

# Deploying a Static Website on AWS EC2 using Apache and nano

## Create a Key Pair (Console)

Sign in to the AWS Console → **EC2**.

Left nav → **Key pairs** → **Create key pair**.

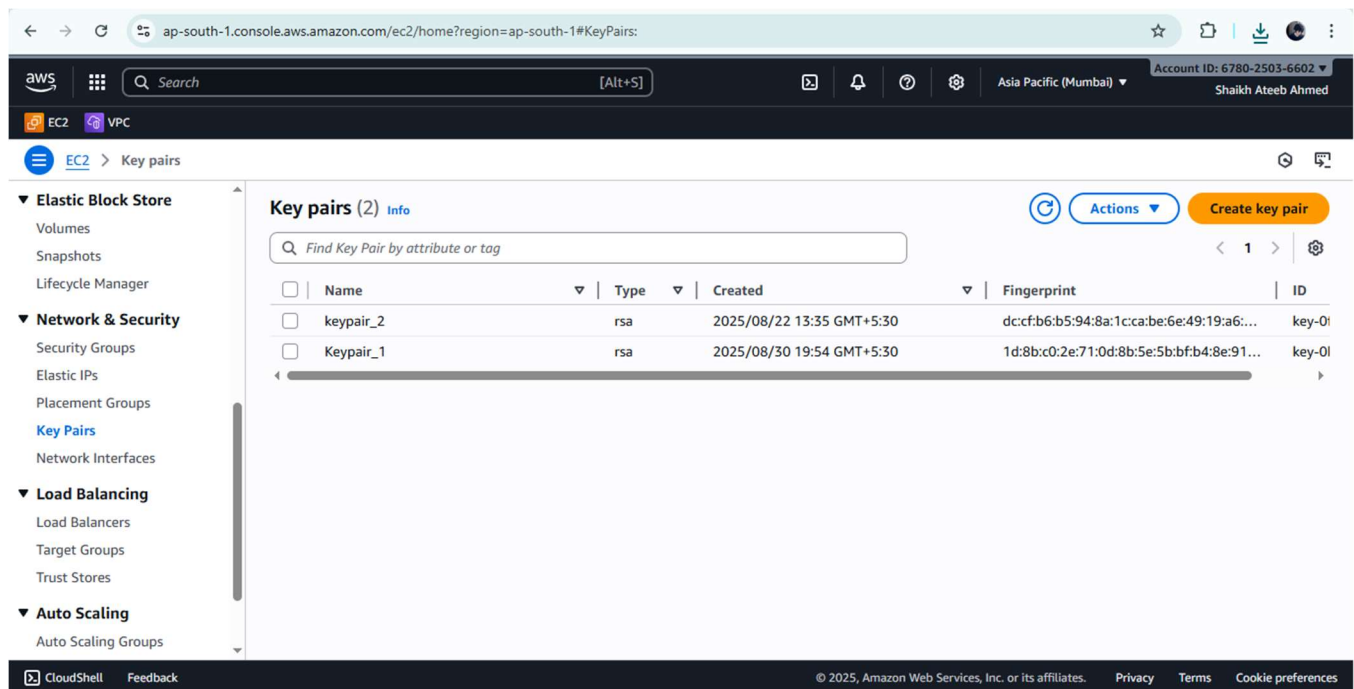
Set fields:

**Name:** Keypair\_1.

**Type:** RSA.

**Private key file format:** .pem

Click **Create key pair** → your browser will download Keypair\_1.pem.



## Create a Security Group (Console)

Console → **EC2** → left nav **Security Groups** → **Create security group**.

Fields:

**Security group name:** Web-SG.

**Description:** Allow SSH from my IP and HTTP from anywhere.

# Shaikh Ateeb Ahmed

## 01-08-2025

VPC: default.

**Inbound rules** — add:

**SSH** (Type: SSH, Port range: 22) → **Source: My IP** (select **My IP**).

**HTTP** (Type: HTTP, Port range: 80) → **Source: Anywhere IPv4 0.0.0.0/0** (allows everyone to browse your site).

Leave **Outbound** as default.

Click **Create security group**.

The screenshot shows the AWS Management Console interface for creating a new security group. The page is titled 'Create security group' and includes a brief description: 'A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To create a new security group, complete the fields below.'

**Basic details**

- Security group name:** Web-SG (Note: Name cannot be edited after creation.)
- Description:** Allow SSH from my IP and HTTP from anywhere
- VPC:** vpc-049fda76130d569bf

**Inbound rules**

Type	Protocol	Port range	Source	Description - optional	Action
SSH	TCP	22	My IP		Delete
HTTP	TCP	80	Anywhere...		Delete

Additional source IP addresses are listed below the HTTP rule: 110.226.182.42/32 and 0.0.0.0/0.

