

Oracle Database 11g: OLAP Essentials

Duration: 3 Days

Course Code: D58832GC10

What you will learn

This Oracle Database 11g: OLAP Essentials training will teach you how to progressively build an OLAP data model to support a wide range of business intelligence requirements. Expert Oracle University instructors will teach you how to design OLAP cubes to serve as a summary management resource for existing SQL table queries.

Learn to:

- Design and create an Oracle OLAP data model.
- Enable query rewrite to OLAP Cube MVs for relational summary management.
- Easily create OLAP calculations that enrich the analytic content of your data model.
- Query OLAP data using simple SQL.
- Implement cube security.
- Efficiently design cubes for performance and scalability.
- Create sophisticated reports of OLAP data by using simple SQL queries.

Benefits to You

Taking this course will teach you how to leverage the power of Oracle OLAP by adding rich analytic content to your data model. You'll develop the skills to create and execute OLAP queries in SQL Developer and Oracle Application Express (APEX). You'll learn how to implement cube security, including how to authorize access to cube data and methods for scoping user views of data.

Live Virtual Class Format

A Live Virtual Class (LVC) is exclusively for registered students; unregistered individuals may not view an LVC at any time. Registered students must view the class from the country listed in the registration form. Unauthorized recording, copying, or transmission of LVC content may not be made.

Audience

- Business Analysts
- Business Intelligence Developer
- Data Warehouse Administrator
- Data Warehouse Analyst
- Data Warehouse Developer
- Database Administrators

Related Training

Required Prerequisites

Basic SQL knowledge
A basic understanding of OLAP concepts

Course Objectives

Describe OLAP concepts and terminology
Examine the role of Oracle OLAP within the Oracle BI / DW Platform
Design and create OLAP Cubes
Enable query rewrite to OLAP Cube MVs for summary management
Create OLAP calculated measures
Query stored and calculated OLAP data with simple SQL
Use ad hoc query and reporting tools against OLAP data
Implement cube security
Efficiently design cubes for performance and scalability

Course Topics

Examining the Role of Oracle OLAP within the Oracle BI / DW Platform

Oracle OLAP and the Oracle BI / DW Platform
Features of the Oracle OLAP Option
Accessing Oracle 11g OLAP data

Understanding the Dimensional Model

Stored and Calculated Measures
Dimensions
Hierarchies
Levels
Attributes

Building OLAP Cubes

Using the Cube Building Tool
Creating Dimensions
Designing Cubes
Creating Measures
Mapping to Source Data
Loading Data

Examining Cube-Organized Materialized Views (Cube MVs)

Benefits of Cube MV Summary Management
General Requirements for rewrite to MVs
Designing Cube MVs
Using Cube MVs

Creating Calculated Measures

- Examining OLAP Calculation Types
- Using the Calculation Builder
- Creating Common Business Calculations
- Creating Custom Calculations

Using SQL to Query Oracle OLAP Cubes

- Understanding Cube Views
- Querying OLAP Cubes: The Basics
- Leveraging Cube Summaries
- Applying Query Filters
- Joining OLAP and Relational Data

Enhancing Analytic Content

- Creating Cubes with Varying Dimensionality
- Integrating Measures from Data with Different Dimensionality
- Creating Forecast Measures Using OLAP DML

Using Ad Hoc Query and Reporting Tools Against OLAP Data

- Exploring OLAP Data Using Oracle Application Express (APEX)
- Performing Ad Hoc Query of OLAP Data Using Oracle BI Answers
- Examining Metadata Requirements for BI Tools

Implementing Cube Security

- Understanding Authentication Requirements
- Authorizing Access to Cube Data
- Examining User and Object Privileges
- Examining Methods for Scoping User Views of Data

Designing Cubes for Performance and Scalability

- Objectives of Performant and Scalable Design
- Examining how Data is Stored in Oracle Cubes
- Identifying Cube Features that Impact Performance and Scalability
- Implementing Design Techniques for Performance and Scalability

Examining Performance Tuning

- Describing How Cubes are Stored
- Understand Cube Build Processing
- Examining Balanced Configurations
- Correcting Performance Bottlenecks