## **Visual Web Tools Reference Guide**

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# **Visual Web Tools**

This guide covers the usage of Visual Web Tools in JBoss Developer Studio and JBoss Tools. The difference between these products is that JBoss Tools are just a set of Eclipse plugins, where JBoss Developer Studio adds the following functionality:

- An installer
- Eclipse and Web Tools preconfigured
- JBoss EAP with JBoss AS and Seam preconfigured
- Third party plugins bundled and configured
- Access to Red Hat Enterprise Linux and Red Hat Network
- · Access to the JBoss and Red Hat supported software

For additional information, please visit the *JBoss Developer Studio home page* [http:// www.jboss.com/products/devstudio].

In JBoss Tools there is an extensive collection of specialized wizards, editors and views that can be used in various scenarios while developing Web applications. The following chapters walk through these features.

### **1.1. Key Features of Visual Web Tools**

Here is the table of the main features of Visual Web Tools:

Table 1.1. Ke	y Functionality	y for Visu	ual Web Tools
---------------	-----------------	------------	---------------

Feature	Benefit	Chapter
Visual Page Editor	Powerful and customizable visual page editor that provides the ability to develop an application using any web technology including JSF, Seam, Struts, JSP, HTML and others. Development is done using three tabs: <b>Visual/</b> <b>Source, Source</b> and <b>Preview</b> . Fast and easy switching between these tabs. Split screen design of visual and source views. Full and instant synchronization between source and visual views. Integration with properties and outline views. Graphical toolbar to add inline styling to any tag.	
Multiple Editors	An extensive collection of specialized editors for different file types including properties, TLD, web.xml, tiles, and so on. These	

Feature	Benefit	Chapter
	include Graphical Properties Editor, Graphical TLD Editor, Graphical Web Application File (web.xml) Editor, CSS Editor, JavaScript Editor, XSD Editor, and support for XML Schema.	
JBoss Tools Palette	Organizing various tags by groups, inserting tags into a JSP or XHTML page with one click, adding custom or 3rd party tag libraries into the palette, easy controlling the number of tag groups shown on the palette.	Chapter 5, JBoss Tools Palette
Web Projects View	Visualizing and displaying projects by function. Easy selecting of different kinds of items and dropping them into JSP pages. Using context menus to develop the application. Using icon shortcuts to create and import JSF and Struts projects. Expanding and inspecting tag library files. Selecting custom and third-party tag libraries to drag and drop onto the JBoss Tools Palette.	Chapter 8, Web Projects View
OpenOn	Easy navigation between views and other parts of your projects.	Section 3.1.1, "OpenOn"
Content Assist	Code completion proposals while working with HTML, Java, JavaScript, XML, JSP, XHTML, seam project and JSF configuration files. Content assist based on project data (dynamic code assist). Code completion for values from property files, beans attributes and methods, navigation rule outcomes and JSF variables.	Section 3.1.2, "Content Assist"
Drag-and-Drop	Possibility of inserting any tag onto the page you are editing by just drag-and-droping it from the palette to this page. Adding any properties, managed bean attributes, navigation rules, tag library file declarations, JSP files from web projects view by clicking them and dragging to source code.	Section 3.2, "Visual Page Editor" Section 8.2, "Drag and Drop"
RichFaces Support	Tight integration between JBoss Developer Studio and <i>RichFaces</i> [http://www.jboss.org/ jbossrichfaces] frameworks. Easy managing RichFaces components in any web application. Support for RichFaces and Ajax4jsf libraries	Chapter 7, RichFaces Support

Feature	Benefit	Chapter
	in JBoss Tools Palette. Rendering RichFaces components in Visual Page Editor.	
Flexible Configuration	Various features of JBoss Developer Studio can be easily configured via the Preferences screen.	

### **1.2. Other relevant resources on the topic**

All JBoss Developer Studio and JBoss Tools release documentation can be found on the *RedHat Documentation* [http://docs.redhat.com/docs/en-US/index.html] website in the corresponding release directory.

The latest documentation is available as *nightly builds* [http://download.jboss.org/jbosstools/ nightly-docs/].

# **Spring Tools**

JBoss Developer Studio is bundled with the *Spring IDE* [http://springide.org/project] for Eclipse. Visit Spring IDE site for the latest versions and documentation.

### 2.1. Spring IDE guide [http://springide.org/project/wiki/ SpringideGuide]

The *Spring IDE* [http://springide.org/project] is a graphical user interface for the configuration files used by the *Spring Framework* [http://www.springframework.org/]. It is built as a set of plugins for the Eclipse platform.

2.1.1. *Add Spring Project Nature* [http://springide.org/project/ wiki/SpringideGuide#AddProjectNature]

2.1.2. Create New Spring Project [http://springide.org/project/ wiki/SpringideGuide#CreateNewProject]

2.1.3. Add References To Other Spring Projects [http://springide.org/project/wiki/ SpringideGuide#AddProjectReferences]

2.1.4. Add Spring Beans Config Files [http://springide.org/ project/wiki/SpringideGuide#AddBeansConfigs]

2.1.5. *Create Spring Beans Config Sets* [http://springide.org/ project/wiki/SpringideGuide#CreateBeansConfigSets]

2.1.6. *Open Spring Explorer* [http://springide.org/project/wiki/ SpringideGuide#OpenSpringExplorer]

2.1.7. Validate Spring Beans Config [http://springide.org/ project/wiki/SpringideGuide#ValidateBeansConfig] 2.1.8. *Open Spring Beans Graph* [http://springide.org/project/ wiki/SpringideGuide#OpenBeansGraph]

2.1.9. Search Spring Beans [http://springide.org/project/wiki/ SpringideGuide#SearchBeans]

# **Editors**

In the JSF Tools Reference Guide and Struts Tools Reference Guide you may have read about the Graphical Editors for JSF and Struts configuration files, Tiles Files, and Struts Validation Files. All these editors have OpenOn (see Section 3.1.1, "OpenOn") and Code Assist (see Section 3.1.2, "Content Assist") features, which are described in more detail in this document. In addition, this document will cover the Visual Page Editor (see Section 3.2, "Visual Page Editor"), which provides combined visual and source editing of Web pages, as well as a number of additional editors (see Section 3.3, "More Editors") for different types of files.

### 3.1. Editors Features

JBoss Developer Studio has powerful editing features that help you easily navigate within your application and make use of content and code assist no matter what type of project file (JSP, XHTML, XML, CSS etc.) you are working on.

The mentioned features are the following:

- Section 3.1.1, "OpenOn"
- Section 3.1.2, "Content Assist"
- Section 3.1.3, "Synchronized Source and Visual Editing"

#### 3.1.1. OpenOn

OpenOn lets you easily link directly from one resource to another in your project without using the **Package Explorer** view (i.e. the project tree). With OpenOn, you can simply use **F3** or **Ctrl+Click** on a reference to another file and the file will be opened.

OpenOn is available for:

- Section 3.1.1.1, "XML Files"
- Section 3.1.1.2, "JSP/XHTML Pages"
- Java files
- Section 3.1.1.3, "CSS Classes"
- Section 3.1.1.4, "OpenOn for EL variables"

#### 3.1.1.1. XML Files

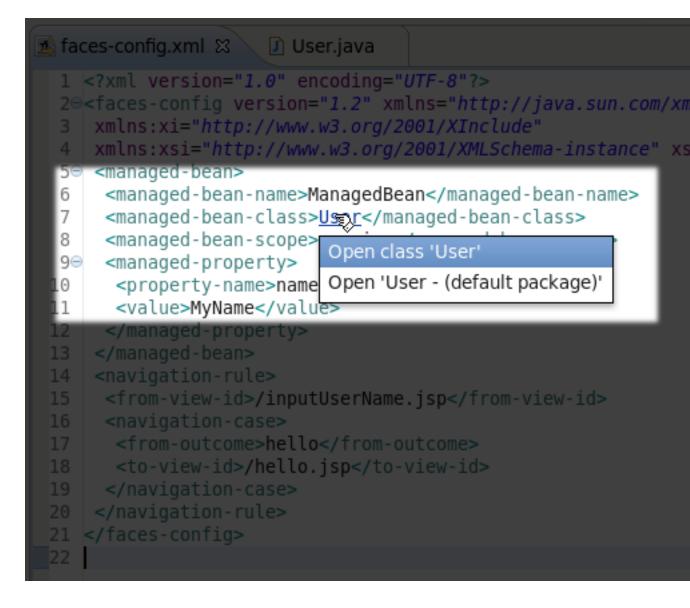
When editing an XML file press and hold down the **Ctrl** key. As you move the mouse cursor over different file references in the file, they are displayed with an underline. In this state these file

references effectively become links, and when they are clicked the appropriate file will be opened in its own editor.

Use the OpenOn functionality for the next entries defined in XML file:

1. Managed beans

In this example source code of the managed bean User will be open.



#### Figure 3.1. Opening a Managed Bean

The image below shows the result of using OpenOn.

```
J User.java 🛿
1 faces-config.xml
  1
     public class User
  2
  3
     {
         private String name;
  4
  5
         public String getName()
  60
  7
         {
              return name;
  8
  9
         }
 10
         public void setName(String value)
 11⊝
 12
         {
              name = value;
 13
 14
         }
 15
         public User()
 16⊖
 17
         {
 18
 19
         }
 20
 21 }
 22
```

#### Figure 3.2. Opened Managed Bean

2. Beans properties



#### Figure 3.3. OpenOn for the Bean Property

3. JSP file references



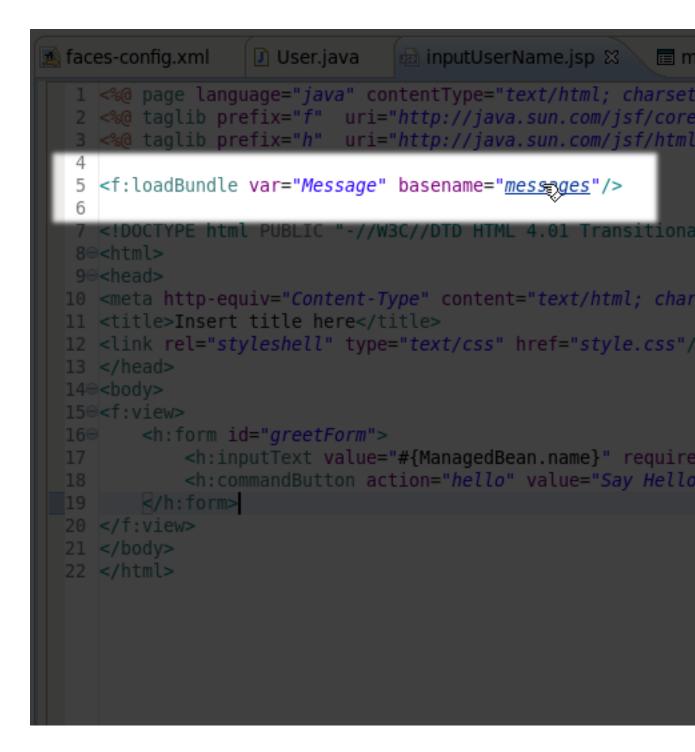
Figure 3.4. OpenOn for JSP Page

#### 3.1.1.2. JSP/XHTML Pages

OpenOn is also available in JSP and XHTML pages edited in the Visual Page Editor. It will allow you to quickly jump to the reference instead of having to hunt around in the project structure.

