Microsoft

Azure VMware Solution

Tales from the field

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Agenda

Introduction to AVS

On-premises vs VMware PaaS

SDDC's

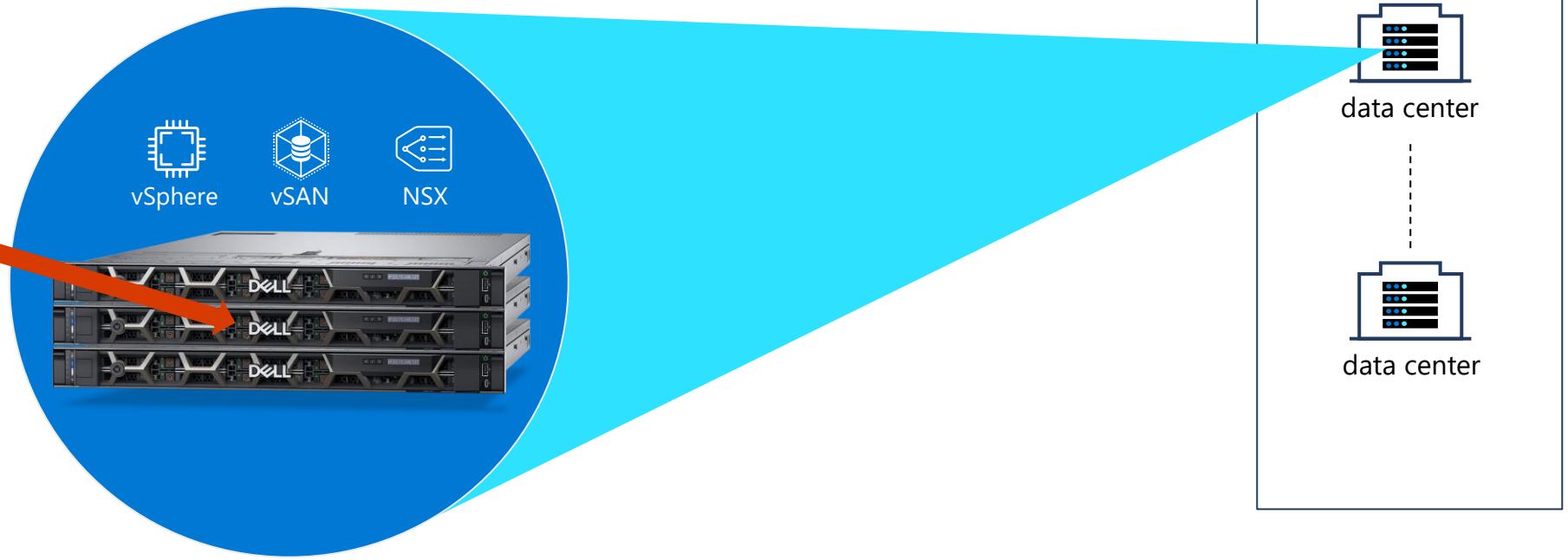
Networking & Connectivity

Management & Monitoring

What is Azure VMware Solution?

First-party Microsoft Azure Service, verified by VMware

Check the DELL logo's, it's true ;-)



hyper-converged, bare-metal infrastructure

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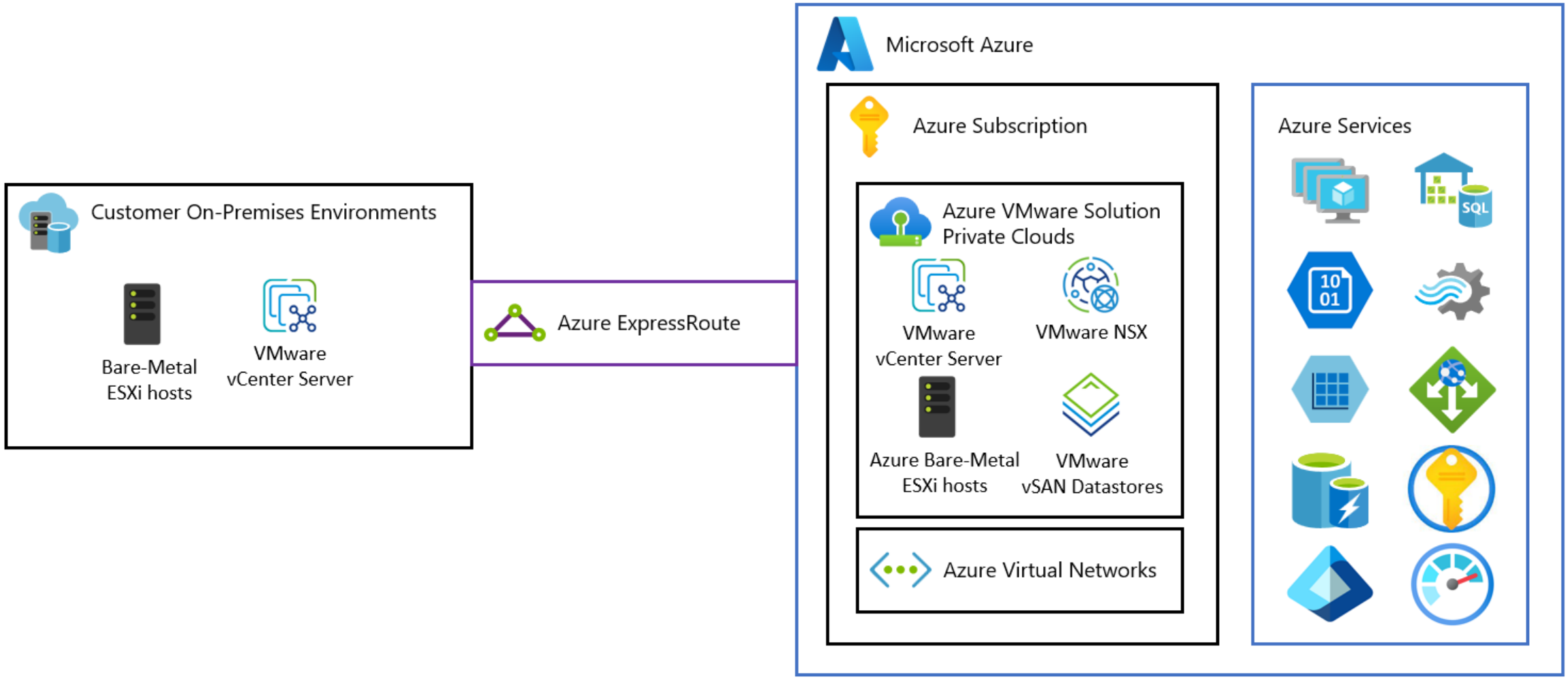
AVS Architecture – High level



