

# docker-compose.yml - A work in progress.

```
---
version: '3.3'
networks:
  traefik_network:
    external:
      name: homelabos_traefik
services:
  app:
    image: matrixdotorg/synapse
    restart: always
    networks:
      - traefik_network
    volumes:
      - /var/homelabos/Matrix/matrix:/data
    labels:
      - "traefik.http.services.matrix.loadbalancer.server.scheme=http"
      - "traefik.http.services.matrix.loadbalancer.server.port=8008"
      - "traefik.enable=true"
      - "traefik.docker.network=homelabos_traefik"
      - "traefik.http.routers.matrix-http.service=matrix"
      - "traefik.http.routers.matrix-http.rule=Host(`matrix.<DOMAIN NAME>`)"
      - "traefik.http.routers.matrix-http.entrypoints=http"
      - "traefik.http.routers.matrix-http.middlewares=authelia@file, customFrameHomelab@file"
      - "traefik.http.routers.matrix.service=matrix"
      - "traefik.http.routers.matrix.rule=Host(`matrix.<DOMAIN NAME>`)"
      - "traefik.http.routers.matrix.entrypoints=https"
      - "traefik.http.routers.matrix.middlewares=authelia@file, customFrameHomelab@file"
      - "traefik.http.routers.matrix.tls=true"
      - "traefik.http.routers.matrix.tls.certresolver=http"
```

The following steps are then needed:

```
docker run -it --rm -v /var/homelabos/Matrix/matrix:/data -e SYNAPSE_SERVER_NAME=matrix.<DOMAIN>
```

This generates the configuration files for editing in /var/homelabos/Matrix/matrix/

There will be a file called 'homeserver.yaml' which is a big long configuration file. Still getting my head around it..

So.. edit `/var/docker_data/matrix/homeserver.yaml`

Then `docker-compose up -d`

I found the least sucky way to generate an admin user was the following which is adapted specifically for the setup above. You can enable user registration in the homeserver yaml but leaves your server open to others registering.

```
docker exec -it matrix_app_1 register_new_matrix_user http://localhost:8008 -c /data/homeserver.yaml
```

Snakes on a plane! we can register an admin user:

```
New user localpart [root]: username
Password: password
Confirm password: password
Make admin [no]: yes|no
Sending registration request...Success.
```

username and password of your choice are set here. Make admin..

Then `docker-compose down`

Then `docker-compose up -d`

Actually ignore me restarting probably unnecessary there.

So: we now move on to <https://matrix.<DOMAIN>> to see that Synape now does indeed live.

Give it a few seconds to start but then it will redirect to:

[https://matrix.<DOMAIN>/\\_matrix/static](https://matrix.<DOMAIN>/_matrix/static)



## It works! Synapse is running

Your Synapse server is listening on this port and is ready for messages.

To use this server you'll need [a Matrix client](#).

Welcome to the Matrix universe :)

Have a cup of tea. Have another one. Eat some cheese crackers. Let the dogs out for a piss.

You can head over to `riot.im` or a matrix client of your choice and select your new custom server to log in to your server. You'll be talking to yourself of course, but hey, lockdown, what's new?

Federation and base domain is explained in more detail here and getting Matrix to talk to other Matrix servers is kind of the whole point unless you just want a private chat invite only instance.

<https://adfinis.com/en/blog/how-to-set-up-your-own-matrix-org-homeserver-with-federation/>

Much of the above work was adapted from:

<https://upcloud.com/community/tutorials/install-matrix-synapse/>

Now certain groovy fellas (and ladies, lets be correct here) have also adapted the docker-compose.yml to have an all in one of teh Synapse server, an admin utility for user management and also host a matrix client all on the same server. That sounds really sexy doesn't it?

Zblesk has the best clues on how to do this:

<https://zblesk.net/blog/setting-up-a-matrix-chat-server/>

A few more clues here about SRV records on the domain but a bit over my head..

[https://matrix.org/docs/spec/server\\_server/unstable](https://matrix.org/docs/spec/server_server/unstable)

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