You can use OpenOn for the following  $\tt JSP$  or <code>XHTML</code> file entries:

1. Imported property files.



#### Figure 3.5. OpenOn for Property File Imported to the JSP Page

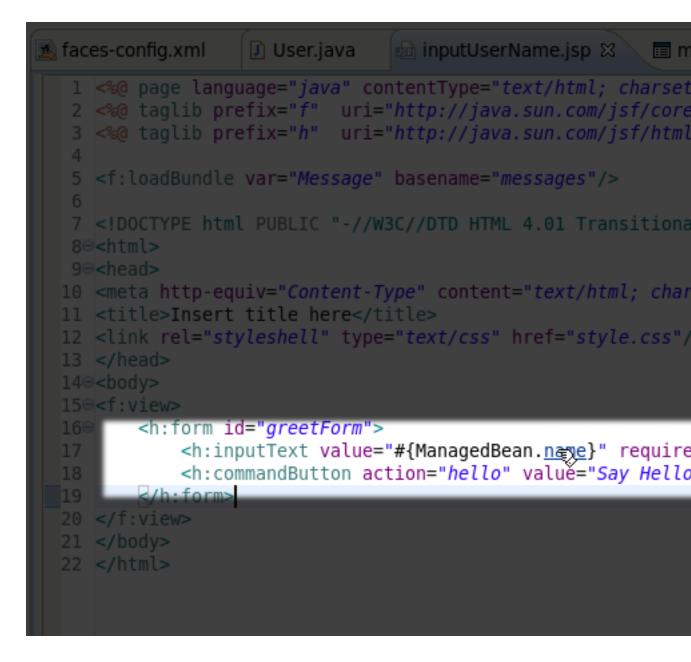
2. CSS files used in a  ${\tt JSP}$  or  ${\tt XHTML}$  page.

```
OpenOn
```



#### Figure 3.6. OpenOn With CSS File

3. Managed beans and their properties.



#### Figure 3.7. OpenOn With Managed Beans

4. Navigation rules in JSP files.

For JSP files in a JSF project, you can easily open the navigation rules by applying OpenOn to the JSF tag for the navigation outcome:

```
OpenOn
```

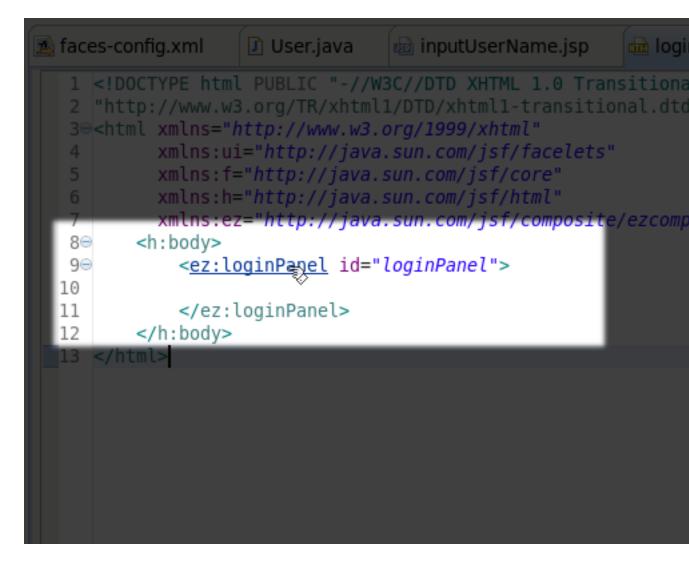


#### Figure 3.8. OpenOn with JSF Tag

5. Custom Facelets tag libraries in XHTML pages.

For details, see Section 3.2.8.2, "OpenOn for Custom Facelets Components" later in this guide.

6. Custom JSF 2.0 components.

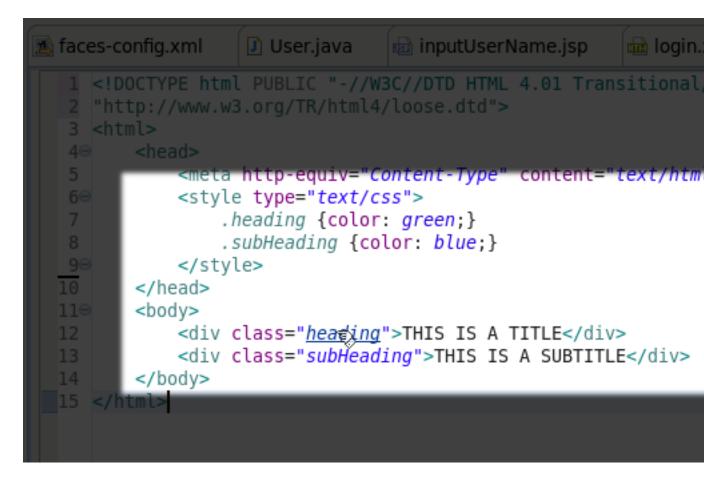


#### Figure 3.9. OpenOn with JSF 2.0 Component

#### 3.1.1.3. CSS Classes

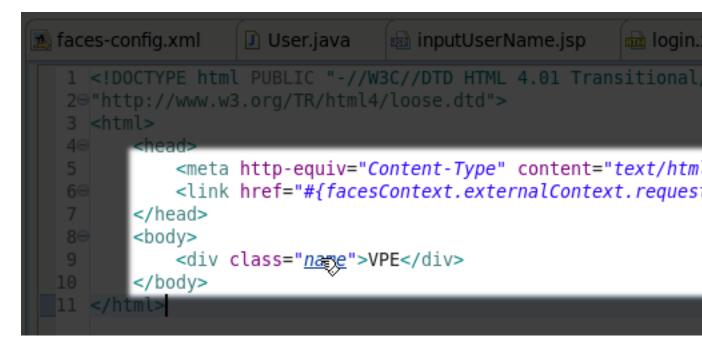
You can quickly navigate through CSS classes using OpenOn.

```
OpenOn
```



#### Figure 3.10. OpenOn With CSS Class

OpenOn is also implemented for CSS classes added by a complex link.



#### Figure 3.11. OpenOn With CSS Class added by a complex link

#### 3.1.1.4. OpenOn for EL variables

OpenOn can be used for paths to files set with EL variable.



#### Figure 3.12. OpenOn for paths to files set with EL variable

#### 3.1.2. Content Assist

Content assist is available when working with:

- Seam project files [../../seam/html\_single/index.html#ContentAssist]
- Section 3.1.2.1, "JSF Project Files"
- Section 3.1.2.2, "Struts Project Files"
- Section 3.1.2.3, "JSP Pages"
- Section 3.1.2.4, "Content Assist for XHTML Pages"
- Section 3.1.2.5, "Content Assist for Java Files"
- Section 7.1, "Code Assist for RichFaces"
- ESB XML files [../../esb\_ref\_guide/html\_single/index.html#ESBContentAssist]
- Section 3.1.2.6, "Content Assist for Insert Tag Wizard"

Notice that code completion for EL variables have icons illustrating what they are from. These icons are described in the table below.

Table 3.1. Content assist icons	Table 3.1.	Content	assist	icons
---------------------------------	------------	---------	--------	-------

Icon	Туре	Context
Ð	Enumeration	Used to show items which exist in the predefined set of equivalent proposals.
\$.	Seam Proposal	Used to show Seam Context variables, its properties and methods.
<b>@</b> ,	JSF EL	Used to show Managed Beans, Managed Bean Properties, Managed Bean Methods, Constants, Resource Bundles, Resource Bundle Properties.
<b>e</b> ,	JSF Action	Used to show navigation rules defined in the faces- config.xml.
	Message Bundle	Used to show Messages Resources items.

Icon	Туре	Context
1.5%	Resource path	Used to show paths
		which are accessible
		from the cursor place.

	150	<f:view></f:view>	
I	160		_
I	17	<h:inputtext hello"="" required="tr&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;I&lt;/td&gt;&lt;td&gt;18&lt;/td&gt;&lt;td&gt;&lt;h:commandButton action=" td="" va<="" value="#{ManagedBean.&lt;/td&gt;&lt;td&gt;.}"><td>🛯 🔍 name : String -</td></h:inputtext>	🛯 🔍 name : String -
I	19		
I	20		< class
I			🔹 name
I			
I	23		
I			
I			
I			
I			
I			
I			
I			
I			
I			
I			

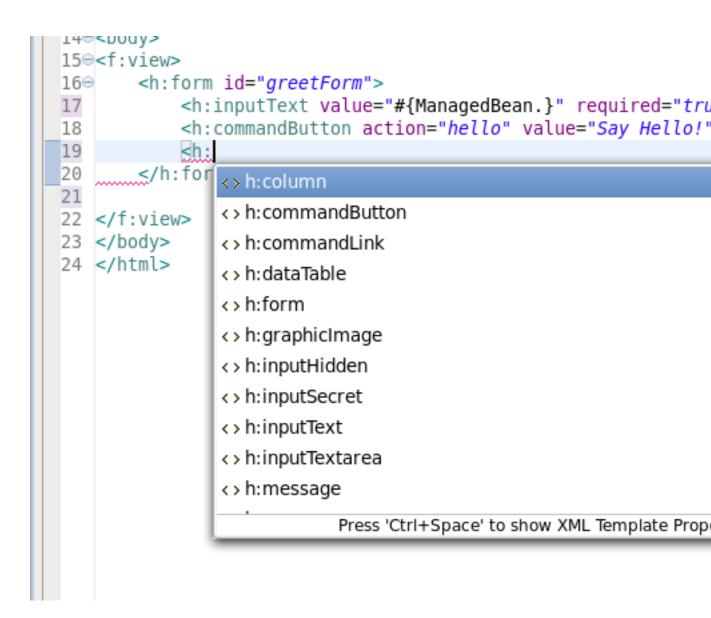
Figure 3.13. JSF Content Assist

<pre><rich:toolbargroup location="right"></rich:toolbargroup></pre>	<pre>}* rendered=*#{identity.logg</pre>
<pre><s:link rend<br="" value="Login" view="/login.xhtml"></s:link></pre>	

#### Figure 3.14. Seam Content Assist

The ranking and sorting are available in EL code completions.

