Install Hadoop v.3.4.0 in your dev environment

```
C:\hadoop-3.4.0>bin\hadoop version
Hadoop 3.4.0
Source code repository git@github.com:apache/hadoop.git -r bd8b77f398f626bb7791783192ee7a5dfaeec760
Compiled by root on 2024-03-04T06:35Z
Compiled on platform linux-x86_64
Compiled with protoc 3.21.12
From source with checksum f7fe694a3613358b38812ae9c31114e
This command was run using /C:/hadoop-3.4.0/share/hadoop/common/hadoop-common-3.4.0.jar

C:\hadoop-3.4.0>date
The current date is: Mon 09/23/2024
Enter the new date: (mm-dd-yy)
```

bin\hadoop envvars- This command didn't work in windows.

```
C:\hadoop-3.4.0>echo %JAVA_HOME%
C:\Java\jdk1.8.0_202

C:\hadoop-3.4.0>echo %HADOOP_HOME%
C:\hadoop-3.4.0

C:\hadoop-3.4.0>bin\hadoop envvars.cmd
Error: Could not find or load main class envvars.cmd

C:\hadoop-3.4.0>bin\hadoop envvars
Error: Could not find or load main class envvars

C:\hadoop-3.4.0>bin\hadoop env.cmd
Error: Could not find or load main class env.cmd

C:\hadoop-3.4.0>bin\hadoop env
Error: Could not find or load main class env

C:\hadoop-3.4.0>
```

In windows we can print the path of each environment variable individually as below.

```
C:\hadoop-3.4.0>echo %JAVA_HOME%
C:\Java\jdk1.8.0_202

C:\hadoop-3.4.0>echo %HADOOP_HOME%
C:\hadoop-3.4.0

C:\hadoop-3.4.0>
```

Capture the screenshot of the HDFS web UI

localhost:9870/dfshealth.html#tab-overview

Hadoop | Overview | Datanodes | Datanode Volume Failures | Snapshot | Startup Progress | Utilities ▾

Overview 'localhost:9000' (✔active)

Started:	Tue Sep 24 22:56:54 -0700 2024
Version:	3.4.0, rbd8b77f398f626bb7791783192ee7a5dfaeec760
Compiled:	Sun Mar 03 22:35:00 -0800 2024 by root from (HEAD detached at release-3.4.0-RC3)
Cluster ID:	CID-6606de13-8c31-4cd8-963f-7a4f13aa9aa3
Block Pool ID:	BP-1595830690-172.20.224.1-1727243649793

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 142.94 MB of 333 MB Heap Memory. Max Heap Memory is 889 MB.

Non Heap Memory used 52.1 MB of 53.92 MB Commited Non Heap Memory. Max Non Heap Memory is <unbounded>.

Configured Capacity:	930.77 GB
Configured Remote Capacity:	0 B

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

NameNode Journal Status

Current transaction ID: 1

Journal Manager	State
FileJournalManager(root=C:\hadoop\data\namenode)	EditLogFileOutputStream(C:\hadoop\data\namenode\current\edits_inprogress_0000000000000000001)

NameNode Storage

Storage Directory	Type	State
C:\hadoop\data\namenode	IMAGE_AND_EDITS	Active

DFS Storage Types

Storage Type	Configured Capacity	Capacity Used	Capacity Remaining	Block Pool Used	Nodes In Service
DISK	930.77 GB	148 B (0%)	759.51 GB (81.6%)	148 B	1

Hadoop, 2024.

Hadoop   Overview   Datanodes   Datanode Volume Failures   Snapshot   Startup Progress   Utilities

Datanode Information

✔ In service   ⓘ Down   ⊘ Decommissioning   ⊘ Decommissioned   ⊘ Decommissioned & dead
🔧 Entering Maintenance   🔧 In Maintenance   🔧 In Maintenance & dead

Datanode usage histogram
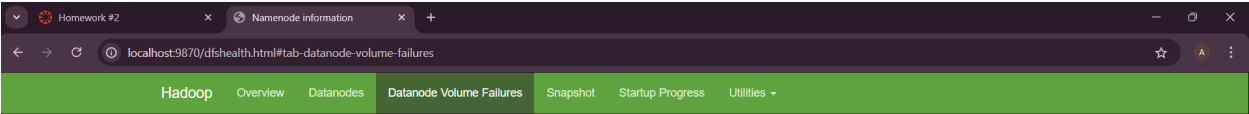

Disk usage of each DataNode (%)

In operation

DataNode State [All]   Show [25] entries   Search: [   ]

	Last Block	Non DFS		Block	Block pool	

localhost:9870/dfshealth.html#tab-datanode-volume-failures

Hadoop   Overview   Datanodes   Datanode Volume Failures   Snapshot   Startup Progress   Utilities ▾

Datanode Volume Failures

There are no reported volume failures.

Hadoop, 2024.

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localhost:9870/dfshealth.html#tab-startup-progress

Hadoop   Overview   Datanodes   Datanode Volume Failures   Snapshot   Startup Progress   Utilities ▾
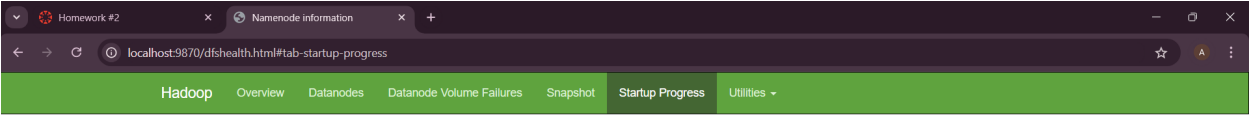
Startup Progress

Elapsed Time: 0 sec, Percent Complete: 100%

Phase	Completion	Elapsed Time
Loading fsimage C:\hadoop\data\namenode\current\fsimage_0000000000000000000 397 B	**100%**	**0 sec**
erasure coding policies (0/0)	100%	
inodes (1/1)	100%	
delegation tokens (0/0)	100%	
cache pools (0/0)	100%	
Loading edits	**100%**	**0 sec**
Saving checkpoint	**100%**	**0 sec**
Safe mode	**100%**	**0 sec**
awaiting reported blocks (0/0)	100%	

Hadoop, 2024.