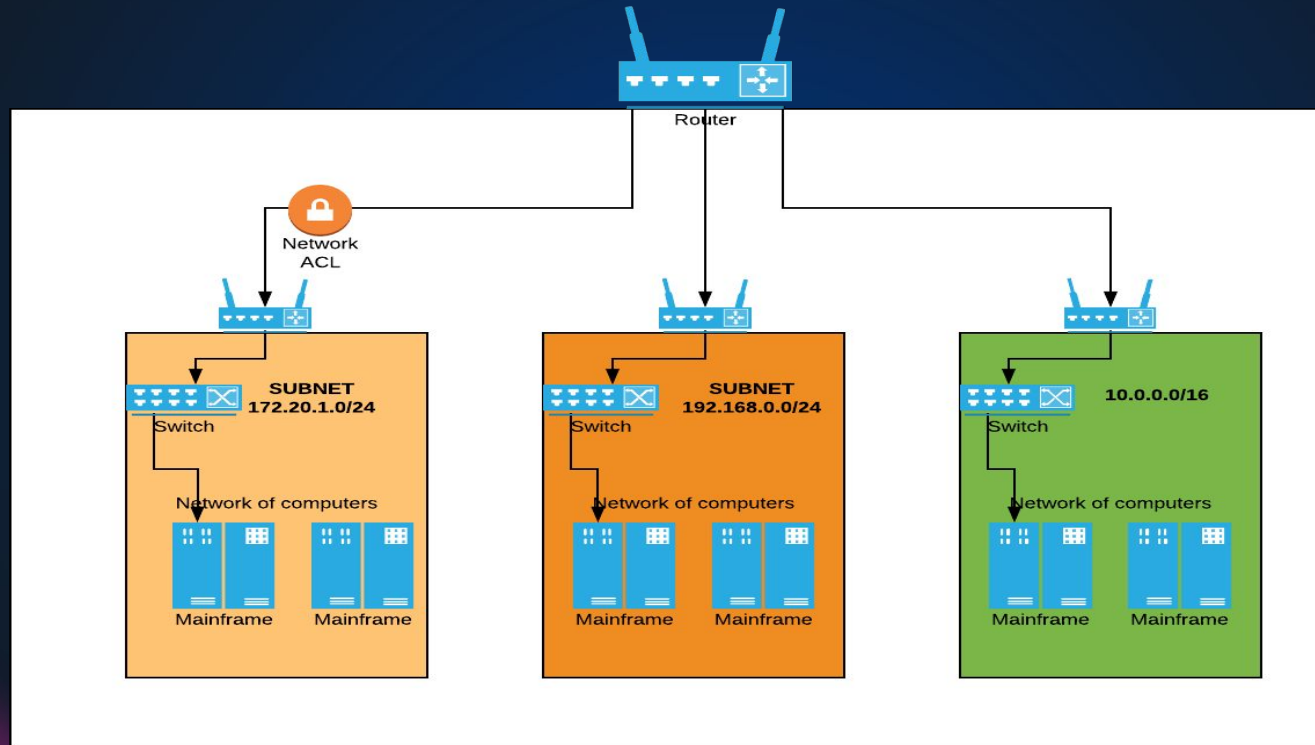


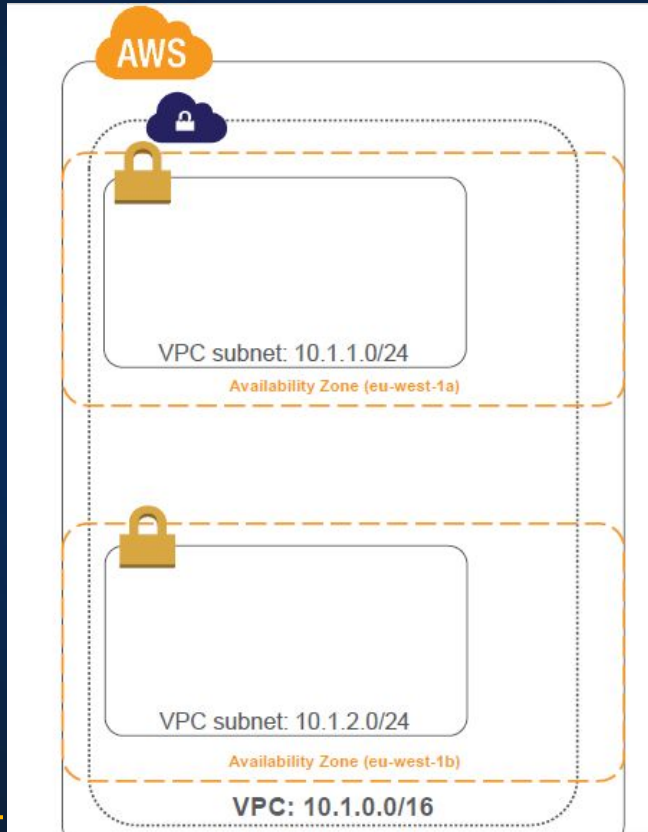


Virtual Private Cloud (VPC)

Corporate Datacenter



VPC Network

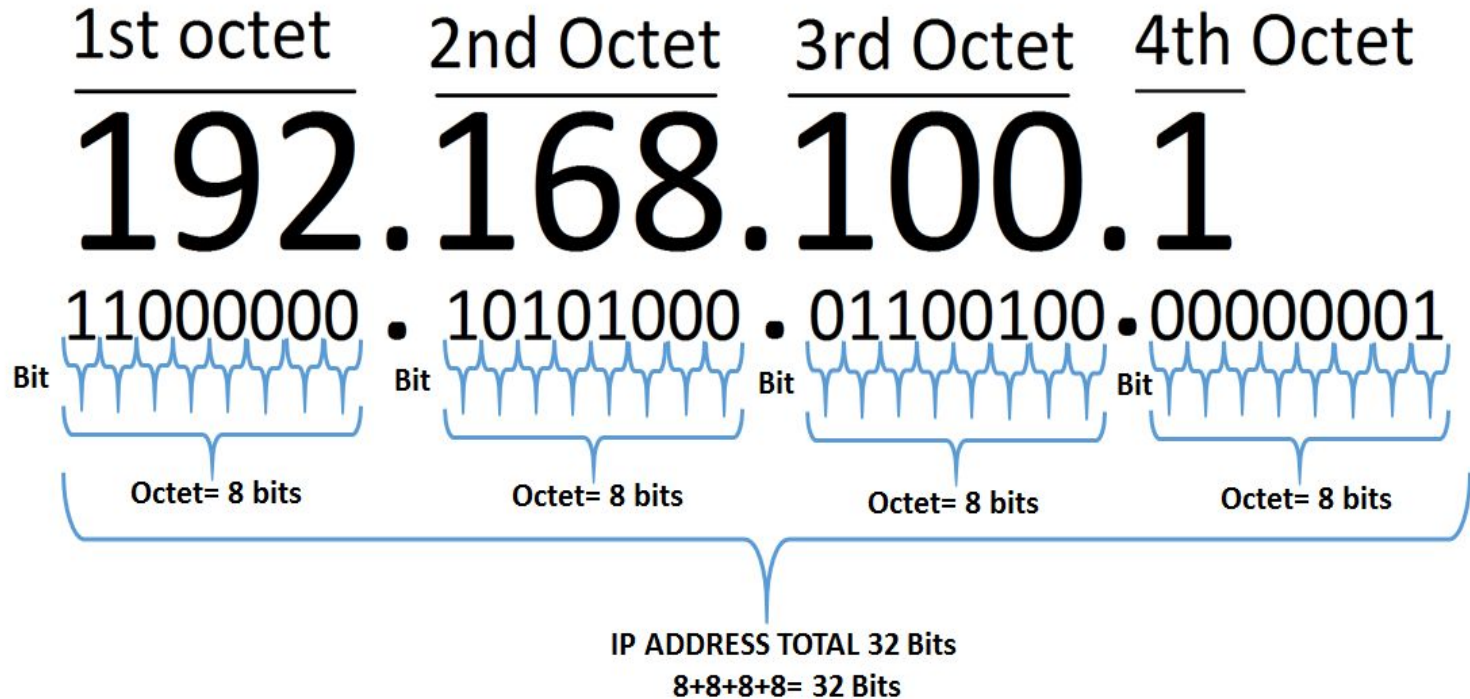


Virtual Private Cloud (VPC)



- VPC is a logical data center within an AWS Region.
- virtual private cloud is an on-demand configurable pool of shared computing resources allocated within a public cloud environment.
- Control over network environment, select IP address range, subnets and configure route tables and gateways.

