



# ItalyNorth Cloud Region: best practice di onboarding e migrazione



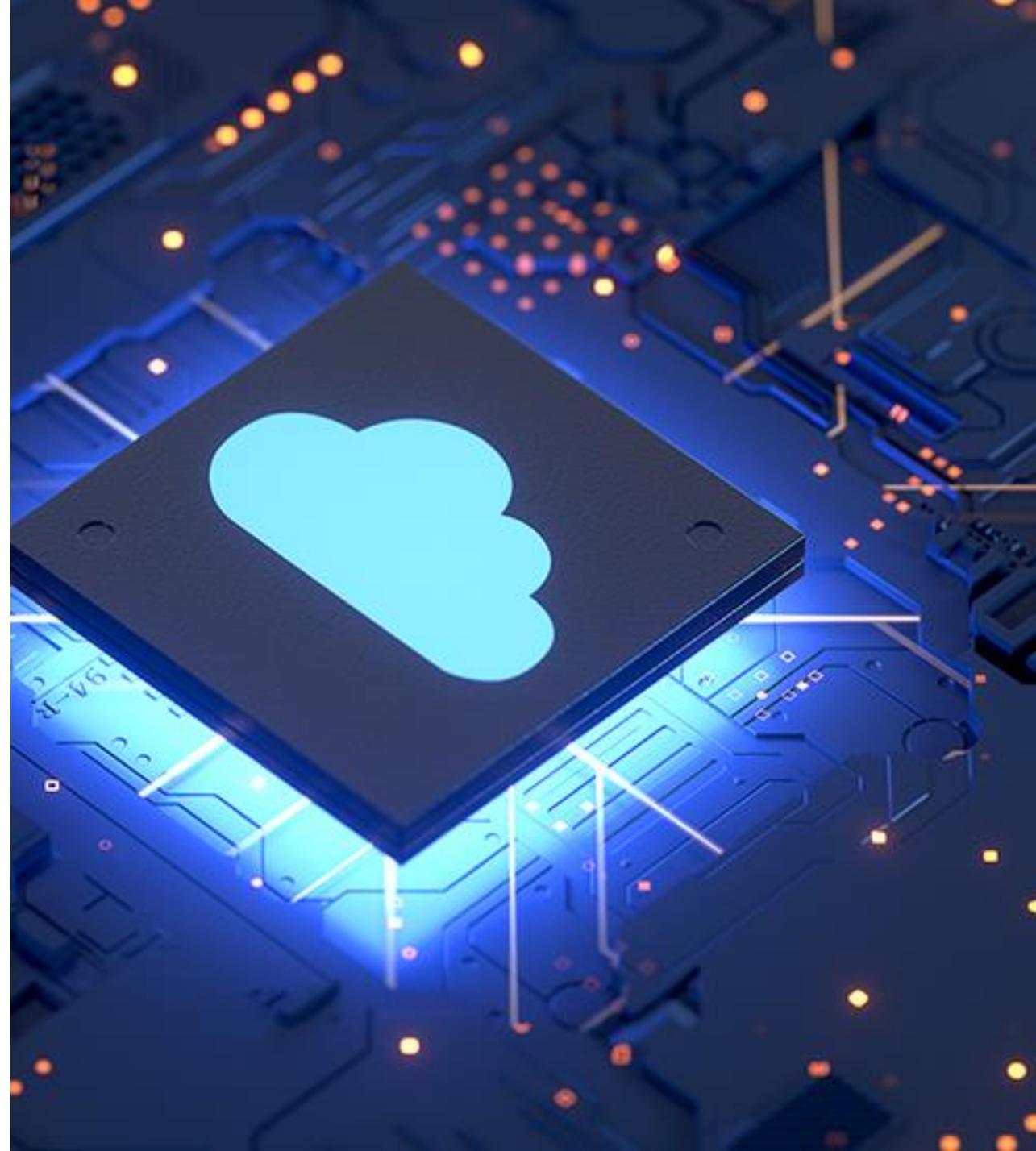
# Speakers



**Tiziano Durante**  
Italian Region - Datacenter Lead  
Microsoft Italy



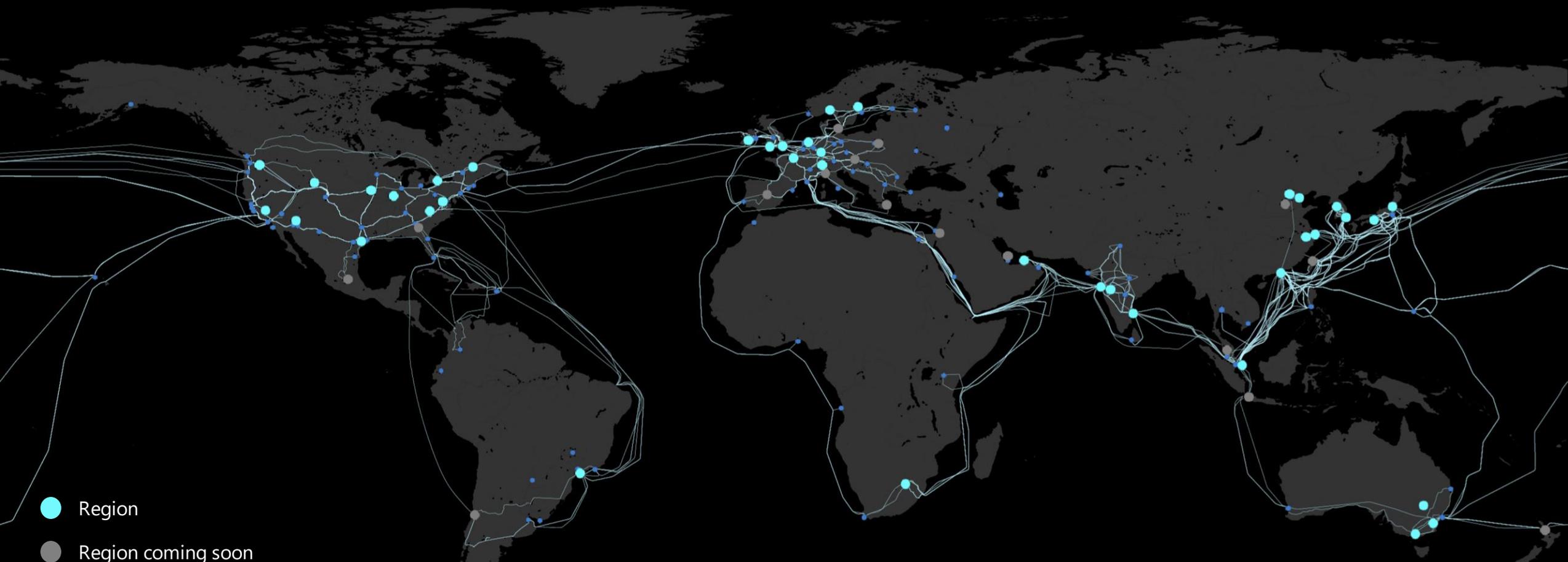
**Marco Moioli**  
Cloud Solution Architect  
Microsoft Italy



