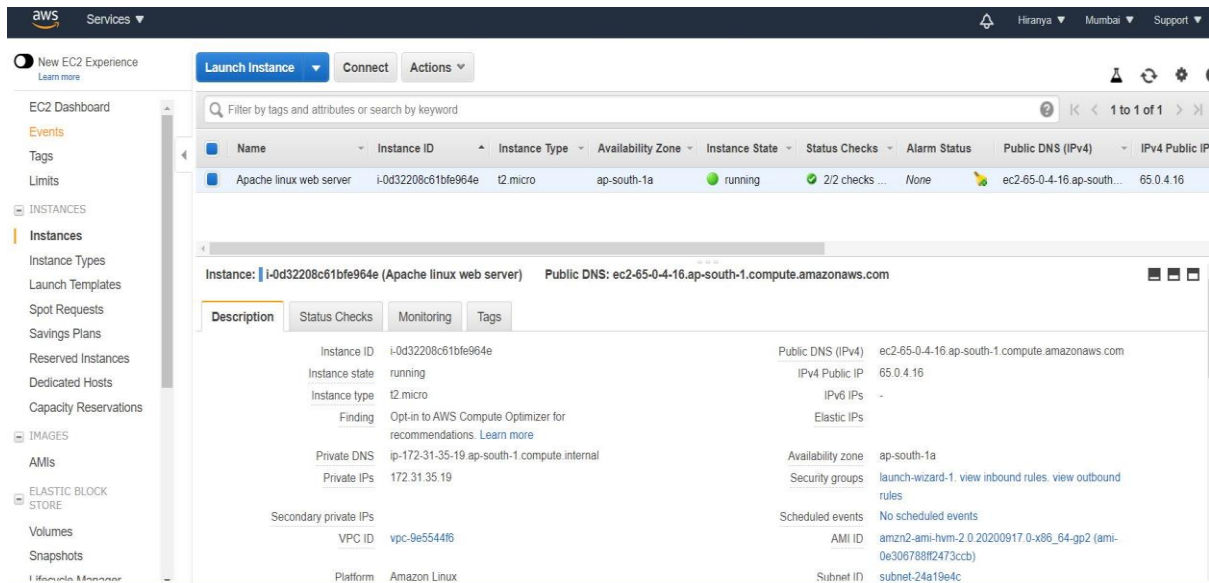
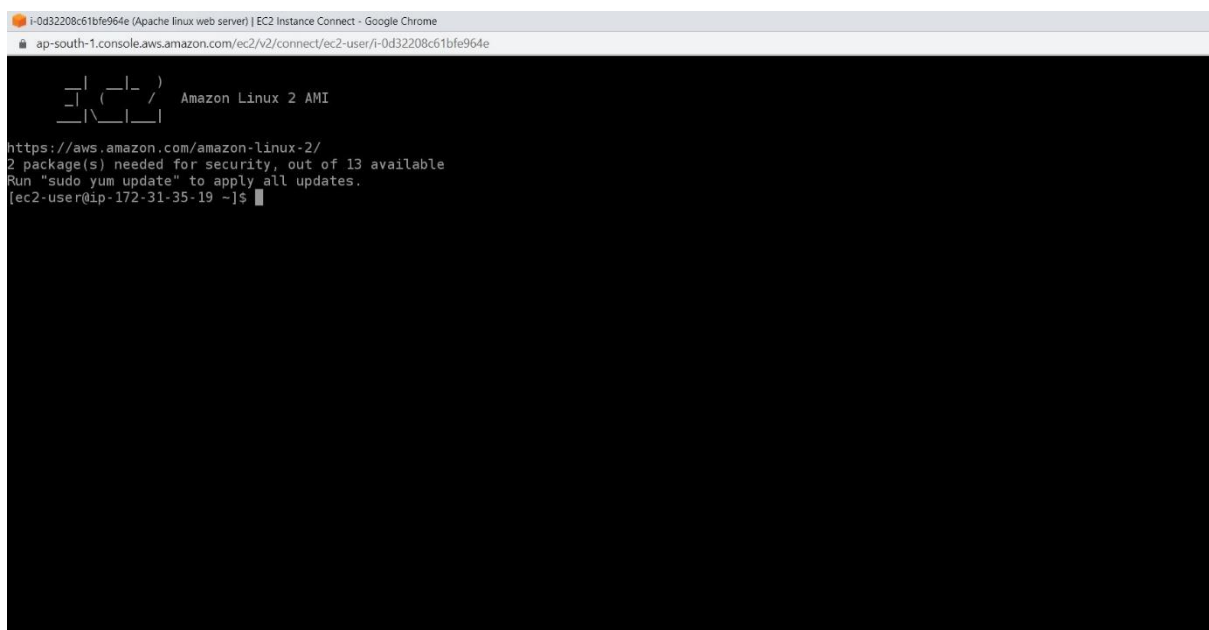


