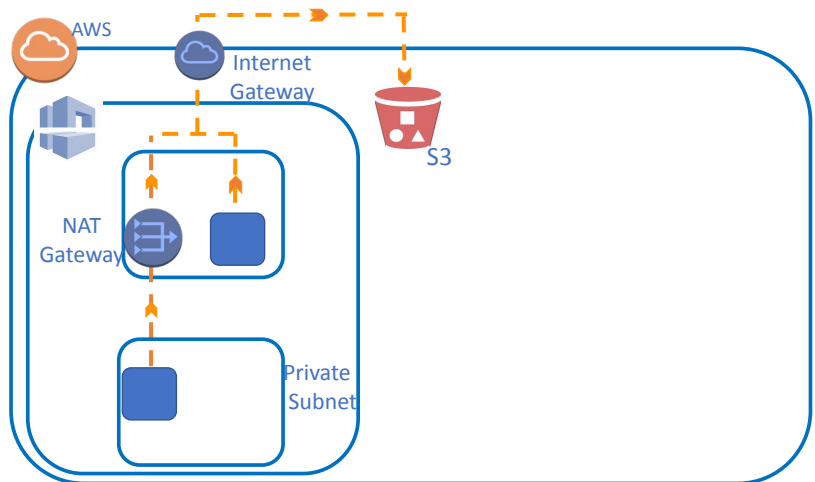# Amazon VPC-3

Table of Contents

- VPC Endpoint
- VPC Peering
- VPN & Direct Connect
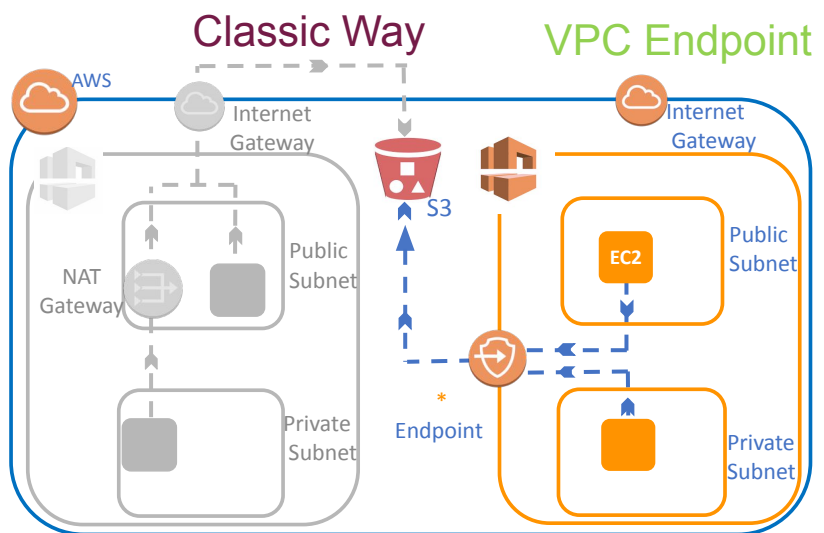
Connecting to non-VPC resources (e.g. S3)

- Must traverse through an Internet Gateway, **over the internet** via HTTP(S)

AWS

Internet Gateway

S3

NAT Gateway

Private Subnet

VPC Endpoint

- The VPC Endpoint is a component that allows you to privately connect your VPC to AWS services such as S3. In other words, it a shortcut.

- Thus, an instance in VPC can no longer be required to use Internet Gateway or NAT Instance. It allows you to make the connection via the network of AWS, not through the public internet.

Classic Way

VPC Endpoint

AWS

Internet Gateway

NAT Gateway

Public Subnet

Private Subnet

S3

Internet Gateway

EC2

Public Subnet

Private Subnet

* Endpoint

4

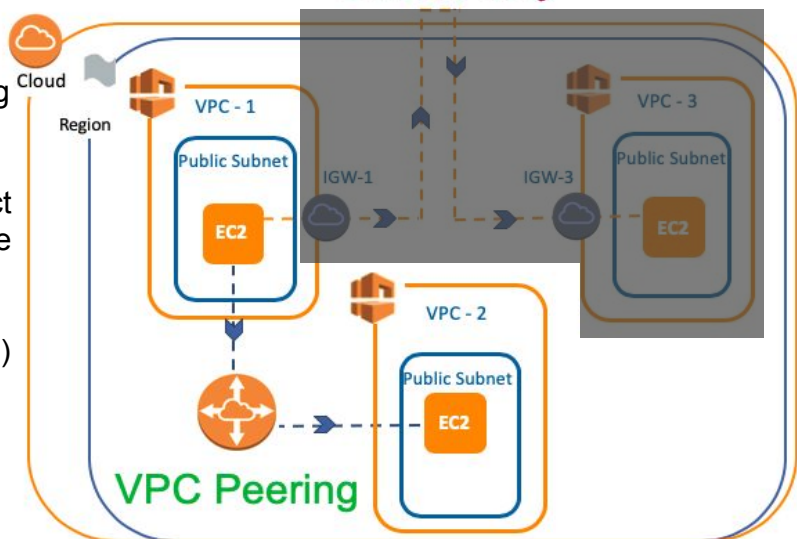# Connecting to another VPC - Without Peering

