

# Assignment No : 3

## 1)hostname command

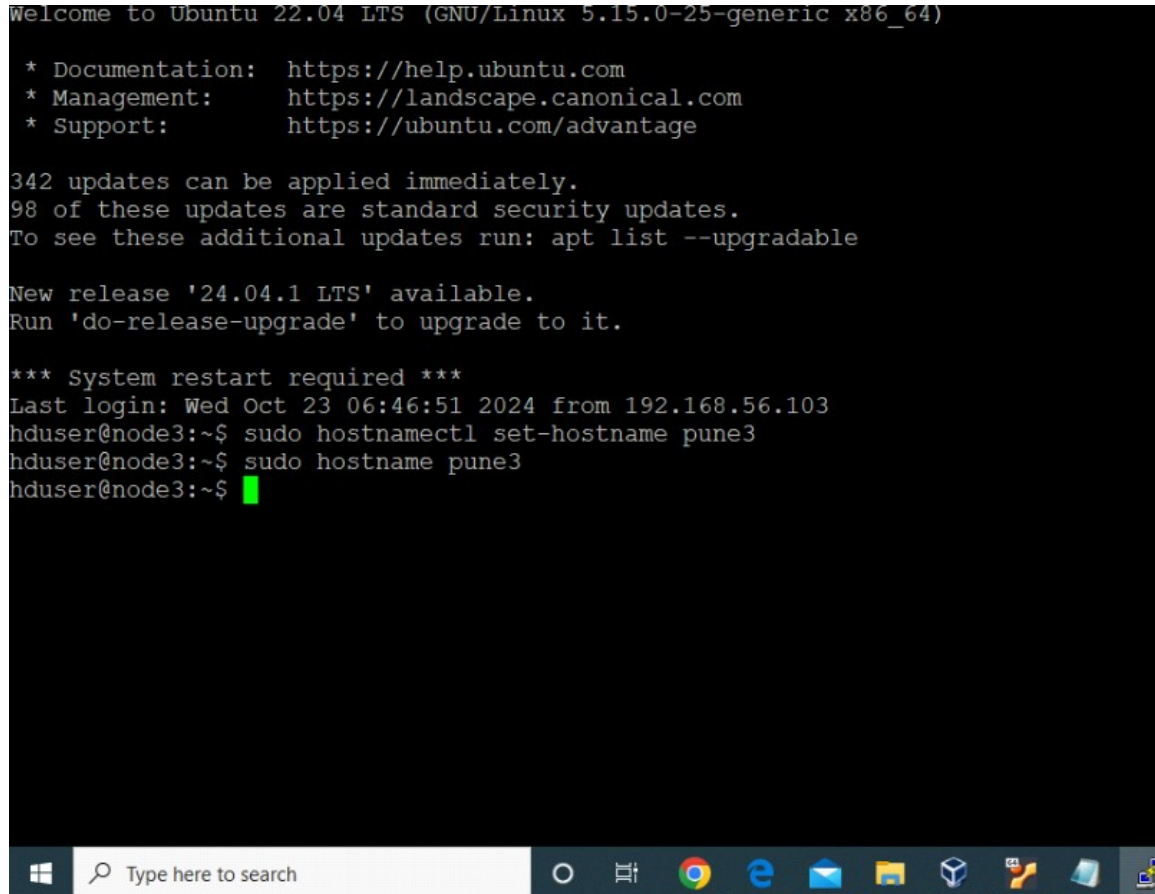
```
Welcome to Ubuntu 22.04 LTS (GNU/Linux 5.15.0-25-generic x86_64)

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

342 updates can be applied immediately.
98 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

New release '24.04.1 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

*** System restart required ***
Last login: Wed Oct 23 06:46:51 2024 from 192.168.56.103
hduser@node3:~$ sudo hostnamectl set-hostname pune3
hduser@node3:~$ sudo hostname pune3
hduser@node3:~$ █
```



