

Cassandra – Fundamentals

Description

The Cassandra database now occupies a central place in distributed environments. Its design is based on principles of high availability, performance, and scalability. This Cassandra training provides a clear understanding of its architecture, internal mechanisms, and practical use in business environments.

A database built for performance

This course emphasizes practical aspects. The teaching approach combines theory, hands-on exercises, and direct application. You will study the differences between relational databases and NoSQL systems, then explore the CAP theorem. You will also learn how to create and manage efficient clusters. Special focus is given to complementary tools such as Thrift, Avro, and JSON, which are essential for advanced integrations. By the end of the training, you will be able to effectively administer a complete environment and handle large volumes of data.

Course Content

- Module 1: Advantages and Usage of Cassandra
- Module 2: CAP Theorem and No SQL DataBase
- Module 3: Cassandra fundamentals, Data model, Installation and setup
- Module 4: Cassandra Configuration
- Module 5: Summarization, node tool commands, cluster, Indexes, Cassandra & MapReduce, Installing Ops-center
- Module 7: Multi Cluster setup
- Module 8: Thrift/Avro/Json/Hector Client
- Module 9: Datastax installation part, Secondary index
- Module 10: Advance Modelling
- Module 11: Deploying the IDE for Cassandra applications
- Module 12: Cassandra Administration
- Module 13: Cassandra API and Summarization and Thrift

Lab / Exercises

- This course includes hands-on exercises designed to reinforce your knowledge and apply your skills in real-world professional scenarios.

Documentation

- Digital courseware included

Participant profiles

- Developers and software engineers
- Database administrators
- Technical project managers
- Data analysts and testers

Prerequisites

- Basic familiarity with Linux will be helpful

Objectives

- Learn about Cassandra concepts and the architecture
- Difference between RDBMS and Cassandra
- Learn Key features of NoSQL database and CAP theorem
- Install, configure and monitor Cassandra
- Learn Cluster management, Indexing and Data Modeling in Cassandra
- Understand basics of Thrift, AVRO, JSON and Hector Client
- Learn to use Cassandra for handling large volumes of data

Description

Cassandra training

Niveau

Fondamental

Classroom Registration Price (CHF)

3100

Virtual Classroom Registration Price (CHF)

2900

Duration (in Days)

4

Reference

CAS-FON