

# **Elasticsearch**

**Duration: 4days (8hrs/day)** 

Prerequisites: Basic Linux Knowledge

### **Course Objective:**

The learning objectives of an Elasticsearch course would typically include acquiring proficiency in the basic functionalities, features, and architecture of Elasticsearch. Students should understand the process of installing and configuring Elasticsearch, and be able to create, manage, and restore indices. The course will also aim to build foundational knowledge on working with Elasticsearch cluster.

**Elasticsearch Version:** 8.x

Lab Requirement: Koenig DC (CentOS 7)

#### Module 1 - Introduction

Overview of Elastic Search

**Use Case** 

**Elastic Search Terminologies** 

#### Module 2 - Installation and Configuration

**Lab:** Deploy Elastic Search

Lab: Create a Single Node Cluster and Join Another Nodes

Lab: Configure cluster nodes

Lab: Deploy and configure Kibana

### **Module 3 - Indexing Data**

Lab: Create, Read, Update and Delete Operations in Elastic Search

Lab: Bulk API

Lab: Index Templates

Lab: Create custom & dynamic Index Templates

Lab: Reindexing or Updating Documents



## **Module 4 - Mapping and Text Analysis**

Lab: Define Index Mapping

Lab: Managing Custom Analyzer

Lab: Analyzers

Lab: Field Mappings

#### Module 5 - Cluster Administration

Lab: Allocate the Shard of an Index to Specific Nodes

Lab: Managing Users and Roles Using Kibana

Lab: Back Up and Restore a Cluster

Lab: Backup and Restore a Specific Indices

Lab: Configure a Cluster for Use with a Hot/Warm Architecture

Configure Cross-Cluster

#### Module 6 - Queries

Lab: Search Query

Lab: Multiple Queries into one

Lab: Highlighting the Search Terms

Lab: Sorting the Query Results

Lab: Implement Pagination

#### Module 7 – Aggregations

Lab: Metric and Bucket Aggregations

Lab: Nested Metric Aggregation