

# Deploy a web-server in ec2 Instance

## ➤ Step - 1 (VPC Creation)

The screenshot shows the 'Create VPC' page in the AWS Management Console. The breadcrumb navigation is 'VPC > Your VPCs > Create VPC'. A header bar at the top contains the AWS logo, a search bar, and account information: 'United States (Ohio)' and 'Account ID: 8699-3510-4956'. Below the header, a descriptive text states: 'A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.'

**VPC settings**

**Resources to create** [Info](#)  
Create only the VPC resource or the VPC and other networking resources.

☒ VPC only ☐ VPC and more

**Name tag - optional**  
Creates a tag with a key of 'Name' and a value that you specify.

My-VPC

**IPv4 CIDR block** [Info](#)  
☒ IPv4 CIDR manual input  
☐ IPAM-allocated IPv4 CIDR block

**IPv4 CIDR**  
10.0.0.0/16  
CIDR block size must be between /16 and /28.

**IPv6 CIDR block** [Info](#)  
☒ No IPv6 CIDR block  
☐ IPAM-allocated IPv6 CIDR block  
☐ Amazon-provided IPv6 CIDR block  
☐ IPv6 CIDR owned by me

## ➤ Step – 2 (Subnet creation – Public)

The screenshot shows the 'Create subnet' page in the AWS Management Console. The breadcrumb navigation is 'VPC > Subnets > Create subnet'. The header bar is identical to the previous screenshot.

**VPC ID**  
Create subnets in this VPC.

vpc-02892031166be94be (My-VPC)

**Associated VPC CIDRs**

**IPv4 CIDRs**  
10.0.0.0/16

**Subnet settings**  
Specify the CIDR blocks and Availability Zone for the subnet.

**Subnet 1 of 1**

**Subnet name**  
Create a tag with a key of 'Name' and a value that you specify.

My-Pub-Sub-1  
The name can be up to 256 characters long.

**Availability Zone** [Info](#)  
Choose the zone in which your subnet will reside, or let Amazon choose one for you.

No preference

**IPv4 VPC CIDR block** [Info](#)  
Choose the VPC's IPv4 CIDR block for the subnet. The subnet's IPv4 CIDR must lie within this block.

10.0.0.0/16

**IPv4 subnet CIDR block**  
10.0.1.0/24 256 IPs

### ➤ Step- 3 (Subnet creation- Private)





The screenshot shows the 'Create subnet' page in the AWS Management Console. The breadcrumb navigation is 'VPC > Subnets > Create subnet'. The 'VPC ID' is set to 'vpc-02892031166be94be (My-VPC)'. Under 'Associated VPC CIDRs', the 'IPv4 CIDRs' are '10.0.0/16'. The 'Subnet settings' section includes: 'Subnet name' set to 'my-prv-sub-1', 'Availability Zone' set to 'No preference', 'IPv4 VPC CIDR block' set to '10.0.0/16', and 'IPv4 subnet CIDR block' set to '10.0.2.0/27' with a '32 IPs' indicator.

### ➤ Step – 4 (Instance creation with Public subnet)

The screenshot shows the 'Launch an instance' page in the AWS Management Console. The breadcrumb navigation is 'EC2 > Instances > Launch an instance'. The 'Name and tags' section has the 'Name' set to 'Webserver-1'. The 'Application and OS Images (Amazon Machine Image)' section shows a search bar and a 'Quick Start' tab. Under 'Quick Start', the 'Ubuntu' AMI is selected. The 'Amazon Machine Image (AMI)' section shows 'Ubuntu Server 24.04 LTS (HVM), SSD Volume Type' as 'Free tier eligible'. The 'Summary' section on the right shows: 'Number of instances' set to 1, 'Software Image (AMI)' as 'Canonical, Ubuntu, 24.04, amd64...', 'Virtual server type (instance type)' as 't2.micro', 'Firewall (security group)' as 'default', and 'Storage (volumes)' as '1 volume(s) - 8 GiB'. A 'Free tier' notification is displayed. At the bottom right, there are 'Cancel', 'Launch instance', and 'Preview code' buttons.