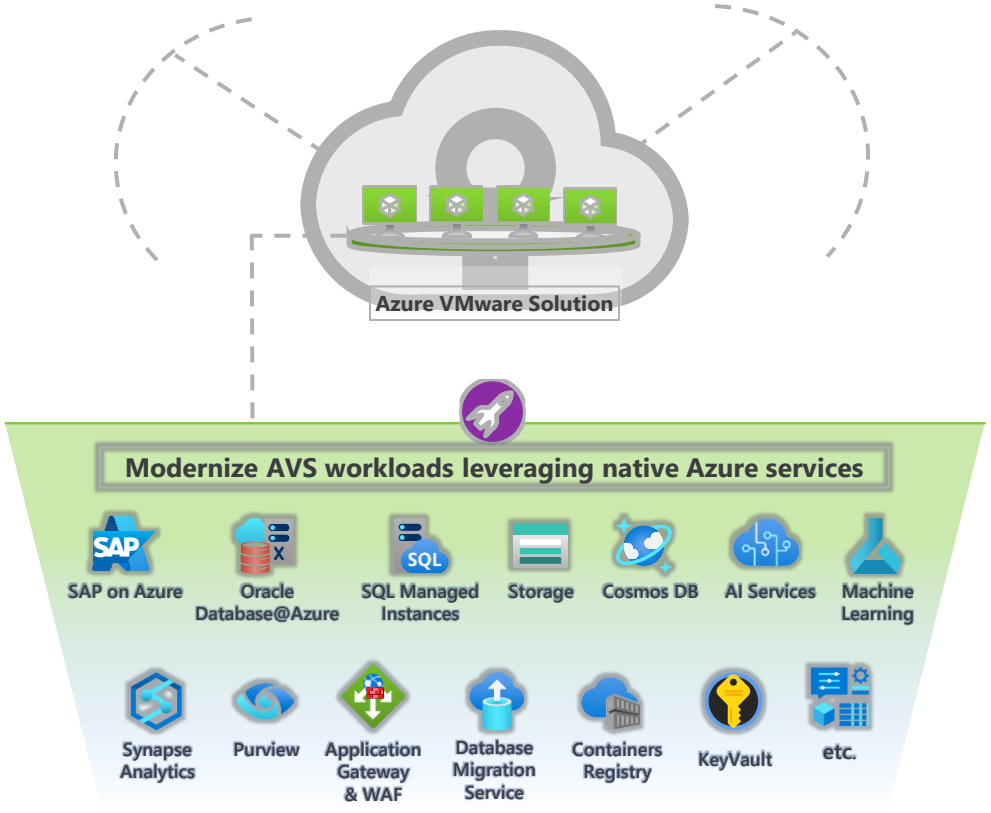
AVS Architecture – It's an extensive eco-system

Storage
- Elastic SAN
- NetApp Files
- Pure CBS
- 3rd Party Solutions

Migration
- Migrate Assessment
- VMware HCX
- 3rd Party Tools

Networking
- ExpressRoute
- Virtual WAN
- Route Server
- Virtual Gateway

Operations & Management
- Arc-enabled vSphere
- Arc-enabled servers
- Lighthouse
- Landing Zone



Monitoring
- Monitor (Dashboard)
- Sentinel
- Log Analytics
- Cost Management

Security
- Defender for Cloud
- Firewall
- Private Endpoint
- Bastion

Governance
- Policy
- Automation
- Update Manager
- Regulatory & Compliance

BCDR
- Backup
- Site Recovery
- 3rd Party Solutions

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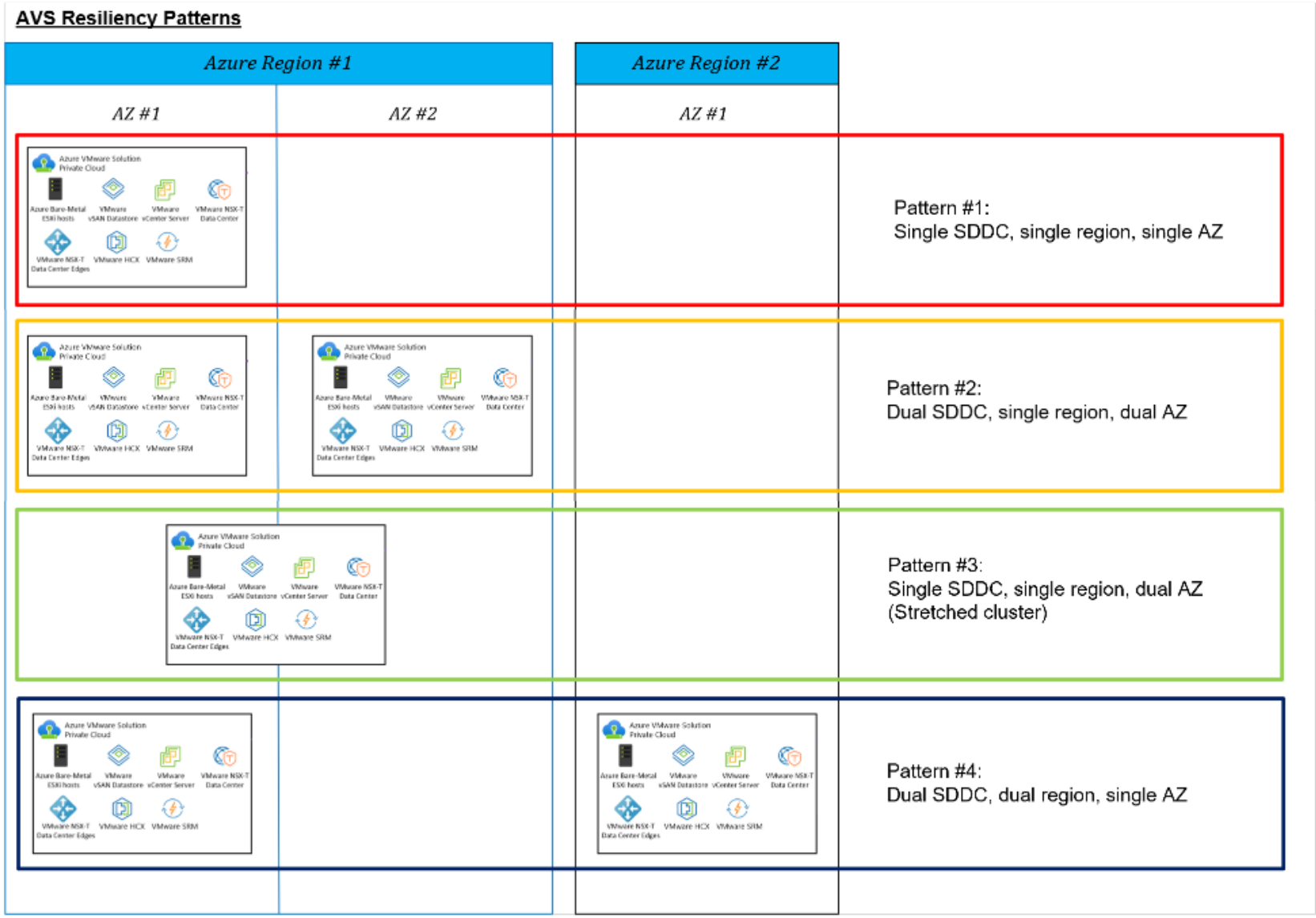
Disclaimer: This is not an exhaustive list of all Azure services that can integrate with AVS. The goal is to demonstrate some of the common examples.