**Outbound rules**

Type	Protocol	Port range	Destination	Description - optional	Action
All traffic	All	All	Custom		Delete

Additional destination IP address is listed below the All traffic rule: 0.0.0.0/0.

**Tags - optional**

At the bottom of the page, there are links for 'CloudShell' and 'Feedback', and a footer with copyright information: '© 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences'.

# Shaikh Ateeb Ahmed

## 01-08-2025

The screenshot displays the AWS Management Console interface. The top navigation bar includes the AWS logo, a search bar, and the account name 'Shaikh Ateeb Ahmed' in the 'Asia Pacific (Mumbai)' region. The left-hand navigation menu is expanded to 'Security Groups', showing a list of services including Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images, Elastic Block Store, Network & Security, Load Balancing, and Auto Scaling. The main content area is titled 'sg-047e30293484e58a9 - Web-SG'. It features a 'Details' section with the following information: Security group name 'Web-SG', Security group ID 'sg-047e30293484e58a9', Description 'Allow SSH from my IP and HTTP from anywhere', VPC ID 'vpc-049fda76130d569b1f', Owner '678025036602', Inbound rules count '2 Permission entries', and Outbound rules count '1 Permission entry'. Below the details, there are tabs for 'Inbound rules', 'Outbound rules', 'Sharing - new', 'VPC associations - new', and 'Tags'. The 'Inbound rules' tab is active, showing a table with two rules. The table has columns for Name, Security group rule ID, IP version, Type, Protocol, and Port range. The first rule is for HTTP (Type: HTTP, Protocol: TCP, Port range: 80) with rule ID 'sgr-0f25406ed890fef30'. The second rule is for SSH (Type: SSH, Protocol: TCP, Port range: 22) with rule ID 'sgr-040d8100e324ca6c7'. At the bottom of the console, there is a footer with '© 2025, Amazon Web Services, Inc. or its affiliates.' and links for Privacy, Terms, and Cookie preferences.

Name	Security group rule ID	IP version	Type	Protocol	Port range
-	sgr-0f25406ed890fef30	IPv4	HTTP	TCP	80
-	sgr-040d8100e324ca6c7	IPv4	SSH	TCP	22

### Open the VPC Console

Console → **Services** → **VPC** → **Subnets**.

### Create the subnet

Click **Create subnet**.

Select the **VPC** you want.

**Name tag:** Public-Subnet-1.

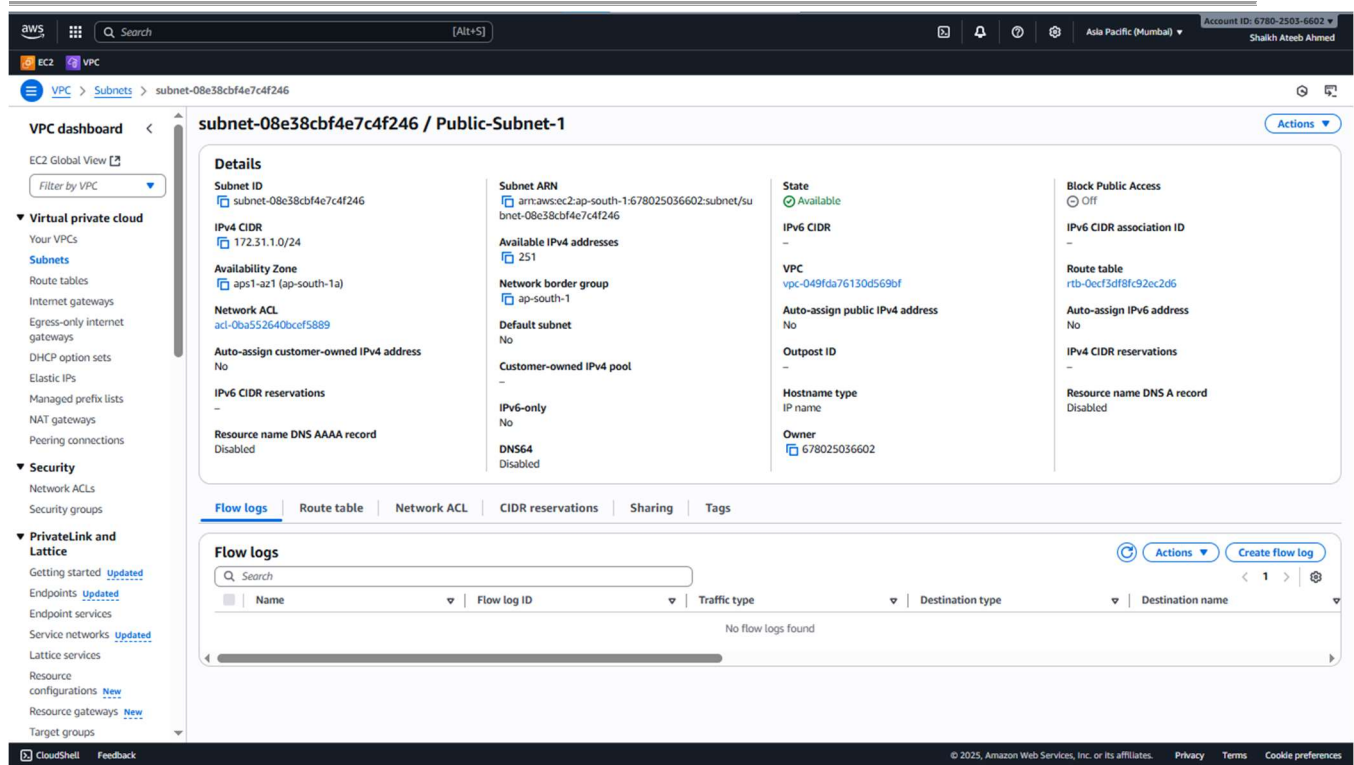
**Availability Zone:** pick one (e.g., us-east-1a).

