

# Oracle Database: Backup and Recovery Workshop

Duration: 5 days; Instructor-led

#### WHAT YOU WILL LEARN

In this course, students learn how to perform backup and recovery based on the related Oracle Database architecture components. Various backup, failure, restore, and recovery scenarios are provided so that students learn to evaluate their own recovery requirements and develop an appropriate strategy for backup and recovery procedures. This course includes an interactive workshop, with scenarios that provide participants with opportunities to diagnose and recover from several failure situations.

The student begins by gaining a deeper understanding of possibly the most important job of a DBA - backup and recovery. The concepts and architecture that support backup and recovery, along with implementation in various ways and situations are covered in detail. Students gain knowledge of the Recovery Manager (RMAN) command-line interface for various backup, failure, restore, and recovery scenarios, including data duplication.

Extensive hands-on practices and workshop scenarios provide the student with experience in a realistic technical environment. This course includes an interactive workshop that provide participants with opportunities to diagnose and recover from several failure scenarios, based on backup and recovery case studies.

After completing this course, students should be able to evaluate their own recovery requirements and develop an appropriate strategy for backup and recovery procedures.

## **Learn To:**

- Develop appropriate backup and recovery procedures to address your business needs.
- Implement backup and recovery settings and perform backup operations to disk and tape.
- Employ Oracle Database recovery procedures to recover from media and other failures.

- Diagnose and repair data failures.
- Use flashback technologies and data duplication to complement backup and recovery procedures.
- Secure the availability of your database by appropriate backup and recovery strategies.

#### **Benefits**

- The student benefits by gaining a deeper understanding of possibly the most important job of a DBA - backup and recovery. The concepts and architecture that support backup and recovery, along with implementation steps in various ways and situations, are presented in detail.
- Students gain knowledge of the Recovery Manager (RMAN) command-line interface for various backup, failure, restore, and recovery scenarios, including data duplication.

#### **Hands-On Lessons**

Extensive hands-on practices and workshop scenarios provide the student with experience in a realistic technical environment. This course includes an interactive workshop that provide participants with opportunities to diagnose and recover from several failure scenarios, based on backup and recovery case studies. After completing this course, students should be able to evaluate their own recovery requirements and develop an appropriate strategy for backup and recovery procedures.

#### **AUDIENCE**

- Oracle Database Administrator
- Data Warehouse Administrator
- Support Engineer
- Technical Consultant
- Technical Administrator

# **PREREQUISITES**

Oracle Database: Administration Workshop

#### **METHODOLOGY**

This program will be conducted with interactive lectures, PowerPoint presentation, discussions and practical exercise.



### **COURSE OBJECTIVES**

Upon completion of this course, the student should be able to:

- Describe the Oracle Database architecture components related to backup and recovery operations.
- Plan effective backup and recovery procedures.
- Describe Oracle Database backup methods and recovery operations that can be used to resolve database failure.
- Configure the database for recoverability.
- Use Recovery Manager (RMAN) to create backups and perform recovery operations.
- Use the Data Recovery Advisor to diagnose and repair failures.
- Use Oracle Flashback Technologies to recover from human error.
- Perform an encrypted database backup and restore.
- Perform tablespace point-in-time recovery.

#### **COURSE OUTLINES**

# **Module 1: Introduction and Configuration**

- Introduction
- Getting Started
- Configuring for Recoverability
- Using the RMAN Recovery Catalog

### Module 2: Backup

- Backup Strategies and Terminology
- Performing Backups
- Improving Your Backups
- Using RMAN-Encrypted Backups

# **Module 3: Recovery**

- Diagnosing Failures
- Restore and Recovery Concepts
- Performing Complete Recovery
- Performing Point-in-Time Recovery
- Performing Additional Recovery Operations

## **Module 4: Additional Technologies**

- Using Flashback Technologies
- Using Flashback Database
- Transporting Data
- Duplicating a Database

RMAN Troubleshooting and Tuning

#### Module 5: Hands-On

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