Migration and Modernization at Scale with VMware Cloud on AWS

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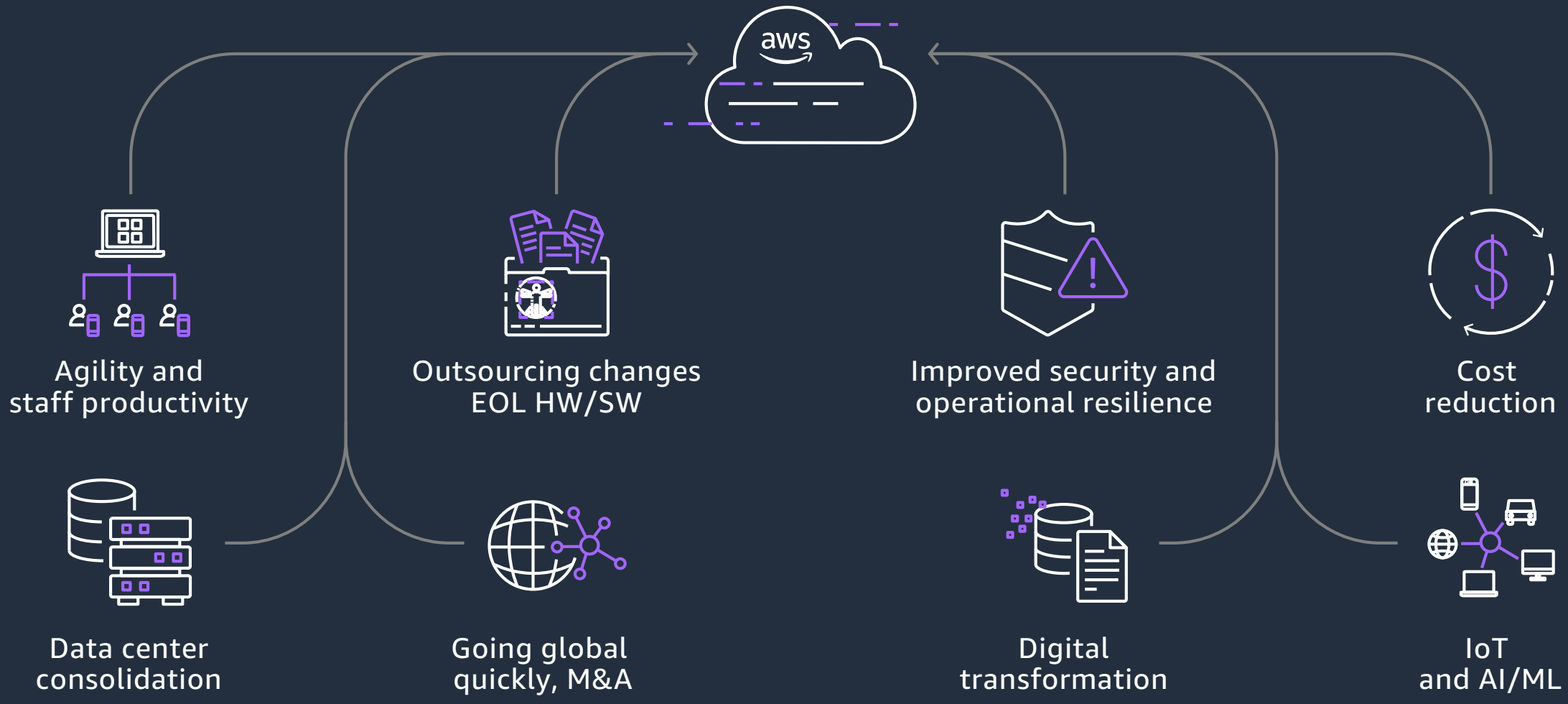
- Migration & Modernization with VMware Cloud on AWS
- Modernizing in your datacenter with VMware Cloud on AWS

VMware Cloud on AWS

An Insight into the service

Business drivers for migrating to the cloud



VMware cloud on AWS

Cloud migrations

Application specific

Data center wide

Infrastructure refresh

William HILL

Data center extension

Footprint expansion

On-demand capacity

Test/dev

DELL PennyMac

Disaster recovery

Protect additional workloads

DR data center replacement

Add or modernize DR solutions

BRINKS

Next-generation applications

Application modernization

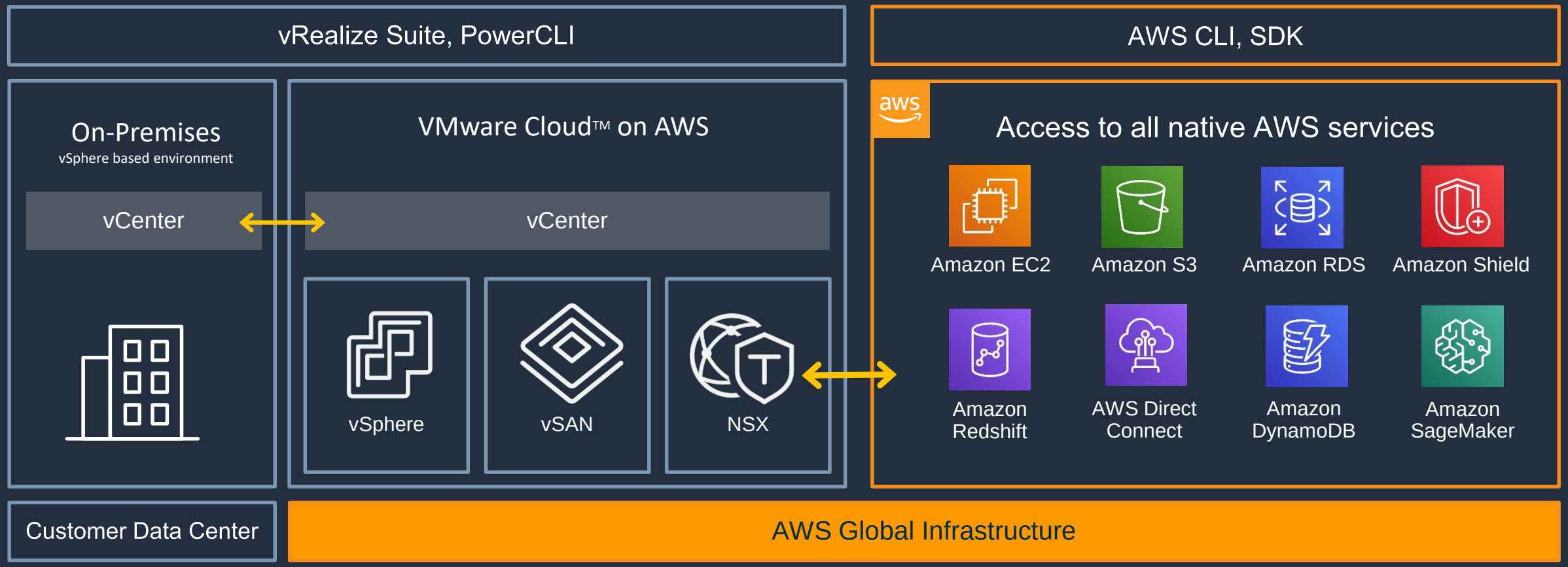
Next-gen app build out

Enterprise workloads

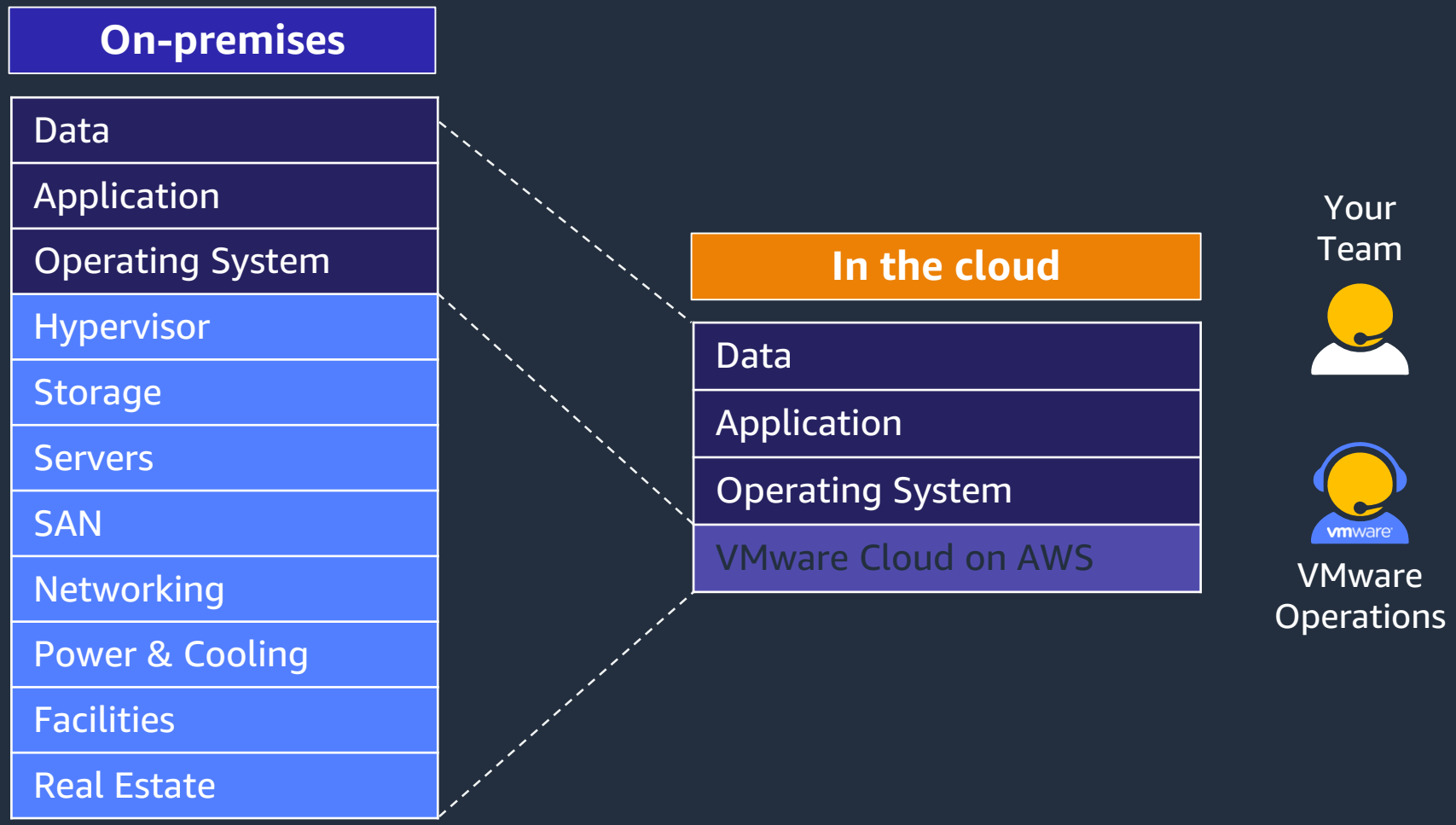
S&P Global Ratings

VMware Cloud on AWS

Innovation jointly engineered by VMware and AWS



Reduce undifferentiated heavy lifting



Benefits of VMware Cloud on AWS

Managed by VMware

Operational consistency

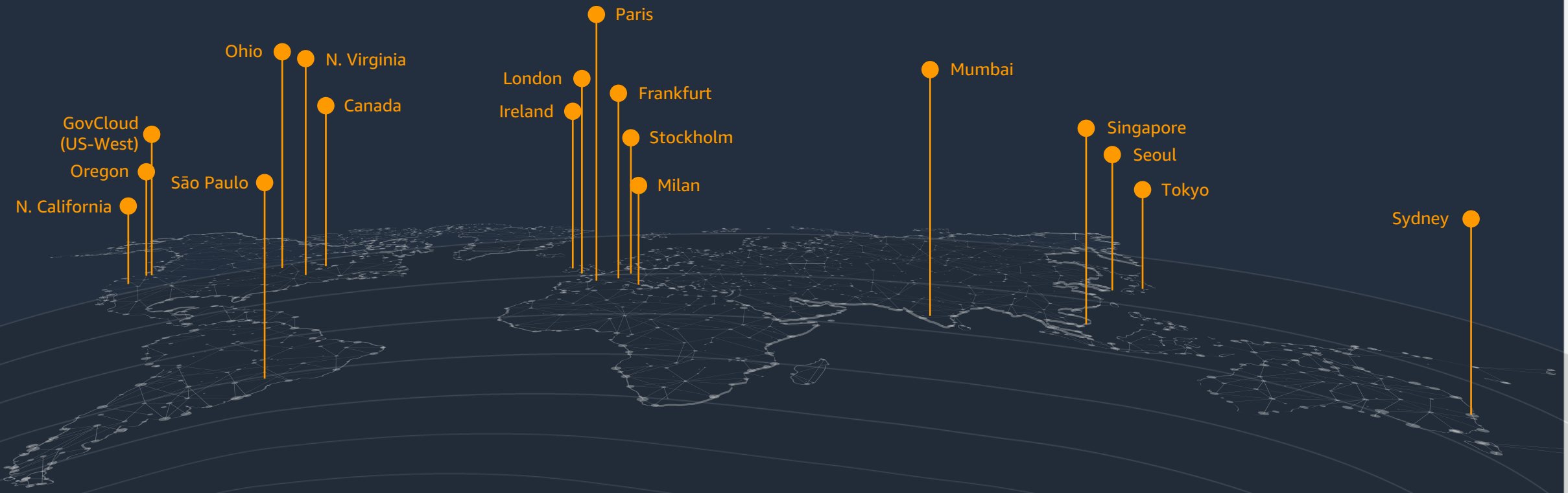
Workload portability

Native integration

Application modernization

AWS Global Infrastructure

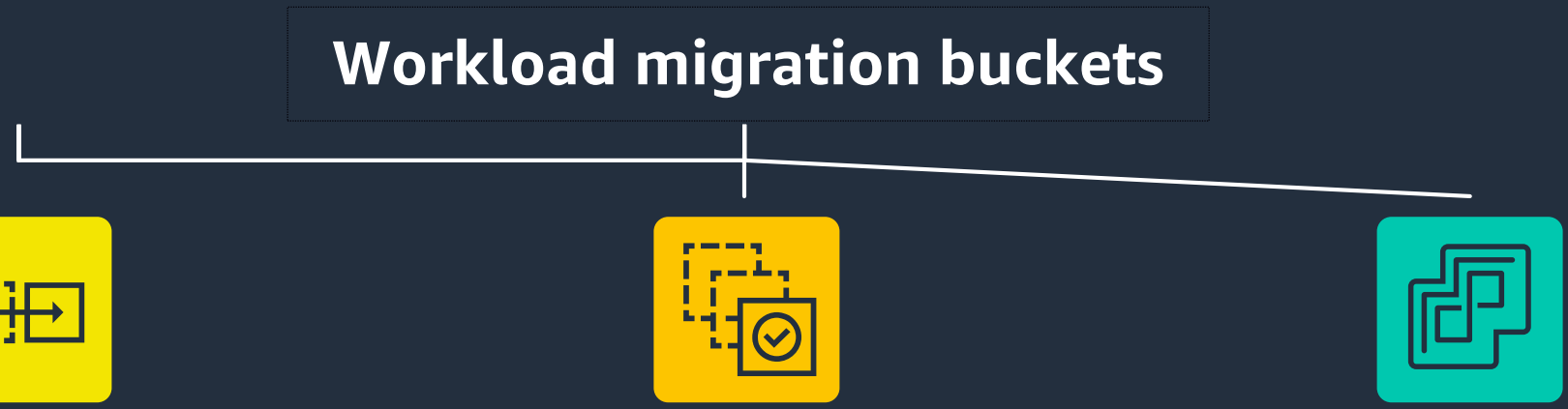
- VMware Cloud on AWS is available in 18 Regions



