How to upgrade java 1.7 to java 1.8 using cloudera manager on AWS EC2 (CDH)-:

Step 1: Verify the Java version which you have already installed on AWS EC2 CDH.
Open Putty and login to EC2 instance.

i) Insert Command: **java -version**

```
[root@ip-10-0-0-206 ~]# java -version
java version "1.7.0_67"
Java(TM) SE Runtime Environment (build 1.7.0_67-b01)
Java HotSpot(TM) 64-Bit Server VM (build 24.65-b04, mixed mode)
[root@ip-10-0-0-206 ~]#
```

ii. **ls /usr/java/jdk1.7.0_67-cloudera/**

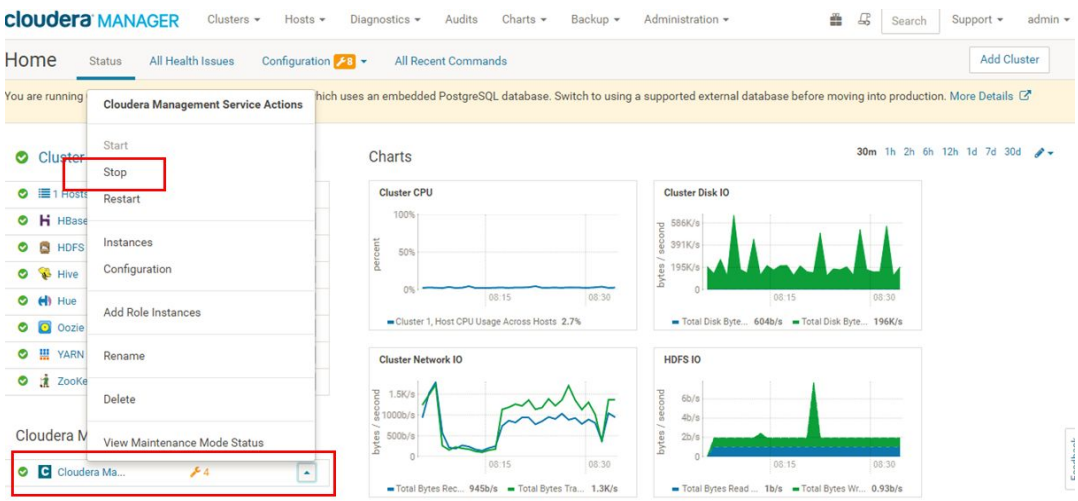
```
[root@ip-10-0-0-206 ~]# ls /usr/java/jdk1.7.0_67-cloudera/
bin  COPYRIGHT  db  include  jre  lib  LICENSE  man  README.html  release  src.zip  THIRDPARTYLICENSEREADME-JAVAFX.txt  THIRDPARTYLICENSEREADME.txt
[root@ip-10-0-0-206 ~]#
```

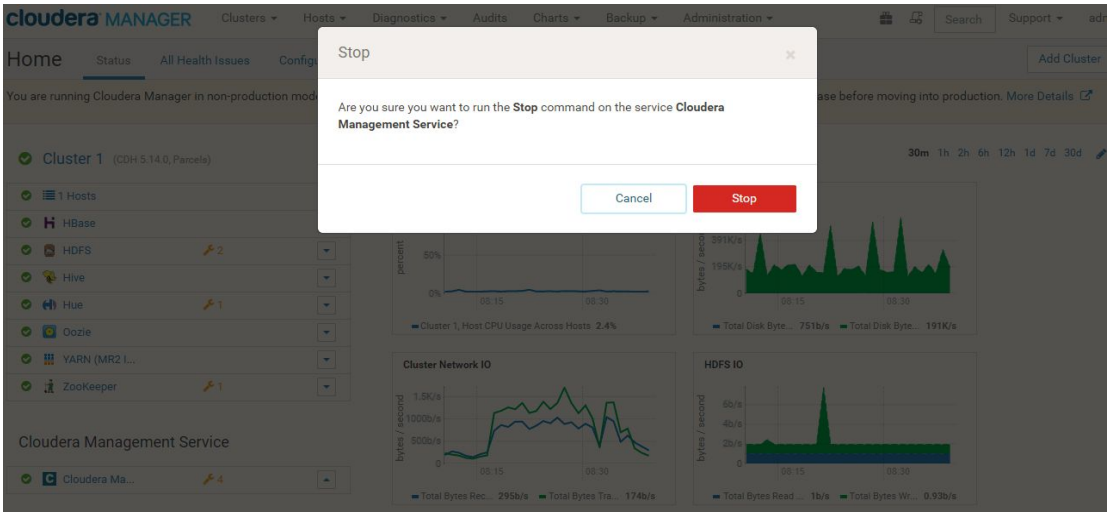
Click here to view image

Step2: Shut down cloudera management service and cluster service, using cloudera manager.

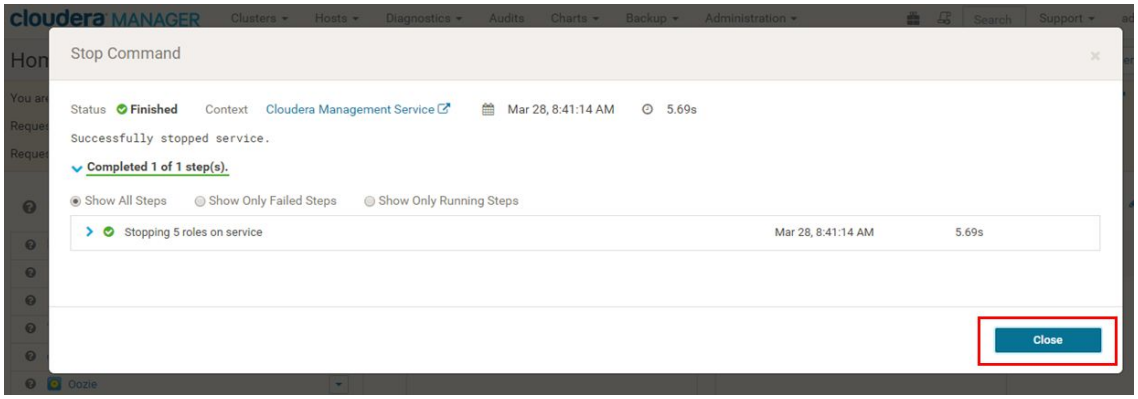
PS: If your cloudera management service and cluster service is already shut, no need to perform the step below.

