



# VMware Cloud on AWS

## Overview

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Vmware Cloud on AWS

# Agenda

Brief overview refresher on VMC/AWS high level

Product updates worth sharing

What's coming down the road



Advanced analytics



Next-generation storefronts



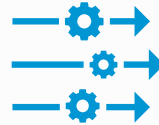
Self-service experiences



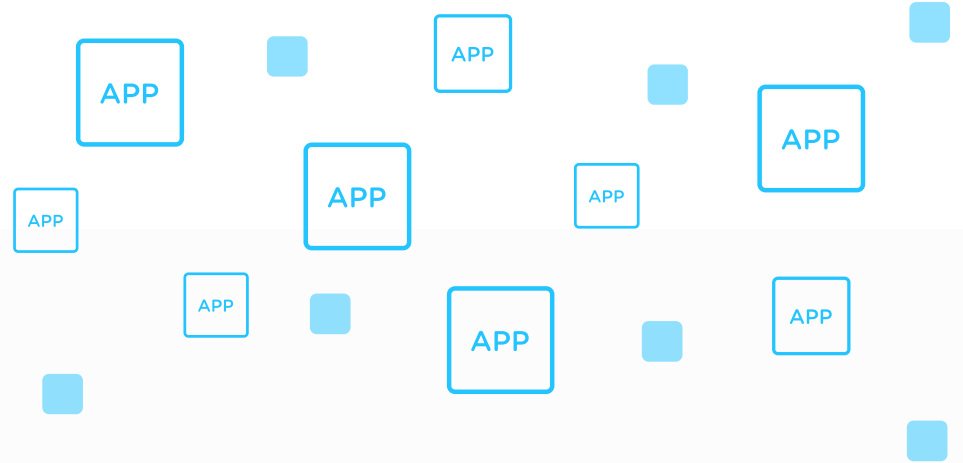
Data-Defined Business Processes



Industrial IoT

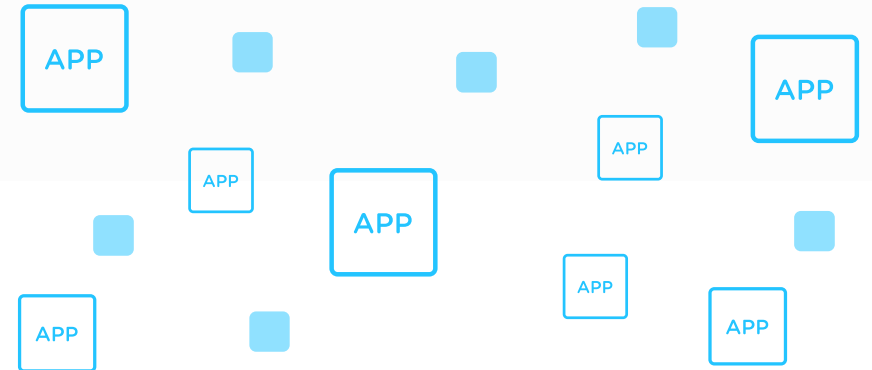


Business process automation



More applications and solutions will be deployed

in the next five years than in the last 40 years



# Modern business applications require flexibility

...enabled by a hybrid cloud that delivers consistent infrastructure and operations



# VMware and AWS partnering to deliver a seamlessly integrated hybrid cloud

Jointly engineered solution delivers the best of VMware and AWS for customers

vmware®

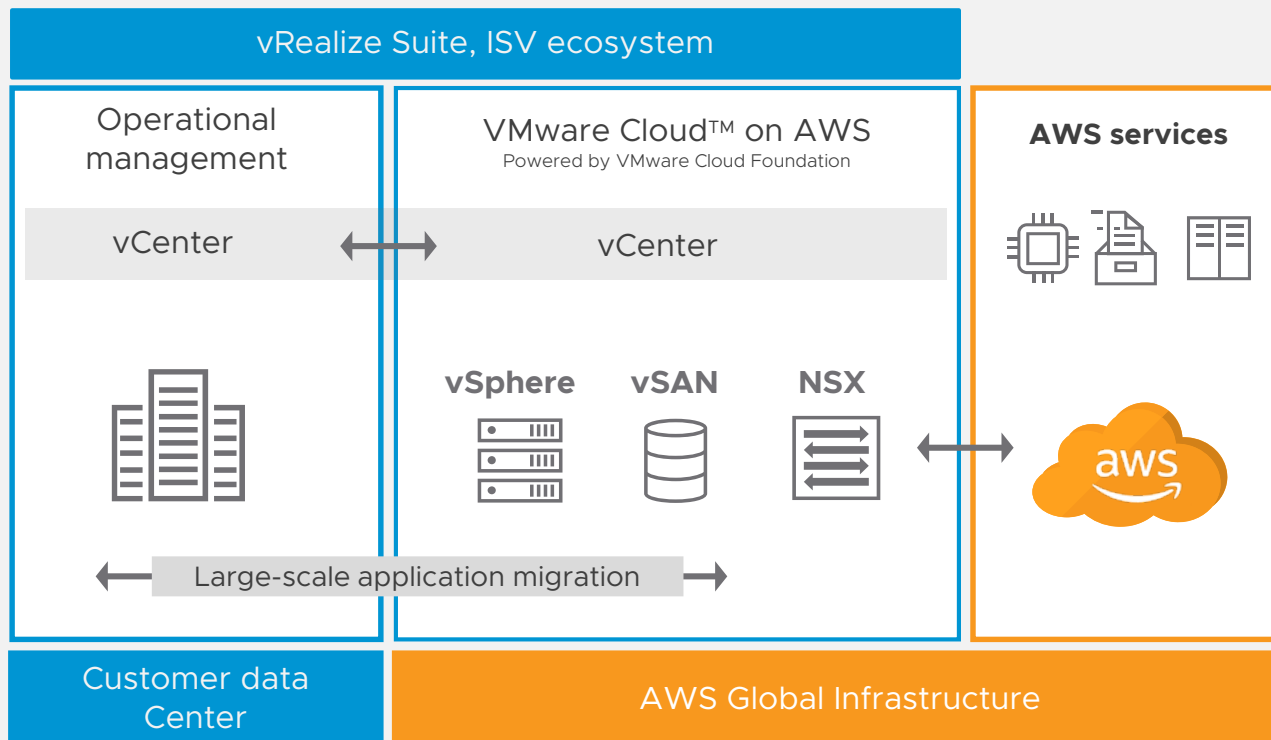
+

aws

- Leading compute, storage and network virtualization capabilities
- Support for a broad range of workloads
- De-facto standard for the enterprise DC

- Flexible consumption economics
- Broadest set of cloud services
- Global scale and reach

