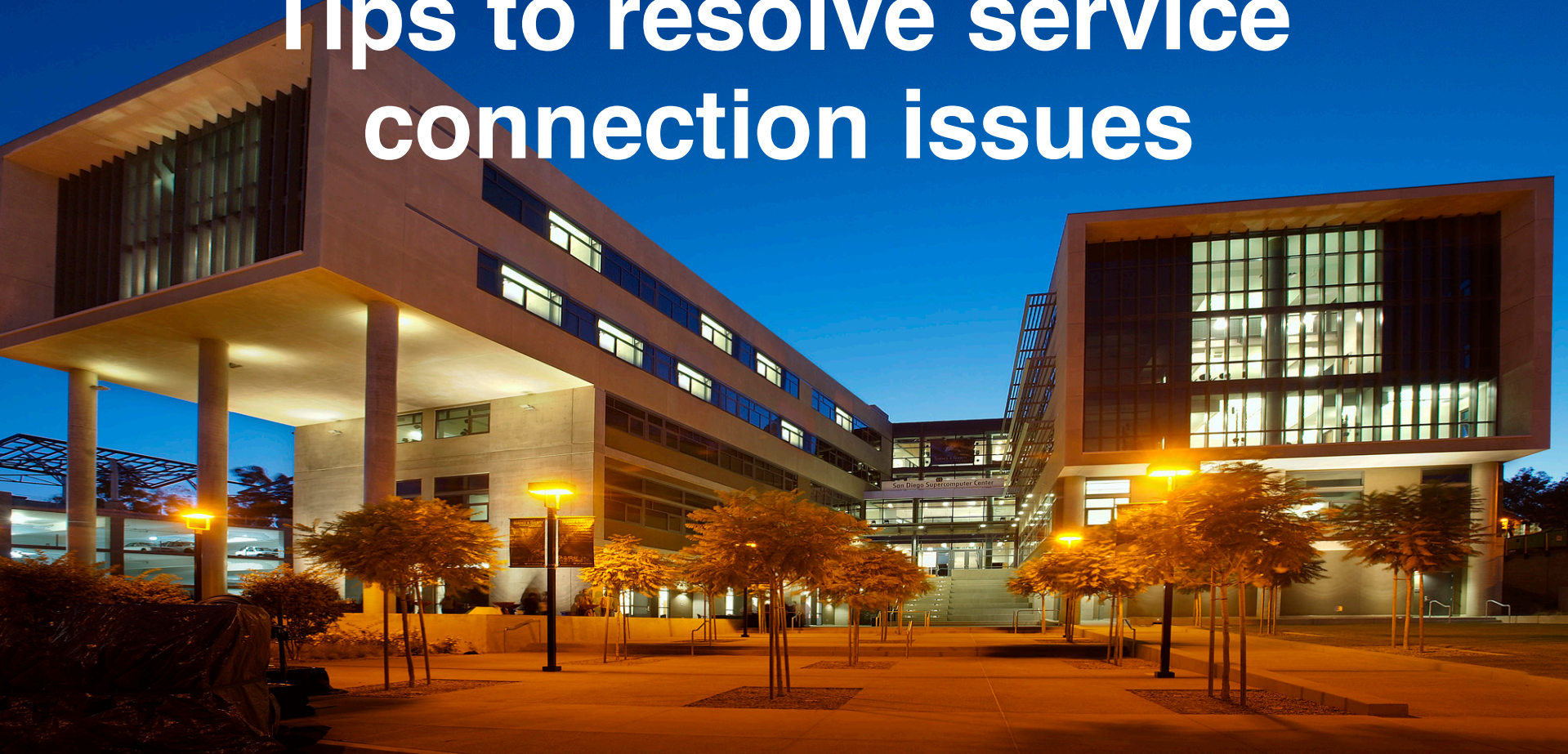


Tips to resolve service connection issues



Reported issues

- **Hbase shell cannot connect to zookeeper**
- **HDFS REST API unable to connect to hadoop-httpfs service**
- **beeline failed to connect to MetaStore Server**
- **Typically this is because the service is not running and can be fixed by starting the relevant services.**

