Hadoop Cluster Assignment

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STEPS FOR CONFIGURING HADOOP CLUSTER:

Install brew on mac – using the command :
/usr/bin/ruby -e "$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/master/install

Installed Homebrew

Checking the Homebrew version

Installing Hadoop using homebrew

```
AkshayaNagarajanMacbookPro:~ akshayanagarajan$ brew install hadoop
Warning: hadoop 3.1.2 is already installed and up-to-date
To reinstall 3.1.2, run `brew reinstall hadoop`
AkshayaNagarajanMacbookPro:~ akshayanagarajan$ brew reinstall hadoop
==> Reinstalling hadoop
==> Downloading https://www.apache.org/dyn/closer.cgi?path=hadoop/common/hadoop-3.1.2/hadoop-3.1.2.tar.gz
Already downloaded: /Users/akshayanagarajan/Library/Caches/Homebrew/downloads/190eebdbb181ba6d46acd050a5df80ee0ff76d392324f9805ca7f702093c2834--hadoop-3.1.2.tar.gz
🍺  /usr/local/Cellar/hadoop/3.1.2: 21,686 files, 774.1MB, built in 32 seconds
Removing: /usr/local/Cellar/hadoop/hdfs... (63 files, 5MB)
```

Hadoop version

```
AkshayaNagarajanMacbookPro:~ akshayanagarajan$ hadoop version
Hadoop 3.1.2
Source code repository https://github.com/apache/hadoop.git -r 1019dde65bcf12e05ef48ac71e84550d589e5d9a
Compiled by sunilg on 2019-01-29T01:39Z
Compiled with protoc 2.5.0
From source with checksum 64b8bdd4ca6e77cce75a93eb09ab2a9
This command was run using /usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/hadoop-common-3.1.2.jar
AkshayaNagarajanMacbookPro:~ akshayanagarajan$ 
```

Configuring Hadoop-env.sh in /usr/local/Cellar/hadoop/3.1.2/libexec/etc/hadoop

```
###
# HDFS Balancer specific parameters
###
# Specify the JVM options to be used when starting the HDFS Balancer.
# These options will be appended to the options specified as HADOOP_OPTS
# and therefore may override any similar flags set in HADOOP_OPTS
#
# export HDFS_BALANCER_OPTS=""

###
# HDFS Mover specific parameters
###
# Specify the JVM options to be used when starting the HDFS Mover.
# These options will be appended to the options specified as HADOOP_OPTS
# and therefore may override any similar flags set in HADOOP_OPTS
#
# export HDFS_MOVER_OPTS=""

###
# Router-based HDFS Federation specific parameters
# Specify the JVM options to be used when starting the RBF Routers.
# These options will be appended to the options specified as HADOOP_OPTS
# and therefore may override any similar flags set in HADOOP_OPTS
#
# export HDFS_DFSROUTER_OPTS=""
###

###
# Advanced Users Only!
###

#
# When building Hadoop, one can add the class paths to the commands
# via this special env var:
# export HADOOP_ENABLE_BUILD_PATHS="true"

#
# To prevent accidents, shell commands be (superficially) locked
# to only allow certain users to execute certain subcommands.
# It uses the format of (command)_(subcommand)_USER.
#
# For example, to limit who can execute the namenode command,
# export HDFS_NAMENODE_USER=hdfs

export HADOOP_OPTS="$HADOOP_OPTS -Djava.net.preferIPv4Stack=true -Djava.security.krb5.realm= -Djava.security.krb5.kdc="
export JAVA_HOME="/Library/Java/JavaVirtualMachines/jdk1.8.0_221.jdk/Contents/Home"
```

