanumeric | OT060825.1002.0001 | A (20) |
|  | | | | | |

# Response Syntax

PreTUPS system sends the acknowledgement to the External system about the transaction status. The acknowledgement will be in XML and send as response of the request. The XML response details are mentioned below. Response may be of two types based on the input details 1) Summary Response 2) Detail Response.

**Response Syntax for summary Response**

< Xml version="1.0">

<COMMAND>

<TYPE>O2CENQRESP</TYPE>

<TXNSTATUS><Transaction Status></TXNSTATUS>

<ERRORKEY><Error key></ERRORKEY>

<DATE><Date and time ></DATE>

<EXTREFNUM><Unique Reference number in the external system></ EXTREFNUM>

<DATA>

<RECORDTYPE>SUMMARY</RECORDTYPE>

<RECORD>

<TRANSACTIONID><Transaction ID></TRANSACTIONID>

<TXNDATE><Date and time of the Transfer></TXNDATE>

<NETWORK>Network</NETWORK>

< MSISDN><Receiver Mobile number></MSISDN>

<TRFCATEGORY><></TRFCATEGORY>

<APPROVEDBY><Channel Admin></ APPROVEDBY>

<APPROVEDON><DD-MM-YYYY></APPROVEDON>

<TRFTYPE><Type of Transfer T or R or W></TRFTYPE>

<REQVALUE><Requested quantity></QTY>

<AMOUNT><Amount></AMOUNT>

<STATUS><Transaction Status></STATUS>

</RECORD>

</DATA>

</COMMAND>

**Fields Detail**

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| Common Response TAGS refer section 3.1.2 | | | | | |
| **DATA** | | | | | |
| RECORDTYPE | Type of Record |  | SUMMARY or DETAIL | A (20) | M |
| RECORD Tag will be repeated for multiple records | | | | | |
| TRANSACTIONID | PreTUPS Transaction ID | Transaction ID for O2C transfer generated by PreTUPS System. | OR061005.1658.0001 | A (20) | M |
| TXNDATE | Date and Time of Transaction | DD-MM-YYYY HH:MI:SS , HH in 24 Hour format |  | D(20) | M |
| NETWORK | Name of Network |  | Jordan | A (50) | M |
| MSISDN | Channel user MSISDN | Channel User MSISDN who has received the transfer | 9810112345 | N (15) | M |
| TRFCATEGORY | Transfer Category |  |  |  |  |
| APPROVEDBY | Approved by | Operator user who has approved the request | Channel admin | N (15) | M |
| APPROVEDON | Approved on | Transaction Approval date DD-MM-YYYY HH:MI:SS, HH in 24 Hour format | 06-09-2006 | D (20) | M |
| TRFTYPE | Transfer Type | Type of the Transfer | T or R or W | A (10) | M |
| REQVALUE | Requested quantity | Requested quantity | 100 | N (20) | M |
| AMOUNT | Amount | Amount payable by the channel user | 95 | N (20) | M |
| STATUS | Transaction Status | Status of the O2C Request   * Transaction Status = Closed means Transaction Closed * Other Transaction Status will be New, Approved 1,Approved 2 | Closed | A (10) | M |

