

6. Collaboration

This Chapter discusses some collaboration applications i.e alternatives to slack for instance.

- [1. Mattermost](#)
- [2. Matrix](#)

1. Mattermost

Source: [Mattermost Docker Installation](#)

compose.yml

```
# https://docs.docker.com/compose/environment-variables/
services:
  postgres:
    image: postgres:${POSTGRES_IMAGE_TAG}
    restart: ${RESTART_POLICY}
    security_opt:
      - no-new-privileges:true
    # See https://docs.mattermost.com/administration-guide/scale/scaling-for-
enterprise.html
    # for guidance on memory limits based on your deployment size.
    mem_limit: 16G
    read_only: true
    tmpfs:
      - /tmp
      - /var/run/postgresql
    volumes:
      - ${POSTGRES_DATA_PATH}:/var/lib/postgresql
    environment:
      # timezone inside container
      - TZ

      # necessary Postgres options/variables
      - POSTGRES_USER
      - POSTGRES_PASSWORD
      - POSTGRES_DB

  mattermost:
    depends_on:
      - postgres
    image: mattermost/${MATTERMOST_IMAGE}:${MATTERMOST_IMAGE_TAG}
```

```
restart: ${RESTART_POLICY}
security_opt:
  - no-new-privileges:true
# See https://docs.mattermost.com/administration-guide/scale/scaling-for-enterprise.html
# for guidance on memory limits based on your deployment size.
mem_limit: 4G
read_only: ${MATTERMOST_CONTAINER_READONLY}
tmpfs:
  - /tmp
volumes:
  - ${MATTERMOST_CONFIG_PATH}:/mattermost/config:rw
  - ${MATTERMOST_DATA_PATH}:/mattermost/data:rw
  - ${MATTERMOST_LOGS_PATH}:/mattermost/logs:rw
  - ${MATTERMOST_PLUGINS_PATH}:/mattermost/plugins:rw
  - ${MATTERMOST_CLIENT_PLUGINS_PATH}:/mattermost/client/plugins:rw
  - ${MATTERMOST_BLEVE_INDEXES_PATH}:/mattermost/bleve-indexes:rw
# When you want to use SSO with GitLab, you have to add the cert pki chain of GitLab
inside Alpine
# to avoid Token request failed: certificate signed by unknown authority
# (link: https://github.com/mattermost/mattermost-server/issues/13059 and
https://github.com/mattermost/docker/issues/34)
# - ${GITLAB_PKI_CHAIN_PATH}:/etc/ssl/certs/pki_chain.pem:ro
environment:
  # timezone inside container
  - TZ

# necessary Mattermost options/variables (see env.example)
  - MM_SQLSETTINGS_DRIVERNAME
  - MM_SQLSETTINGS_DATASOURCE

# necessary for bleve
  - MM_BLEVESETTINGS_INDEXDIR

# additional settings
  - MM_SERVICESETTINGS_SITEURL
```

