

# BNi eCollection Technical Specification v3.0.0

CONFIDENTIAL

## Document Sign-Off

Version 3.0.0		
Author	Candra	14 July 2016
Reviewer		
Approver		

## Document Change Control

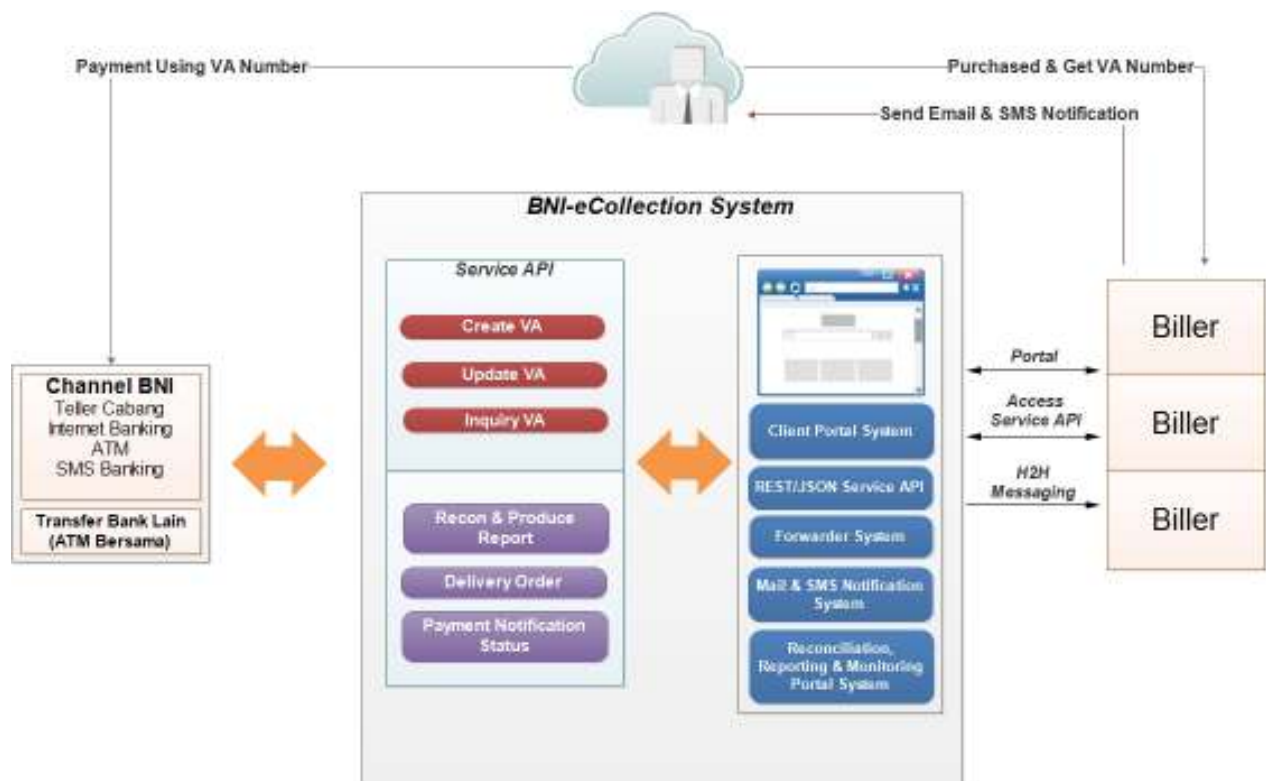
Version	Implementation Date	Authors	Summary of changes
1.0	23 June 2015	Nura Aditya	
1.1	24 June 2015	Nura Aditya	Revision the security data.
1.2	25 June 2015	Nura Aditya	API for bank client request.
1.3	22 September 2015	Nura Aditya	Fix format virtual account number, update flow process transaction, domain for access.
1.4	25 September 2015	Nura Aditya	Information for Client Portal System.
1.5	26 October 2015	Nura Aditya	Add information payment messaging for biller.
1.6	28 October 2015	Nura Aditya	Update flow architecture and process payment notification to biller.
1.7	14 January 2016	Candra	Added field description to the API; transaction amount can now be updated when the transaction has not been paid.
1.8	23 February 2016	Candra	Added field <code>billing_type</code> to the API; Changed <code>trx_amount</code> maximum length to 14.
1.8.1	16 Mei 2016	Candra	Renew outdated library links.
1.9.0	14 July 2016	Candra	All datetime parameters can now accept ISO8601 format; Added new parameter to <code>inquirybilling</code> response; Added new parameter to payment notification system; Added section 3.5 Parameter Information.
1.9.1	14 September 2017	Zola	Updated section 3.1;