# Response Syntax for Detail Response

< Xml version="1.0">

<COMMAND>

<TYPE>< O2CENQRESP ></TYPE>

<TXNSTATUS><Transaction Status></TXNSTATUS>

<ERRORKEY><Error key></ERRORKEY>

<DATE><Date and time ></DATE>

<EXTREFNUM><Unique Reference number in the external system></ EXTREFNUM>

<DATA>

<RECORDTYPE>DETAIL</RECORDTYPE>

<TRANSACTIONID><Transaction ID></TRANSACTIONID>

<TXNDATE><Date and time of the Transfer></TXNDATE>

<NETWORK>Network</NETWORK>

<DOMNAME><Domain></DOMNAME>

<CATEGORY><Category></CATEGORY>

<GEONAME><geographical domain></GEONAME>

<TRFCATEGORY><Transfer Category></TRFCATEGORY>

<TRFTYPE><Transfer type></TRFTYPE>

<MSISDN><Primary Mobile number></MSISDN>

<EXTTXNNUMBER><External transaction number in PreTUPS></EXTTXNNUMBER>

<EXTTXNDATE><External transaction date></EXTTXNDATE>

<COMMPRF><Commission profile ></COMMPRF>

<STATUS><Transaction Status></STATUS>

<PAYMENTINSTTYPE><></PAYMENTINSTTYPE>

<PAYMENTINSTNUMBER><></PAYMENTINSTNUMBER>

<PAYMENTINSTDATE><></PAYMENTINSTDATE>

<PAYMENTINSTAMT><></PAYMENTINSTAMT>

<FIRSTAPPREMARKS><></FIRSTAPPREMARKS>

<SECONDAPPREMARKS><></SECONDAPPREMARKS>

<THIRDAPPREMARKS><></THIRDAPPREMARKS>

<REQSOURCE><source of the request></REQSOURCE>

<RECORD>

<PRODCODE><Product short code></PRODCODE>

<MRP><MRP of the product></MRP>

<REQVALUE><Requested quantity></REQVALUE>

<TAX1R><Tax 1 Rate></TAX1R>

<TAX1A><Tax 1 amount></TAX1A>

<TAX2R><Tax 2 Rate ></TAX2R>

<TAX2A><Tax 2 Amount></TAX2A>

<TAX3R><Tax 3 Rate ></TAX3R>

<TAX3A><Tax 3 Amount></TAX3A>

<COMMR><Commission Rate></COMMR>

<COMMA><Commission Amount></COMMA>

<AMOUNT><Amount to be paid></AMOUNT>

<NETAMT><Net amount to be paid></NETAMT>

</RECORD>

</DATA>

</COMMAND>

**Fields Detail**

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| Common Response TAGS Refer Section 3.1.2 | | | | | |
| **DATA** | | | | | |
| TRANSACTIONID | PreTUPS Transaction ID | Transaction ID for O2C transfer generated by PreTUPS System. | OR061005.1658.0001 | A (20) | M |
| TXNDATE | Date and Time of Transaction | DD-MM-YYYY HH:MM:SS, HH in 24 Hour format |  | D(20) | M |
| NETWORK | Name of Network |  | Jordan | A (50) | M |
| DOMNAME | Domain | User domain involved in the transaction |  | A(40) | M |
| CATEGORY | Category | User category involved in the transaction |  | A(40) | M |
| GEONAME | Geographical domain | Users geographical domain |  | A(40) | M |
| TRFCATEGORY | Transfer Category | Transfer category |  | A(15) | M |
| TRFTYPE | Transfer Type | Transfer type |  | A(10) | M |
| MSISDN | MSISDN | Primary mobile number of the user |  | A(15) | M |
| EXTTXNNUMBER | External transaction number | Unique external transaction number in PreTUPS |  | A(20) | O |
| EXTTXNDATE | External transaction date | External transaction date in PreTUPS |  | D(10) | O |
| COMMPRF | Commission Profile | Commission profile of the user |  | A(10) | M |
| STATUS | Transaction Status | Status of the O2C Request   * Transaction Status = Closed means Transaction Closed * Other Transaction Status will be New, Approved 1,Approved 2 | Closed | A (10) | M |
| PAYMENTINSTTYPE | Payment instrument type | Payment instrument type |  | A (10) | O |
| PAYMENTINSTNUMBER | Payment instrument number | Payment instrument number |  | A(20) | O |
| PAYMENTINSTDATE | Payment instrument date | Payment instrument date |  | D(10) | O |
| PAYMENTINSTAMT | Payment instrument amount | Payment instrument amount |  | N(20) | O |
| FIRSTAPPREMARKS | First approver Remarks | First level Approver remarks |  | A(100) | O |
| SECONDAPPREMARKS | Second Approver Remarks | Second level Approver remarks |  | A(100) | O |
| THIRDAPPREMARKS | Third Approver Remarks | Third level approver remarks |  | A(100) | O |
| REQSOURCE | Transfer requested by source |  | WEB/SMS | A(10) | O |
| RECORD Tag will be repeated | | | | | |
| PRODCODE | Product Code | Product code involved in the transaction |  | A(10) | M |
| MRP | MRP | MRP of the product |  | N(20) | M |
| REQVALUE | Quantity | Quantity requested for transfer |  | N(20) | M |
| TAX1R | Tax 1 Rate | Tax 1 rate |  | N(20) | M |
| TAX1A | Tax 1 Amount | Tax 1 amount |  | N(20) | M |
| TAX2R | Tax 2 Rate | Tax 2 Rate |  | N(20) | M |
| TAX2A | Tax 2 Amount | Tax 2 Amount |  | N(20) | M |
| TAX3R | Tax 3 Rate | Tax 3 Rate |  | N(20) | M |
| TAX3A | Tax 3 Amount | Tax 3 Amount |  | N(20) | M |
| COMMR | Commission Rate | Commission rate |  | N(20) | M |
| COMMA | Commission Amount | Commission amount |  | N(20) | M |
| AMOUNT | Amount | Amount |  | N(20) | M |
| NETAMT | Net amount | Net amount |  | N(20) | M |

# Business Rules

* Type tag will identify the type of Enquiry.
* TRFCATEGORY tag will identify the type of transaction like TRF for Transfer, SALE for Sale. In each request only one TRFCATEGORY tag has to be present.
* To date given in the TODATE tag must be always greater than or equal to From date given in the FROMDATE tag.
* If No value of From Date is there then by default Configurable Number of days will be subtracted from current date and it will be taken as From Date.
* If No value of To Date is there current date and it will be taken as To Date.
* Date range should be between in Configurable No of Days.
* Transfer value present in the TRFVALUE tag will be actual amount transferred to subscriber.
* If Transaction ID then record loading will be done only on the basis of it, For rest all other combinations will be used for record loading.

## ICCID re-association

PreTUPS would expose a new XML over HTTP based API, using which a pre-associated ICCID against a MSISDN can be changed with another ICCID.

