**09-Nov-2022**

Azure Account creation: <https://k21academy.com/microsoft-azure/create-free-microsoft-azure-trial-account/>

Azure Basic Services Understanding:

Azure IAM/Active Directory => User Management | SAAS

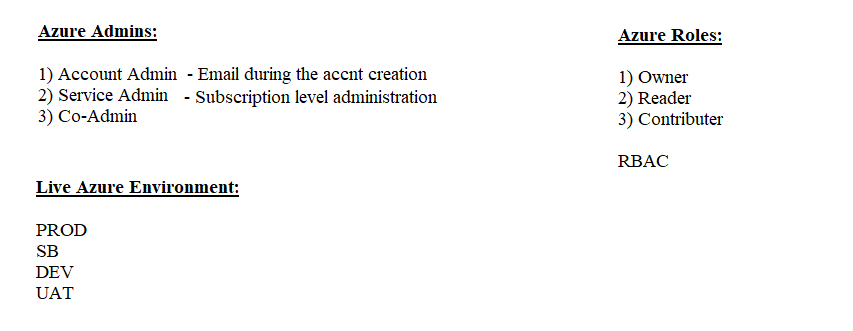
Azure Virtual Machine => Server | IAAS

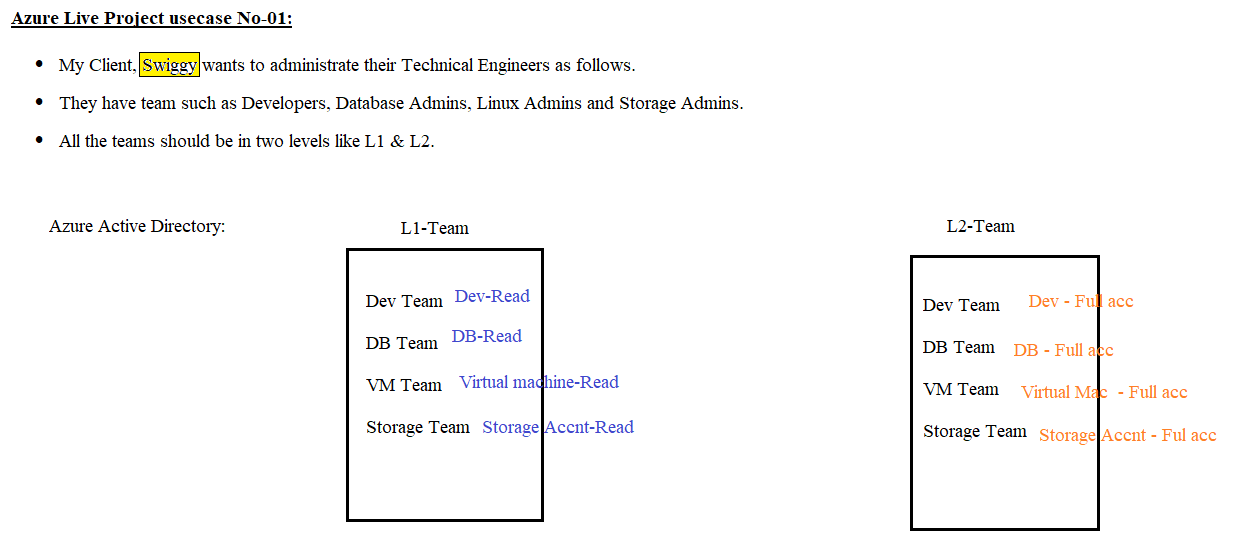