			<p>Added 2 (two) types of billing/invoice, minimum payment (m) and open minimum payment (n);</p> <p>Updated section 3.5, changed notes for parameter type, customer_name, customer_phone, va_status;</p> <p>Updated section 4, added status code 013, 107, 200, 201;</p> <p>Updated <b>Appendix C</b>;</p> <p>Updated <b>Appendix D</b>;</p> <p>Added library link for Node.js.</p>
1.9.2	19 December 2017	Zola	<p>Added 1 (one) types of billing/invoice, open maximum payment (x);</p> <p>Added library link for Golang.</p>
3.0.0	27 April 2018	Zola	

## Table of Contents

Document Sign-Off .....	2
Document Change Control .....	2
1. Introduction .....	5
2. Biller Client Integration .....	6
2.1 Biller Client Detail .....	6
2.2 Virtual Account Number .....	6
2.3 Data Security System .....	7
3. Transaction Flow .....	8
3.1 Create Invoice/Billing .....	10
3.2 Inquiry Invoice/Billing .....	12
3.3 Update Transaction .....	14
3.4 Transaction Payment Notification (BNI eCollection system to Biller Client POST JSON) .....	16
3.5 Parameter Information .....	18
4. Status Code Message .....	24
Appendix .....	25

## 1. Introduction



Biller client is a merchant who integrated with the BNI eCollection system

BNI eCollection system to provide these services:

- Create invoice/billing (API)
- Inquiry invoice/billing details (API)
- Update invoice/billing details (API)
- Payment notification (callback)

## 2. Biller Client Integration

### 2.1 Biller Client Detail

Biller client should be able to provide technical data for the integration purpose, which consist:

- Company name
- Public IP address to be used to integrate with BNI eCollection
- A callback URL to receive payment notification from BNI eCollection
- Default billing lifetime, number of hours a billing can stay active

### 2.2 Virtual Account Number

The virtual account number has 16 digits long and consists of 3 components, below are the details:

#### 1. Virtual Account with 988 prefix

9	8	8	0	0	0	0	1	0	0	0	0	0	0	0	1
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

- 1<sup>st</sup> – 3<sup>rd</sup> digit: Fixed, sets '988' as constant value
- 4<sup>th</sup> – 8<sup>th</sup> digit: Number (00000-99999), indicates company identity (Client ID)
- 9<sup>th</sup> – 16<sup>th</sup> digit: Number (00000000-99999999), indicates virtual account number

#### 2. Virtual Account with 8 prefix

8	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

- 1<sup>st</sup> digit: Fix, sets '8' as constant value
- 2<sup>nd</sup> – 4<sup>th</sup> digit: Number (000-999), indicates company identity (Client ID)
- 5<sup>th</sup> – 16<sup>th</sup> digit: Number (000000000000-999999999999), indicates virtual account number

## 2.3 Data Security System

For security purpose, all messages that sent from and to BNI eCollection will be encrypted with a library (provided, see **Appendix E**). The encryption algorithm needs a secret key which will be provided by BNI eCollection. The secret key is a regular 32 hexadecimal characters.

Sample of a secret key: **ea0c88921fb033387e66ef7d1e82ab83**

The encryption also uses time to validate the request. Biller client should be able to make sure the time on the machine which making a request is set properly, though there is a 5 (five) minutes tolerance.

