



BulkPayment Northound API Documentation

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1 introduction

Bizao gateway gives you access to a large panel of services through REST APIs. Bulkpayment is one of these services.

This service is based on a <bulk> northbound API that aggregates and covers **multiple countries** and **operators**.

This API allows you to do Cashin to different recipients with just one click through Bizao Hub based on the information provided in your request.

This API lets you target the right **country, operator** by using the dedicated Header for that.

The onboarding of < **bulk** > partners is covered in detail in this document.

2 Your ACCESS_TOKEN

The ACCESS_TOKEN is generated offline and sent to the IRT via a suitable channel.

3 Partner onboarding:

For < **Bulk** >, we have two additional steps apart the access token:

- 1- we will follow the same step as the <**transfer**> to create the partner id and the security token for the authentication
- 2- We will create Three virtual wallets for the partner:
 - a. one called <**MainAccount**> where we credit the balance of the partner in Bizao hub. Transactions will debit this account. It is mandatory to have enough balance in this wallet for a transaction to be processed correctly. It is necessary to have a dedicated profile to be able to credit this account via a GUI portal. All transactions there are typed (via the parameter operationType) as **credit, debit, refund or advance**.
 - i. **operationType= credit:** means it is a classical and normal operation of crediting an account
 - ii. **operationType = debit:** means it is a classical and normal operation of debiting an account
 - iii. **operationType =advance** means it is a loan possibility accorded to the partner. This operation can only be done in the <**advancedAccount**> and is like a counter which limits the maximum loan amount for a service provider. If the advancedAccount is set to 100.000 for an SP, this means that SP can have a loan till 100.000. In other word, the mainAccount can be decreased till (-100.000) but not lower.
 - iv. **operationType =refund: :** means it is an operation of credit (or debit) to (from) the main account to adjust an error.
 - b. <**fees**> wallet where Bizao collects all the fees gained from transactions processed by this partner. This wallet is only for internal use. In order to be able to collect the fees, it is mandatory to setup the fees calculation process in the Bizao system. Based on the fees, Bizao system should be able to generate invoices.
 - c. <**advancedAccount**>: is used to set a loan possibility accorded to the partner

4 < Bulk > API

4.1 Principles

This API allows you to do Cashin in different recipients with just one click through Bizao Hub based on the information provided in your request.

This API manages three categories of parameters:

- **Headers:** contains information letting Bizao to route your traffic by *country, operator, channel and type* you target.
- **Body-parameters** contains detail on your bulk: beneficiary details, *amount, currency, destination country, destination wallet, etc...*
- **Static-parameters:** this category of parameter cover all parameters that are static per merchant for all its payment traffic (*Notification-Fees rules, sender details, ...*). These parameters will be provisioned in Bizao Hub (in SignUP step) per Partner and will be used by Bizao-Hub in the transfer process.

4.2 Description

Bizao <bulk> iss a restful API, based on json.

- **Api-name:** "bulk/v1"
- **URL:**
 - **Preproduction:** <https://preproduction-gateway.bizao.com>
 - **Production:** <https://api.bizao.com>
- **Method:** POST

4.2.1 bulkpayment API query syntax

Your query will contain the following Headers:

Header	Description/Content	Usage
Authorization	YOUR_ACCESS_TOKEN	Mandatory
country-code	(string)2 characters code of the country you target (use this norme : ISO 3166 alpha 2 country code, url to get the all country-code list: https://www.iban.com/country-codes (for instance: <ci> is the country-code for ivory Coast.	Mandatory
channel	The type of targeted channel using one of keyword: <web>:	Mandatory
type	The type is set to bulk	Mandatory
lang	the abbreviation in 2 characters of targeted language for the request, In ISO 639 (alpha-2) format	Mandatory
content-type	application/json	Mandatory

The body of your query will manage parameters below:

Parameter name	Description	Usage
----------------	-------------	-------

currency	(string) currency identifier as defined in [ISO4217]. Note (as described for the amount parameter) that either currency and amount or code must be specified. you can use this site to know the currency-code by country: https://fr.iban.com/currency-codes.html	Mandatory
reference	Reference to the bulkpayment client	Mandatory 30 char max
batchNumber	(string) identifies this create payment request. This field SHOULD be present. IT MUST BE UNIQUE FOR THE SYSTEM.	Mandatory
state	Parameter up to merchant to set within any value he wants to keep over all payment transaction processing; this field must be in Encodeded-URL (Bizao do not alternate/update this value and send it back within payment response/notification)	Mandatory
beneficiary	Object <customer>	Mandatory, it is an object

Customer object

<<customer ::Object>>

id //lock number

beneficiaryFirstName //customer first name

beneficiaryLastName //customer last name

beneficiaryAddress //customer address

beneficiaryMobileNumber //customer msisdn

amount //customer address Amount to transfer to the beneficiary wallet

feesApplicable //(YES or NO) boulean parameter to know if the fees is applicable or not

mno // MNO name

bulkpayment query sample:

