

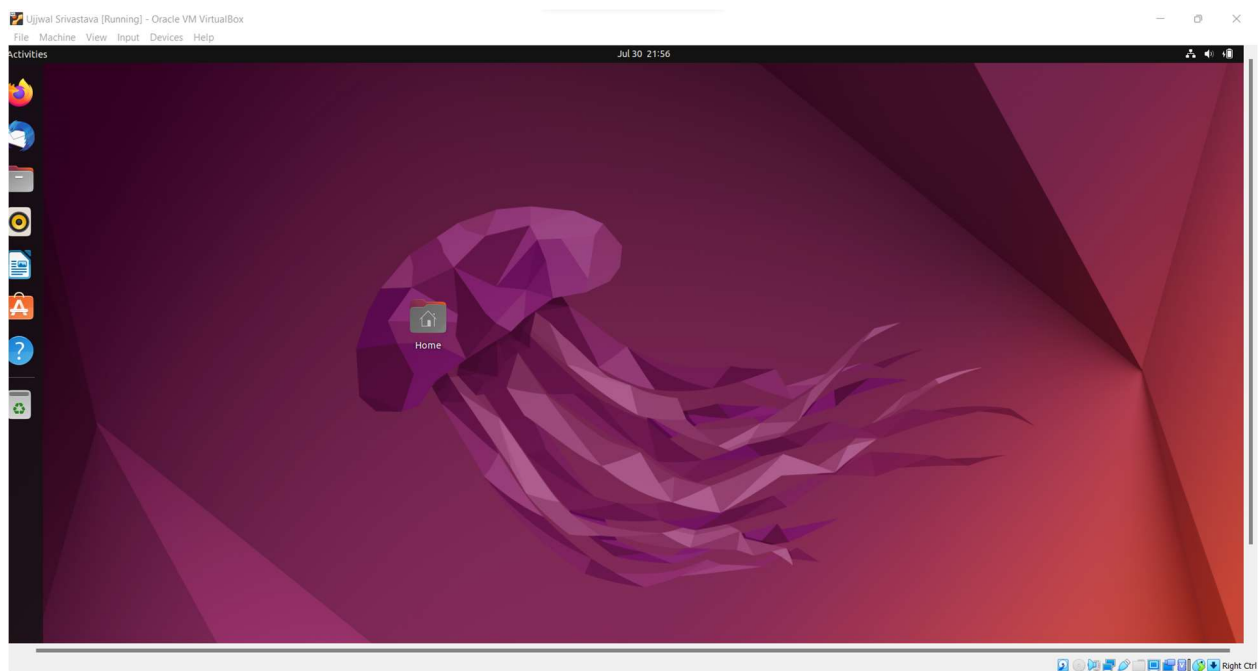
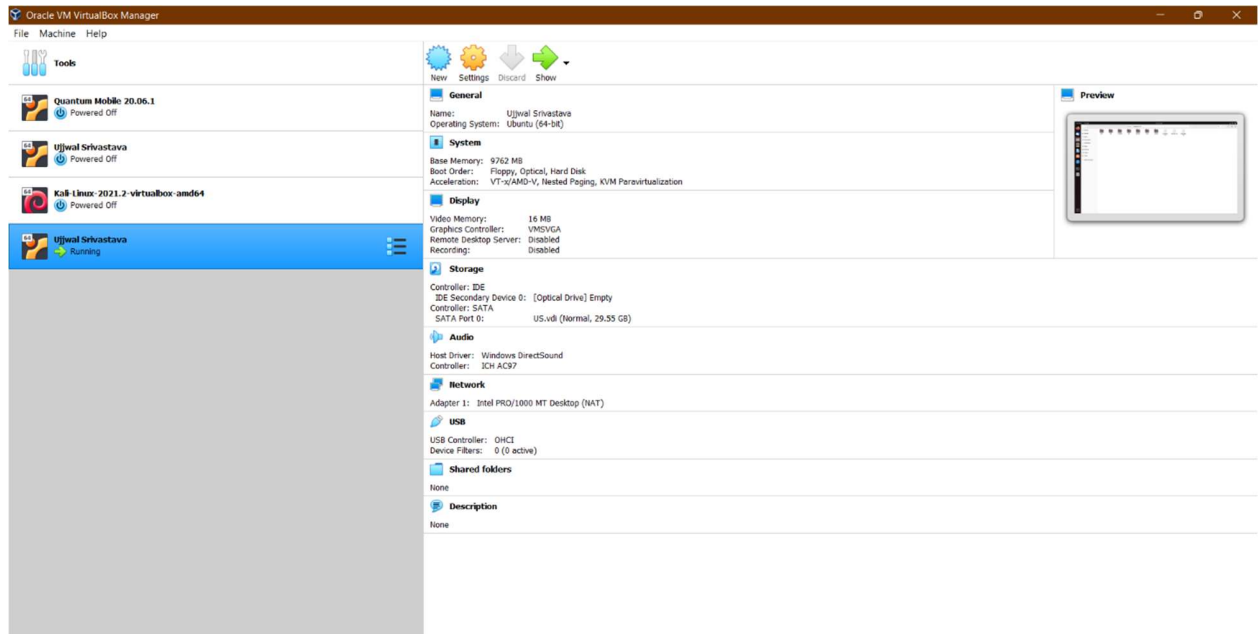
# CSE4003 - Big Data Analytics

