

Oracle Data Integrator 12c: Advanced Integration and Development Ed 2

Course Duration:24 Hours

Course code: D82167

1. Course Overview

This advanced course is designed for developers and integration specialists who want to leverage Oracle Data Integrator (ODI) 12c for sophisticated data integration solutions. Participants will go beyond the fundamentals and learn advanced concepts such as parallel execution, performance tuning, ODI SDK, advanced mappings, reusable components, web services, and integration with big data technologies. The course combines theoretical lessons with practical hands-on exercises to help participants design and implement scalable and high-performance data integration processes.

2. What you'll learn?

By the end of this course, you should be able to:

- Understand advanced ODI 12c architecture and components
- Design and develop complex mappings and packages
- Implement reusable components such as knowledge modules and reusable mappings
- Optimize ODI processes with parallel execution and tuning strategies
- Integrate ODI with web services and SOA environments
- Use ODI for big data integration and Hadoop ecosystems
- Automate tasks using ODI SDK and Groovy scripting
- Manage lifecycle, deployment, and security in ODI 12c

3. Target Audience

- Data integration developers
- ETL and BI professionals
- Database administrators managing large-scale data flows
- Architects implementing enterprise integration strategies

4. Pre-Requisites

Familiarity with:

- Oracle Data Integrator 12c fundamentals (preferably completion of ODI12c: Integration and Administration course)
- SQL and PL/SQL
- General data warehousing and ETL concepts

5. Course content

Module 1: Introduction

- Overview of Oracle Data Integrator

Module 2: ODI Knowledge Modules: Overview

- Working with Knowledge Modules
- Developing Knowledge Modules
- ODI Knowledge Modules: Overview

Module 3: Developing Knowledge Modules

- Using Substitution Methods: Code Examples
- Developing Knowledge Modules: Best Practices
- Using Java in Knowledge Modules
- Troubleshooting Knowledge Modules

Module 4: Designing ODI Integration Mappings

- Designing Integration Mappings: Best Practices
- Maintaining Integrity of Data
- Integration Process: Overview
- Integration Mappings: Overview

Module 5: Designing Advanced Integration Mappings

- Partitioning
- ODI Mappings: Advanced Functionality

- Reusable Mappings

Module 6: Using Variables in ODI

- Tracking Variables
- Using Variables: Overview
- Using Variables in ODI Objects

Module 7: Accelerating Development with Groovy

- Using Groovy Editor
- Performing SDK Tasks Using Java with Groovy Editor
- Interacting Programmatically with ODI

Module 8: Working with ASCII Files

- Complex Files: Configuring the Topology
- Complex Files in Integration Projects
- Complex Files Concepts: Overview

Module 9: Integration of ODI in Enterprise Environment and SOA

- Invoking Web Services
- Using Web Services with ODI: Overview
- ODI Integration with Java EE
- Integration of ODI with SOA

Module 10: Enhancing ODI Security

- Security Integration
- ODI Security: Overview
- Implementing a Strongly Secured Approach
- Configuring ODI External Authentication

Module 11: Choosing Integration Strategies: Best Practices

- Working on ODI Projects: Best Practices
- Real-Time Data Integration: Using ODI with Oracle GoldenGate

- Strategies with Staging Area on the Target
- Strategies with Staging Area Different from the Target
- Using ODI for Bulk Processing
- Defining an ODI Integration Strategy

Module 12: Cubes and Dimensions

- Creating Cubes
- Overview of Dimensions
- Creating Dimensions
- Overview of a Cube

