# Installing Openemail Docker Host

> **Warning**
>
> Make sure you've read "Prepare Your System" before proceeding!

You need to install `Docker` and `Docker Compose` to setup **Openemail** for your domain.

This section will help you to learn how to install Docker and Docker Compose.

## Installing Docker Community Edition on Ubuntu

To install Docker CE, you need the 64-bit version of one of these Ubuntu versions:

- Cosmic 18.10
- Bionic 18.04 (LTS)
- Xenial 16.04 (LTS)

In this guide I am using Bionic 18.04 (LTS)

## Uninstall Old Versions of Docker

Older versions of Docker were called `docker, docker.io , or docker-engine.` If these are installed, uninstall them:

```
sudo apt-get remove docker docker-engine docker.io containerd runc
```

## Using The Docker Repository

Before you install Docker CE for the first time on a new host machine, you need to set up the Docker repository. Afterward, you can install and update Docker from the repository.

### Setup The Repository

**1.** Update the apt package index:

```
sudo apt-get update
```

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**2.** install packages to allow apt to use a repository over HTTPS:

```
sudo apt-get install apt-transport-https  ca-certificates curl  gnupg-agent
software-properties-common
```

**3.** Add Docker's official GPG key:

```
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
```

Verify that you now have the key with the fingerprint 9DC8 5822 9FC7 DD38 854A E2D8 8D81 803C 0EBF CD88, by searching for the last 8 characters of the fingerprint.

```
sudo apt-key fingerprint 0EBFCD88
```

You should get an output like below.

```
pub   rsa4096 2017-02-22 [SCEA]
      9DC8 5822 9FC7 DD38 854A  E2D8 8D81 803C 0EBF CD88
uid           [ unknown] Docker Release (CE deb) <docker@docker.com>
sub   rsa4096 2017-02-22 [S]
```

**4.** Use the following command to set up the stable repository.

```
sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/
ubuntu $(lsb_release -cs) stable"
```

## Install docker-ce

**1.** Update the `apt` package index.

```
sudo apt-get update
```

**2.** Install the latest version of Docker CE and containerd.

```
sudo apt-get install docker-ce docker-ce-cli containerd.io
```

**3.** Verify that Docker CE is installed correctly by running the hello-world image.

```
sudo docker run hello-world
```

This command downloads a test image and runs it in a container. When the container runs, it prints an informational message and exits.

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> **Note**
>
> If you are planing to use CentOS as your **openemai** docker host please follow the official CentOS docker-ce Installation Guide

# Install Docker Compose on Linux systems

On Linux, you can download the Docker Compose binary from the Compose repository release page on GitHub. Follow the instructions from the link, which involve running the curl command in your terminal to download the binaries. These step by step instructions are also included below.

**1.** Run this command to download the latest version of Docker Compose:

```
sudo curl -L "https://github.com/docker/compose/releases/download/1.23.2/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose
```

**2.** Apply executable permissions to the binary:

```
sudo chmod +x /usr/local/bin/docker-compose
```

> **Note**
>
> If the command docker-compose fails after installation, check your path. You can also create a symbolic link to /usr/bin or any other directory in your path.
>
> For example:
>
> ```
> sudo ln -s /usr/local/bin/docker-compose /usr/bin/docker-compose
> ```

**3.** Test your installation

```
docker-compose --version
```

# Cloning Openemail Repository

Clone the master branch of the repository, make sure your `umask` equals 0022.

```
sudo su -
umask
cd /opt
```

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```
git clone https://github.com/openemail/openemail.git
cd openemail
```

## Generating Openemail Configuration File

Generate openemail.conf configuration file. Use a FQDN ( `host.yourdomain.tld` ) as hostname when asked.

```
./generate_config.sh
```

## Customize The Configuration

Change configuration if you want or need to.

```
nano openemail.conf
```

If you plan to use a reverse proxy, you can, for example, bind HTTPS to 127.0.0.1 on port 8443 and HTTP to 127.0.0.1 on port 8080.

You may need to stop an existing pre-installed MTA which blocks port 25/tcp. See this chapter to learn how to reconfigure Postfix to run besides Openemail after a successful installation.

## Setup MTU

If you are Openemail in OpenStack users with an MTU not equal to 1500:

Edit `docker-compose.yml` and change the network settings according to your MTU. Add the new driver_opts parameter like this:

```
networks:
  openemail-network:
    ...
    driver_opts:
      com.docker.network.driver.mtu: 1450
    ...
```

## Pull Openemail Docker Images

Pull the images and run the composer file. The parameter `-d` will start openemail docker containers detached:

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```
docker-compose pull
docker-compose up -d
```

## Accessing Openemail Web UI

You can now access **https://${OPENEMAIL_HOSTNAME}** with the default credentials `admin` + password `openemail`

For an example: https://hasuna.openemail.io

The database will be initialized right after a connection to MySQL can be established.

Done!

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