As you can see, in addition to proposals, content assist also provides descriptions of selected tags or attributes.



#### Figure 3.15. Tag description

#### 3.1.2.1. JSF Project Files

When working with a JSF project in JBoss Developer Studio, you can use various Content Assist features while developing:

- Content Assist for <code>xml</code>, <code>xhtml</code>, <code>JSP</code> and <code>JSF</code> configuration files
- Content Assist for Composite Components
- Content Assist based on project data
- Content Assist with graphical  ${\tt JSF}$  editor

#### 3.1.2.1.1. Content Assist for XML, JSP and JSF configuration files

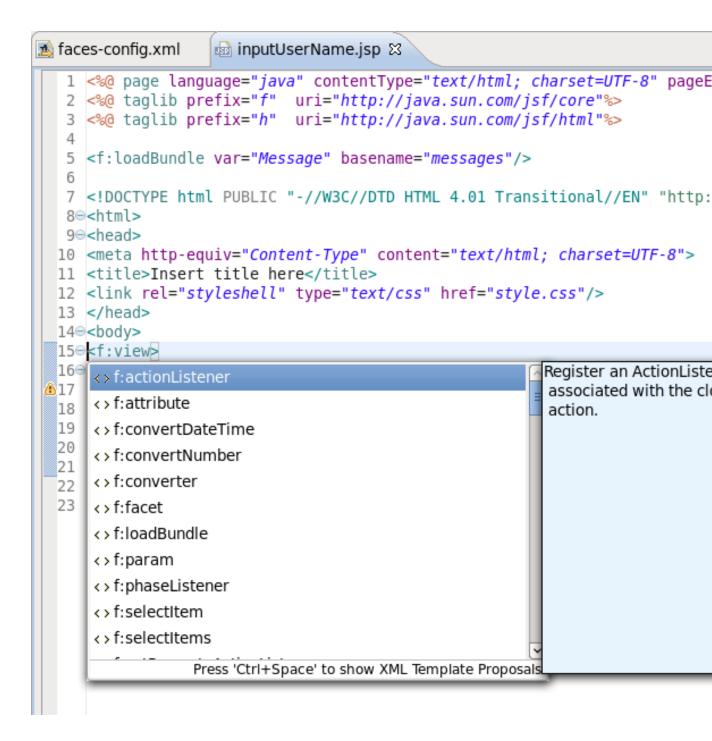
Content Assist is available to help you at any point when working with any XML, JSP and JSF configuration files. Simply press **Ctrl+Space** to see what options are available.

Content Assist for JSF configuration file:

	ces-config.xml 🕱 🚺 User.java	📾 *inputUserName.jsp	📾 *login.xhtml
2⊝< 3 4	<pre>:?xml version="1.0" encoding="U :faces-config version="1.2" xml xmlns:xi="http://www.w3.org/26 xmlns:xsi="http://www.w3.org/2</pre>	ns="http://java.sun.com 001/XInclude"	
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 20 21 22 23 24 25	<pre><managed-bean> &lt;&gt; application &lt;&gt; component &lt;&gt; converter &lt;&gt; faces-config-extension &lt;&gt; factory &lt;&gt; lifecycle &lt;&gt; managed-bean</managed-bean></pre>		El Co m I
	<pre>&lt;&gt; navigation-rule &lt;&gt; referenced-bean &lt;&gt; render-kit &lt;&gt; validator Press 'Ctrl+Space' to show JBoss CDI (Content of the second secon</pre>	Context and Dependency Inject	ion) Class Proposal

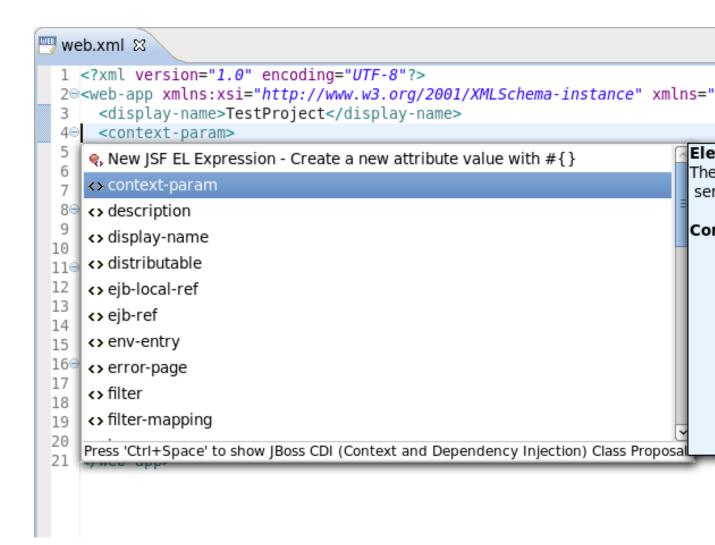
#### Figure 3.16. Content Assist in JSF Configuration File

Content Assist for JSF JSP file:



#### Figure 3.17. Content Assist in JSP File

Content Assist for other JSF XML project files (web.xml shown):



#### Figure 3.18. Content Assist in web.xml File

#### 3.1.2.1.2. Content Assist for Composite Components

Content assist functionality is also available for composite components. The image below shows content assist used with a composite component file named loginPanel.xhtml within a JSF 1.2 project with facelets.

🕎 web.xml	📾 *inputUserName.jsp	na *login.xhtml	n index.html	🗟 *hell
2 <‰@ tag 3 <‰@ tag 4 DOCTY<br 5⊖ <html x<br="">6 <he 7 8</he </html>	<pre><meta conte<="" http-equiv="Conto&lt;br&gt;&lt;title&gt;Insert title he&lt;br&gt;ead&gt;&lt;/pre&gt;&lt;/th&gt;&lt;th&gt;tp://java.sun.c&lt;br&gt;tp://java.sun.c&lt;br&gt;/DTD HTML 4.01&lt;br&gt;a.sun.com/jsf/c&lt;br&gt;ent-Type" th=""/><th>om/jsf/core"%&gt; om/jsf/html"%&gt; Transitional//E omposite/ezcomp</th><th>EN" "http )"&gt;</th></pre>	om/jsf/core"%> om/jsf/html"%> Transitional//E omposite/ezcomp	EN" "http )">	
12	<			
13 14 15	<pre>&lt;&gt; f:attribute &lt;&gt; f:convertDateTim &lt;&gt; f:convertNumber &lt;&gt; f:converter &lt;&gt; f:facet &lt;&gt; f:loadBundle &lt;&gt; f:param &lt;&gt; f:phaseListener &lt;&gt; f:selectItem </pre>	ne	v JSP Template Prop	sals

#### Figure 3.19. Content Assist for Composite Components

#### 3.1.2.1.3. Content Assist Based on Project Data

JBoss Developer Studio takes Content Assist to the next level. JBoss Developer Studio will constantly scan your project, and you will be able to insert code into the JSP page from your project including:

- Values from Property files
- · Managed beans attributes and methods
- Navigation Rule Outcomes

- JSF variables (context, request etc...)
- Resource Bundles from template page

The figure below demonstrates how to insert a message from a Properties file. You simply put the cursor inside the value attribute and press **Ctrl+Space**. JBoss Developer Studio will scan your project and display a list of possible values that can be inserted.

```
web.xml
             📾 *inputUserName.jsp 🖾
                                     📠 *login.xhtml
                                                       index.ht
   1 <%@ page language="java" contentType="text/html; charset=L</pre>
   2 <%@ taglib prefix="f" uri="http://java.sun.com/jsf/core"%</p>
   3 <%@ taglib prefix="h" uri="http://java.sun.com/jsf/html"%
   4
   5 <f:loadBundle var="Message" basename="messages"/>
   6
   7 <!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional/</p>
   8⊖<html>
   9⊖<head>
  10 <meta http-equiv="Content-Type" content="text/html; charse</pre>
  11 <title>Insert title here</title>
  12 <link rel="styleshell" type="text/css" href="style.css"/>
  13 </head>
  14@<body>
  15⊖<f:view>
         <h:form id="greetForm">
  160
             <h:inputText value="#{Message.}" required="true"/>
  17
             <h:commandButton action="hello 🕞 Test
  18
         </h:form>
  19
                                             🖻 header
  20
  21 </f:view>
                                             22 </body>
                                             header
  23 </html>
```

Figure 3.20. Inserting Message

In the following screenshot we are inserting a Managed bean attribute value. Again, by simply pressing **Ctrl+Space**, JBoss Developer Studio will show a list of all possible values that can be inserted.