i. Enter your Public IP Address in the link given below to access cloudera manager http://**Public IP Address**:7180
ii. Click on cloudera management service and **click on Stop**.

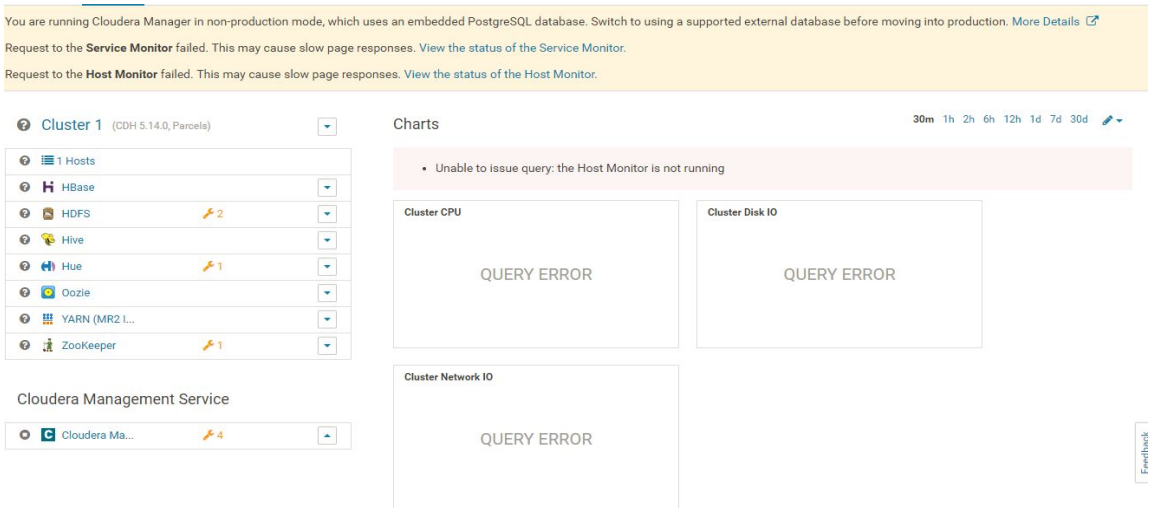




iii. Click on **Stop** and then **Close**.



iv. After closing you should get window as shown below.



Step 3: Now Again go to putty and stop *cloudera-scm-server* and *cloudera-scm-agent* using the command line.

i. Insert Command: **systemctl stop cloudera-scm-server**

```
[root@ip-10-0-0-206 ~]# systemctl stop cloudera-scm-server
[root@ip-10-0-0-206 ~]#
```

ii. Insert Command: **systemctl stop cloudera-scm-agent**

```
[root@ip-10-0-0-206 ~]# systemctl stop cloudera-scm-agent
[root@ip-10-0-0-206 ~]#
```

Step 4: Now download the JAVA 1.8 using below url.

i. Insert the command lines below together in Putty. Command can also be found here.

wget --no-cookies --no-check-certificate --header "Cookie: gpw_e24=http%3A%2F%2Fwww.oracle.com%2F; oraclelicense=accept-securebackup-cookie" "http://download.oracle.com/otn-pub/java/jdk/8u161-b12/2f38c3b165be4555a1fa6e98c45e0808/jdk-8u161-linux-x64.tar.gz"

Note - Download might not go through if the Oracle Server is down. So you might have to wait.

```
[root@ip-10-0-0-206 ~]# wget --no-cookies --no-check-certificate --header "Cookie: gpw_e24=http%3A%2F%2Fwww.oracle.com%2F;oraclelicense=accept-securebackup-cookie" "htt
p://download.oracle.com/otn-pub/java/jdk/8u161-b12/2f38c3b165be4555a1fa6e98c45e0808/jdk-8u161-linux-x64.tar.gz"
--2018-03-28 08:47:51--  http://download.oracle.com/otn-pub/java/jdk/8u161-b12/2f38c3b165be4555a1fa6e98c45e0808/jdk-8u161-linux-x64.tar.gz
Resolving download.oracle.com (download.oracle.com)... 23.46.60.117
Connecting to download.oracle.com (download.oracle.com)|23.46.60.117|:80... connected.
HTTP request sent, awaiting response... 302 Moved Temporarily
Location: https://edelivery.oracle.com/otn-pub/java/jdk/8u161-b12/2f38c3b165be4555a1fa6e98c45e0808/jdk-8u161-linux-x64.tar.gz [following]
--2018-03-28 08:47:51--  https://edelivery.oracle.com/otn-pub/java/jdk/8u161-b12/2f38c3b165be4555a1fa6e98c45e0808/jdk-8u161-linux-x64.tar.gz
Resolving edelivery.oracle.com (edelivery.oracle.com)... 23.49.182.138, 2600:1408:2000:197::2d3e, 2600:1408:2000:198::2d3e
Connecting to edelivery.oracle.com (edelivery.oracle.com)|23.49.182.138|:443... connected.
HTTP request sent, awaiting response... 302 Moved Temporarily
Location: http://download.oracle.com/otn-pub/java/jdk/8u161-b12/2f38c3b165be4555a1fa6e98c45e0808/jdk-8u161-linux-x64.tar.gz?AuthParam=1522226991_8a5785ae4925d306259925b
a39684a22 [following]
--2018-03-28 08:47:51--  http://download.oracle.com/otn-pub/java/jdk/8u161-b12/2f38c3b165be4555a1fa6e98c45e0808/jdk-8u161-linux-x64.tar.gz?AuthParam=1522226991_8a5785ae
4925d306259925ba39684a22
Connecting to download.oracle.com (download.oracle.com)|23.46.60.117|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 189756259 (181M) [application/x-gzip]
Saving to: 'jdk-8u161-linux-x64.tar.gz'

100%[=============================================================================================================>] 189,756,259 94.9MB/s   in 1.9s

2018-03-28 08:47:53 (94.9 MB/s) - 'jdk-8u161-linux-x64.tar.gz' saved [189756259/189756259]

[root@ip-10-0-0-206 ~]#
```

