

## HBase and Hive Flight Information System - Command Summary

### 1. Create HBase Table:

```
create 'flight_info', 'flight_details', 'schedule', 'delay'
```

### 2. Insert into HBase Table:

```
put 'flight_info', 'F001', 'flight_details:number', 'AI101'
```

```
put 'flight_info', 'F001', 'schedule:departure', '14:00'
```

```
put 'flight_info', 'F001', 'delay:departure_delay', '15'
```

```
put 'flight_info', 'F002', 'flight_details:number', 'BA202'
```

```
put 'flight_info', 'F002', 'schedule:departure', '16:30'
```

```
put 'flight_info', 'F002', 'delay:departure_delay', '5'
```

### 3. Update in HBase (same as put):

```
put 'flight_info', 'F001', 'delay:departure_delay', '20'
```

### 4. Delete in HBase:

```
delete 'flight_info', 'F001', 'delay:departure_delay'
```

```
deleteall 'flight_info', 'F001'
```

### 5. Retrieve in HBase:

```
scan 'flight_info'
```

```
get 'flight_info', 'F001'
```

```
get 'flight_info', 'F001', 'schedule:departure'
```

### 6. Hive External Table for HBase:

```
CREATE EXTERNAL TABLE hive_flight_info (
```

```
rowkey STRING,
```

```
flight_number STRING,
```

```
departure_time STRING,
```

```
departure_delay INT
```

```
)
```

```
STORED BY 'org.apache.hadoop.hive.hbase.HBaseStorageHandler'
```

WITH SERDEPROPERTIES (

"hbase.columns.mapping" = ":key,flight\_details:number,schedule:departure,delay:departure\_delay"

)

TBLPROPERTIES ("hbase.table.name" = "flight\_info");

7. Create Hive Index:

CREATE INDEX delay\_index

ON TABLE hive\_flight\_info (departure\_delay)

AS 'COMPACT'

WITH DEFERRED REBUILD;

8. Rebuild Index:

ALTER INDEX delay\_index

ON hive\_flight\_info

REBUILD;

9. View Index Info:

SHOW INDEXES ON hive\_flight\_info;

SHOW TABLES LIKE '\_index\_hive\_flight\_info\_delay\_index';

SELECT \* FROM \_index\_hive\_flight\_info\_delay\_index;