

Identity

Active Directory

LDAP, Kerberos, NTLM

Sync

Entra ID Domain SVC

Entra ID

HTTP/S

XOU, XGPO

Entra ID Connect

OAuth
OpenID
WSFed

Password Hash
Pass Through

Entra ID Join

Domain Join Full Control

Domain Registrar B2D, Partial Control

Hybrid Join



EA.

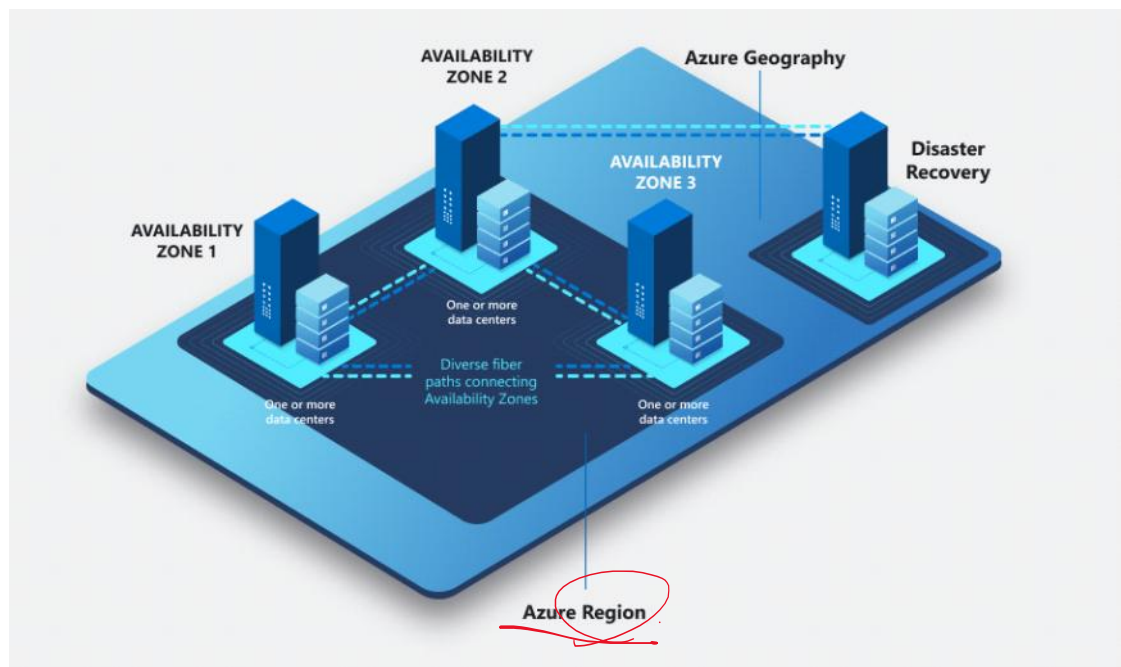
Data Center.

License.

Availability Zone $\times 3$ Pur Cooling Net

Azure Hybrid Benefit.

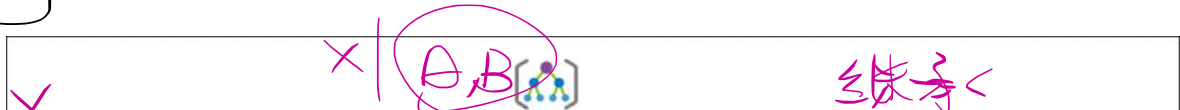
Region.