# Agenda

- Region status
- Onboarding strategies
- What about Region Pair?
- Azure Resource Mover

# More trusted capability than any provider



- Region
- Region coming soon
- Network PoPs

**60+** regions worldwide  
**175K+** miles of fiber and subsea cable  
**190+** network PoPs  
**100+** compliance offerings  
**35** countries with data residency  
**200+** ExpressRoute partners

# Welcome ItalyNorth!



1

Geography



Data Residency and Sovereignty

1

Region



Minimal latency of under 2 ms

3

Zones



VM Uptime SLA – 99.99 (4x9s)



Storage SLA 99.999999999999 (12x9s)



Fully Microsoft managed and operated

# Azure Availability Zones

When an Azure region supports Availability Zones, the region is composed of three physically-separated zones (each composed of one or more datacenters).

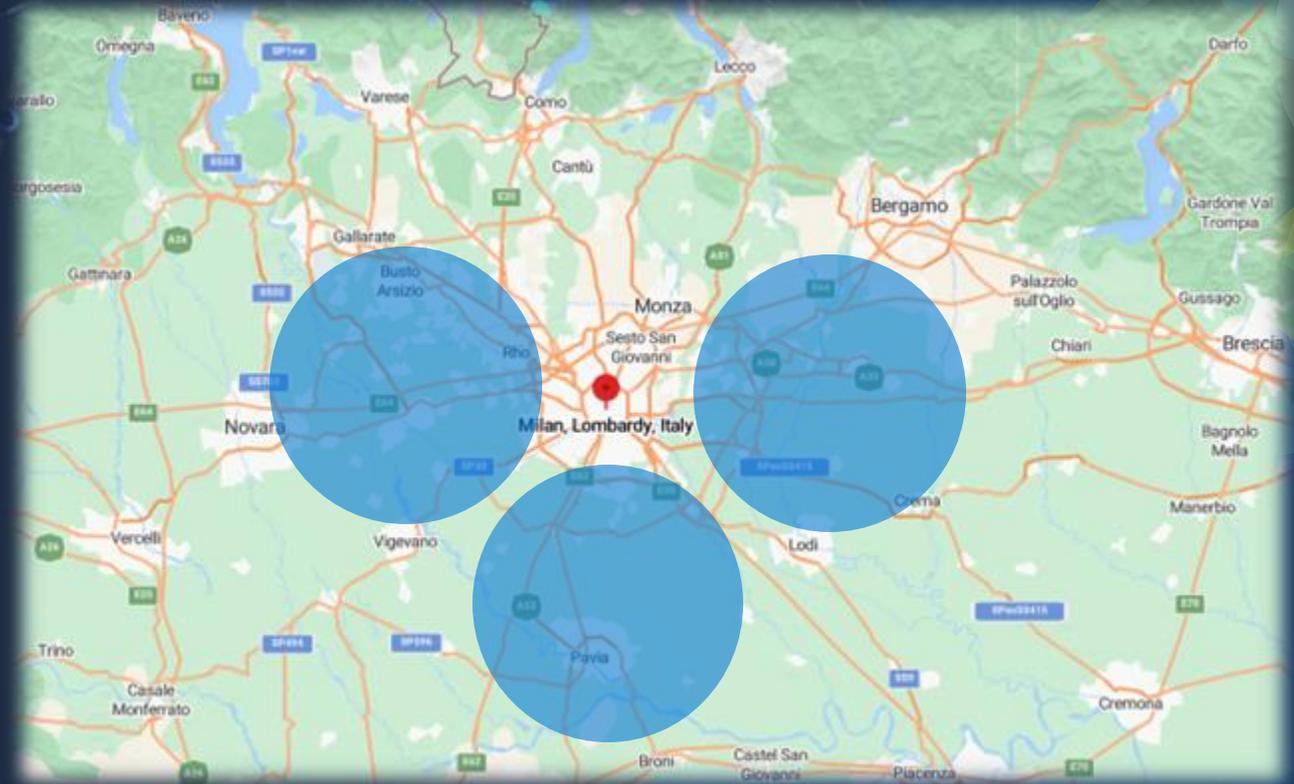
**Each zone has completely independent power, cooling, and networking infrastructure**

A facility-level failure (such as a datacenter outage) will affect only one Availability Zone within the region.

