

Elasticsearch

By Dinesh Amatya

Elasticsearch

- Built on top of Lucene
- Document oriented
- Scalable
- (Near) Real Time Search
- Schema free
- JSON document

Configuring Elastic

ElasticHome/config/elasticsearch.yml

- cluster.name: clusterName
- index.number_of_replicas: 0
- path.data: /path/to/data

Starting Elastic

ElasticHome/bin/

- ./elasticsearch

Creating Index

```
curl -XPUT localhost:9200/testdb
```

Writing Document

```
curl -XPUT localhost:9200/testdb/testtbl/1 -d '{  
  "name":"peter",  
  "age":12,  
  "active_status":[1,2,3],  
  "gender":"M"  
}'
```

Updating document

```
curl -XPOST 'localhost:9200/testdb/testtbl/1/_update?pretty' -d '{
  "doc": { "name": "peter 123", "age": 10 }
}'
```

Deleting document

```
curl -XDELETE 'localhost:9200/testdb/testtbl/2?pretty'
```

```
curl -XDELETE 'localhost:9200/testdb/testtbl/_query?pretty' -d '{  
  "query": { "match": { "name": "John" } }  
}'
```


Auto-generated Mapping

```
curl -XGET localhost:9200/testdb/_mapping?pretty=true
```

Simple query

- `curl -XGET localhost:9200/testdb/testtbl/1`
- `curl -XGET localhost:9200/testdb/testtbl/_search?q=name:peter`

Term query

```
POST testdb/testtbl/_search
```

```
{  
  "query": {"term": {  
    "name": {  
      "value": "peter"  
    }  
  }}  
}
```

Bool query

POST testdb/testtbl/_search

```
{
  "query": { "bool": {
    "must":
      [
        { "term": { "name": { "value": "peter" } } },
        { "term": { "active_status": { "value": "3" } } }
      ]
    }
  }
}
```

Range query

POST testdb/testtbl/_search

```
{  
  "query": {"range": {  
    "age": {  
      "gte": 10,  
      "lte": 20  
    }  
  }}  
}
```

Filtered query

POST testdb/testtbl/_search

```
{  
  "query": {"filtered": {  
    "query": {"match_all": {}},  
    "filter": {"range": {  
      "age": {  
        "gte": 1,  
        "lte": 20  
      }  
    }  
  }  
}
```

Custom mapping

```
curl -XPUT ${1}:9200/${2}/temptable1/_mapping -d '{
  "temptable1": {
    "properties": {
      "clientId":{"type": "string","index": "not_analyzed"},
      "stageVersion":{"type" : "string", "index" : "analyzed"}
    }
  }
}'
```

Custom mapping

```
curl -XPUT ${1}:9200/${2}/temptable1/_mapping -d '{
  "temptable1": {
    "properties": {
      "clientId":{"type": "string","index": "not_analyzed"},
      "stageVersion":{"type" : "string", "index" : "analyzed"}
    }
  }
}'
```


References

- elasticsearch.org