Note : for each new bulkpayment query you have to provide a new value for "batchNumber"

Parameter.

```
POST bulk/v1/
Host: api.bizao.com
Authorization: Bearer token
Content-Type: application/json
country-code: sn
lang: fr
channel: web
type: bulk
```

```
--d '{
```

```

"currency": "XOF",
"reference": "bsc-bulk-mt-XOF",
"batchNumber": "bulk-sn_07-10-2021_01", // Unique
"state": "param1%3Dvalue1%26param2%3Dvalue2",
"data": [
  {
    "id": "001", // This id will be concatenated with the batchNumber. The result of this concatenation
    will be order_id of the request to be sent to the MNO.
    "beneficiaryFirstName": "Abdou",
    "beneficiaryLastName": "Diop",
    "beneficiaryAddress": "",
    "beneficiaryMobileNumber": "221761234567", // to be mapped with the MSISDN in the
    southbound request. The international mobile number without 00 or +
    "amount": 10,
    "feesApplicable": "YES",
    "mno": "free"
  },
  {
    "id": "002",
    "beneficiaryFirstName": "Logan",
    "beneficiaryLastName": "Doo",
    "beneficiaryAddress": "Rue 10 angle 20, Medina, Dakar",
    "beneficiaryMobileNumber": "2217754566666",
    "amount": 1,
    "feesApplicable": "YES",
    "mno": "orange"
  }
]
}'

```

4.2.2 Bulk API response

Bizao <bulk> API will response in Json format

This Json format/response has two different parties :

- The meta bloc containing the common details(reference, batchNumber, bulkpayment customer informations, ...)
- The second bloc(**data**) contain the specific data for the beneficiary

Response query

Content-Type: application/json

```

{
  "meta": {
    "source": "bizao",
    "merchant-name": "bizao-bsc@carbon.super",

```



```

"type": "bulk",
"currency": "XOF",
"batchNumber": "bulk-sn_07-10-2021_01",
"reference": "bsc-bulk-mt-XOF",
"feesType": "FIXED_FEE", //Type of fees applicable for this bulk payment customer
"lang": "fr",
"totalAmount": 11.00, //Total principal amount in the batch
"totalFees": 2.00, //Total fees amount in the batch

//Bulkpayment customer details
"senderFirstName": "Damith",
"senderLastName": "Sulochana",
"senderAddress": "Colombo",
"senderMobileNumber": "2250512345678",
"fromCountry": "cm",
//END Bulkpayment customer details
"comment": "Bulk Process will take minimum 0.28 minutes"
},
"data": [
{
" id": "001",
"orderId": "bulk-sn_07-10-2021_01-001",
"mno": "free",
"beneficiaryFirstName": "Salif",
"beneficiaryLastName": "KA",
"beneficiaryAddress": "",
"beneficiaryMobileNumber": "221765151504". The international mobile number without 00 or +
"toCountry": "sn",
"feesApplicable": "Yes",
"amount": 10.00,
"fees": 1.00,
"status": "Pending",
"intTransaction-Id": "1aa27e52-969b-4fd1-8012-da5606b8de71", //the transaction id from
BIZAO system
"extTransaction-Id": "" //the transaction id from the MNO system
},
{
" id": "002",
"orderId": "bulk-sn_07-10-2021_01-002",
"mno": "orange",
"beneficiaryFirstName": "Logan",
"beneficiaryLastName": "Doo",
"beneficiaryAddress": "Rue 10 angle 20, Medina, Dakar",
"beneficiaryMobileNumber": "221775782348",
"toCountry": "sn",
"feesApplicable": "Yes",
"amount": 1.00,
"fees": 1.00,
"status": "Pending",
"intTransaction-Id": "4be22560-389b-4c69-9e45-e6aa7452b7dd", //the transaction id from
BIZAO system
"extTransaction-Id": "" //the transaction id from the MNO system
}
]

```

```
}
```

4.3 getBalanceInfo

This service is very important for Northbound partners. It will help them to know the remaining balance in their virtual wallet merchantAccount(**main wallet**) in BIZAO system.

Each partner has its own dedicated < main wallet>. So, it is necessary to have the partner id to be able to display the correct balance for a given partner.

```
Get
/bulk/v1/getBalanceInfo/merchantAccount/Account_number
api.bizao.com
Authorization: Bearer token
type: bulk
```

Samples Responses:

```
{
  "meta": {
    "source": "bizao",
    "type": "bulk"
  },
  "accounts": [
    {
      "account_number": "bsc2001", // Account number
      "status": "Active", // Account status
      "currency": "XOF",
      "balance": 9767.00, //total balance in the system
      "reserved_amount": 43.00, //reserved amount for a batch not treated yet
      "loan_balance": 0.00,
      "advance_amount": 0.00,
      "turnover_balance": 6.00,
      "settlement_balance": 0.00
    }
  ]
}
```

4.4 Notification flow

Bizao bulk is an asynchronous API.

