Launch Apache2 Server in AWS EC2 Instance

2 ways to hold web page on a server: AWS S3 or AWS EC2.
S3 needs you to store your website files (js, html, css) in its “S3 bucket”.
EC2 needs you to run a server on the system and put website files in certain folder.

Before launching:

A running AWS EC2 instance (in Ubuntu system)

keypair file, e.g. my_first_aws_keypair.pem
Filezilla

Steps:

1. Connect remote system with SSH

xingjis-air:~ xingjichen$ ssh -i my_first_aws_keypair.pem ubuntu@54.***.****.77
-> Make sure we have the keypair file in current directory.

2. (Optional) Switch to root user (in case permission denied)

$ sudo su

3. Install Apache2 and check status

$ sudo apt-get install apache2
-> This may take a few seconds

$ sudo systemctl status apache2.service
-> check server status

```
ubuntu@ip-172-31-18-10:/$ sudo systemctl status apache2.service
● apache2.service - LSB: Apache2 web server
   Loaded: loaded (/etc/init.d/apache2; bad; vendor preset: enabled)
  Drop-In: /lib/systemd/system/apache2.service.d
           └─apache2-systemd.conf
   Active: active (running) since Tue 2018-12-18 22:55:36 UTC; 4h 1min ago
     Docs: man:systemd-sysv-generator(8)
   CGroup: /system.slice/apache2.service
           ├─2111 /usr/sbin/apache2 -k start
           ├─2114 /usr/sbin/apache2 -k start
           └─2115 /usr/sbin/apache2 -k start

Dec 18 22:55:35 ip-172-31-18-10 systemd[1]: Starting LSB: Apache2 web server...
Dec 18 22:55:35 ip-172-31-18-10 apache2[2094]:  * Starting Apache httpd web serv
Dec 18 22:55:36 ip-172-31-18-10 apache2[2094]:  *
Dec 18 22:55:36 ip-172-31-18-10 systemd[1]: Started LSB: Apache2 web server.
```

$ sudo systemctl stop apache2.service

-> Stop server, and we will see

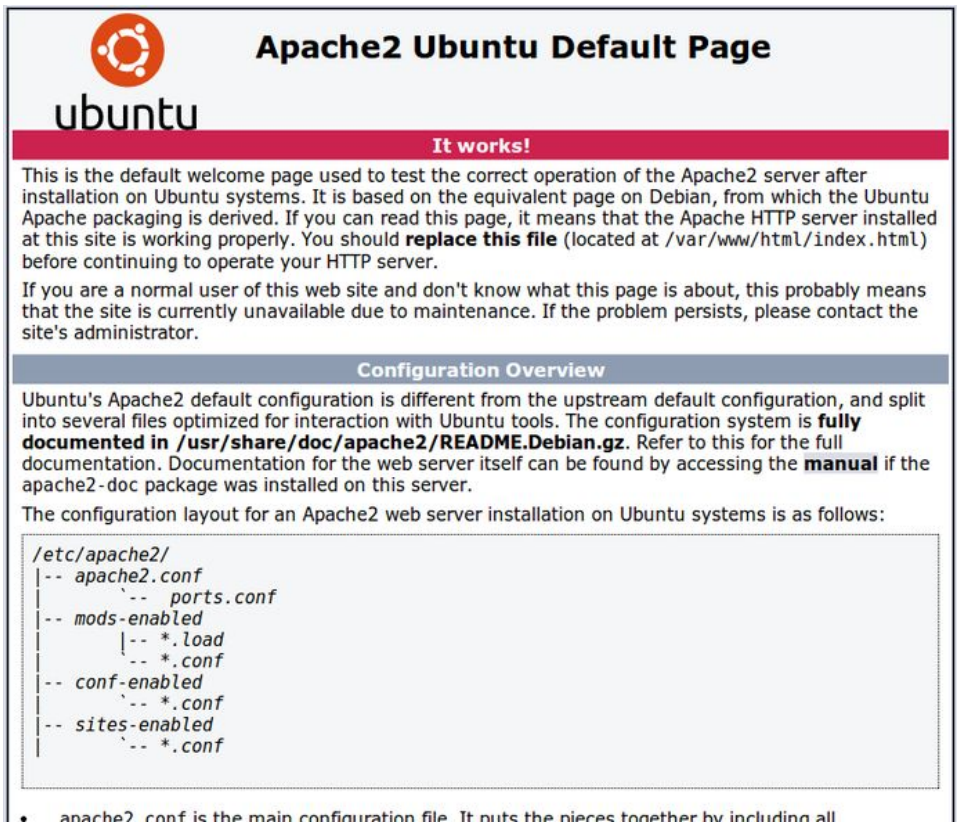
```
Drop-In: /lib/systemd/system/ap
         └─apache2-systemd.conf
 Active: inactive (dead) since
   Docs: man:systemd-sysv-gener
Process: 2700 ExecStop=/etc/ini
```

$ sudo systemctl start apache2.service

-> Start server.

