



Version 1.1

NABRoll Payment Gateway

This is a technical API Specification document.

NABRoll

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Introduction

This document is a technical and integration document for NABRoll payment gateway. It provides guidance and template material which is intended to assist the relevant stakeholders to easily integrate to the payment interface for collection and processing of transactions using various payments channel.

Initiate Transaction

This operation generates the NABRoll Transaction Reference (NTR) and payment code to be used to complete or authorize a payment. Every reference generated is unique. The assumptions is you have already saved the provided information in your database before initiating the transaction, as same information will be required for verification in other processes.

URL	<i>https://demo.nabroll.com.ng/api/v1/transactions/initiate</i>
VERB	Post
CONTENT-TYPE	application/json
HASH GENERATION	hashString = payerRefNo + amount + publicApiKey; Hash = <i>hash_hmac('sha256', hashString, secretApiKey)</i> ;
REQUEST PAYLOAD	<pre>{ "ApiKey":"PK_TEST_EWRdfksadfierw", "Hash":"dWedkseiwekldsfjndsfafd2932ks8e2", "Amount ":"200.00", "PayerRefNo ":"0000001", "PayerName ":"Sani Bello", "Email":"sani@example.com", "Mobile":"08123456789", "Description":"Application Fees", "ResponseUrl ":"https://example.com/nabrollResponsePage/", "MetaData ":"Applicant ID: 233", "FeeBearer":"Customer" }</pre>
RESPONSE PAYLOAD	<pre>{ "status":"SUCCESSFUL", "code":"00", "msg":"Payment Successful", "TransactionRef":"862698572355", }</pre>

	<pre>"PaymentCode":"adet2312938dx", "PaymentUrl": https://demo.nabroll.com.ng/web/checkout/adet2312938dx", "ShortPaymentUrl":null }</pre>								
NOTES	<table border="1"> <thead> <tr> <th>Field</th><th>Remark</th></tr> </thead> <tbody> <tr> <td>ResponseUrl</td><td>Is optional, but needed when you need customer to seamlessly continue with service upon confirmation of payment. See Web Checkout Section on how to configure this.</td></tr> <tr> <td>MetaData</td><td>Optional</td></tr> <tr> <td>FeeBearer</td><td>Optional. Default to Customer. Available options are Customer or Merchant</td></tr> </tbody> </table>	Field	Remark	ResponseUrl	Is optional, but needed when you need customer to seamlessly continue with service upon confirmation of payment. See Web Checkout Section on how to configure this.	MetaData	Optional	FeeBearer	Optional. Default to Customer. Available options are Customer or Merchant
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MetaData	Optional								
FeeBearer	Optional. Default to Customer. Available options are Customer or Merchant								

Re-Generate Transaction Reference

URL	https://demo.nabroll.com.ng/api/v1/transactions/inittransactionref
VERB	Post
CONTENT-TYPE	application/json
HASH GENERATION	<p>hashString = payerRefNo + amount + publicApiKey;</p> <p>Hash = <i>hash_hmac</i>('sha256', hashString, secretApiKey);</p>
REQUEST PAYLOAD	<pre>{ "ApiKey":"PK_TEST_EWRdfksadfierw", "Hash":"dWedkseiwekldsfjndsfafd2932ks8e2", "Amount ":"200.00", "PayerRefNo ":"0000001", "PayerName ":"Sani Bello", "Email":"sani@example.com", "Mobile":"08123456789", "Description":"Application Fees", "ResponseUrl ":"https://example.com/nabrollResponsePage/", "MetaData ":"Applicant ID: 233", "FeeBearer":"Customer" }</pre>

RESPONSE PAYLOAD	<pre>{ "status": "SUCCESSFUL", "code": "00", "msg": "Payment Successful", "TransactionRef": "862698572355", "PaymentCode": "adet2312938dx", "PaymentUrl": " https://demo.nabroll.com.ng/web/checkout/adet2312938dx", "ShortPaymentUrl": null }</pre>								
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FeeBearer	Optional. Default to Customer. Available options are Customer or Merchant								

Verify Transaction

This is the operation to get details of a particular transaction.

