EJB3

Summary

Duration: 3 days

This course describes the major changes made to EJB's in their third revision.

The course covers the full set of EJB types (Session Beans, Message Driven Beans and Entity Beans).

The course can also be cut down to just cover Entity Beans (also known as "Java Persistence API" or JPA).

Detailed Course Description

- An overview of EJB3
- What did EJB2 get wrong?
- Writing Stateless Session Beans
- Writing Stateful Session Beans
- Exposing an EJB as a Webservice
- Messaging with Message Driven Beans (MDBs)
- Dependency Injection using @Resource
- Aspect Oriented Programming - EJB3 Interceptors
- The Java Persistence API (JPA)
- Mapping Complex Domain Models
- Finding Objects with JPQL
- Transactions
- Security

Objectives

By the end of the course attendees will:

- Understand the differences between EJB3 and "legacy" EJB2
- Know the purpose of, and be able to write Session Beans, Entity Beans and Message Driven Beans
- Have used a J2EE Application Server to deploy and test a full scale application
- Be able to use all of the required annotations for EJB3
- Be able to implement Aspect Oriented Programming (AOP) by using EJB3 Interceptors
- Be familiar with EJB3 best practices
- Understand Dependency Injection (DI) and how it is implemented in EJB3
- Be able to apply transactions and security to EJB session beans
- Be able to use the Java Persistence API to persist plain Java domain models
- Understand the JPQL for querying objects
- Be able to expose an EJB as a web service using JAX-WSEach theory session is followed by a practical session.

Prerequisites

A good understanding of fundamental Java. As a minimum you will need to be able to create objects, handle exceptions and use collections.

J2EE requires Java 5, but all of the necessary concepts such as annotations will be covered if required.