4. Deploy webpage

After step 3, we should see default Apache server page index.html if we enter the public IP address of our instance in browser



Now we need to replace it with our own webpage/files

$ cd var/www/html

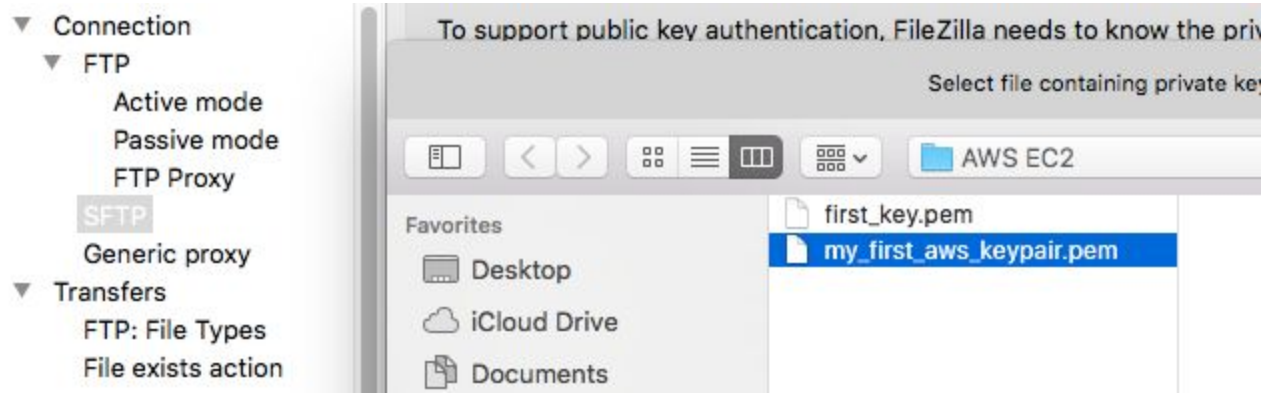
$ ls

-> you will see index.html in this directory

In order to move files to this folder, we need to change owner of /www to “ubuntu” (default owner = “root” and Filezilla doesn’t have root access)

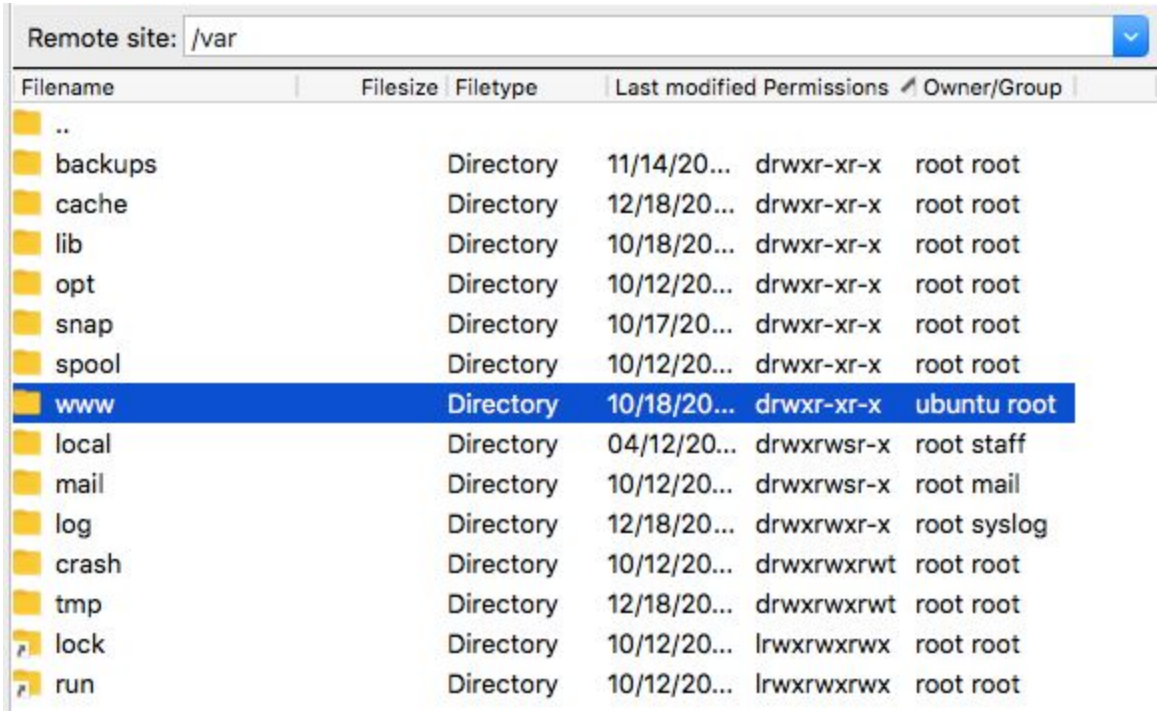
$ sudo chown -R ubuntu /var/www

Start Filezilla, go to settings, click SFTP, click “add key file”
Then choose the keypair file in our PC



Connect to remote system

Redirect to /var in Filezilla and see /www has owner “ubuntu”



Go to /var/www/html and drag your webpage files (js,css,html) into the directory.