This API can also be used to associate an ICCID for the 1st time with a new MSISDN.

<?xml version="1.0"?>

<**COMMAND**>

<**TYPE**>ICCIDMSISDNMAP</**TYPE**>

<**DATE**><Date & Time of the Request></**DATE**>

<**EXTNWCODE**><External network code</**EXTNWCODE**>

**<CATCODE>**<Category Code of the Operator user>**</CATCODE>**

**<EMPCODE>**<Employee Code of the Operator user>**</EMPCODE>**

**<LOGINID>**<Login ID of the Operator user>**</LOGINID>**

<**PASSWORD**><Password of the Operator user></**PASSWORD**>

<**EXTREFNUM**><Unique Reference number in the external system></**EXTREFNUM**>

<**DATA**>

<**ICCID**><ICCID that needs to be associated></**ICCID**>

<**MSISDN**><Mobile Number></**MSISDN**>

</**DATA**>

</**COMMAND**>

**Fields Detail**

| TAG | Field | Remarks | Example | Field Type | | Optional / Mandatory |
| --- | --- | --- | --- | --- | --- | --- |
| ICCIDMSISDNMAP | Request type | Fixed parameter | ICCIDMSISDNMAP | A(20) | | M |
| DATE | Date and time | Date and time on which request generated by external system, HH are in 24 Hour Format | DD-MM-YYYY HH:MM:SS | D (20) | | O |
| EXTNWCODE | External Network Code | External network code as configured in PreTUPS | CI | A (2) | | M |
| CATCODE | Category Code | Category Code of the operator user as configured in PreTUPS | NWADM | A (10) | | O |
| EMPCODE | Employee Code | Employee code of the operator user as configured in PreTUPS | 1291 | A (10) | | O  **M – In-case CATCODE is passed** |
| LOGINID | Login ID | Login ID of the Operator user as configured in PreTUPS | btnadm | A (20) | | O |
| PASSWORD | Password | Password of the Operator user as configured in PreTUPS | hgrTW#21 | A (8) | | O  **M – In-case LOGINID is passed** |
| **Between CATCODE & LOGINID one of them must be present. If CATCODE is specified then EMPCODE is mandatory to specify. If LOGINID is specified then PASSWORD is mandatory to specify. If all the 4 are passed in the request, then all the parameters would be validated** | | | | | | |
| EXTREFNUM | External Reference number | Unique Reference number in the external system | 12345 | A (20) | O | |
| **DATA – Data tag over which action needs to be performed** | | | | | | |
| ICCID | ICCID | ICCID which needs to be associated with the MSISND | 98197010116152909119 | A (20) | M | |
| MSISDN | Mobile Number | Mobile number with which the ICCID needs to be associated | 981212311 | N (15) | M | |

# Business Rules

* The value for TYPE tag is fixed as mentioned in syntax.
* This API can be used by the Network administrators of PreTUPS. In other words, a valid network administrator’s credentials needs to be passed every-time a request is sent using this API
* Either CATGODE or LOGINID of a valid Network administrator of the PreTUPS system needs to be passed
* If CATCODE is passed, then it would be mandatory to specify the EMPCODE of the Network administrator as registered in PreTUPS
* If LOGINID is passed, then it would be mandatory to specify the PASSWORD of the Network administrator as registered in PreTUPS
* If both CATCODE & LOGINID are passed along with EMPCODE & PASSWORD, then all the 4 parameters would be validated for authenticity in PreTUPS
* ICCID that is specified for association with a MSISDN, should be a valid ICCID as present in PreTUPS
* ICCID as passed in the API would get associated with the MSISDN as specified only if the ICCID is found to be valid & existing in PreTUPS
* If an ICCID as passed in the request is found to be associated with other MSISDN, then the ICCID would get de-associated with that MSISDN & would get associated with the MSISDN as passed in the request
* If a MSISDN as passed in the request is found to be associated with other ICCID, then that ICCID would get de-associated & the ICCID as passed in the request would get associated

# Response Syntax

<?xml version="1.0"?>

<**COMMAND**>

<**TYPE**>ICCIDMSISDNMAPRESP</**TYPE**>

<**TXNSTATUS**><Transaction Status></**TXNSTATUS**>

<**DATE**><Date & Time of processing the Request></**DATE**>

<**MESSAGE**>Response Message</**MESSAGE**>

<**COMMAND**>

**Fields Detail**

| TAG | Field | Remarks | Example | Field Type | Optional / Mandatory |
| --- | --- | --- | --- | --- | --- |
| ICCIDMSISDNMAPRESP | Response type | Fixed parameter | ICCIDMSISDNMAPRESP | A(20) | M |
| TXNSTATUS | Transaction Status | Status of the request  Transaction Status= 200 means Success  Transaction Status other than 200 means Fail | 200 | N (10) | M |
| DATE | Date and time | Date and time on which request was received/processed by PreTUPS, HH are in 24 Hour Format | DD-MM-YYYY HH:MM:SS | D (20) | O |
| MESSAGE | Response message | Response message against the request | MSISDN xxxxxhas been associated with ICCID yyyyyyyy | A (100) | O |

# Business Rules

* The value for TYPE tag is fixed as mentioned in syntax.
* These type of requests would not generate any transaction IDs in PreTUPS, hence requests related reports or enquiries would not be available.

