

## **Introduction to Amazon AWS Virtual Private Cloud (VPC)**

Today we are going to talk about the Amazon AWS VPC which stands for the Virtual Private Cloud. It will give you to launch AWS resources into a virtual network which enterprises or administrator defines. This virtual network intently look like a conventional network that we would be operating in our own data center, with the profits of using the scalable infrastructure of AWS.

### **Now What is VPC- Virtual Private Cloud ?**

A virtual private cloud (VPC) is a virtual network devoted to customer's AWS account. It is logically separated from other virtual networks in the AWS Cloud. We can spin our AWS instances, such as Amazon EC2, into our VPC. we can specify an IP address range for the VPC, add subnets, associate security groups, and configure route tables.

Here the use of the subnet which is a range of IP addresses in VPC. By launching AWS resources into a dedicated subnet. Use a public subnet for instances that must be associated to the internet, and a private subnet for instances that won't be connected to the internet.

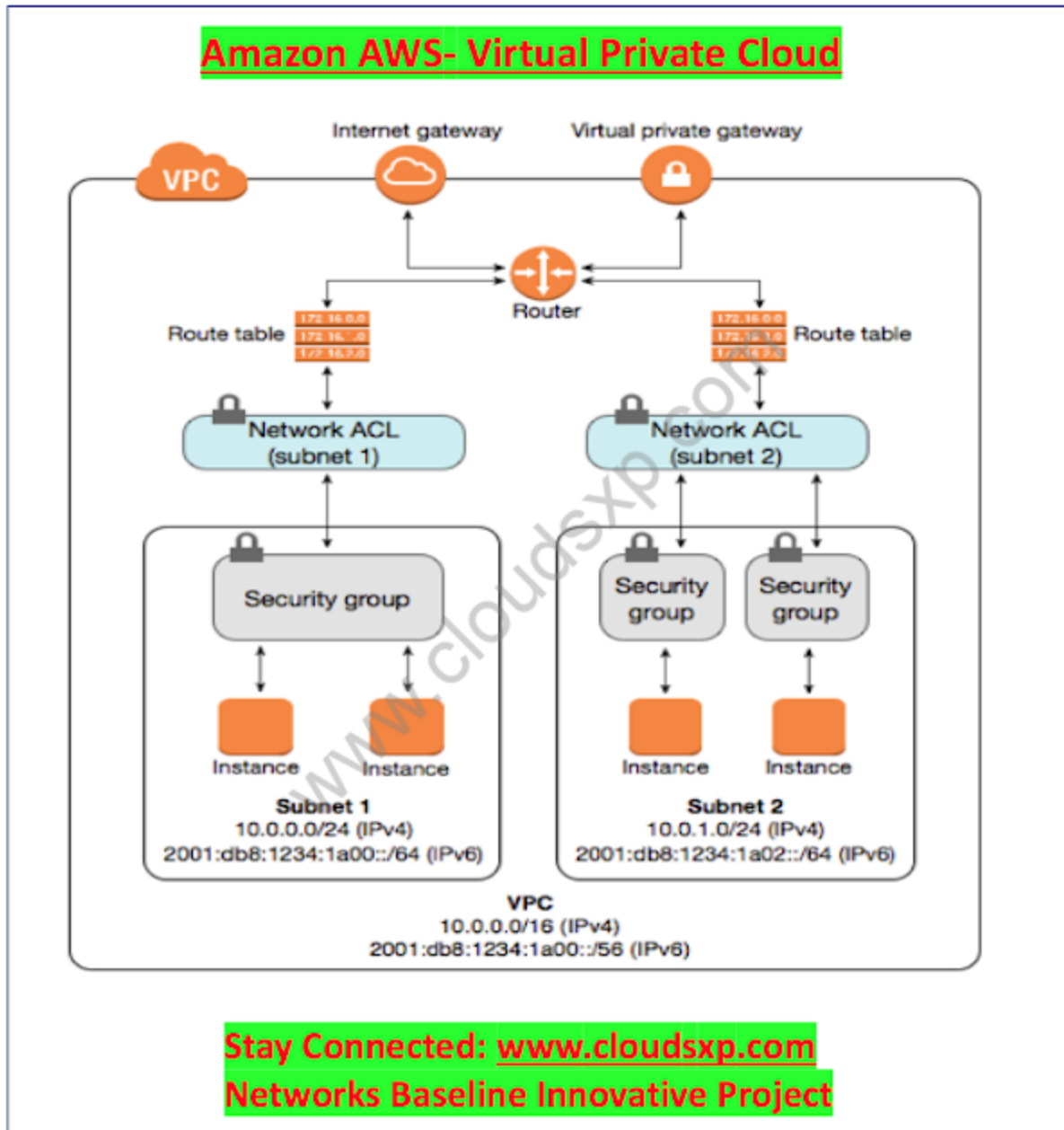


Fig 1.1- Amazon AWS- Virtual Private Cloud ( VPC)

By initiation instances into a VPC in its place of EC2 Classic, we will get the achievement or capability of:

- Allocate static private IPv4 addresses to instances that endure across starts and stops
- You can associate an IPv6 CIDR block to VPC and allocate IPv6 addresses to instances
- Allocate multiple IP addresses to instances

- Describe network interfaces, and attach one or more network interfaces to instances
- Modification security group membership for instances while they are running
- Regulate the outgoing traffic from instances (egress filtering) in accumulation to regulatory the incoming traffic to them.
- Adding an extra layer of access control to instances in the form of network access control lists (ACL)
- Spin up instances on single-tenant hardware

### **What is Default and non-default VPC's ( Virtual Private Cloud) ?**

A default VPC has the profits of the innovative qualities delivered by EC2-VPC, and is complete to use. If we have a default VPC and we don't stipulate a subnet when we spin up an instance, the instance is propelled into default VPC. We can spin up instances into default VPC without requiring to identify anything about Amazon VPC.

Irrespective of which platforms our account provisions, We can produce own VPC, and implement it as we required. This is identified as a nondefault VPC. Subnets that generate in nondefault VPC and supplementary subnets that create in default VPC are called nondefault subnets.