**IPv4 CIDR block:** choose a non-overlapping CIDR, e.g. 172.31.1.0/24.

Click **Create subnet**.

# Shaikh Ateeb Ahmed

## 01-08-2025



### Launch EC2 Instance (Console)

Open **EC2**. In the EC2 dashboard click **Launch instances**.

**Name and tags** For **Name** enter: apache-web-01.

### Choose an Amazon Machine Image (AMI)

Select **Ubuntu Server**.

### Choose instance type

Select **t3.micro** (Free Tier eligible in many accounts).

### Configure instance details / Networking

**Network (VPC):** choose your default VPC (or the VPC you want to use).

**Subnet:** pick a subnet (one that auto-assigns public IPs or where you can enable it).

**Auto-assign Public IPv4:** **Enable** (so the instance gets a public IP).

Leave other defaults unless you need specific options.

**Add storage** Root volume: set **8 GiB** (or 16 GiB) with **gp3** or **gp2** — 8 GiB is fine for a simple web host.

**Security group** Choose security group that you have created

**Key pair** choose **Keypair\_1**.

# Shaikh Ateeb Ahmed

## 01-08-2025

### Review & Click Launch instance.

Wait for the instance to appear in **Instances** list and reach **running** state.

Launch an instance [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

**Name and tags** [Info](#)

Name  
apache-web-01 [Add additional tags](#)

**Application and OS Images (Amazon Machine Image)** [Info](#)

An AMI contains the operating system, application server, and applications for your instance. If you don't see a suitable AMI below, use the search field or choose [Browse more AMIs](#).

Search your full catalog including 1000s of application and OS images

Recents **Quick Start**

Amazon Linux macOS Ubuntu Windows Red Hat SUSE Linux Debian

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type  
ami-02d26659f082cf299 / ami-0b9093e40b0fcd992 (64-bit (Arm))  
Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible

**Summary**

Number of instances [Info](#)  
1

Software Image (AMI)  
Canonical, Ubuntu, 24.04, amd64... [read more](#)  
ami-02d26659f082cf299

Virtual server type (instance type)  
t3.micro

Firewall (security group)  
Web-SG

Storage (volumes)  
1 volume(s) - 8 GiB

[Cancel](#) [Launch instance](#) [Preview code](#)

☐ Create security group ☒ Select existing security group

**Common security groups** [Info](#)

Select security groups

Web-SG sg-047e30293484c58a9 [X](#) [Compare security group rules](#)

Security groups that you add or remove here will be added to or removed from all your network interfaces.

**Configure storage** [Info](#) [Advanced](#)

1x 8 GiB gp3 Root volume, 3000 IOPS, Not encrypted

[Add new volume](#)

The selected AMI contains instance store volumes, however the instance does not allow any instance store volumes. None of the instance store volumes from the AMI will be accessible from the instance.

[Click refresh to view backup information](#)

The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems [Edit](#)

**Advanced details** [Info](#)

**Summary**

Number of instances [Info](#)  
1

Software Image (AMI)  
Canonical, Ubuntu, 24.04, amd64... [read more](#)  
ami-02d26659f082cf299

Virtual server type (instance type)  
t3.micro

Firewall (security group)  
Web-SG

Storage (volumes)  
1 volume(s) - 8 GiB

[Cancel](#) [Launch instance](#) [Preview code](#)

# Shaikh Ateeb Ahmed

## 01-08-2025

ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:

EC2 > Instances > Launch an instance

▼ Instance type [Info](#) [Get advice](#)

Instance type

t3.micro

Family: t3 2 vCPU 1 GiB Memory Current generation: true On-Demand Linux base pricing: 0.0112 USD per Hour On-Demand SUSE base pricing: 0.0112 USD per Hour On-Demand Windows base pricing: 0.0204 USD per Hour On-Demand Ubuntu Pro base pricing: 0.0147 USD per Hour On-Demand RHEL base pricing: 0.04 USD per Hour

