**Required ­­Machines**

**Master : 8GB RAM, 50GB Storage, 4 Core, Network (NAT,HOST)**

**Node1 : 4GB RAM, 50GB Storage, 4 Core, Network (NAT,HOST)**

**Node2 : 4GB RAM, 50GB Storage, 4 Core, Network (NAT,HOST)**

**On All machine**

# systemctl stop firewalld.service && systemctl disable firewalld.service

# vi /etc/selinux/config --------> SELINUX=disabled

# useradd hpcsa

# passwd hpcsa

**On Master**

# vi /etc/hosts

192.168.44.157 master

192.168.44.154 node1

192.168.44.172 node2

# rsync /etc/hosts root@node1:/etc/hosts

# rsync /etc/hosts root@node2:/etc/hosts

# ssh-keygen

# ssh-copy-id root@node1

# ssh-copy-id root@node2

# yum install git -y

# git clone <https://github.com/openpbs/openpbs.git>

# yum group install "Development Tools"

# cd openpbs

# cd

# mv /root/openpbs/ /root/openpbs-23.06.06

# tar -cvf /root/rpmbuild/SOURCES/openpbs-23.06.06.tar.gz openpbs-23.06.06

# cd openpbs-23.06.06/

# rpmbuild -ba openpbs.spec

# yum install libtool-ltdl-devel hwloc-devel libXt-devel libedit-devel libical-devel ncurses-devel postgresql-devel postgresql-contrib python3-devel tcl-devel tk-devel zlib-devel expat-devel openssl-devel -y

# rpmbuild -ba openpbs.spec

# cd

# cd rpmbuild/RPMS/x86\_64/

# yum install openpbs-server-23.06.06-0.x86\_64.rpm -y

# chmod 4755 /opt/pbs/sbin/pbs\_iff /opt/pbs/sbin/pbs\_rcp

# systemctl start pbs.service && systemctl enable pbs.service

# . /etc/profile.d/pbs.sh

# qstat –B

**On Node1**

# yum install git

# git clone https://github.com/openpbs/openpbs.git

# cd openpbs/

# ./autogen.sh

# ./configure

# mkdir /opt/pbs/

# yum install libtool-ltdl-devel hwloc-devel libXt-devel libedit-devel libical-devel ncurses-devel postgresql-devel postgresql-contrib python3-devel tcl-devel tk-devel zlib-devel expat-devel openssl-devel -y

# ./configure --prefix=/opt/pbs/

# make

# make install

# qstat

If command not found error occurs do following steps

# chmod +x /opt/pbs/etc/pbs.sh

# export PATH=${PATH}:/opt/pbs/bin

**On Master**

# scp /etc/pbs.conf root@node1:/etc/

**On Node1**

# vi /etc/pbs.conf

PBS\_START\_SERVER=0

PBS\_START\_SCHED=0

PBS\_START\_COMM=0

PBS\_START\_MOM=1

# systemctl start pbs.service && systemctl enable pbs.service

**On Master & node2**

# yum install nfs-utils \*

# systemctl start nfs && systemctl enable nfs

**On Master**

# chmod 777 /root/rpmbuild/RPMS/x86\_64/

# vi /etc/exports

# root/rpmbuild/RPMS/x86\_64/ 192.168.44.143(rw,sync,no\_root\_squash)

# exportfs –avr

**On Node2**

# mkdir /root/pbs

# mount -t nfs 192.168.44.157:/root/rpmbuild/RPMS/x86\_64/ /root/pbs

# df -H

# cd pbs/

# yum install openpbs-execution-23.06.06-0.x86\_64.rpm

**On Node1**

# rsync /etc/pbs.conf root@node2:/etc/

**On Node2**

# systemctl start pbs.service

# systemctl enable pbs.service

# vi /var/spool/pbs/mom\_priv/config

$logevent 0x1ff

#$clientname node2

$restrict\_user\_maxsysid 999

# systemctl restart pbs.service

**On Node1**

# vi /var/spool/pbs/mom\_priv/config

$logevent 0x1ff

#$clientname node1

$restrict\_user\_maxsysid 999

# systemctl restart pbs.service

**On Master**

# vi /var/spool/pbs/server\_priv/nodes

node1 np=1

node2 np=1

# qmgr

Now you will get qmgr shell

Qmgr: create node node1

Qmgr: create node node2

Qmgr: exit

# pbsnodes –a -------> list all nodes & their attributes

**Now add master as client**

#vi /etc/pbs.conf

PBS\_START\_MOM=**1**

# systemctl restart pbs.service

# vi /var/spool/pbs/mom\_priv/config

$logevent 0x1ff

#$clientname master

$restrict\_user\_maxsysid 999

# systemctl restart pbs.service

# vi /var/spool/pbs/server\_priv/nodes

master np=1

# qmgr

# Qmgr: create node master

# Qmgr: exit

# su – hpcsa

# qsub -I -------->This job is queued & scheduled as any PBS batch jo-