

# APISIX Setup

## Finmars APISIX Setup Guide

### Abstract

As result of that instruction you will have proxy to Exante Broker e.g. <https://exante-proxy.client.com> where client.com your domain

### Prerequisites

Before starting make sure you have the following:

1. A machine running Linux with Ubuntu 22.04.
2. Docker installed on your machine.
3. A public IP address.
4. Generated API keys in Exante Account Page
5. You need to convert `API Key` and `Secret Key` to Basic Auth Token String (Use any public base64 encoder, in other words it should be `base64(api_key + ":" + secret_key)` )

### Steps to Set Up APISIX

#### 1. Run the APISIX Docker Container:

```
docker run -d --name apache-apisix -p 9080:9080 -p 9443:9443 -e
APISIX_STAND_ALONE=true apache/apisix
```

#### 2. Create the `apisix.yaml` Configuration File:

Create a file named `apisix.yaml` with your desired configuration.

#### 3. Copy the `apisix.yaml` File to the APISIX Container:

```
docker cp apisix.yaml apache-apisix:/var/tmp/
```

#### 4. Move the `apisix.yaml` File to the APISIX Configuration Directory:

```
docker exec -i apache-apisix sh -c 'cp /var/tmp/apisix.yaml /usr/local/apisix/conf/'
```

#### 5. Reload the APISIX Configuration:

```
docker exec -it apache-apisix apisix reload
```

# Setting Up HTTPS

If you want your APISIX instance to listen for HTTPS connections, follow these additional steps:

## 1. Obtain an SSL Certificate:

Get or create an SSL certificate and export it along with its private key to PEM format.

## 2. Update `ssls.yaml`:

Put the PEM contents into the corresponding sections of `ssls.yaml`.

## 3. Include SSL Configuration in `apisix.yaml`:

Add the contents of `ssls.yaml` to `apisix.yaml` before the `#END` instruction.

```
apisix:
  node_listen: 9080          # HTTP inbound port
  ssl:
    enable: true
    listen:
      - port: 9443          # HTTPS inbound port
        enable_http3: false

consumers:
  - username: finmars      # client name
    plugins:
      basic-auth:
        username: foo      # inbound credentials, that you will pass to Finmars IT Team
        password: bar

# upstream.yaml

upstreams:
  - id: 1
    nodes:
      api-demo.exante.eu:443: 1
    scheme: https
    pass_host: node
```

```
type: roundrobin
- id: 2
  nodes:
    api-live.exante.eu:443: 1
  scheme: https
  pass_host: node
  type: roundrobin

# plugin_config.yaml

plugin_configs:
- id: 1
  plugins:
    basic-auth: {}
    proxy-rewrite:
      headers:
        set: # credentials used to connect to api-demo.exante.eu # Basic Auth string from
API key and Secret Key
        Authorization: "Basic
NDQ3YTIxNzEtYWnkMi00N2Q0LWEy0WYt0Tk4ZTA5YzQ2Njk00kJSUpEQk9NUGdXVmxpN2wyeDBW"
      regex_uri:
        - "^/demo/(.*)"
        - "/$1"
- id: 2
  plugins:
    basic-auth: {}
    proxy-rewrite:
      headers:
        set: # credentials used to connect to api-live.exante.eu # Basic Auth string from
API key and Secret Key
        Authorization: "Basic
NDQ3YTIxNzEtYWnkMi00N2Q0LWEy0WYt0Tk4ZTA5YzQ2Njk00kJSUpEQk9NUGdXVmxpN2wyeDBW"
      regex_uri:
        - "^/live/(.*)"
        - "/$1"

# routes.yaml
```

```
routes:
  - uris:
    - /demo/md/*/accounts
    - /demo/md/*/symbols/*
    - /demo/md/*/summary/*
    - /demo/md/*/ohlc/*
    - /demo/md/*/transactions
    - /demo/trade/*/orders/*
  upstream_id: 1
  plugin_config_id: 1
  - uris:
    - /live/md/*/accounts
    - /live/md/*/symbols/*
    - /live/md/*/summary/*
    - /live/md/*/ohlc/*
    - /live/md/*/transactions
    - /live/trade/*/orders/*
  upstream_id: 2
  plugin_config_id: 2
#END
```

## Also part if you dont have nginx proxy

```
# ssls.yaml

ssls:
  - id: 1
    snis:
      - test.com          # hostname where apisix instance is running
    cert: |
      -----BEGIN CERTIFICATE-----
      MII CojCCAYoCCQDoby1LjeWcZzANBgkqhkiG9w0BAQsFADARMQ8wDQYDVQQDDAZS
      T09UQ0EwIBcNMjQwNzEyMjE1MjEzWhgPMjEyNDA2MTgyMTUyMTNaMBMxETAPBgNV
      BAMMCHRlc3QuY29tMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAs5Y
      uQvVwF3CFbNlJPK8007QlKA8UuapWdSKgT59Vqnkk0/7dfUHfP6p0FG8kxQexZBG
```

