

# Technical Documentation Virtual Account via API for Company Partner

Version 0.10

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## **Document Version**

Date	Doc	Description	PIC
	Version		
19 January 2018	0.10	Inquiry List of Bills	JSL
		- Fix typo value of "TotalAmount" in response field for no-bill	
		transaction	
		- Highlight "SubCompany" in request field for non-multi bill	
		transaction	
		Elsa Danisa d	
		Flag Payment	
		- Add description for "BillDetails" in response field	
		- Add "Reference" value in request field for no-bill transaction	
		- Update inconsistent value between "PaidAmount" and	
		"TotalAmount" in response field for no-bill transaction	
		Content Table	
		- Update show heading "request" and "response"	
07 November 2017	0.9	Inquiry List of Bills	BIL
07 NOVEMBER 2017	0.5	Fix typo "FreeTexts" in response field (adding character "s")	DIL
		The type Tree texts in response hera (adding character 5 )	
		Flag Payment	
		- Fix typo "FreeTexts" in response field (adding character "s")	
17 October 2017	0.8	Inquiry List of Bills	ABE
		- Fix typo duplicate "non multi bills" section header title	
		- Fix typo for inconsistent no-bill section header title typed as	
		"multi bill"	
		- Update sample request and response	
		Space sumple request and response	
		Flag Payment	
		- Fix typo duplicate "non multi bills" section header title	
		The type duplicate from main bills section header title	

		<ul> <li>- Fix typo for inconsistent no-bill section header title typed as "multi bill"</li> <li>- Update sample request and response</li> <li>Error Response</li> <li>- Redefine error schema structures</li> <li>Others</li> <li>- Fix inconsistent format of TransactionDate, previous "yyyymm-ddTHH24:mi:ss.sssZ", now "dd/mm/yyyy hh24:mi:ss" to fit the length of 19</li> </ul>	
02 October 2017	0.7	Remove sections Authorization, Headers and Signature.	ABE
31 August 2017	0.6	Housekeeping feature, keeping Bill Presentment dan Flag Payment only.	ABE
17 July 2017	0.5	Update Section Authorizatoin and Signatures.	ABE
19 May 2017	0.4	Add Inquiry Status and Inquiry Reason in request table of Inquiry List of Bills Change null value in response sample to ""	BIL
24 August 2016	0.3	Add Inquiry Status Payment Service	BIL
08 August 2016	0.2	Update Endpoint URI Update Description	GID
22 June 2016	0.1	Initial Document	GID

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# Introduction

<u>This document intended for BCA's company partner perspective</u>. BCA will acts as client to send request to the company partner as the server.

# Overview

Overview of generated endpoints that company partners should create to be called from BCA:

Method	Endpoint	Usage
POST	/api/oauth/token	Get access token for Authorization
POST	/va/bills	Get list of customer's bills from copartners
POST	/va/payments	Flag considered as "already paid" for the specified copartner transaction

# Core Resources

#### Introduction

This document was made for the online payment using BCA Virtual Account project in BCA, supporting the needs of business process summary and data movements in technical way, from BCA to copartner. This file describes the system's process, data flow, and fields that are needed for either BCA or BCA's co-partners to communicate.

The main concept of online payment to be implemented is using BCA Virtual Account that can be accessed by customer to do payment for all bills that are owned by the customer. It can accommodate payment solution between BCA's co-partners and its customers.

The system process is separated in two sub processes, namely inquiry list of all bills that are owned by customer and payment flag invocation to co-partners.

# Inquiry List of Bills (Bill Presentment)

The customers can do the online payment on all BCA channel. Customers can see the list of bills that are owned by the customers.

At this part, BCA will do the online inquiry of customers list of bills from BCA co-partners, using customer number which is owned and provided by the customer to do the inquiry.

