AWS re:Invent

NOV. 29 – DEC. 3, 2021 | LAS VEGAS, NV

ENT211

Modernizing VMware workloads with native AWS services

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Agenda

Intro to VMware Cloud on AWS and integration with AWS native services

Lab 1: Getting familiar with the VMware Cloud on AWS console

Lab 2: Using Amazon FSx for Windows File Server

Lab 3: Integrating Amazon EFS and Amazon S3

Lab 4: Using Application Load Balancer with your web application

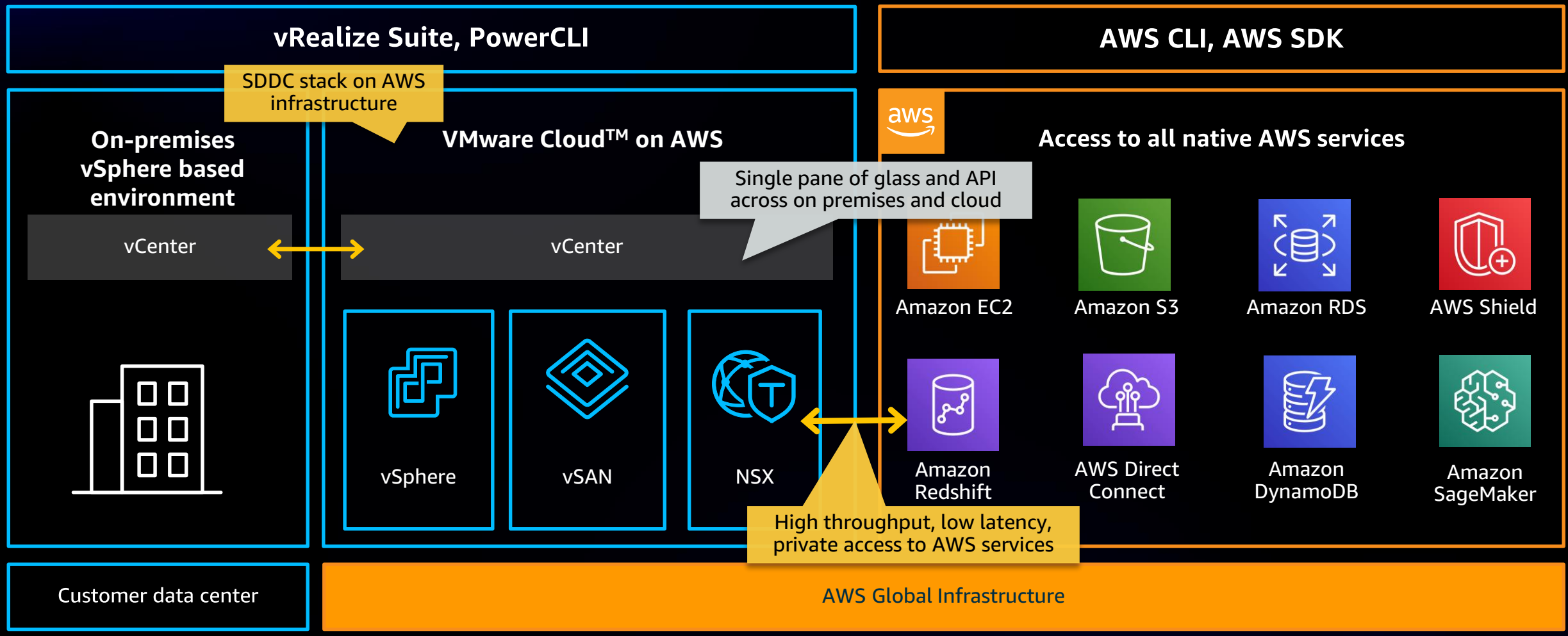
Lab 5: Configure AWS WAF for the web application (optional)

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Introduction to VMware Cloud on AWS

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Introduction to VMware Cloud on AWS



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Access VMware Cloud on AWS



VMware Cloud on AWS console

- ESXi host addition and removal
- Console user and role management
- Software-Defined Data Center (SDDC) networking and firewall management



vSphere client (HTML 5)

- Hybrid Linked Mode (HLM)
- Virtual machine (VM) administration
- VM storage policies
- Migrations and vMotion

