

Course : JBoss WildFly, administering a Java EE server

Practical course - 3d - 21h00 - Ref. JBO

Price : 2150 CHF E.T.



This course covers all the basic features of WildFly/JBoss Jakarta EE application server. It will enable administrators to acquire all the skills needed to operate applications in production, implement optimized configuration and secure access.

Teaching objectives

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

- ✓ Installing a WildFly/JBoss application server
- ✓ Learn how to deploy war, jar and ear components
- ✓ Setting up a domain with multiple hosts
- ✓ Monitor WildFly/JBoss application server activity
- ✓ Optimizing WildFly/JBoss application server performance
- ✓ Securing access to deployed applications

Intended audience

Developers, operators or integrators of Jakarta EE applications.

Prerequisites

Basic knowledge of operating system administration and Java.

Course schedule

1 Introduction to Jakarta EE

- Java and Jakarta EE fundamentals.
- From Java EE to Jakarta EE.
- Jakarta EE application architectures.
- Application servers.

PARTICIPANTS

Developers, operators or integrators of Jakarta EE applications.

PREREQUISITES

Basic knowledge of operating system administration and Java.

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.

2 Introduction to JBoss and WildFly

- Open Source principles.
- Professional Open Source with RedHat, Sun...
- Successive versions of Jakarta EE, the corresponding JBoss EAP and WildFly servers.
- Architecture of a recent version of WildFly.

Hands-on work

Installation of a recent version of the WildFly server.

3 JBoss/WildFly administration basics

- Principle of configurations.
- Deployment of Jakarta EE applications (ear), Web applications (war) and EJB components (jar).
- Deployment of JDBC 4 drivers, DataSources and shared modules.

Hands-on work

Deploying a DataSource and JDBC driver 4.

4 Stand-alone configuration

- Description of stand-alone and domain modes.
- Stand-alone configurations (default, full, ha, full-ha).
- Configuration tools: Web console, JBoss-cli.
- Deployment modes: stand-alone, partial...

Hands-on work

Deploy war, jar and ear.

5 Server monitoring

- Integrated inspection tools.
- JMX supervision tools: Jconsole, JvisualVM.
- Web access log settings.
- Use of server logs.
- Integration of application logs with Log4J and SLF4J.

Hands-on work

Configure logs.

6 Domain administration

- Domain organization.
- Domain administrative services: Host Controller Slave or Master, Process Controller.
- Configure multiple domain hosts.
- Deploy applications in domains using the Web console or JBoss-cli.

Hands-on work

Configure a domain with multiple hosts.

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.

7 Performance optimization

- VM settings: client/server profile, heap memory, GC.
- Set up pools (EJB, DataSource, threads).
- Optimize class loading: module loading strategy, module dependencies.
- Introduction to high availability.

Hands-on work

JVM optimization.

8 Security

- Server security principles.
- Choose between legacy and Elytron modules.
- Manage access to administration tools.
- Authorization and authentication management.
- Realms: JDBCRealm, LDAPRealm...
- Secure exchanges with TLS.

Hands-on work

Control access to applications.

Dates and locations

REMOTE CLASS

2026 : 10 June, 14 Sep., 16 Nov.