IPv4 Address



IPv4 Range

- 0.0.0.0 – 255.255.255.255
- 00000000.00000000.00000000.00000000 (0.0.0.0)
- 11111111.11111111.11111111.11111111 (255.255.255.255)

Public and Private IP Division

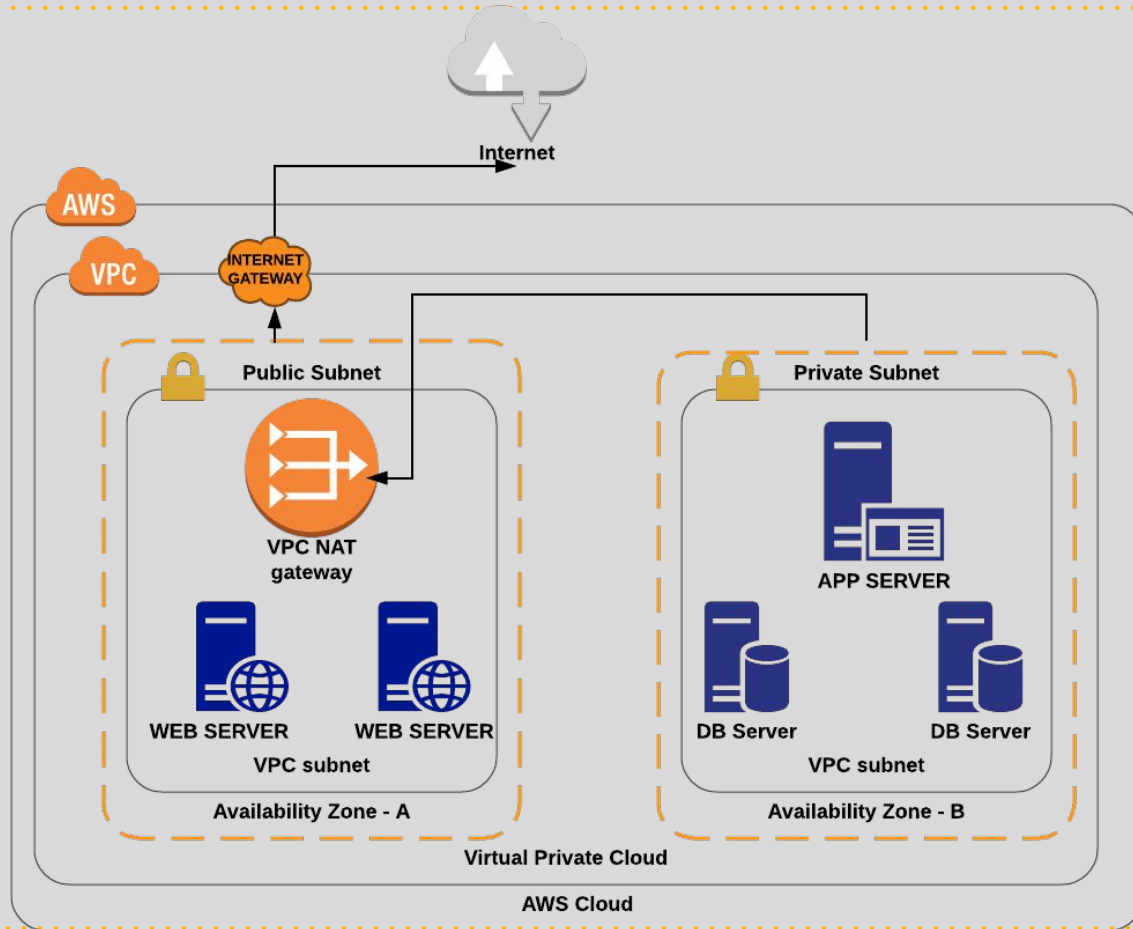
- Public IP => Internet
 - E:g 54.86.23.90
- Private IP => For local network design
 - E:g 192.168.1.10

Private IP Ranges

- Class A 10.0.0.0 - 10.255.255.255
- Class B 172.16.0.0 - 172.31.255.255
- Class C 192.168.0.0 - 192.168.255.255

