AWS VPC Network

Cloud infrastructure security is a major concern for any business. As a result, as per the cloud best practice recommendation, it is always recommended to utilize your own custom network settings in your cloud to make it more secure.

Amazon VPC allows you to create a conceptually isolated area of the Amazon Web Services (AWS) cloud where you can deploy AWS resources in a defined virtual network. You have comprehensive control over your virtual networking environment, including IP address range selection, subnet formation, and route table and network gateway configuration. You can also make a hardware device.

Components of Amazon VPC

Virtual Private Cloud:Is a logically isolated virtual network. The IP address space of a VPC is defined by the ranges you choose.

Internet Gateway: The Amazon VPC side of a public Internet connection.

Subnet:A sector of a VPC's IP address range where groups of isolated resources can be placed.

NAT Gateway: A managed Network Address Translation (NAT) solution for accessing the Internet from your resources on a private subnet.

Route Table: A route table is made up of a set of rules called routes that control where network traffic from your subnet or gateway goes.

DNS hostname: Outside the instance's network, the Amazon DNS server resolves a public DNS hostname to the instance's public IPv4 address.

CIDR (Classless Inter-Domain Routing) is an acronym for Classless Inter-Domain Routing.

The steps to create and verify your VPC are outlined below.

- 1. .Create a VPN
- 2. Create two Public subnet and create two private subnet
- 3. Create an Internet Gateway and attach to the VPC.
- 4. Create a Public and Private Route Table.
- 5. Add Internet Gateway in the Public Route table(0.0.0.0/0)
- 6. Add Public Subnet(1a and 1b) in the Route Table.
- 7. Add NAT GW into the Public Route Table.
- 8. Add NAT GW into the Private Route Table.
- 9. Add Private Subnet in Private Route Table.
- 10. Launch EC2 in this VPC and Validate your connection.

My 1-year career goal professionally?

Gain new skills; With increase in cloud computing is my desire to learn new skill sets which can be more useful to me and the team of organization I am working with. **Improve my networking ability:** is my plan to build a reliable network for both career and social life from the group members and colleagues i will be working with.