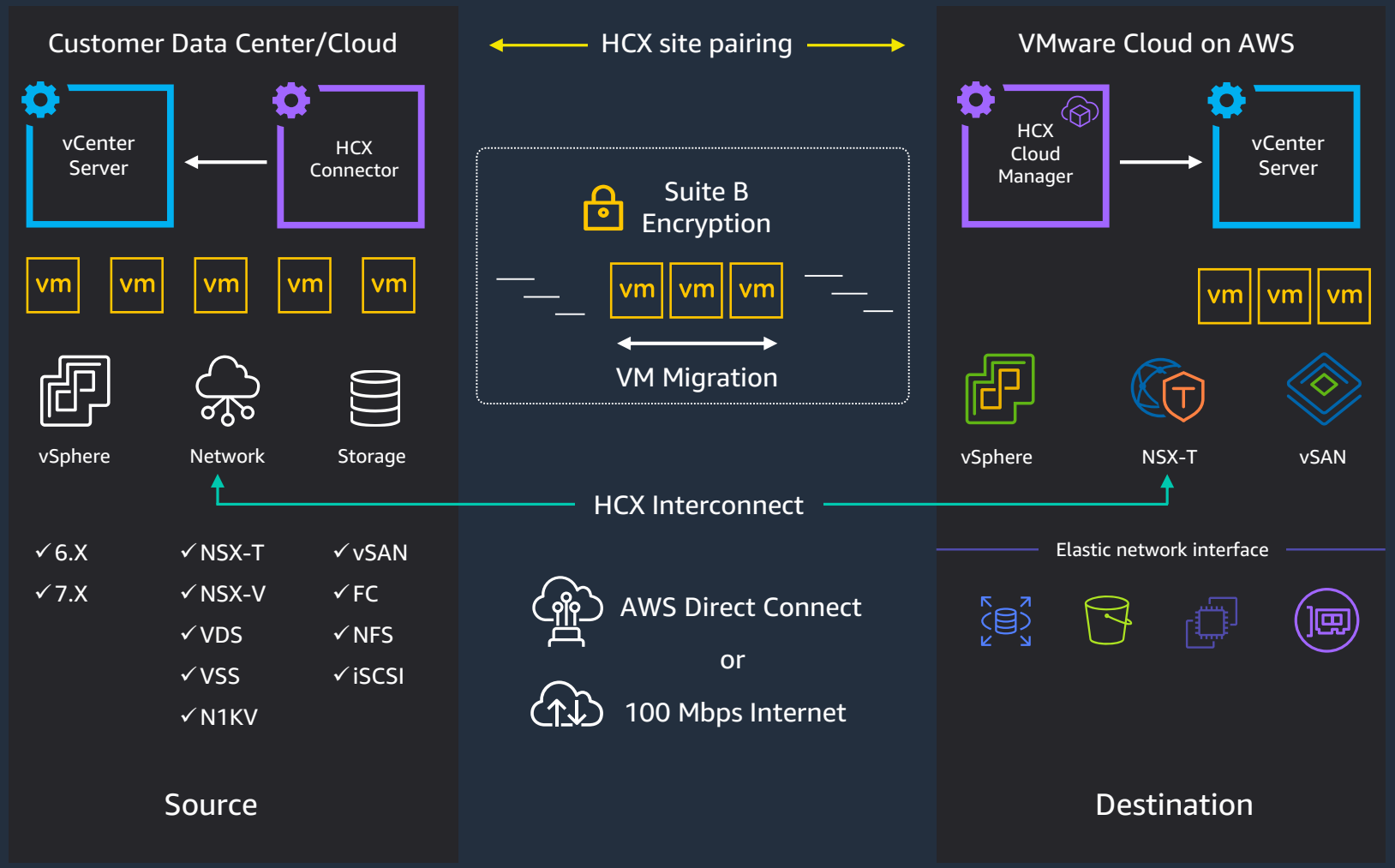
VMware Cloud on AWS

Migration Options,
Connectivity. Security,
Backup & Recovery

Migration options



VMware Hybrid Cloud Extension™ (HCX) service



Included with subscription for VMware Cloud on AWS

Supports vSphere 5.x, 6.x, 7.x (check interoperability)

Online and offline VM migration at scale options

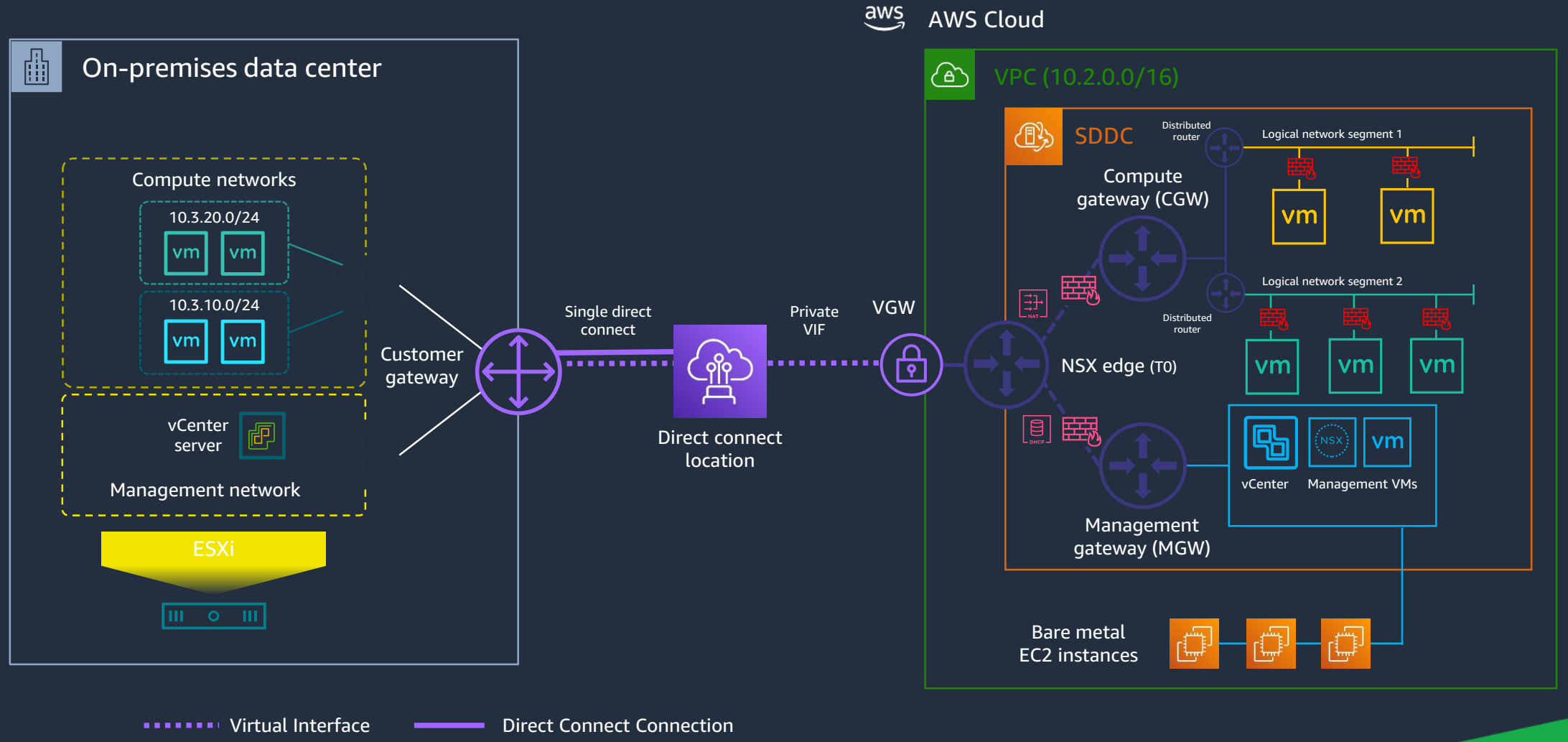
Agnostic to on-prem vMotion network design

