CXS1206BCN

vmware EXPLORE

VMware Cloud Provider Platform

End-to-End Architecture

Abdullah Abdullah

Staff Consulting Architect, VMware PSO

#vmwareexplore #CXS1206BCN

Agenda

The Cloud Provider Platform

Tenant Use Cases & Architecture

Q & A

© 2023 VMware, Inc.

Presenter

Abdullah Abdullah

Staff Consulting Architect

vmware CERTIFIED DESIGN EXPERT #270

Ambassador OFFICE OF THE CTO

vmware vEXPERT

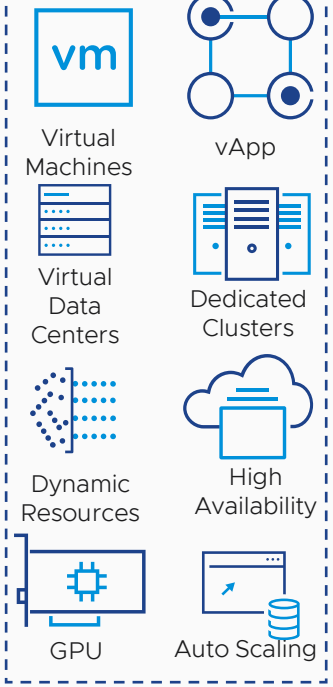
© 2023 VMware, Inc.

The Cloud Provider Platform

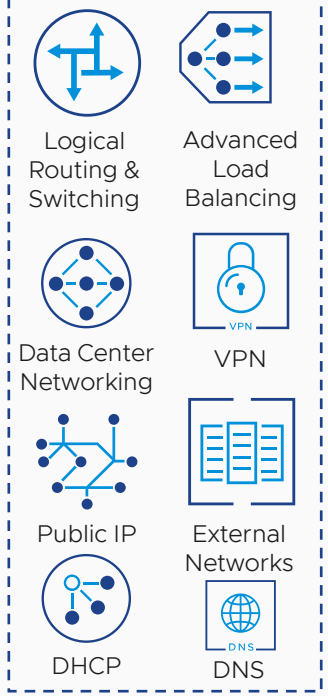
© 2023 VMware, Inc.

VMware Cloud Provider

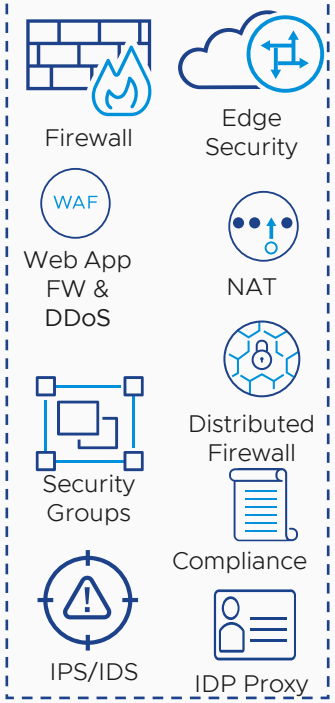
Infrastructure as a Service



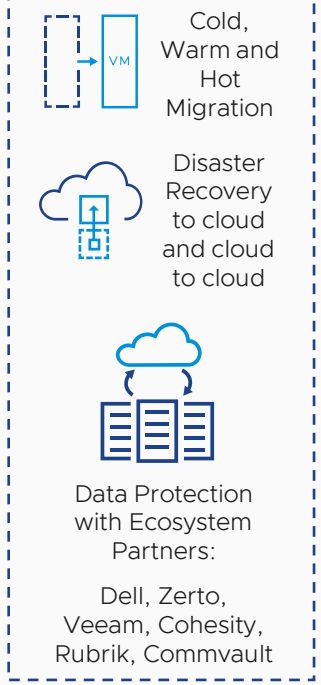
Network as a Service



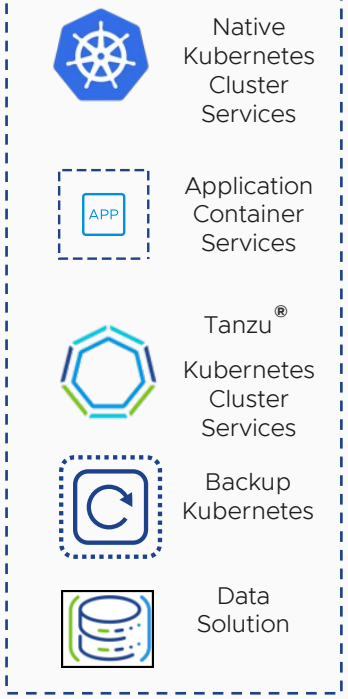
Security as a Service



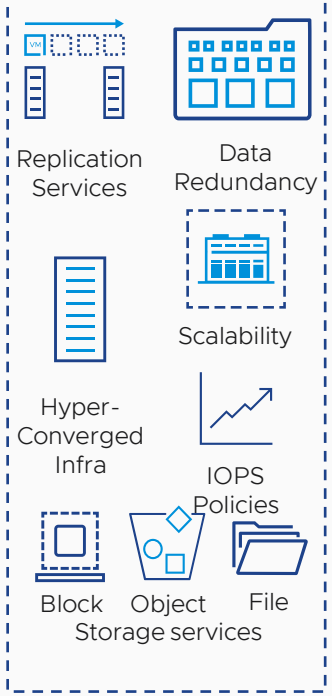
Data Protection as a Service



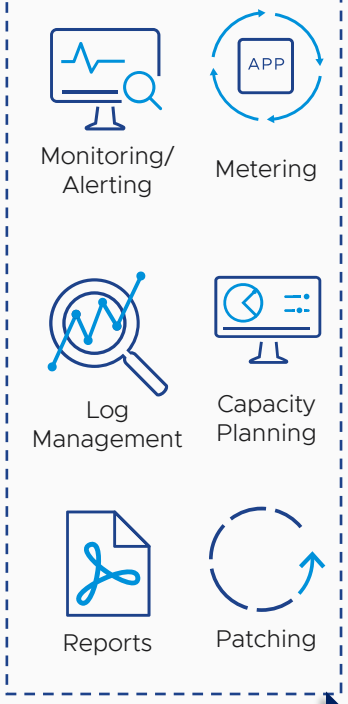
Container as a Service



Storage as a Service



Monitoring & Management services



Application Catalog as a Service

VMware Cloud Director™

VMware Chargeback | VMware Aria Operations™ | VMware Aria Operations™ for Logs

VMware vSphere® (Compute) | VMware vCenter Server® (Management) | Core SDDC Platform | VMware NSX® (Network & Security) | VMware vSAN™ (Storage & Availability)

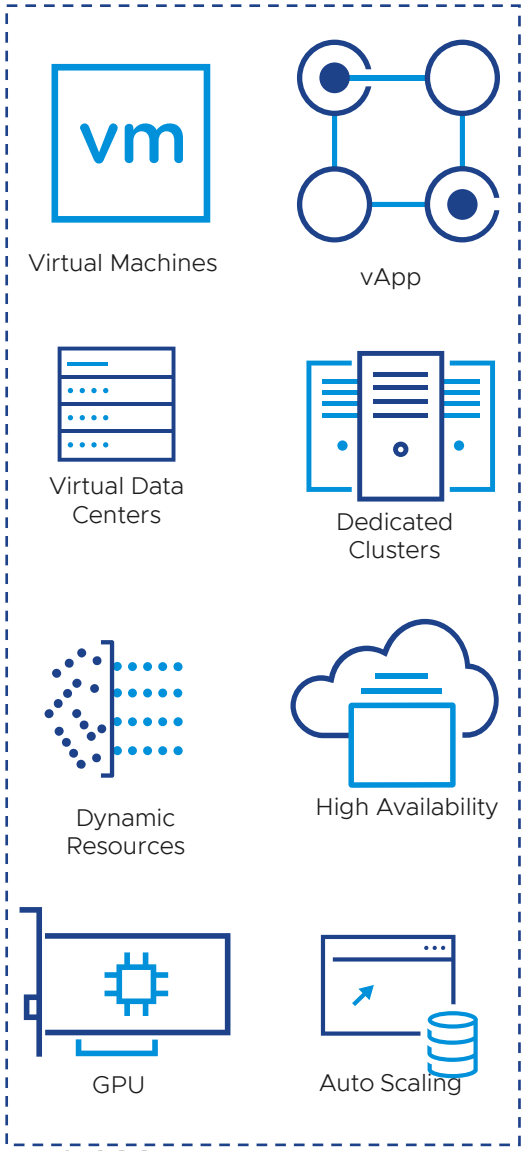
Physical Infrastructure | Compute | Networking | Storage

© 2023 VMware, Inc.

