



MONGODB TRAINING

Mongodb Admin

Master MongoDB administration, ensuring high performance and robust data security for your applications.

DURATION

Flexible

LEVEL

Intermediate

FORMAT

Instructor-Led

-
- Globally Recognized Certification
 - Expert-Led Hands-On Training
 - Flexible Scheduling

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COURSE OVERVIEW

The MongoDB Admin course at Computer Pride is meticulously designed for IT professionals seeking to master the administration, operation, and maintenance of MongoDB databases. This intermediate-level program dives deep into the architecture and operational best practices of MongoDB, equipping you with the essential skills to deploy, manage, and scale high-performance NoSQL database environments. You will gain hands-on experience with core technologies such as replica sets for high availability, sharding for horizontal scalability, robust backup and restoration strategies, and comprehensive security implementations.

Upon completion, participants will be proficient in ensuring optimal database performance, guaranteeing data integrity, and securing mission-critical MongoDB deployments. The professional benefits include enhanced career prospects in a rapidly expanding field, the ability to troubleshoot complex database issues, and the confidence to architect resilient and scalable data solutions. This course is ideal for individuals aiming to become indispensable assets in organizations leveraging MongoDB for their data needs.

Level	Intermediate
Vendor	MongoDB

COURSE CURRICULUM

01 Module 1: MongoDB Fundamentals & Installation

- Introduction to NoSQL and MongoDB Architecture
- Understanding Data Models in MongoDB (Documents, Collections, Databases)
- Installation and Configuration on Linux/Windows
- MongoDB Shell Basics and CRUD Operations Review
- Storage Engines (WiredTiger) and Journaling

02 Module 2: Replication for High Availability

- Introduction to Replica Sets and their Architecture
- Configuring and Deploying a Replica Set
- Monitoring Replica Set Status and Health
- Failover and Recovery Procedures
- Read Preferences and Write Concerns

03 Module 3: Sharding for Scalability

- Introduction to Sharding and Horizontal Scaling Concepts
- Components of a Sharded Cluster (mongos, config servers, shards)
- Choosing Effective Shard Keys and Data Distribution
- Deploying and Configuring a Sharded Cluster
- Adding and Removing Shards, Rebalancing Data

04 Module 4: Backup, Restore & Disaster Recovery

- Understanding Backup Strategies for MongoDB
- Using mongodump and mongorestore for Logical Backups
- Filesystem Snapshots and Cloud-based Backups
- Point-in-Time Recovery Techniques
- Disaster Recovery Planning and Implementation

Module 5: Security and Authentication

- 05**
- MongoDB Security Architecture and Best Practices
 - Role-Based Access Control (RBAC)
 - User Management and Authentication Mechanisms (SCRAM-SHA-1, SCRAM-SHA-256)
 - TLS/SSL Encryption for Client-Server Communication
 - Auditing and Compliance Features

06 Module 6: Monitoring, Performance & Troubleshooting

- Key Performance Metrics and Monitoring Tools (mongostat, mongotop)
- MongoDB Cloud Manager/Ops Manager for Advanced Monitoring
- Query Optimization and Indexing Strategies
- Hardware Sizing and Configuration Best Practices
- Troubleshooting Common Performance and Availability Issues

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **MongoDB Database Administrator (DBA)**
- > **NoSQL Data Infrastructure Engineer**
- > **Cloud Database Operations Specialist**

FREQUENTLY ASKED QUESTIONS

Q: What prior experience or prerequisites are recommended before enrolling in the MongoDB Admin course?

This intermediate-level course assumes a foundational understanding of database concepts and basic Linux command-line proficiency. While not strictly required, prior exposure to MongoDB development or general database administration experience will be beneficial for a smoother learning experience.

Q: How will this MongoDB Admin course enhance my ability to manage high-traffic, production-grade MongoDB environments?

This course focuses extensively on practical skills for production environments, covering advanced topics like configuring and maintaining highly available replica sets, designing and deploying sharded clusters for massive scalability, implementing robust security measures, and optimizing performance for demanding workloads. You'll learn to anticipate and resolve issues critical for stable operations.

Q: Will I gain hands-on experience in setting up and maintaining both replica sets and sharded clusters during the course?

Absolutely. A significant portion of this course is dedicated to practical, hands-on labs where you will actively set up, configure, and manage both replica sets for high availability and sharded clusters for horizontal scalability. You'll perform tasks such as initiating replica sets, adding shards, rebalancing data, and troubleshooting common operational challenges.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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