CONFIDENTIAL

### 3. Transaction Flow

Biller will interact with BNI eCollection web API using **JSON POST** on a single URL:

Development URL: **https://apibeta.bni-ecollection.com/**

Production URL: **https://api.bni-ecollection.com/**

These are the basic rules to integrate with BNI eCollection web API system:

- Using HTTP POST
- Header Content-Type should be application/json
- Request data should be encrypted with BNI eCollection encryption method
- Response data should be decrypted with BNI eCollection decryption method

#### Example request of creating an invoice/billing

Raw data:

```
{
  "client_id" : "001",
  "trx amount" : "100000",
  "customer_name" : "Mr. X",
  "customer_email" : "xxx@email.com",
  "customer_phone" : "08123123123",
  "virtual_account" : "8001000000000001",
  "trx id" : "1230000001",
  "datetime_expired" : "2015-07-01 16:00:00",
  "description" : "Payment of transaction ABC",
  "type" : "createBilling"
}
```

Encrypt the raw data before making a request, result of the encryption will look like this:

```
GEhHGEwbHh0WE0QNA0ZPTU1VCkVPejghNxFFGgQ9NVxVDnBBAVddWFYDUTQRFbMTGRc3E
wgDeFR5BE8KMANACTs3PgJ2X1tdUk57BT9IUURRVDcgCQ0OYFRGA01LfkBLUwIzDTVLX1
xWUQN3U0JTTFdVewggOEYfRhNIGHrERBoWOD0CC1FaXldCA3FBR0ZSX1UJCSA3TxdEE0U
YE0FCGRNFQhBDGgoVBVUICz9MSAUiCkYYGkVGGEQRRhkEPjRcXQV2A00KTFtHQwp3I0xP
UFFVfQgSOHpICUYJUK92ck1bBnpSeUwKJAQTR0MVERMaFhdGBxdLURdeHEUYBQ4
```

**Note:** this is not the real result from encrypting the above JSON, because the result will vary over time



Send the encrypted data along with the provided Client ID:

```
{
  "client_id": "001",
  "data": "GEhHGEwbHh0WE0QNA0ZPTU1VCkVPejghNxFFGgQ9NVxVDnBBAVddWFYDU
TQRFBMTGRc3EwgDeFR5BE8KMANACTs3PgJ2X1tdUk57BT9IUURRVDcgCQ
0OYFRGA01LfkBLUwIzDTVLX1xWUQN3U0JTTFdVewggOEYfRhNIGhRERBo
WOD0CClFaXldCA3FBR0ZSX1UJCSA3TxdEE0UYE0FCGRNFQhBDGgoVBVUI
Cz9MSAUiCkYYGkVGGEQRRhkEPjRcXQV2A00KTfthQwp3I0xPUFFVfQgSO
HpICUYJUk92ck1bBnpSeUwKJAQTR0MVERMaFhdGBxdLURdEHEUYBQ4"
}
```

Example response of successful request:

```
{
  "status": "000",
  "data": "GEZHFEMcHh0WE0QNA1ZXRVxcCQggOEYXRQNBC0ZyB0kFUAwCClFaXld
CA3FBR0ZSX1UJCSA3TxdEE0UYE0FCGRNFQhBDGgoVBVUICz9MSAUiCk
YYGkVGGEQRRhkEDw8"
}
```

Decrypt the response data:

```
{
  "virtual_account" : "8001000000000001",
  "trx_id" : "1230000001"
}
```

Example response of failed request (will be sent unencrypted):

```
{
  "status" : "001",
  "message" : "Incomplete/invalid Parameter(s)."
}
```

### 3.1 Create Invoice/Billing

This section provides the information for Biller client to create an invoice/billing.

Accepted parameters to create an invoice/billing (for more information about each parameter, please refer to **section 3.5**).