Tenant Use Cases & Architecture

© 2023 VMware, Inc.

Infrastructure as a Service

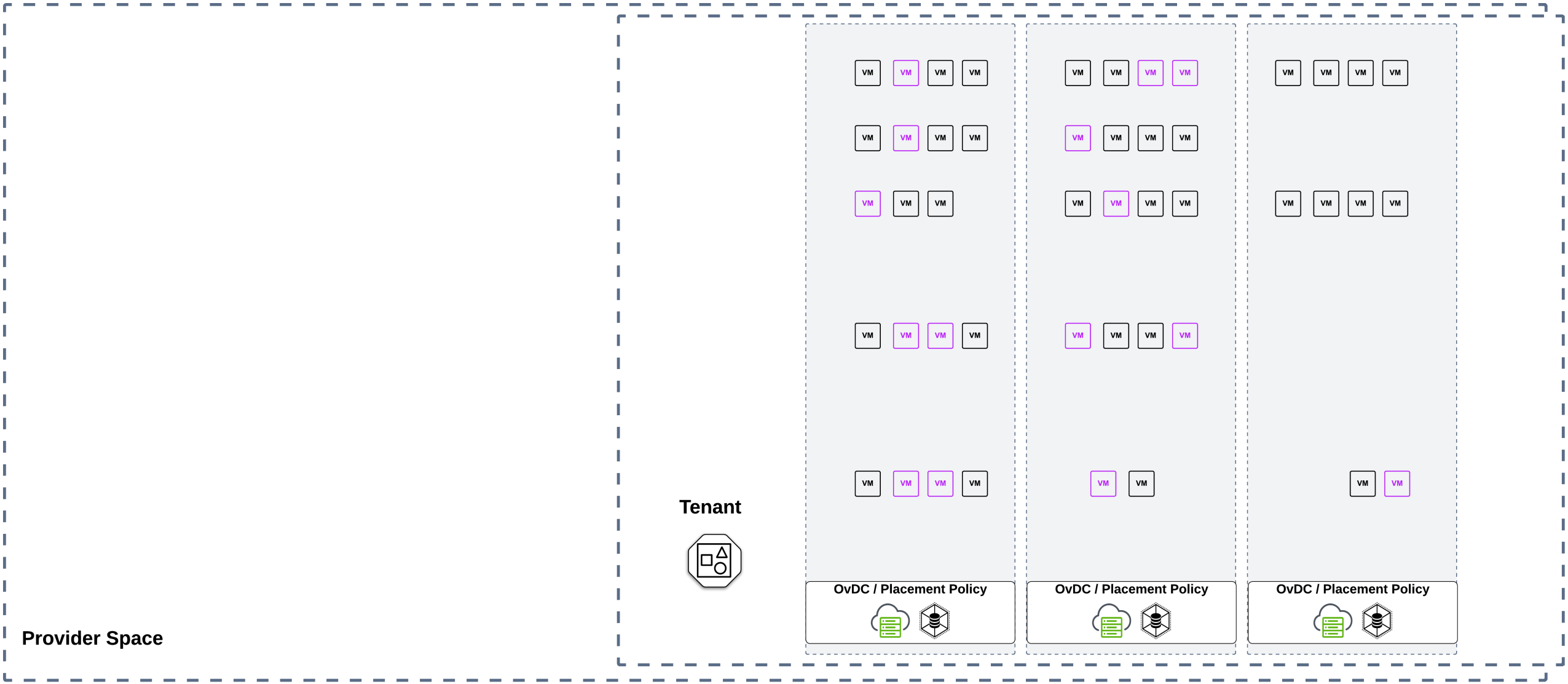


vCenter + vSphere

VMware Cloud Director

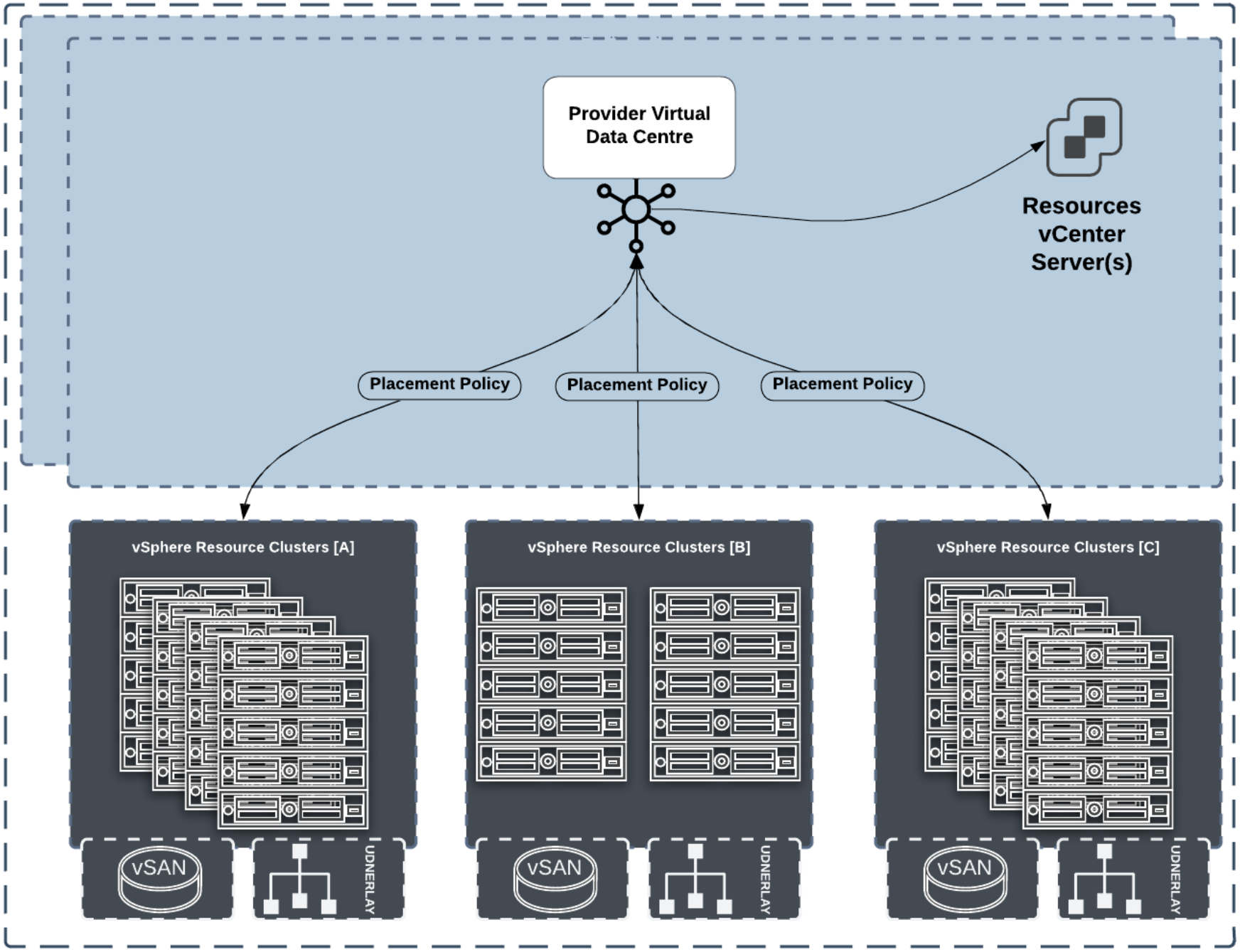
© 2023 VMware, Inc.