**Three zones is the minimum to support quorum-based workloads (such as SQL, Service Fabric, or MongoDB)**

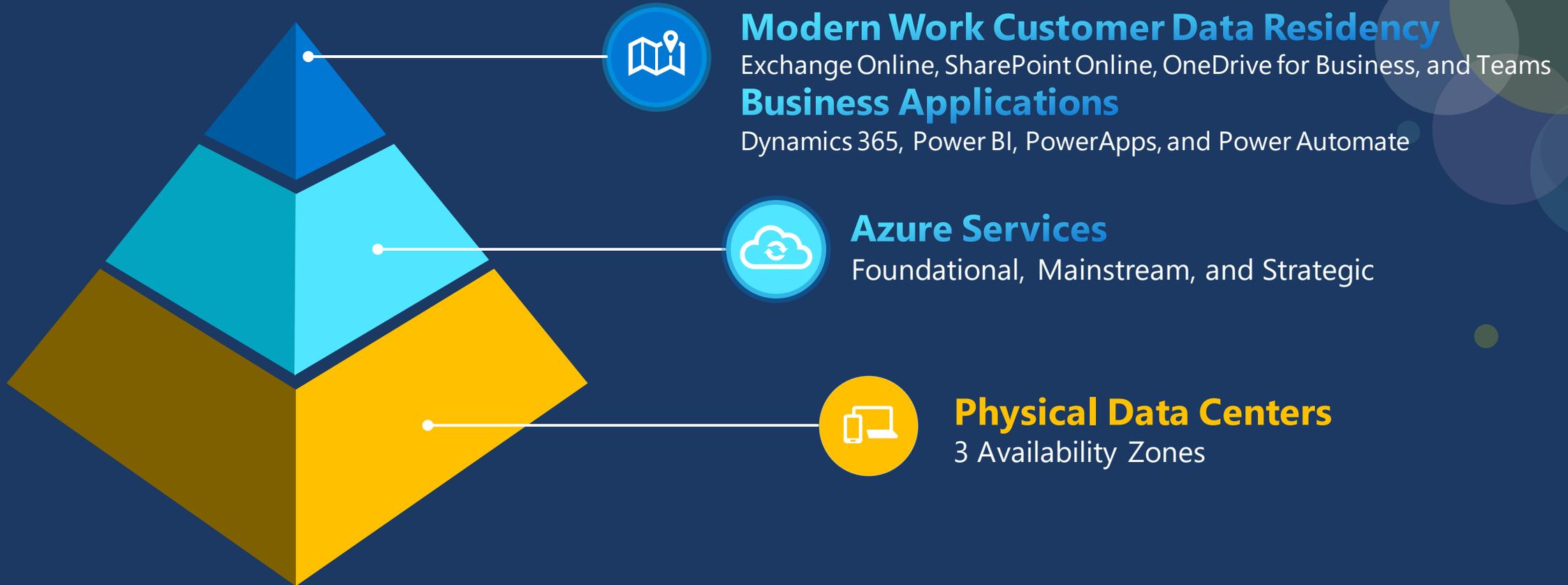
A **latency-defined perimeter** dictates how far apart Availability Zones can be without compromising networking performance.

**<= 2ms inter-Availability Zone RTT**

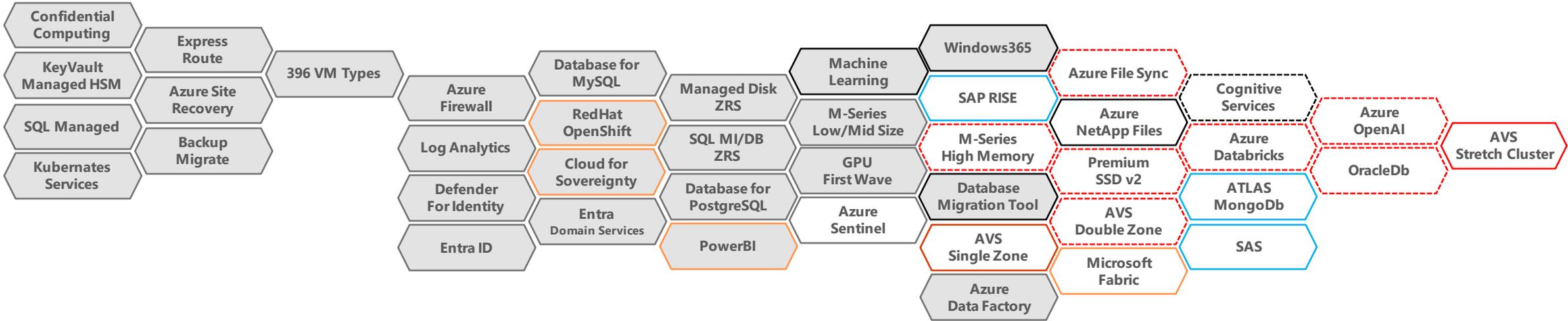


● Availability Zones

# The Foundation of the Microsoft Cloud



# Service Availability Roadmap



# Services Availability

<https://azure.microsoft.com/it-it/explore/global-infrastructure/products-by-region/?regions=italy-north,non-regional&products=all>

## Prodotti disponibili in base all'area

Con più di 60 aree annunciate, più di qualsiasi altro provider di servizi cloud, Azure semplifica la scelta del data center e delle aree più adatte a te e ai tuoi clienti.

Seleziona un prodotto

**Prodotti**

**Are**

CHIAVE TABELLA:  Disponibile a livello generale  In anteprima  In anteprima (passa il puntatore per visualizzare l'intervallo di tempo previsto)  Disponibilità futura (passa il puntatore per visualizzare l'intervallo di tempo previsto)