uxbID+nCM175pJyJxjd2mZngtj2E1l3vUH0H6hhE0o5xLAgrDbBxgHnMZHyh/4xz  
quXgho0nv1R0i+0cIou4viyDp4BslyBJU0NskEih0yUTJaSUS6zR6Q1aABEVEgYi  
0F9Wyr2tJ58jTlrRvFgrsDXe0oyf81diAmWePg4mETanejbaDBhtCQH8PllFfu1b  
TeqqZXRAdE0kbV23o4BfPYPB73Px1bdo0u/wGZTTY2DKQwd9QPg8fg0dT8dvegke  
3dUUX/XozqekMt3w2QIDAQABMA0GCSqGSIb3DQEBcwUAA4IBAQAAnBUBhEnk2zjP5  
P9AJ/2cwfRQSBj/Bti5vW/xAAEAw0Wqpcdsenr9/T8D4n1g5SZJeXhmRWdvSdB  
pYbUr0a4ISjpvotxze4dC0hQo2E09XupQZPKbioyZTWJczwgxmccdkLH8uJD2llz  
e/JKVfFH7Ax09Cz9I3+oyfEehPjemb5dJg/HQa+nWCC7ic7tC4mvd72GyGqAub4e  
omhzWfmSsDxQpmJauA6uW0swfH+Ws+id6YhwArsxgMYcwURQ6L1YeaXks3kTRnrN  
9XV0Tt1N00aHPlBo4kGDuJ+acfh9bReFbwa1CV6nS6wDqXu0SWEkKa69hXI3Wzp  
gv0mZ+28

-----END CERTIFICATE-----

key: |

-----BEGIN RSA PRIVATE KEY-----

MIIEpAIBAAKCAQEAz5YuQvVwF3CFbnLJPk8007QLKA8UuapWdSKgT59Vqnkk0/7  
dfUHfP6p0FG8kxQexZBGuxbID+nCM175pJyJxjd2mZngtj2E1l3vUH0H6hhE0o5x  
LAgrDbBxgHnMZHyh/4xzquXgho0nv1R0i+0cIou4viyDp4BslyBJU0NskEih0yUT  
JaSUS6zR6Q1aABEVEgYi0F9Wyr2tJ58jTlrRvFgrsDXe0oyf81diAmWePg4mETan  
ejbaDBhtCQH8PllFfu1bTeqqZXRAdE0kbV23o4BfPYPB73Px1bdo0u/wGZTTY2DK  
Qwd9QPg8fg0dT8dvegke3dUUX/XozqekMt3w2QIDAQABAoIBAHZaPQhZr5CRL7tX  
mXDZeg+TDKeiNC01ggG40zm4Ef8A56EuytgszIZKL4ndrS/2+c1SzkfPt9rzioJf  
vjrosc3/q84n9CQXf0g5hfXiyEu+a9ScVERAwHLrIWnHSqPPd96KAMaZIpWePrs0  
mExejEJw9990FmJL6th8PHkgTkcbYRKv8K7WnNDIHdUK6iSg0rtyvg2YDgRDDiRv  
GS3ofHd05WxQsrqxYdle8aThuKV31gjt3nlfDNinWKHGEmvXbSGu7HGck61Nlk+j  
py3lkTZLeoxVaoZ5fIjdA/a0WDgV9HQBxtiCjd4VGC6xAsLT9gBy9c6cJFdb52Nc  
w/jjn6ECgYEA/gx6UrCcp2TuZYU/xkEIMi6mVe7d60w7672pK6FxcNrBiV0T/+F1  
o2Cwd0iq0X9IJKBLDIGM2fFTptIER60f8P/RnfzLX7Gen0X+voR9zpYePuyIKaf  
UW6n4ZB4wlt7ZIoRwTAwo/Whhx+XGL4iVosw2DI6tFXRWI0+8dCew0CgYEA0GT6  
Xp0yi/D9UjZ1vM/fpojZb6gZaK6zQjWi5CrcMzC2FyD0K9BTS2BWe28gmgV2Sab  
9/fZJmXnpAnleiI2Co8b4p+44QAPtPUPCsLaiVR0S1vaEv/S+0ag682jDFWn0R5C  
VYSg4hyC0f3KA0Jb9mgL/B/vFEnq1YBEr3P6af0CgYEAqef0Kt104+DqSZJA/KGg  
CW6IbA4+94kSyKEa7sIWSZD+ugwzW3fQYL/Vn1e2YkDqzilQBhzbQyHMUmreRhRy  
Pr2hhk3P5Lfr0TCLAJkYSmoJn10v0AWbo6iL0pqrJeZmr0Rm2vi0jhVC3kiRkUoT  
TCvnjap3DV7PL0Zu565nFkECgYEAAtVC2Wi3RtdqWvboulHoU8H0w2Nga3HNKrmxb  
JxFXaQxvFwrfDSnG2lyWZ+UmGBxxrf8ewxA90mB9u8cCcyJi/KrpKz0nCVuftWV9  
MSpLYXEdsgmX4uH88q3QA3pmu6umlFbUhk2gITuGvugmosBQHUMH8nTicjeh/+Lb  
YAC7xw0CgYA8rePgM3xCn5U7zZPbvraYa7UZKvmrBAJpnh+oaYVpF4B1SCVJL23V  
Ym/vXkzR3K0Q8eKiUOUTV23CeZ1CSIDeDS5Y3yjVmfbABxlGmF/Z4kuvfTpk2Lns

```
AjX3slshjCQj fNtVfelqXW+9QDyZbDZpNs5Cfl8/awj0+Mwv/isxVA==
```

```
-----END RSA PRIVATE KEY-----
```

# How To Test

Make a CURL request to APISIX proxy

```
curl -u foo:bar 0.0.0.0:9080/demo/md/3.0/accounts
```

or open `0.0.0.0:9080/demo/md/3.0/accounts` in browser and pass Basic Auth Credentials

## Get help

- APISIX Documentation [<https://apisix.apache.org/docs/apisix/getting-started/README/>]
- Exante Documentation [<https://api-live.exante.eu/api-docs/>]
- Finmars IT Help: [s.zhitenev@finmars.com](mailto:s.zhitenev@finmars.com)

---

Revision #14

Created 2024-07-18 21:18:12 UTC by Anton Petrushkaneki

Updated 2025-05-21 15:50:50 UTC by Sergei Osipov