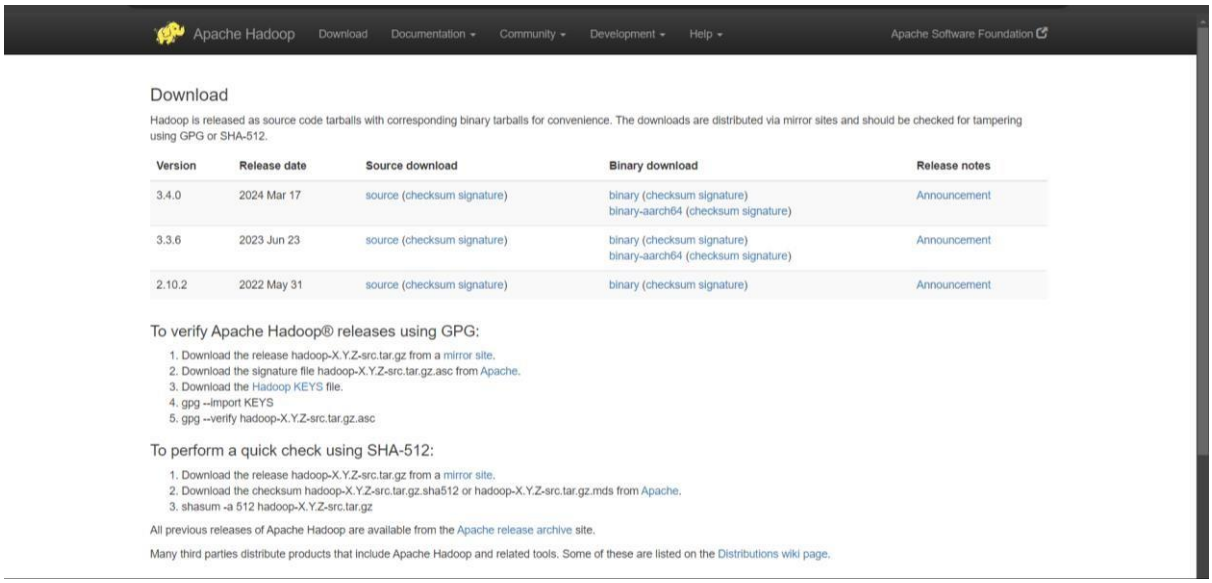
Exp. No : 1

Installation of Hadoop

1. Download Hadoop Binary file



Apache Hadoop Download Documentation Community Development Help Apache Software Foundation

Download

Hadoop is released as source code tarballs with corresponding binary tarballs for convenience. The downloads are distributed via mirror sites and should be checked for tampering using GPG or SHA-512.

Version	Release date	Source download	Binary download	Release notes
3.4.0	2024 Mar 17	source (checksum signature)	binary (checksum signature) binary-aarch64 (checksum signature)	Announcement
3.3.6	2023 Jun 23	source (checksum signature)	binary (checksum signature) binary-aarch64 (checksum signature)	Announcement
2.10.2	2022 May 31	source (checksum signature)	binary (checksum signature)	Announcement

To verify Apache Hadoop® releases using GPG:

1. Download the release hadoop-X.Y.Z-src.tar.gz from a mirror site.
2. Download the signature file hadoop-X.Y.Z-src.tar.gz.asc from Apache.
3. Download the Hadoop KEYS file.
4. gpg --import KEYS
5. gpg --verify hadoop-X.Y.Z-src.tar.gz.asc