## Bar User XML API

This API can be used by CCE to send a request for barring a subscriber’s MSISDN. Barring would mean that the request received from the barred subscriber MSISDN would not be processed in PreTUPS.

# Request Syntax

<?xml version="1.0"?>

<**COMMAND**>

<**TYPE**><BARUSERREQ></**TYPE**>

<**DATE**><Date and time></**DATE**>

<**EXTNWCODE**>*<Network External Code>*</**EXTNWCODE**>

<**CATCODE**><Category Code of the Operator user></**CATCODE**>

<**EMPCODE**><Employee Code of the Operator user></**EMPCODE**>

<**LOGIN**\_ID> Login Id of the Operator user</**LOGIN**\_ID>

<**PASSWORD**>Password of the Operator user </**PASSWORD**>

<**EXTREFNUM**><Unique Reference number in the External system></ **EXTREFNUM**>

<**DATA**>

<**MODULE**><User module to be barred></**MODULE**>

<**MSISDN**><User MSISDN></**MSISDN**>

<**USERTYPE**><User type to be barred></**USERTYPE**>

<**BARTYPE**><Barring type></**BARTYPE**>

<**REMARKS**><Any free text></**REMARKS**>

</**DATA**>

<**/COMMAND**>

# Fields Detail

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| TYPE | Request type | Request Type, should be sent with each request – **fixed value** | BARUSERREQ | A (20) | M |
| DATE | Date and time | Date and time on which request was sent by external system, HH are in 24 Hour Format | DD-MM-YYYY HH:MM:SS | D (20) | O (Tag is mandatory) |
| EXTNWCODE | Network code | Network code of the requestor defined in PreTUPS as External Network code | AT | A (2) | M |
| CATCODE | Category Code | Category Code of the Operator user | CCE | A (10) | O (Tag is mandatory) |
| EMPCODE | Employee code | Employee code of the Operator user.  **Mandatory in case CATCODE is specified** | 123 | A (10) | O (Tag is mandatory) |
| LOGINID | Login ID | Login ID of the Operator user | Mo\_cce | A (20) | O (Tag is mandatory) |
| PASSWORD | Password | Password of the Operator user  **Mandatory in case LOGINID is specified** | 2468 | A (8) | O (Tag is mandatory) |
| **Between LOGINID & EMPCODE value of one of them must be present. Both of them can also be present in the request** | | | | | |
| EXTREFNUM | External Reference number | Unique Reference number in the external system. | 12345 | A (20) | O |
| **DATA – Under this tag, details of user who needs to barred should be provided** | | | | | |
| MODULE | Module of the User | Module of the user against which services needs to be barred.  **Airtel Tanzania should always use the value as P2P in-case they wish to use this API only for Me2U service** | C2S, P2P | A (10) | M |
| MSISDN | User mobile number | User mobile number, which needs to be barred  **All MSISDN should be in national dial format i.e. without country code.** | 9942222 | N (15) | M |
| USERTYPE | Type of the user to be Barred | Whether the user needs to be barred as a Sender or Receiver of a Transfer | SENDER/ RECEIVER | A (15) | M |
| BARTYPE | Barring Type i.e. Sub look up code | Refer Business Rules section for details | SIMSWP | A (10) | M |
| REMARKS | Reason for the Barring | Reason to be given for the Barring | User Barring | A (100) | O (Tag is mandatory) |

# Business Rules

* All tags are mandatory to be present in XML. If value is optional and tag must be present.
* The value for TYPE tag is fixed as mentioned in syntax.
* The possible value for USERTYPE tag could be SENDER or RECEIVER. If a user is barred as a Sender, then requests initiated by the user would not be processed in PreTUPS. Similarly if a user is barred as a receiver, transaction against or for the user would not be allowed in PreTUPS
* In the barring request the Channel user will be identified by the module and the user type. In case if user type is sender and module is C2S then PreTUPS would identify the user as Channel user and if user type is RECEIVER then it will be taken as C2S Subscriber.
* For C2S sender the user must exist in PreTUPS system. No such check will be done on C2S receiver combination.
* In the barring request the subscriber will be identified by the module and the user type. In case if user type is sender/receiver and module is P2P then PreTUPS would identify the user as Subscriber.
* For P2P sender the user must exist in PreTUPS system. IN other words, should be a registered P2P subscriber. No such check will be done on P2P receiver combination.
* In-case of Airtel Tanzania, if **BARTYPE** is specified as **SIMSWP**, then the user would be automatically unbarred after a configurable duration of time.
* In-case of Airtel Tanzania, if **BARTYPE** is specified something other than **SIMSWP,** then the barred user would not be eligible for auto unbar
* This BARTYPE could be used by CCE or a user having rights to bar, from the PreTUPS GUI as well. In other words, this BARTYPE would not be just limited to this API
* A barred user (irrespective of BARTYPE) can be explicitly un-barred as-well using the un-bar XML API or using the functionality available over PreTUPS GUI
* All other business rules related to user barring remain same as currently existing.
* A user can be barred using the API or PreTUPS GUI. There would not be any identification from PreTUPS based on which it can be know whether a user has been barred using the API or PreTUPS GUI.

