

Multi node cluster set up:

1. Ssh-keygen

2. Cd .ssh/
3. ls

```
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.
```

```
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted  
applicable law.
```

```
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.
```

```
ubuntu@ip-172-31-26-77:~$ ssh-keygen  
Generating public/private rsa key pair.  
Enter file in which to save the key (/home/ubuntu/.ssh/id_rsa):  
Enter passphrase (empty for no passphrase):  
Enter same passphrase again:  
Your identification has been saved in /home/ubuntu/.ssh/id_rsa  
Your public key has been saved in /home/ubuntu/.ssh/id_rsa.pub  
The key fingerprint is:  
SHA256:hdNl+/YC7FWJy8ULonrC/PicoNAMPUE6OdmDVHAXBd8 ubuntu@ip-172-31-26-77:~$  
The key's randomart image is:  
+---[RSA 3072]-----+  
|  o+O+.      o      |  
| . O + .o o .o .|  
| O = .oEo..o +.|  
| * o  o..o.+..|  
| . o .S. oo+. |  
| . + o . + . |  
| . = o . . . |  
| . = . . . |  
|      o+      |  
+----[SHA256]-----+  
ubuntu@ip-172-31-26-77:~$
```

```
+----[SHA256]-----+  
ubuntu@ip-172-31-26-77:~$ cd .ssh/  
ubuntu@ip-172-31-26-77:~/.ssh$ ls  
authorized_keys  id_rsa  id_rsa.pub  
ubuntu@ip-172-31-26-77:~/.ssh$
```

4:

- cat id_rsa.pub >> authorized_keys
- Cd
- Ssh localhost

```
authorized keys id_rsa id_rsa.pub
ubuntu@ip-172-31-26-77:~/.ssh$ cat id_rsa.pub >> authorized_keys
ubuntu@ip-172-31-26-77:~/.ssh$ cd
ubuntu@ip-172-31-26-77:~$ ssh localhost
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:vcQy/f1aBlz5dPvYWX10Paf/FeX6MbZxwkc4cOu7GDo.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'localhost' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1036-aws x86_64)

* Documentation:  https://help.ubuntu.com
```

5: exit 6: ls 7: wget. 8: chmod 400

```
ubuntu@ip-172-31-26-77:~$ exit
logout
Connection to localhost closed.
ubuntu@ip-172-31-26-77:~$ ls
ubuntu@ip-172-31-26-77:~$ wget https://a-nw-nishant.s3.eu-west-1.amazonaws.com/
--2023-10-05 13:48:50-- https://a-nw-nishant.s3.eu-west-1.amazonaws.com/nw-nis
Resolving a-nw-nishant.s3.eu-west-1.amazonaws.com (a-nw-nishant.s3.eu-west-1.am
Connecting to a-nw-nishant.s3.eu-west-1.amazonaws.com (a-nw-nishant.s3.eu-west-
HTTP request sent, awaiting response... 200 OK
Length: 1674 (1.6K) [binary/octet-stream]
Saving to: 'nw-nishant.pem'

nw-nishant.pem                               100%[=====
2023-10-05 13:48:50 (92.7 MB/s) - 'nw-nishant.pem' saved [1674/1674]
```

```
ubuntu@ip-172-31-26-77:~$ ls
nw-nishant.pem
ubuntu@ip-172-31-26-77:~$ chmod 400 nw-nishant.pem
ubuntu@ip-172-31-26-77:~$ sudo nano /etc/hosts
ubuntu@ip-172-31-26-77:~$ cat /etc/hosts
172.31.26.77 nn
172.31.24.222 dn
# The following lines are desirable for IPv6 capable hosts
::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
ff02::3 ip6-allhosts
ubuntu@ip-172-31-26-77:~$
```

9:

```
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
ff02::3 ip6-allhosts
ubuntu@ip-172-31-26-77:~$ ssh -i nw-nishant.pem dn
The authenticity of host 'dn (172.31.24.222)' can't be established.
ECDSA key fingerprint is SHA256:tMU57Rtu3Rv0iIS25CmfLz1GnC6AYRBJj52iin192L8.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'dn,172.31.24.222' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1036-aws x86_64)

* Documentation:  https://help.ubuntu.com
* Management:     https://landscape.canonical.com
* Support:        https://ubuntu.com/advantage

System information as of Thu Oct 5 13:53:47 UTC 2023
```

