

# Oracle API Gateway 11g R2: Manage and Control Security

## Course Introduction

- Course goal
- Lesson objectives
- Agenda for each day of lessons
- Describing the practice environment and business scenario

## Web Services Security Overview

- Security challenges for Web Services
- Web Services
- Web Services security concepts
- Transport versus message security
- Security standards overview
- Best practices for applying security for web services

## Getting Started with Oracle API Gateway (OAG) 11g

- Need for XML gateways
- Oracle API Gateway as multi-layered security deployment for web services
- Oracle API Gateway Basics
- Oracle API Gateway Features
- Oracle API Gateway architecture and components
- Oracle API Gateway User Interface

## Registering Web Services in OAG

- Introduction to Policy Studio interface
- Capabilities of registered/virtualized web services
- Registering and testing web services in Policy Studio
- Policies
- Assigning policies to web services in Policy Studio

## Monitoring, Logging and Tracing

- Monitoring traffic in API Gateway Manager
- Troubleshooting Tools

## Managing Configurations

- Describe OAG configuration structure
- Manage a deployed configuration
- Compare and merge API Gateway configurations
- Import and export configuration data

### Fault Handling

- What is Fault Handling?
- SOAP Faults
- Default Fault Handler
- Overriding the Default Fault Handler
- Custom Fault Handling by using a policy
- Example of Custom Fault Handling: Global Handler

### Blocking XML Threats

- XML Concepts
- XML Firewalling
- XML content & schema attacks and the filters to use
- What is throttling
- Define rules for throttling
- Protect REST

### Accelerating XML Processing and Managing Traffic

- Caching
- Configuring cache settings
- Managing Traffic

### Configuring SSL

- Encryption concepts
- SSL basics
- SSL support in the OAG Gateway
- Configuring SSL settings
- Configuring mutual SSL settings
- Terminating an SSL connection

### Securing XML Messages

- XML signature
- XML encryption
- XML transformation

### Securing SOA Composites with OAG and Oracle Web Services Manager (OWSM)

- SOA and Web Services
- SOA Composite Applications
- Oracle Service Bus
- Oracle Web Services Manager

### Integrating OAG with Identity and Access Management and OAuth

- Oracle Access Management Suite
- OAM Architecture
- OAG-OAM Integration
- OAG-OES Integration
- OAuth 2.0

### Cloud Security with OAG

- Cloud Computing
- API keys
- Protecting and Managing API Keys