# VMware Cloud on AWS: Jointly engineered cloud service



- VMware SDDC running on AWS bare metal
- Sold, operated & supported by VMware and its partners
- On-demand capacity and flexible consumption
- Full operational consistency with on-premises SDDC
- Seamless large-scale workload portability and hybrid operations
- Global AWS footprint, reach, availability over time
- Direct access to native AWS services

# What Are You Trying to Accomplish?

## Migration

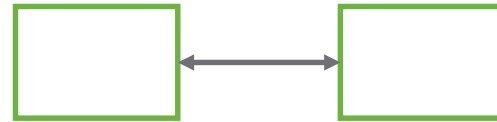


Application specific

Data center wide

Infrastructure refresh

## Workload mobility

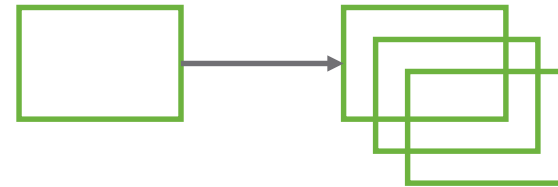


Footprint expansion /  
On-demand capacity

Virtual Desktops &  
Published Apps

Test/Dev

## Supplemental Capacity

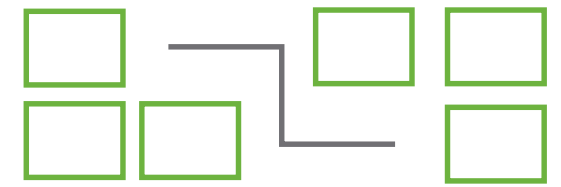


New / Replacement  
DR

New Applications

Expansion

## Augmentation



Application  
modernization

New application  
build-out

Hybrid applications

# What Problem Are You Trying to Solve?

VMware cloud on AWS production offerings

## Cluster

Restricted to a single AZ within a region

---

**99.9%** availability  
guarantee

---

Ideal for customers and workloads:

Balance risk with  
cost

Suitable for  
most workloads

## Stretched Cluster

Restricted to a single region

---

**99.99%** availability  
guarantee

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Ideal for customers and workloads:

Business  
Critical  
Workloads

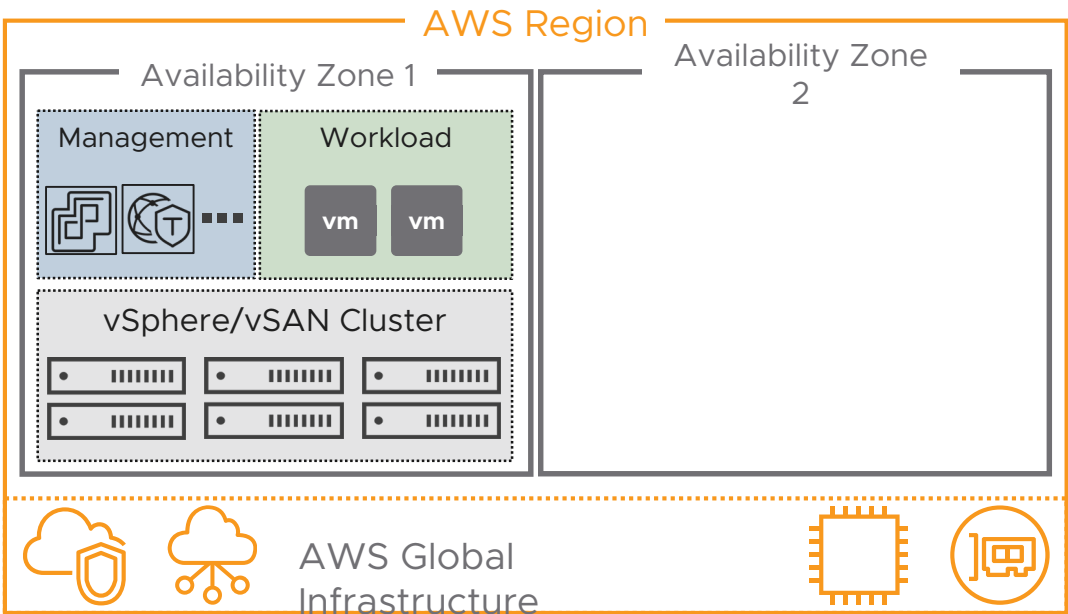
Abstract  
infrastructure  
Volatility



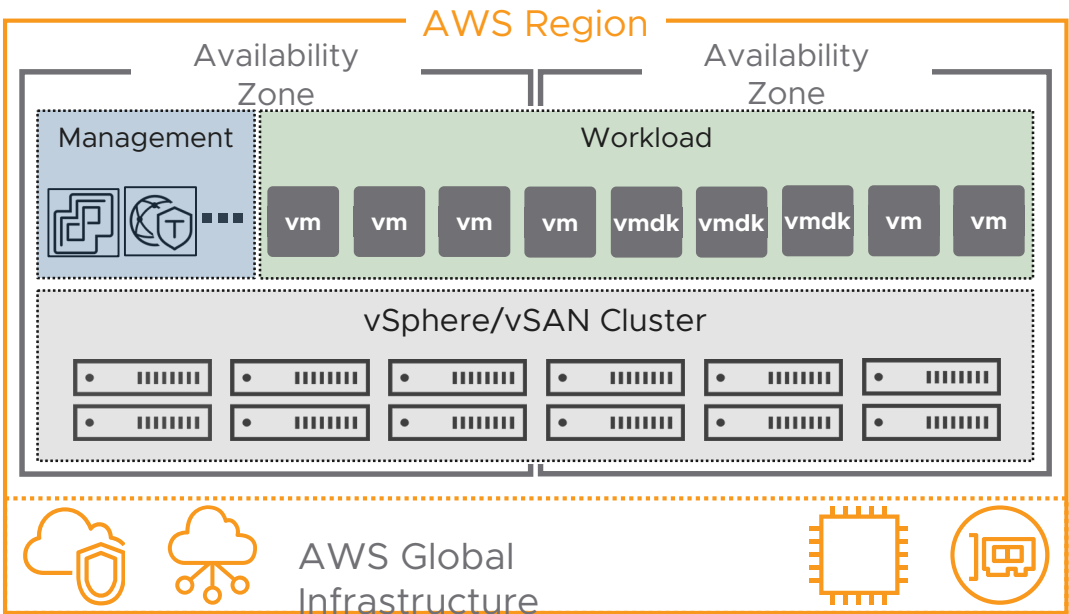
# What Problem Are You Trying to Solve?

