

Web Server & APP server

(TASK)

1. Install Apache and run Apache on port number 82

Installed apache using command sudo apt install then systemctl start then systemctl status. Changed the port : find the path using command 'find / -n httpd.conf then 'vi path then chage the port number

2. Deploy a sample index.html file on Apache.

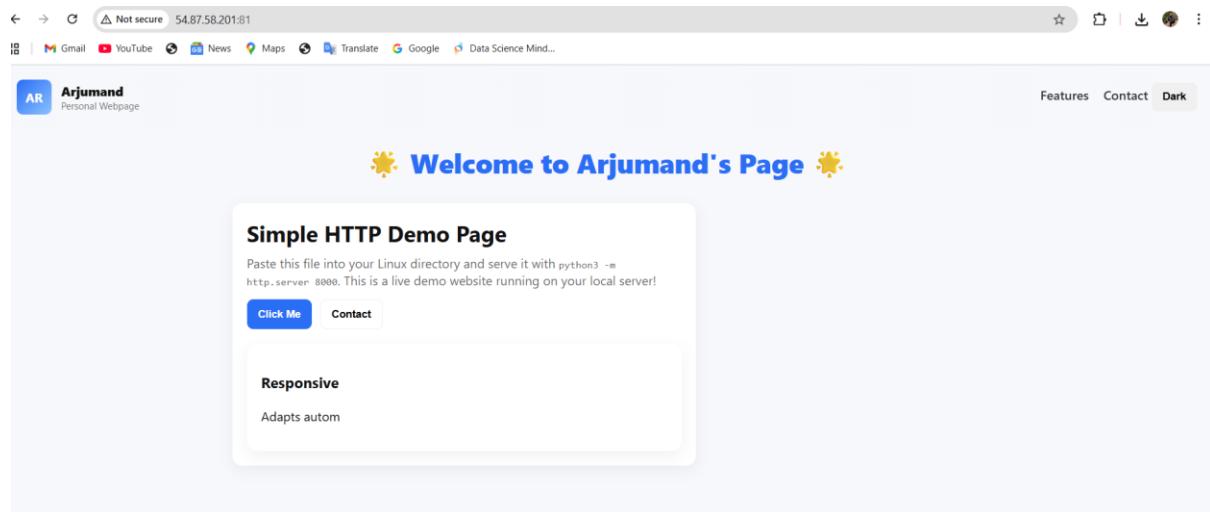
After changing the port number copy public id and paste it on web along with the code. Then created file in this mention ed path '/var/www/html, then vi index.html edit webserver html code close it then restart apache using systemctl restart httpd. Then refresh the page.

```
# same ServerRoot for multiple httpd daemons, you will need to change at
# least PidFile.
#
ServerRoot "/etc/httpd"

#
# Listen: Allows you to bind Apache to specific IP addresses and/or
# ports, instead of the default. See also the <VirtualHost>
# directive.
#
# Change this to Listen on a specific IP address, but note that if
# httpd.service is enabled to run at boot time, the address may not be
# available when the service starts. See the httpd.service(8) man
# page for more information.
#
#Listen 12.34.56.78:80
Listen 81

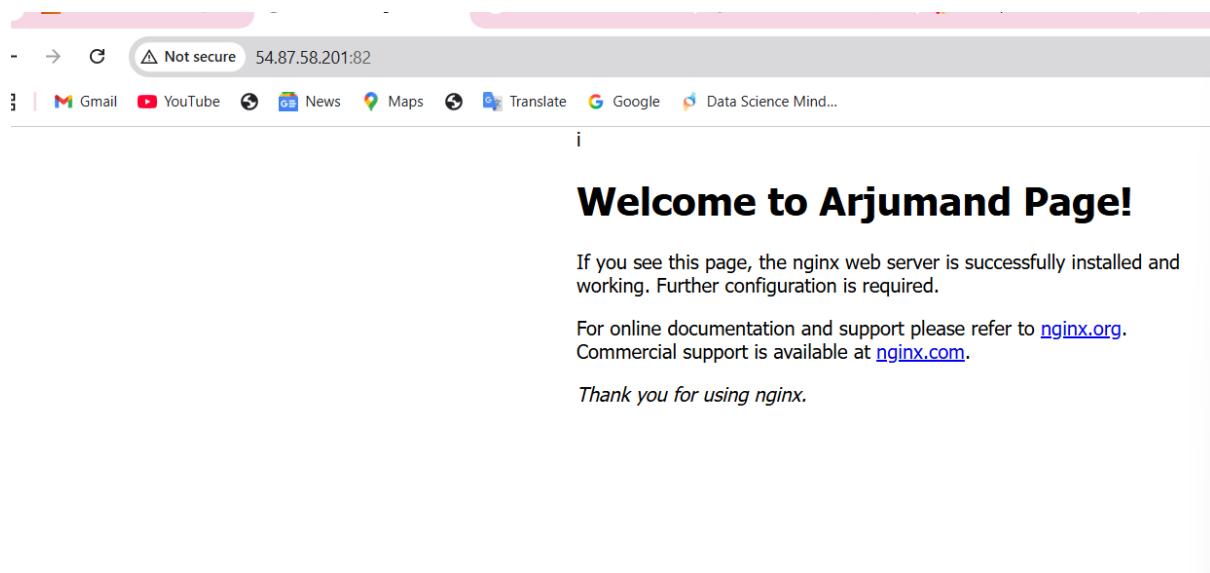
#
# Dynamic Shared Object (DSO) Support
#
# To be able to use the functionality of a module which was built as a DSO you
# have to place corresponding 'LoadModule' lines at this location so the
# directives contained in it are actually available _before_ they are used.
# Statically compiled modules (those listed by 'httpd -l') do not need
# to be loaded here.
#
# Example:
# LoadModule foo_module modules/mod_foo.so
#
include conf.modules.d/*.conf

#
# If you wish httpd to run as a different user or group, you must run
# httpd as root initially and it will switch.
#
# User/Group: The name (or #number) of the user/group to run httpd as.
# It is usually good practice to create a dedicated user and group for
# running httpd, as with most system services.
#
User apache
Group apache
```



