

Course: MMDS

Lab 01

Set up Hadoop

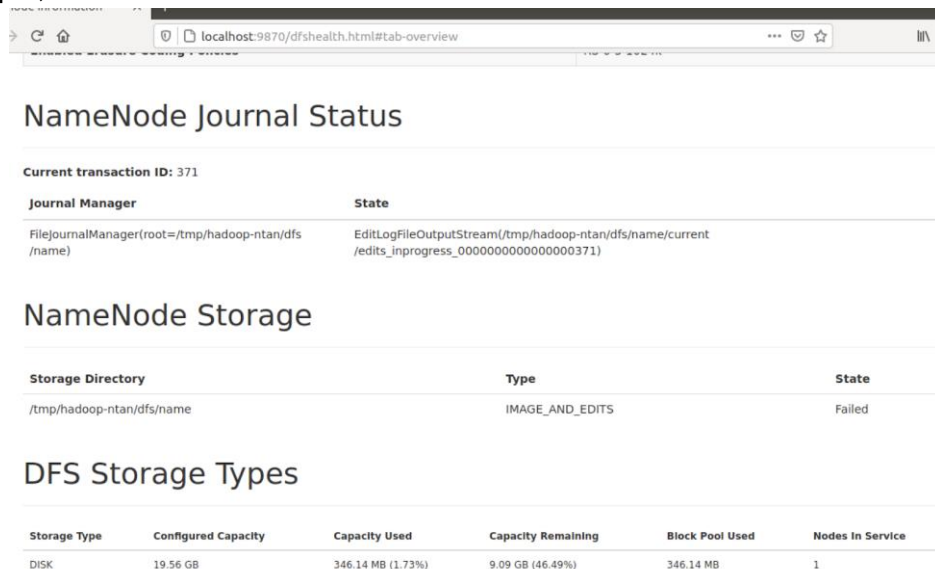
Fill answers of the questions below in the given tables.

Your screenshots must contain commands for required operations.

Question 1:

Set up Hadoop following this [tutorial](#) and then take a screenshot of the hdfs-site ([localhost:9870](#)) which shows information for NameNode Journal Status, NameNode Storage, DFS Storage Types (Overview page).

For example,



The screenshot shows the Hadoop NameNode Journal Status, NameNode Storage, and DFS Storage Types overview page. The browser address bar shows 'localhost:9870/dfshealth.html#tab-overview'. The page is divided into three sections: NameNode Journal Status, NameNode Storage, and DFS Storage Types.

NameNode Journal Status	
Current transaction ID: 371	
Journal Manager	State
FileJournalManager(root=/tmp/hadoop-ntan/dfs/name)	EditLogOutputStream(/tmp/hadoop-ntan/dfs/name/current/edits_inprogress_00000000000000000371)

NameNode Storage		
Storage Directory	Type	State
/tmp/hadoop-ntan/dfs/name	IMAGE_AND_EDITS	Failed

DFS Storage Types					
Storage Type	Configured Capacity	Capacity Used	Capacity Remaining	Block Pool Used	Nodes In Service
DISK	19.56 GB	346.14 MB (1.73%)	9.09 GB (46.49%)	346.14 MB	1

Block Deletion Start Time: Thu Jan 18 19:21:55 +0700 2024

Last Checkpoint Time: Thu Jan 18 19:21:32 +0700 2024

Enabled Erasure Coding Policies: RS-6-3-1024k

NameNode Journal Status

Current transaction ID: 1

Journal Manager	State
FileJournalManager(root=/tmp/hadoop-hohuan/dfs/name)	EditLogFileStream(/tmp/hadoop-hohuan/dfs/name/current/edits_inprogress_0000000000000000001)

NameNode Storage

Storage Directory	Type	State
/tmp/hadoop-hohuan/dfs/name	IMAGE_AND_EDITS	Active

DFS Storage Types

Storage Type	Configured Capacity	Capacity Used	Capacity Remaining	Block Pool Used	Nodes In Service
DISK	24.44 GB	24 KB (0%)	13.12 GB (53.7%)	24 KB	1

Hadoop, 2019.

Question 2:

Set up Hadoop following this [tutorial](#) and then take a screenshot of the yarn-site (localhost:8088) which shows information for nodes (<http://localhost:8088/cluster/nodes>).

For example,

Nodes of the cluster

Cluster Metrics

Apps Submitted	Apps Pending	Apps Running	Apps Completed	Containers Running	Memory Used	Memory Total	Memory Reserved	VCoers Used	VCoers Total	VCoers 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

Node Labels	Rack	Node State	Node Address	Node HTTP Address	Last health-update	Health-report	Containers	Allocation Tags	Mem Used	Mem Avail	VCoers Used	VCoers Avail	Version
/default-rack		RUNNING	ubuntu:34741	ubuntu:8042	Tue May 11 12:30:58 +0700 2021		0		0 B	8 GB	0	8	3.2.1

Showing 1 to 1 of 1 entries

Ubuntu 18.04 [Running] - Oracle VM VirtualBox

Activities Firefox Web Browser

Nodes of the cluster

localhost:8088/cluster/nodes

Nodes of the cluster

Cluster

Cluster Metrics

Cluster Nodes Metrics

Scheduler Metrics

Showing 1 to 1 of 1 entries

Node Labels

29°C Trôi mây

7:29 PM 1/18/2024

Apps Submitted	Apps Pending	Apps Running	Apps Completed	Containers Running	Memory Used	Memory Total	Memory Reserved	VCores Used	VCores Total	VCores Reserved
1	0	1	0	5	6 GB	8 GB	0 B	5	8	0

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

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

Node Labels	Rack	Node State	Node Address	Node HTTP Address	Last health update	Health report	Containers	Allocation Tags	Mem Used	Mem Avail	VCores Used	VCores Avail	Version
/default-rack		RUNNING	ubuntu.myquest.virtualbox.org-41615	ubuntu.myquest.virtualbox.org-8042	Thu Jan 18 19:27:59 +0700 2024		5		6 GB	2 GB	5	3	3.2.1

Showing 1 to 1 of 1 entries

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Submission Notice

- Export your answer file as pdf
- Rename the pdf following the format:
lab01_<student number>_<Full Name>.pdf
E.g: **lab01_123456_NguyenThanhAn.pdf**
If you have not been assigned a student number yet, then use 123456 instead.
- Careless mistakes in filename, format, question order, etc. are not accepted (0 pts).