



NORDIC CLOUD Epic ON AZURE\_APPROACH

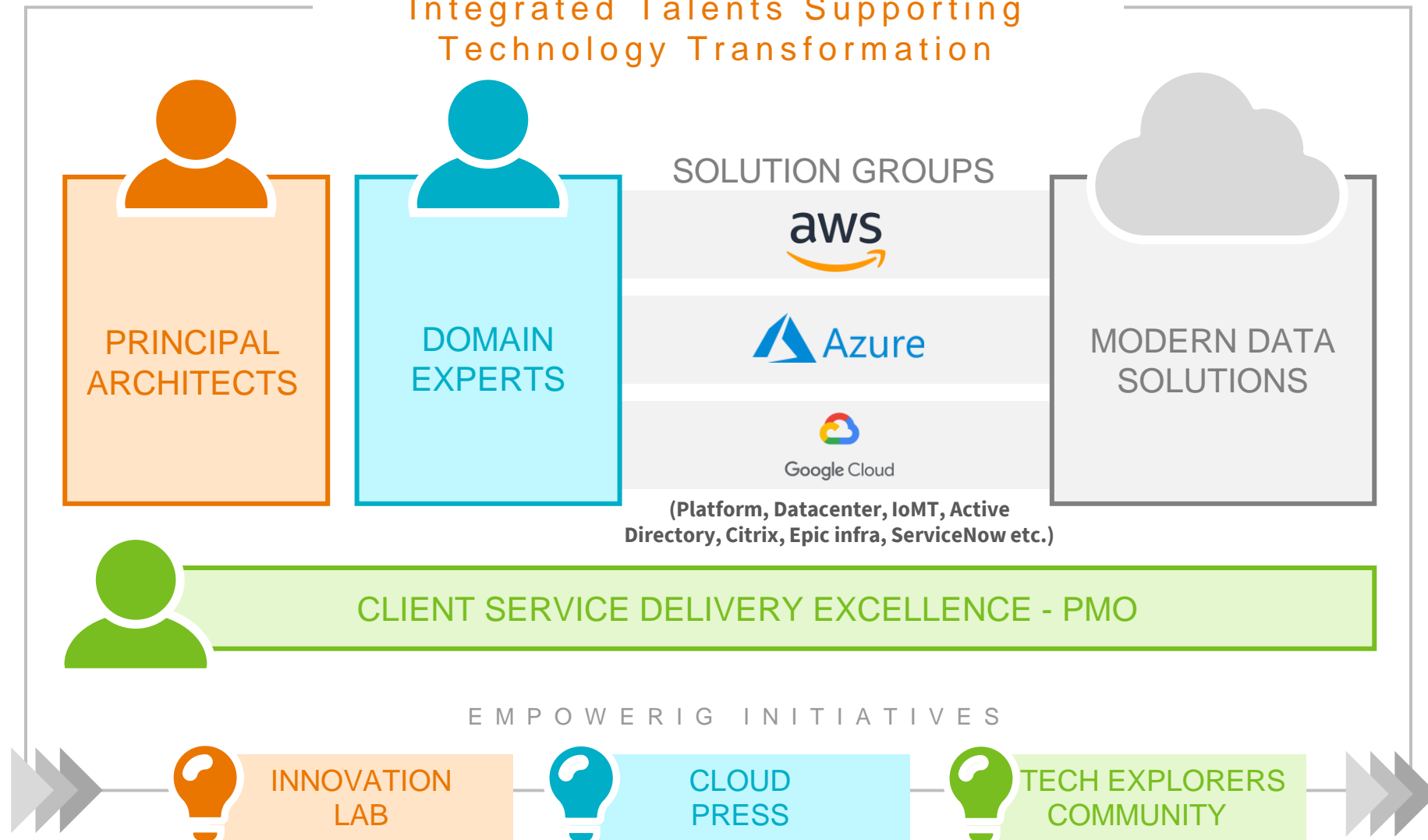
NORDIC

# CLOUD OPERATING MODEL

- ✓ MULTI CLOUD & PLATFORM COMPETENCIES
- ✓ ADVANCE SOLUTIONS CAPABILITIES
- ✓ DEEP HEALTHCARE EXPERIENCE
- ✓ ACTIVE CADENCE WITH TECH PARTNERS AND EHR VENDORS



