Memmcol Webservice Specification Document

3rd party Bill payment Integration

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Overview

The purpose of the web service is to allow 3rd party payment providers to integrate with PHCN database systems to allow payment of PHCN bills for either pre-paid or post-paid customers. The web service uses REST architecture, which makes it easy to integrate with the platform be making HTTP request over SSL connection. Each merchant is identified with a unique IP Address and all requests are expected to come from that IP Address. All web services method support both XML and JSON data format.

Web Method

The service implements the following specifications

- Account Verification
- Payment Notification

Web Methods Overview and Samples

Webservice Endpoint and Merchant Code

There are 2 different web service endpoints on for pilot while the other is for live integration. Merchant code a unique code that identifier the integration partner. All request sent to the web service must include your merchant code.

ResourceURL	
Live	http://197.211.39.204:8080/MEMMCOLWebServices/webresources
Pilot	http://197.211.39.204:8080/MEMMCOLWebServices_Pilot/webresources
Merchant Code	Your unique merchant identifier

Account Verification

The Account Verification method should be called to verify an account number. It would return the customer user details including billing information like minimum purchase for pre-paid customer and last bill total due for post-paid customers.

{ResourceURL}/{merchantcode}/{CustomerIdentifier}?postpaid={IsPostPaid}

Parameters	
Web Method	GET

Resource URL	{WebserviceEndpoint}/Identification
Merchant Code	Your unique merchant identifier
Customer Identifier	The number enter by the customer for identification e.g. 62120104070
Is post paid	This values can either be true or false use true for postpaid customers and false for prepaid customer. if not specified the system assumes the customer is a prepaid customer.

Example Request

http://197.211.39.204:8080/MEMMCOLWebServices_Pilot/webresources/IdentificationV2/101/04040404040

```
<customer>
    <responsecode>00</responsecode>
    <customerName>OKEOLA MUDA</customerName>
    <meterNumber>04040404040</meterNumber>
    <accountNumber>1234567890-01</accountNumber>
    <undertaking>LSEB_UT</undertaking>
    <phoneNumber/>
    <email/>
    <lastTransactionDate>2014-02-26 11:42:33.05</lastTransactionDate>
    <minimumPurchase>0.0</minimumPurchase>
    <customerArrears>0.0</customerArrears>
</customer>
```

Payment Notification

This request should be called to notify our system that a particular customer have made payment. A unique transaction reference must be generated by your system; you would also send the customer identification reference, your merchant id and the amount paid.

{ResourceURL}/{CustomerIdentifier}/{metertype}/{merchantname}/{transreference}/{amount}

Parameters	
Web Method	POST
Resource URL	{WebserviceEndpoint}/Payment
Customer Identifier	The number enter by the customer for identification
Identifier Type	This value can either be meter or accountnumber
Meter Type	Allowed values are postpaid or prepaid for post-paid and pre-paid customers respectively
Merchant Name	A unique merchant identifier
transreference	A unique transaction reference generated by the merchant. Maximum 20 numeric characters
Amount	The amount paid by the customer.

Example Request
ResourceURL:

http://197.211.39.204:8080/MEMMCOLWebServices_Pilot/webresources/PaymentV2/meterno/prepaid/merchantcode/transref/amount

Parameter :

       CustomerIdentifier = '04040404040'
       metertype = prepaid
       merchantCode = 101

       transreference =
       201209847292039038 amount = 2000


```
<transaction>
    <responsecode>00</responsecode>
    <transactionReference>201209847292039038</transactionReference>
    <merchantId> interswitch </merchantId>
    <recieptNumber>21120121091807164</recieptNumber>
    <paidamount>2000.0</paidamount>
```

```
<costOfUnit>1700.0</costOfUnit>
<unit>20</unit>
<vat>300.0</vat> <transactionDate>2012-11-
02T00:00:00+01:00</transactionDate>
<transactionStatus>Success</transactionStatus>
<customer>

    <responsecode>00</responsecode>
    <customerName>ALH.M.B. YUSUF </customerName>
    <meterNumber>440736</meterNumber>
    <accountNumber>31/11/90/0481-01</accountNumber>
    <businessUnit>NASSARAWA BUSINESS
    UNIT</businessUnit> <undertaking>UNDERTAKING CODE
    11</undertaking> <email></email>
    <minimumPurchase>0.0</minimumPurchase>
    <customerArrears>831871.78</customerArrears>
</customer>
</transaction>
```

Response Xml Description	
Responsecode	Response code
Responsedesc	Optional. Description of the code (Only if response code is not '00')
TransactionReference	A unique reference number for that transaction maximum 20 characters
MerchantId	Your merchant reference number
receiptNumber	receiptNumber for the transaction, for prepaid customers ,it would represent the credit token
Paidamount	The amount the customer paid for
Transaction date	Date of transaction
Transaction Status	It can either be "Success","Failedor "Reversed"
Customer xml	The customer details

Error Response

If an exception occurred while processing the request, and error response in this format would be returned

```
<transaction>
    < Responsecode >196</ Responsecode >
    < Responsedesc >Duplicate Key please try again</ Responsedesc
> </transaction>
```

Response Xml Description	
Responsecode	Unique error code reference

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Responsedesc	Description of the error message