Orake 18c New Features

Course Summary

Description

Oracle Database 18c, is the latest generation of the world’s most popular database and may be deployed on-premises and/or in Oracle Cloud running on general purpose hardware or engineered systems specifically designed for database workloads such as Oracle Exadata and Oracle Database Appliance.

It provides businesses of all sizes with access to the world’s fastest, most scalable and reliable database technology for secure and cost-effective deployment of transactional and analytical workloads in the Cloud, on-premises and Hybrid Cloud configurations.

This course will focus on the new features and enhancements of Oracle Database.

Topics

- Introduction
- Using Multitenant Enhancements
- Managing Security
- Using RMAN Enhancements
- Using General Database Enhancements
- Improving Performance
- Handling Enhancements in Big Data and Data Warehousing
- Sharding Enhancements
- Database Sharding

Prerequisite

Basic computer skills, internet access, basic analytic or programming skills.

Duration

Three Days
# Oracle 18c New Features

## Course Outline

### I. Introduction
- A. Introduction

### II. Using Multitenant Enhancements
- A. CDB fleet
- B. PDB snapshots
- C. Using a dynamic container map
- D. Using static and dynamic lockdown profiles
- E. Switching over refreshable cloned PDBs

### III. Managing Security
- A. Creating schema-only accounts
- B. Managing PDB keystores
- C. Creating user-defined TDE master keys
- D. Exporting and importing fixed-user database links
- E. Encrypting sensitive data in DB Replay files

### IV. Using RMAN Enhancements
- A. Recovering a plugged non-CDB using preplugin backups
- B. Recovering a plugged PDB using preplugin backups
- C. Duplicating a PDB into an existing CDB
- D. Duplicating an on-premise CDB for Cloud

### V. Using General Database Enhancements
- A. Managing private temporary tables
- B. Using the Data Pump Import CONTINUE_LOAD_ON_FORMAT_ERROR option of the DATA_OPTIONS parameter
- C. Performing online modification of partitioning and subpartitioning strategy
- D. Performing online MERGE partition and subpartition
- E. Generating batched DDL by using the DBMS_METADATA package
- F. Benefiting from Unicode 9.0 support

### VI. Improving Performance
- A. Configuring and using Automatic In-Memory
- B. Configuring the window capture of In-Memory expressions

- C. Describing the Memoptmized Rowstore feature and use in-memory hash index structures
- D. Describing the new SQL Tuning Set package
- E. Describing the concurrency of SQL execution of SQL Performance Analyzer tasks
- F. Describing SQL Performance Analyzer result set validation
- G. Describing a SQL Exadata-aware profile

### VII. Handling Enhancements in Big Data and Data Warehousing
- A. Query inlined external tables
- B. Managing in-memory external tables
- C. Using the new query capabilities of the Analytics view
- D. Creating and using polymorphic table functions
- E. Using new functions for approximate Top-N queries

### VIII. Sharding Enhancements
- A. User-defined sharding method
- B. Support for PDBs as shards
- C. Oracle GoldenGate enhancements for Oracle Sharding support
- D. Query System Objects Across Shards
- E. Setting multi-shard query data consistency level
- F. Sharding support for JSON, LOBs, and spatial objects
- G. Improved multi-shard query enhancements
- H. Where to find Oracle Sharding documentation in Oracle Database 18c

### IX. Database Sharding
- A. Describing the challenges and benefits of a sharded database
- B. Describing sharded database architecture
- C. Configuring a sharded database (SDB)

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