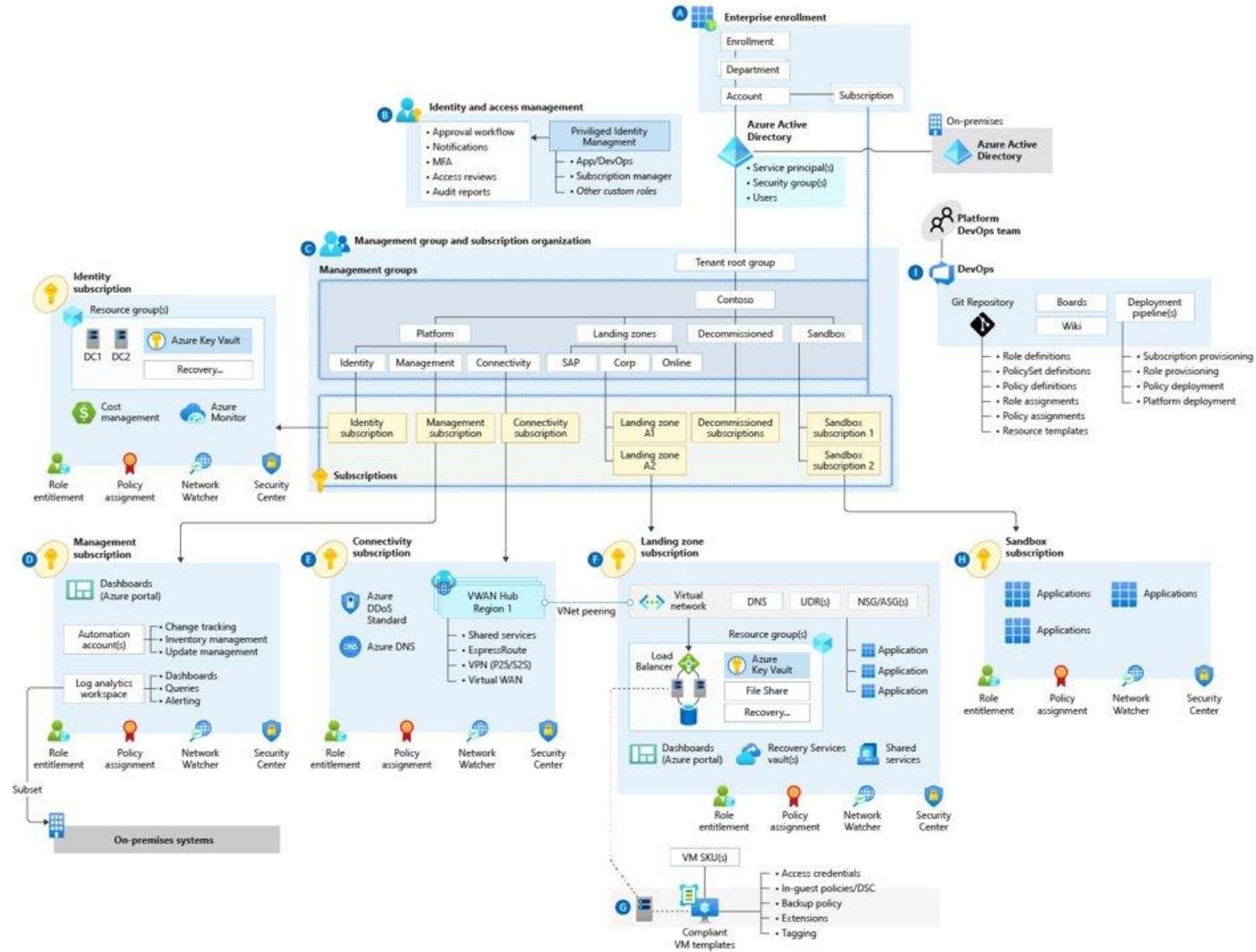
ITALIA

Prodotti	Non a livello di area	Italia settentrionale
INTELLIGENZA ARTIFICIALE + MACHINE LEARNING		
<a href="#">Azure Databricks</a>		
<a href="#">Servizio di Azure AI Bot</a>	<input checked="" type="checkbox"/>	
<a href="#">Health Bot</a>		
<a href="#">Ricerca cognitiva di Azure</a>		<input checked="" type="checkbox"/>

# Italy North Onboarding – Green field vs Brown Field



# Enterprise Scale



# Design Areas – Enterprise Scale Green Field



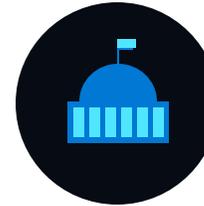
Enterprise Enrolment &  
Entra ID Tenants



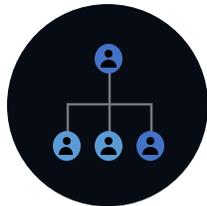
Business Continuity  
& Disaster Recovery



Identity & Access  
Management



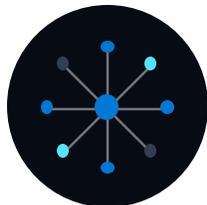
Security, Governance &  
Compliance



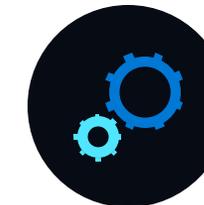
Management Group &  
Subscription  
Organization



Management &  
Monitoring



Network Topology &  
Connectivity

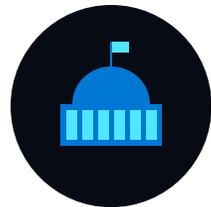


Platform Automation &  
DevOps

# Design Areas – Brown Field Italy North



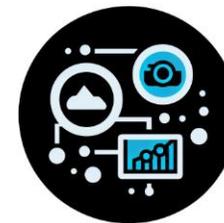
Network Topology &  
Connectivity



Security, Governance &  
Compliance



Business Continuity  
& Disaster Recovery



Regional Services  
Availability

# Networking

- Expand the networking
  - Plan the regional address space
  - Create the new hub
    - Firewall
    - Name resolution
    - Gateways
- Can I reuse my Express Route circuit? → YES!