Tenant View



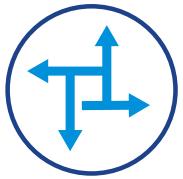
© 2023 VMware, Inc.

Service Provider View

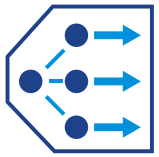


© 2023 VMware, Inc.

Network as a Service



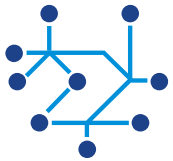
Logical Routing & Switching



Advanced Load Balancing

Data Center Networking

VPN



Public IP

External Networks

DHCP

DNS

vCenter + vSphere

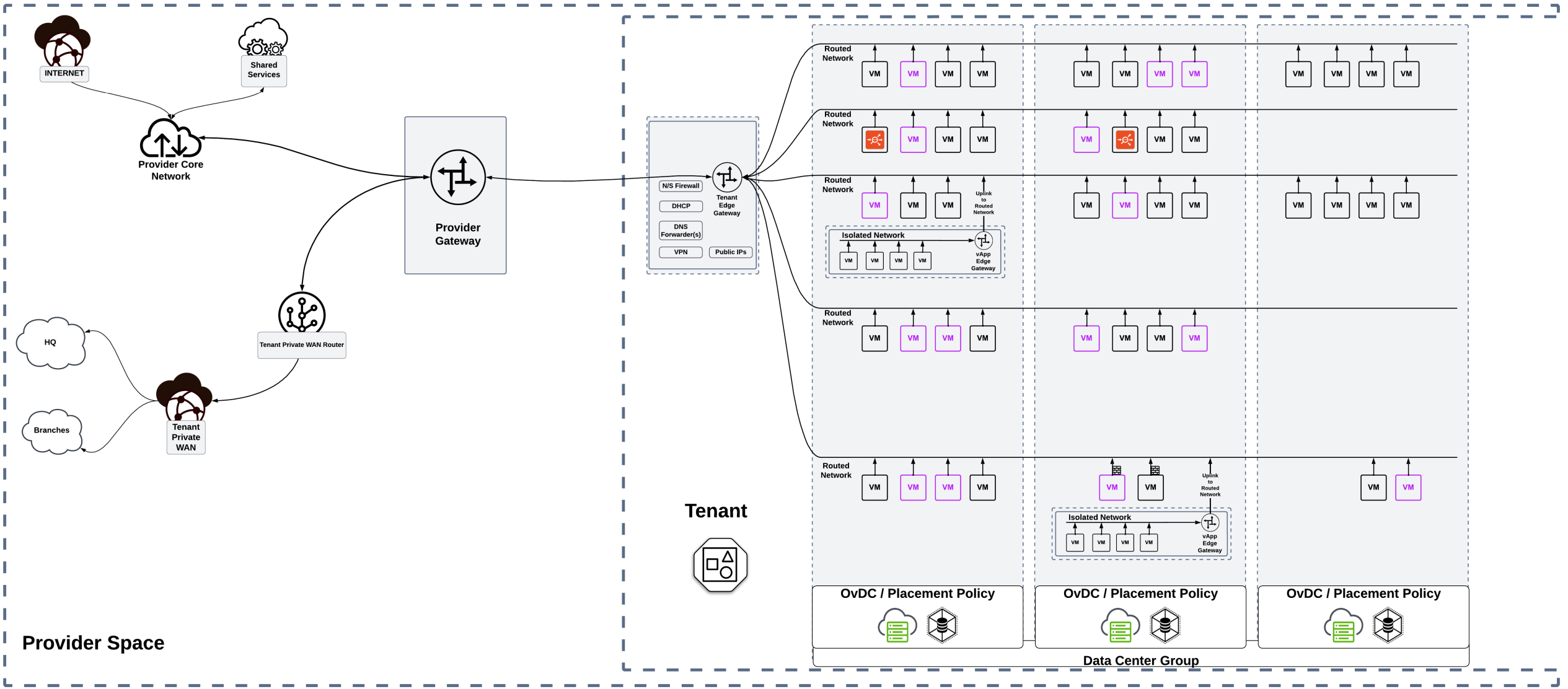
VMware Cloud Director

NSX

NSX® Advanced Load Balancer™

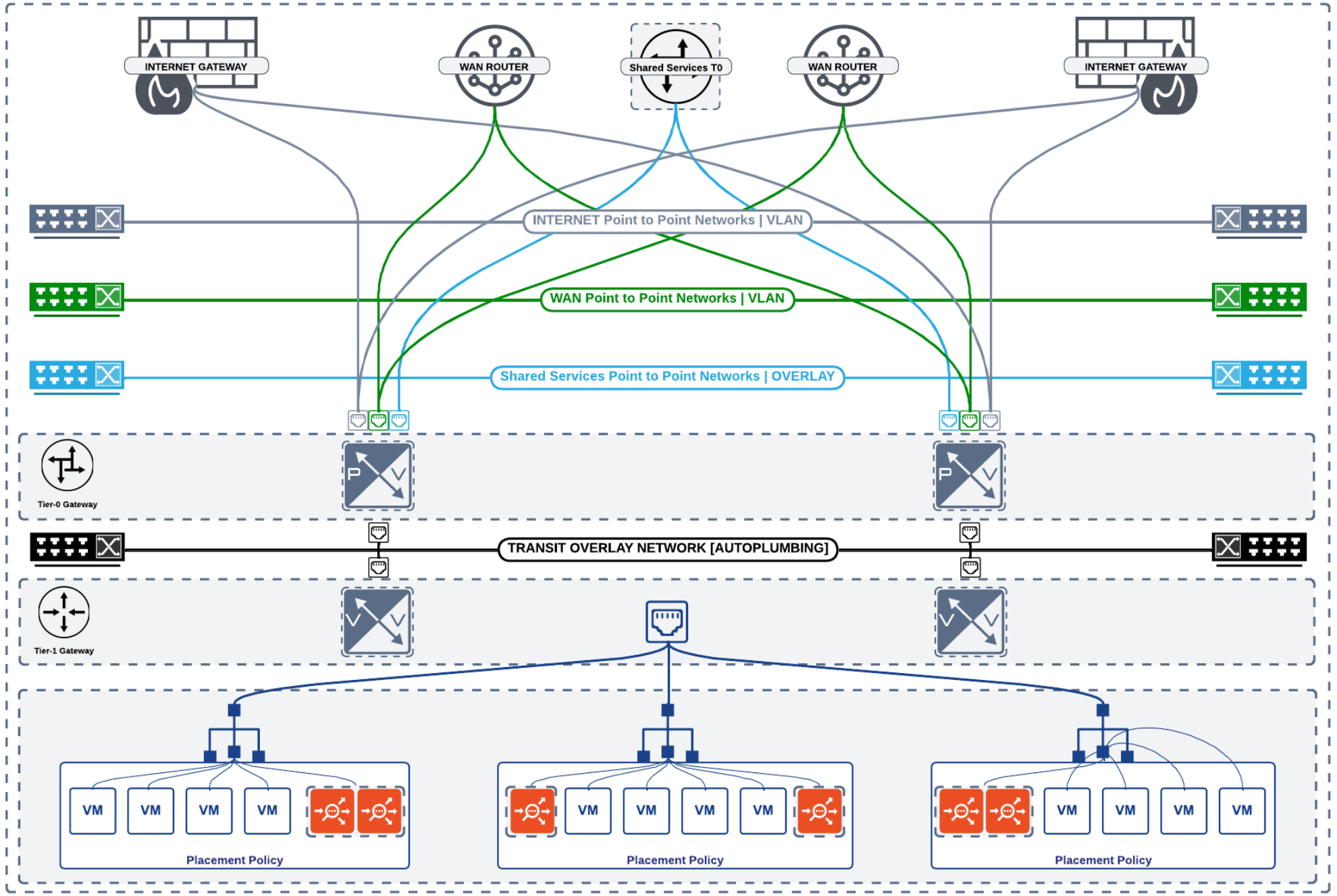
© 2023 VMware, Inc.