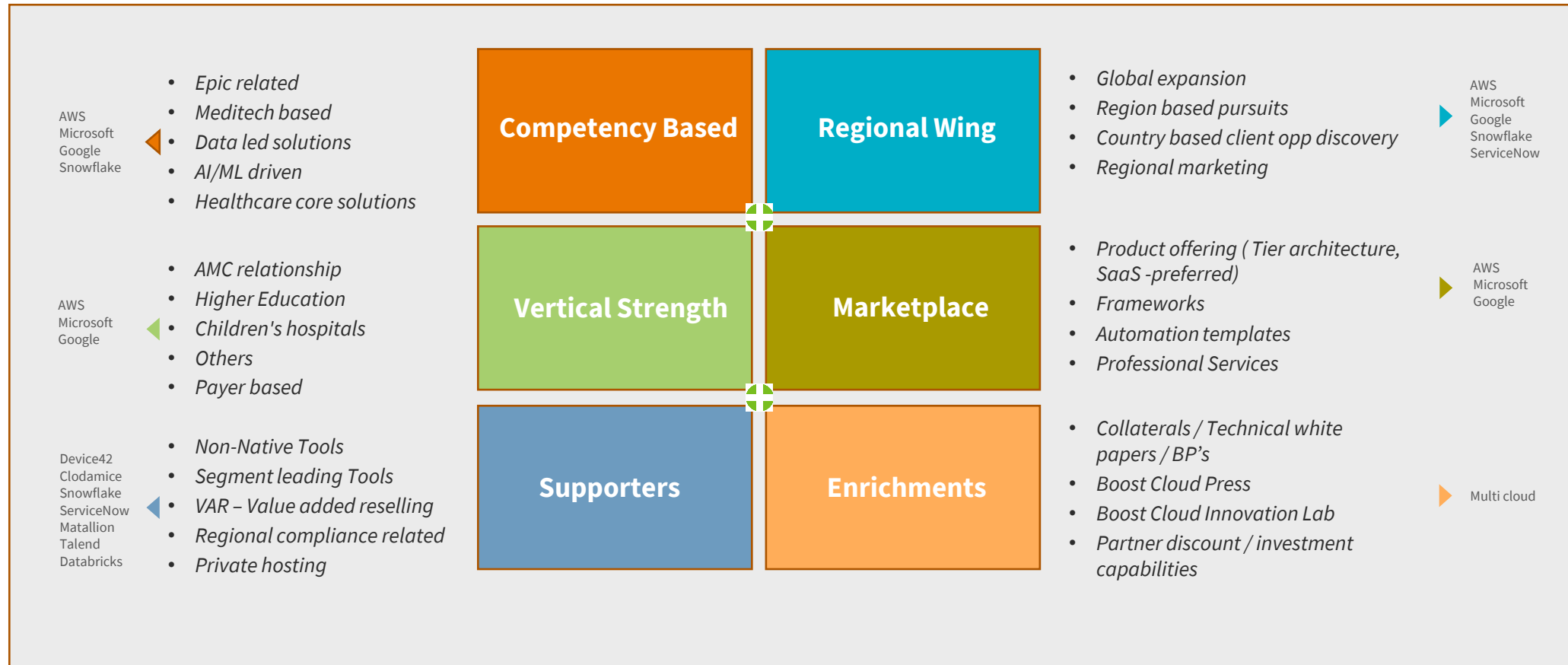
## Integrated Talents Supporting Technology Transformation



- Collectively, our team has more than 100+ Years of experience, leading technology modernization in Healthcare and other industries
- Prior to Nordic we are “ex IBM, ex AWS, ex Cognizant, ex BlueOrigin” etc.,
- We have executed multiple medium to large scale enterprise transformation including Tier 3-4 datacenters across globe
- A team that is comprised of both Healthcare domain experts and tech leaders

# Cloud Alliance Partnership Charter

Our levers to progress on Go-To-Market strategies



Mainstream of Partners – Alliances

# Cloud Service Catalogue – “Innovate IT Services & Accelerate Customer Outcomes”

## Tech Advisory & Cloud Adoption

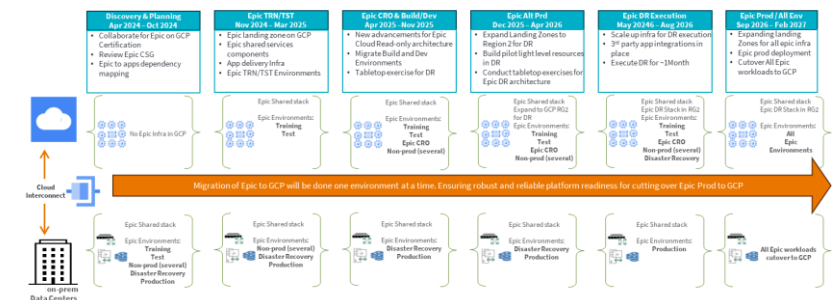
- TCV assessment to cloud – Getting Cloud ready
- Build next gen IT Road map, spanning enterprise apps and architectures
- Develop and Disaster recovery strategies and solutions(On-premise, Hybrid)
- Establish Healthcare Cloud Landing Zone ( POC, Training, Data archival)
- Cloud based Data analytics assessment and implementation
- Enhance Interoperability Solutions
- Assessment for Cognitive Services AI/ML & Implementations
- Infrastructure productivity (Cloud & Onpremises) - KPI establishment
- End of Life Assessment – Infrastructure and applications
- FinOps / Cost assessment / Cost savings

## Get to Run & Run better Services

- Monitoring Service assessment and Integration (As-Is assessment, Gap identification, Tagging, governance reports )
- Cloud Center Of Excellence, like operating model for continued operational excellence
- Infrastructure, database and Application BAU Operations (EHR and Non-EHR Apps)
- Cyber Security (assessment, recommendations and Triage )
- Identity Access Management (On-Premise and Cloud)
- ITSM / ServiceNow Integration and Implementation
- End to End Infra Automation (Terraform, Cloud Formation, ARM Templates etc.,)

## Transition & Transformation

- EHR Hosting
- Enterprise Infra and App hosting
- Modernization (Datacenter, Virtualization, Compute, Storage, Backup, Application)
- EHR or Enterprise workload growth assessment
- Guidance on outsourcing / vendor consolidation
- Tenant Integration & consolidations
- Data monetization and De-identification solutions



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# Factory-Based Migration Plan