Built-in WAN optimization, de-dupe, and compression

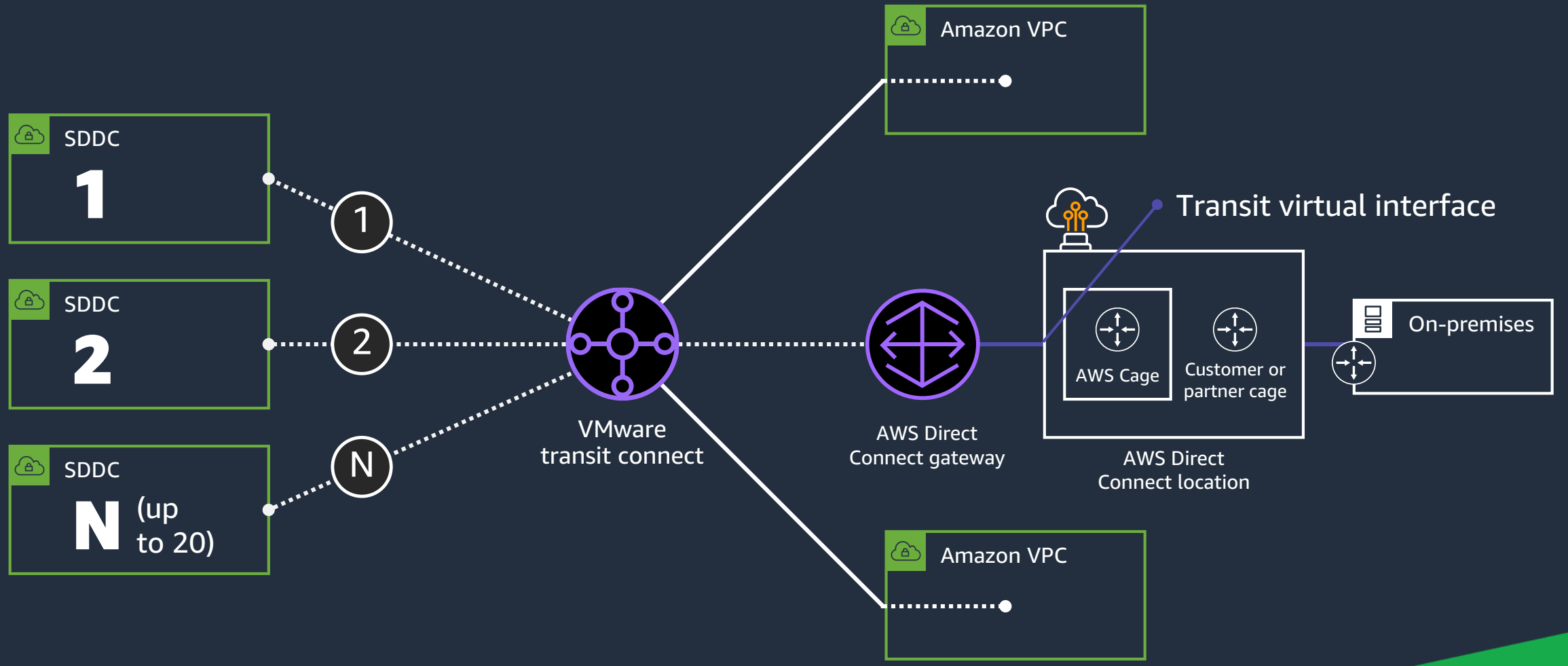
Accessible via

- vSphere HTML5 plugin
- HCX standalone client
- HCX API & PowerCLI

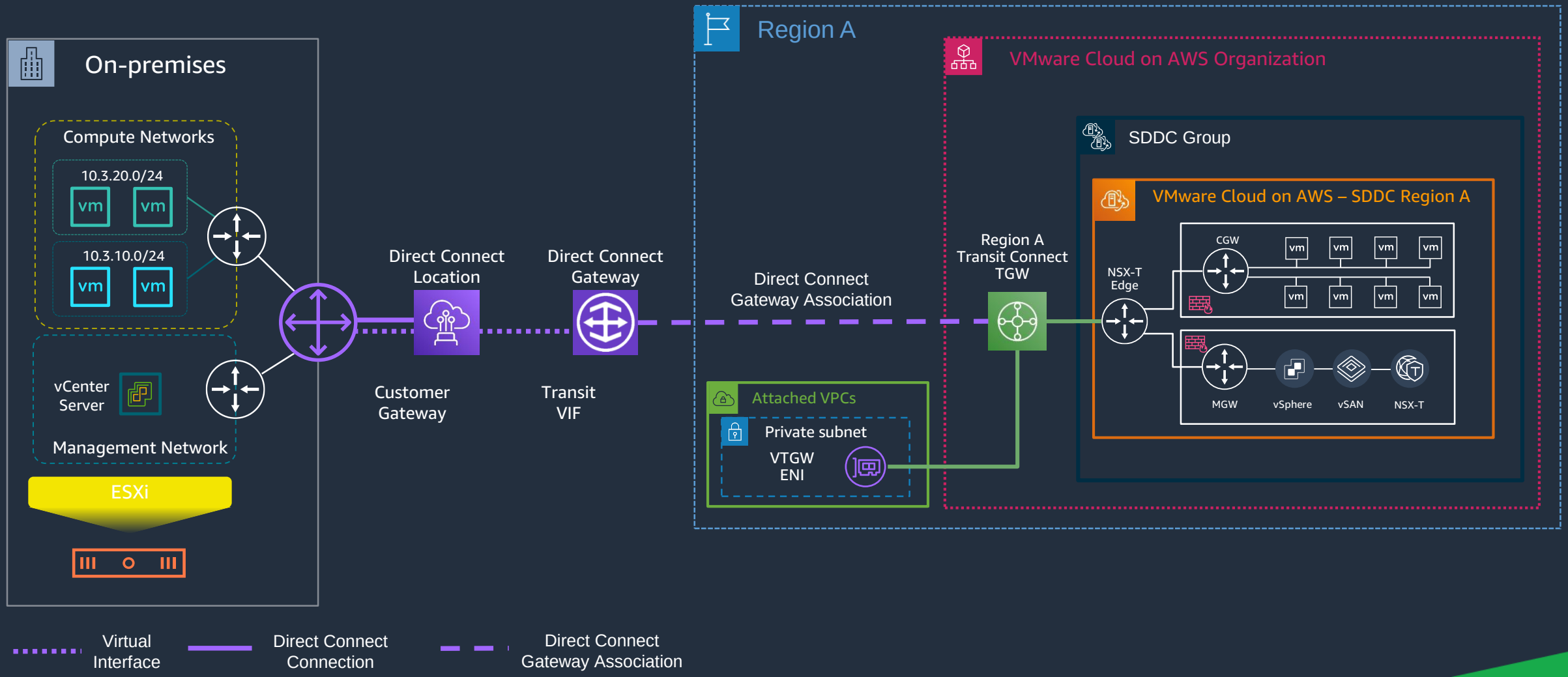
Direct connect—private virtual interface



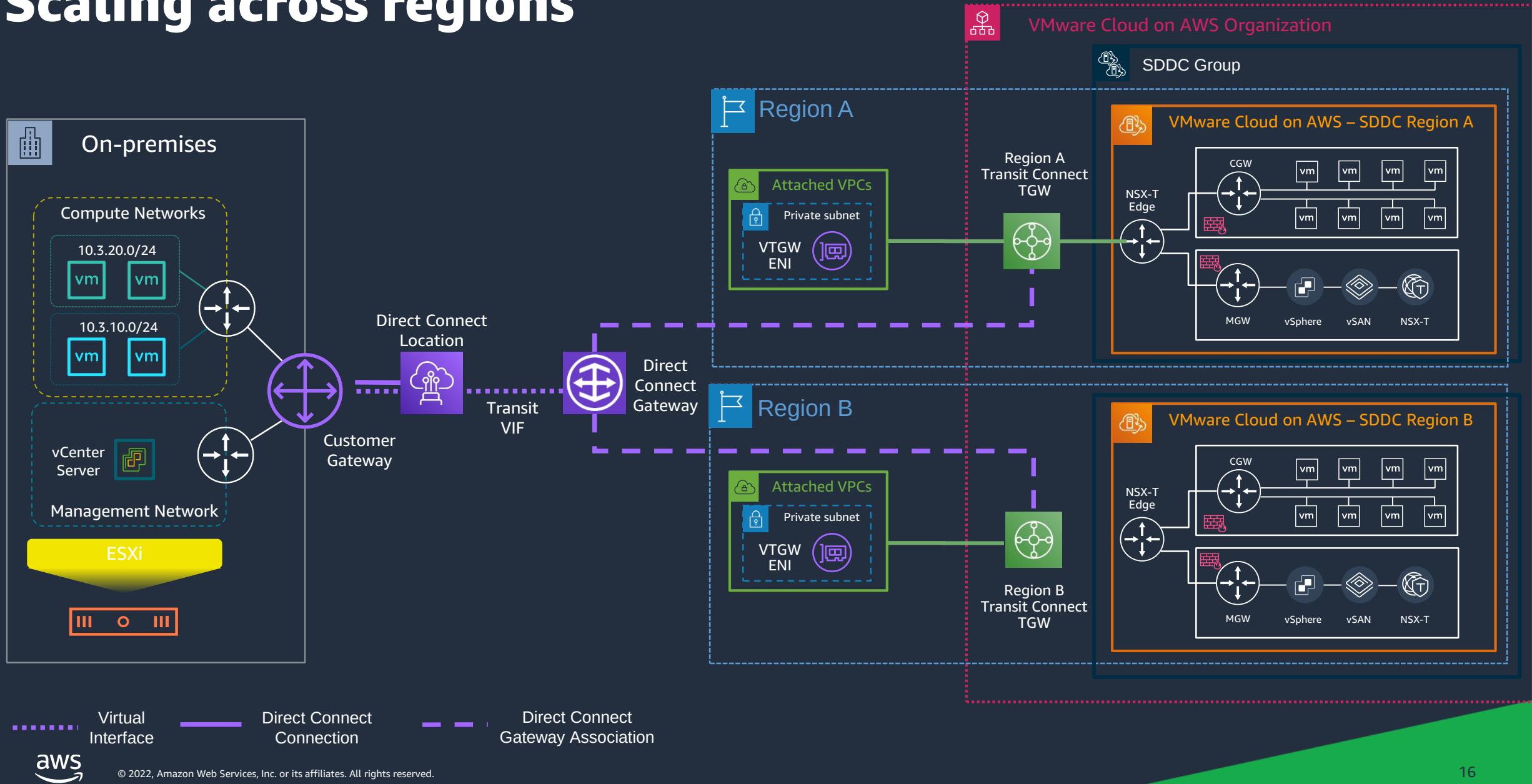
Connectivity at scale for migrations and modernization



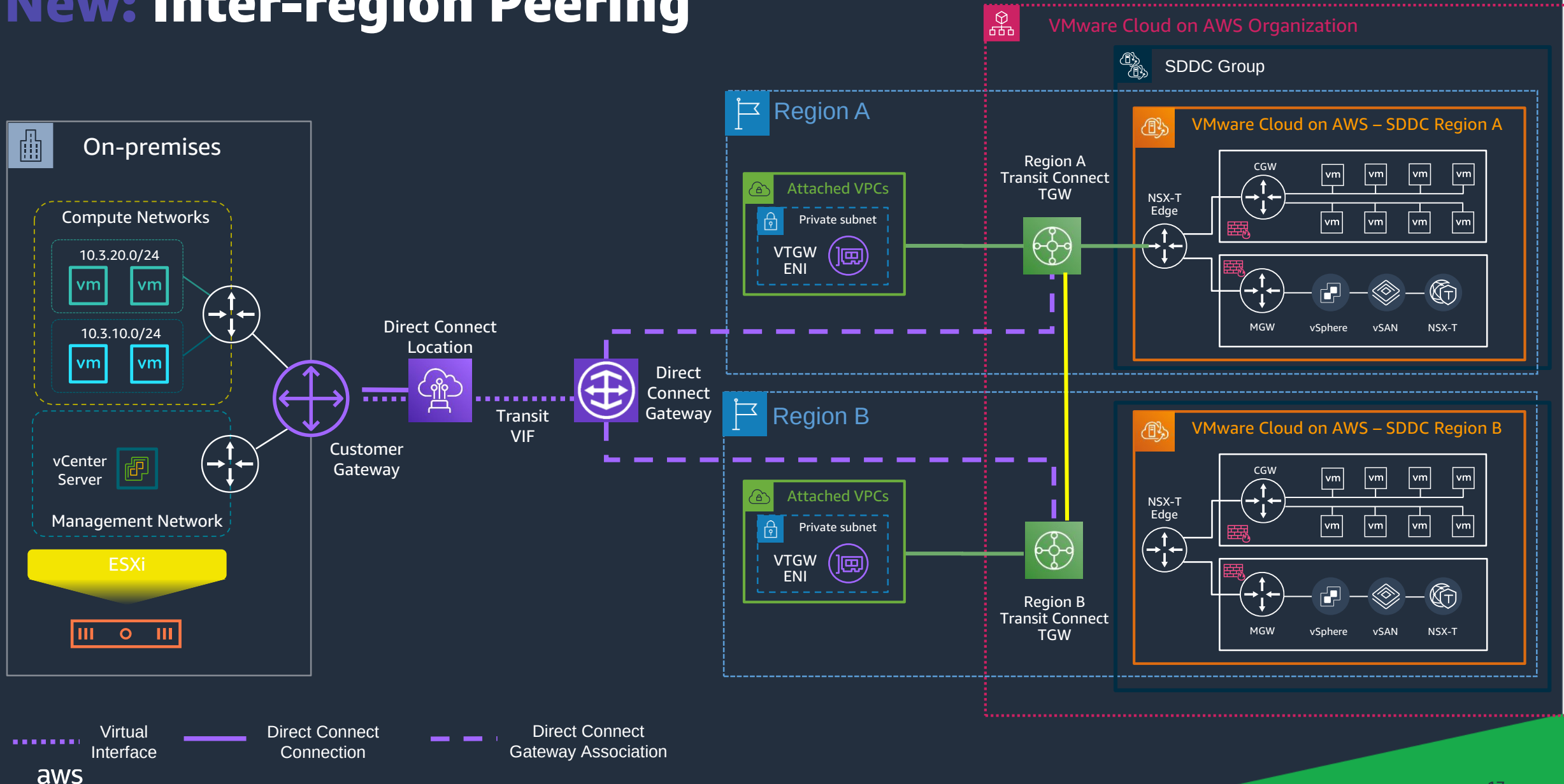
Transit virtual interface architecture



Scaling across regions



New: Inter-region Peering



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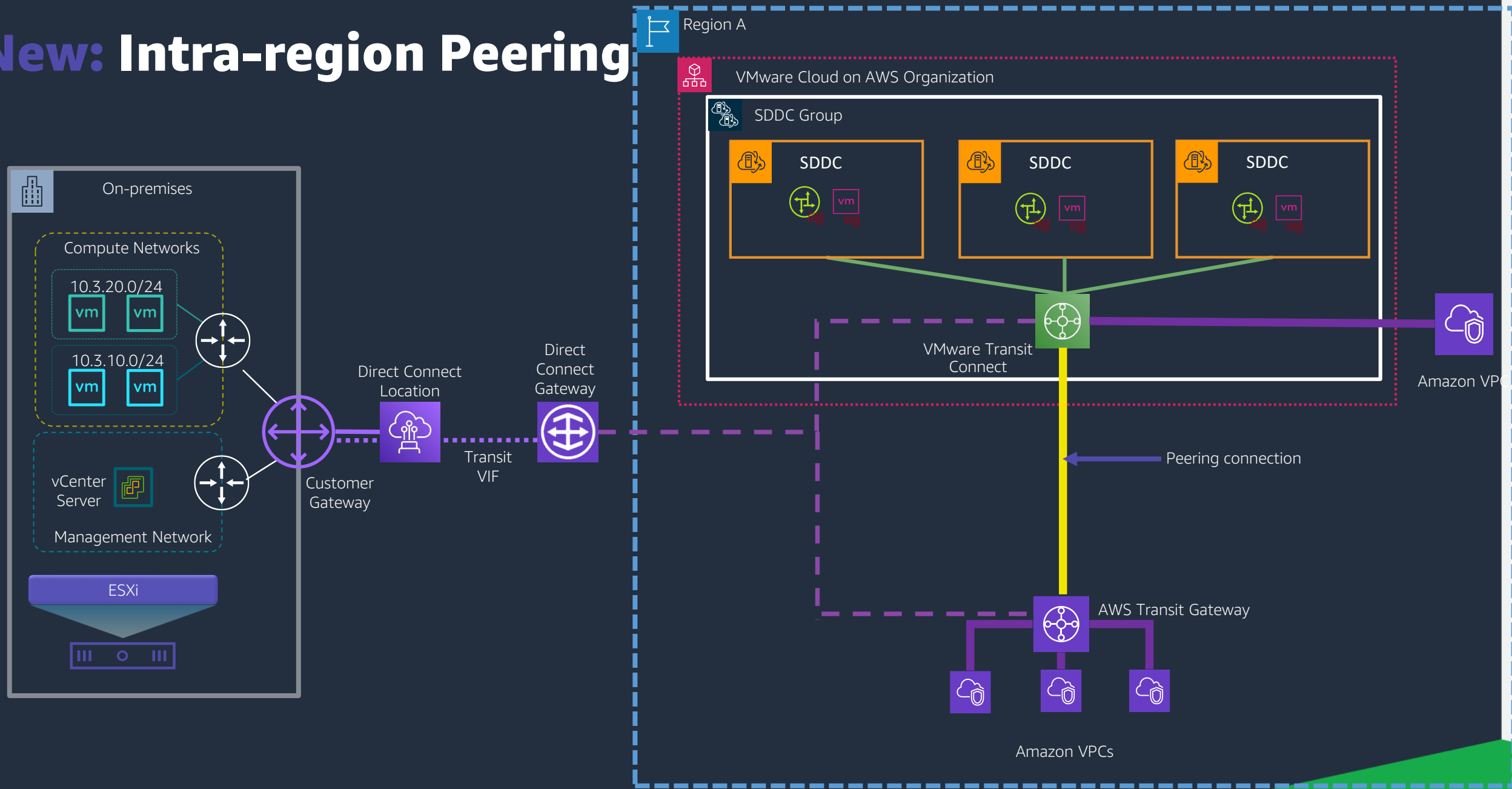
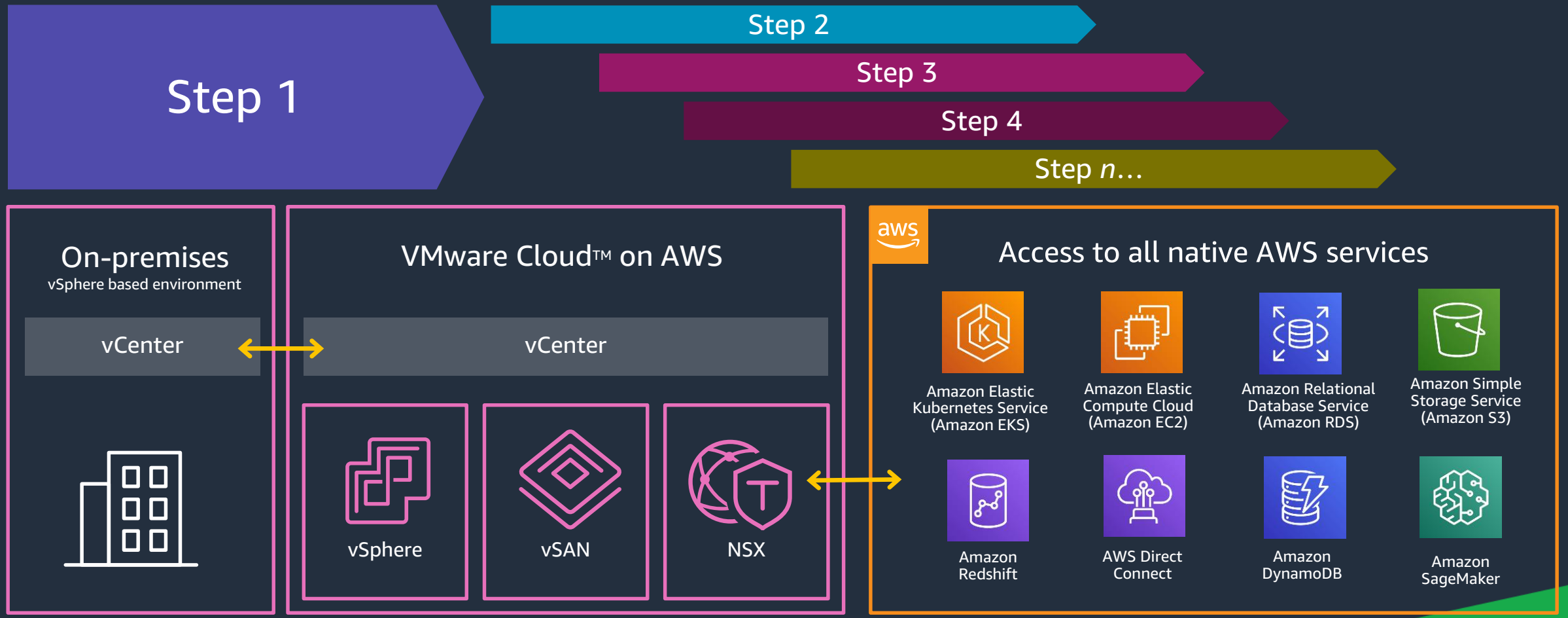


