



Spring MVC Tiles 3 Integration Tutorial

by Tousif Khan MVB · Jul. 18, 14 · Integration Zone · Tutorial

How to Transform Your Business in the Digital Age: Learn how organizations are re-architecting their integration strategy with data-driven app integration for true digital transformation.

One of the areas in which Spring MVC has advance compares to other frameworks is in the separation of view technologies. In this post, i will show how to integrate Apache Tiles 3 with Spring MVC. Apache Tiles is a free open-source template engine for java web frameworks. It's based on Composite pattern and used to simplify the development of user interfaces.

Create a spring configuration XML file which add bean definition for TilesConfigurar and TilesView.

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <beans xmlns="http://www.springframework.org/schema/beans"
3   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:context="http://www.springframework.org/s
4   xmlns:tx="http://www.springframework.org/schema/tx" xmlns:p="http://www.springframework.org/schema/p"
5   xmlns:mvc="http://www.springframework.org/schema/mvc"
6   xsi:schemaLocation="http://www.springframework.org/schema/beans
7     http://www.springframework.org/schema/beans/spring-beans-3.2.xsd
8     http://www.springframework.org/schema/context
9     http://www.springframework.org/schema/context/spring-context-3.2.xsd
10    http://www.springframework.org/schema/mvc
11    http://www.springframework.org/schema/mvc/spring-mvc-3.2.xsd
12    http://www.springframework.org/schema/tx
13    http://www.springframework.org/schema/tx/spring-tx-3.2.xsd">
14
15 <context:annotation-config />
16 <context:component-scan base-package="org.techzoo.springtiles.controller" />
17
18 <mvc:annotation-driven />
19 <mvc:default-servlet-handler />
20 <mvc:resources mapping="/resources/**" location="/resources/" />
21
22 <bean id="viewResolver" class="org.springframework.web.servlet.view.tiles3.TilesViewResolver"/>
23
24 <bean id="tilesConfigurer" class="org.springframework.web.servlet.view.tiles3.TilesConfigurer">
25 <property name="definitions">
26 <list>
27 <value>/WEB-INF/layouts/layouts.xml</value>
```

```

28 <value>/WEB-INF/layouts/views.xml</value>
29 </list>
30 </property>
31 </bean>
32
33 </beans>

```

Now create a tiles definition xml file which contains tiles template definitions. I have created two xml files, one for tiles base template and another for tiles body definition but you can combine it in one.

```

1  <?xml version="1.0" encoding="UTF-8"?>
2  <!DOCTYPE tiles-definitions PUBLIC
3      "-//Apache Software Foundation//DTD Tiles Configuration 3.0//EN"
4      "http://tiles.apache.org/dtds/tiles-config_3_0.dtd">
5  <tiles-definitions>
6
7      <definition name="DefaultTemplate"
8          template="/WEB-INF/views/template/SiteTemplate.jsp">
9  <put-attribute name="title" value="Home" />
10 <put-attribute name="header" value="/WEB-INF/views/template/header.jsp" />
11 <put-attribute name="menu" value="/WEB-INF/views/template/menu.jsp" />
12 <put-attribute name="body" value="" />
13 <put-attribute name="footer" value="/WEB-INF/views/template/footer.jsp" />
14 </definition>
15
16 </tiles-definitions>

```

Create a template jsp which include the common pages (like header, footer, menu etc.). I have used Blueprint css framework to create a grid for layout.

```

1  <%@ taglib uri="http://tiles.apache.org/tags-tiles" prefix="tiles"%>
2  <html xmlns="http://www.w3.org/1999/xhtml">
3  <head>
4  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
5  <title>Spring MVC - Tiles Integration tutorial</title>
6  <link rel="stylesheet" href="resources/css/screen.css"
7      type="text/css" media="screen, projection"></link>
8  <link rel="stylesheet" href="resources/css/print.css"
9      type="text/css" media="print"></link>
10 <!--[if IE]>
11 <link rel="stylesheet" href="resources/css/ie.css"
12     type="text/css" media="screen, projection">
13 <![endif]-->
14 <style>
15 body{ margin-top:20px; margin-bottom:20px; background-color:#DFDFDF;}
16 </style>
17 </head>
18 <body>
19 <div class="container" style="border: #C1C1C1 solid 1px; border-radius:10px;">

```

```

20 <!-- Header -->
21 <tiles:insertAttribute name="header" />
22 <!-- Menu Page -->
23 <div class="span-5 border" style="height:400px;background-color:#FCFCFC;">
24 <tiles:insertAttribute name="menu" />
25 </div>
26 <!-- Body Page -->
27 <div class="span-19 last">
28 <tiles:insertAttribute name="body" />
29 </div>
30 <!-- Footer Page -->
31 <tiles:insertAttribute name="footer" />
32 </div>
33 </body>
34 </html>

```

Header.jsp