Azure VNet => Cloud network

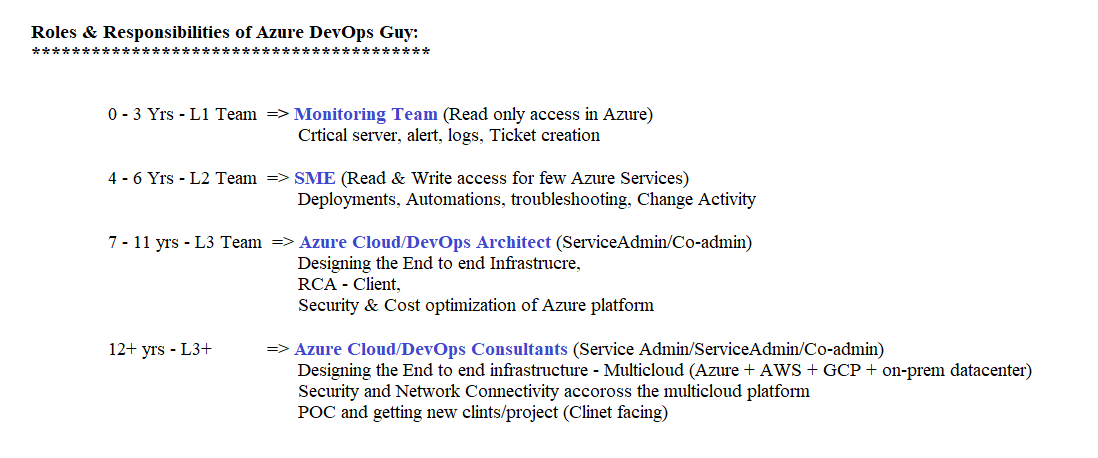
Azure Storage Account => Online storage

Azure DB => DB servers | PAAS

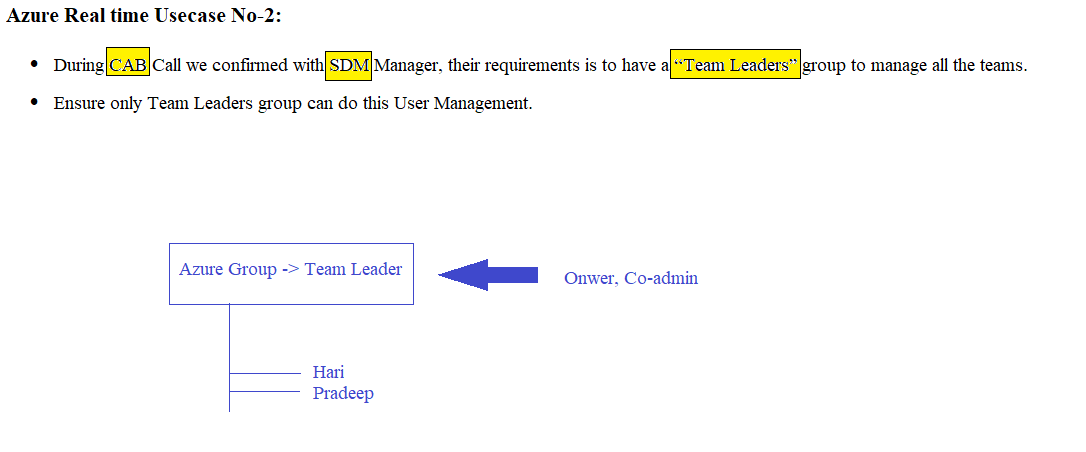
**10-Nov-2022**

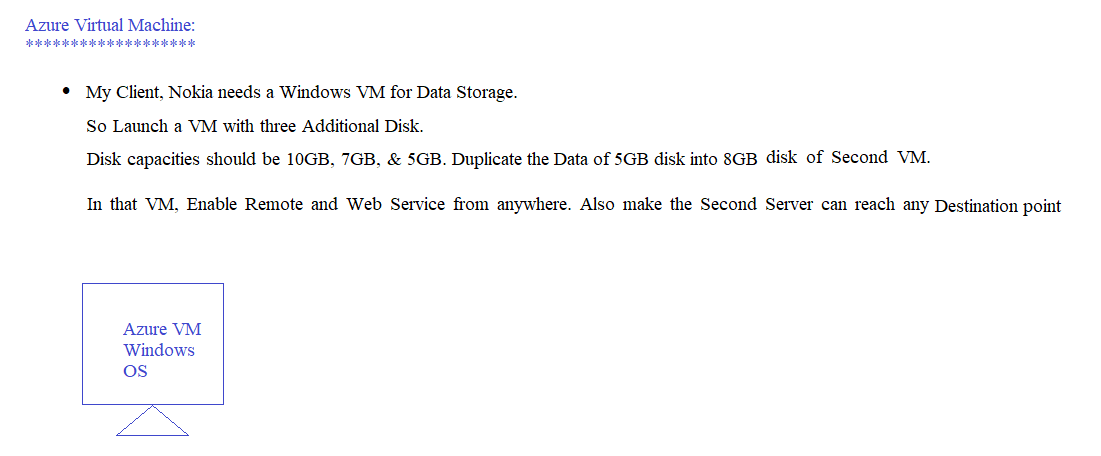
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**15-Nov-2022**

