

Elastic Search, Kibana Installation & Workouts:

1) Goto the below path

cd /home/hduser/install/

2) Extract the tarfile,

tar xvzf elasticsearch-2.4.1.tar.gz tar xvzf kibana-4.6.1-linux-x86_64.tar.gz

3) Rename and move the below folder,

sudo mv elasticsearch-2.4.1 /usr/local/elasticsearch sudo mv kibana-4.6.1-linux-x86_64 /usr/local/kibana

4) Start Elastic search & Kibana

nohup /usr/local/elasticsearch/bin/elasticsearch & nohup /usr/local/kibana/bin/kibana &

Elastic Search Workouts:

ES URL:

http://localhost:9200/

ES Index creation:

```
curl -XPUT 'http://localhost:9200/empinfo' -d '
{
    "mappings": {
        "emp": {
            "type": "string"
            },
            "name": {
                 "type": "string",
                 "index": "not_analyzed", "store": "yes"
            },
            "city": {
                 "type": "string",
                  "index": "not_analyzed"
            }
            }
        }
    }
}
```

Load ES Index

```
curl -XPOST 'http://localhost:9200/empinfo/emp/1' -d' { "name" : "Karthik", "city" :
"Bangalore" }'
curl -XPOST 'http://localhost:9200/empinfo/emp/2' -d' { "name" : "varun", "city" :
"Bangalore" }'
curl -XPOST 'http://localhost:9200/empinfo/emp/3' -d' { "name" : "bala", "city" : "Bangalore"
}'
curl -XPOST 'http://localhost:9200/empinfo/emp/4' -d' { "name" : "vikas", "city" : "Chennai"
}'
curl -XPOST 'http://localhost:9200/empinfo/emp/5' -d' { "name" : "arun", "city" : "Chennai"
}'
curl -XPOST 'http://localhost:9200/empinfo/emp/6' -d' { "name" : "raju", "city" : "Bangalore"
1'
```

```
curl -XPOST 'http://localhost:9200/empinfo/emp/7' -d' { "name" : "tom", "city" : "Chennai" }'
curl -XPOST 'http://localhost:9200/empinfo/emp/8' -d' { "name" : "naveen", "city" :
"Chennai" }'
curl -XPOST 'http://localhost:9200/empinfo/emp/9' -d' { "name" : "raju", "city" : "Bangalore"
}'
curl -XPOST 'http://localhost:9200/empinfo/emp/10' -d' { "name" : "imran", "city" :
"Chennai" }'
curl -XPOST 'http://localhost:9200/empinfo/emp/11' -d' { "name" : "balu", "city" : "Chennai"
}'
```

Open Chrome/Firefox:

To get all the indices:

http://localhost:9200/ cat/indices

To get schema of the indices:

http://localhost:9200/empinfo?pretty

To get data of the indices:

http://localhost:9200/empinfo/ search?pretty

To query data of the indices:

http://localhost:9200/empinfo/ search?q=bangalore&pretty

Create another index:

```
"index": "not analyzed"
}'
curl -XPOST 'http://localhost:9200/empinfo1/emp/1' -d' { "name" : "Karthik", "city" :
"Bangalore" }'
curl -XPOST 'http://localhost:9200/empinfo1/emp/2' -d' { "name" : "varun", "city
"Bangalore" }'
Delete a row in an Index
curl -XDELETE 'http://localhost:9200/empinfo1/emp/2'
Delete an Index
curl -XDELETE 'http://localhost:9200/empinfo1'
Hive Elasticsearch Integeration:
service mysqld start
hive --service metastore
hive
create table txnrecord(txnno int,txndate string,custno int,amount
double, category string, product string, city string, state string, spendby
string) row format delimited fields terminated by ',';
load data local inpath '/home/hduser/hive/data/txns' into table txnrecord;
add jar /home/hduser/install/elasticsearch-hadoop-hive-2.4.1.jar;
create table txnrecord es(txnno int,txndate string,custno int,amount
double, category string, product string, city string, state string, spendby string)
stored by 'org.elasticsearch.hadoop.hive.EsStorageHandler'
tblproperties('es.resource'='trans/docs');
insert into table txnrecord es select * from txnrecord limit 10;
```

Create Additional ES index to enable id into txnno:

```
curl -XPUT 'http://localhost:9200/transid' -d '
"settings" : {
    "index" : {
       "number of shards": 3,
       "number of replicas": 1
  },
"mappings": {
"transactions": {
"properties": {
"id": {
"type": "long"
"amount": {
"type": "float"
"category": {
"type": "string",
"index": "not analyzed", "store
"state": {
"type": "string",
"index": "not analyzed"
"spendby": {
"type": "string"
add jar /home/hduser/install/elasticsearch-hadoop-hive-2.4.1.jar;
create table txnrecord_es_id(id int,amount double,category string,state string,spendby
string)
stored by 'org.elasticsearch.hadoop.hive.EsStorageHandler'
tblproperties('es.resource'='transid/transactions','es.mapping.id'='id','es.mapping.exclude'='i
d');
```

insert into table txnrecord_es_id select txnno,amount,category,state,spendby from retail.txnrecords limit 100;