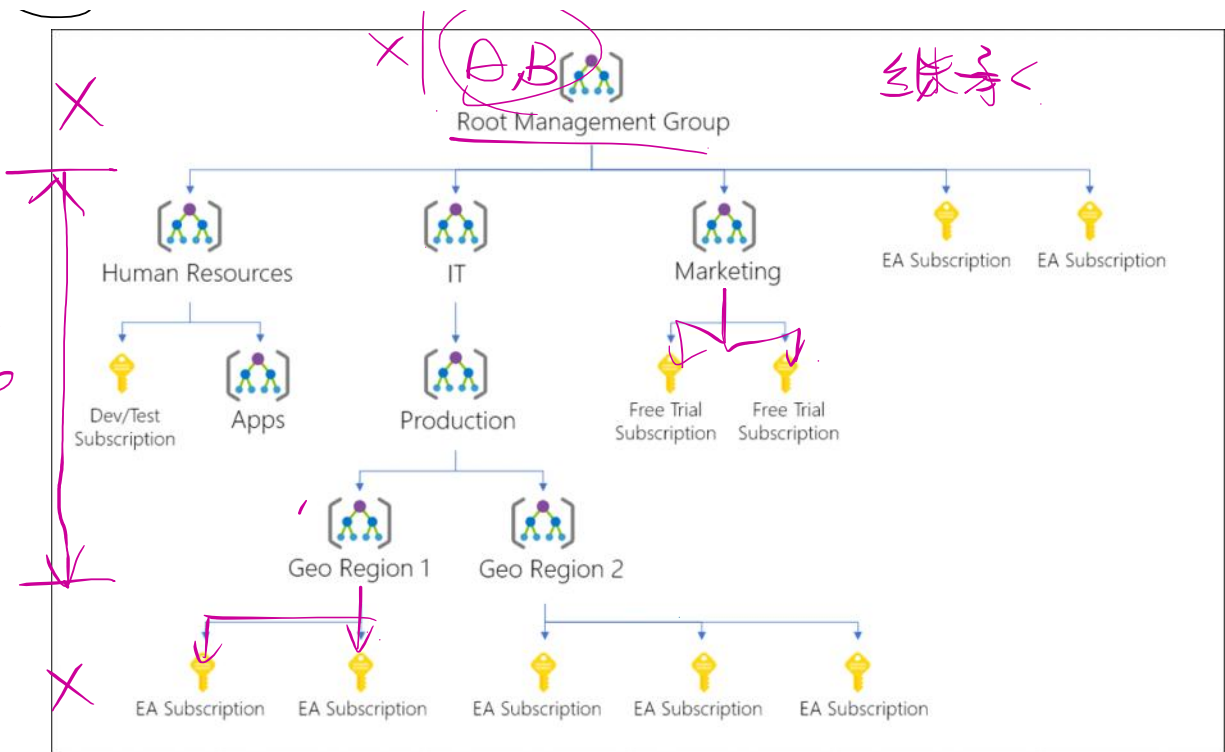


Cost = Cost Management

Tag = Metadata.

Management Group.





Azure Policy > Rules | Built-in

| Check
| Force

Custom

Definition

Policy

Interactive - Policy's Folder

Assignment

| MG.
| Sub
| RG

RBAC (Role based Access Control)

based on Azure Resource Manager
Role $\Rightarrow$ Run Permission

$\hookrightarrow$ JSON. — Action/NotAction.

Data Action/NotAction.

Assignable Scope.

VNET (SDN) - Addr Space (주소) - CIDR

L Independent

10.10.0.0/16

L Subnet x n ← Resource

10.10.1.0/24

10.10.5.0/24

Reserved Addr.

⇒ 251

256 ⇒ .0 ~ .255 ⇒ .0 .1 .2 .3

.0 .1 .2 .3

.255

.31

⇒ 32-5

⇒ 27

IP { Private IP - Dynamic / Static

{ Public IP - Azure Resource - Standard
Pricing AZ, Static

NSG (Network Security Group) Layer 4 Stateless

{ Inband - Rule x n
{ Outband

(TCP/UDP), Free

- Priority (Smaller First)

