Oracle Database 11g: Administration Workshop-I

Duration: 40 hrs

Audience:
- Database Administrators
- Sales Consultants
- Support Engineer
- Project Manager
- Database Designers
- Technical Consultant

Suggested Prerequisites:
- Working knowledge of SQL

Course Objectives:
- Install Oracle Database 11g and configure a database
- Manage the Oracle instance
- Manage the Database storage structures
- Create and administer user accounts
- Perform backup and recovery of a database
- Monitor, troubleshoot, and maintain a database
- Configure Oracle Net services
- Move data between databases and files

Contents:

1. Installing the Oracle Database Software
   - Explain core DBA tasks and tools
   - Plan an Oracle installation
   - Use optimal flexible architecture
   - Install software with Oracle Universal Installer (OUI)

2. Creating an Oracle Database
   - Create a database with the Database Configuration Assistant (DBCA)
   - Create a database design template with the DBCA
   - Generate database creation scripts with the DBCA

3. Managing the Oracle Instance
   - Start and stop the Oracle database & components
   - Use Enterprise Manager (EM)

9. Implementing Oracle Database Security
   - Describe DBA responsibilities for security
   - Apply the principal of least privilege
   - Enable standard database auditing
   - Specify audit options
   - Review audit information
   - Maintain the audit trail

10. Configuring the Oracle Network Environment
    - Use Enterprise Manager for configuring the Oracle network environment
    - Create additional listeners
    - Create Net Service aliases
    - Configure connect-time failover
    - Control the Oracle Net Listener
Access database with SQL*Plus & iSQL*Plus
Modify database initialization parameters
Understand the stages of database startup
View the Alert log
Use the Data Dictionary

Test Oracle Net connectivity
Identify when to use shared vs dedicated servers

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Identify when to use shared vs dedicated servers

Describe table data storage (in blocks)
Define the purpose of tablespaces & data files
Understand & utilize Oracle Managed Files (OMF)
Create and manage tablespaces
Obtain tablespace information
Describe the main concepts and functionality of Automatic Storage Management (ASM)

Use Automatic Database Diagnostic Monitor (ADDM)
Describe advisory framework
Set alert thresholds

Use Automated Task Scheduler
Use server-generated alerts

Use Enterprise Manager pages to monitor performance
Use the SQL Tuning Advisor
Use the SQL Access Advisor
Use Automatic Shared Memory Management
Use the Memory Advisor to size memory buffers

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Identify the types of failure that may occur in an Oracle Database
Describe ways to tune instance recovery
Identify the importance of checkpoints, redo log files, and archived log files

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Manage Oracle Net connectivity
Identify when to use shared vs dedicated servers

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Create consistent database backups
Back your database up without shutting down

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Create and manage database user accounts
Authenticate users
Assign default storage areas (tablespaces)

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Create and manage roles
Create and manage profiles
Implement standard password security features

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Control resource usage by users

Control resource usage by users

Manage data through SQL

Manage data through SQL

Administering User Security

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Managing Database Storage Structures

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Managing Schema Objects

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Performing Database Recovery

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- Identify and administer PL/SQL Objects
- Describe triggers and triggering events
- Monitor and resolve locking conflicts
- Recover from loss of a control file
- Recover from loss of a redo log file
- Perform complete recovery following the loss of a data file

8. Managing Undo Data

- Explain DML and undo data generation
- Monitor and administer undo
- Describe the difference between undo & redo data
- Configure undo retention
- Guarantee undo retention
- Use the undo advisor

16. Performing Flashback

- Describe Flashback database
- Restore the table content to a specific point in the past with Flashback Table
- Recover from a dropped table
- View the contents of the database as of any single point in time with Flashback Query
- See versions of a row over time with Flashback Versions Query
- View the transaction history of a row with Flashback Transaction Query

Certification Information:

Oracle 11g DBA OCA /OCP

3-Exams:
- Oracle Database 11g: Introduction to SQL (exam code 1z0-051)
- Oracle Database 11g: Administration –I (exam code 1z0-052)
- Oracle Database 11g: Administration –II (exam code 1z0-053)

3-Certifications:
- Oracle Database SQL Expert,
- Oracle Database 11g Administrator Certified Associate,
- Oracle Database 11g Administrator Certified Professional

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Follow on Training:

1. Oracle Database 11g: Administration Workshop-II