VM

App

Blob

SQL

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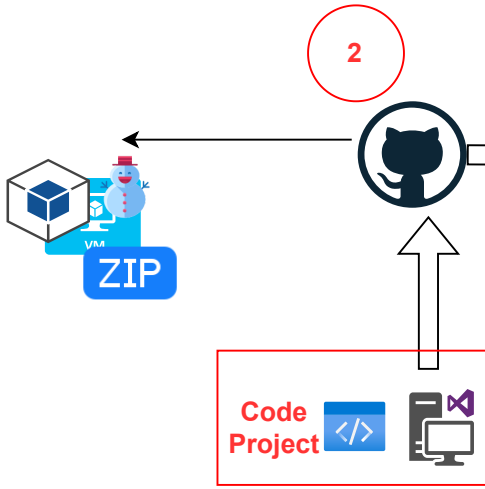
A customer want t

*Customer DO N
* We want to Dep
* Developer put t
* In case if any pro
* Whenever Load i
Scal out



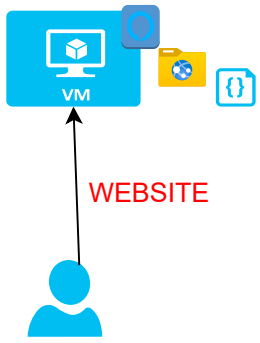
Azure Solutions Developer

Azure Platform	Language	IDE	Build
CosmoDB	Java	Elipse	Maven
AD, Messaging		Visual Studio	VSBuild
Kubernetes	python	PyCharm	Nuget
Function			

customer want to deploy its application developed in Java/Dotnet on Microsoft Azure
latform.

**Customer want to implement security checks like own Antivirus , services
ardening etc.**

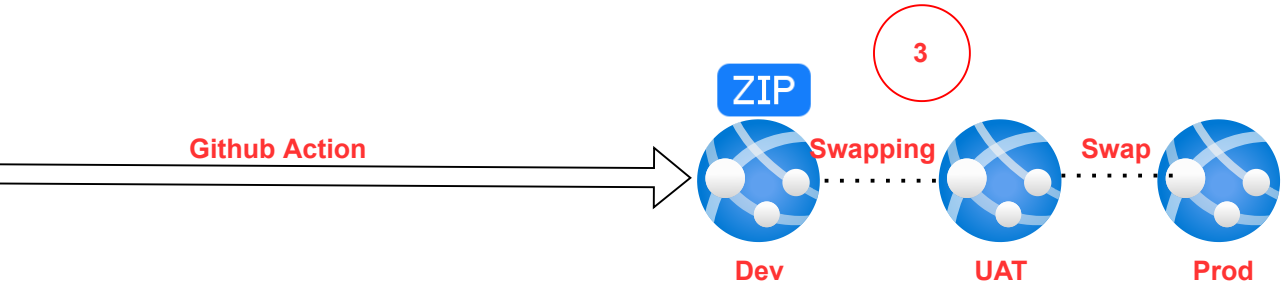
ACHE
MCAT
NIX



1. Create VM
2. Connect to VM with Public IP
3. Install IIS webserver
4. 4. Put our Code in Virtual Folder
5. Connect with public IP

o deploy its application developed in Java/Dotnet on Microsoft Azure Platform.

OT WANT TO MANAGE BACKEND INFRA (OS ,SCALING) / Use App Service with Code Base
loy the code first in Dev , then UAT and the in Prod / Create single app with three Deployment Slots
heir code in GitHub , so Azure service should able tp pull code from GitHub and deploy it. / Github Action
oblem occur Developer should able to do some basic troubleshooting / Kudu Console
increases on App it should automatically Scale (Increase CPU/Memory or Create another instance) / Scale in an



1

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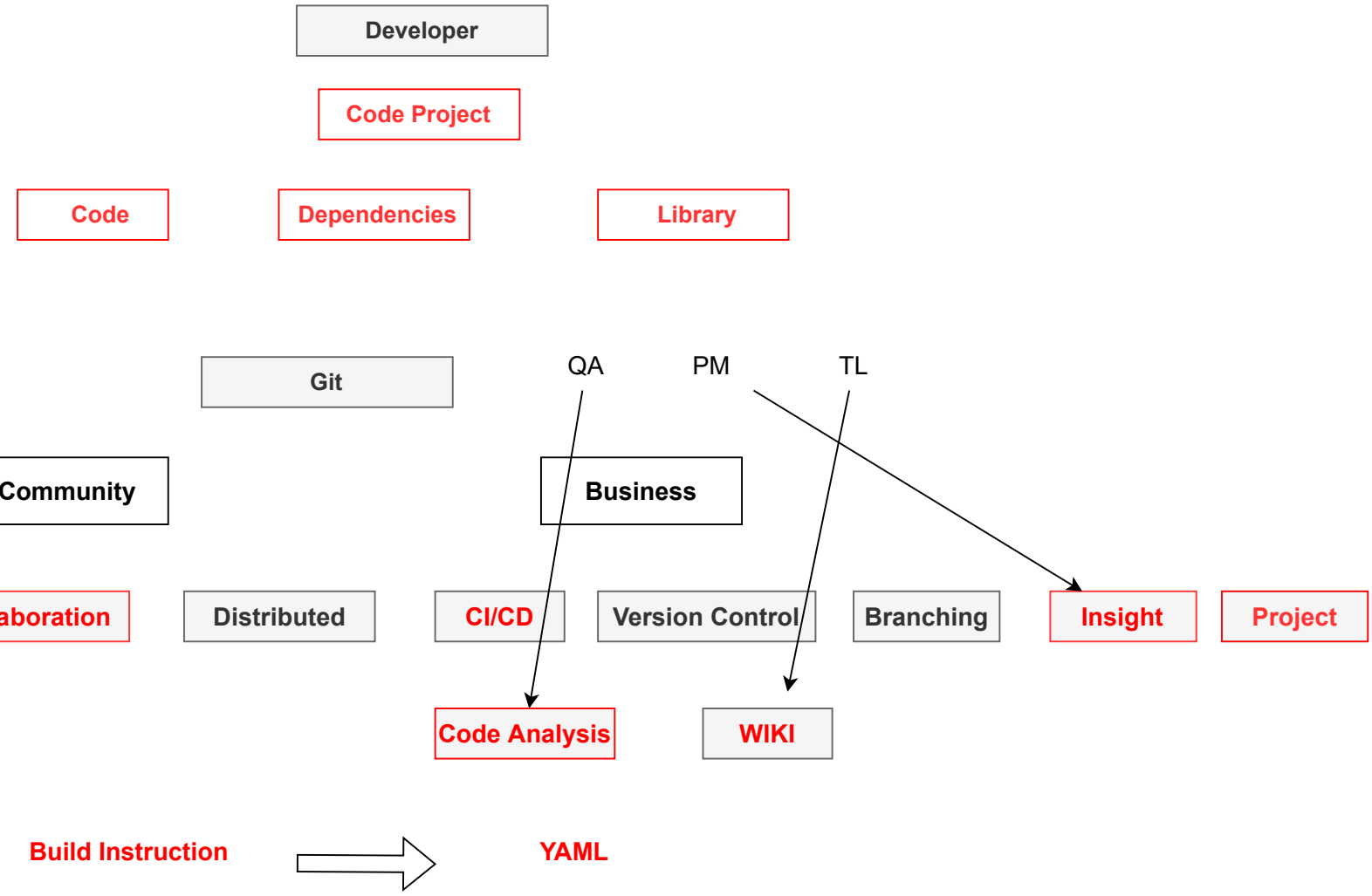
Repo

Colla

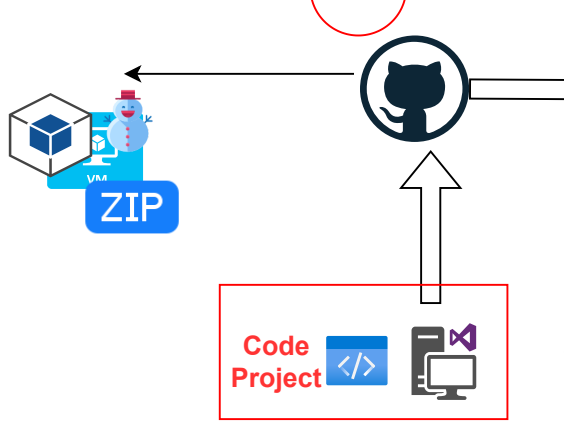
1. Where we use
2. VM is IAAS o
3. Why we shoul
4. As an develop
   run my code ?
5. Which all lang
6. Customer war
   Time to load i
   Application Te

