Elastic Certified Analyst Curriculum

# Day 1: Introduction to Elastic Stack and Searching Data

## Learning Objectives

Understand the components of the Elastic Stack (Elasticsearch, Kibana, Logstash, Beats)

Learn the basic concepts of Elasticsearch

Master the fundamentals of Kibana

Effectively use KQL to filter and search data

Topics

Introduction to Elastic Stack

Elasticsearch Basics

Kibana Overview

KQL Fundamentals

Creating and managing data views

Applying time filters

Creating and using filters

Applying search criteria to visualizations

# Day 2: Visualizing Data

## Learning Objectives

Create various visualization types to represent data effectively

Customize visualizations for better understanding and communication

Build interactive dashboards to explore data dynamically

Topics:

Creating visualizations with pipeline aggregations and custom formulas

Customizing Lens visualizations

Creating maps

Creating tables with Lens

Dashboard creation and management

Defining and using spaces

Creating and sharing permalinks

Building interactive dashboards

# Day 3: Analyzing Data

## Learning Objectives:

Extract insights from data using search and visualization

Utilize machine learning tools to detect anomalies

Create alerts for critical events

Topics:

Data analysis using search and visualization

Introduction to machine learning in Elastic

Anomaly detection (single metric, multi-metric, population, categorization)

Using runtime fields

Creating Kibana alerts

Data frame analytics for outlier detection

# Day 4: Advanced Visualization and Analysis

## Learning Objectives:

Create complex visualizations for deeper insights

Utilize advanced machine learning techniques

Prepare data for analysis

Topics:

Creating Lens visualizations with layers

Adding reference lines and annotations

Advanced machine learning techniques

Data frame analytics for outlier detection

Creating entity-centric indices using transforms

The curriculum can be adjusted based on the participants' experience level and the specific focus of the training.

Hands-on exercises and labs should be incorporated throughout the course to reinforce learning.

Access to Elastic Cloud or a local Elastic Stack environment is required for practical exercises.

Consider providing additional resources (e.g., documentation, tutorials, code samples) for participants.

By following this curriculum and incorporating practical exercises, participants will develop the necessary skills to become proficient Elastic Certified Analysts.