FIDELITY
(TRANSFER SERVICE)
API DEBUG REPORT

1. CHANGE LOG

Version	Date	Status	Change	Author
1.0	06/24/2022	Initial draft	None	Kingsley Obioha (kingsley.obioha@palmpay-inc.com)
2.0	23/03/2023	Modified	Added: • Balance Enquiry and Statement APIs. • Failure response sample. • Updated response body of Requery endpoints. • Response Code List	Emmanuel Irabor (emmanuel.irabor@palmpay-inc.com)

2. TEST CREDENTIALS

Item	Value
BaseUrl	https://mtnsimswap.fidelitybank.ng
client-Id	PALM@Fid
client-key	c8858091-ccf7-4153-8bc7-e56d86c8fa30
hashKey	ebac1caa-a997-44c5-9852-8509f3778ba7
AES-Symmetric-Key	C8858091CCF741538BC7E56D86C8FA30

3. TEST DATA

Item	Account No.	Bank Code
Source Account Number (Fidelity Bank)	9110001898	00070
Destination Account Number (ZENITH BANK)	2088636939	999057
Destination Account Number (FCMB)	2766231015	999214
Destination Account Number (FIDELITY BANK)	5050131363	00070
Destination Account Number (FIDELITY BANK)	5050138001	00070

4. API ENDPOINTS

1. Intra-Bank Name Enquiry
2. Inter-Bank Name Enquiry
3. Intra-Bank Transfer
4. Inter-Bank Transfer
5. Intra-Bank Requery
6. Inter-Bank Requery
7. Balance Enquiry
8. Statement of Account

4.1 INTRA-Bank Name Enquiry

This endpoint allows a payer to confirm the accuracy of the Bank customer's account details of a Fidelity bank customer before conducting a financial or non-financial transaction.

URL:
{{BaseUrl}}/CDL_API/FidelityFundsTransfer/IntraNameEnquiry?AccountNumber=9110001898

Method: GET

Headers:

Param	Value	Description
Content-Type	application/json	Used to indicate the original media type of the resource
client-id	{{client-id}}	For every API call, you are required to pass this in your HTTP request header
client-key	{{client-key}}	For every API call, you are required to pass this in your HTTP request header

Response Body:

```
{
    "AccountName": "PALMPAY LIMITED(ACCT2)",
    "AccountNumber": "9110001898"
}
```

4.2 INTER-Bank Name Enquiry

This endpoint allows a payer to confirm the accuracy of the Bank customer's account details of another bank before conducting a financial or non-financial transaction.

URL: {{BaseUrl}}/CDL_API/FidelityFundsTransfer/InterbankNamEnquiry

Method: POST

Headers:

Param	Value	Description
Content-Type	application/json	Used to indicate the original media type of the resource
client-id	{{client-id}}	For every API call, you are required to pass this in your HTTP request header
client-key	{{client-key}}	For every API call, you are required to pass this in your HTTP request header

Request Parameters:

Parameter	Mandatory	Type	Description
DestinationAccount	Yes	String	This is the account number of the beneficiary
DestinationBankCode	Yes	String	This is the bank code of the beneficiary

Request Body:

```
{
    "DestinationAccount": "0051762787",
    "DestinationBankCode": "999998"
}
```

Response Body:

```
{
    "responseCode": "00",
    "accountName": "Stan Lee",
    "channelReference": "99907023031514533933138 0223664",
    "BankVerificationNumber": "22222222223"
}
```

4.3 INTRA-Bank Transfer

This endpoint is used for the transfer of funds from a Fidelity Bank account to another Fidelity Bank account.