# Response Syntax

PreTUPS will send following response to the External System against user bar request:

<?xml version="1.0"?>

<**COMMAND**>

<**TYPE**><BARUSERRESP></**TYPE**>

<**TXNSTATUS**><Transaction Status></**TXNSTATUS**>

<**ERROR**\_**KEY**></**ERROR**\_**KEY**>

<**DATE**><Date & Time></**DATE**>

<**EXTREFNUM**><External reference number></**EXTREFNUM**>

</**COMMAND**>

Fields Detail

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| TYPE | Response type | Response Type – **Fixed value** | BARUSERRESP | A (20) | M |
| TXNSTATUS | Transaction Status | Status of the recharge request   * Transaction Status = 200 means Success, * Transaction Status Other than 200 means failed | 200 | N (7) | M |
| ERROR\_KEY | Error Key | Value in this tag will be available in case of invalid xml request, tag name will be returned. | TYPE | A(30) | O |
| DATE | Date and time | Date and time on which response was sent from PreTUPS. HH are in 24 Hour format | DD-MM-YYYY HH:MM:SS | D (20) | M |
| EXTREFNUM | External Reference number | Reference number that was passed by the external system during the request | 36427 | N (20) | O (Tag is mandatory) |

* The value of TYPE tag is fixed, as mentioned above

## 2.8 View User XML API

This API can be used to view details of Channel user.

# Request Syntax

<?xml version="1.0"?>

<**COMMAND**>

<**TYPE**><VIEWCUSER></**TYPE**>

<**DATE**><Date and time></**DATE**>

<**EXTNWCODE**>*<Network External Code>*</**EXTNWCODE**>

<**CATCODE**><Category Code of the Operator user></**CATCODE**>

<**EMPCODE**><Employee Code of the Operator user></**EMPCODE**>

<**LOGIN**ID> Login Id of the Operator user</**LOGIN**ID>

<**PASSWORD**>Password of the Operator user </**PASSWORD**>

<**EXTREFNUM**><Unique Reference number in the External system></ **EXTREFNUM**>

<**DATA**>

<**NETWORKCODE**><Network code ></**NETWORKCODE**>

<**USERLOGINID**><User Login id></**USERLOGINID**>

<**MSISDN**><MSISDN of user></**MSISDN**>

</**DATA**>

<**/COMMAND**>

# Fields Detail

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| TYPE | Request type | Request Type, should be sent with each request – **fixed value** | VIEWCUSER | A (20) | M |
| DATE | Date and time | Date and time on which request was sent by external system, HH are in 24 Hour Format | DD-MM-YYYY HH:MM:SS | D (20) | O |
| EXTNWCODE | Network code | Network code of the requestor defined in PreTUPS as External Network code | AT | A (2) | M |
| CATCODE | Category Code | Category Code of the Operator user | CCE | A (10) | O (Tag is optional) |
| EMPCODE | Employee code | Employee code of the Operator user.  **Mandatory in case CATCODE is specified** | 123 | A (10) | O (Tag is mandatory) |
| LOGINID | Login ID | Login ID of the Operator user | Mo\_cce | A (20) | O (Tag is mandatory) |
| PASSWORD | Password | Password of the Operator user  **Mandatory in case LOGINID is specified** | 2468 | A (8) | O |
| **Between LOGINID & EMPCODE value of one of them must be present. Both of them can also be present in the request** | | | | | |
| EXTREFNUM | External Reference number | Unique Reference number in the external system. | 12345 | A (20) | O |
| **DATA – Under this tag, details of user who needs to barred should be provided** | | | | | |
| **USERLOGINID** | Login ID of User | Login ID of User | btdist | A (30) | M |
| MSISDN | User mobile number | User mobile number, which needs to be barred  **All MSISDN should be in national dial format i.e. without country code.** | 9942222 | N (15) | M |

# Response Syntax

PreTUPS will send following response to the External System against View user request:

