

## Task 1:

- Installing apache2 on 2 ec2s:

### ec2-01:

```
aws
Services
Search [Alt+S]
N. Virginia
stephane @ iam-user1-stephane

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

Last login: Fri Feb 10 19:00:45 2023 from 197.52.183.3
ubuntu@ip-10-0-0-36:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2023-02-10 19:00:53 UTC; 3min 37s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 2118 (apache2)
     Tasks: 55 (limit: 1143)
    Memory: 5.0M
       CPU: 39ms
   CGroup: /system.slice/apache2.service
           └─2118 /usr/sbin/apache2 -k start
             └─2120 /usr/sbin/apache2 -k start
               └─2121 /usr/sbin/apache2 -k start

Feb 10 19:00:53 ip-10-0-0-36 systemd[1]: Starting The Apache HTTP Server...
Feb 10 19:00:53 ip-10-0-0-36 apachectl[2117]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 10.0.0.36. Set the
Feb 10 19:00:53 ip-10-0-0-36 systemd[1]: Started The Apache HTTP Server.
lines 1-16/16 (END)

i-038535e086dab23ad (ec2-01)
PublicIPs: 54.166.160.125 PrivateIPs: 10.0.0.36
```

### ec2-02:

```
aws
Services
Search [Alt+S]
N. Virginia
stephane @ iam-user1-stephane

the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-10-0-0-51:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2023-02-10 19:00:51 UTC; 39s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 2500 (apache2)
     Tasks: 55 (limit: 1143)
    Memory: 4.8M
       CPU: 39ms
   CGroup: /system.slice/apache2.service
           └─2500 /usr/sbin/apache2 -k start
             └─2502 /usr/sbin/apache2 -k start
               └─2503 /usr/sbin/apache2 -k start

Feb 10 19:00:51 ip-10-0-0-51 systemd[1]: Starting The Apache HTTP Server...
Feb 10 19:00:51 ip-10-0-0-51 apachectl[2499]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 10.0.0.51. Set the
Feb 10 19:00:51 ip-10-0-0-51 systemd[1]: Started The Apache HTTP Server.
lines 1-16/16 (END)

i-0f2050d805e29d269 (ec2-02)
PublicIPs: 54.234.138.107 PrivateIPs: 10.0.0.51
```

- changing port 80 -> 8090

```
aws Services Search [Alt+S] N. Virginia stephane @ iam-user1-stephane

# If you just change the port or add more ports here, you will likely also
# have to change the VirtualHost statement in
# /etc/apache2/sites-enabled/000-default.conf

Listen 8090

<IfModule ssl_module>
    Listen 443
</IfModule>

<IfModule mod_gnutls.c>
    Listen 443
</IfModule>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet

"/etc/apache2/ports.conf" 15L, 322B 1,1 All

i-0c94108196ce0ef8f (ec2-01)
PublicIPs: 75.101.252.165 PrivateIPs: 10.0.0.85
```

## - changing default.index:

```
aws Services Search [Alt+S] N. Virginia stephane @ iam-user1-stephane

<IfModule mod_dir.c>
DirectoryIndex my_default_index.html index.html index.cgi index.pl index.php index.xhtml index.htm
</IfModule>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet

"/etc/apache2/mods-available/dir.conf" 5L, 179B 1,1 All

i-0c94108196ce0ef8f (ec2-01)
PublicIPs: 75.101.252.165 PrivateIPs: 10.0.0.85
```

## edit inbound rules to listen on 8090:

EC2 > Security Groups > sg-05d79fca5e11d252a - deploy-apache2 > Edit inbound rules

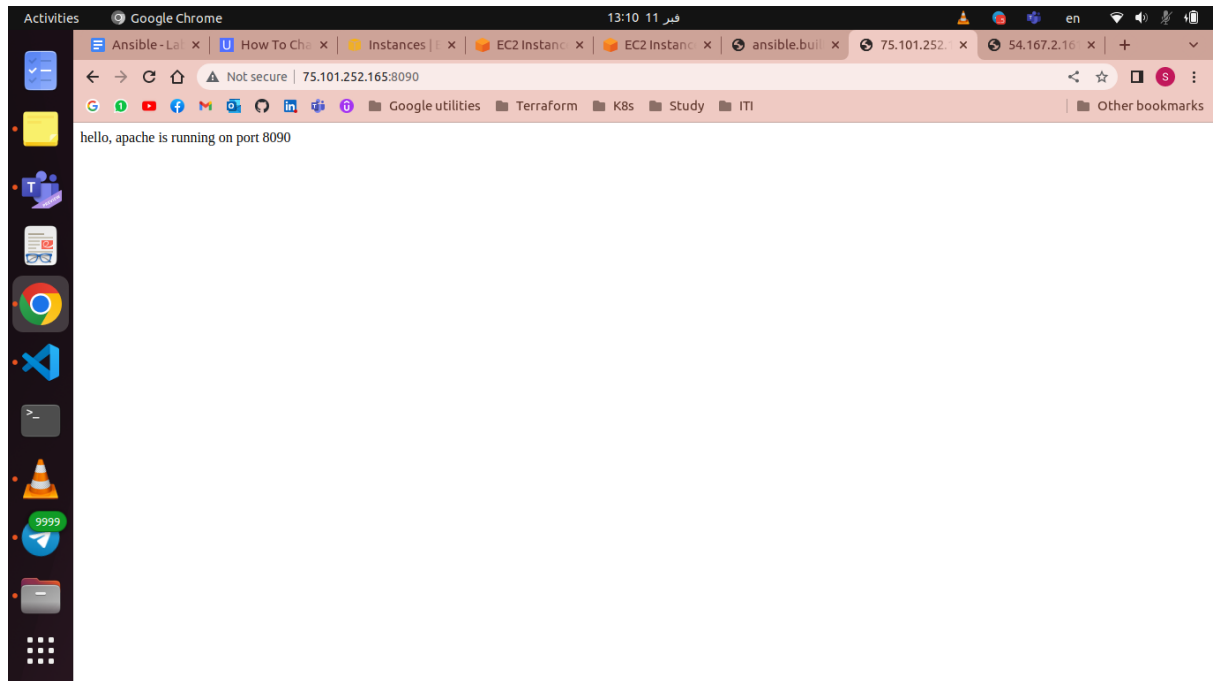
### Edit inbound rules [Info](#)