Zookeeper not running

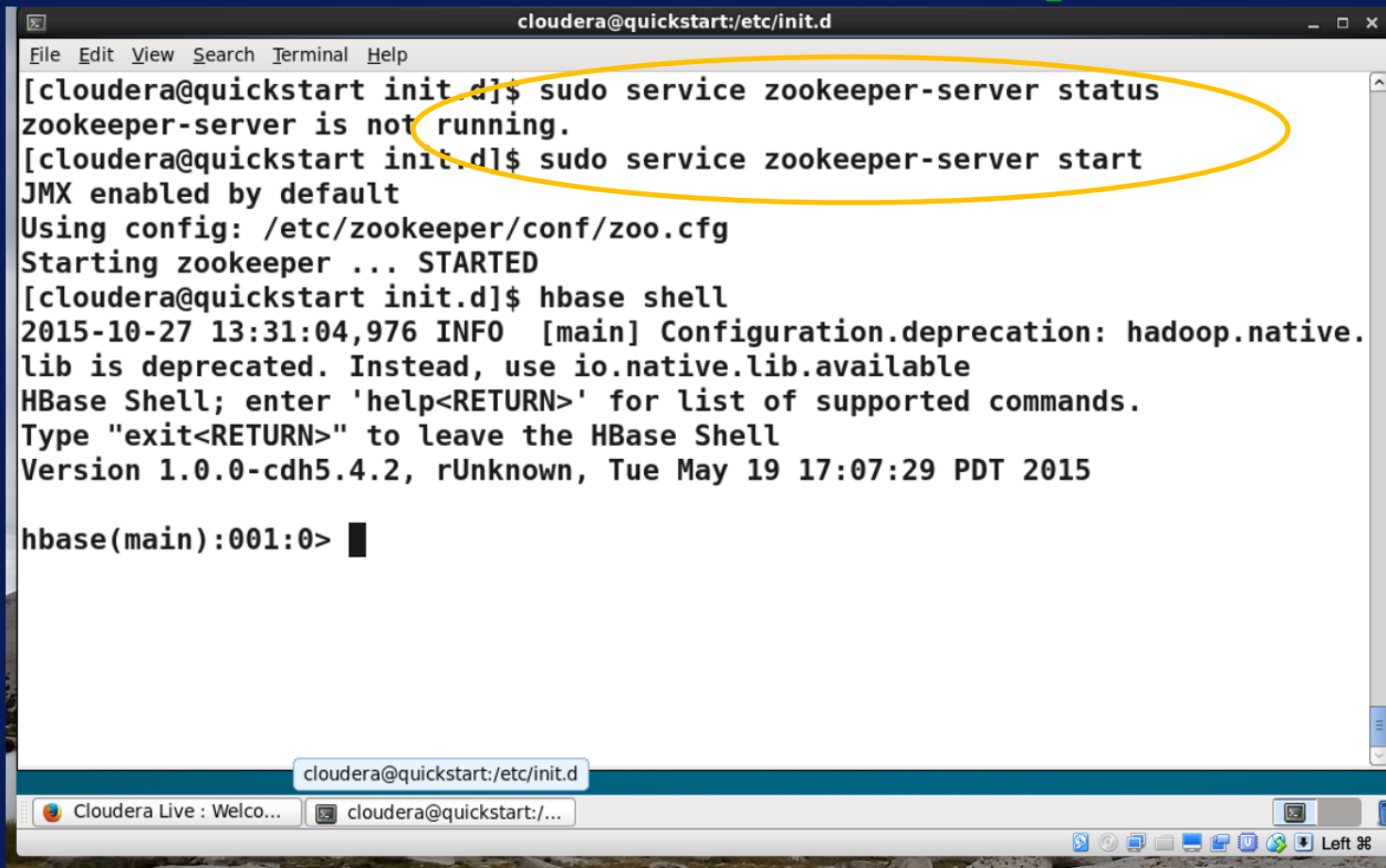
- **Commands to check status and start:**
sudo service zookeeper-server status
sudo service zookeeper-server start