```

1 <div class="span-24">
2     
4 </div>

```

Footer.jsp

```

1 <%@ taglib prefix="spring" uri="http://www.springframework.org/tags"%>
2 <ul style="list-style:none;line-height:28px;">
3
4     <li>
5         <spring:url value="/index" var="homeUrl" htmlEscape="true" />
6         <a href="${homeUrl}">Home</a>
7     </li>
8
9     <li>
10        <spring:url value="/viewPeson" var="personListUr1" htmlEscape="true" />
11        <a href="${personListUr1}">Person List</a>
12    </li>
13
14 </ul>

```

As you can see, In you main template jsp we have inserted body attribute but in tiles-def.xml file that body attribute is blank. This is because spring controller will render this portion using its view rendering mechanism.

Create a Controller which has two action (index and viewPeson) . The return value of every controller will be mapped with each tiles definition which is associated with jsp to render as body in template.

```

1 package org.techzoo.springtiles.controller;
2
3 import java.util.HashMap;
4 import java.util.List;
5 import java.util.Map;

```

```
6
7  import org.springframework.stereotype.Controller;
8  import org.springframework.ui.Model;
9  import org.springframework.web.bind.annotation.RequestMapping;
10 import org.springframework.web.servlet.ModelAndView;
11 import org.techzoo.springtiles.vo.Person;
12
13 @Controller
14 public class SpringTilesController {
15
16     @RequestMapping(value="index")
17     public String index() {
18         return "index";
19     }
20
21     @RequestMapping(value="viewPeson")
22     public ModelAndView viewPersons(Model model) {
23         Map<String, List<Person>> persons =
24             new HashMap<String, List<Person>>();
25         persons.put("persons", Person.createPersons());
26         return new ModelAndView("personList", persons);
27     }
28
29 }
```

A Person VO class just to show a list of person in personList.jsp.

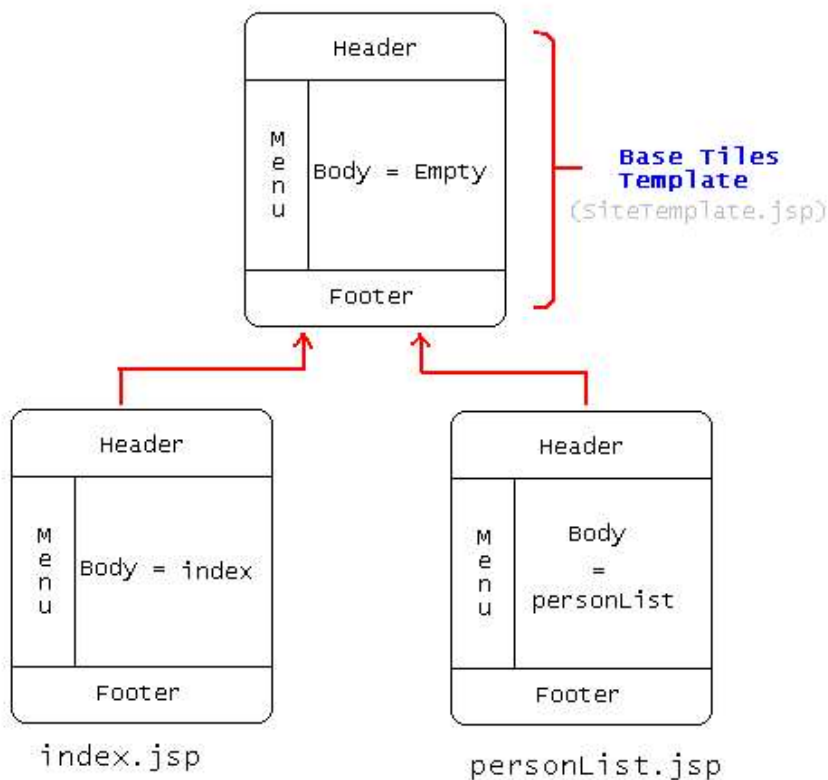
```
1  ckage org.techzoo.springtiles.vo;
2
3  import java.util.ArrayList;
4  import java.util.List;
5
6  public class Person {
7
8      private String name, email;
9      private int age;
10
11     public Person(String name, String email, int age) {
12         this.name = name;
13         this.email = email;
14         this.age = age;
15     }
16
17     //getter, setters methods
18
19     @Override
20     public String toString()
21     {
```

