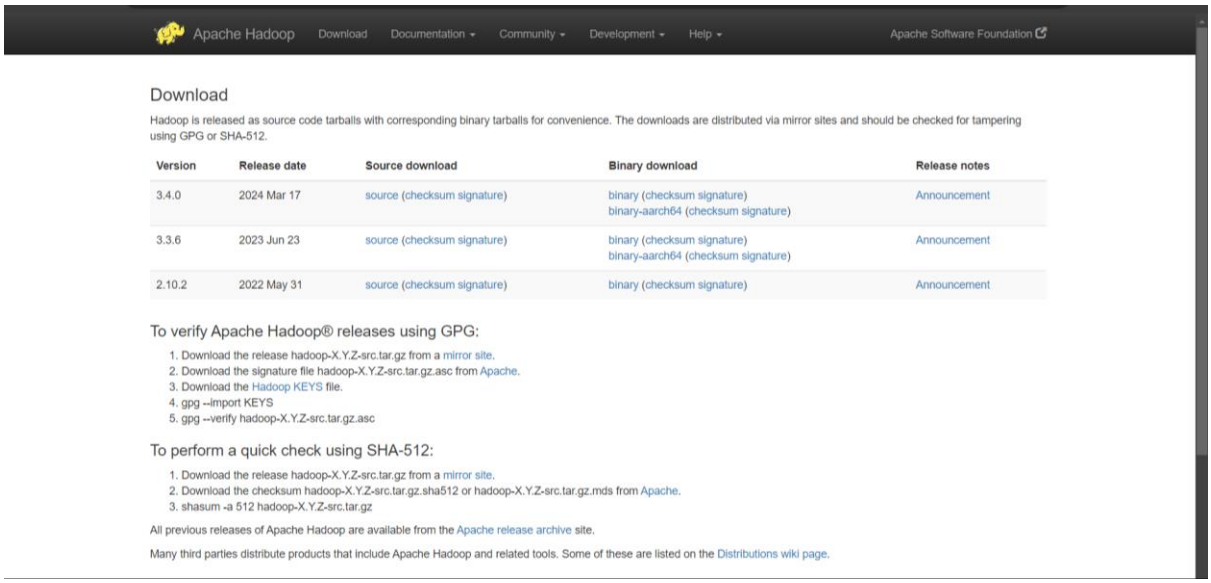
Exp. No : 1

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

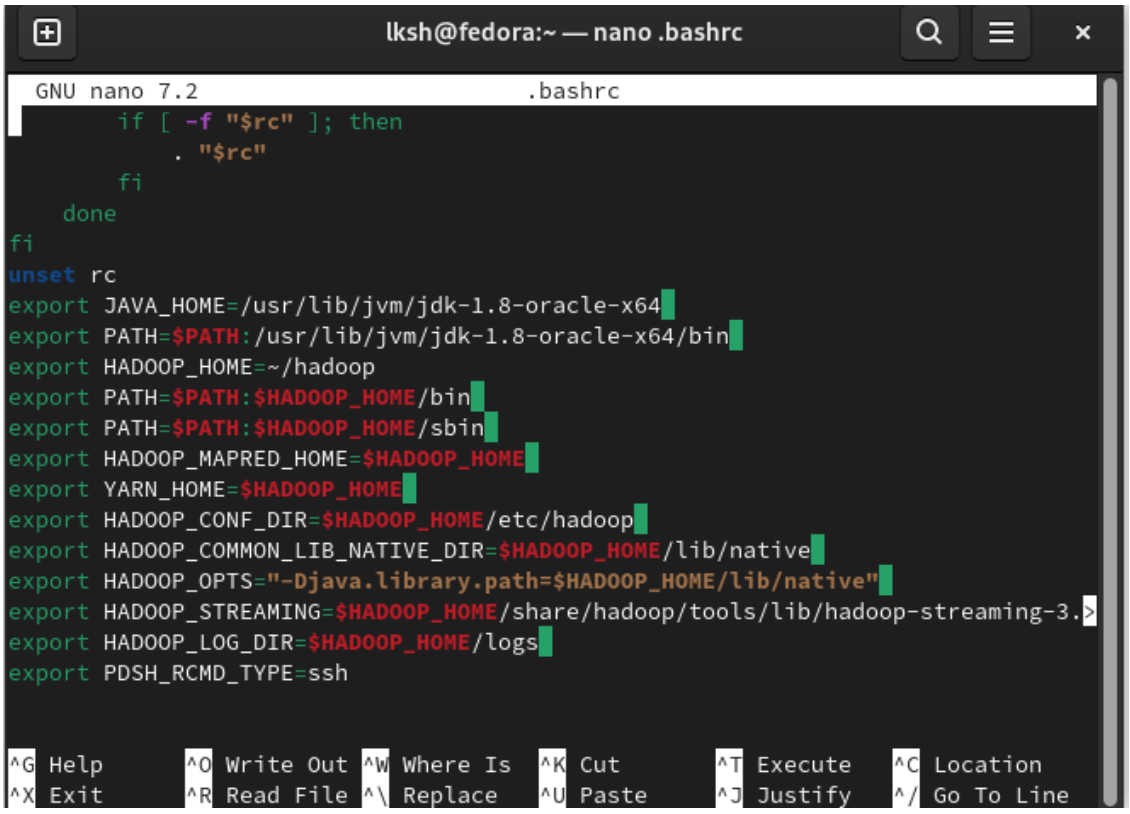
To perform a quick check using SHA-512:

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



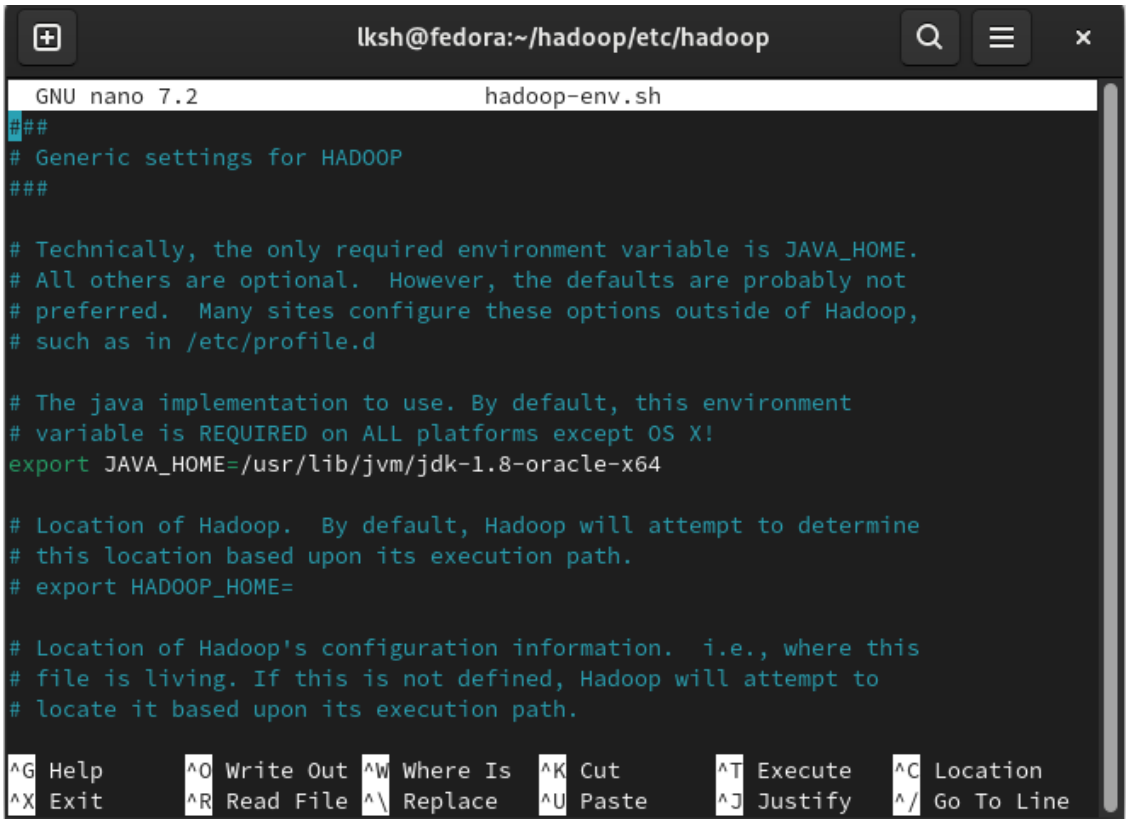
lksh@fedora:~ — nano .bashrc

GNU nano 7.2 .bashrc

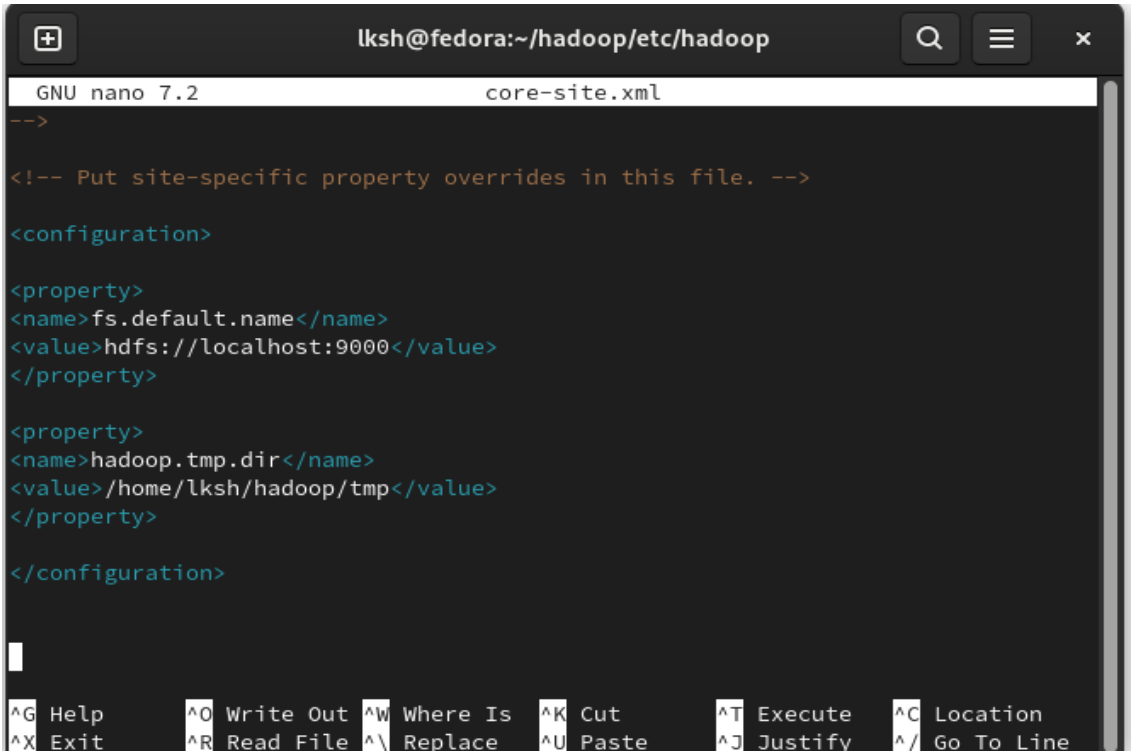
```
        if [ -f "$rc" ]; then
            . "$rc"
        fi
    done
fi
unset rc
export JAVA_HOME=/usr/lib/jvm/jdk-1.8-oracle-x64
export PATH=$PATH:/usr/lib/jvm/jdk-1.8-oracle-x64/bin
export HADOOP_HOME=~/hadoop
export PATH=$PATH:$HADOOP_HOME/bin
export PATH=$PATH:$HADOOP_HOME/sbin
export HADOOP_MAPRED_HOME=$HADOOP_HOME
export YARN_HOME=$HADOOP_HOME
export HADOOP_CONF_DIR=$HADOOP_HOME/etc/hadoop
export HADOOP_COMMON_LIB_NATIVE_DIR=$HADOOP_HOME/lib/native
export HADOOP_OPTS="-Djava.library.path=$HADOOP_HOME/lib/native"
export HADOOP_STREAMING=$HADOOP_HOME/share/hadoop/tools/lib/hadoop-streaming-3.>
export HADOOP_LOG_DIR=$HADOOP_HOME/logs
export PDSH_RCMD_TYPE=ssh
```

^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location
^X Exit ^R Read File ^\ Replace ^U Paste ^J Justify ^/ Go To Line