(See next few slides for snapshots)

Zookeeper not running

```
cloudera@quickstart:/etc/init.d$ hbase shell
2015-10-27 13:29:37,318 INFO [main] Configuration.deprecation: hadoop.native.lib is deprecated. Instead, use io.native.lib.available
2015-10-27 13:29:56,878 ERROR [main] zookeeper.RecoverableZooKeeper: ZooKeeper exists failed after 4 attempts
2015-10-27 13:29:56,879 WARN [main] zookeeper.ZKUtil: hconnection-0x3ade87500x0, quorum=localhost:2181, baseZNode=/hbase Unable to set watcher on znode (/hbase/hbaseid)
org.apache.zookeeper KeeperException$ConnectionLossException: KeeperErrorCode = ConnectionLoss for /hbase/hbaseid
    at org.apache.zookeeper.KeeperException.create(KeeperException.java:99)
    at org.apache.zookeeper.KeeperException.create(KeeperException.java:51)
    at org.apache.zookeeper.ZooKeeper.exists(ZooKeeper.java:1041)
    at org.apache.hadoop.hbase.zookeeper.RecoverableZooKeeper.exists(RecoverableZooKeeper.java:222)
    at org.apache.hadoop.hbase.zookeeper.ZKUtil.checkExists(ZKUtil.java:481)
    at org.apache.hadoop.hbase.zookeeper.ZKClusterId.readClusterIdZNode(ZK
```

Start Zookeeper

A terminal window titled 'cloudera@quickstart:/etc/init.d' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the execution of 'sudo service zookeeper-server status' (circled in yellow), which returns 'zookeeper-server is not running.' followed by 'sudo service zookeeper-server start'. The output shows 'JMX enabled by default', 'Using config: /etc/zookeeper/conf/zoo.cfg', and 'Starting zookeeper ... STARTED'. Then 'hbase shell' is entered, showing a timestamp, log level, and deprecation warning. The HBase Shell prompt is shown with help instructions and the version '1.0.0-cdh5.4.2'.

```
cloudera@quickstart:/etc/init.d
File Edit View Search Terminal Help
[cloudera@quickstart init.d]$ sudo service zookeeper-server status
zookeeper-server is not running.
[cloudera@quickstart init.d]$ sudo service zookeeper-server start
JMX enabled by default
Using config: /etc/zookeeper/conf/zoo.cfg
Starting zookeeper ... STARTED
[cloudera@quickstart init.d]$ hbase shell
2015-10-27 13:31:04,976 INFO [main] Configuration.deprecation: hadoop.native.
lib is deprecated. Instead, use io.native.lib.available
HBase Shell; enter 'help<RETURN>' for list of supported commands.
Type "exit<RETURN>" to leave the HBase Shell
Version 1.0.0-cdh5.4.2, rUnknown, Tue May 19 17:07:29 PDT 2015

hbase(main):001:0>
```