Once you select a Managed bean, it will show you a list of all available attributes for the selected Managed bean.

```
web.xml
             📾 *inputUserName.jsp 🖾
                                       📠 *login.xhtml
                                                         index.ht
   1 <%@ page language="java" contentType="text/html; charset=L</pre>
   2 <%@ taglib prefix="f" uri="http://java.sun.com/jsf/core"%</p>
   3 <%@ taglib prefix="h" uri="http://java.sun.com/jsf/html"%</pre>
   4
   5 <f:loadBundle var="Message" basename="messages"/>
   6
   7 <!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional/</p>
   8⊖<html>
   9⊖<head>
  10 <meta http-equiv="Content-Type" content="text/html; charse</pre>
  11 <title>Insert title here</title>
  12 <link rel="styleshell" type="text/css" href="style.css"/>
  13 </head>
  14⊖<body>
  15⊖<f:view>
         <h:form id="greetForm">
  160
              <h:inputText value="#{Message.header}" required="f
  17
              <h:inputText value="#{ManagedBean.}"/>
  18
              <h:commandButton action="hello" va
  19
                                                  🗞 name : String -
  20
         </h:form>
                                                   < class
  21
  22 </f:view>
                                                   o name
  23 </body>
  24 </html>
```

Figure 3.21. Attributes List

Code Assist based on project data will also prompt you for navigation rules that exist in your  $_{\tt JSF}$  configuration file.

```
web.xml
             📾 *inputUserName.jsp 🖾
                                       📠 *login.xhtml
                                                         index.ht
   1 <%@ page language="java" contentType="text/html; charset=L</pre>
   2 <%@ taglib prefix="f" uri="http://java.sun.com/jsf/core"%</p>
   3 <%@ taglib prefix="h" uri="http://java.sun.com/jsf/html"%</pre>
   4
   5 <f:loadBundle var="Message" basename="messages"/>
   6
   7 <!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional/</p>
   8⊖<html>
   9⊖<head>
  10 <meta http-equiv="Content-Type" content="text/html; charse</pre>
  11 <title>Insert title here</title>
  12 <link rel="styleshell" type="text/css" href="style.css"/>
  13 </head>
  14@<body>
  15⊖<f:view>
         <h:form id="greetForm">
  160
              <h:inputText value="#{Message.header}" required="f
  17
              <h:inputText value="#{ManagedBean.}"/>
  18
              <h:commandButton action=" value="Say Hello!"/>
  19
  20
          </h:form>
                                         🖲 hello
  21
                                         ManagedBean : User
  22 </f:view>
  23 </body>
                                         🖻 Message
  24 </html>
                                         hello: goto /hello.jsp
                                                     Press 'Ctrl+Space
```

Figure 3.22. Code Assist

Code Assist can also provide you with access to the beans located in  $\ensuremath{\mathtt{JAR}}$  archives.

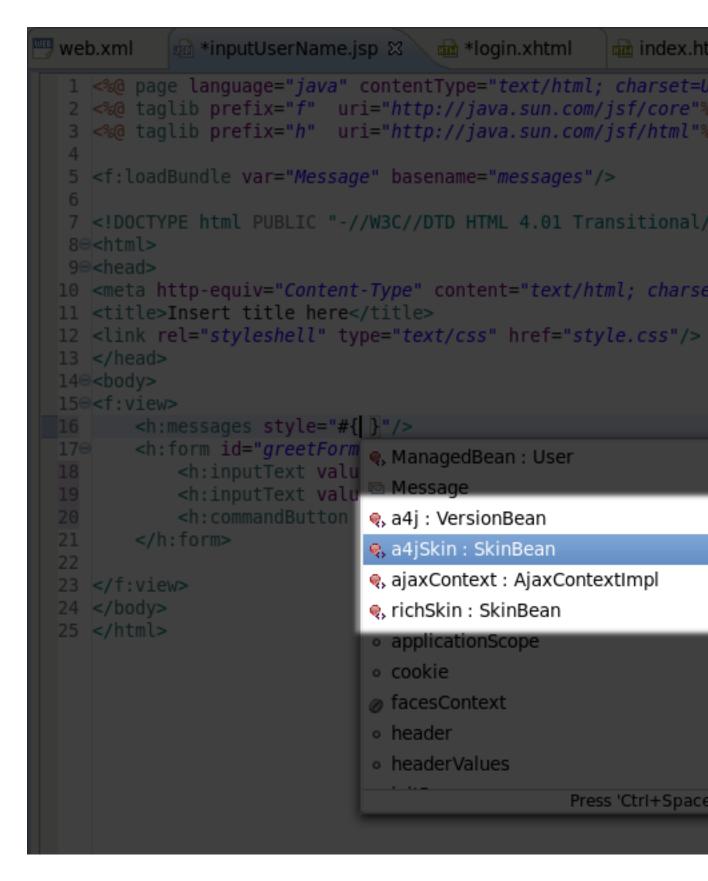


Figure 3.23. Code Assist: accessing beans in jar archives

Code Assist is able to define Resource Bundles on template pages and provides the proposals on the client page.

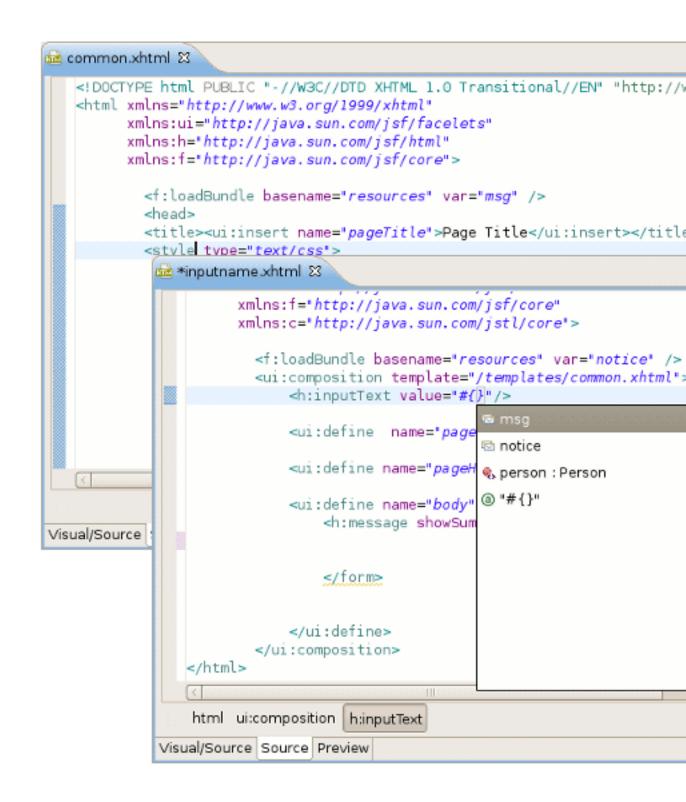


Figure 3.24. Code Assist: Message Bundles proposals from template page

### 3.1.2.1.4. Content Assist within Tree JSF Editor

JBoss Developer Studio also provides Content Assist when working within the **Tree** JSF configuration editor. Just press **Ctrl+Space**.

🔊 *faces-config.xml 🕴 🔛 web.	xml 👜 inputUserName.jsp	° 0
Faces Config Editor		
	▼ Factories	
<ul> <li>faces-config.xml*</li> <li>Application</li> <li>Components</li> <li>Converters</li> <li>Managed Beans</li> <li>Managed Beans</li> <li>Navigation Rules</li> <li>Referenced Beans</li> <li>Render Kits</li> <li>Validators</li> <li>Extensions</li> </ul>	Application-Factory:	Image: subset of the system
Diagram Tree Source		
bidgrann nee bource		

# Figure 3.25. Content Assist in Tree JSF Configuration Editor

### 3.1.2.2. Struts Project Files

Content Assist features are available when you work with Struts projects.

### 3.1.2.2.1. Content Assist for Struts Configuration File

Content Assist helps you edit Struts Configuration files.

🐟 *struts-config.xml 🕴	- 8							
<pre><?xml version="1.0" encoding="UTF-8"?> <!DOCTYPE struts-config PUBLIC "-//Apache Softwa     "http://struts.ap"</pre>    </pre>	are Foundation//DTD Struts Configuration 1.2//EN							
<pre><struts-config> <data-sources></data-sources> <form-beans> <form-bean name="GetNameForm" type="demo.GetNameForm"></form-bean> </form-beans> <global-exceptions></global-exceptions> <global-forwards> <forward name="getName" path="/pages/inputname.jsp"></forward> </global-forwards></struts-config></pre>								
<pre><action mappings=""> </action></pre> <pre><action <="" name="GetNameForm" path="/greeting" pre=""></action></pre>	<pre>scope="request" type="demo.GreetingAction"&gt;</pre>							
Attribute : attribute Data Type : CDATA	<ul> <li>attribute</li> <li>className</li> <li>forward</li> <li>id</li> <li>include</li> <li>input</li> <li>parameter</li> <li>prefix</li> <li>roles</li> </ul>							
	suffix     unknown="true"							

### Figure 3.26. Struts Content Assist

### 3.1.2.2.2. Content Assist for Struts JSP File

The image below shows Code Assist being used in a Struts JSP file.

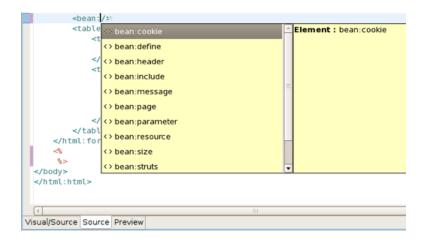
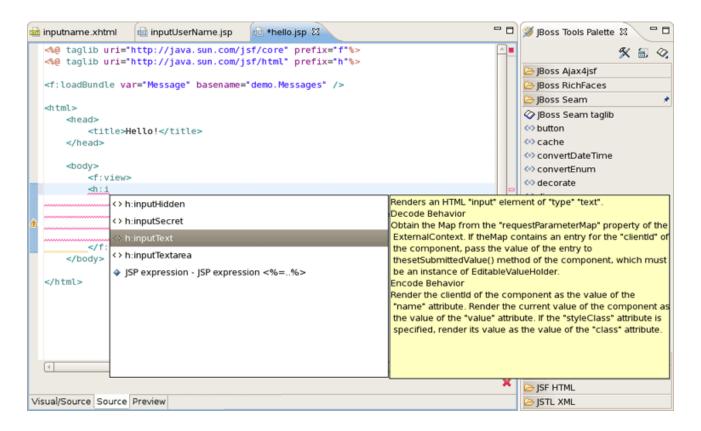


Figure 3.27. Struts JSP Content Assist

# 3.1.2.3. JSP Pages

## 3.1.2.3.1. Content Assist for JSF Tags

JBoss Developer Studio provides full code completion for JSF tags:



# Figure 3.28. JSF Tags Content Assist

When the tag is selected, the required attributes, if there are any, are already inserted and the cursor is moved to the first attribute. At this point you can ask for attribute proposals.