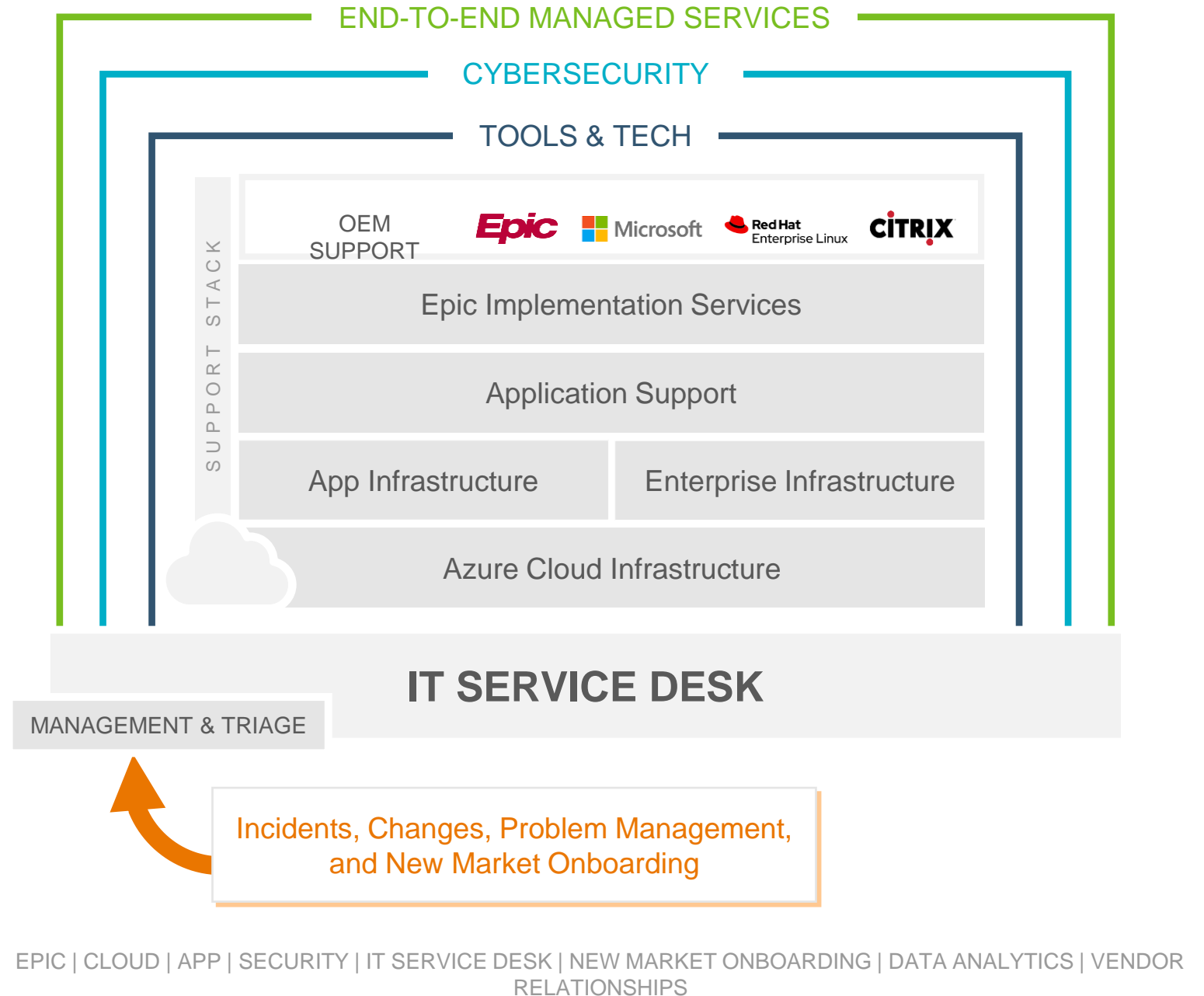
# EXAMPLE: NORDIC GOVERNED SUPPORT



## One Nordic. Endless Benefits.

Beyond a single point of contact and communication, having a **full stack support partner** helps identify root causes for issues *(and opportunities)*

- ✓ Active handshake between Nordic and Partners
- ✓ Infrastructure as a Code for Automation
- ✓ Cloud native tools for Monitoring and access Management
- ✓ Meeting Epic Infrastructure standards