MetaStore restart

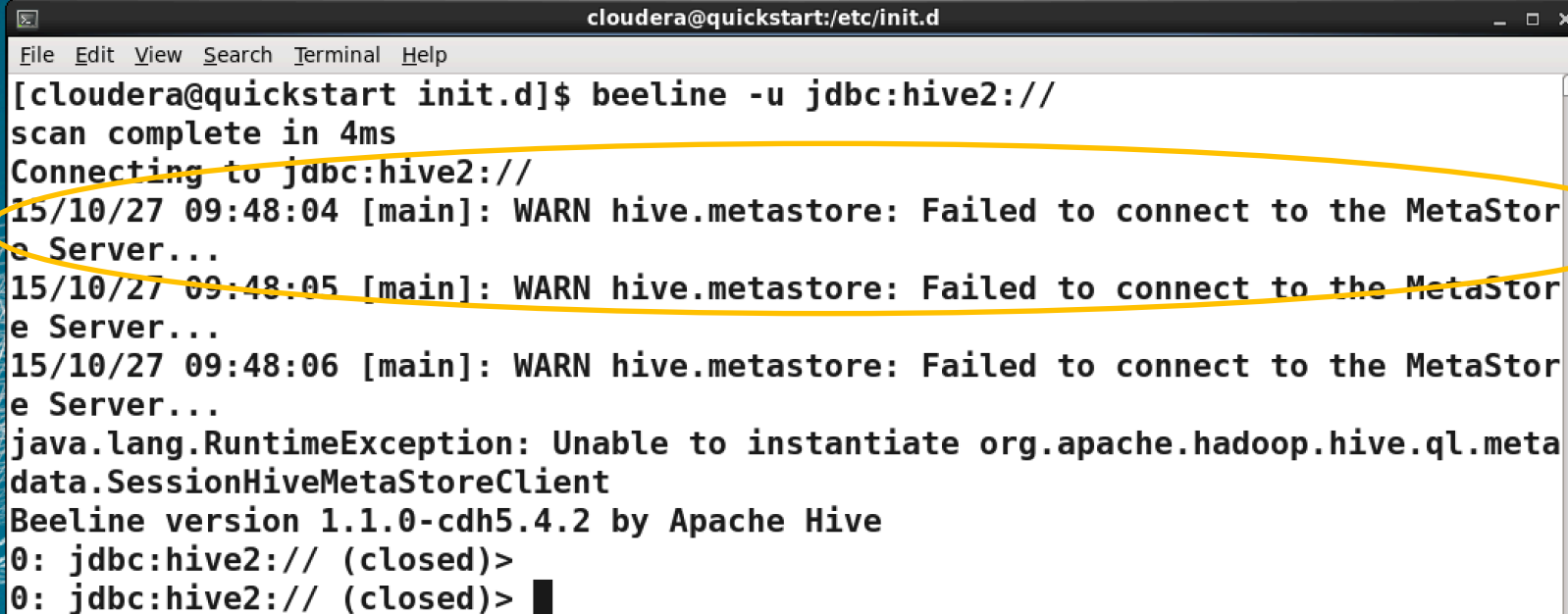
Commands to check status and restart:

sudo service hive-metastore status

sudo service hive-metastore start

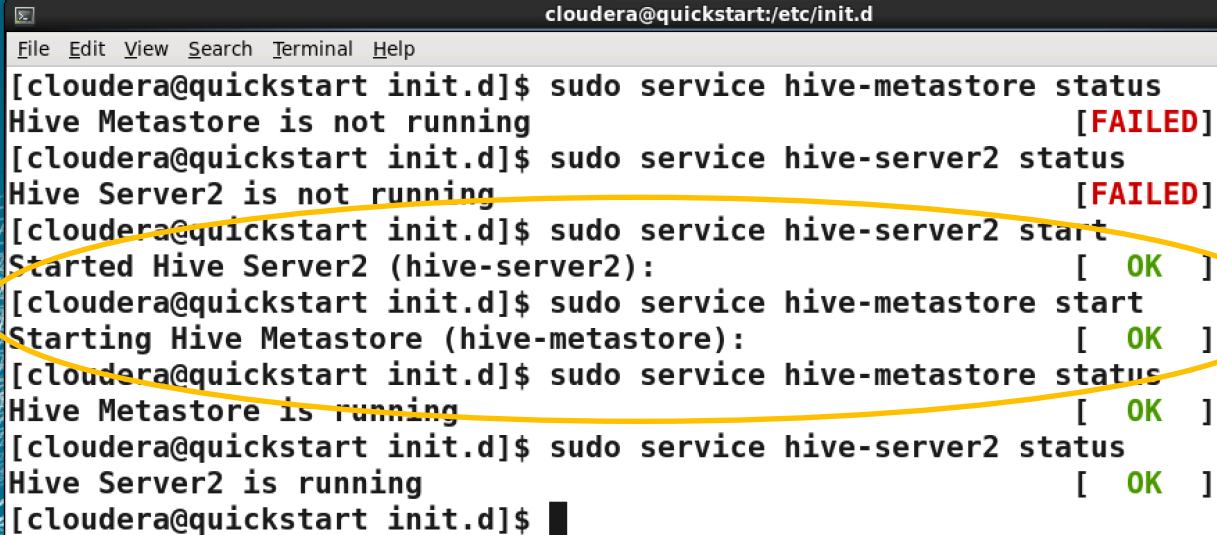
(See few next slides for snapshots)