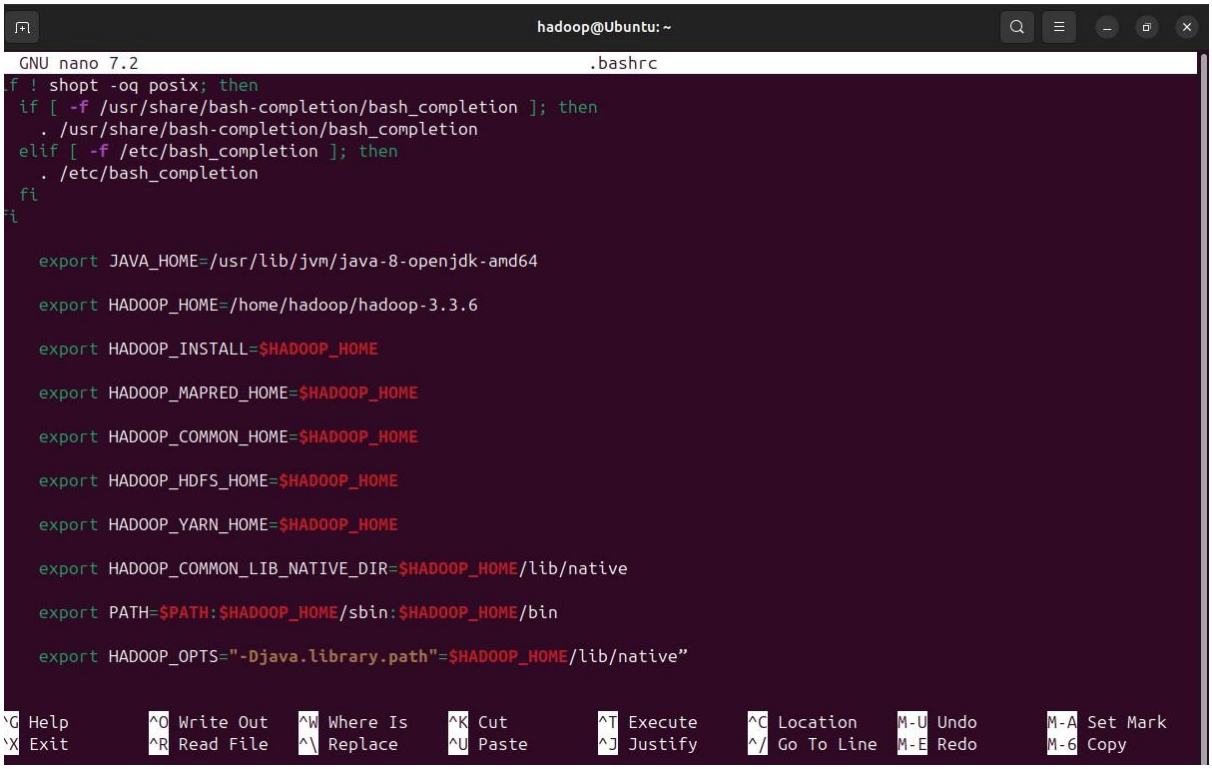
To perform a quick check using SHA-512:

1. Download the release hadoop-X.Y.Z-src.tar.gz from a mirror site.
2. Download the checksum hadoop-X.Y.Z-src.tar.gz.sha512 or hadoop-X.Y.Z-src.tar.gz.mds from Apache.
3. shasum -a 512 hadoop-X.Y.Z-src.tar.gz

All previous releases of Apache Hadoop are available from the Apache release archive site.

Many third parties distribute products that include Apache Hadoop and related tools. Some of these are listed on the Distributions wiki page.