# Infrastructure-as-code – Templates



SERVER BUILD  
TEMPLATE



AUTO SCALE  
FOR DR  
TEMPLATE



V-NET  
CREATION  
TEMPLATE



SERVER  
PATCHING  
TEMPLATE



FAILOVER  
AUTOMATION

Stages

Jobs

✓ Deploy\_VnetSharedInfra

4 jobs completed

3m 36s

✓ Deploy\_ADSubnet

4 jobs completed

2m 34s

✓ Deploy\_VM-AD001

4 jobs completed

2m 26s

✓ Deploy\_VM-AD002

4 jobs completed

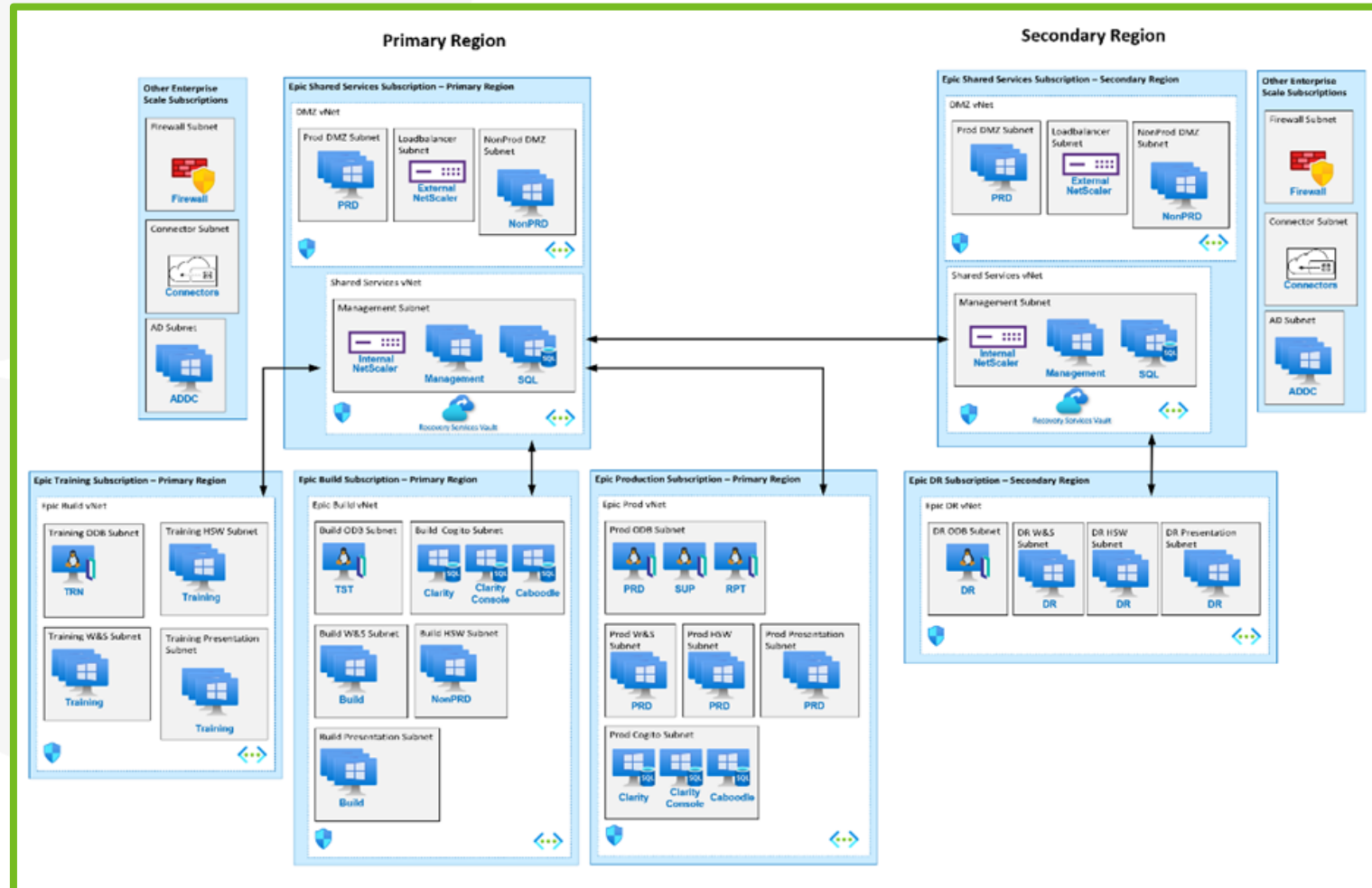
3m 3s

✓ Deploy\_VM-AD003

4 jobs completed

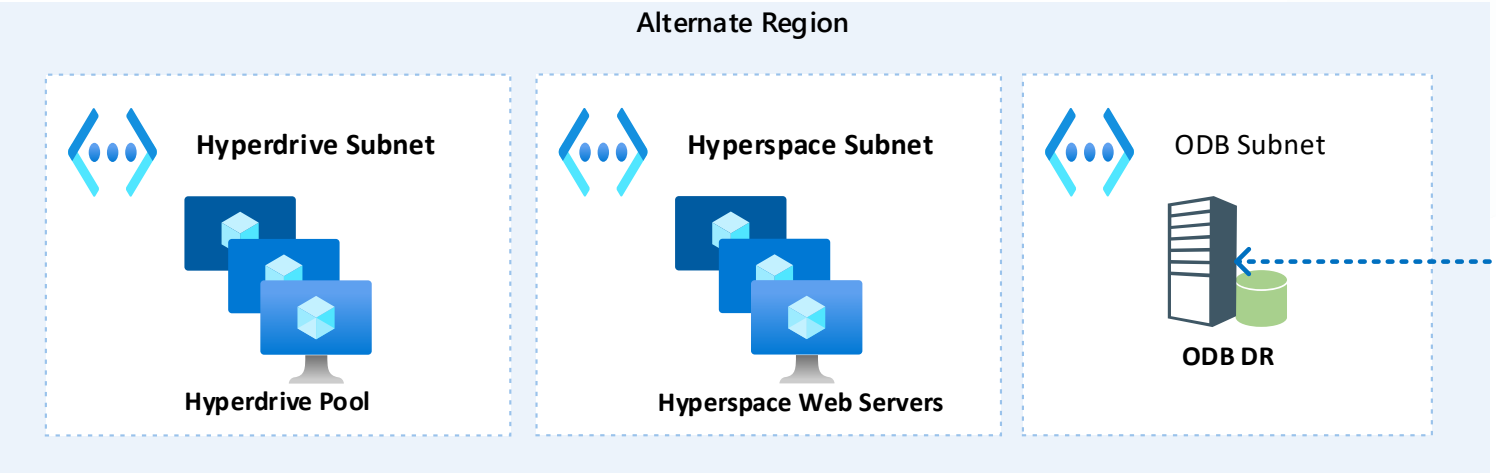
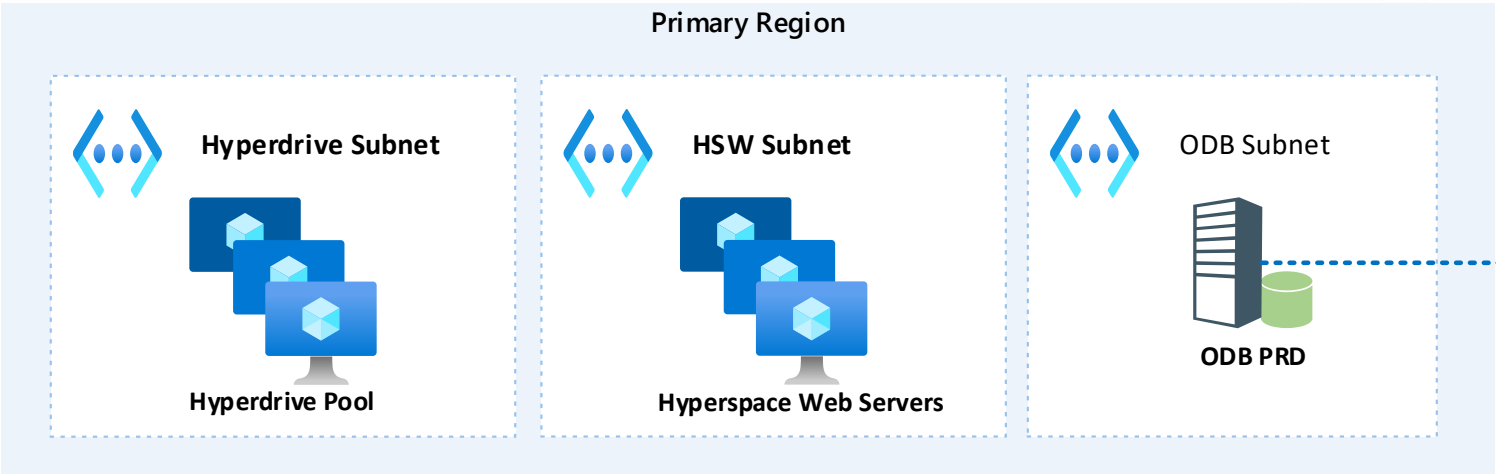
3m 18s

