



Hubtel Sales API

DIRECT RECEIVE MONEY

API Reference



API Change Log

Changes between document issues are cumulative. The latest document issue contains all the changes made in earlier issues.

v1.5.8 (2024-02-13)

Hubtel Contacts updated

v1.5.7 (2024-01-15)

Receive money flow updated

v1.5.6 (2024-01-04)

Links updated.

v1.5.5 (2023-08-14)

This is the previous official issue.
Notice to businesses added.

v1.5.4 (2023-08-11)

Notice to businesses added

v1.5.3 (2023-07-21)

Minor updates in request and response parameters.

v1.5.2 (2023-01-22)

CustomerName mandatory.



v1.5.1 (2023-01-22)

Failed Callback ResponseCode updated.

v1.5 (2022-08-25)

This issue includes new transaction status API endpoint.

v1.2 (2021-08-23)

This is the previous official issue.

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1.0 Overview of the Hubtel Sales API

The **Hubtel Sales API** allows you to sell goods and services online, instore and on mobile. With a single integration, you can easily:

1. Accept mobile money payments on your application, sell services in-store, online and on mobile as well as process all your sales on your Hubtel account.
2. You can also send money to your customers.

This API can be used to provide a wide array of services including: processing e-commerce payments, mobile banking, bulk payments and more. You can also easily accept payments for goods and services into your account.

The following provides an overview of the **Hubtel Sales REST Receive Money API** endpoints for interacting programmatically within your application.

NOTE: Businesses are required to implement a security feature for this API in order to prevent individuals from receiving unsolicited prompts.

This security feature may be:

1. Only registered users can make payments and before payment initiation, they cannot edit their numbers.
OR
2. Send OTP to unregistered users to confirm the numbers before proceeding to initiate payment.

2.0 Available Channels

The following are the available channels through which a merchant can **receive mobile money** into a Hubtel Merchant Account.

<u>Mobile Money Provider</u>	<u>Channel Name</u>
MTN Ghana	mtn-gh
Vodafone Ghana	vodafone-gh
AirtelTigo Ghana	tigo-gh

3.0 Getting Started

First you need to hold a Hubtel Merchant Account to be able to use the Hubtel Sales API. If you already have a Hubtel account, then skip to **Step 2**.

Step 1: Create a Hubtel Account

Step 2: Have the Account Verified and approved.

3.1 Authentication

For this API, there are two mandatory methods of authentication:

1. API Keys

You need to authenticate every API request you make to any Hubtel Sales API using **Basic Auth**. Authenticate by encoding your username (**API ID**) and password (**API Key**) to **Base64 HTTP Basic Authorization** given in the formula below.

Authorization: Basic {base64_encode(APIID:APIKey)}

A Base64 encoding of your API keys should have a similar Authorization header appear like this: **Basic azhlcW2sb3U6bWdhtHdgYW8=**. Try sample basic auth encoding [here](#).

Login to your Hubtel account [here](#) to generate your API ID and API Key(s).

Please contact your Retail Systems Engineer to add scopes to your API Keys.

2. Business IP Whitelisting

You must share your public IP address with your Retail System Engineer for whitelisting.

All API Endpoints are **live** and only requests from **whitelisted** IP(s) can **reach** these endpoints shared in this reference.

