

Working with Spring Web Flow

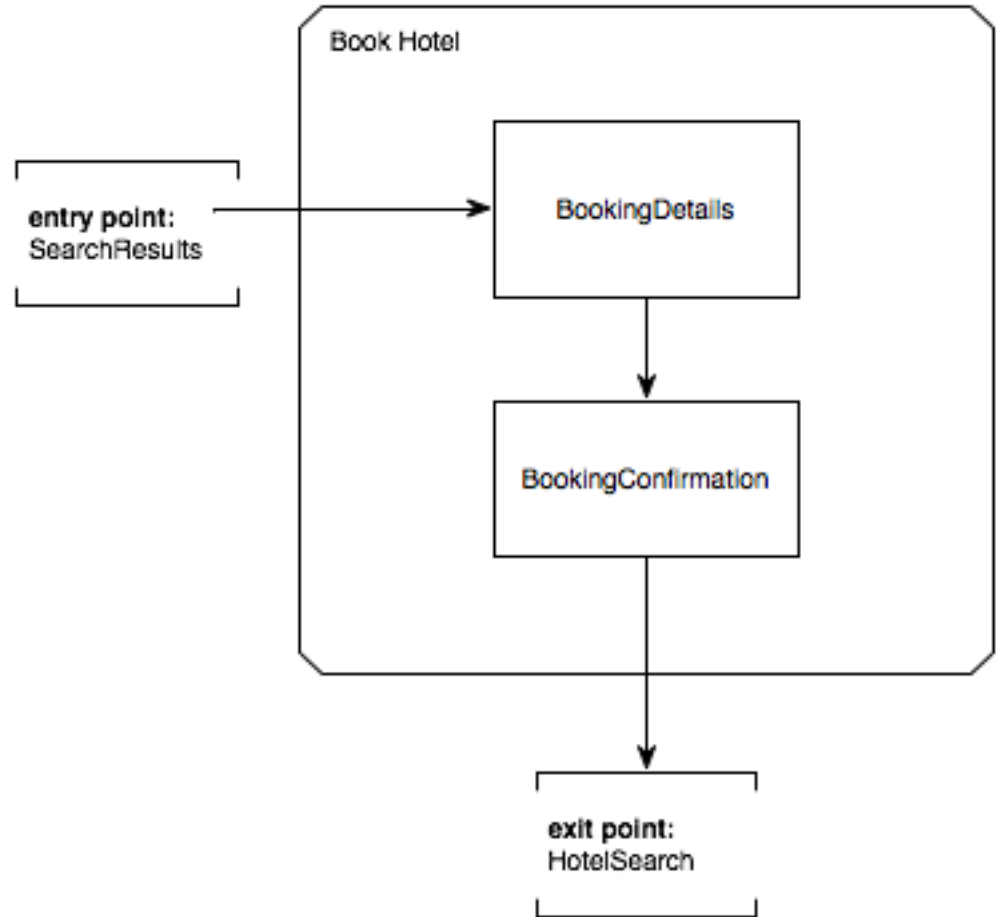
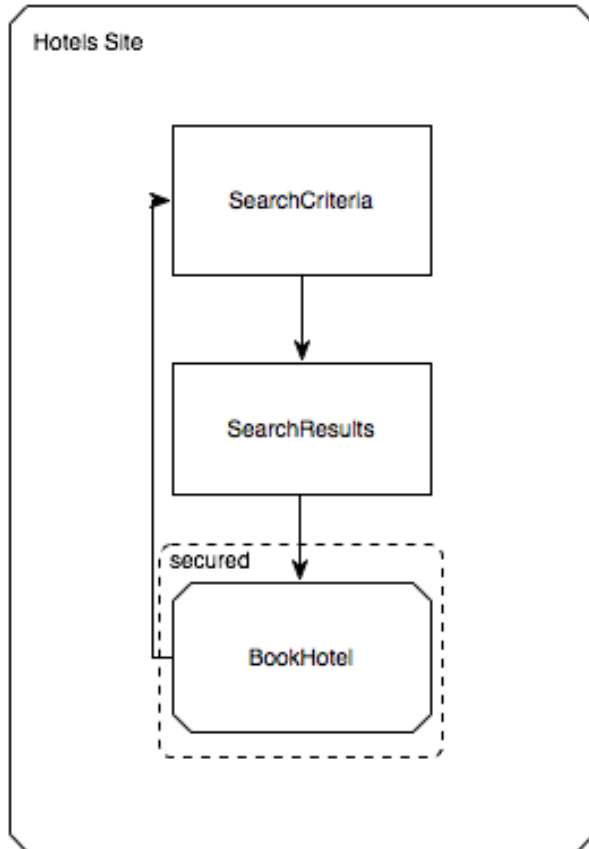
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Covering version 2
of the Spring Web Flow module in detail