Subnet Masks

- 255.0.0.0
- 255.255.0.0
- 255.255.255.0

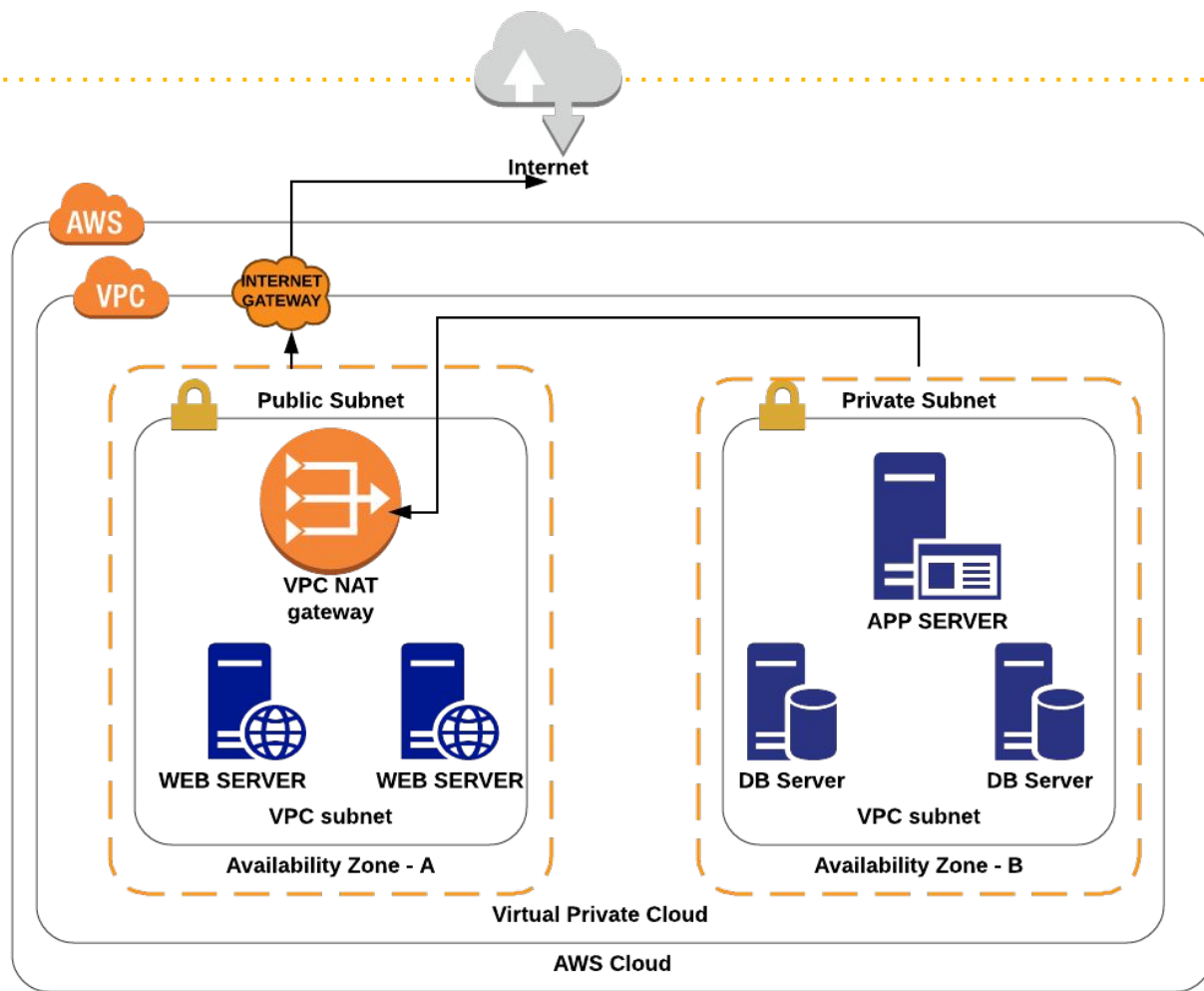




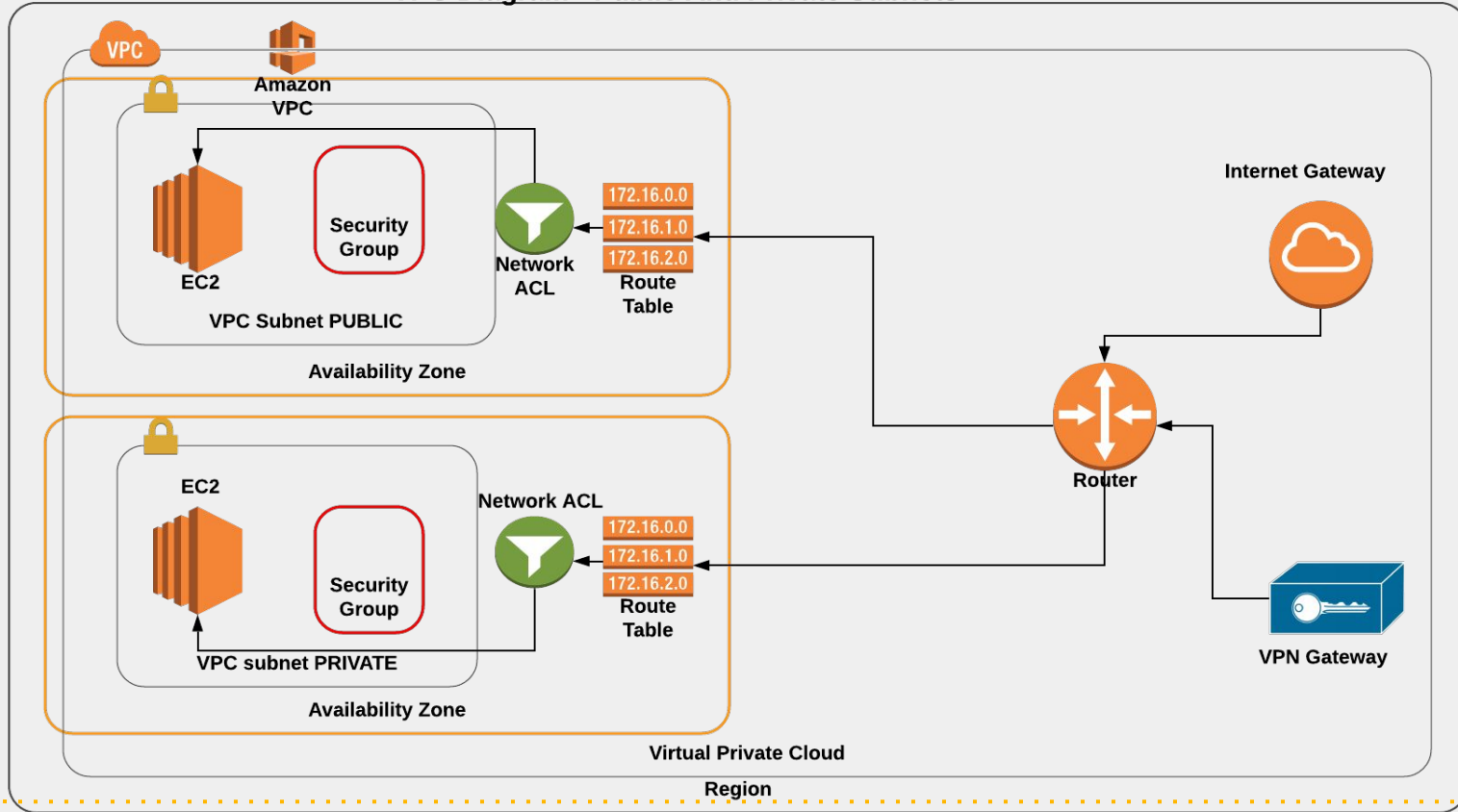
Network Address Translation (NAT) gateway to enable instances in a private subnet to connect to the internet or other AWS services.