Configuring Core-site.xml in
/usr/local/Cellar/hadoop/3.1.2/libexec/etc/hadoop

```xml
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
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  you may not use this file except in compliance with the License.
  You may obtain a copy of the License at

    http://www.apache.org/licenses/LICENSE-2.0

  Unless required by applicable law or agreed to in writing, software
  distributed under the License is distributed on an "AS IS" BASIS,
  WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
  See the License for the specific language governing permissions and
  limitations under the License. See accompanying LICENSE file.
-->

<!-- Put site-specific property overrides in this file. -->

<configuration>
    <property>
        <name>hadoop.tmp.dir</name>
        <value>/usr/local/Cellar/hadoop/hdfs/tmp</value>
        <description>A base for other temporary directories.</description>
    </property>
    <property>
        <name>fs.default.name</name>
        <value>hdfs://localhost:8020</value>
    </property>
</configuration>
```

Configuring Mapred-site.xml in
/usr/local/Cellar/hadoop/3.1.2/libexec/etc/hadoop

```xml
<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
  Licensed under the Apache License, Version 2.0 (the "License");
  you may not use this file except in compliance with the License.
  You may obtain a copy of the License at

    http://www.apache.org/licenses/LICENSE-2.0

  Unless required by applicable law or agreed to in writing, software
  distributed under the License is distributed on an "AS IS" BASIS,
  WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
  See the License for the specific language governing permissions and
  limitations under the License. See accompanying LICENSE file.
-->

<!-- Put site-specific property overrides in this file. -->

<configuration>
    <property>
        <name>mapred.job.tracker</name>
        <value>localhost:8021</value>
    </property>
</configuration>
~
~
~
~
~
```

Configuring Hdfs-site.xml in
/usr/local/Cellar/hadoop/3.1.2/libexec/etc/hadoop

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
  Licensed under the Apache License, Version 2.0 (the "License");
  you may not use this file except in compliance with the License.
  You may obtain a copy of the License at

    http://www.apache.org/licenses/LICENSE-2.0

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  distributed under the License is distributed on an "AS IS" BASIS,
  WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
  See the License for the specific language governing permissions and
  limitations under the License. See accompanying LICENSE file.
-->

<!-- Put site-specific property overrides in this file. -->

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

Configuring Yarn-site.xml in
/usr/local/Cellar/hadoop/3.1.2/libexec/etc/hadoop

```
<?xml version="1.0"?>
<!--
  Licensed under the Apache License, Version 2.0 (the "License");
  you may not use this file except in compliance with the License.
  You may obtain a copy of the License at

    http://www.apache.org/licenses/LICENSE-2.0

  Unless required by applicable law or agreed to in writing, software
  distributed under the License is distributed on an "AS IS" BASIS,
  WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
  See the License for the specific language governing permissions and
  limitations under the License. See accompanying LICENSE file.
-->
<configuration>

<!-- Site specific YARN configuration properties -->
    <property>
        <name>yarn.nodemanager.aux-services</name>
        <value>mapreduce_shuffle</value>
    </property>
    <property>
        <name>yarn.nodemanager.env-whitelist</name>
        <value>JAVA_HOME,HADOOP_COMMON_HOME,HADOOP_HDFS_HOME,HADOOP_CONF_DIR,CLASSPATH_PREPEND_DISTCACHE,HADOOP_YARN_HOME,HADOOP_MAPRED_HOME</value>
    </property>
</configuration>
```

Generate SSH key

```
AkshayaNagarajanMacbookPro:~ akshayanagarajan$ ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/Users/akshayanagarajan/.ssh/id_rsa):
Created directory '/Users/akshayanagarajan/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /Users/akshayanagarajan/.ssh/id_rsa.
Your public key has been saved in /Users/akshayanagarajan/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:82dfDX7imWqIt2c0dW0XbUTJNbWocRD7fnAU5NnU6X0 akshayanagarajan@AkshayaNagarajanMacbookPro
The key's randomart image is:
+---[RSA 2048]----+
|          o. o*&|
|           o o*X|
|           o o.*=|
|            = o.E|
|       S  . +.+o|
|        o  +.o..|
|         ..oooo.+|
|        . oo+o.* |
|          ..=..=  |
+----[SHA256]-----+
```