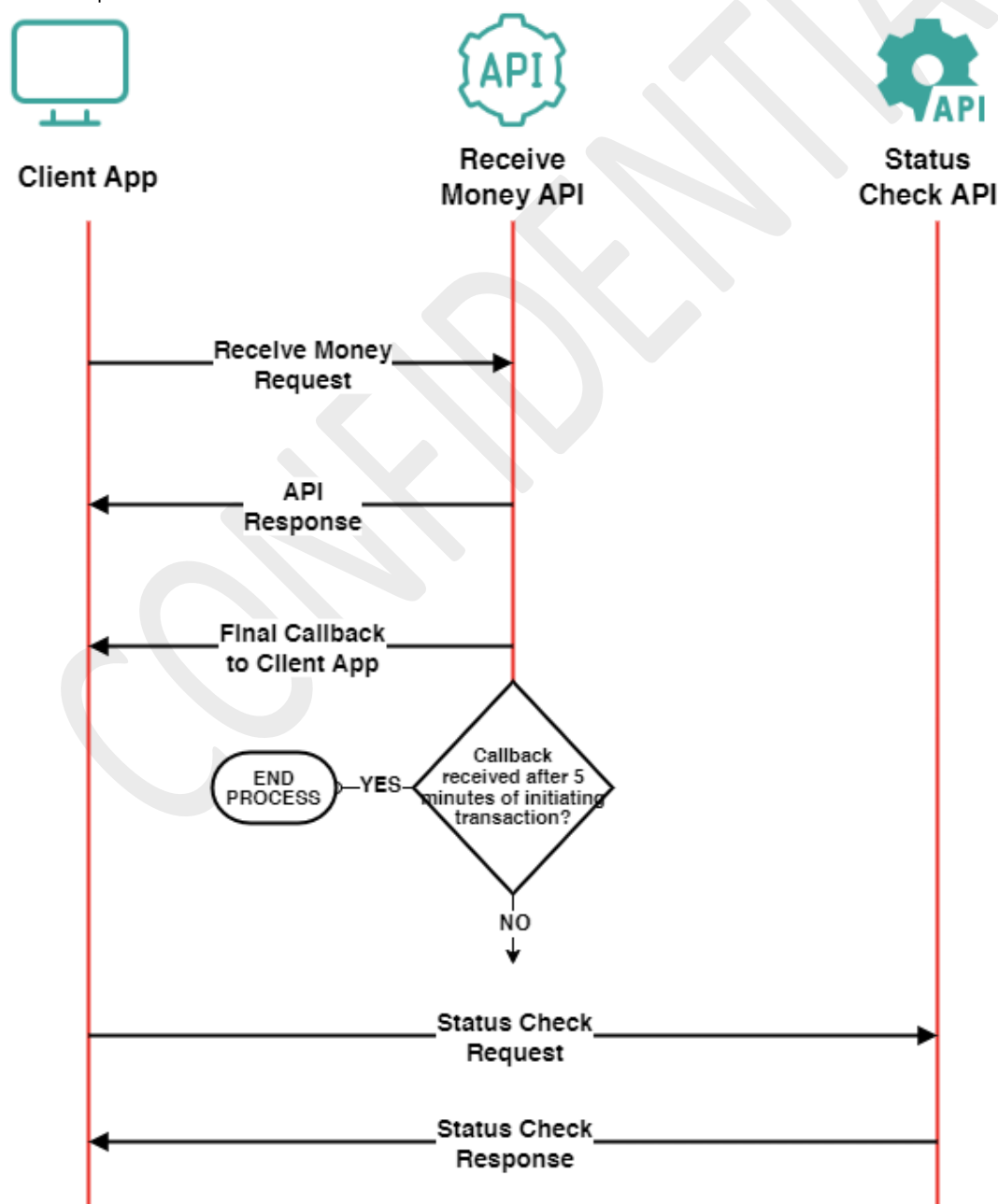
4.0 Understanding the Service Flow

The **Hubtel Sales API** allows you to integrate multiple functionalities into your applications.

This document focuses on

- **Direct Receive Money API:** REST API to receive money directly into your Hubtel Merchant Account from a Mobile Money Wallet for all available networks.
- **Transaction Status Check API:** REST API to check for the status of any debit transaction initiated after **five (5) or more minutes** of the debit transaction's **completion**. It is **mandatory** to implement the Transaction Status Check API **only** for transactions that you do not receive a callback from Hubtel.