VMware cloud on AWS production offerings

## Cluster

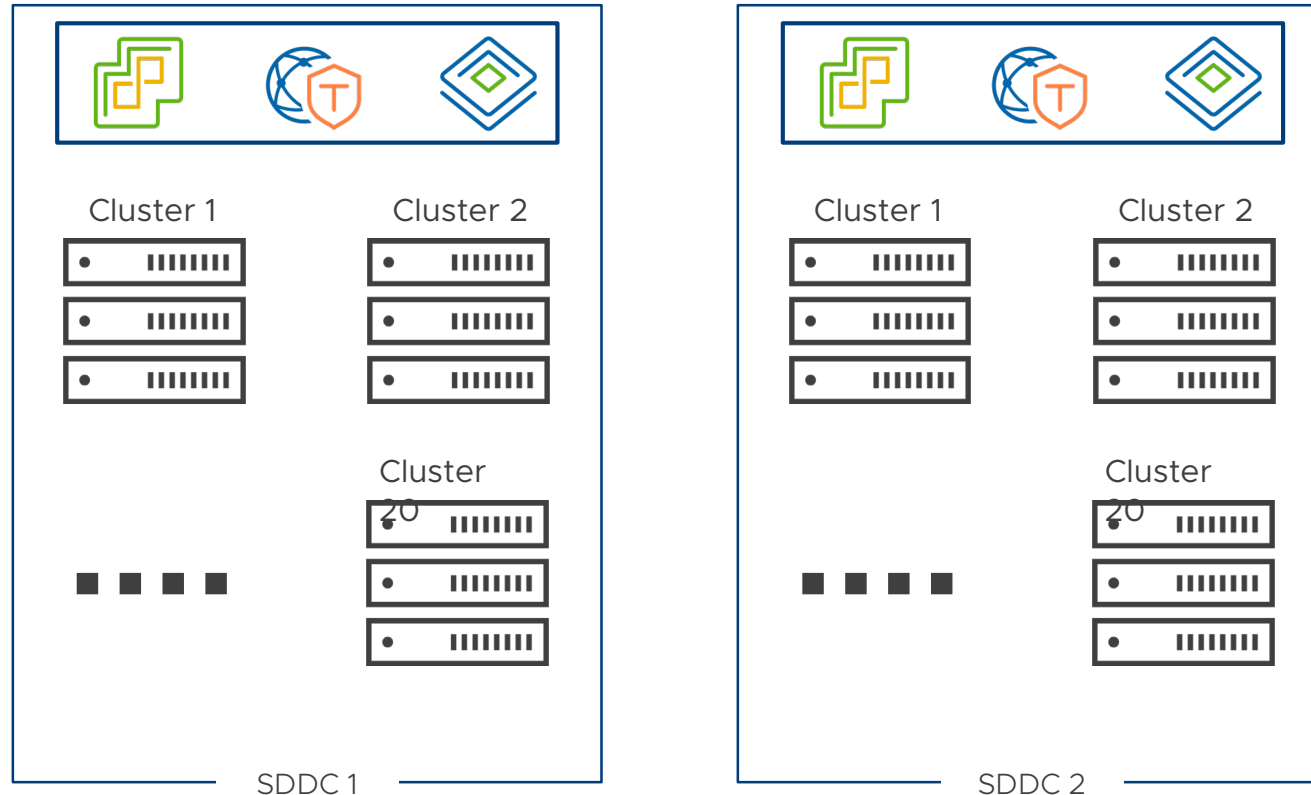


## Stretched Cluster



# Cloud SDDC

VMware Cloud on AWS



Customer Org

- Two SDDCs per Org\*
- 20 vSphere Clusters per SDDC
- 2 – 16 hosts per vSphere Cluster
- Cluster 1 contains Management VMs
  - vCenter Server
  - NSX-T
  - HCX
  - Site Recovery

<http://vmwa.re/vmc-configmax>

# AWS Bare-metal Host Instance Types



Typical Use Case	General purpose Clusters	Storage bound clusters
Suitable for	Workloads with high transaction rates <ul style="list-style-type: none"> <li>Databases used in OLTP</li> <li>High-speed analytics</li> </ul>	Workloads with high storage capacity needs and high transaction rates. E.g., <ul style="list-style-type: none"> <li>NoSQL Databases</li> <li>Distributed File Systems</li> <li>Data Warehouse with high random I/O</li> </ul>
<b>Compute</b>		
CPU Type	Intel® Xeon® Broadwell	Intel® Xeon® Cascade Lake
CPU Cores	36 Cores @ 2.3Ghz	48 Cores @ 2.5Ghz Hyperthreading enabled by default
<b>Memory</b>		
RAM	512 GiB	768 GiB
<b>Storage</b>		
Type	vSAN with Local <b>NVMe Flash</b> <b>Compression and Deduplication enabled</b>	vSAN with Local <b>NVMe SSD (checksum only)</b> <b>Compression and Deduplication disabled</b>
Capacity Tier	10.3 TiB (raw storage capacity)	~45 TiB (raw storage capacity)
<b>Network</b>		
Physical Speed	25 Gbps	25 Gbps w native encryption at NIC-level for east-west traffic

# 2-host cluster with i3.metal

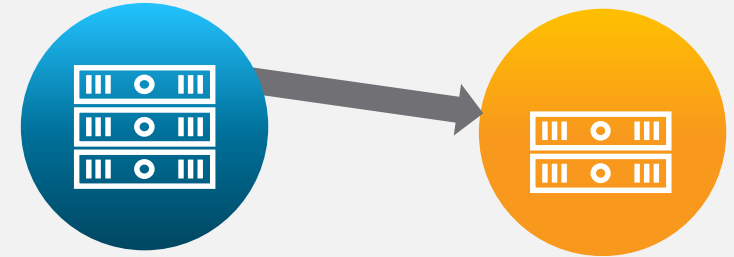
## For production environments

Further broadens access of the service and reduces minimum cluster size requirement for persistent environments

Supports:

- Storage policies: RAID-1 and FTT 1
- EDRS Default Storage Scale-Out Policy only
- Easy scale up from 2 to 3 hosts using add host functionality
- VMware Site Recovery
- Horizon 7 VDI workloads
- Offered with production SLA