URL: {{BaseUrl}}/CDL_API/FidelityFundsTransfer/IntraTransfer

Method: POST

Headers:

Param	Value	Description
Content-Type	application/json	Used to indicate the original media type of the resource
client-id	{{client-id}}	For every API call, you are required to pass this in your HTTP request header
client-key	{{client-key}}	For every API call, you are required to pass this in your HTTP request header

Request Parameters:

Parameter	Mandatory	Type	Description
DestinationAccount	Yes	String	This is the beneficiary account number
TransferAmount	Yes	Float	This is the transaction amount
Narration	Yes	String	This is the description of the reason for payment
BeneficiaryName	Yes	String	This is the name of the beneficiary
ReferenceNumber	Yes	Integer	Unique transaction reference code
Hash	Yes	String	This is encrypted with SHA512 algorithm. The value to pass is the concatenation of the destination account number, transfer amount and key in that order. **SHA512(account + amount + hashKey)**

Request Body:

```
{
    "DestinationAccount": "5050131363",
    "TransferAmount": 100.00,
    "Narration": "Testing",
    "BeneficiaryName": "Chukwuka",
    "ReferenceNumber": 13253,
    "Hash": "A8B9F748A1193846AA29F7AF00F8264407B419BA7FCD844D80B27EBE068D41DF4099B590D
D6258F27779E9B284E5C49B06DD17E1EA3C85F73CBFDE817A92744D"
}
```

Response:

```
{
    "Result": {
        "responseCode": "00",
        "responseMessage": "SUCCESS",
        "transferReference": "220672",
        "channelReference": null
    },
    "Id": 30,
```

```
    "Exception": null,
    "Status": 5,
    "IsCanceled": false,
    "IsCompleted": true,
    "CreationOptions": 0,
    "AsyncState": null,
    "IsFaulted": false
}
```

FAILURE RESPONSE SAMPLES

Insufficient Funds (HTTP Status 200):

```
{
    "Result": {
        "responseCode": "51",
        "responseMessage": "INSUFFICIENT_FUNDS",
        "transferReference": "220239",
        "channelReference": null
    },
    "Id": 29,
    "Exception": null,
    "Status": 5,
    "IsCanceled": false,
    "IsCompleted": true,
    "CreationOptions": 0,
    "AsyncState": null,
    "IsFaulted": false
}
```

Transaction Not Permitted (HTTP Status 200):

```
{
    "Result": {
        "responseCode": "99",
        "responseMessage": "TXN_NOT_PERMITTED",
        "transferReference": "220663",
        "channelReference": null
    },
    "Id": 29,
    "Exception": null,
    "Status": 5,
    "IsCanceled": false,
    "IsCompleted": true,
    "CreationOptions": 0,
```

```
    "AsyncState": null,
    "IsFaulted": false
}
```

4.4 INTER-Bank Transfer

This endpoint is used for the transfer of funds from a Fidelity Bank account to another bank.

URL: {{BaseUrl}}/CDL_API/FidelityFundsTransfer/InterbankTransfer

Method: POST

Headers:

Param	Value	Description
Content-Type	application/json	Used to indicate the original media type of the resource
client-id	{{client-id}}	For every API call, you are required to pass this in your HTTP request header
client-key	{{client-key}}	For every API call, you are required to pass this in your HTTP request header

Request Parameters:

Parameter	Mandatory	Type	Description
DestinationAccount	Yes	String	This is the beneficiary account number
TransferAmount	Yes	Float	This is the transaction amount
Narration	Yes	String	This is the description of the reason for payment
BeneficiaryName	Yes	String	This is the name of the beneficiary
ReferenceNumber	Yes	Integer	Unique transaction reference code
Hash	Yes	String	This is encrypted with SHA512 algorithm. The value to pass is the concatenation of the destination account number, transfer amount and key in that order. **SHA512(account + amount + hashKey)**

Request Body:

```json
{
    "DestinationAccount": "2088636939",
    "DestinationBankCode": "999057",
    "TransferAmount": 1000.00,
    "Narration": "Testing",
    "BeneficiaryName": "Chukwuka",
    "ReferenceNumber": 4102611,
    "Hash":"53B9FD14551DBD6752F3831EDE3D42E3C25452E27E5AAB14F7A68D233006B5B26E83959F24FA9E3A4A9A92FC0B3729BAA54AEE7C0D8D753351C0F8EF6634EAD6"
}
```

