

# How to get QMK and its web stack up and running

## 1. Linux Distribution and Preparation

Ubuntu or any similar Linux Distribution will do. For this purpose I am working with Ubuntu 22.04 LTS as host system running the docker container:

```
roland@QMK ~# cat /etc/lsb-release
DISTRIB_ID=Ubuntu
DISTRIB_RELEASE=22.04
DISTRIB_CODENAME=jammy
DISTRIB_DESCRIPTION="Ubuntu 22.04 LTS"
```

The below packages are the ones I installed during testing:

- mc, vim, tmux, wget, curl, zsh, git, docker,

## 2. QMK Web Stack Configuration

### 2.1 Git

Configuration of Git under my username:

```
git config --global user.name "Roland Huber"
git config --global user.email roland.huber@omnibox.org
```

### 2.2 Setting up Standard Directories

```
sudo mkdir /srv/qmk
sudo chmod 770 /srv/qmk
sudo chown root:adm /srv/qmk
cd /srv/qmk
```

### 2.3 Cloning qmk\_web\_stack

```
git clone --recursive https://github.com/qmk/qmk_web_stack
```

#### 2.3.1 Fixing the qmk\_metrics\_aggregator

```
cd qmk_web_stack
git clone --recursive https://github.com/qmk/qmk_metrics_aggregator.git
```

### 2.3.2 Fixing Submodules

```
cd /srv/qmk/qmk_web_stack
./fix-submodules.sh
```

Info: The below error is normal

```
error: pathspec 'master' did not match any file(s) known to git
fatal: run_command returned non-zero status for qmk_metrics_aggregator
```

### 2.3.2 Fixing pip3

Within: qmk\_api (Dockerfile) change:

```
RUN pip3 install -r requirements.txt
git+https://github.com/qmk/qmk_compiler.git@master
git+https://github.com/skullydazed/kle2xy.git@master
to:
```

```
RUN pip3 install -r requirements.txt git+https://github.com/qmk/qmk_compiler.git
git+https://github.com/skullydazed/kle2xy.git
```

Within: qmk\_api\_tasks (Dockerfile) change:

```
RUN pip3 install git+https://github.com/qmk/qmk_compiler.git@master
to:
```

```
RUN pip3 install git+https://github.com/qmk/qmk_compiler.git
```

## 2.4 Get docker installed (latest)

### 2.4.1 Docker Community Edition

```
sudo apt-get remove docker docker-engine docker.io containerd
sudo apt-get install apt-transport-https ca-certificates curl software-properties-
common
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
sudo apt-key fingerprint 0EBFCD88
sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu
$(lsb_release -cs) stable"
sudo apt install docker-ce docker-ce-cli containerd.io
```

### 2.4.2 Docker-Compose Community Edition Installation

```
cd /usr/local/bin
sudo wget https://github.com/docker/compose/releases/download/v2.5.1/docker-
compose-linux-x86_64
sudo mv /usr/local/bin/docker-compose-linux-x86_64 /usr/local/bin/docker-compose
sudo chmod +x /usr/local/bin/docker-compose
sudo ln -s /usr/local/bin/docker-compose /usr/bin/docker-compose
sudo systemctl start docker
```

### 2.4.3 Changing the docker-compose.yml file

--> see demo file for localhost and standard QMK

## 2.4.2 Clone qmk\_firmware

```
cd /srv/qmk  
git clone --recurse-submodules https://github.com/qmk/qmk_firmware.git
```

## 2.4.3 Building the container

```
cd /srv/qmk/qmk_web_stack  
sudo /usr/local/bin/docker-compose build  
sudo /usr/local/bin/docker-compose up
```

## 2.4.4 Populating API

```
cd /srv/qmk/qmk_web_stack  
./populate_api.sh
```