AWS re:Invent

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Deep dive into Amazon Elastic VMware Service

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Agenda

01 What is Amazon Elastic VMware Service (Amazon EVS)?

02 Compute

03 Storage

04 Networking

05 Q&A

Amazon
Elastic VMware Service

The fastest path to migrate and operate VMware-based workloads on AWS

PREVIEW

- Simplify and accelerate your migration to AWS
- Retain control of your VMware architecture in the cloud
- Choose to self-manage or leverage AWS Partners for a managed experience
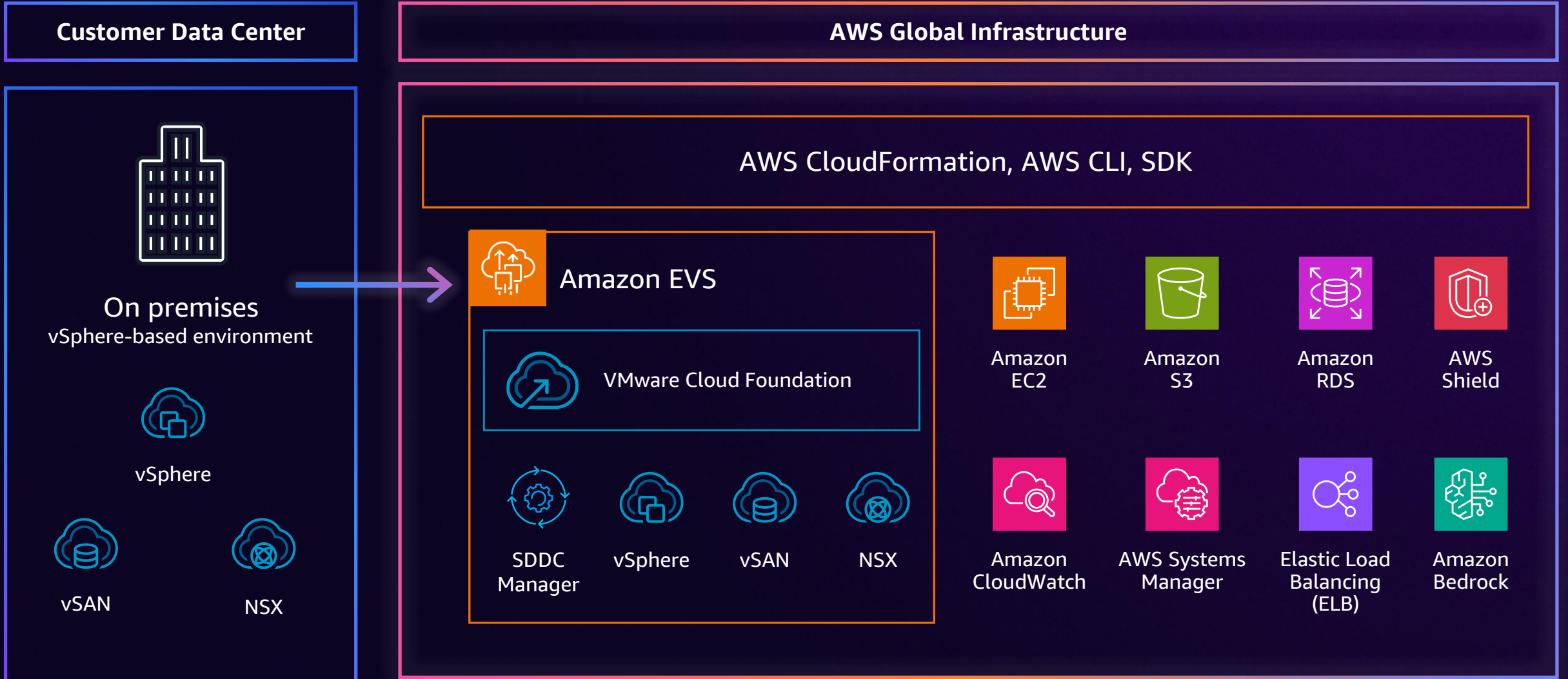- Embrace AWS innovation to transform your workloads

Available in preview to pre-selected customers and partners. Details are subject to change.
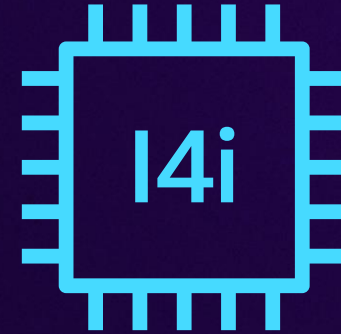
Architecture overview

