

Docker Lab

10:59 AM

index.html
 /
 /
 /

Setup a Simple Apache Web Server in a Docker Container

```
systemctl start docker
```

```
systemctl status docker
```

```
sudo docker run -dit --name demo-web -p 8080:80  
/home/user/website:/usr/local/apache2/htdocs/ httpd:2.4
```

We will use an image called httpd:2.4 from Docker Hub.
 requests made to our public IP address on port 8080 be redirected to port 80 on the container.
 serving content from the container itself, we will serve a simple web page from /home/user/website.
 mapping /home/user/website/ on the /usr/local/apache2/htdocs/ on the container. Note that you will need to use sudo or log in as root to proceed

```
sudo docker ps
```

create simple page

```
vi /home/user/website/docker.html
```

```
publicip:8080/docker.html
```

```
sudo docker stop demo-web  
sudo docker rm demo-web
```

```
sudo docker image remove httpd:2.4
```

How to Build a Docker Image and Docker Container Using Dockerfile?

First of all, you should create a directory in order to store all the Docker images you build.

```
mkdir demo_docker
```

```
cd demo_docker  
touch Dockerfile
```

- Open the file with the editor. In this example, we opened the file using vi:

```
vi Dockerfile
```
- Then, add the following content:

```
FROM ubuntu  
MAINTAINER simpli  
RUN apt-get update  
CMD ["echo", "Welcome to Docker demo"]
```
- 5. Save and exit the file.

Now, let's build a basic image using a Dockerfile:

docker build [location of your dockerfile]

Now, by adding -t flag, the new image can be tagged with a name:

docker build -t welcome_image

Please start docker demon before build image

```
DELL@DESKTOP-AARVGFN MINGW64 ~/Desktop/docker-demo
$ docker build . -t welcom_image
#1 [internal] load build definition
```

Verify image

docker images

Create a New Container

docker run --name mydemocont welcome_image

```
DELL@DESKTOP-AARVGFN MINGW64 ~/Desktop/docker-demo
$ docker run --name mydemocont welcom_image
Welcome to Docker demo
```