

JBoss Administration

Audience JBoss Administration Course

System Administrators and Web Developers who need to administer and control the JBoss Server and who need to deploy applications onto JBoss versions AS 7.*, WildFly or EAP 6.*.

Prerequisites Course JBoss Administration

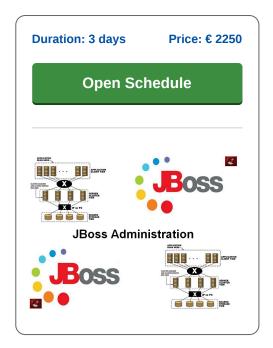
Participants should be familiar basic computing skills like working with a command prompt and accessing the file system. Knowledge of Web Applications and other Web Servers is beneficial.

Realization Training JBoss Administration

The theory is covered using presentation slides. The concepts are further explained using demo's. The theory is alternated with exercises.

Certificate JBoss Administration

Attendants receive a certificate of participation in JBoss Administration after successful completion of the course.



Content Course JBoss Administration

In the course JBoss Administration participants learn to install, set up and configure the JBoss Application Server. The JBoss Application Server is an open source Java EE based runtime platform from RedHat. The course JBoss Administration deals with the latest JBoss Application Server version but also covers the differences with the previous versions of the server. The course works with the JBoss versions EAP 6.x, EAP 7.x and Wildfly.

Java EE Intro

The course JBoss Administration starts with a discussion of the fundamental concepts of the Java EE standard with Web components such as servlets and JSP and Enterprise Bean components such as sessions and message driven beans.

JBoss Intro

Then the architecture and installation of the application server is covered. In the latest version of JBoss many improvements have been made, such as centralized configuration management and a faster start-up time. Issues such as the difference between standalone and domain mode, profiles and subsystems are treated here.

Modules

Attention is also paid to modular kernel and class loading, parallel deployment and sub-deployments. And dynamic module naming and implicit module dependencies are also discussed.

Logging

An important part of the tuning and monitoring of JBoss is the configuration of the Logging Subsystem. The various options for its configuration are covered.

User Management and Security

User Management with the Management Console and the Command Line interface for assigning rights to individuals and groups is treated. And in that context, securing JBoss Applications with Login Modules and SSL certificates is also discussed.

Database Access

Database access is also part of the course program. The installation and configuration of data sources and JDBC drivers is explained. And the deployment of Web Services on JBoss is covered.

Clustering and Performance

Finally the possibilities of clustering JBoss servers, the difference between horizontal and vertical clustering and the integration with Message Queues are discussed. Performance tuning is also part of this.

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Locations



Modules Course JBoss Administration

Module 1 : Java EE Standard	Module 2 : JBoss Intro	Module 3 : Modules
Java EE Servers	WildFly versus EAP	Class Loading Preference
Servlets and JSP's	JBoss EAP 6 en 7	Modular Class Loading
EJB Components	Features of EAP 6	Why use Modules?
Persistent Entities	Standalone versus Domain	Static Modules
Container Services	Extensions	module.xml
Stateless Session Beans	Profiles and Subsystems	Dynamic Modules
Stateful Session Beans	Datasources Subsystem	Module Dependencies
Passivation and Activation	Paths and Interfaces	Dependency Example
Java EE API's	Standalone and Domain Mode	Class Loading in Deployments
JAX-WS Java EE Web Services	Start Standalone Server	Dynamic Module Naming
JAXB for Java to XML Binding	Management Resources	Class Loading and Subdeployments
REST Web Services	Attributes	Implicit Module Dependencies
Message Driven Beans	Children	Included Modules
Module 4 : JBoss Logging	Module 5 : User Management	Module 6 : JBoss Security
log4J Basic Concepts	About User Management	Securing Applications
Logging API	Creating a User	Database Login Module
Simple Logging	Using Web Console	FORM-based Login
JBoss Logging	Using Command Line Interface	Configuring JBoss AS for SSL
Supported Logging Frameworks	Add user Command Arguments	Creating SSL Certificates
Bootup Logging	Specifying Realms	Configure SSL Connector
View Bootup Errors	Passing Arguments	Securing JMS destinations
read-boot-errors Command	Alternate Property Files	Securing AS
Garbage Collection Logging	User in Single Group	AS System User
Log Levels	User in Multiple Groups	File System Security
Logging Configuration	Remote Access	Java Security Manager
Handlers and Loggers	Administrator Privileges	Running Behind a Firewall
Module 7 : Connecting to Databases	Module 8 : Web Services and JBoss	Module 9 : Clustering
Java Database Connectivity	Web Services Overview	Clustering Types
JDBC Architecture and Operation	Service Oriented Architecture	Vertical and Horizontal
JDBC Drivers	Web Services With JAX-WS	Sticky Sessions
Types of DataSources	Web Services on JBoss	State Replication
Non XA Datasources	Configure Web Services Options	Clustering in Jboss
Datasource Connection URL's	Modify WSDL Address	HTTP Session Clustering
	WSDI Host Setting	
Non-XA Datasources	WSDL Port	Session Beans
Non-XA Datasources Datasource Connection URL's	WSDL Port	Java Persistence API
Non-XA Datasources Datasource Connection URL's Common Datasources Parameters	WSDL Port WSDL Secure Port	Java Persistence API persistence.xml
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Java Object Behavior
Heap Space Organization
Heap Area Characteristics
Tuning Garbage Collection
Application Server Trimming
Thread Pool Tuning

Database Connection Pooling

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