```

22     return String.format(
23         "Person [name = %s, email = %s, age = %d]",
24         name, email, age);
25 }
26
27 public static List<Person> createPersons() {
28     List<Person> persons = new ArrayList<Person>();
29     persons.add(new Person("Tousif", "tousif@mail.com", 32));
30     persons.add(new Person("Asif", "asif@mail.com", 28));
31     persons.add(new Person("Ramiz", "ramiz@mail.com", 26));
32     persons.add(new Person("Rizwan", "rizwan@mail.com", 32));
33     persons.add(new Person("Amol", "amol@mail.com", 33));
34     persons.add(new Person("Ramdas", "ramdas@mail.com", 31));
35     return persons;
36 }
37 }

```

Your second tiles definition xml (views.xml) will look similar to following. Both the tile definition 'index' and 'personList' is extending 'DefaultTemplate'.



```

1  <?xml version="1.0" encoding="UTF-8"?>
2  <!DOCTYPE tiles-definitions PUBLIC
3  "-//Apache Software Foundation//DTD Tiles Configuration 3.0//EN"
4  "http://tiles.apache.org/dtds/tiles-config_3_0.dtd">
5  <tiles-definitions>
6
7  <definition name="index" extends="DefaultTemplate">
8      <put-attribute name="body"

```

```
9         value="/WEB-INF/views/index.jsp" />
10    </definition>
11
12    <definition name="personList" extends="DefaultTemplate">
13        <put-attribute name="body"
14            value="/WEB-INF/views/personList.jsp" />
15    </definition>
16
17 </tiles-definitions>
```

index.jsp


```
1 <div style="margin:10px;">
2 <h3>SpringMVC - Tiles3 Integration tutorial</h3>
3 <p>By:- Tousif Khan</p>
4 </div>
```

personList.jsp

```
1 <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
2 <div style="margin: 10px;">
3 <h4>List of Persons</h4>
4 <table style="width: 600px" class="reference">
5 <tbody>
6 <tr>
7 <th>Sr. No.</th>
8 <th>Name</th>
9 <th>Age</th>
10 <th>Email</th>
11 </tr>
12 <c:forEach var="person" items="${requestScope.persons}"
13     varStatus="loopCounter">
14 <tr>
15 <td><c:out value="${loopCounter.count}" /></td>
16 <td><c:out value="${person.name}" /></td>
17 <td><c:out value="${person.email}" /></td>
18 <td><c:out value="${person.age}" /></td>
19 </tr>
20 </c:forEach>
21 </tbody>
22 </table>
23 </div>
```

Output:





Sr. No.	Name	Age	Email
1	Tousif	tousif@mail.com	32
2	Asif	asif@mail.com	28
3	Ramiz	ramiz@mail.com	26
4	Rizwan	rizwan@mail.com	32
5	Amol	amol@mail.com	33
6	Ramdas	ramdas@mail.com	31

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Skype Integrates With Alexa

by Lauren Ferrell  STAFF • Nov 20, 18 • Integration Zone • News

SnapLogic is the leading self-service enterprise-grade integration platform. Download the 2018 Gartner Magic Quadrant for Enterprise iPaaS or play around on the platform, risk free, for 30 days.

It was recently announced that you will be able to make Skype calls using your Alexa device.

Microsoft, who owns Skype, will be stocking Alexa devices in their stores thanks to this integration.



Skype is a free video chat service that allows you to call people and talk to them "face-to-face." After being bought and sold by multiple companies including eBay, Skype was bought by Microsoft for 8.5 billion back in May 2011, which was their largest purchase ever until their acquisition of LinkedIn in 2016, which came in at a whopping \$26.2 billion.

Gaurav Sareen, Corporate Vice President for Microsoft, stated on the official Skype blog, "We are excited to bring Skype calling to Alexa devices, so users can easily communicate with their friends and family from their Echo devices, simply using voice."

When you link your Skype account with Alexa, you get 100 free minutes of call time per month for two months. Users can take advantage of SkypeOut and make calls to mobile phones and landlines. After that, calling a cell phone or landline or sending an SMS costs money.

Not only is Alexa integrating with Skype, but users of the free video chat service will soon be able to make Skype calls from other devices, such as Xbox.

There are instructions on Microsoft's site that explain how to set up the integration. Not all Alexa devices support Skype calls, however, so if you want to utilize this integration, be sure you have a compatible device.

Download A Buyer's Guide to Application and Data Integration, your one-stop-shop for research, checklists, and explanations for an application and data integration solution.

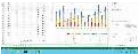
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