

# Hibernate with Spring

## Overview

In this 3-day training you will learn how to create effective data-driven Spring applications with Hibernate. The training shows the use of both XML and annotation based configuration of both Spring and Hibernate.

Through our trainings, you benefit from the wide experience and architectural expertise of our team. We bring that experience to you in a highly interactive, intensely hands-on setting.

## Training Objectives

At the end of the training, you should gain an understanding of creating Spring applications with Hibernate and be able to:

- Configure Hibernate in the context of a Spring application
- Create efficient object/relational mappings with Hibernate
- Leverage the Spring Framework to facilitate Hibernate session, transaction and exception management
- Use Hibernate with Spring and understand fundamental architectural issues
- Know how and when to use parts of the Spring Framework

## Target Audience

This training is designed for developers interested in developing Hibernate with Spring

## Prerequisites

- Create basic Java web applications
- Basic understanding of JDBC and relational database concepts

## Pricing and Scope

- Three (3) days of instructor-led, classroom training
- 50% lecture and 50% hands-on lab
- Individual enrollment available at convenient locations worldwide: <http://www.springsource.com/training/curriculum>
- Contact your VMware representative for pricing information
- Onsite training available for companies that want the benefits of instructor-led classes without travel
- Contact VMware Education to discuss facility requirements for onsite training at [education@vmware.com](mailto:education@vmware.com)

## Training Outline

### Day 1: Spring Framework Foundations

- Introduction to Spring
- Using Spring to configure an application
- Simplifying application configuration
- Annotation-based dependency injection
- Simplifying JDBC-based data access with Spring
- Driving database transactions in a Spring environment

### Day 2: Using the Hibernate ORM

- Introducing object-to-relational mapping (ORM)
- Getting started with Hibernate in a Spring environment
- Using JPA annotations and Hibernate XML
- Inheritance: considerations and trade-offs
- Defining custom user-types for Value Objects
- Using queries: HQL, criteria API, native (SQL)
- Hibernate in web applications: open session in view
- Using the different Java collection mappings
- Using joins and components to go beyond naïve class to table mappings

### Day 3: Hibernate Internals and Configuration

- Working with Hibernate objects
- Lazy loading and detached objects
- Optimistic and pessimistic locking
- Mixing Hibernate and JDBC
- Performance tuning
- Advanced Features: interceptors, schema generation, caching, batching

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## For More Information

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