Beeline error: MetaStore not running

A terminal window titled 'cloudera@quickstart:/etc/init.d' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal output shows a Beeline command being executed, which fails to connect to the MetaStore. A yellow oval highlights the error messages. The error messages are: '15/10/27 09:48:04 [main]: WARN hive.metastore: Failed to connect to the MetaStore Server...', '15/10/27 09:48:05 [main]: WARN hive.metastore: Failed to connect to the MetaStore Server...', and '15/10/27 09:48:06 [main]: WARN hive.metastore: Failed to connect to the MetaStore Server...'. The terminal also shows a 'java.lang.RuntimeException: Unable to instantiate org.apache.hadoop.hive.ql.metadata.SessionHiveMetaStoreClient' error and the Beeline version '1.1.0-cdh5.4.2 by Apache Hive'. The prompt '0: jdbc:hive2:// (closed)>' is shown twice.

```
cloudera@quickstart:/etc/init.d
File Edit View Search Terminal Help
[cloudera@quickstart init.d]$ beeline -u jdbc:hive2://
scan complete in 4ms
Connecting to jdbc:hive2://
15/10/27 09:48:04 [main]: WARN hive.metastore: Failed to connect to the MetaStore Server...
15/10/27 09:48:05 [main]: WARN hive.metastore: Failed to connect to the MetaStore Server...
15/10/27 09:48:06 [main]: WARN hive.metastore: Failed to connect to the MetaStore Server...
java.lang.RuntimeException: Unable to instantiate org.apache.hadoop.hive.ql.metadata.SessionHiveMetaStoreClient
Beeline version 1.1.0-cdh5.4.2 by Apache Hive
0: jdbc:hive2:// (closed)>
0: jdbc:hive2:// (closed)>
```