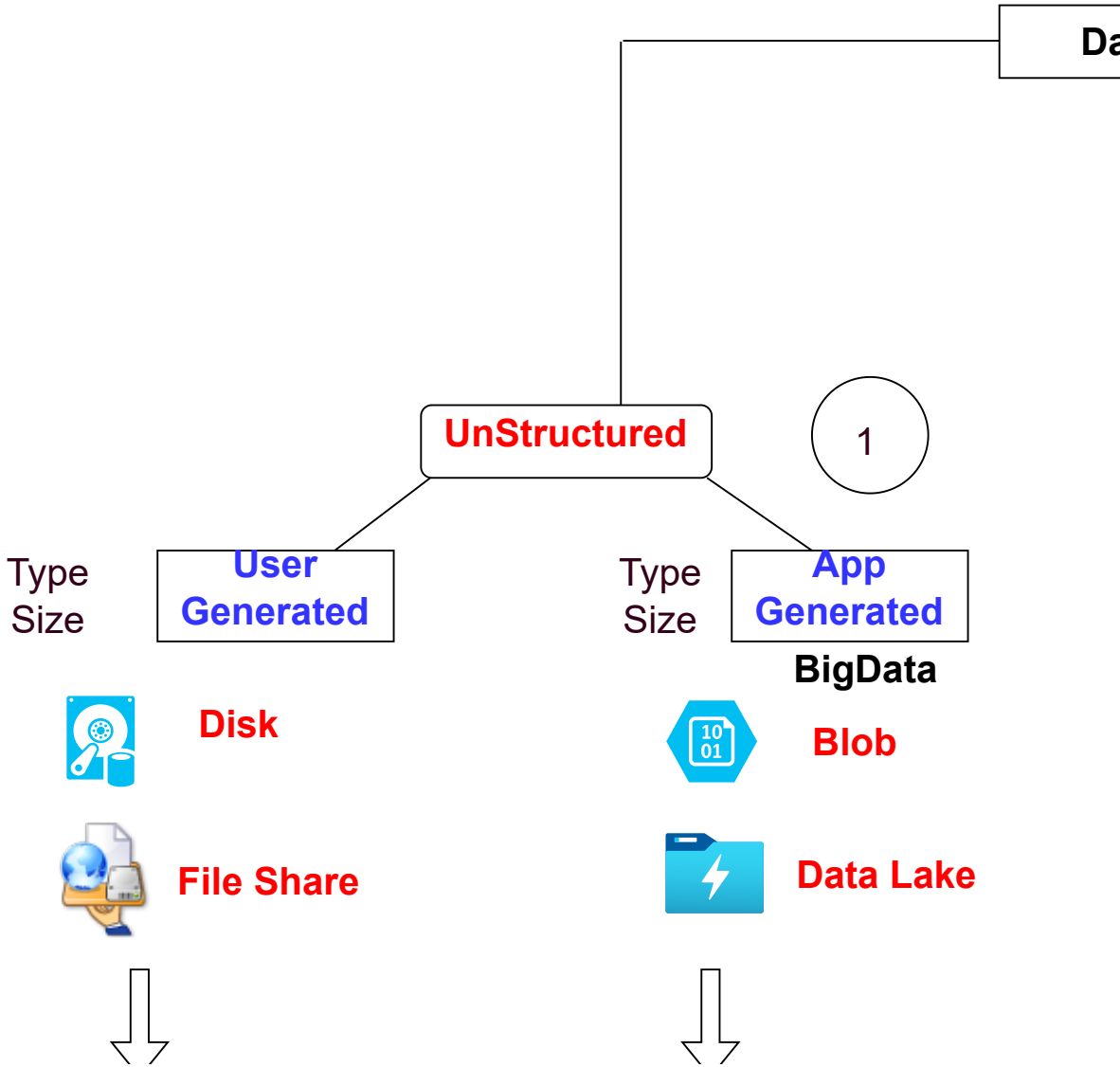
Create New Outlook/Hotmail Account
Go to https://portal.azure.com/ and Login
Open New Tab in same browser and type https://www.micr



e VM and where we should use App?
r PaaS ? App is IAAS or PaaS?
ld store our code / document in central repo like Github?
per we probably not aware how to create VM , Load Balancing , Network but i want to
? which service i should use in azure?
guage supported by App service?
nt to monitor and capture various telemetry of the application including No of Session,
n browser , CPU and Memory Usages etc. whish tool Azure provide to Monitor
elemetry.

rosoftazurepass.com/


ZIP
Code
Project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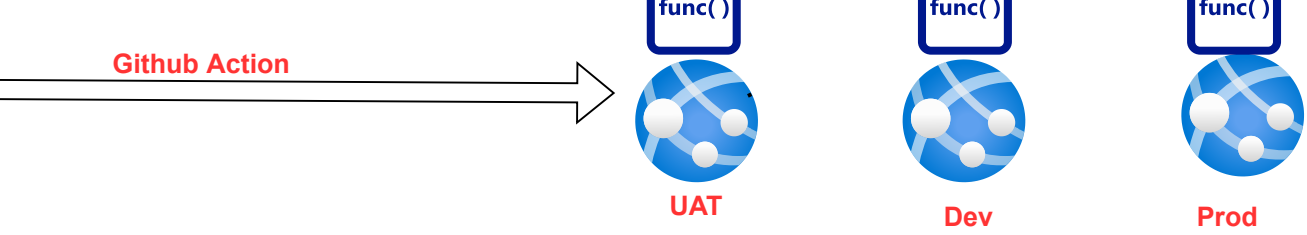
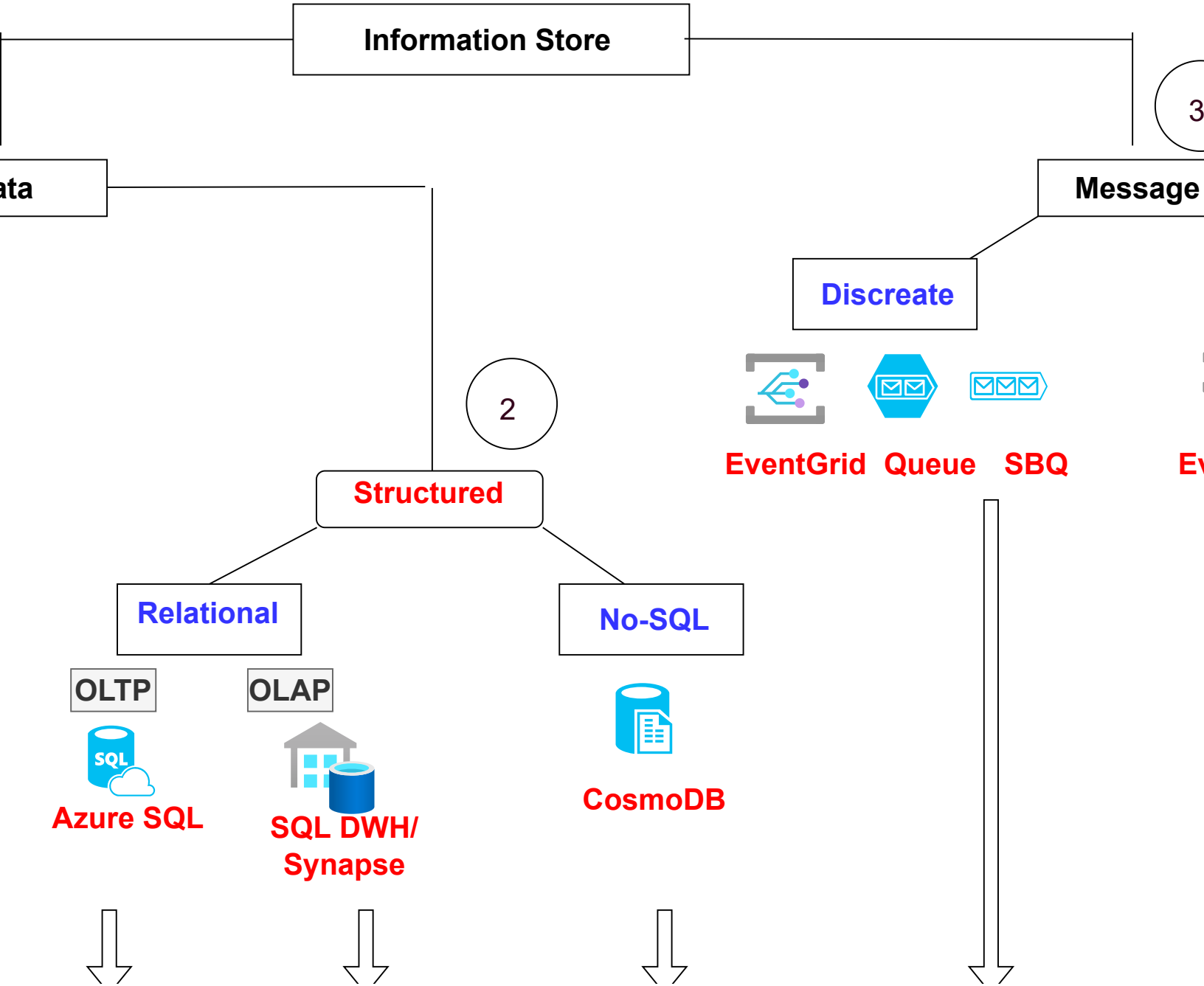
App
Generated
BigData
Disk
Blob
File Share
Data Lake