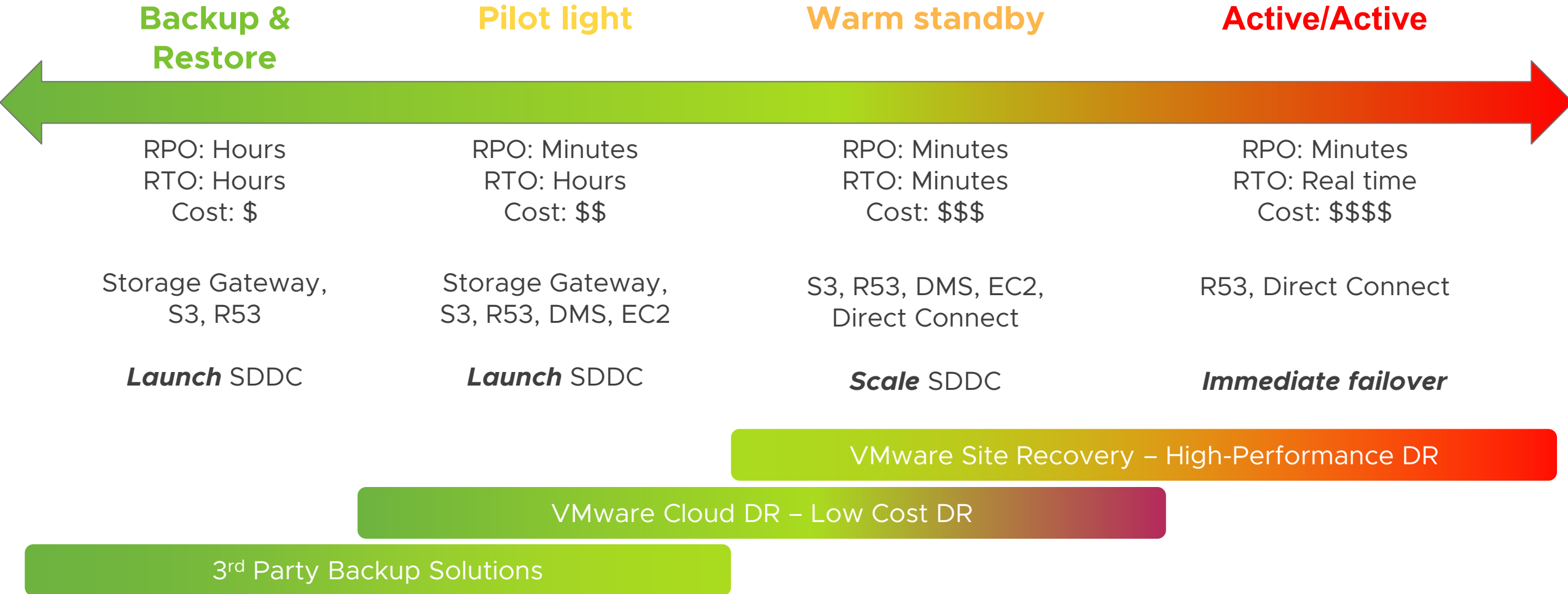
### i3.metal Production Cluster Minimum



**33%** lower cost of getting started with production i3.metal single-AZ VMware Cloud on AWS environments

# Multiple levels of DR support

...across a spectrum of complexity and time.

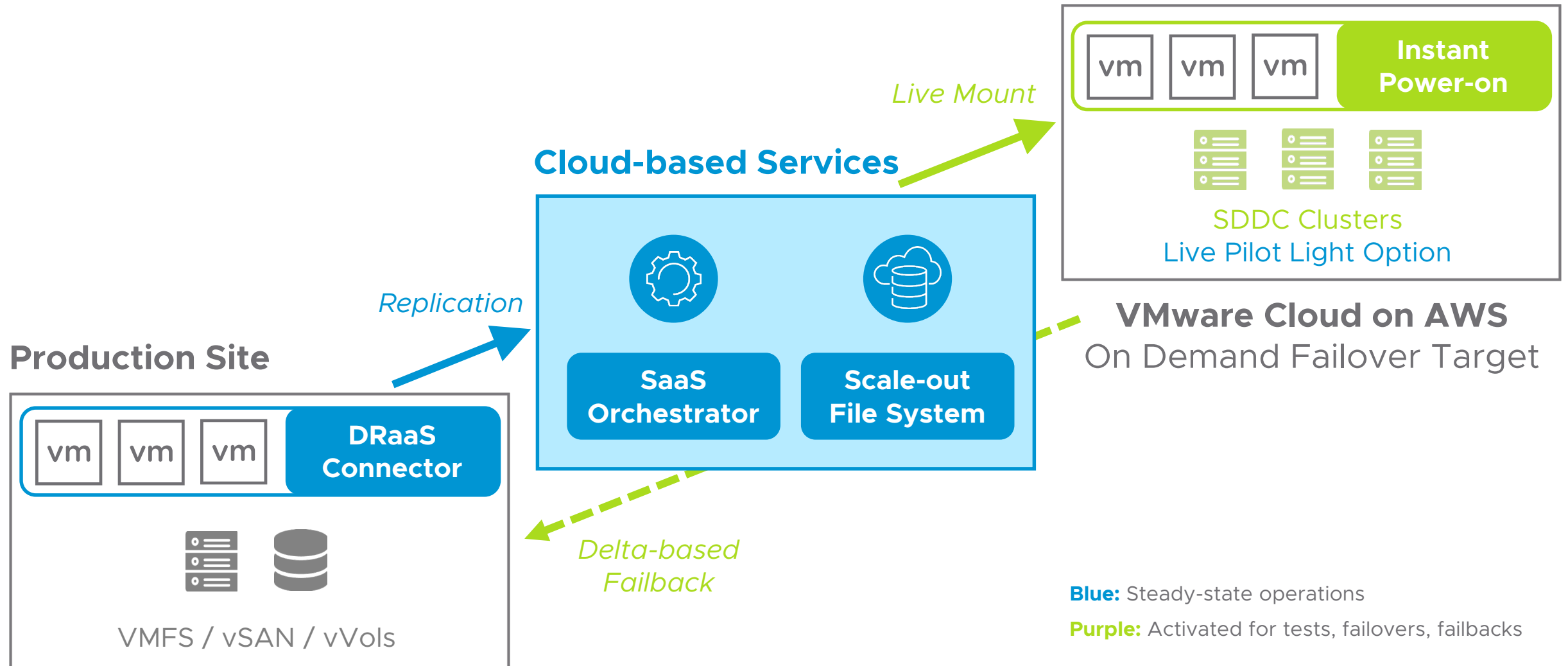


# Recent Updates

# VMware Cloud Disaster Recovery: On-Demand DRaaS

*On-demand disaster recovery, delivered as an easy-to-use SaaS solution, with cloud economics*

