

Installation Guide

Initial proxy server setup and configuration

- [APISIX Setup](#)
- [Vault Setup](#)
- [Configuration Installation](#)

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 `ssl.yaml`:

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

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

Add the contents of `ssl.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

NDQ3YTIxNzEtYWwNkMi00N2Q0LWEyOWYtOTk4ZTA5YzQ2Njk0OkJSMUpEQk9NUGdXVmxpN2wyeDBW"

```
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
```

NDQ3YTIxNzEtYWwNkMi00N2Q0LWEyOWYtOTk4ZTA5YzQ2Njk0OkJSMUpEQk9NUGdXVmxpN2wyeDBW"

```
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-----

MIICojCCAYoCCQDoby1LjeWcZzANBgkqhkiG9w0BAQsFADARMQ8wDQYDVQQDDAZS

T09UQ0EwIBcNMjQwNzEyMjE1MjEzWhgPMjEyNDA2MTgyMTUyMTNaMBMxETAPBgNV
BAMMCHRlc3QuY29tMIIbIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAzs5Y
uQvVwF3CFbNIjPk8OO7QIKA8UuapWdSKgT59Vqnkk0/7dfUHfP6pOFG8kxQexZBG
uxbID+nCM175pjYjXjd2mZngtj2E1I3vUHOH6hhE0o5xLAgrDbBxgHnMZHyh/4xz
quXgho0nv1R0i+Oclou4viyDp4BsIYBJUONskEihOyUTJaSUS6zR6Q1aABEVEgYi
OF9Wyr2tj58jTlrRvFgrsDXeOoyf81diAmWePg4mETanejbaDBhtCQH8PIIFfU1b
TeqqZXRAdeOkbV23o4BfPYPB73Px1bdo0u/wGZTTY2DKQwd9QPg8fg0dT8dvegke
3dUUx/XozqekMt3w2QIDAQABMA0GCSqGSIb3DQEBCwUAA4IBAQAAnBUBhEnk2zjP5
P9AJ/2cwfrQSBj/Bti5vW/xAAEAWxOWqpcdsenr9/T8D4n1g5SZJeXhmRWdvSdB
pYbUrOa4ISjpvotxe4dCOhQo2EO9XupQZPKbioyZTWJczwgxmccdKLH8uJD2IIz
e/JKVfFH7AxO9Cz9I3+oyfEehPjemb5djg/HQa+nWCC7ic7tC4mvd72GyGqAUb4e
omhzWfmSsDxQpmJauA6uW0swfH+Ws+id6YhwArsxgMYcwURQ6L1YeaXKs3kTRnrN
9XVOTt1NQ0aHPiBo4kGDujj+aCfH9bReFbwa1CV6nS6wDqXuOSWEkKa69hXI3Wzp
gv0mZ+28
-----END CERTIFICATE-----

key: |

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

MIIEpAIBAAKCAQEAzs5YuQvVwF3CFbNIjPk8OO7QIKA8UuapWdSKgT59Vqnkk0/7
dfUHfP6pOFG8kxQexZBGuxbID+nCM175pjYjXjd2mZngtj2E1I3vUHOH6hhE0o5x
LAgrDbBxgHnMZHyh/4xzquXgho0nv1R0i+Oclou4viyDp4BsIYBJUONskEihOyUT
JaSUS6zR6Q1aABEVEgYiOF9Wyr2tj58jTlrRvFgrsDXeOoyf81diAmWePg4mETan
ejbaDBhtCQH8PIIFfU1bTeqqZXRAdeOkbV23o4BfPYPB73Px1bdo0u/wGZTTY2DK
Qwd9QPg8fg0dT8dvegke3dUUx/XozqekMt3w2QIDAQABAoIBAHZaPQhZr5CRI7tX
mXDZeg+TDKeiNCO1ggG40zM4Ef8A56EuytgszLZKL4ndrS/2+c1SzkfPt9rzioJf
vjrosc3/q84n9CQXfOg5hfXiyEu+a9ScVERAwHLrIWnHSqPPd96KAMAzlpWePrsO
mExejEjw999OFmjL6th8PHkgTkcbYRKv8K7WnNDIHDUK6iSg0rtyvg2YDgRDDiRv
GS3ofHdO5WxQSRqxYdle8aThuKV31gjt3nlfDNinWKHGEmvXbSGu7HGCK61NIK+j
py3lktZLeoxVaoZ5fljdA/aOWDgv9HQBxtiCjd4VGC6xAsLT9gBy9c6cJFdb52Nc
w/jjn6ECgYEA/gx6UrCcp2TuZYU/xkEIMi6mVe7d60w7672pK6FxcNrBiV0T/+F1
o2CwdOiQ0X9IjKBLDIGM2fFTptPIER60f8P/RnfzIX7GenOX+voR9zpYePuyIKaf
UW6n4ZB4wlt7ZloRwTAwo/Whhx+XGL4iVosw2DIf6tFXRWI0+8dCew0CgYEA0GT6
Xp0yi/D9UjZ1vM/fpojbZh6gZaK6zQjWi5CrcMzC2FyDOK9BTS2BWe28gmgV2Sab
9/fZJmXnpAn1eil2Co8b4p+44QAPtPUpCsIAiVROS1vaEv/S+0ag682jDFWnOR5C
VYSg4hyCoF3KAOJb9mgL/B/vFEnq1YBEr3P6af0CgYEAqeFOkt1O4+DqSZjA/KGg
CW6IbA4+94kSyKEa7siWSZD+ugwzw3fQYI/Vn1e2YkDqzilQBhzbQyHMuMreRhRy
Pr2hhk3P5LfRoTCLAJkYSmoJn10v0AWbo6iLOpqRJeZmrORm2viOjhVC3kiRkUoT
TCvnjap3DV7PLOZu565nFkECgYEAAtVC2Wi3RtdqWvboulHoU8H0w2Nga3HNKrmxb
JxFXaQxvFwrfDSnG2lyWZ+UmGBxxrf8ewxA9OmB9u8cCcyJi/KrpKzOnCvUftWV9