Step 5: Verify java 1.8 is downloaded or not. Using ls -ltrh and size is 181 MB.

i. Insert Command: **ls -ltrh**

```
[root@ip-10-0-0-206 ~]# ls -ltrh
total 182M
-rw-r--r--  1 root root 6.0K Nov 12  2015 mysql-community-release-el7-5.noarch.rpm
-rw-r--r--  1 root root 181M Dec 20 19:10 jdk-8u161-linux-x64.tar.gz
-rw-------. 1 root root 6.9K Jan  3 18:48 original-ks.cfg
-rw-------. 1 root root 7.6K Jan  3 18:48 anaconda-ks.cfg
-rwxr-xr-x  1 root root 508K Feb  8 14:48 cloudera-manager-installer.bin
[root@ip-10-0-0-206 ~]#
```

Step 6: Extract the tar file using below command and installed into the location /usr/java/

i. Insert Command: **tar zxvf jdk-8u161-linux-x64.tar.gz -C /usr/java/**

You will get an output like shown below:

```
[root@ip-10-0-0-206 ~]# tar zxvf jdk-8u161-linux-x64.tar.gz -C /usr/java/
jdk1.8.0_161/
jdk1.8.0_161/javafx-src.zip
jdk1.8.0_161/bin/
jdk1.8.0_161/bin/jmc
jdk1.8.0_161/bin/serialver
jdk1.8.0_161/bin/jmc.ini
jdk1.8.0_161/bin/jstack
jdk1.8.0_161/bin/rmiregistry
jdk1.8.0_161/bin/unpack200
jdk1.8.0_161/bin/jar
jdk1.8.0_161/bin/jps
jdk1.8.0_161/bin/wsimport
jdk1.8.0_161/bin/rmic
jdk1.8.0_161/bin/jdeps
jdk1.8.0_161/bin/jcontrol
jdk1.8.0_161/bin/javafxpackager
jdk1.8.0_161/bin/schemagen
jdk1.8.0_161/bin/jcmd
jdk1.8.0_161/bin/servertool
jdk1.8.0_161/bin/xjc
jdk1.8.0_161/bin/jmap
jdk1.8.0_161/bin/jvisualvm
jdk1.8.0_161/bin/policytool
jdk1.8.0_161/bin/jstat
jdk1.8.0_161/bin/jconsole
jdk1.8.0_161/bin/jdb
jdk1.8.0_161/bin/jstatd
jdk1.8.0_161/bin/appletviewer
```

Step 7: Verify java 1.8 is installed or not under the location: /usr/java/

i. Insert Command: **cd /usr/java**
ii. Insert Command: **ls**

```
[root@ip-10-0-0-206 ~]# cd /usr/java
[root@ip-10-0-0-206 java]# ls
jdk1.6.0_31  jdk1.7.0_67-cloudera  jdk1.8.0_161
[root@ip-10-0-0-206 java]#
```

Step 8: Check the java and jre location using

i. Insert Command: **ls /usr/java/jdk1.8.0_161/**

```
[root@ip-10-0-0-206 ~]# ls /usr/java/jdk1.8.0_161/
bin  COPYRIGHT  db  include  javafx-src.zip  jre  lib  LICENSE  man  README.html  release  src.zip
[root@ip-10-0-0-206 ~]#
```

Step 9: Edit the JAVA HOME path for cloudera-scm-server and other users.

i. Insert Command: **vi /etc/default/cloudera-scm-server** to edit your Java path.

```
[root@ip-10-0-0-206 ~]# vi /etc/default/cloudera-scm-server
```

After Inserting the above command. Click ‘i’ to change your Java_home path as shown below.

Earlier our path for Java:
export JAVA_HOME=/usr/java/jdk**1.7.0**_67-cloudera/

After inserting the above command you need to click ‘i’ and update the new Java_home path:
export JAVA_HOME=/usr/java/jdk**1.8.0**_161/

```
#
# Specify any command line arguments for the Cloudera SCM Server here.
#

export JAVA_HOME=/usr/java/jdk1.8.0_161/
CMF_SERVER_ARGS=""
```

ii. Insert Command **:** Click ‘i’ to enter insert mode and then insert :**wq!** to save and exit from vi editor.

Step 10: Now change Java_home path for other users by going to edit /etc/profile

i. Insert Command: **vi /etc/profile**

```
[root@ip-10-0-0-206 ~]# vi /etc/profile
[root@ip-10-0-0-206 ~]#
```

```
unset i
unset -f pathmunge
export JAVA_HOME=/usr/java/jdk1.8.0_161/
export JRE_HOME=/usr/java/jdk1.8.0_161/jre/
export PATH=$JAVA_HOME/bin:$PATH

-- INSERT --
```

ii. Insert Command **:** Click ‘i’ to enter insert mode and then insert :**wq!** to save and exit from vi editor.