Staged approach to modernization via VMC

- Fast migration to AWS, staggered move to native



Next-Gen apps 2.0

What are you trying to integrate between VMC on AWS and AWS native services?

Other AWS Services

Amazon EC2

Amazon S3

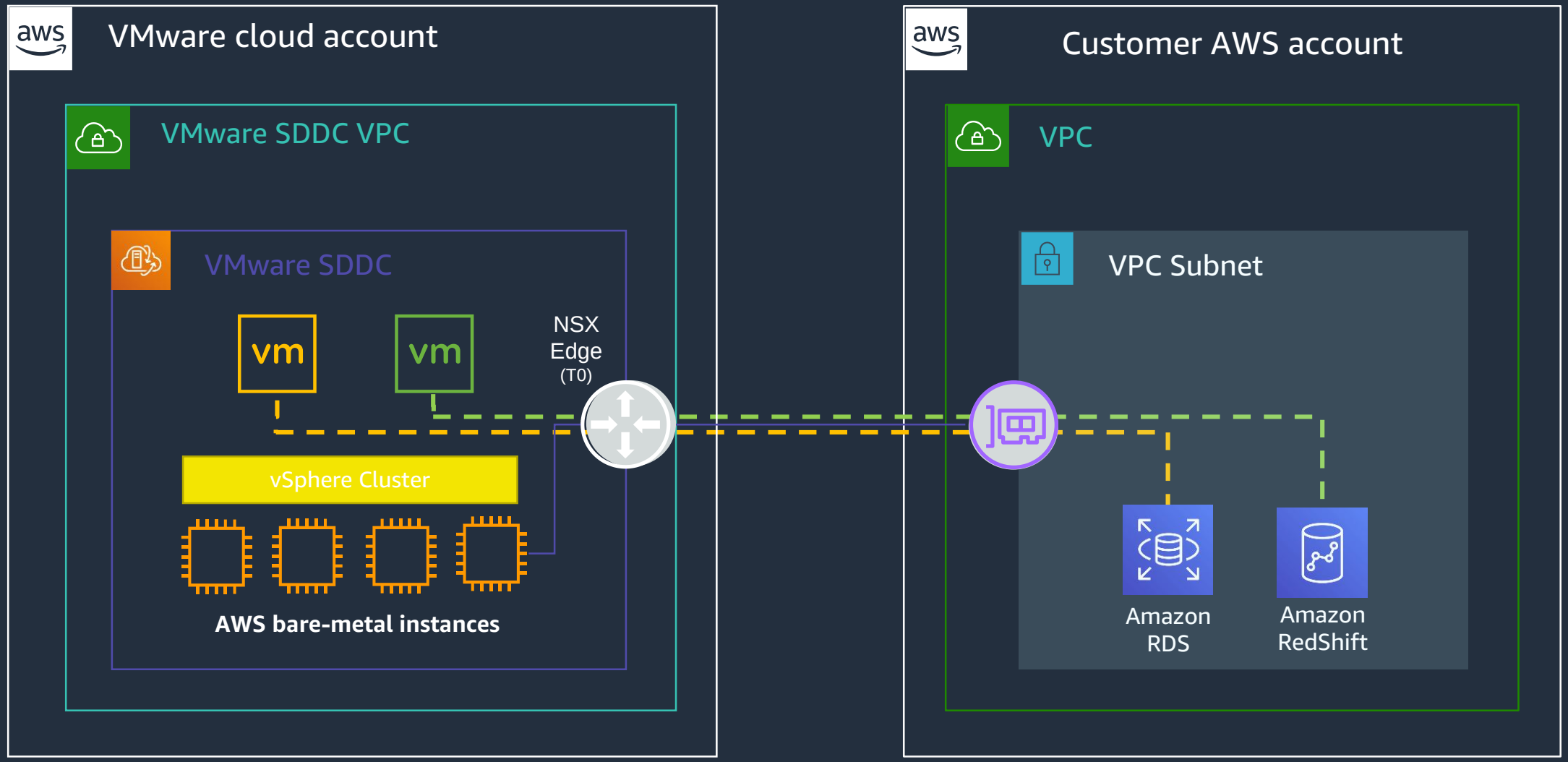
Amazon RDS

Application Load Balancer

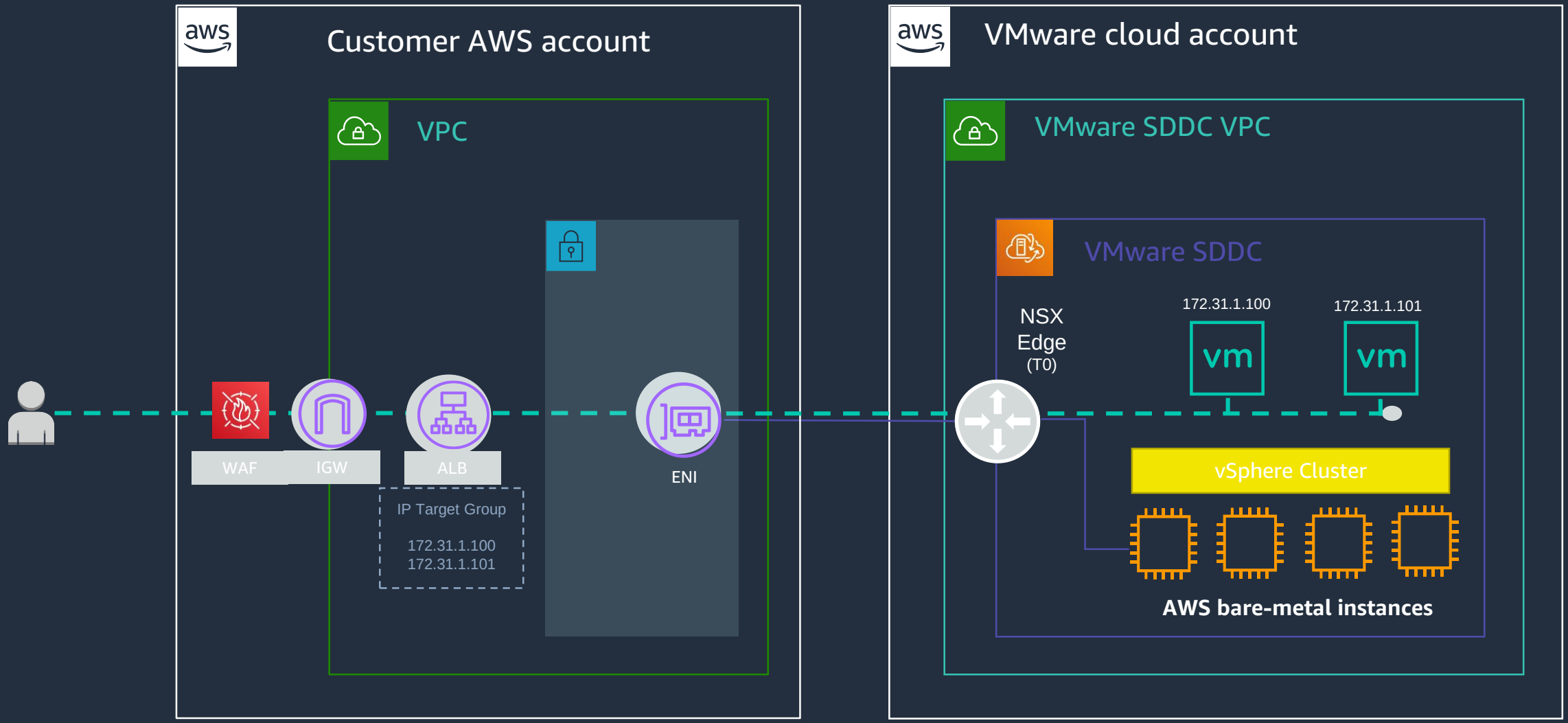
Amazon Redshift

Amazon FSx

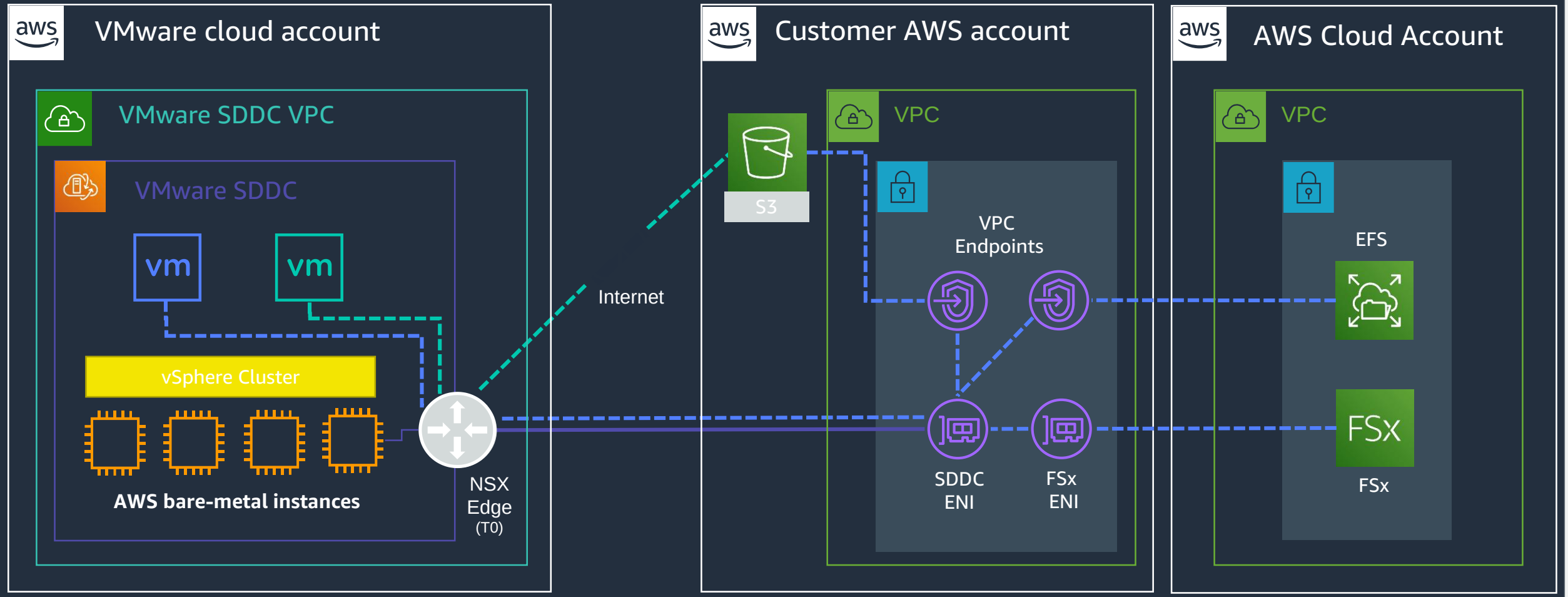
Integration with AWS Native Database Services



