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.

Audience
Database Administrators

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 Nar
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

Oracle9i DBA Fundamentals II Self-Study Course