AVS Architecture – Resiliency patterns



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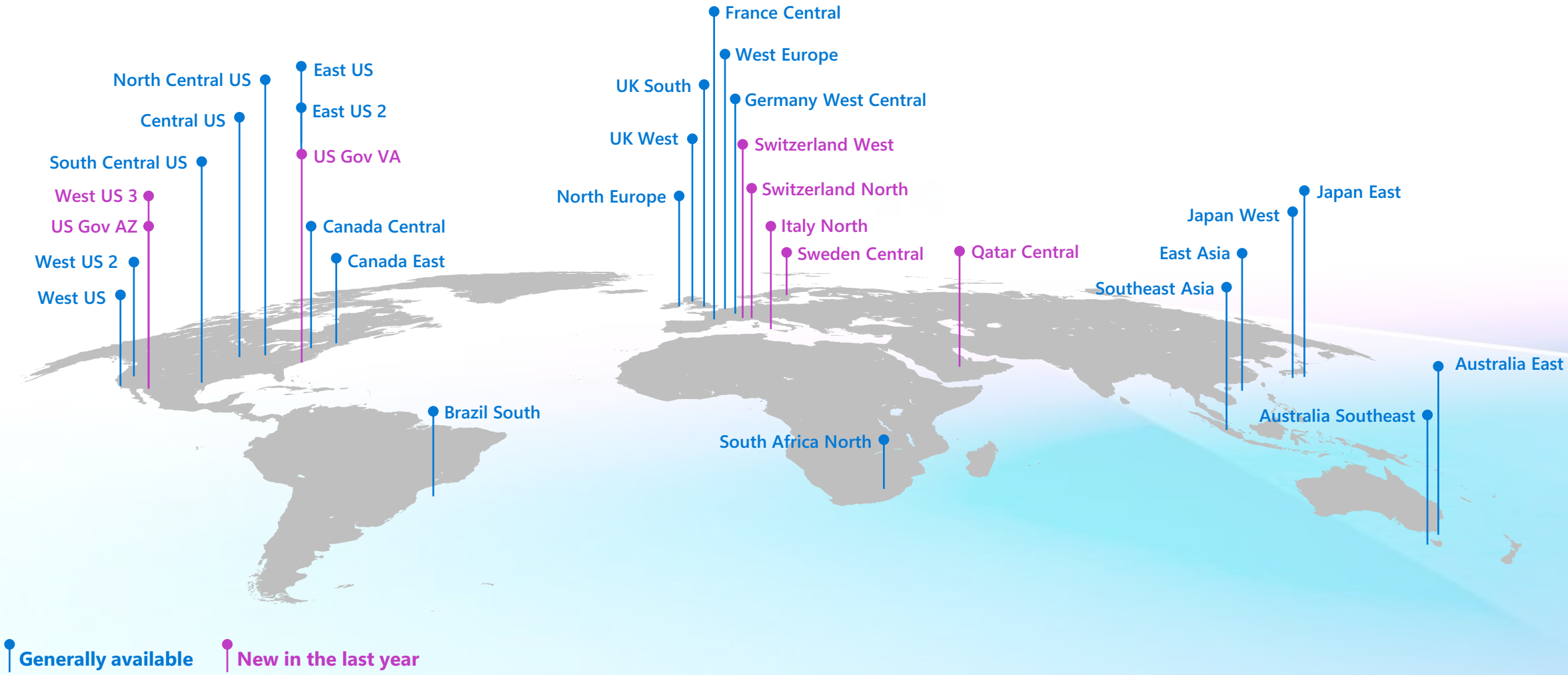
Azure VMware Solution global availability