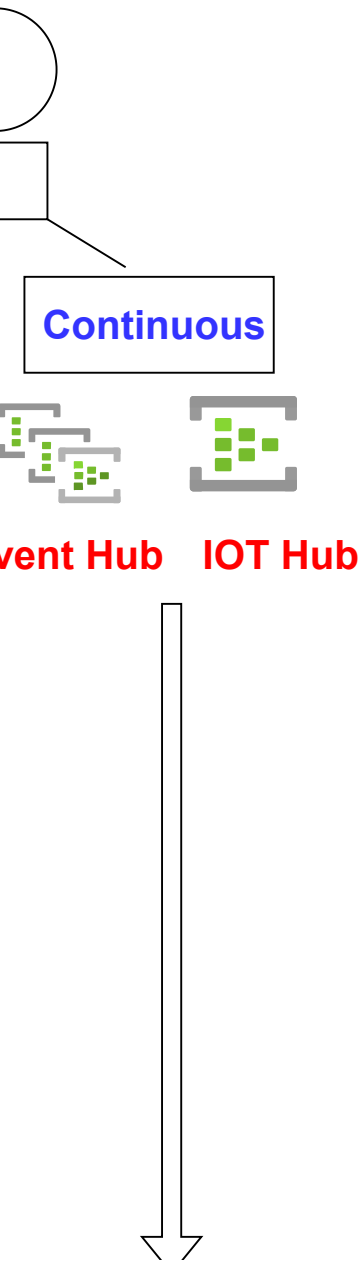


1

- In The app Service Create 2 Slots (Dev & UAT)
- Click the Dev Slot --> Deployment Center
- Connect Dev slot Deployment Center with Github
- Once Code from Git Hub Push to Dev App , we test it with Dev URL.
- Once we satisfied we click SWAP and SWAP the Code (Copy the Cod from Dev to UAT.
- Now check the UAT URL and if we staisfy , we repete steps and swap the code from UAT to Prod.



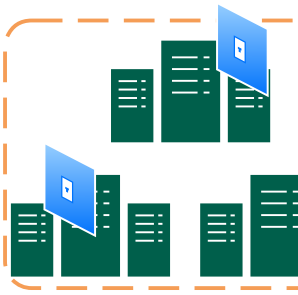
le)



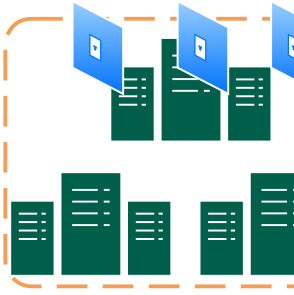
Azure Storage

LRS

ZRS



GRS



URL

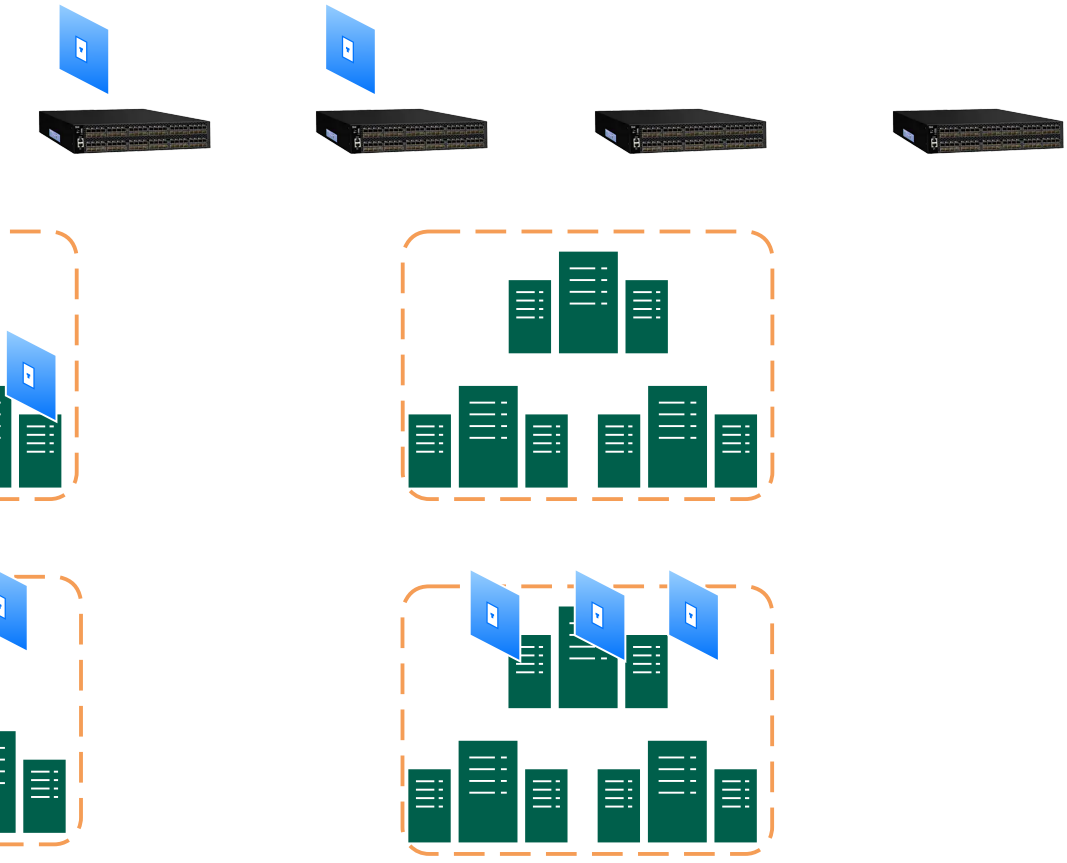
Blob

HOT COLD ARCHIVE

DATA LAKE

Premium: Fast Read & Write

Standard: OK Read & Write

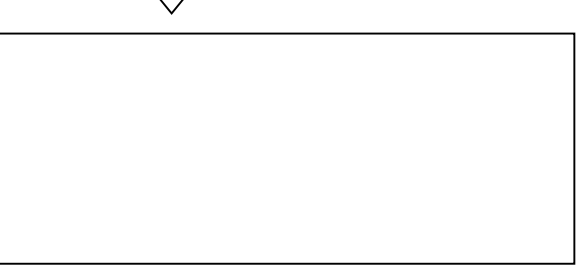


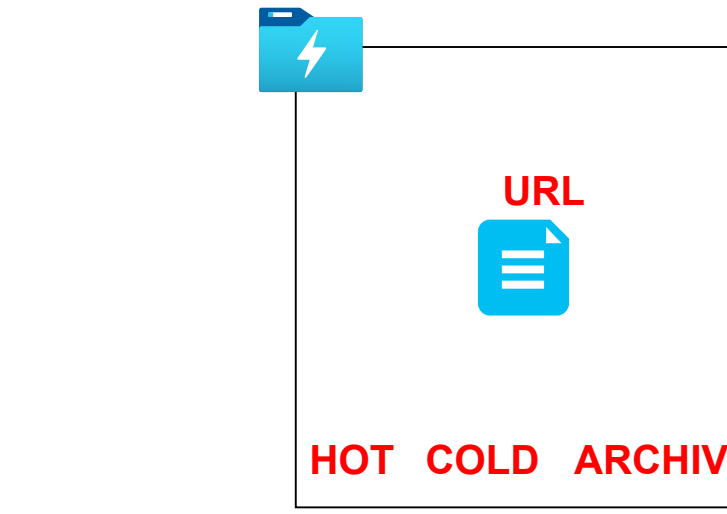
Can we store a file / image / video which is more then 100 GB in local disk?

What is the size of Bahubali Movie?

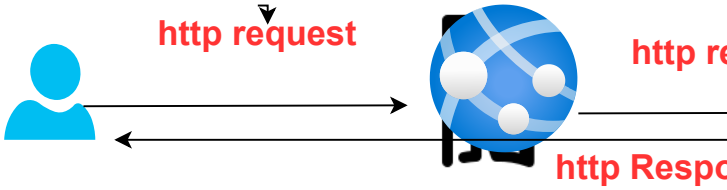
- **Store single file which can upto 5 TB**
- **Every Blob (File) will have additional attribute like http URL**
- **You can pay as per Hot, Cold and Archive Data**

- **Blob Store the Data in Flat Hierarchy (No Folder / Sub Folder)**
- **No User-wise Permission**





