

Oracle9i Database Administration Fundamentals II

Duration: 5 Days

What you will learn

Develop your ability to manage the industry's most advanced information system. Learn several methods to backup and to recover your Oracle database. Hands-on workshops give you experience in a realistic technical environment.

Develop skills for basic network administration. Simplify your duties with Oracle Recovery Manager. This course gives the Oracle database administrator (DBA) a firm foundation in Oracle Net administration and backup and recovery operations. Students learn about transporting data between databases and the utilities used to perform these activities.

Students are also introduced to networking concepts and configuration parameters, as well as how to solve some common network problems. In hands-on exercises, students configure network parameters so that database clients and tools can communicate with the Oracle database server. This course also addresses backup and recovery techniques, and examines various backup, failure, restore and recovery scenarios. Students also examine backup methodologies based on business requirements in a mission critical enterprise. Students use multiple strategies and Oracle Recovery Manager to perform backups, and restore and recovery operations. This course includes two interactive workshops that provide participants with the opportunity to walk through numerous real-world networking, backup, and recovery case studies. This course counts towards the Hands-on course requirement for the Oracle 9i Database 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.

Database Administrators

Prerequisites

Required Prerequisites

Oracle9i Database Administration Fundamentals I

Introduction to Oracle9i: SQL

Course Objectives

Define networking requirements and the solutions provided by Oracle to implement these requirements

Perform database and datafile backups with and without Recovery Manager (RMAN)

Configure the network environment for an Oracle client-server system

List the different Oracle backup methods and recovery operations that can be used to resolve database failure

Describe the database utilities (Export and Import) and the situations where they can be used

Develop network configuration and recovery techniques through various workshop scenarios

List the Oracle architecture components related to backup and recovery operations

Course Topics

Networking Overview

Explaining solutions included with Oracle9i for managing complex networks

Describing Oracle networking add-on solutions

Basic Oracle Net Architecture

Explaining the key components of Oracle Net architecture

Explaining Oracle Net Services role in client-server connections

Describing how web client connections are established through Oracle networking products

Basic Oracle Net Services Server-Side Configuration

Identifying How the Listener Responds to Incoming Connections

Configuring the Listener using Oracle Net Manager

Controlling the Oracle Net Listener by Using the Listener Control Utility

Describing Dynamic Service Registration

Configuring the Listener for IIOp and HTTP Connections

Basic Oracle Net Services Client-Side Configuration

Describing the Difference Between Host Naming and Local Service Name Resolution

Using Oracle Net Configuration Assistant to Configure Host Naming Method, Local Naming Method, and Net Service Name

Performing Simple Connection Troubleshooting

Usage and Configuration of the Oracle Shared Server

Identifying the Components of the Oracle Shared Server

Describing the Oracle Shared Server Architecture

Configuring Shared Servers by Using Initialization Parameter

Configuring Dispatchers by Using Initialization Parameters

Identifying Useful Data Dictionary Views

Backup and Recovery Overview

Describing the Basics of Database Backup, Restore, and Recovery

Listing the Types of Failures that May Occur in an Oracle Environment

Defining a Backup and Recovery Strategy

Instance and Media Recovery Structures

Describing the Oracle Processes, Memory Structures, and Files Relating to Recovery

Identifying the Importance of Checkpoints, Redo Log Files, and Archived Log Files

Describing Ways to Tune Instance Recovery

Configuration of the Database Archiving Mode

Noarchivelog and Archivelog Mode Configuration

Automatic and Manual Archiving of Redo Log Files

Multiple Archival Destinations and Processes

Oracle Recovery Manager (RMAN) Overview and Configuration

Identifying the Features and Components of RMAN

Describing the RMAN Repository and Control File Usage

Describing Channel Allocation

Describing Media Management Library Interface

Connecting to Recovery Manager

Configuring the RMAN Environment

User-Managed Backups

Describing User-Managed Backup and Recovery Operations

Performing Closed Database Backups

- Performing Open Database Backups
- Cleaning Up After a Failed Online Backup
- Backing Up the Control File
- Discussing Backup Issues Associated with Read-Only Tablespaces
- Identifying the Backup Implications of Operations with NOLOGGING Options
- Using DBVerify to Check for Block Corruption

RMAN Backups

- Identifying RMAN Specific Backups
- Using the RMAN BACKUP Command to Create Backup Sets
- Backing Up the Control File
- Backing Up the Archived Redo Log Files
- Using the RMAN COPY Command to Create Image Copies

User-Managed Complete Recovery

- Describing Media Recovery
- Performing Recovery in Noarchivelog Mode
- Performing Recovery in Archivelog Mode
- Read-only Tablespace Recovery
- Relocating and Recovering a Tablespace

RMAN Complete Recovery

- Describing the Use of RMAN for Restoration and Recovery
- Performing Recovery in Noarchivelog Mode
- Performing Completing Recovery in Archivelog Mode
- Restoring Data Files to a Different Location
- Relocating and Recovering a Tablespace

User-Managed Incomplete Recovery

- Describing the Steps of Incomplete Recovery
- Identifying the Situations Which Require Incomplete Recovery
- Performing an Incomplete Recovery
- Recovering from the Loss of Current Online Redo Logs

RMAN Incomplete Recovery

- Performing Incomplete Recovery Using UNTIL TIME
- Performing Incomplete Recovery Using UNTIL SEQUENCE

RMAN Repository Maintenance

- Performing Crosschecking of Backups and Copies
- Updating the Repository When Backups Have Been Deleted
- Changing the Availability Status of Backups and Copies
- Making a Backup or Copy Exempt from the Retention Policy
- Cataloging Backups Made with Operating System Commands

RMAN Catalog Creation and Usage

- Describing the Contents of the Recovery Catalog
- Listing the RMAN Features Which Require the Recovery Catalog
- Creating the Recovery Catalog
- Maintaining the Recovery Catalog by Using RMAN Commands
- Using RMAN to Register, Resynchronize, and Reset a Database
- Querying the Recovery Catalog to Generate Reports and Lists

Creating, Storing and Executing Scripts

Describing Methods for Backing Up and Recovering the Recovery Catalog

Transporting Data Between Databases

Export

Import

Guidelines for Using Export and Import

Backup and Recovery and Networking Workshop

Related Courses

Oracle9i DBA Fundamentals II Self-Study CD Course