

# Direct Connect Gateways



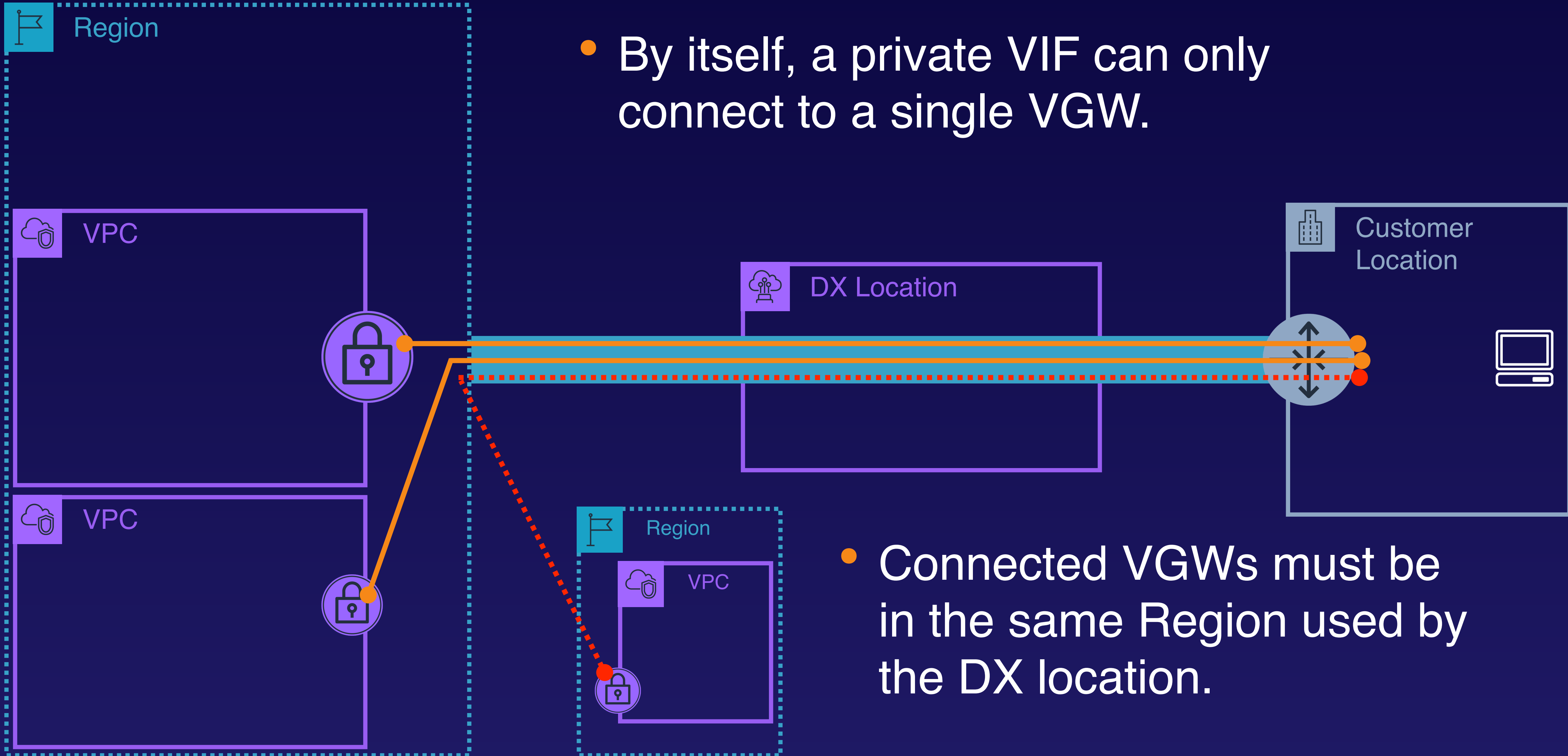
Steven Moran

TECHNICAL INSTRUCTOR

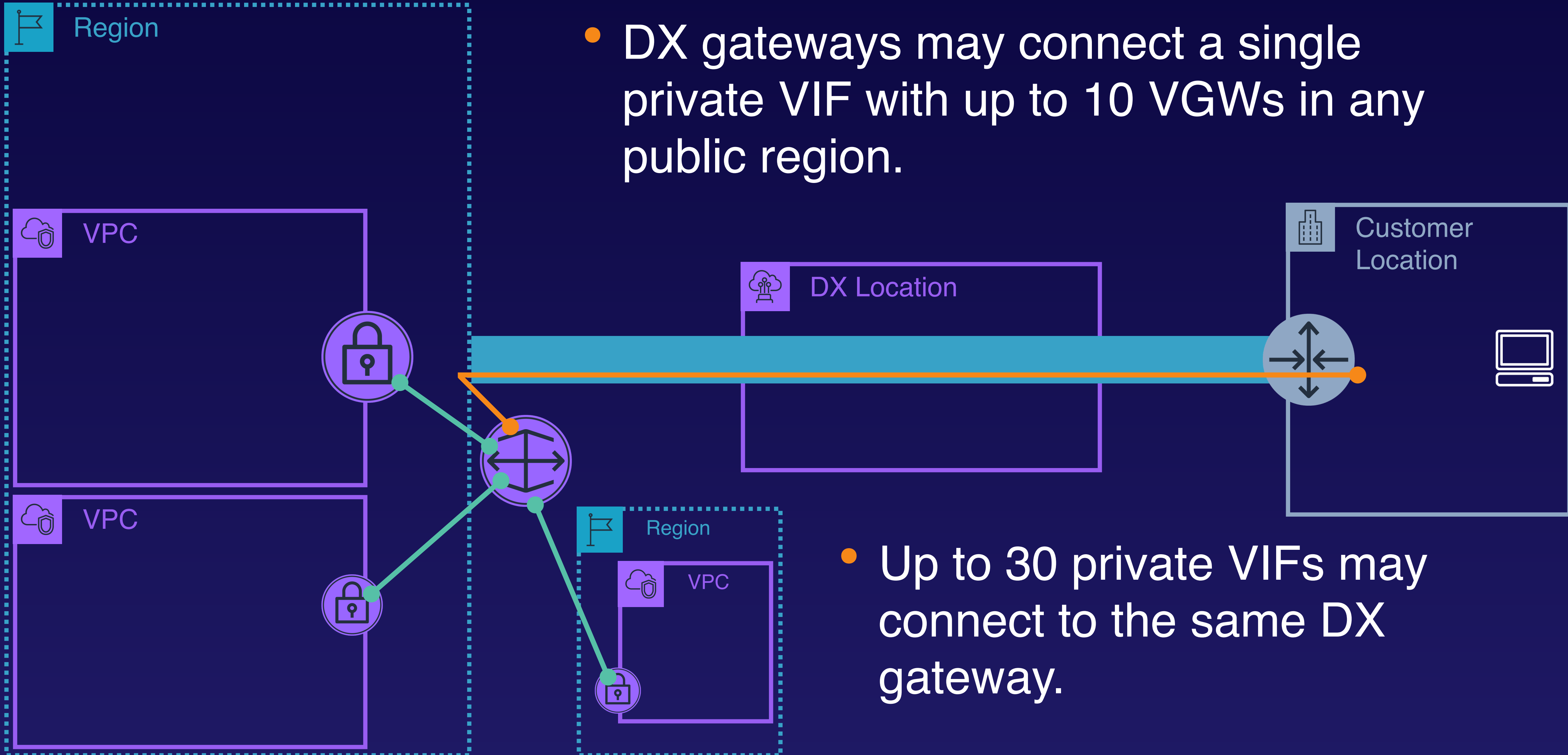
# What Are Direct Connect Gateways?

- Global services that facilitate DX connectivity to multiple AWS Regions.
- A bridge between Private or Transit VIFs and AWS networking objects.
- No interaction with Public VIFs.
- Are free of charge.