<pre></pre>

# Figure 3.29. Attributes Content Assist

## 3.1.2.3.2. Content Assist for JSTL Tags



### Figure 3.30. JSTL Tags Content Assist

### 3.1.2.3.3. Content Assist for HTML Tags

Content assist for HTML tags works in the same manner as the JSF tags:

⊲bo ⊲in	dy>	
	<> input	Defines a form control for user input
	<> ins	
	JSP expression - JSP expression <%=%>	
۵		
-		
<td></td> <td></td>		
٩	111	· · · · · · · · · · · · · · · · · · ·
Visual/Source	se Source Preview	

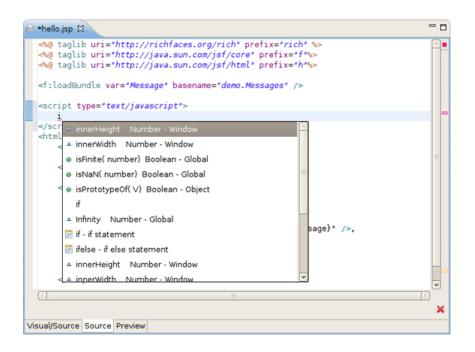
# Figure 3.31. HTML Tags Content Assist

Content Assist can also be used for HTML tag attributes:

<th><pre> P. person : Person  # "button"  # "checkbox"  # "file" # "hidden"  # "image"  # "password" # "radio" # "radio" # "reset" # "submit" # "reset" # "reset"# "reset" # "reset"# "reset"# "reset"# "reset"# "reset"# "reset## "reset## "reset## "reset## "res</pre></th> <th>Attribute : type Data Type : ENUM Default Value : text Enumerated Values : <ul> <li>text</li> <li>password</li> <li>checkbox</li> <li>radio</li> <li>submit</li> <li>reset</li> <li>file</li> <li>hidden</li> <li>image</li> <li>button</li> </ul></th>	<pre> P. person : Person  # "button"  # "checkbox"  # "file" # "hidden"  # "image"  # "password" # "radio" # "radio" # "reset" # "submit" # "reset" # "reset"# "reset" # "reset"# "reset"# "reset"# "reset"# "reset"# "reset## "reset## "reset## "reset## "res</pre>	Attribute : type Data Type : ENUM Default Value : text Enumerated Values : <ul> <li>text</li> <li>password</li> <li>checkbox</li> <li>radio</li> <li>submit</li> <li>reset</li> <li>file</li> <li>hidden</li> <li>image</li> <li>button</li> </ul>

Figure 3.32. HTML Tags Content Assist

# 3.1.2.3.4. Content Assist for JavaScript Tags



## Figure 3.33. JavaScript Tags Content Assist

### 3.1.2.3.5. Content Assist for EL expressions

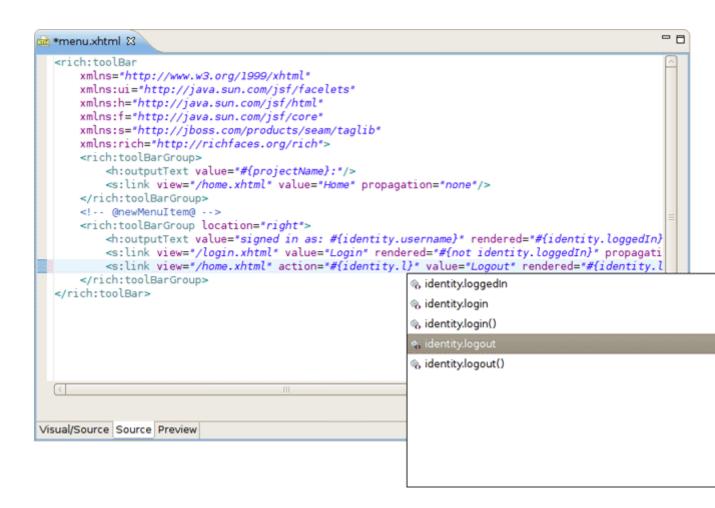
Content Assist also provides expression language (JSF EL) support. It is used in web application pages to access the JavaBeans components in the page bean and in other beans associated with the web application, such as the session bean and the application bean.

ee ∗greeting.jsp ⊠		- 8
<pre>&lt;@ taglib uri="http://java.sun.com/jsf/com <f:loadbundle <="" basename="messages" pre="" var="msg"></f:loadbundle></pre>	re" prefix="f" %> />	
<html> <head></head></html>		
<title></title>		
<pre><body>     <f:view>     <h:outputtext value="#{msg.greeting&lt;/pre&gt;&lt;/td&gt;&lt;td&gt;1 text}"></h:outputtext></f:view></body></pre>	=	
<pre></pre>		
	🇞 getName : String - PersonBean	
	getName() : String - PersonBean	
	🔍 name : String - PersonBean	
	🔍 setName : void - PersonBean	
html body f:view h:outputText	🔍 setName(name) : void - PersonBean	
Visual/Source Preview		

### Figure 3.34. EL Content Assist

# 3.1.2.4. Content Assist for XHTML Pages

The code completion menu items for the Seam components in a Seam project shows the proposals marked with Seam icon.

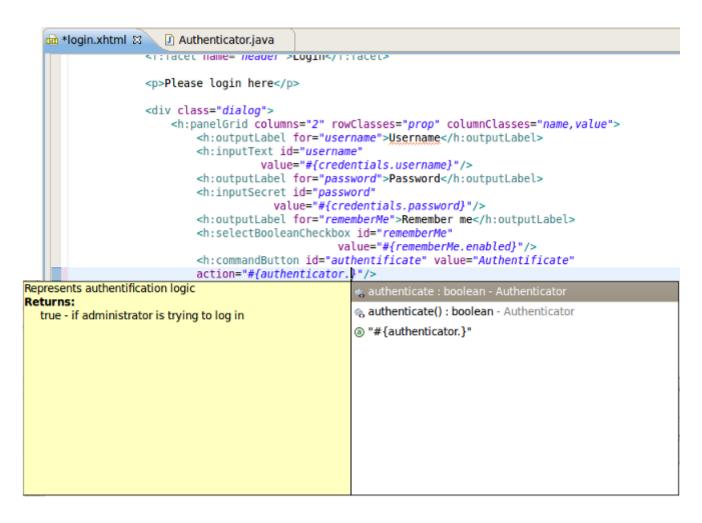


### Figure 3.35. Content Assist for Seam Components in the XHTML Page

If an XHTML file uses custom Facelets components, the Content Assist should also be available for them. For details, see Section 3.2.8.1, "Content Assist for Custom Facelets Components" later in this guide.

### 3.1.2.5. Content Assist for Java Files

Various tools tips provide you additional information about Java elements (JavaDocs, source classes, return types, method names, parameters and etc.) when working with Java files.



### Figure 3.36. Content assist for JavaDoc

# 3.1.2.6. Content Assist for Insert Tag Wizard

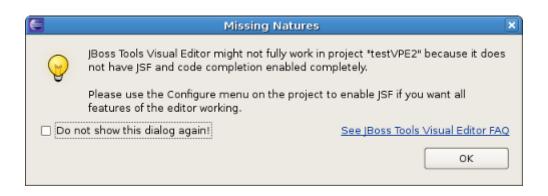
Content Assist is also available for any attribute value in the Insert Tag wizard.

)		Insert Tag	- 8							
<h:comr< th=""><th colspan="10">h:commandButton&gt; attributes</th></h:comr<>	h:commandButton> attributes									
General	Advanced									
Attribute	e name	Value	^							
actionLis	stener									
alt			=							
binding										
dir										
disabled										
id		#{}								
image		false								
immediate		true								
label										
lang										
onblur			~							
?										

### Figure 3.37. Content Assist for Insert Tag Wizard

# 3.1.2.7. Adding dynamic code assist to custom components that were added to JBoss Tools Palette

If you open projects that were created in older studio versions you may see the following message:



#### Figure 3.38. Missing Natures Message

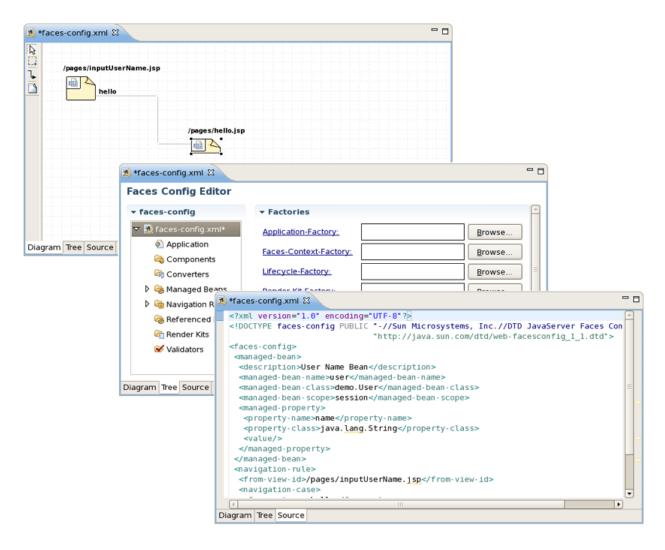
It warns that some features of content assist may not work. Use the following steps to fix the problem and turn off the message box:

- Right click the project in the Package Explorer view
- \* Select Configure  $\rightarrow$  Add JSF Capabilities from the context menu
- · Configure your project using the Add JSF Capabilities wizard and click the Finish button

# 3.1.3. Synchronized Source and Visual Editing

JBoss Developer Studio offers the ability to edit the source code of a file, as well as providing visual editors for many file types. The source code and visual editors can be viewed and edited at the same time in a split screen view, and any changes you make in the source code editor will immediately appear in the visual editor.

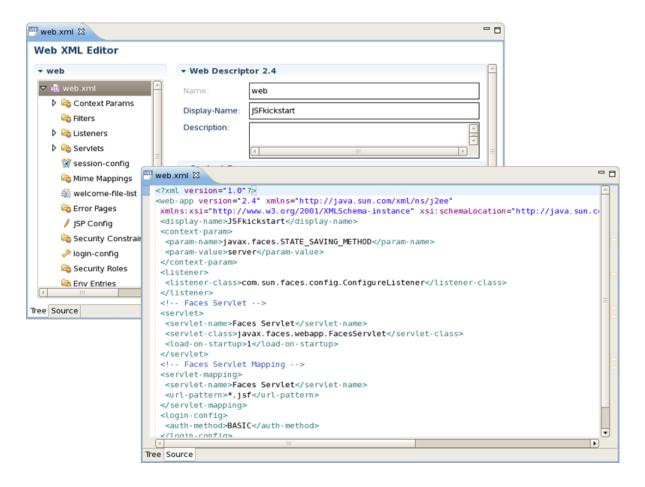
The JSF configuration file editor has three views: **Diagram**, **Tree** and **Source**. All views are synchronized and you can edit the file in any view.