2. Modifying .bashrc file



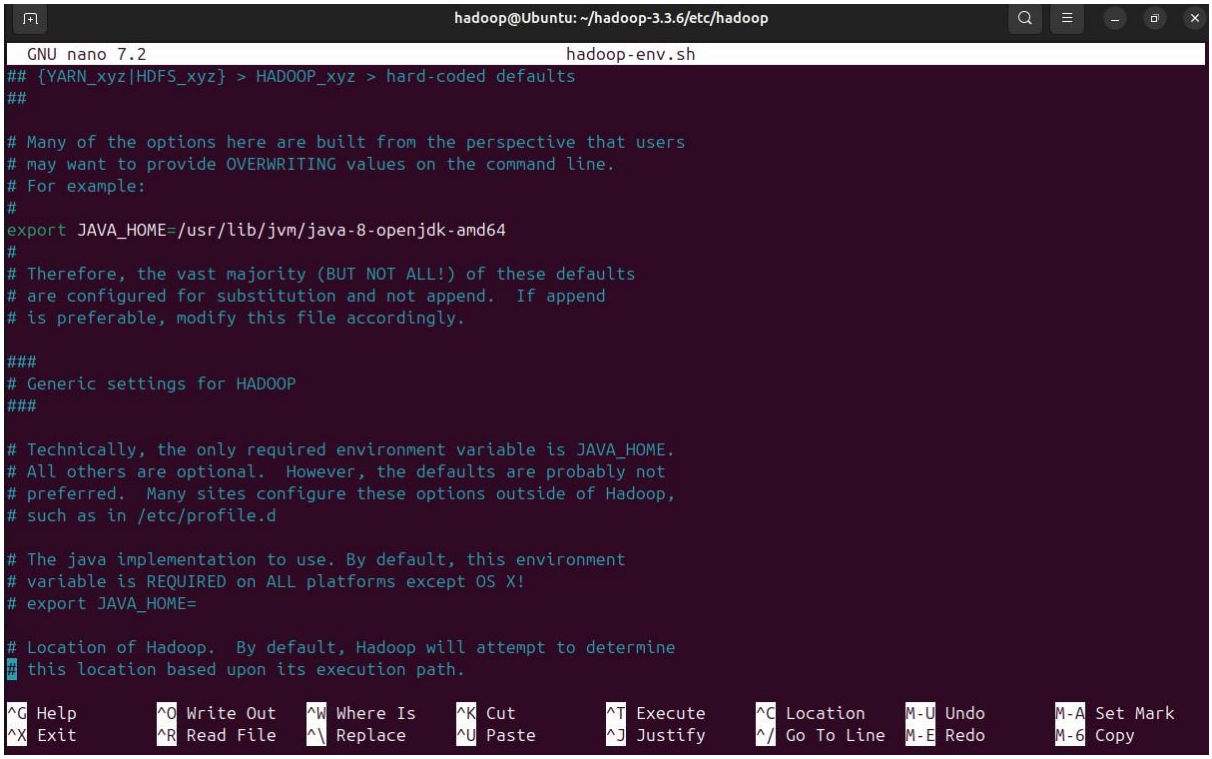
hadoop@Ubuntu: ~

GNU nano 7.2 .bashrc

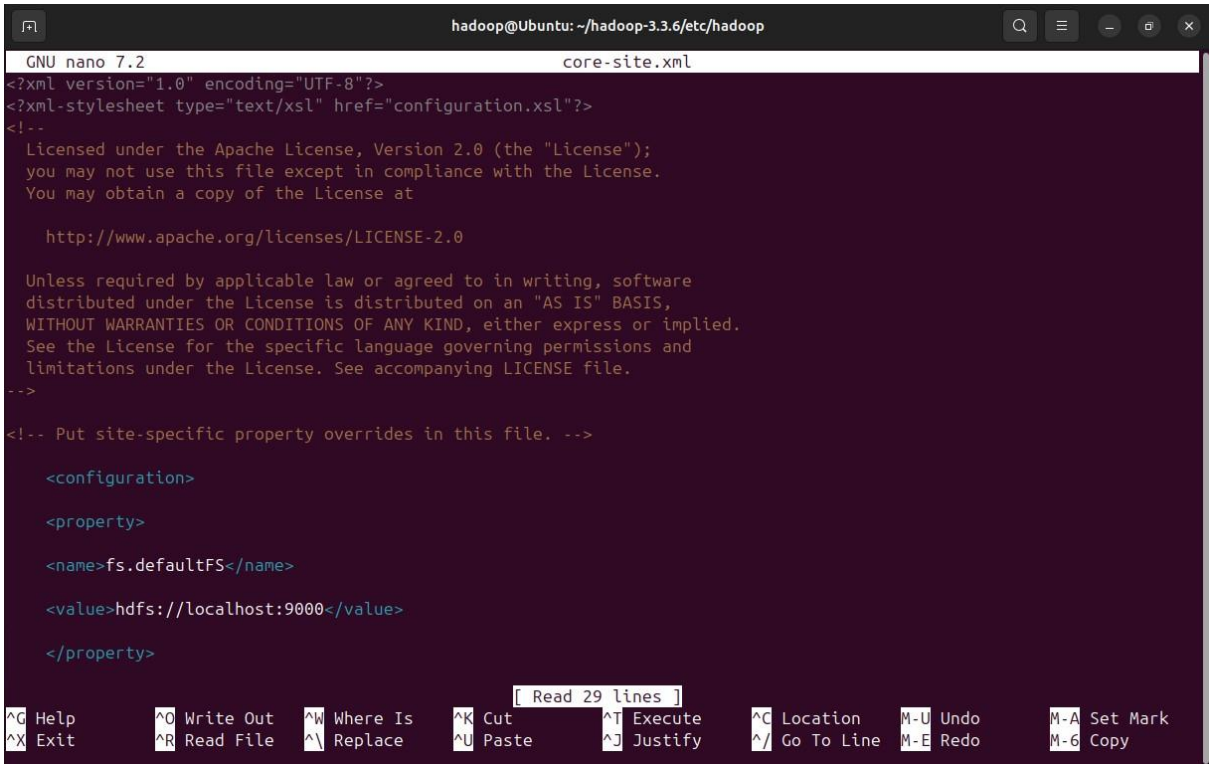
```
if ! shopt -oq posix; then
  if [ -f /usr/share/bash-completion/bash_completion ]; then
    . /usr/share/bash-completion/bash_completion
  elif [ -f /etc/bash_completion ]; then
    . /etc/bash_completion
  fi
fi

   export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64

   export HADOOP_HOME=/home/hadoop/hadoop-3.3.6

   export HADOOP_INSTALL=$HADOOP_HOME

   export HADOOP_MAPRED_HOME=$HADOOP_HOME

   export HADOOP_COMMON_HOME=$HADOOP_HOME

   export HADOOP_HDFS_HOME=$HADOOP_HOME

   export HADOOP_YARN_HOME=$HADOOP_HOME

   export HADOOP_COMMON_LIB_NATIVE_DIR=$HADOOP_HOME/lib/native

   export PATH=$PATH:$HADOOP_HOME/sbin:$HADOOP_HOME/bin

   export HADOOP_OPTS="-Djava.library.path"=$HADOOP_HOME/lib/native”
```

^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo M-A Set Mark
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^/ Go To Line M-E Redo M-6 Copy