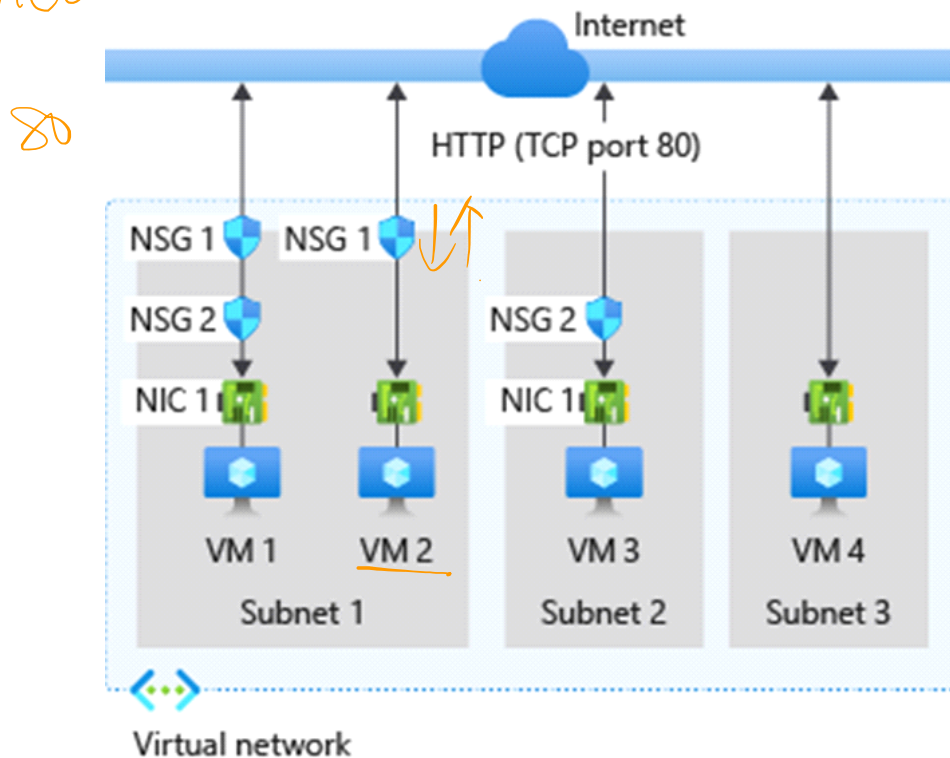
Appliance

- Default Rules (X/Modify)

Appliance

Subnet

- Default Rules (X/Moddy)



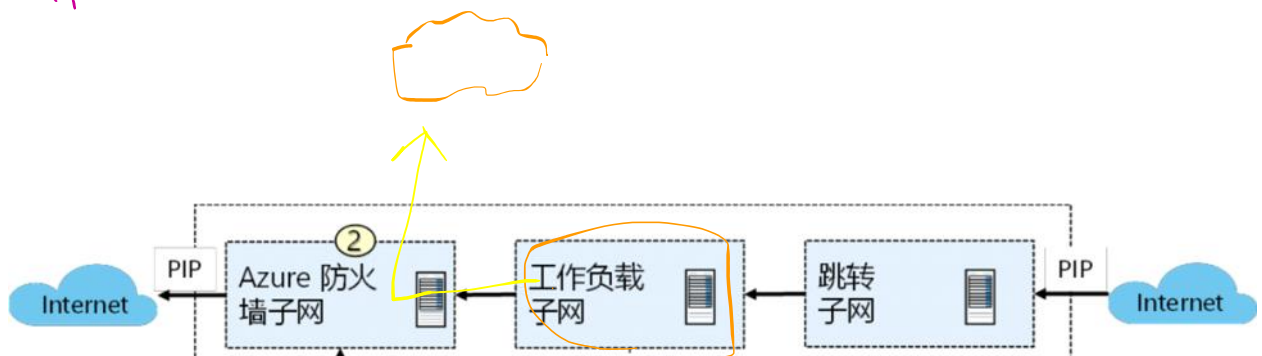
Azure Firewall (PaaS) (Layer 3, Stateless)