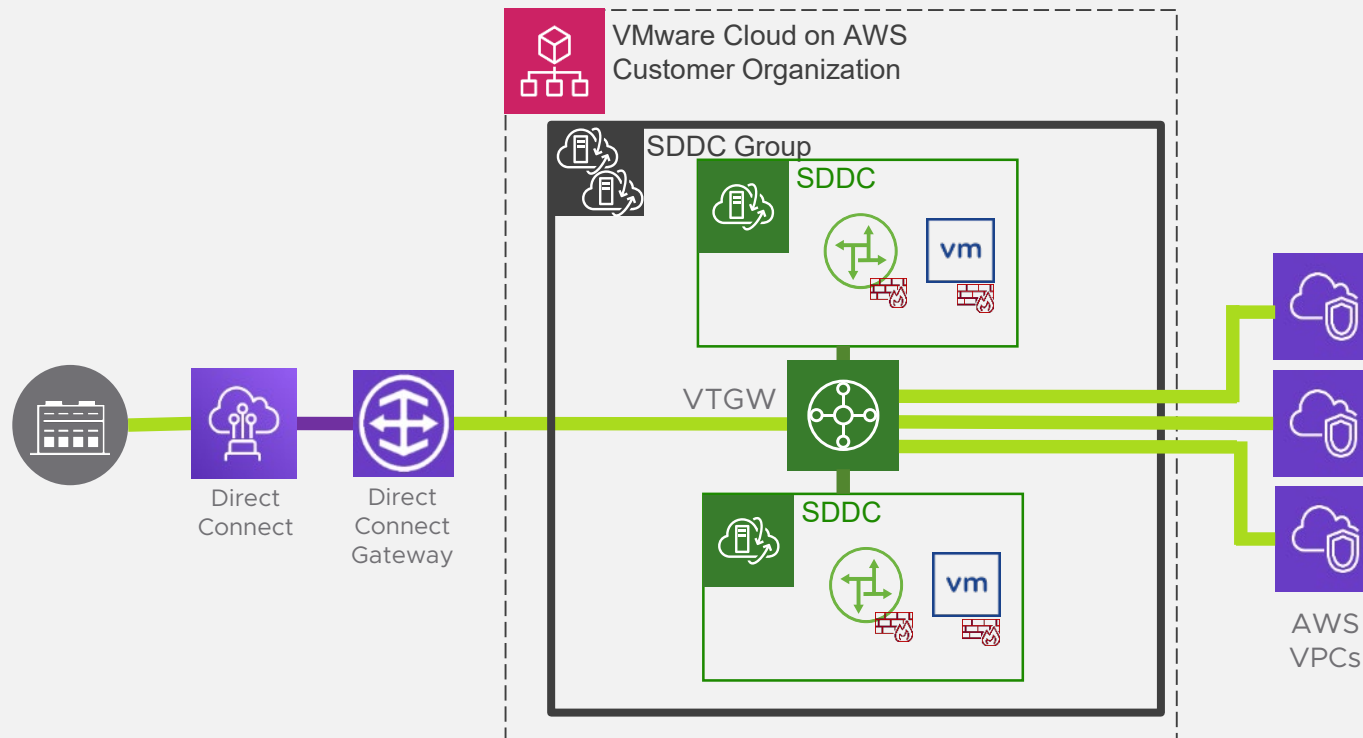
Availability  
Targeted\* for Q3 FY21



# VMware Transit Connect™

Simplifying connectivity at scale

Available



VMware-managed

Operationally simple with automated provisioning and controls

Scalable design

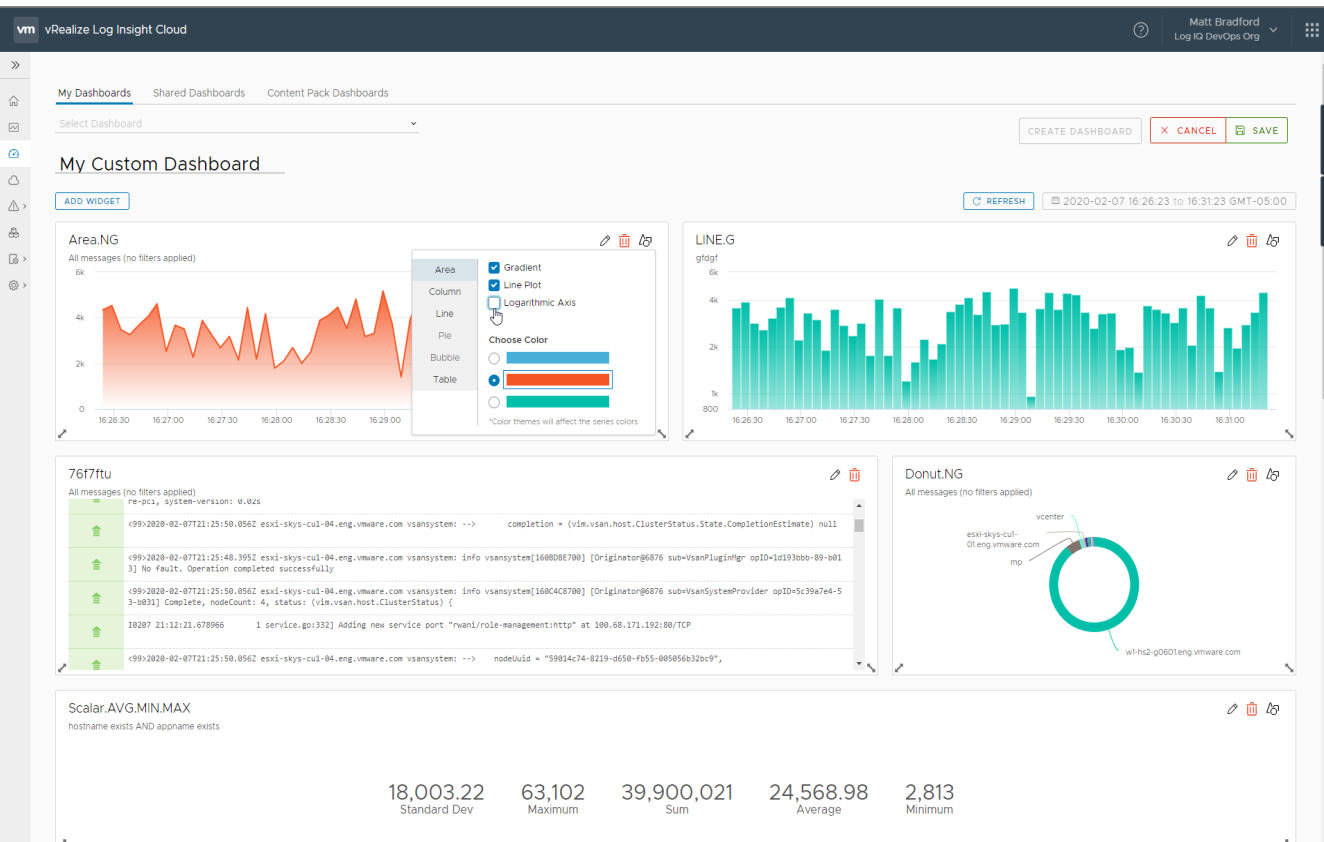
High-bandwidth, low latency and resilient connectivity