Parameter	Mandatory	Notes
type	Yes	Set to <a href="#">createbilling</a> or <a href="#">createbillingsms</a>
client_id	Yes	
trx_id	Yes	Invoice/billing ID
trx_amount	Yes	
billing_type	Yes	See <b>Appendix A</b>
customer_name	Yes	
customer_email	No	
customer_phone	No	
virtual_account	No	
datetime_expired	No	
description	No	

Parameters of response from a successful request.

Parameter	Notes
trx_id	Invoice/billing ID
virtual_account	VA number will be generated by BNI eCollection system if it has not been provided on request parameters.

**Note:** Invoice/billing that has been created **cannot** be deleted, though it can be deactivated to prevent end-user from paying the associated VA number.

If parameter [type](#) is set to [createbillingsms](#), BNI eCollection will also send an SMS to customer to pay the invoice/billing. SMS will be sent only if the provided number is registered with BNI SMS Banking.

**Sample of createbilling request and response**

Request:

```
{
  "type" : "createbilling",
  "client_id" : "001",
  "trx_id" : "1230000001",
  "trx_amount" : "100000",
  "billing_type" : "c",
  "customer_name" : "Mr. X",
  "customer_email" : "xxx@email.com",
  "customer_phone" : "08123123123",
  "virtual_account" : "8001000000000001",
  "datetime_expired" : "2016-03-01T16:00:00+07:00",
  "description" : "Payment of Trx 1230000001"
}

-----

{
  "client_id": "001",
  "data": "GutJFEMcHh0WE0QNA0ZPTU1VCkVPejghNxFFGgQ9NVxVDnBBAVddWfYD
UTQRFBMTGRc3Ewh4DFoIUQJNVXAASlB6NBolNl6XAzk4PwJGWVZcVwJL
WXR7VXVKAgocNApgXEV2TnRRVRdFUQM0DQVGWVtbBVNLCHVxfVADTgRL
NRgbR0MTRRobGxQUOT4CWkxVXVx2U0V2ekoDVwNcBUsoIRNFQxBDGRgZ
ExFGQxATFQUUCglYX3R TDYbOBkURUIYFEVBEUQKFQtWWwZ3Ax0FR1pM
dlpLWH9TAUoDUAQ9NUxEcnZUfVvNSUdZB3tSSUcFIw1HFxdKRBdLD0UZ
A0JIIxNFTBBDc2U"
}
```

Success response:

```
{
  "status": "000",
  "data": "FUpBFUMcHh0WE0QNA1ZXRvxcCQggOEYXRQNBC0ZyB0kFUAwCC1
FaXldCA3FBR0ZSXlUJCSA3Txdee0UYE0FCGRNFQhBDGgoVBVUI
Cz9MSAUiCkYYGkVGGEQRRhkEDw8"
}

-----

{
  "status" : "000",
  "data" : {
    "virtual_account" : "8001000000000001",
    "trx_id" : "1230000001"
  }
}
```

### 3.2 Inquiry Invoice/Billing

This section provides the information for Biller client to retrieve information of the existing invoice/billing.

Accepted parameters to inquiry an invoice/billing (for more information about each parameter, please refer to **section 3.5**).

Parameter	Mandatory	Notes
type	Yes	Set to <a href="#">inquirybilling</a>
client_id	Yes	
trx_id	Yes	Invoice/billing ID. This parameter will be used to identify which invoice/billing to be presented.

Parameters of response from a successful request.

Parameter	Notes
client_id	
trx_id	
trx_amount	
virtual_account	
customer_name	
customer_email	
customer_phone	
datetime_created	<b>Deprecated.</b> Please use <code>datetime_created_iso8601</code> instead.
datetime_created_iso8601	
datetime_expired	<b>Deprecated.</b> Please use <code>datetime_expired_iso8601</code> instead.
datetime_expired_iso8601	
datetime_last_updated	<b>Deprecated.</b> Please use <code>datetime_last_updated_iso8601</code> instead.
datetime_last_updated_iso8601	
description	
va_status	
payment_amount	
payment_ntb	
Billing_type	
datetime_payment	<b>Deprecated.</b> Please use <code>datetime_payment_iso8601</code> instead.
datetime_payment_iso8601	