Copying the generated SSH key to authorized_keys

```
AkshayaNagarajanMacbookPro:~ akshayanagarajan$     cat ~/.ssh/id_rsa.pub >> ~/.ssh/authorized_keys
```
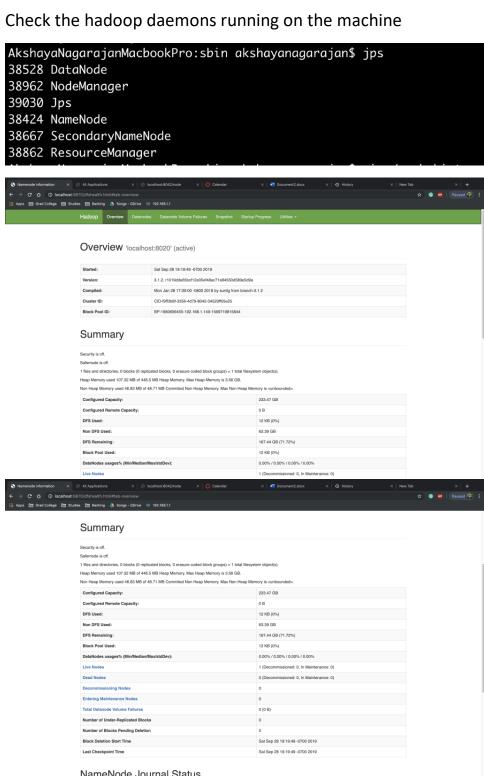
Checking if the SSH localhost works

```
AkshayaNagarajanMacbookPro:hadoop akshayanagarajan$ ssh localhost
Last login: Sat Sep 28 19:46:06 2019
```

