Release Notes

Elasticsearch Installation in Ubuntu

1. *wget -qO - https://artifacts.elastic.co/GPG-KEY-elasticsearch | sudo apt-key add -*
2. *sudo apt-get install apt-transport-https*
3. *echo "deb https://artifacts.elastic.co/packages/6.x/apt stable main" | sudo tee -a /etc/apt/sources.list.d/elastic-6.x.list*
4. *sudo apt-get update && sudo apt-get install elasticsearch*

Please edit elasticsearch.yml file as shown below:

1. *sudo vi /etc/elasticsearch/elasticsearch.yml*

change network.host to 0.0.0.0

Steps to reload configuration and restart:

1. *sudo /bin/systemctl daemon-reload*
2. *sudo /bin/systemctl enable elasticsearch.service*
3. *sudo /bin/systemctl start elasticsearch.service*

Elasticsearch engine verification:

URL: 127.0.0.1:9200 from browser to test it.

Result:

*{*

*"name" : "W00e6to",*

*"cluster\_name" : "elasticsearch",*

*"cluster\_uuid" : "7LmC1WosTjiDbkYyx7eTXQ",*

*"version" : {*

*"number" : "6.2.3",*

*"build\_hash" : "c59ff00",*

*"build\_date" : "2018-03-13T10:06:29.741383Z",*

*"build\_snapshot" : false,*

*"lucene\_version" : "7.2.1",*

*"minimum\_wire\_compatibility\_version" : "5.6.0",*

*"minimum\_index\_compatibility\_version" : "5.0.0"*

*},*

*"tagline" : "You Know, for Search"*

*}*

Mapping definition of a movie library:

*curl -H “Content-Type: application/json” - XPUT 127.0.0.1:9200/movies -d’*

*{*

*“mappings”:{*

*“movies”:{*

*“properties”:{*

*“year” : {“type”:”date”}*

*}*

*}*

*}*

*}’*

*sudo apt-get install default-jdk*

*Configuration Elasticsearch:*

1. *cluster*
2. *Node*
3. *Network*
4. *Discovery*
5. *split brain*

*elasticsearch: 9200*

*kibana: 5601*

*Configuration Kibana.yml:*

1. *port: Host*
2. *server.name*
3. *URL for elasticsearch instance*
4. *kibana.index*

*Creating Index:*

*curl -XPUT “http://localhost:9200/product?pretty"*

*Creating Document;*

*curl -XPOST "http://localhost:9200/product/default" -H 'Content-Type: application/json' -d'*

*{*

*"name":"Processing Events with Logstash",*

*"instructor":{*

*"firstname":"Siddharth",*

*"lastname":"Rai"*

*}*

*}’*

*curl -XPOST "http://localhost:9200/product/default/1" -H 'Content-Type: application/json' -d'*

*{*

*"name":"Complete Guide to Elasticsearch",*

*"instructor":{*

*"firstname":"Siddharth",*

*"lastname":"Rai"*

*}*

*}'*

*curl -XGET "http://localhost:9200/product/default/2"*

*Updating field:*

*curl -XPOST "http://localhost:9200/product/default/1/\_update" -H 'Content-Type: application/json' -d'*

*{*

*"doc":{"price":95}*

*}'*

*curl -XPOST "http://localhost:9200/product/default/1/\_update" -H 'Content-Type: application/json' -d'*

*{*

*"doc":{"price":95, "tags":["Elasticsearch"]}*

*}'*

*Delete doc:*

*curl -XDELETE “http://localhost:9200/product/default/1"*

*Delete index:*

*curl -XDELETE “http://localhost:9200/product"*

*Bulk create:*

*curl -XPOST "http://localhost:9200/product/default/\_bulk" -H 'Content-Type: application/json' -d'*

*{"index":{"\_id":"100"}}*

*{"price":100}*

*{"index":{"\_id":"101"}}*

*{"price":101}*

*‘*

*Bulk update & delete*

*curl -XPOST "http://localhost:9200/product/default/\_bulk" -H 'Content-Type: application/json' -d'*

*{"update":{"\_id":"100"}}*

*{"doc":{"price":1000}}*

*{"delete":{"\_id":101}}*

*GET \_cat/health?v*

*GET \_cat/nodes?v*

*GET \_cat/indices?v*

*GET \_search*

*{*

*"query":{*

*"match\_all":{}*

*}*

*}*

*GET \_cat/allocation?v*

*GET \_cat/shards?v*

*Metafields:*

1. *\_index -> contains the name of the index to which a document belongs*
2. *\_id -> Stored the ID of documents.*
3. *\_source -> Contains the original JSON object used when indexing a document.*
4. *\_field\_names -> contains the names of every field that contains a non-null value.*
5. *\_routing -> stores the value used to route a document to a shard.*
6. *\_version -> stores the internal version of a document.*
7. *\_meta -> may be used to store custom data that is left untouched by Elasticsearch.*

*Field Data Types:*

1. *Core Data Types*

*a) Text Data Type (Text we want to search)*

*b) Keyword Data Type (used for aggregation)*

*c) Numeric Data Type*

*d) Date Data Type (Date)*

*e) Boolean Data Type*

*f) Binary Data Type (Binary)*

*g) Range Data Types*

1. *Complex Data Types*

*a) Object Data Type (Stored as Key-value pairs internally)*

*b) Array*

*c) Nested Data Types*

1. *Geo Data Types*
2. *Specialised Data Types (IP Data Type, Completion data Type)*
3. *Attachment Data Type (attachment)*

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

*Creating, Deleting & Modifying mapping*

*PUT product/default/\_mapping*

*{*

*"properties": {*

*"discount": {*

*"type":"double"*

*}*

*}*

*}*

*DELETE /product*

*PUT /product*

*{*

*"mappings":{*

*"default":{*

*"dynamic": false,*

*"properties": {*

*"in\_stock":{*

*"type":"integer"*

*},*

*"in\_active":{*

*"type":"integer"*

*},*

*"price":{*

*"type":"integer"*

*},*

*"sold":{*

*"type":"long"*

*}*

*}*

*}*

*}*

*}*