B

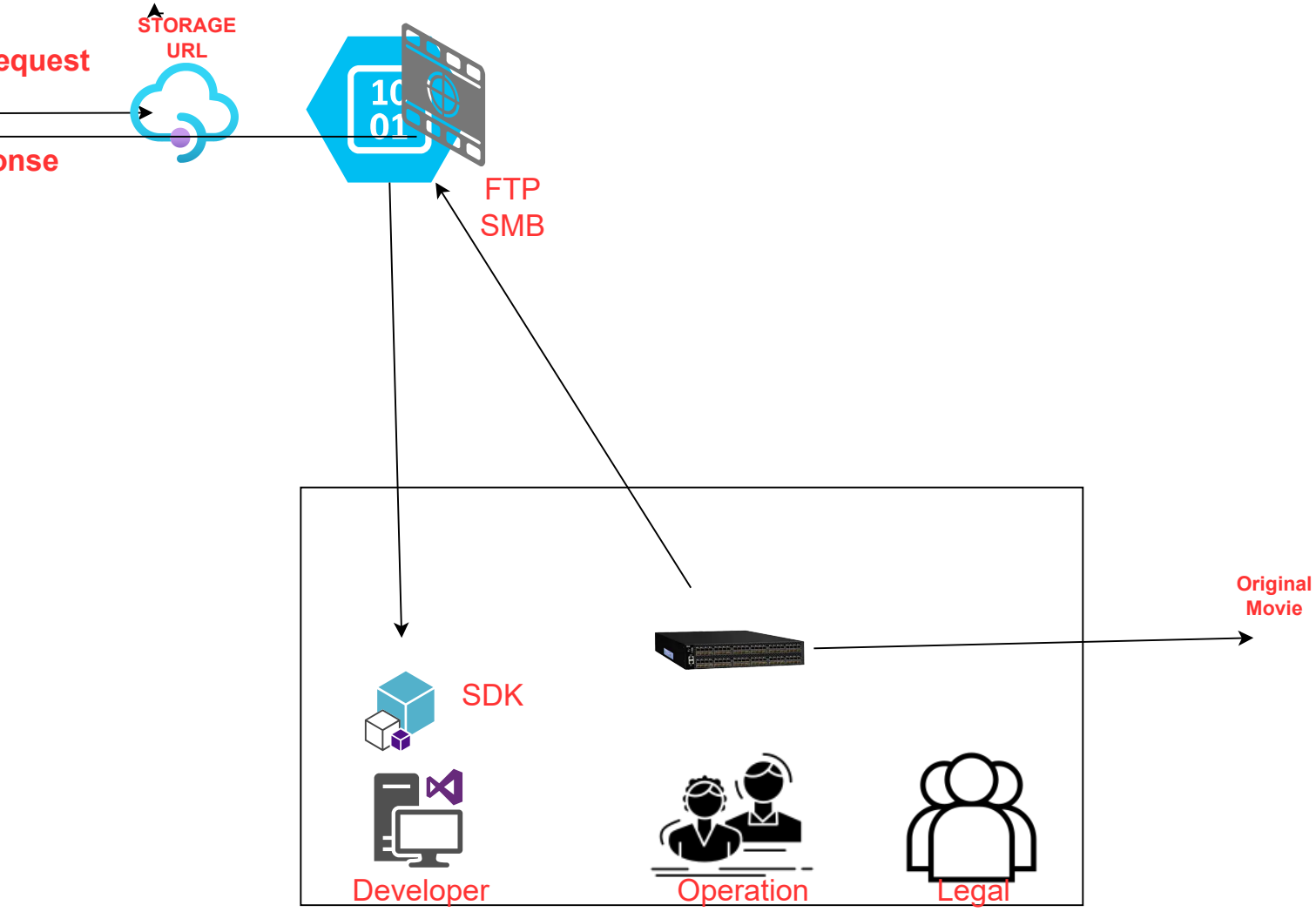


Relat

- Store single file which can upto 5 TB
- Every Blob (File) will have additional attribute like http URL
- You can pay as per Hot, Cold and Archive Data

- DataLake Store the can Store Data in Hierarchy (Folder / Sub Folder)
- Assign User-wise Permission (R,W,X)

lob Use Case



ional Data Storage

MySQL

Po

SQL Database

- No OS Control
- Only Database Not all Features of SQL

M

stgress

Microsoft

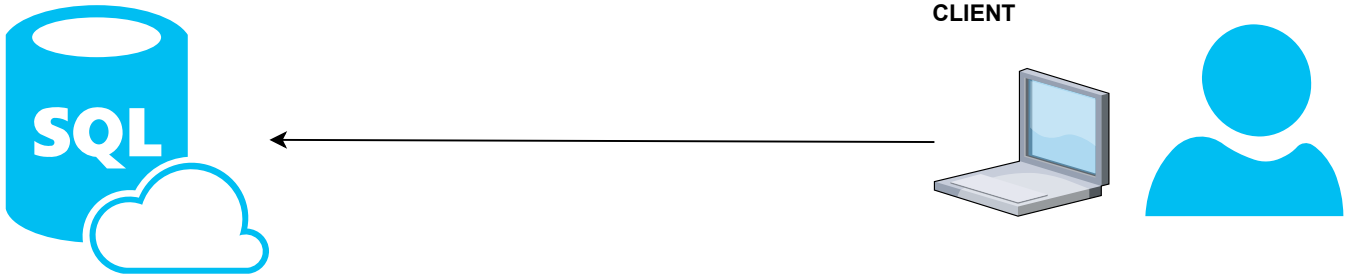
Azure SQL

Managed Instance

- No OS Control
- All Features of SQL

SQL on VM

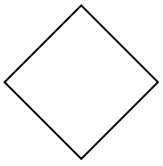
- Full OS Control
- All Features of SQL



NoSQL

longoDB SQL Gramlin Casandra

MongoDB



json

Collection

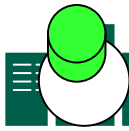
Name	Age	Salary

D

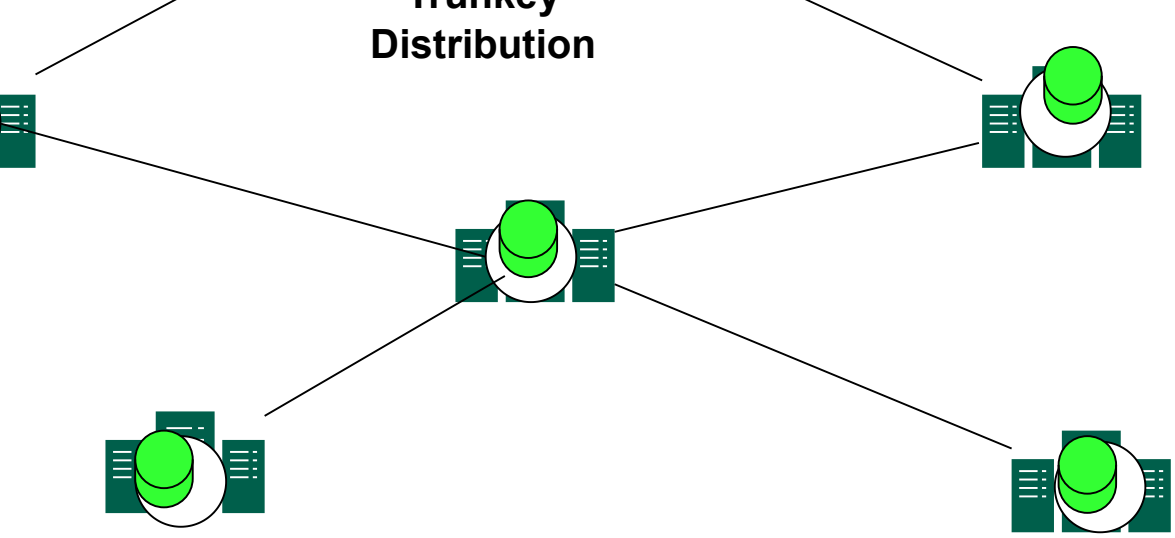
Text

Trunkey

ocument



Distribution

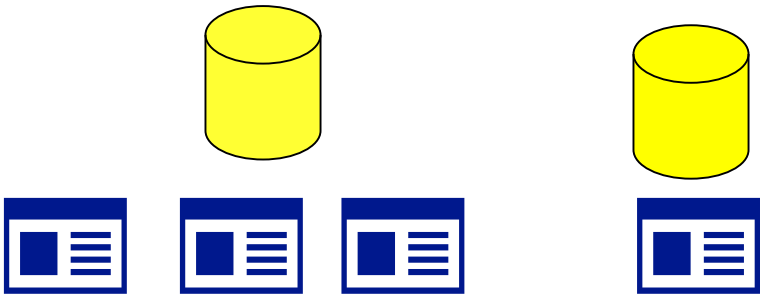


CosmoDB

CosmoDB Account

API

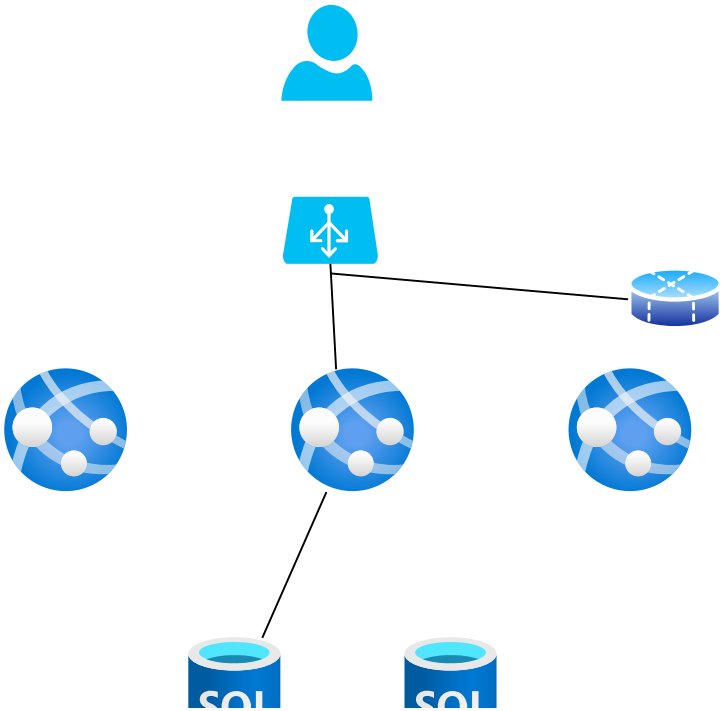
MongoDB
Gramlin
SQL
Casandra



Database

Collection/Container

Items

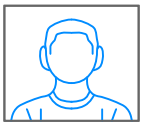


Hi , Good Morning

Swati

Publisher

Publisher



FlipKart

Hi , Good Morning

DLQ

Active Message

Hi , Good Morning

45 days

14 days

QUEUE

4 hours

it Is Temporary Storage. It store the data for limited period.

