Course : Open Source, DevOps tools

Seminar - 2d - 14h00 - Ref. OSO
Price : 2170 CHF E.T.

★★★★★ **5 / 5**

The DevOps movement poses new challenges for traditional IT Departments that have taken other paths. This seminar offers an in-depth analysis of the key elements of the DevOps movement, and more specifically of the Open Source tools that enable participants to more easily take part in its implementation.

🎯 Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Discover the origins and principles of the DevOps movement
- ✓ Understanding the challenges and practices of DevOps
- ✓ Evaluate and understand the main Open Source tools for DevOps and their limitations
- ✓ Identify the necessary tools and their uses within the software factory
- ✓ Identify the steps involved in implementing the approach, including risk anticipation

Intended audience

IT and business decision-makers, technical architects, designers, developers/testers, operators, managers, project leaders, Scrum Masters, Product Owners, experts/consultants.

Prerequisites

Knowledge of IT services. Basic knowledge of agile methods.

Practical details

Teaching methods
Learning is assessed throughout the session through case studies and targeted discussions.

Course schedule

PARTICIPANTS
IT and business decision-makers, technical architects, designers, developers/testers, operators, managers, project leaders, Scrum Masters, Product Owners, experts/consultants.

PREREQUISITES
Knowledge of IT services. Basic knowledge of agile methods.

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.

1 DevOps: challenges, origins and fundamentals

- Changes brought about by digital (r)evolution and the associated new challenges.
- Solutions: Agile and DevOps methods.
- Differences with traditional CIOs.
- Genealogy of DevOps: Agile Methods and Lean Manufacturing.
- Foundations of the DevOps movement.

2 DevOps, from requirements to production

- How DevOps IT works and key processes.
- Building multidisciplinary teams. Continuous learning.
- Build the software production chain and associated practices.
- Operational reliability, feedback and continuous improvement.
- Adapt governance: move to an innovative structure.
- Involving everyone: the real challenge for managers.
- Changing attitudes.
- DevOps transformation management: supporting evolution.

Group discussion
Cultural evolution of the company: obstacles and solutions.

3 Tools, positioning, features, risks and limitations

- Requirements management, Agile/DevOps (Trello, Wekan, Flowdock, Taiga...). Collaboration (Slack, Hipchat, Rocket.Chat...).
- Cloud (OpenStack, OpenShift Origin, Cloud Foundry...). Microservices and containers (Docker, Rkt, Kubernetes, Mesos...).
- Configuration management (GLPI, Fusion Inventory, SpaceWalk, etc.). Version management (Git, Github, Gitlab, Bitbucket...).
- Continuous integration (Maven, Graddle, Jenkins, GitLab-CI, TeamCity, TravisCI, CircleCI, JUnit, PhPUnit, Mokito...).
- Repository and environment management (DockerHub/Registry, Artifactory, Infrastructure As Code/Configuration As Code).
- Delivery automation (Salstack, Vagrant, Terraform, CFEngine, Capistrano, Rundeck, Ansible, Chef, Puppet...).
- Test automation (Fitness, SOAPUI, LynIS, Snort, ZAP, Jasmine, Appium, Selenium, Cucumber, Gatling, JMeter...).
- Release orchestration. Continuous monitoring: monitoring/alerting and dashboard (ELK, Zabbix, Nagios...).

Case study
Analysis of various technological and industrial contexts.

4 Summary

- The importance of technology watch.
- Points to remember.
- Conclusion.

Dates and locations

REMOTE CLASS
2026 : 19 May, 13 Oct., 3 Dec.

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.