

AWS Project: VPC Setup with Public & Private Subnets

Steps to Set Up a VPC with Public & Private Subnets

1. Create a VPC

Navigate to AWS VPC Console

Click Create VPC → VPC only

Set CIDR Block: 10.0.0.0/16

Enable DNS hostname & DNS resolution

2. Create Subnets

Public Subnet:

CIDR Block: 10.0.1.0/24

Enable Auto-assign Public IP

Private Subnet:

CIDR Block: 10.0.2.0/24

3. Create an Internet Gateway & Attach to VPC

Navigate to Internet Gateways

Click Create Internet Gateway → Attach it to the VPC

4. Create Route Tables

Public Route Table

Associate with Public Subnet

Add Route: 0.0.0.0/0 → Target: Internet Gateway

Private Route Table

Associate with Private Subnet

5. Launch EC2 Instances

Public Instance:

Select Public Subnet

Enable Auto-assign Public IP

Private Instance:

Select Private Subnet (No Public IP)

6. Security Groups & Key Pair

Create a Security Group:

Allow SSH (22) from your IP for Public Instance

Allow HTTP (80) for web access (if needed)

7. Verify Setup

Connect to Public EC2 via SSH

Test outbound connectivity from private subnet (if needed)

This setup ensures a secure and structured VPC with public and private instances. 🚀