The entire process is asynchronous. The figure below demonstrates the service flow using these two endpoints:



The table below describes the steps involved in Sending Money using the API:

Step	Description
1	Client App makes a Receive Money request to Hubtel.
2	Hubtel performs authentication on the request and sends a response to Client App accordingly.
3	A final callback is sent to Client App via the PrimaryCallbackURL provided in the request. (See sample callback here)
4	In instances where a merchant does not receive the final status of the transaction after five (5) minutes from Hubtel, it is mandatory to do a status check using the Status Check API to determine the final status of the transaction. (Refer here)

5.0 API Reference

5.1 Direct Receive Money API

Direct Receive Money allows you to accept direct mobile money payments into your Hubtel Merchant Account. Note that the flow for charging mobile subscribers differs across the various Telco networks.

To initiate a Receive Money transaction, make a HTTP **POST** request to the below URL with the required parameters. It's also **mandatory** to pass your **Hubtel POS Sales ID** for Receive Money requests in the endpoint. Find your **POS Sales ID** [here](#) after logging into your Hubtel Account.

API Endpoint	https://rmp.hubtel.com/merchantaccount/merchants/{Hubtel_POS_Sales_ID}/receive/mobilemoney
Request Type	POST
Content Type	JSON

Request Parameters:

Parameter	Type	Requirement	Description
CustomerName	String	Mandatory	The name on the customer's mobile money wallet.

CustomerMsisdn	String	Mandatory	The customer's mobile money number. The customer's mobile money number. This should be in the international format. E.g.: "233249111411"
CustomerEmail	String	Optional	Email of customer.
Channel	String	Mandatory	The mobile money channel provider. Available channels are: mtn-gh vodafone-gh tigo-gh
Amount	String	Mandatory	Amount of money to be debit during this transaction. NB: Only 2 decimal places is allowed E.g.: 0.50
PrimaryCallbackURL	String	Mandatory	URL used to receive callback payload of Receive Money transactions from Hubtel.
Description	String	Mandatory	A brief description of the transaction.
ClientReference	String	Mandatory	The reference provided by the API user and must be unique for every transaction and preferably be alphanumeric characters. Maximum length is 36 characters.

NB: Kindly note that a clientReference must never be duplicated for any transaction.

5.2 Sample Receive Money HTTP Request

```
POST /merchantaccount/merchants/{Hubtel_POS_Sales_ID}/receive/mobilemoney HTTP/1.1
Host: rmp.hubtel.com
Accept: application/json
Content-Type: application/json
Authorization: Basic endje0BiZHza250fT3=
Cache-Control: no-cache
{
  "CustomerName": "Joe Doe",
  "CustomerMsisdn": "233200010000",
  "CustomerEmail": "recipient@gmail.com",
  "Channel": "vodafone-gh",
  "Amount": 0.8,
  "PrimaryCallbackUrl": "https://webhook.site/b503d1a9-e726-f315254a6ede",
  "Description": "Union Dues",
  "ClientReference": "3jL2K1Uy3vt21"
}
```

Response Parameters:

Parameter	Type	Description
Message	String	The description of response received from the Receive Money API that is related to the ResponseCode.
ResponseCode	String	The unique response code on the status of the transaction.
Data	Object	An object containing the required data response from the Receive Money API .
Amount	Number	The transaction amount.
Charges	Number	The charge/fee for the transaction.
AmountAfterCharges	Number	The transaction amount after charges/fees deduction.
AmountCharged	Number	The actual amount that is charged from the customer's mobile money wallet.
Description	String	The description initially provided by API user in the request payload.
ClientReference	String	The reference ID that is initially provided by the client/API user in the request payload. (from merchant)
TransactionId	String	The unique ID used to identify a Hubtel transaction. (from Hubtel)
ExternalTransactionId	String	The transaction reference from the mobile money provider (from Telco) .
OrderId	String	The unique ID used to identify a transaction order.
DeliveryFee	Number	The delivery fee of the transaction is normally zero (0.0).

