

# SOA, Service Oriented Architecture overview

Seminar of 2 days - 14h

Ref.: SAO - Price 2024: CHF2 090 (excl. taxes)

This seminar presents the key concepts of SOA - Services Oriented Architecture- and the functional and technical stakes connected to its implementation. It also presents the best practices for the definition of its architecture as well as the link with Web Services. It explains how to move from the applications of a classical computing system to oriented services and how SOA can benefit your information system and what is required for its implementation.

## THE PROGRAMME

last updated: 01/2018

### 1) SOA Concepts

- SOA definitions from Gartner, W3C ...
- Basic SOA concepts : what are the concepts behind SOA (subdivide method agreement, use existing, change for commercial r
- Why to use SOA ? We develop the reasons to implement SOA and approach the advantages and the risks in implementing SOA i
- SOA stereotypes : common ideas about SOA. What SOA is or what it i not; What SOA covers or what it does not cover.
- Service concepts. We explain the key features of services: service contract (abstract and concrete WSDL, WS Policy, SLA.

### 2) SOA Governance

- What are the definitions of SOA Governance: by Gartner, by Hoogervorst...
- What is a SOA Roadmap: the SOA project lifecycle - What are the main steps to implement SOA architecture in a company? H
- State of the situation - Why to use of different maturity models to estimate the state of the situation: to improve SOA

### 3) SOA Technical Architecture

- Services infrastructure : what are the common components you find in a SOA platform. Preview of BPEL, BPMN, ESB, JMS, E
- WSDL Contract to describe services: a practical example of the abstract and concrete parts of a service.
- WS-standards and their implementations : what are the different current standards for the following fields : security, t
- Implementation of WS with Java: presentation of different Java implementation standards as JAX-RPC, JAX-WS, JAXB to deve
- Services orchestration : What are the standard behind this concept ? (Such as BPMN, BPEL, SCA (service components archit
- Enterprise Service Bus (ESB) : notion and basic features : transport, routing, transformation ..., definition of EDA (Ev
- Services Registry : research and publication of services through UDDI standard.
- Services Repository : enterprise reference system to document services, to manage services lifecycle (versions, variants
- Business Rules (BR) : how to use them to increase business processes agility ? What is the typical implementation of Bus
- Master Data Management (MDM) : what is the business issues and how to manage the reference data of an enterprise ?

### PARTICIPANTS

This seminar addresses the architects, the analysts, the designers-developers, the project managers wishing to understand the stakes of SOA's architectures and possibilities to implement it.

### PREREQUISITES

Basic knowledge in application architecture and in Web Services technologies.

### TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

### ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more. Participants also complete a placement test before and after the course to measure the skills they've developed.

### TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@ORSYS.fr to review your request and its feasibility.

- Business Activity Monitoring (BAM) : It is a tool of supervision and piloting of the processes. It allows to define busi
- Complex Event Processing (CEP): Enables Advanced Event-Driven Analysis & Pattern Detection. Provides IT Users with a Ric

#### 4) Actors and the products of the market

- Criteria for selecting a SOA platform : general criteria whatever the tool and specific criteria.
- Offers of the market: commercial software (IBM, Oracle, TIBCO...), open source (Mule, JBoss...), ?hybrid solution? (JBos

## DATES

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Contact us