

Here we have collected all the information, data and useful resources that could guide you to deep more into Elasticsearch.

General information

- Real-time distributed and open source full-text search and analytics engine
- Stores data & allows to search it
- Used in Single Page Application projects
- Developed in Java
- Apache license
- Based on Lucene search engine
- Interaction with Elasticsearch is through Restful API
- accessible from RESTful web service interface and uses schema less JSON (JavaScript Object Notation) documents to store data.

You can take a look into the following resources:

- From amazon: <https://aesworkshops.com/>
- Opensourcelib (also with Docker): <https://opensourcelibs.com/lib/elasticsearch-workshop>

Links to material:

Documentation

- <https://www.elastic.co/guide/index.html>
- <https://stackshare.io/stackups/elasticsearch-vs-kibana>

good overview:

- <https://www.section.io/blog/elasticsearch-and-kibana/tutorials>

- <https://www.tutorialspoint.com/elasticsearch/index.htm>

website of the product:

- <https://www.elastic.co/de/elasticsearch/>
- <https://www.elastic.co/de/kibana/>

using elasticsearch with docker:

- <https://www.elastic.co/guide/en/elasticsearch/reference/current/docker.html>

Elasticsearch Terminology

-Basic terminology

Cluster is a collocation of one or more nodes(servers) that together holds your entire data and provides federated indexing and search capability across all nodes.

Node is a single server that is part of your cluster, stores the data and participates in the cluster's indexing and search capability

Index is a collection of document that have somewhat similar characteristics

Document is a basic unit of information that can be indexed

Shards is a single piece of a subdivided index, it is in itself a fully-functional and independent 'index' that can be hosted on any node in the cluster

Replica shards one or more copies of the index shards

Terminology

Relation Databases		Elasticsearch
• Database	↔	Index
• Table	↔	Type
• Row	↔	Document
• Column	↔	Fields
• Schema	↔	Mapping

What is ELK stack? How Elasticsearch connect with it?

ELK Stack is a set of three components - Elasticsearch, Logstash, and Kibana. Each component of the ELK stack is used for different purposes.

- Elasticsearch is a NoSQL database tool, which is used to store the unstructured data.
- Logstash is a log pipeline tool to perform transformation on data. It takes input from different sources and performs various transformations on it. At last, it exports the data into various targets.
- Kibana is a data visualization tool, which provides an interactive UI (User Interface) to the users for data visualization.

<https://www.javatpoint.com/elasticsearch>