

Oracle 19c Database Administration (TTOR02019)

Overview

This comprehensive, hands-on course provides concrete information on the design of an Oracle Database instance and database, allowing you to manage your database investment. In this class, you will learn how to create database storage structures that align with your requirements and business models. You will also learn how to create users and administer databases as well as harden the databases to meet your business requirements. This is the foundational course for learning about Oracle Database and it does not assume prior knowledge or Oracle technologies.

Prerequisite Comments

TTSQLQY3 Writing SQL Queries

Target Audience

This hands-on course is geared for experienced DBAs new to Oracle 19c. Incoming students should possess:
Basic understanding of database principles
Linux skills, including familiarity with command-line options such as ls, cd, cp, and su
Beginning to intermediate proficiency with SQL

Course Objectives

This course is approximately 50% hands-on, combining expert lecture, real-world demonstrations and group discussions with machine-based practical labs and exercises. Working in a hands-on learning environment led by our Oracle Certified expert facilitator, students will learn how to:

- Describe Oracle Database architecture
- Describe Oracle Database Cloud Service (DBCS) architecture and features
- Create and manage DBCS database deployments
- Configure the database to support your applications
- Manage database security and implement auditing
- Implement basic backup and recovery procedures
- Move data between databases and files
- Employ basic monitoring procedures and manage performance

Course Outline

[Register Online](#)

Schedule

Class Length: 5 Days

G2R = "Guaranteed to Run" | OLL = "Online LIVE"
ILT = "Instructor-Led-Training"

This course is not currently available on the public schedule. Please contact us using the information in the footer below to inquire about future dates or to schedule a private class.

1 - Oracle Database Architecture

Oracle Database Server Architecture
Oracle Database Instance Configurations
Connecting to the Database Instance
Oracle Database Memory Structures

2 - Creating DBCS Database Deployments

Automated Database Provisioning
Creating a Database Deployment

3 - Accessing an Oracle Database

Connecting to an Oracle Database Instance
Oracle Database Tools
SQL*Plus
Oracle SQL Developer
SQL Developer Command Line (SQLcl)
Database Configuration Assistant (DBCA)
Oracle Enterprise Manager Database Express
Enterprise Manager Cloud Control 13c Features

4 - Managing DBCS Database Deployments

Managing the Compute Node
Scaling a Database Deployment
Patching DBCS

5 - Managing Database Instances

Working with Initialization Parameters
Starting the Oracle Database Instance
Shutting Down an Oracle Database Instance
Opening and Closing PDBs
Alert Log
Trace Files
DDL Log File

6 - Oracle Net Services

Oracle Net Services
Oracle Net Listener
The Default Listener
Establishing Oracle Network Connections
Connecting to an Oracle Database

7 - User Security

- Database User Accounts
- Oracle-Supplied Administrator Accounts
- Creating Oracle Database Users in a Multitenant Environment-9
- Schema-Only Account
- Authenticating Users
- System Privileges for Administrators
- Object Privileges
- Granting Privileges in a Multitenant Environment
- Granting and Revoking System Privileges
- Granting and Revoking Object Privileges

8 - Creating PDBs

- Creating a New PDB from PDB\$SEED
- Cloning PDBs
- Unplugging and Plugging in PDBs
- Plugging an Unplugged Regular PDB into a CDB

9 - Creating and Managing Tablespaces

- Creating Tablespaces
- Creating Permanent Tablespaces in a CDB
- Altering and Dropping Tablespaces
- Viewing Tablespace Information
- Tablespace Encryption by Default in DBCS

10 - Managing Storage Space

- Space Management Features
- Block Space Management
- Row Chaining and Migration
- Types of Segments
- Allocating Extents

11 - Managing Undo Data

- Undo Data

12 - Moving Data

- Oracle Data Pump
- SQL Loader

13 - Backup and Recovery Concepts

Types of Failures
Instance Recovery
The Checkpoint (CKPT) Process
Redo Log Files and the Log Writer (LGWR)
Automatic Instance Recovery or Crash Recovery
Using the MTTR Advisor
Complete Recovery Process
The Point-in-Time Recovery Process
Flashback

14 - Backup and Recovery Configuration

Configuring for Recoverability
Redo Log Files

15 - Creating Database Backups

RMAN Backup
Backing Up Databases on DBCS

16 - Performing Database Recovery

Data Recovery Advisor
Loss of a Control File
Loss of a Redo Log File
DBCS: Performing Recovery by Using the Console
dbaascli Utility

17 - Monitoring and Tuning Database Performance

Automatic Workload Repository (AWR)
Automatic Database Diagnostic Monitor (ADDM)
Advisory Framework

18 - Tuning SQL

SQL Tuning Process
Oracle Optimizer
Optimizer Statistics
SQL Plan