## 2)scp /usr/local/hadoop/

```

hduser@pune3: ~
hadoop-mapreduce-client-jobclient-3.2.4-tests.jar 100% 1650KB 98.6MB/s 00:00
Apache_Hadoop_MapReduce_JobClient_2.7.2.xml 100% 9931 10.8MB/s 00:00
Apache_Hadoop_MapReduce_Common_2.8.3.xml 100% 11KB 12.4MB/s 00:00
Apache_Hadoop_MapReduce_JobClient_3.2.2.xml 100% 9332 12.5MB/s 00:00
Apache_Hadoop_MapReduce_Core_2.8.3.xml 100% 1150KB 191.0MB/s 00:00
Apache_Hadoop_MapReduce_Common_3.1.0.xml 100% 13KB 12.7MB/s 00:00
Apache_Hadoop_MapReduce_Core_2.6.0.xml 100% 1295KB 44.7MB/s 00:00
Apache_Hadoop_MapReduce_Common_2.8.2.xml 100% 11KB 8.7MB/s 00:00
Apache_Hadoop_MapReduce_Core_3.1.0.xml 100% 1177KB 168.3MB/s 00:00
Apache_Hadoop_MapReduce_Core_2.8.2.xml 100% 1150KB 209.4MB/s 00:00
Apache_Hadoop_MapReduce_JobClient_2.8.0.xml 100% 6672 6.1MB/s 00:00
Apache_Hadoop_MapReduce_JobClient_3.1.0.xml 100% 8593 9.6MB/s 00:00
Apache_Hadoop_MapReduce_JobClient_2.8.3.xml 100% 6679 7.5MB/s 00:00
Apache_Hadoop_MapReduce_Common_2.6.0.xml 100% 22KB 17.9MB/s 00:00
Apache_Hadoop_MapReduce_Core_3.2.2.xml 100% 1181KB 178.6MB/s 00:00
Apache_Hadoop_MapReduce_Common_2.8.0.xml 100% 11KB 14.5MB/s 00:00
Apache_Hadoop_MapReduce_Core_2.10.0.xml 100% 1163KB 45.5MB/s 00:00
Apache_Hadoop_MapReduce_Core_2.8.0.xml 100% 1150KB 86.7MB/s 00:00
Apache_Hadoop_MapReduce_JobClient_2.8.2.xml 100% 6679 5.1MB/s 00:00
Null.java 100% 849 786.5KB/s 00:00
Apache_Hadoop_MapReduce_JobClient_2.6.0.xml 100% 61KB 31.7MB/s 00:00
Apache_Hadoop_MapReduce_Common_2.7.2.xml 100% 14KB 7.9MB/s 00:00
Apache_Hadoop_MapReduce_Core_2.7.2.xml 100% 1140KB 26.2MB/s 00:00
Apache_Hadoop_MapReduce_JobClient_2.10.0.xml 100% 8259 5.6MB/s 00:00
Apache_Hadoop_MapReduce_Common_2.10.0.xml 100% 12KB 8.0MB/s 00:00
Apache_Hadoop_MapReduce_Core_3.1.2.xml 100% 1178KB 75.3MB/s 00:00
Apache_Hadoop_MapReduce_Common_3.2.2.xml 100% 13KB 7.7MB/s 00:00
Apache_Hadoop_MapReduce_JobClient_3.1.2.xml 100% 8638 3.9MB/s 00:00
hduser@node2:~$ exit
logout

```

### 3)commands starting datanode and nodemanager

```

hduser@pune3: ~
hduser@pune3:~$ hdfs --daemon start datanode
hduser@pune3:~$ yarn --daemon start nodemanager
hduser@pune3:~$ jps
179474 DataNode
179563 NodeManager
179673 Jps
hduser@pune3:~$ █

```

### 4)workers

hduser@manager: /usr/local/hadoop/etc/hadoop

GNU nano 6.2

node1

node2

pune3

5)hdfs dfsadmin -report

hduser@manager: /usr/local/hadoop/etc/hadoop

Missing block groups: 0  
Low redundancy blocks with highest priority to recover: 0  
Pending deletion blocks: 0

-----  
Live datanodes (2):

Name: 192.168.56.104:9866 (node1)  
Hostname: node1  
Decommission Status : Normal  
Configured Capacity: 232015802368 (216.08 GB)  
DFS Used: 98304 (96 KB)  
Non DFS Used: 10569306112 (9.84 GB)  
DFS Remaining: 209586114560 (195.19 GB)  
DFS Used%: 0.00%  
DFS Remaining%: 90.33%  
Configured Cache Capacity: 0 (0 B)  
Cache Used: 0 (0 B)  
Cache Remaining: 0 (0 B)  
Cache Used%: 100.00%  
Cache Remaining%: 0.00%  
Xceivers: 1  
Last contact: Wed Oct 23 07:29:19 EDT 2024  
Last Block Report: Wed Oct 23 07:03:41 EDT 2024  
Num of Blocks: 7