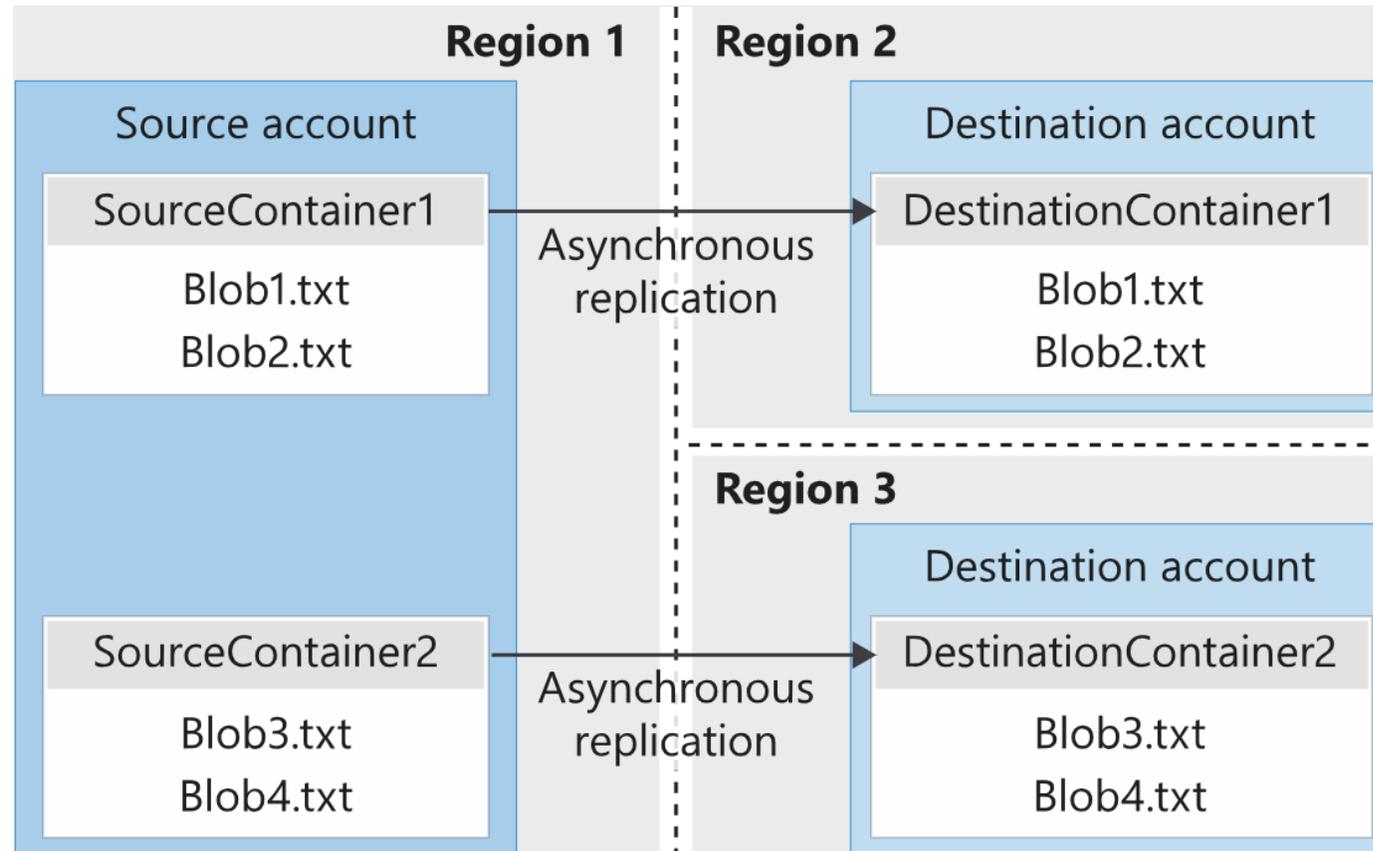
# What about Region Pair?

- Newer Azure regions have no regional pair – No GRS
- Could I architect my DR inside the region?
  - Leverage ZRS for BC/DR
  - Azure Site Recovery offers inter-zone replica
  - ZRS could be easier to deploy and maintain

**Several services can perform replication to any target region**

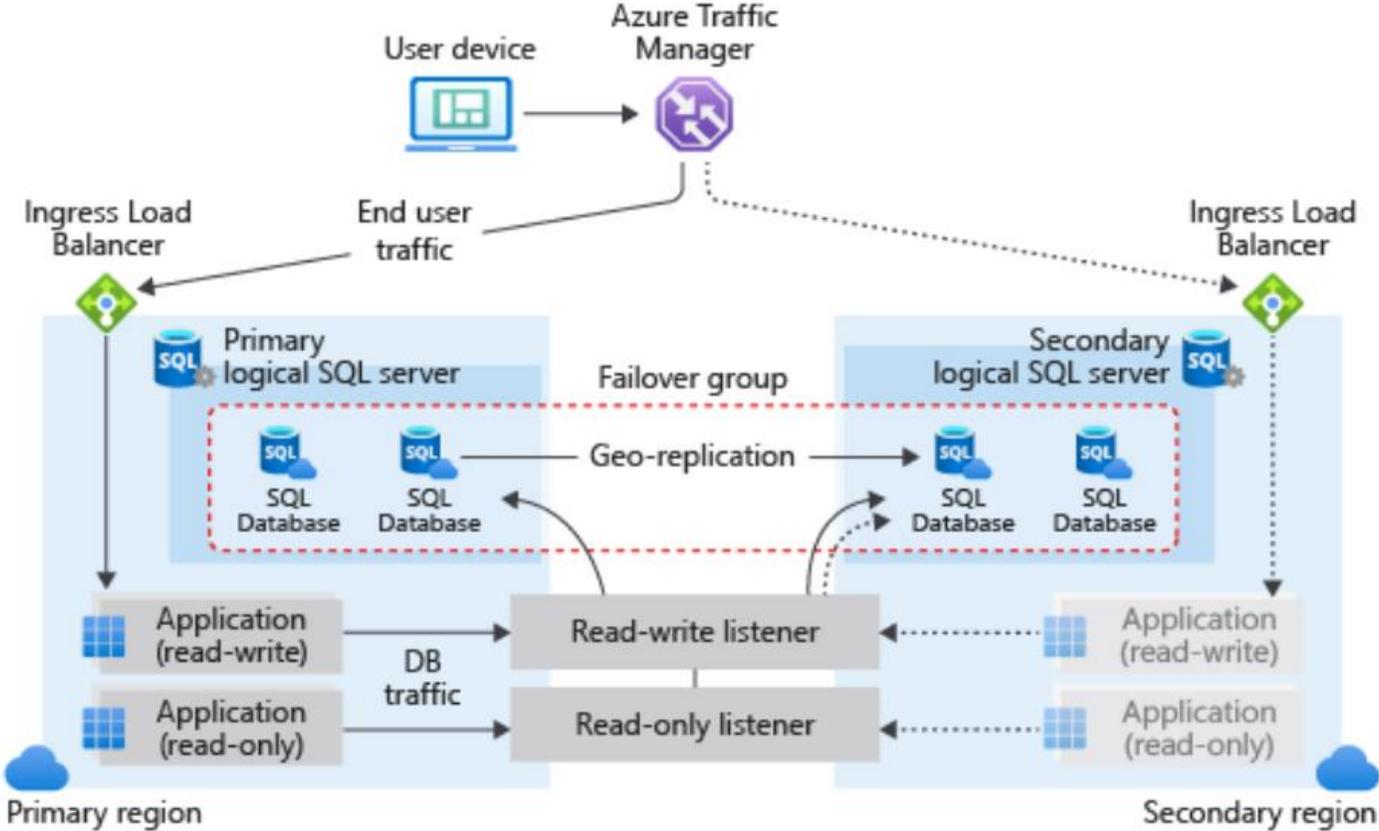
# Disaster Recovery with unpaired regions

