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**[ New Thinking To Implement New Technology ]**

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**Virtuous Soft Solution, Pune Virtuous Soft Solution, Pune**

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| Employee Training Guide |

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**Red Hat Pre-Requisite**

**[1] Change Instances Password**

[rehan@node1 ~]$ sudo su

[root@node1 ~]$passwd

**[2] Install wget command**

[root@node1 ~]$ yum install wget

**[3] Disabled Selinux**

[root@node1 ~]$ vi /etc/sysconfig/selinux

SELINUX=disabled

**[4] Disabled IPV6 and Change Swappiness**

[root@node1 ~]$ su -c 'cat >>/etc/sysctl.conf <<EOL

net.ipv6.conf.all.disable\_ipv6 =1

net.ipv6.conf.default.disable\_ipv6 =1

net.ipv6.conf.lo.disable\_ipv6 =1

EOL'

[root@node1 ~]$ iptables -L -n -v

[root@node1 ~]$ iptables-save > firewall.rules

[root@node1 ~]$ systemctl disable firewalld

[root@node1 ~]$ sed -i '/exit 0/d' /etc/rc.local

[root@node1 ~]$ su -c 'cat >>/etc/rc.local <<EOL

if test -f /sys/kernel/mm/redhat\_transparent\_hugepage/defrag/enabled; then

echo never > /sys/kernel/mm/redhat\_transparent\_hugepage/defrag/enabled

fi

if test -f /sys/kernel/mm/redhat\_transparent\_hugepage/defrag; then

echo never > /sys/kernel/mm/redhat\_transparent\_hugepage/defrag

fi

exit 0

EOL'

[root@node1 ~]$ source /etc/rc.local

[root@node1 ~]$ su -c 'cat >>/etc/sysctl.conf <<EOL

'vm.swappiness=10'

EOL'

[root@node1 ~]$ sudo sysctl -p

**[5] Install and Start NTP**

[root@node1 ~]$yum install ntp

[root@node1 ~]$service ntpd start

[root@node1 ~]$mv /etc/localtime /etc/localtime.back

[root@node1 ~]$ln -s /usr/share/zoneinfo/Asia/Kolkata /etc/localtime

[root@node1 ~]$chkconfig ntpd on

[root@node1 ~]$ntpstat

[root@node1 ~]$ntpq -p

[root@node1 ~]$date

[root@node1 ~]$ulimit -n 100000

**[6] Generate Passwordless Connectivity (ONLY FOR CM INSTANCE)**

[root@node1 ~]$ssh-keygen

[root@node1 ~]$cd .ssh/

[root@node1 ~]$cat id\_rsa.pub >> authorized\_keys

**[7] Configure sshd\_conf File For Password Less Login for All Instances**

[root@node1 ~]$vi /etc/ssh/sshd\_config

(remove all # hash tag)

#Port 22

#AddressFamily any

#ListenAddress 0.0.0.0

#ListenAddress ::

PermitRootLogin no (change to yes)

#PubkeyAuthentication yes

PasswordAuthentication no (apply Hash # Tag)

[root@node1 ~]$service sshd restart

**[8] Assign All IP Address For Hosts File (ONLY FOR CM INSTANCE)**

[root@node1 ~]$vi /etc/hosts (Assign All Hosts FQDN Like)

PrivateIP PrivateDNS AliasName

172.164.1.120 ip-172-164-1-110-internal nn

**[9] For Password Less Login Send Public Key To All Instances (SEND KEY FOR CM HOST TO ALL INSTANCES)**

[root@node1 ~]$ssh-copy-id -i .ssh/id\_rsa.pub root@nn

**[10] Send Hosts File For All Instances (SEND FILE FOR CM HOST TO ALL INSTANCES)**

[root@node1 ~]$scp /etc/hosts root@nn:/etc/

[11] Install JDBC OR ODBC Connector For All Hosts

[root@node1 ~]$yum install mysql-connector-java.noarch

[root@node1 ~]$yum install mysql-connector-odbc.x86\_64

**[12] Restart Instances**

[root@node1 ~]$init 6

**Mysql-Server Database Creation (MariaDB)**

**[1] Install MariaDB Server**

[root@node1 ~]$yum install mariadb-server

**[2] Start MariaDB Server**

[root@node1 ~]$service mariadb restart

**[3] Change Database Password and Configure Some Pre-Requisite**

[root@node1 ~]$mysql\_secure\_installation

Enter current password for root (enter for none): (for first time you don’t have password so just hit enter)

