

ORACLE DBA I

Duration: 5 days

Develop the skills to effectively administer an Oracle Server Database and configure and Oracle Database

Course Description:

This course prepares students to administer an Oracle8i Database. The course covers the Oracle Server architecture, expanding the size of the database and implementing security. Participants will learn why they perform certain tasks, as well as the mechanics of those tasks. The labs included in the course allow students to gain hands-on experience in administering an Oracle Database.

Participants will learn...

- Oracle Server Architecture
- Installing Oracle Server Software
- Server Manager and Enterprise Manager
- Starting and Stopping an Oracle Database
- Managing Tablespaces and Rollback Segments
- Creating an Oracle Database
- Managing Redo Logs
- Performing Backup and Recovery
- Performing an Oracle Export/Import
- Managing Security
- SQL*Loader
- Database Auditing

Who Needs to Attend:

Application Developers and Designers, managers, Database Administrators, Systems Administrators, Network Managers and Technical Support Personnel

Prerequisites:

Either Oracle Foundations classes or equivalent experience

Course Content:

DUTIES OF THE DBA

TABLES, INDEXES AND CONSTRAINTS

DATABASE OBJECTS

- Tables and Constraints
- Indexes and IndexType
- Clusters
- LOB
- Java Class, Data, Resource
- Rollback segments
- Segments and Sequences
- Snapshots
- Tablespaces
- Views
- Synonyms
- DataBase Links
- V\$ views and X\$ tables
- Users, Profiles and Roles
- Directory
- Library
- Operator
- Resource plan
- Consumer group
- PL/SQL objects
- Procedure and Function
- Package
- Type (Object)
- Database triggers

CONNECTING TO AND STARTING AND STOPPING AN ORACLE DATABASE

- Startup and Shutdown
- Startup nomount
- Alter database mount (startup mount)
- Alter database open (startup mount)
- Effects of pfile=filename
- Shutdown immediate, transactional, abort (startup force)

HOW SPACE IS CONSUMED

- Blocks
- Extents
- Segments
- Deallocate unused/keep
- Coalesce
- Row chaining and migration
- Fragmentation
- Freelist

WHAT DO ROLLBACK SEGMENTS DO?

- Create rollback segment
- Extent use and re-use
- Set transaction use...
- Rollback segments =(...)

WHAT IS A TABLESPACES

- Unlimited extents
- Permanent vs. temporary data
- Default storage for objects stored in tablespaces
- Transportable tablespaces

WHY DO YOU NEED DATAFILES?

- V\$DATAFILE
- V\$CONTROLFILE
- V\$LOGFILE
- Autoextend for datafile(s) assigned to tablespace

BASIC ORACLE ARCHITECTURE

- System Global Area (SGA)
- Parts of the SGA
- Background processes
- Dedicated user processes
- Multi Threaded Server (MTS)

USERIDS AND SECURITY

- Users
- Profiles
- System privileges
- Object privileges
- Fine grain security
- Roles
- Grant role

ORACLE ENTERPRISE MANAGER (OEM)

- SNMP overview
- Oracle's agent
- Starting OEM
- OEM console and daemon
- Desktop pane
- Instance, Storage, Security and Schema managers

INSTALLING ORACLE8i

- Oracle Application Server (OAS)
- Web Listener
- Internet File System (IFS)
- Pre/Post-installation tasks
- Install Oracle

CREATE DATABASE-the command

- OFA
- Syntax
- NT's "Create Database" Wizard

DATABASE AUDITING

- The Audit command
- PL/SQL database triggers

SQL*LOADER

PL/SQL SUPPORT and PACKAGES for the DBA

- Database Triggering events
- DBMS_OUTPUT
- DBMS_UTILITY

ON NATIONAL LANGUAGE SUPPORT (NLS)

DAY IN THE LIFE OF A DBA

Course Labs:

1. Starting & stopping the database
2. Create rollback segment
3. Create tablespace
4. Create user
5. Create profile
6. Grant...System Privileges
7. Grant...Object Privileges
8. Column level security
9. Create role
10. Grant role
11. OEM
12. Install Oracle
13. Create database
14. Database Auditing
15. SQL*Loader
16. PL/SQL Packages