

# Oracle BI 12c: Build Repositories

## Duración

Días: 5 Días

Horas: 30 horas

## Descripción

This Oracle BI 12c: Build Repositories training is designed for Oracle Business Intelligence implementation team members who need to define and build dimensional models for business intelligence processing. Learn how to build an Oracle Business Intelligence repository and perform administrative tasks.

## A quién se dirige

- ✓ Data Warehouse Administrator
- ✓ Application Developers
- ✓ Business Analysts
- ✓ Technical Consultant
- ✓ Data Modelers
- ✓ Reports Developer
- ✓ Business Intelligence Developer
- ✓ Data Warehouse Developer

## Beneficios para usted

By taking this course, you'll walk away with the ability to extend the initial repository and model more complex business requirements, including: logical

dimension hierarchies, multiple logical table sources, aggregate tables, partitions, and time series data. You will have developed the experience to use Administration Tool wizards and utilities to manage, maintain, and enhance repositories. Finally, you'll be exposed to more advanced topics, like implicit fact columns, bridge tables, usage tracking, patch merge, and managing service instances.

## Objetivos

- ✓ Model partitions and fragments to improve application performance and usability
- ✓ Use variables to streamline administrative tasks and modify metadata content dynamically
- ✓ Use time series functions to support historical time comparison analyses
- ✓ Set up security to authenticate users and assign appropriate permissions and privileges
- ✓ Apply cache management techniques to maintain and enhance query performance
- ✓ Set up query logging for testing and debugging
- ✓ Set up a multiuser development environment
- ✓ Use the Administration Tool wizards and utilities to manage, maintain, and enhance repositories
- ✓ Enable usage tracking to track queries and database usage, and improve query performance
- ✓ Perform a patch merge in a development-to-production scenario
- ✓ Use Business Application Archive (BAR) files to move Oracle BI between environments

## Qué aprenderá

This Oracle BI 12c: Build Repositories training teaches you how to build and verify the three layers of an Oracle Business Intelligence (BI) repository, step-by-step. Expert Oracle University instructors will begin by teaching you how to use the Oracle BI Administration Tool to construct a simple repository.

- ✓ Construct the repository.
- ✓ Import schemas.
- ✓ Design and build logical business models.
- ✓ Expose business models to users in the Oracle BI user interface.

- ✓ Build physical and logical joins, simple measures, and calculation measures.
- ✓ Validate your work by creating and running analyses.
- ✓ Verify query results using the query log.
- ✓ Implement Oracle BI Server security.
- ✓ Manage the Oracle BI Server cache.
- ✓ Set up a multi-user development environment.

## Contenido

### 1. Repository Basics

- ✓ Loading a repository into Oracle BI Server
- ✓ Exploring a repository's structure, features, and functions
- ✓ Exploring Oracle BI architecture components
- ✓ Using the Oracle BI Administration Tool
- ✓ Creating a repository
- ✓ Installing the BI Client software

### 2. Building the Physical Layer of a Repository

- ✓ Examining physical layer object properties
- ✓ Importing data sources
- ✓ Setting up Connection Pool properties
- ✓ Creating alias tables
- ✓ Printing the physical layer diagram
- ✓ Defining keys and joins

### 3. Building the Business Model and Mapping Layer of a Repository

- ✓ Building logical tables, columns, and sources
- ✓ Building a business model
- ✓ Building measures
- ✓ Examining business model object properties
- ✓ Defining logical joins
- ✓ Printing the business model and mapping layer diagram

### 4. Building the Presentation Layer of a Repository

- ✓ Exploring presentation layer objects
- ✓ Nesting presentation tables
- ✓ Modifying presentation layer objects
- ✓ Examining presentation layer object properties