<?xml version="1.0"?>

<**COMMAND**>

<**TYPE**>< VIEWCUSERRESP></**TYPE**>

<**TXNSTATUS**><Transaction Status></**TXNSTATUS**>

<**ERROR**\_**KEY**></**ERROR**\_**KEY**>

<**DATE**><Date & Time></**DATE**>

<**EXTREFNUM**><External reference number></**EXTREFNUM**>

<DATA>

<STATUS><Status of user></STATUS>

<USRNAME><User name of user></USRNAME>

<MSISDN><mobile number of user></MSISDN>

<USERLOGINID>< Login ID of user ></USERLOGINID>

<SHTNAME>< short name of user ></SHTNAME>

<SUBCODE>< Subscriber code ></SUBCODE>

<EXTCODE>< External Code of user ></EXTCODE>

<INSUSPEND><Inside transfers suspended or not></INSUSPEND>

<OUTSUSPEND><whether outside transfers suspended></OUTSUSPEND>

<ADDRESS>< address of user ></ADDRESS>

<USRGRADE>< grade of user ></USRGRADE>

<COMMPRF>< commission profile ></COMMPRF>

<TRFPRF>< transfer profile ></TRFPRF>

<SERVICES>< services list ></SERVICES>

<PARENTNAME>< user’s parent name ></PARENTNAME>

<PARENTMSISDN><user’s parent msisdn></PARENTMSISDN>

<PARENTCATEGORY>< parent’s category ></PARENTCATEGORY>

<OWNERNAME><user’s owner’s name ></OWNERNAME>

<OWNERMSISDN>< owner msisdn></OWNERMSISDN>

<OWNERCATEGORY>< owner category ></OWNERCATEGORY>

</DATA>

</**COMMAND**>

Fields Detail

| TAG | Fields | Remarks | Example | Field Type | Optional/  Mandatory |
| --- | --- | --- | --- | --- | --- |
| TYPE | Response type | Response Type – **Fixed value** | VIEWCUSERRESP | A (20) | M |
| TXNSTATUS | Transaction Status | Status of the recharge request   * Transaction Status = 200 means Success, * Transaction Status Other than 200 means failed | 200 | N (7) | M |
| ERROR\_KEY | Error Key | Value in this tag will be available in case of invalid xml request, tag name will be returned. | TYPE | A(30) | O |
| DATE | Date and time | Date and time on which response was sent from PreTUPS. HH are in 24 Hour format | DD-MM-YYYY HH:MM:SS | D (20) | M |
| EXTREFNUM | External Reference number | Reference number that was passed by the external system during the request | 36427 | N (20) | O |
| STATUS | Status of user | Status of user | Active | A(30) | M |
| USRNAME | User name of user | User name of user | Ramesh | A(30) | M |
| MSISDN | mobile number of user | mobile number of user | 7255665566 | D(10) | M |
| USERLOGINID | Login ID of user | Login ID of user | sadealer | A(30) | M |
| SHTNAME | short name | short name of user | deal | A(10) | O |
| SUBCODE | Subscriber code | Subscriber code | 11551155 | D(10) | O |
| EXTCODE | External Code | External Code of user | 233445 | D(10) | O |
| INSUSPEND | Suspended status | Inside transfers suspended or not | N | A(30) | M |
| OUTSUSPEND | Suspended status | whether outside transfers suspended | N | A(30) | M |
| ADDRESS | address | Address of user | 55 street 1 | A(30) | O |
| USRGRADE | grade | Grade of user | Gr22 | A(30) | M |
| COMMPRF | commission profile | commission profile | Com1 | A(30) | M |
| TRFPRF | transfer profile | transfer profile | Trf1 | A(30) | M |
| SERVICES | services list | Comma separated services list | RC,GRC | A(30) | M |
| PARENTNAME | user’s parent name | user’s parent name | btdist | A(30) | M |
| PARENTMSISDN | user’s parent msisdn | user’s parent msisdn | 7299999908 | D(10) | O |
| PARENTCATEGORY | parent’s category | parent’s category | dist | A(30) | M |
| OWNERNAME | user’s owner’s name | user’s owner’s name | btdist | A(30) | M |
| OWNERMSISDN | owner’s msisdn | owner’s msisdn | 7299999908 | D(10) | O |
| OWNERCATEGORY | owner’s category | owner’s category | dist | A(30) | M |

* The value of TYPE tag is fixed, as mentioned above

## 2.9 Channel User Movement XML API

This API allows the operator users (channel administrator) to move the channel users from one channel hierarch to another channel hierarchy within same domain.

# XML Request Syntax

The External System should send the following request for User Movement. The request format and details of request are mentioned below.

<?xml version="1.0"encoding="UTF-8"?>

<COMMAND>

<TYPE>USERMOVEMENTREQ</TYPE>

<DATE><Date and time></DATE>   
<EXTNWCODE><Network External Code></EXTNWCODE>

<EMPCODE><Employee Code of the channel admin user></EMPCODE>

<LOGINID><Login ID of the channel admin user></LOGINID>

<PASSWORD><Password of the channel admin user></PASSWORD>

<EXTCODE>*<*Channel user unique External code*>*</EXTCODE>

<EXTREFNUM><DSM Transaction ID></EXTREFNUM>

<NETWORKCODE><NETWORK CODE></NETWORKCODE>

<FROM\_USER\_MSISDN><From User Mobile no></FROM\_USER\_MSISDN>

<FROM\_USER\_LOGINID><From User Login ID></FROM\_USER\_LOGINID>

<FROM\_USER\_EXTCODE><From User User id></FROM\_USER\_EXTCODE>

<TO\_PARENT\_MSISDN><To Parent Mobile no></TO\_PARENT\_MSISDN>

<TO\_PARENT\_LOGINID><To Parent Login Id></TO\_PARENT\_LOGINID>

<TO\_PARENT\_EXTCODE><To Parent User id></TO\_PARENT\_EXTCODE>

<TO\_USER\_GEOGRAPHICAL\_CODE><To User Geographical Code></TO\_USER\_GEOGRAPHICAL\_CODE>