Amazon EVS overview

Compute

- Amazon EVS will be built on x86 baremetal EC2 instances starting with i4i.metal instances

- Intel Xeon Ice Lake - 128 vCPUs - 2.9 GHz / 3.5 GHz Turbo

- 30 TiB of raw local NVMe flash storage used for VMware vSAN primary datastore

- 75 Gbps networking shared across 2 x ENIs
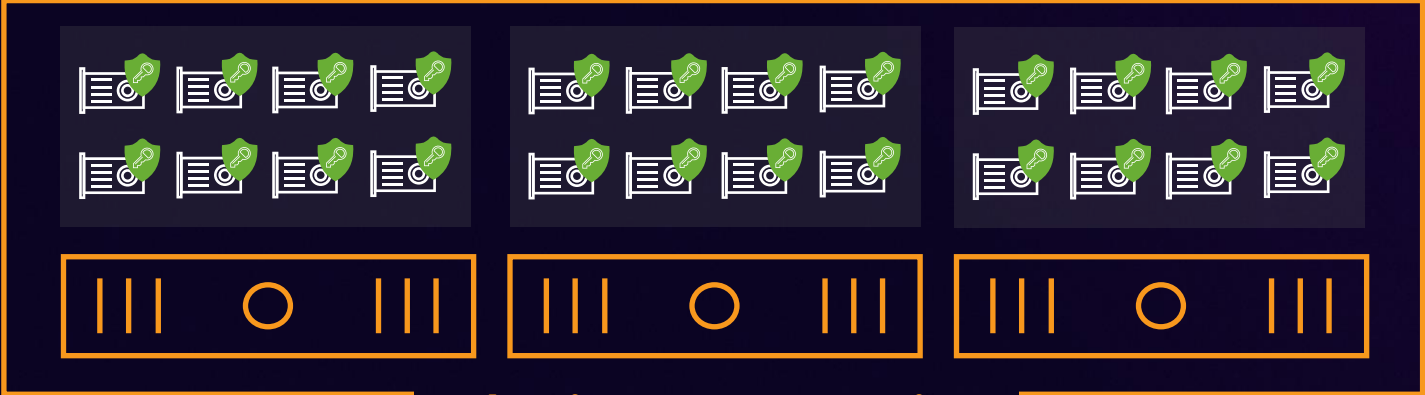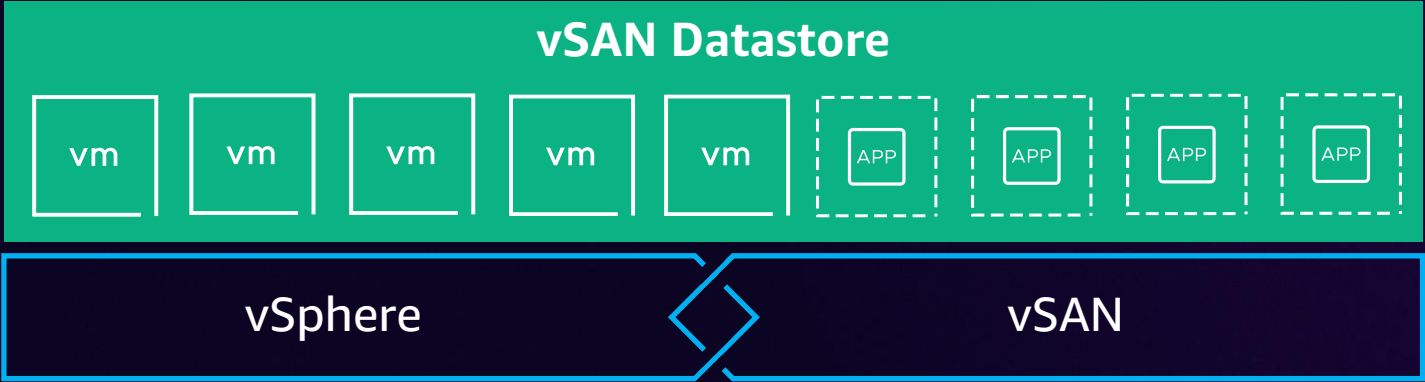
I4i

