Virtual Private Cloud

Amazon Virtual Private Cloud (Amazon VPC) lets you provision a logically isolated section of the AWS Cloud where you can launch AWS resources in a virtual network that you define. You have complete control over your virtual networking environment, including selection of your own IP address range, creation of subnets, and configuration of route tables and network gateways. You can use both IPv4 and IPv6 in your VPC for secure and easy access to resources and applications.

You can easily customize the network configuration of your Amazon VPC. For example, you can create a public-facing subnet for your web servers that have access to the internet. You can also place your backend systems, such as databases or application servers, in a private-facing subnet with no internet access. You can use multiple layers of security, including security groups and network access control lists, to help control access to Amazon EC2 instances in each subnet.

Configuring a VPC

1. Sign in to the AWS management console.
2. Under services, find and click on VPC.
3. The VPC management console opens. In the console, click on “Launch VPC wizard” button.
4. Select a VPC configuration. Here it allows you to decide in what way your VPC is divided into subnets and their accesibility. For now, we go with VPC with a single public subnet.
5. VPC configuration page. It allows you to define the block of IP addresses that the VPC will contain, and some additional information.
6. Click create VPC, and DONE!

Creating a subnet

1. Sign in to the AWS management console.
2. Under services, find and click on VPC.
3. The VPC management console opens. In VPC dashboard, click subnets.
4. Click on the “Create subnet” button.
5. Create subnet page opens up. Fill in the details.
6. Name tag is used to uniquely identify the subnet.
7. Then you must link it to one of your previously created VPCs.
8. Select an availability zone.
9. Specify the IPv4 block, i.e. the block of IP addresses that the subnet can have.
10. Click create.

Create a VPC security group

1. Sign in to the AWS management console.
2. Under services, find and click on VPC.
3. The VPC management console opens. In VPC dashboard, click Security Groups.
4. Click on the “Create Security group” button.
5. Define name, description, and link it to a VPC.
6. Click create.