Free tier eligible

All generations

Compare instance types

Additional costs apply for AMIs with pre-installed software

▼ Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required

Keypair\_1

Create new key pair

▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-049fda76130d569bf 172.31.0.0/16 (default)

Subnet [Info](#)

Select

Create new subnet

Auto-assign public IP [Info](#)

Enable

Summary

Number of instances [Info](#)

1

Software Image (AMI) [Info](#)

Canonical, Ubuntu, 24.04, amd64...read more

ami-02d26659f82cf299

Virtual server type (instance type)

t3.micro

Firewall (security group)

Web-SG

Storage (volumes)

1 volume(s) - 8 GiB

Cancel

Launch instance

Preview code

CloudShell Feedback

© 2025, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#LaunchInstances:

EC2 > Instances > i-0bbc8eea9be600d6d

Instance summary for i-0bbc8eea9be600d6d (apache-web-01) [Info](#)

Updated less than a minute ago

Instance ID

i-0bbc8eea9be600d6d

IPv6 address

-

Hostname type

IP name: ip-172-31-1-81.ap-south-1.compute.internal

Answer private resource DNS name

-

Auto-assigned IP address

65.0.81.124 [Public IP]

IAM Role

-

IMDSv2

Required

Operator

-

Public IPv4 address

65.0.81.124 [open address](#)

Instance state

Running

Private IP DNS name (IPv4 only)

ip-172-31-1-81.ap-south-1.compute.internal

Instance type

t3.micro

VPC ID

vpc-049fda76130d569bf

Subnet ID

subnet-08e38cbf4e7c4f246 (Public-Subnet-1)

Instance ARN

arn:aws:ec2:ap-south-1:678025036602:instance/i-0bbc8eea9be600d6d

Private IPv4 addresses

172.31.1.81

Public DNS

ec2-65-0-81-124.ap-south-1.compute.amazonaws.com [open address](#)

Elastic IP addresses

-

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer for recommendations. [Learn more](#)

Auto Scaling Group name

-

Managed

false

Details

Status and alarms

Monitoring

Security

Networking

Storage

Tags

▼ Instance details [Info](#)

AMI ID

ami-02d26659f82cf299

Monitoring

disabled

Platform details

Linux/UNIX

AMI name

ubuntu/images/hvm-ssd-gp3/ubuntu-noble-24.04-amd64-server-2025082

Allowed image

-

Termination protection

Disabled

CloudShell Feedback

© 2025, Amazon Web Services, Inc. or its affiliates. [Privacy](#) [Terms](#) [Cookie preferences](#)

