

Administering Apache HBase

OEM: Cloudera • Duration: 3 Days (24 hrs) • Code: ADMIN-234

COURSE MODULES & TOPICS

Configuring HBase for High Availability

HBase Schema Design

- General Design Considerations
- Application-Centric Design
- Designing HBase Row Keys
- Case: Row Key Design

HBase Performance Tuning

- Performance Evaluation using 'pe'
- Optimization through Parameters
- Garbage Collection
- Case: Parameter Optimization
- Best Practices

HBase Migration, Backup, and Recovery

- Full Migration
- Incremental Migration
- Best Practices

Resource Management

- Managing Roles and Templates
- Adding Workers
- Decommissioning and removing workers

YARN Queues and Jobs

- Install and Configure YARN Queues
- Running and Managing jobs

Managing Services

- Identifying and installing Parcels
- Add and remove Cloudera services

Configuration Management

- Configuration changes to properties
- Configuring Role Groups

HBase Monitoring & Troubleshooting

- Monitoring HBase
- Testing Network Bandwidth
- Cloudera Manager Charts
- Troubleshooting RIT Issues
- Best Practices

Operational Database — HBase Essentials

- Overview
- HBase Table Fundamentals
- HBase Shell
- HBase Data Access
- Column Family Design and Considerations
- Filtering Scans
- Best Practices

HBase Write & Read Path

- HBase Write Path
- HBase Read Path
- Deploying and Accessing to HBase Cluster
- HBase Cluster in Cloudera on Premises
- HBase Cluster in Cloudera on Cloud

Phoenix Overview

- Command Line Client
- Metadata SQL Commands and Line Client
- Creating a Table
- Table Architecture
- Modifying and Deleting rows
- Reading Data
- Transaction
- BulkLoad

- Views
- Mapping Phoenix table to an existing HBase table
- Secondary Index
- Salted Table
- Phoenix Optimization

Introduction to the HBase HBACK2 Repair Tool

Introduction to BucketCache

Benchmarking HBase Using YCSB Tool

Storing Medium Object (MOBs)