

Single Node Installation

A . To generate keys :

1. ((sudo apt-get update)) On Ubuntu machine

2. ((ssh-keygen))

Your identification has been saved in /home/ubuntu/.ssh/id_rsa.

Your public key has been saved in /home/ubuntu/.ssh/id_rsa.pub.

3. Go to ((cd .ssh)) where keys stored

4 . ((:~\$ ls -a)) To see hidden files

.ssh will contain your key.

Two keys will be generated as below

id_rsa & id_rsa.pub

5. Now you have to append id_rsa.pub key into authorized_keys file

- ((Cat id_rsa.pub >> authorized_keys))
- ((Cat authorized_keys))to see if key is successfully added in auth file.

6.-----**downloading and installing java (Hadoop requires a working Java 1.6+)**-----

((sudo apt-get install openjdk-8-jdk -y))

((java --version))

To check installed java version.

B. Installing Hadoop

7 . -----**downloading hadoop**-----

```
(( wget https://archive.apache.org/dist/hadoop/core/hadoop-1.2.1/hadoop-1.2.1.tar.gz ))  
    -(( tar -xzvf hadoop-1.2.1.tar.gz )) / to extract archive file  
    to unzip (( du -h hadoop-1.2.1))
```

c: Moving hadoop :

8. move hadoop to local diractory ((sudo mv hadoop-1.2.1 /usr/local/hadoop))

1. -----**configuring bashrclinuxenv setup**-----

```
(( nano .bashrc ))
```

```
export HADOOP_PREFIX=/usr/local/hadoop/  
export PATH=$PATH:$HADOOP_PREFIX/bin  
export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64  
export PATH=$PATH:$JAVA_HOME
```

~\$((source .bashrc)) To update bashfile configuration

2 ----**setting hadoopenv**-----

```
(( nano /usr/local/hadoop/conf/hadoop-env.sh ))
```

```
export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64  
export HADOOP_OPTS=-Djava.net.preferIPv4Stack=true
```

3 -----**configuring xml's**-----

```
(( nano /usr/local/hadoop/conf/core-site.xml ))
```

```
<property>  
<name>fs.default.name</name>  
<value>hdfs://localhost:9000</value>  
</property>
```

```
<property>  
<name>hadoop.tmp.dir</name>  
<value>/usr/local/hadoop/tmp</value>  
</property>
```

_-----12. config hdfs-----

```
(( nano /usr/local/hadoop/conf/hdfs-site.xml ))
```

```
<property>
<name>dfs.replication</name>
<value>1</value>
</property>
```

13. config mapred-----

```
(( nano /usr/local/hadoop/conf/mapred-site.xml ))
```

```
<property>
<name>mapred.job.tracker</name>
<value>hdfs://localhost:9001</value>
</property>
```

14. -----**making tmpdir**-----

```
mkdir /usr/local/hadoop/tmp
```

15. -----**exec bash**-----

```
(( exec bash ))
```

16. -----**formatting hadoopnamenode**-----

```
(( ssh localhost ))
```

```
yes
```

```
(( hadoop namenode -format ))
```

-----**starting hadoop services(daemons)**-----

```
(( start-all.sh ))
```

to see started services

```
(( jps ))
```