

## Oracle NoSQL Database for Administrators

**Course Duration: 24 Hours**

**Course code: D91324**

### 1. Course Overview

This course provides administrators with the knowledge and skills required to install, configure, manage, and monitor Oracle NoSQL Database. It covers key administrative tasks such as setting up clusters, configuring security, monitoring performance, troubleshooting, and ensuring high availability. The course also focuses on backup, recovery, and capacity planning for scalable and fault-tolerant NoSQL database deployments.

### 2. What you'll learn?

**By the end of this course, participants will be able to:**

- Understand the architecture of Oracle NoSQL Database
- Install and configure Oracle NoSQL Database clusters
- Manage storage nodes, replication, and consistency models
- Configure and manage security (authentication, authorization, encryption)
- Monitor system health and optimize performance
- Implement backup, recovery, and high availability strategies
- Perform scaling operations and capacity planning
- Troubleshoot common administrative and operational issues

### 3. Target Audience

- Database Administrators (DBAs)
- System Administrators
- Data Engineers managing Oracle NoSQL workloads
- Cloud/Big Data Infrastructure Engineers

### 4. Pre-Requisites

- Basic knowledge of databases and SQL
- Familiarity with Linux/Unix administration

- Understanding of distributed systems is recommended

## 5. Course content

### Module 1: Introduction to Oracle NoSQL Database

- NoSQL concepts and use cases
- Oracle NoSQL Database overview
- Key features and benefits

### Module 2: Architecture and Components

- Cluster topology and storage nodes
- Replication and shard management
- Consistency and availability models

### Module 3: Installation and Configuration

- System requirements and prerequisites
- Installing Oracle NoSQL Database
- Initial configuration and setup

### Module 4: Cluster Management

- Creating and managing storage nodes
- Configuring replication groups
- Adding and removing nodes

### Module 5: Security Administration

- Authentication and authorization
- Role-based access control (RBAC)
- Data encryption and secure communication

### Module 6: Monitoring and Performance Tuning

- Monitoring tools and logs
- Performance metrics and health checks

- Tuning best practices

#### Module 7: Backup and Recovery

- Backup strategies and implementation
- Recovery procedures
- Disaster recovery planning

#### Module 8: High Availability and Scaling

- Replication for fault tolerance
- Scaling out clusters and capacity planning
- Load balancing strategies

#### Module 9: Troubleshooting and Maintenance

- Common administrative issues and resolutions
- Log analysis and diagnostics
- Regular maintenance tasks

#### Module 10: Advanced Administration

- Multi-datacenter deployments
- Integrating Oracle NoSQL with Oracle Cloud
- Best practices and optimization techniques