Tenant View



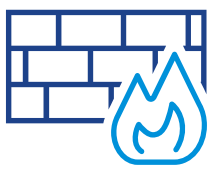
© 2023 VMware, Inc.

Service Provider View



© 2023 VMware, Inc.

Security as a Service



Firewall

Edge Security

Web App FW & DDoS

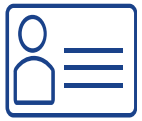
NAT

Distributed Firewall

Security Groups

Compliance

IPS/IDS



IDP Proxy

vCenter + vSphere

VMware Cloud Director

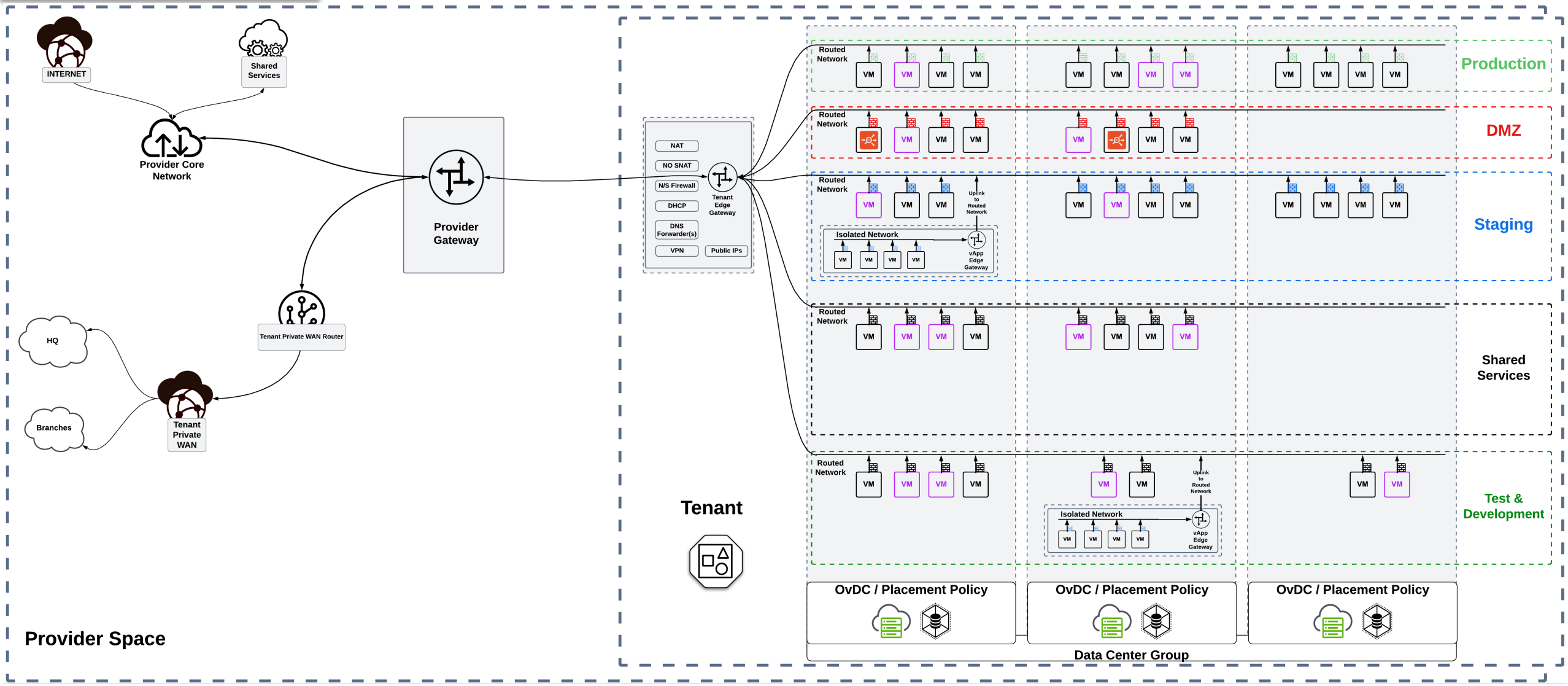
NSX

NSX Advanced Load Balancer

NSX with Backend Managed Services

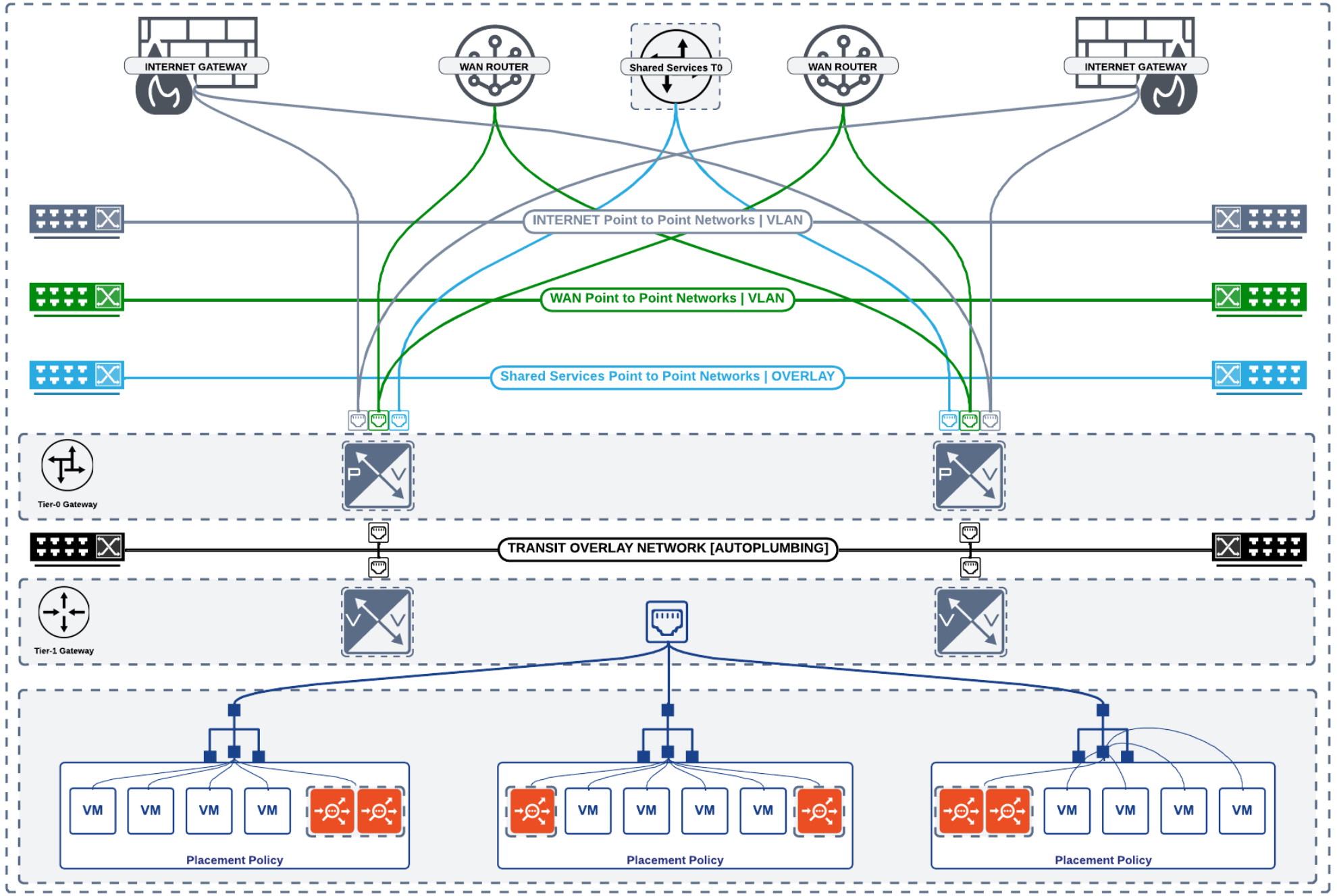
© 2023 VMware, Inc.