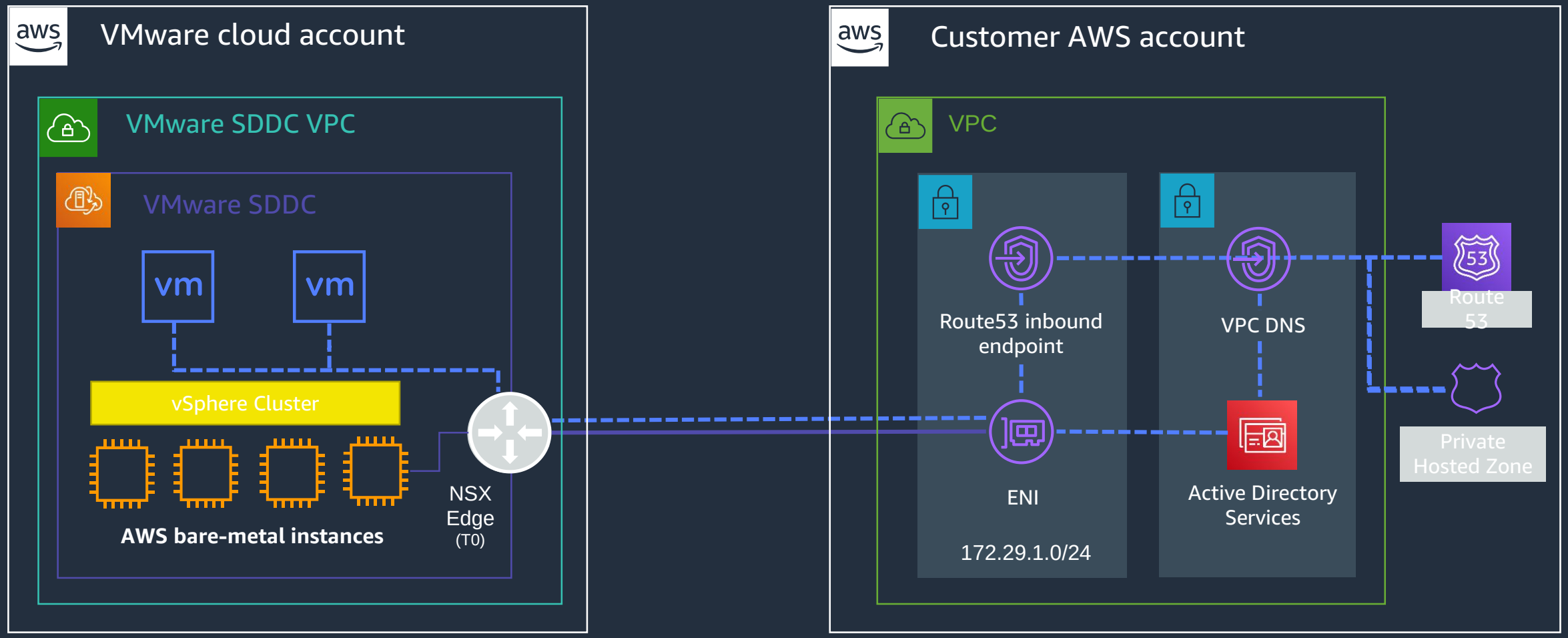
AWS Application Load Balancer with VMs



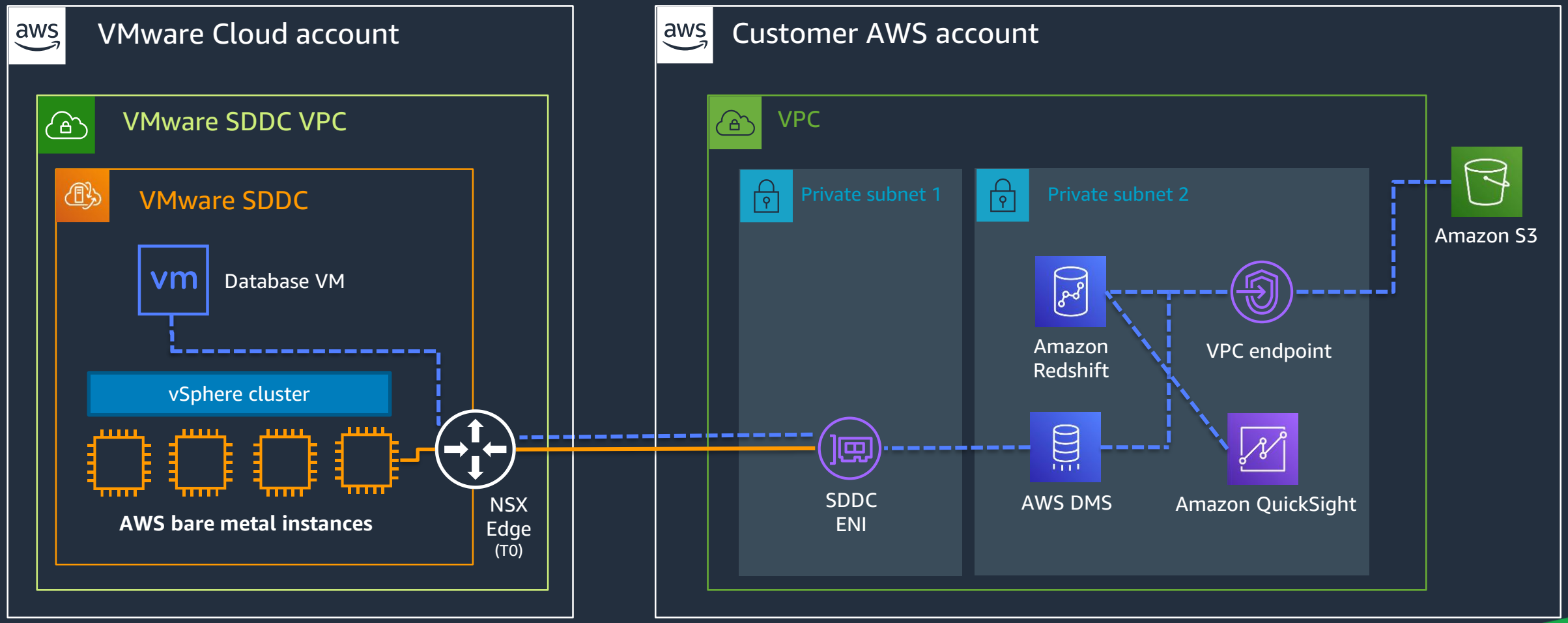
Storage Integrations – Amazon S3, Amazon EFS or Amazon FSx



Domain name resolution using Amazon Route53



Extending VMware Cloud on AWS with AWS native services



Security for your migrations

New: NSX advanced firewall for VMware cloud on AWS

L7 distributed firewall

Layer 7 AppID profiles and FQDN filtering

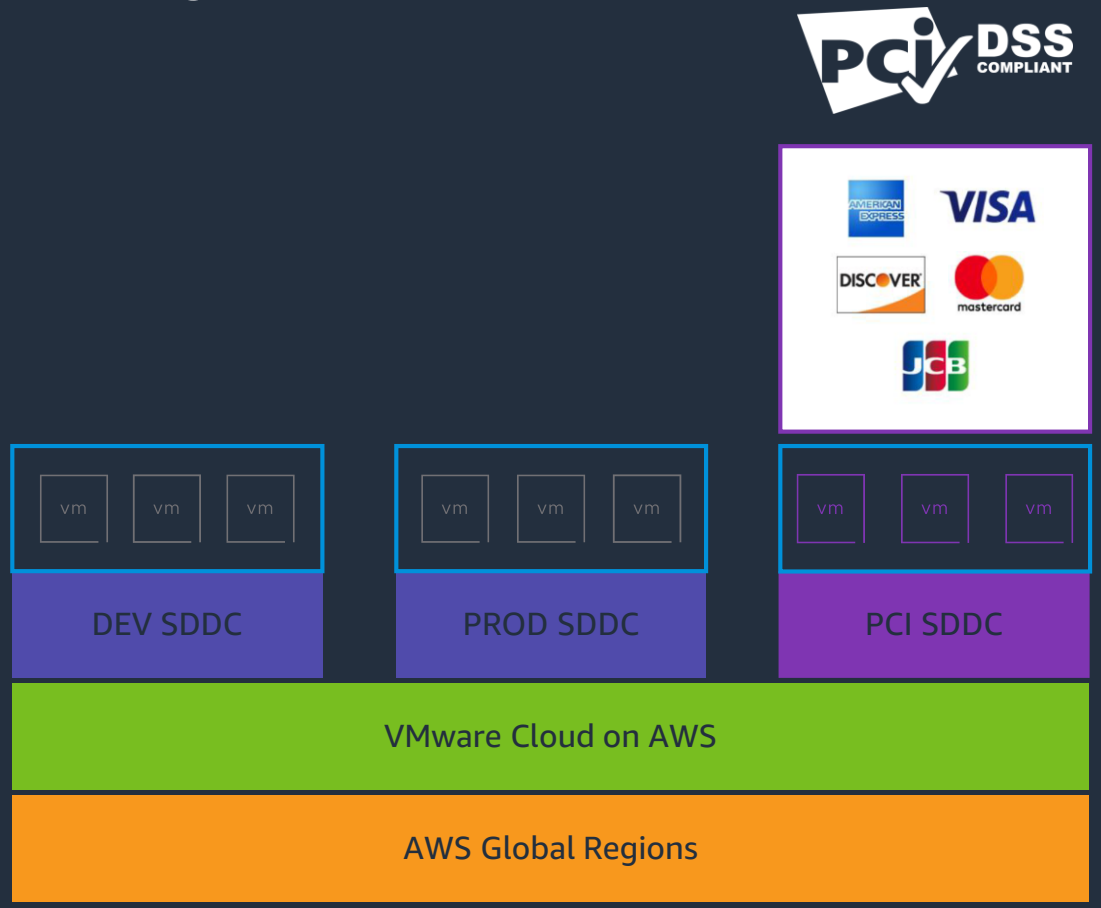
Identity firewall

Active directory based user ID filtering

Distributed IDS/IPS

Integrated with NSX threat intelligence cloud

PCI DSS Level 1 certification for your workloads



- Greatly reduces the time, effort, cost, and complexity of operating PCI Applications
- Enables customers to evacuate all the applications in their data centers, including their PCI in-scope systems
- PCI SDDCs are simple to deploy, configure and manage
- Available in 13 AWS regions

New : VMware Cloud on AWS GovCloud (US) for US Public Sector

- Now FedRAMP HIGH AUTHORIZED

  - Achieved FedRAMP High impact level Agency Authority to Operate (ATO)
  - Achieved FedRAMP Ready High status with the JAB
  - In-process of achieving DoD IL5
  - Operated by VMware employees who are U.S. citizens on U.S. soil

https://marketplace.fedramp.gov/#/product/vmware-cloud-on-aws-govcloud-vmc

Thinking about backup and recovery

VMware cloud on AWS DRaaS

VMware site recovery manager

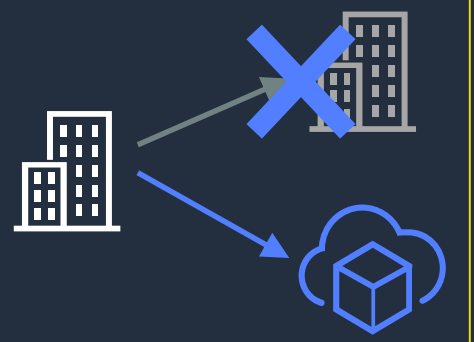
VMware Site Recovery protects workloads both on-premises and on VMware Cloud on AWS, with on-demand Disaster Recovery as-a-Service

VMware cloud disaster recovery

DRaaS solution that replicates VMs to a cost-effective & highly efficient cloud storage layer, enabling rapid recovery at scale using the live mount capability