Hi , Good Morning

Manvendra

KAMLESH

30 DAYS

VISWANATH

Subscriber

Jeans

Smartwatch

Iphone

Payment

Inventory

Logistics

Tranasaction

QUEUE

Storage Queue

Bigger Size Message

Amazon.com

Put/Crea
Event

A customer nee

Queue Storage Service

Service Bus Queue

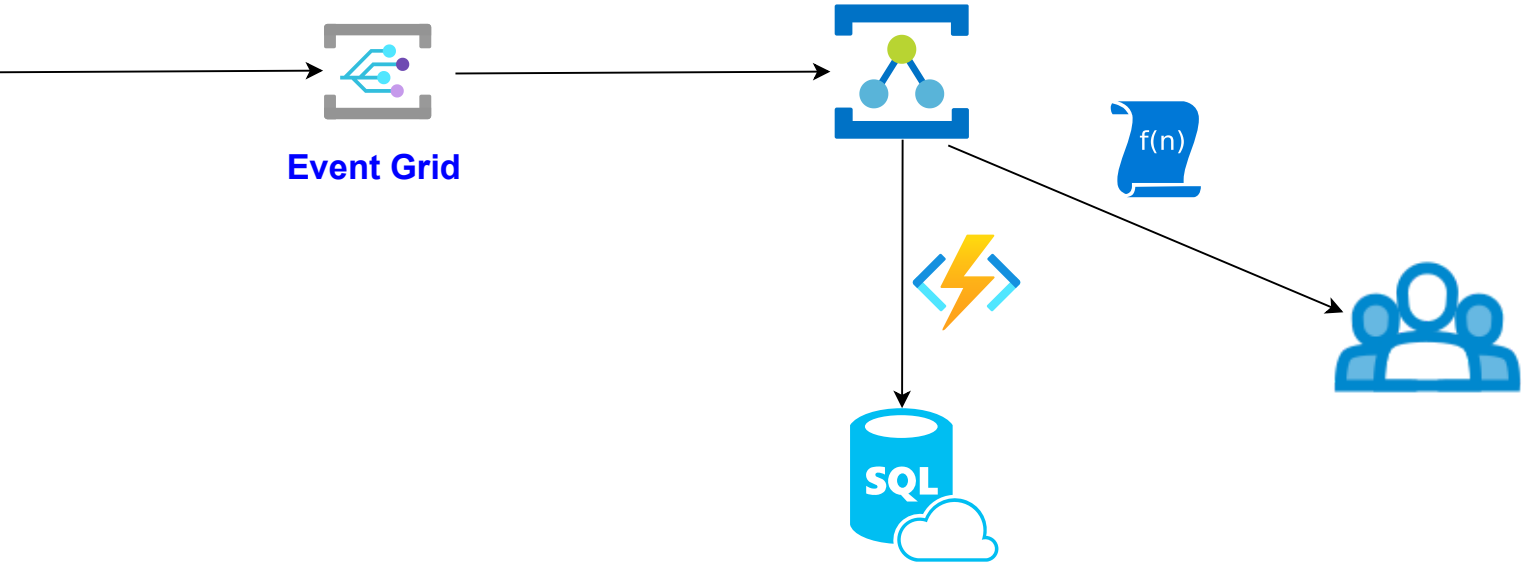
Avg Size Message

AyushAWs

NishantAWs

SERVER LESS

ate



d to Deploy an Java App on Azure App Service.

- **They want al**
  different Tea

Azure Native

CLI

PowerShell

Ter

Local

ll your infra which you deploy should be replicated by their am as it is in their respective Azure Subscription..

impossible

EVERYTHING AS A CODE

CAC NAC DAC

IAC

Reusability
Standardization
Less Documentation

Third Party

mplate

Terraform Ansible Chef

Cloudshell

Every command in Azure CLI start with small az
It follow Noun + Verb syntax
You should use only defined Name of the Module

- **Every command in Azure Powershell start with Action (New /Delete)**
- **It follow Verb+Noun syntax**
- **You should use only defined Name of the Module**

Classic Library

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Image
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Resour
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Resourc
Parame

}

How much confidenc

ARM Library
BICEP Library

JSON

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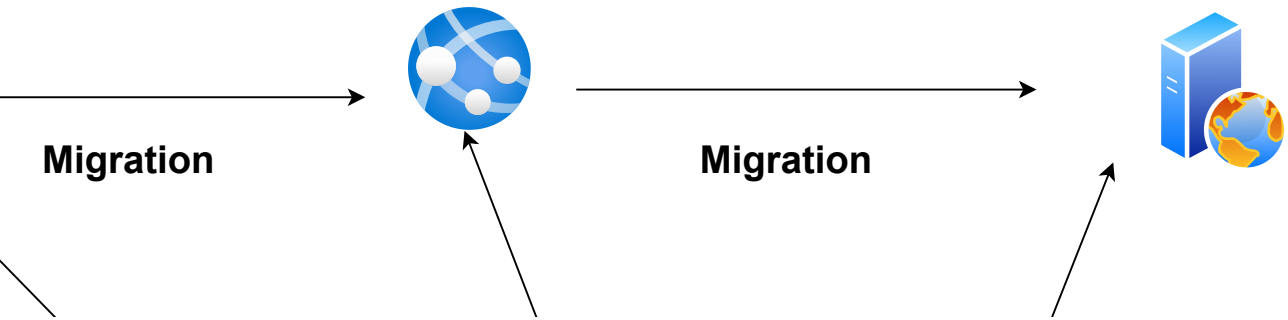
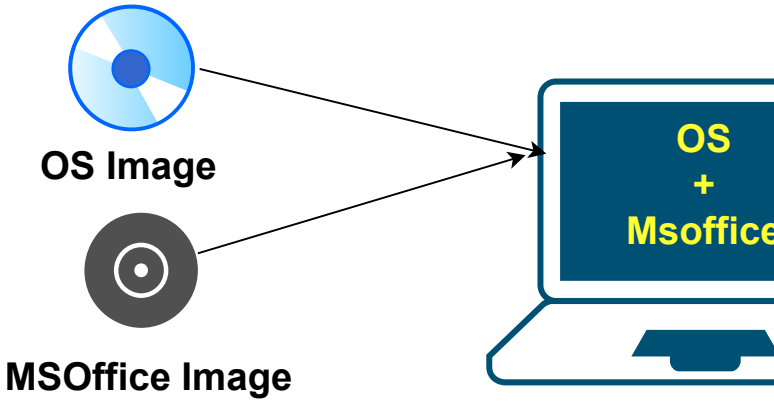
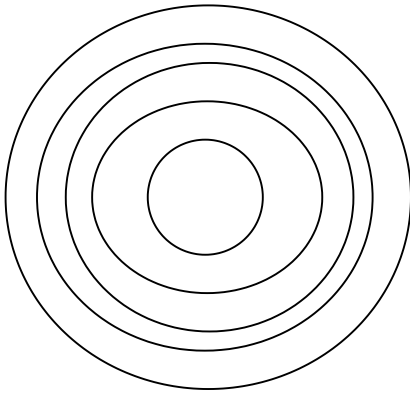
ce: VirtualMachine
ter

Variable
Subscription:

ce now you have that you can handle Azure ?