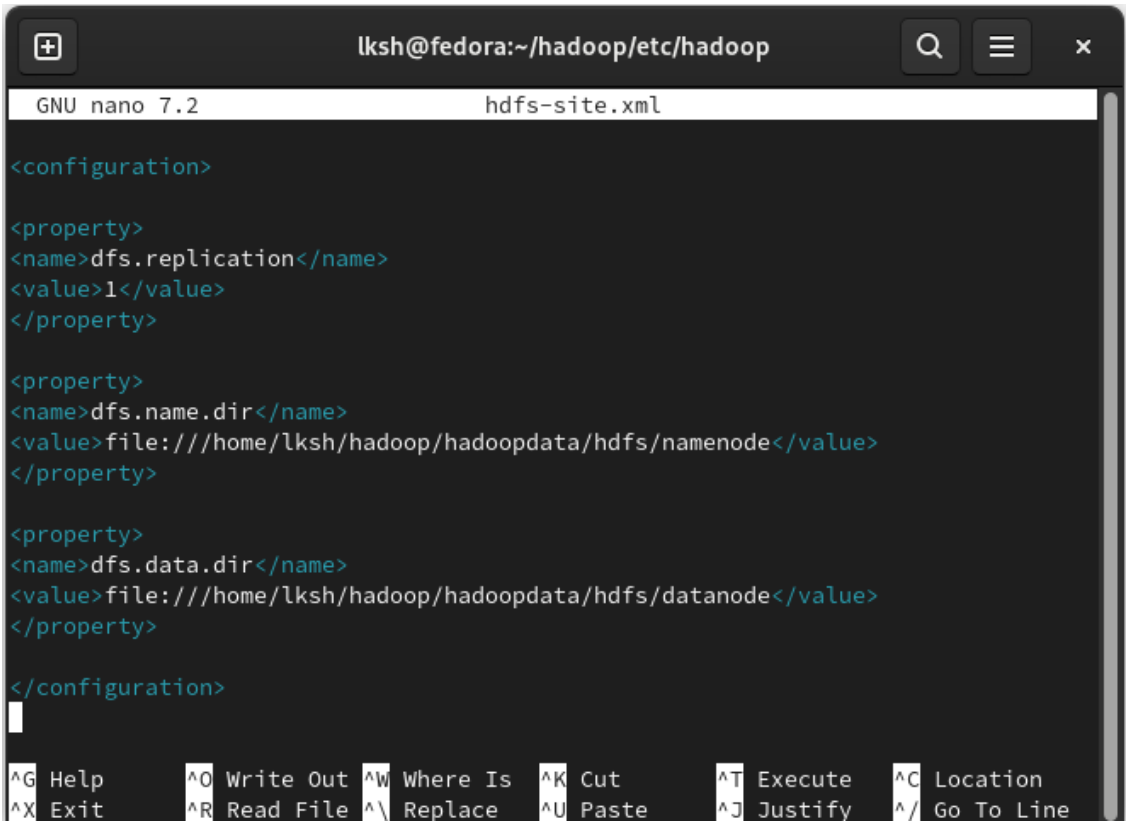
3. Updating JAVA_HOME in $HADOOP_HOME/etc/hadoop/hadoop-env.sh



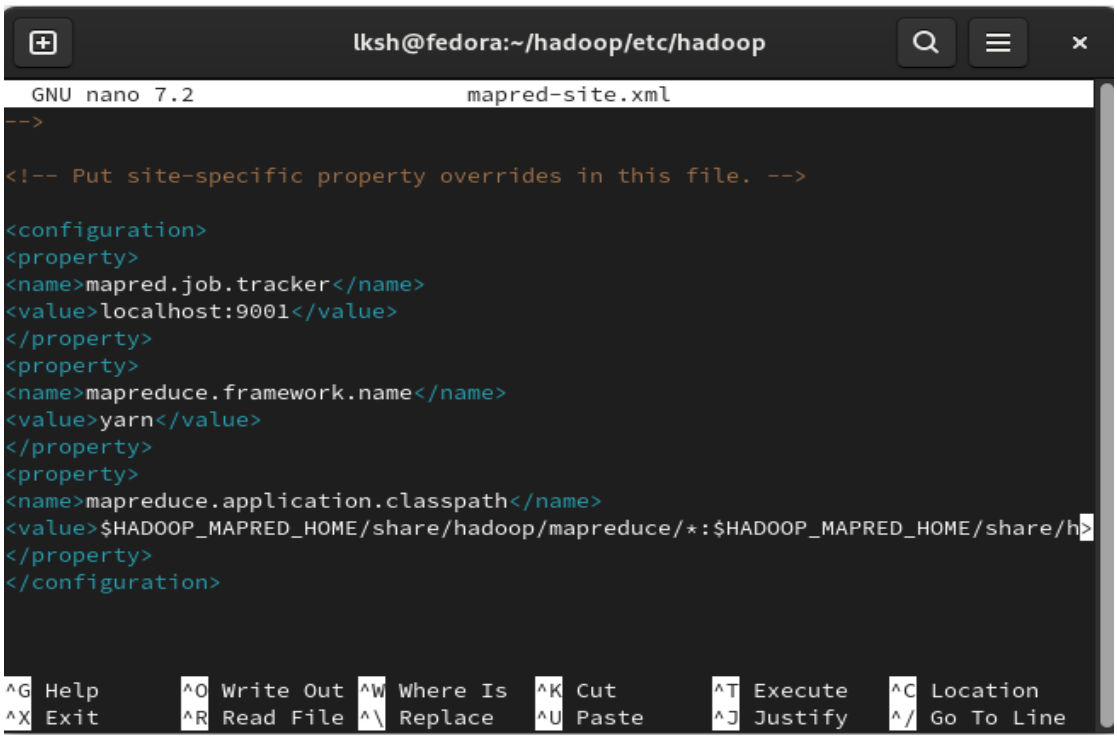
4. Modifying $HADOOP_HOME/etc/hadoop/core-site.xml