Formatting HDFS using the command: hdfs namenode –format


```
AkshayaNagarajanMacbookPro:bin akshayanagarajan$ hdfs namenode -format
WARNING: /usr/local/Cellar/hadoop/3.1.2/libexec/logs does not exist. Creating.
2019-09-28 16:51:51,408 INFO namenode.NameNode: STARTUP_MSG:
/************************************************************
STARTUP_MSG: Starting NameNode
STARTUP_MSG:   host = akshayanagarajanmacbookpro/192.168.1.149
STARTUP_MSG:   args = [-format]
STARTUP_MSG:   version = 3.1.2
STARTUP_MSG:   classpath = /usr/local/Cellar/hadoop/3.1.2/libexec/etc/hadoop:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jaxb-impl-2.2.3-1.jar:/usr/local/Cellar/hadoo
p/3.1.2/libexec/share/hadoop/common/lib/hadoop-auth-3.1.2.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/slf4j-log4j12-1.7.25.jar:/usr/local/Cellar/hadoop/3.1.2/libe
xec/share/hadoop/common/lib/jetty-server-9.3.24.v20180605.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jetty-util-9.3.24.v20180605.jar:/usr/local/Cellar/hadoop/3.1
.2/libexec/share/hadoop/common/lib/woodstox-core-5.0.3.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/htrace-core4-4.1.0-incubating.jar:/usr/local/Cellar/hadoop/3.1.
2/libexec/share/hadoop/common/lib/kerby-xdr-1.0.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/snappy-java-1.0.5.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/h
adoop/common/lib/jetty-io-9.3.24.v20180605.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/hadoop-annotations-3.1.2.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/h
adoop/common/lib/slf4j-api-1.7.25.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jackson-jaxrs-1.9.13.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/
lib/commons-logging-1.1.3.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/kerby-pkix-1.0.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/avro-1.7
.7.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jetty-webapp-9.3.24.v20180605.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jackson-annotation
s-2.7.8.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/javax.servlet-api-3.1.0.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/kerb-server-1.0.1.j
ar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/log4j-1.2.17.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/commons-configuration2-2.1.1.jar:/usr/local/Cellar/h
adoop/3.1.2/libexec/share/hadoop/common/lib/protobuf-java-2.5.0.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jcip-annotations-1.0-1.jar:/usr/local/Cellar/hadoop/3.
1.2/libexec/share/hadoop/common/lib/kerby-asn1-1.0.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/netty-3.10.5.Final.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/sha
re/hadoop/common/lib/jsr311-api-1.1.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jackson-xc-1.9.13.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common
/lib/zookeeper-3.4.13.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/kerb-identity-1.0.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/httpclien
t-4.5.2.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/kerby-config-1.0.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/guava-11.0.2.jar:/usr/lo
cal/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/json-smart-2.3.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/kerb-util-1.0.1.jar:/usr/local/Cellar/hadoop/3.
1.2/libexec/share/hadoop/common/lib/curator-framework-2.13.0.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jersey-servlet-1.19.jar:/usr/local/Cellar/hadoop/3.1.2/share/
libexec/share/hadoop/common/lib/jersey-json-1.19.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jaxb-api-2.2.11.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/had
oop/common/lib/jetty-security-9.3.24.v20180605.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/commons-io-2.5.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/com
mon/lib/jackson-core-asl-1.9.13.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/stax2-api-3.1.4.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jul
-to-slf4j-1.7.25.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/metrics-core-3.2.4.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jsp-api-2.1.jar
:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/kerb-crypto-1.0.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/commons-codec-1.11.jar:/usr/local/Ce
llar/hadoop/3.1.2/libexec/share/hadoop/common/lib/asm-5.0.4.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/kerb-admin-1.0.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexe
c/share/hadoop/common/lib/audience-annotations-0.5.0.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/paranamer-2.3.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/ha
doop/common/lib/kerb-client-1.0.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/commons-collections-3.2.2.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/co
mmon/lib/jettison-1.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jetty-http-9.3.24.v20180605.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/c
urator-recipes-2.13.0.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/commons-compress-1.18.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/token-p
rovider-1.0.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jetty-xml-9.3.24.v20180605.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jersey-cor
e-1.19.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jsch-0.1.54.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/kerb-common-1.0.1.jar:/usr/local
/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/httpcore-4.4.4.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/kerb-simplekdc-1.0.1.jar:/usr/local/Cellar/hadoop/
3.1.2/libexec/share/hadoop/common/lib/jersey-server-1.19.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/accessors-smart-1.2.jar:/usr/local/Cellar/hadoop/3.1.2/libexe
c/share/hadoop/common/lib/re2j-1.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/gson-2.2.4.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/commo
ns-lang-2.6.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/kerb-core-1.0.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/commons-net-3.6.jar:/us
r/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/kerby-util-1.0.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jackson-databind-2.7.8.jar:/usr/local/Cel
lar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jackson-core-2.7.8.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jetty-servlet-9.3.24.v20180605.jar:/usr/local/Cell
ar/hadoop/3.1.2/libexec/share/hadoop/common/lib/jackson-mapper-asl-1.9.13.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/commons-math3-3.1.1.jar:/usr/local/Cellar/ha
doop/3.1.2/libexec/share/hadoop/common/lib/commons-beanutils-1.9.3.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/commons-lang3-3.4.jar:/usr/local/Cellar/hadoop/3.1.
2/libexec/share/hadoop/common/lib/jsr305-3.0.0.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share/hadoop/common/lib/nimbus-jose-jwt-4.41.1.jar:/usr/local/Cellar/hadoop/3.1.2/libexec/share
```

```
2019-09-28 16:51:52,349 INFO namenode.FSDirectory: POSIX ACL inheritance enabled? true
2019-09-28 16:51:52,349 INFO namenode.FSDirectory: XAttrs enabled? true
2019-09-28 16:51:52,349 INFO namenode.NameNode: Caching file names occurring more than 10 times
2019-09-28 16:51:52,356 INFO snapshot.SnapshotManager: Loaded config captureOpenFiles: false, skipCaptureAccessTimeOnlyChange: false, snapshotDiffAllowSnapRootDescendant: true, maxSnaps
hotLimit: 65536
2019-09-28 16:51:52,360 INFO snapshot.SnapshotManager: SkipList is disabled
2019-09-28 16:51:52,364 INFO util.GSet: Computing capacity for map cachedBlocks
2019-09-28 16:51:52,364 INFO util.GSet: VM type       = 64-bit
2019-09-28 16:51:52,364 INFO util.GSet: 0.25% max memory 4 GB = 10.2 MB
2019-09-28 16:51:52,364 INFO util.GSet: capacity      = 2^20 = 1048576 entries
2019-09-28 16:51:52,384 INFO metrics.TopMetrics: NNTop conf: dfs.namenode.top.window.num.buckets = 10
2019-09-28 16:51:52,384 INFO metrics.TopMetrics: NNTop conf: dfs.namenode.top.num.users = 10
2019-09-28 16:51:52,384 INFO metrics.TopMetrics: NNTop conf: dfs.namenode.top.windows.minutes = 1,5,25
2019-09-28 16:51:52,389 INFO namenode.FSNamesystem: Retry cache on namenode is enabled