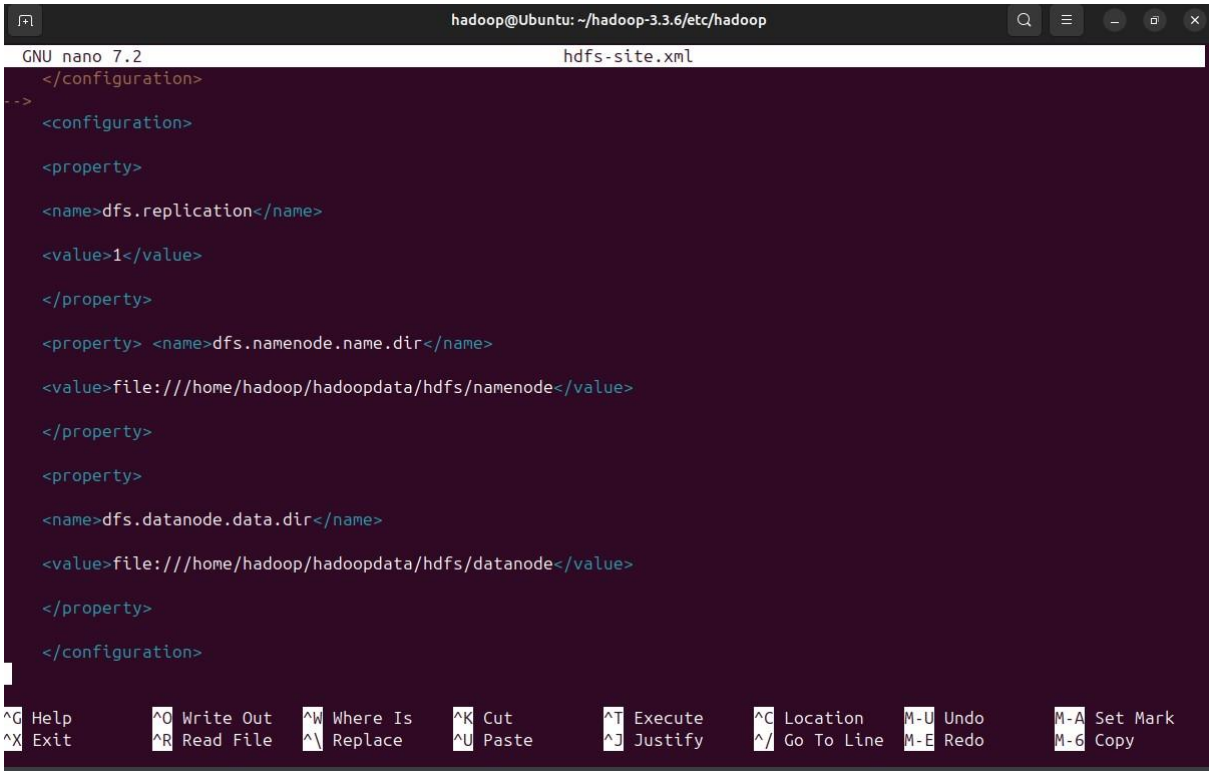
3. Updating JAVA_HOME in $HADOOP_HOME/etc/hadoop/hadoop-env.sh



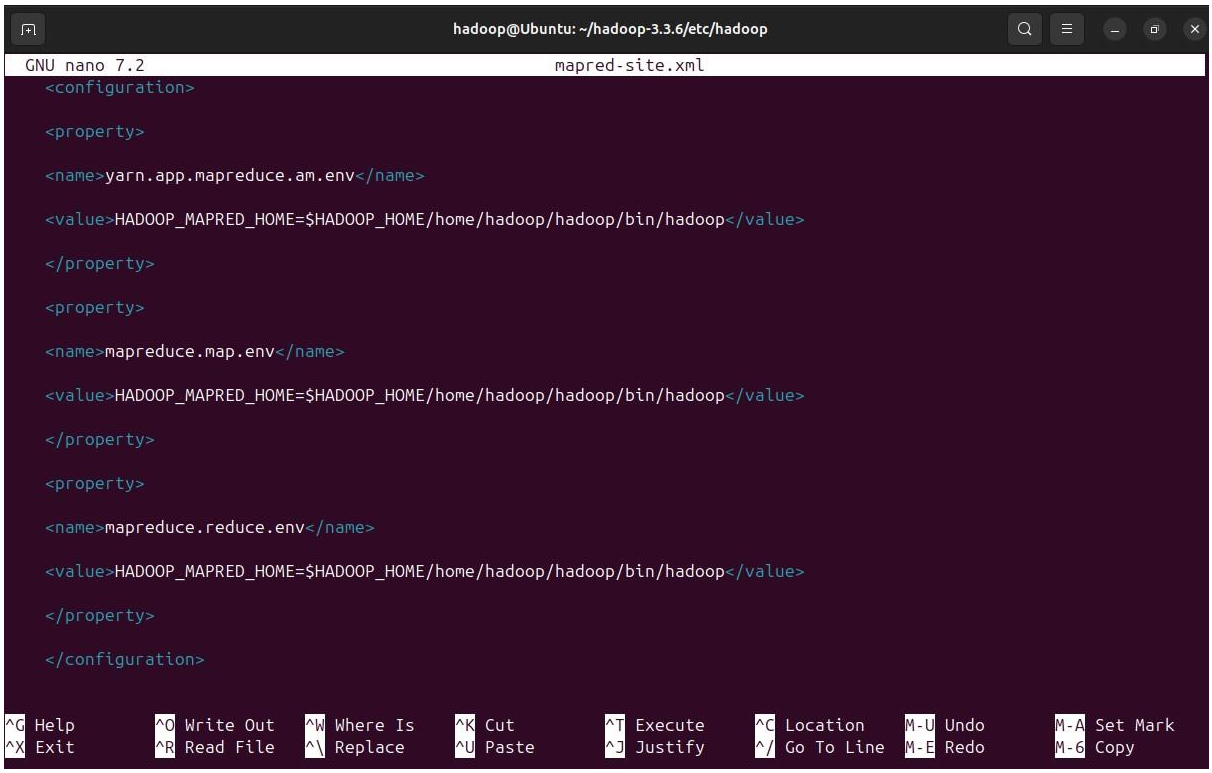
4. Modifying $HADOOP_HOME/etc/hadoop/core-site.xml