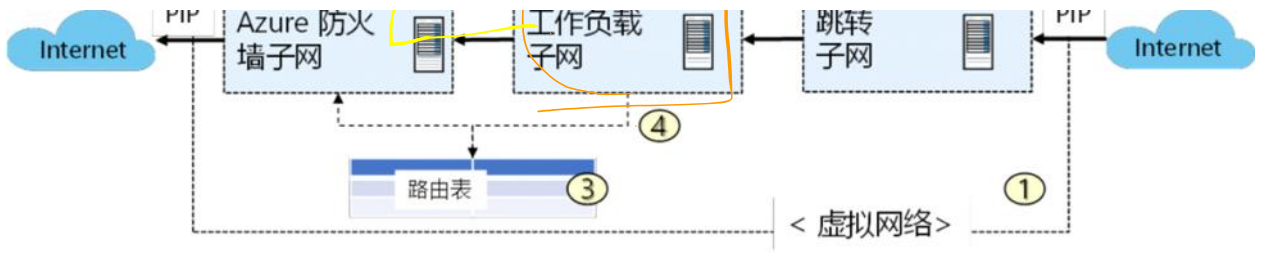
├ NAT
├ Network
└ Application

├ HA
└ Scale

→ Dedicated Subnet.

↳ Name





Route - System Route

User Defined Route

web - A

db - B (~~web+db~~)

(web+db) - C

Route Table

1 Subnet $\Rightarrow$ 1 RT

Route x n.
Subnet x n.

Azure DNS

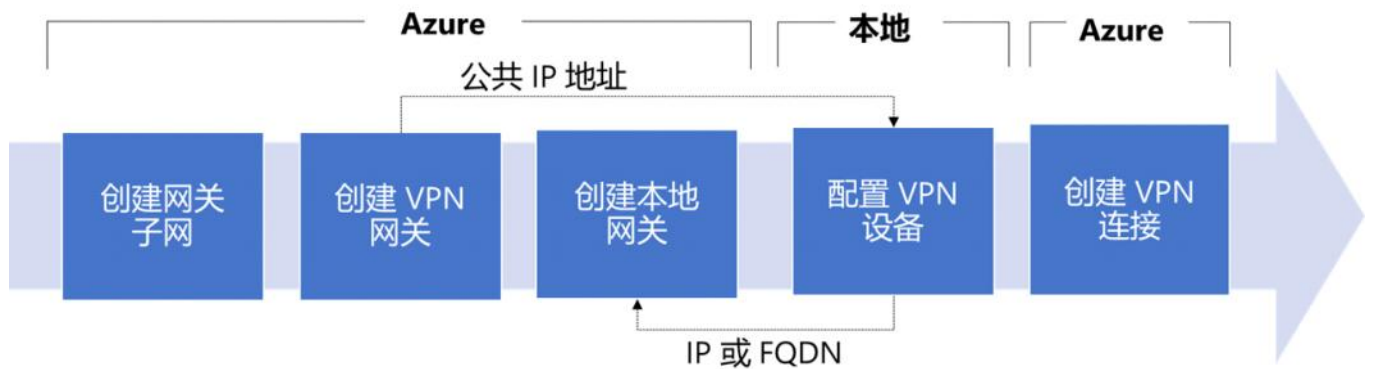
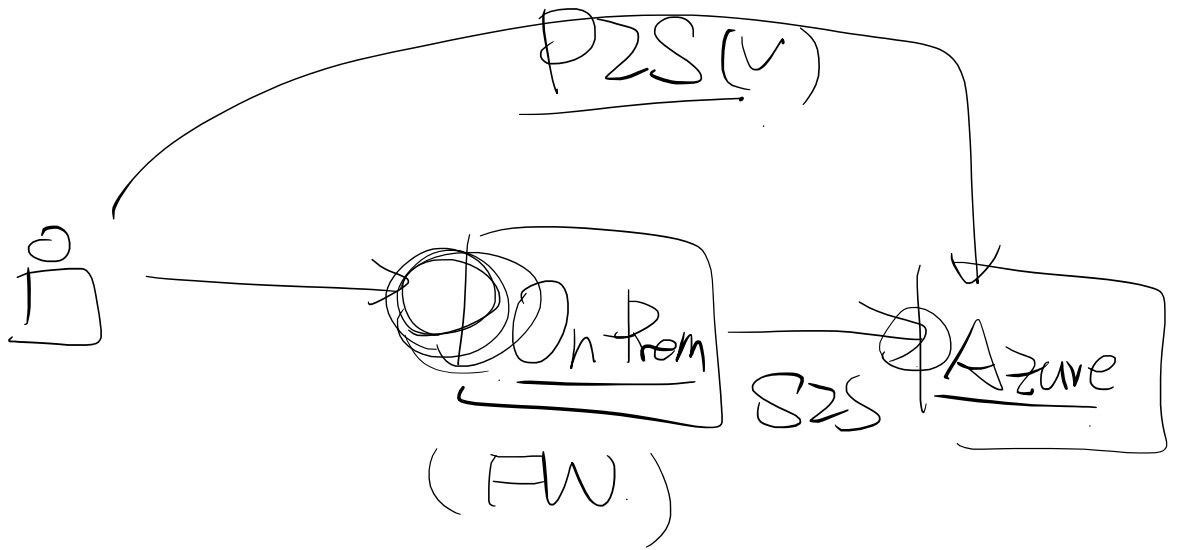
↳ DNS Zone

