SOLR

Using solr search engine

Using solr search engine

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
    º ElasticSearch

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