**Sample of inquirybilling request and response**

Request:

```
{
  "type" : "inquirybilling",
  "client_id" : "001",
  "trx_id" : "1230000001",
}
-----
{
  "client_id": "001",
  "data" : "GUpCFUMcHh0WE0QNA0ZPTU1VCkVPejghNxFFGgQ9NVxVDnBJeAoiDB
           MTSkiQFBMTGRg3EwgJEFd5BE8KTH8DXkwHCyJ8VVRsUUG4EA"
```

Success response:

```
{
  "status": "000",
  "data": "GkdDFUMcHh0WE0QNA1ZXRvxcCQggOEYXRQNBC0ZyB0kFUAWCCFpgSut
          FOUwCFRUWGRdFFxZFSALABAtRVQUHsk90c0N2WF1XVwNQNRgTFBQYGE
          UWF0VGGEQRRhkEPjRLWQgFUABNW0hQQwN3Ax0FMVoVNj4IQjhXdloCT
          lAFclZxeDManhgZHBuVTEgXHBwFFQl5SFp6C1ABR3RYRAp_TlEJNBol
          GxgaGA5GSQ0VFwMaG08YGk9GITYNOFxUCnFJUQQTWcKIwstEkZCERM
          FEApXd19TewRbdEICWfd BwodOEIQRBgYGgReFA"
}
-----
{
  "status" : "000",
  "data" : {
    "client_id" : "001",
    "trx id" : "1230000001",
    "trx_amount" : "100000",
    "virtual account" : "8001000000000001",
    "customer_name" : "Mr. X",
    "customer_phone" : "08123123123",
    "customer_email" : "xxx@email.com",
    "datetime_created" : "2016-02-01 16:00:00",
    "datetime_expired" : "2016-03-01 16:00:00",
    "datetime_last_updated" : "2016-02-10 16:00:00",
    "datetime_payment" : "2016-02-23 23:23:09",
    "payment_ntb" : "023589",
    "payment_amount" : "100000",
    "va status" : "2",
    "billing_type" : "c",
    "description" : "Payment of Trx 1230000001",
    "datetime_created_iso8601" : "2016-02-01T16:00:00+07:00",
    "datetime_expired_iso8601" : "2016-03-01T16:00:00+07:00",
    "datetime last updated iso8601" : "2016-02-10T16:00:00+07:00",
    "datetime_payment_iso8601" : "2015-06-23T23:23:09+07:00"
  }
}
```

### 3.3 Update Transaction

This section provides the information for Biller client to update details of the existing invoice/billing.

Accepted parameters to update an invoice/billing (for more information about each parameter, please refer to **section 3.5**).

Parameter	Mandatory	Notes
type	Yes	Set to <a href="#">updatebilling</a>
client_id	Yes	
trx_id	Yes	Invoice/billing ID. This parameter will be used to identify which invoice/billing to be updated.
trx_amount	Yes	See <b>Appendix C</b> .
customer_name	Yes	
customer_email	No	
customer_phone	No	
datetime_expired	No	
description	No	

Parameters of response from a successful request.

Parameter	Notes
trx_id	Invoice/billing ID
virtual_account	VA number of the updated invoice/billing.

**Note:**

- In order to maintain invoice/billing detail, biller client must provide every value that are set before when requesting an update to BNi eCollection. If, for example, biller client doesn't provide customer\_email in update request, then its previous value will be replaced with an empty string.
- Parameter billing\_type and virtual\_account **cannot** be updated.