# High level Epic on Azure reference architecture





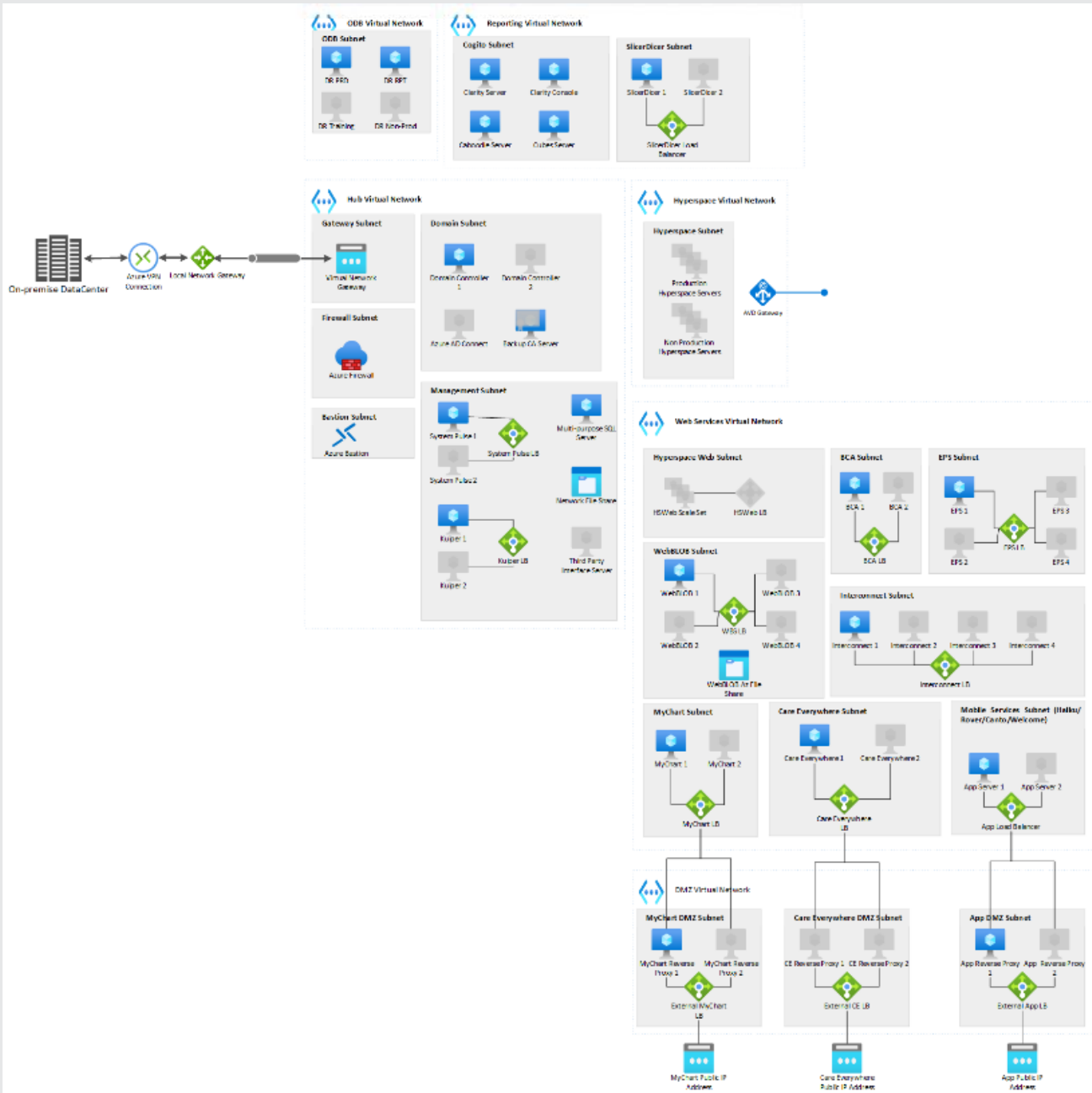
# Disaster Recovery Approach



IRIS Mirroring

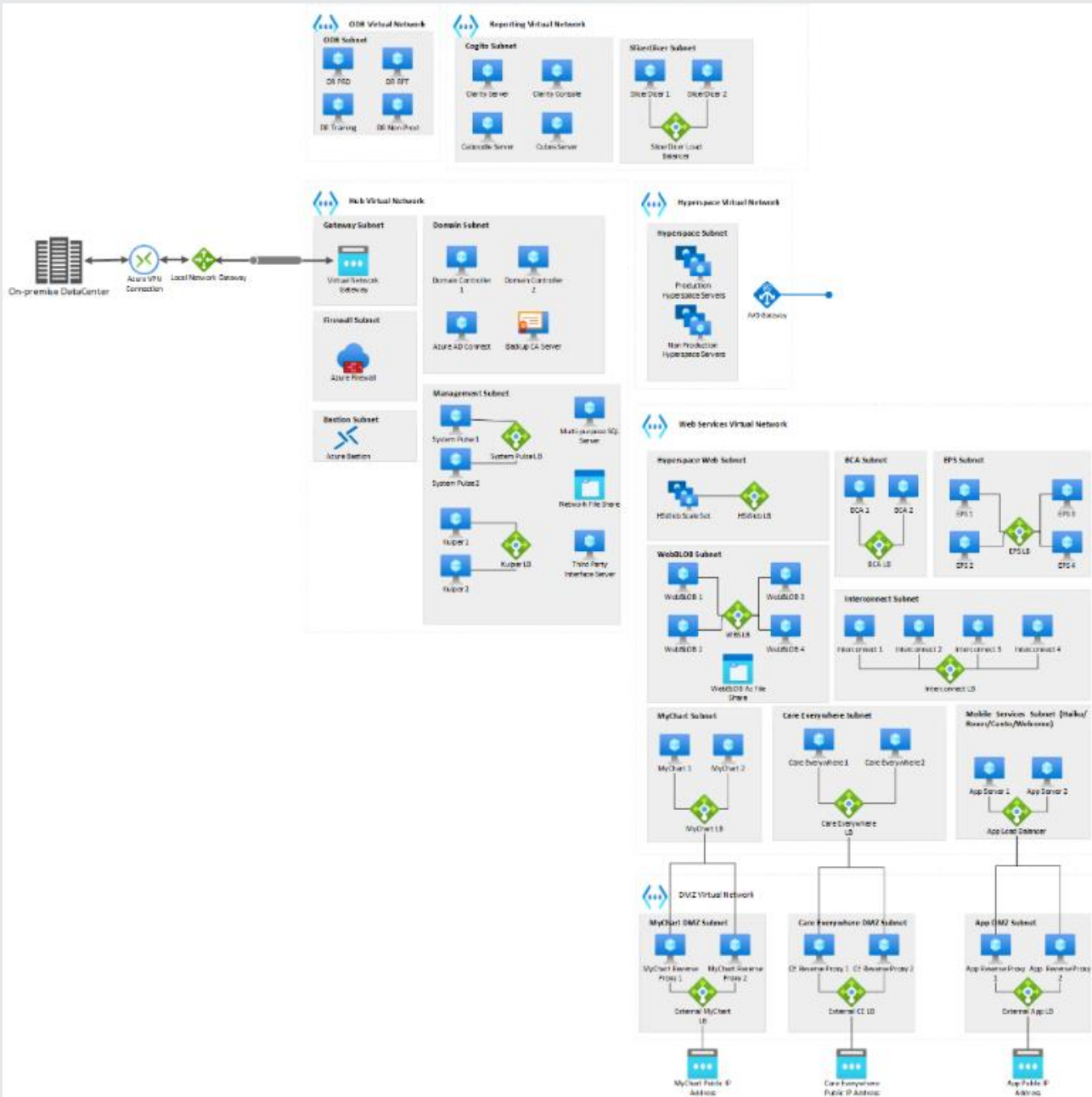
Primary/Alternate Region with Pilot Light Approach

IRIS Mirroring for near point-of-failure RPO



# Pilot Light Approach

- Infrastructure configured, deployed
- <10% of infrastructure active during production uptime
- Near instantaneous activation of full infrastructure during DR activation



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Progressive  
Migration  
Strategy

Risk Mitigation  
& Outcome  
based project  
plan

People & Tech  
Collaboration,  
for Cross  
Functional  
Synergy

Factory based  
migration  
workflow with  
Guardrails

**Approach** based on environment, waved planned based on dependencies (app, infra and end user exp)

**Risk mitigation** integrated project plan with governance and outcomes driven work break down structure

**Establish** an active governance, Two in the box, where both technical and functional inputs are collectively important