## Blob Storage Object Replication



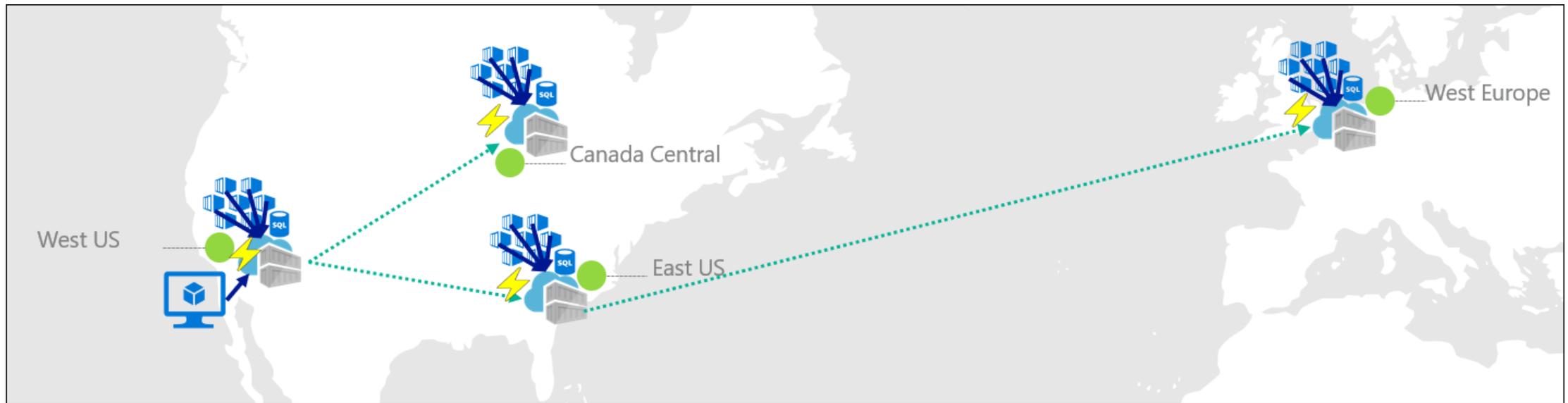
# Disaster Recovery with unpaired regions

## Azure SQL



# Disaster Recovery with unpaired regions

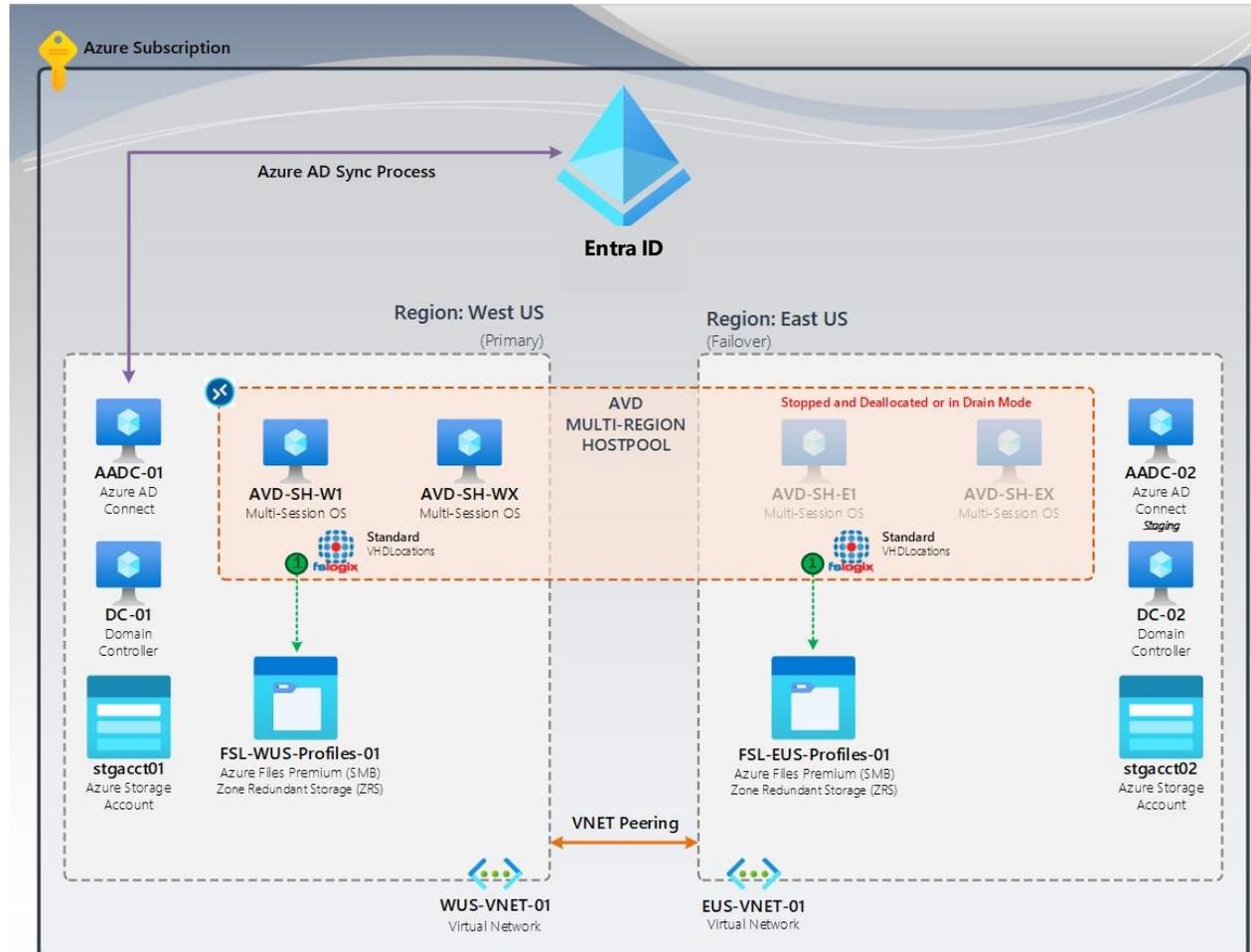
## Container Registry Replication



[Geo-replicate a registry - Azure Container Registry | Microsoft Learn](#)