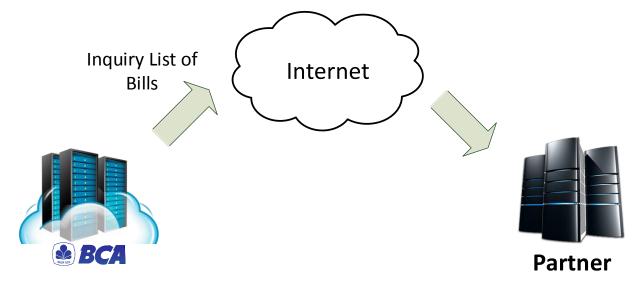


Figure
Inquiry List of Bills

# **Input Payload**

Field	Data Type	Mandatory	Description
CompanyCode	Number(5)	Υ	VA CompanyCode
CustomerNumber	String(18)	Υ	CustomerNumber / BillID
RequestID	String(30)	Υ	Unique value generated by BCA
		Υ	6010 = Teller/Branch
			6011 = ATM
			6012 = POS/EDC
ChannelType	String(4)		6013 = AutoDebit
			6014 = Internet Banking
			6015 = Kiosk
			6016 = Phone Banking

6017 = Mobile Banking 6018 = LLG / Kiriman Uang (KU)

TransactionDate	String(19)	Υ
AdditionalData	String(999)	N

## Request

```
{
    "CompanyCode": "12345",
    "CustomerNumber": "ABC0012300DEF",
    "RequestID": "201507131507262221400000001975",
    "ChannelType": "6014",
    "TransactionDate": "15/03/2014 22:07:40",
    "AdditionalData": ""
}
```

Result of the request will contains following information:

# Response

Field	Data Type	Description
CompanyCode	String(5)	VA CompanyCode
CustomerNumber	String (18)	CustomerNumber / BillID
RequestID	String (30)	Unique value generated by BCA
InquiryStatus	String (2)	
InquiryReason	Object	
Indonesian	String (64)	
English	String (64)	
CustomerName	String (30)	

CurrencyCode	String(3)	CurrencyCode must be same for TotalAmount, BillAmount. CurrencyCode field may vary with these values:  - IDR - USD - SGD
TotalAmount	String (15)	Format: Number, 13.2
SubCompany	String (5)	Represent the Copartner's product which BCA create a code for it.
DetailBills	List(N)	For No-Bill type, keep this field exist with null value.
BillDescription	Object	
Indonesian	String(18)	
English	String(18)	
BillAmount	String(15)	Format: Number, 13.2
BillNumber	String(18)	
BillSubCompany	String(5)	
FreeTexts	List(5)	
Indonesian	String(32)	
English	String(32)	
AdditionalData	String(999)	

# Note:

- TotalAmount field value should be total amount for all the detail bills provided in multi bills transaction.
- For single bill transaction with single settlement, DetailBills is optional. If DetailBills available then BillSubCompany field value in DetailBills must match with SubCompany field value.

- For multi bills transaction and single bill transaction with multi settlements, BillSubCompany field value might be different for each bill number and SubCompany field value would be ignored.
- BillDescription field value must be define in two languages, Indonesian and English.
- FreeTexts field defined by co-partner and will be displayed in BCA channel's screen. This field must be define in two languages, Indonesian and English. For multi bills transaction, this field will be ignored and not displayed in BCA channel's screen.

## Response (Sample of the JSON format for non multi bills transaction)

```
{
      "CompanyCode": "12345",
      "CustomerNumber": "ABC0012300DEF",
      "RequestID": "201507131507262221400000001975",
      "InquiryStatus": "00",
      "InquiryReason": {
             "Indonesian": "Sukses",
             "English": "Success"
      },
      "CustomerName": "Customer BCA Virtual Account",
      "CurrencyCode": "IDR",
      "TotalAmount": "150000.00",
      "SubCompany": "00001",
      "DetailBills": [
             {
                    "BillDescription": {
                           "Indonesian": "Maintenance",
                           "English": "Maintenance"
                    },
                    "BillAmount": "70000.00",
                    "BillNumber": "1234567890",
                    "BillSubCompany": "00001"
             },
             {
                    "BillDescription": {
```

```
"Indonesian": "Listrik",
                           "English": "Electric"
                    },
                    "BillAmount": "50000.00",
                    "BillNumber": "1133557799",
                    "BillSubCompany": "00001"
             },
             {
                    "BillDescription": {
                           "Indonesian": "Air",
                           "English": "Water"
                    },
                    "BillAmount": "30000.00",
                    "BillNumber": "2244668800",
                    "BillSubCompany": "00001"
             }
      ],
      "FreeTexts": [
             {
                    "Indonesian": "Free Text 1",
                    "English": "Free Text 1"
             },
             {
                    "Indonesian": "Free Text 2",
                    "English": "Free Text 2"
             }
      ],
      "AdditionalData": ""
}
```