Tenant View



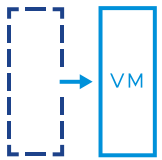
© 2023 VMware, Inc.

Service Provider View



© 2023 VMware, Inc.

Data Protection as a Service



Cold, Warm and Hot Migration

Disaster Recovery to cloud and cloud to cloud

Data Protection with Ecosystem Partners:

Dell, Zerto, Veeam, Cohesity, Rubrik, Commvault

vCenter + vSphere

VMware Cloud Director

NSX

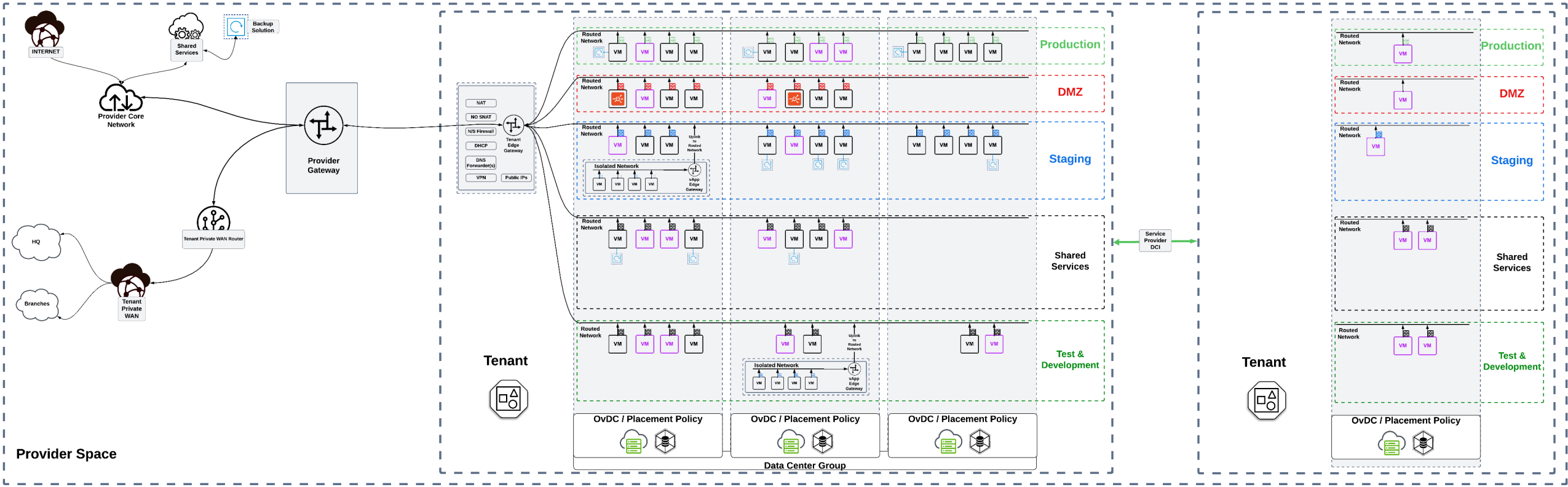
NSX Advanced Load Balancer

NSX with Backend Managed Services

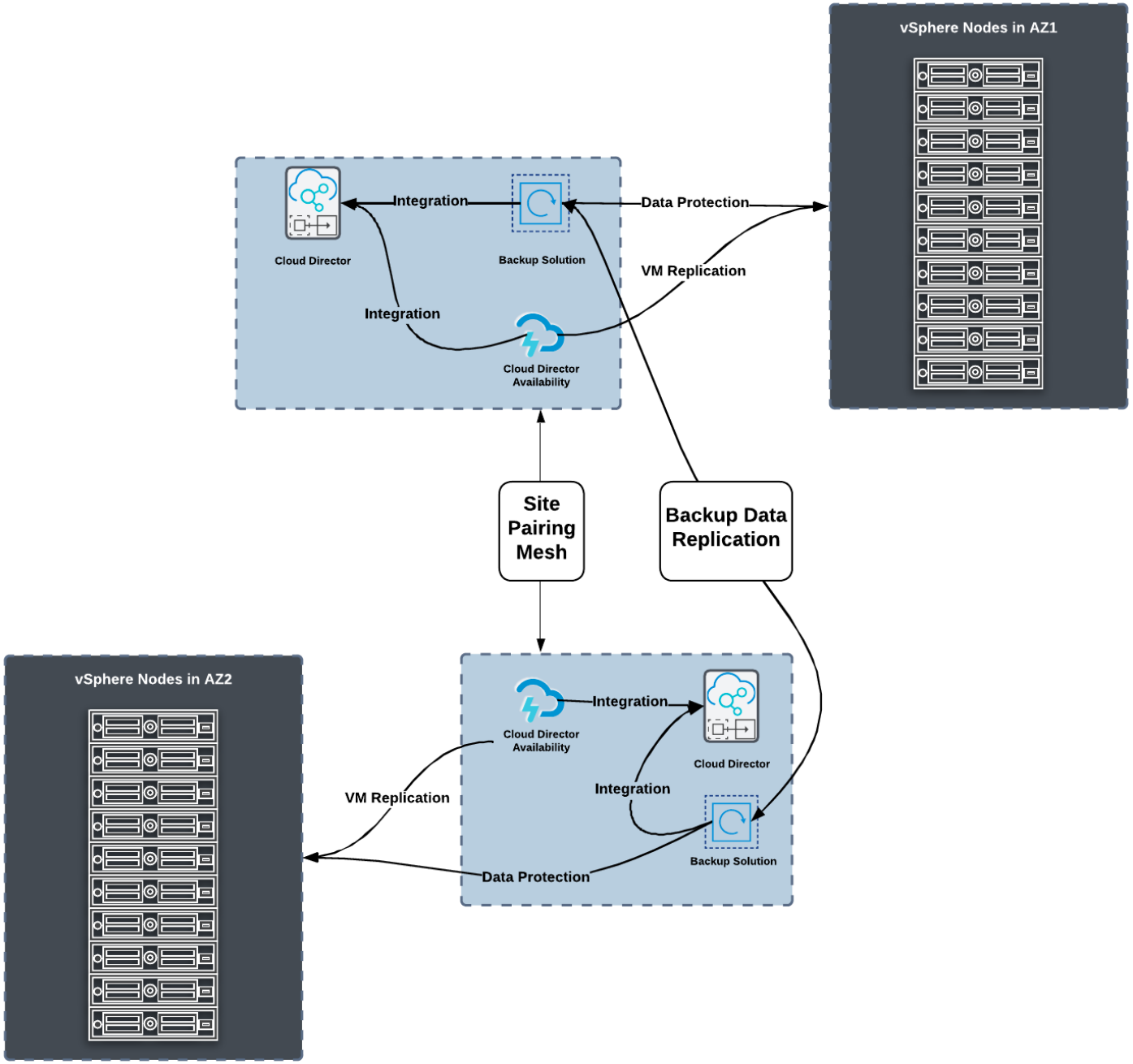
VMware Cloud Director Availability™ + 3rd party add-ons

© 2023 VMware, Inc.