```
MSpLYXEdsgmX4uH88q3QA3pmu6umIFbUhk2glTuGvugmosBQHUMH8nTicjeh/+Lb
YAC7xw0CgYA8rePgM3xCn5U7zZPbvraYa7UZKvmrBAJpnh+oaYVpF4B1SCVJI23V
Ym/xVKzR3KOQ8eKiUOUTV23CeZ1CSIDeDS5Y3yjVmfBaBxIGmF/Z4kuvfTpk2Lns
AjX3slshjCQjfNtVfelqXW+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

Vault Setup

Connecting Vault

Currently performed by a Finmars employee at the client's request.

Initializing Vault

Prerequisites

- A created database with an activated license

Actions

1. Go to `Settings -> Vault`
2. Activate Vault and save the secret keys.
Do not lose these keys, as they cannot be recovered. If the keys are lost, the data saved in the Vault will be lost.
3. Inform the Finmars employee of the Vault token

Unseal Vault

Prerequisites

- A created database with an activated license
- Vault initialized

Actions

1. Go to `Settings -> Vault`

2. Click the Unseal Vault button
3. Enter the three keys one by one

Adding Access to Proxy Server

Prerequisites

- A created database with an activated license
- Vault initialized
- Vault unsealed
- Proxy Server deployed

Actions

1. Go to `Settings -> Vault`
2. Click the `Add Engine` button
3. Enter the name `finmars`
4. Click the `Add Secret` button
5. Add the following `json` content:

```
{
  "data_url": "{url_to_proxy_server}/md/3.0/",
  "trading_url": "{url_to_proxy_server}/trade/3.0/",
  "api_key": "foo",
  "secret_key": "bar"
}
```

- `data_url` - URL to the proxy server's information endpoint specifying the API version - example `https://demo-exante.finmars.com/demo/md/3.0/`
- `trading_url` - URL to the proxy server's trading endpoint (required for enriching transaction information with orders) specifying the API version - example `https://demo-exante.finmars.com/demo/trade/3.0/`
- `api_key`, `secret_key` - credentials for `basic auth` to the proxy server