10: Scp -i nw-nishant.pem .ssh/id_rsa .ssh/id_rsa.pub dn:/home/ubuntu/.ssh

```

ubuntu@ip-172-31-24-222:~$ exit
logout
Connection to dn closed.
ubuntu@ip-172-31-26-77:~$ ls
nw-nishant.pem
ubuntu@ip-172-31-26-77:~$ scp .bashrc dn:/home/ubuntu
ubuntu@dn: Permission denied (publickey).
lost connection
ubuntu@ip-172-31-26-77:~$ scp -i nw-nishant.pem .ssh/id_rsa .ssh/id_rsa.pub dn:/home/ubuntu/.ssh
id_rsa
id_rsa.pub
ubuntu@ip-172-31-26-77:~$ █

```

11: ls,

```

id_rsa.pub
ubuntu@ip-172-31-26-77:~$ ls
nw-nishant.pem
ubuntu@ip-172-31-26-77:~$ ssh -i nw-nishant.pem dn
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1036-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Thu Oct  5 13:59:39 UTC 2023

System load:  0.0               Processes:    98

```

12:

```

ubuntu@ip-172-31-24-222:~$ ls
ubuntu@ip-172-31-24-222:~$ cd .ssh/
ubuntu@ip-172-31-24-222:~/.ssh$ ls
authorized_keys  id_rsa  id_rsa.pub
ubuntu@ip-172-31-24-222:~/.ssh$ cat id_rsa.pub >> authorized_keys
ubuntu@ip-172-31-24-222:~/.ssh$ ssh localhost
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:tMU57Rtu3Rv0iIS25CmfLz1GnC6AYRBjJ52iin192L8.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'localhost' (ECDSA) to the list of known hosts.
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1036-aws x86_64)

```

13.

```

ubuntu@ip-172-31-24-222:~$ exit
logout
Connection to localhost closed.
ubuntu@ip-172-31-24-222:~/.ssh$ exit
logout
Connection to dn closed.
ubuntu@ip-172-31-26-77:~$ ls
nw-nishant.pem
ubuntu@ip-172-31-26-77:~$ rm nw-nishant.pem
rm: remove write-protected regular file 'nw-nishant.pem'? yes
ubuntu@ip-172-31-26-77:~$ ls
ubuntu@ip-172-31-26-77:~$ █

```

14.

```

ubuntu@ip-172-31-24-222:~$ exit
logout
Connection to dn closed.
ubuntu@ip-172-31-26-77:~$ ls
ubuntu@ip-172-31-26-77:~$ sudo apt update^C
ubuntu@ip-172-31-26-77:~$ sudo apt update█

```

15.

```

Reading package lists... Done
Building dependency tree
Reading state information... Done
111 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-26-77:~$ sudo apt install dsh -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:

```

16.

```

Processing triggers for man-db (2.9.1-1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.9) ...
ubuntu@ip-172-31-26-77:~$ sudo nano /etc/dsh/machines.list
ubuntu@ip-172-31-26-77:~$ dsh -uptime
dsh: invalid option -- 'u'
ubuntu@ip-172-31-26-77:~$ dsh -a uptime
The authenticity of host 'nn (172.31.26.77)' can't be established.
ECDSA key fingerprint is SHA256:vcQy/f1aBlz5dPvYWX10Paf/Fex6MbZxwkc4cOu7GDo.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'nn,172.31.26.77' (ECDSA) to the list of known hosts.
 14:12:43 up 31 min,  1 user,  load average: 0.01, 0.09, 0.05
 14:12:44 up 31 min,  0 users,  load average: 0.00, 0.00, 0.00
ubuntu@ip-172-31-26-77:~$

```

17.

```

Processing triggers for libgdk-pixbuf2.0-0:amd64 (2.40.0+dfsg-
ubuntu@ip-172-31-26-77:~$ dsh -a javac -version
javac 17.0.8.1
javac 17.0.8.1
ubuntu@ip-172-31-26-77:~$

```

18.

```

javac 17.0.8.1
ubuntu@ip-172-31-26-77:~$ dsh -a wget https://archive.apache.org/dist/hadoop/core/hadoop-2.5.0/hadoop-2.5.0.tar.gz

```

19.

```

hadoop-2.5.0/bin/yarn.cmd
ubuntu@ip-172-31-26-77:~$ dsh -a ls
hadoop-2.5.0
hadoop-2.5.0.tar.gz
hadoop-2.5.0
hadoop-2.5.0.tar.gz
ubuntu@ip-172-31-26-77:~$