1. Install nginx and run nginx on port number 81.
 2. Installed nginx using command sudo apt install then systemctl start then systemctl status. Changed the port : find the path using command 'find / -n httpd.conf then 'vi path then change the port number
-
3. Deploy a sample index.html file on nginx.

After changing the port number copy public id and paste it on web along with the code. Then vi index.html edit webserver html code close it then restart nginx using systemctl restart httpd. Then refresh the page.



```

[root@ip-172-31-19-106 html]# vi /etc/nginx/nginx.conf
[root@ip-172-31-19-106 html]# sudo systemctl restart nginx
[root@ip-172-31-19-106 html]# sudo systemctl status nginx
● nginx.service - The nginx HTTP and reverse proxy server
   Loaded: loaded (/usr/lib/systemd/system/nginx.service; disabled; preset: disabled)
     Active: active (running) since Tue 2025-11-04 11:24:00 UTC; 17s ago
       Process: 32624 ExecStartPre=/usr/bin/m -f /run/nginx.pid (code=exited, status=0/SUCCESS)
      Process: 32638 ExecStartPre=/usr/sbin/nginx -t (code=exited, status=0/SUCCESS)
      Process: 32649 ExecStart=/usr/sbin/nginx (code=exited, status=0/SUCCESS)
    Main PID: 32650 (nginx)
      Tasks: 2 (limit: 1115)
        Memory: 2.5M
          CPU: 38ms
        CGroup: /system.slice/nginx.service
                  └─32650 "nginx: master process /usr/sbin/nginx"
                     ├─32651 "nginx: worker process"

Nov 04 11:24:00 ip-172-31-19-106.ec2.internal systemd[1]: Starting nginx.service - The nginx HTTP and reverse proxy server ...
Nov 04 11:24:00 ip-172-31-19-106.ec2.internal nginx[32638]: nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
Nov 04 11:24:00 ip-172-31-19-106.ec2.internal nginx[32638]: nginx: configuration file /etc/nginx/nginx.conf test is successful
Nov 04 11:24:00 ip-172-31-19-106.ec2.internal systemd[1]: Started nginx.service - The nginx HTTP and reverse proxy server.

[root@ip-172-31-19-106 html]# cd /var/www/html
[bash: cd /var/www/html: No such file or directory]
[root@ip-172-31-19-106 html]# ls -l
total 16
-rw-r--r--. 1 root root 3650 Aug 12 21:18 404.html
-rw-r--r--. 1 root root 3693 Aug 12 21:18 50x.html
drwxr-xr-x. 2 root root 27 Nov 4 11:07 icons
-rw-r--r--. 1 root root 615 Aug 12 21:19 index.html
-rw-r--r--. 1 root root 368 Aug 12 21:18 nginx-logo.png
lrwxrwxrwx. 1 root root 14 Aug 12 21:19 poweredby.png → nginx-logo.png
[root@ip-172-31-19-106 html]# sudo vi /usr/share/nginx/html
[root@ip-172-31-19-106 html]# sudo vi /usr/share/nginx/html
[root@ip-172-31-19-106 html]# sudo vi /usr/share/nginx/html
[root@ip-172-31-19-106 html]# ll | html
[bash: html: command not found]
[root@ip-172-31-19-106 html]# ls
404.html 50x.html NetrwTreeListing icons index.html nginx-logo.png poweredby.png
[root@ip-172-31-19-106 html]# vi index.html
[root@ip-172-31-19-106 html]# vi index.html
[root@ip-172-31-19-106 html]#
```