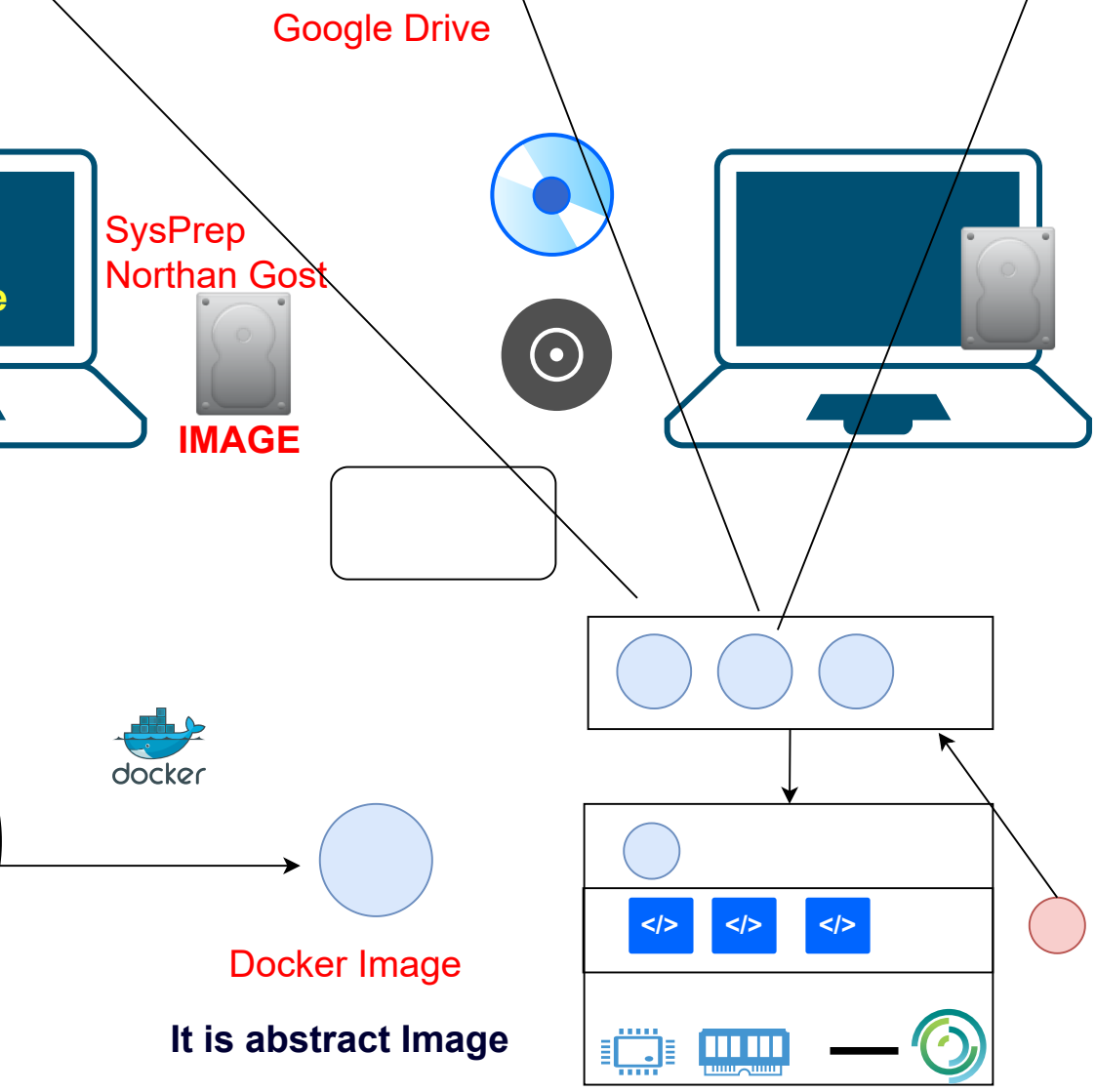


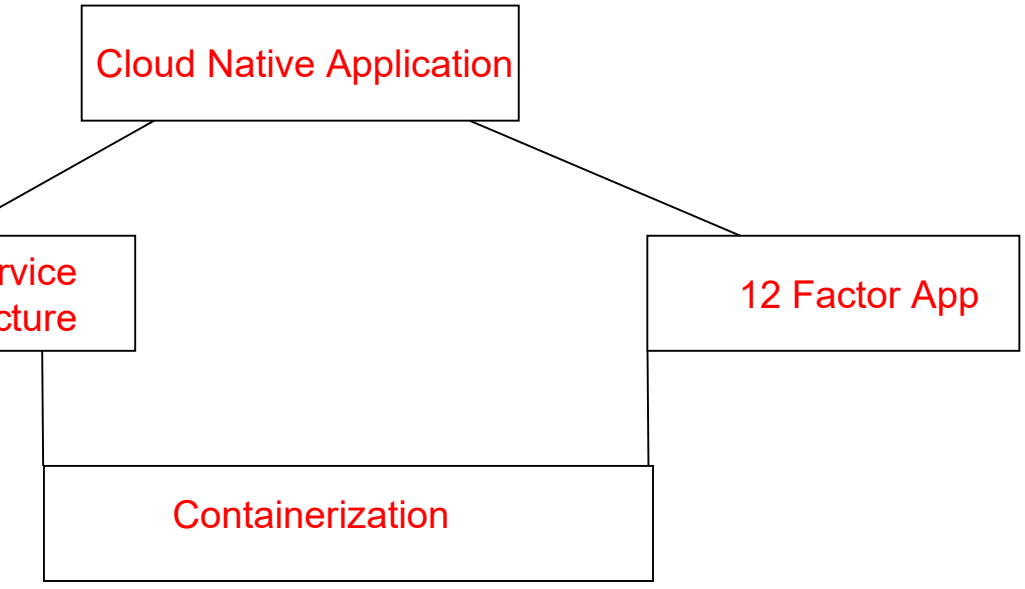


2 Mb-100 Mb

Microse
Archite

Azure Container Insta





nce

Azure Kubernetes Service

etup

- **ACI Best Used for Singl**
- **Used for Mostly Low To**
- **ACI Support Single serv**
- **No Scaling / No autohea**

1. What is Image vs C
2. How many Contain
3. To create container
4. Can we download i
5. A company have m

Https

e Image
uched App / Testing App
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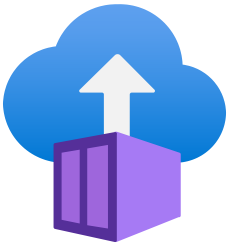
ling

- AKS Best Used for Multi Container
- Used for Mostly used in Complex Production Deployment
- AKS Support Cluster
- Auto Scaling / autohealing

Application



Amazon ECS

Container?
ere we can create with one Image?
from an image which command we use ? Docker run
mage from docker hub and run without any client?
onolithic application like below