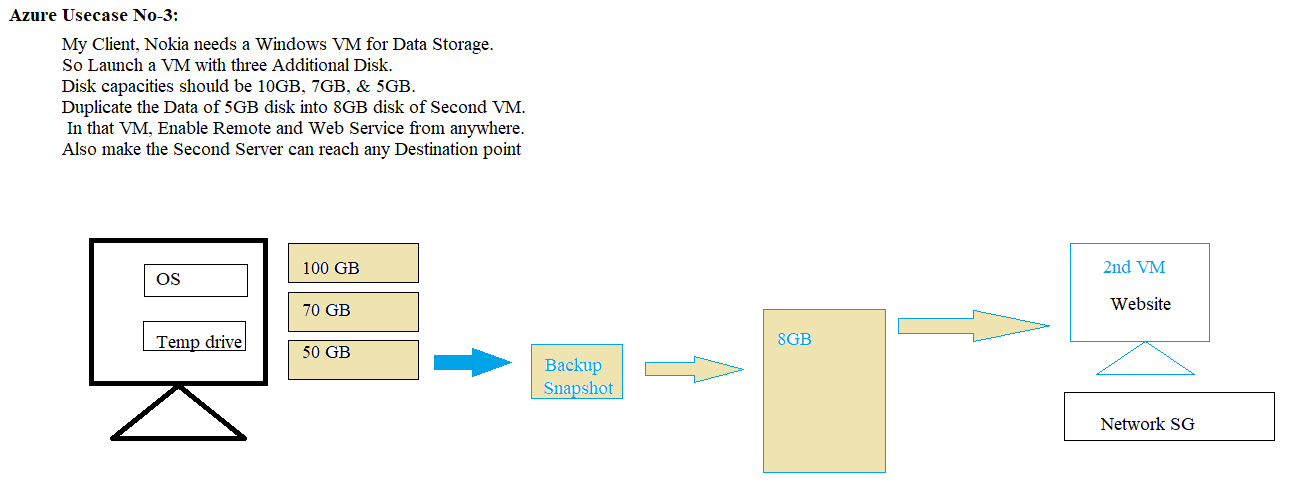
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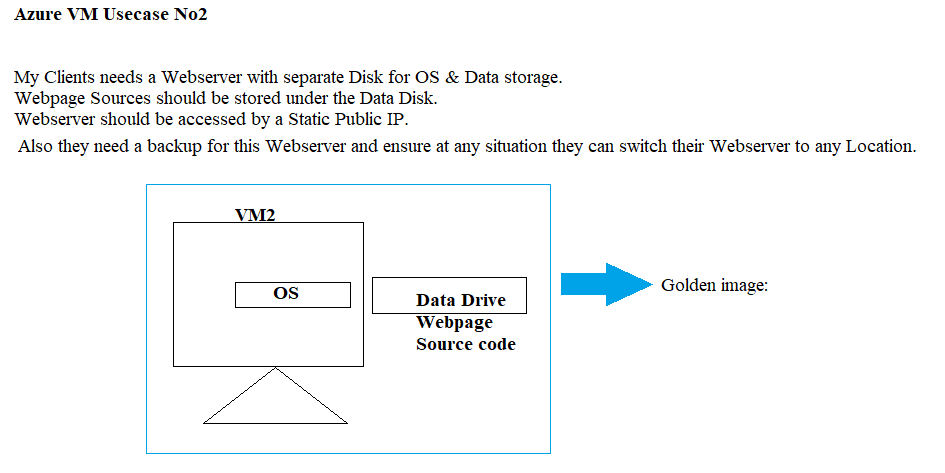
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https://azure.microsoft.com/en-us/explore/global-infrastructure/geographies/#geographies