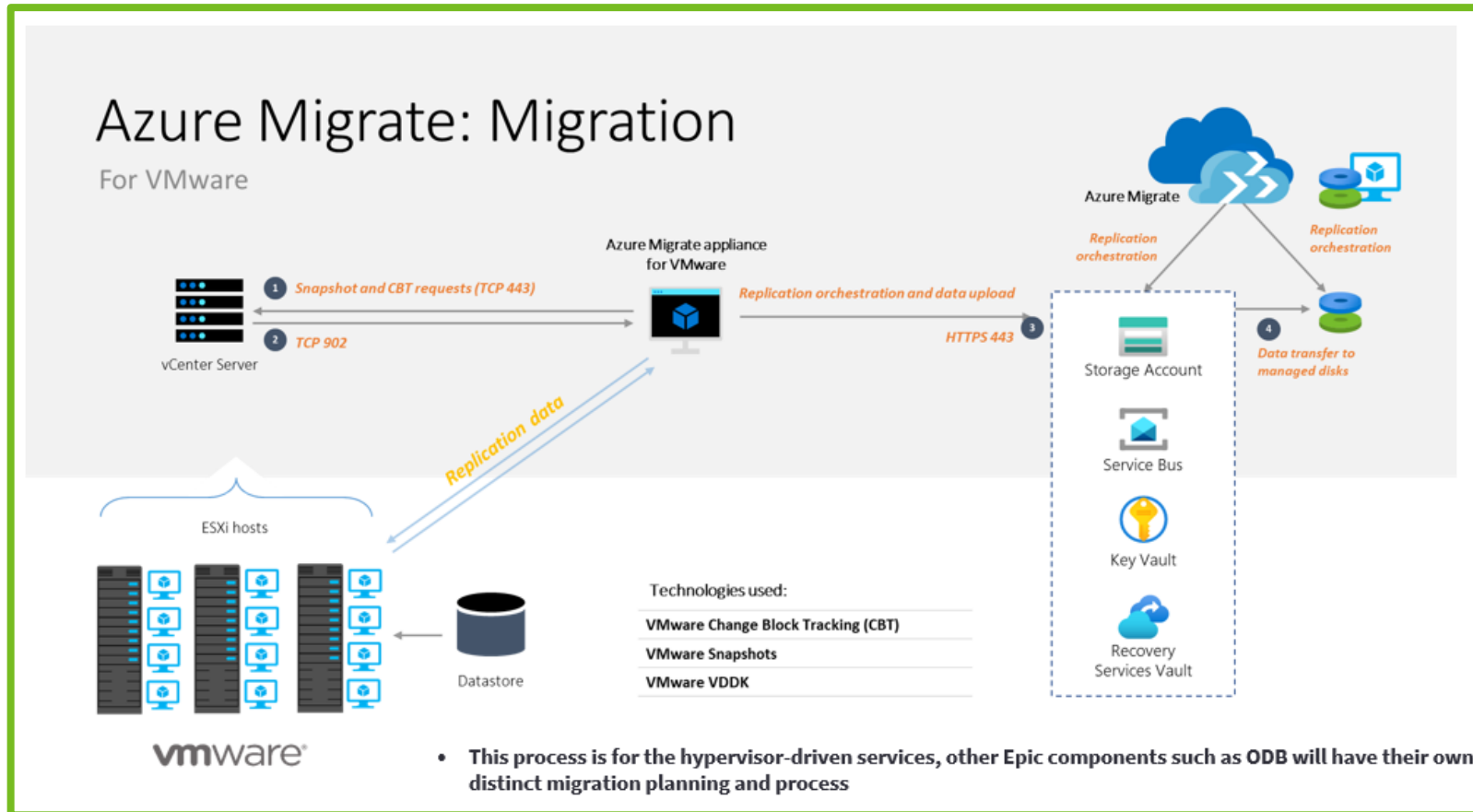
**Guard rails around:** System availability, Compliance, Access Management, Post Migration system functionality, User Experience, Documentation, Transition, DR Tests, Hyper Automation



PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5
<ul style="list-style-type: none"> <li>Discovery of OnPrem</li> <li>Dependency Mapping</li> <li>Azure Platform Readiness</li> <li>Migration Wave Planning</li> <li>Establish Command Center</li> <li>Establish Tools Architecture<sup>1</sup></li> <li>Orchestrate ITSM Integration</li> <li>Build Infrastructure as a Code</li> </ul>	<ul style="list-style-type: none"> <li>Establish Shared Infrastructure<sup>2</sup></li> <li>Migrate Training ODB<sup>3</sup></li> <li>Migrate Build on waves</li> <li>Azure Secondary Region Build</li> <li>Tools Advancements &amp; Maturity</li> <li>Managed Services Ramp Up</li> </ul>	<ul style="list-style-type: none"> <li>Build DR Workload – Alternate Production</li> <li>Coordinate 1 DR Test<sup>4</sup> (On-Prem to New Azure)</li> <li>Tools Advancements &amp; Maturity</li> <li>Managed Service Ramp Up</li> </ul>	<ul style="list-style-type: none"> <li>Prod Migration</li> <li>Tools Advancements</li> <li>Epic Patch upgrade<sup>5</sup></li> <li>Managed Service Ramp up</li> <li>DR Test (Azure to Azure)</li> </ul>	<ul style="list-style-type: none"> <li>Decommission of Epic environments, platform services from Datacenter</li> </ul>
<ul style="list-style-type: none"> <li>✓ Dependency mappings (app-app + app-infrastructure, ports, IP etc.,)</li> <li>✓ Azure Core Platform ( Core VNet, Connectivity, SIEM etc.,)</li> <li>✓ Wave Mapping &amp; Migration methods</li> <li>✓ Governance and Command center</li> </ul>	<ul style="list-style-type: none"> <li>✓ Build, Test, Training environment on Azure (Hybrid environment)</li> <li>✓ Tools Maturity and integration of alerts and workflows</li> <li>✓ Managed Services Kick off</li> </ul>	<ul style="list-style-type: none"> <li>Interim DR arrangements – Hybrid structure</li> <li>✓ Epic PRD stays on On Prem</li> <li>✓ Epic DR env on New Azure</li> </ul>	<ul style="list-style-type: none"> <li>✓ Production and all Epic environments fully on Azure</li> <li>✓ Tools integration and modernization</li> <li>✓ Full managed services with SLAs and Operating procedures</li> <li>✓ Final Azure DR failover testing</li> </ul>	<p><b>DELIVERABLES</b></p> <ul style="list-style-type: none"> <li>✓ Final decommission of on-premises env / infra / all migrated to Azure</li> </ul>