PROJECT 4: WORKING WITH ELASTIC IP

TASK 1: *Creating a Apache Linux instance*



TASK 2: *Launching the Apache server*



i-0d32208c61bfe964e (Apache linux web server)

Public IPs: 65.0.4.16 Private IPs: 172.31.35.19

TASK 3: Installation and run Apache HTTP server

```
i-0d32208c61bfe964e (Apache linux web server) | EC2 Instance Connect - Google Chrome
ap-south-1.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0d32208c61bfe964e
Verifying : generic-logos-httpd-18.0.0-4.amzn2.noarch 8/9
Verifying : httpd-2.4.46-1.amzn2.x86_64 9/9

Installed:
httpd.x86_64 0:2.4.46-1.amzn2

Dependency Installed:
apr.x86_64 0:1.6.3-5.amzn2.0.2          apr-util.x86_64 0:1.6.1-5.amzn2.0.2          apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2
generic-logos-httpd.noarch 0:18.0.0-4.amzn2  httpd-filesystem.noarch 0:2.4.46-1.amzn2          httpd-tools.x86_64 0:2.4.46-1.amzn2
mailcap.noarch 0:2.1.41-2.amzn2          mod_http2.x86_64 0:1.15.14-2.amzn2

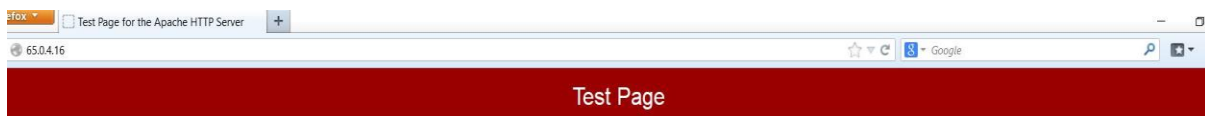
Complete!
[root@ip-172-31-35-19 ec2-user]# systemctl start httpd
bash: systemctl: command not found
[root@ip-172-31-35-19 ec2-user]# systemctl start httpd
[root@ip-172-31-35-19 ec2-user]# systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-35-19 ec2-user]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; vendor preset: disabled)
   Active: active (running) since Thu 2020-10-08 11:10:25 UTC; 37s ago
     Docs: man:httpd.service(8)
   Main PID: 10582 (httpd)
   Status: "Total requests: 0; Idle/Busy workers 100/0; Requests/sec: 0; Bytes served/sec: 0 B/sec"
   CGroup: /system.slice/httpd.service
           └─10582 /usr/sbin/httpd -DFOREGROUND
             └─10583 /usr/sbin/httpd -DFOREGROUND
               └─10584 /usr/sbin/httpd -DFOREGROUND
                 └─10585 /usr/sbin/httpd -DFOREGROUND
                   └─10586 /usr/sbin/httpd -DFOREGROUND
                     └─10587 /usr/sbin/httpd -DFOREGROUND

Oct 08 11:10:25 ip-172-31-35-19.ap-south-1.compute.internal systemd[1]: Starting The Apache HTTP Server...
Oct 08 11:10:25 ip-172-31-35-19.ap-south-1.compute.internal systemd[1]: Started The Apache HTTP Server.
[root@ip-172-31-35-19 ec2-user]#
```

i-0d32208c61bfe964e (Apache linux web server)

Public IPs: 65.0.4.16 Private IPs: 172.31.35.19

TASK 4: Running the test page for Apache HTTP server



This page is used to test the proper operation of the Apache HTTP server after it has been installed. If you can read this page, it means that the Apache HTTP server installed at this site is working properly.