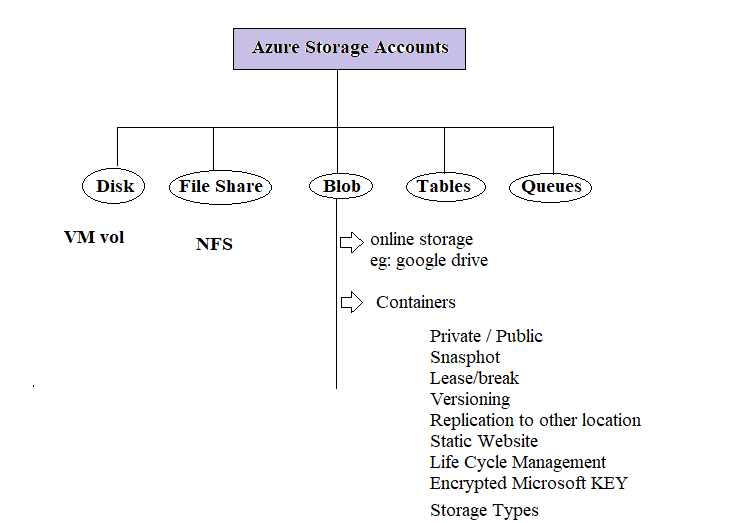
https://learn.microsoft.com/en-us/azure/reliability/availability-zones-overview

