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Collaborative IT Training, Coaching & Skills Development Solutions w w w . t r i v e r a t e c h . c o m



Working with Elasticsearch 7.0 (TTDS6882)

Gain the Modern Skills Required to Store, Manage and Analyze Data with Elasticsearch 7.0

Course Snapshot

- Course: Working with Elasticsearch 7.0 (TTDS6882)
- **Duration**: 2 days
- Audience: This course is geared for those who wants to get guide to storing, managing, and analyzing data with the updated features of Elastic 7.0
- Skill-level: Foundation-level Elasticsearch skills for experienced team members.
- **Format / Hands-on:** This course combines engaging instructor-led presentations and practical demonstrations with hands-on programming exercises, challenge labs, use case exploration and engaging group activities. Student machines are required.
- **Flexible Delivery Options**: This course can be delivered for your team or organization online-live (virtual), onsite inperson, self-paced or across our immersive blended learning experience platform (LXP).
- Public Schedule: This course is currently available on our Public Open Enrollment Schedule.
- **Customizable**: We're flexible! This course agenda, topics, labs, hours and delivery modalities can be adjusted to target your specific training skills objectives, tools and learning goals. Please ask for details.

Overview

The Elastic Stack is a powerful combination of tools for techniques such as distributed search, analytics, logging, and visualization of data. Elastic Stack 7.0 encompasses new features and capabilities that will enable you to find unique insights into analytics using these techniques. Geared for experienced data analysts, IT professionals, and software developers who seek to augment their data processing and analytics capabilities, **Working with Elasticsearch** will explore how to use Elastic Stack and Elasticsearch efficiently to build powerful real-time data processing applications.

Throughout the two-day hands-on course, you'll explore the power of this robust toolset that enables advanced distributed search, analytics, logging, and visualization of data, enabled by new features in Elastic Stack 7.0. You'll delve into the core functionalities of Elastic Stack, understanding the role of each component in constructing potent real-time data processing applications. You'll gain proficiency in Elasticsearch for distributed searching and analytics, Logstash for logging, and Kibana for compelling data visualization. You'll also explore the art of crafting custom plugins using Kibana and Beats, and familiarize yourself with Elastic X-Pack, a vital extension for effective security and monitoring.

The course also covers essentials like Elasticsearch architecture, solving full-text search problems, data pipeline building, and creating interactive Kibana dashboards. Learn how to deploy Elastic Stack in production environments and explore the powerful analytics capabilities offered through Elasticsearch aggregations. The course will also touch upon securing, monitoring, and utilizing Elastic Stack's alerting and reporting capabilities. Hands-on labs, captivating demonstrations, and interactive group activities enrich your learning journey throughout the course.

For teams with specific requirements, our team is ready to tailor the course content to your unique learning objectives and goals. Upon completion, you will be well-equipped with a deep understanding of Elastic Stack's fundamental functionalities and how each component contributes to solving various data processing challenges.

Learning Objectives

This course combines engaging instructor-led presentations and useful demonstrations with valuable hands-on labs and engaging group activities. Throughout the course you'll explore:

- New features and updates introduced in Elastic Stack 7.0
- Fundamentals of Elastic Stack including Elasticsearch, Logstash, and Kibana
- Useful tips for using Elastic Cloud and deploying Elastic Stack in production environments



- How to install and configure an Elasticsearch architecture
- How to solve the full-text search problem with Elasticsearch
- Powerful analytics capabilities through aggregations using Elasticsearch
- How to build a data pipeline to transfer data from a variety of sources into Elasticsearch for analysis
- How to create interactive dashboards for effective storytelling with your data using Kibana
- How to secure, monitor and use Elastic Stack's alerting and reporting capabilities

If your team requires different topics, additional skills or a custom approach, our team will collaborate with you to adjust the course to focus on your specific learning objectives and goals.

