

# Sela.

SOLR

## Using solr search engine

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SOLR - Version: 3.1

 3 days Course

### Description:

This course introduces students to the Solr platform. Through a combination of lecture, discussion, and labs students will gain hands-on experience configuring effective search and indexing.

### Intended audience:

Developers, business users, administrators

### Prerequisites:

All attendees should be experienced technical staff with a background in web application operations and, preferably, development

### Objectives:

- Solr installation and configuration
- Solr architecture and design
- Faceting, indexing, and search
- Advanced topics including spell checking, suggestions, Multicore, and SolrCloud.

### Topics:

Fundamentals



- Solr Overview
- Installing and running Solr
- Adding content to Solr
- Reading a Solr XML response
- Changing parameters in the URL
- Using the browse interface
- Labs: install Solr, run queries

## Searching

- Sorting results
- Query parsers
- More queries
- Hardwiring request parameters
- Adding fields to default search
- Faceting
- Result grouping
- Labs: advanced queries, experiment with faceted search

## Indexing

- Adding your own content to Solr
- Deleting data from Solr
- Building a bookstore search
- Adding book data
- Exploring the book data
- Dedupe update processor
- Labs: indexing various document collections

## Schema Updating



- Adding fields to the schema
- Analyzing text
- Labs: customize Solr schema

## Relevance

- Field weighting
- Phrase queries
- Function queries
- Fuzzier search
- Sounds-like
- Labs: implementing queries for relevance

## Extended features

- More-like-this
- Geospatial
- Spell checking
- Suggestions
- Highlighting
- Pseudo-fields
- Pseudo-joins
- Multilanguage
- Labs: implementing spell checking and suggestions

## Multicore

- Adding more kinds of data
- Labs: creating and administering cores



## SolrCloud

- Introduction
- How SolrCloud works
- Commit strategies
- ZooKeeper
- Managing Solr config files
- Labs: administer SolrCloud

## Developing with Solr API

- Talking to Solr through REST
- Configuration
- Indexing and searching
- Solr and Spring
- Labs: code to read and write Solr index, exercise in Spring with Solr

## Developing with Lucene API

- Building a Lucene index
- Searching, viewing, debugging
- Extracting text with Tika
- Scaling Lucene indices on clusters
- Lucene performance tuning
- Labs: coding with Lucene

## Conclusion

- Other approaches to search
  - Elasticsearch

# Sela.



- DataStax Enterprise: Solr+Cassandra
- Cloudera Solr integration
- Blur
- Future directions