For each bulk payment, there are two types of notification:

- **B2C-Notif:** this category of notification is for the beneficiary. For each successful transfer, the mobile operator will send him an SMS with the details of the transfer.

- **B2B-Notif**: this category of notification is for the bulkpayment customer backend. For each batch of transfers, based on the backend configuration (Asynch), Bizao will notify the partner backend (using the partner-Callback when necessary) with the final status of the payment transaction.

Below a sample of notification content:

```
{
  "meta": {
    "source": "bizao",
    "merchant-name": "bizao-bsc@carbon.super",
    "type": "bulk",
    "currency": "XOF",
    "batchNumber": "bulk-sn_07-10-2021_01",
    "reference": "bsc-bulk-mt-XOF",
    "feesType": "FIXED_FEE",
    "lang": "fr",
    "totalAmount": 11.00,
    "totalFees": 2.00,
    "senderFirstName": "Damith",
    "senderLastName": "Sulochana",
    "senderAddress": "Colombo",
    "senderMobileNumber": "2250512345678",
    "fromCountry": "cm"
  },
  "data": [
    {
      "id": "001",
      "orderId": "bulk-sn_07-10-2021_01-001",
      "mno": "free",
      "beneficiaryFirstName": "Salif",
      "beneficiaryLastName": "KA",
      "beneficiaryAddress": "",
      "beneficiaryMobileNumber": "221765151504",
      "toCountry": "sn",
      "feesApplicable": "Yes",
      "amount": 10.00,
      "fees": 1.00,
      "status": "Successful",
      "intTransaction-Id": "1aa27e52-969b-4fd1-8012-da5606b8de71",
      "extTransaction-Id": "CI211007.1411.A95748"
    },
    {
      "id": "002",
      "orderId": "bulk-sn_07-10-2021_01-002",
      "mno": "orange",
      "beneficiaryFirstName": "Logan",
      "beneficiaryLastName": "Doo",
      "beneficiaryAddress": "Rue 10 angle 20, Medina, Dakar",
      "beneficiaryMobileNumber": "221775782348",
      "toCountry": "sn",
      "feesApplicable": "Yes",
    }
  ]
}
```

```
"amount": 1.00,  
"fees": 1.00,  
"status": "Failed",  
"failedReason": "Validation failed, please contact support",  
"intTransaction-Id": "4be22560-389b-4c69-9e45-e6aa7452b7dd",  
"extTransaction-Id": ""  
}  
]  
}
```

5 "getStatus" API

5.1 Principales

The bulkpayment customer can check any transactions in a batch via the "getStatus" service.

"getStatus" API

5.2 Description

Bizao <getStatus> API Resful/json API. Below syntax and description

- **Api-name:** "bulk/v1/getStatus"
- **batchNumber:** the batchNumber of the bulk transaction.
- **Based URL:**
 - **Preproduction:** <https://preproduction-gateway.bizao.com>
 - **Production:** <https://api.bizao.com/>
- **Method:** GET

5.2.1 "getStatus" API query syntax :

To call the "getStatus" service, below is the syntax:

<https://api.bizao.com/bulk/v1/getStatus/{batchNumber}>

"getstatus" sample query :

```
curl --location --request GET 'https://api.bizao.com/bulk/v1/getStatus/bulk-sn_07-10-2021_01' \  
--header 'Authorization: token' \  
--header 'Content-Type: application/json' \  
--header 'channel: web' \  
--header 'type: bulk' \  
--header 'Cookie: AlteonMS17=AVGuRvbEYwp+/a0U3c6Ndg$$; SERVERID=s0; SRV=c4929e28-54ed-4c57-bec6-a50f7151ac41'
```

5.2.2 Getstatus API response

Bizao <getstatus> API will response in Json format.