Activate Windows
Go to Settings to activate Windo

5. Install Apache tomcat on port number 8082

change port in server.xml

Go to the Tomcat configuration directory

cd /opt/apache-tomcat-9.0.111/conf

Open the server.xml file using vi

vi server.xml

Search for the Connector port line

Inside vi, type:

/Connector port

and press Enter to jump to the port line.

You will see something like:

<Connector port="8080" protocol="HTTP/1.1"

Edit the port number

Move the cursor to 8080

Press i to enter insert mode

Change 8080 → 8082

```
<Connector port="8082" protocol="HTTP/1.1"
```

Save and Exit

Press Esc

Then type:

```
:wq
```

Press Enter

Restart Tomcat to apply changes

```
cd /opt/apache-tomcat-9.0.111/bin
```

```
./shutdown.sh
```

```
./startup.sh
```

Verify Tomcat is listening on new port

```
ss -tulpn | grep 8082
```

or open in browser:

```
http://<SERVER_PUBLIC_IP>:8082
```

```
# start
```

```
/opt/apache-tomcat-9.0.111/bin/startup.sh
```

```
[tomcat started,
root@ip-172-31-19-106 bin]# grep "Connector port" /opt/apache-tomcat-9.0.111/conf/server.xml
<Connector port="8082" protocol="HTTP/1.1"
<Connector port="8443" protocol="org.apache.coyote.http11.Http11NioProtocol"
<Connector port="8443" protocol="org.apache.coyote.http11.Http11AprProtocol"
root@ip-172-31-19-106 bin]# ]
```

Activate Windows
Go to Settings to activate Windows.

- Deploy a sample app on webapps

Procedure: Deploy a Sample Application on Tomcat Webapps

Go to the Tomcat webapps directory

```
cd /opt/apache-tomcat-9.0.111/webapps
```

Create a new application folder

```
mkdir sample
```

Move inside the newly created application directory

```
cd sample
```

Create an index.jsp file using vi

```
vi index.jsp
```

Press i to enter insert mode and paste sample JSP content**

```
<!DOCTYPE html>
<html>
<body>
<h1>Tomcat Application Running Successfully</h1>
</body>
</html>
```

Save and Exit the file

Press Esc

Type:

:wq

Press Enter

Restart Tomcat to load the new application

```
cd /opt/apache-tomcat-9.0.111/bin
```

```
./shutdown.sh
```

```
./startup.sh
```

Verify the application in browser

<http://<server-public-ip>:8082/sample/>

- Create a tomcat.service file for tomcat.

