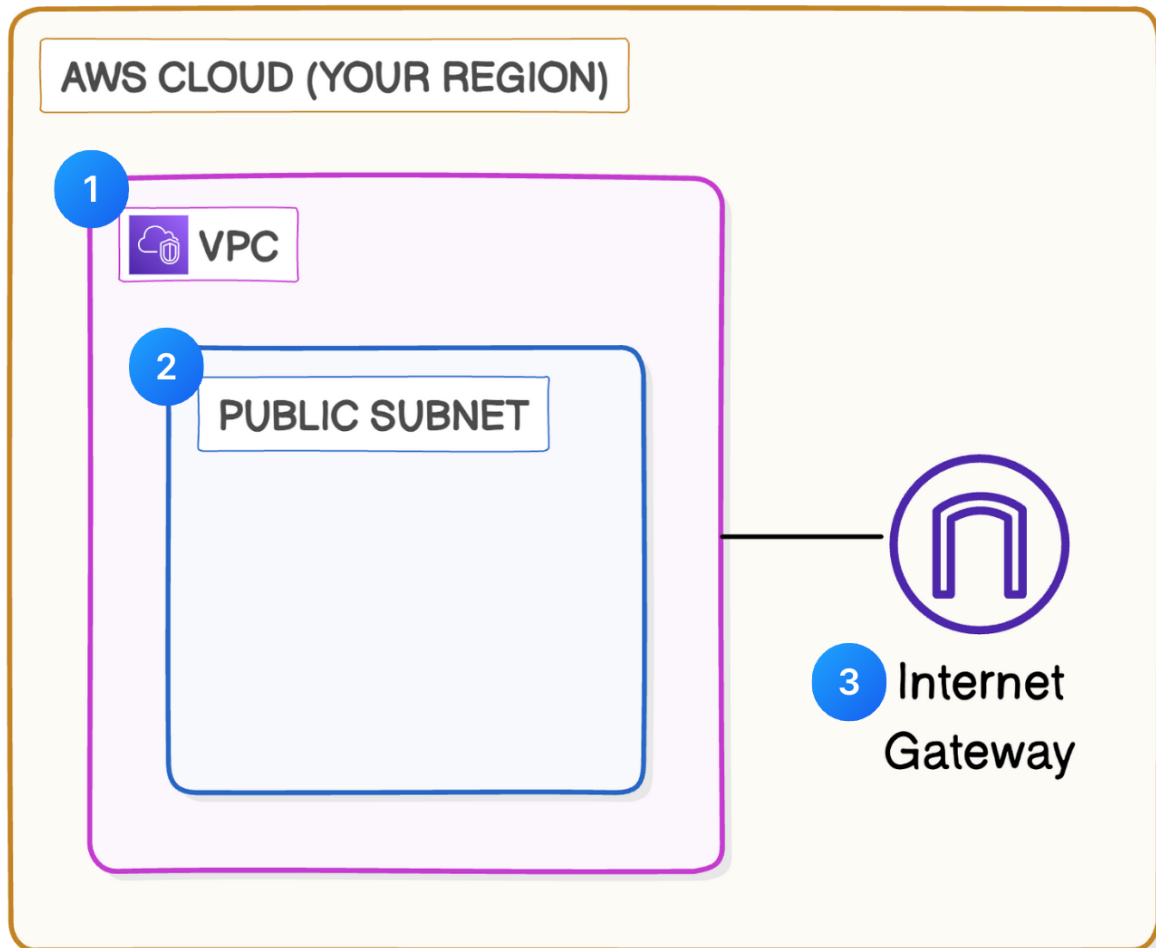


## Build a Virtual Private Cloud

### Let's get ready to:

1. Create an Amazon VPC.
2. Create a public subnet.
3. Create an internet gateway.



### Create a VPC

- Access the VPC console in AWS.
- Create a VPC.
- In the **AWS Management Console** search field, type VPC.
- Select **VPC** from the drop-down menu.
- In the left navigation pane, choose **Your VPCs**.
- Make sure you're on the **Region** that's closest to you. Use the dropdown on the top right-hand corner to switch Regions.
- Choose **Create VPC**.
- Choose **VPC Only**.
- **Name tag:** NextWork VPC
- **IPv4 CIDR:** 10.0.0.0/16

- Select **Create VPC** to finish setting up your VPC.

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[VPC](#) > [Your VPCs](#) > [Create VPC](#)

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**Create VPC** [Info](#)

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.

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**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.

NextWork 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

**Tenancy** [Info](#)  
Default ▼

## Create Subnets

In this step, get ready to:

- Launch a subnet inside your VPC.
- In the **VPC Dashboard**, under **Virtual Private Cloud**, choose **Subnets**.
- Choose **Create subnet**.

Configure your subnet settings:

- **VPC ID:** NextWork VPC
- **Subnet name:** Public 1
- **Availability Zone:** Select the first Availability Zone in the list.
- **IPv4 VPC CIDR block:** 10.0.0.0/16
- **IPv4 subnet CIDR block:** 10.0.0.0/24
- Choose **Create subnet**.
- Select the checkbox next to **Public 1**.
- In the **Actions** menu, select **Edit subnet settings**.
- Check the box next to **Enable auto-assign public IPv4 address**.

- Choose **Save**.

VPC > Subnets > Create subnet

Subnet 1 of 1

**Subnet name**  
Create a tag with a key of 'Name' and a value that you specify.  
Public 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.  
US East (N. Virginia) / us-east-1a

**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**  
10.0.0.0/24 256 IPs

▼ **Tags - optional**

Key	Value - optional
Q Name	Q Public 1

[Add new tag](#) [Remove](#)

You can add 49 more tags.

## Create an internet gateway

In this step, get ready to:

- Connect your VPC to the internet using a internet gateway.
- In the left navigation pane, choose **Internet gateways**.
- Choose **Create internet gateway**.
- Configure your internet gateway settings:
  - **Name tag:** NextWork IG
- Choose **Create internet gateway**.

igw-08ca1784d461387dc / NextWork IG [Actions](#)

**Details** [Info](#)

<b>Internet gateway ID</b> igw-08ca1784d461387dc	<b>State</b> Attached	<b>VPC ID</b> vpc-038bbbaa68b4dbf4d   NextWork VPC	<b>Owner</b> 329599662468
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**Tags** [Manage tags](#)

Search tags

Key	Value
Name	NextWork IG

- Select your newly created internet gateway and choose **Actions**, then **Attach to VPC**.
- Select **NextWork VPC**.
- Select **Attach internet gateway**.