# Azure Migrate

Migration will be done using Azure Migrate, which provides a centralized hub to assess and migrate to Azure servers, infrastructure, applications, and data.



## AZURE MIGRATE

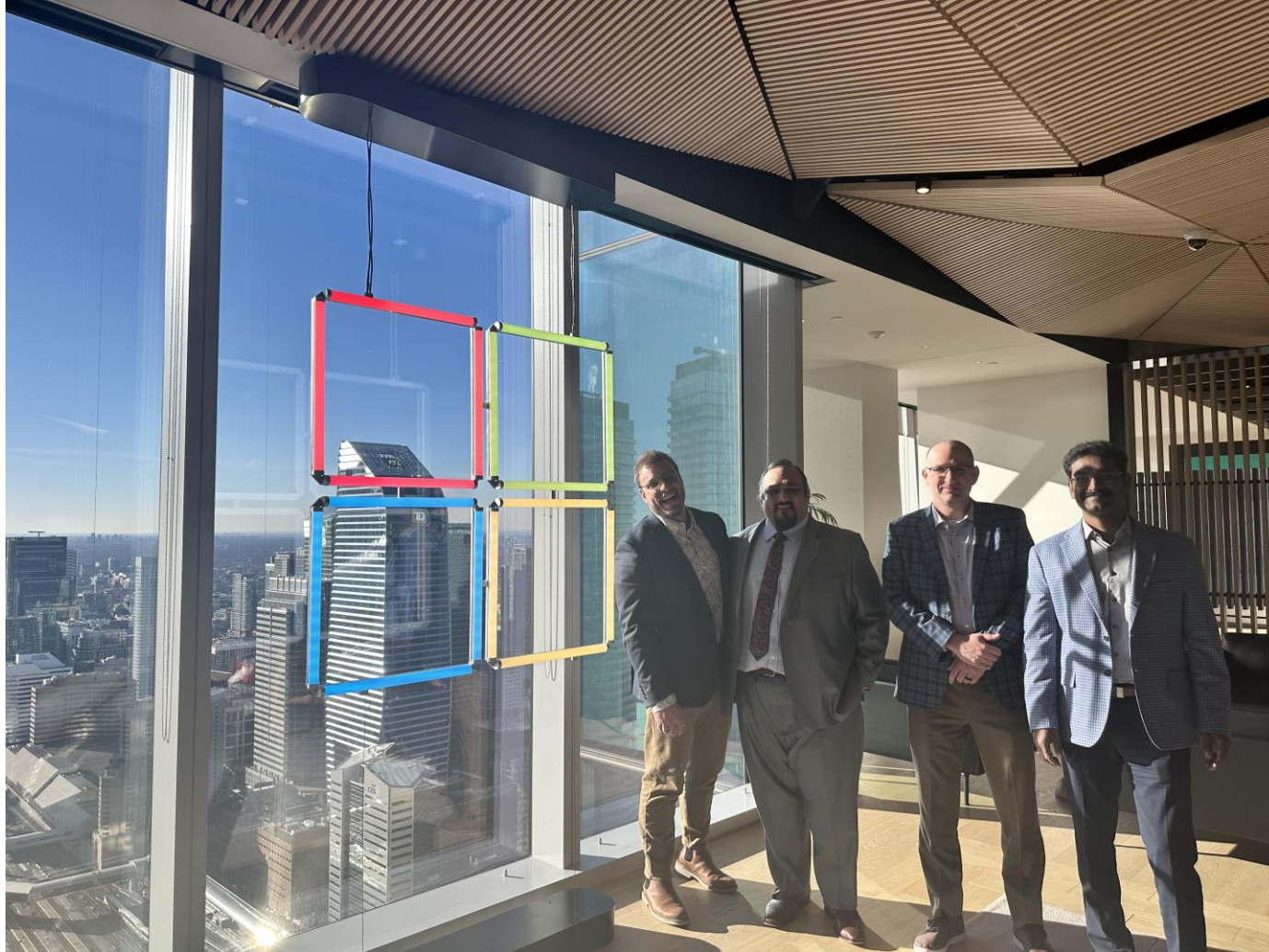
- ✓ Unified migration platform is a single portal to start, run, and track your migration to Azure
- ✓ Range of tools is for assessment and migration
- ✓ Assessment and migration

## AZURE MIGRATE HUB

- ✓ Windows, Linux, and SQL Server
- ✓ Ability to assess databases and migrate them to Azure SQL Database or to SQL Managed Instance.
- ✓ Migrate large amounts of data to Azure quickly and cost-effectively using Azure Data Box products.

**Collaboration with Microsoft**

# Microsoft Toronto MTC – After a joint RFP Orals with Microsoft





# Microsoft NY MTC – After a joint Partner Development Session