2019-09-28 16:51:52,389 INFO namenode.FSNamesystem: Retry cache will use 0.03 of total heap and retry cache entry expiry time is 600000 millis
2019-09-28 16:51:52,391 INFO util.GSet: Computing capacity for map NameNodeRetryCache
2019-09-28 16:51:52,391 INFO util.GSet: VM type       = 64-bit
2019-09-28 16:51:52,392 INFO util.GSet: 0.029999999329447746% max memory 4 GB = 1.2 MB
2019-09-28 16:51:52,392 INFO util.GSet: capacity      = 2^17 = 131072 entries
2019-09-28 16:51:52,424 INFO namenode.FSImage: Allocated new BlockPoolId: BP-368296384-192.168.1.149-1569714712417
2019-09-28 16:51:52,456 INFO common.Storage: Storage directory /usr/local/Cellar/hadoop/hdfs/tmp/dfs/name has been successfully formatted.
2019-09-28 16:51:52,467 INFO namenode.FSImageFormatProtobuf: Saving image file /usr/local/Cellar/hadoop/hdfs/tmp/dfs/name/current/fsimage.ckpt_0000000000000000000 using no compression
2019-09-28 16:51:52,552 INFO namenode.FSImageFormatProtobuf: Image file /usr/local/Cellar/hadoop/hdfs/tmp/dfs/name/current/fsimage.ckpt_0000000000000000000 of size 403 bytes saved in 0
seconds .
2019-09-28 16:51:52,577 INFO namenode.NNStorageRetentionManager: Going to retain 1 images with txid >= 0
2019-09-28 16:51:52,582 INFO namenode.NameNode: SHUTDOWN_MSG:
/************************************************************
SHUTDOWN_MSG: Shutting down NameNode at akshayanagarajanmacbookpro/192.168.1.149
************************************************************/
AkshayaNagarajanMacbookPro:bin akshayanagarajan$ cd..
-bash: cd..: command not found
AkshayaNagarajanMacbookPro:bin akshayanagarajan$ ls
container-executor       hadoop            hdfs              mapred            test-container-executor yarn
AkshayaNagarajanMacbookPro:bin akshayanagarajan$ cd..
-bash: cd..: command not found
AkshayaNagarajanMacbookPro:bin akshayanagarajan$ cd ..
AkshayaNagarajanMacbookPro:libexec akshayanagarajan$ ls
bin            hadoop-config.sh     hdfs-config.sh     logs           sbin               yarn-config.sh
etc            hadoop-functions.sh  libexec            mapred-config.sh  share
AkshayaNagarajanMacbookPro:libexec akshayanagarajan$ cd sbin
AkshayaNagarajanMacbookPro:sbin akshayanagarajan$ ls
FederationStateStore   hadoop-daemons.sh   mr-jobhistory-daemon.sh start-balancer.sh   start-yarn.sh      stop-dfs.sh        workers.sh
distribute-exclude.sh  httpfs.sh           refresh-namenodes.sh    start-dfs.sh        stop-all.sh        stop-secure-dns.sh yarn-daemon.sh
hadoop-daemon.sh       kms.sh              start-all.sh            start-secure-dns.sh stop-balancer.sh   stop-yarn.sh       yarn-daemons.sh
AkshayaNagarajanMacbookPro:sbin akshayanagarajan$ ./start-all.sh
WARNING: Attempting to start all Apache Hadoop daemons as akshayanagarajan in 10 seconds.
WARNING: This is not a recommended production deployment configuration.
WARNING: Use CTRL-C to abort.
```
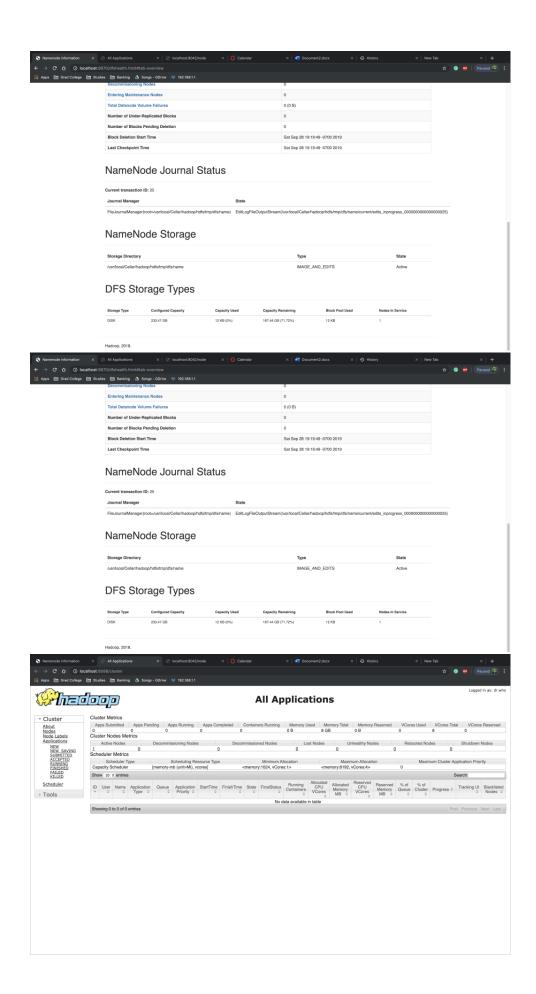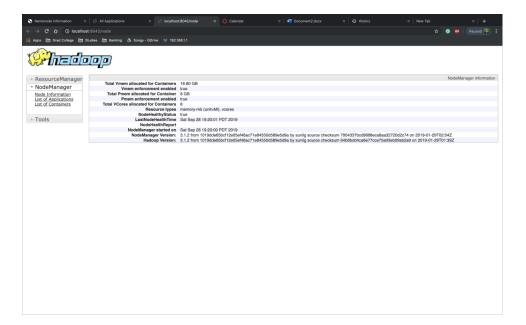
Start hadoop using the command : ./start-all.sh after changing the directory to /usr/local/Cellar/hadoop/3.1.2/sbin/


```
AkshayaNagarajanMacbookPro:sbin akshayanagarajan$ ./start-all.sh
WARNING: Attempting to start all Apache Hadoop daemons as akshayanagarajan in 10 seconds.
WARNING: This is not a recommended production deployment configuration.
WARNING: Use CTRL-C to abort.
Starting namenodes on [localhost]
Starting datanodes
Starting secondary namenodes [AkshayaNagarajanMacbookPro]
2019-09-28 19:19:56,673 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Starting resourcemanager
Starting nodemanagers
```

```
AkshayaNagarajanMacbookPro:sbin akshayanagarajan$ ./start-all.sh
WARNING: Attempting to start all Apache Hadoop daemons as akshayanagarajan in 10 seconds.
WARNING: This is not a recommended production deployment configuration.
WARNING: Use CTRL-C to abort.
Starting namenodes on [localhost]
Starting datanodes
Starting secondary namenodes [AkshayaNagarajanMacbookPro]
2019-09-28 19:19:56,673 WARN util.NativeCodeLoader: Unable to load native-hadoop library
Starting resourcemanager
Starting nodemanagers
```