Classic way

- Must traverse through an Internet Gateway, **over the internet** via HTTP(S)
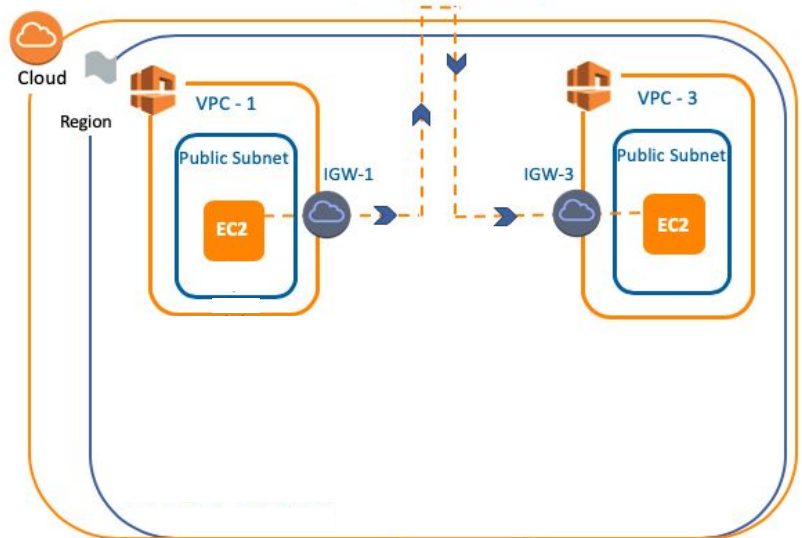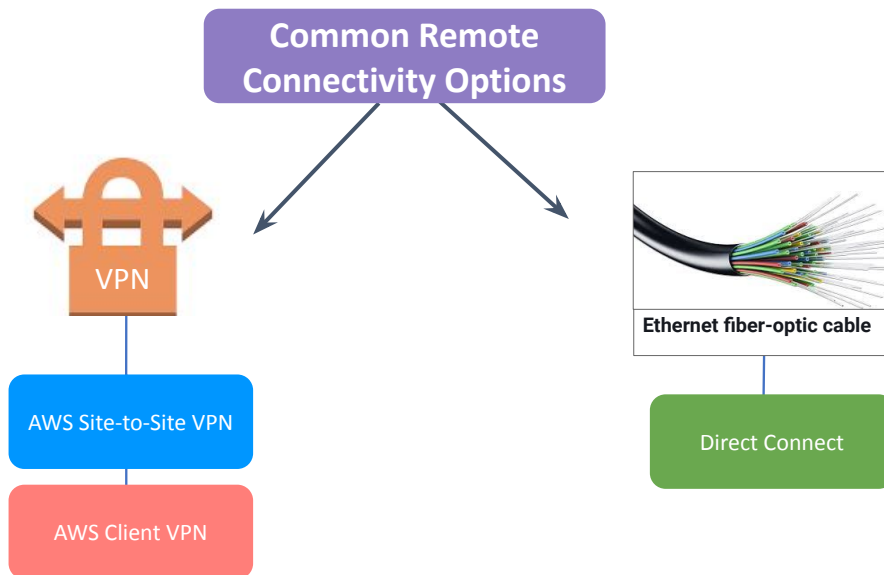

VPC Peering

Classic way

- A VPC peering is a networking connection between two VPCs.

- It enables you to provide direct connection between the instance in different VPC

-
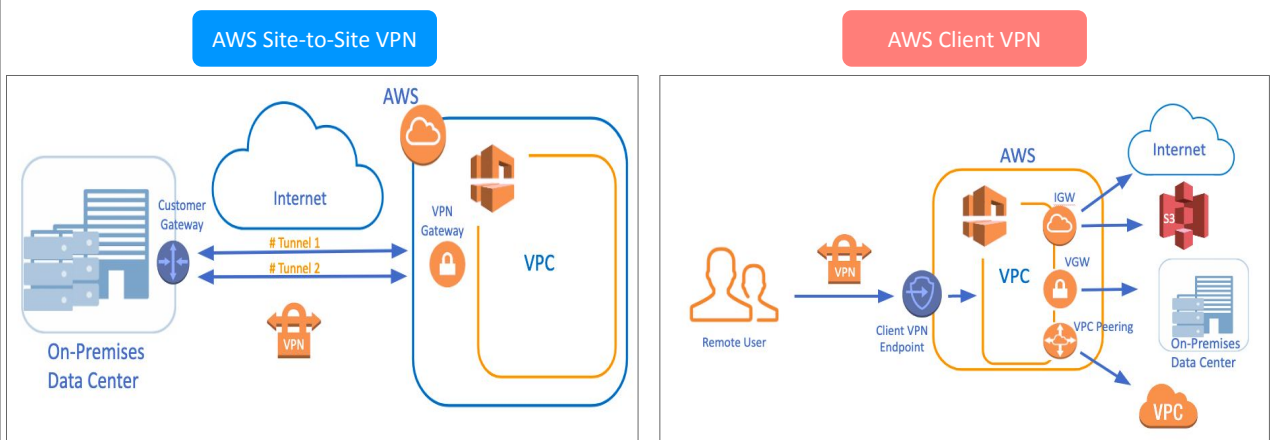- Can use **VPC peering** (original) or **Transit Gateway** (most common)