Connection Service

Authentication

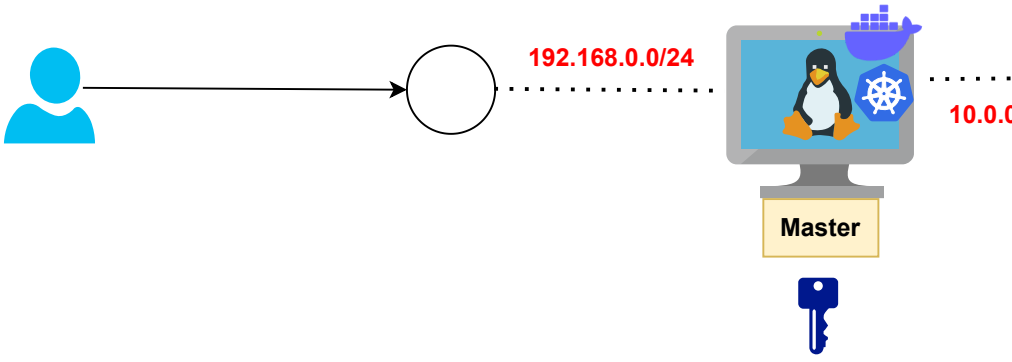
Connect

Auther

Midd

Dat

Lo



Pull and Run container for Im
For the outside user applicat

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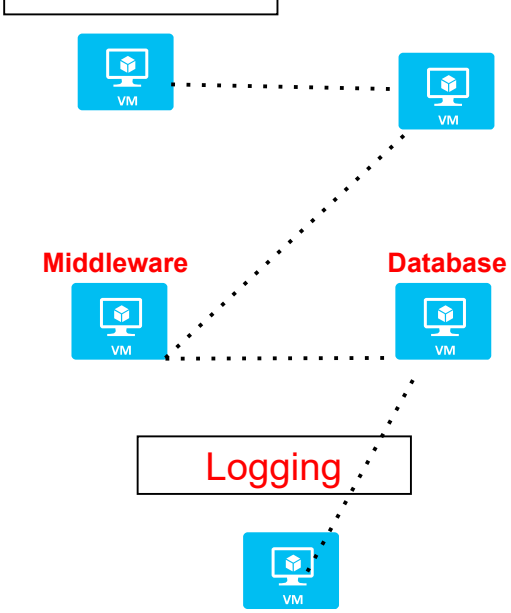
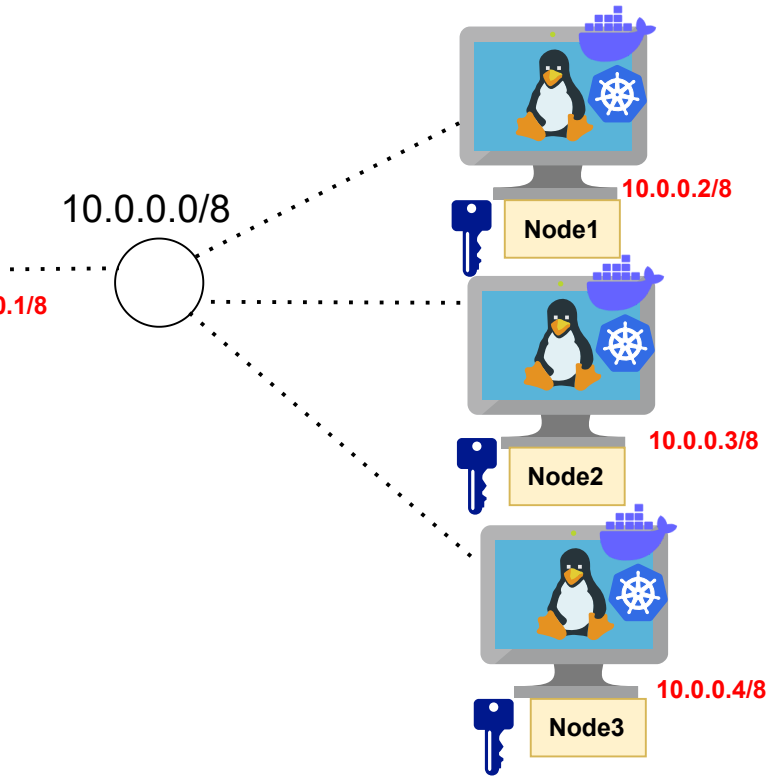
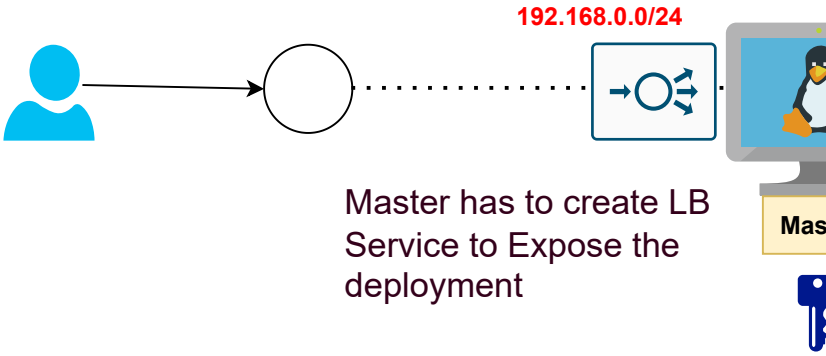


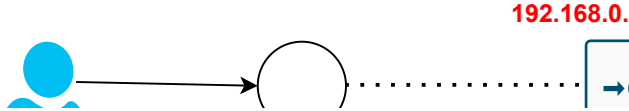
Azure Kubernetes Service

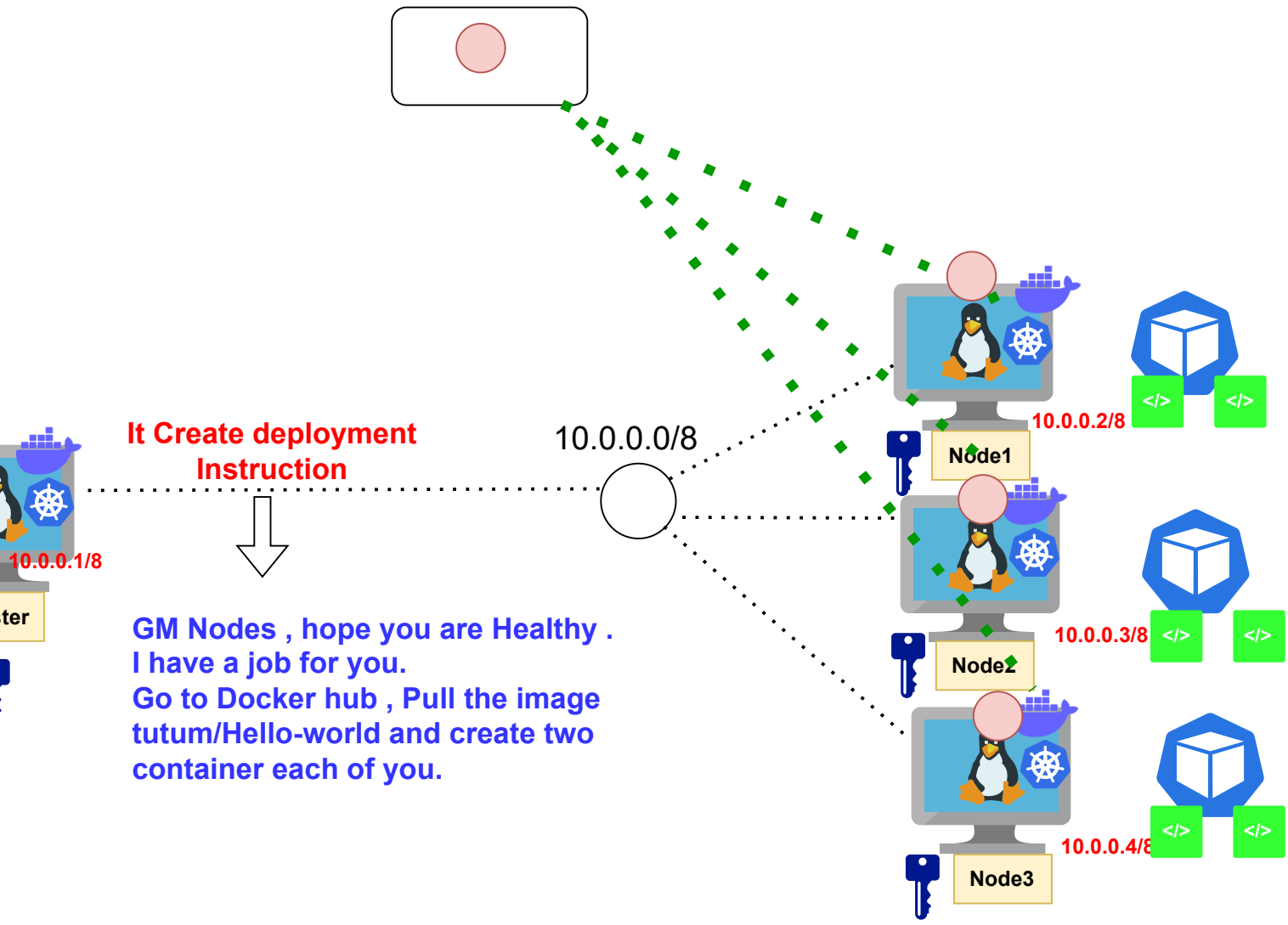


nage tutum Hello-world . i need 6 container to run.
ion will be delivered by Load balancer

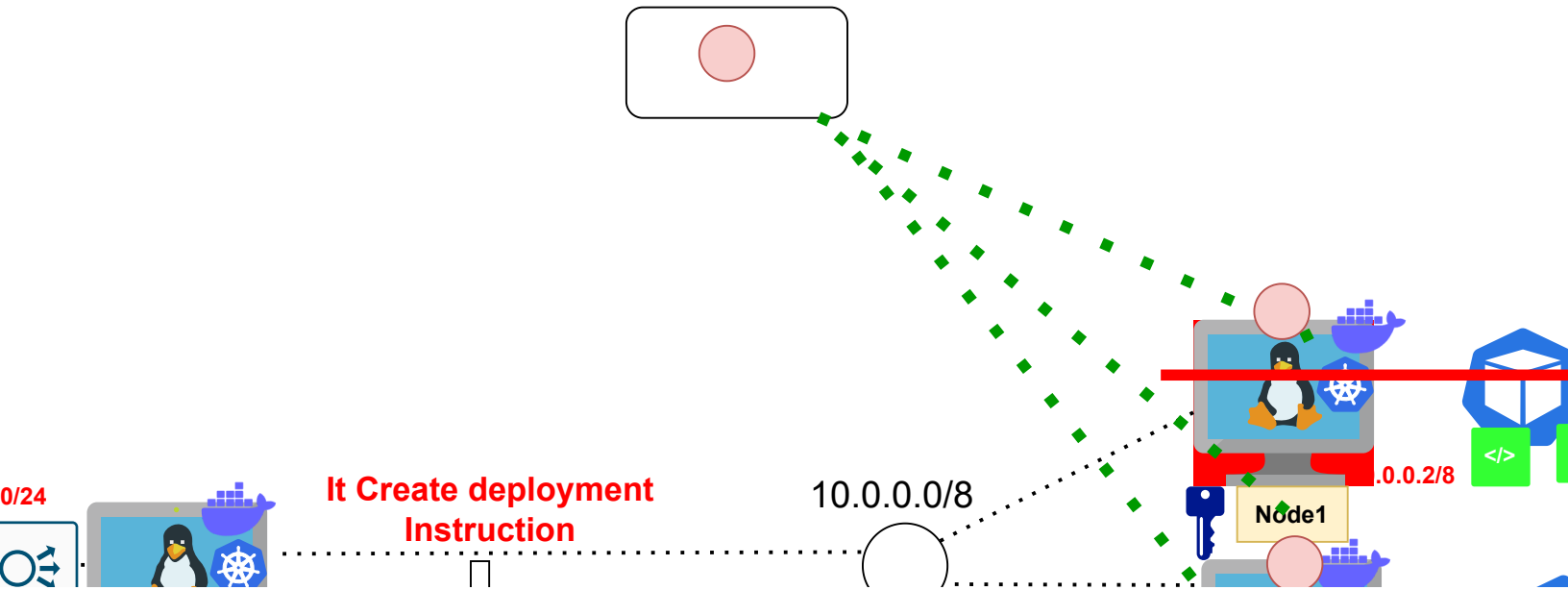


Pull and Run con
For the outside u





tainer for Image tutum Hello-world . i need 6 container to run.
ser application will be delivered by Load balancer