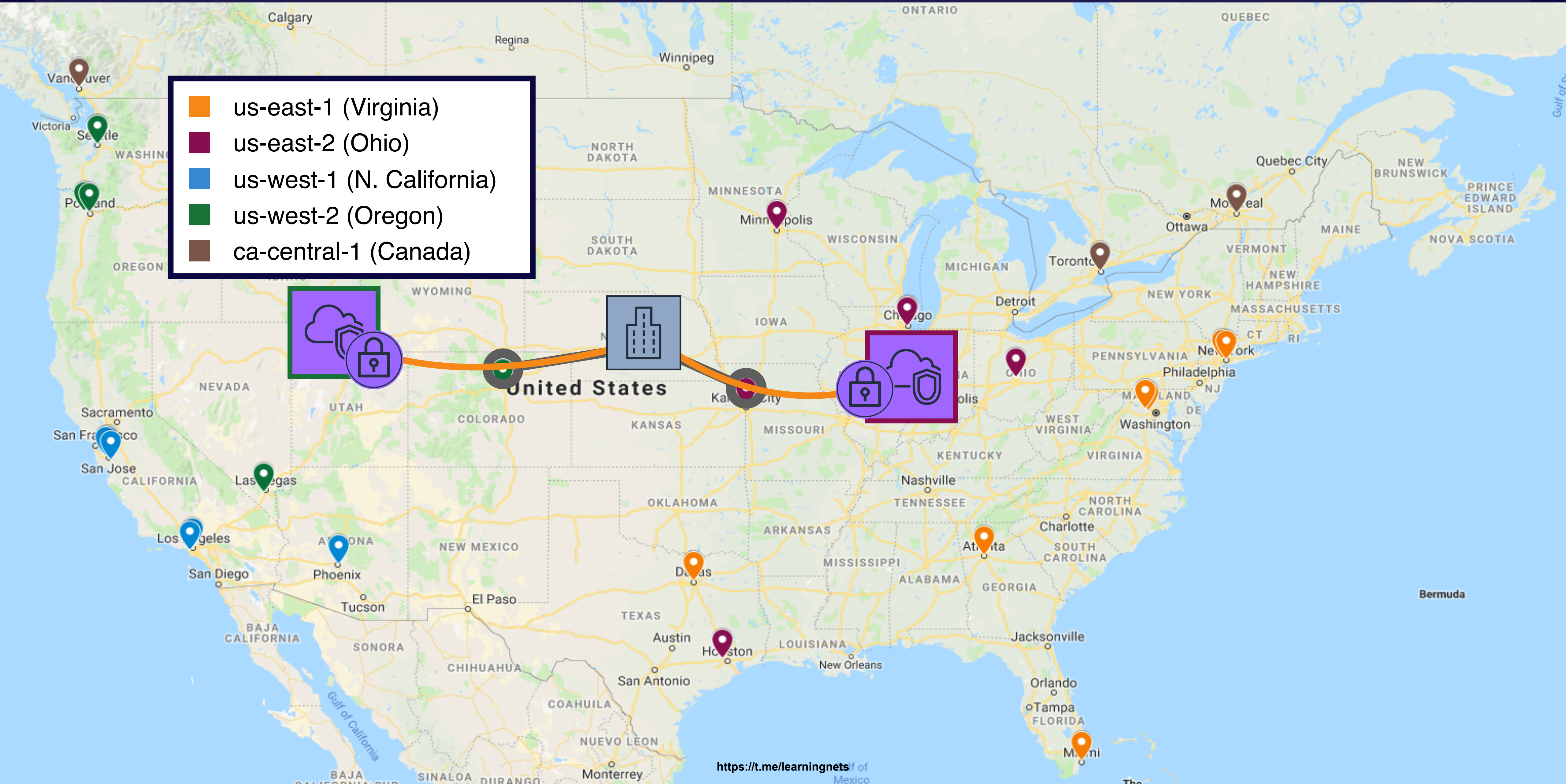
# Direct Connect Gateways and Private VIFs