Step 11: Now you have to update your /etc/profile using the source command and check the new java version.

```
[root@ip-10-0-0-206 ~]# source /etc/profile
[root@ip-10-0-0-206 ~]# java -version
java version "1.8.0_161"
Java(TM) SE Runtime Environment (build 1.8.0_161-b12)
Java HotSpot(TM) 64-Bit Server VM (build 25.161-b12, mixed mode)
[root@ip-10-0-0-206 ~]#
```

i. Insert Command: **source /etc/profile**

Step 12: Now you need to start cloudera-scm-server and cloudera-scm-agent using command line. Insert the following 2 commands shown below.

i. Insert Command: **systemctl start cloudera-scm-server**

ii. Insert Command: **systemctl status cloudera-scm-server**

```
[root@ip-10-0-0-206 ~]# systemctl start cloudera-scm-server
[root@ip-10-0-0-206 ~]# systemctl status cloudera-scm-server
● cloudera-scm-server.service - LSB: Cloudera SCM Server
   Loaded: loaded (/etc/rc.d/init.d/cloudera-scm-server; bad; vendor preset: disabled)
   Active: active (exited) since Wed 2018-03-28 09:16:52 UTC; 15s ago
     Docs: man:systemd-sysv-generator(8)
  Process: 6795 ExecStop=/etc/rc.d/init.d/cloudera-scm-server stop (code=exited, status=0/SUCCESS)
  Process: 12336 ExecStart=/etc/rc.d/init.d/cloudera-scm-server start (code=exited, status=0/SUCCESS)

Mar 28 09:16:46 ip-10-0-0-206.ec2.internal systemd[1]: Starting LSB: Cloudera SCM Server...
Mar 28 09:16:47 ip-10-0-0-206.ec2.internal su[12360]: (to cloudera-scm) root on none
Mar 28 09:16:52 ip-10-0-0-206.ec2.internal cloudera-scm-server[12336]: Starting cloudera-scm-server: [  OK  ]
Mar 28 09:16:52 ip-10-0-0-206.ec2.internal systemd[1]: Started LSB: Cloudera SCM Server.
```

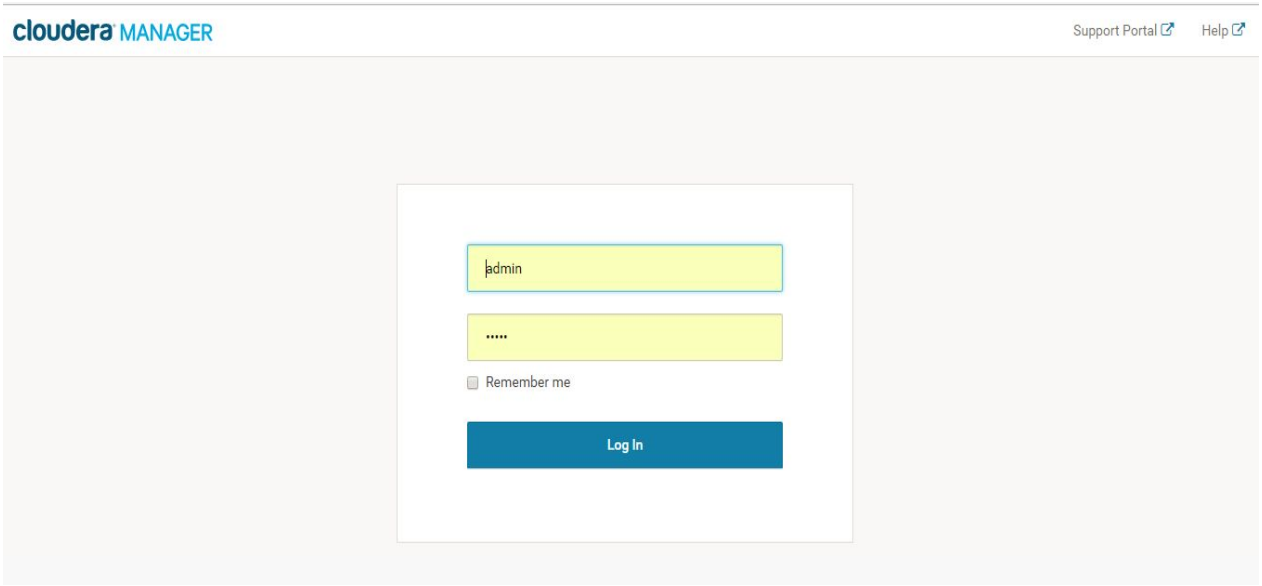
Now insert the 3rd command line shown below.

