Hewlett Packard
Enterprise

SMOKE TEST

HDP 3.1.0

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Enterprise

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1 TESTING BASIC FUNCTIONALITY OF YARN

In this section, we will test some basic functionality of yarn.

1. Execute yarn test

```
hadoop --config /usr/hdp/3.1.0.0-78/hadoop/conf jar
/usr/hdp/3.1.0.0-78/hadoop-mapreduce/hadoop-mapreduce-examples-
3.*.jar wordcount /user/ambari-qa/mapredsmokeinput
/user/ambari-qa/mapredsmokeoutput
```

2. Word count will run on input data file in the below path

```
/user/ambari-qa/mapredsmokeinput
```

3. Output will be written to this file

```
/user/ambari-qa/mapredsmokeoutput
```

2 TESTING BASIC FUNCTIONALITY OF HBASE

In this section, we will test some basic functionality of HBase

1. For Kerberos, execute

```
kinit -kt {keytab path} {principal}
```

2. Execute the below command in HBase shell

```
hbase shell
```

3. To disable database, execute the below command

```
disable 'smoketest'
```

4. To drop database, execute the below command

```
drop 'smoketest'
```

5. To create table, execute the below command

```
create 'smoketest','family'
```

6. Insert data into table, execute the below command

```
put 'smoketest','row01','family:col01','id000a2001_date232319'
```

7. To view the data in HTable, execute the below command

```
scan 'smoketest'
exit
```

3 TESTING BASIC FUNCTIONALITY OF HIVE

In this section, we will test some basic functionality of Hive

1. For Kerberos

```
kinit -kt {keytab path} {principal}
```

2. Execute the below command to run beeline

```
beeline -u "{hive jdbc url}"
```

3. To drop database, execute the below command

```
drop database if exists smoketest;
```

4. To create database, execute the below command

```
create database if not exists smoketest;
```

5. To use the database, execute the below command

```
use smoketest;
```

6. Insert data into the table using the below command

```
create table smoketable(number int, name string);
insert into smoketable values(1,'test1');
insert into smoketable values(2,'test2');
```

7. To fetch records from the table, execute the below command

```
select count(*) from smoketable;
```

8. To drop table, execute the below command

```
drop table smoketable;
quit;
```

4 TESTING BASIC FUNCTIONALITY OF IMPALA

In this section, we will test some basic functionality of Impala

1. For Kerberos

```
kinit -kt {keytab path} {principal}
```

2. Open Impala shell, using the below command

```
impala-shell -k -i {impala deamon url}
```

3. To drop database, execute the below command

```
drop database if exists smoketest;
```

4. To create database, execute the below command

```
create database if not exists smoketest;
```

5. To use the database, execute the below command

```
use smoketest;
```

6. Insert data into the table using the below command

```
create table smoketable(number int, name string);
insert into smoketable values(1,'test1');
insert into smoketable values(2,'test2');
```

7. To fetch the records from the table use the below command

```
select count(*) from smoketable;
```

8. To drop table, execute the below command

```
drop table smoketable;
quit;
```

5 TESTING BASIC FUNCTIONALITY OF ZOOKEEPER

In this section, we will test some basic functionality of Zookeeper.

1. For Kerberos

```
kinit -kt {keytab path} {principal}
```

2. Execute Zookeeper Client Server using the below command

```
zookeeper-client -server {zk-host:2181}
```

3. Execute the below command to return the associated data in znode

```
get /zk_smoketest
```

4. To create data in znode, execute the below command

```
create /zk_smoketest []
```

5. To set data in specific path of znode, execute the below command

```
set /zk_smoketest testdata
get /zk_smoketest
```

6. To delete znode in specific path, execute the below command

```
delete /zk_smoketest
quit
```

6 TESTING BASIC FUNCTIONALITY OF PIG

In this section, we will test some basic functionality of Pig.

1. For Kerberos

```
kinit -kt {keytab path} {principal}
```

2. Execute the below command to put hosts information into **etc/passwd/tmp** file

```
hdfs dfs -put /etc/passwd /tmp
```

3. Execute Pig shell

```
A = load '/tmp/passwd' using PigStorage(':');
B = foreach A generate \$0 as id;
```

4. To store output in a separate file, execute the below command

```
store B into 'pigsmoke.out';
quit;
```

7 TESTING BASIC FUNCTIONALITY OF SPARK

In this section, we will test some basic functionality of Spark

1. For Kerberos

```
kinit -kt {keytab path} {principal}
```

2. Execute PySpark shell

```
pyspark
```

3. Source code

```
a = [1,2,3,4]
b = sc.parallelize(a)
c = b.map(lambda x: x*x)
c.collect()
```

4. Output

```
[1, 4, 9, 16]
```