**16-Nov-2022**

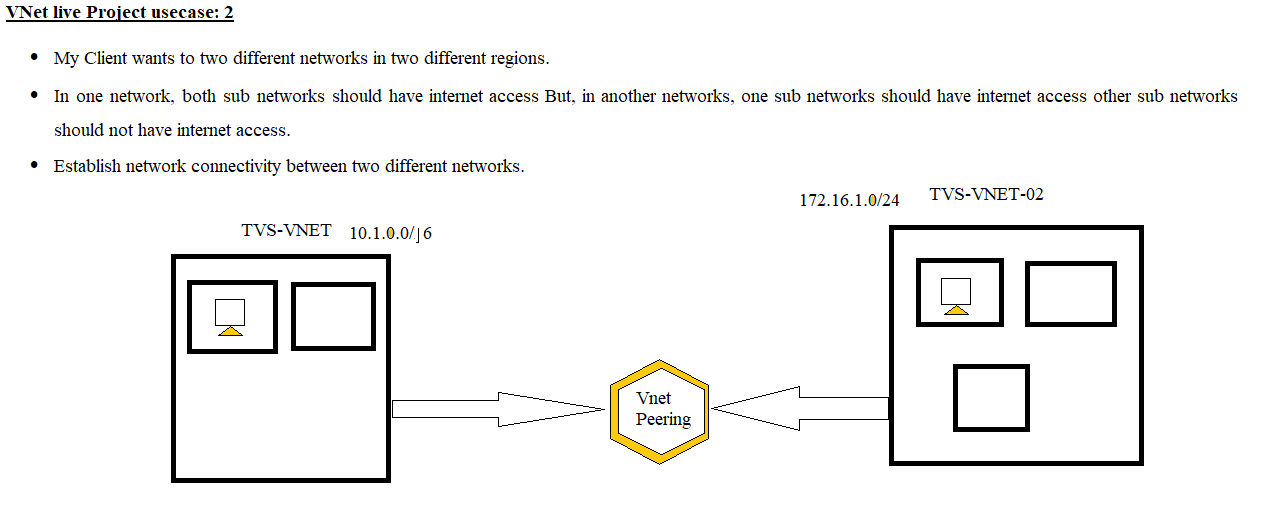
****

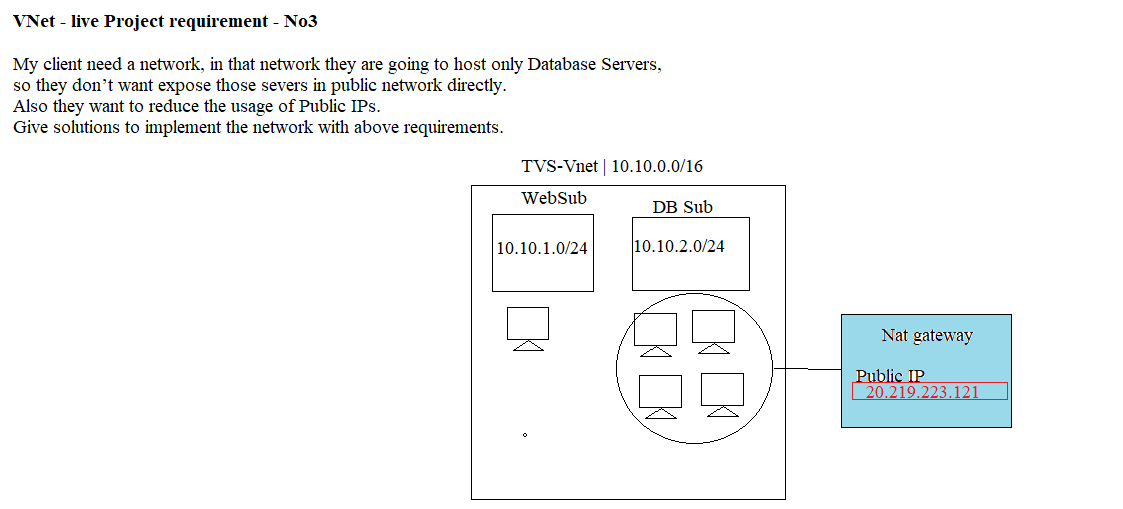
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**17-Nov-2022**

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**23-nov-2022**

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**07-Dec-2022**

**Putty Link:** [**https://the.earth.li/~sgtatham/putty/latest/w64/putty.exe**](https://the.earth.li/~sgtatham/putty/latest/w64/putty.exe)

Linux OS:

\*\*\*\*\*\*\*\*\*

RedHat Family

RHEL

Centos

Fedora

Debian Family

Ubuntu

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Root => Admin

Linux Basic Commands:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Clear => To clear the Putty shell interface

sudo su => We can switch the user as Root

cd / => change the directory

ls or ll => to list the available contents inside of the current directory

mkdir <fol\_name> => To create new directory

touch <file\_name> => To create a new file

Package Manager in Linux:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

apt-get update

apt-get install nginx

Services Management in linux:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