Tenant View


INTERNET
Shared Services
Backup Solution
Provider Core Network
Provider Gateway
Tenant Private WAN Router
HQ
Branches
Tenant Private WAN
Provider Space
NAT
NO SNAT
N/S Firewall
DHCP
DNS Forwarder(s)
VPN
Public IPs
Tenant Edge Gateway
Routed Network
Isolated Network
vApp Edge Gateway
Uplink to Routed Network
VM
Production
DMZ
Staging
Shared Services
Test & Development
Tenant
OvDC / Placement Policy
Data Center Group
Service Provider DCI

Service Provider View



© 2023 VMware, Inc.

Container as a Service

Native Kubernetes Cluster Services

Application Container Services

Tanzu Kubernetes Cluster Services

Backup Kubernetes

Data Solution

vCenter + vSphere

VMware Cloud Director

NSX

NSX Advanced Load Balancer

NSX with Backend Managed Services

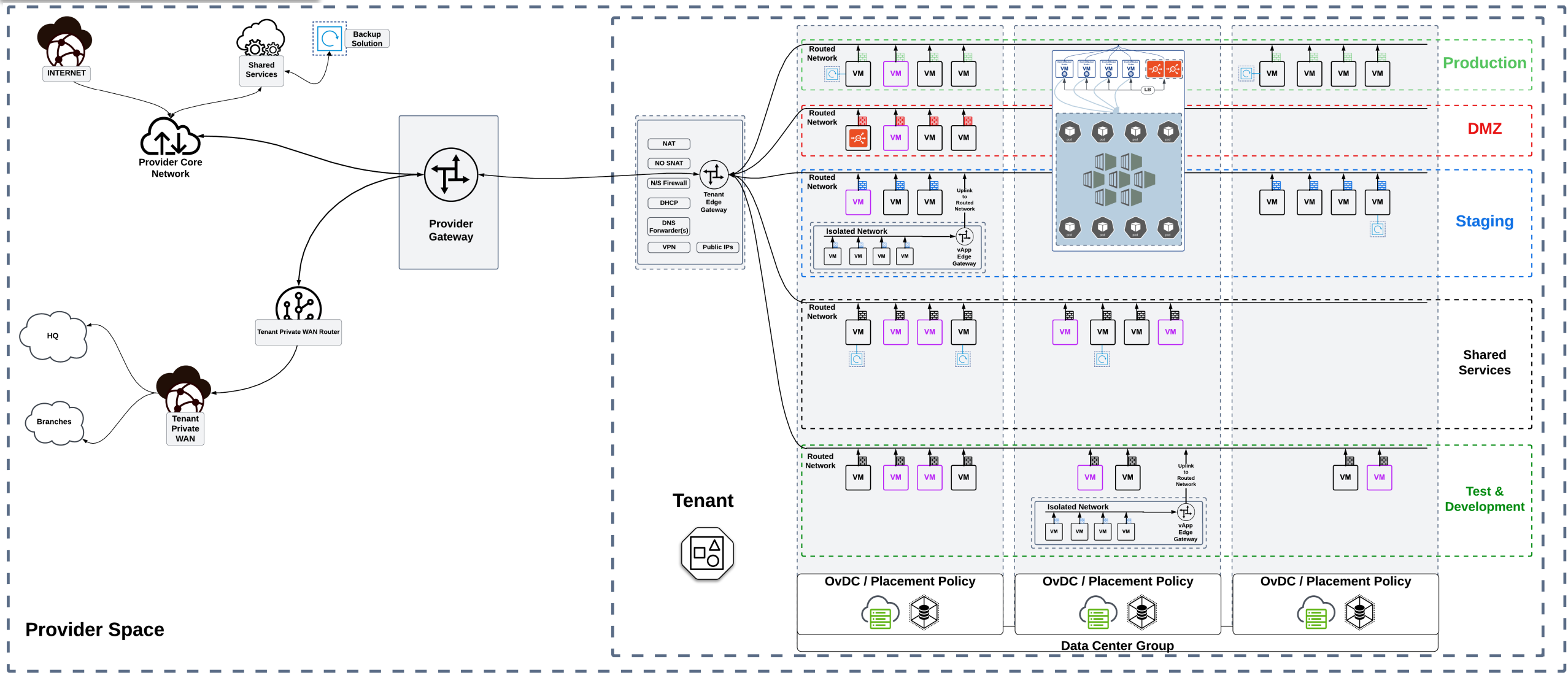
VMware Cloud Director Availability + 3rd party add-ons

Container Services Extension

Data Solution Extension

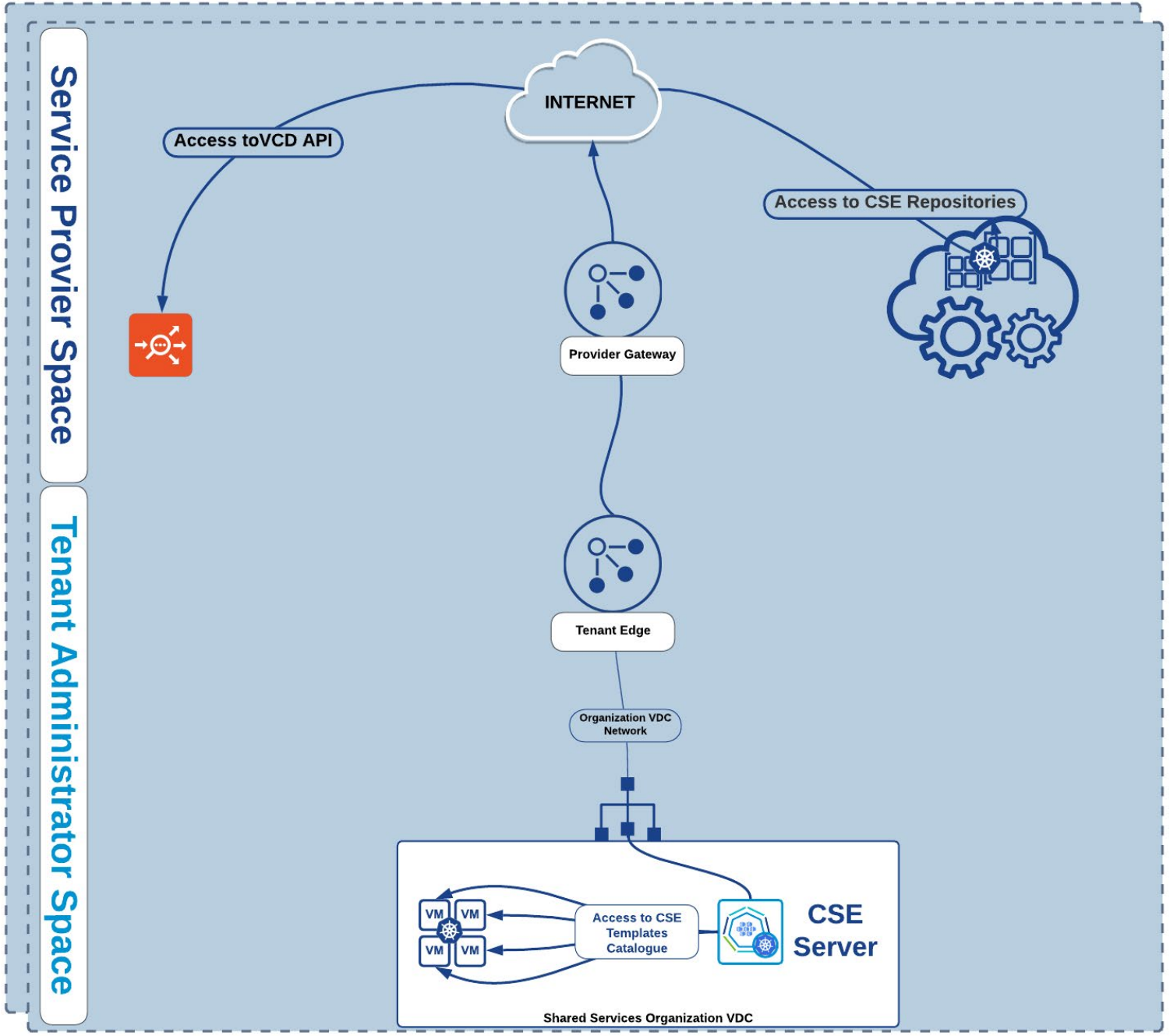
© 2023 VMware, Inc.