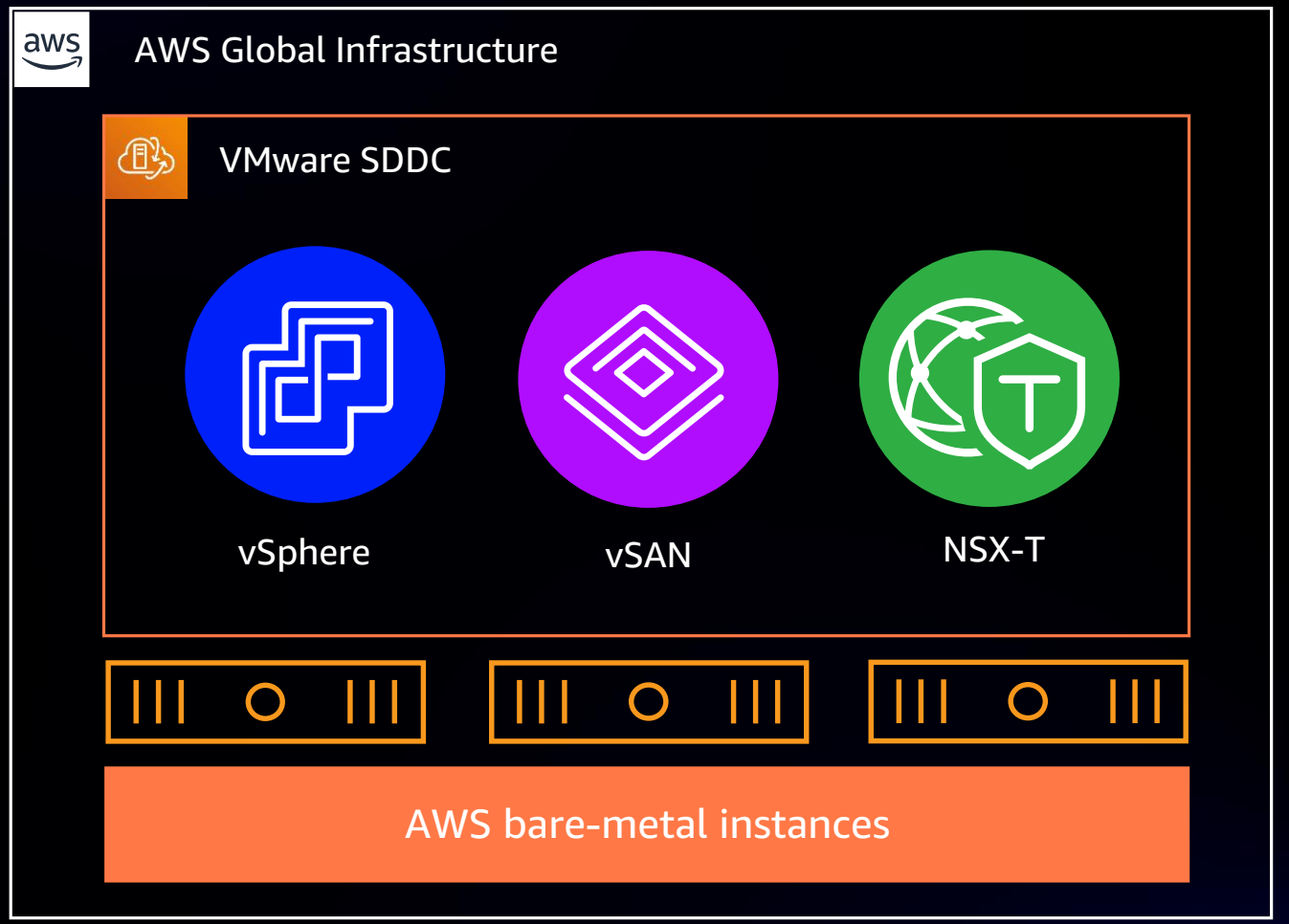


AWS Management Console

- Amazon VPC configuration
- Network and security configuration to access AWS services
- Manage AWS services

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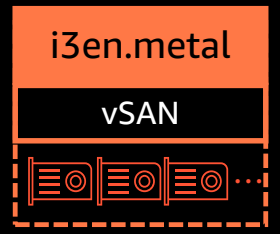
SDDC components



