Oracle Database SQL and PL/SQL New Features

The Oracle Database 12c: SQL and PL/SQL New Features training introduces you to the new features available in Oracle Database 12c. Expert Oracle University instructors will help you explore the latest features available in SQL language and feature enhancements in PL/SQL, data types, language performance and data warehousing. In this course, you will be introduced to Oracle Database Exadata Express Cloud Service.

Learn To:

- Understand the FETCH clause to limit the rows returned by a SQL query.
- Take advantage of the invisible and hidden columns.
- Make use of the IDENTITY column to automatically generate the number column.
- Utilize the ACCESSIBLE BY clause to create a white list of PL/SQL units.
- Grant roles to PL/SQL packages and standalone stored procedures.
- Understand Synchronous Materialized Views.
- Identify ways to improve query performance against OLAP cubes.
- Gain an understanding of the Oracle Database Exadata Express Cloud Service.

Benefits to You

When you walk away from this course, you will have gained a better understanding of the data warehousing new features available in Oracle Database 12c. This includes maintaining multiple partitions and SQL for pattern matching.

Audience

- Database Administrator
- Developer
- Manager
- Systems Administrator

Objectives

- Create Invisible and Hidden columns in a table
- Understand enhanced DDL capabilities using ONLINE keyword
- Identify additional new features available in SQL Language
- Identify the increased length limits of data types
- Configure database for extended data type
- Understand SQL IDENTITY column
- Identify SQL Column enhancements defaulting on explicit NULL and using a sequence
- Identify additional feature available in Data Types such as ANYDATA, and GATEWAY
- Understand fine grained access controls for packaged procedures
- Define invoker's rights function that can be result cached
- Implement ACCESSIBLE BY clause
- Grant roles to PL/SQL packages and standalone stored subprograms
- Identify PL/SQL functions that can run faster in SQL
- Maintain Multiple Partitions
- Use FETCH clause in SQL queries
- Gain an understanding of the Oracle Database Exadata Express Cloud Service

Topics

- Course Introduction
  - Course Objectives
  - Course Agenda
  - Schemes used in this course
  - Classroom account information
  - Overview of SQL Developer 4.0
  - Review the Oracle Database 12c SQL and PL/SQL documentation and additional resources
- SQL Language Enhancements
  - SQL Row Limiting Clause
  - Invisible and Hidden Columns
  - Enhanced DDL capabilities using ONLINE keyword
  - Additional features in SQL Language
- Data Types Enhancements
  - Increased Length Limits of Data Types
  - Using SQL IDENTITY Column
  - SQL Column enhancements
  - ANYDATA type Enhancements
  - GATEWAY Enhancements
- PL/SQL Enhancements
  - What is a White List?
  - Understanding Invoker's right and Definer's right
  - Granting Roles to PL/SQL packages and standalone stored subprograms
  - PL/SQL functions that run faster in SQL
  - Additional PL/SQL Enhancements
- Data Warehousing Enhancements
  - Multi partition maintenance operations
  - Review of partitioned indexes
  - SQL for Pattern Matching
  - Overview of Synchronous Materialized View Refresh
  - Improving Query Performance Against OLAP Cubes
- Oracle Cloud Overview
  - Introduction to Oracle Cloud & Oracle Cloud Services
  - Cloud Deployment Models
  - Evolving from On-premises to Exadata Express
  - What is in Exadata Express?

- Exadata Express for Users & Developers
- Oracle Exadata Express Cloud Service
- Getting Started with Exadata Express
- Service Console & Web Access through Service Console