Inbound rules control the incoming traffic that's allowed to reach the instance.

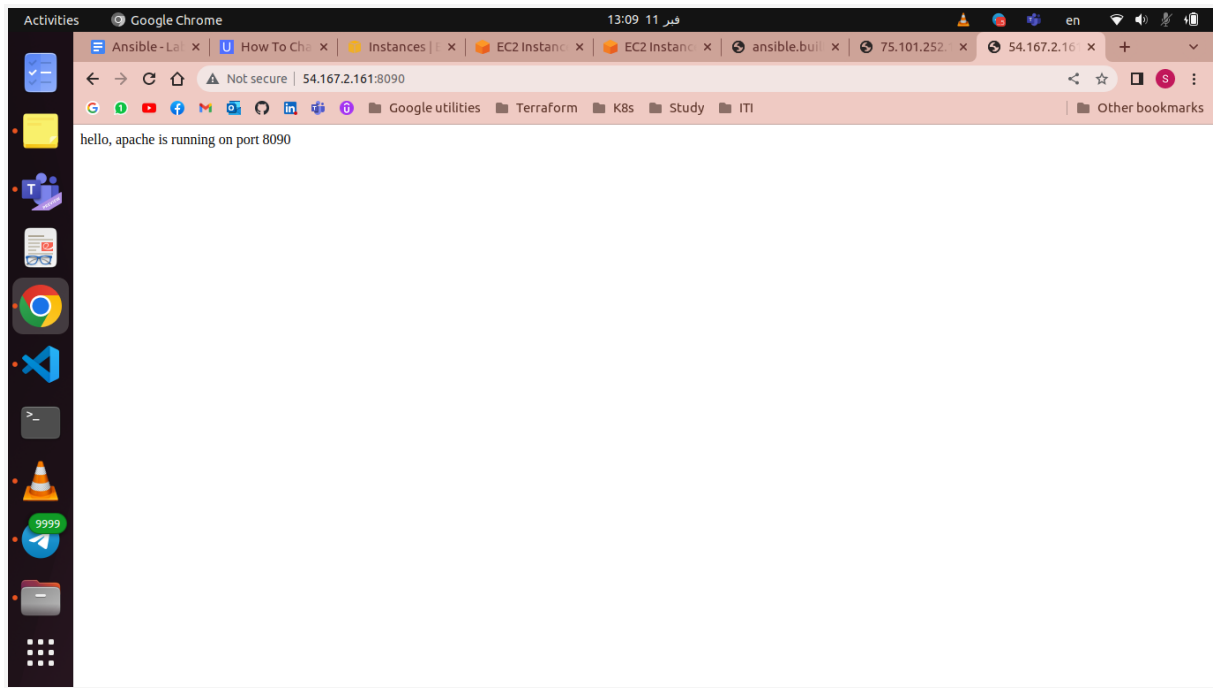
Security group rule ID	Type <a href="#">Info</a>	Protocol <a href="#">Info</a>	Port range <a href="#">Info</a>	Source <a href="#">Info</a>	Description - optional <a href="#">Info</a>	
sgr-0e5398459304cfbd4	HTTP	TCP	80	Custom <input type="text" value="0.0.0.0"/>		<input type="button" value="Delete"/>
sg-016fe72d46afcf85	SSH	TCP	22	Custom <input type="text" value="0.0.0.0"/>		<input type="button" value="Delete"/>
-	Custom TCP	TCP	8090	Anywh... <input type="text" value="0.0.0.0"/>		<input type="button" value="Delete"/>

output:

ec2-01:



ec2-02:



- **display custom index.html (port 8090)**

## **Task 2:**