Response Body:

```json
{
    "Result": {
        "responseCode": "00",
        "responseMessage": "Approved or completed successfully",
        "transferReference": "",
        "channelReference": "999070220624094128013715420487"
    },
    "Id": 992,
    "Exception": null,
    "Status": 5,
    "IsCanceled": false,
    "IsCompleted": true,
    "CreationOptions": 0,
    "AsyncState": null,
    "IsFaulted": false
}
```

FAILURE RESPONSE SAMPLES

Duplicate Reference (HTTP Status 200):

```json
{
    "responseCode": "06",
    "responseMessage": "Reference number already exist",
    "transferReference": null,
    "channelReference": null
}
```

Invalid Account (HTTP Status 200):

```json
{
    "Result": {
        "responseCode": "07",
        "responseMessage": "Invalid Account",
        "transferReference": "",
        "channelReference": "99907023031510175766173386212 9"
    },
    "Id": 225,
    "Exception": null,
    "Status": 5,
    "IsCanceled": false,
    "IsCompleted": true,
    "CreationOptions": 0,
    "AsyncState": null,
    "IsFaulted": false
}
```

System Malfunction (HTTP Status 200):

```json
{
    "Result": {
        "responseCode": "96",
        "responseMessage": "System malfunction",
        "transferReference": "",
        "channelReference": "99907023031717375446392066948 4"
    },
    "Id": 56,
    "Exception": null,
    "Status": 5,
    "IsCanceled": false,
    "IsCompleted": true,
    "CreationOptions": 0,
    "AsyncState": null,
    "IsFaulted": false
}
```

Timeout (HTTP Status 200):

```json
{
    "Result": {
        "responseCode": "97",
        "responseMessage": "Timeout waiting for response from destination",
```

```
      "transferReference": "",
      "channelReference": "999070230322105256316002521012"
   },
   "Id": 29,
   "Exception": null,
   "Status": 5,
   "IsCanceled": false,
   "IsCompleted": true,
   "CreationOptions": 0,
   "AsyncState": null,
   "IsFaulted": false
}
```

4.5 INTRA-Bank Requery

This endpoint is used enables you to make an inquiry on the status of a transaction that was processed via the Intrabank transfer endpoint.

URL:{{BaseUrl}}/CDL_API/FidelityFundsTransfer/IntraRequery?ReferenceNumber=1402&accountNo=5050131363

Method: GET

Headers:

Param	Value	Description
Content-Type	application/json	Used to indicate the original media type of the resource
client-id	{{client-id}}	For every API call, you are required to pass this in your HTTP request header
client-key	{{client-key}}	For every API call, you are required to pass this in your HTTP request header

Query Parameters:

Parameter	Value	Description
ReferenceNumber	1402	Unique transaction reference code
accountNo	5050131363	This is the account number of the beneficiary

Response Body:

```json
{
    "responseCode": "00",
    "responseMessage": "SUCCESS",
    "transferReference": "156925",
    "channelReference": ""
}
```

4.6 INTER-Bank Requery

This endpoint is used enables you to make an inquiry on the status of a transaction that was processed via the Interbank transfer endpoint.

URL:{{BaseUrl}}/CDL_API/FidelityFundsTransfer/InterRequery?ReferenceNumber=410258&accountNo=0051762787

Method: GET

Headers:

Param	Value	Description
Content-Type	application/json	Used to indicate the original media type of the resource
client-id	{{client-id}}	For every API call, you are required to pass this in your HTTP request header
client-key	{{client-key}}	For every API call, you are required to pass this in your HTTP request header

Query Parameters:

Parameter	Value	Description
ReferenceNumber	410258	Unique transaction reference code
accountNo	0051762787	This is the account number of the beneficiary

Response Body:

```json
{
    "responseCode": "00",
    "responseMessage": "Approved or completed successfully",
    "transferReference": "",
    "channelReference": "99907022061609002105014594515252"
}
```

4.7 Balance Enquiry

This endpoint allows you to check the balance of your Fidelity account.

