

Advanced Solr

Learn how to use modern Solr and SolrCloud.



A PLURALSIGHT COMPANY

720-445-4360

info@developintelligence.com

Course Overview:

The Advanced Solr training course is designed to teach students advanced principles of the latest release of Solr and SolrCloud. In the course, students learn best practices for sharing indexes and running SolrCloud Mode at scale.

The course begins with Solr Architecture and the exploration of version 2 of the API. Students will then learn how to configure, tune, scale Solr, and SolrCloud. Next, the course moves into advanced concepts of searching under control. The course concludes with a lesson on tuning Solr and SolrCloud from an expert perspective.

Before beginning the course students should have completed an Introduction to Solr/Lucene course or have equivalent knowledge.

Productivity Objectives:

After this course, you will be able to:

- > Leverage version 2 of the Solr API
- > Tune Solr
- > Transition to SolrCloud

Course Duration:

This course will be delivered in 3 Days

Course Delivery:

DI will work with you and your team to define the most appropriate delivery structure, schedule and dates. Structure, schedule and dates will be determined by project schedule, team availability and classroom availability. And of course, it will also be determined by DI's instructor availability.

Course Outline:

- > Solr Architecture
 - > SolrCloud architecture
- > API v2
 - > What is API v2
 - > Nested documents

- Configuring Solr Internals
 - General solrconfig.xml section
 - Replication
 - Update request processors
 - Language detection
 - Configuring logging
 - Slow query log
- Tuning Solr
 - Indexing threads
 - Indexing buffer size
 - Auto commit tuning
 - Caches
 - Replication throttling
 - Warming up
- Scaling Solr & SolrCloud
 - Solr master & slaves configuration
 - ZooKeeper role explained
 - Working with ZooKeeper
 - Sharding
 - Using Collections API
 - SolrCloud Replica Types
 - Caches in SolrCloud
 - Aliases
- Operations
 - Running in Container/Kubernetes (on GCP)
 - Backing up SolrCloud
 - Monitoring using JMX
 - Monitoring using SPM
 - Key Metrics to Monitor

- Search Under Control
 - Routing
 - Index time routing
 - Query time routing
 - Basic syntax for local params
 - Parameter dereferencing
 - Using parameter dereferencing in handlers configuration
 - Using filters tagging
 - Using faceting exclusions
 - Using pivot facets with stats component and query faceting
 - Advanced facets control
 - JSON facets control
 - Re-ranking queries results
 - Timing out searches
- Expert Tuning Solr
 - Memory considerations
 - Indexing threads
 - Auto commit tuning
 - Caches
 - Replication throttling
- Expert SolrCloud
 - ZooKeeper role explained
 - Sharding and replication
 - Rule based shard placement
 - Cluster state explained
 - Caches in SolrCloud
 - Shard splitting
 - Migrating data between collections
 - Working with large number of collections

Let the learning commence!

Contact us to begin the personalization process. We'll work with you to design a **custom training solution** that works for you, your team and your budget. Let's get started! **720-445-4360**