# Shaikh Ateeb Ahmed

01-08-2025

## Connect to Your Instance (SSH)

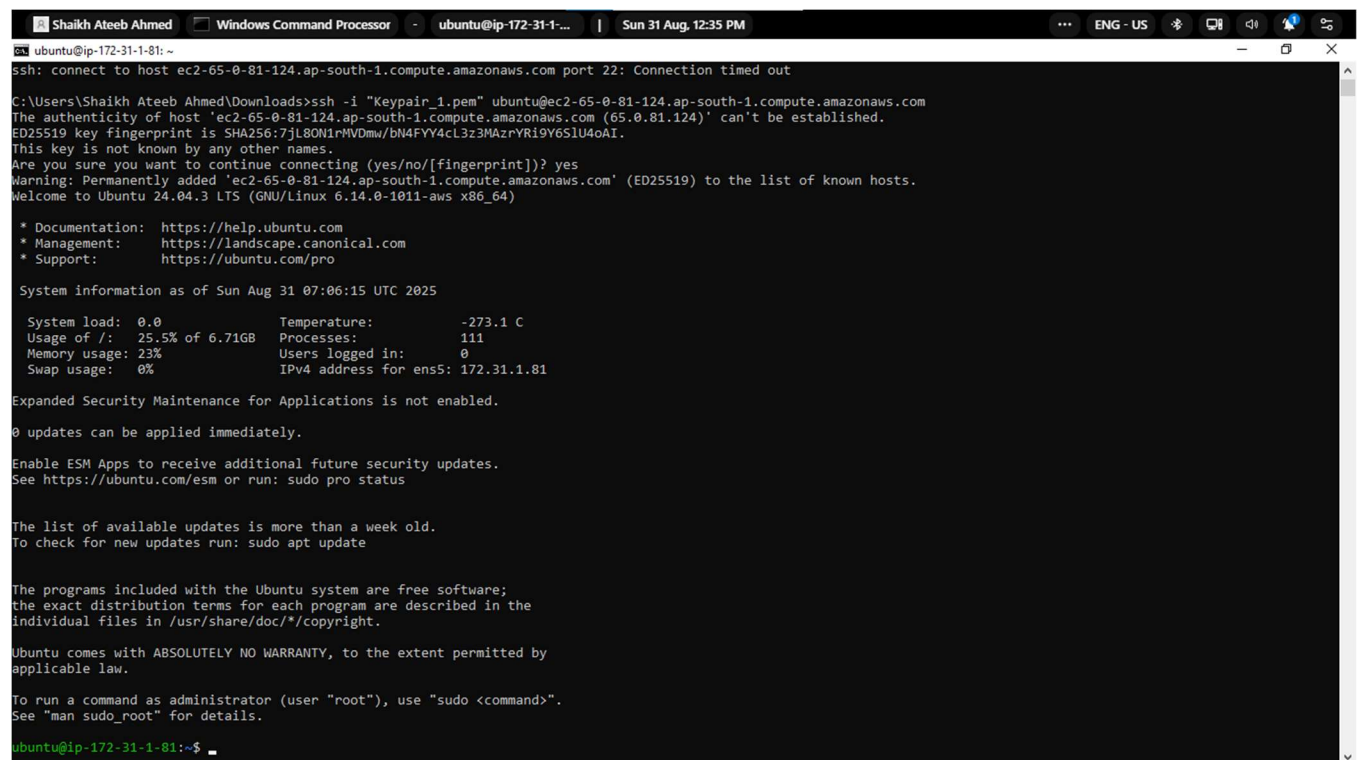
### Open cmd Windows PowerShell

**Get the Public IPv4** Console → EC2 → Instances → select your instance → copy **Public IPv4 address** (e.g. 13.234.225.154).

**Run the SSH command** `ssh -i "Keypair_1.pem" ubuntu@ec2-65-0-81-124.ap-south-1.compute.amazonaws.com`

If asked The authenticity of host ... are you sure you want to continue connecting (yes/no)? type yes and press Enter.

**You're in** — you should see a shell prompt on the remote host. Use `sudo` for admin tasks



```
Shaikh Ateeb Ahmed Windows Command Processor - ubuntu@ip-172-31-1-81: ~ Sun 31 Aug, 12:35 PM
ubuntu@ip-172-31-1-81: ~
ssh: connect to host ec2-65-0-81-124.ap-south-1.compute.amazonaws.com port 22: Connection timed out

C:\Users\Shaikh Ateeb Ahmed\Downloads>ssh -i "Keypair_1.pem" ubuntu@ec2-65-0-81-124.ap-south-1.compute.amazonaws.com
The authenticity of host 'ec2-65-0-81-124.ap-south-1.compute.amazonaws.com (65.0.81.124)' can't be established.
ED25519 key fingerprint is SHA256:7jL80W1rMVDm/bN4FY4cL3z3MAzrYRi9Y6S1U4oAI.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-65-0-81-124.ap-south-1.compute.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 24.04.3 LTS (GNU/Linux 6.14.0-1011-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Sun Aug 31 07:06:15 UTC 2025

System load:  0.0          Temperature:   -273.1 C
Usage of /:   25.5% of 6.71GB  Processes:    111
Memory usage: 23%          Users logged in: 0
Swap usage:   0%            IPv4 address for ens5: 172.31.1.81

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

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
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-172-31-1-81:~$
```



# Shaikh Ateeb Ahmed

## 01-08-2025

### Install & Start Apache (Ubuntu)

#### Update package lists (and upgrade if you want):

sudo apt update

```
Shaikh Ateeb Ahmed Windows Command Processor ubuntu@ip-172-31-1-... Sun 31 Aug, 12:37 PM
ubuntu@ip-172-31-1-81:~$ sudo apt update
Get:17 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1473 kB]
Get:18 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [297 kB]
Get:19 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [377 kB]
Get:20 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [30.5 kB]
Get:21 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [1785 kB]
Get:22 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [399 kB]
Get:23 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
Get:24 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [33.2 kB]
Get:25 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [6772 B]
Get:26 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
Get:27 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [592 B]
Get:28 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Packages [39.9 kB]
Get:29 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main Translation-en [9152 B]
Get:30 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [7076 B]
Get:31 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [272 B]
Get:32 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [30.2 kB]
Get:33 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [17.4 kB]
Get:34 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [19.2 kB]
Get:35 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [1304 B]
Get:36 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
Get:37 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [116 B]
Get:38 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
Get:39 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:40 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [1106 kB]
Get:41 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [190 kB]
Get:42 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [21.6 kB]
Get:43 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [8708 B]
Get:44 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [881 kB]
Get:45 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [195 kB]
Get:46 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.2 kB]
Get:47 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [18.0 kB]
Get:48 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [1685 kB]
Get:49 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [377 kB]
Get:50 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [208 B]
Get:51 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [18.5 kB]
Get:52 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [4288 B]
Get:53 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
Get:54 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [380 B]
Fetched 36.9 MB in 6s (5947 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
13 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-1-81:~$
```



