**VIRTUAL PRIVATE CLOUD**

A VPC (Virtual Private Cloud) is a private, isolated network that you create in AWS. It acts like your own data center in the cloud, where you can deploy and manage AWS resources securely.

**IMPORTANCE OF VPC**

* Security
* Customization
* Scalability

**VPC COMPONENTS**

**1) SUBNETS (DIVIDING THE VPC INTO SMALLER NETWORKS)**

* **Public Subnet** - for resources needing internet access, like web servers.
* **Private Subnet** - for internal resources like databases, which don’t need direct internet access.

**2) ROUTE TABLE (CONTROLS TRAFFIC FLOW)**

* It decides where network traffic should go inside the VPC.
* Example: Sending internet traffic through an Internet Gateway (IGW).

**3) INTERNET GATEWAY (IGW)**

* A special gateway that allows resources in the public subnet to access the internet.
* It must be attached to the VPC and referenced in the Route Table.

A screenshot of a computer

AI-generated content may be incorrect.

**FIG.1: VPC CREATED SUCCESSFULLY**