# vRealize Log Insight Cloud enhancements

## What's new in FYQ3

Available



### Refreshed customizable user experience:

- Ability to drag and drop queries or widgets to build custom views of dashboard workbench

### Increased ease of use:

- New dashboard management action pane that enables users to search for logs/sources based on native, custom filtering and tagging strings
- URL-based dashboard-sharing for increased collaboration across teams

### More insight: Extensibility into OpenShift and AWS logs

# Coming Soon

# vRealize Automation Cloud for VMware Cloud on AWS

What's new in FYQ3



vRealize Automation Cloud



Release Pipelines



Cloud Catalog &  
Policy Definitions



Templating and Extensibility



## Infrastructure-as-Code with VMware Cloud Templates

Use VMware Cloud Templates Infrastructure-as-Code to define and deploy high abstraction, repeatable, readily consumable workloads based on VMware Cloud on AWS infrastructure.

## VMware Cloud on AWS as-a-service with Terraform Service

Setup and consume VMware Cloud on AWS environments with consistent policies and consumption interface with the new Terraform Service in vRealize Automation Cloud.

## Approvals Policies

Gate actions for critical workloads and ensure proper resource allocation in your VMware Cloud for AWS environment with approval policies. Approvals for post-provisioning (Day 2) actions on any catalog item including native VMware Cloud Templates for VMware Cloud on AWS, imported OVAs and Code Stream pipelines are added in this release.

## Pricing for VMware Cloud on AWS

Acquire pricing for new VMware Cloud on AWS deployments and track costs for existing ones by applying vRealize Operations Cloud-based rate cards.

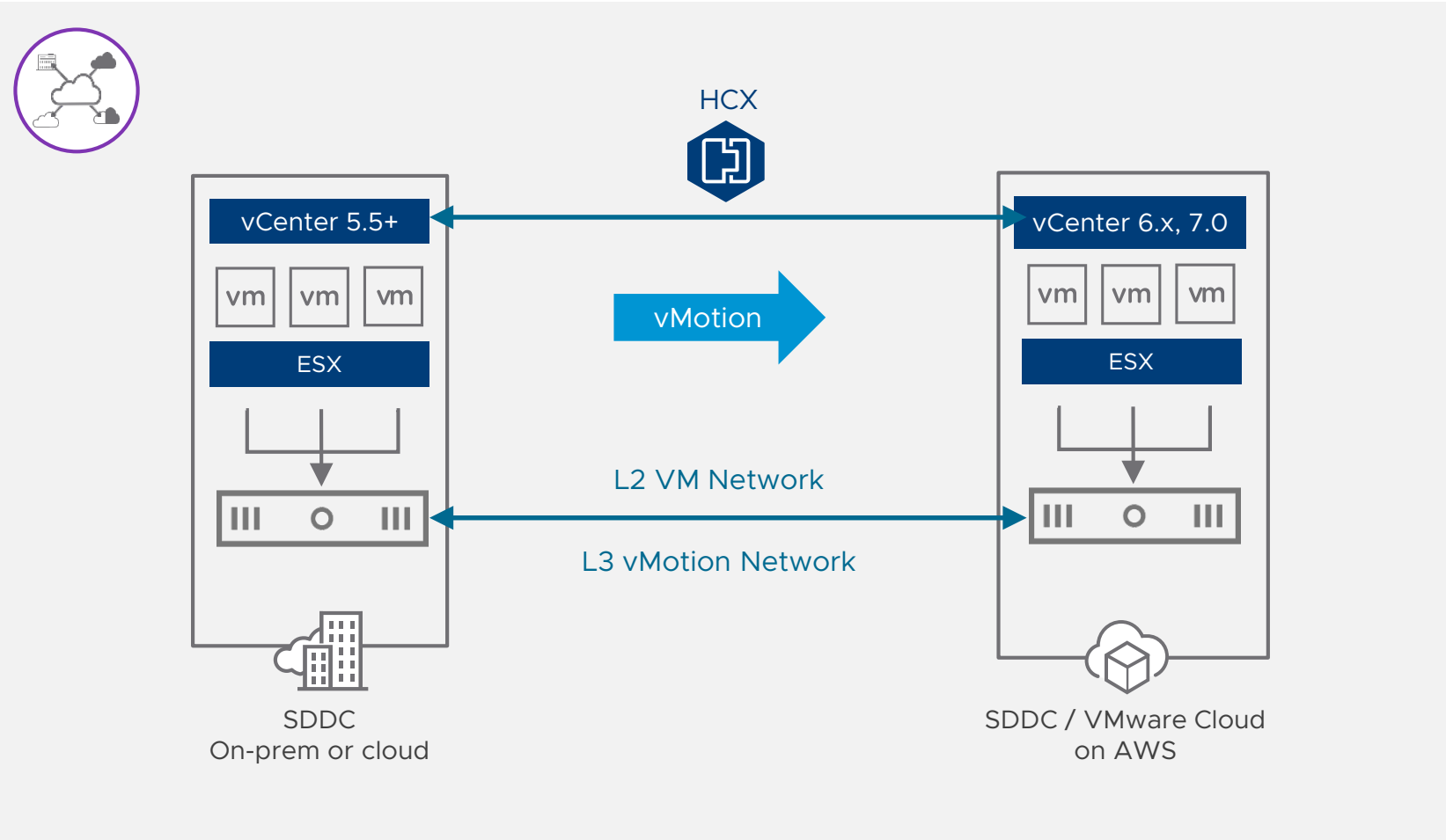
## Custom Role Based Access Control (RBAC)

Define tailored roles to manage, consume or view-only your VMware Cloud on AWS environment, to adapt to your organization's specific needs.