iii. Insert Command: **systemctl start cloudera-scm-agent**

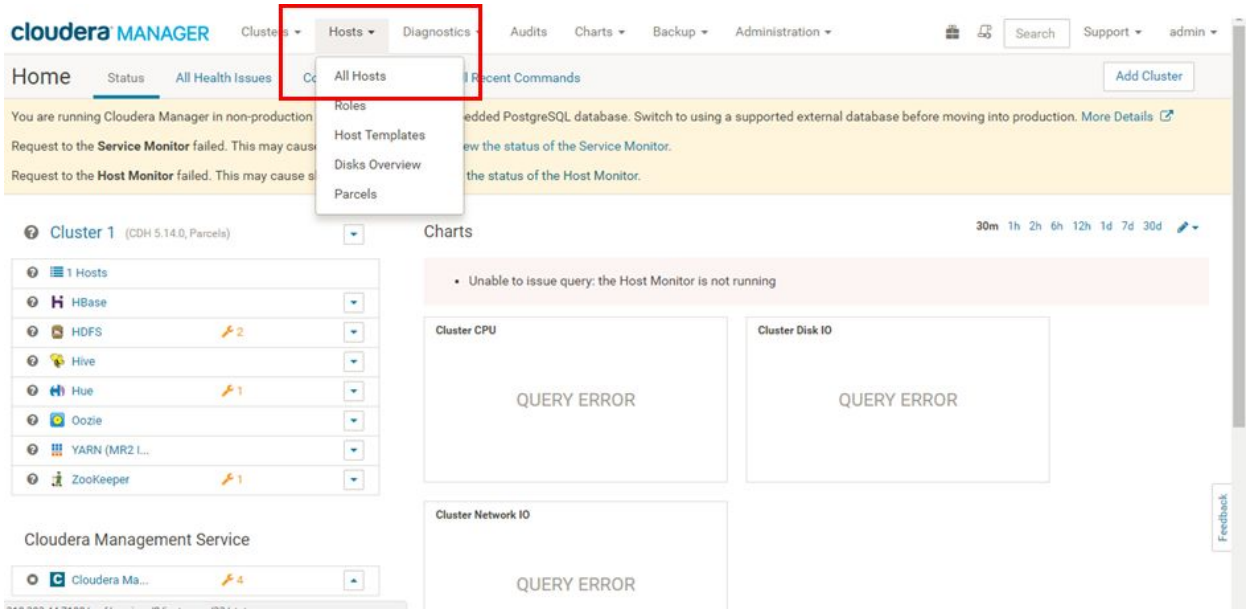
```
[root@ip-10-0-0-206 ~]# systemctl start cloudera-scm-agent
[root@ip-10-0-0-206 ~]#
```

Step 13: Now go to cloudera manager and wait for a few minutes.

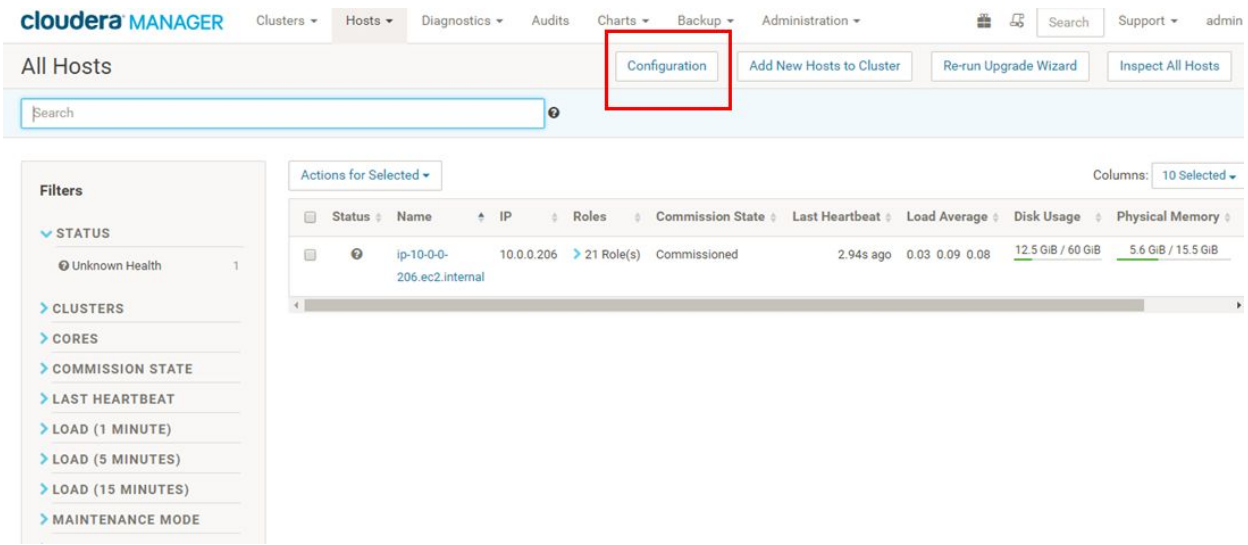
ii. Enter your Public IP Address in the link given below to access cloudera manager
http://**Public IP Address**:7180



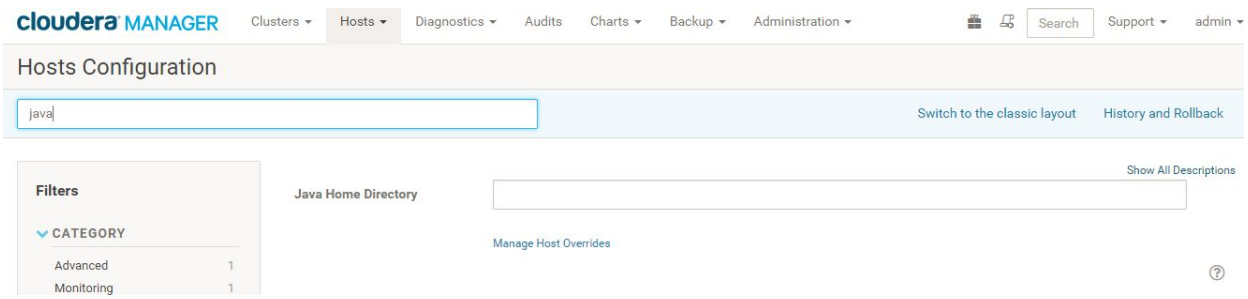
Step 14: Click on Host and click on All host.



