

**KNOWLEDGE
POWER**



Exploring the Oracle Database Architecture
Installing your Oracle Software
Creating an Oracle Database
Managing the Database Instance
Manage the ASM Instance
Configuring the Oracle Network Environment
Managing Database Storage Structures

ORACLE 11g Administration- I

Administering User Security
Managing Data Concurrency
Managing Undo Data
Implementing Oracle Database Auditing
Database Maintenance
Performance Management
Backup and Recovery Concepts
Performing Database Backups
Performing Database Recovery
Moving Data
Working with Support



Data Softech Inc

DATA SOFTECH INCORPORATION
12 PERRINE ROAD, SUITE 106
MONMOUTH JUNCTION
NJ 08852

PHONE 1-877-463-3765
1-732-823-4793
FAX 1-732-862-4607

WEBSITE
www.datasoftech.com
EMAIL
contact@datasoftech.com

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This training course is your first step towards success as an Oracle professional, it is designed to give you a firm foundation in basic database administration.

Lesson Plan

DAY 1



Session Hours

3 days

Who are we?

Data Softech Incorporation is a dynamic and progressive organization committed to provide an affordable and flexible Database Administration, Solution, Consultation and Employee or Staff training to meet the client needs. We have been working with major Fortune 500 companies.



Exploring the Oracle Database Architecture

- Oracle Database Architecture Overview
- Oracle ASM Architecture Overview
- Description of Process Structure and Architecture
- Explanation of Memory structures
- Logical and physical storage structures
- ASM storage components

Installing your Oracle Software

- Tasks of an Oracle Database Administrator
- Tools Used to Administer an Oracle Database
- Installation: System Requirements
- Oracle Universal Installer (OUI)
- Installing Oracle Grid Infrastructure
- Installing Oracle Database Software
- Silent Install

Creating an Oracle Database

- Plan the Database Design and Architecture
- Using the DBCA to Create a Database
- Password Management
- Creating a Database Design Template
- Using the DBCA to Delete a Database

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Trainers

Our database training experts come from various IT backgrounds and possess market-specific IT qualifications. These specialists have worked on various data management fields with leading database industries in Information Technology.

Tutorials

DSI custom designed tutorials and live training on key projects helps the learners gain a quality and accountable experience with various projects.



Managing the Database Instance

- Start and stop the Oracle database and components
- Use of Oracle Enterprise Manager (OEM)
- Access a database with SQLPlus
- Set and modify database installation parameters
- Describe the stages of database startup and shutdown
- Use the alert log and tracing concepts
- Access data dictionary and dynamic performance views

Manage the ASM Instance

- Set up initialization parameter files for ASM instance
- Start up and shut down ASM instances
- Administer ASM disk groups

Configuring the Oracle Network Environment

- Use Enterprise Manager to create and configure the Listener
- Enable Oracle Restart to monitor the listener
- Use tnsping to test Oracle Net connectivity
- Identify when to use shared servers and when to use dedicated servers

DAY 2

Managing Database Storage Structures

- Storage Structures - tablespace and datafiles
- How Table Data Is Stored
- Anatomy of a Database Block
- Space Management in Tablespaces
- Tablespaces in the Preconfigured Database
- Actions with Tablespaces
- Oracle Managed Files (OMF)

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Training Benefits

Our certified and highly experienced trainers will help you equip with the IT knowledge and database management solutions that helps you independently assess and utilize the updated technology skills in any business-IT firm. We provide state-of-art infrastructure to incorporate our training practices.

Affordable Training

DSI custom designs the training addressing the clients, their staff or learners needs thus maximizing the benefit they gain from their training investment.



Administering User Security

- Create and Manage Database User Accounts
- Predefined Administrative Accounts
- Benefits of Roles
- Predefined Roles
- Implementing Profiles

Managing Data Concurrency

- Data Concurrency - Manage data through SQL
- Enqueue Mechanism
- Monitor and Resolving Lock Conflicts
- Deadlocks

Managing Undo Data

- Data Manipulation Language (DML) and Undo generation
- Transactions and Undo Data
- Undo Data Versus Redo Data
- Configuring Undo Retention

Implementing Oracle Database Auditing

- Describe DBA responsibilities for security
- Enable standard database auditing
- Specify audit options
- Review audit information
- Maintain the audit trail

Database Maintenance

- Manage optimizer statistics
- Manage the Automatic Workload Repository (AWR)
- Use the Automatic Database Diagnostic Monitor (ADDM)
- Describe and use the advisory framework
- Set alert thresholds
- Use server-generated alerts
- Use automated tasks

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Training Courses

Oracle 11g New features

Oracle 11g R2 RAC Administration

Oracle 11g R2 Administration I

Oracle 11g R2 Administration II

Oracle 11g R1 RAC Administration

Oracle 11g/10g Performance tuning

Oracle 11g/10g Streams

Oracle 11g/10g Data Guard

Oracle 11g/10g Backup

Oracle 11g/10g Recovery using RMAN

Oracle Application server Administration I

Oracle Application server Administration II

Oracle 10g Sql Tuning

Oracle Apps 11i System Administration

Installations



Performance Management

- Performance Monitoring
- Managing Memory Components
- Enabling Automatic Memory Management (AMM)
- Automatic Shared Memory Advisor
- Using Memory Advisors
- Dynamic Performance Statistics
- Troubleshooting and Tuning Views
- Invalid and Unusable Objects

DAY 3

Backup and Recovery Concepts

- Identify types of failure in Oracle DB (Statement Failure, User Error, Media Failure)
- Understanding Instance Recovery
- Phases of Instance Recovery
- Using the MTTR Advisor
- Media Failure
- Use and configure Archive Log Mode

Performing Database Backups

- Terminology - Types of Backup
- Oracle Secure Backup
- User-Managed Backup
- Using Recovery Manager (RMAN)
- Configuring Backup Settings
- Backing Up the Control File to a Trace File
- View the backup reports and monitoring the Flash Recovery Area

Performing Database Recovery

- Opening a Database
- Data Recovery Advisor
- Loss of a Control File
- Loss of a Redo Log File
- Use Data Recovery Advisor for recovery
- Data Failures - Listing Data Failures
- Data Recovery Advisor Views

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DSI Activities

Database Management
Database Monitoring
Database Administration
Performance Tuning
Database Backup
Recovery Procedures
Quality Assessment
System Analysis
Database Upgrades
Database Patching
Cloning and Refresh
Instance Management
Security Administration
Schema Maintenance
Application Development
Server Hosting
Web Development
Domain Registration
E-business solutions
Business Process Outsourcing
Database Migration
Strategic IT Planning
Consultation and Advices



Moving Data

- Describe ways to move data (Directory objects, SQL*Loader, External Tables, exp, imp, Data Pump)
- Create and use directory objects
- Use SQL*Loader to move data
- Use external tables to move data
- Understanding architecture of Oracle Data Pump
- Use Data Pump export and import to move data

Working with Support

- Use the Enterprise Manager Support Workbench
- Work with Oracle Support
- Log service requests (SR)
- Manage patches