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Instance types

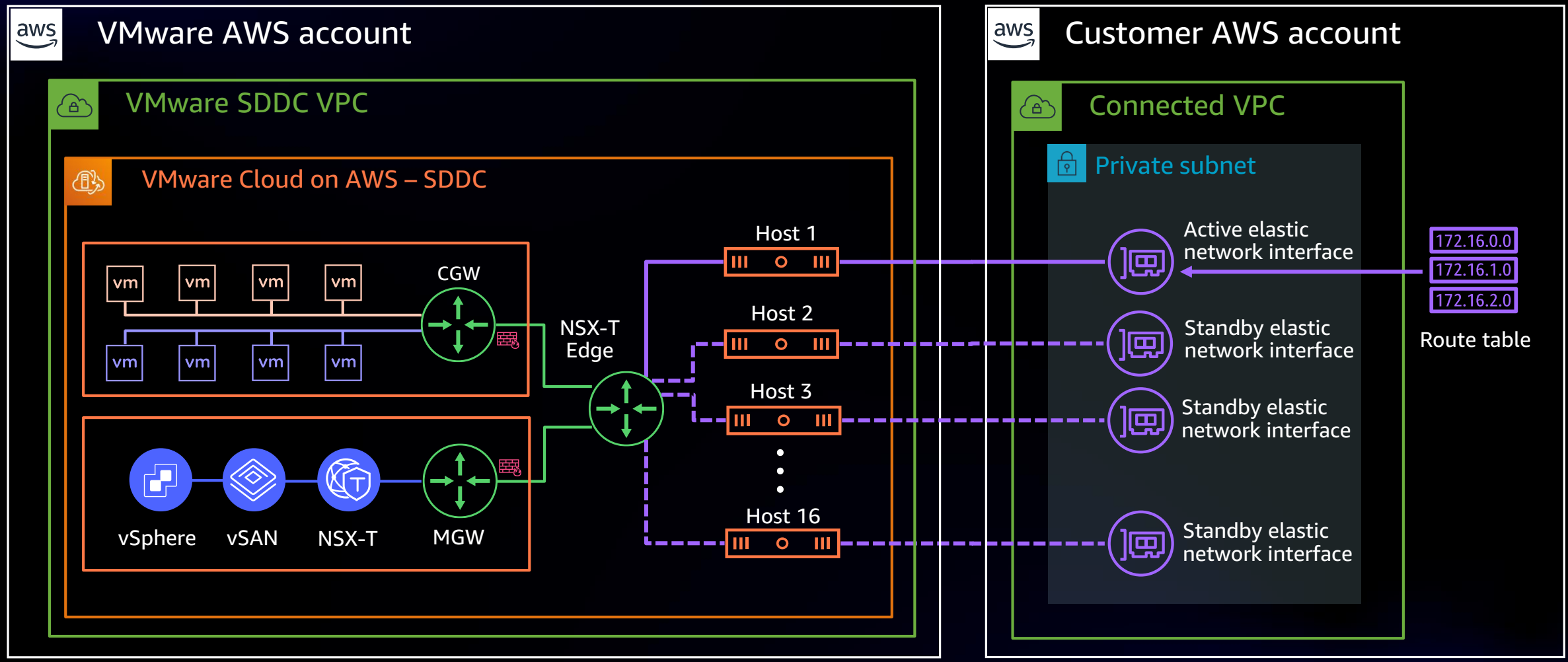




Typical use case	General purpose clusters	General purpose or storage bound clusters
Suitable for	Workloads with high transaction rates: • Databases used in OLTP • High-speed analytics	Workloads with high storage capacity needs, high transaction rates: • NoSQL databases • Data warehouse with high random I/O
Compute		
CPU type	Intel Xeon E5-2686	Intel Xeon Cascade Lake
CPU cores	36 Cores @ 2.3 GHz	48 Cores @ 2.5 GHz (Hyperthreading enabled by default)
Memory		
RAM	512 **GiB**	768 **GiB**
Storage		
Type	vSAN with local **NVMe All Flash**	vSAN with local **NVMe All Flash**
Capacity tier	~10.7 TiB (raw)	~45.8 TiB (raw)
Network		
Physical speed	25 Gbps	50 Gbps (has native encryption at NIC-level for east-west traffic)