- ✓ Controlling presentation layer object visibility
  - ✓ Creating presentation layer objects
- 5. Testing and Validating a Repository**
- ✓ Executing analyses to test the repository
  - ✓ Uploading the repository through Enterprise Manager
  - ✓ Inspecting the query log
  - ✓ Checking repository consistency
  - ✓ Turning on logging
- 6. Managing Logical Table Sources**
- ✓ Specifying logical content
  - ✓ Adding multiple logical table sources to a logical table
- 7. Adding Calculations to a Fact**
- ✓ Creating new calculation measures based on physical columns
  - ✓ Creating measures using functions
  - ✓ Creating new calculation measures using the Calculation Wizard
  - ✓ Creating new calculation measures based on logical columns
- 8. Working with Logical Dimensions**
- ✓ Creating dimension-specific aggregation rules
  - ✓ Creating share measures
  - ✓ Creating logical dimension hierarchies
  - ✓ Creating level-based measures
  - ✓ Creating ragged and skipped-level hierarchies
  - ✓ Creating parent-child hierarchies
  - ✓ Creating presentation hierarchies
- 9. Enabling Usage Tracking**
- ✓ Tracking and storing Oracle BI Server usage at the detailed query level
  - ✓ Creating the usage tracking tables
  - ✓ Setting up the sample usage tracking repository
  - ✓ Using usage tracking statistics to optimize query performance and aggregation strategies
- 10. Using Model Checker and Aggregates**
- ✓ Setting the number of elements in a hierarchy
  - ✓ Using the Aggregate Persistence Wizard

- ✓ Testing aggregate navigation
- ✓ Using Model Check Manager
- ✓ Modeling aggregate tables to improve query performance

## 11. Using Partitions and Fragments

- ✓ Exploring partition types
- ✓ Modeling partitions in an Oracle BI repository

## 12. Using Repository Variables

- ✓ Creating initialization blocks
- ✓ Creating session variables
- ✓ Using the Variable Manager
- ✓ Using dynamic repository variables as filters
- ✓ Creating repository variables

## 13. Modeling Time Series Data

- ✓ Using time comparisons in business analysis
- ✓ Using Oracle BI time series functions to model time series data

## 14. Modeling Many-to-Many Relationships

- ✓ Using bridge tables to resolve many-to-many relationships between dimension tables and fact tables

## 15. Setting an Implicit Fact Column

- ✓ Ensuring the correct results for dimension-only queries
- ✓ Selecting a predetermined fact table source
- ✓ Specifying a default join path between dimension tables

## 16. Importing Metadata from Multidimensional Data Sources

- ✓ Incorporating horizontal federation into a business model
- ✓ Importing a multidimensional data source into a repository
- ✓ Displaying data from multidimensional sources in Oracle BI analyses and dashboards
- ✓ Adding Essbase measures to a relational model
- ✓ Incorporating vertical federation into a business model

## 17. Security

- ✓ Setting up object permissions
- ✓ Creating users and groups
- ✓ Exploring Oracle BI default security settings

- ✓ Setting query limits and timing restrictions
- ✓ Creating application roles
- ✓ Setting row-level security (data filters)

## 18. Cache Management

- ✓ Seeding the cache
- ✓ Inspecting cache reports
- ✓ Using Cache Manager
- ✓ Purging cache entries
- ✓ Restricting tables as non-cacheable
- ✓ Modifying cache parameters and options

## 19. Managing Metadata and Working with Service Instances

- ✓ Managing service instances using WLST commands
- ✓ Managing BAR files using WebLogic Scripting Tool (WLST) commands
- ✓ Using BI Application Archive (BAR) files to export and import service instances

## 20. Using Administration Tool Utilities

- ✓ Using the various Administration Tool utilities
- ✓ Using BI Server XML API to create XML representation of repository metadata

## 21. Multiuser Development

- ✓ Setting up a multiuser development environment
- ✓ Tracking development project history
- ✓ Developing a repository using multiple developers

## 22. Performing a Patch Merge

- ✓ Creating a patch
- ✓ Equalizing objects
- ✓ Making merge decisions
- ✓ Comparing repositories
- ✓ Applying a patch