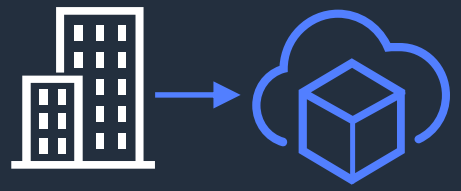
Disaster recovery use cases

Replace existing
DR Site/Solution



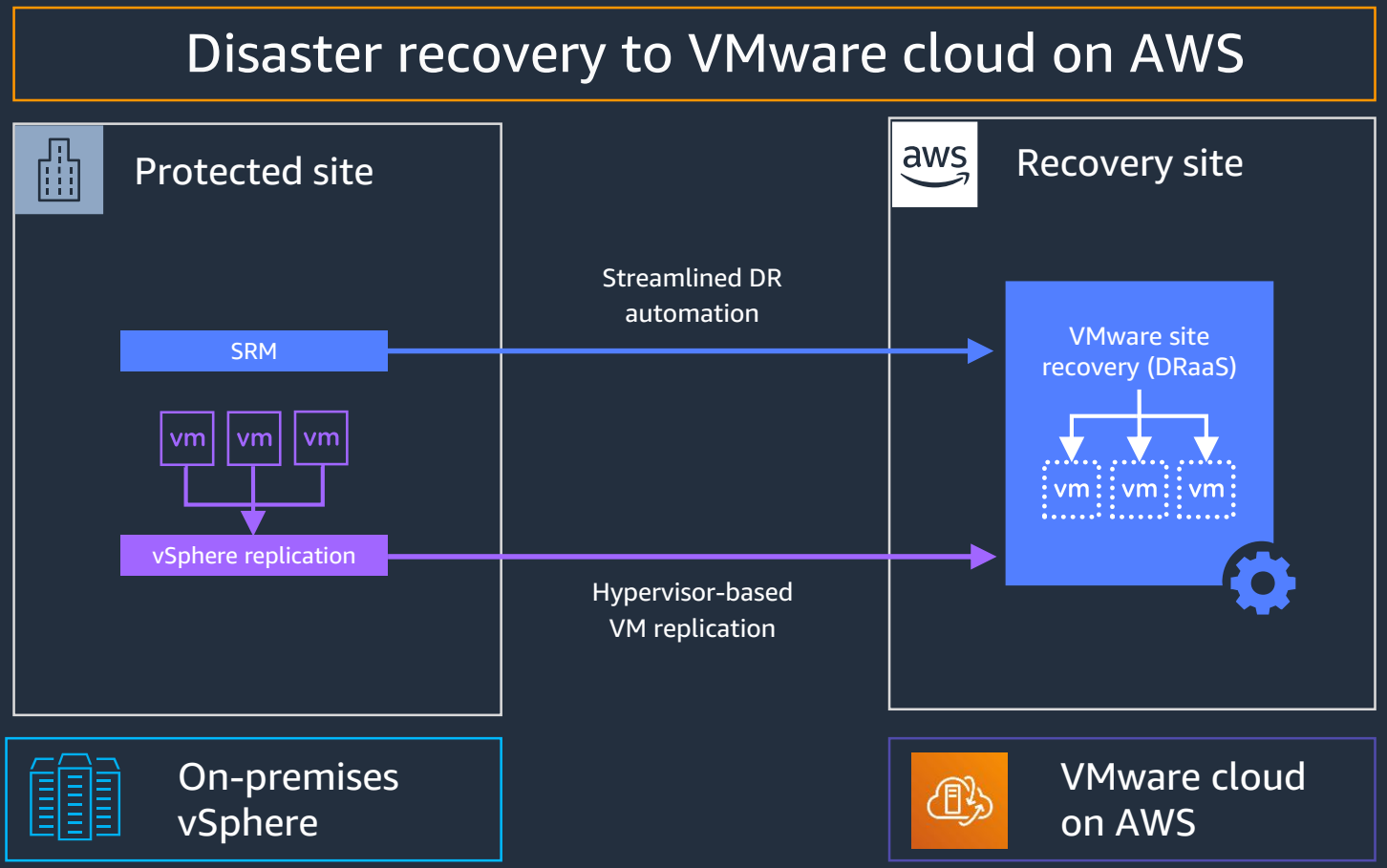
Complement existing
DR Site/Solution

Establish new
DR for on-prem apps



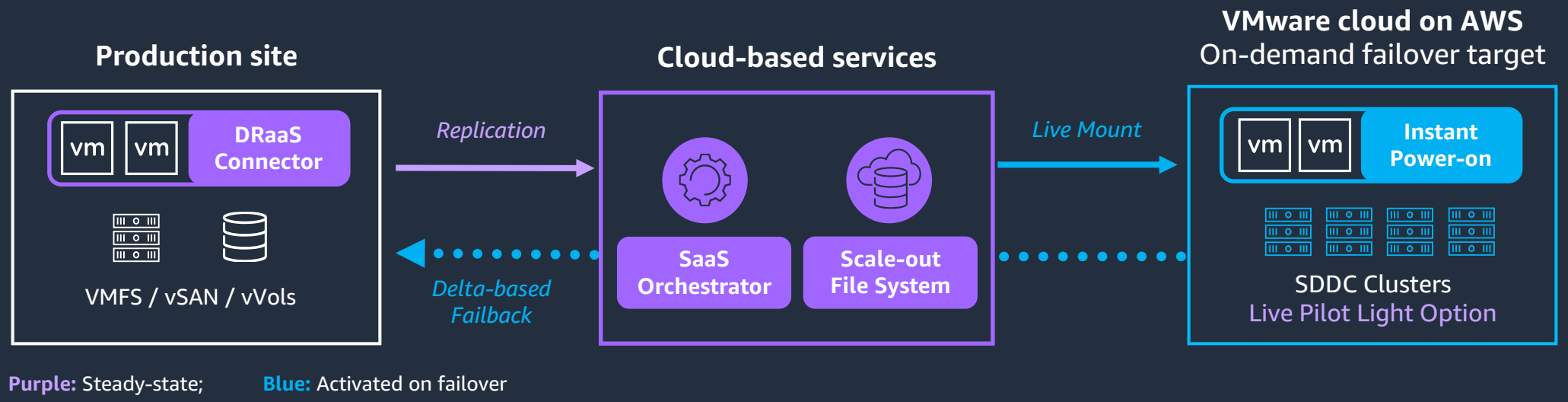
Disaster recovery for
VMware Cloud on AWS

DRaaS with VMware Site Recovery



- Accelerate time to protection
- Delivered as a service
- Provide application centric DR runbook automation
- Remove need for dedicated DR Data Center
- Post-failover cluster scaling with Elastic DRS
- Inter-region protection

VMware Cloud Disaster Recovery: on-demand DRaaS



Purple: Steady-state; **Blue:** Activated on failover

On-demand

Instant power-on (Live Mount)

Pilot light option

No VM format conversions

Rapid ransomware recovery

Easy-to-use

Consistent, familiar operations

SaaS-based management

Continuous DR health checks

Built-in audit reports

Cloud economics

Pay when capacity needed

Efficient cloud storage

Simplified pricing model

Optimized failbacks

VMware Cloud on AWS Outposts

Driving modernization in your datacenter

Why migration is not possible for some

On-premises

Local data processing

Large data sets that can’t be easily moved

Low latency

Sensitive to compute latency, requiring <10 ms responses

AWS Regions or on-premises

Residency

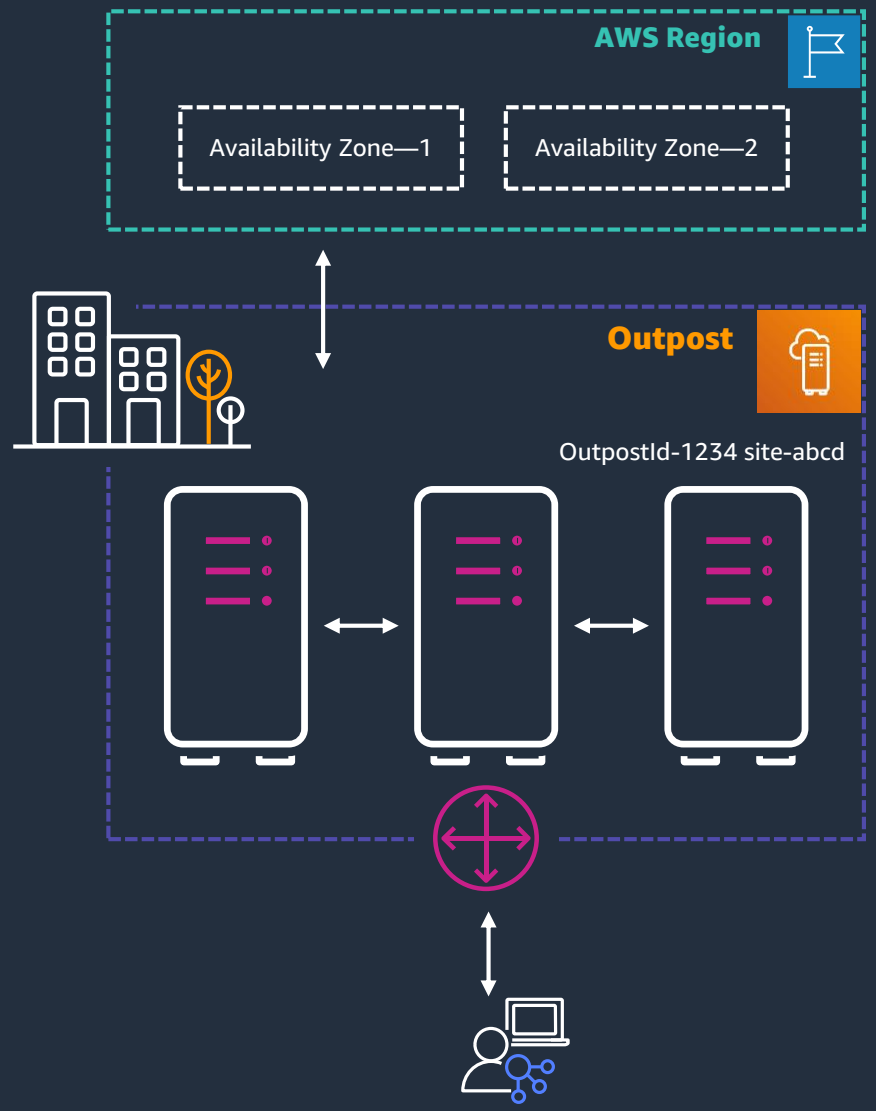
Data and infrastructure must reside in specific countries, states, or provinces

What is VMware Cloud on AWS Outposts?

AWS outposts is a service that brings AWS infrastructure services and operating models to customer premises

An **outposts is a logical construct** that is used to pool capacity from 1 or more racks of servers

Customers **can extend architecture** to span the AWS Region and their site, and integrate to local networks for seamless networking



What is in the rack?

Industry standard 42U rack

Fully assembled, ready to be rolled into final position

Installed by AWS, simply plugged into power and network

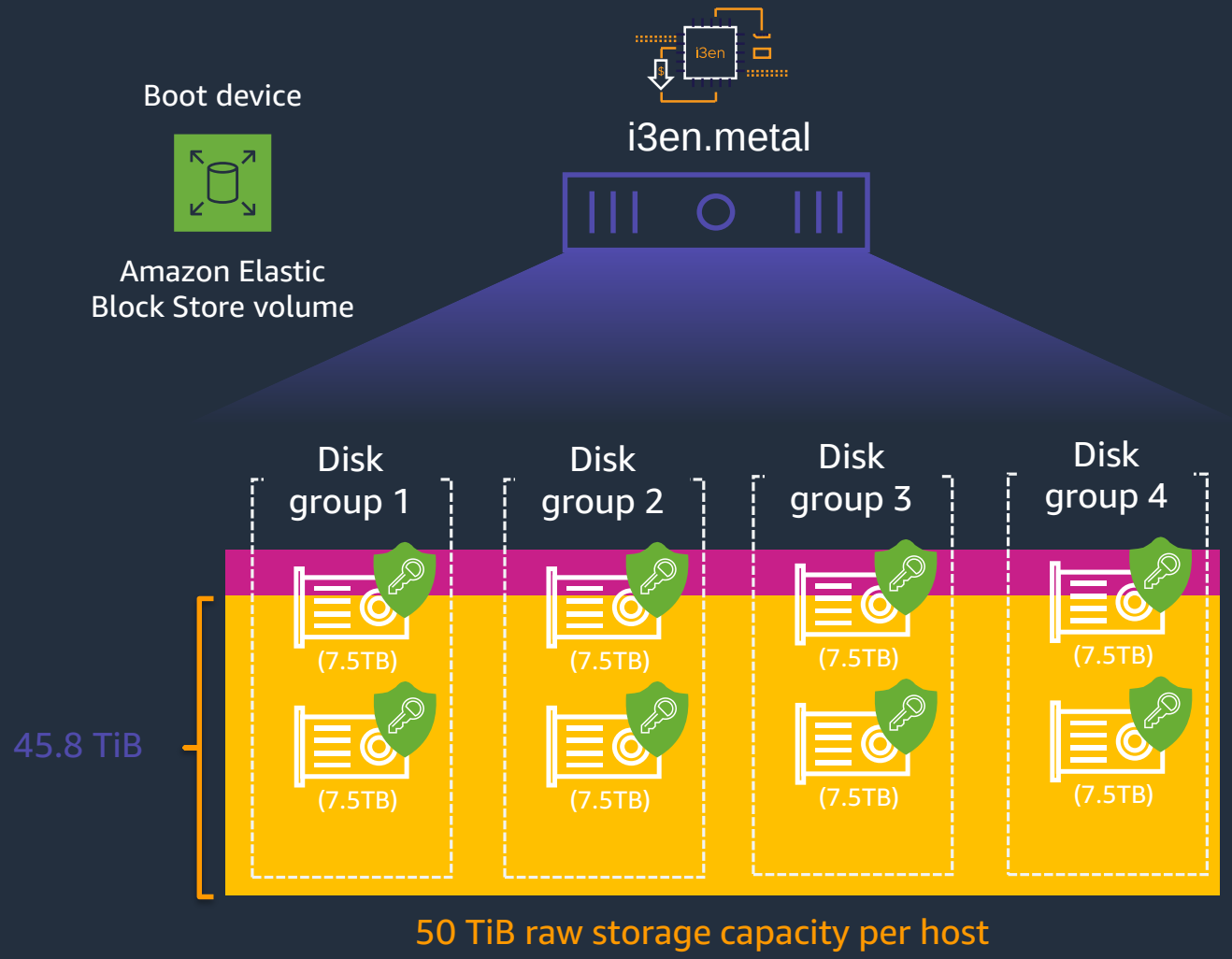
Centralized redundant power conversion unit and DC distribution system for higher reliability, energy efficiency, easier serviceability

Redundant active components including top of rack switches

Stand-by node for maintenance operations and failover (Dark capacity)

VMware cloud on AWS Outposts rack

Compute and storage in the rack



CPU

48 physical CPU cores

96 logical cores (hyperthreading)