# Response (Sample of the JSON format for multi bills transaction)

```
{
    "CompanyCode": "12345",
    "CustomerNumber": "ABC0012300DEF",
```

```
"RequestID": "201507131507262221400000001975",
"InquiryStatus": "00",
"InquiryReason": {
       "Indonesian": "Sukses",
      "English": "Success"
},
"CustomerName": "Customer BCA Virtual Account",
"CurrencyCode": "IDR",
"TotalAmount": "100000.00",
"SubCompany": "",
"DetailBills": [
      {
             "BillDescription": {
                    "Indonesian": "Pensil",
                    "English": "Pencil"
             },
             "BillAmount": "25000.00",
             "BillNumber": "1234567890",
             "BillSubCompany": "00002"
      },
      {
             "BillDescription": {
                    "Indonesian": "Kaos",
                    "English": "T-Shirt"
             },
             "BillAmount": "35000.00",
             "BillNumber": "2234567891",
             "BillSubCompany": "00003"
      },
      {
             "BillDescription": {
                    "Indonesian": "Buku",
                    "English": "Book"
             },
             "BillAmount": "40000.00",
```

# Response (Sample of the JSON format for no-bill transaction)

```
{
       "CompanyCode": "12345",
       "CustomerNumber": "ABC0012300DEF",
       "RequestID": "201507131507262221400000001975",
       "InquiryStatus": "00",
       "InquiryReason": {
             "Indonesian": "Sukses",
             "English": "Success"
      },
       "CustomerName": "Customer BCA Virtual Account",
      "CurrencyCode": "IDR",
       "TotalAmount": "0.00",
      "SubCompany": "00000",
       "DetailBills": [],
       "FreeTexts": [],
      "AdditionalData": ""
}
```

# Payment Flag Invocation to Partners

From the first process (list inquiry of bills), after customers choose and submit which bills to be paid, BCA will deduct customers account (debit and/or credit account) and send the payment confirmation (payment flag) to be acknowledged by co-partners.

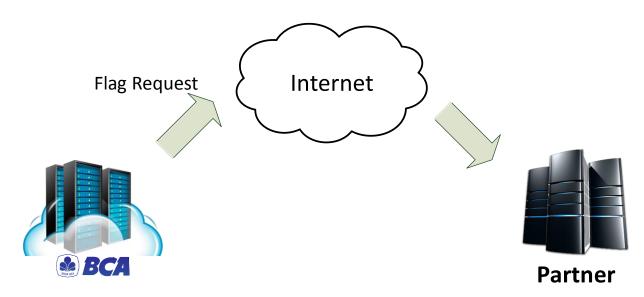


Figure
Flag Request to Partner

# **Input Payload**

Field	Data Type	Mandatory	Description
CompanyCode	String(5)	Υ	
CustomerNumber	String(18)	Υ	
RequestID	String(30)	Υ	
ChannelType	String(4)		
CustomerName	String(30)		
CurrencyCode	String(3)		
PaidAmount	Number(15)		
TotalAmount	Number (15)		
SubCompany	String(5)		Represent the Copartner's product which BCA create a code for it.
TransactionDate	String(19)		
Reference	String(15)		

DetailBills	List(N)	Optional, mandatory for multi bills transaction
BillAmount	Number(15)	Optional, mandatory for multi bills transaction
BillNumber	String(18)	Optional, mandatory for multi bills transaction
BillSubCompany	String(5)	Optional, mandatory for multi bills transaction
BillReference	Number(15)	Optional, mandatory for multi bills transaction
FlagAdvice	String(1)	
AdditionalData	String(999)	

