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DLI Accelerated Data Science Teaching Kit

Lecture 12.3 - How to Use HBase



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How to use HBase

Interactive shell

Can run on your computer, without using HDFS

Programmatically

e.g., via Java, Python, etc.

Example, using interactive shell

```
$ cd /usr/local/hbase-0.91.0-SNAPSHOT
```

```
$ bin/start-hbase.sh
```

Start HBase

```
starting master, logging to \
```

```
/usr/local/hbase-0.91.0-SNAPSHOT/bin/../logs/hbase-<username>-master-localhost.out
```

```
$ bin/hbase shell
```

```
HBase Shell; enter 'help<RETURN>' for list of supported commands.
```

```
Type "exit<RETURN>" to leave the HBase Shell
```

```
Version 0.91.0-SNAPSHOT, r1130916, Sat Jul 23 12:44:34 CEST 2011
```

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

```
1 servers, 0 dead, 2.0000 average load
```

Start Interactive Shell

Check HBase is running

Example: Create table, add values

```
hbase(main):002:0> create 'testtable', 'colfam1'  
0 row(s) in 0.2930 seconds
```

```
hbase(main):003:0> list 'testtable'  
TABLE  
testtable  
1 row(s) in 0.0520 seconds
```

```
hbase(main):004:0> put 'testtable', 'myrow-1', 'colfam1:q1', 'value-1'  
0 row(s) in 0.1020 seconds
```

```
hbase(main):005:0> put 'testtable', 'myrow-2', 'colfam1:q2', 'value-2'  
0 row(s) in 0.0410 seconds
```

```
hbase(main):006:0> put 'testtable', 'myrow-2', 'colfam1:q3', 'value-3'  
0 row(s) in 0.0380 seconds
```


Example: Scan (show all cell values)

```
hbase(main):007:0> scan 'testtable'
```

ROW	COLUMN+CELL
myrow-1	column=colfam1:q1, timestamp=1297345476469, value=value-1
myrow-2	column=colfam1:q2, timestamp=1297345495663, value=value-2
myrow-2	column=colfam1:q3, timestamp=1297345508999, value=value-3

```
2 row(s) in 0.1100 seconds
```

Example: Get (look up a row)

```
hbase(main):008:0> get 'testtable', 'myrow-1'
```

```
COLUMN
```

```
CELL
```

```
colfam1:q1
```

```
timestamp=1297345476469, value=value-1
```

```
1 row(s) in 0.0480 seconds
```

Can also look up a particular cell value with a certain timestamp, etc.

Example: Delete a value

```
hbase(main):009:0> delete 'testtable', 'myrow-2', 'colfam1:q2'  
0 row(s) in 0.0390 seconds
```

```
hbase(main):010:0> scan 'testtable'
```

ROW	COLUMN+CELL
myrow-1	column=colfam1:q1, timestamp=1297345476469, value=value-1
myrow-2	column=colfam1:q3, timestamp=1297345508999, value=value-3

```
2 row(s) in 0.0620 seconds
```




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Thank You