

Talk Home Payment API

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Document Management

|  |  |
| --- | --- |
| Document Title | Talk Home Payment API |
| Document Type | Talk Home Payment API Interface Specification |
| Revision | 1.0 |
| Date | 07/08/2017 |
| Author | Puratchimani |

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Revision | Author | Revision Description | Date |
| 1.0 | Puratchimani | Talk Home Payment API – Initial Document. | 07/08/2017 |
|  |  |  |  |

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| --- | --- |
|  | Nowtel email signature v1-07  Nowtel Web API Document  Authorization Memorandum |

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NAME DATE

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# **INTRODUCTION**

## **1.1 Overview**

This document describes how the TalkHome Website interacts with Talk Home Payment API for Mi-Pay Payment Solution.

## **1.2 Purpose**

This document contains information on the parameters and response information for all the supported API.

## **1.2 Acronyms and Abbreviations**

|  |  |
| --- | --- |
| API | Application Programming Interface |
| MSISDN | Mobile Subscriber Integrated Services Digital Network |
| THM | Talk Home Mobile |
| THA | Talk Home App |
| THCC | Talk Home Calling Card |
| M / O / C | Mandatory / Optional / Conditional |
| HTTP | Hyper Text Transfer Protocol |
| JSON | Java Script Object Notation |

# **API SCOPE**

The current scope of the Payment API is to provide the ability to implement the payment with new website for Talk Home, which includes the following products: THM, THA and THCC.

# **API TYPE**

The API uses the following guidelines shown below:

* Use of URI’s to uniquely identify resources (i.e. objects/data records).
* Use of the following HTTP methods: GET & POST to manipulate the resources on the server.
* GET methods are used for retrieving resources, this will not alter the data in any way.
* POST methods are used for creating/changing the resources.

## **3.1 Supported Code**

The Talk Home Payment API supports JSON only for both requests and responses. Below is an example of a subscriber address details object encoded as JSON.

{

"address1": "50 Shad Thames",

"address2": "Floor 1",

"address3": "London",

"address4": "London"

}

# **4.0 MAKING REQUESTS**

# **5.0 STATUS CODES**

The API will use the standard HTTP response status codes. By default, successful requests will return a resource object(s) in the response body.

## **5.1 Common Status Codes**

|  |  |  |
| --- | --- | --- |
| HTTP CODE | MESSAGE | DESCRIPTION |
| 200 | Ok | The request succeeded. |
| 400 | Bad Request | The request could not be understood due to invalid request. |
| 401 | Unauthorized | Either the API authentication credentials haven't been supplied or they're not valid. |
| 404 | Not Found | The server has not found anything matching the Request-URI. |
| 405 | Method Not Allowed | A request method is not supported for the requested resource; for example, a GET request on a form which requires data to be presented via POST. |
| 500 | Internal Server Error | An exception was raised internally and the request could not be processed. |

## **5.2 Unsuccessful Requests**

For unsuccessful requests, the response body will contain an array of Error objects.

**Elements of the Error Object:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data Type** | **Required Field** | **Description** |
| Status | String | Yes | Http Status code. |
| message | String | Yes | Details of the Problem. |
| errorCode | String | Yes | The error code. |

## **5.3 User Defined Error Codes and Messages**

|  |  |
| --- | --- |
| **ERROR CODE** | **MESSAGE** |
| 888 | Sorry! No record found. |
| 999 | Failure! Internal error occurred while processing your request. |
| 998 | Invalid request! Please give valid input. |

# **6.0 RESOURCES**

Parameters are passed and returned as strings in most cases, any conversion then performed by the code receiving those parameters.

## **6.1 Payment Start**

This URI is used to submit the payment request for unregister user and this applicable for all three domains TH / THM / NOW.

### **6.1.1 Request**

This URI accepts the following parameters.

