Oracle BI 12c: Build Repositories

Code:	12c-REPOSIT
Length:	5 days
URL:	View Online

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.

Learn To:

- 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.

Benefits to You

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.

Skills Gained

- 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 enchance 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
- Build the Physical, Business Model and Mapping, and Presentation layers of a repository
- Build and run analyses to test and validate a repository
- Build simple and calculated measures for a fact table
- Create logical dimension hierarchies and level-based measures
- Check the model and then model aggregate tables to speed query processing

Who Can Benefit

- Administrator
- Analyst
- Architect
- Developer
- Implementer

Course Details

Topics

Repository Basics,Building the Physical Layer of a Repository ,Building the Business Model and Mapping Layer of a Repository,Building the Presentation Layer of a Repository,Testing and Validating a Repository,Managing Logical Table Sources,Adding Calculations to a Fact,Working with Logical Dimensions,Enabling Usage Tracking,Using Model Checker and Aggregates,Using Partitions and Fragments,Using Repository Variables,Modeling Time Series Data,Modeling Many-to-Many Relationships,Setting an Implicit Fact Column,Importing Metadata from Multidimensional Data Sources,Security,Cache Management,Managing Metadata and Working with Service Instances,Using Administration Tool Utilities,Multiuser Development,Performing a Patch Merge

- 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

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

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

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

Managing Metadata and Working with Service Instances

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

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

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