

### #####Lab 3 ##### Data importation module 3

##Check the cluster health

```
curl 'localhost:9200/_cat/health?v'
```

##List the nodes in our cluster

```
curl 'localhost:9200/_cat/nodes?v'
```

##List the indices in the cluster

```
curl 'localhost:9200/_cat/indices?v'
```

##Create an Index

```
curl -XPUT 'localhost:9200/customer?pretty'
```

```
curl 'localhost:9200/_cat/indices?v'
```

##A possible response

| health | index    | pri | rep | docs.count | docs.deleted | store.size | pri.store.size |
|--------|----------|-----|-----|------------|--------------|------------|----------------|
| yellow | customer | 5   | 1   | 0          | 0            | 495b       | 495b           |

##Index and Query a document

```
curl -XPUT 'localhost:9200/customer/external/1?pretty' -d '
```

```
{  
  "name": "John Doe"  
}'
```

```
curl -XGET 'localhost:9200/customer/external/1?pretty'
```

##Delete an Index

```
curl -XDELETE 'localhost:9200/customer?pretty'
```

```
curl 'localhost:9200/_cat/indices?v'
```

```
curl -XPUT 'localhost:9200/customer'
```

```
curl -XPUT 'localhost:9200/customer/external/1' -d '
```

```
{  
  "name": "John Doe"  
}'
```

```
curl 'localhost:9200/customer/external/1'
```

```
curl -XDELETE 'localhost:9200/customer'
```

```
curl -X<REST Verb> <Node>:<Port>/<Index>/<Type>/<ID>
```

### ##Modifying your Data

```
curl -XPUT 'localhost:9200/customer/external/1?pretty' -d '{
  "name": "John Doe"
}'
```

```
curl -XPUT 'localhost:9200/customer/external/1?pretty' -d '{
  "name": "Jane Doe"
}'
```

```
curl -XPUT 'localhost:9200/customer/external/2?pretty' -d '{
  "name": "Jane Doe"
}'
```

```
curl -XPOST 'localhost:9200/customer/external?pretty' -d '{
  "name": "Jane Doe"
}'
```

### ##Updateing Documents

```
curl -XPOST 'localhost:9200/customer/external/1/_update?pretty' -d '{
  "doc": { "name": "Jane Doe" }
}'
```

```
curl -XPOST 'localhost:9200/customer/external/1/_update?pretty' -d '{
  "doc": { "name": "Jane Doe", "age": 20 }
}'
```

```
curl -XPOST 'localhost:9200/customer/external/1/_update?pretty' -d '{
  "script" : "ctx._source.age += 5"
}'
```

```
curl -XDELETE 'localhost:9200/customer/external/2?pretty'
```

### ##Batch Processing

```
curl -XPOST 'localhost:9200/customer/external/_bulk?pretty' -d '
```

```
{"index":{"_id":"1"}}
{"name": "John Doe" }
{"index":{"_id":"2"}}
{"name": "Jane Doe" }
,
```

```
curl -XPOST 'localhost:9200/customer/external/_bulk?pretty' -d '
{"update":{"_id":"1"}}
{"doc": { "name": "John Doe becomes Jane Doe" } }
{"delete":{"_id":"2"}}
,
```

## ##Exploring your Data

Download this....<https://github.com/bly2k/files/blob/master/accounts.zip?raw=true>

```
curl -XPOST 'localhost:9200/bank/account/_bulk?pretty' --data-binary "@accounts.json"
curl 'localhost:9200/_cat/indices?v'
```

## ###The Search API

```
curl 'localhost:9200/bank/_search?q=*&pretty'
```

```
curl -XPOST 'localhost:9200/bank/_search?pretty' -d '
{
  "query": { "match_all": {} }
}'
```

```
$ curl -XPUT 'http://localhost:9200/twitter/tweet/1' -d '{
  "user" : "kimchy",
  "post_date" : "2009-11-15T14:12:12",
  "message" : "trying out Elasticsearch"
}'
```

```
curl -XPUT 'localhost:9200/twitter/tweet/1?version=2' -d '{
  "message" : "elasticsearch now has versioning support, double cool!"
}'
```

```
$ curl -XPUT 'http://localhost:9200/twitter/tweet/1?op_type=create' -d '{
  "user" : "kimchy",
  "post_date" : "2009-11-15T14:12:12",
  "message" : "trying out Elasticsearch"
}'
```