#### Note:

- 2 last digits for TotalAmount, BillAmount and PaidAmount field should be decimal point.
- TotalAmount field value will be same with TotalAmount field value returned from copartners when BCA do inquiry list of bills.
- RequestID is unique from BCA for each transaction.
- PaidAmount field value will be total amount paid by customer through BCA. For multi bills transaction, PaidAmount field value might be different with TotalAmount field value. For non multi bills transaction, PaidAmount field value will be same with TotalAmount field value.
- CurrencyCode must be same for TotalAmount, BillAmount and PaidAmount. CurrencyCode field may vary with these values :
  - o IDR
  - o USD
  - o SGD
- ChannelType field may vary with these values :
  - o 6010 = Teller/Branch
  - o 6011 = ATM
  - o 6012 = POS/EDC

- 6013 = AutoDebit
- 6014 = Internet Banking
- o 6015 = Kiosk
- o 6016 = Phone Banking
- o 6017 = Mobile Banking
- 6018 = LLG / Kiriman Uang (KU)
- For multi bills transaction, BillSubCompany field value might be different for each bill number and BillReference field value will be different for each bill number. Reference and SubCompany field value will be blank for multi bills transaction.
- FlagAdvice field may vary with these values :
  - N = new request for payment flag
  - o Y = advice request (retry flag) for payment flag
- n is sum of detail bills owned by customers and should not be more than 5. Detail bills returned from BCA to co-partners only bills that customer choose to pay.

## Request (Sample of the JSON format for non multi bills transaction)

```
{
      "CompanyCode": "12345",
      "CustomerNumber": "ABC0012300DEF",
      "RequestID": "201507131507262221400000001975",
      "ChannelType": "6014",
      "CustomerName": "Customer BCA Virtual Account",
      "CurrencyCode": "IDR",
      "PaidAmount": "150000.00",
      "TotalAmount": "150000.00",
      "SubCompany": "00001",
      "TransactionDate": "15/03/2014 22:07:40",
      "Reference": "1234567890",
      "DetailBills": [],
      "FlagAdvide": "N",
      "Additionaldata": ""
}
```

#### Request (Sample of the JSON format for multi bills transaction)

```
{
       "CompanyCode": "12345",
      "CustomerNumber": "ABC0012300DEF",
      "RequestID": "201507131507262221400000001975",
      "ChannelType": "6014",
       "CustomerName": "Customer BCA Virtual Account",
      "CurrencyCode": "IDR",
      "PaidAmount": "60000.00",
       "TotalAmount": "100000.00",
      "SubCompany": "",
      "TransactionDate": "15/03/2014 22:07:40",
      "Reference": "",
      "DetailBills": [
             {
                    "BillAmount": "25000.00",
                    "BillNumber": "1234567890",
                    "BillSubCompany": "00002",
                    "BillReference": "12345678900"
             },
             {
                    "BillAmount": "35000.00",
                    "BillNumber": "2234567891",
                    "BillSubCompany": "00003",
                    "BillReference": "22345678901"
             }
      ],
      "FlagAdvice": "N",
       "Additionaldata": ""
```

#### Request (Sample of the JSON format for no-bill transaction)

```
{
```

```
"CompanyCode": "12345",
    "CustomerNumber": "ABC0012300DEF",
    "RequestID": "201507131507262221400000001975",
    "ChannelType": "6014",
    "CustomerName": "Customer BCA Virtual Account",
    "CurrencyCode": "IDR",
    "PaidAmount": "100000.00",
    "TotalAmount": "100000.00",
    "SubCompany": "00000",
    "TransactionDate": "15/03/2014 22:07:40",
    "Reference": "1234567890",
    "DetailBills": [],
    "FlagAdvice": "N",
    "Additionaldata": ""
}
```

Result of the request will contains following information:

## Response

Field	Data Type	Description
CompanyCode	Number(5)	
CustomerNumber	String(18)	
RequestID	String(30)	
PaymentFlagStatus	String(2)	
PaymentFlagReason	Object	
Indonesian	String(64)	
English	String(64)	
CustomerName	String(30)	
CurrencyCode	String(3)	
CurrencyCode	String(3)	

PaidAmount	Number(15)	
TotalAmount	Number(15)	
TransactionDate	String(19)	
DetailBills	List(N)	
BillNumber	String(18)	
Status	String(2)	
Reason	Object	
Indonesian	String(50)	
English	String(50)	
FreeTexts	List(9)	
Indonesian	String(32)	
English	String(32)	
AdditionalData	String(999)	