Azure IaaS Now available in more than 60+ regions

Azure VMware Solution
Now available in 31 regions

Azure IaaS
Now available in more than 60+ regions

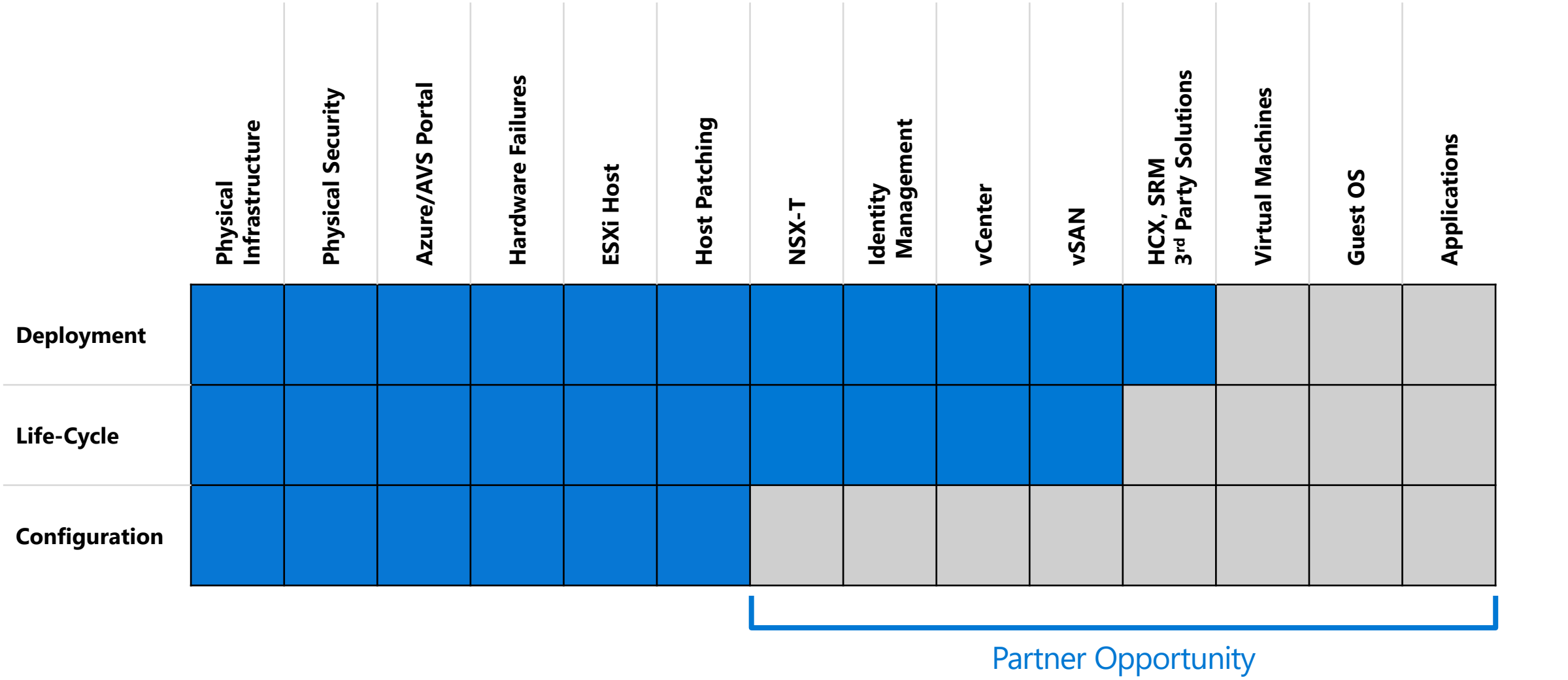


Take-away #1:

Functional equivalent *–ne* Technically equivalent !

Azure VMware Solution Responsibility Matrix

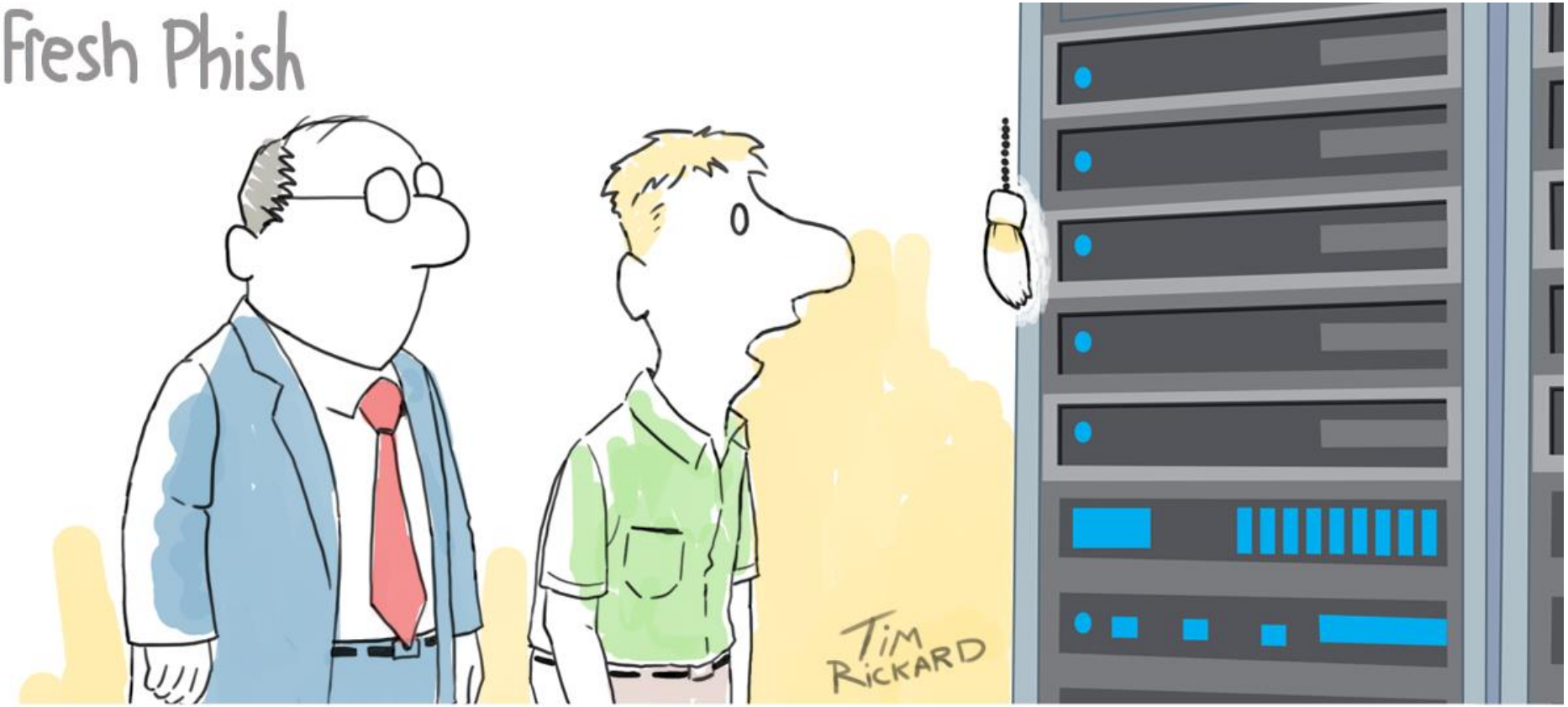
Control boundaries



Administrator vs CloudAdmin

Host maintenance and lifecycle management

Take-away #2:
Management paradigm might differ from yours!