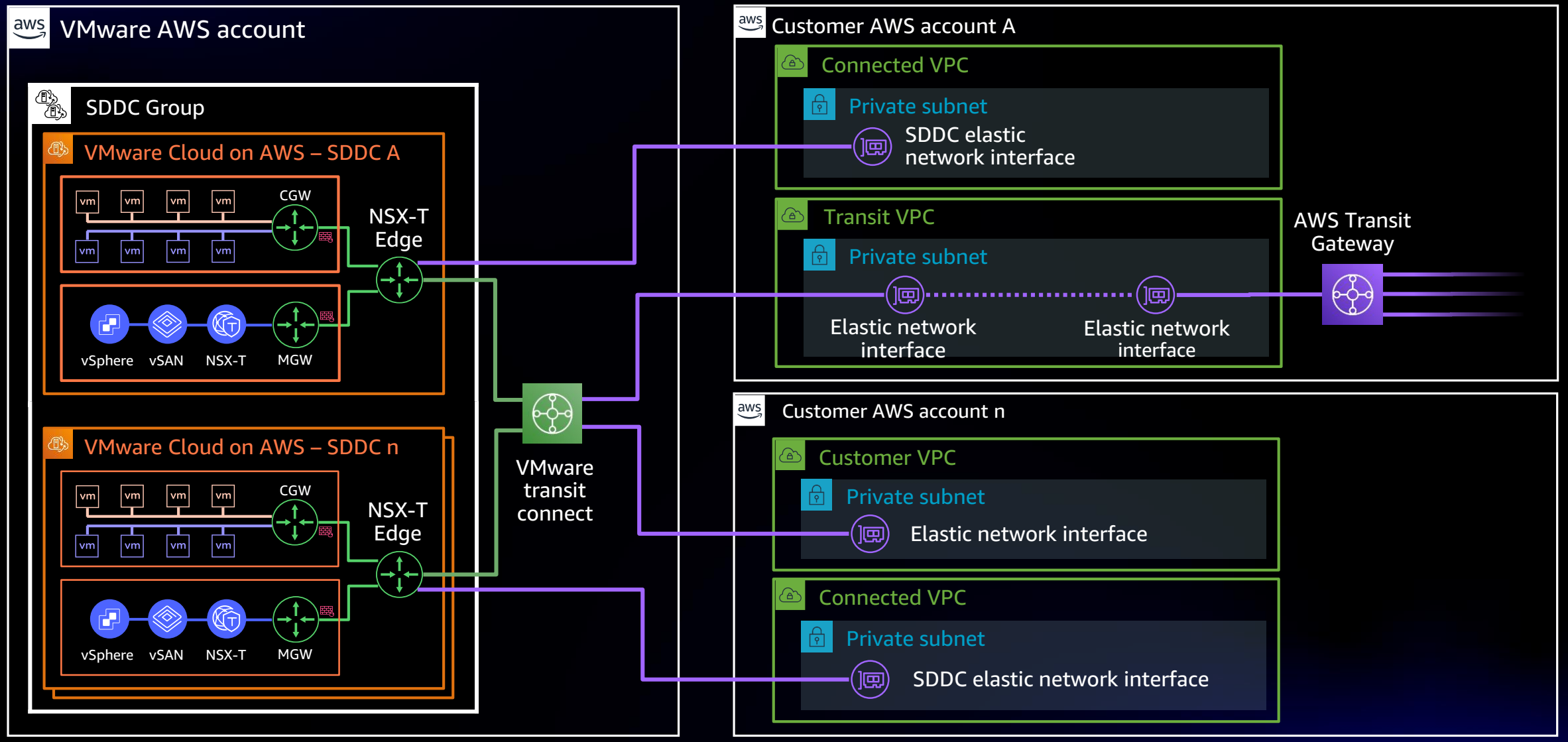
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AWS customer VPC connectivity



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Scaling AWS customer VPC connectivity



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Workshop labs

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Lab introductions

Lab 1: Getting familiar with the VMware Cloud on AWS console

Lab 2: Using Amazon FSx for Windows File Server

Lab 3: Integrating Amazon EFS and Amazon S3

Lab 4: Using Application Load Balancer with your web application

Lab 5: Integrating with AWS WAF (optional)