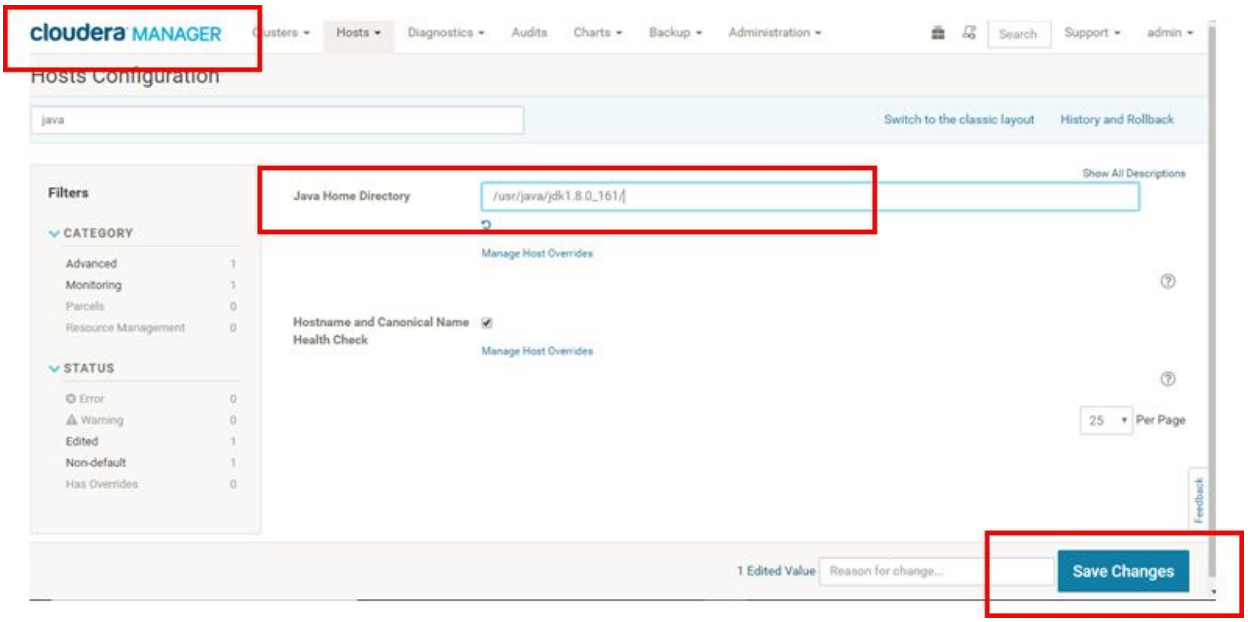
Step 15: Click on configuration:



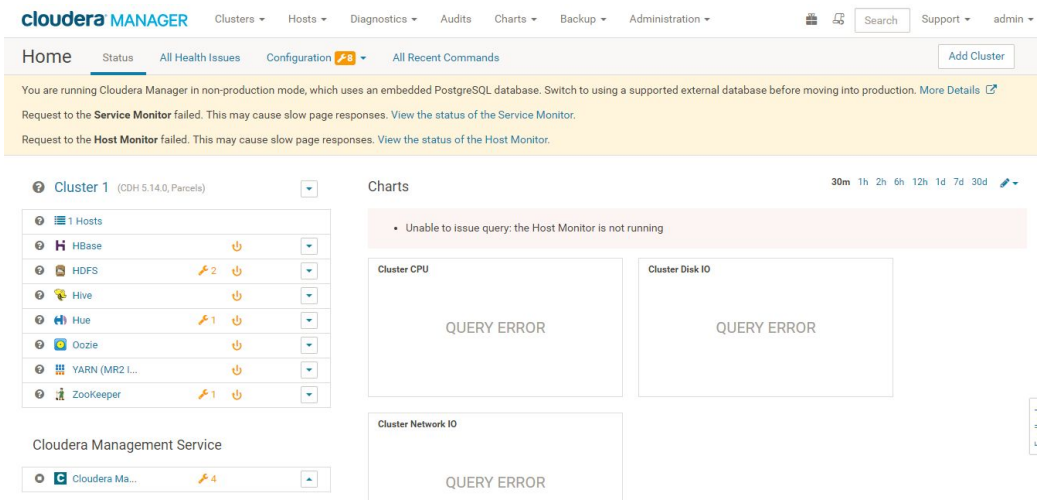
Step 16: Inside the search tab just type **“java”**



Step 17: Inside the JAVA HOME Directory paste the Java_home path - /usr/java/jdk1.8.0_161/