Check the permissions of the folders! needs to be 2000:2000

.env

```
# Domain of service
DOMAIN=mattermost.rfeyn.org

# Container settings
## Timezone inside the containers. The value needs to be in the form 'Europe/Berlin'.
## A list of these tz database names can be looked up at Wikipedia
## https://en.wikipedia.org/wiki/List_of_tz_database_time_zones
TZ=Europe/Amsterdam
RESTART_POLICY=unless-stopped

# Postgres settings
## Documentation for this image and available settings can be found on hub.docker.com
## https://hub.docker.com/_/postgres
## Please keep in mind this will create a superuser and it's recommended to use a less
privileged
## user to connect to the database.
## A guide on how to change the database user to a nonsuperuser can be found in
docs/creation-of-nonsuperuser.md
POSTGRES_IMAGE_TAG=18-alpine
POSTGRES_DATA_PATH=./volumes/db/var/lib/postgresql/data

POSTGRES_USER=mmuser
POSTGRES_PASSWORD=aosdjfasjdfajsfjlaskdfasdf
POSTGRES_DB=mattermost

# Nginx
## The nginx container will use a configuration found at the NGINX_MATTERMOST_CONFIG. The
config aims
## to be secure and uses a catch-all server vhost which will work out-of-the-box. For
additional settings
## or changes ones can edit it or provide another config. Important note: inside the
container, nginx sources
## every config file inside */etc/nginx/conf.d* ending with a *.conf* file extension.

## Inside the container the uid and gid is 101. The folder owner can be set with
```

```
## `sudo chown -R 101:101 ./nginx` if needed.
## Note that this repository requires nginx version 1.25.1 or later
NGINX_IMAGE_TAG=alpine

## The folder containing server blocks and any additional config to nginx.conf
NGINX_CONFIG_PATH=./nginx/conf.d
NGINX_DHPARAMS_FILE=./nginx/dhparams4096.pem

CERT_PATH=./volumes/web/cert/cert.pem
KEY_PATH=./volumes/web/cert/key-no-password.pem
#GITLAB_PKI_CHAIN_PATH=<path_to_your_gitlab_pki>/pki_chain.pem
#CERT_PATH=./certs/etc/letsencrypt/live/${DOMAIN}/fullchain.pem
#KEY_PATH=./certs/etc/letsencrypt/live/${DOMAIN}/privkey.pem

## Exposed ports to the host. Inside the container 80, 443 and 8443 will be used
HTTPS_PORT=443
HTTP_PORT=80
CALLS_PORT=8443

# Mattermost settings
## Inside the container the uid and gid is 2000. The folder owner can be set with
## `sudo chown -R 2000:2000 ./volumes/app/mattermost`.
MATTERMOST_CONFIG_PATH=./volumes/app/mattermost/config
MATTERMOST_DATA_PATH=./volumes/app/mattermost/data
MATTERMOST_LOGS_PATH=./volumes/app/mattermost/logs
MATTERMOST_PLUGINS_PATH=./volumes/app/mattermost/plugins
MATTERMOST_CLIENT_PLUGINS_PATH=./volumes/app/mattermost/client/plugins
MATTERMOST_BLEVE_INDEXES_PATH=./volumes/app/mattermost/bleve-indexes

## Bleve index (inside the container)
MM_BLEVESETTINGS_INDEXDIR=/mattermost/bleve-indexes

## This will be 'mattermost-enterprise-edition' or 'mattermost-team-edition' based on the
version of Mattermost you're installing.
MATTERMOST_IMAGE=mattermost-enterprise-edition
## Update the image tag if you want to upgrade your Mattermost version. You may also
upgrade to the latest one. The example is based on the latest Mattermost ESR versi>
MATTERMOST_IMAGE_TAG=11.7.0
```

```
## Make Mattermost container readonly. This interferes with the regeneration of root.html
inside the container. Only use
## it if you know what you're doing.
## See https://github.com/mattermost/docker/issues/18
MATTERMOST_CONTAINER_READONLY=false

## The app port is only relevant for using Mattermost without the nginx container as
reverse proxy. This is not meant
## to be used with the internal HTTP server exposed but rather in case one wants to host
several services on one host
## or for using it behind another existing reverse proxy.
APP_PORT=1023

## Configuration settings for Mattermost. Documentation on the variables and the settings
itself can be found at
## https://docs.mattermost.com/administration/config-settings.html
## Keep in mind that variables set here will take precedence over the same setting in
config.json. This includes
## the system console as well and settings set with env variables will be greyed out.

## Below one can find necessary settings to spin up the Mattermost container
MM_SQLSETTINGS_DRIVERNAME=postgres
MM_SQLSETTINGS_DATASOURCE=postgres://${POSTGRES_USER}:${POSTGRES_PASSWORD}@postgres:5432/${POSTGRES_DB}?sslmode=disable&connect_timeout=10

## Example settings (any additional setting added here also needs to be introduced in the
docker-compose.yml)
```

Notifications: <https://docs.mattermost.com/end-user-guide/preferences/manage-your-mobile-notifications.html>

2. Matrix