

Oracle Database 11g: Administration Workshop II

Duração: 5 Dias

Objetivos do Curso

In this course, the concepts and architecture that support backup and recovery, along with the steps of how to carry it out in various ways and situations, are covered in detail. This includes how to define and test your own backup and recovery scenarios.

Also, the students learn to manage memory effectively and to perform some performance evaluation and tuning tasks, including using some of the advisors. All types of flashback technologies, scheduling jobs inside and outside of the database, and controlling system resource usage are covered. Topics are reinforced with hands-on practices.

This course counts towards the Hands-on course requirement for the Oracle Database 11g Administrator Certification. Only instructor-led inclass or instructor-led online formats of this course will meet the Certification Hands-on Requirement. Self Study CD-Rom and Knowledge Center courses DO NOT meet the Hands-on Requirement.

Learn To:

Back up and recover a database using RMAN and Enterprise Manager

Configure Oracle Database for optimal recovery for any environment

Identify burdensome database sessions and poorly performing SQL

Configure the database instance such that resources are allocated among sessions and tasks appropriately

Schedule jobs to run inside or outside of the database

Administrador de Banco de Dados

Administrador de Data Warehouse

Consultor Técnico

Data Warehouse Administrator

Database Administrators

Support Engineer

Technical Consultant

Pré-requisitos

Pré-requisitos Obrigatórios

Oracle Database 11g: Administration Workshop I

Objetivos do Curso

Back up and recover a database

Configure Oracle Database for optimal recovery

Administer ASM disk groups

Use an RMAN backup to duplicate a database
Automating Tasks with the Scheduler

Tópicos do Curso

Database Architecture and ASM

Oracle Database Architecture Overview
ASM General Architecture
Creating an ASM Instance
Using Enterprise Manager to Manage ASM Users
ASM Storage Concepts
The ASMCMD Utility
ASM Scalability and Performance

Configuring for Recoverability

Purpose of Backup and Recovery Functionality
Typical Backup and Recovery Tasks
Oracle Backup and Recovery Solutions
Using Recovery Manager (RMAN)
Using a Flash Recovery Area
Flash Recovery Area Space Management

Using the RMAN Recovery Catalog

RMAN Repository Data Storage: Comparison of Options
Storing Information in the Recovery Catalog
Registering a Database in the Recovery Catalog
Recovery Catalog Resynchronization: Concepts
Using RMAN Stored Scripts
Backing Up and Recovering the Recovery Catalog
Using a Virtual Private Catalog

Configuring Backup Specifications

Using RMAN to Create Backups
Configuring Persistent Settings for RMAN
Using Enterprise Manager to Configure RMAN Settings
Control File Auto-backups
Managing Persistent Settings
Configuring Devices for Backup
Configuring and Allocating Channels for Use in Backups
Configuring Backup Optimization

Creating Backups

Creating an Oracle-Suggested Backup
Creating Backup Sets & Image Copies
Creating a Whole Database Backup
RMAN Backup Types
Monitoring Block Change Tracking
Creating Duplex Backup Sets
Archival Backups: Concepts
Encrypting Backups

Performing User-Managed Backup and Recovery

- Restoring and Recovering
- Causes of File Loss
- Critical Versus Non-critical
- Recovering from a TEMPFILE Loss
- Re-creating Indexes
- Recovering from a Lost Index Tablespace
- Authentication Methods for Database Administrators
- Recovering a Read-Only Tablespace

Using RMAN to Perform Recovery

- Using RMAN RESTORE and RECOVER Commands
- Performing Recovery Using Enterprise Manager
- Recovery Using Incrementally Updated Backups
- Perform a Fast Switch to Image Copies
- Restoring and Recovering the Database on a New Host
- Performing Disaster Recovery

Using RMAN to Duplicate a Database

- Using RMAN to Create a Duplicate Database
- Creating a Duplicate Database
- Creating an Initialization Parameter File for the Auxiliary Instance
- Allocating Auxiliary Channels
- Understanding the RMAN Duplication Operation
- Using EM to Clone a Database
- Cloning a Running Database

Performing Tablespace Point-in-time Recovery

- Tablespace Point-in-Time Recovery (TSPITR) Concepts
- Tablespace Point-in-Time Recovery: Architecture
- Understanding When to Use TSPITR
- Determining the Tablespaces for the Recovery Set
- Using Enterprise Manager to Perform TSPITR
- Understanding TSPITR Processing
- Troubleshooting RMAN TSPITR

Monitoring and Tuning RMAN

- Parallelization of Backup Sets
- Monitoring RMAN Sessions
- Interpreting RMAN Message Output
- Using the DEBUG Option
- Tuning RMAN
- RMAN Multiplexing
- Comparing Synchronous and Asynchronous I/O
- Tape Subsystem Performance Rules

Using Flashback Technology

- Flashback Technology
- Transactions and Undo
- Guaranteeing Undo Retention
- Preparing Your Database for Flashback
- Flashback Drop and the Recycle Bin

Using Flashback Technology to Query Data

Possible Workflow

Flashback Transaction Wizard

Using Flashback Database

Flashback Table

Enabling Row Movement on a Table

Enabling Row Movement on a Table

Flashback Database Architecture

Configuring Flashback Database

Performing Flashback Database Using EM

Flashback Database Considerations

Flashback Data Archive

Diagnosing the Database

Automatic Diagnostic Workflow & Repository

Location for Diagnostic Traces

Viewing the Alert Log Using Enterprise Manager

The Support Workbench and Oracle Configuration Manager

Create a Service Request

Package and upload diagnostic data to Oracle Support

Incident Packaging Configuration

Health Monitor Overview & Data Recovery Advisor

Managing Memory

Oracle Memory Structures

Automatic Memory Management Overview

Oracle Database Memory Parameters

Auto Memory Parameter Dependency

Automatic Shared Memory Management: Overview

Automatic PGA Memory Management

Using the Memory Advisor to Size the SGA

Memory Tuning Guidelines for the Library Cache

Managing Database Performance

Tuning Activities

Performance Planning & Performance Tuning Methodology

Instance Tuning

Troubleshooting and Tuning Views

Automatic Workload Repository

SQL Tuning & SQL Advisors

Using the SQL Tuning Advisor

SQL Access Advisor: Overview

Using the Segment Advisor

Space Management: Overview

Proactive Tablespace Monitoring

Thresholds and Resolving Space Problems

Monitoring Tablespace Space Usage

Shrinking Segments

Space Reclamation with ASSM

Automatic Segment Advisor

Minimum Compatibility Level

Managing Resources

Database Resource Manager: Overview

Database Resource Manager Concepts

Accessing Resource Plans

Default Maintenance Resource Manager Plan

Creating Consumer Groups

Resource Allocation Methods for Resource Plans

Resource Allocation Methods for Resource Plans

Monitoring the Resource Manager

Automating Tasks with the Scheduler

Simplifying Management Tasks

Key Components and Steps

Creating an Event-Based Schedule

Creating Complex Schedules

Creating Job Chains

Creating Job Chains

Administering the Scheduler

Advanced Scheduler Concepts

Job Classes

Windows

Prioritizing Jobs Within a Window

Remote Jobs

Installing the Scheduler Agent

Dictionary Views Supporting Remote Jobs

Globalization

Globalization Support Features

What Every DBA Needs to Know

Understanding Unicode

Database Character Sets and National Character Sets

Language- and Territory-Dependent Parameters

Linguistic Searching and Sorting

Case- and Accent-Insensitive Search and Sort

NLS Data Conversion with Oracle Utilities

Cursos Equivalentes

Oracle Database 11g: Administration Workshop II - Self-Study CD Course