7. Click the "Save" button

Configuration Installation

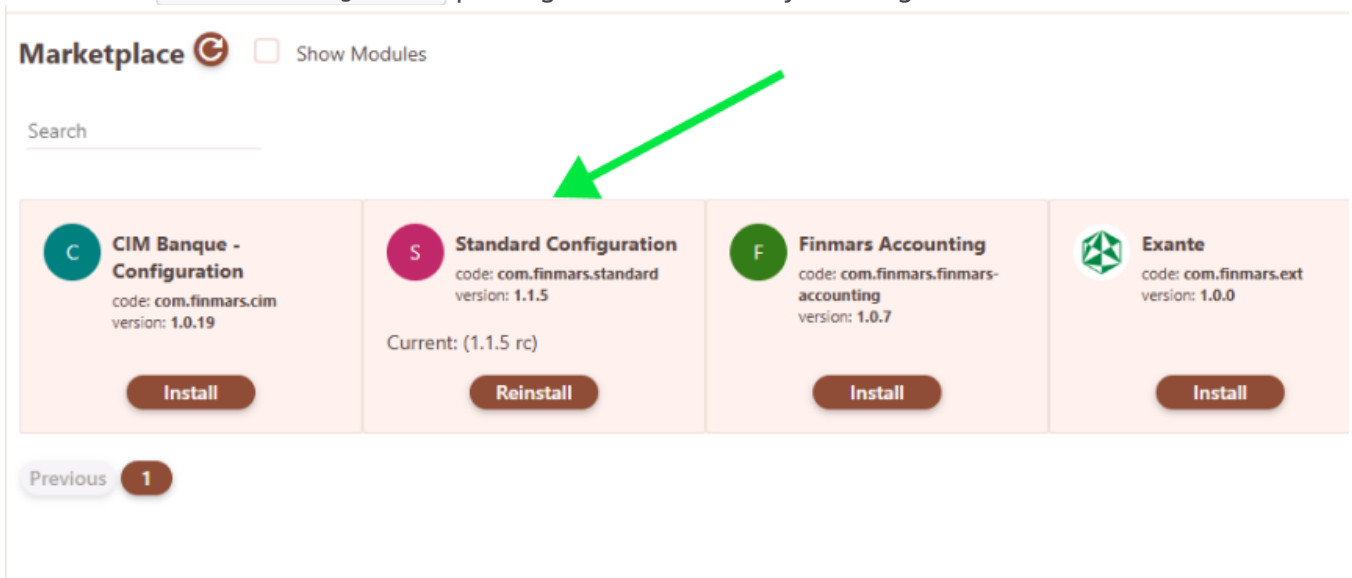
Installing Modules

Prerequisites

- A created database with an activated license

Actions

1. Go to `Settings -> Configuration -> Marketplace`
2. Select the `Standard Configuration` package and install it by clicking the install button



3. Wait for the module installation to complete

4. You can check the success of the module installation in the **Data -> Tasks** section. All tasks should be completed. Completion is indicated by a brown rectangle.

Finmars

Master Finance

Dashboard

Home

Reports

Data

Transactions

Valuations

Import

Reconciliation

Tasks

Date From2024-06-18Date To2024-07-18Search

Status

Task type

Result

Stats

Configure

Worker: celery@worker01
Uptime: 79:54:54
Memory consumed: 243.4375 MB

Worker: celery@worker00
Uptime: 37:58:13
Memory consumed: 171.55078125 MB

Worker: meta
Uptime: aNaNaN
Memory consumed: NaN MB

Status	Result	Date	Task	User
	Errors: Skip: Success:	2024-07-15	Configuration Import [21]	apetrushkin
	Errors: Skip: Success:	2024-07-15	Configuration Import [20]	apetrushkin
	Errors: Skip: Success:	2024-07-15	Configuration Import [19]	apetrushkin
	Errors: Skip: Success:	2024-07-15	Configuration Import [18]	apetrushkin
	Errors: Skip: Success:	2024-07-15	Configuration Import [17]	apetrushkin
	Errors: Skip: Success:	2024-07-15	Configuration Import [16]	apetrushkin
	Errors: Skip: Success:	2024-07-15	Configuration Import [15]	apetrushkin
	Errors: Skip: Success:	2024-07-15	Configuration Import [14]	apetrushkin
	Errors: Skip: Success:	2024-07-15	Configuration Import [13]	apetrushkin
	Errors: 0 Skip: 0 Success: 0	2024-07-15	Install Configuration From Marketplace [12]	apetrushkin

Journal