

Oracle BI Applications 7.9: Develop a Data Warehouse

Duration: 5 Days

What you will learn

This course is designed for those individuals on the implementation team who are responsible for extracting, transforming, and loading data (ETL) from Siebel Customer Relationship Management (CRM) and other data sources, into the Oracle Business Analytics Warehouse (OBAW). This course teaches students about the architecture and contents of the OBAW and the use of the Data Warehouse Administration Console (DAC) in designing, performing, and managing ETL. Students learn about the different methods used to modify the Oracle Business Analytics Warehouse to support specific analytical application requirements, as well as how to weigh performance issues related to the various modifications. Practices are based on Siebel Customer Relationship Management (CRM) data. Learn To: Describe and Build Source Dependent Extract and Source Independent Load mappings Build, load and configure the Oracle Business Analytics Warehouse using Data Warehouse Administration Describe and use the Change Capture Process Manage Performance

Audience

Business Intelligence, Developer, Data Warehouse Administrator, Data Warehouse Developer, Database Administrators, Technical Consultant

Course Topics

Oracle Business Intelligence Application Overview

- Describing the Oracle Business Intelligence Applications
- Describing Oracle Business Intelligence Applications components
- Describing analytic workflows and application integration

Oracle Business Intelligence Applications Architecture Overview

- Describing the Oracle Business Intelligence logical architecture
- Describing the process flow of building the data warehouse
- Employing the recommended deployment options to maximize data warehouse performance
- Listing the components supporting the Oracle Business Analytics Warehouse and the functions performed by each core

Oracle Business Analytics Warehouse Content

- Describing the contents of the Oracle Business Analytics Warehouse
- Describing the warehouse tables

Installing Oracle Business Analytics Warehouse Components

- Installing the components on each machine in an Oracle Business Analytics Warehouse implementation
- Detailing the required steps for each installation
- Explaining the use of components on each machine
- Identifying steps to grant access to Oracle Business Analytics Warehouse from Oracle Business Intelligence applications

Understanding the ETL Process

- Understanding the Extraction, Transformation, and Loading (ETL) process used to load Oracle Business Analytics Warehouse
- Describing the full and incremental load of the OBAW
- Identifying the tables, tasks, and mappings used to support ETL processing

Working with Informatica Designer

- Identifying the Informatica Repository objects used to configure the OBAW

Navigating the set of tools in the Informatica Designer used to configure the OBAW
Describing the process for building Oracle mappings using Informatica Designer

Exploring SDE and SIL Mappings

Defining extract and load workflows

Describing the difference between Source Dependent Extract (SDE) and Source Independent Load (SIL) sessions

Identifying transformations and their mechanics in Source Dependent Extract and Source Independent Load mappings

Exploring out-of-the-box mapplets and reusable transformations

Explaining the differences between SIL dimension and fact mappings

Building SDE and SIL Mappings

Describing the process of building mappings using Informatica Designer

Creating mapping sources and targets

Copying, modifying, and validating mappings

Working with Informatica Workflow Manager

Navigating Informatica Workflow Manager

Running workflows and sessions using Informatica Workflow Manager

Describing the steps for creating, running, and troubleshooting workflows and sessions

Working with Data Warehouse Administration Console

Using the tools and views of the Data Warehouse Administration Console (DAC)

Describing DAC objects, how they relate to each other, and their roles in the OBAW ETL

Examining the internal DAC tasks

Creating custom execution plans and subject areas in DAC

Generating custom DDL using DAC Schema Manager

Populating Oracle Business Analytics Warehouse

Exploring prebuilt ETL execution plans

Running and viewing exception reports using DAC

Examining exception types

Loading the OBAW using DAC

Troubleshooting the load process

Configuring Oracle Business Analytics Warehouse

Reviewing configuration types

Identifying the performance benefits of ETL configuration: Research and Analysis using DAC

Configuring ETL to increase performance

Examining the impact on Auto Dependency Engine analysis

Customizing Oracle Business Analytics Warehouse

Examining customization types and scenarios

Examining customization considerations

Examining customization leading practices and requirements

Adding Columns to an Existing Dimension Table

Describing the steps in a Type I customization of the Oracle Business Analytics Warehouse

Modifying custom mapping templates to perform a Type I customization

Creating workflows and sessions for a Type I customization

Creating DAC tasks and assigning source and target tables

Generating task dependencies

Running a custom execution plan to add data to an existing table in OBAW

Validating results

Adding a New Dimension in OBAW

Describing the steps and examples of a Type II customization of the Oracle Business Analytics Warehouse, bringing in c

Adding a new table to the OBAW and creating required foreign keys

Registering new tables in the DAC

Creating and running mappings and sessions for a Type II customization

Exploring the Change Capture Process

Describing the change capture process

Describing and generating change capture tables

Describing and generating change capture views

Describing and generating change capture SQL

Using the change capture filter

Capturing and Applying Deletes

Identifying business scenarios where records are deleted in the transactional database creating the need to capture the c

Generating delete triggers

Executing delete triggers

Building mappings to capture and extract deletes from the transactional database

Building mappings to apply deletes to the OBAW

Building sessions and workflows to apply the deletes to the OBAW

Configuring the DAC to load the deleted rows onto the OBAW

Loading the deleted rows onto the OBAW

Building Auxiliary Change Capture

Describing auxiliary change capture

Identifying the business need to perform auxiliary change capture

Building the image table for auxiliary tables

Creating auxiliary change capture mapping

Creating sessions and workflows for auxiliary change capture process

Configuring the DAC to perform the auxiliary change capture process

Defining dependencies, building the image flag, and describing auxiliary source tables

Running ETL and validating results

Managing OBAW Performance

Reviewing performance trade-offs

Reviewing common performance bottlenecks

Explaining Informatica Server throughput

Reviewing ETL parallel processing guidelines

Reviewing recommended Informatica Server parameter settings

Reviewing database server throughput and indexes

Managing optimizer statistics

Managing OBAW schema objects