URL	https://demo.nabroll.com.ng/api/v1/transactions/verify
VERB	Post
CONTENT-TYPE	application/json
HASH GENERATION	<p>hashString = payerRefNo + amount + transactionRef + publicApiKey;</p> <p>Hash = <i>hash_hmac</i>('sha256', hashString, secretApiKey);</p>
REQUEST PAYLOAD	<pre>{ "ApiKey": "PK_TEST_12345", "Hash ": "d234dkiewierjerjskoeiwo48344d23Qkddf", "TransactionRef": "862698572355" }</pre>

RESPONSE PAYLOAD	<pre>{ "status":"SUCCESSFUL", "code":"00", "msg":"Payment Successful", "metadata":null, "TransactionRef":"862698572355", "amount":"250.00", "PayerRefNo":"SCI892001", "paymentRef":"NBRLLTESTSSOX5", "channel":"Card", "bank":"Mastercard", "accountNumber":"5123-45xx-xxxx-0008", "pan":"5123-45xx-xxxx-0008", "paymentDate":"2023-09-04 00:54:53" }</pre>

Web Checkout

URL	<i>https://demo.nabroll.com.ng/web/checkout/[PAYMENT_CODE]</i>	
VERB	Get	
TOKEN HASH	hashString = payerRefNo + paymentCode + amount; Token = <i>md5</i> (hashString);	
RESPONSE PAYLOAD	<i>[RESPONSE_URL_PROVIDED_DURING_TRANSACTION_INITIATION]</i> <i>?token=dweirekjerjdfdfkljekrj&TransactionRef=862698572355&Msg=Payment+Successful</i>	
NOTES	<i>[RESPONSE_URL_PROVIDED_DURING_TRANSACTION_INITIATION]</i>	In example above, we used: https://example.com/nabrollResponsePage/ replace it with the one you used during initiate transaction
	<i>[PAYMENT_CODE]</i>	Replace it with the PaymentCode received during initiate transaction
	<i>Token</i>	You need to url decode it
	<i>TransactionRef</i>	You need to url decode it

	Msg	You need to url decode it
	You are required to call verify api endpoint before updating your records for successful transactions	

Call-Back Operation

NABRoll always send payment status notification in real time as soon as the payment is authorized to the profiled notification webhook.

NABRoll will retry to push the notification 4 times within an hour until we get Http response 200.

Note: There is a Transaction query to get status if you eventually didn't get the real-time notification

Sample Notification for successful transaction

```
{
  "id": "61867fd2fc6287067238510ac6b443cfbd8d51c0",
  "type": "transaction.successful",
  "TransactionRef": "862698572355",
  "date": "2023-09-04 00:54:53",
  "data": {
    "status": "SUCCESSFUL",
    "code": "00",
    "msg": "Payment Successful",
    "metadata": null,
    "TransactionRef": "862698572355",
    "amount": "250.00",
    "PayerRefNo": "SCI892001",
    "paymentRef": "NBRLLESTSSOX5",
    "channel": "Card",
    "bank": "Mastercard",
    "accountNumber": "5123-45xx-xxxx-0008",
    "pan": "5123-45xx-xxxx-0008",
    "paymentDate": "2023-09-04 00:54:53"
  }
}
```

NOTES: You are required to call verify API endpoint before updating your records for successful transactions.

Transaction Split (Programmatically)

This operation enable developer to programmatically split transaction settlement amount to various beneficiaries. The split is defined during transaction initiation in the **MetaData** field, it can contain as many instructions as possible, but any split that leads to zero or negative settlement amount to the merchant (after deduction of all splits), will be ignored. The split can be instructed for the following split type:

- **Bank Account**
 - For Bank Account split type, the instructions is to be paid to any bank account holder using the beneficiary bank details
- **NABRoll Wallet**
 - NABRoll Wallet split type, the instructions is to be paid to specific user using the beneficiary NABRoll Wallet ID(s)

NOTES: Splits are only entertain when **Enable Split** is checked to **Yes** in **Settlement Split Configuration** from the NABRoll Dashboard.

