

Module-3: Docker – I Assignment - 1

You have been asked to:

- Pull ubuntu container
 - Run this container, and map port 80 on the local
 - Install apache2 on this container
 - Check if you are able to access the apache page on your browser.
- I had been done the above task on ubuntu terminal . The commands were as follows
- `sudo apt update`

```
/root/.hushlogin file.  
root@MTLP-1751:~# sudo apt update  
Get:1 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]  
Hit:2 http://archive.ubuntu.com/ubuntu jammy InRelease  
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
```

- `sudo apt install docker.io`
- `sudo docker pull ubuntu`
- `sudo docker run -itd -p 80:80 --name sai ubuntu`
- `sudo docker ps`
- `sudo docker exec -it <container id> bash`

```

107 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@MTLP-1751:~# sudo apt install docker.io
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
docker.io is already the newest version (24.0.5-0ubuntu1~22.04.1).
0 upgraded, 0 newly installed, 0 to remove and 107 not upgraded.
root@MTLP-1751:~# sudo docker pull ubuntu:20.04
20.04: Pulling from library/ubuntu
96d54c3075c9: Pull complete
Digest: sha256:ed4a42283d9943135ed87d4ee34e542f7f5ad9ecf2f244870e23122f703f91c2
Status: Downloaded newer image for ubuntu:20.04
docker.io/library/ubuntu:20.04
root@MTLP-1751:~# sudo docker run -itd -p 80:80 --name sai ubuntu
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
aece8493d397: Pull complete
Digest: sha256:2b7412e6465c3c7fc5bb21d3e6f1917c167358449fecac8176c6e496e5c1f05f
Status: Downloaded newer image for ubuntu:latest
5d0aabddfdfe528cfe55fb35f10baf4343cc62f02d1275aef4ffc805348a4cf53
root@MTLP-1751:~# sudo docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED          STATUS          PORTS                               NAMES
5d0aabddfdfe5   ubuntu   "/bin/bash"             36 seconds ago   Up 32 seconds   0.0.0.0:80->80/tcp               sai
root@MTLP-1751:~# sudo docker exec -it 5d0aabddfdfe5 bash
root@5d0aabddfdfe5:/# apt update
Get:1 http://archive.ubuntu.com/ubuntu jammy InRelease [270 kB]
Get:2 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]

```

- [apt update](#)

```

11 packages can be upgraded. Run 'apt list --upgradable' to see th
root@5d0aabddfdfe5:/# apt install -y apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils bzip2 ca-certificates fil
  libcurl4 libexpat1 libgdbm-compat4 libgdbm6 libicu70 libjansson4
  libperl5.34 libpsl5 librtmp1 libsasl2-2 libsasl2-modules libsasl
  netbase openssl perl perl-modules-5.34 publicsuffix ssl-cert xz-
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-
  | libsasl2-modules-gssapi-heimdal libsasl2-modules-ldap libsasl2
  | libterm-readline-perl-perl make libtap-harness-archive-perl
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils bzip2 ca-certific
  libbrotli1 libcurl4 libexpat1 libgdbm-compat4 libgdbm6 libicu70
  libnghttp2-14 libperl5.34 libpsl5 librtmp1 libsasl2-2 libsasl2-m


```

- `apt install -y apache2`
- `service apache2 start`
- `service apache2 status`

```
root@5d0aabddfd5:/# service apache2 status
* apache2 is not running
root@5d0aabddfd5:/# service apache2 start
* Starting Apache httpd web server apache2
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, please
edit the /etc/httpd.conf file to suppress this message
*
root@5d0aabddfd5:/#
```

Then redirect to local host by using <http://localhost/> we can get the default apache2 web page in our browser as shown below.

localhost



Apache2 Default Page

Ubuntu

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in `/usr/share/doc/apache2/README.Debian.gz`**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
|   |-- ports.conf
|-- mods-enabled
|   |-- *.load
|   |-- *.conf
|-- conf-enabled
```