i4i.metal

128 Physical Cores

1024 GiB Memory

30 TiB
8 x 3,750 AWS Nitro SSD

Storage

vSAN Datastore

| vm | vm | vm | vm | vm | APP | APP | APP | APP |

vSphere | vSAN

Elastic VMware Service

VMware vSAN™
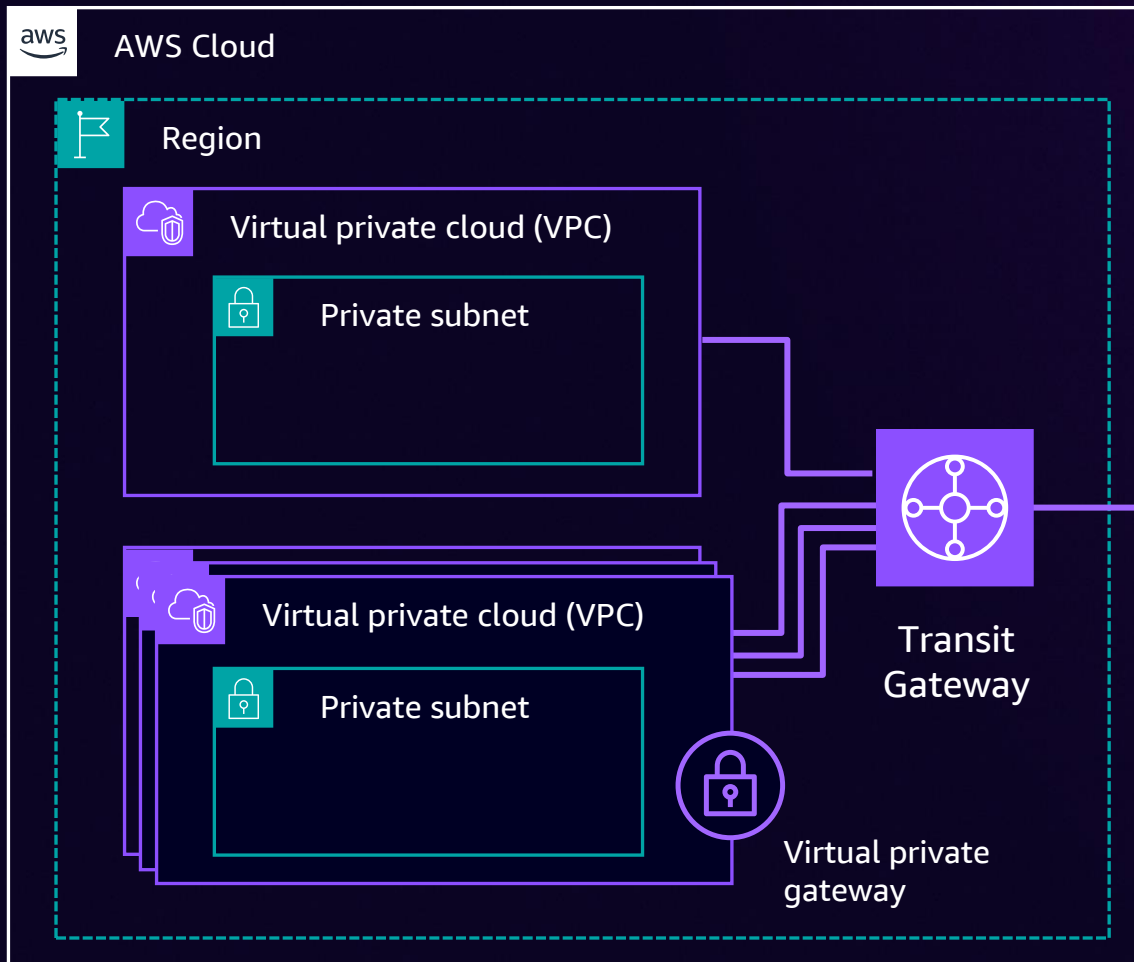
Primary Storage

Local Instance Storage powered by vSAN