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AVS SDDCs – The hardware level

- Based on Dell standard hardware, *mainly* …..
- Three different hardware sku's, *sort of* …..

Okay, why so vague?

- AVS2.0 is Dell hardware only /w 3 sku's
- AVS2.5 allows for adding additional clusters with the AV64 sku, which is Azure Fleet hardware.
- Today: AV64 add-on only
- Future: full AV64 sddc's

AVS SDDCs – The logical level

- Single AZ deployment by default, unless vSAN stretched cluster selected
- 3 node minimum per cluster, 16 node maximum per cluster
- 1 cluster minimum, 12 cluster maximum
- 96 node maximum per SDDC
- vSAN instance scoped **per cluster**

- Cluster-1
  - always holds the management components: vCenter, NSX-Manager, HCX-Manager, etc
  - ***Today*** is always based on Dell sku: AV36, AV36P, AV52

- Cluster-N
  - AV64 sku is added to the options

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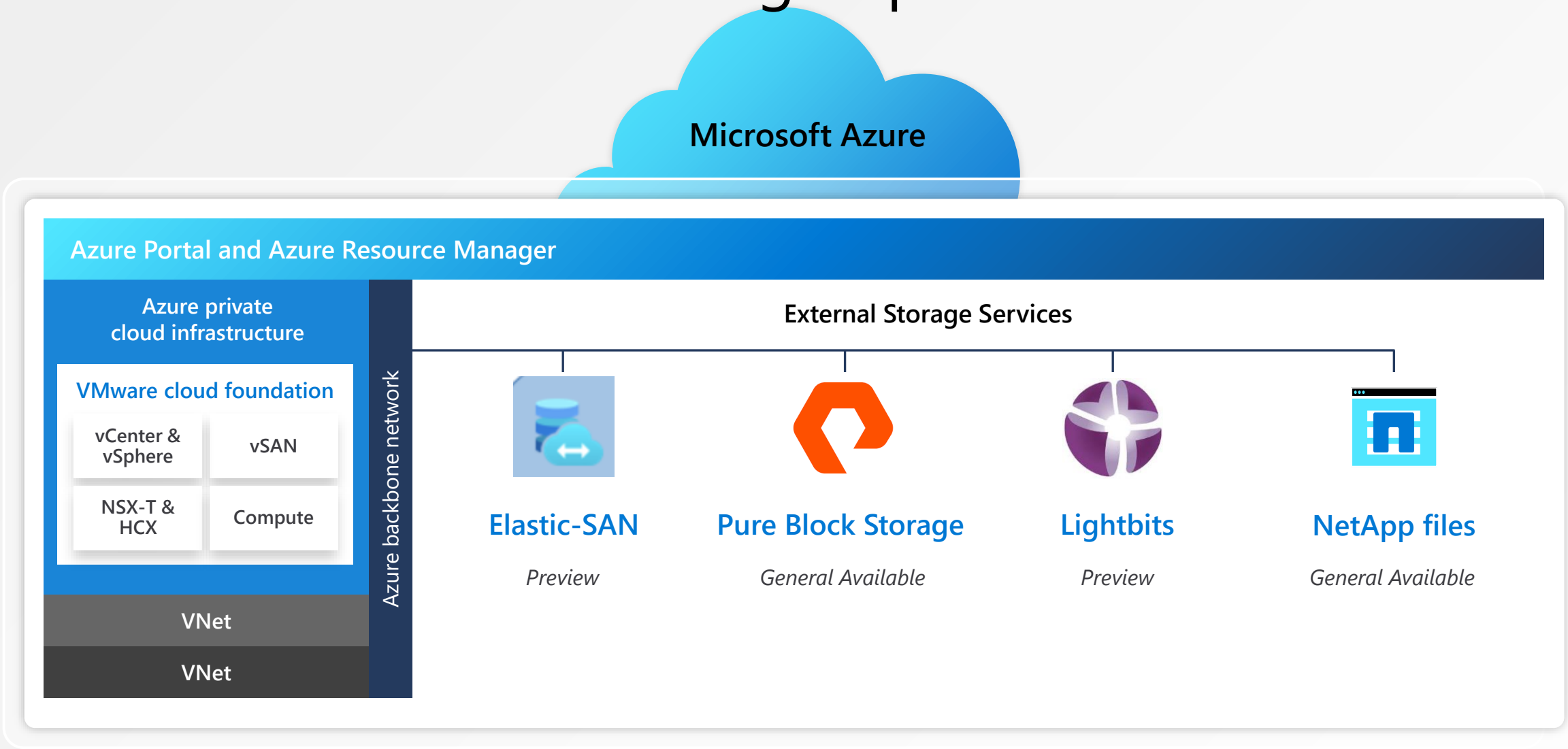
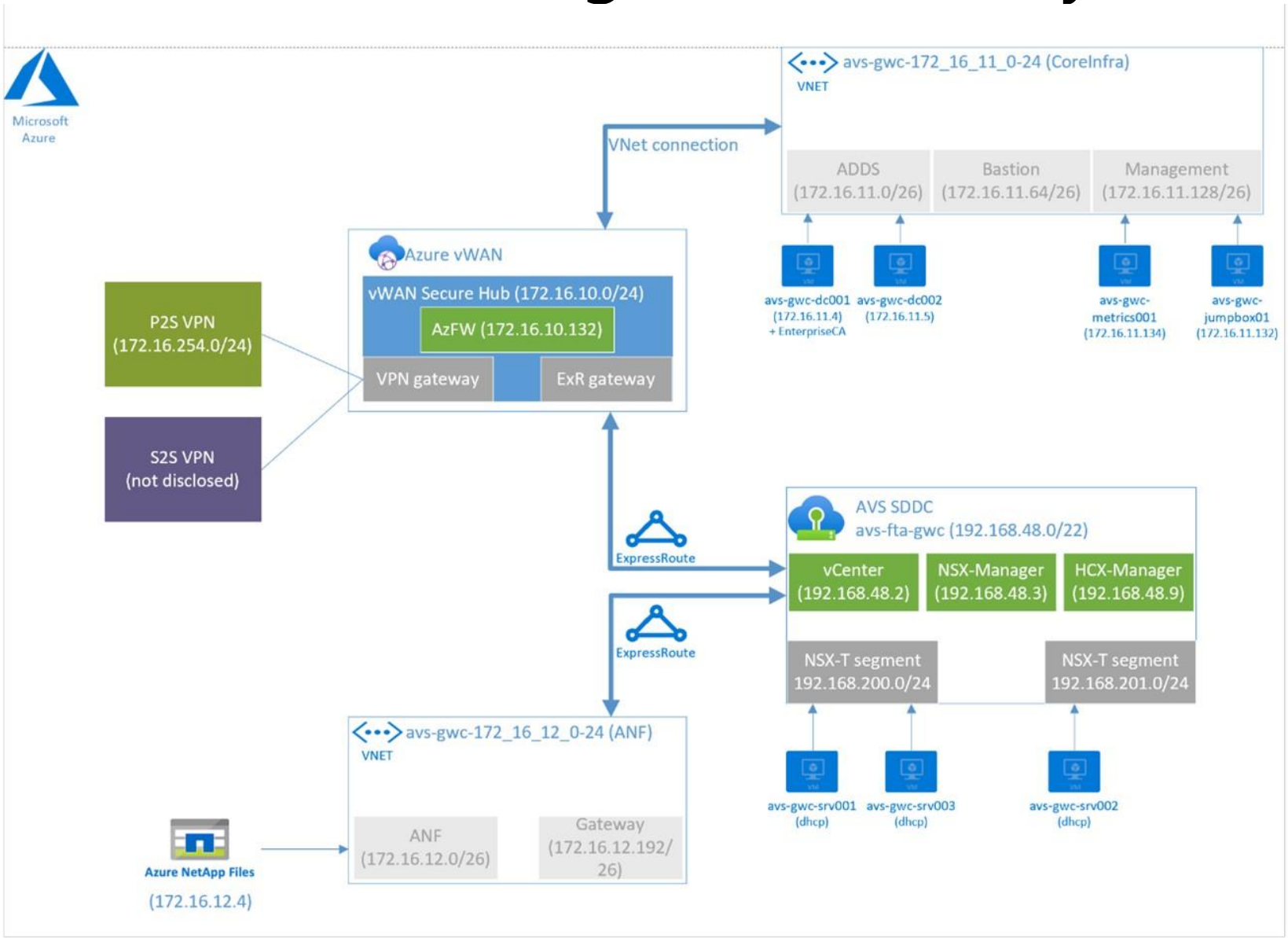
Introduction - Azure VMware Solution | Microsoft Learn

