Oracle BI 11g R1: Build Repositories

Duration: 5 Days

What you will learn

This Oracle BI 11g R1: Build Repositories training is based on OBI EE release 11.1.1.7. Expert Oracle University instructors will teach you step-by-step procedures for building and verifying the three layers of an Oracle BI repository; you'll begin by using the Oracle BI Administration Tool to construct a simple repository to address a fictitious company's business requirements.

Learn To:

Build and execute analyses to test and verify a dimensional business model.
Use the Oracle BI Adminstration Tool to administer Oracle BI Server.
Use the Oracle BI Administration Tool to build, manage and maintain an Oracle BI repository.
Build a dimensional business model to address business intelligence requirements.
Validate your work by creating and running analyses, and verifying query results using the query log.

Benefits to You

By taking this course, you'll walk away with the ability to transform your organization’s data into intelligence, which will improve your day-to-day decision making. This new knowledge will help you provide time-critical, relevant and accurate insights. Furthermore, you'll develop skills that will help you become more efficient at building repositories.

Build Logical Business Models

This course will also teach you how to import schemas, design and build logical business models and expose business models to users in the Oracle BI user interface. While constructing the repository, you'll learn how to build physical and logical joins, simple measures and calculation measures.

Model Logical Dimension Hierarchies

You'll then extend the initial repository and learn how to model more complex business requirements. This includes logical dimension hierarchies, multiple logical table sources, aggregate tables, partitions and time series data.
Implement Oracle BI Server Security

Oracle University instructors will also walk you through implementing the Oracle BI Server security and managing the Oracle BI Server cache. You'll learn how to set up a multi-user development environment and use Administration Tool wizards and utilities to manage, maintain and enhance repositories.

Audience

Application Developers, Business Analysts, Business Intelligence Developer, Data Modelers, Data Warehouse Administrator, Data Warehouse Analyst, Reports Developer

Course Topics

Repository Basics
Exploring Oracle BI architecture components
Exploring a repository's structure, features, and functions
Using the Oracle BI Administration Tool
Creating a repository
Loading a repository into Oracle BI Server
Installing the BI Client software
Overview of Exalytics Machine

Building the Physical Layer of a Repository
Importing data sources
Setting up Connection Pool properties
Defining keys and joins
Examining physical layer object properties
Creating alias tables
Printing the physical layer diagram

Building the Business Model and Mapping Layer of a Repository
Building a business model
Building logical tables, columns, and sources
Defining logical joins
Building measures
Examining business model object properties
Printing the business model and mapping layer diagram

Building the Presentation Layer of a Repository
Exploring presentation layer objects
Creating presentation layer objects
Modifying presentation layer objects
Examining presentation layer object properties
Nesting presentation tables
Controlling presentation layer object visibility

Testing and Validating a Repository
Checking repository consistency
Turning on logging
Uploading the repository through Enterprise Manager
Executing analyses to test the repository
Inspecting the query log

Managing Logical Table Sources
Adding multiple logical table sources to a logical table
Specifying logical content

Adding Calculations to a Fact
Creating new calculation measures based on logical columns
Creating new calculation measures based on physical columns
Creating new calculation measures using the Calculation Wizard

Creating measures using functions

Working with Logical Dimensions
Creating logical dimension hierarchies
Creating level-based measures
Creating share measures
Creating dimension-specific aggregation rules
Creating presentation hierarchies
Creating parent-child hierarchies
Creating ragged and skipped-level hierarchies

Enabling Usage Tracking
Creating the usage tracking tables
Setting up the sample usage tracking repository
Tracking and storing Oracle BI Server usage at the detailed query level
Using usage tracking statistics to optimize query performance and aggregation strategies

Using Model Checker and Aggregates
Using Model Check Manager
Modeling aggregate tables to improve query performance
Using the Aggregate Persistence Wizard
Testing aggregate navigation
Setting the number of elements in a hierarchy

Using Partitions and Fragments
Exploring partition types
Modeling partitions in an Oracle BI repository

Using Repository Variables
Creating session variables
Creating repository variables
Creating initialization blocks
Using the Variable Manager
Using dynamic repository variables as filters

Modeling Time Series Data
Using time comparisons in business analysis
Using Oracle BI time series functions to model time series data

Modeling Many-to-Many Relationships
Using bridge tables to resolve many-to-many relationships between dimension tables and fact tables

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

Importing Metadata from Multidimensional Data Sources
Importing a multidimensional data source into a repository
Incorporating horizintal federation into a business model
Incorporating vertical federation into a business model
Adding Essbase measures to a relational model

Displaying data from multidimensional sources in Oracle BI analyses and dashboards

Security
Exploring Oracle BI default security settings
Creating users and groups
Creating application roles
Setting up object permissions
Setting row-level security (data filters)
Setting query limits and timing restrictions

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

Exploring the Summary Advisor Tool
Setting up Summary Advisor
Running the Summary Advisor wizard to create the aggregate script
Running the aggregate script to create the aggregates

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

Multiuser Development
Setting up a multiuser development environment
Developing a repository using multiple developers
Tracking development project history

Performing a Patch Merge
Comparing Repositories
Equalizing objects
Creating a patch Applying a patch
Making merge decisions