#Operation type

```
$ curl -XPUT 'http://localhost:9200/twitter/tweet/1/_create' -d '{
  "user" : "kimchy",
  "post_date" : "2009-11-15T14:12:12",
  "message" : "trying out Elasticsearch"
}'
```

```
$ curl -XPOST 'http://localhost:9200/twitter/tweet/' -d '{
  "user" : "kimchy",
  "post_date" : "2009-11-15T14:12:12",
  "message" : "trying out Elasticsearch"
}'
```

### versioning

```
$ curl -XPOST 'http://localhost:9200/twitter/tweet/' -d '{
  "user" : "kimchy",
  "post_date" : "2009-11-15T14:12:12",
  "message" : "trying out Elasticsearch"
}'
```

```
{
  "_index" : "twitter",
  "_type" : "tweet",
  "_id" : "6a8ca01c-7896-48e9-81cc-9f70661fcb32",
  "_version" : 1,
  "created" : true
}
```

#### routing

```
$ curl -XPOST 'http://localhost:9200/twitter/tweet?routing=kimchy' -d '{
  "user" : "kimchy",
  "post_date" : "2009-11-15T14:12:12",
  "message" : "trying out Elasticsearch"
}'
```

###parents and children

```
$ curl -XPUT localhost:9200/blogs/blog_tag/1122?parent=1111 -d '{
  "tag" : "something"
}'
```

### GET API#####

```
curl -XGET 'http://localhost:9200/twitter/tweet/1'
```

```
curl -XHEAD -i 'http://localhost:9200/twitter/tweet/1'
```

####source filtering

```
curl -XGET 'http://localhost:9200/twitter/tweet/1?_source=false'
```

```
curl -XGET
```

```
'http://localhost:9200/twitter/tweet/1?_source_include=*.id&_source_exclude=entities'
```

```
curl -XGET 'http://localhost:9200/twitter/tweet/1?_source=*.id,retweeted'
```

```
curl -XGET 'http://localhost:9200/twitter/tweet/1?fields=title,content'
```

```
curl -XGET 'http://localhost:9200/twitter/tweet/1/_source'
```

```
curl -XGET
```

```
'http://localhost:9200/twitter/tweet/1/_source?_source_include=*.id&_source_exclude=entities'
```

```
curl -XHEAD -i 'http://localhost:9200/twitter/tweet/1/_source'
```

```
curl -XGET 'http://localhost:9200/twitter/tweet/1?routing=kimchy'
```

#####Delete API#####

```
$ curl -XDELETE 'http://localhost:9200/twitter/tweet/1'
```

```
$ curl -XDELETE 'http://localhost:9200/twitter/tweet/1?routing=kimchy'
```

###Update API

```
curl -XPUT localhost:9200/test/type1/1 -d '{
```

```
  "counter" : 1,
```

```
  "tags" : ["red"]
```

```
}'
```

```
curl -XPOST 'localhost:9200/test/type1/1/_update' -d '{
```

```
  "script" : {
```

```
    "inline": "ctx._source.counter += count",
```

```
    "params" : {
```

```
      "count" : 4
```

```
    }
```

```
}  
'
```

```
curl -XPOST 'localhost:9200/test/type1/1/_update' -d '{  
  "script" : {  
    "inline": "ctx._source.tags += tag",  
    "params" : {  
      "tag" : "blue"  
    }  
  }  
'
```

```
curl -XPOST 'localhost:9200/test/type1/1/_update' -d '{  
  "script" : "ctx._source.name_of_new_field = \"value_of_new_field\""  
'
```

```
curl -XPOST 'localhost:9200/test/type1/1/_update' -d '{  
  "script" : "ctx._source.remove(\"name_of_field\")"  
'
```

```
curl -XPOST 'localhost:9200/test/type1/1/_update' -d '{  
  "script" : {  
    "inline": "ctx._source.tags.contains(tag) ? ctx.op = \"delete\" : ctx.op = \"none\"",  
    "params" : {  
      "tag" : "blue"  
    }  
  }  
'
```

####partial updates####

```
curl -XPOST 'localhost:9200/test/type1/1/_update' -d '{  
  "doc" : {  
    "name" : "new_name"  
  }  
'
```

####upserts

```
curl -XPOST 'localhost:9200/test/type1/1/_update' -d '{  
  "script" : {  
    "inline": "ctx._source.counter += count",
```

```
    "params" : {  
      "count" : 4  
    }  
  },  
  "upsert" : {  
    "counter" : 1  
  }  
}
```