Memory

768 GB RAM

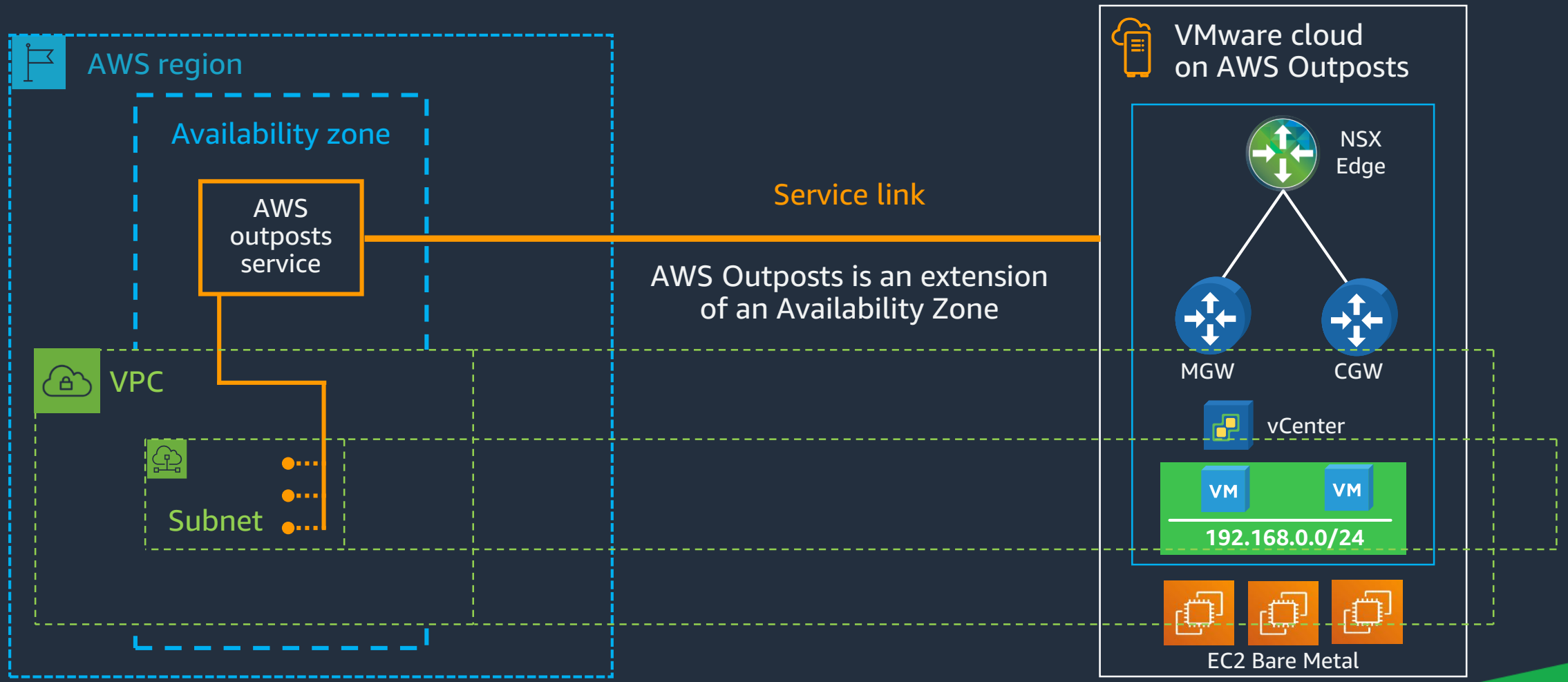
Caching tier

Capacity tier

VMware Cloud on AWS Outposts—configurations

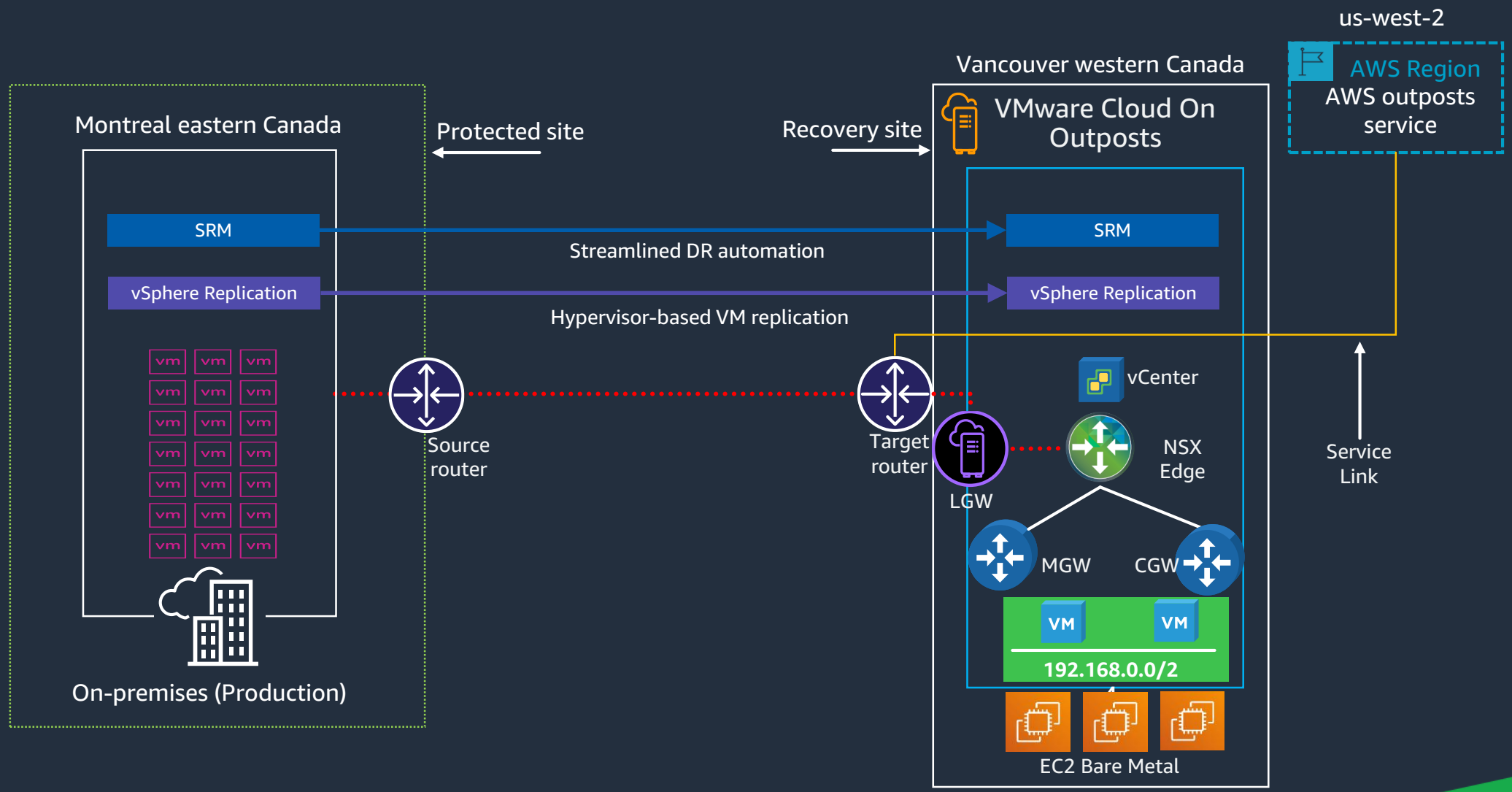
- **Node sizing**
  - 3 Node Non-default configuration
  - 6 Node Default configuration
  - 8 Node Large configuration
  - Note—4,5,7 Node configurations are also available
  - **All configurations come with Dark Capacity for (Remediation, EDRS scale-out, and LCM) purposes

How does it work?