This Json format/response has the same format as for notification flow.

```
{  
  "meta": {  
    "source": "bizao",  
    "merchant-name": "bizao-bsc@carbon.super",  
    "type": "bulk",  
    "currency": "XOF",  
    "batchNumber": "bulk-sn_07-10-2021_01",  
    "reference": "bsc-bulk-mt-XOF",  
    "feesType": "FIXED_FEE",  
    "lang": "fr",  
    "totalAmount": 11.00,  
    "totalFees": 2.00,  
    "senderFirstName": "Damith",
```

```

"senderLastName": "Sulochana",
"senderAddress": "Colombo",
"senderMobileNumber": "2250512345678",
"fromCountry": "cm"
},
"data": [
  {
    "id": "001",
    "orderId": "bulk-sn_07-10-2021_01-001",
    "mno": "free",
    "beneficiaryFirstName": "Salif",
    "beneficiaryLastName": "KA",
    "beneficiaryAddress": "",
    "beneficiaryMobileNumber": "221765151504",
    "toCountry": "sn",
    "feesApplicable": "Yes",
    "amount": 10.00,
    "fees": 1.00,
    "status": "Successful",
    "intTransaction-Id": "1aa27e52-969b-4fd1-8012-da5606b8de71",
    "extTransaction-Id": "CI211007.1411.A95748"
  },
  {
    "id": "002",
    "orderId": "bulk-sn_07-10-2021_01-002",
    "mno": "orange",
    "beneficiaryFirstName": "Logan",
    "beneficiaryLastName": "Doo",
    "beneficiaryAddress": "Rue 10 angle 20, Medina, Dakar",
    "beneficiaryMobileNumber": "221775782348",
    "toCountry": "sn",
    "feesApplicable": "Yes",
    "amount": 1.00,
    "fees": 1.00,
    "status": "Failed",
    "failedReason": "Validation failed, please contact support",
    "intTransaction-Id": "4be22560-389b-4c69-9e45-e6aa7452b7dd",
    "extTransaction-Id": ""
  }
]
}

```

6 Bizao transfer API common error code

Error Code	API Reponses Error Message	Error Description.
Transfer API (BMT100XX)		
BMT10001	Missing mandatory header parameter: mno-name	mno-name header is missing
BMT10002	Missing mandatory header parameter: country-code	country-code header is missing
BMT10003	Missing mandatory header parameter: channel	channel header is missing
BMT10004	Missing mandatory parameter: amount	Transfer amount is not provided
BMT10005	Amount cannot contain cents	Invalid amount, amount is provided with cents
BMT10006	Amount should be in number	Provided amount consist some character or special signs
BMT10007	Missing mandatory parameter: beneficiaryMobileNumber	BeneficiaryMobileNumber is not provided
BMT10008	senderMobileNumber and beneficiaryMobileNumber must not be same.	User has pass same MSISDN for sender and beneficiary.
BMT10009	Beneficiary number does not match with MNO number format.	Invalid MSISDN format for MNO and country
BMT10010	Missing mandatory parameter: currency	Currency for transfer is not provided.
BMT10011	Missing mandatory parameter: reference	Merchant reference for the currency account is not provided.
BMT10012	Missing mandatory parameter: order_id	Order id for request is not provided.
BMT10013	Missing mandatory header parameter: lang	Lang header is missing.
BMT10014	Missing mandatory header parameter: USER_ID	Missing USER_ID parameter which send from Api Manager
BMT10015	Missing mandatory header parameter: state	State is not provided in the request
BMT10016	Missing mandatory header parameter : type	Type header is missing
BMT10017	Invalid parameter for header parameter: type	When type parameter type other than wallet or bulk
BMT10018	Invalid header parameter: channel	When the channel parameter is having unrecognized values
BMT11000	Duplicate Order ID	Order ID is already used.
BMT11001	You have successful transaction recently for same amount, same sender and same beneficiary.	Request has already success for same beneficiary/sender/mount/currency/mno

BMT11002	No matching account for the request	Cannot find Service provider provisioning for requested currency and reference.
BMT11003	Invalid service provider name: %s or merchant name does not match with service provider name.	Invalid Service Provider
BMT11004	Fee rule not found for the transfer. Please contact support.	Fee rule has not been provisioned for the currency and SP.
BMT11005	Order does not exist for given order ID	Invalid or not existing Order ID
BMT11006	Insufficient account Balance	Insufficient account balance
BMT00000	Validation failed. Please contact support.	General Error
BMT21000	Can't find the mt_bulk settings conf	Cannot find the bulk account no
BMT21001	Exceeded the bulk transaction record limit	Cannot find the bulk settings configuration for id = 1
BMT21002	Can't find bulk account no	Merchant is not provisioned or invalid merchant reference
BMT21003	Date format exception yyyy-mm-dd	For the request parameters, date format should be as "yyyy-mm-dd"
BMT20004	Number format exception	Beneficiary msisdn is not match with the mno number format.
BMT20005	Can't find the sender msisdn	Merchant information is invalid or not provision the sender msisdn.
BMT20006	Same sender and beneficiary msisdn	Both sender and beneficiary msisdns as same.
BMT20007	Can't find the information for given order id.	Invalid order id.
BMT20008	Can't find the bulk accounts for given sp	Invalid given parameters
BMT20009	Request items have missing mandatory properties.	Request items have missing mandatory properties
BMT20010	Transaction amount exceeded to current balance.	Transaction amount exceeded to current balance.
BMT20011	No records found for the given criteria.	No records found for the given criteria.
BMT20012	date format error	When the request parameter is not on the declared date format.
BMT20013	Error while executing background processor.	Error while executing background processor.