Child Zone

- Private DNS Zone - Any Name

↳ link UNSET

- ✓ Auto Registration (Discovery)
 - ↳ CName Record



功能	应用程序网关	Front Door	负载均衡器	流量管理器
使用情况	使用 Web 应用程序防火墙增强应用程序安全性时，优化来自应用程序服务器场的交付。	可缩放的安全增强型交付点，适用于基于微服务的全局 Web 应用程序。	均衡入站和出站连接以及对应用程序或服务终结点的请求。	在全球 Azure 区域内以最佳方式向服务分发流量，同时提供高可用性和响应性。
协议	HTTP、HTTPS、HTTP2	HTTP、HTTPS、HTTP2	TCP、UDP	DNS
区域	是		是	
全局		是	是	是

Env	Azure、非 Azure 云、本地	Azure、非 Azure 云、本地	Azure	Azure、非 Azure 云、本地
安全性	WAF	WAF、NSG	NSG	

Storage

2021 Millions of websites offline after fire at French cloud services firm

By Mathieu Rosemain, Raphael Satter

3 MIN READ



©Microsoft Corporation

Azure

⚠️ Datacenter Cooling Event - Southeast Asia

Issue Summary: Starting around 20:19 UTC on 7 February 2023, a utility power surge in the Southeast Asia region tripped all of the chiller units for one datacenter offline. While working to restore the chiller units, temperatures in the datacenter increase so we are proactively powering down compute, storage and networking resources to avoid damage to hardware. All impacted infrastructure is in the same datacenter, within one of the region's three Availability Zones (AZs). Downstream services that have been identified as impacted include Azure App Services, Azure Backup, Azure Cosmos DB, Azure Database for MySQL & flexible server, Azure Database for PostgreSQL & flexible server, Azure Log Analytics, Azure Red Hat OpenShift, Azure Search, Azure SQL Database, and Azure Virtual Machines (VMs).

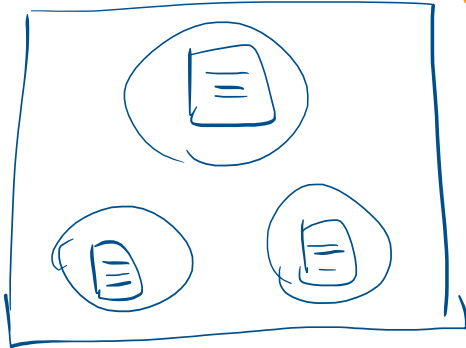
This message was last updated at 02:25 UTC on 08 February 2023

Redundancy 4+2 3 ~ 6 Gpus

LRS (Local)