# Shaikh Ateeb Ahmed

## 01-08-2025

---

### Install Apache:

`sudo apt install apache2 -y`

```
Shaikh Ateeb Ahmed  Windows Command Processor  ubuntu@ip-172-31-1-...  Sun 31 Aug, 12:38 PM

ubuntu@ip-172-31-1-81:~$ sudo apt install apache2 -y
Setting up apache2 (2.4.58-1ubuntu8.8) ...
Enabling module mpm_event.
Enabling module authz_core.
Enabling module authz_host.
Enabling module authn_core.
Enabling module auth_basic.
Enabling module access_compat.
Enabling module authn_file.
Enabling module authz_user.
Enabling module alias.
Enabling module dir.
Enabling module autoindex.
Enabling module env.
Enabling module mime.
Enabling module negotiation.
Enabling module setenvif.
Enabling module filter.
Enabling module deflate.
Enabling module status.
Enabling module reqtimeout.
Enabling conf charset.
Enabling conf localized-error-pages.
Enabling conf other-vhosts-access-log.
Enabling conf security.
Enabling conf serve-cgi-bin.
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /usr/lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /usr/lib/systemd/system/apache-htcacheclean.service.
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.5) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-1-81:~$
```

# Shaikh Ateeb Ahmed

## 01-08-2025

Start the server and enable it at boot:

sudo systemctl start apache2

sudo systemctl enable apache2

```
Shaikh Ateeb Ahmed Windows Command Processor ubuntu@ip-172-31-1-... | Sun 31 Aug. 12:38 PM
ubuntu@ip-172-31-1-81:~$
Enabling site 000-default.
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /usr/lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /usr/lib/systemd/system/apache-htcacheclean.service.
Processing triggers for ufw (0.36.2-6) ...
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.5) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-1-81:~$ sudo systemctl enable --now apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
ubuntu@ip-172-31-1-81:~$ sudo systemctl enable --now apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
ubuntu@ip-172-31-1-81:~$ sudo systemctl enable --now apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
ubuntu@ip-172-31-1-81:~$ systemctl status apache2 --no-pager
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
   Active: active (running) since Sun 2025-08-31 07:08:53 UTC; 59s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 2356 (apache2)
    Tasks: 55 (limit: 1008)
   Memory: 5.4M (peak: 5.7M)
      CPU: 42ms
   CGroup: /system.slice/apache2.service
           └─2356 /usr/sbin/apache2 -k start
             └─2358 /usr/sbin/apache2 -k start
               └─2359 /usr/sbin/apache2 -k start

Aug 31 07:08:53 ip-172-31-1-81 systemd[1]: Starting apache2.service - The Apache HTTP Server...
Aug 31 07:08:53 ip-172-31-1-81 systemd[1]: Started apache2.service - The Apache HTTP Server.
ubuntu@ip-172-31-1-81:~$
```