URL: {{BaseUrl}}/CDL_API/FidelityFundsTransfer/accountbalance

Method: GET

Headers:

Param	Value	Description
Content-Type	application/json	Used to indicate the original media type of the resource
client-id	{{client-id}}	For every API call, you are required to pass this in your HTTP request header
client-key	{{client-key}}	For every API call, you are required to pass this in your HTTP request header

Response Body:

```
{
    "ResponseCode": "00",
    "ResponseMessage": "Success",
    "Data": {
        "customerID": "C03597173",
        "accountNumber": "9110001898",
        "accountName": "PALMPAY LIMITED(ACCT2)",
        "accountCurrency": "NGN",
        "accountType": "Current",
        "ledgerBalance": "9998993",
        "sanctLim": "0.0000",
        "drawingPower": "0.0000",
        "availableBalance": "9998993.0000",
        "lienAmount": "0.0000",
        "unclearedBalance": "0.0000",
        "schemeCode": "CA911",
        "solID": "031",
        "accountOpenDate": "2022-12-16T00:00:00",
        "accountStatus": "A",
        "freezeCode": " ",
        "minimumBalance": "0.0000"
    }
}
```

4.8 Statement of Account

This endpoint allows you to query the statement of transactions on your Fidelity account within the start and end dates specified.

URL: {{BaseUrl}}/StatementOfAccountAPI_Dev/api/Account/GetStatements

Method: POST

Authorization:

The live credentials (Username and Password) will be provided by Fidelity. The test credentials are:

Username = PALM@Fid

Password = PalmPay@225

The username and password are arranged in a string format as stated below.

"{Username}:{Password}"

The string is then encrypted to base64 and the result concatenation is stated below.

Authorization = "Basic {encrypted Username and Password}"

Headers:

Param	Value	Description
Content-Type	application/json	Used to indicate the original media type of the resource
Authorization	Basic UEFMTUBGaWQ6UGFsbVBheUAyMjU=	For every Statement API call, you are required to pass this in your HTTP request header

Security:

The request and response payloads are encrypted using **AES/CBC/PKCS7/Padding**. Using the defined AES-Symmetric Key.

Request Body:

```
{
    "accountNumber": "6237607714",
    "startDate": "01-03-2022",
    "endDate": "03-03-2022"
}
```

Encrypted Request Body:

```
{
  "requestData": "K5DrKf85cMbZejgLeiYjOP8RopegyvnX4Pwm8IEcRXl2LZxTgyCRbgHAADnLsWpL/WGc
8xdVZdNka4ZaFwjbY/lxnoZfzP0FuLMJUC71lvY="
}
```