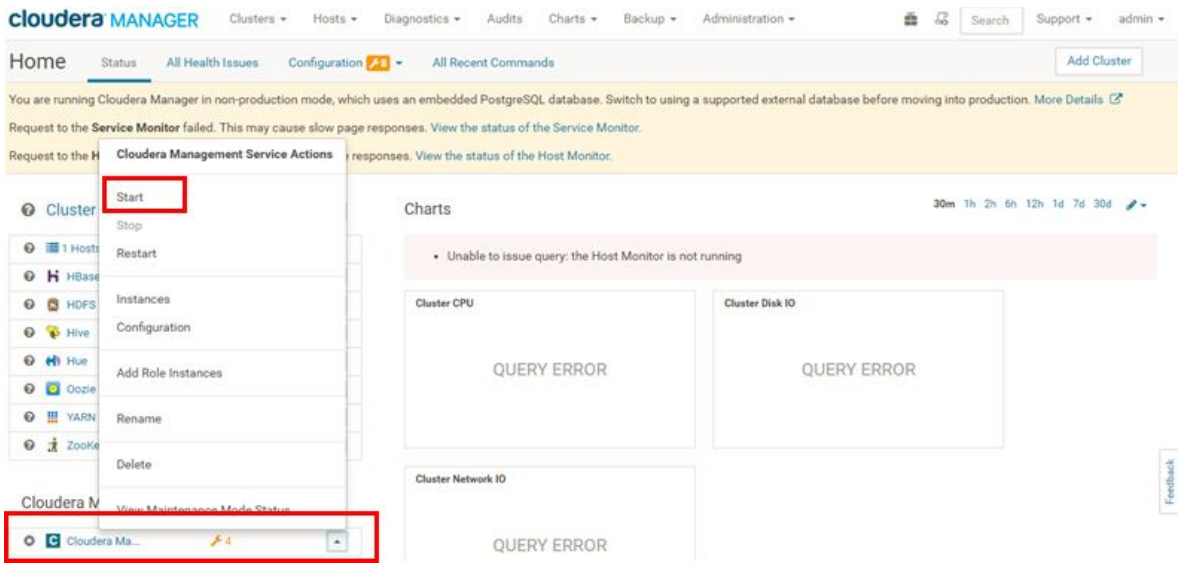


Now click on Save Changes. And then click on Cloudera Manager and you will be redirected to the Cloudera Homepage.

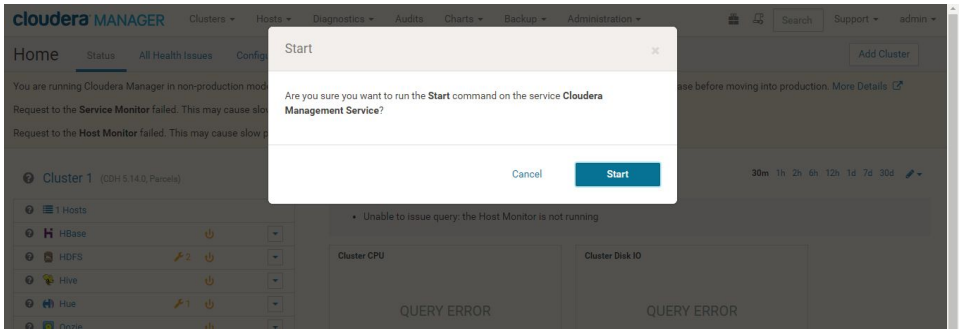


Step 18: Now you need to restart both the cloudera management service and the cluster service.

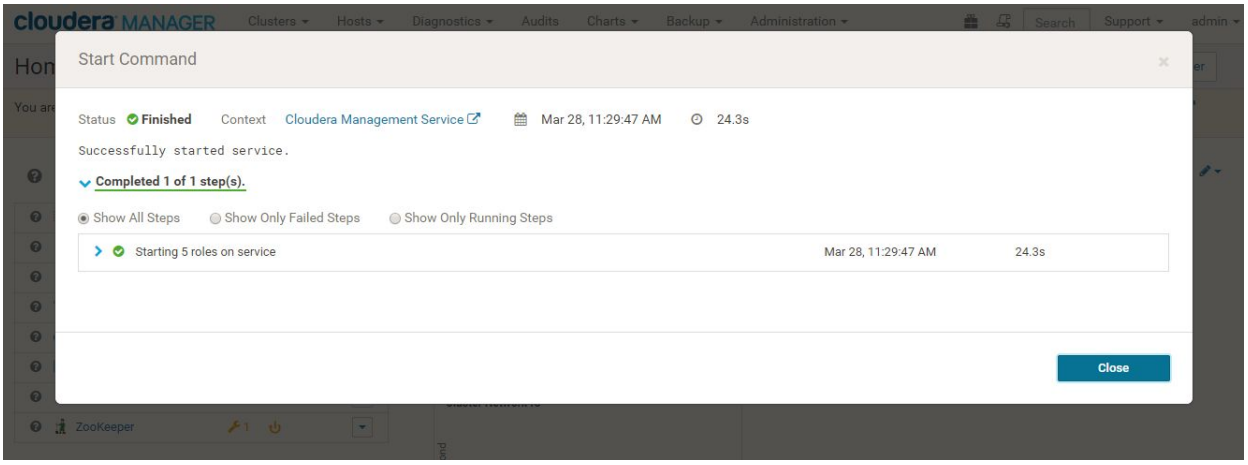
Click on cloudera management service then click on start.



After that a new window will pop up and click on ‘Start’.