URL	https://demo.nabroll.com.ng/api/v1/transactions/initiate
VERB	Post
CONTENT-TYPE	application/json
REQUEST PAYLOAD	<pre>{ "ApiKey":"PK_TEST_EWRdfksadfierw", "Hash":"dWedkseiwekldsfjndsfafd2932ks8e2", "Amount ":"200.00", "PayerRefNo ":"0000001", "PayerName ":"Sani Bello", "Email":"sani@example.com", "Mobile":"08123456789", "Description":"Application Fees", "ResponseUrl ":"https://example.com/nabrollResponsePage/", "MetaData ":" { "transaction_split": [{ "split_type": "bank_account", "deduction_type": "Fixed", "rate": "250.40", "bank_code": "058", "account_no": "0011223344", "account_name": "Developer One" }] } }</pre>

	<pre> { "split_type": "bank_account", "deduction_type": "Percentage", "rate": "3", "bank_code": "057", "account_no": "0011223355", "account_name": "Developer Two" }, { "split_type": "wallet", "deduction_type": "Fixed", "rate": "150.00", "wallet_id": "hdxdi923bvhd239d" }, { "split_type": "wallet", "deduction_type": "Percentage", "rate": "5.50", "wallet_id": "d2482xHs2Qddf8inm" }] }, "FeeBearer":"Customer" } </pre>				
RESPONSE PAYLOAD	<pre> { "status":"SUCCESSFUL", "code":"00", "msg":"Payment Successful", "TransactionRef":"862698572355", "PaymentCode":"adet2312938dx", "PaymentUrl": https://demo.nabroll.com.ng/web/checkout/adet2312938dx, "ShortPaymentUrl":null } </pre>				
NOTES	<table border="1"> <thead> <tr> <th>Field</th><th>Remark</th></tr> </thead> <tbody> <tr> <td>transaction_split</td><td>Mandatory for split, array of split beneficiaries in json</td></tr> </tbody> </table>	Field	Remark	transaction_split	Mandatory for split, array of split beneficiaries in json
Field	Remark				
transaction_split	Mandatory for split, array of split beneficiaries in json				

	<i>split_type</i>	<i>Mandatory, options are bank_account or wallet</i>
	<i>deduction_type</i>	<i>Mandatory, options are Fixed or Percentage</i>
	<i>rate</i>	<i>Mandatory, the exact amount to be deducted for Fixed deduction or the percentage rate (without the percentage symbol) for Percentage deduction</i>
	<i>bank_code</i>	<i>Mandatory for bank_account split_type. Use the CBN approved bank codes. Some popular bank codes are provided in the table below.</i>
	<i>account_no</i>	<i>Mandatory for bank_account split_type. Use 10 digits NUBAN Account Number</i>
	<i>account_name</i>	<i>Optional, but important</i>
	<i>wallet_id</i>	<i>Mandatory for wallet split_type. Beneficiary wallet_id is retrieve from Beneficiary's NABRoll Dashboard</i>

CBN Bank Codes

Bank Code	Bank
044	Access Bank
023	Citi Bank
559	Coronation Merchant Bank
551	Covenant
050	Ecobank
084	Enterprise Bank
040	Equitorial Trust Bank
070	Fidelity Bank
011	First Bank
214	First City Monument Bank
085	First Inland Bank
103	Globus Bank
058	Guaranty Trust Bank
030	Heritage Bank
800	Hope PSB
301	Jaiz Bank

082	Keystone Bank
014	Mainstreet Bank
50515	MoniePoint
561	New Prudential Bank
100004	OPAY
076	Polaris Bank
101	Providus Bank
221	Stanbic IBTC Bank
068	Standard Chartered Bank
232	Sterling Bank
100	SunTrust
302	TAJ Bank
032	Union Bank
033	United Bank for Africa
215	Unity Bank
035	Wema Bank
057	Zenith Bank