Check MetaStore status and restart

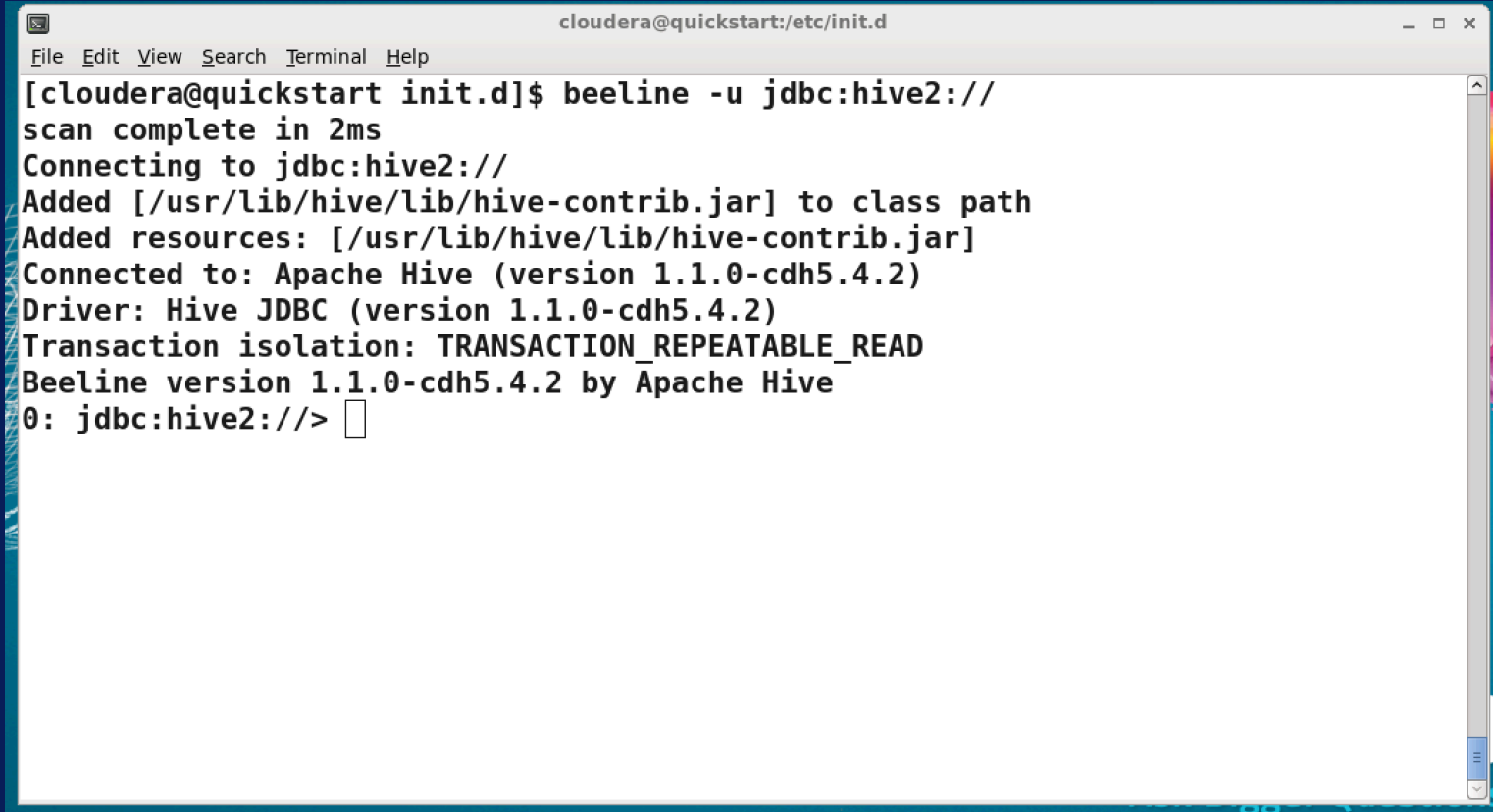


A terminal window titled 'cloudera@quickstart:/etc/init.d' showing the process of checking and restarting Hive services. The terminal output is as follows:

```
cloudera@quickstart:/etc/init.d$ sudo service hive-metastore status
Hive Metastore is not running [FAILED]
cloudera@quickstart:/etc/init.d$ sudo service hive-server2 status
Hive Server2 is not running [FAILED]
cloudera@quickstart:/etc/init.d$ sudo service hive-server2 start
Started Hive Server2 (hive-server2): [ OK ]
cloudera@quickstart:/etc/init.d$ sudo service hive-metastore start
Starting Hive Metastore (hive-metastore): [ OK ]
cloudera@quickstart:/etc/init.d$ sudo service hive-metastore status
Hive Metastore is running [ OK ]
cloudera@quickstart:/etc/init.d$ sudo service hive-server2 status
Hive Server2 is running [ OK ]
cloudera@quickstart:/etc/init.d$
```

A yellow oval highlights the sequence of commands from 'sudo service hive-server2 start' to 'sudo service hive-metastore status', indicating the successful restart of the services.