**Sample of updatebilling request and response**

Request:

```
{
  "client_id" : "001",
  "trx_id" : "1230000001",
  "trx_amount" : "100000",
  "customer_name" : "Mr. X",
  "customer_email" : "xxx@email.com",
  "customer_phone" : "08123123123",
  "datetime_expired" : "2016-03-30T23:00:00+07:00",
  "description" : "Payment of Trx 1230000001",
  "type" : "updateBilling"
}

-----

{
  "client_id": "001",
  "data": "GUdEFUMcHh0WE0QNA0ZPTU1VCkVPejghNxFFGgQ9NVxVDnBJeAoiDB
MTskIQFBMTGRg3EwgJCV9zQwJXWH8GCx03QxBDGRgZBQ04dlVWWFJV
TQdFVXYDTTYbODVUQDJABkEzRAhbXVhPRwhxRlBETVQJUAheDg4nek
52Uk4 dldQOD0Cd11bXlFOfAQ VEtSV0w3IQhFTxhGFUYaFkJEHAVB
NER0XUldTE57ckVbVExaTXkIIITdIGEUEWQxgYP0UYBEdeG0MYIxxSBE
I0VVxTSQohOFtWendbeiN-VU56AU8FEw"
}
```

Success response:

```
{
  "status": "000",
  "data": "GkxEFUMcHh0WE0QNA1ZXRVxcCQggOEYXRQNBC0ZyB0kFUAwCClFaXl
dCA3FBR0ZSXlUJCSA3TxdEE0UYE0FCGRNFQhBDGgoVBVUICz9MSAUi
CkYYGkVGGEQRRhkEDw8"
}

-----

{
  "status" : "000",
  "data" : {
    "virtual account" : "800100000000000001",
    "trx_id" : "1230000001"
  }
}
```

### 3.4 Transaction Payment Notification (BNI eCollection system to Biller Client POST JSON)

Parameters of payment notification (for more information about each parameter, please refer to **section 3.5**).

Parameter	Notes
virtual_account	
customer_name	
trx_id	Invoice/billing ID
trx_amount	
payment_amount	
cumulative_payment_amount	
payment_ntb	
datetime_payment	
datetime_payment_iso8601	

**Notes:**

- **Callback URL:** provided by Biller client,
- If payment notification failed, our system will send another request to callback URL until succeed or at maximum 5 times retry,
- A notification is considered as success if and only if response from the callback URL indicated status = 000 with JSON format (see example on the next page),
- Payment simulation for development purpose: <http://dev.bni-ecollection.com/>.



Example of payment notification from BNI eCollection:

```
{
  "trx_id" : "1230000001",
  "virtual account" : "8001000000000001",
  "customer_name" : "Mr. X",
  "trx_amount" : "100000",
  "payment amount" : "100000",
  "cumulative_payment_amount" : "100000",
  "payment_ntb" : "233171",
  "datetime_payment" : "2016-03-01 14:00:00",
  "datetime_payment_iso8601" : "2016-03-01T14:00:00+07:00"
}

-----

{
  "client_id": "001",
  "data": "FUdFFUMcHh0WE0QNA1dVXEdQegggOEczSBFFGRJBQxkFQjNWfVpcX0N
NdnNDR1JYV1s3IQhNRxdFEkUYE0FCGRNFQhBECxQLR1YJB09QSVVHVn
ZTTDdQCmFTRAg6ND4KWAcJQHRVWF5QVjhMAxQTFBgXRggSOAZIDk56V
1ZwdFVSC39UNiIKGxIRR0IQBg8FWUgOVESDC0YCVncKHTNJGhVIQxJG
CxQLR0IKeFRMUUhHWHZfVHoEXDYbOBosQ0cVFES-EkkIGH0cEkZMERM
FYQ"
}
```

Response should be like this (otherwise it is considered as a failed request):

```
{
  "status" : "000"
}
```

### 3.5 Parameter Information

Parameters of payment notification (for more information about each parameter, please refer to **section 3.5**).