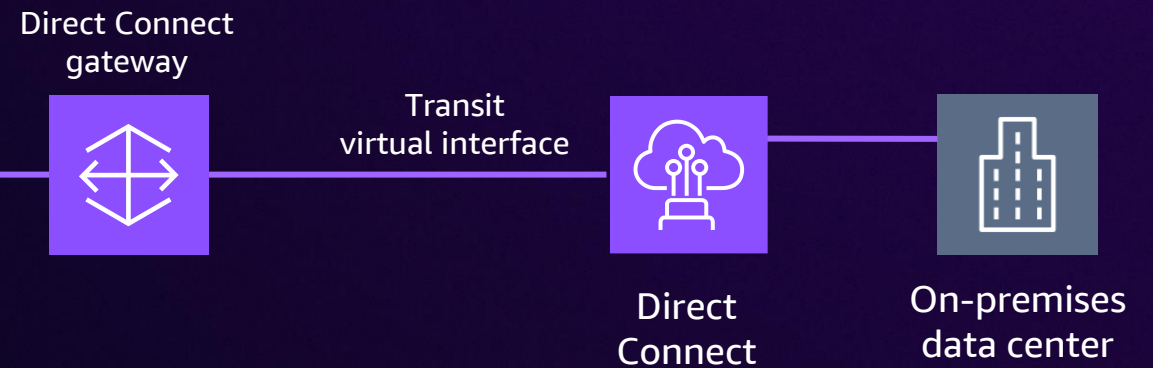HCI simplicity and straightforward consumption

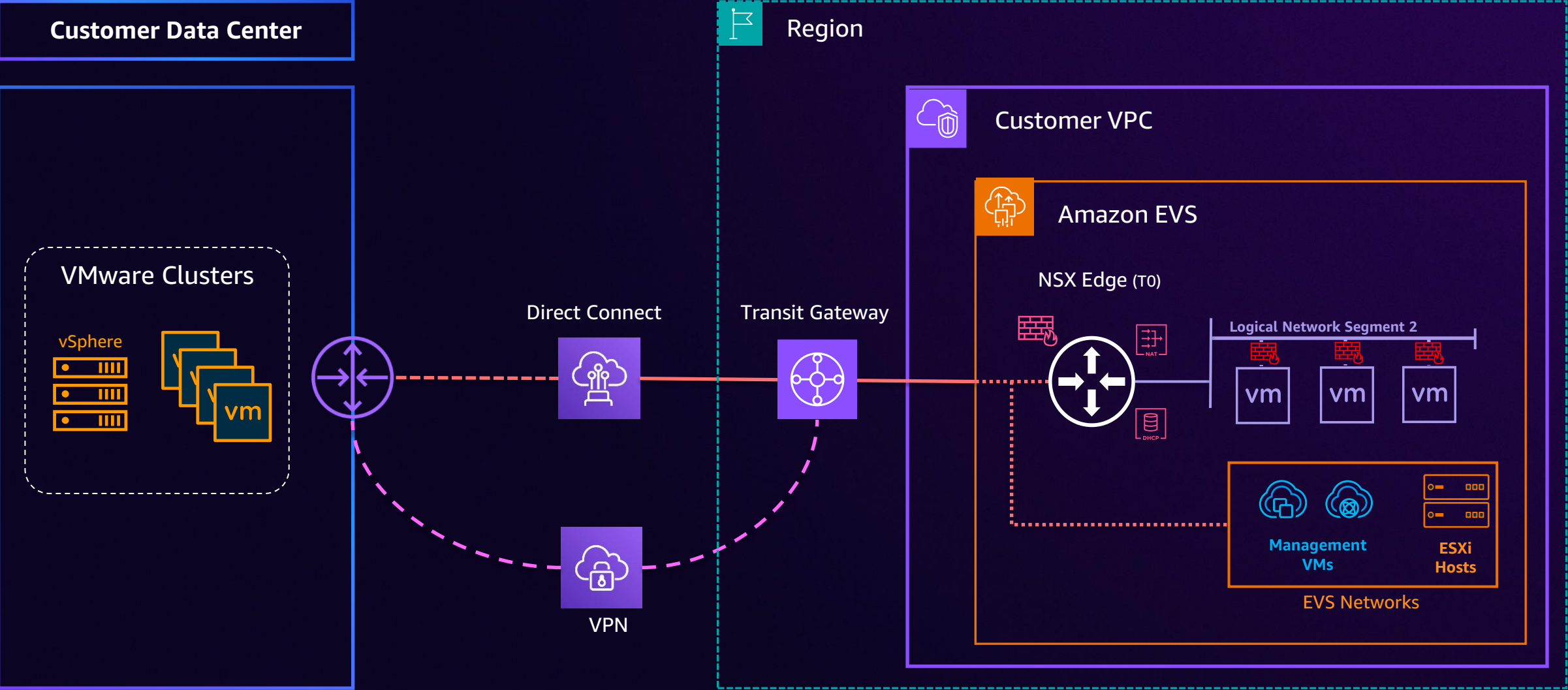vmware®

AWS networking building blocks

AWS Transit Gateway: Connects VPCs and on-premises networks through a central hub; it acts as a cloud router – each new connection is made only once