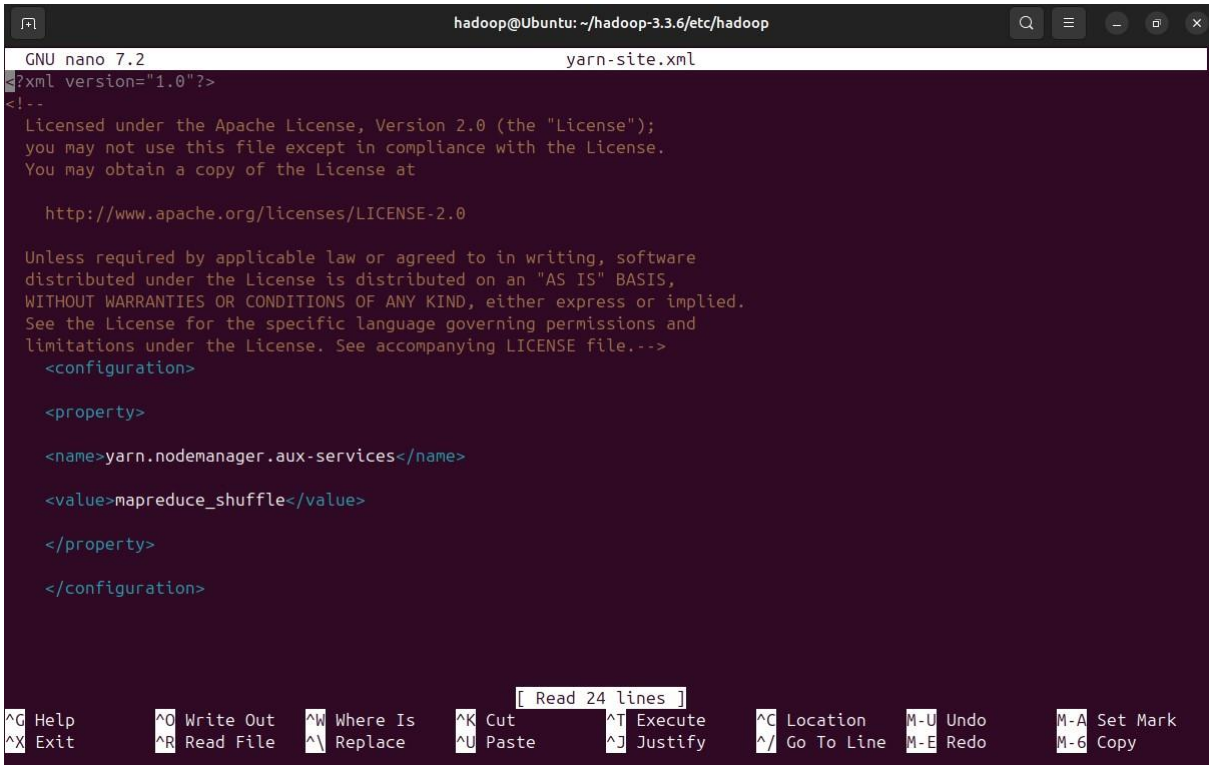
5. Modifying $HADOOP_HOME/etc/hadoop/hdfs-site.xml



