

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

TOPIC NAME	TOPIC NAME
1. Installing the Oracle Database Software	9. Implementing Oracle Database Security
➤ Explain core DBA tasks and tools	➤ Describe DBA responsibilities for security
➤ Plan an Oracle installation	➤ Apply the principal of least privilege
➤ Use optimal flexible architecture	➤ Enable standard database auditing
➤ Install software with the Oracle Universal Installer (OUI)	➤ Specify audit options
	➤ Review audit information
2. Creating an Oracle Database	➤ Maintain the audit trail
➤ Create a database with the Database Configuration Assistant (DBCA)	
➤ Create a database design template with the DBCA	10. Configuring the Oracle Network Environment
➤ Generate database creation scripts with DBCA	➤ Use Enterprise Manager for configuring the Oracle network environment
	➤ Create additional listeners
3. Managing the Oracle Instance	➤ Create Net Service aliases
➤ Start and stop the Oracle database & components	➤ Configure connect-time failover
➤ Use Enterprise Manager (EM)	➤ Control the Oracle Net Listener
➤ Access a database with SQL*Plus and iSQL*Plus	➤ Test Oracle Net connectivity
➤ Modify database initialization parameters	➤ Identify when to use shared versus dedicated servers
➤ Understand the stages of database startup	
➤ View the Alert log	11. Proactive Maintenance
➤ Use the Data Dictionary	➤ Use statistics
	➤ Manage the Automatic Workload Repository (AWR)

Palium Skills Academy

TOPIC NAME	TOPIC NAME
4. Managing Database Storage Structures	➤ Use the Automatic Database Diagnostic Monitor (ADDM)
➤ Describe table data storage (in blocks)	➤ Describe advisory framework
➤ Define the purpose of tablespaces & data files	➤ Set alert thresholds
➤ Understand & utilize Oracle Managed Files	➤ Use server-generated alerts
➤ Create and manage tablespaces	➤ Use automated tasks
➤ Obtain tablespace information	
➤ Describe the main concepts and functionality of Automatic Storage Management (ASM)	12. Performance Management
	➤ Use Enterprise Manager pages to monitor performance
5. Administering User Security	➤ Use the SQL Tuning Advisor
➤ Create and manage database user accounts	➤ Use the SQL Access Advisor
➤ Authenticate users	➤ Use Automatic Shared Memory Management
➤ Assign default storage areas (tablespaces)	➤ Use the Memory Advisor to size memory buffers
➤ Grant and revoke privileges	➤ Use performance related dynamic views
➤ Create and manage roles	➤ Troubleshoot invalid or unusable objects
➤ Create and manage profiles	
➤ Implement standard password security features	13. Backup and Recovery Concepts
➤ Control resource usage by users	➤ Identify the types of failure that may occur in an Oracle Database
	➤ Describe ways to tune instance recovery
6. Managing Schema Objects	➤ Identify the importance of checkpoints, redo log files, and archived log files
➤ Define schema objects and data types	➤ Configure ARCHIVELOG mode
➤ Create and modify tables	
➤ Define constraints	14. Performing Database Backups
➤ View the columns and contents of a table	➤ Create consistent database backups
➤ Create indexes, views and sequences	➤ Back your database up without shutting down
➤ Explain the use of temporary tables	➤ Create incremental backups
➤ Use the Data Dictionary	➤ Automate database backups
	➤ Monitor the flash recovery area
7. Managing Data and Concurrency	
➤ Manage data through SQL	15. Performing Database Recovery
➤ Identify and administer PL/SQL Objects	➤ Recover from loss of a control file
➤ Describe triggers and triggering events	➤ Recover from loss of a redo log file
➤ Monitor and resolve locking conflicts	➤ Perform complete recovery following the loss of a data file
8. Managing Undo Data	16. Performing Flashback
➤ Explain DML and undo data generation	➤ Describe Flashback database
➤ Monitor and administer undo	➤ Restore the table content to a specific point in the past with Flashback Table
➤ Describe the difference between undo and redo data	➤ Recover from a dropped table
➤ Configure undo retention	➤ View the contents of the database as of any single point in time with Flashback Query
➤ Guarantee undo retention	➤ See versions of a row over time with Flashback Versions Query
➤ Use the undo advisor	➤ View the transaction history of a row with Flashback Transaction Query