```

20.

```

hadoop-2.5.0
hadoop-2.5.0.tar.gz
ubuntu@ip-172-31-26-77:~$ dsh -a sudo mv hadoop-2.5.0 /usr/local/hadoop/
ubuntu@ip-172-31-26-77:~$ dsh -a ls
hadoop-2.5.0.tar.gz
hadoop-2.5.0.tar.gz
ubuntu@ip-172-31-26-77:~$

```

21.

```

hadoop-2.5.0
hadoop-2.5.0.tar.gz
ubuntu@ip-172-31-26-77:~$ dsh -a sudo mv hadoop-2.5.0 /usr/local/hadoop/
ubuntu@ip-172-31-26-77:~$ dsh -a ls
hadoop-2.5.0.tar.gz
hadoop-2.5.0.tar.gz
ubuntu@ip-172-31-26-77:~$ nano .bashrc
ubuntu@ip-172-31-26-77:~$ cd /usr/local/hadoop/
ubuntu@ip-172-31-26-77:/usr/local/hadoop$ ls
bin  etc  include  lib  libexec  sbin  share
ubuntu@ip-172-31-26-77:/usr/local/hadoop$

```

22.

```

ubuntu@ip-172-31-26-77:/usr/local/hadoop$ cd etc/
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc$ ls
hadoop
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc$ cd hadoop/
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ ls
capacity-scheduler.xml  hadoop-env.sh  httpfs-env.sh  mapred-env.cmd  ssl-client.xml.example
configuration.xml       hadoop-metrics.properties  httpfs-log4j.properties  mapred-env.sh  ssl-server.xml.example
container-executor.cfg  hadoop-metrics2.properties  httpfs-signature.secret  mapred-queues.xml.template  yarn-env.cmd
core-site.xml           hadoop-policy.xml  httpfs-site.xml  mapred-site.xml.template  yarn-env.sh
hadoop-env.cmd          hdfs-site.xml  log4j.properties  slaves  yarn-site.xml
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$

```

23.

```

hadoop-env.cmd  hdfs-site.xml  log4j.properties  slaves
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ nano hadoop-env.sh
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ nano hadoop-env.sh
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ nano core-site.xml
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ nano hdfs-site.xml
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ nano mapred-site.xml.template
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$

```

24.

```

ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ nano hdfs-site.xml
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ nano mapred-site.xml.template
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ nano slaves
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ nano masters
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$

```

25.

```

Try: sudo apt install <deb name>
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ scp core-site.xml hadoop-env.sh hdfs-site.xml mapred-site.xml.template slaves masters dn:/usr/local/hadoop/etc/hadoop/
core-site.xml 100% 945 836.0KB/s 00:00
hadoop-env.sh 100% 3547 4.9MB/s 00:00
hdfs-site.xml 100% 843 1.3MB/s 00:00
mapred-site.xml.template 100% 842 332.0KB/s 00:00
slaves 100% 3 5.3KB/s 00:00
masters 100% 3 4.9KB/s 00:00
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$

```

26.

```

ubuntu@ip-172-31-26-77:~$ hadoop namenode -format
hadoop: command not found
ubuntu@ip-172-31-26-77:~$ cd /usr/local/hadoop/
ubuntu@ip-172-31-26-77:/usr/local/hadoop$ ls
bin  etc  include  lib  libexec  sbin  share
ubuntu@ip-172-31-26-77:/usr/local/hadoop$ cd bin
-bash: cd: bin: No such file or directory
ubuntu@ip-172-31-26-77:/usr/local/hadoop$ cd bin
ubuntu@ip-172-31-26-77:/usr/local/hadoop/bin$ ls
container-executor  hadoop  hadoop.cmd  hdfs  hdfs.cmd  mapred  mapred.cmd  rcc  test-container-executor  yarn  yarn.cmd
ubuntu@ip-172-31-26-77:/usr/local/hadoop/bin$ cd ..
ubuntu@ip-172-31-26-77:/usr/local/hadoop$ cd etc/hadoop/
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$ ls
capacity-scheduler.xml  hadoop-env.sh  httpfs-env.sh  mapred-env.cmd  slaves  yarn-site.xml
configuration.xml       hadoop-metrics.properties  httpfs-log4j.properties  mapred-env.sh  ssl-client.xml.example
container-executor.cfg  hadoop-metrics2.properties  httpfs-signature.secret  mapred-queues.xml.template  ssl-server.xml.example
core-site.xml           hadoop-policy.xml  httpfs-site.xml  mapred-site.xml.template  yarn-env.cmd
hadoop-env.cmd          hdfs-site.xml  log4j.properties  masters  yarn-env.sh
ubuntu@ip-172-31-26-77:/usr/local/hadoop/etc/hadoop$