# Shaikh Ateeb Ahmed

## 01-08-2025

### Check the service status:

`sudo systemctl status apache2`

Look for active (running) in the output.

```
Shaikh Ateeb Ahmed  Windows Command Processor  ubuntu@ip-172-31-1-...  Sun 31 Aug, 12:39 PM
ubuntu@ip-172-31-1-81:~$ sudo systemctl enable --now apache2
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
ubuntu@ip-172-31-1-81:~$ sudo systemctl enable --now apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
ubuntu@ip-172-31-1-81:~$ systemctl status apache2 --no-pager
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
   Active: active (running) since Sun 2025-08-31 07:08:53 UTC; 59s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 2356 (apache2)
    Tasks: 55 (limit: 1008)
   Memory: 5.4M (peak: 5.7M)
      CPU: 42ms
   CGroup: /system.slice/apache2.service
           └─2356 /usr/sbin/apache2 -k start
             └─2358 /usr/sbin/apache2 -k start
               └─2359 /usr/sbin/apache2 -k start

Aug 31 07:08:53 ip-172-31-1-81 systemd[1]: Starting apache2.service - The Apache HTTP Server...
Aug 31 07:08:53 ip-172-31-1-81 systemd[1]: Started apache2.service - The Apache HTTP Server.
ubuntu@ip-172-31-1-81:~$ sudo systemctl start apache2
ubuntu@ip-172-31-1-81:~$ sudo systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
ubuntu@ip-172-31-1-81:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/apache2.service; enabled; preset: enabled)
   Active: active (running) since Sun 2025-08-31 07:08:53 UTC; 1min 41s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Main PID: 2356 (apache2)
    Tasks: 55 (limit: 1008)
   Memory: 5.4M (peak: 5.7M)
      CPU: 44ms
   CGroup: /system.slice/apache2.service
           └─2356 /usr/sbin/apache2 -k start
             └─2358 /usr/sbin/apache2 -k start
               └─2359 /usr/sbin/apache2 -k start

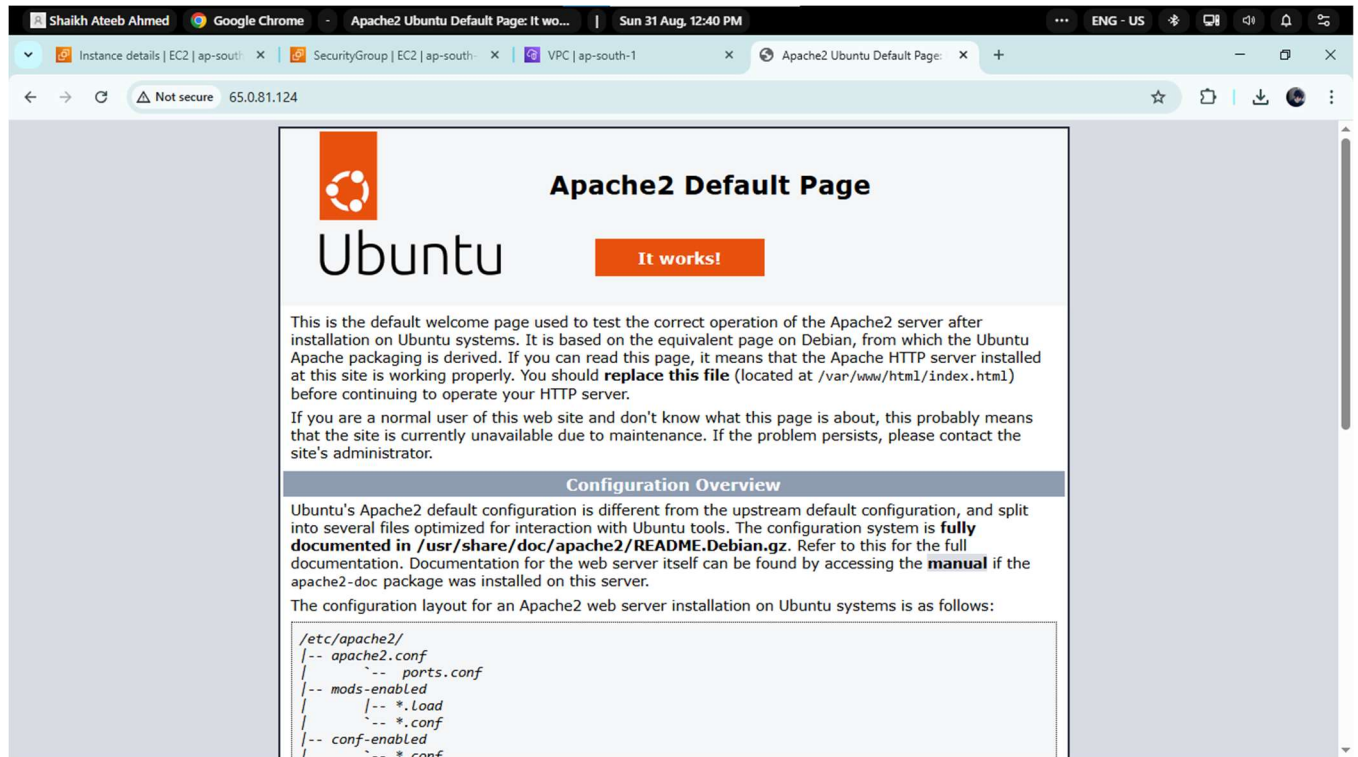
Aug 31 07:08:53 ip-172-31-1-81 systemd[1]: Starting apache2.service - The Apache HTTP Server...
Aug 31 07:08:53 ip-172-31-1-81 systemd[1]: Started apache2.service - The Apache HTTP Server.
ubuntu@ip-172-31-1-81:~$
```

Shaikh Ateeb Ahmed

01-08-2025

View the default page from your browser:

Open `http://<PUBLIC_IP>` (use the instance Public IPv4). You should see the Apache default page.