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Getting familiar with the VMware Cloud on AWS console

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Lab: Navigating the VMware Cloud console

Time for lab: 15 mins

Tasks

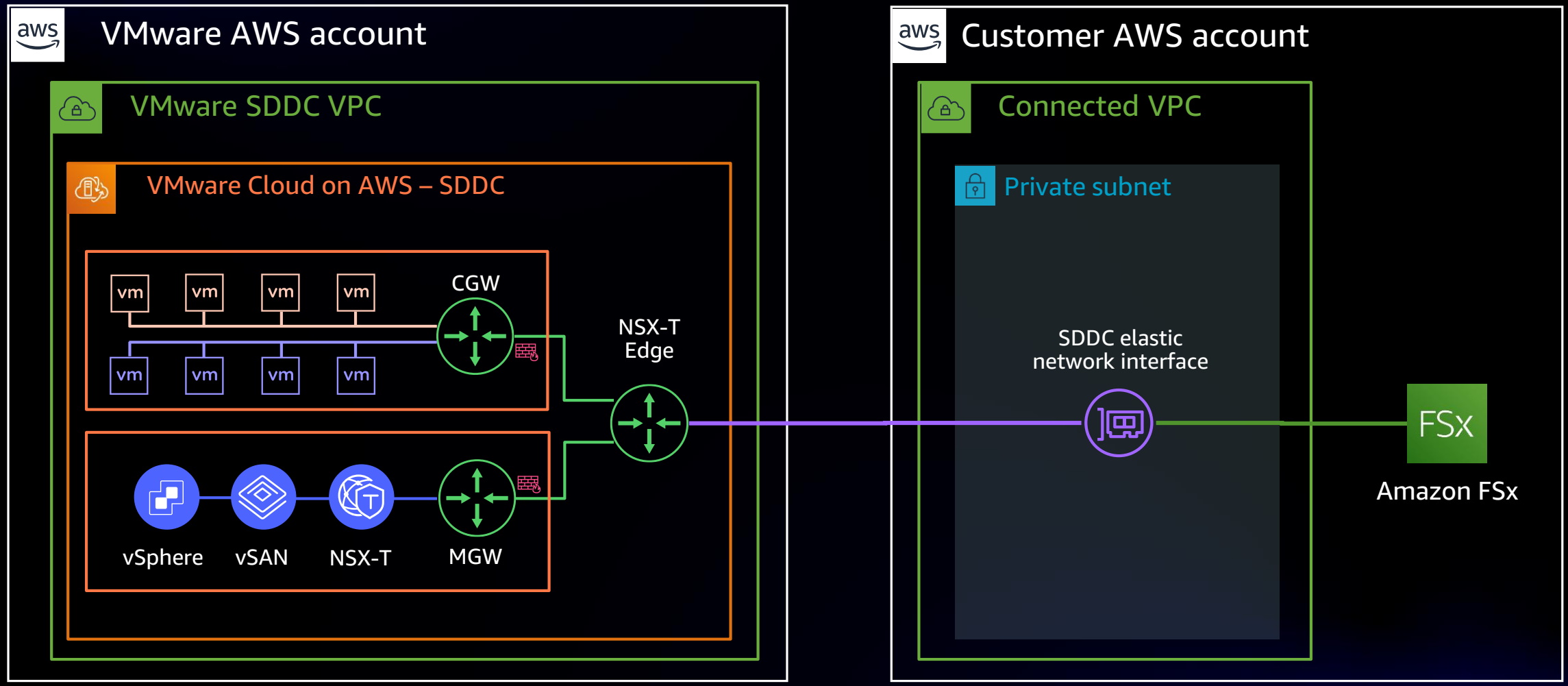
- Log in to the VMware Cloud console
- View the details of your SDDC
- Review the network configuration within the SDDC, including segments, firewall rules, public IPs, and connected VPC details
- Log in to your vCenter server and view your student virtual machine details

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Using Amazon FSx for Windows File Server

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Using Amazon FSx with virtual machines



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Lab: Using Amazon FSx with virtual machines