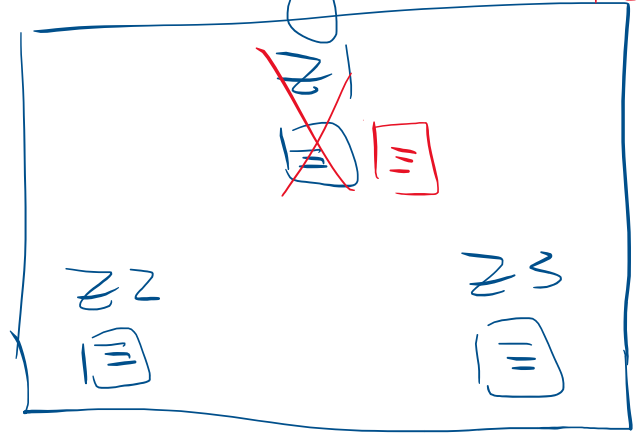
ZRS (Zone)

1 Region, 1 AZ
3 copies



99.9-99.999%

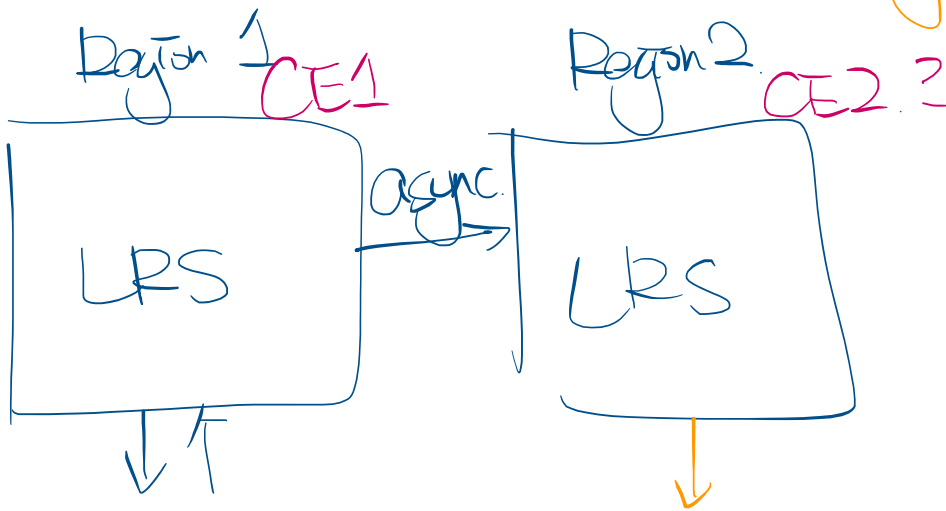
1 Region, 3 AZ
3 copies



GRS (Geo)

2 Region, 2 AZ 6 copies

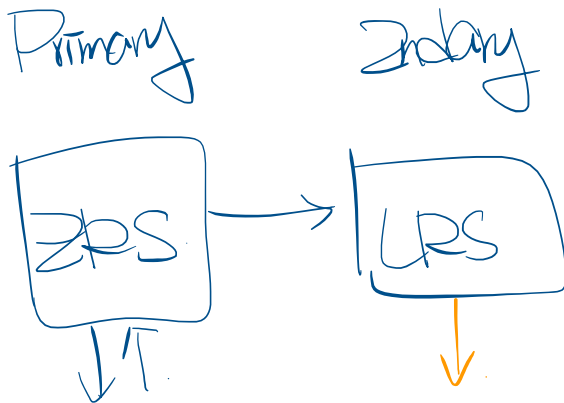
Region Pair



GZRS

Read Access (RA)

2 Region, 3+1 AZ



<https://demo0625stor.blob.core.windows.net/images?si=demo0625-policy&spr=https&sv=2024-11-04&sr=c&sig=FfI9u%2FYnVkhXhwZT09InO3BwQ%2FLEtiWbr%2FsGPXXwKIs%3D>

si=demo0625-policy&spr=https&sv=2024-11-04&sr=c&sig=FfI9u%2FYnVkhXhwZT09InO3BwQ%2FLEtiWbr%2FsGPXXwKIs%3D

[https://demo0625stor.blob.core.windows.net/images/Screenshot](https://demo0625stor.blob.core.windows.net/images/Screenshot%202025-03-21%20094843.png) 2025-03-21 094843.png

