

DSC 650

Week 1 Assignment

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## HDFS Screenshot

The screenshot displays the Hadoop DFS Health web interface in a browser window. The browser's address bar shows the URL `localhost:9870/dfshealth.html#tab-overview`. The interface has a green navigation bar with tabs: Hadoop, Overview (selected), Datanodes, Datanode Volume Failures, Snapshot, Startup Progress, and Utilities. The main content area is titled "Overview 'master:9000' (active)". Below the title is a table with the following information:

Started:	Fri Mar 15 21:43:01 -0500 2024
Version:	3.2.3, rabe5358143720085498613d399be3bbf01e0f131
Compiled:	Sat Mar 19 20:18:00 -0500 2022 by ubuntu from branch-3.2.3
Cluster ID:	CID-8e78185b-fce0-4343-8c7f-5095e051d901
Block Pool ID:	BP-1632848888-172.26.1.1-1710556948179

Below the table is a "Summary" section. It contains the following text:

Security is off.  
Safemode is off.  
362 files and directories, 288 blocks (288 replicated blocks, 0 erasure coded block groups) = 650 total filesystem object(s).  
Heap Memory used 125.95 MB of 306 MB Heap Memory. Max Heap Memory is 1.72 GB.  
Non Heap Memory used 61.81 MB of 63.06 MB Committed Non Heap Memory. Max Non Heap Memory is <unbounded>.

Below the text is a table with the following information:

Configured Capacity:	96.55 GB
Configured Remote Capacity:	0 B

The bottom of the screenshot shows the Windows taskbar with the Start button, Search bar, and several application icons. The system tray on the right shows the date and time as 10:29 PM 3/15/2024.

YARN Screenshot

Cloud Compute

VM instances

bellevue-univ

Namenode inform

All Applications X

Spark Master

History Server

Master: master

Soir Admin

localhost:8443/

localhost:8088/cluster

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	Used Resources	Total Resources	Reserved Resources	Physical Memory
0	0	0	0	0	<memory:0 B, vCores:0>	<memory:8 GB, vCores:16>	<memory:0 B, vCores:0>	94

Cluster Nodes Metrics

Active Nodes	Decommissioning Nodes	Decommissioned Nodes	Lost Nodes	Unhealthy Nodes	Rebooted Nodes
2	0	0	0	0	0

User Metrics for dr.who

Apps Submitted	Apps Pending	Apps Running	Apps Completed	Containers Running	Containers Pending	Containers Reserved	Memory Used	Memory Pending	Memory Reserved	vCores
0	0	0	0	0	0	0	0 B	0 B	0 B	0

Scheduler Metrics

Scheduler Type	Scheduling Resource Type	Minimum Allocation	Maximum Allocation	Maximum Cluster Application P
Fair Scheduler	[memory-mb (unit=M), vcores]	<memory:512, vCores:1>	<memory:1536, vCores:4>	0

Show 20 entries

ID	User	Name	Application Type	Queue	Application Priority	StartTime	LaunchTime	FinishTime	State	FinalStatus	Running Containers	Allocated CPU V-Cores	Allocated Memory MB	Allocated GPUs	Reserved CPU V-Cores	Reserved Memory MB	Reserved GPUs	% of Queue
No data available in table																		

Showing 0 to 0 of 0 entries

Spark Master

Cloud Compute

VM instances

bellevue-univ

Namenode inform

All Applications

Spark Master X

History Server

Master: master

Soir Admin

localhost:8443/

localhost:8080

Spark Master at spark://master:7077

URL: spark://master:7077

Alive Workers: 2

Cores in use: 8 Total, 0 Used

Memory in use: 13.5 GiB Total, 0.0 B Used

Resources in use:

Applications: 0 Running, 0 Completed

Drivers: 0 Running, 0 Completed

Status: ALIVE

Workers (2)

Worker Id	Address	State	Cores	Memory	Resources
worker-20240316024326-worker1-8881	worker1:8881	ALIVE	4 (0 Used)	6.7 GiB (0.0 B Used)	
worker-20240316024326-worker2-8882	worker2:8882	ALIVE	4 (0 Used)	6.7 GiB (0.0 B Used)	

Running Applications (0)

Application ID	Name	Cores	Memory per Executor	Resources Per Executor	Submitted Time	User	State	Duration
----------------	------	-------	---------------------	------------------------	----------------	------	-------	----------

Completed Applications (0)


Application ID	Name	Cores	Memory per Executor	Resources Per Executor	Submitted Time	User	State	Duration
----------------	------	-------	---------------------	------------------------	----------------	------	-------	----------

2

Spark History

Cloud Comput...VM instances...bellevue-univ...Namenode inform...All Applications...Spark Master...History Server XMaster: masterSolr Adminlocalhost:8443/

localhost:18080/?showIncomplete=false

History Server3.0.0

Event log directory: hdfs://log/spark  
Last updated: 2024-03-15 22:19:25  
Client local time zone: America/Chicago

No completed applications found!


Did you specify the correct logging directory? Please verify your setting of spark.history.fs.logDirectory listed above and whether you have the permissions to access it. It is also possible that your application did not run to completion or did not stop the SparkContext.

