



# DATA STORE INTEGRATION



ELASTICSEARCH ADVANCED  
SEARCH COURSE OUTLINE

## Overview

Your data lives in many different places — relational databases, NoSQL databases, file systems, and more — and bringing it all together can be difficult. This course provides a strong foundation for understanding the differences between a relational database and Elasticsearch, and how to model your data accordingly. It covers how to extract data from a database, transform and enrich it, and load it into Elasticsearch. You will also explore how to keep different data stores synchronized. After completing this course, you will be prepared to model and migrate your data in a systematic and sustainable way.

## Audience

Software Developers and Engineers, Data Architects, System Administrators, DevOps

## Duration

2-3 hours

## Language

English

## Prerequisites

We recommend you have taken [Elasticsearch Engineer I](#) and [Elasticsearch Engineer II](#) or possess equivalent knowledge. Engineer I and Engineer II teach the concepts that are the foundation upon which all specializations are built.

## Requirements

- Stable internet connection
- Mac, Linux, or Windows
- Latest version of Chrome or Firefox (Safari is not 100% supported)
- Due to virtual classroom JavaScript requirements, we recommend that you disable any ad-blockers and restart your browser before class.



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## Modules

### Elasticsearch and Databases

- Learn when Elasticsearch is a good alternative to relational databases. Using a real use case, we will discuss the different architectural options and show you that sometimes using both datastores can improve your business.
- **Hands-On Lab**

### Data Modeling

- Learn the main differences between a data model in a relational database and in Elasticsearch and how to migrate your model from one to another. We will also discuss when to use Elasticsearch *nested* and *join* data types.
- **Hands-On Lab**

### FROM database INTO elasticsearch

- Learn how to use Logstash to migrate data from a relational database to Elasticsearch. Migrating N:N relationships is not straightforward and will cover different options on how to do it.
- **Hands-On Lab**

### Synchronizing Different Data Stores

- Learn the different strategies, and their trade-offs, to keep Elasticsearch synchronized with your database.
- **Hands-on Lab**