

Module: Web services with Java REST API

The objective of this training is to learn how to create REST web services in Java, and how to consume them. In particular, you will be able to: understand what REST is and the Java EE 6 JAX-RS specification, design REST services, secure them, deploy them and consume them via various clients.

Prerequisites : Good knowledge of XML, Java and J2E programming.



Ways to take this course: Online Instructor Led
Online self-paced
Video On Demand

Video conference tool: ZOOM

Duration: 14 H (2 days)

Scalability

Caching
Competitor access

OUTLINE

Introduction to REST

Service Oriented Architectures
RESTful: definition and principles
REST compared to SOAP
JSON and XML formats
HTTP methods: GET, POST, PUT, DELETE, etc.
Layered architecture of a service
Microservices architecture
JAX-RS and Jersey

RESTful JAX-RS Services

Object model, URIs
API design: JAX-RS, Jersey
JAX-RS annotations
WADL: XML description of a service
Handling exceptions

REST Services Deployment

Service Deployment
JAX-RS Web services clients
More complex web services with JAX-RS
Deploying a REST application
Configure REST components

RESTful Services with Spring

Spring integration
Spring annotations
Spring Web services clients
Exception handling

Security of services

CORS filters
Stateful Authentication
Stateless Authentication