systemctl status nginx

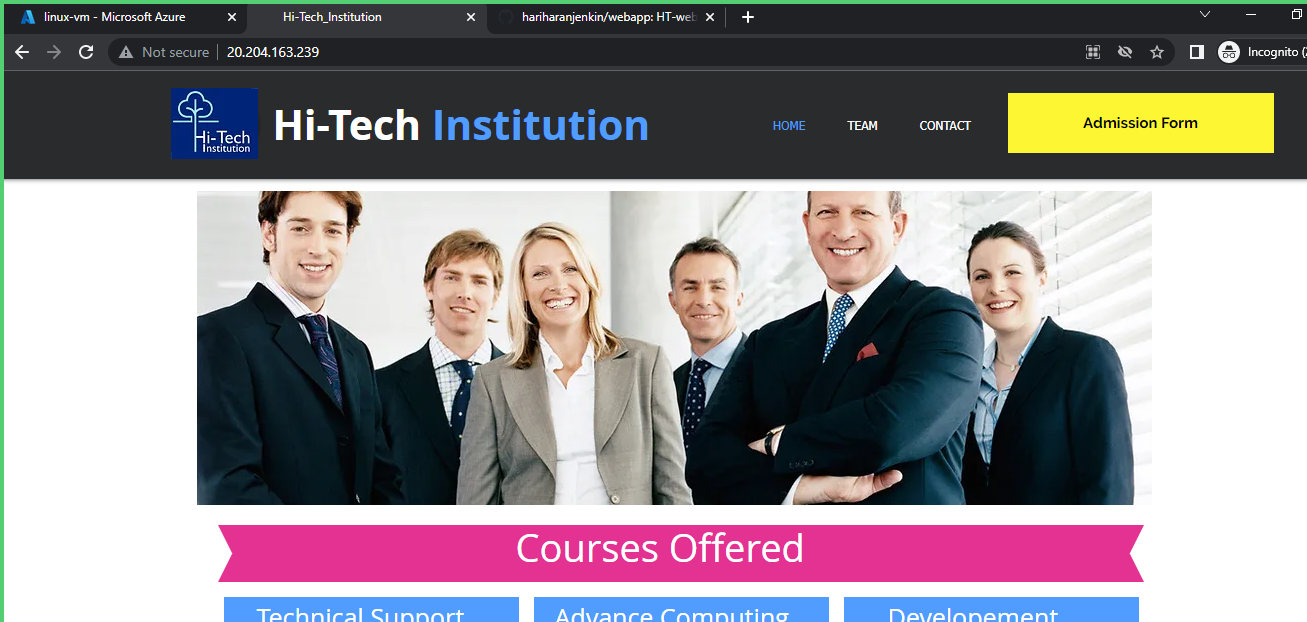
systemctl start nginx

systemctl stop nginx

Hosting the web application in Linux:

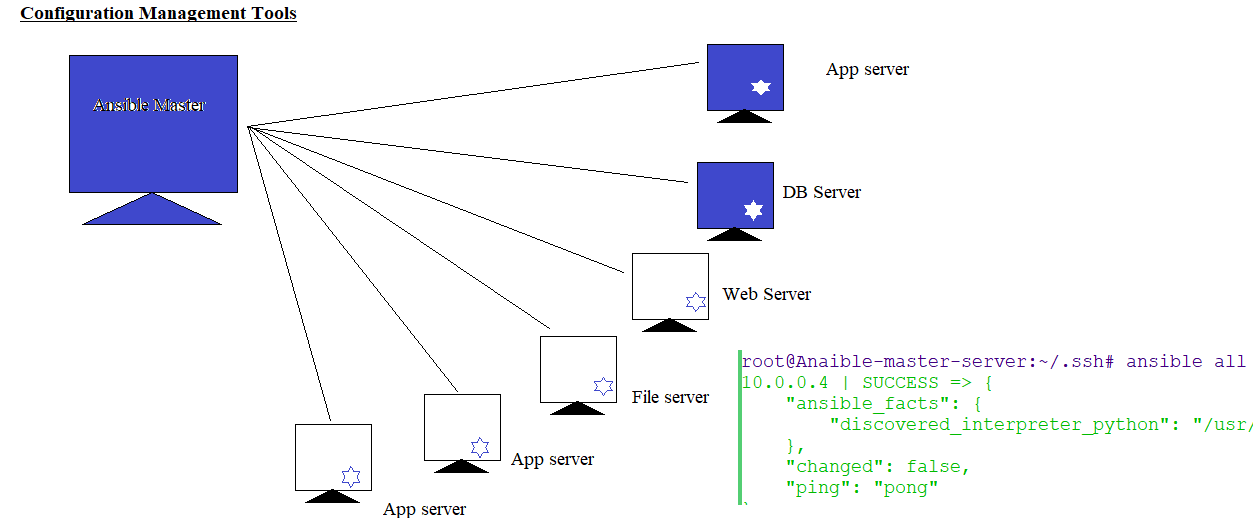
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

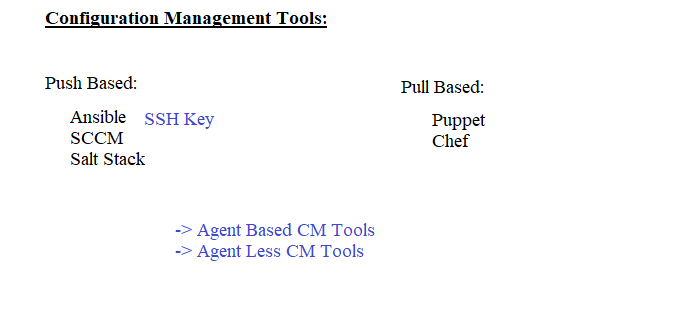
cd /var/www/html

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**Repo URL:** <https://github.com/hariharanjenkin/webapp.git>