- Introduction to Web Flow
- Getting started
- Demo of common scenarios
 - Wizard
 - Ajax
 - Persistence
 - Security
 - Fileupload

- Official Spring MVC Controller technology for implementing flows
- Version 2 released last year
 - Greatly simplifies the flow programming model
 - Adds major new features
 - Comprehensive JSF support
 - First class Ajax event handling support
 - Spring Security integration
 - View scope
- 2.0.7 current release

Web Flow Sweet Spot



The Spring Web Stack

Spring Faces

Spring
BlazeDS Integration

**Spring
Web Flow**

Spring
JavaScript

Spring Security

Spring Framework and Spring MVC

- Flows are defined in a higher-order domain specific language (DSL)
 - Simple declarative syntax
 - Independent of low-level HTTP constructs

Example Flow



```
<flow>
  <view-state id="step1">
    <transition on="eventA" to="step2"/>
  </view-state>

  <view-state id="step2">
    <transition on="eventB" to="done"/>
  </view-state>

  <end-state id="done"/>
</flow>
```

- Use it when it makes sense
 - For stateful, controlled navigations that span multiple requests
- Favor Web Flow over `AbstractWizardController`
- Favor `@Controller` usage for stateless (RESTful) interactions
- Keep flows independent of their environment / usage context
 - Design them as reusable black boxes

- Introduction to Web Flow
- **Getting started**
- Common scenarios by example
 - Wizard
 - Ajax
 - Persistence
 - Security
 - Fileupload

Getting Started



- Add Web Flow to your project
- Plug into Spring MVC
- Implement your first flow

- Typically use Maven or Ant/Ivy

```
<dependency>  
  <groupId>org.springframework.webflow</groupId>  
  <artifactId>spring-webflow</artifactId>  
  <version>${webflow.version}</version>  
</dependency>
```

- Also need an EL
 - OGNL or Unified EL Implementation
- Web Flow JARs also available from SpringSource Bundle Repository