AVS SDDC – External Storage options



AVS SDDC – External Storage Connectivity



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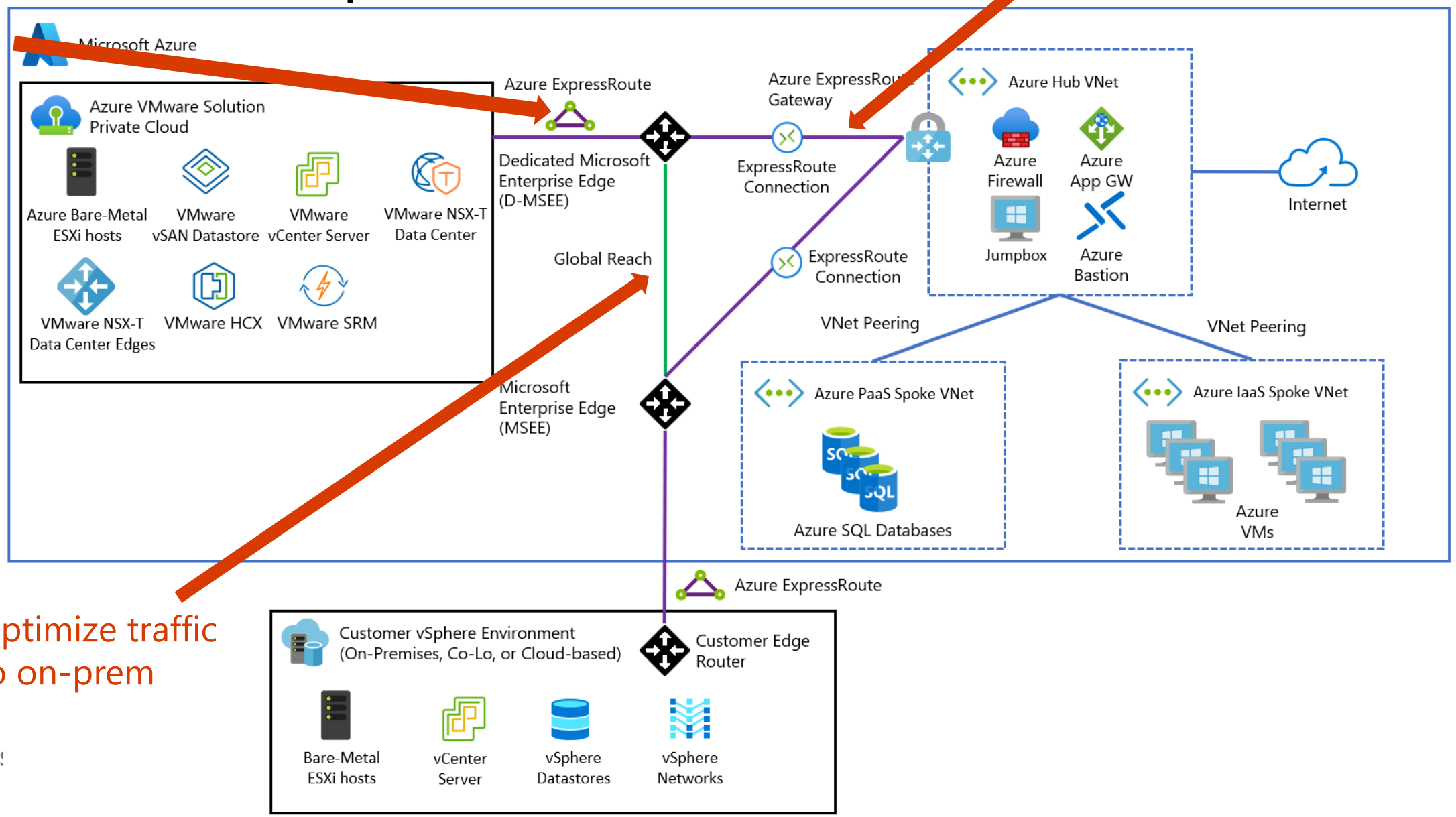
AVS in Hub & Spoke architecture