Parameter	Data Type	Notes
type	Accepted value: - createbilling - createbillingsms - updatebilling - inquirybilling	This field indicate your type of action, it is required for each API request. If this parameter is omitted, error code <b>005</b> will be thrown. If the provided value other than the accepted value, error code <b>004</b> will be thrown.
client_id	char(3) or char(5)	Client ID is given by BNI along with the Secret Key.
trx_id	varchar(30)	Invoice/billing ID. Accepts any <b>printable</b> characters. This parameter will be the identifier of each invoice/billing; thus, it must be unique.  Invoice/billing of the same ID <b>cannot</b> be created more than once even if it has been expired, otherwise error code <b>105</b> will be thrown.
trx_amount	decimal(14,0)	Invoice/billing amount. Accepts only integer value without decimal and/or thousand separators.  See <b>Appendix B</b> for more information.
billing_type	Accepted value: - o - c - i - m - n - x	See <b>Appendix A</b>

Parameter	Data Type	Notes
customer_name	varchar(255)	Accepts any <b>printable</b> characters. This parameter will be used as a VA name, which will be displayed when customer wants to pay the invoice/billing.  If parameter <b>type</b> is set to <b>createbillingsms</b> , this parameter can only accept maximum 14 characters.
customer_email	varchar(255)	Accepts any <b>printable</b> characters with a valid email address format. This parameter will be used if biller client wants to send an invoice and/or payment email notification to customer.
customer_phone	varchar(30)	Accepts any <b>printable</b> characters. This parameter provide the customer's phone information.  If parameter <b>type</b> is set to <b>createbillingsms</b> , this parameter should be started with <b>628</b> . Example: <b>6281234567890</b>
virtual_account	char(16)	VA number that will be used to make a payment. It must follow the format specified on <b>Section 2.2</b> .

Parameter	Data Type	Notes
datetime_expired	datetime  Format: <date>T<time><timezone>	<p>This parameter will determine VA's expiry date &amp; time. It must follow the format specified on ISO 8601.</p> <p>Example: 2015-12-31T23:59:00+07:00</p> <p>This parameter will use other date/time format if you do the inquirybilling request: &lt;date&gt; &lt;time&gt;</p> <p>Example: 2015-12-31 23:59:00</p> <p>With this format, date &amp; time are presented in UTC+7.</p>
description	varchar(100)	Accepts any <b>printable</b> characters. This parameter provide some additional information about the invoice/billing, and will be displayed on the invoice email notification.
datetime_created	datetime  Format: <date> <time>	<p>This parameter presents only if you do the inquirybilling, indicating when the invoice/billing was created.</p> <p>Example: 2015-12-31 23:59:00</p> <p>With this format, date &amp; time are presented in UTC+7.</p>

Parameter	Data Type	Notes
datetime_last_updated	datetime  Format: <date> <time>	This parameter presents only if you do the inquirybilling, indicating when the invoice/billing was updated.  Example: 2015-12-31 23:59:00 With this format, date & time are presented in UTC+7.  <u>This parameter is nullable.</u>
datetime_payment	datetime  Format: <date> <time>	This parameter presents if you do the inquirybilling and on payment notification. Indicating when the invoice/billing was paid.  Example: 2015-12-31 23:59:00 With this format, date & time are presented in UTC+7.  <u>It will be null when the invoice/billing has not been paid.</u>
datetime_created_iso8601	datetime  Format: <date>T<time><timezone>	This parameter is the ISO 8601 version of datetime_created parameter.  Example: 2015-12-31T23:59:00+07:00

Parameter	Data Type	Notes
datetime_last_updated_iso8601	datetime  Format: <date>T<time><timezone>	This parameter is the ISO 8601 version of datetime_last_updated parameter.  Example: 2015-12-31T23:59:00+07:00
datetime_payment_iso8601	datetime  Format: <date>T<time><timezone>	This parameter is the ISO 8601 version of datetime_payment parameter.  Example: 2015-12-31T23:59:00+07:00
datetime_expired_iso8601	datetime  Format: <date>T<time><timezone>	This parameter presents only if you do the inquirybilling, and is the ISO 8601 version of datetime_expired parameter.  Example: 2015-12-31T23:59:00+07:00
payment_ntb	char(6)	Journal number, also known as reference number.  This parameter presents if you do the inquirybilling and on payment notification. It's a sequence of 6 (six) digit random number.  Example: 058305  <u>It will be null when the invoice/billing has not been paid.</u>