<TO\_USER\_CATEGORY\_CODE><To User Category Code></TO\_USER\_CATEGORY\_CODE>

</COMMAND>

# Fields Detail

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TAG | **Fields** | **Example** | Max Length | Optional/  Mandatory | Remarks |
| TYPE | EXTUSERMOVEMENTREQ | **USERMOVEMENTREQ** | A(18) | M | Request Type |
| DATE | Date of Transaction Request | DD/MM/YYYY | DATE | M | Alpha-Numeric, format will be defined in SYSTEM\_PREFRENCES table |
| EXTNWCODE | External Network Code | GN or NG | 10 | M | Code of External Network in which the service is to be used in. |
| EMPCODE | Employee code | Employee code of the operator user. | 123 | A (10) | M |
| LOGINID | Login ID | Login ID of the channel admin user | btchadm | A (20) | M |
| PASSWORD | Password | Password of the channel admin user | 2468 | A (8) |  |
| EXTCODE | User’s External Code | Abc123 | 20 | O (Tag is mandatory) | Unique external code of the channel user defined in PreTUPS. |
| **Note:** Between EMPCODEand LOGINID value of one of them must be present. All of them can also be present in the request. | | | | | |
| EXTREFNUM | External Reference Number or DSM Transaction ID | 1234 | 20 | O (Tag is mandatory) | Unique Reference number in the external system. |
| NETWORKCODE | Network code | BD | 10 | M | Code of Network in which the user moved |
| FROM\_USER\_MSISDN | Mobile no of channel user who need to move | 9810712323 | N(10) | M | Channel user Mobile number who need to move |
| FROM\_USER\_LOGINID | Login Id of channel user who needs to move | saagent | A(20) | M | Login Id of channel user who needs to move |
| FROM\_USER\_EXTCODE | External code of channel user who need to move | 1234321 | A(10) | O | Channel user external code who need to move |
| **Between FROM\_USER\_MSISDN&FROM\_USER\_LOGINIDvalue of one of them must be present. Both of them can also be present in the request.** | | | | | |
| TO\_PARENT\_MSISDN | Mobile no of Parent Under whom the user need to move | 9810712346 | N(10) | M | Parent Mobile number under whom the channel user need to move |
| TO\_PARENT\_LOGINID | Login id of the parent under whom the user need to move | Sadealer | A(20) | M | Login id of the parent under whom the user need to move |
| TO\_PARENT\_EXTCODE | External code of Parent Under whom the user need to move | 223554 | A(10) | O | Parent external code under whom the channel user need to move |
| **Between TO\_USER\_MSISDN&TO\_USER\_LOGINID value of one of them must be present. Both of them can also be present in the request.** | | | | | |
| TO\_USER\_GEOGRAPHICAL\_CODE | Geography code to where the user ( hierarchy) need to move | DEL2 | A(15) | O | Geography code to where the user ( hierarchy) need to move. In case no value is send then default geography would be picked. |
| TO\_USER\_CATEGORY\_CODE | Category code of the channel user who need to move | RET2 | A(10) | M | Category code of the channel user who need to move |

* All tags are mandatory to be present in XML. If value is optional and tag must be present.
* The value for TYPE tag is fixed as mentioned in syntax.

# Request API Business Rules

* Transfer of channel user will be done within same channel domain.
* Transfer of Owner user of the channel domain is not allowed.
* The selection of channel user is based on Mobile number or Login Id
* Channel user will be transferred from one hierarchy to another hierarchy with their existing product balances.
* All other business rules for transfer through API would remain same as of feature available through web.
* If user is a leaf then only the user shall be transferred
* User movement happens in the real time so it is suggested to perform this activity at non-peak hours.

# XML Response Syntax

PreTUPS will send following response (acknowledgement) to External system for channel user movement. The XML response details are mentioned below.

<?xml version="1.0"encoding="UTF-8"?>

<COMMAND>

<TYPE>**USERMOVEMENTRESP**</TYPE>

<TXNSTATUS>*<*Transaction Status*>*</TXNSTATUS>

<DATE><Date and time></DATE>

<EXTREFNUM><Unique Reference number in the external system></EXTREFNUM>

<MESSAGE><Transaction Message></MESSAGE>

<REMARKS>*<*Remarks if any*>*</REMARKS>

</COMMAND>

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TAG** | **Fields** | **Example** | **Max Length** | **Optional/Mandatory** | **Remarks** |
| TYPE | **EXTUSERMOVEMENTRESP** | **USERMOVEMENTRESP** | 18 | M | Request Type. Static value |
| TXNSTATUS | Transaction Status | 200 | 5 | M | Transaction Status i.e.  200- Successful |
| DATE | Date of Transaction Request | DD/MM/YYYY HH:MM:SS | 15 | M | Alpha-Numeric, format will be defined in SYSTEM\_PREFRENCES table |
| EXTREFNUM | External Reference Number | 1234 | 20 | O (Tag is mandatory) | Unique Reference number in the external system. |
| MESSAGE | Message |  |  | O | Gives details about the transaction. |
| REMARKS | Purpose | Remarks/purpose | 100 | M | Alpha numeric |

## 2.10 Voucher Pin expiry extension XML API

This API allows the operator user to modify the expiry pin of a voucher.

