**Building Your Custom VPC in AWS: Step-by-Step Guide**

**Prerequisites:**

1. An AWS account.

**Step 1: Sign in to the AWS Management Console**

1.1. Sign in to your AWS account using your credentials.

**Step 2: Access the VPC Dashboard**

2.1. In the AWS Management Console, navigate to the "Services" dropdown menu and select "VPC."

2.2. In the VPC Dashboard, select "Your VPCs" from the left sidebar.

**Step 3: Create a New VPC**

3.1. Click the "Create VPC" button.

3.2. Provide the following details:

- VPC name tag: Give your VPC a descriptive name.

- IPv4 CIDR block: Define the IP address range for your VPC. For example, "10.0.0.0/16" for a large VPC.

3.3. Leave the other settings as default or configure them according to your needs.

3.4. Click the "Create VPC" button.

**Step 4: Create Subnets**

4.1. In the VPC Dashboard, select "Subnets" from the left sidebar.

4.2. Click the "Create Subnet" button.

4.3. Provide the following details:

- Name tag: Give your subnet a descriptive name.

- VPC: Select the VPC you created in step 3.

- Availability Zone: Choose an availability zone for the subnet.

- IPv4 CIDR block: Define the IP address range for the subnet within the VPC CIDR block.

4.4. Click the "Create" button.

4.5. Repeat this process to create additional subnets in different availability zones if needed.

**Step 5: Configure Route Tables**

5.1. In the VPC Dashboard, select "Route Tables" from the left sidebar.

5.2. Click the "Create Route Table" button.

5.3. Provide a name for your route table and select the VPC created in step 3.

5.4. Click the "Create" button.

5.5. Select the newly created route table, click the "Routes" tab, and add routes as necessary to define how traffic should flow within your VPC and to external resources.

**Step 6: Configure Security Groups and Network ACLs**

6.1. In the VPC Dashboard, configure Security Groups and Network ACLs to control inbound and outbound traffic to your instances within the VPC.

**Step 7: Associate Subnets with Route Tables**

7.1. In the VPC Dashboard, select "Subnet Associations" within your route table.

7.2. Click the "Edit subnet associations" button and associate the appropriate subnets with your route table.

**Step 8: Launch Instances**

8.1. In the VPC Dashboard, select "Launch Instances" to create EC2 instances within your custom VPC.

**Conclusion:**

You have successfully created your custom Virtual Private Cloud (VPC) in AWS. This VPC provides you with a private network space where you can launch and manage your AWS resources while maintaining control over networking configurations and security settings. You can further customize your VPC to meet the specific requirements of your applications and workloads.