[Show incomplete applications](#)

HBASE

Cloud Comput...VM instances...bellevue-univ...Namenode inform...All Applications...Spark Master...History Server XMaster: master XSolr Adminlocalhost:8443/

localhost:16010/master-status

HomeTable DetailsProcedures & LocksHBCK ReportProcess MetricsLocal LogsLog LevelDebug DumpMetrics DumpProfilerHBase Configuration

Master master

Region Servers

Base StatsMemoryRequestsStorefilesCompactionsReplications

ServerName	Start time	Last contact	Version	Requests Per Second	Num. Regions
worker1,16020,1710557127644	2024-03-16T02:45:27.644Z	0 s	2.3.6	0	1
worker2,16020,1710557127039	2024-03-16T02:45:27.039Z	2 s	2.3.6	0	1
Total:2				0	2

Backup Masters

ServerName	Port	Start Time
Total:0		

Tables

User TablesSystem TablesSnapshots

- Dashboard
- Logging
- Security
- Core Admin
- Java Properties
- Thread Dump

Instance

Start 37 minutes ago

Versions

<b>solr-spec</b>	9.5.0
<b>solr-impl</b>	9.5.0 cdd27dd15c3a6574032e9b148ab4e383599 - gerlowskija - 2024-02-07 15:10:13
<b>lucene-spec</b>	9.9.2
<b>lucene-impl</b>	9.9.2 a2939784c4ca60bc28bf488b5479c02fc2e5e22c - 2024-01-25 09:51:09

JVM

Runtime Eclipse Adoptium OpenJDK 64-Bit Server VM 17.0.10 17.0.10+7

Processors 4

Args

```

-DSTOP.KEY=solrlocks
-DSTOP.PORT=7983
-DdisableAdminUI=false
-Djava.security.manager
-Djava.security.policy=/opt/solr-9.5.0/server/etc/security.policy
-Djava.security.properties=/opt/solr-9.5.0/server/etc/security.properties
-Djava.util.logging.manager=org.apache.logging.log4j.jul.LogManager
-Djetty.home=/opt/solr-9.5.0/server
-Djetty.port=8983
-Dlog4j.configurationFile=/var/solr/log4j2.xml
-Dsolr.default.confdir=/opt/solr-9.5.0/server/solr/configsets/_default/conf
-Dsolr.install.dir=/opt/solr-9.5.0
-Dsolr.install.symDir=/opt/solr
-Dsolr.internal.network.permission=*
-Dsolr.jetty.host=0.0.0.0
-Dsolr.jetty.inetaccess.excludes=
-Dsolr.jetty.inetaccess.includes=

```

System 0.52

Physical Memory 98.3%  
7.61 GB / 7.75 GB

File Descriptor Count 0.0%  
169 / 1048576

JVM-Memory 40.9%  
209.55 MB / 512.00 MB

Security  
WARNING: Security is not enabled for this server!  
See security screen for how to enable authentication  
TLS enabled? ❌

# KAFKA

```
root@dsc650-kueviakoe:/home/rsa-key-20240315/dsc650-infra/bellevue-bigdata/kafka#
Global Options:
  --config string      Location of client config files (default "/root/.docker")
  -c, --context string  Name of the context to use to connect to the daemon (overrides DOCKER_HOST env var and default context set with "docker context use")
  -D, --debug           Enable debug mode
  -H, --host list       Daemon socket to connect to
  -l, --log-level string Set the logging level ("debug", "info", "warn", "error", "fatal") (default "info")
  --tls                Use TLS; implied by --tlsverify
  --tlscacert string    Trust certs signed only by this CA (default "/root/.docker/ca.pem")
  --tlscert string      Path to TLS certificate file (default "/root/.docker/cert.pem")
  --tlskey string       Path to TLS key file (default "/root/.docker/key.pem")
  --tlsverify           Use TLS and verify the remote
  -v, --version         Print version information and quit

Run 'docker COMMAND --help' for more information on a command.

For more help on how to use Docker, head to https://docs.docker.com/go/guides/

root@dsc650-kueviakoe:/home/rsa-key-20240315/dsc650-infra/bellevue-bigdata/kafka# docker compose up -d
[+] Running 2/3
  ✓ zookeeper 8 layers [#####] 0B/0B Pulled
    9d19ee268e0d Pull complete
    32db0ad8d863 Pull complete
    e01bb55fbcac Pull complete
    297c6e3d37ee Pull complete
    49c4f23b55f6 Pull complete
    82b2637e3749 Pull complete
    49f6dfebf85b Pull complete
    e7e1ad511904 Pull complete
  ✓ kafka 7 layers [#####] 0B/0B Pulled
    42c077c10790 Pull complete
    44b062e78fd7 Pull complete
    b3ba9647f279 Pull complete
    10c9a58bd495 Pull complete
    ed9bd501c190 Pull complete
    03346d650161 Pull complete
    539ec416bc55 Pull complete
[+] Running 2/3
  ✓ Network kafka_default Created
  ✓ Container kafka-zookeeper-1 Started
  ✓ Container kafka-kafka-1 Started
root@dsc650-kueviakoe:/home/rsa-key-20240315/dsc650-infra/bellevue-bigdata/kafka# docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED     STATUS      PORTS                               NAMES
3bdb72d173e2  nasheeb/zookeeper:1.0  "/docker-entrypoint..."  8 seconds ago  Up 4 seconds  2888/tcp, 3888/tcp, 0.0.0.0:2181->2181/tcp, :::2181->2181/tcp, 8080/tcp  kafka-zooke
per-1
3f8c30757d0a  nasheeb/kafka:1.0      "start-kafka.sh"          8 seconds ago  Up Less than a second  0.0.0.0:32770->9092/tcp, :::32770->9092/tcp  kafka-kafka
391c68fbacdd  solr               "docker-entrypoint.s..."  54 minutes ago  Up 54 minutes  0.0.0.0:8983->8983/tcp, :::8983->8983/tcp  solr_solr_1
root@dsc650-kueviakoe:/home/rsa-key-20240315/dsc650-infra/bellevue-bigdata/kafka#
```