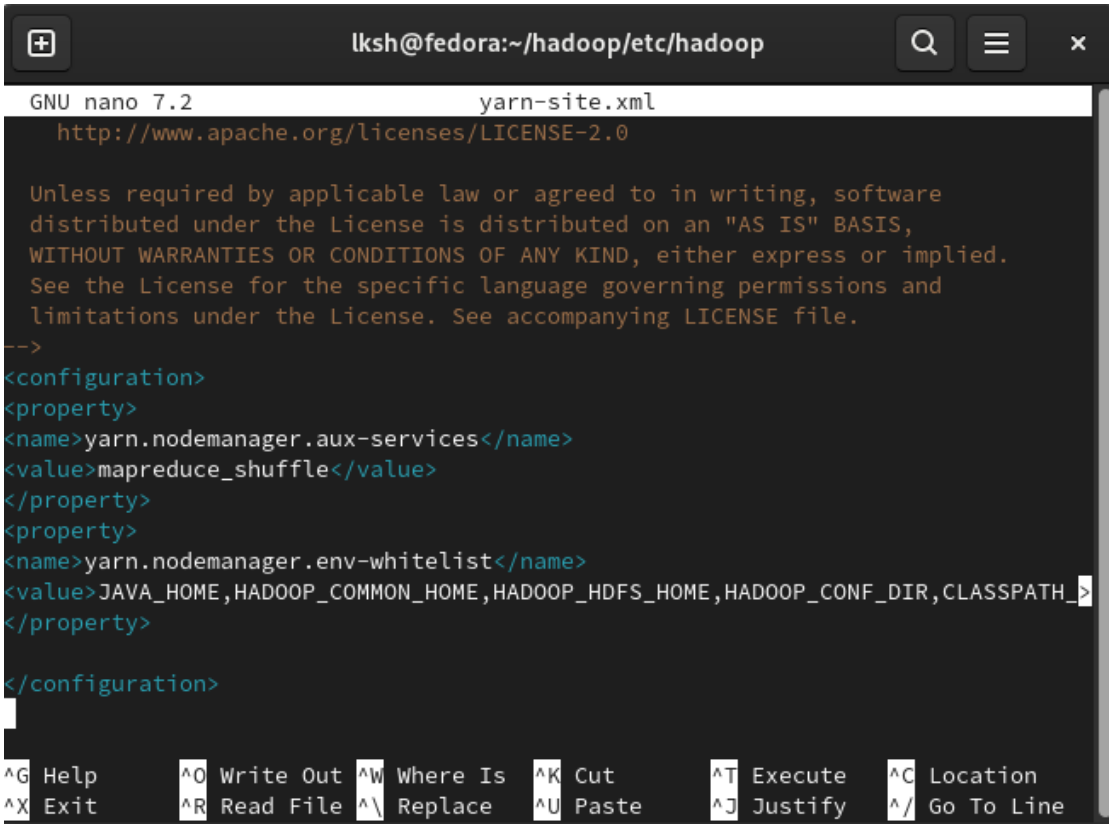
5. Modifying $HADOOP_HOME/etc/hadoop/hdfs-site.xml