- Create Spring webflow-config.xml

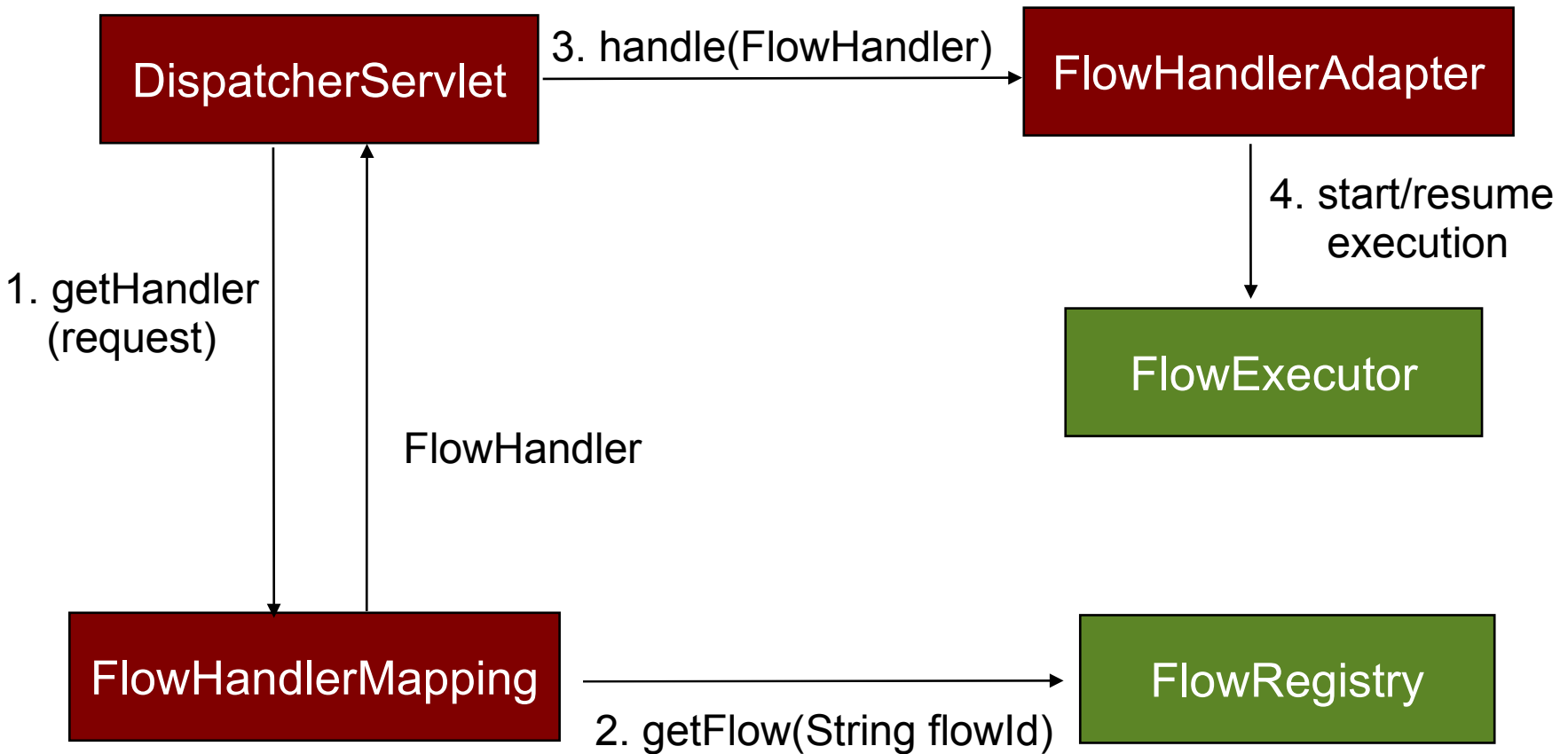
```
<webflow:flow-executor id="flowExecutor" registry="flowRegistry" />
<webflow:flow-registry id="flowRegistry" base-path="/WEB-INF/"
    flow-builder-services="flowBuilderServices">
    <webflow:flow-location-pattern value="/**/*-flow.xml" />
</webflow:flow-registry>

<webflow:flow-builder-services id="flowBuilderServices" development="true" />
```

- In `mvc-config.xml`

```
<bean class="org.springframework.webflow.mvc.servlet.FlowHandlerMapping">  
  <property name="flowRegistry" ref="flowRegistry"/>  
  <property name="order" value="0" />  
</bean>  
  
<bean class="org.springframework.webflow.mvc.servlet.FlowHandlerAdapter">  
  <property name="flowExecutor" ref="flowExecutor"/>  
</bean>
```

Spring MVC and Web Flow



- Source lives at <http://src.springframework.org/svn/spring-samples/templates>
- Create a new Spring MVC project with Web Flow pre-integrated
- Available in SpringSource Tool Suite
 - New -> Other... -> Project From Template -> Web Flow Project

Demo of common scenarios



- Wizard
- Ajax
- Persistence
- Security
- Fileupload

Questions and Answers