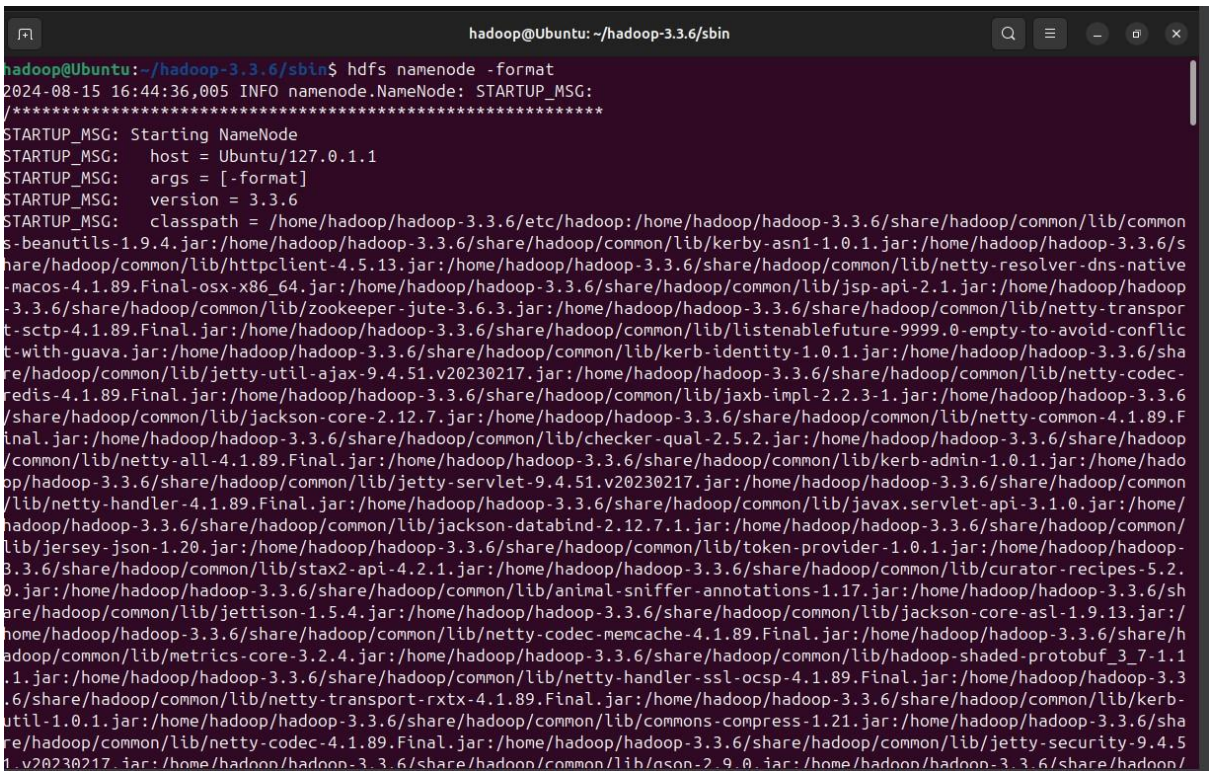
6. Modifying $HADOOP_HOME/etc/hadoop/mapred-site.xml