### Figure 3.39. Three Views are Synchronized

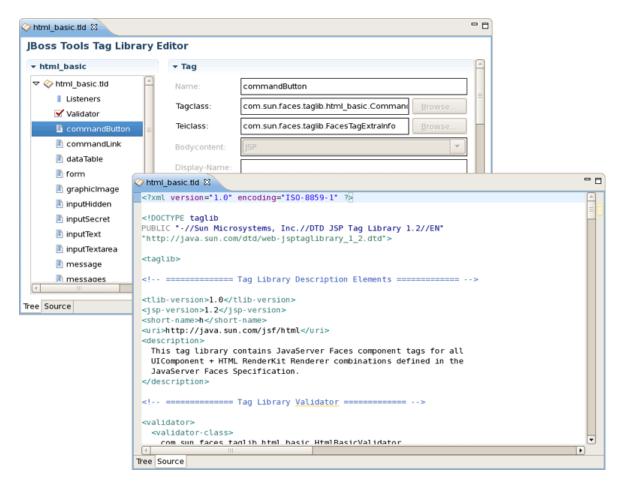
The same is true of all other JBoss Developer Studio editors.

The Web XML editor is shown. The Web XML editor has a graphical view, accessed by the **Tree** tab, and a source view, accessed by the **Source** tab.



### Figure 3.40. Two Views are Synchronized

The JBoss Developer Studio TLD file editor is shown below in **Tree** view. At any point you can edit the source by switching to the **Source** view.



# Figure 3.41. Two Views are Synchronized

# 3.2. Visual Page Editor

JBoss Developer Studio comes with a powerful and customizable Visual Page Editor (VPE). You can use the Visual Page Editor to develop an application using any technology such as JSF, Struts, JSP, HTML and more. Double-click on a file in the **Package Explorer** view to open it in the Visual Editor, or just drag-and-drop it into perspective (the drag-and-drop feature can be also applied to JSP, XHTML or HTML files created locally).

As a new JSF 2.0 specification has been released, support of new features is now implemented in the Visual Page Editor. The JSF 2.0 tags like <h:body>, <h:head>, <h:outputscript>, <h:outputstyle> are supported in the editor, as well as the composite components and expression language resource handling. (See the JSF 2 fu, Part 2: Templating and composite components [http://www.ibm.com/developerworks/java/library/j-jsf2fu2/index.html] for information on how to use composite components and JSF 2.0 New Feature Preview Series (Part 2.3): Resources [http://blogs.sun.com/rlubke/entry/jsf\_2\_0\_new\_feature3] on how to handle EL resources).

The current VPE version has three tabs: **Visual/Source**, **Source** and **Preview**. To switch between the views you can use tabs at the bottom of the VPE or the shortcut keys **Ctrl+PageUp** and **Ctrl+PageDown**.

<pre><ui:composition "http:="" 1999="" dtd="" f="http://java.sun.com/jsf/core" http:="" n="http://java.sun.com/jsf/html" rich="http://richfaces.org/rich" s="http://java.sun.com/jsf/facelets" te="layout/template.xhtml" tr="" www.w3.org="" xhtml"="" xhtml1="" xhtml1-transit="" xmlns=' xmlns:s xmlns:s xmlns:f x&lt;/th&gt;&lt;th&gt;&lt;pre&gt;PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" '> </ui:composition></pre>	
<u>ه</u>	
🔌 🛛 🗍 🗘 - Font	Name -   ◊   - Font Size -   ◊ ] B I U *
#{projectHame}: <u>Home</u>	Welcome, #{identity.username}: <u>Login Logout</u>
<ul> <li>Error Messages</li> </ul>	
Login	
∀	
isual/Source Source Preview	

# Figure 3.42. Visual Page Editor

# 3.2.1. Visual/Source View

Using the **Visual/Source** view you can edit your pages in the Source and Visual modes simultaneously, with instant synchronization between them:

nd la	agin.xhtml 🕴	- 8		
<pre>     login.xhtml 23     </pre> <pre>         &gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;</pre>				
		~		
Visi Pro	h:outputLabel h:inputText	×		

### Figure 3.43. Visual/Source View

The view is designed in the form of a split pane with toggle buttons for quickly moving between **Source**, **Visual** or **Source/Visual** modes, as shown on the figure above.

One more way to toggle between the various states of the split pane is using the **Shift+F6** keyboard shortcut for maximizing or restoring the **Source** part and **Shift+Alt+F6** for maximizing or restoring the **Visual** part.

You synchronize the scrolling can between the visual panes source and by clicking the Synchronize scrolling between panes source and visual ( 🔠

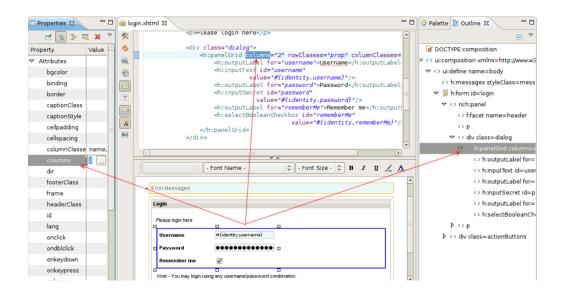
button in the toolbar of the Web Development perspective. This will ensure that scrolling in one window pane will automatically scroll the other pane to the same location.

# Tip:

When editing large documents hiding the Visual part will speed up the editing.

)

It should be pointed out that, no matter what mode you are working in, you get a full integration with the **Properties** and **Outline** views:



### Figure 3.44. Integration with Properties and Outline Views

The **Outline** view displays a specific outline of a structured file that is currently open in the editor area, and lists its structural elements. Right-clicking on these elements will open additional options that allow other specific elements to be added in their appropriate positions.

The **Properties** view shows the property names and their values for a selected item. The values are editable: just select any value and click on the button that will appear to choose a new value. The key combination **Ctrl+Z** will return the previous value, while **Ctrl+Y** will return the new value again. The **Properties** view has additional options and can be set up to display categories and advanced properties.

It is also possible to use the **JBoss Tools Palette** (see *Chapter 5, JBoss Tools Palette*) to insert any tag from the list of tag libraries into the page you are editing with just a click or by dragging-and-dropping.

📾 lo	ogin.xhtml 🕴	- 0	🕴 Pale 😫 🔡
×	<h:messages styleclass="message"></h:messages>	^	
4	<h:form id="login"></h:form>		🗁 JBoss Ajax4Jsf
<b>6</b>	<pre>crich:panel&gt;</pre>	=	Boss RichFace
	<f:facet name="header">Login</f:facet>		e ordeningList
22	Please login here		© paint2D
$[\mathbf{T}]$	<pre><div class="dialog"></div></pre>		panel
	<pre></pre>	~	🗖 panelBar
			🗖 panelBariten
(11)	🗘 - Font Name - 🗘 - Font Size - 🗘 B I 🗓 🦾 🗛		🔚 panelMenu
	Error Messages		🔚 panelMenuG
			🔚 panelMenuit
	Login		B:0 pickList
	Please login here	=	📅 progressBar
			😤 recursiveTree
	Username #{identity.username}		📰 scrollableDat
	Password •••••••••	~	separator

### Figure 3.45. Inserting Tag From the Palette

You can insert a tag or component from the palette into either the **Source** or the **Visual** part by displaying the context menu and selecting **Insert around**, **Insert before**, **Insert after** or **Replace With**, picking the type of the tag and finally choosing the tag you want to insert.

The image below illustrates how you can insert a tag into the **Source** part.

aces-config.x	Save	Ctrl+S	
<pre>&lt;%@ page &lt;%@ tagli</pre>	Open With Show In	> Shift+Alt+W	וg=" <i>U</i> ז
<pre>&lt;%@ tagli<sup>-</sup> <!DOCTYPE @<html>     @<head> <meta htt_<="" pre=""/></head></pre>	Cut Copy Paste	Ctrl+X Ctrl+C <b>Ctrl+V</b>	.w3.o
<title>In&lt;/th&gt;&lt;th&gt;Insert around&lt;/th&gt;&lt;th&gt;&gt;&lt;/th&gt;&lt;th&gt;JBo&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/head&gt;&lt;br&gt;e&lt;body&gt;&lt;/th&gt;&lt;th&gt;Insert before&lt;br&gt;Insert after&lt;br&gt;Insert into&lt;br&gt;Replace with&lt;/th&gt;&lt;th&gt;&gt; &gt; &gt;&lt;/th&gt;&lt;th&gt;JSF&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;Please ente&lt;/th&gt;&lt;th&gt;Setup Visual Template for &lt;jsp:directive.page&gt;&lt;br&gt;Create JSF2 composite&lt;br&gt;Externalize all strings&lt;br&gt;Externalize selected string&lt;/th&gt;&lt;th&gt;Ctrl+7&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title>			

# Figure 3.46. Inserting a tag into the Source part

And this is how a tag is inserted using a context menu in the Visual part.

		7		~									
🗟 faces-co	onfig.xml	🗟 inputi	name.jsp	x	💩 in	dex.js	ı p	🗟 greet	ing.j	sp			
<%@ t <%@ t DOC<br ⊝ <html ⊖<heac <meta< td=""><td>d&gt; a http-equi le&gt;Insert 1</td><td>fix="f" fix="h" PUBLIC iv="Cont</td><td>uri="h uri="h "-//W3C, ent-Typ</td><td>ttp:// ttp:// //DTD e" con</td><td>'java 'java HTML</td><td>.sun. .sun. 4.01</td><td>com/j com/j Tran</td><td>sf/cor sf/htm sition</td><td>e"%&gt; l"%&gt; al//</td><td>EN" '</td><td>'http</td><td></td><td></td></meta<></heac </html 	d> a http-equi le>Insert 1	fix="f" fix="h" PUBLIC iv="Cont	uri="h uri="h "-//W3C, ent-Typ	ttp:// ttp:// //DTD e" con	'java 'java HTML	.sun. .sun. 4.01	com/j com/j Tran	sf/cor sf/htm sition	e"%> l"%> al//	EN" '	'http		
⊖ <body< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></body<>													
<u> </u>								,					
		🗘 🗌 - Font	: Name -			\$		Size -	¢ I	3 Z	U	l	A 15
	Setup Visu		ate for <j< td=""><td>sp:dire</td><td>ective</td><td>.page</td><td>&gt;</td><td></td><td>&gt;</td><td>JBoss</td><td></td><td>&gt;</td><td>Ajax4J</td></j<>	sp:dire	ective	.page	>		>	JBoss		>	Ajax4J
	Insert befo	ore						;	>	JSF		>	RichFa
	Insert afte	r						2					Seam
	Insert into							2	>				
Visual/So	Replace w	ith						2	>				
🛃 Proble	Strip Tag Externaliz	e selecte	d string										
🗎 http	Zoom							;	>				
Preferences													
	Cut							Ctrl+X					
	Сору							Ctrl+C	_	-			
	Paste							Ctrl+V	1	Sm	art In	sert	1:1
									_		_		

# Figure 3.47. Inserting a tag into the Visual part

The Visual Page Editor also displays custom tags correctly if they are configured properly. The picture below shows an example how the custom tags pagination and echo will be displayed in VPE.