<https://demo0625stor.blob.core.windows.net/images/Screenshot%202025-03-21%20094843.png?sp=r&st=2025-06-25T02:16:57Z&se=2025-06-25T10:16:57Z&spr=https&sv=2024-11-04&sr=b&sig=pC1Vk%2Ba5bCZln5TNMrFmMRs4gLzb9QKBa%2FXQHcfMsmM%3D>

VM's HA

3x VM → LB

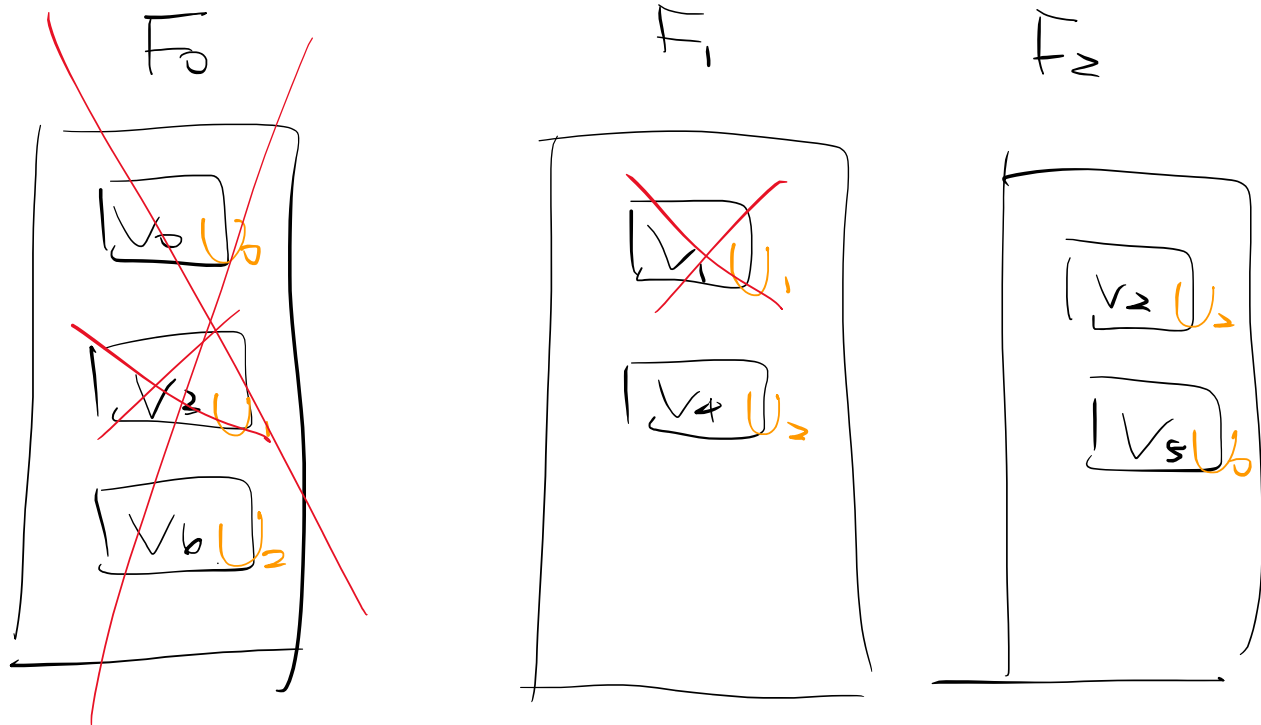
Availability Set — Fault Domain $\frac{1 \sim 3}{x}$
Hardware