Change the root password? [Y/n] Y (just type Y hit enter and assign new password)

Remove anonymous users? [Y/n] Y

Disallow root login remotely? [Y/n] n

Remove test database and access to it? [Y/n] Y

Reload privilege tables now? [Y/n] Y

**[4] Login For MariaDB for Database Creation**

[root@node1 ~]$mysql –u root –p

**[5] Create Database and its Permission**

Mariadb>create database hive DEFAULT CHARACTER SET utf8;

Mariadb>grant all on hive.\* TO 'hive'@'%' IDENTIFIED BY 'hive';

Mariadb>create database amon DEFAULT CHARACTER SET utf8;

Mariadb>grant all on amon.\* TO 'amon'@'%' IDENTIFIED BY 'amon';

Mariadb>create database rman DEFAULT CHARACTER SET utf8;

Mariadb>grant all on rman.\* TO 'rman'@'%' IDENTIFIED BY 'rman';

Mariadb>create database nav DEFAULT CHARACTER SET utf8;

Mariadb> grant all on nav.\* TO 'nav'@'%' IDENTIFIED BY 'nav';

Mariadb> create database navms DEFAULT CHARACTER SET utf8;

Mariadb> grant all on navms.\* TO 'navms'@'%' IDENTIFIED BY 'navms';

Mariadb> create database oozie DEFAULT CHARACTER SET utf8;

Mariadb> grant all on oozie.\* TO 'oozie'@'%' IDENTIFIED BY 'oozie';

Mariadb> create database hue DEFAULT CHARACTER SET utf8;

Mariadb> grant all on hue.\* TO 'hue'@'%' IDENTIFIED BY 'hue';

Mariadb> grant all on \*.\* to 'temp'@'%' identified by 'temp' with grant option;

Mariadb>exit

**Install Cloudera Manager Using Path - B**

**[1] Download Cloudera Manager Repo File**

[root@node1 ~]$ wget <https://archive.cloudera.com/cm5/redhat/7/x86_64/cm/cloudera-manager.repo>

[root@node1 ~]$ ls

**[2] Move File into /etc/yum.repos.d/ Location**

[root@node1 ~]$ mv Cloudera-manager.repo /etc/yum.repos.d/

**[3] Edit The Base Url**

[root@node1 ~]$ vi /etc/yum.repos.d/cloudera-manager.repo

baseurl = <https://archive.cloudera.com/cm5/redhat/7/x86_64/cm/5.13.3/>

**[4] Install the JDK from a repository**

[root@node1 ~]$ yum install oracle-j2sdk1.7

**[5] Install the Cloudera Manager Server Packages**

[root@node1 ~]$ yum install cloudera-manager-daemons cloudera-manager-server

**[6] Connect Mysql (MariaDB) Database into Cloudera Manager Through Mysql JDBC Connector**

[root@node1 ~]$ sudo /usr/share/cmf/schema/scm\_prepare\_database.sh mysql -h <priIP of mysql Host> -utemp -ptemp --scm-host <priIP of CM Server> scm scm scm

**[7] Restart The Cloudera Manager Server For Changes to Take Effect**

[root@node1 ~]$ service Cloudera-scm-server restart

**[8] Check Server Log File**

[root@node1 ~]$ tail –f /var/log/Cloudera-scm-server/Cloudera-scm-server.log

**[9] Login Cloudera Manager Admin Console Through Web Browser**

PublicIP:7180

Username : admin

Password : admin