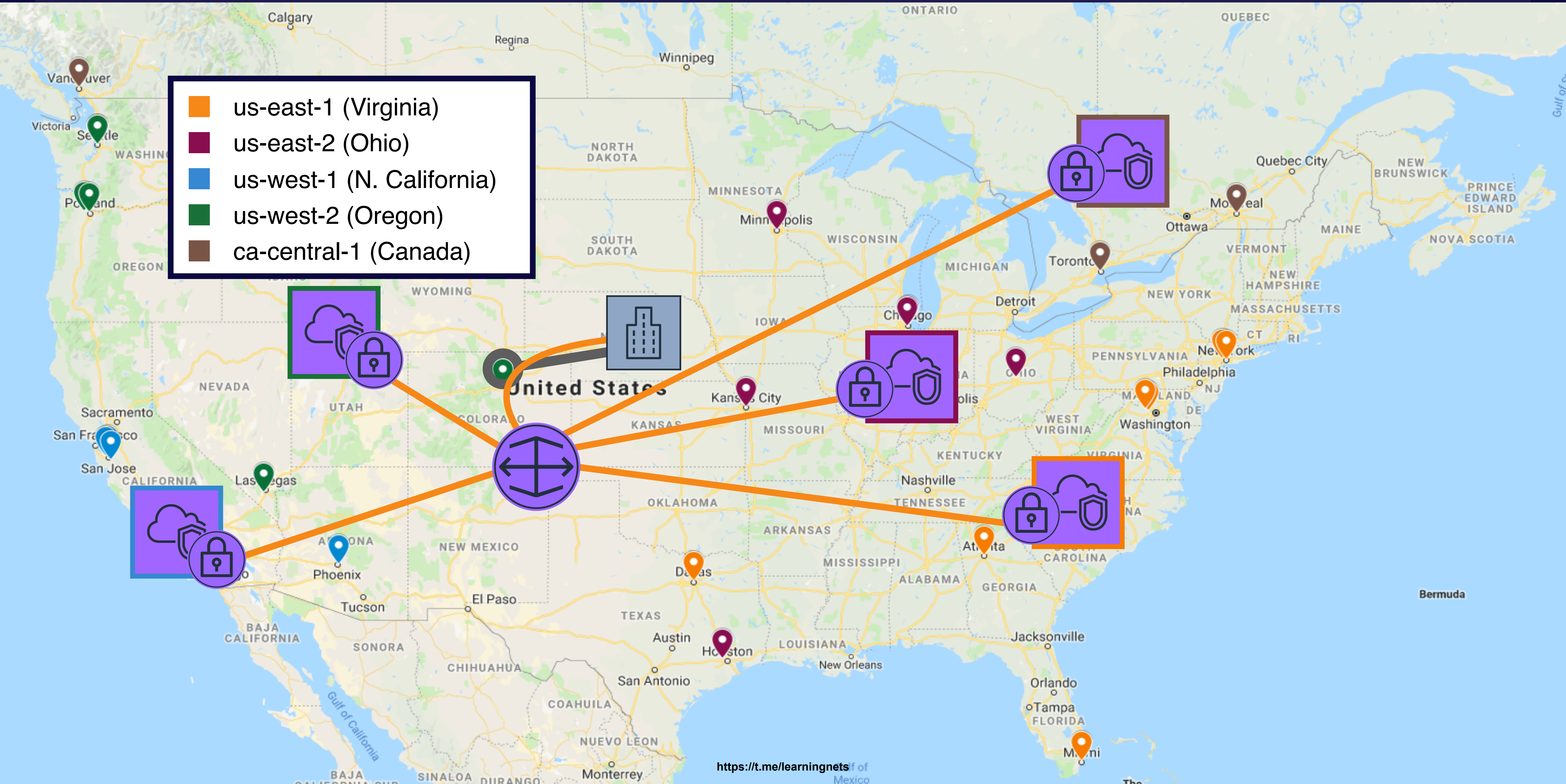
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