Tenant View



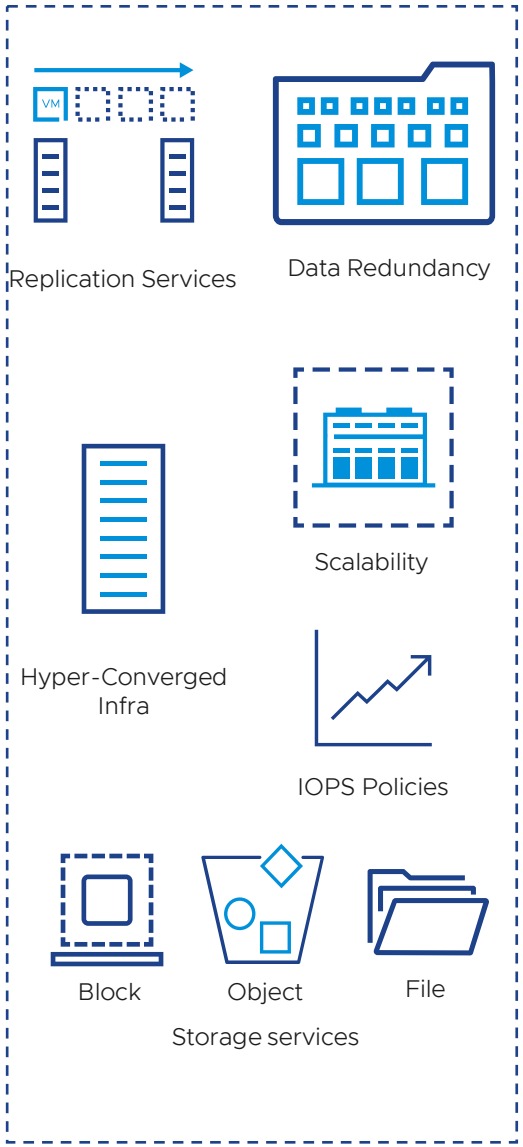
© 2023 VMware, Inc.

Service Provider View



© 2023 VMware, Inc.