5.3 Sample Server Response

```
{
  "Message": "Transaction pending. Expect callback request for final state",
  "ResponseCode": "0001",
  "Data": {
    "TransactionId": "09f84e20a283942e807128e8c21d08d6",
    "Description": "Union Dues",
    "ClientReference": "3jL2K1Uy3vt21",
```

```

    "Amount": 0.8,
    "Charges": 0.05,
    "AmountAfterCharges": 0.8,
    "AmountCharged": 0.85,
    "DeliveryFee": 0.0
  }
}

```

6.0 Receive Money Callback

The **Hubtel Sales Receive Money API** mandatory sends a payload to callbackURL provided in each request. The callback payload determines **final status** of a pending transaction response i.e.; transaction with **0001** ResponseCode. The callback URL you specified in the Receive Money request should be implemented to listen for a HTTP **POST** payload from Hubtel.

Receive Money request requires **approval** from the customer for money to move from your customer's mobile money into your Hubtel Account. As a result, receive money has an **asynchronous flow** on all networks. This also means that the final status of a transaction cannot be determined immediately after the request. It may take some time (usually less than 30 seconds). Hence, it is **paramount** and **required** to implement a HTTP callback on your server to be able **to receive final status** of each transaction.

We recommend using services like [RequestBin](#) or [Webhook](#) to test your callback. These services allow you to define temporary dummy endpoints which will show you the requests and all the data you are receiving from Hubtel. Refer Response Parameters [here](#).

6.1 Sample Successful Receive Money Callback

```

{
  "ResponseCode": "0000",
  "Message": "Success",
  "Data": {
    "Amount": 0.8,
    "Charges": 0.05,
    "AmountAfterCharges": 0.8,
    "Description": "The Vodafone Cash payment has been approved and processed successfully",
    "ClientReference": "3jL2KlUy3vt21",
    "TransactionId": "09f84e20a283942e807128e8c21d08d6",
    "ExternalTransactionId": "2116938399",
    "AmountCharged": 0.85,
    "OrderId": "09f84e20a283942e807128e8c21d08d6"
  }
}

```

6.2 Sample Failed Receive Money Callback

```
{
  "ResponseCode": "2001",
  "Message": "Failed",
  "Data": {
    "Amount": 0.8,
    "Charges": 0.05,
    "AmountAfterCharges": 0.8,
    "Description": "The Vodafone Cash payment has been approved and processed successfully ",
    "ClientReference": "3jL2KlUy3vt21",
    "TransactionId": "09f84e20a283942e807128e8c21d08d6",
    "ExternalTransactionId": "2116938399",
    "AmountCharged": 0.85,
    "OrderId": "09f84e20a283942e807128e8c21d08d6"
  }
}
```

Refer Response Parameters [here](#)

7.0 Transaction Status Check API

It is **mandatory** to implement the **Transaction Status Check API** as it allows merchants to check for the status of receive money transaction **in rare instances** where a merchant does not receive the final status of the transaction **after five (5) minutes** from Hubtel.

To check a transaction status, make a HTTP **GET** request to the below URL **with either one or more unique transaction identifiers** as parameters.

It's also **mandatory** to pass your **Hubtel POS Sales ID** for Status Check requests in the endpoint. Find your **POS Sales ID** [here](#) after logging into your Hubtel Account.

API Endpoint	https://api-txnstatus.hubtel.com/transactions/{Hubtel_POS_Sales_ID}/status
Request Type	GET
Content Type	JSON

Request Parameters:

Parameter	Type	Requirement	Description
clientReference	String	Mandatory (preferred)	The clientReference of the transaction specified in the request payload.

hubtelTransactionId	String	Optional	TransactionId from Hubtel after successful receive money request.
networkTransactionId	String	Optional	The transaction reference from the mobile money provider.

Although either one of the unique transaction identifiers above could be passed as parameters, **clientReference** is recommended to be used often.