Check to see if Beeline works

A terminal window titled 'cloudera@quickstart:/etc/init.d' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the execution of the 'beeline -u jdbc:hive2://' command. The output indicates a successful connection to Apache Hive (version 1.1.0-cdh5.4.2) using the Hive JDBC driver (version 1.1.0-cdh5.4.2). The transaction isolation is set to TRANSACTION_REPEATABLE_READ. The Beeline version is 1.1.0-cdh5.4.2 by Apache Hive. The prompt '0: jdbc:hive2://>' is shown at the end.

```
cloudera@quickstart:/etc/init.d
File Edit View Search Terminal Help
[cloudera@quickstart init.d]$ beeline -u jdbc:hive2://
scan complete in 2ms
Connecting to jdbc:hive2://
Added [/usr/lib/hive/lib/hive-contrib.jar] to class path
Added resources: [/usr/lib/hive/lib/hive-contrib.jar]
Connected to: Apache Hive (version 1.1.0-cdh5.4.2)
Driver: Hive JDBC (version 1.1.0-cdh5.4.2)
Transaction isolation: TRANSACTION_REPEATABLE_READ
Beeline version 1.1.0-cdh5.4.2 by Apache Hive
0: jdbc:hive2://> 
```

Hadoop-httpfs service

- **Commands to check status and start:**

```
sudo service hadoop-httpfs status
```

```
sudo service hadoop-httpfs start
```

(See next few slides for snapshots)

Hadoop-httpfs service

```
cloudera@quickstart:/etc/init.d$ curl -i "http://quickstart.cloudera:14000/webhdfs/v1/user/cloudera?user.name=cloudera&op=GETFILESTATUS"
curl: (7) couldn't connect to host
cloudera@quickstart:/etc/init.d$ service hadoop-httpfs status
Hadoop httpfs is not running [FAILED]
cloudera@quickstart:/etc/init.d$ sudo service hadoop-httpfs start

Setting HTTPFS_HOME:          /usr/lib/hadoop-httpfs
Using  HTTPFS_CONFIG:         /etc/hadoop-httpfs/conf
Sourcing:
Using  HTTPFS_LOG:            /var/log/hadoop-httpfs/
Using  HTTPFS_TEMP:           /var/run/hadoop-httpfs
Setting HTTPFS_HTTP_PORT:     14000
Setting HTTPFS_ADMIN_PORT:    14001
Setting HTTPFS_HTTP_HOSTNAME: quickstart.cloudera
Setting HTTPFS_SSL_ENABLED:   false
Setting HTTPFS_SSL_KEYSTORE_FILE: /var/lib/hadoop-httpfs/.keystore
Setting HTTPFS_SSL_KEYSTORE_PASS: password
Using  CATALINA_BASE:         /var/lib/hadoop-httpfs/tomcat-deployment
```

Hadoop-httpfs service

[illegible]

Hadoop-httpfs service

```
cloudera@quickstart:/etc/init.d
File Edit View Search Terminal Help
Using JRE_HOME:      /usr/java/jdk1.7.0_67-cloudera
Using CLASSPATH:     /usr/lib/bigtop-tomcat/bin/bootstrap.jar
Using CATALINA_PID:  /var/run/hadoop-httpfs/hadoop-httpfs-httpfs.pid
Started Hadoop httpfs (hadoop-httpfs):      [ OK ]
[cloudera@quickstart init.d]$ service hadoop-httpfs status
Hadoop httpfs is running                      [ OK ]
[cloudera@quickstart init.d]$ curl -i "http://quickstart.cloudera:14000/webhdfs/
v1/user/cloudera?user.name=cloudera&op=GETFILESTATUS"
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Set-Cookie: hadoop.auth="u=cloudera&p=cloudera&t=simple&e=1445999524870&s=sBJbcF
PUvjPm5z2FxnUKNumo1Fo="; Path=/; Expires=Wed, 28-Oct-2015 02:32:04 GMT; HttpOnly
Content-Type: application/json
Transfer-Encoding: chunked
Date: Tue, 27 Oct 2015 16:32:06 GMT

{"FileStatus":{"pathSuffix":"","type":"DIRECTORY","length":0,"owner":"cloudera",
"group":"cloudera","permission":"755","accessTime":0,"modificationTime":14338462
37536,"blockSize":0,"replication":0}}
[cloudera@quickstart init.d]$
```