AWS Direct Connect: A cloud service that creates a dedicated network connection from your premises to AWS

Direct Connect gateway: A global service that supports communication between transit virtual interfaces (VIF) and transit gateways

Amazon EVS on-premises connectivity

Customer Data Center

Region

Customer VPC

Amazon EVS

VMware Clusters

vSphere

NSX Edge (T0)

Logical Network Segment 2

Direct Connect

Transit Gateway

VPN

Management VMs

ESXi Hosts

EVS Networks

Amazon EVS building blocks

A virtualization environment is a logical container for all the resources related to a VCF deployment.
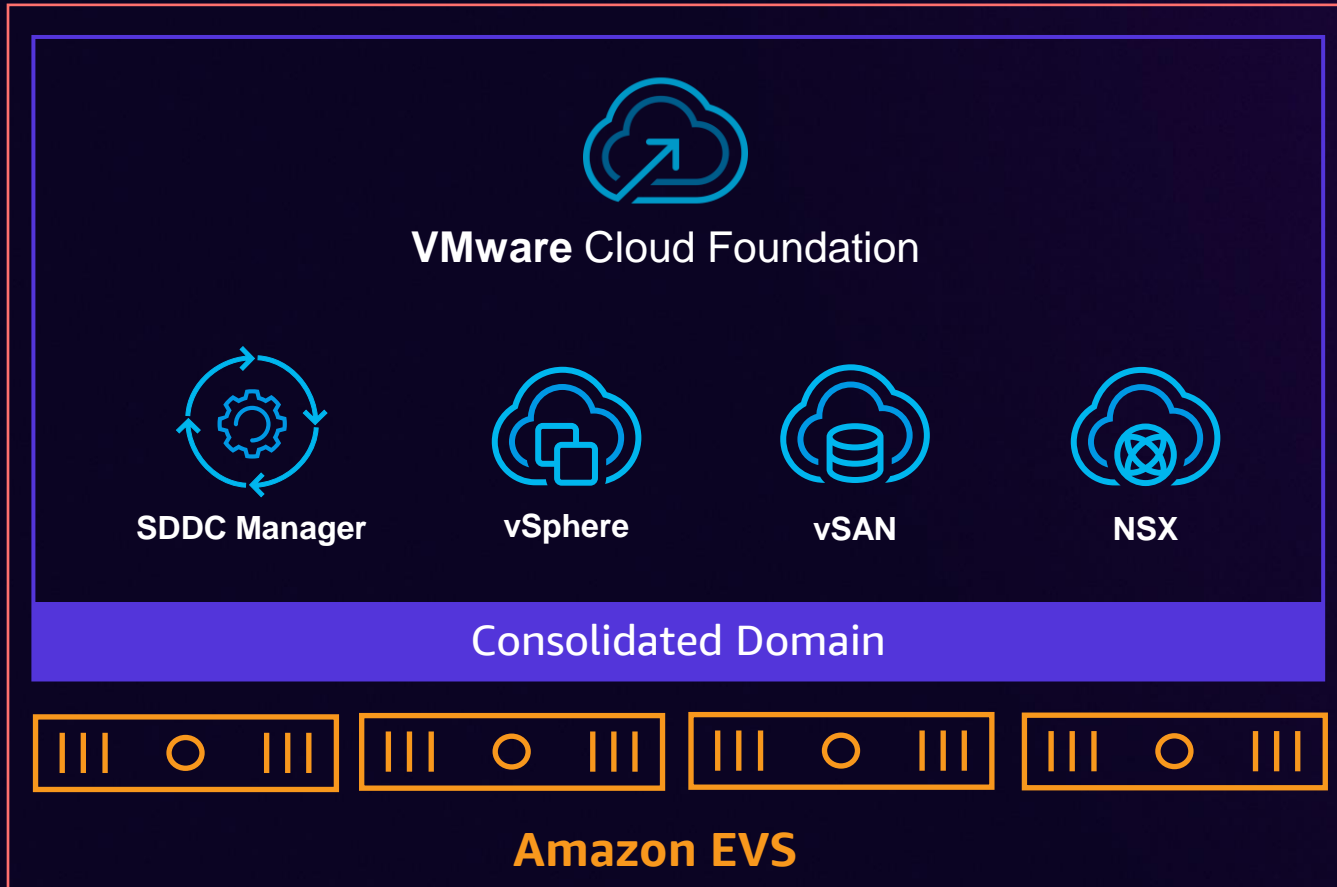
A host group defines network and server settings that the service uses to deploy hosts.

