

## Managing Database Using Hive

### Queries:

```
hadoop@jeff-VirtualBox:~$ hive
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/home/hadoop/apache-hive-3.1.2-bin/lib/log4j-slf4j-impl-2.10.0.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/home/hadoop/hadoop/share/hadoop/common/lib/slf4j-reload4j-1.7.36.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
SLF4J: Actual binding is of type [org.apache.logging.slf4j.Log4jLoggerFactory]
Hive Session ID = fbce9664-cfa8-48e3-8279-0056d07792ab

Logging initialized using configuration in jar:file:/home/hadoop/apache-hive-3.1.2-bin/lib/hive-common-3.1.2.jar!/hive-log4j2.properties Async: true
Hive Session ID = 84ed5565-b938-4c36-9f69-4282d1499b39
Hive-on-MR is deprecated in Hive 2 and may not be available in the future versions. Consider using a different execution engine (i.e. spark, tez) or using Hive 1.X releases.
hive> CREATE DATABASE financials;
OK
Time taken: 0.445 seconds
hive> use financials;
OK
Time taken: 0.02 seconds
hive> CREATE TABLE finance_table(id INT, name STRING);
OK
Time taken: 0.460 seconds
```

```
hive> INSERT INTO finance_table VALUES (1, 'Jeff'), (2, 'Nikki'), (3, 'Rose');
Query ID = hadoop_20240830175337_16216b2e-89e3-4b8e-9fa8-bf5d26b8ad01
Total jobs = 3
Launching Job 1 out of 3
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Job running in-process (local Hadoop)
2024-08-30 17:53:41,053 Stage-1 map = 0%,  reduce = 0%
2024-08-30 17:53:42,061 Stage-1 map = 100%,  reduce = 100%
Ended Job = job_local693003618_0001
Stage-4 is selected by condition resolver.
Stage-3 is filtered out by condition resolver.
Stage-5 is filtered out by condition resolver.
Moving data to directory hdfs://localhost:9000/user/hive/warehouse/financials.db/finance_table/.hive-staging_hive_2024-
8-30_17-53-37_729_92038976188877633-1/-ext-10000
Loading data to table financials.finance_table
MapReduce Jobs Launched:
Stage-Stage-1:  HDFS Read: 0 HDFS Write: 204 SUCCESS
Total MapReduce CPU Time Spent: 0 msec
OK
Time taken: 4.699 seconds
```

```
hive> SELECT * from finance_table;
OK
1      Jeff
2      Nikki
3      Rose
Time taken: 0.126 seconds, Fetched: 3 row(s)
hive> DESCRIBE finance_table;
OK
id              int
name            string
Time taken: 0.035 seconds, Fetched: 2 row(s)
hive> ALTER TABLE finance_table ADD COLUMNS (age INT);
OK
Time taken: 0.077 seconds
hive> quit;
hadoop@jeff-VirtualBox:~$
```