## ➤ Step – 5 (IGW create and attach to VPC)

[Alt+S]



United States (Ohio) ▼

Account ID: 8699-3510-4956 ▼  
GB INFOTECH

igw-0664a8924069dadeb

Internet gateway igw-0664a8924069dadeb successfully attached to vpc-02892031166be94be

igw-0664a8924069dadeb / MY-IGW

Actions

Details

Internet gateway ID  
igw-0664a8924069dadeb

State  
Attached

VPC ID  
vpc-02892031166be94be | My-VPC

Owner  
869935104956

Tags

Search tags

Manage tags

< 1 > ⚙





Key	Value
Name	MY-IGW

## ➤ Step – 6 (Public Subnet Associate with Route Table)

aws

Search

[Alt+S]



United States (Ohio) ▼

Account ID: 8699-3510-4956 ▼  
GB INFOTECH

VPC > Route tables > rtb-07d59c905671e8086

You have successfully updated subnet associations for rtb-07d59c905671e8086 / My-RTB.

rtb-07d59c905671e8086 / My-RTB

Actions

Details

Route table ID  
rtb-07d59c905671e8086

VPC  
vpc-02892031166be94be | My-VPC

Main  
Yes

Owner ID  
869935104956

Explicit subnet associations  
subnet-02af8f345bf0090a8 / My-Pub-Sub-1

Edge associations  
-

Routes | Subnet associations | Edge associations | Route propagation | Tags

Explicit subnet associations (1)

Find subnet association

Edit subnet associations

< 1 > ⚙

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
My-Pub-Sub-1	subnet-02af8f345bf0090a8	10.0.1.0/24	-

Subnets without explicit associations (1)

The following subnets have not been explicitly associated with any route tables and are therefore associated with the main route table:

Find subnet association

Edit subnet associations

< 1 > ⚙

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR
my-prv-sub-1	subnet-0e6046cf3ccd12f9	10.0.2.0/27	-

➤ **Step – 7** (Define Routes, Destination – 0.0.0.0/0)

**Edit routes**

Destination	Target	Status	Propagated	Route Origin
10.0.0.0/16	local	Active	No	CreateRouteTable
0.0.0.0/0	Internet Gateway	-	No	CreateRoute

Buttons: Add route, Cancel, Preview, Save changes

➤ **Step – 8** (SSH enable from security group)

**Edit inbound rules**

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

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
sgr-08f172c5107943d32	All traffic	All	All	Custom	
sgr-088518831c2eab4d0	SSH	TCP	22	Custom	

Buttons: Add rule, Cancel, Preview changes, Save rules

➤ **Step – 9** (Connect to Instance)

```
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 6.8.0-1035-aws x86_64)
* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:       https://ubuntu.com/pro

System information as of Sat Sep 20 05:40:10 UTC 2025

System load:  0.1          Processes:      107
Usage of /:   25.7% of 7.57GB   Users logged in: 0
Memory usage: 23%          IPv4 address for eth0: 10.0.1.103
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

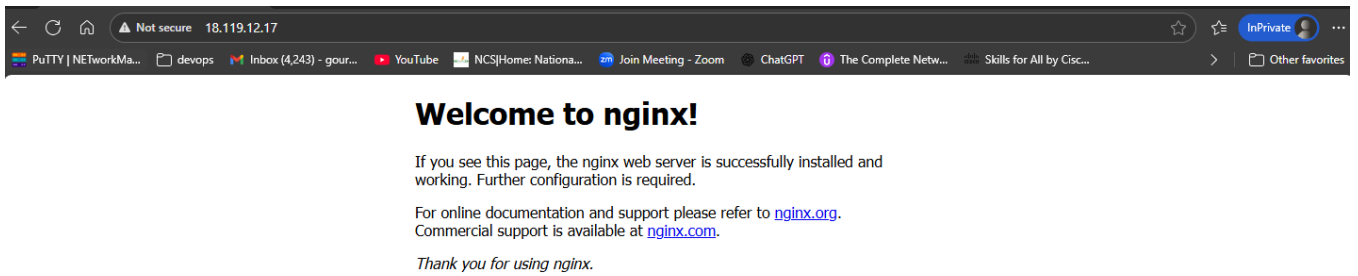
17 updates can be applied immediately.
12 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

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

New release '24.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Sat Sep 20 05:37:27 2025 from 3.16.146.5
ubuntu@ip-10-0-1-103:~$ df -h
```

➤ **Step – 10** (update packages and Install nginx )



➤ **Step – 11** (replace the html file with custom html code)