## Lab Experiment – 1

UJJWAL SRIVASTAVA

20MIP10020

### Installation of Virtual Box and Installation of Ubuntu



## Installation of Hadoop

Ujjwal Srivastava [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Activities Firefox Web Browser Jul 30 21:59

WhatsApp x Namenode information x All Applications x +

127.0.0.1:8088/cluster

Logged in as: dr.who

### All Applications

**Cluster Metrics**

Apps Submitted	Apps Pending	Apps Running	Apps Completed	Containers Running	Used Resources	Total Resources	Reserved Resources	Physical Mem Used %	Physical VCores Used %
0	0	0	0	0	<memory:0 B, vCores:0>	<memory:8 GB, vCores:8>	<memory:0 B, vCores:0>	39	25

**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	Scheduler Busy %
Capacity Scheduler	[memory-mb (unit=Mi), vcores]	<memory:1024, vCores:1>	<memory:8192, vCores:4>	0	0

Show 20 entries

ID	User	Name	Application Type	Queue	Application Priority	StartTime	LaunchTime	FinishTime	State	FinalStatus	Running Containers	Allocated CPU VCores	Allocated Memory MB	Allocated GPUs	Reserved CPU VCores	Reserved Memory MB	Reserved GPUs	% 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

Ujjwal Srivastava [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

Activities Firefox Web Browser Jul 30 22:00

WhatsApp x Namenode information x All Applications x +

127.0.0.1:9870/dfshealth.html#tab=overview

Hadoop Overview Datanodes Datanode Volume Failures Snapshot Startup Progress Utilities

### Overview 'hadoop.ujjwal-VirtualBox.com:9000' (active)

Started:	Sat Jul 30 21:18:05 +0530 2022
Version:	3.2.3, rabe5358143720085498613d399be3bbf01e0f131
Compiled:	Sun Mar 20 06:48:00 +0530 2022 by ubuntu from branch-3.2.3
Cluster ID:	CID-17a211b9-7218-43ae-9ed6-78aab7b93ed5
Block Pool ID:	BP-729095390-127.0.1.1-1658341454496

### Summary

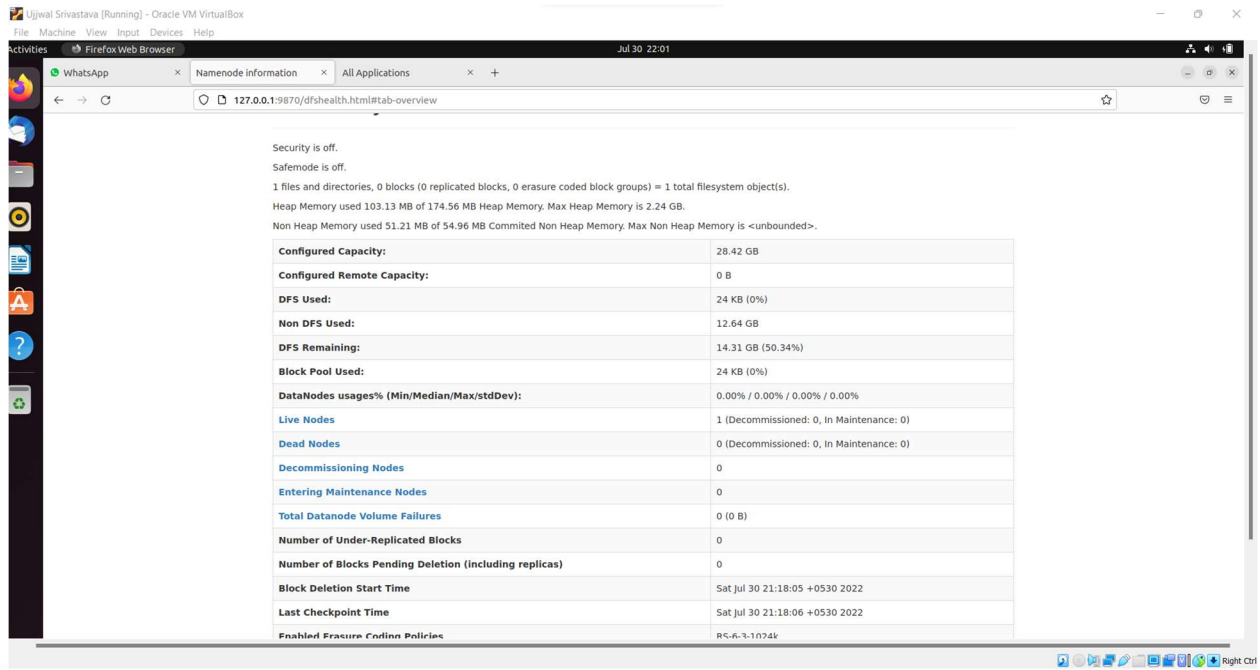
Security is off.  
Safemode is off.