- Note:
- 2 last digits for TotalAmount and PaidAmount field should be decimal point.
- TotalAmount field value will be same with TotalAmount field value returned from copartners when BCA do inquiry list of bills.
- RequestID is unique from BCA for each transaction.
- PaidAmount field value will be total amount paid by customer through BCA. For multi bills transaction, PaidAmount field value might be different with TotalAmount field value. For non multi bills transaction, PaidAmount field value will be same with TotalAmount field value.
- CurrencyCode must be same for TotalAmount and PaidAmount. CurrencyCode field may vary with these values :
  - o IDR
  - o USD

- SGD
- For non multi bills transaction, status and reason will be defined in PaymentFlagStatus and PaymentFlagReason field. PaymentFlagStatus field is status for payment flag. This field may vary with these values:
  - 00 = Success payment flag.
  - 01 = Reject payment flag by co-partner, co-partner must defined reason for this status in PaymentFlagReason field value in two languages, Indonesian and English.
  - 02 = Payment Timeout (Payment Via Switcher).

Note: payment flag status other than 00, 01, and 02 will be considered as 01.

For multi bills transaction, co-partner must defined PaymentFlagStatus field value as "00" and PaymentFlagReason field value as "Success".

- For multi bills transaction, BillSubCompany field value might be different for each bill number. Status field value is status of payment flag for each bill number. Status field value may vary with these values :
  - 00 = Success payment flag.
  - 01 = Reject payment flag by co-partner, co-partner must defined reason for this status in Reason field value in two languages, Indonesian and English. Reason field value will be displayed to customer.
  - 02 = Payment Timeout (Payment Via Switcher).

Note: payment flag status other than 00, 01, and 02 will be considered as 01.

- n is sum of detail bills owned by customers and should not be more than 5. For Multi Bills, detail bills returned from co-partners to BCA only bills that customer choose to pay.

#### Response (Sample of the JSON format for non multi bills transaction)

```
"English": "Success"
},
"CustomerName": "Customer BCA Virtual Account",
"CurrencyCode": "IDR",
"PaidAmount": "150000.00",
"TotalAmount": "150000.00",
"TransactionDate": "15/03/2014 22:07:40",
"DetailBills": [],
"FreeTexts": [
      {
             "Indonesian": "Free Text 1",
             "English": "Free Text 1"
      },
      {
             "Indonesian": "Free Text 2",
             "English": "Free Text 2"
      },
      {
             "Indonesian": "Free Text 3",
             "English": "Free Text 3"
      }
],
"AdditionalData": ""
```

## Response (Sample of the JSON format for multi bills transaction)

```
{
    "CompanyCode": "12345",
    "CustomerNumber": "ABC0012300DEF",
    "RequestID": "201507131507262221400000001975",
    "PaymentFlagStatus": "00",
    "PaymentFlagReason": {
        "Indonesian": "Sukses",
```

```
"English": "Success"
},
"CustomerName": "Customer BCA Virtual Account",
"CurrencyCode": "IDR",
"PaidAmount": "60000.00",
"TotalAmount": "100000.00",
"TransactionDate": "15/03/2014 22:07:40",
"DetailBills": [
      {
             "BillNumber": "1234567890",
             "Status": "00",
             "Reason": {
                    "Indonesian": "Sukses",
                    "English": "Success"
             }
      },
      {
             "BillNumber": "2234567891",
             "Status": "00",
             "Reason": {
                    "Indonesian": "Sukses",
                    "English": "Success"
             }
      }
],
"FreeTexts": [
      {
             "Indonesian": "Free Text 1",
             "English": "Free Text 1"
      },
      {
             "Indonesian": "Free Text 2",
             "English": "Free Text 2"
      },
      {
```

```
"Indonesian": "Free Text 3",

"English": "Free Text 3"

}
],

"AdditionalData": ""
}
```

