
Oracle Data Integrator 12c: Advanced Integration and Development

Duration: 3 Days

What you will learn

This Oracle Data Integrator course covers advanced techniques for using Oracle Data Integrator 12c (ODI). You learn how 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 mappings, procedures, and packages to perform EL-T data transformations.

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

Develop and customize Knowledge Modules with substitution methods and Java.

Automate ODI tasks by using the Groovy script editor.

Implement integration strategies with ODI by using best practices.

Use ODI web services and perform integration of ODI in an enterprise environment and SOA.

Benefits

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 mappings, set up ODI security, and automate ODI tasks. Administering the IT infrastructure and Metadata

This course helps you learn how 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

In addition, this course teaches you how to perform advanced ODI topology configuration. Learn how to design advanced ODI mappings, procedures, packages, and other objects for high-performance data integration among various technologies.

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

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

SOA applications.

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

Apply Strongly Secured Approach

Taking this course helps you learn how to enhance ODI security by applying the Strongly Secured Approach and by

implementing External Authentication with LDAP. This course is based on Oracle Data Integrator 12c (12.1.3).

Audience

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

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 Mappings

Designing Integration Mappings: E-LT and ETL Mappings
Selecting LKM and Mono-Connection (Single Technology) IKM
Applying Best Practices for Integration Mapping Design
Designing Reusable Mappings
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 a Mapping with Complex Files
Implementing JSON 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

Integration of ODI in 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 in SOA

Choosing Integration Strategies: Best Practices

Selecting Integration Strategies
Loading and Integration Patterns
Selecting Staging Area Location
Working with Slowly Changing Dimensions (SCD)
Working with Changed Data Capture
Using ODI with Oracle GoldenGate
Locate OGG/ODI VM for further research

ODI and Big Data

Describe Big Data concepts
Contrast Hadoop, NoSQL, Apache, Hive, HBase, HDFS
Implement ODI mapping for Big Data to Oracle SQL
Locate BigDataLite VM for further research