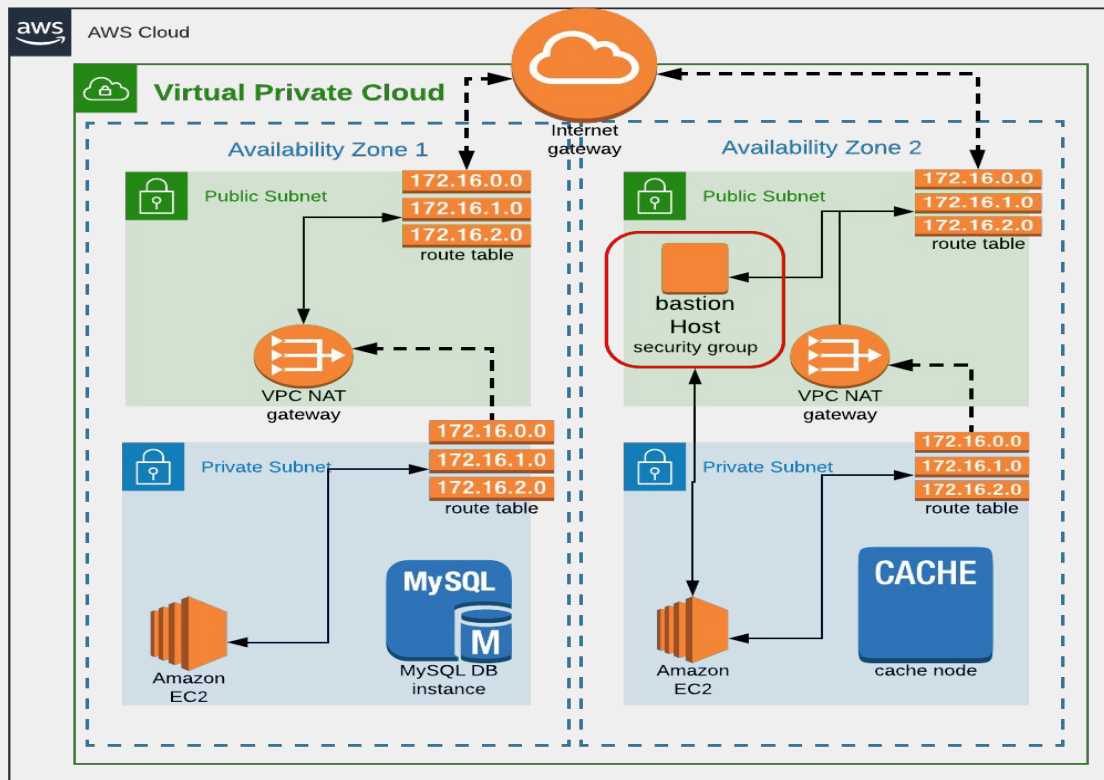
An internet gateway is a horizontally scaled, redundant, and highly available VPC component that allows communication between instances in your VPC and the internet.



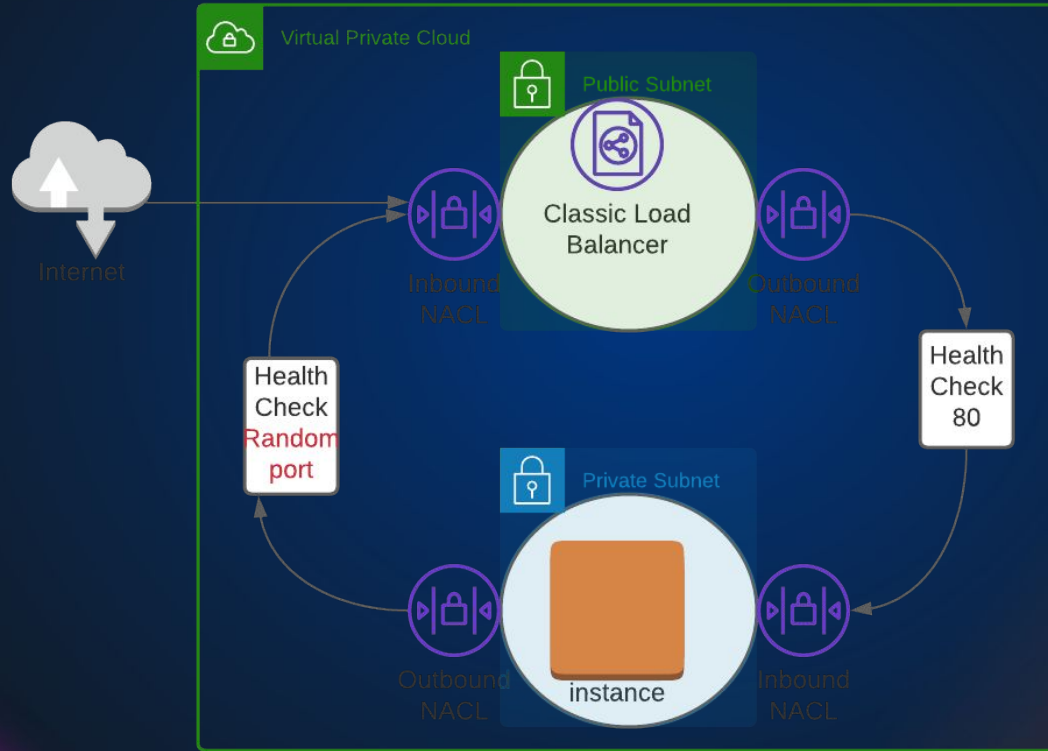
VPC Diagram - Public And Private Subnets



High Availability | VPC



NACL



VPC Peering