## Response (Sample of the JSON format for no-bill transaction)

```
{
      "CompanyCode": "12345",
      "CustomerNumber": "ABC0012300DEF",
      "RequestID": "201507131507262221400000001975",
      "PaymentFlagStatus": "00",
      "PaymentFlagReason": {
             "Indonesian": "Sukses",
             "English": "Success"
      },
      "CustomerName": "Customer BCA Virtual Account",
      "CurrencyCode": "IDR",
      "PaidAmount": "150000.00",
      "TotalAmount": "100000.00",
      "TransactionDate": "15/03/2014 22:07:40",
      "DetailBills": [],
      "FreeTexts": [
             {
                    "Indonesian": "Free Text 1",
                    "English": "Free Text 1"
             },
             {
                    "Indonesian": "Free Text 2",
                    "English": "Free Text 2"
             },
             {
                    "Indonesian": "Free Text 3",
```

```
"English": "Free Text 3"
}
],
    "AdditionalData": ""
}
```

# **Errors Response**

For the error response, use the following error schema:

List of Bills

```
{
      "CompanyCode": "12345",
      "CustomerNumber": "ABC0012300DEF",
      "RequestID": "201507131507262221400000001975",
      "InquiryStatus": "01",
      "InquiryReason": {
             "Indonesian": "Keterangan error disini",
             "English": "The error reason goes here"
      },
      "CustomerName": "Customer BCA Virtual Account",
      "CurrencyCode": "IDR",
      "TotalAmount": "150000.00",
      "SubCompany": "00001",
      "DetailBills": []
      "FreeTexts": [
             {
                    "Indonesian": "Free Text 1",
                    "English": "Free Text 1"
             },
             {
                    "Indonesian": "Free Text 2",
```

```
"English": "Free Text 2"
}
],
"AdditionalData": ""
}
```

# Flag Payment (Non-Multi Bills)

```
{
       "CompanyCode": "12345",
      "CustomerNumber": "ABC0012300DEF",
      "RequestID": "201507131507262221400000001975",
      "PaymentFlagStatus": "01",
       "PaymentFlagReason": {
             "Indonesian": "Keterangan error disini",
             "English": "The error reason goes here"
      },
       "CustomerName": "Customer BCA Virtual Account",
      "CurrencyCode": "IDR",
      "PaidAmount": "150000.00",
      "TotalAmount": "150000.00",
       "TransactionDate": "15/03/2014 22:07:40",
       "DetailBills": [],
      "FreeTexts": [
             {
                    "Indonesian": "Free Text 1",
                    "English": "Free Text 1"
             },
             {
                    "Indonesian": "Free Text 2",
                    "English": "Free Text 2"
             },
             {
                    "Indonesian": "Free Text 3",
                    "English": "Free Text 3"
             }
```

```
],
"AdditionalData": ""
}
```

#### Flag Payment (Multi Bills)

```
{
       "CompanyCode": "12345",
      "CustomerNumber": "ABC0012300DEF",
      "RequestID": "201507131507262221400000001975",
      "PaymentFlagStatus": "01",
      "PaymentFlagReason": {
             "Indonesian": "Keterangan error disini",
             "English": "The error reason goes here"
      },
      "CustomerName": "Customer BCA Virtual Account",
      "CurrencyCode": "IDR",
      "PaidAmount": "60000.00",
      "TotalAmount": "100000.00",
       "TransactionDate": "15/03/2014 22:07:40",
      "DetailBills": [
             {
                    "BillNumber": "1234567890",
                    "Status": "01",
                    "Reason": {
                           "Indonesian": "Gagal",
                           "English": "Failed"
                    }
             },
             {
                    "BillNumber": "2234567891",
                    "Status": "01",
                    "Reason": {
                           "Indonesian": "Gagal",
                           "English": "Failed"
```

```
}
      ],
      "FreeTexts": [
             {
                    "Indonesian": "Free Text 1",
                    "English": "Free Text 1"
             },
             {
                    "Indonesian": "Free Text 2",
                    "English": "Free Text 2"
             },
             {
                    "Indonesian": "Free Text 3",
                    "English": "Free Text 3"
             }
      ],
      "AdditionalData": ""
}
```

#### Flag Payment (No-Bill)

```
"DetailBills": [],
"FreeTexts": [
      {
             "Indonesian": "Free Text 1",
             "English": "Free Text 1"
      },
      {
             "Indonesian": "Free Text 2",
             "English": "Free Text 2"
      },
      {
             "Indonesian": "Free Text 3",
             "English": "Free Text 3"
      }
],
"AdditionalData": ""
```