If you are a member of the general public:

The fact that you are seeing this page indicates that the website you just visited is either experiencing problems, or is undergoing routine maintenance.

If you would like to let the administrators of this website know that you've seen this page instead of the page you expected, you should send them e-mail. In general, mail sent to the name "webmaster" and directed to the website's domain should reach the appropriate person.

For example, if you experienced problems while visiting www.example.com, you should send e-mail to "webmaster@example.com".

If you are the website administrator:

You may now add content to the directory `/var/www/html/`. Note that until you do so, people visiting your website will see this page, and not your content. To prevent this page from ever being used, follow the instructions in the file `/etc/httpd/conf.d/welcome.conf`.

You are free to use the image below on web sites powered by the Apache HTTP Server:



TASK 5 : Allocate a Elastic Ip address

Elastic IP addresses (1/1)

Filter Elastic IP addresses

Public IPv4 address: 65.0.83.242

<input checked="" type="checkbox"/>	Name	Allocated IPv4 address	Type	Allocation ID	Associated instance ID
<input checked="" type="checkbox"/>	Elastic IP Apache server	65.0.83.242	Public IP	eipalloc-051ca863256107746	i-0d32208c61bfe964e

Allocated IPv4 address: 65.0.83.242

Type: Public IP

Allocation ID: eipalloc-051ca863256107746

Association ID: eipassoc-0ee9105893a173ba6

Scope: VPC

Associated instance ID: i-0d32208c61bfe964e

Private IP address: 172.31.35.19

Network interface ID: eni-0feb417fb6e6a7efc

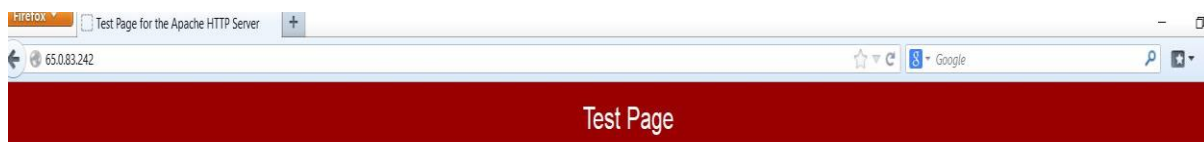
Network interface owner account ID: 477487505631

Public DNS: -

NAT Gateway ID: -

Address pool: Amazon

TASK 6: Running the Apache HTTP server using Elastic IP



This page is used to test the proper operation of the Apache HTTP server after it has been installed. If you can read this page, it means that the Apache HTTP server installed at this site is working properly.

If you are a member of the general public:

The fact that you are seeing this page indicates that the website you just visited is either experiencing problems, or is undergoing routine maintenance.

If you would like to let the administrators of this website know that you've seen this page instead of the page you expected, you should send them e-mail. In general, mail sent to the name "webmaster" and directed to the website's domain should reach the appropriate person.

For example, if you experienced problems while visiting www.example.com, you should send e-mail to "webmaster@example.com".

If you are the website administrator:

You may now add content to the directory `/var/www/html/`. Note that until you do so, people visiting your website will see this page, and not your content. To prevent this page from ever being used, follow the instructions in the file `/etc/httpd/conf.d/welcome.conf`.

You are free to use the image below on web sites powered by the Apache HTTP Server.



