

Oracle9i Database Administration Fundamentals I

Duration: 5 Days

What you will learn

Oracle DBAs manage the industry's most advanced information systems and command some of the highest salaries. This course is your first step towards success as an Oracle professional, designed to give you a firm foundation in basic database tasks. In this class, you'll learn how to design, create, and maintain an Oracle database. Students will gain a conceptual understanding of the Oracle database architecture and how its components work and interact with one another. Students will also learn how to create an operational database and properly manage the various structures in an effective and efficient manner. The lesson topics are reinforced with structured hands-on practices. This course is designed to prepare you for the corresponding Oracle Certified Associate exam: Exam #1Z0-031.

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 are excellent study and reference tools but DO NOT meet the Hands-on Requirement for certification.

Audience

Database Administrators

Prerequisites

Required Prerequisites

Introduction to Oracle9i: SQL

Course Objectives

- Manage tablespaces, segments, extents, and blocks
- Manage users, privileges, and resources
- Create an operational database
- Start up and shut down an Oracle instance and database
- Manage Oracle database files
- Use Globalization Support features

Course Topics

Oracle Architectural Components

- Defining an Oracle Database, the Oracle server, and the Oracle Instance
- Establishing a connection and creating a session
- Understanding the physical structure
- Understanding the memory structure
- Understanding the process structure
- Understanding the logical structure
- Outlining the stages of an SQL statement

Getting Started with the Oracle Server

Identifying database administrative tools

Identifying the features of the Universal Installer

Defining the Optimal Flexible Architecture

Creating a database during installation

Creating a new database

Identifying database administrative users

Understanding operating system and password file authentication

SQL*Plus

Enterprise Manager

Managing an Oracle Instance

Creating, managing, and using initialization files: PFILE and SPFILE

Identifying the various states of starting an instance

Identifying the various options available to shutdown an instance

Monitoring Alert and Trace files

Creating a Database

Using the Database Configuration Assistant to create a database

Creating a database manually

Using the Data Dictionary

Identifying the uses and contents of the data dictionary

Using the data dictionary to retrieve information about the database

Maintaining the Control File

Explaining the uses of the control file

Listing the contents of the control file

Multiplexing the control file

Managing control file with Oracle Managed Files (OMF)

Obtaining control file information

Maintaining Redo Log Files

Explaining the purpose of and how online redo log files work

Control log switches and checkpoints

Maintaining online redo log files

Managing online redo log files using OMF

Multiplexing and maintaining online redo log files

Archiving online redo log files

Obtaining online and archived redo log file information

Managing Tablespaces and Datafiles

Describing storage hierarchy

Establishing the difference between SYSTEM and Non-SYSTEM tablespaces

Creating and managing tablespaces

Creating a tablespace when using OMF

Obtaining tablespace and datafile information

Storage Structures and Relationships

Describing the logical structure of the database (segments, extents, blocks)

Listing the segment types and their uses

Understanding the use of extents and their allocation and deallocation

Understanding the structure of a database block

Maintaining storage structures with automatic segment - space management

Maintaining storage structures manually

Obtaining storage structure information

Managing Undo Data

Understanding the difference between automatic undo management and manual undo management

Creating and maintaining UNDO tablespaces

Obtaining undo information

Managing Tables

Creating and maintaining tables using appropriate storage settings

Obtaining table information

Managing Indexes

Listing the different types of indexes and their uses

Creating b-tree and bitmap indexes

Maintaining Indexes

Identifying unused indexes

Obtaining index Information

Related Courses

Oracle9i Complete Self-Study CD Course