Check the hadoop daemons running on the machine

```
AkshayaNagarajanMacbookPro:sbin akshayanagarajan$ jps
38528 DataNode
38962 NodeManager
39030 Jps
38424 NameNode
38667 SecondaryNameNode
38862 ResourceManager
```

Decommissioning Nodes	0
Entering Maintenance Nodes	0
Total Datanode Volume Failures	0 (0 B)
Number of Under-Replicated Blocks	0
Number of Blocks Pending Deletion	0
Block Deletion Start Time	Sat Sep 28 19:19:49 -0700 2019
Last Checkpoint Time	Sat Sep 28 19:19:49 -0700 2019

NameNode Journal Status

Current transaction ID: 25

Journal Manager	State
FileJournalManager(root=/usr/local/Cellar/hadoop/hdfs/tmp/dfs/name)	EditLogFileOutputStream(/usr/local/Cellar/hadoop/hdfs/tmp/dfs/name/current/edits_inprogress_0000000000000000025)

NameNode Storage

Storage Directory	Type	State
/usr/local/Cellar/hadoop/hdfs/tmp/dfs/name	IMAGE_AND_EDITS	Active

DFS Storage Types

Storage Type	Configured Capacity	Capacity Used	Capacity Remaining	Block Pool Used	Nodes In Service
DISK	233.47 GB	12 KB (0%)	167.44 GB (71.72%)	12 KB	1

Hadoop, 2018.

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hadoop

All Applications

Logged in as: dr.who

Cluster
- About
- Nodes
- Node Labels
- Applications
  - NEW
  - NEW_SAVING
  - SUBMITTED
  - ACCEPTED
  - RUNNING
  - FINISHED
  - FAILED
  - KILLED
- Scheduler
- Tools

Cluster Metrics

Apps Submitted	Apps Pending	Apps Running	Apps Completed	Containers Running	Memory Used	Memory Total	Memory Reserved	VCores Used	VCores Total	VCores Reserved
0	0	0	0	0	0 B	8 GB	0 B	0	8	0

Cluster Nodes Metrics

Active Nodes	Decommissioning Nodes	Decommissioned Nodes	Lost Nodes	Unhealthy Nodes	Rebooted Nodes	Shutdown Nodes
1	0	0	0	0	0	0

Scheduler Metrics

Scheduler Type	Scheduling Resource Type	Minimum Allocation	Maximum Allocation	Maximum Cluster Application Priority
Capacity Scheduler	[memory-mb (unit=Mi), vcores]	<memory:1024, vCores:1>	<memory:8192, vCores:4>	0

Show 20 entries   Search:

ID ▾	User ◇	Name ◇	Application Type ◇	Queue ◇	Application Priority ◇	StartTime ◇	FinishTime ◇	State ◇	FinalStatus ◇	Running Containers ◇	Allocated CPU VCores ◇	Allocated Memory MB ◇	Reserved CPU VCores ◇	Reserved Memory MB ◇	% of Queue ◇	% of Cluster ◇	Progress ◇	Tracking UI ◇	Blacklisted Nodes ◇
							No data available in table												

Showing 0 to 0 of 0 entries   First Previous Next Last

Stopping Hadoop using the command: ./stop-all.sh after moving to the directory /usr/local/Cellar/hadoop/3.1.2/sbin/