PROJECT 5: WORKING WITH S3

TASK 1: Creating a S3 Bucket

The screenshot shows the AWS S3 console interface. On the left, there's a navigation menu with options like 'Buckets', 'Batch operations', 'Access analyzer for S3', 'Block public access (account settings)', and 'Feature spotlight'. The main content area is titled 'S3 buckets' and includes a search bar, a 'Discover the console' link, and a 'Create bucket' button. Below this, there's a table listing the buckets. The table has columns for 'Bucket name', 'Access', 'Region', and 'Date created'. One bucket is listed: 'heera123' with 'Bucket and objects not public' access, in the 'Asia Pacific (Mumbai)' region, created on 'Oct 8, 2020 5:23:56 PM GMT+0530'.

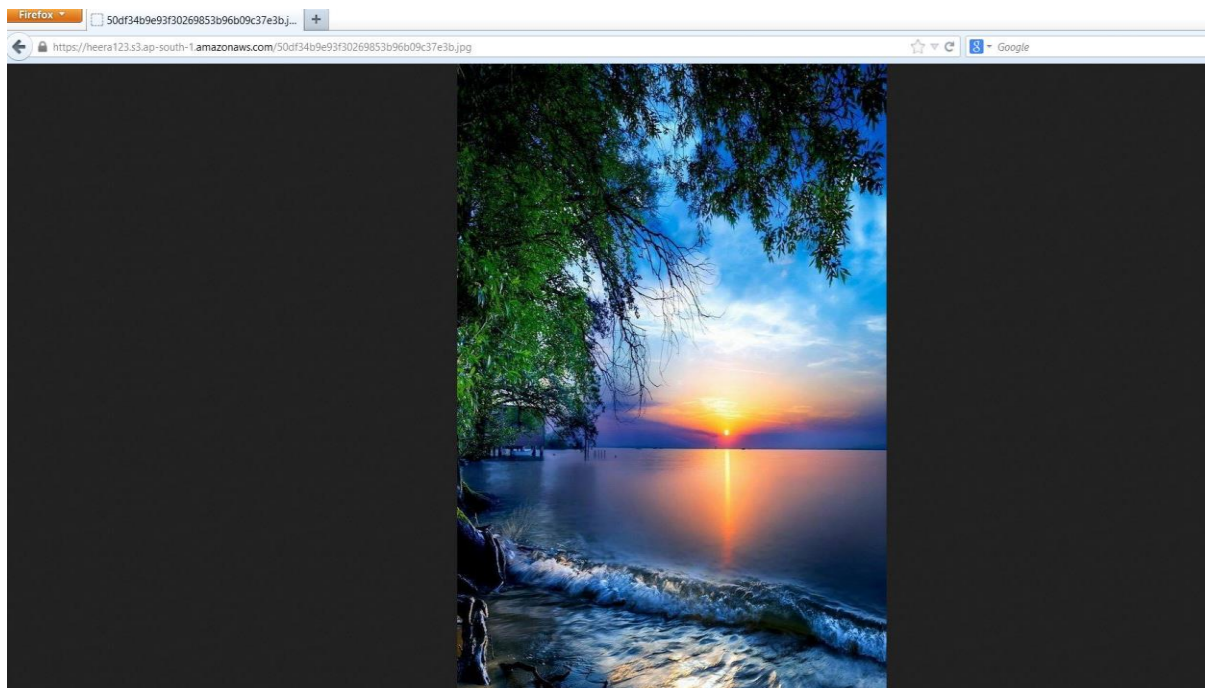
Bucket name	Access	Region	Date created
heera123	Bucket and objects not public	Asia Pacific (Mumbai)	Oct 8, 2020 5:23:56 PM GMT+0530

TASK 2: Uploading two objects (one jpg & one txt) in Bucket

The screenshot shows the AWS S3 console interface for the 'heera123' bucket. The 'Overview' tab is selected, showing a search bar, 'Upload', 'Create folder', 'Download', and 'Actions' buttons. Below these, there's a table listing the objects in the bucket. The table has columns for 'Name', 'Last modified', 'Size', and 'Storage class'. Two objects are listed: '50df34b9e93f30269853b96b09c37e3b.jpg' (204.1 KB) and 'deepa.txt' (25.0 B), both created on 'Oct 8, 2020 5:30:02 PM GMT+0530' and stored in 'Standard' storage class.

