DS250: DataStax Enterprise V6.7 FastTrack for DevOps

Overview:

In this course, you will learn the fundamentals of Datastax Enterprise, its distributed architecture, and how data is stored. You will master DSE's internal architecture and Data Modeling techniques that will ensure you develop the skills necessary to build disruptive cloud applications. You'll also learn how to estimate the size of the cluster, how to configure and modify the cluster configuration, how to monitor and tune the cluster as well as the supporting operating system, JVM, hardware and how to secure your DSE deployment.

Course length:

3 Days

Outline:

Introduction

- o Introduction
- o What is Cassandra?
- o Fundamentals of Apache Cassandra
- o CQL Fundamentals
- o Partitions
- o Primary Keys
- o Clustering Columns

Cassandra Features

- o Denormalizing
- o Collections. Counters & UDT's
- o Collections
- o User-Defined Types
- o Counters





Data Modeling

- o Data Modeling
- o Conceptual Data Model
- o Workflow & Access Patterns
- o Mapping Conceptual to Logical
- o Logical Model
- o Physical Model

Configuration, Performance & Tuning

- o JVM Tuning
- o Write Path
- o Read Path
- o Configure your Node
- o Cluster Performance
- o Cluster Performance Continued
- o System Logs
- o Up & Running

Care, Feeding & Expansion of your Cluster

- o (Bulk) Load Data
- o Compaction
- o Repair & Rebuild
- o Backup & Restore
- o Expand your cluster with a second DC
- o You now have a distributed Cluster, Congrats!
- o Kernel Config
- o Authentication & Authorization
- o SSL

ABOUT DATASTAX

DataStax helps companies compete in a rapidly changing world where expectations are high and new innovations happen daily. DataStax is an experienced partner in on-premises, hybrid, and multi-cloud deployments and offers a suite of distributed data management products and cloud services. We make it easy for enterprises to deliver killer apps that crush the competition.

More than 400 of the world's leading enterprises including Capital One, Cisco, Comcast, Delta Airlines, eBay, Macy's, McDonald's, Safeway, Sony, and Walmart use DataStax to build modern applications that can be deployed across any cloud. For more information, visit www.DataStax.com and follow us on Twitter gDataStax.

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DSE Tuning & Features

- o DSE Performance Tuning
- o Tuning the Heap
- o Introduction to DSE Search
- o Introduction to DSE Analytics
- o Introduction to DSE Graph
- o You now have a full DSE installation
 - § Course Summary

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