Amazon EVS runs on dedicated, single-tenant, bare-metal ESXi hosts.

EVS Environment

Host Group   Host Group

Host Host Host Host   Host Host Host Host
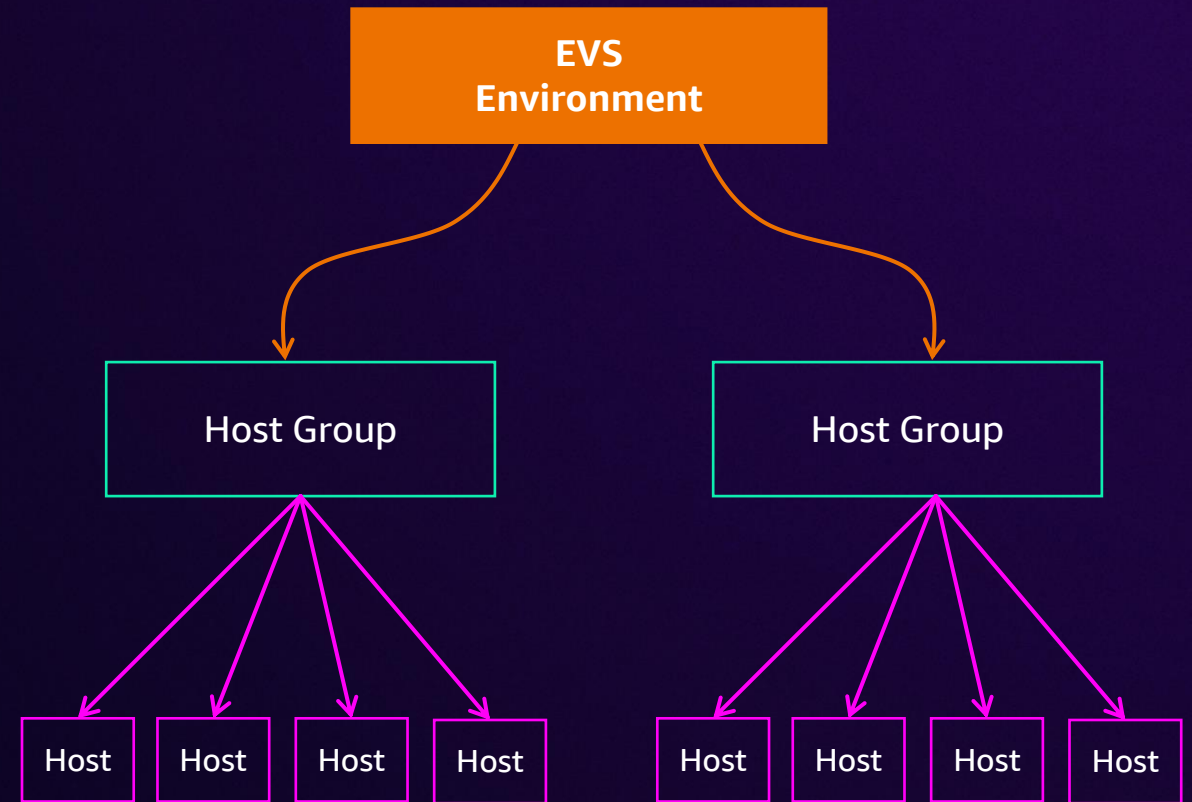
Amazon EVS software stack

VMware Cloud Foundation

SDDC Manager   vSphere   vSAN   NSX

Consolidated Domain

Amazon EVS

- **Host Groups:** Maximum of 1 host group at launch
- **Hosts**: Minimum of 4 x EVS Hosts based on VCF requirements
- **VMware Cloud Foundation**: Standard off-the-shelf VCF 5.2.1 deployed using VMware Cloud Builder
  - Only consolidated Amazon EVS domain is supported
  - vSphere, vSAN and NSX are configured automatically as part of VCF deployment

Want to learn more?

[VMware Elastic VMware Service Blog](#)

Service
Announcement

[VMware Elastic VMware Service Site](#)

Service Site

Thank you!

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