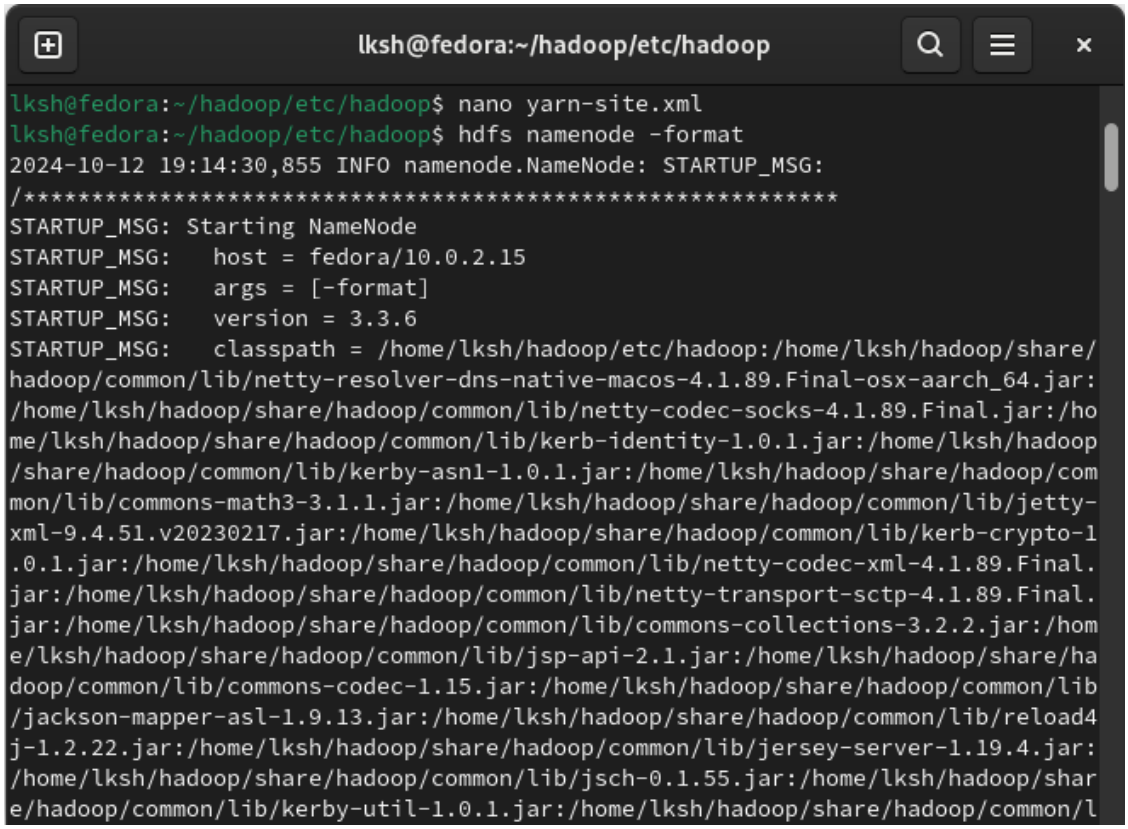
6. Modifying $HADOOP_HOME/etc/hadoop/mapred-site.xml