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter name** | **Type** | **M/O/C** | **Comment** |
| Amount | String | M | The amount of the authorisation (order)  request in lowest denomination of currency |
| Currency | String | M | ISO 3 numeric code for currency |
| SuccessURL | String | M | URL to direct the user to when transaction completes in success |
| FailureURL | String | M | URL to direct the user to when transaction completes with failure |
| Description | String | O | Optional description of the transaction and Max 30 characters |
| Salutation | String | O | Honorific used as part of a name. Maximum length 5 alphabetic characters. For example Mr, Mrs, Miss etc |
| FirstName | String | O | Max 30 characters |
| LastName | String | O | Max 30 characters |
| AddressLine1 | String | O | Max 30 characters |
| AddressLine2 | String | O | Max 30 characters |
| City | String | O | Max 20 characters |
| CountyOrProvince | String | O | Max 20 characters |
| Country | String | O | ISO 3166-1 Alpha-3 Code |
| PostalCode | String | O | Max 9 alpha numerics |
| HomeTelNumber | String | O | Max 15 digits |
| EmailAddress | String | O | Email address format up to 40 characters |
| DateTimeLocal | String | O | DD MMM YYYY HH:mm:SS |
| SubID | String | M | An ID code that identifies the particular  Merchant that is using this service |
| Locale | String | O | Language/Country of the user if known |
| UniqueID | String | O | The customer unique ID used to identify in the Operator system. |
| IDType | String | O | The type of unique ID to use. |
| MSISDN | String | O | The MSISDN of the phone being topped up where the request relates to a topup. |

**Supported HTTP Methods and URI**

POST https://payment.lab.talkhome.co.uk/{domain}/payment/start

**Header**

User-Agent: Fiddler

Host: payment.lab.talkhome.co.uk

Content-Type: application/json

Content-Length: 691

**Body**

{

"Amount": "1000",

"Currency": "826",

"Description": "Test By Nowtel",

"Salutation": "Mrs",

"SuccessURL":"http://www.talkhomeapp.com/",

"FailureURL":"https://www.google.co.uk/",

"FirstName": "NowtelUser",

"LastName": "TalkHome",

"AddressLine1": "50 Shad Thames",

"AddressLine2": "London",

"City": "London",

"CountyOrProvince": "London",

"Country": "826",

"PostalCode": "SE1 5TD",

"HomeTelNumber": "786868678",

"EmailAddress": "test@testing.com",

"DateTimeLocal": "03/08/2017 13:02:00",

"SubID": "NWTTH\_UNREG",

"Locale": "",

"UniqueID": "",

"IDType": "",

"MSISDN": "447965941421"

}

### **6.1.2 Process**

The code validates the parameters such that mandatory values are present and properly formed. If the validation fails then an appropriate value is returned in the errorCode. If the validation is success then code will generate unique ClientReference and send to Mi-Pay for Payment Start and Mi-Pay will return unique token for this order with PaymentURL.

### **6.1.3 Response**

{

"status": 200,

"message": "Success",

"payload": {

"token": "BECBA226-D286-4377-9446-DC0EB095C0F1",

"paymentURL": "https://talkhome.cte.mipaytest.co.uk/Talk-Home/Account/LandingPage?OrderToken=BECBA226-D286-4377-9446-DC0EB095C0F1&SubID=NWTTH\_UNREG&MerchantID=1330000003&ClientReference=00A274BA712A49018ECDC916828C39F5",

"clientReference": "00A274BA712A49018ECDC916828C39F5",

"errorFields": "",

"responseCode": "0"

},

"errorCode": 0

}

## **6.2 Payment Retrieve**

This URI used to find out the result of a transaction. Whilst you may also find out the result when the customer is redirected back to a success or failure URL, it is recommended that you always call this URI to determine the transition result, since the customer may close their browser during the redirection process. If this happens, the you will not find out the transaction result.

### **6.1.1 Request**

This URI accepts the following parameters.

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter name** | **Type** | **M/O/C** | **Comment** |
| Token | String | C | Unique Order reference provided by Mi-Pay in response to PaymentStart |
| ClientReference | String | C | Only use if the Token is not known |
| MerchantID | String | C | Internal Mi-Pay use only |
| SubID | String | M | Same value as used for the original call to PaymentStart method |
| NoStateChange | String | O | Merchants should omit this parameter |

**Supported HTTP Methods and URI**

POST https://payment.lab.talkhome.co.uk/th/payment/retrieve

**Header**

User-Agent: Fiddler

Host: payment.lab.talkhome.co.uk

Content-Type: application/json

**Body**

{

"Token": "BECBA226-D286-4377-9446-DC0EB095C0F1",

"ClientReference":"00A274BA712A49018ECDC916828C39F5",

"SubID": "NWTTH\_UNREG"

}

### **6.1.2 Process**

The code validates the parameters such that mandatory values are present and properly formed and the ClientReference matches a configurable regular expression. If the validation fails then an appropriate value is returned in the errorCode.