Procedure: Create & Enable tomcat.service File

Create a new service file for Tomcat

```
sudo vi /etc/systemd/system/tomcat.service
```

Press i to enter insert mode, then paste the following:

[Unit]

Description=Apache Tomcat Server

After=network.target

[Service]

Type=forking

Environment=CATALINA_HOME=/opt/apache-tomcat-9.0.111

Environment=CATALINA_BASE=/opt/apache-tomcat-9.0.111

Environment=CATALINA_PID=/opt/apache-tomcat-9.0.111/temp/tomcat.pid

ExecStart=/opt/apache-tomcat-9.0.111/bin/startup.sh

ExecStop=/opt/apache-tomcat-9.0.111/bin/shutdown.sh

Restart=on-failure

[Install]

WantedBy=multi-user.target

Save and exit

Press Esc

Type:

:wq

Press Enter

Reload systemd to recognize the new service

sudo systemctl daemon-reload

Enable Tomcat to start on boot

sudo systemctl enable tomcat

Start Tomcat service

sudo systemctl start tomcat

Check service status

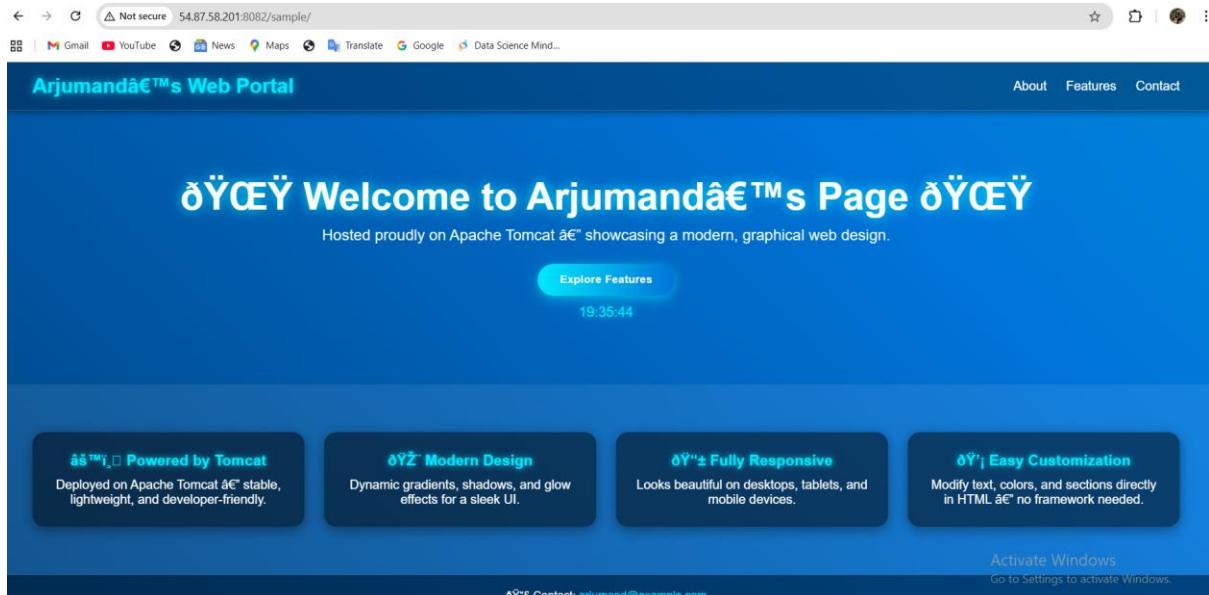
sudo systemctl status tomcat

```

tomcat started.
[root@ip-172-31-19-106 bin]# cd ..
[root@ip-172-31-19-106 apache-tomcat-9.0.111]# ls
BUILDING.txt CONTRIBUTING.md LICENSE NOTICE README.md RELEASE-NOTES RUNNING.txt bin conf lib logs temp webapps work
[root@ip-172-31-19-106 apache-tomcat-9.0.111]# cd webapps
[root@ip-172-31-19-106 webapps]# ls -1
ROOT
docs
examples
host-manager
manager
sample
[root@ip-172-31-19-106 webapps]# cd sample
[root@ip-172-31-19-106 sample]# ni index.jsp
-bash: ni: command not found
[root@ip-172-31-19-106 sample]# vi index.jsp
[root@ip-172-31-19-106 sample]# cd ..
[root@ip-172-31-19-106 webapps]# ls
ROOT docs examples host-manager manager sample
[root@ip-172-31-19-106 webapps]# cd ..
[root@ip-172-31-19-106 apache-tomcat-9.0.111]# ls
BUILDING.txt CONTRIBUTING.md LICENSE NOTICE README.md RELEASE-NOTES RUNNING.txt bin conf lib logs temp webapps work
[root@ip-172-31-19-106 apache-tomcat-9.0.111]# cd bin
[root@ip-172-31-19-106 bin]# ls

```

Activate Windows
Go to Settings to activate Windows



• 8. Configure HA Proxy server

Launch 3 ec2 instances name as Server1, Server-2, HA-Proxy-Server.