# Disaster Recovery with unpaired regions

## Azure Virtual Desktop – FSLogix Cloud Cache

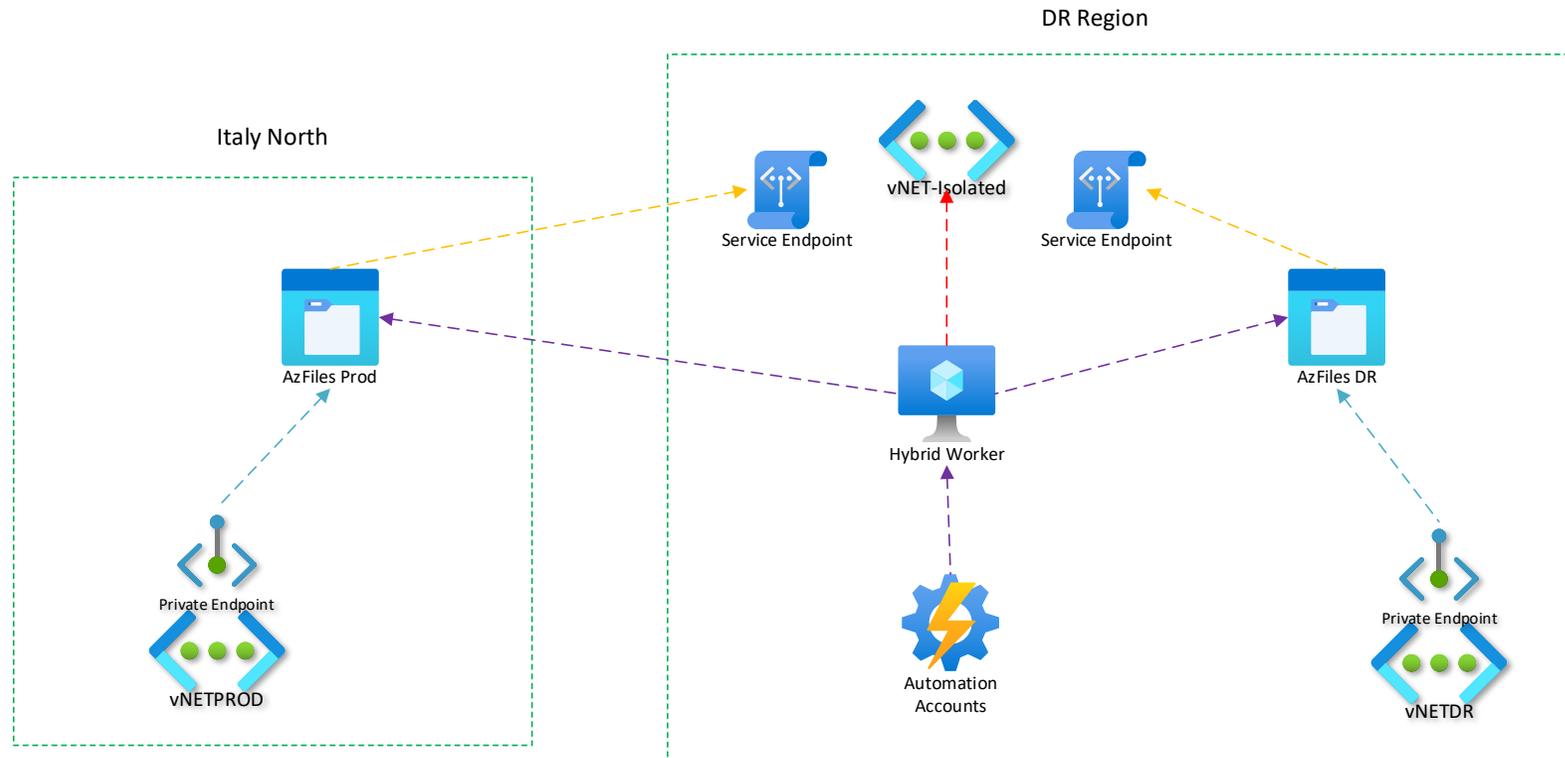


**Do we have a service that cannot be geo replicate?**

# Disaster Recovery with unpaired regions

## Storage Account – File share

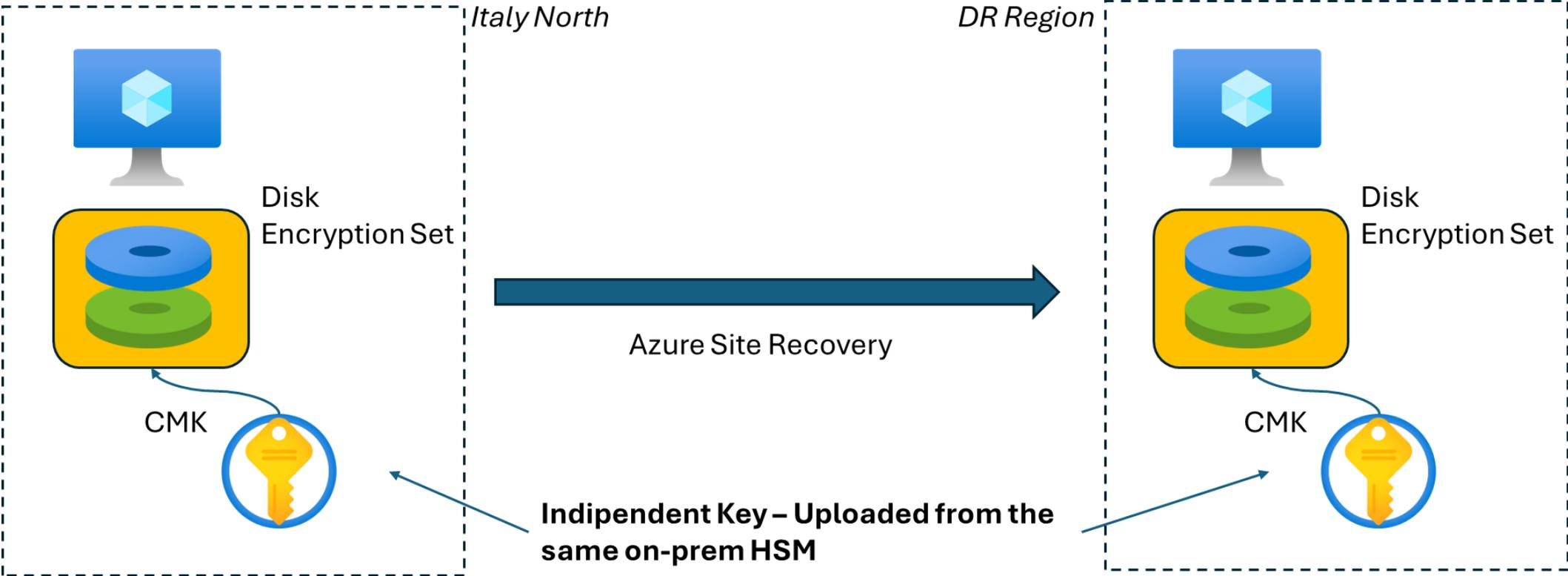
Leverage Azure automation resources to architect replication processes.



