

JB336 JBoss for Application Administrators

Course Summary

Description

JB336 JBoss Application Administrator focuses on installation and deployment of the JBoss Application Server, as well as configuring and monitoring the server for production usage. This class balances the essential concept-based lectures with the real world task and project oriented labs. It reaches beyond the application programming interface (API) and enforces the applied knowledge of the technology. With the heavy emphasis real-world scenarios, the JBoss Application administrator will be able to better understand, maintain and troubleshoot their environment.

Topics

- Overview of Technologies
- Preparing a Production System for Deployment
- Deploying an Enterprise Application
- Secure Applications
- Troubleshooting
 - ◊ Identifying potential problems and determining root causes
 - ◊ Solutions for application crashes and performance problems
 - ◊ Performance tuning
- Deploying Clustered Applications
- Tying Together Multiple Applications in a Single Environment
- Integrating External Applications with SOA
- Coordinating Transactionality

Audience

This course is targeted towards Systems administrators, build/deployment managers, and quality assurance engineers who want to optimally administer JBoss Application Server deployments.

Prerequisites

Students should have experience with the following:

- Base experience with system administration on Windows, UNIX, or Linux operating systems
- Understanding of hardware and networking
- No prior knowledge of Java™, scripting, or JBoss Developer Studio is required.

Duration

Four days

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Course Outline

- I. Installation and basic configuration of JBoss Enterprise Application Platform (EAP)**
 - A. Students learn about the hardware and software required to run JBoss products
 - B. Students will also learn how to determine which software versions to use and about the interdependencies of supporting software
- II. Deploying enterprise applications to JBoss EAP**
 - A. Students learn what defines an enterprise application, how to deploy it to JBoss EAP, and what types of supporting components are needed
 - B. Students also learn what deployable packages exist and the structure of package internals
- III. Monitoring and controlling JBoss EAP**
 - A. Students will learn what tools are available to monitor JBoss EAP installations, how to configure those tools, and what information they offer
 - B. Students will be introduced to the JBoss Operations Network and will experience how it can be used to monitor and manage applications deployed to the application server
- IV. Connecting to JBoss EAP**
 - A. Students learn what connections are available and can provide access to JBoss components
 - B. Student will be exposed to web protocols such as HTTP, and secure socket layer (SSL) via HTTP/S
 - C. Various services, such as Java Naming and Directory Interface and Java Messaging Service, will be introduced and discussed
 - D. The vulnerabilities of these choices will be introduced, with best practices around how to protect the appropriate ports
- V. Securing applications with JBoss solutions**
 - A. Students will gain an understanding of the various forms security takes within an enterprise system and how they are best used
- B.** They will learn to slim down their EAP installation to trim away any unnecessary services or applications and about application-level security and how encryption can be implemented
- C.** A discussion of the pros and cons of container-managed security is included
- VI. Troubleshooting applications on JBoss EAP**
 - A. Students will learn about the tools available to help understand and identify potential application problems as they arise
 - B. Best practices in response to such situations will be introduced
 - C. Database bottlenecks, memory management issues, garbage collection, and other performance-stealing problems will be covered
- VII. Clustering applications with JBoss EAP**
 - A. Students will learn how to deploy a clustered application into a tuned and clustered production environment
 - B. The unit asks students to tie together previous learning's to deploy and configure a potentially complex solution
- VIII. Optimizing applications for JBoss EAP**
 - A. Students will learn how to load-balance the embedded web server in JBoss
 - B. They will also learn about best methods for fail-over and session state management in the application server using caching technologies
 - C. After configuring an application for deployment to the load-balanced server, the student will learn how to tune request-handling parameters for optimum scalability
- IX. Integrating other systems**
 - A. New JBoss products will be introduced in this unit, including the JBoss Enterprise Portal Platform (EPP), JBoss Service Oriented Architecture Platform (SOA-P) and JBoss Data Services Platform (JDSP)