Name: 192.168.56.106:9866 (pune3)  
Hostname: pune3  
Decommission Status : Normal  
Configured Capacity: 232015802368 (216.08 GB)  
DFS Used: 98304 (96 KB)  
Non DFS Used: 10717040640 (9.98 GB)  
DFS Remaining: 209438380032 (195.05 GB)  
DFS Used%: 0.00%  
DFS Remaining%: 90.27%  
Configured Cache Capacity: 0 (0 B)  
Cache Used: 0 (0 B)  
Cache Remaining: 0 (0 B)  
Cache Used%: 100.00%  
Cache Remaining%: 0.00%  
Xceivers: 1  
Last contact: Wed Oct 23 07:25:48 EDT 2024  
Last Block Report: Wed Oct 23 07:25:48 EDT 2024  
Num of Blocks: 7

hduser@manager: /usr/local/hadoop/etc/hadoop\$

6) entry decommsion dfs.host.exclude

hduser@manager: /usr/local/hadoop/etc/hadoop

GNU nano 6.2  
node2

## 7)entry in hdfs-site.xml

hduser@manager: /usr/local/hadoop/etc/hadoop

```
GNU nano 6.2
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
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    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.name.dir</name>
<value>/usr/local/hadoop/hd-data/nn</value>
</property>
<property>
<name>dfs.replication</name>
<value>2</value>
</property>
<property>
<name>dfs.namenode.acls.enabled</name>
<value>true</value>
</property>
<property>
<name>dfs.hosts.exclude</name>
<value>/usr/local/hadoop/etc/hadoop/dfs.hosts.exclude</value>
</property>
</configuration>
```

8)hdfs.dfsadmin-refreshNodes

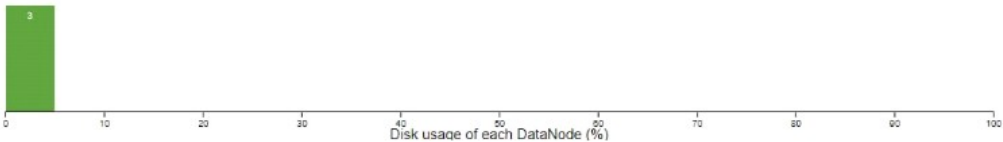
```
duser@manager:~$ hdfs dfsadmin -refreshNodes
refresh nodes successful
duser@manager:~$
duser@manager:~$
```

9)hdfs.dfsadmin -report node2 status decommission

Datanode Information

✔ In service
❌ Down
🔄 Decommissioning
🗑 Decommissioned
⛔ Decommissioned & dead
  
🔧 Entering Maintenance
🔧 In Maintenance
🔧 In Maintenance & dead

Datanode usage histogram



In operation

Show
25
entries
Search:

Node	Http Address	Last contact	Last Block Report	Capacity	Blocks	Block pool used	Version
✔ node1.9866 (192.168.56.104.9866)	http://node1.9866	1s	13m	216.08 GB	21	208 KB (0%)	3.2.4
✔ pune3.9866 (192.168.56.107.9866)	http://pune3.9866	19s	13m	216.08 GB	21	44.67 KB (0%)	3.2.4
🔧 node2.9866 (192.168.56.105.9866)	http://node2.9866	1s	13m	216.08 GB	21	208 KB (0%)	3.2.4

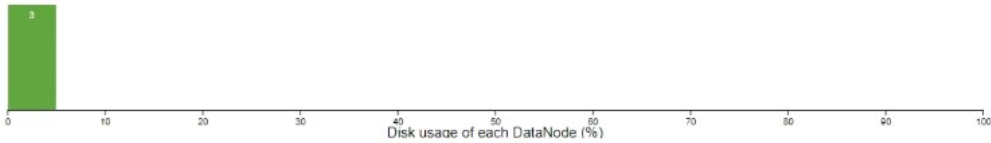
Showing 1 to 3 of 3 entries

Previous
1
Next

# Datanode Information

✔ In service    ❌ Down    ⏸ Decommissioning    ⚠ Decommissioned    ☠ Decommissioned & dead  
➡ Entering Maintenance    ⚡ In Maintenance    ⚡ In Maintenance & dead

## Datanode usage histogram



## In operation

Show 25 entries Search:

Node	Http Address	Last contact	Last Block Report	Capacity	Blocks	Block pool used	Version
✔ node1 9866 (192.168.56.104:9866)	http://node1:9864	0s	16m	216.08 GB <div></div>	21	208 KB (0%)	3.2.4
✔ node2 9866 (192.168.56.105:9866)	http://node2:9864	0s	16m	216.08 GB <div></div>	21	208 KB (0%)	3.2.4
✔ pune3 9866 (192.168.56.107:9866)	http://pune3:9864	235s	16m	216.08 GB <div></div>	21	44.67 KB (0%)	3.2.4

Showing 1 to 3 of 3 entries Previous 1 Next