

Updated 05/26/2025

Sign up

OpenSearch training

3 days (21 hours)

Presentation

Our OpenSearch training course will enable you to integrate a powerful real-time application monitoring and analysis tool into your workflows. Designed by Amazon as an alternative to Elastic Stack and Elasticsearch, OpenSearch is a highly scalable open-source tool that lets you quickly access and visualize large volumes of data.

This training program will teach you how to navigate the OpenSearch dashboards, initiate configurations and fine-tune settings for optimum performance. You'll also learn how to manage plugins to enhance functionality.

Our training course will put your knowledge to the test with practical exercises. Create indexes, manipulate [mappings](#) and run simple search queries to reinforce your learning and validate your skills.

Like all our training courses, it will run on the latest version of the tool: [OpenSearch 2.13](#).

Objectives

- Learn how the OpenSearch engine works
- Know how to manipulate, search and aggregate documents in OpenSearch
- Understanding how to create dashboards in OpenSearch Dashboards
- Installing and configuring an OpenSearch cluster
- Administering and monitoring an OpenSearch cluster

Target audience

- **Data Analysts**
- Developers

Prerequisites

- Basic knowledge of programming and data manipulation is recommended

OPENSEARCH TRAINING PROGRAM

INTRODUCTION TO OPENSEARCH

- OpenSearch presentation and use cases
- Versions and major changes
- General architecture and components
- Ecosystem and integration

INSTALLING AND CONFIGURING OPENSEARCH

- Installation requirements
- Local OpenSearch installation
- Installing OpenSearch Dashboards
- Initial configuration and basic settings
- Principles of administration

HOW OPENSEARCH WORKS

- Architecture and key concepts
- Using the API for CRUD operations
- Creating and managing indexes
- Understanding mappings, stored and indexed fields
- Query DSL for simple and compound queries
- Scoring and aggregation

ADVANCED FEATURES

- Ingestion and pipelines
- Analyzers, character filters and tokenizers
- Sorting results
- Suggesting and highlighting
- Geographical relevance
- Improved indexing
- Query optimization

VISUALIZATION WITH OPENSEARCH DASHBOARDS

- OpenSearch Dashboard principles
- The different types of aggregation
- The different visualizations
- Graphics configuration

- Setting up a Map (Geopoint)
- Create dashboards and data visualizations
- Object management

CLUSTER CONFIGURATION

- Cluster and node configuration
- Index configuration
- Distribution of shards
- Alias management
- Index template

CLUSTER ADMINISTRATION

- Backup and restoration
- Index lifecycle management
- Configuring OpenSearch security parameters (SSO, users and permissions)
- Cluster monitoring and auditing
- Identifying and managing performance bottlenecks

SECURITY IN OPENSEARCH

- Configuring security settings in OpenSearch
- Understanding user roles and permissions

PRACTICAL LABS

- Local installation and configuration
- Using the API: CRUD operations, simple and complex searches
- OpenSearch dashboards
- Cluster configuration and monitoring

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is confirmed, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the forthcoming course, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or learning difficulties.

in-company security (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.