Time for Lab: 15 mins

Tasks

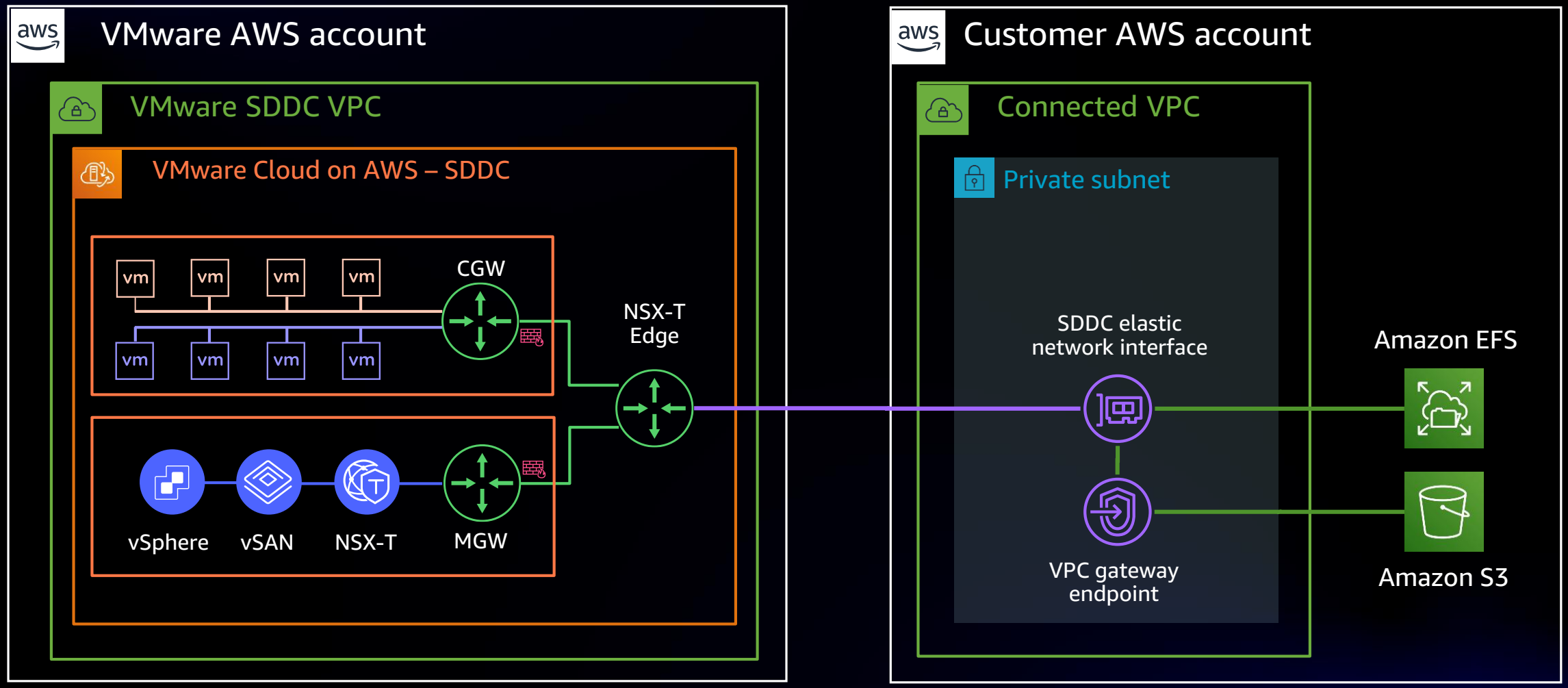
- Get details for the Amazon FSx for Windows File Server deployment in the AWS account
- Connect to your virtual machine using remote desktop gateway (RD gateway)
- Connect to the Amazon FSx share in your virtual machine

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Integrating Amazon EFS and Amazon S3

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Using Amazon EFS and Amazon S3



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Lab: Using Amazon EFS and Amazon S3