```

27.

```

Last login: Thu Oct 5 14:04:47 2023 from 172.31.26.77
ubuntu@ip-172-31-24-222:~$ cd /usr/local/hadoop/
ubuntu@ip-172-31-24-222:/usr/local/hadoop$ sbin/start-yarn.sh
starting yarn daemons
starting resourcemanager, logging to /usr/local/hadoop/logs/yarn-ubuntu-resourcemanager-ip-172-31-24-222.out
dn: ssh: Could not resolve hostname dn: Temporary failure in name resolution
ubuntu@ip-172-31-24-222:/usr/local/hadoop$

```

28.

29.

30.

31.

32.

33.

```

Physical memory (bytes) snapshot=0
Virtual memory (bytes) snapshot=0
Total committed heap usage (bytes)=1841168384

Shuffle Errors
BAD_ID=0
CONNECTION=0
IO_ERROR=0
WRONG_LENGTH=0
WRONG_MAP=0
WRONG_REDUCE=0

File Input Format Counters
  Bytes Read=1180
File Output Format Counters
  Bytes Written=97
Job Finished in 2.897 seconds
Estimated value of Pi is 3.141552000000000000000000
ubuntu@ip-172-31-26-77:/usr/local/hadoop$

```

34.

```

File Output Format Counters
  Bytes Written=97
Job Finished in 2.897 seconds
Estimated value of Pi is 3.141552000000000000000000
ubuntu@ip-172-31-26-77:/usr/local/hadoop$ cd share/hadoop/mapreduce/
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$ ls
hadoop-mapreduce-client-core-2.5.0.jar  hadoop-mapreduce-client-jobclient-2.5.0.jar
hadoop-mapreduce-client-common-2.5.0.jar  hadoop-mapreduce-client-shuffle-2.5.0.jar
hadoop-mapreduce-client-tools-2.5.0.jar  hadoop-mapreduce-examples-2.5.0.jar
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$

```

35.

```

Estimated value of Pi is 3.141552000000000000000000
ubuntu@ip-172-31-26-77:/usr/local/hadoop$ cd share/hadoop/mapreduce/
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$ ls
hadoop-mapreduce-client-core-2.5.0.jar  hadoop-mapreduce-client-jobclient-2.5.0.jar
hadoop-mapreduce-client-common-2.5.0.jar  hadoop-mapreduce-client-shuffle-2.5.0.jar
hadoop-mapreduce-client-tools-2.5.0.jar  hadoop-mapreduce-examples-2.5.0.jar
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$ hadoop jar hadoop-mapreduce-examples-2.5.0.jar pi 10 1000
Number of Maps = 10
Samples per Map = 1000
Wrote input for Map #0
Wrote input for Map #1
Wrote input for Map #2
Wrote input for Map #3
Wrote input for Map #4
Wrote input for Map #5
Wrote input for Map #6
Wrote input for Map #7
Wrote input for Map #8
Wrote input for Map #9
Starting Job
23/10/05 15:08:58 INFO Configuration.deprecation: session.id is deprecated. Instead, use dfs.metrics.session-id
23/10/05 15:08:58 INFO jvm.JvmMetrics: Initializing JVM Metrics with processName=JobTracker, sessionId=
23/10/05 15:08:58 INFO input.FileInputFormat: Total input paths to process : 10
23/10/05 15:08:58 INFO mapreduce.JobSubmitter: number of splits:10

```

36.

```

19646 ops
18751 NameNode
15927 Jps
19645 DataNode
ubuntu@ip-172-31-26-77:~$ cd /usr/local/hadoop/share/hadoop/mapreduce/
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$ hadoop jar hadoop-mapreduce-examples-2.5.0.jar teragen 5287099 input
23/10/05 15:11:40 INFO Configuration.deprecation: session.id is deprecated. Instead, use dfs.metrics.session-id
23/10/05 15:11:40 INFO jvm.JvmMetrics: Initializing JVM Metrics with processName=JobTracker, sessionId=
23/10/05 15:11:41 INFO terasort.TeraSort: Generating 5287099 using 1
23/10/05 15:11:41 INFO mapreduce.JobSubmitter: number of splits:1
23/10/05 15:11:41 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_local272428052_0001