VPC Peering

VPN & Direct Connect

Common Remote Connectivity Options

VPN

AWS Site-to-Site VPN

AWS Client VPN

Ethernet fiber-optic cable

Direct Connect

VPN & Direct Connect
VPN Connections

AWS Site-to-Site VPN

AWS Client VPN

AWS

Internet

Customer Gateway

VPN Gateway

Tunnel 1

Tunnel 2

VPC

VPN

On-Premises Data Center

AWS

Internet

IGW

S3

VGW

VPC

VPC Peering
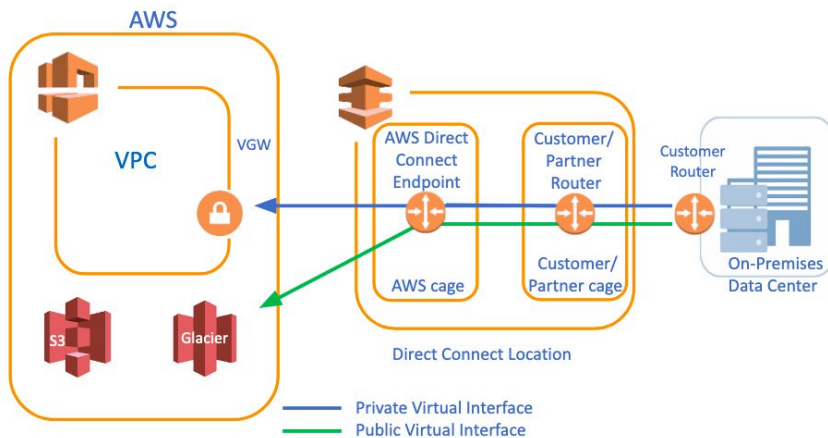
On-Premises Data Center

VPN

Remote User

Client VPN Endpoint

VPC

- **VPN** lets you establish a secure and private tunnel from your network or device to the AWS Cloud. You can extend your existing on-premises network into a VPC, or connect to other AWS resources.
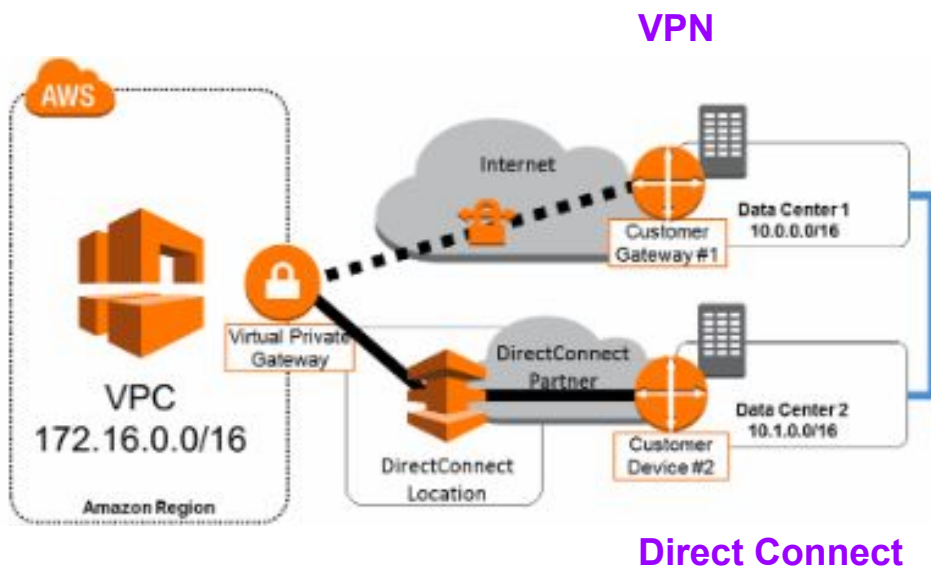
VPN & Direct Connect
Direct Connect

- Direct Connect provides a secure and closed-circuit connection between your on-premises and AWS VPC via Direct Connect partner.

VPN & Direct Connect

VPN

Direct Connect

THANKS!

Any questions?