📾 index.html 🛛 🧧 🗖							
* *		<pre><!DOCTYPE html PUBLIC *-//W3C//DTD XHTML 1.0 Transitional//EN* *http://www.     <html <br="" xmlns="http://www.w3.org/1999/xhtml">xmlns:ui=*http://java.sun.com/jsf/facelets* xmlns:h=*http://java.sun.com/jsf/html* xmlns:f=*http://java.sun.com/jsf/core* xmlns:cu=*http://customTags/tags*&gt;</html></pre>					
		<pre><custom tags=""> <custom tags=""> <custom tags=""> <custom tags=""> <custom msg="Helle Custom Tags"></custom>   </custom></custom></custom></custom></pre>					
(L)							
		<>> - Font Name -   <>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>					
	Н	ello Custom Tags					
	V	html Y					
Visu	al/s	Source Source Preview					

#### Figure 3.48. Custom Tags in the VPE

The listings of the custom tag implementations will help to demonstrate how VPE works.

• echo.xhtml:

```
<ui:composition xmlns:ui="http://java.sun.com/jsf/facelets">
<span class="message">#{msg}</span>
</ui:composition>
```

• paginator.xhtml:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
xmlns:ui="http://java.sun.com/jsf/facelets"
xmlns:h="http://java.sun.com/jsf/html"
xmlns:f="http://java.sun.com/jsf/core">
<ui:component>
<!-- h:inputHidden id="currentPage" replace, because if on page two fields,</pre>
```

```
two elements with equal id has been used, but should be used only one -->
 <h:panelGrid style="margin-right:auto;margin-left:auto;" columns="4">
 <h:commandButton value="&lt;&lt;" type="submit"
 onclick="document.getElementById('currentPage').value=0" >
  </h:commandButton>
 <h:commandButton value="&lt;" type="submit"
   onclick="document.getElementById('currentPage').value=#{user.currentPage-
user.rowsPerPage}">
 </h:commandButton>
  <h:commandButton value="&gt;" type="submit"
     onclick="document.getElementById('currentPage').value=#{user.currentPage
+user.rowsPerPage}">
 </h:commandButton>
 <h:commandButton value="&gt;&gt;" type="submit"
  onclick="document.getElementById('currentPage').value=#{user.numberOfItems
 - user.rowsPerPage}">
 </h:commandButton>
</h:panelGrid>
<h:inputHidden id="currentPage" value=""/>
</ui:component>
</html>
```

If your custom tags are not configured correctly your Visual mode will look like this:

📾 in	dex.html 🛛 🖓 🖓
	<pre><!DOCTYPE html PUBLIC *-//W3C//DTD XHTML 1.0 Transitional//EN* "http://www.     <html xmlns="*http://java.sun.com/jsf/facelets*&lt;br">xmlns:h=*http://java.sun.com/jsf/html* xmlns:f="http://java.sun.com/jsf/core* xmlns:cu=*http://customTags/tags*&gt; <body> <!-- custom tags--> <cu:paginator></cu:paginator> <cu:echo msg="Helle Custom Tags"></cu:echo> </body> <!-- </pre--></html></pre>
(n.)	C - Font Name - C - Font Size - C B I U A
	cu:paginator cu:echo
	<sup>∞</sup> html × X
Visu	al/Source Source Preview

Figure 3.49. Wrong configured Custom Tags in the VPE

When you make a selection of tags in the source part of the editor, they will all be selected in the visual part of the editor as well. This makes it easy to link code that you have written, with the visual output.

6⊖ 7⊝	<body> <form></form></body>	•
8	Enter your name:	
9	<input type="text"/>	=
10		-
11	<input type="submit" value="OK"/>	
12		-
	<	•
	▼ ▲	
	▼ - Font Name - ▼ - Font Size - ▼ B I U	>>
Ente	r your name:	▲ Ⅲ
		-
htm	nl 🔻 body 👻 form 👻 input	×
Visual/S	ource Source Preview	

#### Figure 3.50. All tags from the source selection are selected in the visual part

### 3.2.1.1. Commenting out Code

The Visual Page Editor supports the ability to add comments in files you are working with (JSP, XHTML, etc.):

- HTML comments ( <!-- --> ) which are output to the client
- JSP comments ( <%-- --%> ) which are not output to the client as part of the JSP page output

### 3.2.1.2. Using Code Folding

The Visual Page Editor lets you collapse and expand (or hide and show) sections of your code to make it easier to navigate and read.

Code folding can be enabled by right-clicking on the left margin on the **Source** part of Visual Page Editor, selecting **Folding**, and checking the **Enable Folding** checkbox or using the **Ctrl+Numpad Divide** shortcut.

When	the	code	folding	is	enabled	а	minus	sing	(
$\ominus$									

) will appear on the left margin of the editor next to each opening block tag.

	Θ	<div class="dialog"></div>	
	Θ	<pre><h:panelgrid columnclasses="name,value" columns="2" rowclasses="prop"></h:panelgrid></pre>	
		<pre><h:outputlabel for="username">Username</h:outputlabel></pre>	
	Θ	<h:inputtext <="" id="username" td=""><td></td></h:inputtext>	
8		value="#{identity.username}"/>	
		<pre><h:outputlabel for="password">Password</h:outputlabel></pre>	
	Θ	<h:inputsecret <="" id="password" td=""><td></td></h:inputsecret>	
		value="#{identity.password}"/>	=
		<pre><h:outputlabel for="rememberMe">Remember me</h:outputlabel></pre>	
	Θ	<pre><h:selectbooleancheckbox <="" id="rememberMe" pre=""></h:selectbooleancheckbox></pre>	
		value="#{identity.rememberMe}"/>	

### Figure 3.51. Enabled Code Folding

Click the minus sign to collapse a block tag.

When the minus sign is clicked on the appropriate tag collapses and a plus sign (  $\ensuremath{\textcircled{\bullet}}$  ) is displayed on the left margin as well as a gray rectangle with two dots (

), which appears after opening and closing tags.

	Θ	<div class="&lt;i&gt;dialog&lt;/i&gt;"></div>		
	۲	<h:panelgrid <="" columns="2" th=""><th>rowClasses="prop"</th><th>columnClasses="name,value"&gt;.</th></h:panelgrid>	rowClasses="prop"	columnClasses="name,value">.
		.		

### Figure 3.52. Collapsed Code

### 3.2.1.3. Creating a JSF2 component from the Source view

You can now create a JSF2 component while in the **Source** view. To do this, highlight the code you wish to create into a JSF2 component and then right-click the highlighted code segment to bring up the context menu.

<body> <f:view> <h3></h3></f:view></body>	Revert File
<pre><h:outputtext value="#(Message.hello message)"></h:outputtext>,</pre>	EL Refactor
<h:outputtext value="#(user.name)"></h:outputtext> !  	Open With Show In
	Cut Copy Paste
3 Y - Font Name - Y - Font Size - Y B I U A A	Insert around Insert before Insert after
#{user.name}!	Insert into Replace with
	Create JSF2 composite
	Externalize all strings

### Figure 3.53. Collapsed Code

Within the context menu, select **Create JSF2 composite**. A new component will now be created containing the highlighted code.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
        "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
    xmlns:h="http://java.sun.com/jsf/html"
    xmlns:composite="http://java.sun.com/jsf/composite">
    <!-- INTERFACE -->
    <composite:interface>
    </composite:interface>
    < !-- IMPLEMENTATION -->
    <composite:implementation>
<h3>
                <h:outputText value="#{Message.hello message}" />,
                <h:outputText value="#(user.name)" />!
            </h3>
    </composite:implementation>
</html>
```

### Figure 3.54. Collapsed Code

### 3.2.1.4. JSP Syntax Validation

When working in the JBoss Tools JSP editor you are constantly provided with feedback and contextual error checking as you type.

# 3.2.1.5. Support for custom TagLibs and Taglib versions

VPE templates support custom tag libs, e.g. Seam Mail facelet taglib, RichFaces taglibs or any other created by you.

VPE templates also provides support for various versions of tag libraries, meaning that the Visual Page Editor takes control over those components which have different parameters or preview according to the framework version (like seam 1.2 and seam 2.0, or JSF 1.1 and JSF 1.2).

For example, the <s:decorate> element in Seam has different parameters in versions 1.2 and 2.0, and the <h:outputLink> JSF element has different preview in versions 1.1 and 1.2.

# 3.2.2. Pages Styling

Most web pages use the cascading style sheets (CSS) to control the way they look. With Visual Page Editor you can easily stylize your pages. In this section we are going to introduce you to a powerful mechanism that Visual Page Editor provides for complete control over a pages' styling. Additional information on working with CSS files can be found in *Chapter 6, CSS Editing Perspective* 

### **3.2.2.1. Text Formatting**

In the Visual part of the Visual Page Editor there is а graphical toolbar, which is used to add inline styling to JSF and Struts tags on your page. The toolbar can be hidden with the help of the special button (  $^{\circ}$ 

) on the Visual Page Editor toolbar.

nd lo	gin	axhtml 🖾	- 8					
% *		<ui:define name="body"></ui:define>	^					
		<h:messages styleclass="message"></h:messages>						
		<h:form id="login"></h:form>						
22 T		<rich:panel> <f:facet name="*header*">Login</f:facet></rich:panel>						
A	-		<u>&gt;</u>					
(11)		🗘 🕞 - Font Name - 🛛 🗘 🕞 - Font Size - 🗘 🖪 🛛 💆 🦾	<u>}</u>					
	Г							
		• Error Messages	=					
		Login						
		Please login here						

Figure 3.55. Text Formatting

For editing inline styles for DOM elements, the Visual Page Editor provides the **CSS Dialog**. It can be called from the **style** line in the **Properties** view of a currently selected element.

