



Oracle Database 12c R2: New Features for Administrators Part 1

Throughout the lessons of the Oracle Database 12c R2: New Features for Administrators Part 1 course, students receive comprehensive training on Oracle Database 12c Release 2 new and enhanced features in different areas of database administration, mainly in on-premises Multitenant databases. The lessons are grouped into three modules: **Using SQL New Features and Tools**, **Understanding DB Architectures**, and **Diagnosing Database Problems**,

Learn To:

- Use the new SQLcl utility and gain information on SQL*Plus and SQL enhancements.
- Understand the new and enhanced features of Oracle Database 12c Release 2 (12.2.0.1) amongst different areas such as the new Multitenant architecture and the Sharded database architecture.
- Diagnose database issues, handling Automatic Diagnostic Repository (ADR) file management and using the Trace File Analyzer (TFA) tool.

Benefits To You

You will benefit from learning the following lessons:

- **Using the SQL New Features and Tools** module covers the usage of the new SQLcl utility and the new features in SQL*Plus and SQL.
- Most of the **Understanding DB Architectures** module lessons cover the new Multitenant architecture. The concept of regular and application containers of a Multitenant container database includes new administrative tasks such as creating, managing, securing, backing up, recovering and upgrading regular and application containers, as well as migrating an 11g database to a 12c multitenant container database. The lessons also cover enhanced features of Resource Manager to help you manage the resources within a Multitenant container database. You will discover other enhancements supported in a Multitenant container database like heat map and Automatic Data Optimization (ADO) support, Database Vault and encryption. The second part of the module gives an overview of database sharding. It describes the challenges and benefits of a sharded database, the sharded database architecture and how to configure a sharded database.
- The lesson of the **Diagnosing Database Problems** module covers enhancements in ADR space management and explain what can be completed with the Trace File Analyzer (TFA) tool in terms of

database diagnosis.

Prerequisites

Suggested Prerequisite

- Oracle Database 12c: Install and Upgrade Workshop Ed 1
- Using Oracle Enterprise Manager Cloud Control 13c Ed 2

Required Prerequisite

- Knowledge of Oracle Database 11g R2

Audience

- Database Administrator
- End User
- Systems Administrator

Objectives

- Create and manage pluggable databases
- Describe the challenges and benefits of a sharded database
- Handle the ADR automatic file space
- Diagnose database issues by using the Trace File Analyzer collector
- Use the new SQL*Plus history commands and SQL enhancements such as long identifiers
- Use the SQLcl new utility as the new SQL command line interface
- Create and manage a multitenant container database

Topics

- Introduction
- Using SQL New Features and SQLcl
- Understanding CDB Basics
- Creating CDB and Regular PDBs
- Creating Application PDBs and Installing Applications
- Creating PDBs
- Managing CDB and PDBs
- Managing Storage
- Managing Security
- Backing up, Recovering and Flashing Back
- Managing Performance
- Managing Resources Allocation
- Moving and Migrating Data
- Performing Miscellaneous Operations
- Understanding Database Sharding
- Diagnosing Database Problems