Parameter	Data Type	Notes
payment_amount	decimal(14,0)	<p>Paid amount.</p> <p>This parameter provide two different information from each of these scenarios:</p> <ul style="list-style-type: none"><li>- in a response of inquirybilling request, it provides the <b>total</b> amount paid by end-user for the corresponding invoice/billing ID,</li><li>- in payment notification system, this parameter indicates the <b>current</b> amount paid by the end-user.</li></ul>
cumulative_payment_amount	decimal(14,0)	<p>This parameter presents only on payment notification, it provides the <b>total</b> amount paid by end-user for the corresponding invoice/billing ID.</p>
va_status	integer	<p>This parameter presents if you do the inquirybilling. It provide the status of the invoice/billing.</p> <p>1 =&gt; invoice/billing is active 2 =&gt; invoice/billing is inactive</p>

**Note:** printable characters are a set of all visible characters and spaces (having an ASCII hex between \x20 and \x7E).

#### 4. Status Code Message

STATUS	MESSAGE
000	Success
001	Incomplete/invalid Parameter(s).
002	IP address not allowed or wrong Client ID.
004	Service not found.
005	Service not defined.
006	Invalid VA Number.
008	Technical Failure.
009	Unexpected Error.
010	Request Timeout.
011	Billing type does not match billing amount.
012	Invalid expiry date/time.
013	IDR currency cannot have billing amount with decimal fraction.
101	Billing not found.
102	VA Number is in use.
103	Billing has been expired.
105	Duplicate Billing ID.
107	Amount can not be changed.
200	Failed to send SMS Payment.
201	SMS Payment can only be used with Fixed Payment.
997	System is temporarily offline.
998	"Content-Type" header not defined as it should be.
999	Internal Error.



## Appendix

A. There are 6 (six) types of invoice/billing that can be created:

- Open payment: invoice/billing can be paid multiple times as long as it is still active.

billing\_type code: **o**

- Fixed payment: invoice/billing should be paid with exactly the same amount as requested.

billing\_type code: **c**

- Installment/partial payment: invoice/billing can be paid multiple times as long as paid amount is less than the requested amount and still active.

billing\_type code: **i**

- Minimum payment: invoice/billing can be paid with greater than or equal to the requested amount.

billing\_type code: **m**

- Open minimum payment: invoice/billing can be paid greater than or equal to the requested amount multiple times as long as it is still active.

billing\_type code: **n**

- Open maximum payment: invoice/billing can be paid less than or equal to the requested amount multiple times as long as it is still active.

billing\_type code: **x**

B. Biller client should set `trx_amount` parameter to **0** when creating an open payment invoice/billing, otherwise error code **011** will be thrown.

C. Updating invoice/billing can only be done when it is never been paid before **or** the new amount is greater than or equal to paid amount, otherwise error code **107** will be thrown.

D. `cumulative_payment_amount` will differ from `payment_amount` when `billing_type` is set to **o** (open payment), **i** (partial payment), **n** (open minimum payment), or **x** (open maximum payment) due to the fact that customer can pay more than once.

E. Encryption library:

- a. ASP.NET:  
<https://1drv.ms/f/s!AqQaZjqXrHUQkf1-c2MqGHLhzct9xg>
- b. Java:  
<https://1drv.ms/f/s!AqQaZjqXrHUQkf18PVzSpNzi9qAGsA>
- c. PHP:  
<https://1drv.ms/f/s!AqQaZjqXrHUQkf16MbBq05vqVK0LGQ>
- d. Python:  
<https://1drv.ms/f/s!AqQaZjqXrHUQkf19a3hzaW-b5m4gsQ>
- e. Node.js:  
<https://1drv.ms/f/s!AqQaZjqXrHUQmOUCUbG9Lk1jD9wh-g>
- f. Golang:  
[https://1drv.ms/f/s!AqQaZjqXrHUQspV5mMTrBXC\\_rZMzAg](https://1drv.ms/f/s!AqQaZjqXrHUQspV5mMTrBXC_rZMzAg)