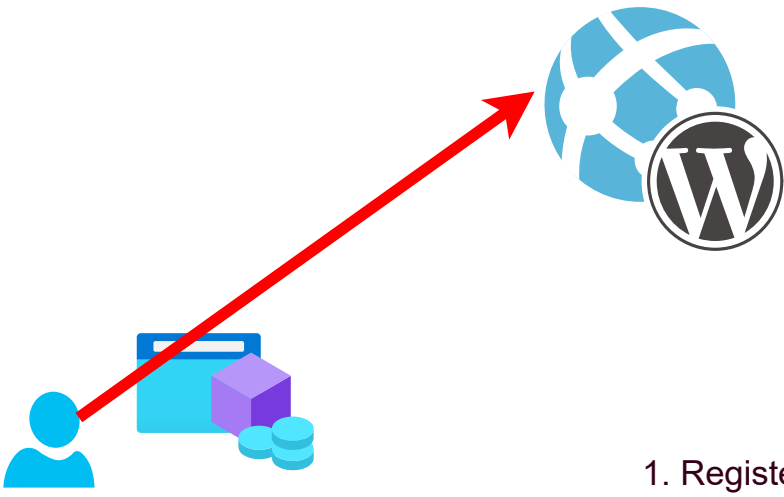
Master has to creat
Service to Expose
deployment

Azu

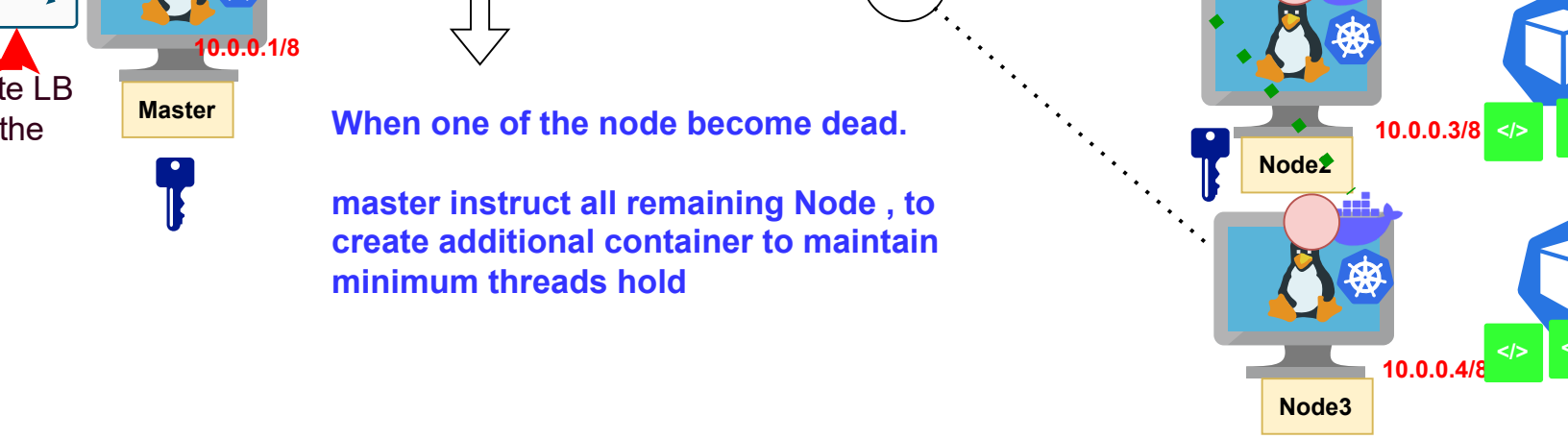
- There is already Ku
- There is already ma
- Kubernetes in azure

- **You only**
- **You will p**

User need to access applicatio



1. Registe
2. Enable
3. Assign

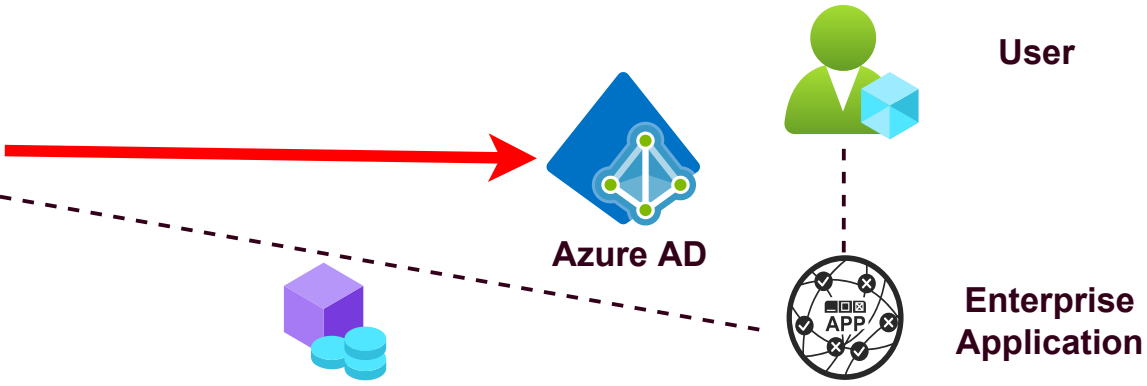


ure Kubernetes Service

bernetes cluster setup
aster node configured
e is free

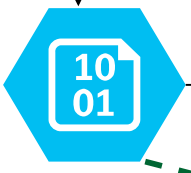
have to add worker Node
pay only for worker Node

n when they get themself authenticated .



er your Application to azure AD Enterprise Application
e token based authentication
this application to user.

S
1
2
3
4



Data

Steps
1. User - > Invite User
2. From Mail -> Accepet Invitaion
3. Enterprise application -> Assing application to User
4. Go -> https://myapplications.microsoft.com/ and access app

Vipin
Bipin
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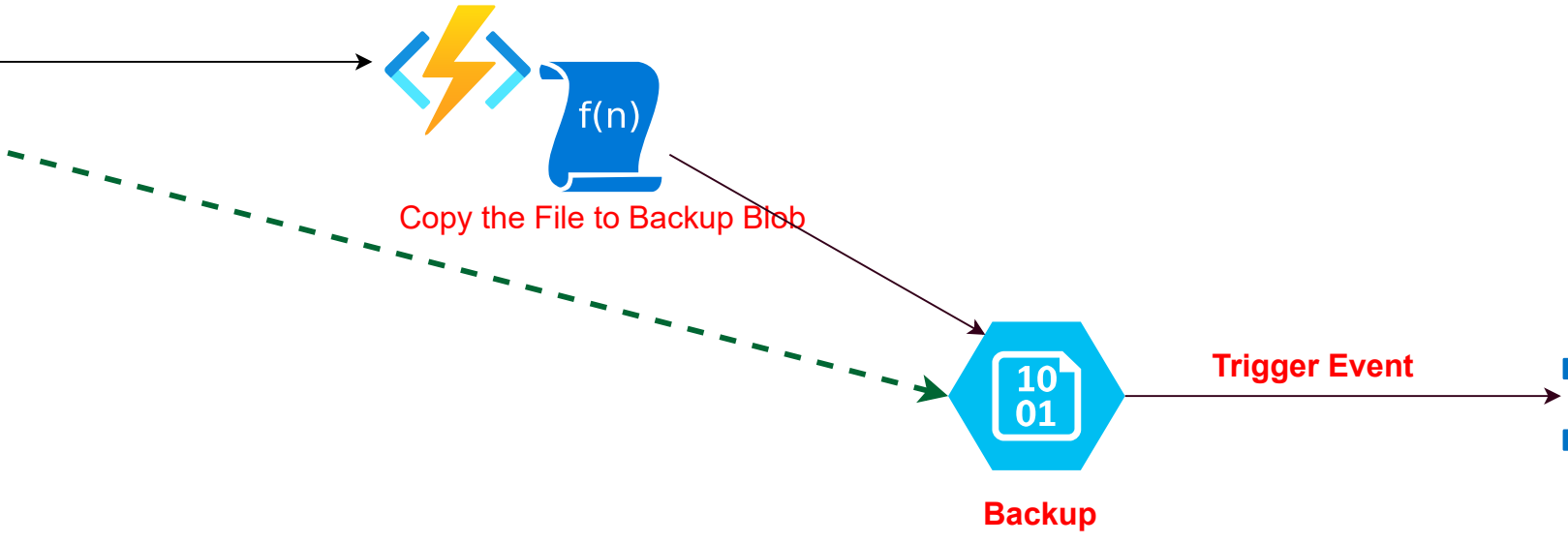

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