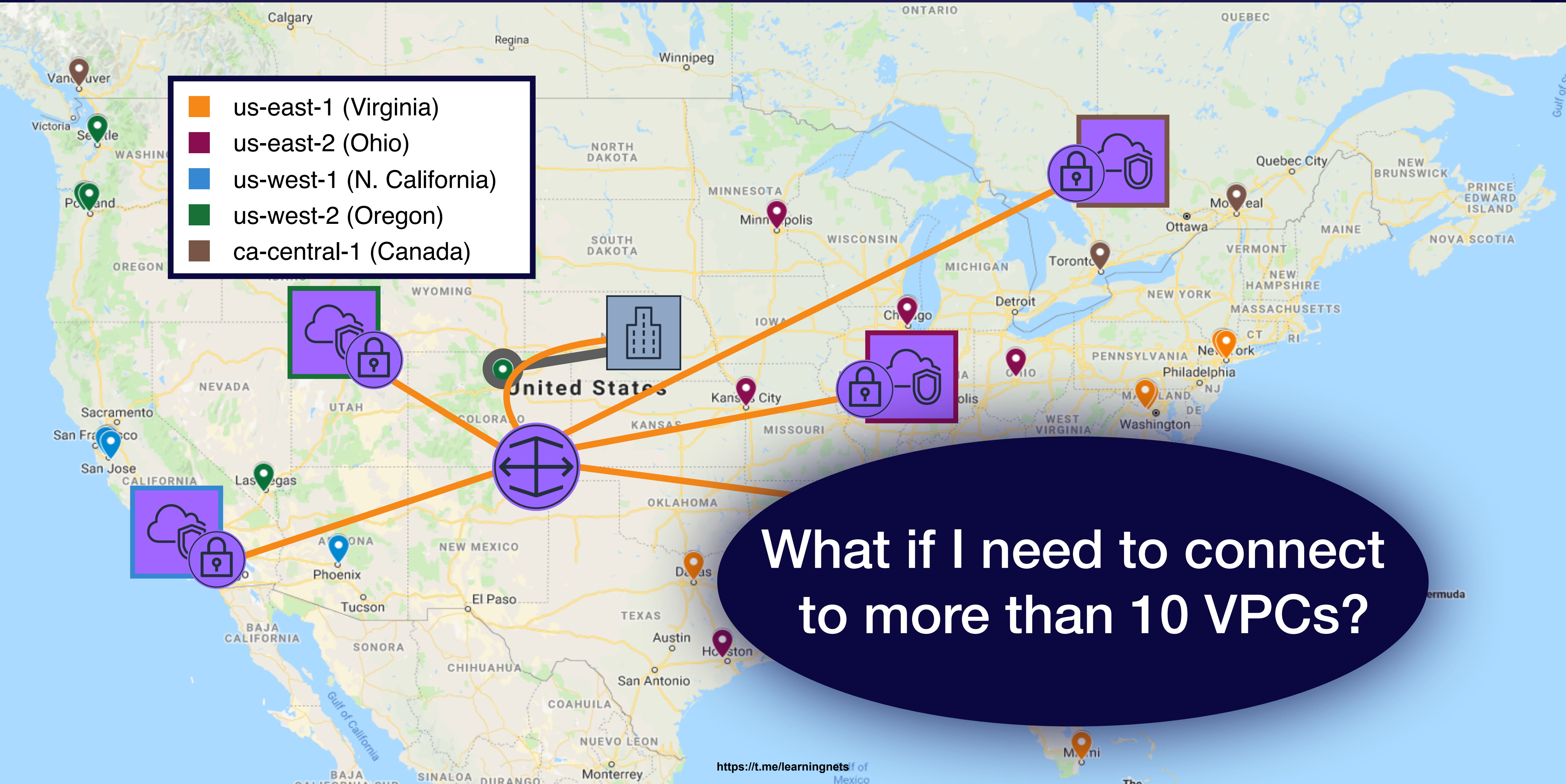