7.1 Sample Transaction Status Request

```
GET /transactions/{Hubtel_POS_Sales_ID}/status?clientReference=3jL2KlUy3vt21 HTTP/1.1
Host: api-txnstatus.hubtel.com
Accept: application/json
Content-Type: application/json
Authorization: Basic endje0BiZHza250f3=
Cache-Control: no-cache
```

7.2 Sample Transaction Status Response

```
{
  "message": "Successful",
  "responseCode": "0000",
  "data": {
    "date": "2022-08-09T09:52:06",
    "status": "Paid",
    "transactionId": "09f84e20a283942e807128e8c21d08d6",
    "externalTransactionId": "2116938399",
    "paymentMethod": "mobilemoney",
    "clientReference": "3jL2KlUy3vt21",
    "currencyCode": null,
    "amount": 0.85,
    "charges": 0.05,
    "amountAfterCharges": 0.8,
    "isFulfilled": null
  }
}
```

Refer Response Parameters [here](#)

8.0 API Response Codes

The Hubtel Recurring Payments API uses standard HTTP error reporting. Successful requests return HTTP status codes in the 2xx. Failed requests return status codes in 4xx and 5xx.

Response Codes are included in the JSON response body, which contains information about the error or status:

<u>ResponseCode</u>	<u>Description</u>	<u>Required Action</u>
0000	The transaction has been processed successfully	None
0001	Request has been accepted. A callback will be sent on final state.	None
0005	There was an HTTP failure/exception when reaching the payment partner.	The transaction state is not known. Please contact support@hubtel.com to confirm the status of this transaction
2001	Transaction failed due to an error with the Payment Processor. Please review your request or retry in a few minutes.	<ul style="list-style-type: none">• Customer either entered no or invalid PIN• Mobile network not able to parse your request.• USSD session timeout.• Having strange characters (&*!%@) in your description.
2100	The request failed as the customer's phone is switched off.	None
2101	The transaction failed as the PIN entered by the Airtel Money customer is invalid.	None
2102	The Airtel Money user has insufficient funds in wallet to make this payment.	None
2103	The mobile number specified is not registered on Airtel Money	None
2050	The MTN Mobile Money user has insufficient funds in wallet to make this payment.	Customer has to top up mobile money wallet with funds more than the amount being charged.
2051	The mobile number provided is not registered on MTN Mobile Money	Ensure that the mobile number is registered on the MTN channel.
2152	The mobile number specified is not registered on Tigo cash.	None

2153	The amount specified is more than the maximum allowed by Tigo Cash	None
2154	The amount specified is more than the maximum daily limit allowed by Tigo Cash.	None
2200	The recipient specified is not registered on Vodafone Cash.	None
2201	The customer specified is not registered on Vodafone Cash.	None
3008	Merchant account has not been registered on this channel.	The payment channel has been disabled on your account. Ensure you have uploaded your business registration documents for your account to be duly verified. Contact support@hubtel.com with your Merchant Account Number if you are receiving this error even though you have provided the necessary documents.
3009	Merchant account is not available.	Check to confirm if your merchant account number is valid
3012	You have insufficient funds in your Merchant account.	Amount is less than funds in merchant account
3013	Amount specified is less than the fees.	The amount you're charging is less than the fee. See the fees charged on a transaction here.
3022	Merchant account has been registered on this channel, but the channel has not been activated.	None
3024	Specified Channel Provider is invalid	The selected payment channel is invalid
4000	Validation Errors	Validation Errors. Something is not quite right with this request. Please check and try again.
4010	Validation Errors	A required request parameter might have been left empty, invalid or omitted.
4075	Insufficient prepaid balance	You don't have enough funds in your prepaid balance to send money to your customers. You can top-up your prepaid balance by transferring funds from your available balance or bank deposit.
4080	Insufficient available balance.	None

4101	Authorization for request is denied.	Ensure that you're providing the correct Basic Auth key for the Authorization header. Also ensure you're passing your POS Sales number in the endpoint
4103	Permission denied	You are not allowed to perform this transaction. Kindly ensure your API keys are accurate.
4105	Authenticated Hubtel organization is not owner of specified account number.	There's a mismatch of the Merchant Account number and the Basic Authorization key. Ensure your API keys are from the same Unity account as the Merchant Account
4505	Transaction has already been refunded.	None

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