

# **Oracle BI 11g R1: Build Repositories LVC (BR-LVC)**

**Modality: Virtual Classroom**

**Duration: 5 Days**

## **About this course:**

This course is based upon OBI EE release 11.1.1.7. Professional trainers of Oracle University will provide you the knowledge and expertise to build and verify the 3 layers of an Oracle Business Intelligence repository. You will also learn how to use Oracle Business Intelligence Administration Tool to develop a simple repository to deal with the business requirements.

## **Learn To:**

- Develop, maintain and manage an Oracle Business Intelligence repository by using the Oracle Business Intelligence Administration Tool.
- Create and perform analyses to verify and test a dimensional business model.
- Tackle business intelligence requirements by building a dimensional business model.
- Manage Oracle Business Intelligence Server by using the Oracle Business Intelligence Administration Tool.
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- Verify work by building and executing analyses and validating query outcomes by utilizing the query log.

## **Benefits to You**

This course will help you to enhance your knowledge and skills to modify your business data into intelligence, this will enhance your day to day decision making. This new learning methodology will assist you to deliver relevant, accurate, and time-critical insights. Additionally, you have an ability that will support you to become more effective and efficient at developing repositories.

## **Build Logical Business Models**

In this Oracle BI 11g R1: Build Repositories training you will also learn how to design and create logical business models, import schemas, and show business models to users in the Oracle Business Intelligence user interface. While developing the repository, you will understand how to build logical and physical joins, calculation measures, and simple measures.

## **Model Logical Dimension Hierarchies**

Initially, you will learn how to build a simple repository and then you will get the knowledge to model more complex business needs. This incorporates multiple logical table sources, partitions, and time-

series data, logical dimension hierarchies, and aggregate tables.

## **Implement Oracle BI Server Security**

Oracle University trainers will also provide you an overview of implementing the Oracle Business Intelligence Server security and handling the Oracle Business Intelligence Server cache. You will study the techniques to establish multiple user development environments and utilization of Administration utilities and Tool wizards to handle, maintain and improve repositories.

## **Advanced Course Topics**

In this course, you will study more advanced topics, such as bridge tables, multilingual environments, implicit fact columns, usage tracking, patch merge and write back. An appendix is incorporated, that covers design and the advantages of the Oracle Exalytics Business Intelligence Machine.

## **Course Objective:**

- Build level-based measures and logical dimension hierarchies
- Support historical time comparison analyses by using time series functions
- Develop and perform analyses to validate and test a repository
- Develop the Business Model and Mapping, Physical, and Presentation layers of a repository
- Establish multiple user development environments
- Execute a patch merge in a different scenario
- Create calculated and simple measures for a fact table
- Utilize variables to transform metadata content dynamically and streamline management tasks
- Establish security to verify users and allocate appropriate privileges and permissions
- Enhance and maintain query performance by applying cache management techniques
- Review the model and its aggregate tables to improve query processing
- Establish query logging for debugging and testing
- Model fragments and partitions to enhance application usability and performance
- Explain the Summary Advisor and Exalytics machine tool used in the machine
- Enhance, maintain and manage repositories by using the Administration Tool utilities
- Allow usage tracking to monitor database and queries usage and enhance query performance

## **Targeted Audience:**

- Data Warehouse Analyst
- BI Developer
- Application Developers
- Data Modelers
- Business Analysts
- Technical Consultant
- Reports Developer
- Data Warehouse Administrator

## **Prerequisite:**

- Understanding of Dimensional modeling
- Understanding of Basic SQL
- Understanding of Data warehouse design

## **Course Outline:**

### **Repository Basics**

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

### **Building the Physical Layer of a Repository**

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

### **Building the Business Model and Mapping Layer of a Repository**

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

### **Building the Presentation Layer of a Repository**

- Creating presentation layer objects
- Nesting presentation tables
- Modifying presentation layer objects
- Controlling presentation layer object visibility
- Exploring presentation layer objects
- Examining presentation layer object properties

### **Testing and Validating a Repository**

- Checking repository consistency

- Uploading the repository through Enterprise Manager
- Turning on logging
- Inspecting the query log
- Executing analyses to test the repository

## **Managing Logical Table Sources**

- Specifying logical content
- Adding multiple logical table sources to a logical table

## **Adding Calculations to a Fact**

- Creating new calculation measures based on logical columns
- Creating measures using functions
- Creating new calculation measures based on physical columns
- Creating new calculation measures using the Calculation Wizard

## **Working with Logical Dimensions**

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

## **Enabling Usage Tracking**

- Using usage tracking statistics to optimize query performance and aggregation strategies
- 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 Model Checker and Aggregates**

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

## **Using Partitions and Fragments**

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

## **Using Repository Variables**

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

## **Modeling Time Series Data**

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

## **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**

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

## **Importing Metadata from Multidimensional Data Sources**

- Incorporating horizontal federation into a business model
- Importing a multidimensional data source into a repository
- 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**

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

## **Cache Management**

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

## Exploring the Summary Advisor Tool

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

## Using Administration Tool Utilities

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

## Multiusers Development

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

## Performing a Patch Merge

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