



Q. What is an index in ElasticSearch ?

An index is similar to a table in relational databases. The difference is that relational databases would store actual values, which is optional in ElasticSearch. An index can store actual and/or analyzed values in an index.

Q. What is a document in ElasticSearch ?

A document is similar to a row in relational databases. The difference is that each document in an index can have a different structure (fields), but should have same data type for common fields. Each field can occur multiple times in a document with different data types. Fields can contain other documents too.

Q. Does ElasticSearch have a schema ?

Yes, ElasticSearch can have mappings which can be used to enforce schema on documents.

Q. What is a document type in ElasticSearch ?

A document type can be seen as the document schema / dynamic mapping (<https://mindmajix.com/elasticsearch/dynamic-mapping-overview>) definition, which has the mapping of all the fields in the document along with its data types.

Q. What is indexing in ElasticSearch ?

The process of storing data in an index is called indexing in ElasticSearch. Data in ElasticSearch can be divided into write-once and read-many segments. Whenever an update is attempted, a new version of the document is written to the index.

Q. What is a node in ElasticSearch ?

Each instance of ElasticSearch is called a node. Multiple nodes can work in harmony to form an ElasticSearch Cluster.

Q. What is a shard in ElasticSearch ?

Due to resource limitations like RAM, vCPU etc, for scale-out, applications need to employ multiple instances of ElasticSearch on separate machines. Data in an index can be divided into multiple

partitions, each handled by a separate node (instance) of Elasticsearch. Each such partition is called a shard. By default an Elasticsearch index has 5 shards.

Q.What is a replica in Elasticsearch ?

Each shard in Elasticsearch has 2 copy of the shard. These copies are called replicas. They serve the purpose of high-availability and fault-tolerance.

Q.What is an Analyzer in Elasticsearch ?

While indexing data in Elasticsearch, data is transformed internally by the Analyzer defined for the index, and then indexed. An analyzer is built of tokenizer and filters. Following types of Analyzers are available in Elasticsearch 1.10.

1. STANDARD ANALYZER
2. SIMPLE ANALYZER
3. WHITESPACE ANALYZER
4. STOP ANALYZER
5. KEYWORD ANALYZER
6. PATTERN ANALYZER
7. LANGUAGE ANALYZERS
8. SNOWBALL ANALYZER
9. CUSTOM ANALYZER

Q.What is a Tokenizer in Elasticsearch ?

A Tokenizer breakdown fields values of a document into a stream, and inverted indexes are created and updates using these values, and these stream of values are stored in the document.

Q.What is a Filter in Elasticsearch ?

After data is processed by Tokenizer, the same is processed by Filter, before indexing. Following types of Filters are available in Elasticsearch 1.10.

1. AND FILTER
2. BOOL FILTER
3. EXISTS FILTER
4. GEO BOUNDING BOX FILTER
5. GEO DISTANCE FILTER
6. GEO DISTANCE RANGE FILTER
7. GEO POLYGON FILTER
8. GEOSHAPE FILTER
9. GEOHASH CELL FILTER
10. HAS CHILD FILTER

11. HAS PARENT FILTER
12. IDS FILTER
13. INDICES FILTER
14. LIMIT FILTER
15. MATCH ALL FILTER
16. MISSING FILTER
17. NESTED FILTER
18. NOT FILTER
19. OR FILTER
20. PREFIX FILTER
21. QUERY FILTER
22. RANGE FILTER
23. REGEXP FILTER
24. SCRIPT FILTER
25. TERM FILTER
26. TERMS FILTER
27. TYPE FILTER

Q.What is the query language of Elasticsearch ?

ElasticSearch uses the Apache Lucene query language, which is called Query DSL.