### **6.1.3 Response**

The following are the return values.

|  |  |  |
| --- | --- | --- |
| **Parameter name** | **Type** | **Comment** |
| ResponseCode | String | A numeric value indicating the outcome - 0 = success, see section 4 below for a full list of codes |
| ErrorFields | String | A useful debug field indicating more detail (when available) if a call has failed |
| Token | String | Mi-Pay generated unique reference |
| ClientRef | String | Reference provided by Merchant |
| MerchantID | String | Internal Mi-Pay Merchant ID |
| AuthAmount | String | Amount of original payment |
| Currency | String |  |
| CaptureAmount | String | Amount in Capture request (after PaymentComplete called) |
| State | String | Current state of Order (see the list in section 2.6 above) |
| LastUpdated | String |  |
| OrderResult | String | See Appendix for possible values |
| Description | String | These values will be the same as passed in the PaymentStart method (they do not reflect any changes made by the user when they enter data on the Mi-Pay pages) |
| Salutation | String | These values will be the same as passed in the PaymentStart URI (they don’t reflect any changes made by the user whey enter data on the Mi-Pay pages) |
| FirstName | String |
| LastName | String |
| AddressLine1 | String |
| AddressLine2 | String |
| City | String |
| CountyOrProvince | String |
| Country | String |
| PostalCode | String |
| HomeTelNumber | String |
| EmailAddress | String |
| DateTimeLocal | String |
| OrderID | String | The Order ID of the transaction |
| ClientData | String | An XML representation of the client data |
| FinalAmount | String | The final charged amount for the transaction |
| State | String | The status code of the transaction |
| SuccessURL | String | An echo of the URL sent by CLIENT |
| FailureURL | String | An echo of the URL sent by CLIENT |
| Locale | String | Language/Country of the user if known. |
| MSISDN | String | Echo of value passed to PaymentStartForKnownUser method |
| UniqueIDValue | String | Echo of value passed to PaymentStartForKnownUser method |

**Response**

{

"status": 200,

"message": "Success",

"payload": {

"uniqueIDValue": "",

"uniqueIDType": "",

"userID": "",

"registeredMerchantID": "1330000002",

"responseCode": "0",

"errorFields": "",

"token": "BECBA226-D286-4377-9446-DC0EB095C0F1",

"clientRef": "00A274BA712A49018ECDC916828C39F5",

"merchantID": "1330000003",

"authAmount": 1000,

"currency": "826",

"captureAmount": "",

"lastUpdated": "07/08/2017 09:32:03",

"orderResult": "00",

"description": "Test By Nowtel",

"salutation": "Mr",

"firstName": "NowtelUser",

"lastName": "TalkHome",

"addressLine1": "50 Shad Thames",

"addressLine2": "London",

"city": "London",

"countyOrProvince": "London",

"country": "826",

"postalCode": "SE1 5TD",

"homeTelNumber": "786868678",

"msisdn": "447965941421",

"emailAddress": "test@testing.com",

"dateTimeLocal": "",

"clientData": "<?xml version=\"1.0\" encoding=\"UTF-8\"?><PostXml><Fields><EmailAddress>test@testing.com</EmailAddress><FailureURL>https://www.google.co.uk/</FailureURL><LastName>TalkHome</LastName><AddressLine2>London</AddressLine2><Description>Test By Nowtel</Description><RequestIPAddress>217.33.40.242</RequestIPAddress><Salutation>Mr</Salutation><Country>826</Country><AddressLine1>50 Shad Thames</AddressLine1><PostalCode>SE1 5TD</PostalCode><CountyOrProvince>London</CountyOrProvince><HomeTelNumber>786868678</HomeTelNumber><FirstName>NowtelUser</FirstName><SuccessURL>http://www.talkhomeapp.com/</SuccessURL><City>London</City><ClientReference>00A274BA712A49018ECDC916828C39F5</ClientReference><MSISDN>447965941421</MSISDN></Fields></PostXml>",

