Silicon Beach Training

The Apache Solr Certification course equips the delegates with the knowledge required to use and adopt the Enterprise Grade Search Engine. The course provides an overview of the Apache Lucene, Solr platform, core Lucene APIs and Solr features. The course enables the delegates to master the concepts of Apache Solr, Apache Solr Cloud and its features. Throughout the course, the delegates will learn the concepts of Apache Solr and its advantages, Solr Installation, Indexing and Updating schemas and SolrCloud cluster load balancing. Many of world's largest internet sites' search and navigation features are powered by Apache Solr. The Apache Solr Certification helps the delegates to get high paying jobs in this field. The delegates will get a course completion certificate at the end of the training program.

Apache Solr is an open source platform built on Apache Lucene for searching and indexing websites and files. Its major features include dynamic clustering, real-time indexing, hit highlighting, database integration and faceted search. It is fault tolerant, highly reliable and scalable. The administration of Enterprise Search Applications is also managed by Apache Solr. The Apache Solr Certification Training program imparts the essential knowledge and skills required to gain expertise in Clustering, Indexing, Pagination and Faceting. The course is highly beneficial for Quality Analysts and Software Developers who want to use search platforms for e-commerce & Business applications.

Features of Apache Solr

Some of the most prominent features of Solr are:

- Restful APIs
- Enterprise ready
- Highly Scalable
- Flexible and Extensible
- Admin Interface
- Text-Centric and Sorted by Relevance
- Full text search
- NoSQL database

Prerequisites

The delegates are expected to have:

- Basic knowledge of Java at an intermediate level
- Good knowledge of Computer Science
- Basics of Linux and databases

Course Objectives

- Master the concepts of Apache Solr
- Thorough understanding of Apache Lucene and APIs concepts

- Learn indexing and searching using Solr
- Learn to make a Solr Cloud
- Explore the advanced features of Solr and Solr Administration
- Efficiently implement a Solr project

Introduction to Apache Lucene

The module introduces delegates to the Basic of Lucene, its architecture, characteristics and basics of search engines. The module also explains the schema, analyzers and query types of Lucene.

- Search Engine Basics
- Lucene Overview & Features
- Indexing Basics
- Architecture
- Inverted Indexing Technique
- Lucene Schema (Documents & Fields)
- Analyzers
- Query Types
- Writing & Searching Index

Exploring Apache Lucene

In this module, the delegates will explore the Scoring, Querying, Highlighting, Analyzers, Boosting, Faceting etc.

- Analyzers
- Querying
- Scoring
- Boosting
- Highlighting
- Faceting
- Grouping
- Joins
- Spatial Search
- Apache Tika

Introduction to Apache Solr

The module provides an overview of Solr, architecture, key features of Solr, field types of Solr and installation steps of Solr.

- Solr Introduction
- Key Features
- Solr Vs Databases

- Installing & Running Solr
- Admin UI Quick Tour
- Solr Architecture
- Solr Schema
- Solr Field Types & Fields

Solr Indexing

This module covers more details about Solar configurations, Solr Indexing, Transaction Logs and much more.

- Introduction to Analysis & Analyzers
- Tokenizers & Filters
- Indexing & Index Handlers
- Indexing Options
- Nested Documents
- Commits
- Transaction Logs
- Solr Configurations

Searching Using Solr

In this module, the delegates will learn how to search using Solr, other major concepts like Search Process, Basics and Extended Parsers, Velocity Search UI and Syntax.

- Search Process
- Velocity Search UI
- Search Types / Options
- Sorting & Relevance
- Boosting
- Query Syntax
- Basic Query Parsers
- Extended Query Parsers

Advanced Features

The module explains the advanced features of Solr like Highlighting, Faceting, Spell Checking, Spatial Search, Collapsing and Expanding and Clustering etc.

- Faceting
- Highlighting
- Spell Checking
- Query Re-Ranking
- Suggestions
- MoreLikeThis
- Pagination
- Grouping
- Clustering
- Spatial Search
- Collapsing & Expanding
- Exporting Results

- Real-Time Search & Get
- Client API's

Administration and SolrCloud

In this module, the delegates will learn about Solr Administration, Solr Cloud, Solr, Plugins and JVM Settings.

- Managing Solrconfig.xml
- Managing solr.xml
- Managing Multiple Cores
- Plugins
- JVM Settings
- Running On Tomcat / Jetty
- Logging & SSL
- SolrCloud

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