Cluster Formation - Ambari server ①

- create 3 centos7 machine (node 1, node2, node3)
- note :- Do all operations in root user

In node 1 machine :-

```
# yum update -y
# yum upgrade -y
# yum install httpd -y
# systemctl start httpd
# systemctl enble httpd
# cd /etc/yum.repos.d/
# yum install repolist -y
# systemctl stop firewalld.service
# systemctl disable firewalld.service
# getenforce
# vi /etc/selinux/contig
  ↳ SELINUX = disabled  (replace entorcing to disabled)
# reboot
```

After rebooting :-

```
# systemctl status firewalld
  ↳ it should be inactive (dead)

# getenforce
  ↳ it should be Disabled.
```

hostnamectl set-hostame node1.ss.com
hostname
↳ node1.ss.com
vi /etc/hosts
↳ ip address of node1 node1 node1.ss.com
ip address of node2 node2 node2.ss.com
ip address of node3 node3 node3.ss.com

In node 2 & node 3 machines.

yum update -y
yum upgrade -y
~~yum install repolist~~
cd /etc/yum.repos.d/
yum install repolist -y
systemctl stop firewalld.service
systemctl disable firewalld.service
~~systemctl disable~~ getenforce
vi /etc/selinux/config
↳ replace SELINX = entorcing to SELINUX = disabled
reboot

After rebooting
systemctl status firewalld
↳ it should be inactive (dead)
getenforce
↳ it should be Disabled

In node 2 machine

```
# hostnamectl set-hostname node2.ss.com
# hostname
  ↳ node2.ss.com
# vi /etc/hosts
  ↳ ip of node 1   node 1   node1.ss.com
    ip of node 2   node 2   node2.ss.com
    ip of node 3   node 3   node3.ss.com.
```

In node 3 machine.

```
# hostnamectl set-hostname node3.ss.com
# hostname
  ↳ node3.ss.com
# vi /etc/hosts
  ↳ ip of node 1   node 1   node1.ss.com
    ip of node 2   node 2   node2.ss.com
    ip of node 3   node 3   node3.ss.com.
```

In node 1 machine

```
# rsync /etc/hosts root@node2:/etc/hosts
# rsync /etc/hosts root@node3:/etc/hosts
```

In node 2 machine

```
# rsync /etc/hosts root@node1:/etc/hosts
# rsync /etc/hosts root@node3:/etc/hosts
```

In node 3 machine

rsync /etc/hosts root@node2:/etc/hosts
rsync /etc/hosts root@node1:/etc/hosts.

now try to ping each machine by other machine & reboot all machines

In node1 machine

#cd /var/www/html/
tar -xvf /root/Desktop/Hadoop/ambari-2.7.3.0-centos7.tar.gz
ls → ambari directory will be there
cd ambari/centos7/2.7.3.0-139/
cp ambari.repo /etc/yum.repos.d/
~~# cd /var/www/html/~~
createrepo ambari/
vi /etc/yum.repos.d/ambari.repo
↳ change baseurl = http url to following
baseurl=http://node1.ss.com/ambari/centos7/2.7.3.0-139/
gpcheck = 0
then comment (#) gpkey= http:// ----- line
yum repolist
yum install ambari-server.x86_64 -y
rsync /etc/yum.repos.d/ambari.repo root@node2:/etc/yum.repos.d/
rsync /ect/yum.repos.d/ambari.repo root@node3:/etc/yum.repos.d/

```
# ambari-server setup -s
# ambari-server status
# ambari-server start
# yum install ambari-agent.x86_64 -y
# ambari-agent status
# ambari-agent start
# tar -xvf /root/Desktop/Hadoop/HDP-3.1.0.0-centos7-rpm.tar.gz
# tar -xvf /root/Desktop/Hadoop/HDP-UTILS-1.1.0.22-centos7.tar.gz
# createrepo HDP/
# createrepo HDP-UTILS/
# cp HDP/centos7/3.1.0.0-78/hdp.repo /etc/yum.repos.d/
# yum repolist
# vi /etc/yum.repos.d/hdp.repo
```

name = HDP version - HDP 3.1.0.0
baseurl = http://node1.ss.com/HDP~~-UTI~~/centos7/3.1.0.0-78/
gpcheck = 0
then comment (#) line gpkey=http.....

name = HDP-UTILS version - HDP-UTILS-1.1.0.22.
baseurl = http://node1.ss.com/HDP-UTILS/centos7/1.1.0.22/
gpcheck = 0
then comment (#) line gpkey=http.....

yum repolist

rsync /etc/yum.repos.d/hdp.repo root@node2:/etc/yum.repos.d/

rsync /etc/yum.repos.d/hdp.repo root@node3:/etc/yum.repos.d/

systemctl start ~~cronyd~~ cronyd → perform it cluster formation step-3 get failed

In node 2 & node 3

yum install ambari-agent.x86_64 -y

ambari-agent status

↳ ~~it~~ the status should be running, if not the then # ambari-agent start

vi /etc/ambari-agent/conf/ambari-agent.ini

↳ change hostname to hostname = node1.ss.com

systemctl start ~~cronyd~~ cronyd → perform it cluster formation step-3 get failed.

reboot all machines now

In node 1 web-browser.

node1:8080

- then login in (username = admin, password = admin)
- then click on Launch wizard
- Give cluster name, then next
- select version HDP-3.1
- In repositories click on use local repository
- select redhat7 os & deselect all other services

HDP-3.1 = http://node1.ss.com/HDP/centos7/3.1.0.0-78/

HDP-UTILS-1.1.0.22 = http://node1.ss.com/HDP-UTILS/centos7/1.1.0.22/

- then click on next
- then in Target Hosts:
  node [1-2].ss.com (type this in that box)
- then click on perform manual registration
- then register & confirm.
  ↳ node 1 & node 2 will get successfully register
- then click on next
- only select YARN + MapReduce2, Tez, Hive, Pig, zookeeper, Ambary matrics, smart sense (debat)
- then next
- in step 5 (Assign masters) click next
- in step 6 select only Datanode, nodemanage, client then next
- in step 7 (customize services)

  Grafana Admin - Password = grafana
  Hive Database - password = hive
  Activity Admin - Password - admin.

  then next

- then click on the download link, the .rpm file will be downloaded in /root/Downloads/directory.

In node1 terminal run this command

```
# rpm -i /root/Downloads/mysql-connector-j-8.0.33-1
  .el7.noarch.rpm
# ll /usr/share/java/mysql-connector-java.jar
# ambari-server setup --jdbc-db=mysql --jdbc-
  driver=/usr/share/java/mysql-connector-java.jar
```

then open ambari service tab in webbrowser & click on next

now wait, all services will be installed by some time