Find Instance by attribute or tag (case-sensitive)									All states			
	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4				
<input type="checkbox"/>		i-0c8b6edfdbe656b65	Stopped	Q Q	t2.micro	-	View alarms +	us-east-1c	-			
<input type="checkbox"/>	Server1	i-06adda51bc100e74f	Running	Q Q	t2.micro	2/2 checks passed	View alarms +	us-east-1c	ec2-54-165-			
<input type="checkbox"/>	HAproxy server	i-0b3cacb0257e0000f	Running	Q Q	t2.micro	2/2 checks passed	View alarms +	us-east-1c	ec2-34-229			
<input checked="" type="checkbox"/>	Server2	i-06fa895646f3807b7	Running	Q Q	t2.micro	2/2 checks passed	View alarms +	us-east-1c	ec2-3-91-24			

- Executed following command to Access the Server-1
- ssh -i your-key.pem ec2-user@Pubipaddress of Server-1 instance

- sudo -i

//'_/_/
Last login: Wed Nov 5 07:32:39 2025 from 14.192.14.55
[ec2-user@ip-172-31-28-81 ~]\$ sudo -i

- yum update -y
 - Yum install httpd -y
 - Vi /etc/hosts
 - Add HA-Proxy-Server Public IP Address
 - Run below command on Server-1
 - ping load_balancer -c 4
 - systemctl start httpd
 - systemctl status httpd
 - Browse with Server-1 Public IP address:80 it will work

Server-2 Steps:

```

>Last login: Wed Nov  5 07:32:39 2025 from 14.192.14.55
[ec2-user@ip-172-31-28-81 ~]$ sudo -i
[root@ip-172-31-28-81 ~]# apt update -y
-bash: apt: command not found
[root@ip-172-31-28-81 ~]# sudo yum update -y
Last metadata expiration check: 2:28:42 ago on Wed Nov  5 07:34:30 2025.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-28-81 ~]# yum install httpd -y
Last metadata expiration check: 2:28:58 ago on Wed Nov  5 07:34:30 2025.
Package httpd-2.4.65-1.amzn2023.0.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-28-81 ~]# vi /etc/hosts
[root@ip-172-31-28-81 ~]# vi /etc/hosts
[root@ip-172-31-28-81 ~]# vi /etc/hosts
[root@ip-172-31-28-81 ~]# cat /etc/hosts
127.0.0.1 localhost.localdomain localhost4 localhost4.localdomain4
::1 localhost6 localhost6.localdomain6
34.229.219.19 load_balance
[root@ip-172-31-28-81 ~]# ping load_balancer -c 4
ping: balancer: Name or service not known
[root@ip-172-31-28-81 ~]# vi /etc/hosts
[root@ip-172-31-28-81 ~]# cat /etc/hosts
127.0.0.1 localhost.localdomain localhost4 localhost4.localdomain4
::1 localhost6 localhost6.localdomain6
34.229.219.19 load_balancer
[root@ip-172-31-28-81 ~]# ping load_balancer -c 4
ping: balancer: Name or service not known
[root@ip-172-31-28-81 ~]# ping load_balancer -c 4
PING load_balancer (34.229.219.19) 56(84) bytes of data.
64 bytes from load_balancer (34.229.219.19): icmp_seq=1 ttl=126 time=0.816 ms
64 bytes from load_balancer (34.229.219.19): icmp_seq=2 ttl=126 time=0.829 ms
64 bytes from load_balancer (34.229.219.19): icmp_seq=3 ttl=126 time=1.51 ms
64 bytes from load_balancer (34.229.219.19): icmp_seq=4 ttl=126 time=0.829 ms
--- load_balancer ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3076ms
rtt min/avg/max/mdev = 0.816/0.995/1.509/0.296 ms
[root@ip-172-31-28-81 ~]# sudo systemctl start httpd
[root@ip-172-31-28-81 ~]# sudo systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: Loaded (/usr/lib/systemd/system/httpd.service; disabled; preset: disabled)
     Active: active (running) since Wed 2025-11-05 07:49:17 UTC; 2h 25min ago
       Docs: man:httpd.service(8)
 Main PID: 26911 (httpd)
   Status: "Total requests: 10; Idle/Busy workers 100/0;Requests/sec: 0.00115; Bytes served/sec: 0 B/sec"
      Tasks: 230 (Limit: 1106)
     Memory: 16.7M
        CPU: 5.887s
      CGroup: /system.slice/httpd.service
              ├─26911 /usr/sbin/httpd -DFOREGROUND
              ├─26912 /usr/sbin/httpd -DFOREGROUND
              ├─26913 /usr/sbin/httpd -DFOREGROUND
              ├─26914 /usr/sbin/httpd -DFOREGROUND
              ├─26915 /usr/sbin/httpd -DFOREGROUND
              └─27194 /usr/sbin/httpd -DFOREGROUND