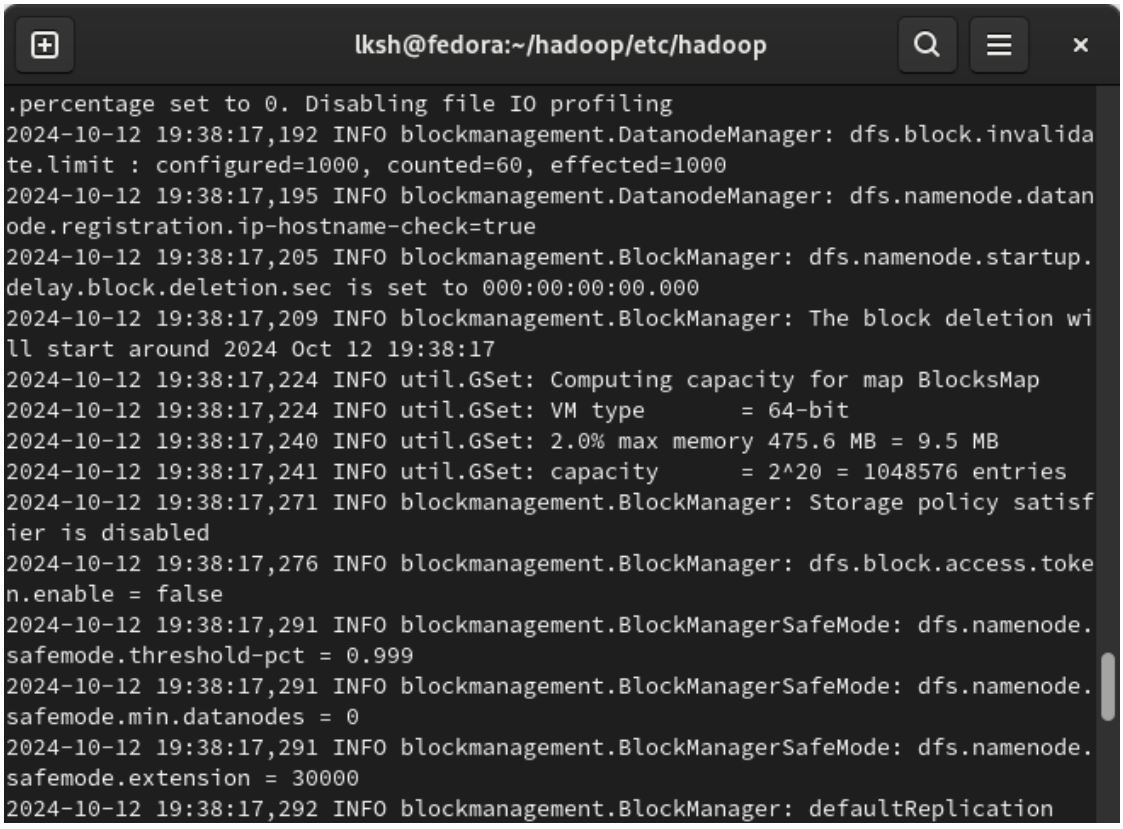


7. Modifying $HADOOP_HOME/etc/hadoop/yarn-site.xml

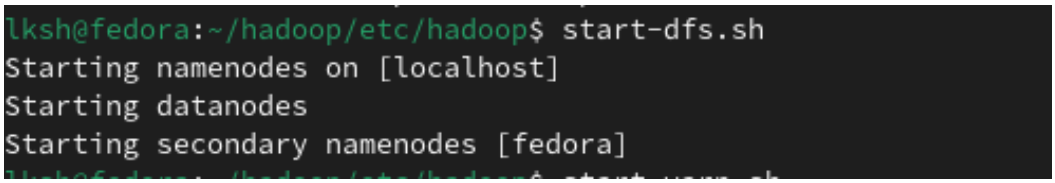


8. Execute hdfs namenode -format

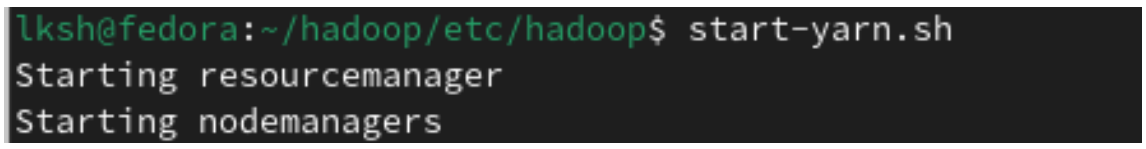




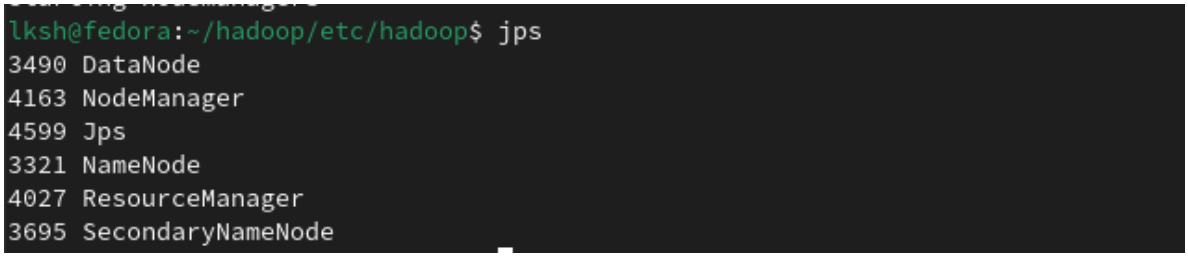