# XML Request Syntax

The External System should send the following request forvoucher Pin expiry extension. The request format and details of request are mentioned below.

<?xml version="1.0"?>

<!DOCTYPE COMMAND PUBLIC "-//Ocam//DTD XML Command 1.0//EN" "xml/command.dtd">

<COMMAND>

<TYPE>< type> </TYPE>

<LOGINID><loginID></LOGINID>

<PASSWORD><password></PASSWORD>

<VOUCHER\_TYPE><vouycher type></VOUCHER\_TYPE>

<FROM\_SERIALNO><from serial number></FROM\_SERIALNO>

<TO\_SERIALNO><from serial number></TO\_SERIALNO>

<NEW\_EXPIRY\_DATE><new expiry date></NEW\_EXPIRY\_DATE>

<EXTNWCODE><network code></ EXTNWCODE >

<EXPIRY\_CHANGE\_REASON><change reason></EXPIRY\_CHANGE\_REASON>

</COMMAND>

# Fields Detail

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| TAG | **Fields** | **Example** | Max Length | Optional/  Mandatory | Remarks |
| TYPE | VMSPINEXT | VMSPINEXT | A(18) | M | Request Type |
| LOGINID | Login ID | Login ID of the user | A (20) | M |  |
| PASSWORD | Password | Password of the channel admin user | A (8) | M |  |
| VOUCHER\_TYPE | Voucher type | Test\_phy |  | M | Type of voucher that nedd to be modified |
| FROM\_SERIALNO | FROM SERIAL NO | 9728000000000008 | VOMS\_SERIAL\_NO\_MAX\_LENGTH | M | Start serial number of voucher |
| TO\_SERIALNO | TO SERIAL NO | 9728000000000008 | VOMS\_SERIAL\_NO\_MAX\_LENGTH | M | Last serial number of voucher |
| NEW\_EXPIRY\_DATE | New expiry date of voucher | YYYY/MM/DD | D(10) | M | New changed date of voucher |
| EXTNWCODE | Network Code | GN or NG | 10 | M | Code of External Network in which the service is to be used in. |
| EXPIRY\_CHANGE\_REASON | Expiry date change reason |  | A (100) | O |  |

* All tags are mandatory to be present in XML. If value is optional and tag must be present.
* The value for TYPE tag is fixed as mentioned in syntax.

# Request API Business Rules

* The expiry date being updated can be greater or less than the current expiry date and greater than the current date.
* Expiry date can be modified multiple times
  + Previous expiry date has to be maintained in the system (Old)
  + If there are multiple changes in expiry date, only previous expiry date has to be maintained
* Expiry date of all vouchers can be extended except consumed, stolen, On Hold, Suspend and damaged i.e. Generated, Print Enabled, Warehouse, Enabled, Pre Active vouchers expiry will change.
* System should restrict to change more than ‘n’ vouchers in online and ‘m’ vouchers for offline batch. ‘n’ and ‘m’ will be system configurations. Offline process will run in off-peak hours (define in system configurations)
  + For e.g. if it is configured that maximum 1000 vouchers will be generated online and, if there is a request for 1001 vouchers, it will be done offline
* All other business rules for transfer through API would remain same as of feature available through web.

# XML Response Syntax

PreTUPS will send following response (acknowledgement) to External system for channel user movement. The XML response details are mentioned below.

<?xml version="1.0"encoding="UTF-8"?>

<COMMAND>   
    <TYPE>VMSPINEXT</TYPE>

<DATE>><Date and time></DATE>   
    <TXNSTATUS>*<*Transaction Status ></TXNSTATUS>

<ERRORCODE><error code></ERRORCODE>

<MESSAGE>><Transaction Message></MESSAGE>

</COMMAND>

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TAG** | **Fields** | **Example** | **Max Length** | **Optional/Mandatory** | **Remarks** |
| TYPE | VMSPINEXT | VMSPINEXT | 18 | M | Request Type. Static value |
| TXNSTATUS | Transaction Status | 200 | 5 | M | Transaction Status i.e.  200- Successful |
| DATE | Date of Transaction Request | DD/MM/YYYY HH:MM:SS | 15 | M | Alpha-Numeric, format will be defined in SYSTEM\_PREFRENCES table |
| ERROR CODE | Error code | TYPE | A(30) | O | Value in this tag will be available in case of invalid xml request, tag name will be returned.Error Code |
| MESSAGE | Message |  |  | O | Gives details about the transaction. |
| REMARKS | Purpose | Remarks/purpose | 100 | M | Alpha numeric |

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