Response Body:

```
{
    "responseData": "CHkTlLFakOPb0wVhyET2jnbq4Kkgzj4fzF0+3n34lBW05UeQpu1/+8GXcRrUn/PGp
q9BfmDQvGe8kvPayvUEfy/o6voRqK/uGhYVu/y62ltKaMnB7VjIqNAuScBx1+fsTERjmGNnqHmauRRS0qmrBe7
Y4T7Tab3bWP4T7C9aDAFhDOCMDVxtPZjqZjU1cT7GuPJqcguTYq3C4EWKqKLBHj8/dzGf9/jdxKF1yPen7UL4C
SzkFfzDzrpdJntleU49xCOmybphAoOEWK4xRG9FFG6Iry1k8K0s7o+Ws8cR0dtoFM0xGqSLNaNcZns5gPzoKOe
9UQ/w02Oz9TOKAOrfMd4aJFQP7pJ4HkBfIqBGpqT9vNw8h3bl/j8waftK+1bhv4DxWPWmwb+aTOhTQewJCuVZ/
CcfkqzFjZHI5jT2R+DEZ0T98qbyKs8kVlam7cSKqjlfutFpT6dyfX4CVnzopHLW8GDpoegUNE4GQkTsqfDzIl0
P85HF4CKmnyRENp1IkSdPf0iqKaNLig22hgp6bYhUNmrCRzB1U875HPlS+jt2uBn0J4fNoZ2RnuIDtUhzCP5ja
85bFnP+5LYECCXUKTXZUgtgat+rdGHRKXCIi0whViu9cmTx0c908dx6SoAg0+f3kFcnJVEeI5N8768H80pjeJ6
hFgs/lSwPkigOkzudGuad8wgLFD9zgAWxmKxSWNmkaT/NMVgrnZcqMKpIqksdfur34VK3OJ7Q5WHTeDVzO4S3y
J8JSEBOWqrW/qHVPBX4TCsxZnIxUicOMEfsSMVPFwH/O6QTPqmcz0Lt43idwF8zi3RIEn9HSJROI+FzZsEYCHR
4+FcmclYvxWPSG8gopIdrVK4Ab00QyZFFesGEWMzLeMaM3OOx/l6kHuEtDSVJeh+GIFAjYi8cQFfif9fGbGzsV
sDjxdla++9oWetBr4Joslx5rdiboXqauEd2+yZa2sKDBwOCUVc3zPMG4Vf8i11oMO4Pmeu7E87zTQKoI80P6Eh
+eKamXgM9gOP5N78SfE7zcgKGNAvudrJgKf7Fnwyk2kTYfs/RPFiJ/R5lYOZ0IW19PN0SNP/1SvpoHUXzVgY/n
HdsWFD59kTFhnoZmyNuafPhxq4CkD4qozmk0ymp0KbXXyU86VnQgFfgBA378UtoQMmwofdVlJMBbCFq447PoCh
5yQ7raDKWW4dylYimlnXi3uhLwk9/ju1Fd6lzWG4JsjCFeV6nZMzKzrzlTR4jCazs24kFy3qq+kIfIvmkJTcde
hQ0qQKtSuM6AGNbriYwQeEbu5GXuOOh+w=="
}
```

Decrypted Response Body:

```
{
    "responseCode ": "00 ",
    "responseMessage ": "Transactions Retrieved ",
    "accountNumber ": "6237607714 ",
    "startDate ": "01-03-2022 ",
    "endDate ": "03-03-2022 ",
    "OpeningBalance ": "4493.1 ",
    "closingBalance ": "1389.1 ",
    "transactions ": [
        {
            "pstd_date ": "3/1/2022 11:02:03 PM ",
            "tran_date ": "3/2/2022 12:00:00 AM ",
            "value_date ": "3/1/2022 12:00:00 AM ",
            "tran_id ": "S86956985 ",
            "tran_sub_type ": "BI ",
            "part_tran_type ": "D ",
```

```
        "tran_amt ": "4 ",
        "balance ": "4489.1 ",
        "tran_particular ": "SMS ALERT CHARGES 28FEB 22 ",
        "tran_rmks ": "000000011223 / 000000009377 ",
        "tran_crncy_code ": "NGN ",
        "rate_code ": " ",
        "rate ": "1 ",
        "channel ": "Others "
    },
    {

        "pstd_date ": "3/2/2022 1:18:13 PM ",
        "tran_date ": "3/2/2022 12:00:00 AM ",
        "value_date ": "3/2/2022 12:00:00 AM ",
        "tran_id ": "S87818646 ",
        "tran_sub_type ": "CI ",
        "part_tran_type ": "D ",
        "tran_amt ": "3100 ",
        "balance ": "1389.1 ",
        "tran_particular ": "POS PURCHASE @2UP1A787-TEAMAPT LIMITED MONIEPO15 ",
        "tran_rmks ": "206112346184 / 000000346184 ",
        "tran_crncy_code ": "NGN ",
        "rate_code ": " ",
        "rate ": "1 ",
        "channel ": "Point of Sale "
    }
  ]
}
```

5. RESPONSE CODES

Code	Description
00	Successful response
01	No Record Found
02	Format Error (Hash does not match)
03	Account not Permitted
06	Reference number already exists
07	Invalid Account
08	No Record Found
16	Invalid Bank code
51	Insufficient Funds

57	Not Permitted Sender
91	Beneficiary Bank Unavailable
94	Duplicate Transaction
96	System Malfunction
97	Timeout waiting for response from destination
99	Transaction Not Permitted