# Disaster Recovery with unpaired regions

## Key vault Replication

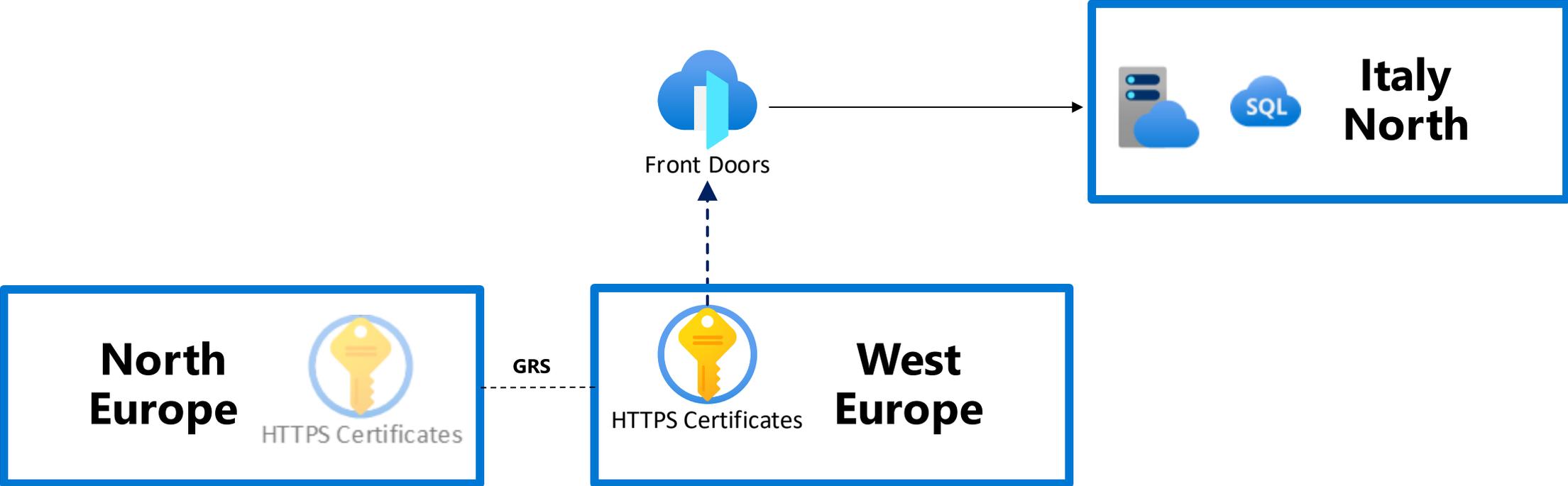
My requirements could be satisfied without KV GRS?



# Disaster Recovery with unpaired regions

## Key vault Replication

Global services, as Frontdoor, could continue leveraging a KV in a region with built-in pair.



# Disaster Recovery with unpaired regions

## Azure Backup

Native backup solutions rely on storage replication features to achieve GRS

Status  
Active

Location  
Italy North

**Backup Configuration**  
vault2

 Save  Discard

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Storage replication type

Locally-redundant **Zone-redundant**

**Use ZRS or third-party service!**

**How can I move my existing workloads?**

# Azure Resource Mover (Region to Region)

- Azure VMs and associated disks (Azure Spot VMs are not currently supported)
- Encrypted Azure VMs and associated disks.
- NICs
- Availability sets
- Azure virtual networks
- Public IP addresses (Public IP will not be retained across regions)
- Network security groups (NSGs)
- Internal and public load balancers
- Azure SQL databases and elastic pools



<https://learn.microsoft.com/en-us/azure/resource-mover/overview>

# Azure Resource Mover - Demo

The screenshot displays the Microsoft Azure portal interface. At the top, there is a search bar and the user's profile information (mmoioli@microsoft.com). Below the search bar, the 'Azure services' section is visible, featuring a grid of service tiles including 'Create a resource', 'Azure Resource Mover', 'Virtual machines', 'Resource groups', 'Microsoft Defender...', 'Microsoft Sentinel', 'Microsoft Defender for...', 'Subscriptions', 'Storage accounts', and 'More services'. The 'Resources' section is active, showing a table of recent resources. The table has columns for 'Name', 'Type', and 'Last Viewed'. Below the table, there is a 'Navigate' section with icons for 'Subscriptions', 'Resource groups', 'All resources', and 'Dashboard'.

Name	Type	Last Viewed
W2019	Virtual machine	17 minutes ago
TEST-RM-WPC_group	Resource group	16 hours ago
azureapp-auto-alerts-74bc7c-mmoioli_microsoft_com	Resource group	17 hours ago
RG-JuiceWebSite	Resource group	17 hours ago
Marketers	Microsoft Defender EASM	21 hours ago
MCAPS-Hybrid-REQ-41007-2022-MarcoMoioli	Subscription	a month ago
RG-Sentinel	Resource group	3 months ago
juicewebsite	Container instances	4 months ago
DefaultResourceGroup-WEU	Resource group	4 months ago
Default-ActivityLogAlerts	Resource group	4 months ago
DefaultWorkspace-228334cd-da3c-4fd6-80e4-ce6930a9c771-WEU	Log Analytics workspace	5 months ago

Grazie