9. Execute start-dfs.sh



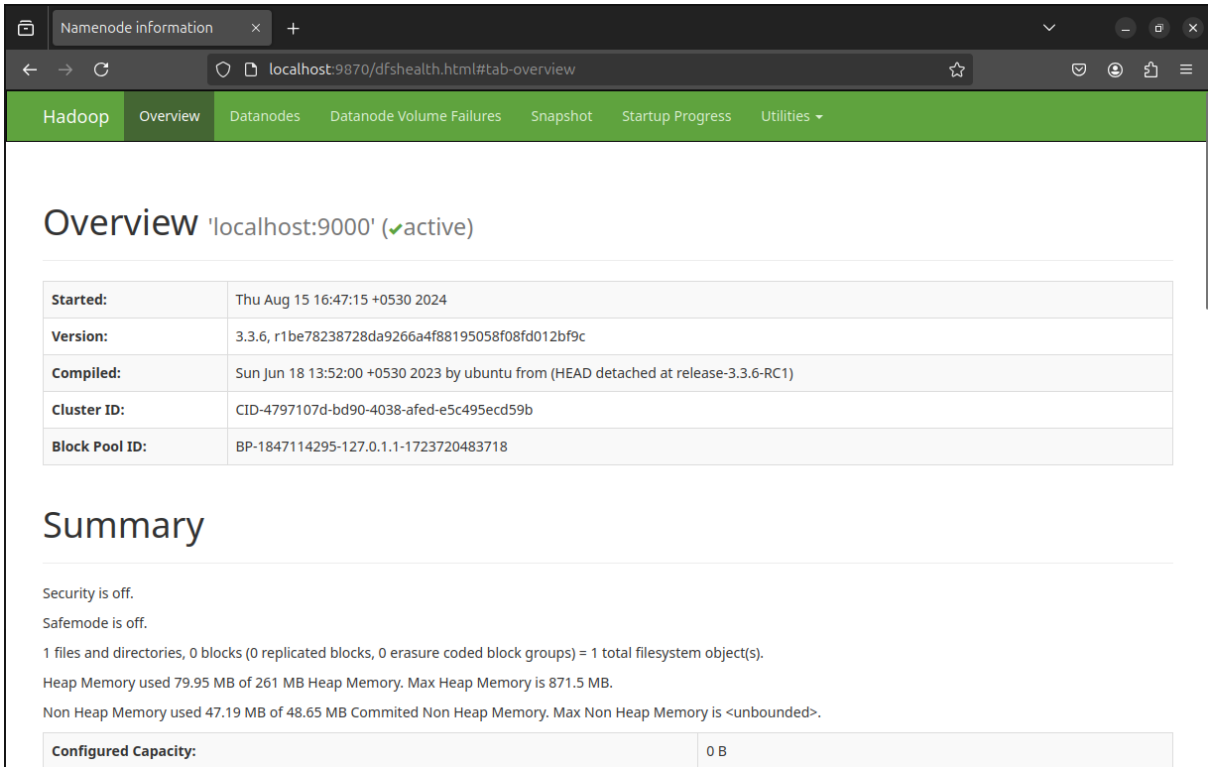
10. Execute start-yarn.sh



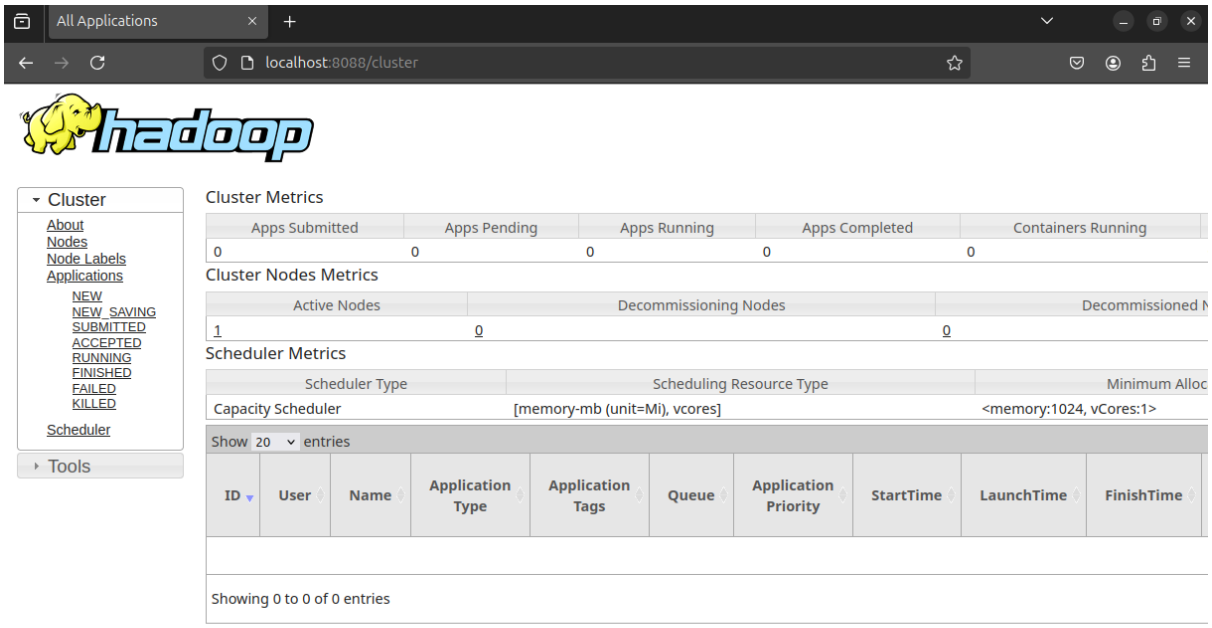
11. Execute jps command



12. Open http://localhost:9870



13. Open http://localhost:8088



14. Open http://localhost:8042