**08-Dec-2022**

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**20-Dec-2022**

**Installation of Docker in ubuntu:**

https://www.digitalocean.com/community/tutorials/how-to-install-and-use-docker-on-ubuntu-20-04

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**Docker Basic Commands:**

docker images => To get the list of available images

docker pull <image\_name> => To download the images from Docker\_hub to local docker host

docker ps => To list the running containers

docker ps -a => To list the Stopped containers

docker run -it <name\_continer> <image\_name> => To create a new container

docker stop <container\_id>

docker start <container\_id>

docker restart <container\_id>

docker rm <container\_id>

docker attach <container\_id> => To login to the containers

Ctrl + P + Q => To logout from the containers

**26-Dec-2022**

az aks get-credentials --resource-group <rg\_Name> --name <cluster\_Name>

Kubectl get nodes => To list the worker nodes

kubectl get pod => To list the pods

kubectl run <name\_pod> --image <image\_name> => Create new POD

kubectl exec -it <name\_pod> -- /bin/bash => To login inside of the pod

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Creating the POD through Deployment:

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kubectl get deployment

kubectl create deployment <name\_deploy> --image <image\_name> => To create the deployment

kubectl delete pod <pod\_name> => To delete the POD

kubectl describe pod <pod\_name> => describe to know more details about pod

kubectl describe deployment <name\_deploy> => describe to know more details about deployment

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Resizing the POD's:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

hari [ ~ ]$ kubectl edit deployment test-deployment01

deployment.apps/test-deployment01 edited

hari [ ~ ]$

hari [ ~ ]$ kubectl get deployment

NAME READY UP-TO-DATE AVAILABLE AGE

test-deployment01 5/5 5 5 14m

hari [ ~ ]$ kubectl get pod

NAME READY STATUS RESTARTS AGE

test-deployment01-57b654966f-cq4gz 1/1 Running 0 30s

test-deployment01-57b654966f-fnz68 1/1 Running 0 30s

test-deployment01-57b654966f-g9h4m 1/1 Running 0 30s

test-deployment01-57b654966f-v2kmw 1/1 Running 0 30s

test-deployment01-57b654966f-xcsl9 1/1 Running 0 10m

hari [ ~ ]$ kubectl get replicaset

NAME DESIRED CURRENT READY AGE

test-deployment01-57b654966f 5 5 5 15m

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Working with the Namespaces:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