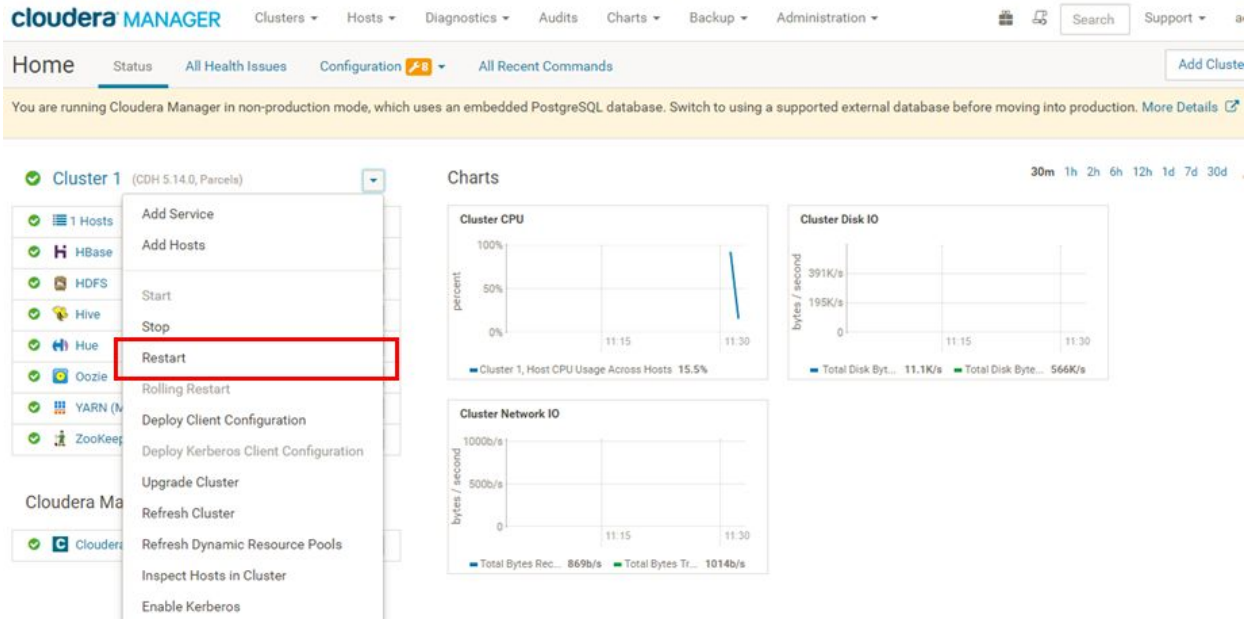


Then Click on ‘Close’.

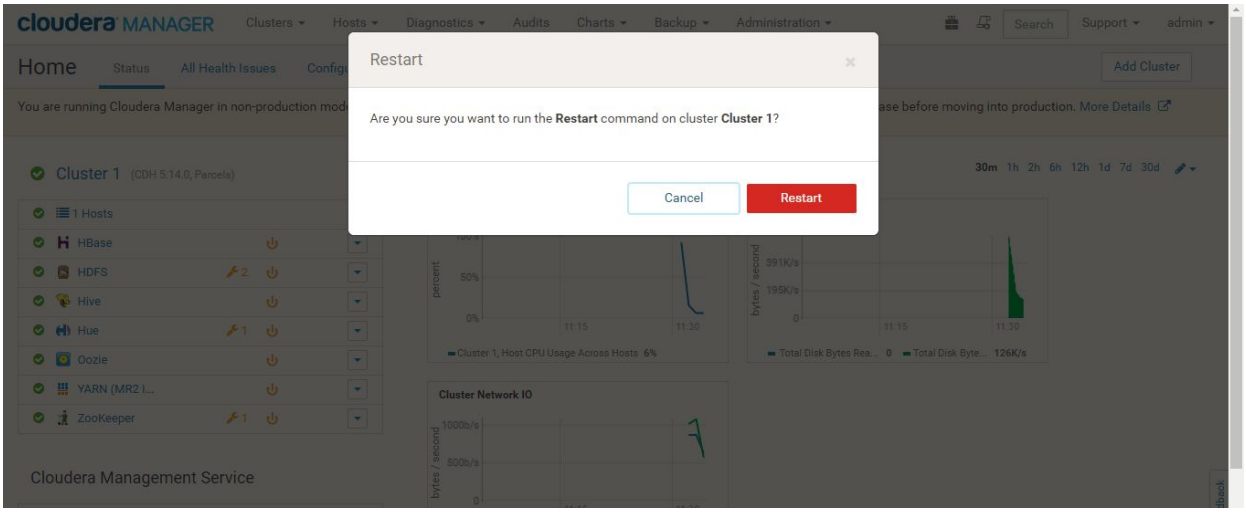


Step 19: Now Restart the cluster service and wait for few minutes.

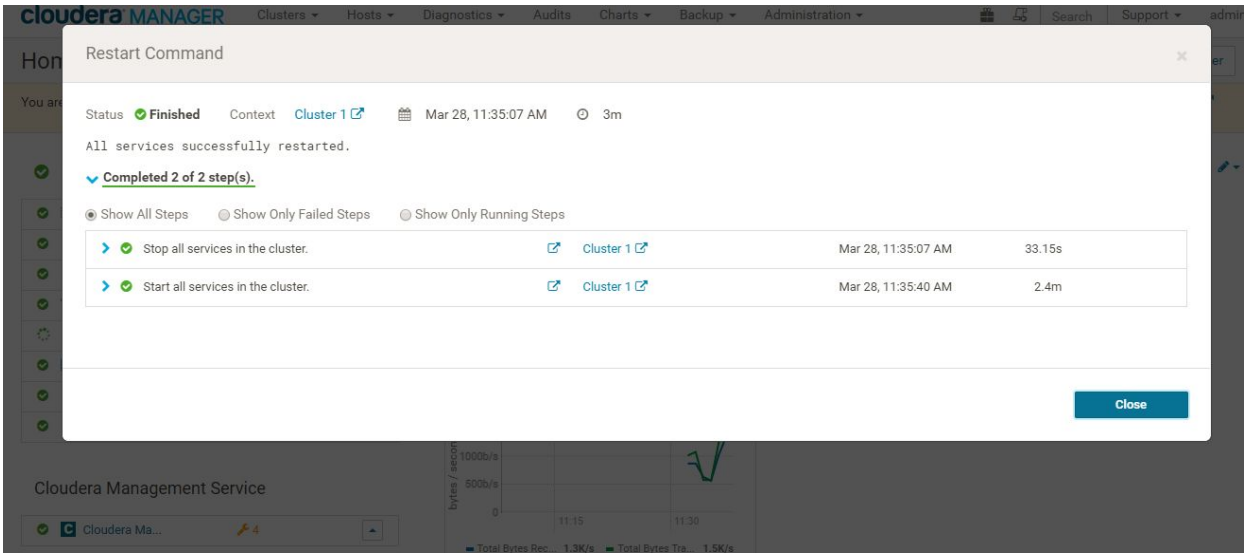
Click on the Restart option



Click on Restart.



Click on close.



Click on close.

Step 20: Now you need to verify (Java Development Kit version) jdk 1.8 is updated or not for cloudera manager.

i. Type command- **ps -ef | grep namenode**