```

```

[26911 /usr/sbin/httpd -DFOREGROUND
-26912 /usr/sbin/httpd -DFOREGROUND
-26913 /usr/sbin/httpd -DFOREGROUND
-26914 /usr/sbin/httpd -DFOREGROUND
-26915 /usr/sbin/httpd -DFOREGROUND
-27194 /usr/sbin/httpd -DFOREGROUND

ov 05 07:49:17 ip-172-31-28-81.ec2.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
ov 05 07:49:17 ip-172-31-28-81.ec2.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
ov 05 07:49:17 ip-172-31-28-81.ec2.internal httpd[26911]: Server configured, listening on: port 80
root@ip-172-31-28-81 ~]# exit
ogout
ec2-user@ip-172-31-28-81 ~]$ ssh -i "Testing.pem" ec2-user@ec2-3-91-249-4.compute-1.amazonaws.com
arning: Identity file Testing.pem not accessible: No such file or directory.
c2-user@ec2-3-91-249-4.compute-1.amazonaws.com: Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
ec2-user@ip-172-31-28-81 ~]$ ssh -i Testing.pem admin@ec-2-3.91.249.4
arning: Identity file Testing.pem not accessible: No such file or directory.
sh: Could not resolve hostname ec-2-3.91.249.4: Name or service not known
ec2-user@ip-172-31-28-81 ~]$ ls ~/Downloads
s: cannot access '/home/ec2-user/Downloads': No such file or directory
ec2-user@ip-172-31-28-81 ~]$ exit
ogout

```

rowse with Server-1 Public IP address:80 it will work

Server-2 Steps:

Run following command to Access Server-2

- ssh -i your-key.pem ec2-user@Pubipaddress of Server-2 instance
- sudo -i

- yum update -y

- yum install nginx -y

- sudo amazon-linux-extras install nginx1 -y

```

hc2-user@ip-172-31-19-195 ~]$ sudo n -i
id: n: command not found
hc2-user@ip-172-31-19-195 ~]$ yum update -y
error: This command has to be run with superuser privileges (under the root user on most systems).
hc2-user@ip-172-31-19-195 ~]$ sudo apt update -y
E: apt: command not found
hc2-user@ip-172-31-19-195 ~]$ sudo yum update -y
ast metadata expiration check: 2:11:03 ago on wed Nov  5 08:16:29 2025.
pendencies resolved.
nothing to do.
complete!
hc2-user@ip-172-31-19-195 ~]$ sudo yum install nginx -y
ast metadata expiration check: 2:11:26 ago on wed Nov  5 08:16:29 2025.
package nginx-1.12.8-0.1.amzn2023.0.2.x86_64 is already installed.
nothing to do.
complete!
hc2-user@ip-172-31-19-195 ~]$ vi /etc/hosts
hc2-user@ip-172-31-19-195 ~]$ cd etc
bash: cd: etc: No such file or directory
hc2-user@ip-172-31-19-195 ~]$ ls
hc2-user@ip-172-31-19-195 ~]$ chmod 777 hosts
hc2-user@ip-172-31-19-195 ~]$ touch hosts
hc2-user@ip-172-31-19-195 ~]$ cd etc
hc2-user@ip-172-31-19-195 etc]$ ls
IR_COLORS bashrc csh.cshrc gcrypt hosts libaudit.conf modprobe.d pam.d rc2.d security subuid- vimrc
LIGHTCOLORS color.bashrc host.conf libibverbs.d modules-load.d passed rc3.d services subsupd- vir
NO_COLORS gnuRC init.d liblvm motd.d rc5.d statusd sudoers xattr.comf
nterfaceManager chkconfig.d default group init.d libreboot motd.d rc5.d statususd sudoers.d xattrr.comf
ntp chrony.conf depmod.d group inittab libuser.conf mtab pkcscfg rc6.d shadow sysconfig
ntpdate chrony.conf dhcp grub.d inputrc locale.conf nanorc pk1 request-key.conf shadow-
ntime cron.daily dracut.conf grubx.cfg issuse.net login.defs networks nopt_d pm request-key.d shells
ntimes cifs-utils dracut.conf grubx.cfg issuse.net login.defs networks nopt_d pm request-key.d shells
nteratives cloud dracut.conf.gshadow kernel logrotate.conf nfss.conf printcap rpc resolv.conf skt
nazon cron.daily environment gshadow keyutils logrotate.d nfsmount.conf profile rpm ssi system-release
azon-linux-release cron.hourly ethertypes gss krb5.conf les nging profile.d rsyncd.conf sssd system-release-cpe
azon-linux-release-cpe cron.monthly exports gssproxy krb5.conf les nging profile.d rsyncd.conf sssd system-release-cpe
cron.weekly exports.d hibinit-config.cfg ld.so.cache magic openldap rcd rwtab_d statetab_d
cron.d cryptologic host.conf ld.so.cache man_db opt rc0.d sas12 subgid- trustedkey.key
udit cronatab filesystems host.conf ld.so.cache man_db opt rc0.d sas12 subgid- trustedkey.key
nh_complition.d crypto-polices fstab hostname ld.so.cache mke2fs.conf os-release screenrc subuid-
ude2-user@ip-172-31-19-195 ~]$ chmod 777 hosts
mod: changing permissions of 'hosts': Operation not permitted
hc2-user@ip-172-31-19-195 etc]$ sudo chmod 777 hosts

```

- vi /etc/hosts

- Add HA-Proxy-Server Public IP Address

Run below command on Server-2

```
ping load_balancer -c 4
```

- `systemctl start nginx`

- `systemctl status nginx`

HA-Proxy-Server Steps:

Run following command to Access HA-Prox-Server

- ssh -i your-key.pem ec2-user@Pubipaddress of HA-Proxy-Server instance

- sudo -i

- yum update -y

- yum install haproxy -y

- vi /etc/hosts

- Add Server-1, Server-2 Public IP's

```
[root@ip-172-31-24-35 ~]# vi /etc/hosts
[root@ip-172-31-24-35 ~]# cat /etc/hosts
127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4
::1 localhost6 localhost6.localdomain6
14.165.145.7 server_1
8.91.249.4 server_2
[root@ip-172-31-24-35 ~]# vi /etc/haproxy/haproxy.cfg
[root@ip-172-31-24-35 ~]# sudo systemctl enable haproxy
```

- vi /etc/haproxy/haproxy.cfg

- Add Server-1, Server-2 public IP's

```
[root@ip-172-31-24-35 ~]# vi /etc/hosts
[root@ip-172-31-24-35 ~]# cat /etc/hosts
127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4
::1 localhost6 localhost6.localdomain6
192.168.145.2 server
192.168.145.4 client-2
[root@ip-172-31-24-35 ~]# vi /etc/haproxy/haproxy.cfg
[root@ip-172-31-24-35 ~]# sudo systemctl enable haproxy
Created symlink /etc/systemd/system/haproxy.service → /usr/lib/systemd/system/haproxy.service.
[root@ip-172-31-24-35 ~]# sudo systemctl start haproxy
```

