



Elasticsearch

40 Hours

Description:

Elasticsearch is an open-source, RESTful, distributed search and analytics engine built on Apache Lucene. Since its release in 2010, Elasticsearch has quickly become the most popular search engine, and is commonly used for log analytics, full-text search, security intelligence, business analytics, and operational intelligence use cases.

How does Elasticsearch work?

You can send data in the form of JSON documents to Elasticsearch using the API or ingestion tools such as Logstash and Amazon Kinesis Firehose. Elasticsearch automatically stores the original document and adds a searchable reference to the document in the cluster's index. You can then search and retrieve the document using the Elasticsearch API. You can also use Kibana, an open-source visualization tool, with Elasticsearch to visualize your data and build interactive dashboards.

Who should take is course?

Developers who want to learn Elasticsearch. The course is intended for developers and not system administrators.

Main syllabus subjects:

- Introduction
- Managing Documents
- Mapping
 - Introduction to mapping
 - Dynamic mapping
 - Meta fields
 - Field data types
 - Adding mappings to existing indices
 - Updated query
 - Changing existing mappings
 - Mapping parameters
 - Adding multi-fields mappings
 - Defining custom date formats
- Analysis & Analyzers
 - Overview of character filters
 - Overview of tokenizers
 - Overview of token filters
 - Overview of built-in analyzers
 - Creating custom analyzers
- Introduction to Searching
 - Search methods
 - Searching with the request URI
 - Introducing the Query DSL
 - How searching works
 - Understanding query results
 - Understanding relevance scores
 - Debugging unexpected search results
- Term Level Queries
- Full Text Queries
- Adding Boolean Logic to Queries
- Joining Queries
- Controlling Query Results
 - Specifying the result format
 - Source filtering
 - Specifying the result size
 - Specifying an offset
 - Pagination
 - Sorting results
 - Sorting by multi-value fields
 - Filters
- Aggregations
- Improving Search Results

- Building a Web Application Search Engine