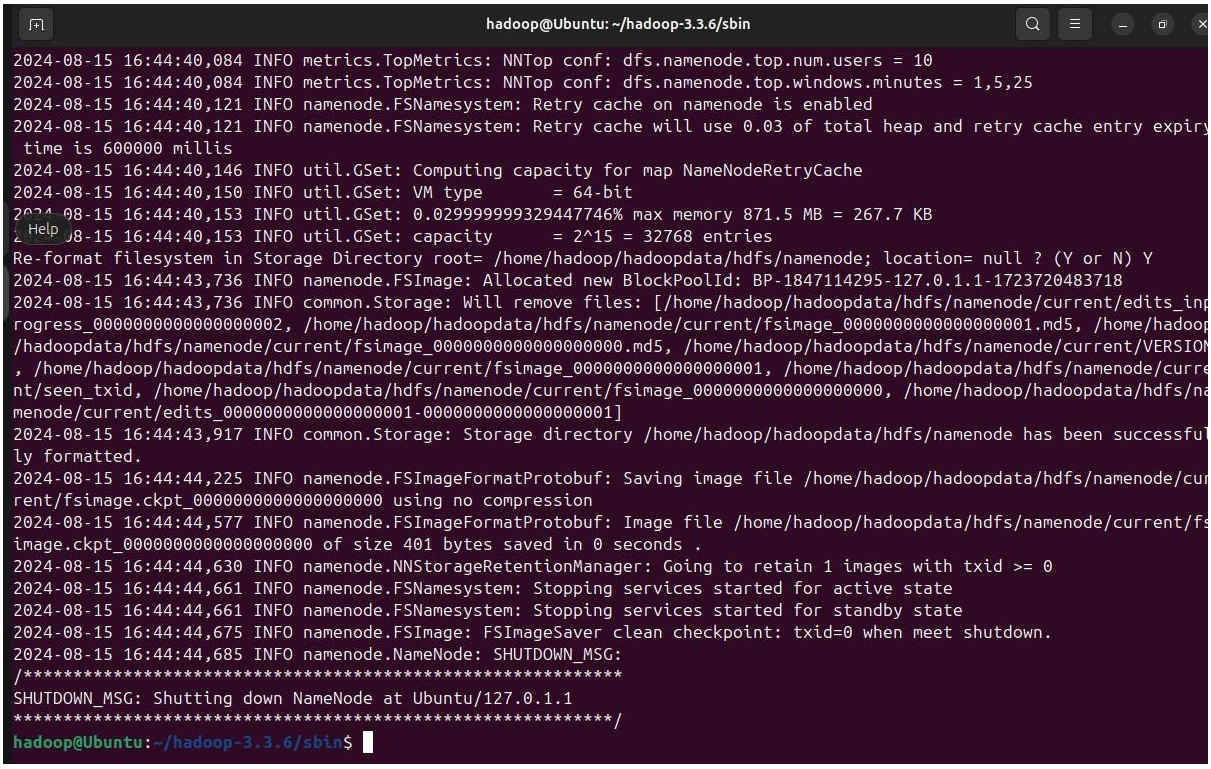


7. Modifying $HADOOP_HOME/etc/hadoop/yarn-site.xml

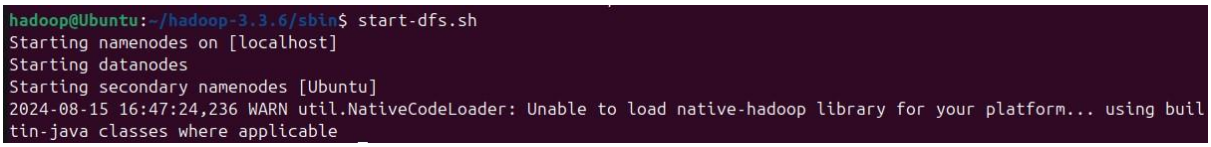


8. Execute hdfs namenode -format





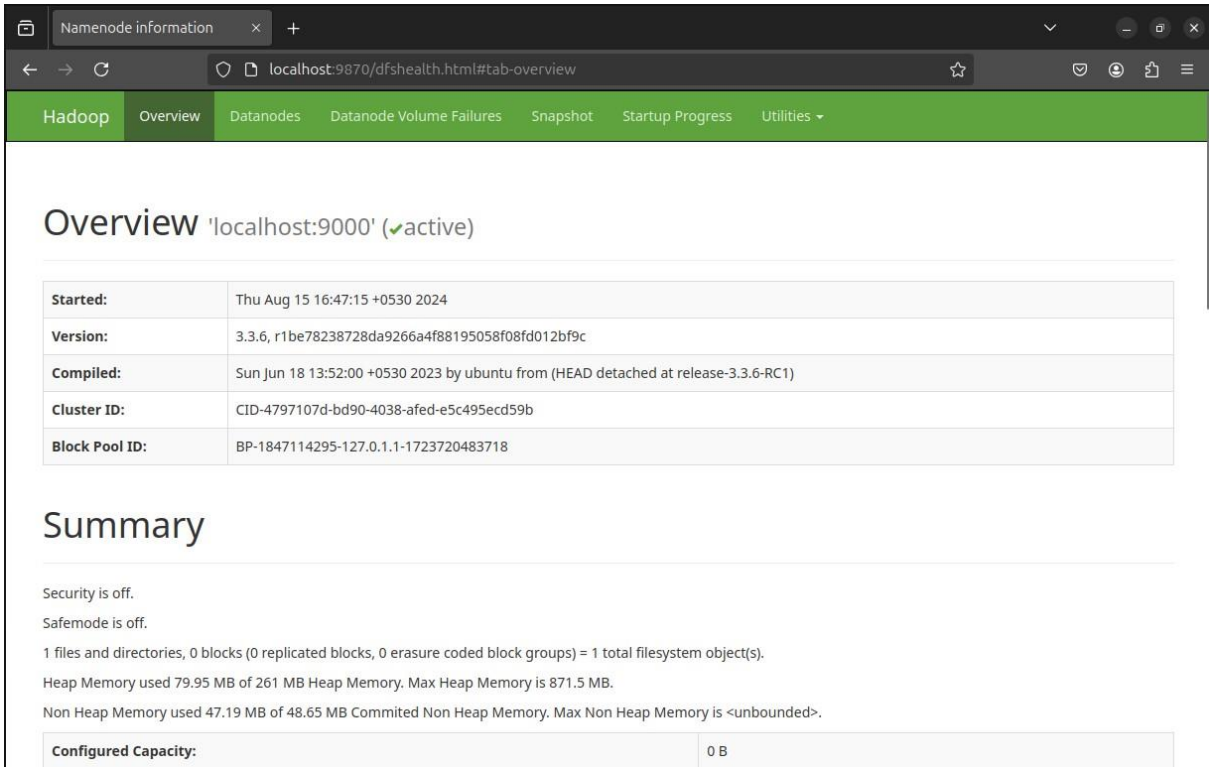
9. Execute start-dfs.sh