Storage as a Service



vCenter + vSphere

VMware Cloud Director

NSX

NSX Advanced Load Balancer

NSX with Backend Managed Services

VMware Cloud Director Availability + 3rd party add-ons

Container Services Extension

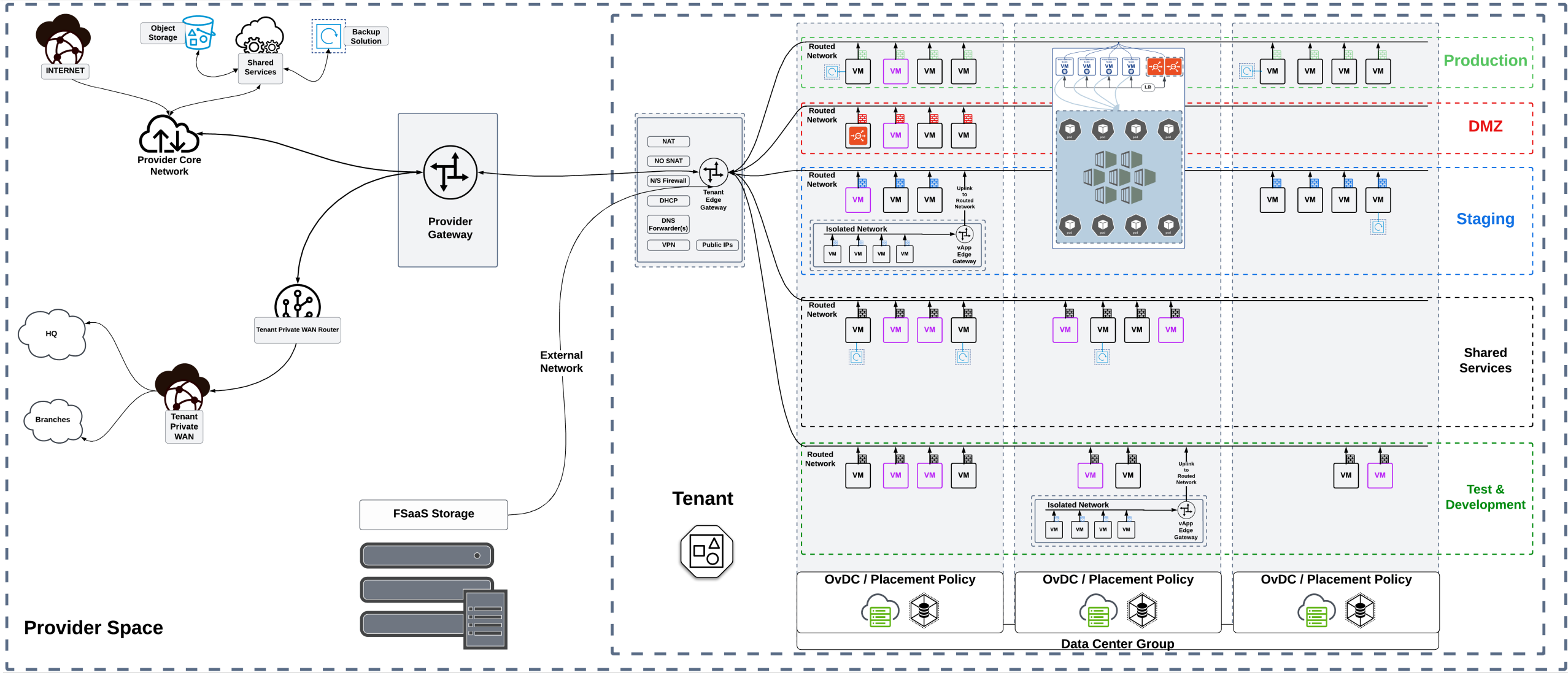
Data Solution Extension

Object Storage Extension

3rd party file services

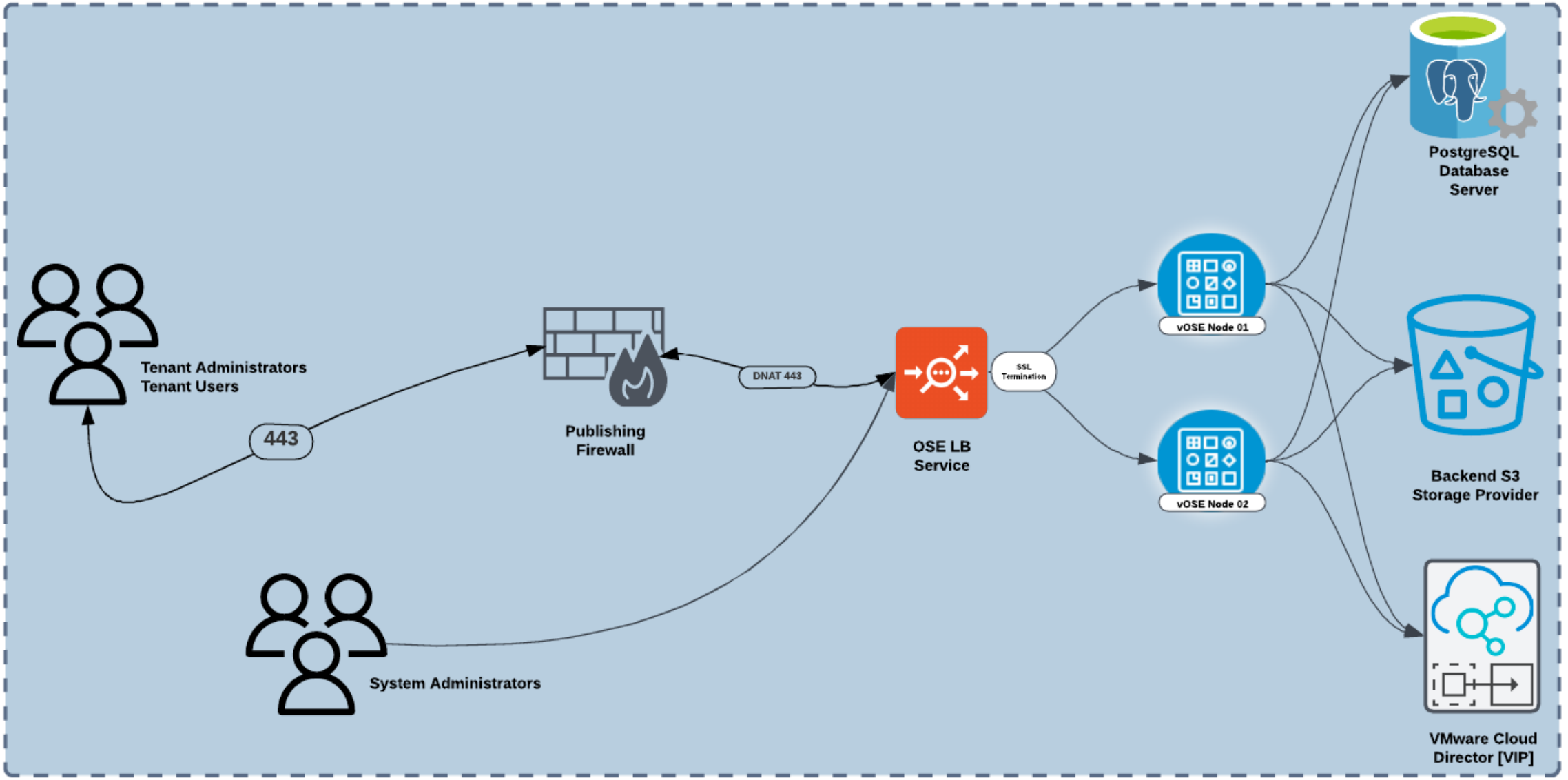
© 2023 VMware, Inc.

Tenant View



© 2023 VMware, Inc.

Service Provider View



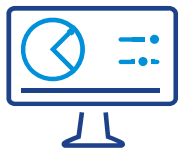
© 2023 VMware, Inc.

Monitoring & Management Services

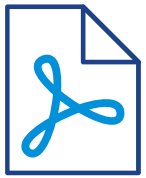
Monitoring/Alerting

Metering

Log Management



Capacity Planning



Reports

Patching

vCenter + vSphere

Cloud Director

NSX

NSX Advanced Load Balancer

NSX with Backend Managed Services

Cloud Director Availability + 3rd party add-ons

Container Services Extension

Data Solution Extension

Tanzu Mission Control

Object Storage Extension

3rd party file services

VMware Aria Operations

Aria Chargeback

Aria Operations for Logs

Aria Operations for Networks

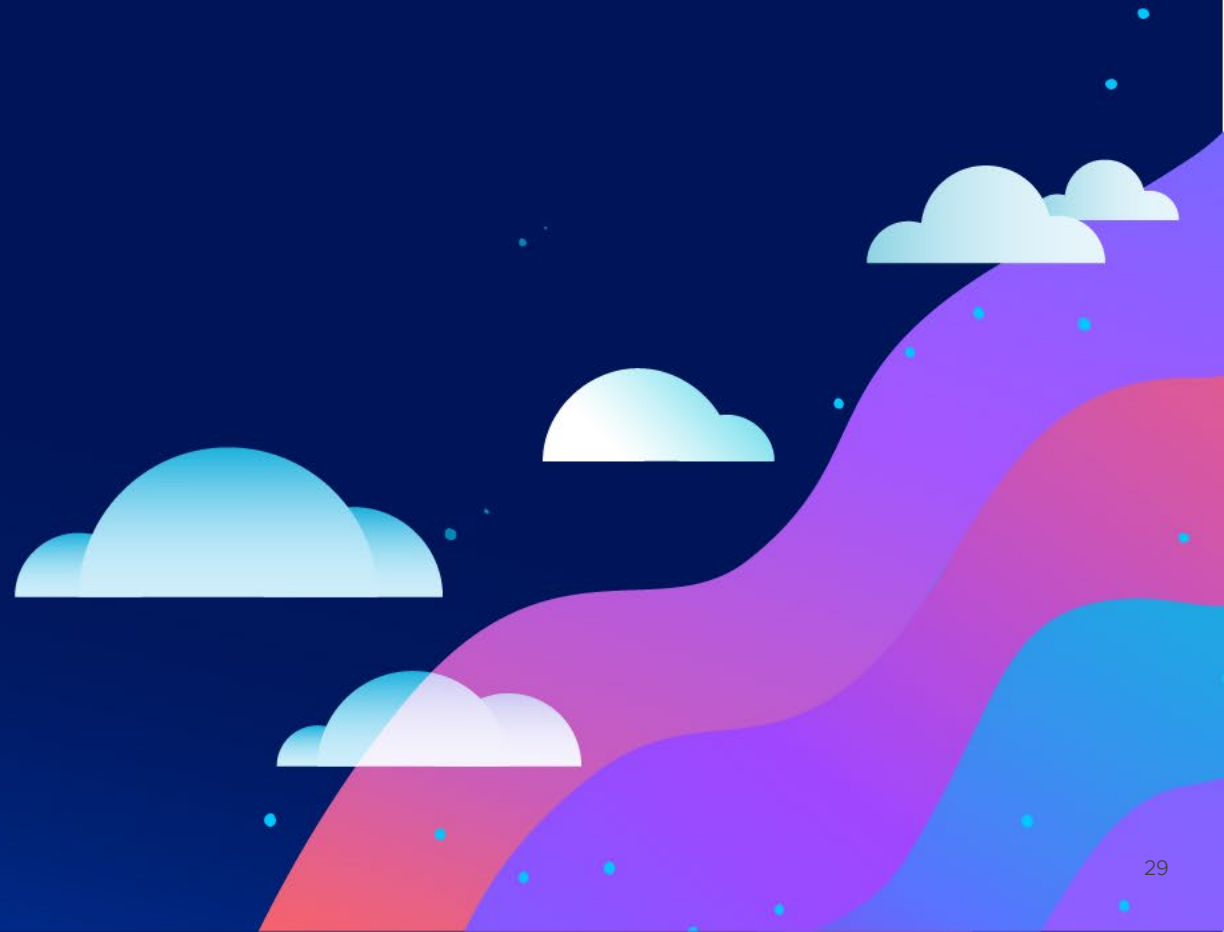
© 2023 VMware, Inc.

Questions…

Questions…

Questions…

© 2023 VMware, Inc.

vmware EXPLORE

Thank You