Time for Lab: 20 mins

Tasks

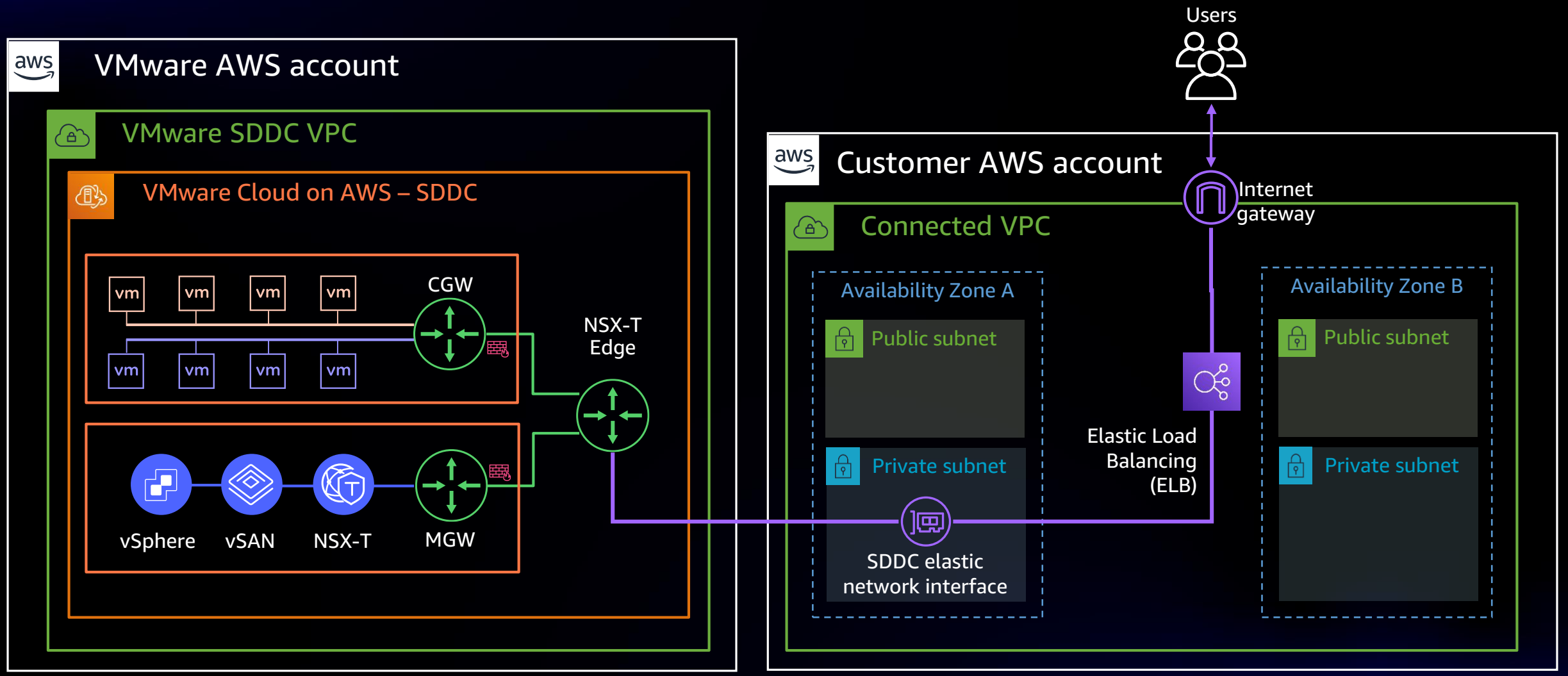
- Get details for the Amazon EFS file share from the AWS account
- Connect to your Linux virtual machine using SSH
- Mount the Amazon EFS file share into the virtual machine
- Upload the files from the virtual machine to Amazon S3 using AWS CLI

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Using Application Load Balancer with virtual machines

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Using Application Load Balancer with VMs



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Lab: Using Application Load Balancer with VMs