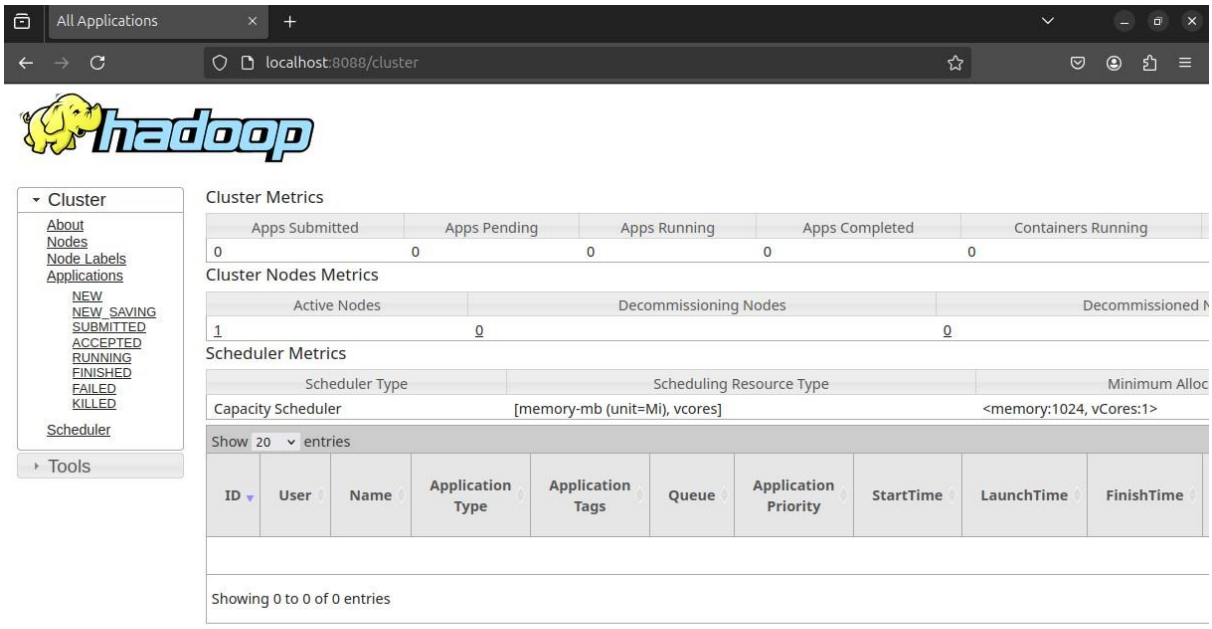
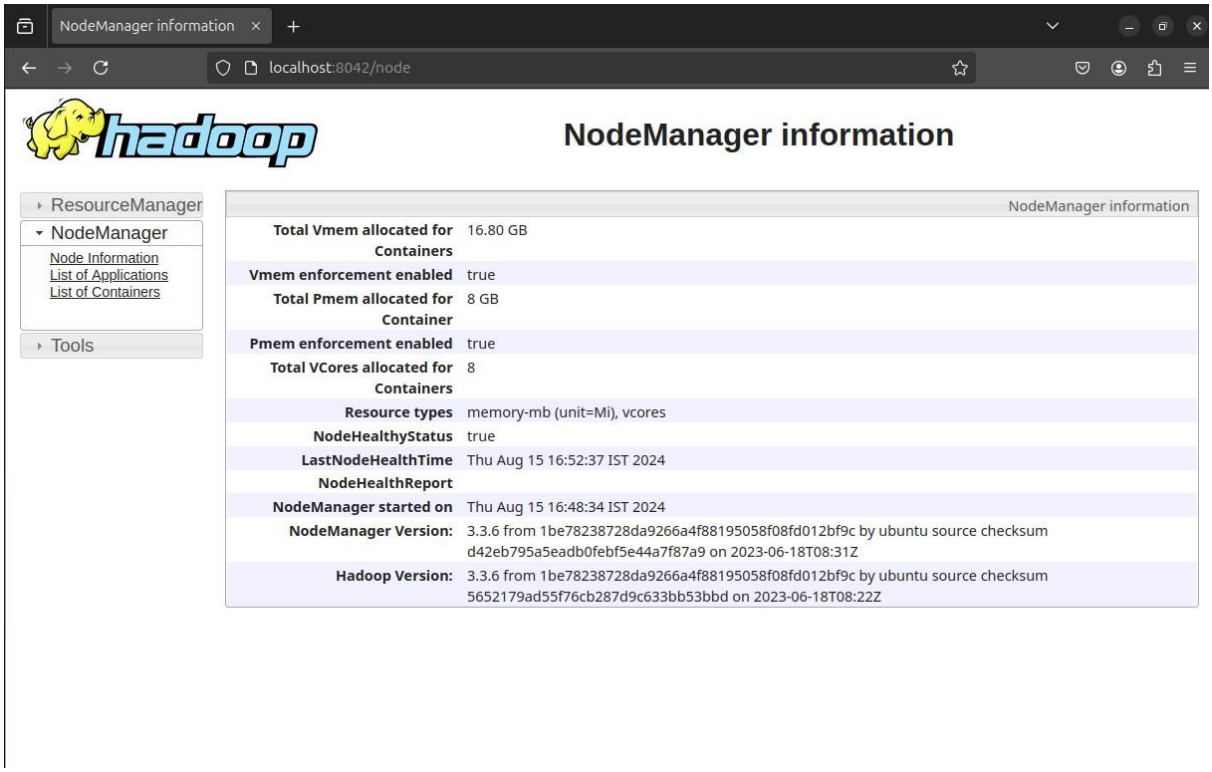
10. Execute start-yarn.sh

11. Execute jps command

12. Open http://localhost:9870



13. Open http://localhost:8088



14. Open http://localhost:8042