# **BNI Digital Service Starter Guide**

Getting Started Quickly and Easily.

## What is the BNI API?

The BNI API is a set of interfaces and protocols that allows you to interact with BNI's API services programmatically. By using the BNI API, you can access a wide range of functionalities, such as retrieving account information, processing transactions, and more.

# Who is this guide for?

This guide is intended for developers who want to learn how to connect to BNI's API and integrate it into their applications. Prior knowledge of programming languages and concepts such as RESTful API is recommended.

# What will you learn from this guide?

By following this guide, you will learn how to:

- · Create an account, create application and obtain API credentials
- · Authenticate your requests to the BNI API
- Process transactions, such as transfers and bill payments through our sandbox
- · How to test our sandbox with our postman collection

## **Prerequisites**

Before you begin, make sure you have:

- Basic knowledge of programming languages such as JavaScript, Python, or Ruby
- A RESTful client such as Postman or Insomnia
- · An internet connection

## Let's get started!

Now that you know what the BNI API is and what you'll learn from this guide, let's get started by creating an account and obtaining your API credentials.

# **Getting Started**

#### **Environment**

BNI API has two environments, production and production sandbox. The production environment is used for applications that are ready for live/production use, while the sandbox environment is used for development or testing purposes before the application is ready for production. The production environment uses the URL <a href="https://api.bni.co.id">https://api.bni.co.id</a>. Meanwhile, the production sandbox environment uses the URL <a href="https://sandbox.bni.co.id">https://sandbox.bni.co.id</a>. The data available in the sandbox environment is simulated data and will not affect real accounts. Users can choose the environment that suits their needs, depending on the development stage or the needs of their application. Make sure to check and use the appropriate endpoint for the desired environment when making API requests.

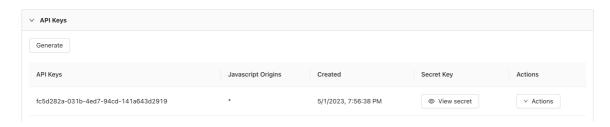
## **Creating an Account**

Before you can start using the BNI API, you need to create an account and obtain your API credentials. Here are the steps to create an account:

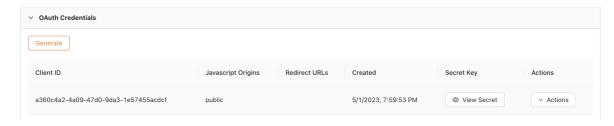
- 1. Go to the BNI API portal at <a href="https://digitalservices.bni.co.id/">https://digitalservices.bni.co.id/</a> and click <a href="https://digitalservices.bni.co.id/">Register / Login</a>, and <a href="https://digitalservices.bni.co.id/">Register / Register /
- 2. Fill all the information and click sign up, and continue to email verification
- 3. After email is verified, click Application from menu and click Create Application



- 4. Fill the Application form, enable application and click next
- 5. Choose API Products, you might tick all the services and click next
- 6. Go back to Application page, edit your application, click Authentication, generate your API Key system will generate API\_KEY along with the API\_SECRET\_KEY



7. Generate OAuth Credentials , in the pop up for example you can tick Application type as public and click <a href="mailto:save changes">save changes</a> , system will generate <a href="mailto:client\_idea">CLIENT\_ID</a> and <a href="mailto:client\_idea">CLIENT



8. Take a note of your API Key with the secret key, also the Client ID with the secret key.

## **Authenticating Your Request**

To access BNI's API, you need to authenticate your requests using an access token. Here are the steps to obtain an access token from BNI production sandbox:

1. Open a terminal or command prompt, and run the following command to get the AUTHORIZATION\_CODE:

```
echo -n 'CLIENT_ID:CLIENT_SECRET' | base64

Sample result:

Lecho -n '778c562c-3fdd-4806-bf5b-12b174ff1e30:03d0b904-f974-4aa7-86d5-33777e81379b' | base64
Nzc4YzU2MmMtM2ZkZC00DA2LWJmNWItMTJiMTc0ZmYxZTMw0jAzZDBiOTA0LWY5NzQtNGFhNy04NmQ1LTMzNzc3ZTqxMzc5Yq==
```

2. Running below command

```
curl -X POST \
https://sandbox.bni.co.id/api/oauth/token \
-H 'Authorization: Basic <AUTHORIZATION_CODE>' \
-H 'Content-Type: application/x-www-form-urlencoded' \
-d 'grant_type=client_credentials'
```

#### Sample

```
└─ curl —X POST \
https://sandbox.bni.co.id/api/oauth/token \
—H 'Authorization: Basic Nzc4YzUZMmMtM2ZkZC000DA2LWJmNwItMTJiMTc0ZmYxZTMw0jAzZDBiOTA0LWY5NzQtNGFhNy04NmQ1LTMzNzc3ZTgxMzc5Yg==' \
—H 'Content—Type: application/x—www-form—urlencoded' \
—d 'grant_type=client_credentials'
{"access_token":"TVgLm0FfyXK6IzqNS45bRYCS2Ppp14cX56QiBLoVe1PqSIENI04gVT","token_type":"Bearer","expires_in":3600,"scope":"resource.WRITE resource.READ"]}
```

3. Save it as your ACCESS\_TOKEN

# Get your first hit!

To start with, we would like to explain how to make an initial API call. For more information on our API products, please visit <a href="https://digitalservices.bni.co.id/">https://digitalservices.bni.co.id/</a> and select the API Product option in the menu. You can also access a complete Postman collection example in the Resource under Documentation menu. However, in this document, we will focus on one of the examples of using the One Gate Payment service, specifically the "Get Balance" endpoint.