Time for Lab: 20 mins

Tasks

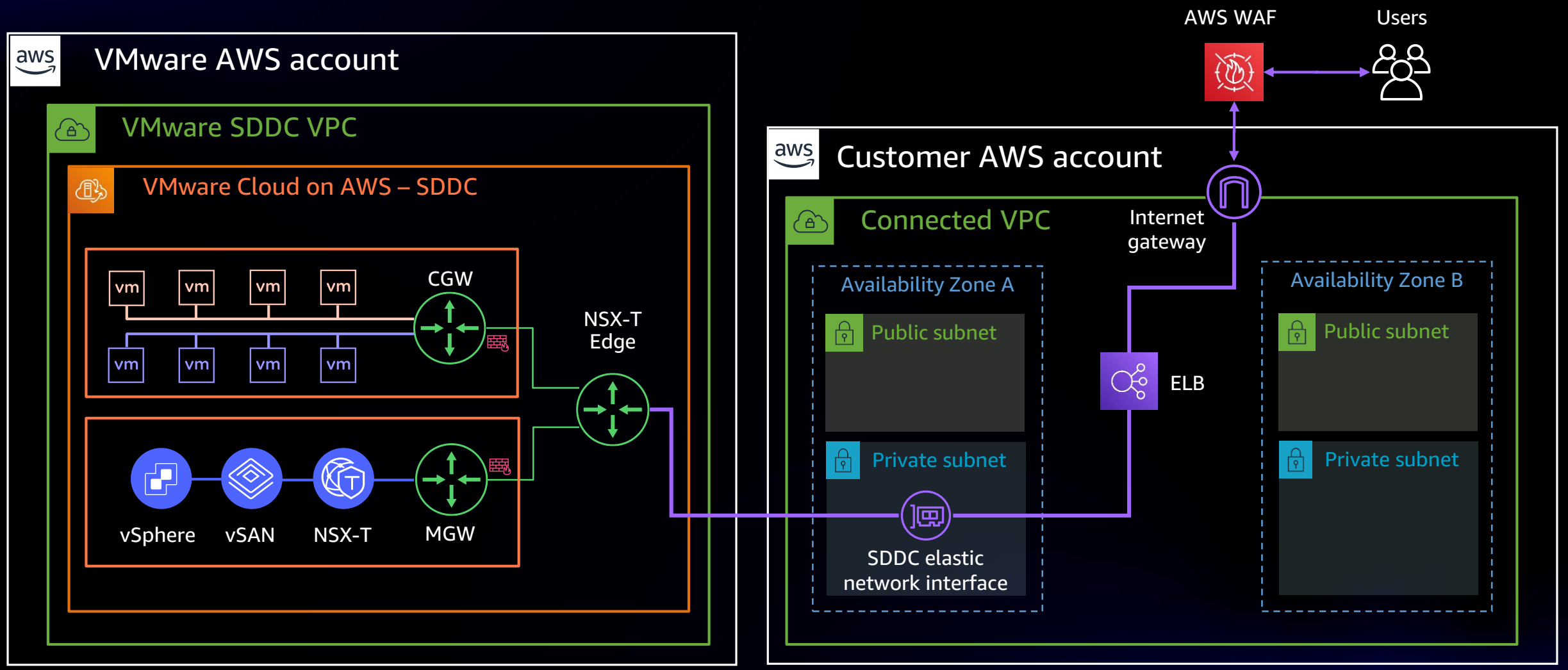
- Create a target group with the virtual machine IP addresses
- Deploy an Application Load Balancer in the AWS account
- Access your web application using the load balancer

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Integrating with AWS WAF

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Integrating with AWS WAF



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Lab: Integrating with AWS WAF

Time for Lab: 20 mins

Tasks

- Configure AWS WAF with the Application Load Balancer
- Test the AWS WAF rules

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VMware Cloud on AWS at re:Invent 2021

ENT225 – Go hybrid: Build and migrate with VMware Cloud on AWS
Workshop: Monday, Nov. 29, 10:00 a.m. – 12:15 p.m. at Alliance 307, Caesars Forum

ENT211 – Modernizing VMware workloads with native AWS services
Workshop: Monday, Nov. 29, 4:45 – 7:00 p.m. at Venetian B, The Venetian

This session

ENT201 – Is VMware Cloud on AWS a good fit for your organization?
Chalk talk: Monday, Nov. 29, 10:00 – 11:00 a.m. at Summit 217, Caesars Forum
Chalk talk: Wednesday, Dec. 01, 3:15 – 4:15 p.m. at Alliance 305, Caesars Forum

ENT311 – Migration and modernization at scale with AWS and VMware
Breakout session: Tuesday, Nov. 30, 1:15 – 2:15 p.m. at Lando 4305, The Venetian

aws

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Thank you!

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