

## Oracle Database SQL and PL/SQL New Features Ed 1

**Duration:** 2 Days

### What you will learn

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

Application Developers  
Database Administrators  
Project Manager  
System Analysts

### Related Training

#### *Required Prerequisites*

Knowledge of Oracle Database, Structured Query Language(SQL), Basic programming concepts such as IF-THEN statements, loops, procedures, and functions

### Course 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

## Course 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