

# DSCI 551 LAB2

Jiahao Sun

-ls

```
13451@DESKTOP-2DRN4D3 /cygdrive/d/usc/dsci551
$ ssh -i "dsci551-jiahaosun.pem" ec2-user@ec2-3-141-22-75.us-east-2.compute.amazonaws.com
Last login: Sat Feb 20 01:58:47 2021 from 45.135.186.47

  _|  _|  _|
  _| (  _| /
  _|\_|_|_|

Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-20-205 ~]$ cd hadoop-3.2.2/
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$ cd bin/
[ec2-user@ip-172-31-20-205 bin]$ hdfs dfs -ls
Found 1 items
drwxr-xr-x - ec2-user supergroup          0 2021-02-16 13:55 dsci551
```

‘drwxr-xr-x’ indicates the authority of the file.

‘d’ means that it is a direction file. ‘rwx’ means that the owner of the file can read, write and execute this file. The first ‘r-x’ means that the users in the same group can read and execute this file but can not write. The second ‘r-x’ means that other users has the same authority with the users in the same group.

-mkdir

```
[ec2-user@ip-172-31-20-205 bin]$ hdfs dfs -mkdir /user
mkdir: `/user': File exists
[ec2-user@ip-172-31-20-205 bin]$ hdfs dfs -mkdir /user/ec2-user
mkdir: `/user/ec2-user': File exists
[ec2-user@ip-172-31-20-205 bin]$ hdfs dfs -mkdir /user/ec2-user/dsci551
mkdir: `/user/ec2-user/dsci551': File exists
[ec2-user@ip-172-31-20-205 bin]$ hdfs dfs -mkdir /user/ec2-user/dsci551/input
mkdir: `/user/ec2-user/dsci551/input': File exists
[ec2-user@ip-172-31-20-205 bin]$
```

-rmdir

```
[ec2-user@ip-172-31-20-205 bin]$ pwd
/home/ec2-user/hadoop-3.2.2/bin
[ec2-user@ip-172-31-20-205 bin]$ hdfs dfs -mkdir /user/ec2-user/test
[ec2-user@ip-172-31-20-205 bin]$ hdfs dfs -ls
Found 2 items
drwxr-xr-x - ec2-user supergroup          0 2021-02-16 13:55 dsci551
drwxr-xr-x - ec2-user supergroup          0 2021-02-20 02:38 test
[ec2-user@ip-172-31-20-205 bin]$ hdfs dfs -rmdir /user/ec2-user/test
[ec2-user@ip-172-31-20-205 bin]$ hdfs dfs -ls
Found 1 items
drwxr-xr-x - ec2-user supergroup          0 2021-02-16 13:55 dsci551
[ec2-user@ip-172-31-20-205 bin]$
```

-put

```
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$ cd etc/hadoop/
[ec2-user@ip-172-31-20-205 hadoop]$ hdfs dfs -put *.xml /user/ec2-user/dsci551/input
put: '/user/ec2-user/dsci551/input/capacity-scheduler.xml': File exists
put: '/user/ec2-user/dsci551/input/core-site.xml': File exists
put: '/user/ec2-user/dsci551/input/hadoop-policy.xml': File exists
put: '/user/ec2-user/dsci551/input/hdfs-site.xml': File exists
put: '/user/ec2-user/dsci551/input/httpfs-site.xml': File exists
put: '/user/ec2-user/dsci551/input/kms-acls.xml': File exists
put: '/user/ec2-user/dsci551/input/kms-site.xml': File exists
put: '/user/ec2-user/dsci551/input/mapred-site.xml': File exists
put: '/user/ec2-user/dsci551/input/yarn-site.xml': File exists
```

-get

```
[ec2-user@ip-172-31-20-205 ~]$ cd hadoop-3.2.2/
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$ hdfs dfs -get /user/ec2-user/dsci551/input input1
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$ ls
bin etc include input1 lib libexec LICENSE.txt logs NOTICE.txt README.txt sbin share
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$
```

-rm

```
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$ hdfs dfs -rm /user/ec2-user/dsci551/input/yarn-site.xml
Deleted /user/ec2-user/dsci551/input/yarn-site.xml
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$
```

-cp

```
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$ hdfs dfs -cp /user/ec2-user/dsci551/input /user/ec2-user/dsci551/input2
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$ hdfs dfs -ls /user/ec2-user/dsci551
Found 2 items
drwxr-xr-x - ec2-user supergroup 0 2021-02-20 02:53 /user/ec2-user/dsci551/input
drwxr-xr-x - ec2-user supergroup 0 2021-02-20 02:55 /user/ec2-user/dsci551/input2
```

-chmod

```
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$ hdfs dfs -chmod 777 /user/ec2-user/dsci551/input2
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$
```

-appendToFile&cat

```
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$ hdfs dfs -cat /user/ec2-user/dsci551/input3
cat: '/user/ec2-user/dsci551/input3': No such file or directory
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$ hdfs dfs -appendToFile etc/hadoop/core-site.xml /user/ec2-user/dsci551/input3
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$ hdfs dfs -cat /user/ec2-user/dsci551/input3
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

    http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software
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>fs.defaultFS</name> <value>hdfs://localhost:9000</value> </property>
</configuration>
[ec2-user@ip-172-31-20-205 hadoop-3.2.2]$
```

-cat

```
[ec2-user@ip-172-31-20-205 ~]$ hdfs dfs -cat /user/ec2-user/dsci551/input/core-site.xml
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
  Licensed under the Apache License, Version 2.0 (the "License");
  you may not use this file except in compliance with the License.
  You may obtain a copy of the License at

    http://www.apache.org/licenses/LICENSE-2.0

  Unless required by applicable law or agreed to in writing, software
  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>fs.defaultFS</name> <value>hdfs://localhost:9000</value> </property>
</configuration>
```

-stat

```
[ec2-user@ip-172-31-20-205 ~]$ hadoop fs -stat "type:%F perm:%a %u:%g size:%b mtime:%y atime:%x name:%n" /user/ec2-user/dsci551/input3
type:regular file perm:644 ec2-user:supergroup size:860 mtime:2021-02-20 05:11:11 atime:2021-02-20 05:11:11 name:input3
```

Type of the file,

Permission is 644.

Usergroup is supergroup.

Size 860.

Modify time and access time is 2021-02-20 05:11:11.

Name of the file is 'input3'.