F0 — AZ

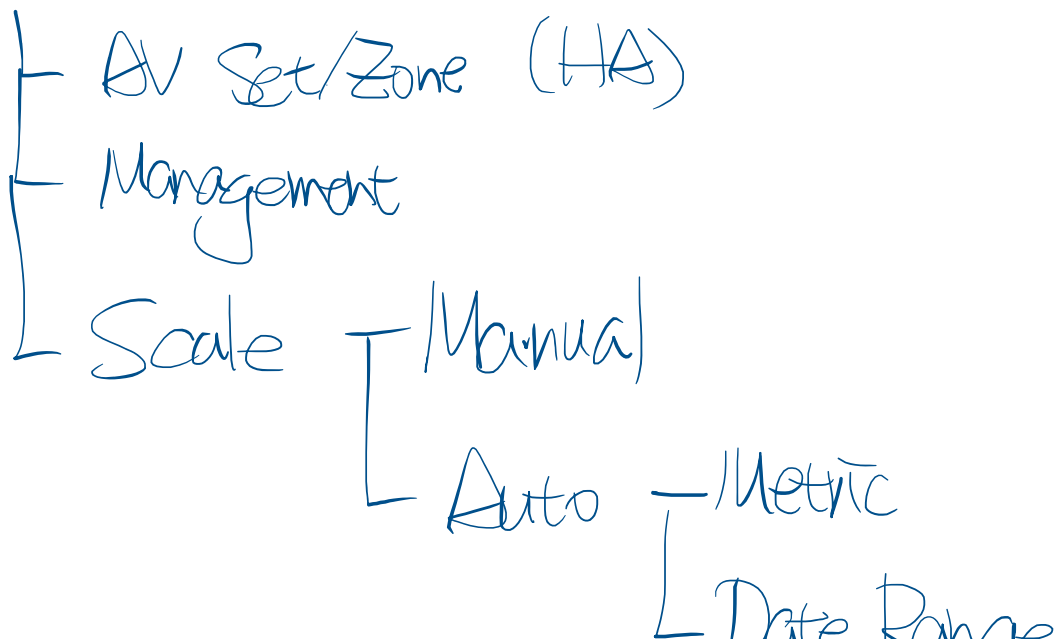
Resource

Resource

- Update Domain
Update $\frac{1 \sim 20}{x}$



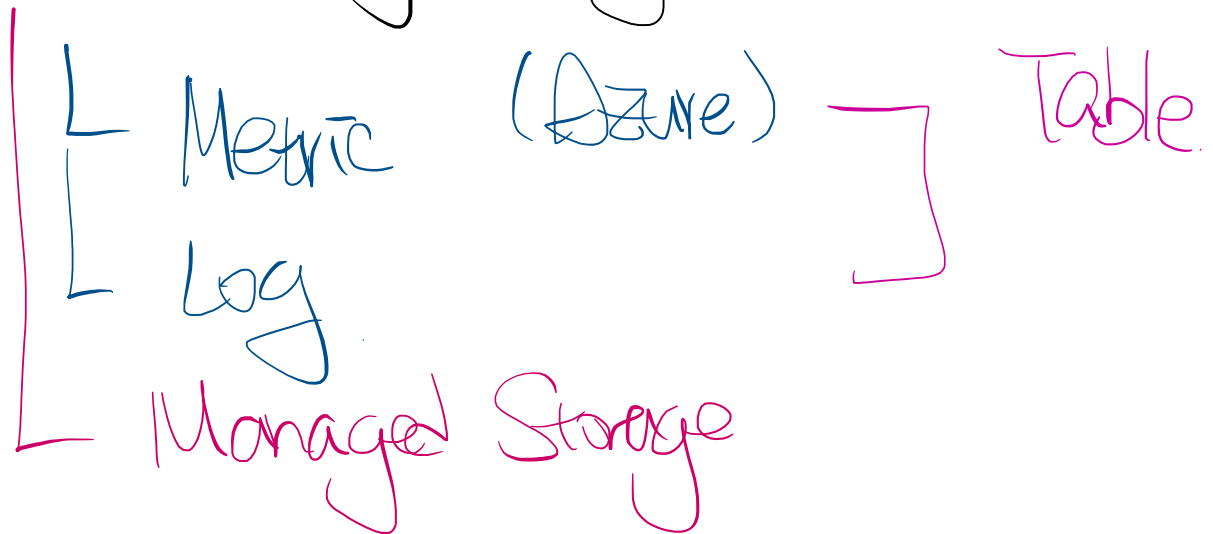
Virtual Machine Scale Set (VMSS)



L Date Range

Monitor

Azure Log Analytics workspace



KQL: Kusto Query Language
↳ SQL like logic