Look … it's a 2nd ExR circuit

Optimize traffic to Azure

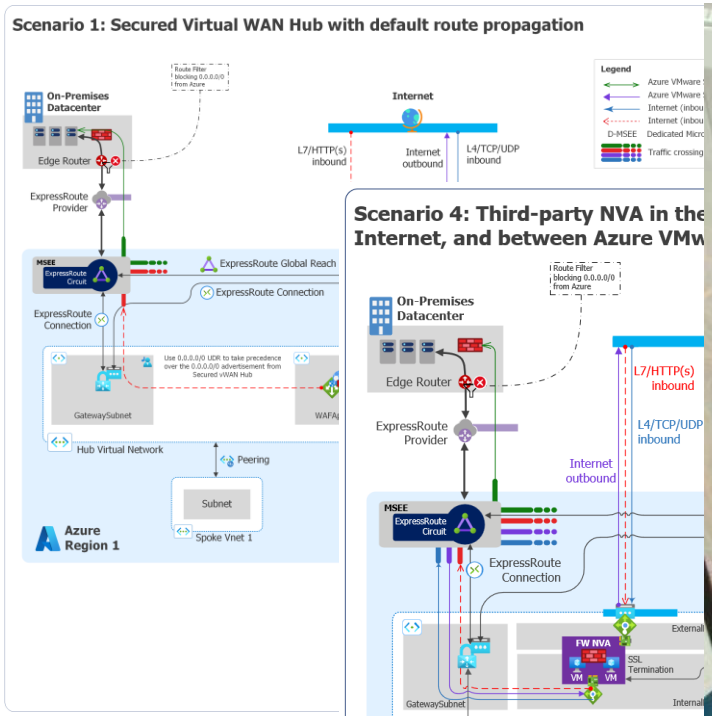


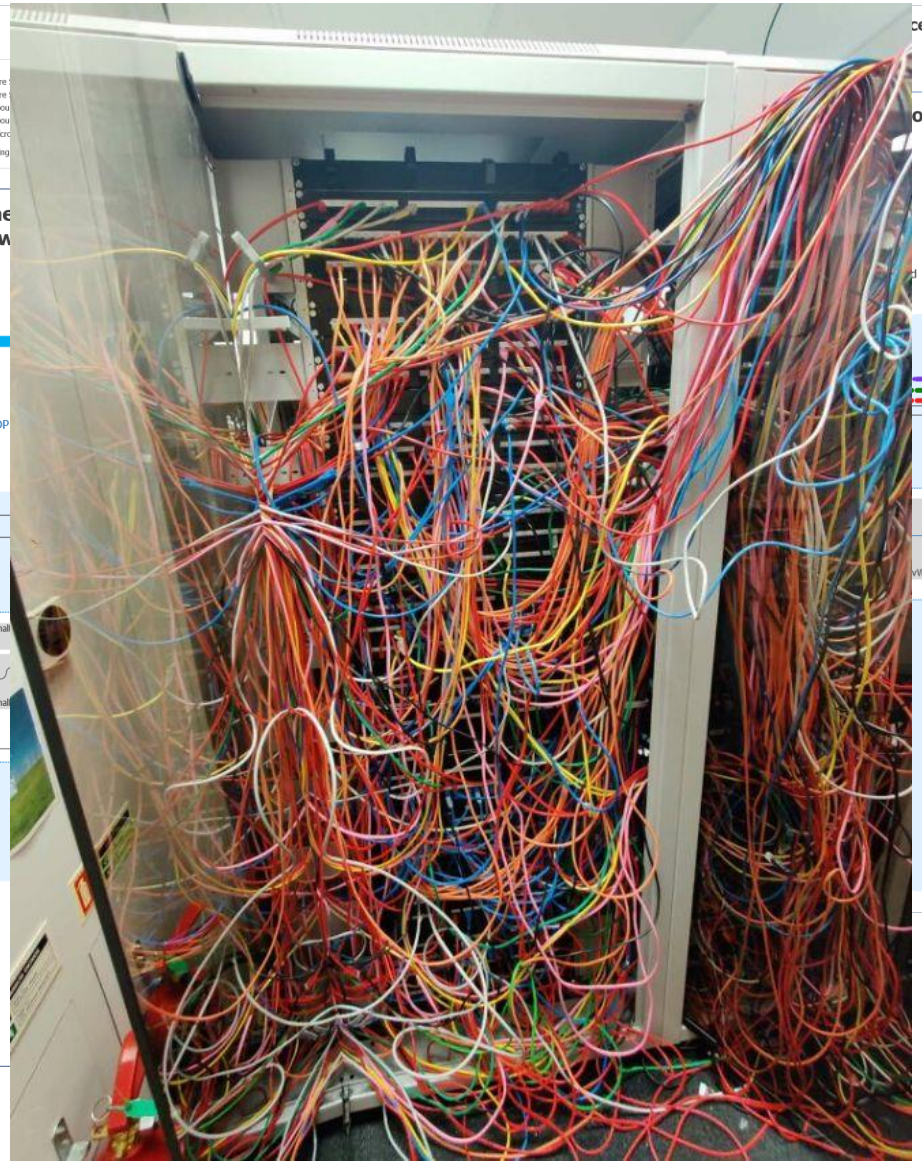
Optimize traffic to on-prem

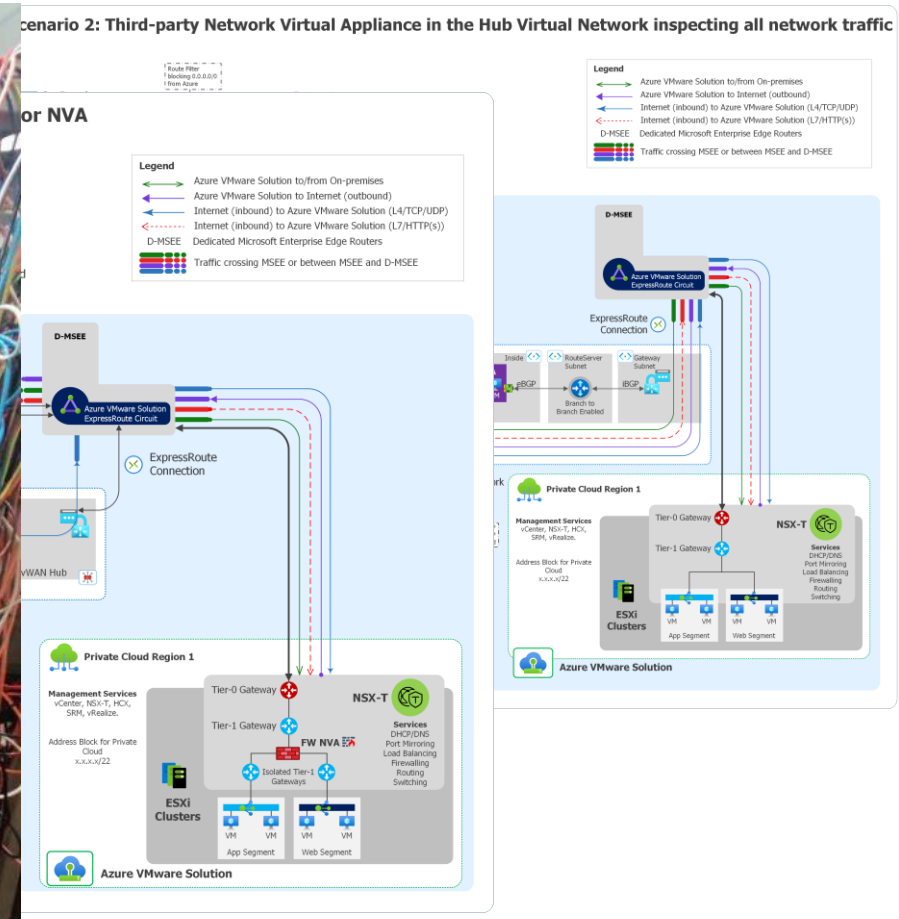
Micros

Take-away #3:

Connectivity is simple, right? Euh, well … potentially yes







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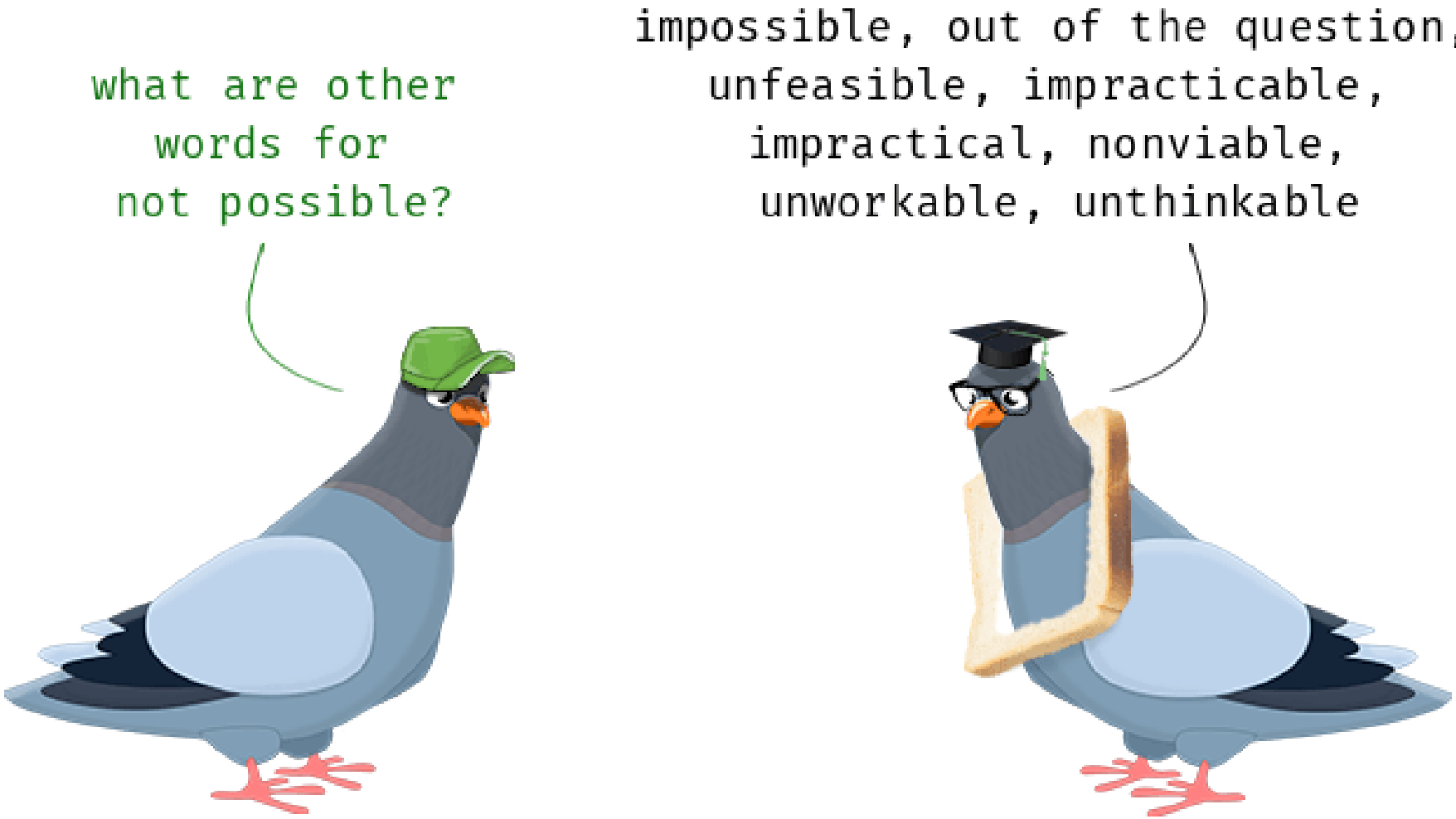
[Enterprise-scale example architectures connectivity to Azure VMware Solution - Cloud Adoption Framework | Microsoft Learn]

Networking things to think about!



Take-away #4:

Pssst … It’s a PaaS service. Monitoring requirements change!

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Recap:

Take-away #1: Functional equivalent *–ne* Technically equivalent !
Take-away #2: Management paradigm might differ from yours!
Take-away #3: Connectivity is simple, right? Euh, well … potentially yes
Take-away #4: Pssst … It's a PaaS service. Monitoring requirements change!

Questions

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