



# Data Analysis with Kibana Duration: 24 Hours (3 Days)

# Overview

The Data Analysis with Kibana course provides comprehensive training on leveraging Kibana for insightful data exploration and visualization. It's designed to help learners understand their data through the Elastic Stack effectively. Module 1 lays the foundation by introducing Kibana's capabilities, including data exploration with the Discover interface and creating visualizations with Lens. As learners progress through the course, Modules 2 through 9 delve deeper into specific functionalities like Kibana search optimization, crafting sophisticated visualizations, and utilizing the visual builder for time series data. The course also covers geo visualizations, dashboard creation, advanced tools for analysts, and the fundamentals of machine learning to analyze large, unused datasets. Additionally, learners will explore various Kibana interfaces and applications, gaining skills to generate reports, manage saved objects, and organize workspaces with Spaces. This course empowers learners to find answers in their data, build powerful dashboards, and apply advanced analysis techniques to uncover valuable insights, preparing them for real-world data challenges

# Audience Profile

The Data Analysis with Kibana course by Koenig Solutions is designed for professionals looking to leverage data visualization and analysis using Elastic Stack.

- Target Audience and Job Roles:
- Data Analysts
- Business Intelligence Professionals
- IT Professionals working with large datasets
- Elastic Stack (ELK) Users
- Data Scientists interested in visualization
- Security Analysts focusing on data monitoring
- DevOps Engineers integrating monitoring solutions
- Database Administrators seeking advanced data visualization tools
- SEO Specialists and Web Analysts using data for optimization
- Network Administrators utilizing data for network performance
- Product Managers analyzing user data for product improvements
- Marketing Analysts studying customer behavior and market trends
- Software Developers who need to visualize application data
- Data Journalists requiring visual storytelling techniques.

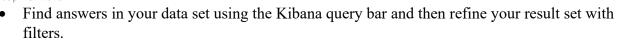
# Course Syllabus

#### Kibana fundamentals

- Learn how Kibana and the other components of the Elastic Stack can help you better understand your
- data. Work with the Discover interface to explore your data, and then create visualizations with Lens.

#### Kibana search





• Learn how to decrease query time by reducing your data to a smaller subset prior to searching.

#### Kibana visualizations

- Turn your data into easy-to-understand visualizations. Explore the available visualization options,
- perfecting your visualizations by customizing the axis, colors and display of the metrics. Learn how to
- display multiple metrics in the same visualization or break them down to multiple, more
- comprehensible visualizations.

#### Kibana visual builder

- Make time series data analysis easy with TSVB. Learn how to build complex time series visualizations
- with just a few clicks.

#### Kibana geo visualizations

- Geo based visualizations are everywhere. They are used in a security context, when displaying
- movement, and for showing user position or density in specific areas. In this lesson you are going to
- learn everything there is to know about the creation of geo visualizations, from creating a simple
- coordinate map to mixing different layers together.

#### Kibana dashboards

- Develop powerful dashboards that deliver insight to any audience. Learn how to customize and share
- your dashboards. Use what you've learned to detect anomalies in data on a guided hunt. Explore the
- basics about Canvas, an infographic tool that can help representing data the way you want.

## Kibana advanced tools for analysts

- Kibana offers many tools for data analysts. In this lesson you are going to explore some of the
- advanced ones. Learn how to build and analyze more advanced visualizations, such as derivatives and
- moving averages. Understand how, behind the scenes, search is powered by the Elasticsearch DSL.
- Discover how Vega allows you to build rich, interactive visualizations.

## Machine learning fundamentals

- A lot of the data is often unused because there is so much of it. Machine learning helps you analyze
- this unused data in an unsupervised way. In this lesson you are going to learn how to create machine
- learning jobs to analyze data.

## Kibana interfaces





- Learn about Kibana apps, pre-built tools for specific use cases, such as observability and security. Learn
- how to generate reports and how to manage saved objects, such as searches, visualizations, and
- dashboards. Understand Spaces, a way to organize your dashboards and visualizations into meaningful
- categories that only defined users have access to. Take your users experience to the next level by
- customizing some advanced settings.