1 files and directories, 0 blocks (0 replicated blocks, 0 erasure coded block groups) = 1 total filesystem object(s).

Heap Memory used 103.13 MB of 174.56 MB Heap Memory. Max Heap Memory is 2.24 GB.

Non Heap Memory used 51.21 MB of 54.96 MB Committed Non Heap Memory. Max Non Heap Memory is <unbounded>.

Configured Capacity:	28.42 GB
Configured Remote Capacity:	0 B
DFS Used:	24 KB (0%)
Non DFS Used:	12.64 GB



**Execute the following commends and take the screen shot**

**(1)cd hadoop-3.2.3/sbin**

**(2)./start-dfs.sh**

**(3)./start-yarn.sh**

**(4)jps**

```
Ujjwal Srivastava [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal Jul 30 22:09
hadoopuser@ujjwal-VirtualBox: ~/hadoop-3.2.3/sbin

hadoopuser@ujjwal-VirtualBox:~$ pwd
/home/hadoopuser
hadoopuser@ujjwal-VirtualBox:~$ ls
Desktop Documents Downloads hadoop hadoop-3.2.3 hadoop-3.2.3.tar.gz hadoopdata Music Pictures Public snap Templates Videos
hadoopuser@ujjwal-VirtualBox:~$ cd hadoop-3.2.3/sbin
hadoopuser@ujjwal-VirtualBox:~/hadoop-3.2.3/sbin$ pwd
/home/hadoopuser/hadoop-3.2.3/sbin
hadoopuser@ujjwal-VirtualBox:~/hadoop-3.2.3/sbin$ ls
distribute-exclude.sh hadoop-daemons.sh mr-jobhistory-daemon.sh start-all.sh start-dfs.sh start-yarn.sh stop-balancer.sh stop-secure-dns.sh workers.sh
FederationStateStore https.sh refresh-namenodes.sh start-balancer.sh start-secure-dns.sh stop-all.cmd stop-dfs.cmd stop-yarn.cmd yarn-daemon.sh
hadoop-daemon.sh hns.sh start-all.cmd start-dfs.cmd start-yarn.cmd stop-all.sh stop-dfs.sh stop-yarn.sh yarn-daemons.sh
hadoopuser@ujjwal-VirtualBox:~/hadoop-3.2.3/sbin$ ./start-dfs.sh
Starting namenodes on [hadoop.ujjwal-VirtualBox.com]
hadoop.ujjwal-VirtualBox.com: namenode is running as process 8239. Stop it first and ensure /tmp/hadoop-hadoopuser-namenode.pid file is empty before retry.
Starting datanodes
localhost: datanode is running as process 8355. Stop it first and ensure /tmp/hadoop-hadoopuser-datanode.pid file is empty before retry.
Starting secondary namenodes [ujjwal-VirtualBox]
ujjwal-VirtualBox: secondarynamenode is running as process 8535. Stop it first and ensure /tmp/hadoop-hadoopuser-secondarynamenode.pid file is empty before retry.
hadoopuser@ujjwal-VirtualBox:~/hadoop-3.2.3/sbin$ ./stop-dfs.sh
Stopping namenodes on [hadoop.ujjwal-VirtualBox.com]
Stopping datanodes
Stopping secondary namenodes [ujjwal-VirtualBox]
hadoopuser@ujjwal-VirtualBox:~/hadoop-3.2.3/sbin$ ./start-dfs.sh
Starting namenodes on [hadoop.ujjwal-VirtualBox.com]
Starting datanodes
Starting secondary namenodes [ujjwal-VirtualBox]
hadoopuser@ujjwal-VirtualBox:~/hadoop-3.2.3/sbin$ ./start-yarn.sh
Stopping nodenagangers
Stopping resourcemananager
hadoopuser@ujjwal-VirtualBox:~/hadoop-3.2.3/sbin$ ./start-yarn.sh
Starting resourcemanager
Starting nodenagangers
hadoopuser@ujjwal-VirtualBox:~/hadoop-3.2.3/sbin$ jps
12128 SecondaryNameNode
11831 NameNode
13800 Jps
12537 ResourceManager
11948 DataNode
12654 NodeManager
hadoopuser@ujjwal-VirtualBox:~/hadoop-3.2.3/sbin$
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