# HCX Replication Assisted vMotion

Live large-scale bulk migration with zero downtime

Availability  
Targeted\* for Q3'FY21



Large-scale, parallel live migrations

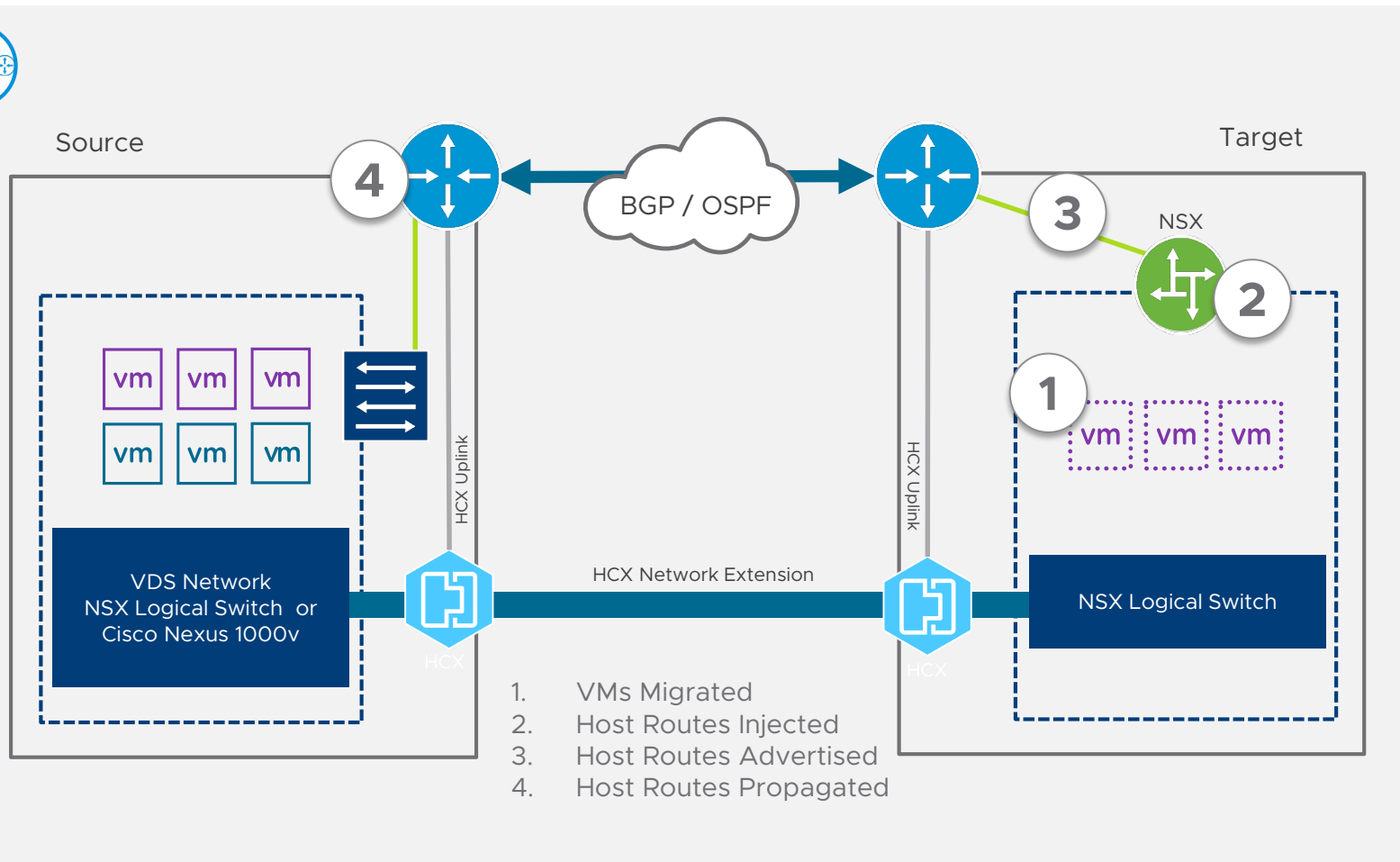
Continuous replication

Specifiable switchover window

# HCX Mobility Optimized Networking

Automatically route migrated VMs locally

Availability  
Targeted\* for Q3'FY21



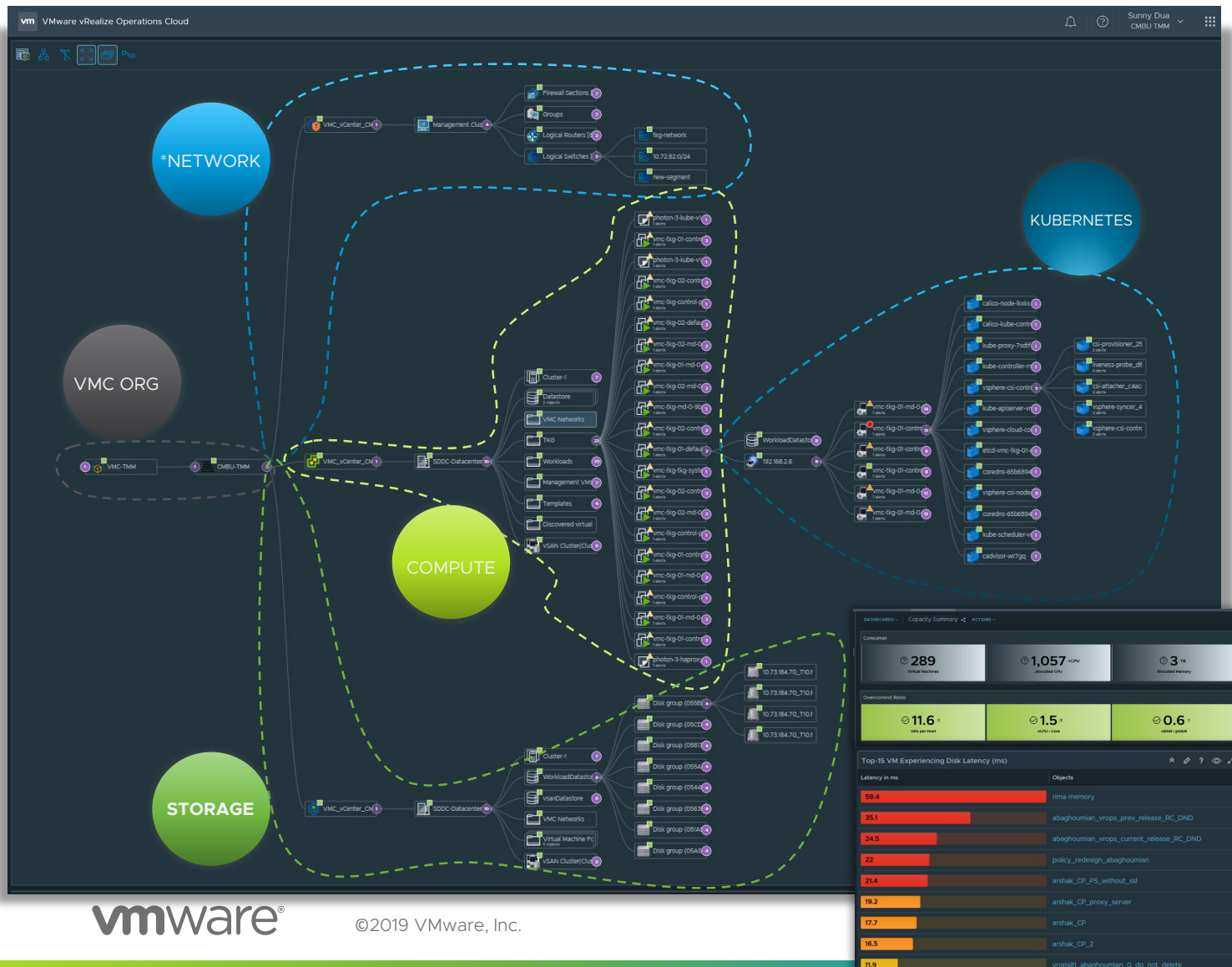
Route traffic optimally for HCX-migrated VMs