# Direct Connect Gateways and Private VIFs



# Direct Connect Gateways and Private VIFs

- us-east-1 (Virginia)
- us-east-2 (Ohio)
- us-west-1 (N. California)
- us-west-2 (Oregon)
- ca-central-1 (Canada)



What if I need to connect to more than 10 VPCs?



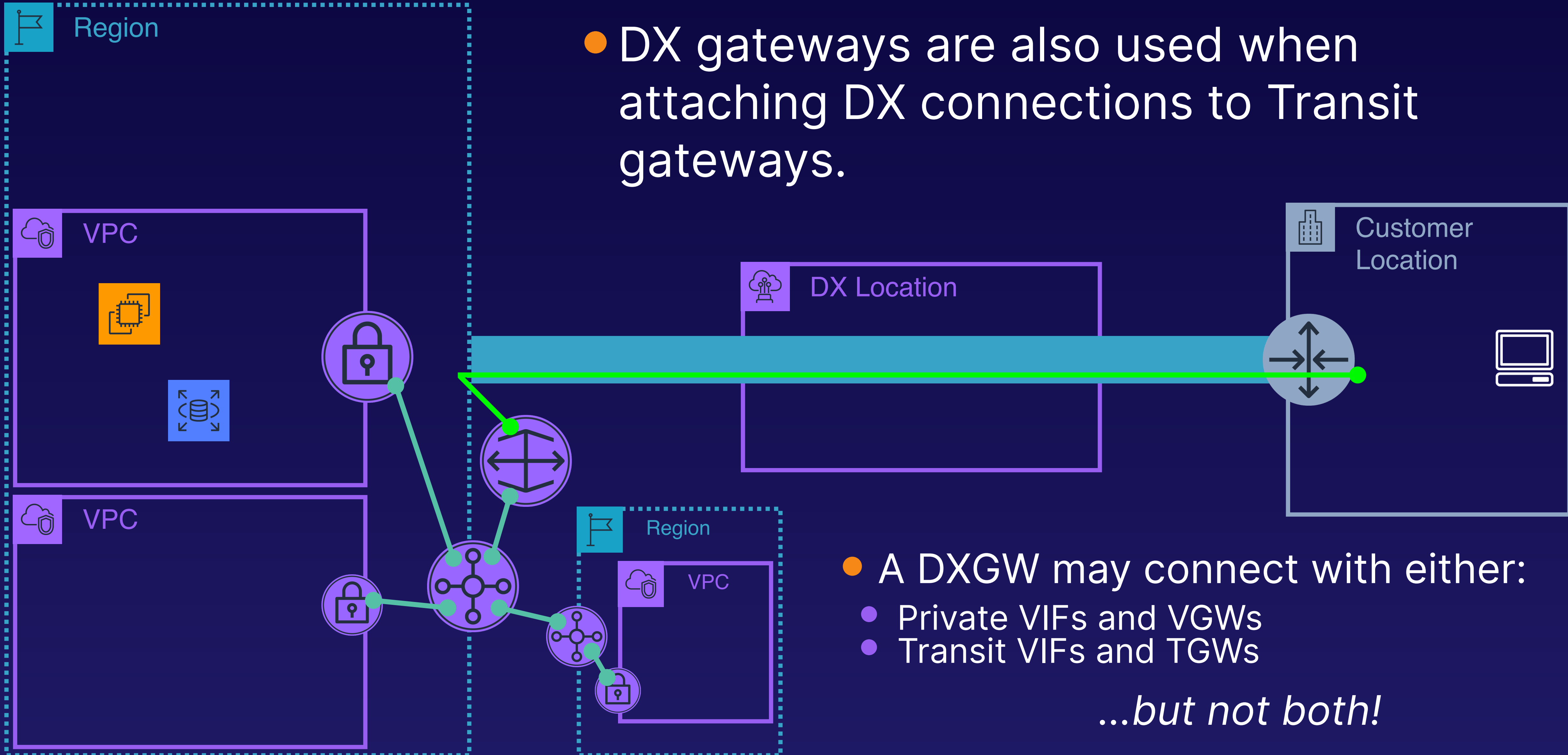
● VPCs connecting through a DX gateway cannot have overlapping IP ranges.

● Only sessions via a single VIF to one connected VPC at a time are allowed.

● You cannot send traffic:

- From one associated VPC to another.
- From one connected VIF to another.
- From a connected VIF through a VPN connection using an associated VPG.

# Direct Connect Gateways and Transit VIFs



## Other DX Gateway Odd-Bits.

VGWs in one AWS account may request association with a DX gateway in a different account.

DX gateways may only be associated with VGWs attached to a VPC.

Each VIF and VGW may only be associated with a single DX gateway

A VGW can be simultaneously attached to both a single private VIF and a single DX gateway (connected to a different private VIF).

- Name
- Amazon side ASN
- Attach to VIF
- Associate with VGW or TGW

Direct Connect > Direct Connect Gateways > Create

## Create Direct Connect gateway

A Direct Connect gateway allows you to use your Direct Connect connection regions. [Learn more](#)

### Direct Connect gateway settings

#### Name

A name to help you identify the new Direct Connect gateway.

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Name must contain no more than 10

#### Amazon side ASN

The Autonomous System Number for

65124

Valid ranges are 64512 - 65534 and 4

#### Gateway type

Gateway type for this virtual interface.

Direct Connect gateway

Virtual private gateway

#### Direct Connect gateway

The Direct Connect gateway to which the new virtual interface

SteveAdvNetSpec

### Associate gateway

#### Association settings

##### Gateways

The gateway you want to associate with the new Direct Connect gateway

My gateway

SteveVPG

vgw-0afca850764dd5aac us-west-2 vpc-084e9239e1736d939

You can only associate gateways of the same type to a Direct Connect gateway

##### Allowed prefixes - optional

List of prefixes you want to be allowed to be advertised to the on-premises network through the Direct Connect gateway.

192.168.0.0/16

Specify up to 20 prefixes separated with commas or put each on a new line.

Direct Connect gateways extend DX connectivity to almost all AWS Regions.

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DX gateways can be used with either private VIFs or transit VIFs.

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DX gateways alone do not enable fully transitive networks.