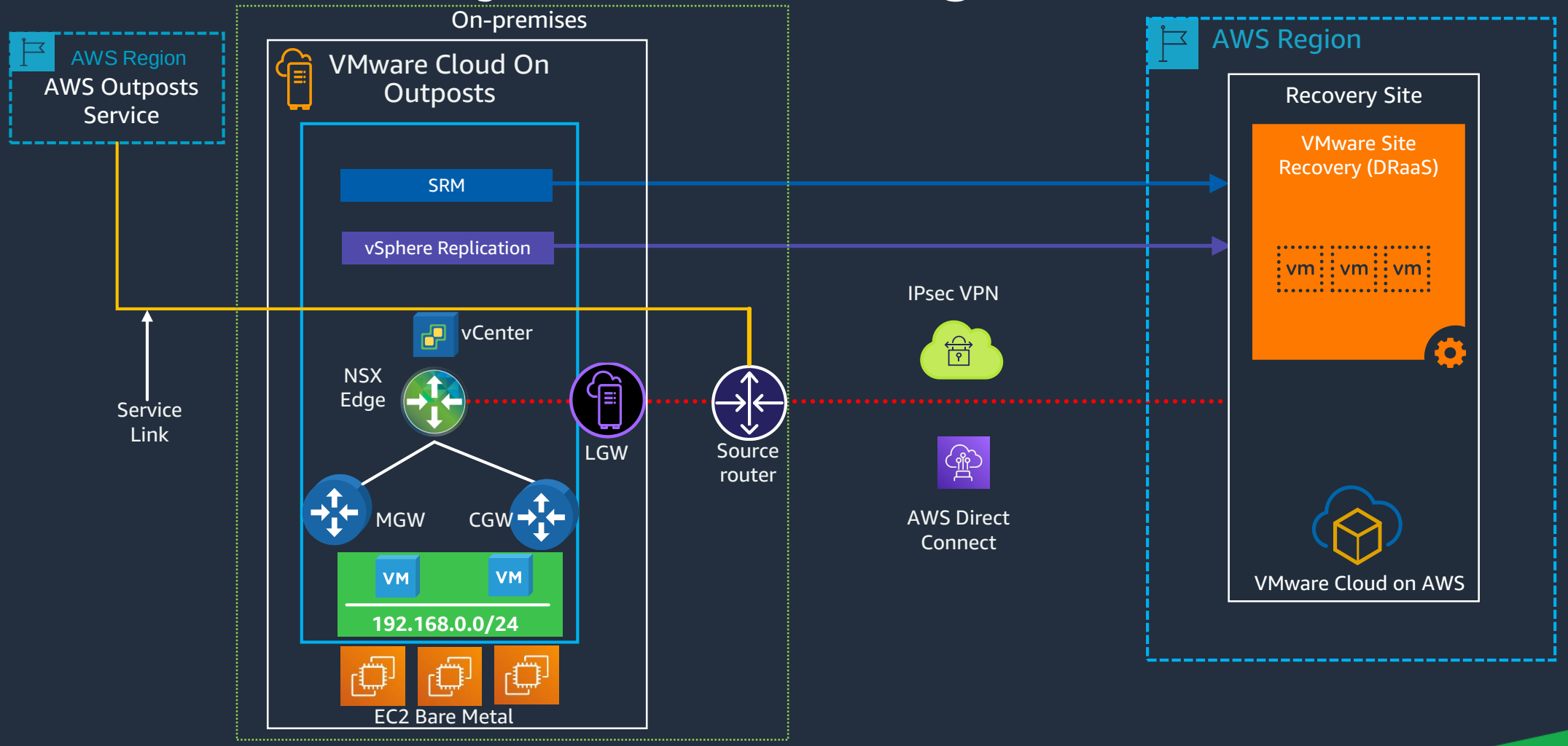


Modernize disaster recovery with VMware Cloud on AWS Outposts

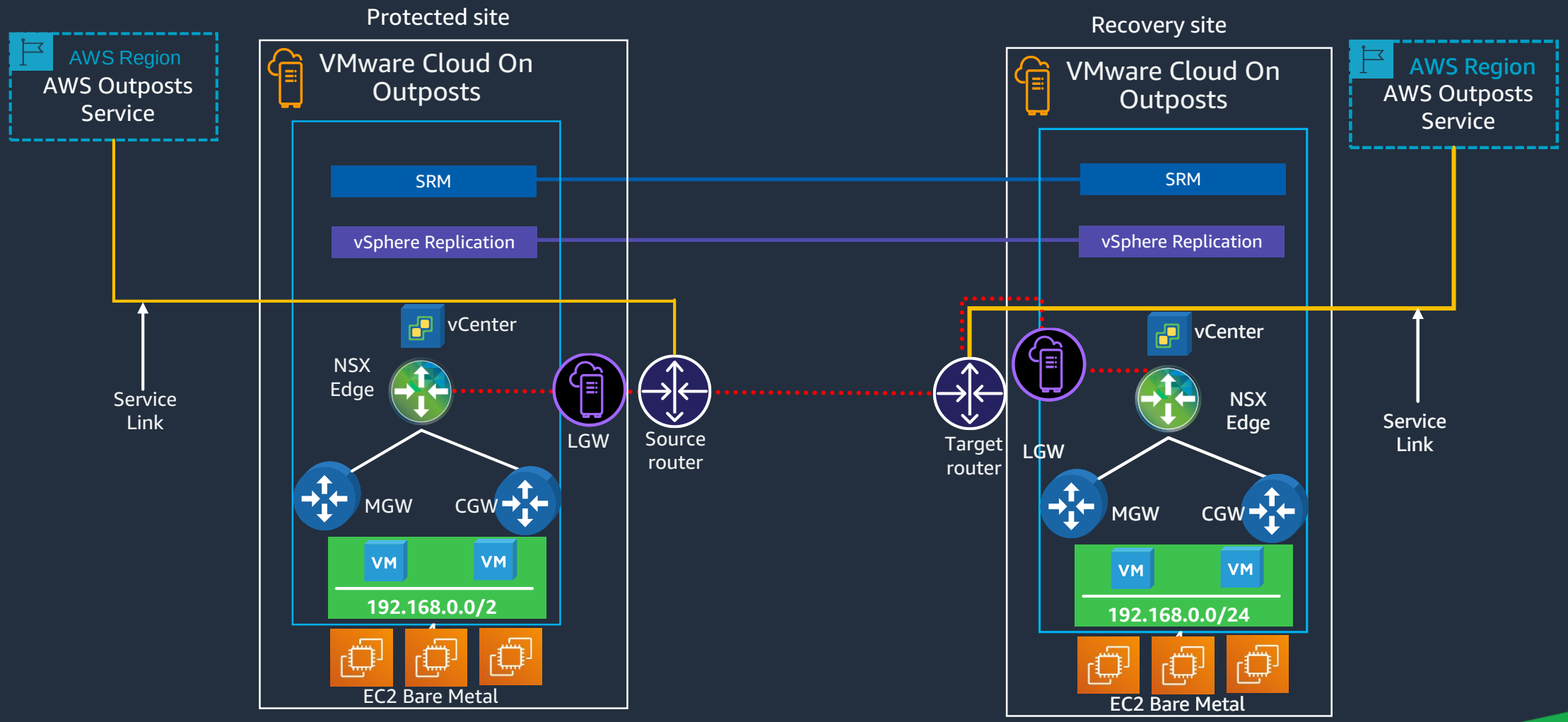
Disaster recovery to remote locations



Disaster recovery to the AWS region

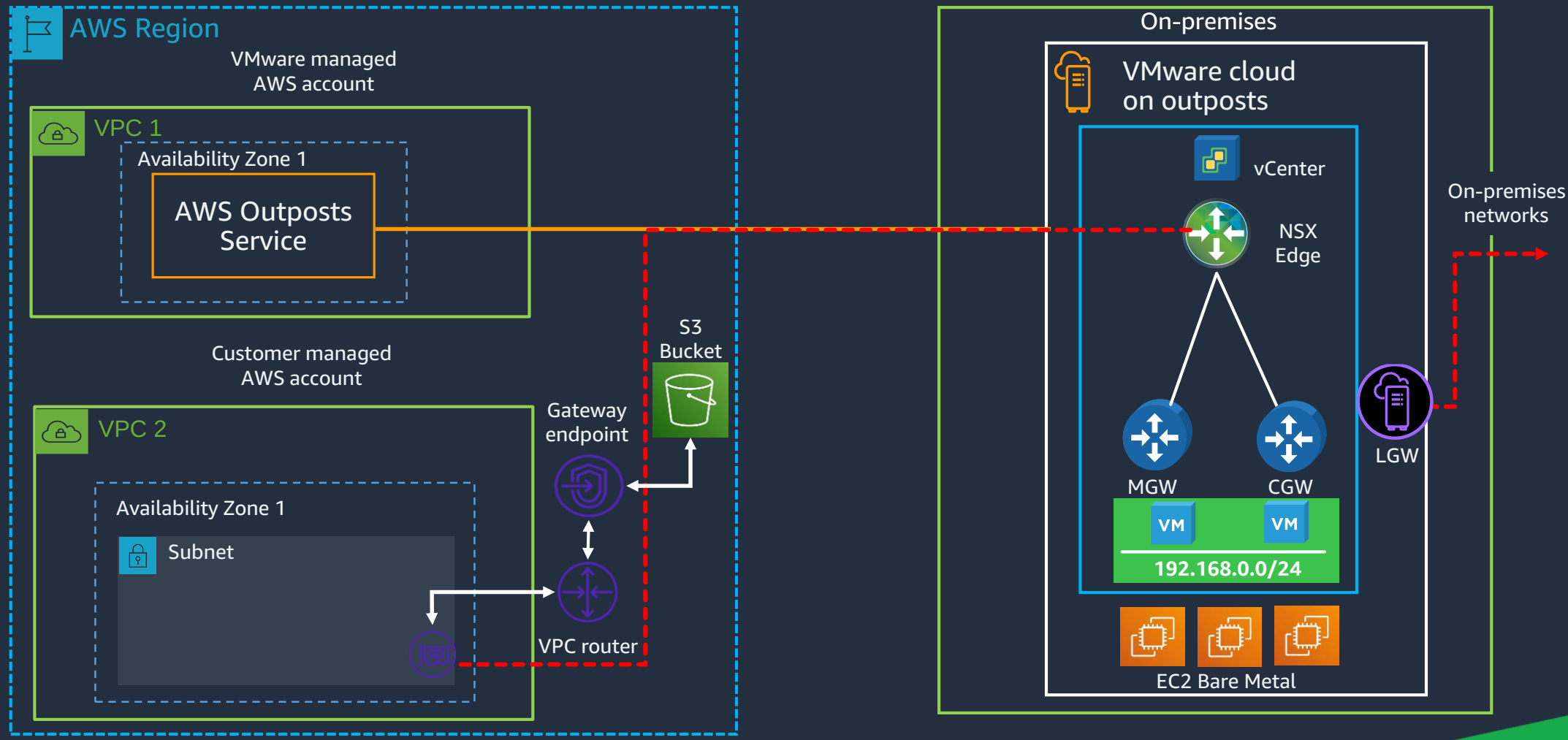


Disaster Recovery—Outposts to Outposts

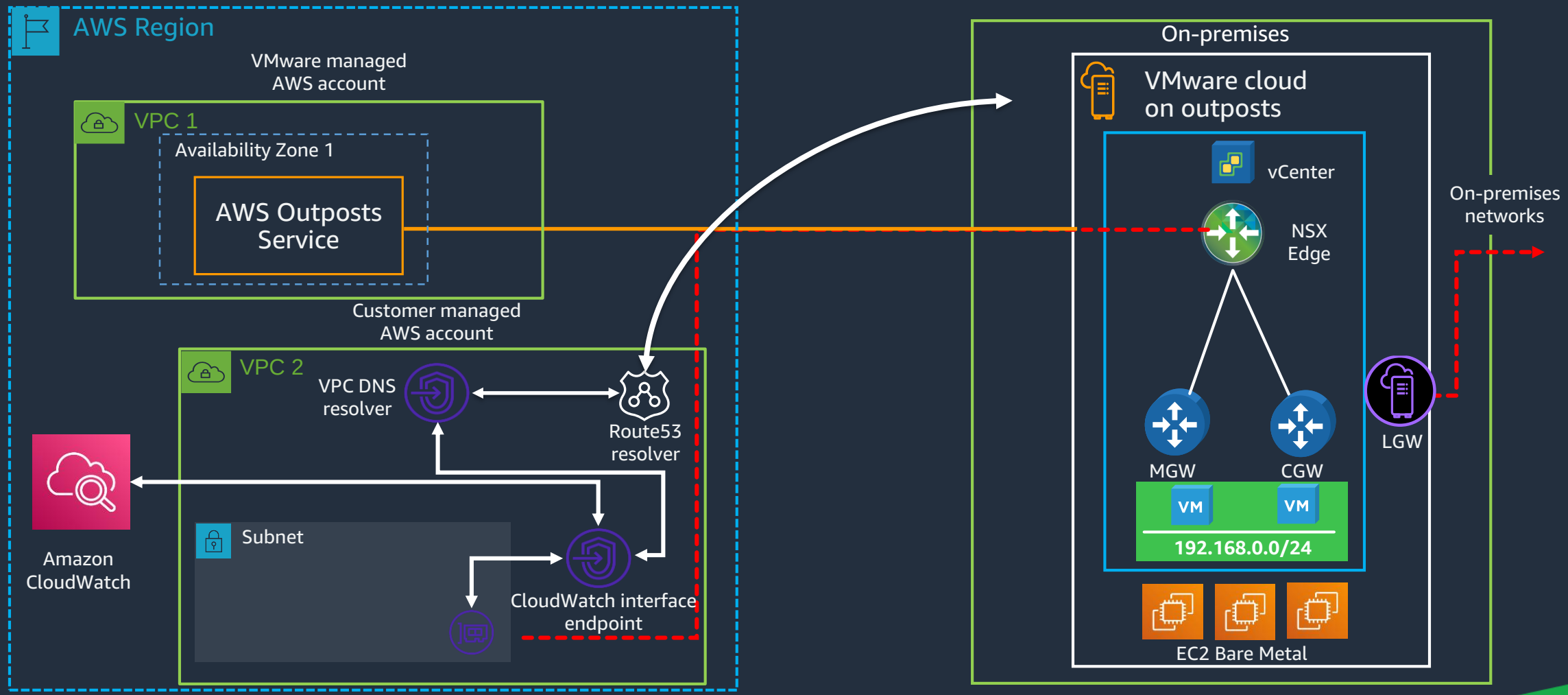


Modernize with native AWS services on VMware Cloud on AWS Outposts

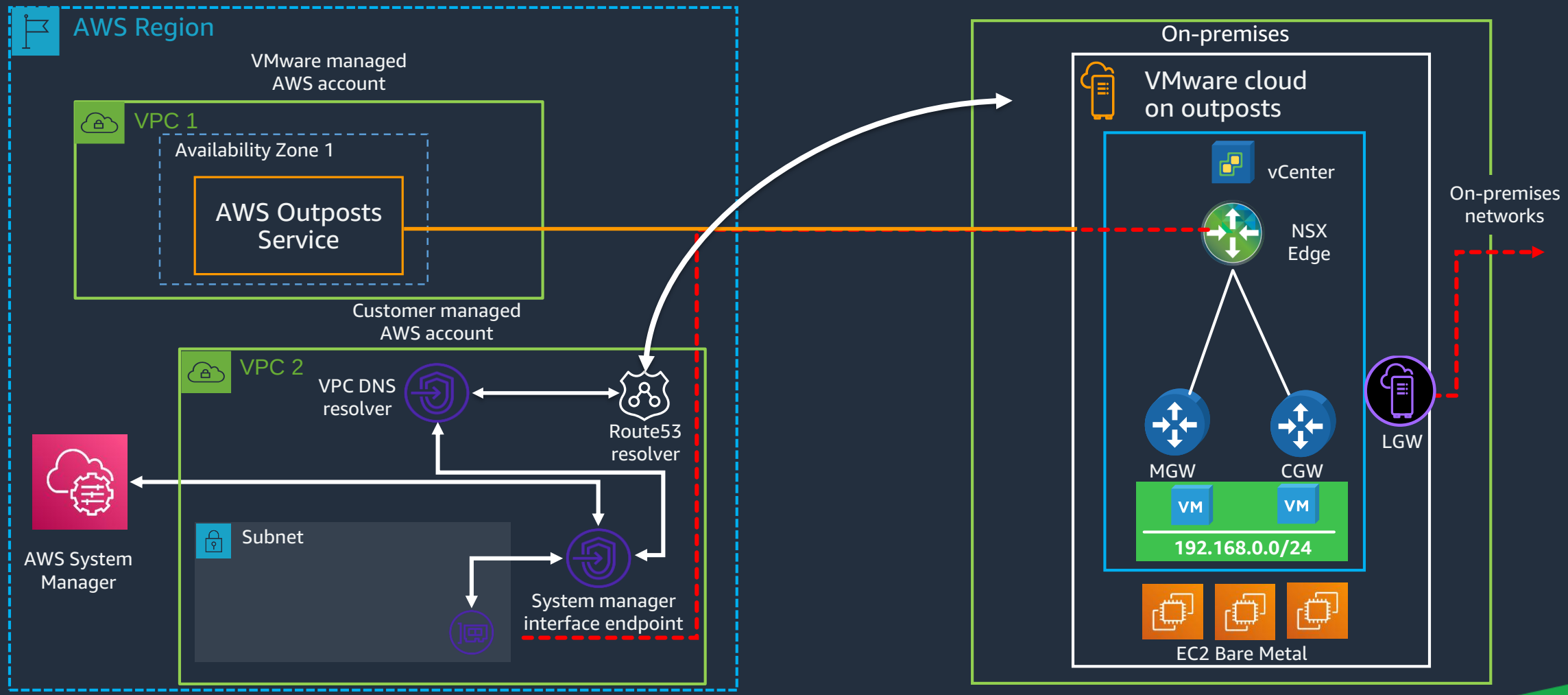
Modernize with native AWS services—storage



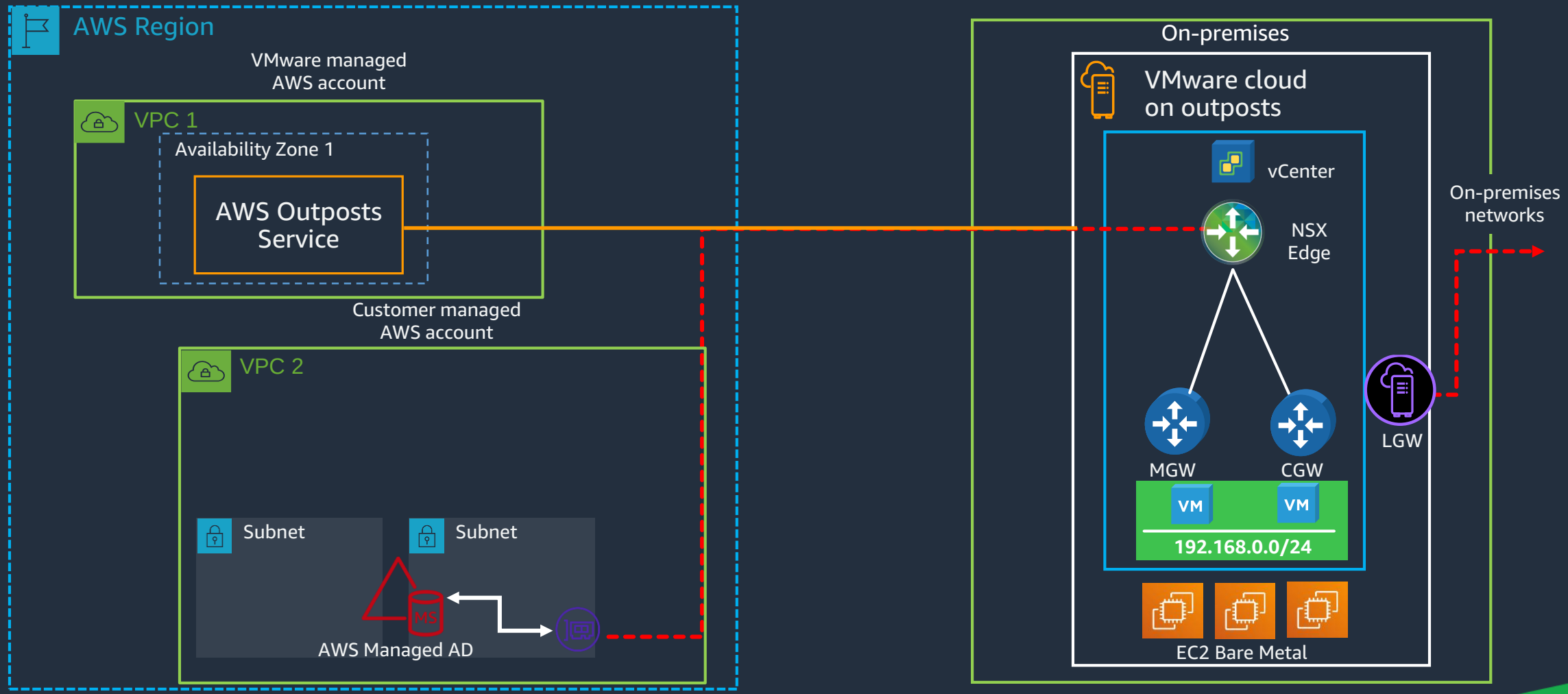
Modernize with native AWS services—monitoring



Modernize with native AWS services—sys. mgt.



Modernize with native AWS services—AD Services



- Reference architectures: aws.amazon.com/vmware/resources/
- Getting started with VMware Cloud on AWS: www.vmw.re/vmc/gettingstarted
- Engage with your AWS Solutions Architect to help you get started

Thank you!

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