# **Oracle Data Integrator 11g: Advanced Integration and Development**

Duration: 3 Days

What you will learn

This Oracle Data Integrator training covers advanced techniques for using Oracle Data Integrator 11g (ODI). Learn to implement high-performance movement and transformation of data among various platforms.

Learn To:

Perform data integration and transformation among various platforms using advance techniques.

Design advanced ODI interfaces, procedures and packages to perform EL-T data transformations.

Set up ODI security by implementing strongly secured approach with non-generic profiles and external user authentication.

Develop and customize Knowledge Modules with substitution methods and Java.

Automate ODI tasks using Groovy script editor.

Implement various integration strategies with ODI using best practices.

Use ODI Web services and perform integration of ODI in an Enterprise environment and SOA.

Benefits to You

Improve performance and reduce integration costs across your organizations' heterogeneous systems. Centralize data across databases using your new skills to perform data integration, design advanced ODI interfaces, setup ODI security, and automate ODI tasks.

Administering the IT infrastructure & Metadata

This course will help you learn to use the ODI Studio for developing projects and models. Expert Oracle instructors will also explore how to monitor executions through instruction and hands-on exercises.

Advanced ODI development for High-Performance Data Integration

Furthermore, this course will teach you how to perform advanced ODI topology configuration. Learn to design advanced ODI interfaces, procedures, packages and other objects for high-performance data integration among various technologies.

Perform Extract Load Transform (EL-T) in Enterprise Environment

For enterprise SOA deployments, there is almost always a need for enterprise data extraction, loading and transformation. By leveraging the native SOA architecture within Oracle Data Integrator, this course will help you perform EL-T from SOA applications.

You'll also learn how to implement the integration of ODI in an Enterprise environment and in SOA. In addition, this course will teach you how to execute ODI transformation from a BPEL process.

Apply Strongly Secured Approach

Taking this course will help you learn how to enhance the ODI security by applying the Strongly Secured Approach and by implementing External Authentication. This course is based on Oracle Data Integrator 11g(11.1.1.6).

#### Audience

Business Analysts Data Modelers Data Warehouse Administrator Database Administrators SOA Architect Technical Consultant

## **Related Training**

## **Required Prerequisites**

Basic Knowledge of ODI 11g

Basic knowledge of ELT data processing

Basic knowledge of SQL

#### Suggested Prerequisites

Oracle Data Integrator 11g: Integration and Administration

Working Knowledge of ODI 11g

Working knowledge of SQL

#### Course Objectives

Develop and enhance Knowledge Modules

Design advanced integration interfaces

Automate ODI tasks using ODI Groovy editor

Enhance ODI security with strongly secured approach

Expose ODI Scenarios as Web services

Integrate ODI in Enterprise environment and SOA

Describe best practices for implementing integration strategies

**Describe Various ODI Integration Patterns** 

#### **Course Topics**

## **Developing ODI Knowledge Modules**

Overview of Different Types of KMs Guidelines for KM Developers Working with Substitution Methods Applying Various ODI Tags Implementing Java in KMs Troubleshooting and Debugging KMs

## **Designing Advanced Integration Interfaces**

Designing Integration Interfaces: E-LT and ETL - Style Interfaces Selecting LKM and Mono-Connection (Single Technology) IKM Applying Best Practices for Integration Interfaces Design Designing Temporary Interfaces Implementing Lookups Combining Multiple Datasets Using Set-Based Operators Partitioning ODI Datastores

#### Using variables

Describing a Variable's Scope Inserting Variables in Object Properties Using Variables within Variables Defining Variables in the Resource Name of a Datastore Applying Variables in Topology Objects Setting Variables as Start Up Parameters Tracking Variables

## **Using Groovy in ODI**

Interacting Programmatically with ODI Overview of ODI SDK Introduction to Groovy Using Groovy Editor Automating Development Tasks with Groovy

## **Using Complex Files**

What are Complex Files Determining Technical Requirements for Complex Files Project Applying nXSD Schema: an Example Setting up the Topology for Complex Files Creating and Reverse-Engineering a Complex Files Model Designing an Interface with Complex Files

# **Enhancing ODI Security**

Overview of ODI Security

Best Practices for Enhancing ODI Security Applying Non-Generic Profiles Configuring External Authentication Configuring LDAP for External Authentication with ODI

# Integration of ODI in Enterprise Environment

Configuring Java EE Agent Monitoring ODI Environment with Enterprise Manager Monitoring ODI Environment with ODI Console

# Integration of ODI within SOA

Working with Web Services with ODI Overview of Public Web Services Invoking Web Services from ODI Exposing ODI Scenario as a Web Service Configuring the OdiInvokeWebService Tool Executing an ODI Scenario from a BPEL Process within SOA

# **Choosing Integration Strategies: Best Practices**

Selecting Integration Strategies Loading and Integration Patterns Selecting Staging Area Location Working with Slowly Changing Dimensions Working with Changed Data Capture Using ODI with Oracle Golden Gate