Oracle Database 12c R2: New Features for Administrators Part 2

Throughout the lessons of the Oracle Database 12c R2: New Features for Administrators Part 2 course constituted by five modules; the Securing Data module, the Making Data Available module, the Partitioning Data module, the Managing Information Lifecycle module and the Monitoring DB Operations and Managing Performance module, students receive a good knowledge of the Oracle Database 12c Release 2 new and enhanced features in different areas of database administration like Unified Auditing, Transparent Data Encryption (TDE) and other areas of security, Recovery Manager, online operations, Oracle Data Pump, SQL*Loader, new partitioning methods, Automatic Data Optimization, In-Memory Column Store, Full Database In-Memory Caching, and Automatic Big Table Caching.

Learn To:

- Gain an understanding of the new and enhanced features of Oracle Database 12c Release 2 (12.2.0.1) amongst different areas such as security, availability, partitioning, performance, and Information Lifecycle Management (ILM).

Benefits To You

Benefit from getting a thorough understanding of the following lessons:

- The lessons of the **Securing Data** module cover enhancements in auditing like role based conditional auditing, in privilege administration like new system administrative privilege for RAC, in Privilege Analysis and Data Redaction, in Transparent Sensitive Data Protection with new types of policies for FGA and TDE, and finally also in Transparent Data Encryption (TDE).
- The lessons of the **Making Data Available** module cover enhanced features in RMAN like table recovery, transport data across platforms, enhancements related to online operations, and finally ongoing enhancements with Oracle Data Pump, SQL*Loader and external tables.
- The lesson of the **Partitioning Data** module covers enhancements and new partitioning methods.
- The lessons of the **Managing Information Lifecycle** module introduce Heat Map and Automatic Data Optimization with heat map statistics tracking and ADO policies. The lessons also cover Temporal functionalities such as temporal history and temporal validity. In-Database Archiving provides a new feature, the Row-archival.

- The lessons of the **Monitoring DB Operations and Managing Performance** module explain the new features to improve the performance of the databases with SQL Performance Analyzer, DB Replay and SQL Plan Management, and to improve query execution with the Optimizer Statistics Advisor, JOIN processing.
- You will also learn about In-Memory Database option.

Prerequisites

Suggested Prerequisite

- Oracle Database 12c R2: New Features for Administrators Part 1 Ed 1
- Oracle Enterprise Manager Cloud Control 13c: Install & Upgrade Ed 2

Required Prerequisite

- Knowledge of Oracle Database 11g R2
- Knowledge of Oracle Multitenant Container Database architecture

Audience

- Database Administrator
- End User
- Systems Administrator

Objectives

- Manage security by using Unified Auditing
- Manage security by using privileges and profiles
- Manage security by using Privilege Analysis
- Manage security by using Data Redaction
- Manage security by using Transparent Data Encryption
- Manage security by using Transparent Sensitive Data Encryption
- Describe the new RMAN enhancements
- Manage data availability by using new features of Oracle Data Pump, SQL*Loader and external tables
- Manage data availability by performing online operations
- Manage data partitioning
- Manage Information Lifecycle by using ADO
- Manage Information Lifecycle by using In-Database Archiving and Temporal features
- Describe database operations
- Configure and use In-Memory Column Store
- Use In-Memory Caching
- Use Real Application Testing enhancements

Topics

- Introduction
- Auditing Using Unified Audit
- Controlling Data Access Using Privileges and Profiles
- Controlling Data Access Using Privilege Analysis
- Redacting Data
- Encrypting Data
- Controlling Data Access Using Transparent Sensitive Data Protection

- Making Data Available by Using RMAN Features
- Making Data Available by Using Oracle Data Pump, SQL*Loader and External Tables
- Making Data Available by Performing Online Operations
- Partitioning Data
- Managing Information Lifecycle Using ADO
- Managing Information Lifecycle Using In-Database Archiving and Temporal
- Monitoring DB Operations and Performance
- Configuring In-Memory Column Store
- Using In-Memory Column Store
- Improving Performance Using In-Memory Caching
- Improving SQL Performance
- Using Real Application Testing Enhancements
- Improving Performance Using Other Features