

# Oracle Database 19c: Performance Management and Tuning

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• Nível:

• Duração: 30h

#### Sobre o curso

Demonstrate fluency in and strong understanding of Oracle Database 19c performance analysis, management, and tuning for optimal performance in a complex environment.

The Oracle Database 19c: Performance Management and Tuning course teaches you about the performance analysis and tuning tasks expected of a database administrator. The instructions are reinforced with hands-on practices.

#### **Destinatários**

• This course intended for Database administrators and technical support staff

## **Objetivos**

In this course, you will learn to:

- Describe Performance Management
- Use AWR Performance Statistics
- Use AWR Based Tools
- Improve SQL Statement Performance
- Influence the Optimizer
- Use Tuning Analyzers and Advisors
- Monitor Operations and applications
- Manage Memory
- Manage Database Memory
- Use In-Memory Column Store Feature

## Pré-requisitos

- Working knowledge of using SQL and administering an Oracle database 19c.
- Basic knowledge of Linux / UNIX is recommended but not essential.

### Programa

- Defining the Scope of Performance Issues
- Using the Time Model to Diagnose Performance Issues
- Using Statistics and Wait Events to Diagnose Performance Issues
- Using Log and Trace Files to Monitor Performance
- Using Enterprise Manager Cloud Control and SQL Developer to Monitor Performance
- Using Statspack to View Performance Data
- Using Automatic Workload Repository
- · Using Metrics and Alerts
- Using Baselines
- Managing Automated Maintenance Tasks
- Using ADDM to Analyze Performance
- Using Active Session History Data for First Fault System Analysis
- Using Emergency Monitoring and Real-Time ADDM to Analyze Performance Issues
- Overview of SQL Statement Processing
- Maintaining Indexes
- Maintaining Tables
- Introduction to Query Optimizer
- Understanding Execution Plans
- Viewing Execution Plans by Using SQL Trace and TKPROF
- Managing Optimizer Statistics
- Using Automatic SQL Tuning
- Using the SQL Plan Management Feature
- · Overview of the SQL Advisors
- Using the SQL Tuning Advisor
- Using the SQL Access Advisor
- Overview of Real Application Testing Components
- Using SQL Performance Analyzer to Determine the Impact of Changes
- Using Database Replay to Test System Performance
- Implementing Real-Time Database Operation Monitoring
- Using Services to Monitor Applications

- Overview of Memory Structures
- Managing Shared Pool Performance
- Managing Buffer Cache Performance
- Managing PGA and Temporary Space Performance
- Configuring the Large Pool
- Using Automatic Shared Memory Management
- Introduction to In-Memory Column Store
- Configuring the In-Memory Column Store Feature
- Using In-Memory Column Store with Oracle Database Features