Working with Elasticsearch 7.0 - TTDS6685

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

Duration: 3 Days
Skill Level: Intermediate
Available Format: Instructor-Led Online ; On Public Schedule

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.

What You'll Learn

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.

Working with Elastic Search is a three-day hands-on course that will provide you with a fundamental understanding of what the stack is all about, and help you use it efficiently to build powerful real-time data processing applications. The first few sections of the course will help you understand how to set up the stack by installing tools, and exploring their basic configurations. You'll then get up to speed with using Elasticsearch for distributed searching and analytics, Logstash for logging, and Kibana for data visualization. As you work through the course, you will discover the technique of creating custom plugins using Kibana and Beats. This is followed by coverage of the Elastic X-Pack, a useful extension for effective security and monitoring. By the end of

this course, you'll be well versed with the fundamental Elastic Stack functionalities and the role of each component in the stack to solve different data processing problems.

Students who attend this course will learn well versed with the fundamental Elastic Stack functionalities and the role of each component in the stack to solve different data processing problems.

Objectives

This skills-focused course is approximately **50% hands-on lab to 50% lecture ratio**, combining engaging lecture, demos, group activities and discussions with machine-based student labs and exercises.. Our engaging instructors and mentors are highly-experienced practitioners who bring years of current, **modern "on-the-job" modern AI and machine learning experience** into every classroom and hands-on project.

Working in a hands-on lab environment led by our expert instructor, 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

Need different skills or topics? If your team requires different topics or tools, additional skills or custom approach, this course may be further adjusted to accommodate. We offer additional AI, machine learning, data science, programming, Python/R and other related topics that may be blended with this course for a track that

best suits your needs. Our team will collaborate with you to understand your needs and will target the course to focus on your specific learning objectives and goals.

Audience

This course is geared for attendees wants to get guide to storing, managing, and analyzing data with the updated features of Elastic 7.0. Incoming students should possess:

- Basic to Intermediate IT Skills, and Machine Learning knowledge
- Good foundational mathematics or logic skills
- Basic Linux skills, including familiarity with command-line options such as ls, cd, cp, and su

Pre-Requisites

Take Before: Attending students should have incoming skills similar to one of the courses below, or should have attended one as a pre-requisite:

- TTML5503 Introduction to AI, AI Programming & Machine Learning | AI/ML JumpStart

TTML5503   Introduction to AI & Machine Learning JumpStart

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.

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

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

Searching - What is Relevant

- The basics of text analysis
- Searching from structured data
- Searching from the full text
- Writing compound queries
- Modeling relationships

Analytics with Elasticsearch

- The basics of aggregations
- Preparing data for analysis
- Metric aggregations
- Bucket aggregations
- Pipeline aggregations

Analyzing Log Data

- Log analysis challenges
- Using Logstash
- The Logstash architecture
- Overview of Logstash plugins
- Ingest node

Building Data Pipelines with Logstash

- Parsing and enriching logs using Logstash
- Introducing Beats
- Filebeat

Visualizing Data with Kibana

- Downloading and installing Kibana
- Preparing data
- Kibana UI
- Timelion
- Using plugins

Elastic X-Pack

- Installing Elasticsearch and Kibana with X-Pack
- Configuring X-Pack
- Securing Elasticsearch and Kibana
- Monitoring Elasticsearch
- Alertin

All course software (limited versions, for course use only), digital courseware files or course notes, labs / data sets and solutions (as applicable) are provided for you in our "easy access / no install required" high-speed remote lab environment. Our tech team works with every student to ensure everyone is set up with working access and ready to go prior to every course start date, ensuring a smooth delivery and great hands-on experience. Please ask for details.

For More Information

Please contact us or call 844-475-4559 toll free for more information about our training services (instructor-led, self-paced or blended), coaching and mentoring services, public course enrollment or questions, partner programs, courseware licensing options and more.