1.6 Deliverables

**1 Please do not screenshot your 5 scripts. Please attach the text of your scripts here (either insert the text, or attach a text doc).**

**1net**

#! /bin/bash

theIP=172.16.10.2

theGW=172.16.10.1

theNM=255.255.255.0

theHOST=cloudstackmgr1

echo "IPADDR=$theIP" >> /etc/sysconfig/network-scripts/ifcfg-eth0

echo "GATEWAY=$theGW" >> /etc/sysconfig/network-scripts/ifcfg-eth0

echo "NETMASK=$theNM" >> /etc/sysconfig/network-scripts/ifcfg-eth0

echo "DNS1=8.8.8.8" >> /etc/sysconfig/network-scripts/ifcfg-eth0

sed -i 's/BOOTPROTO="dhcp"'/BOOTPROTO=static/ /etc/sysconfig/network-scripts/ifcfg-eth0

echo "$theIP $theHOST" >> /etc/hosts

hostnamectl set-hostname $theHOST

sudo systemctl restart network

**2bridge**

#! /bin/bash

theIP=172.16.10.2

theGW=172.16.10.1

theNM=255.255.255.0

theHOST=cloudstackmgr1

yum install bridge-utils net-tools -y

echo "DEVICE=cloudbr0" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "TYPE=Bridge" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "ONBOOT=yes" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "BOOTPROTO=static" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "IPV6INIT=no" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "IPV6\_AUTOCONF=no" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "DELAY=5" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "IPADDR=$theIP" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "GATEWAY=$theGW" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "NETMASK=$theNM" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "DNS1=8.8.8.8" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "DNS2=8.8.4.4" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "STP=yes" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "USERCTL=no" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "NM\_CONTROLLED=no" >> /etc/sysconfig/network-scripts/ifcfg-cloudbr0

echo "DEFROUTE=yes" >> /etc/sysconfig/network-scripts/ifcfg-eth0

echo "NAME=eth0" >> /etc/sysconfig/network-scripts/ifcfg-eth0

echo "BRIDGE=cloudbr0" >> /etc/sysconfig/network-scripts/ifcfg-eth0

sed -i 's/BOOTPROTO="static"'/BOOTPROTO=none/ /etc/sysconfig/network-scripts/ifcfg-eth0

sudo systemctl restart network

**3common**

#! /bin/bash

setenforce 0

sed -i 's/SELINUX=enforcing'/SELINUX=permissive/ /etc/selinux/config

yum -y install ntp

systemctl enable ntpd

systemctl start ntpd

cat <<'EOF' > /etc/yum.repos.d/cloudstack.repo

[cloudstack]

name=cloudstack

baseurl=http://download.cloudstack.org/centos/$releasever/4.18/

enabled=1

gpgcheck=0

EOF

**4mgt**

#! /bin/bash

yum -y install nfs-utils

sed -i 's/#Domain = local.domain.edu/Domain = wcc.edu/' /etc/idmapd.conf

cat <<'EOF' > /etc/exports

/export/secondary \*(rw,async,no\_root\_squash,no\_subtree\_check)

/export/primary \*(rw,async,no\_root\_squash,no\_subtree\_check)

EOF

mkdir -p /export/primary

mkdir /export/secondary

sed -i 's/#LOCKD\_TCPPORT=32803/LOCKD\_TCPPORT=32803/' /etc/sysconfig/nfs

sed -i 's/#LOCKD\_UDPPORT=32769/LOCKD\_UDPPORT=32769/' /etc/sysconfig/nfs

sed -i 's/#MOUNTD\_PORT=892/MOUNTD\_PORT=892/' /etc/sysconfig/nfs

sed -i 's/#STATD\_PORT=662/STATD\_PORT=662/' /etc/sysconfig/nfs

sed -i 's/#STATD\_OUTGOING\_PORT=2020/STATD\_OUTGOING\_PORT=2020/' /etc/sysconfig/nfs

echo "RQUOTAD\_PORT=875" >> /etc/sysconfig/nfs

systemctl enable rpcbind

systemctl enable nfs

systemctl start rpcbind

systemctl start nfs

yum -y install wget

wget http://repo.mysql.com/mysql-community-release-el7-5.noarch.rpm

rpm -ivh mysql-community-release-el7-5.noarch.rpm

yum -y install mysql-server

sed -i '/\[mysqld\]/a

server-id=source-01\innodb\_rollback\_on\_timeout=1\ninnodb\_lock\_wait\_timeout=600\nmax\_connectio

ns=350\nlog-bin=mysql-bin\nbinlog-format = "ROW"' /etc/my.cnf

systemctl enable mysqld

systemctl start mysqld

yum -y install mysql-connector-python

yum -y install cloudstack-management

alternatives --config java

cloudstack-setup-databases cloud:password@localhost --deploy-as=root

cloudstack-setup-management

/usr/share/cloudstack-common/scripts/storage/secondary/cloud-install-sys-tmplt -m /export/secondary -u http://download.cloudstack.org/systemvm/4.18/systemvmtemplate-4.18.1-kvm.qcow2.bz2 -h kvm -F

**5host**

#! /bin/bash

yum -y install epel-release

yum -y install cloudstack-agent

sed -i 's/#vnc\_listen = "0.0.0.0"/vnc\_listen = "0.0.0.0"/' /etc/libvirt/qemu.conf

sed -i 's/#listen\_tls = 0/listen\_tls = 0/' /etc/libvirt/libvirtd.conf

sed -i 's/#listen\_tcp = 1/listen\_tcp = 1/' /etc/libvirt/libvirtd.conf

sed -i 's/#tcp\_port = "16509"/tcp\_port = "16509"/' /etc/libvirt/libvirtd.conf

sed -i 's/#auth\_tcp = "sasl"/auth\_tcp = "none"/' /etc/libvirt/libvirtd.conf

sed -i 's/#mdns\_adv = 1/mdns\_adv = 0/' /etc/libvirt/libvirtd.conf

sed -i 's/#LIBVIRTD\_ARGS="--listen"/LIBVIRTD\_ARGS="--listen"/' /etc/sysconfig/libvirtd

systemctl restart libvirtd

echo "guest.cpu.mode=host-passthrough" >> /etc/cloudstack/agent/agent.properties

echo "guest.cpu.features=vmx" >> /etc/cloudstack/agent/agent.properties

**2 From the Cloudstack web UI get a screen capture of the Dashboard**

A screenshot of a computer

Description automatically generated

**3 From the Cloudstack web UI show the templates you have installed**

A screenshot of a computer

Description automatically generated

**4 From the Cloudstack web UI start a VM using the cirros template. Now from the**

**cloudstackmgr1 system, issue a virsh list --all and show this VM in a running state**

A black screen with white text

Description automatically generated

**5 Login to the VM you started at #4 and get a screen capture of a ping of** [**www.google.com**](http://www.google.com)

A screenshot of a computer

Description automatically generated