

Enterprise JavaBeans (EJB) 3.0

Duration: Three days

Audience

This course is built for experienced Java/J2EE developers, architects, and designers.

- Developers
- Designers
- Architects

- Consultants

Prerequisites

This course is designed for those audience who already know J2EE/EJB but want to learn what's new in EJB 3.0.

- Java

- J2EE

Description

EJB 3.0 specification offers the most drastic changes since EJB technology was first introduced. It aims at simplifying the EJB development process and enhance performance. This three day course covers the new features of EJB 3.0.

Objectives

Upon completion, students will be able to:

- Understand the issues the current EJB technology faces
- Develop EJBs using annotations
- Develop entity beans using the new light-weight persistence API

- Use other changes to simplify the EJB development

Course Outline

Overview of EJB 3.0

- Problems with the current EJB technology
- What's new in EJB 3.0

The EJB 3.0 Simplified API

- A quick review of annotations in Java 1.5
- Overview of using annotations to develop EJBs
- Interceptors
- Home and business interfaces
- Developing stateless session beans
- Developing stateful session beans
- Developing message-driven beans

Accessing EJB Context and Environment

- Setter injection
- Simpler lookup
- Annotation of instance variables

Overview of Java Persistence API for EJB 3.0

- Overview of entity class and O/R mappings
- A simple example

- Overview of packing and deploying entities

Entities

- Persistent fields and properties
- Entity relationship mappings
- Inheritance mappings
- Annotations and XML descriptors for defining mappings

Entity Operations

- EntityManager interface
- Entity instance life cycle
- Entity listeners and callback methods

Query language

- Overview of EJB 3.0 query language
- The Select clause
- The From clause
- The Where clause

Migrating Pre-EJB 3.0 Applications

- Interoperability of EJB 3.0 with earlier components
- Adapting EJB 3.0 session beans to earlier clients

- Coexistence of EJB 3.0 and EJB 2.1 APIs in bean classes