Name	Last modified	Size	Storage class
50df34b9e93f30269853b96b09c37e3b.jpg	Oct 8, 2020 5:29:17 PM GMT+0530	204.1 KB	Standard
deepa.txt	Oct 8, 2020 5:30:02 PM GMT+0530	25.0 B	Standard

TASK 3: Running the jpg object using S3 URL



TASK 4: Uploading the one index1 and one error1 objects in the bucket

aws Services

Amazon S3 > heera123

heera123

Overview Properties Permissions Management Access points

Q Type a prefix and press Enter to search. Press ESC to clear.

Upload Create folder Download Actions

Asia Pacific (Mumbai)

Name	Last modified	Size	Storage class
50df34b9e93f30269853b96b09c37e3b.jpg	Oct 8, 2020 5:29:17 PM GMT+0530	204.1 KB	Standard
error1.txt	Oct 8, 2020 5:56:05 PM GMT+0530	58.0 B	Standard
index1.txt	Oct 8, 2020 5:55:47 PM GMT+0530	64.0 B	Standard

Viewing 1 to 3

Operations 0 In progress 5 Success 0 Error

TASK 5: Enabling the static web hosting

The screenshot shows the AWS Management Console for a bucket named 'heera123'. The 'Static website hosting' tab is selected, displaying the configuration for static website hosting. The endpoint is shown as `http://heera123.s3-website.ap-south-1.amazonaws.com`. The configuration includes a radio button to 'Use this bucket to host a website', which is selected. Below this, there are input fields for the 'Index document' (set to `index1.txt`) and the 'Error document' (set to `error1.txt`). There is also a section for 'Redirection rules (optional)'. At the bottom of the console, a status bar indicates 'Operations: 0 In progress, 7 Success, 0 Error'.

TASK 6: Running the static web site using endpoint of the bucket

The screenshot shows a Firefox browser window with the address bar displaying `http://heera123.s3-website.ap-south-1.amazonaws.com/`. The page content displays 'Welcome to the webpage!!!!!!!!!!' followed by a series of dots, indicating the website is successfully hosted and accessible.

TASK 7: After typing the wrong endpoint URL

The screenshot shows a Firefox browser window with the address bar displaying `http://heera123.s3-website.ap-south-1.amazonaws.com/fr`. The page content displays 'Sorry!!!!!!!!!!' followed by 'YoU are in the wrong place!!!!!!!!!!!!!!', indicating that the endpoint URL is incorrect and the requested resource is not found.

TASK 8: Enabling S3 Versioning of a bucket

The screenshot shows the AWS Management Console for the bucket 'versioning5555'. The 'Overview' tab is active, showing the following settings:

- Versioning:** Enabled (indicated by a purple checkmark icon).
- Server access logging:** Disabled (indicated by a grey circle icon).
- Static website hosting:** Disabled (indicated by a grey circle icon).
- Object-level logging:** Disabled (indicated by a grey circle icon).
- Default encryption:** Automatically encrypt objects when stored in Amazon S3.

At the bottom, the 'Operations' bar shows: 0 In progress, 10 Success, 0 Error.

TASK 9: After deleting the object from the bucket (with S3 versioning)

The screenshot shows the AWS Management Console for the bucket 'versioning5555'. The 'Properties' tab is active, displaying a list of object versions. The object 'versionon.txt' is shown with its version ID and last modified date.

Name	Version ID	Last modified	Size	Storage class
versionon.txt		Oct 8, 2020 6:26:21 PM		
Oct 8, 2020 6:26:21 PM (Delete marker)	3HILHUAxvIN73NuQh7gvtbA3BKn.Gff		--	--
Oct 8, 2020 6:15:47 PM	null		81.0 B	Standard

At the bottom, the 'Operations' bar shows: 0 In progress, 11 Success, 0 Error.