PROD

SB

Dev

kubectl get namespace

kubectl create ns <ns\_name>

hari [ ~ ]$ kubectl run testpod-001 --image nginx -n prod

pod/testpod-001 created

hari [ ~ ]$ kubectl run xyzzzz-001 --image nginx -n prod

pod/xyzzzz-001 created

hari [ ~ ]$ kubectl run abcccc --image nginx -n sb

pod/abcccc created

hari [ ~ ]$

hari [ ~ ]$ kubectl get pod

NAME READY STATUS RESTARTS AGE

test-deployment01-57b654966f-fnz68 1/1 Running 0 12m

test-deployment01-57b654966f-g9h4m 1/1 Running 0 12m

test-deployment01-57b654966f-xcsl9 1/1 Running 0 22m

hari [ ~ ]$ kubectl get pod -n prod

NAME READY STATUS RESTARTS AGE

testpod-001 1/1 Running 0 55s

xyzzzz-001 1/1 Running 0 42s

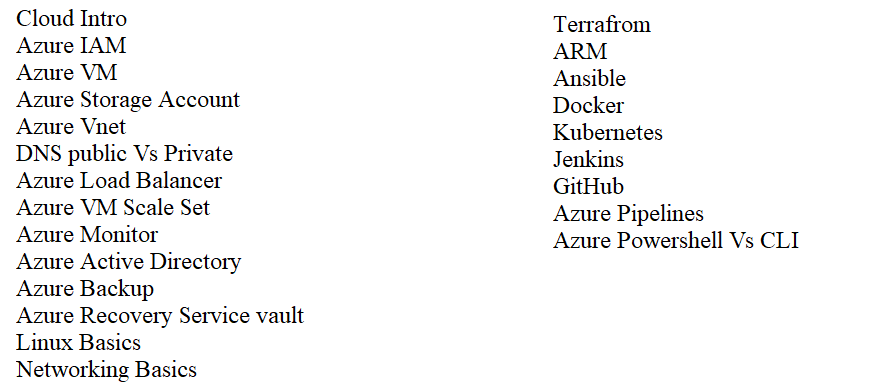
hari [ ~ ]$ kubectl get pod -n sb

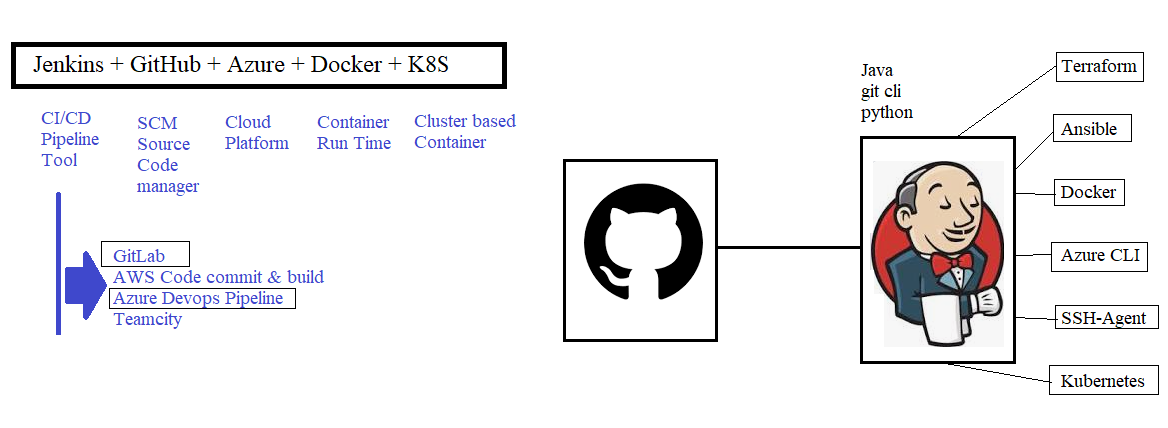
NAME READY STATUS RESTARTS AGE

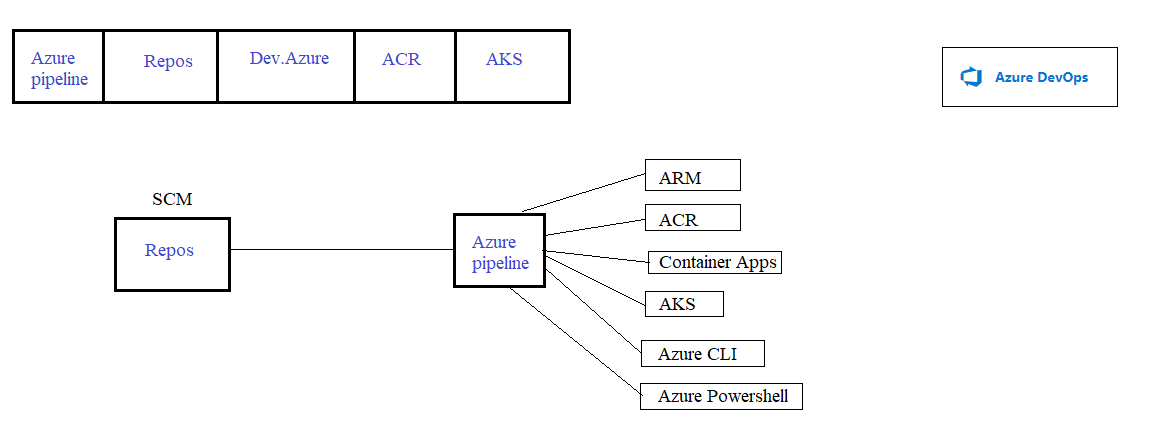
abcccc 1/1 Running 0 34s

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**02-Jan-2023**

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