- `systemctl enable haproxy`

- `systemctl start haproxy`

```
installing      : /usr/lib/systemd/system/haproxy.service          1/1
Running scriptlet: haproxy-3.0.5-1.amzn2023.0.1.x86_64 1/1
Verifying       : haproxy-3.0.5-1.amzn2023.0.1.x86_64 1/1

Installed:
  haproxy-3.0.5-1.amzn2023.0.1.x86_64

complete!
root@ip-172-31-18-214 ~# vi /etc/hosts
root@ip-172-31-18-214 ~# vi /etc/hosts
root@ip-172-31-18-214 ~# vi /etc/hosts
root@ip-172-31-18-214 ~# vi /etc/haproxy/haproxy.cfg
root@ip-172-31-18-214 ~# systemctl start haproxy
root@ip-172-31-18-214 ~# systemctl status haproxy
haproxy.service - HAProxy Load Balancer
   Loaded: loaded (/usr/lib/systemd/system/haproxy.service; disabled; preset: disabled)
     Active: active (running) since Wed 2025-11-05 13:51:40 UTC; 18s ago
   Process: 26659 ExecStartPre=/usr/sbin/haproxy -f $CONFIG -F $CFGDIR -c -q $OPTIONS (code=exited, status=0/SUCCESS)
 Main PID: 26664 (haproxy)
    Status: "Ready."
   Tasks: 2 (limit: 1106)
  Memory: 6.5M
     CPU: 47ms
```

- `systemctl status haproxy`

```
root@ip-172-31-18-214 ~]# vi /etc/haproxy/haproxy.cfg
root@ip-172-31-18-214 ~]# systemctl start haproxy
root@ip-172-31-18-214 ~]# systemctl status haproxy
haproxy.service - HAProxy Load Balancer
   Loaded: loaded (/usr/lib/systemd/system/haproxy.service; disabled; preset: disabled)
     Active: active (running) Since Wed 2025-11-05 13:51:40 UTC; 18s ago
   Process: 26659 ExecStartPre=/usr/sbin/haproxy -f $CONFIG -f $CFGDIR -c -q $OPTIONS (code=exited, status=0/SUCCESS)
 Main PID: 26664 (haproxy)
    Status: "Ready."
      Tasks: 2 (limit: 1106)
     Memory: 6.5M
        CPU: 42ms
       CGroup: /system.slice/haproxy.service
           ├─26664 /usr/sbin/haproxy -Ws -f /etc/haproxy/haproxy.cfg -f /etc/haproxy/conf.d -p /run/haproxy.pid
           ├─26670 /usr/sbin/haproxy -Ws -f /etc/haproxy/haproxy.cfg -f /etc/haproxy/conf.d -p /run/haproxy.pid

Nov 05 13:51:40 ip-172-31-18-214.ec2.internal haproxy[26664]: [ALERT] (26664) : config : parsing [/etc/haproxy/haproxy.cfg:29] : 'pidfile' already specified. continue
Nov 05 13:51:40 ip-172-31-18-214.ec2.internal haproxy[26664]: [NOTICE] (26664) : New worker (26670) forked
Nov 05 13:51:40 ip-172-31-18-214.ec2.internal systemd[1]: Started haproxy.service - HAProxy Load Balancer.
Nov 05 13:51:40 ip-172-31-18-214.ec2.internal haproxy[26664]: [NOTICE] (26664) : Loading success.
Nov 05 13:51:40 ip-172-31-18-214.ec2.internal haproxy[26670]: [WARNING] (26670) : Server static/static is DOWN, reason: Layer4 connection problem, info: "Connection refused"
Nov 05 13:51:40 ip-172-31-18-214.ec2.internal haproxy[26670]: [ALERT] (26670) : backend 'static' has no server available!
Nov 05 13:51:41 ip-172-31-18-214.ec2.internal haproxy[26670]: [WARNING] (26670) : Server/app/app1 is DOWN, reason: Layer4 connection problem, info: "Connection refused"
Nov 05 13:51:41 ip-172-31-18-214.ec2.internal haproxy[26670]: [WARNING] (26670) : Server/app/app2 is DOWN, reason: Layer4 connection problem, info: "Connection refused"
Nov 05 13:51:41 ip-172-31-18-214.ec2.internal haproxy[26670]: [WARNING] (26670) : Server/app/app3 is DOWN, reason: Layer4 connection problem, info: "Connection refused"
Nov 05 13:51:41 ip-172-31-18-214.ec2.internal haproxy[26670]: [WARNING] (26670) : Server/app/app4 is DOWN, reason: Layer4 connection problem, info: "Connection refused"
lines 1-23/23 (END)
```

- now browse with HA-Proxy-Server PublicIP:80 it will distribute load to



Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.