"finalAmount": 0,

"state": 50,

"originalSwitchKey": "BECBA226D28643779446DC0EB095C0F1",

"agentUserName": "",

"successURL": "http://www.talkhomeapp.com/",

"failureURL": "https://www.google.co.uk/",

"locale": ""

},

"errorCode": 0

}

## **6.3 Payment Complete**

Must call this URI to complete a payment transaction in all cases. This tells Mi-Pay to complete the payment with the bank. If this URI is not called successful, the transaction will not be completed, and will automatically be cancelled. The customer will not be charged, and the client will not receive settlement for the transaction.

### **6.1.1 Request**

This will accept the following parameters.

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter name** | **Type** | **M/O/C** | **Comment** |
| Token | String | M | Unique Order reference provided by Mi-Pay in response to PaymentStartForKnownUser |
| ClientReference | String | C | Optional unique reference for order provided by Merchant in PaymentStartForKnownUser |
| CaptureAmount | String | O | If the final amount is different from the amount originally authorised. Usually  this parameter should be left blank. |
| SubID | String | M | Same value as used for the original call to PaymentStart method |

**Supported HTTP Methods and URI**

POST https://payment.lab.talkhome.co.uk/th/payment/complete

**Header**

User-Agent: Fiddler

Host: payment.lab.talkhome.co.uk

Content-Type: application/json

**Body**

{

"Token": "BECBA226-D286-4377-9446-DC0EB095C0F1",

"ClientReference":"00A274BA712A49018ECDC916828C39F5",

"SubID": "NWTTH\_UNREG"

}

### **6.1.2 Process**

The code validates the parameters such that mandatory values are present and properly formed and the ClientReference matches a configurable regular expression. If the validation fails then an appropriate value is returned in the errorCode.

### **6.1.3 Response**

{

"status": 200,

"message": "Success",

"payload": {

"clientReference": "00A274BA712A49018ECDC916828C39F5",

"errorFields": "",

"responseCode": "0"

},

"errorCode": 0

}

## **6.4 Payment Cancel**

If the client is unable to fulfil the order, the client should call this URI to cancel the payment. This will, in most cases, release the reserved funds on the customer’s bank account (althought some banks will delay the cancellation by a few days).

If the client does not make this call, and does not make a PaymentComplete call either, the default action is that the transaction will be cancelled anyway. However, it is best practice to always make a call, and will potentially release funds earlier on a customer’s bank account. Thi

### **6.1.1 Request**

This will accept the following parameters.

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter name** | **Type** | **M/O/C** | **Comment** |
| Token | String | M | Unique Order reference provided by Mi-Pay in response to PaymentStartForKnownUser |
| ClientReference | String | C | Optional unique reference for order provided by Merchant in PaymentStartForKnownUser |
| CaptureAmount | String | O | If the final amount is different from the amount originally authorised. Usually  this parameter should be left blank. |
| SubID | String | M | Same value as used for the original call to PaymentStart method |

**Supported HTTP Methods and URI**

POST https://payment.lab.talkhome.co.uk/th/payment/cancel

**Header**

User-Agent: Fiddler

Host: payment.lab.talkhome.co.uk

Content-Type: application/json

**Body**

{

"Token": "BECBA226-D286-4377-9446-DC0EB095C0F1",

"ClientReference":"00A274BA712A49018ECDC916828C39F5",

"SubID": "NWTTH\_UNREG"

}

### **6.1.2 Process**

The code will validate the parameters such that mandatory values are present and properly formed; and the ClientReference matches a configurable regular expression.

Mi-Pay will then cancel the payment. The method should then respond back to the calling code.

### **6.1.3 Response**

{

"status": 200,

"message": "Success",

"payload": {

"clientReference": "00A274BA712A49018ECDC916828C39F5",

"errorFields": "State is invalid",

"responseCode": "300002"

},

"errorCode": 0

}