# One Gate Payment - Get Balance

#### Information

Hostname	https://sandbox.bni.co.id
HTTP Method	POST
Path	/H2H/v2/getbalance
Format	JSON
Authentication	OAuth 2.0 (client credential)

## **HTTP Headers**

Name	Format	Description
X-API-Key	String	Value of API_KEY
Content-Type	String	Value : "application/json"

# **Request Body**

Field	Data Type	Description
signature	String	JWT of your request body
accountno	String	Sample value : "0115476117"
clientId	String	"IDBNI" + BASE64(Application Name)

## **Full URL**

https://sandbox.bni.co.id/H2H/v2/getbalance?access\_token=[ACCESS\_TOKEN]

### **Get Client ID**

Open <a href="https://www.base64encode.org/">https://www.base64encode.org/</a> and encode your application name

Application	n Name	BNI PORTAL

```
Base64(Application Name) Qk5JIFBPUIRBTA==
clientId IDBNIQk5JIFBPUIRBTA==
```

# **Get Signature Value**

- 1. Open https://jwt.io/
- 2. Fill payload data with:

```
{
  "clientId": "<Your clientId>",
  "accountNo": "0115476117"
}
```

Sample

```
PAYLOAD: DATA

{
    "clientId": "IDBNIQk5JIFBPU1RBTA==",
    "accountNo": "0115476117"
}
```

- 3. In verify signature path, Fill your-256-bit-secret with your API\_SECRET\_KEY
- 4. Copy your signature
- 5. Full body request

```
{
    "clientId": "IDBNIQk5JIFBPUlRBTA==",
    "accountNo": "0115476117",
    "signature": "eyJhbGci0iJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJjbGllbnRJZCI6IklEQk5JUWs1SklGQlBVbFJCVEE9PSIsImFjY291bnR0byI6IjAxMTU0NzYxN
}
```

6. You can curl the request

```
curl -X POST \
   '{{URLSandbox}}/H2H/v2/getbalance?access_token={{access_token}}' \
   -H 'Content-Type: application/json' \
   -H 'X-API-Key: {{apikey}}' \
   -d '{
    "clientId": "{{clientId}}",
    "accountNo": "0115476117",
    "signature": "{{signature}}"
}'
```

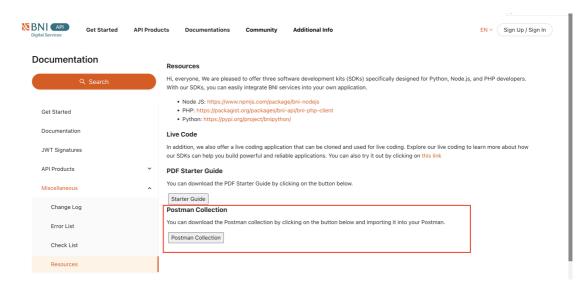
7. Sample Response

Congratulations on your first successful API call to BNI sandbox environment! You have taken the first step towards building great products with BNI's APIs. Keep exploring the API product documentation to unleash the full potential of our APIs

# **Try Our Sandbox via Postman Collection**

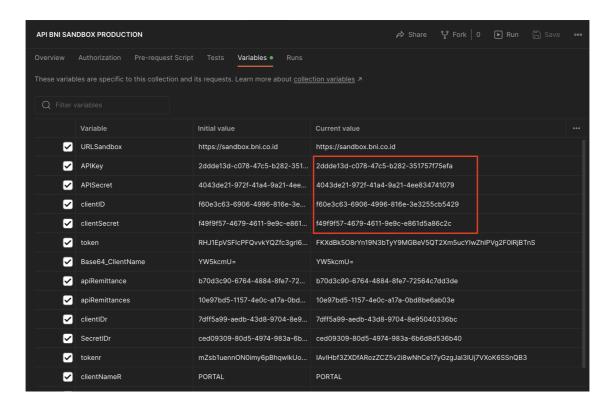
1. Download our postman collection in

https://digitalservices.bni.co.id/documentation/miscellaneous-resources?lang=en

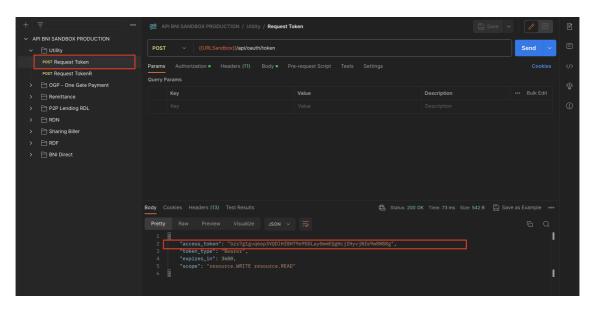


- 2. Import in Postman , open the variables tab and change the current value of
  - a. APIKey
  - b. APISecret
  - c. clientID
  - d. clientSecret

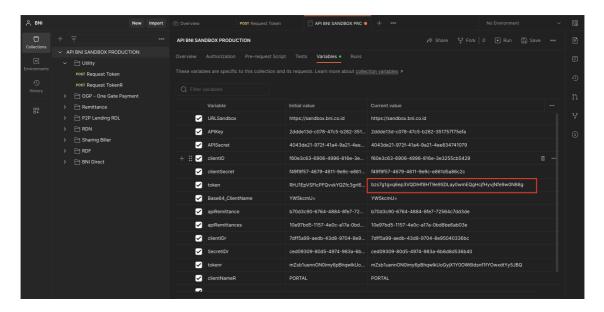
Click Save



3. Hit our utility → Request Token to get your access\_token



4. Copy your access\_token and paste to variables tab, click Save



5. You can explore by running other services to hit our sandbox