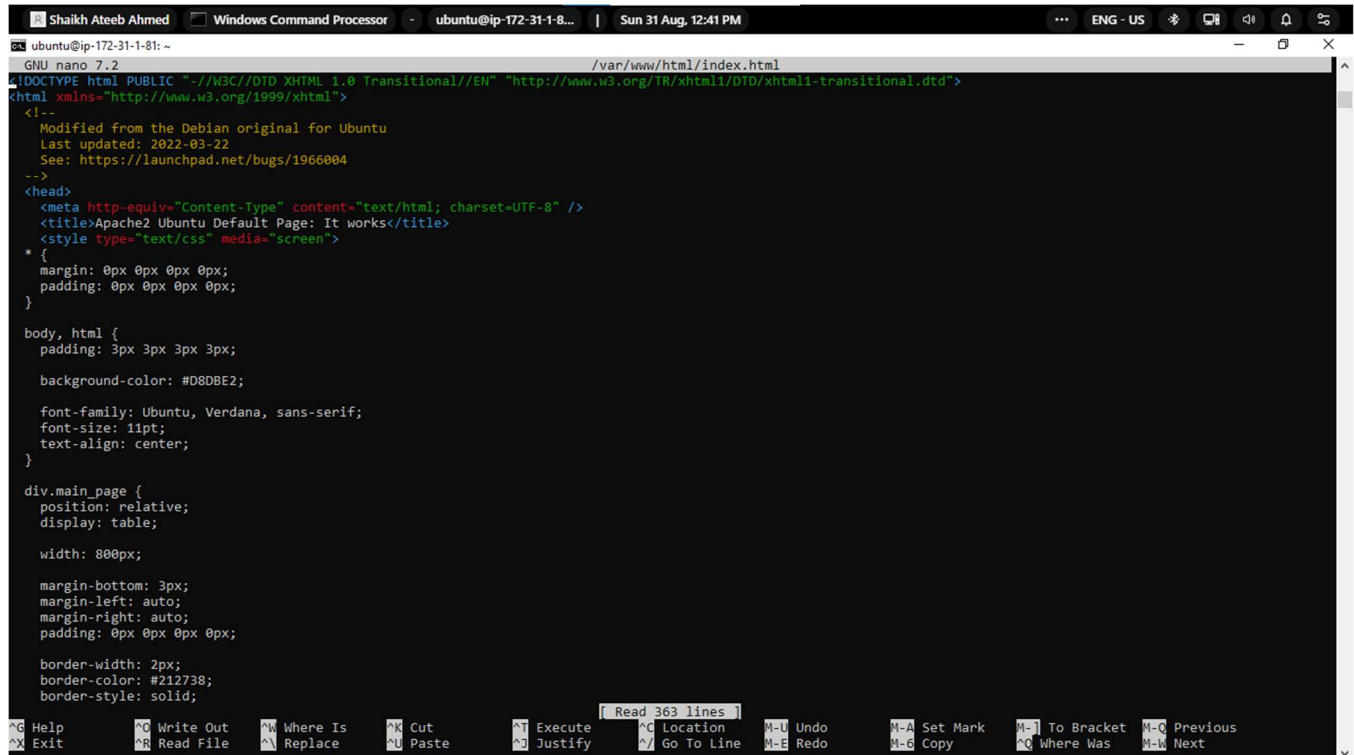
Shaikh Ateeb Ahmed

01-08-2025

Create your homepage with nano

Open the file in nano (root required because /var/www/html is root-owned):

sudo nano /var/www/html/index.html



```
GNU nano 7.2 /var/www/html/index.html
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<!--
  Modified from the Debian original for Ubuntu
  Last updated: 2022-03-22
  See: https://launchpad.net/bugs/1966004
-->
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8" />
  <title>Apache2 Ubuntu Default Page: It works</title>
  <style type="text/css" media="screen">
  * {
    margin: 0px 0px 0px 0px;
    padding: 0px 0px 0px 0px;
  }

  body, html {
    padding: 3px 3px 3px 3px;

    background-color: #D8DBE2;

    font-family: Ubuntu, Verdana, sans-serif;
    font-size: 11pt;
    text-align: center;
  }

  div.main_page {
    position: relative;
    display: table;

    width: 800px;

    margin-bottom: 3px;
    margin-left: auto;
    margin-right: auto;
    padding: 0px 0px 0px 0px;

    border-width: 2px;
    border-color: #212738;
    border-style: solid;
```

Select all existing content:

Press Ctrl + K repeatedly to delete existing lines.

**Write Your HTML Code**

Once nano is open, type your HTML code. Here's a simple example:

<!doctype html>

<html>

<head>

<meta charset="utf-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<title>My AWS Apache Site</title>

<style>body{font-family:system-ui;margin:2rem;}</style>

</head>

**Shaikh Ateeb Ahmed**

**01-08-2025**

---

```
<body>
```

```
<h1>It works! 🍕🍷</h1>
```

```
<p>Served by Apache on AWS EC2.</p>
```

```
</body>
```

```
</html>
```

**Save & exit nano:**

Ctrl + O → Enter (write file)

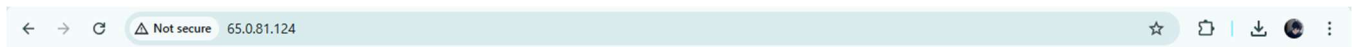
Ctrl + X (exit)

**Reload or restart Apache** (not usually required for static HTML, but safe):

sudo systemctl reload apache2 OR (if reload fails) sudo systemctl restart apache2

**Verify from your computer/browser:**

open <http://65.0.81.124/>



**It works! 🍕🍷**

Served by Apache on AWS EC2.

---

---