

# Oracle Database 11g: OLAP Essentials (D70039)

ID D70039 Preis 2.010,- € (exkl. MwSt.) Dauer 3 Tage

## Kursüberblick

In this course, students learn to progressively build an OLAP data model to support a wide range of business intelligence requirements. Students learn to design OLAP cubes to serve as a summary management resource for existing SQL table queries. Students also learn to leverage the power of Oracle OLAP by adding rich analytic content to your data model.

Students learn to create sophisticated reports of OLAP data by using simple SQL queries. Students also create and execute OLAP queries in SQL Developer, and Oracle Application Express (APEX). Students learn to implement cube security, including how to authorize access to cube data and methods for scoping user views of data. Finally, students learn to design OLAP cubes for performance and scalability.

## 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

## Zielgruppe

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

## Voraussetzungen

- Basic SQL knowledge
- A basic understanding of OLAP concepts

## Kursziele

- 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

## Kursinhalt

- Examining the Role of Oracle OLAP within the Oracle BI / DW Platform
- Understanding the Dimensional Model
- Building OLAP Cubes
- Examining Cube-Organized Materialized Views (Cube MVs)
- Creating Calculated Measures
- Using SQL to Query Oracle OLAP Cubes
- Enhancing Analytic Content
- Using Ad Hoc Query and Reporting Tools Against OLAP Data
- Implementing Cube Security
- Designing Cubes for Performance and Scalability
- Examining Performance Tuning

## Detaillierter Kursinhalt

### 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