Avoids hairpin/trombone effect

# vRealize Operations Cloud enhancements

## What's new in FYQ3

Availability  
Targeted\* for Q3 FY21



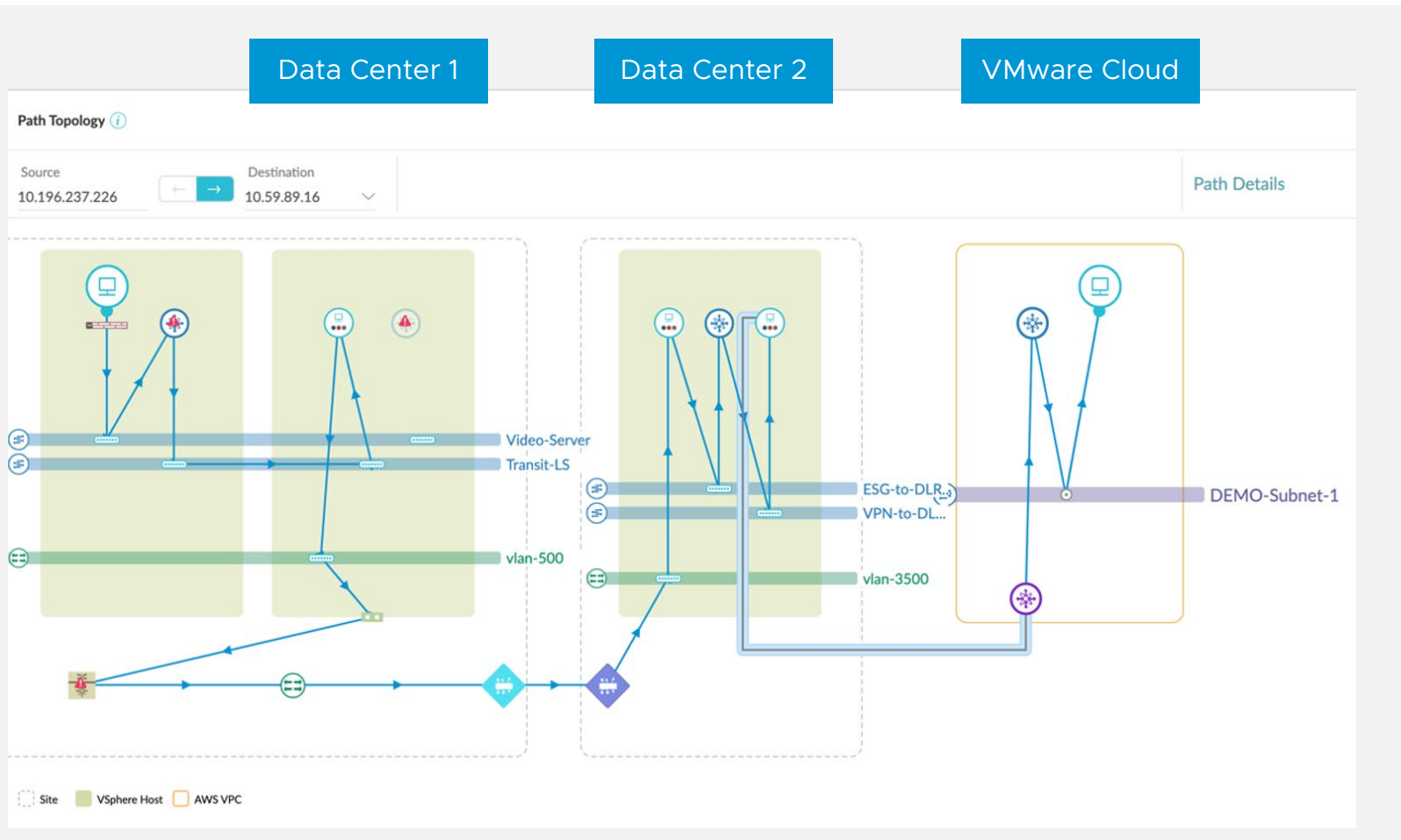
- **Near real-time monitoring** at a 20 second granularity.
- Enhanced metrics for **Configuration Maximums** and **Packets Per Seconds**.
- Enhanced **SDDC relationships** to monitor the health of NSX-T network components.
- Support for Kubernetes cluster discovery with **Tanzu Kubernetes Grid** and **OpenShift** support on VMware Cloud.
- **Pricing API integration** with vRealize Automation Cloud for chargeback.
- Integration with Horizon VDI / Apps with vROPS Cloud.
- Full line of sight with **APM tool integration** (AppDynamics, Datadog, Dynatrace & New Relic).

\*Any information regarding the pre-release of VMware offerings, future updates or other planned modifications is subject to ongoing evaluation by VMware and is subject to change.

# vRealize Network Insight Cloud

## Network Visibility from VMware Cloud on AWS to Hybrid Cloud Connections

Availability  
Targeted\* for Q3 FY21



- VMware Cloud on AWS users can analyze Round Trip Time (RTT) latency, and receive/transmit count metrics to ensure SLAs
- New APIs to fetch metrics and data at a 5-minute interval rate (improved from 30 minutes) to better monitor and troubleshoot VMware Cloud on AWS environments
- Visibility of stretched L2 VLAN connections (also known as Data Center Interconnect DCI) for VM flow correlation between VMware Cloud on AWS SDDC to other remote data centers with HCX
- VMware Cloud Provider Hub Availability for Service Providers

# vRealize Orchestrator support for VMware Cloud on AWS

What's new in FYQ3

Availability  
Targeted\* for Q3 FY21



## Modern workflow automation

VMware vRealize Orchestrator is a modern workflow automation platform that improves IT agility and reduces operational risk by automating the execution of manual IT tasks and processes.

## vRealize Orchestrator is now available for VMware Cloud on AWS

vRealize Orchestrator can be installed and operated within VMware Cloud on AWS environments via the vSphere plugin



# VMware Cloud on AWS

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