Cel szkolenia:

This course teaches you to design and develop SOA composite applications for application integration with services. You'll use a Service-Oriented Architecture (SOA) implementation approach.

Learn To:

- Create a SOA Composite application using JDeveloper
- Initiate SOA composite applications using the Events Delivery Network
- Test, debug, and troubleshoot a SOA composite application
- Apply security policies to service endpoints

Plan szkolenia:

- Introduction to Service Oriented Architecture
  - Describing Service-Oriented Architecture (SOA)
  - Explaining Service Component Architecture
  - Reviewing of services and key standards
  - Explaining the Oracle SOA Suite 11g architecture and components
  - Explaining Business Events and the Event Delivery Network
- Getting Started with Composite Applications
  - Describing basic synchronous and asynchronous interaction patterns
○ Discussing XSD and Web Services Description Language (WSDL)
○ Creating a Mediator component
○ Defining a Routing Service
○ Creating XSL Transformations with the XSLT Mapper
○ Introducing working with adapters
○ Creating a file adapter service reference
○ Examining the composite.xml Source

○ Managing and Monitoring a Composite Application
  ○ Deploying a Composite Application
  ○ Versioning Applications
  ○ Discussing Application state
  ○ Using Configuration Plans
  ○ Managing the life cycle of a Composite Application
  ○ Testing a Composite Application
  ○ Managing SOA Applications with JDeveloper
  ○ Testing a Composite Application in Enterprise Manager

○ Working With Data
  ○ Discussing Data Standards
  ○ Using Attributes
  ○ Introducing XSL Transformations
  ○ Using XPath Functions
  ○ Using the Mapper in JDeveloper
  ○ Using Dictionaries
  ○ Testing Transformations
  ○ Working with native format data

○ Using the JMS and JDBC Adapters
  ○ Introducing Binding Components and JCA Adapters
  ○ Monitoring Adapters
  ○ Discussing JMS Messaging
  ○ Discussing Adapters and the WebLogic Application Server
  ○ Introducing the Oracle JMS Adapter
  ○ Configuring JMS Resources with WebLogic Administration Console
  ○ Configuring the JDBC Adapter
  ○ Discussing Transactionality

○ Introduction to BPEL
  ○ Defining Business Processes and BPEL
Introducing parts of a BPEL Process
Discussing variables in a BPEL Process
Using the Sequence and Scope Activities
Using the BPEL Design Editor
Testing a BPEL Process in Enterprise Manager

More BPEL Activities
- Conditional Branching with the If activity
- Processing with the Flow activity
- Parallel and Sequential Looping with the Foreach activity
- Suspending a process with the Wait activity
- Waiting for a message with the Pick activity
- Looping with the While activity
- Indexing XML arrays dynamically
- Discussing Synchronous and Asynchronous Interaction Patterns

Handling Faults in Composite Applications
- Introducing Faults and Fault Handling options
- Managing Faults in Synchronous and Asynchronous Mediators
- Introducing Faults and Fault Handlers in BPEL Processes
- Returning Faults from Synchronous and Asynchronous Processes
- Throwing Faults
- Introducing Compensation and Compensation Handlers
- Introducing the Fault Management Framework
- Recovering Faults with Enterprise Manager Fusion Middleware Control

Introducing Human Tasks
- Introducing Human Tasks
- Creating and configuring a Human Task in a Composite Application
- Adding a Human Task to a BPEL Process
- Generating and deploying Task Display Forms
- Using the Worklist Application to view and act on task information
- Introducing the Oracle User Messaging Service
- Configuring UMS Notification Properties
- Sending Notifications to Users Preferred Channel

Introducing Business Rules
- Introducing the Business Rule Component
- Describing the Oracle Business Rules architecture
- Creating rules and decision tables with the JDeveloper Rule Editor
• Examining Business Rule Component Files
• Describing the role of the Rules SDK
• Editing Business Rules at Runtime

• Testing SOA Composite Applications
  • Introducing the Composite Test Framework
  • Defining Emulations and Assertions
  • Discussing Test Suites and Test Cases
  • Testing initiation of inbound messages
  • Emulating outbound, fault, and callback messages
  • Running Test Cases
  • Examining results of a Test Run
  • Debugging Composite Applications

• Securing Services and Composite Applications
  • Explaining security for services
  • Describing the Fusion
  • Middleware security architecture
  • Attaching security policies at design time in JDeveloper
  • Attaching security policies post-deployment in Enterprise Manager

• Designing and Managing Business Events
  • Describing the Event Delivery Network
  • Creating a business event
  • Publishing an event
  • Subscribing to an event
  • Managing events in Oracle Enterprise Manager

• Monitoring Composite Applications with Sensors and Oracle BAM
  • Creating and configuring BPEL sensors
  • Creating and configuring composite sensors
  • Introducing Business Activity Monitoring
  • Creating a Data Object with BAM Architect
  • Preparing an Oracle BAM Dashboard
  • Integrating Oracle BAM with the BAM Adapter
  • Creating and configuring a BAM Sensor Action in a BPEL Process
  • Introducing Oracle Complex Event Processing

• Oracle BPM, Governance, and the SOA Suite
  • Exploring another definition of Business Process
  • Introducing the Oracle Business Process Management Suite
Explaining the elements of a BPMN Business Process Model
Discussing SOA challenges and governance objectives
Introducing the Oracle Governance solution
Describing the governance lifecycle

Wymagania:

Recommended Related Training Courses:

- Oracle SOA Suite 11g: Essential Concepts
- XML Fundamentals Ed 1.1 NEW
- Oracle BAM 11g: Build Real-Time Dashboards
- Oracle SOA Suite 11g: Administration
- SOA Adoption and Architecture Fundamentals

Poziom trudności

Certyfikaty:

Uczestnicy szkoleń otrzymają zaświadczenia o ukończeniu kursu sygnowane przez firmę Oracle.

Prowadzący:

Autoryzowany wykładowca Oracle.