```

37.

```

HDFS: Number of bytes read=0
HDFS: Number of bytes written=528709900
HDFS: Number of read operations=4
HDFS: Number of large read operations=0
HDFS: Number of write operations=3

Map-Reduce Framework
  Map input records=5287099
  Map output records=5287099
  Input split bytes=82
  Spilled Records=0
  Failed Shuffles=0
  Merged Map outputs=0
  GC time elapsed (ms)=91
  CPU time spent (ms)=0
  Physical memory (bytes) snapshot=0
  Virtual memory (bytes) snapshot=0
  Total committed heap usage (bytes)=29032448
org.apache.hadoop.examples.terasort.TeraGen$Counters
  CHECKSUM=11352382061958180
File Input Format Counters
  Bytes Read=0
File Output Format Counters
  Bytes Written=528709900
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$

```

38.

```
File Output Format Counters
  Bytes Written=528709900
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$ hadoop dfs -ls
DEPRECATED: Use of this script to execute hdfs command is deprecated.
Instead use the hdfs command for it.

Found 1 items
drwxr-xr-x  - ubuntu supergroup          0 2023-10-05 15:11 input
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$
```

39.

```
File Output Format Counters
  Bytes Written=528709900
23/10/05 15:14:38 INFO terasort.TeraSort: done
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$ hadoop dfs -ls input/
DEPRECATED: Use of this script to execute hdfs command is deprecated.
Instead use the hdfs command for it.

Found 2 items
-rw-r--r--  3 ubuntu supergroup          0 2023-10-05 15:11 input/_SUCCESS
-rw-r--r--  3 ubuntu supergroup  528709900 2023-10-05 15:11 input/part-m-00000
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$
```

40.

```
-rw-r--r-- 10 ubuntu supergroup          0 2023-10-05 15:13 output/_partition.lst
-rw-r--r--  3 ubuntu supergroup  528709900 2023-10-05 15:14 output/part-r-00000
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$ hadoop dfs -ls output/part-r-00000/
DEPRECATED: Use of this script to execute hdfs command is deprecated.
Instead use the hdfs command for it.

-rw-r--r--  3 ubuntu supergroup  528709900 2023-10-05 15:14 output/part-r-00000
ubuntu@ip-172-31-26-77:/usr/local/hadoop/share/hadoop/mapreduce$ hadoop jar hadoop-mapreduce-examples-2.5.0.jar teravalidate input validate
23/10/05 15:18:34 INFO Configuration.deprecation: session.id is deprecated. Instead, use dfs.metrics.session-id
23/10/05 15:18:34 INFO jvm.JvmMetrics: Initializing JVM Metrics with processName=JobTracker, sessionId=
23/10/05 15:18:34 INFO input.FileInputFormat: Total input paths to process : 1
Spent 99ms computing base-splits.
Spent 9ms computing TeraScheduler splits.
23/10/05 15:18:34 INFO mapreduce.JobSubmitter: number of splits:1
23/10/05 15:18:35 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_local920982133_0001
23/10/05 15:18:35 WARN conf.Configuration: file:/usr/local/hadoop/tmp/mapred/staging/ubuntu920982133/.staging/job_local920982133_0001/job.xml:an an
```

41.

Instances | EC2 | eu-west-1

Nameservice information

New Tab

54.74.229.158:50070/dfshealth.html#tab-overview

ACID properties of t... | spreadsheet | Dummy API - User... | Office.com | cheat sheet | Digital Ocean | HTML Code for Reg... | Ready to check - NL... | All Bookmarks

Hadoop

Overview | Datanodes | Snapshot | Startup Progress | Utilities

Overview 'nn:9000' (active)

Started:	Thu Oct 05 15:04:16 UTC 2023
Version:	2.5.0, r1616291
Compiled:	2014-08-06T17:31Z by jenkins from branch-2.5.0
Cluster ID:	CID-df3d9e52-7860-41e4-8000-fcb030ae4fd6
Block Pool ID:	BP-542776925-172.31.26.77-1696517827562

Summary

Security is off.

Safemode is off.

13 files and directories, 11 blocks = 24 total filesystem object(s).

Heap Memory used 31.63 MB of 60.99 MB Heap Memory. Max Heap Memory is 966.69 MB.

Non Heap Memory used 40.58 MB of 43.13 MB Committed Non Heap Memory. Max Non Heap Memory is -1 B.

Configured Capacity:	7.57 GB
DFS Used:	1.25 GB
Non DFS Used:	4.27 GB
DFS Remaining:	2.06 GB
DFS Used%:	16.48%
DFS Remaining%:	27.17%