Audience

This training is ideally suited for data analysts, IT professionals, and software developers who seek to augment their data processing and analytics capabilities. It will also benefit system administrators and data engineers who wish to harness Elastic Stack's functionalities for efficient system logging, monitoring, and robust data visualization. With a focus on practical application, this course is perfect for those aspiring to solve complex data challenges in real-time environments across diverse industry verticals.

Pre-Requisites

To ensure a smooth learning experience and maximize the benefits of attending this course, you should have the following prerequisite skills:

- Knowledge of basic data analysis concepts, including how to work with and interpret data sets, is necessary.
- Familiarity with basic IT and computer concepts, including operating systems and networks, will facilitate understanding of course content.
- Since Elastic Stack is used for data processing and analysis, understanding how databases function, and basic SQL skills are beneficial.
- Some basic programming knowledge, particularly in a language such as Python or Java, will help in understanding and implementing certain concepts, although it's not a hard prerequisite.
- Experience with command-line interfaces (CLI) would be advantageous, as Elastic Stack often involves interactions via CLI.
- Basic Linux skills, including familiarity with command-line options such as ls, cd, cp, and su

Enhanced Learning Services: Please also ask about our robust Learning Experience Platform (LXP), Skills Assessment & Skills Prep Services, Skills Immersion Programs & Camps, Coaching and Mentoring Services and Extended Learning Support programs.

Course Topics / Agenda

Please note that this list of topics is based on our standard course offering, evolved from typical industry uses and trends. We will work with you to tune this course and level of coverage to target the skills you need most. Course agenda, topics and labs are subject to adjust during live delivery in response to student skill level, interests and participation.

- 1. Introducing Elastic Stack
- What is Elasticsearch, and why use it?
- Exploring the components of the Elastic Stack
- Use cases of Elastic Stack
- Downloading and installing
- 2. Getting Started with Elasticsearch
- Using the Kibana Console UI
- Core concepts of Elasticsearch

- CRUD operations
- Creating indexes and taking control of mapping
- REST API overview
- 3. Searching What is Relevant
- The basics of text analysis
- Searching from structured data
- Searching from the full text
- Writing compound queries
- Modeling relationships

- 4. Analytics with Elasticsearch
- The basics of aggregations
- Preparing data for analysis
- Metric aggregations
- Bucket aggregations
- Pipeline aggregations
- Substantial Lab and Case Study
- 5. Analyzing Log Data
- Log analysis challenges
- Using Logstash



- The Logstash architecture
- Overview of Logstash plugins
- Ingest node

- 6. Visualizing Data with Kibana
- Downloading and installing Kibana
- Preparing data

- Kibana UI
- Timelion
- Using plugins

Setup Made Simple! Learning Experience Platform (LXP)

All applicable course software, digital courseware files or course notes, labs, data sets and solutions, live coaching support channels and rich extended learning and post training resources are provided for you in our "easy access, no install required" online **Learning Experience Platform (LXP)**, remote lab and content environment. Access periods vary by course. We'll collaborate with you to ensure your team is set up and ready to go well in advance of the class. Please inquire about set up details and options for your specific course of interest.

For More Information

For more information about our training services (instructor-led, self-paced or blended), collaborative coaching services, robust Learning Experience Platform (LXP), Career Experiences, public course schedule, partner programs, courseware licensing options or to see our complete list of course offerings, solutions and special offers, please visit us at www.triveratech.com, email Info@triveratech.com or call us toll free at 844-475-4559. Our pricing and services are always satisfaction guaranteed.

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LEARNING EXPERIENCE PLATFORM (LXP) • COACHING / MENTORING • ASSESSMENTS • CONTENT LICENSING & DEVELOPMENT

LEARNING PLAN DEVELOPMENT • SKILLS IMMERSION PROGRAMS / RESKILLING / NEW HIRE / BOOT CAMPS

PARTNER & RESELLER PROGRAMS • CORPORATE TRAINING MANAGEMENT • VENDOR MANAGEMENT SERVICES

Trivera Technologies is a Woman-Owned Small-Business Firm