Properties	🗉 🔅 🐹 🗙 🗢 🗖
Property	Value
onselect	
readonly	
rendered	
required	
requiredMessag	e
size	
style	( )
styleClass	
tabindex	
title	=
validator	
validatorMessa	e 🗸

### Figure 3.56. Call the CSS Dialog

The **CSS Style** dialog has several tabs where CSS properties for text, background, borders and others can be specified. A simple preview which is generated at the top of the **CSS Style** dialog allows you to see the changes before you apply them.

<b>9</b>		CS	65 Style		×		
CSS Style							
Double aligh to	adit n	eaulau	. To save cha	ages press Enter			
button.	eun p	review	7. To save chai	nges press Enter			
Text/Font Backgr	round	Boxes	Property Sheet	Edited properties			
Font Family:					3		
Color:	FireBri	ick		~	a l		
	_				21		
Font Size:	18			Y px (			
Font Style:				`			
Font Weight:				~	-		
Text Decoration:				~	2		
Text Align:					л.		
0			Cancel	ок			
0			Cancel	OK			

### Figure 3.57. CSS Style Dialog

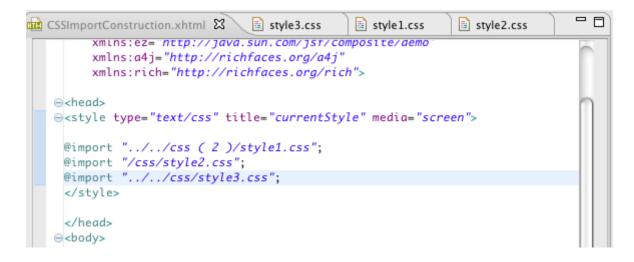
# 3.2.2.2. External Stylesheets (CSS)

The pages you are working with in the Visual Page Editor can use external stylesheets.

### 3.2.2.2.1. Importing a stylesheet

You can import an existing stylesheet by using the @import annotation within your webpage file. The annotation for importing a file is structured as @import "path/to/file.css";.

An example of how it is used can be seen below:

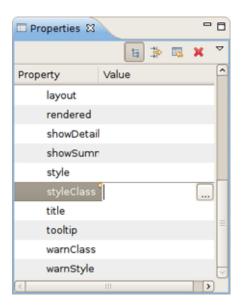


### Figure 3.58. Importing a stylesheet

### 3.2.2.2.2. Modifying an existing stylesheet

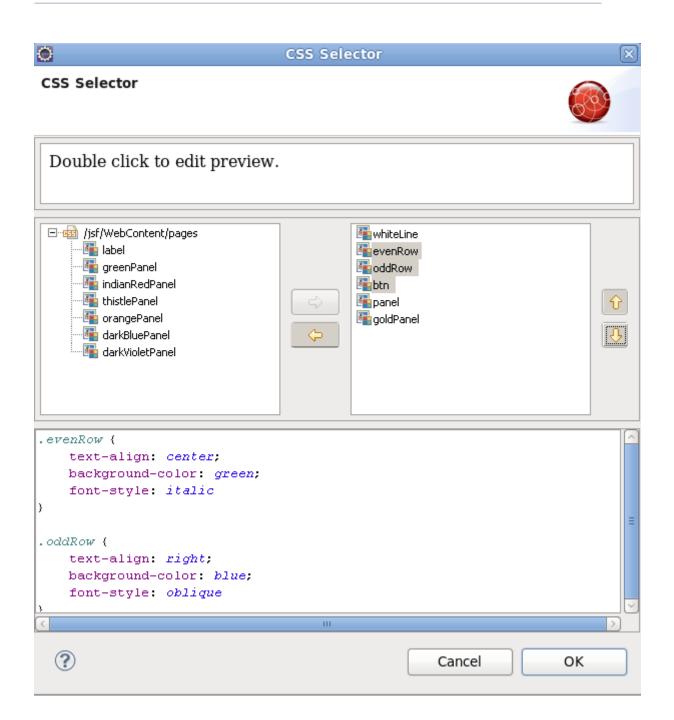
The Visual Page Editor allows you to create new style classes in existing stylesheets, as well as edit them. The **Edit Style Class** dialog is provided for this purposes.

Select the element for which you need to create or edit style class, and press button next to the **styleClass** field in the **Properties** view.



### Figure 3.59. Calling the Edit Style Class Dialog

This will display the Edit Style Class dialog, which is shown in the image below:



### Figure 3.60. Edit Style Class Dialog

Choose a style class from the variants provided, and click on the **OK** button to apply the changes.

To open a CSS dialog based on the active CSS file click on

in the top panel or use hot-keys (Shift+Ctrl+C).

To create a new CSS class for the file click on the **Add CSS Class** button, enter its name in the textbox, and click on the **OK** button:

	Enter New CSS Class Name	×
Enter New CS	S Class Name	
CSS Class Na	ame is not valid	
	Cancel	

### Figure 3.61. Add CSS Class

Then you can configure style settings by switching between the tabs: **Text/Font**, **Background**, **Boxes**, **Property Sheet**. The list of existing classes with names beginning with the symbols printed will be displayed by using the standard **Ctrl+Space** key combination. To add an existing style to the chosen element just point to the necessary one. Each time you select any class it is displayed in the **Preview** tab. Click on the **Apply** button to apply the changes without closing the window.

۲	CSS Class	×
CSS Class		
	.body .columnHeader:hover	
Double click to	.error .errors .errors input	
CSS file:	.errors textarea .footer	ie.css
Style class:	.message .name	Add CSS Class
Text/Font E	.required	perties Preview
background	.rich-stglpanel-body .rich-table .tableControl	
for	tableControl a	v px 0
margin-b	a:active,a:link,a:visited	▼ px ≎
març	a:hover body	✓ px \$
pa	body(2) h1	px 🗘
	img.errors input,textarea input[type='submit'],input[type='button']	Apply Clear
?	Cancel	ок

Figure 3.62. Style Class Selection

The **Edited properties** tab provides a preview of the properties which are set for the existing style class. You can easily modify them with the help of this wizard.

<b>9</b>		CSS Class		×
CSS Class				
Double click to edit preview. To save changes press Enter button.				
<				
CSS file: /SeamWebProject/WebContent/stylesheet/theme.css				
Style class: .message 🗘 Add				dd CSS Class
Text/Font Backgro	ound Boxes	Property Sheet	Edited properties	Preview
background-color	#F0F8FF		-	-
border	1px solid #	FFCC00		
font-size	12			r px ↓
margin-bottom	5			✓ px ○
margin-top	5			r px ≎
padding	5			px 🗘
			4	Apply Clear
?			Cancel	ОК

# Figure 3.63. Edited Properties

If the style class is not chosen, the tab does not show any properties.

۲			CSS Class		×
CSS Class					
Double clic	k to edit prev	iew. To	save changes pr	ess Enter button.	
	-				
CSS file	:				
Style class	:			Add	CSS Class
Text/Font	Background	Roxes	Property Sheet	Edited properties	Preview
	Properties	00000			
				Арр	Clear
?			0	ancel	ОК

## Figure 3.64. Edited Properties when the style class isn't chosen

The **Preview** tab provides a way to view the content of the selected css file. This tab is hidden if no css file is selected.

			CSS Class				×
CSS Class							
Double click to	edit preview. To	save cha	nges press Enter butto	n.			
<			III				>
CSS file:	/SeamWebF	Project∧	WebContent/style	sheet/them	ne.css		
Style class:	.message				¢ Ac	dd CSS Cla	iss
Text/Font E	Background	Boxes	Property Sheet	Edited pro	perties	Preview	
paddin margin margin backgn	( ng: <i>1px sol</i> ng: <i>5px</i> ; n-top: <i>5px</i> n-bottom: nound-colo size: <i>12px</i>	; 5px; r: #FC					_
font-v width: float:	cal-align: weight: <i>bo</i> : <i>115px</i> ; : <i>left</i> ; no: <u>5ox</u> :		III				-
					A	pply Cle	ar
?				Cancel		ОК	

## Figure 3.65. Preview Tab

At the top of the **CSS Class** dialog you can see a preview box which visualizes the result. To edit the preview you should double click in the box. To leave the focus, use **Ctrl+Tab**.

<b>9</b>		CSS Class				×
CSS Class						
Double click to edit p	oreview. To sa	ave changes pres				
<		111				>
CSS file: /Seam	nWebProject/	WebContent/style	sheet/theme.c	ss		
Style class: .mess	sage		0	Add	l css c	lass
Text/Font Backgro	ound Boxes	Property Sheet	Edited propert	ies	Previev	v
background-color					~	
border	1px solid #	FFCC00				
font-size	12			~	рх	٥
margin-bottom	5			~	px	0
margin-top	5			~	рх	0
padding	5				рх	٥
				Ap	ply C	lear
?			Cancel		ок	

## Figure 3.66. Editing the Preview

The dialog for creating a new CSS class, which is called from New  $\rightarrow$  Other...  $\rightarrow$  JBoss Tools Web  $\rightarrow$  CSS Class, is shown in the image below:

<b>9</b>	CSS Style Class Editor	×
CSS Class		
Create New	CSS Class	
CSS File*		Browse
CSS Class*		
?	< Back Next > Cancel	Einish

# Figure 3.67. New CSS Class Dialog

Click on the **Browse** button to open a dialog where you can select the CSS file to create a CSS class for:

۲	CSS File Selection	×
s	elect CSS file from the tree:	
~	z 😂 SeamWebProject	1
	▽ 🗁 WebContent	
	▽ 🗁 stylesheet	
	theme.css	
D	> 😂 SeamWebProject-test	
(	Cancel OK	]

### Figure 3.68. CSS File Selection

Choose the appropriate  $\ensuremath{\mathtt{css}}$  file and click on the OK button.

## 3.2.3. Visual Templates for Unknown Tags

The Visual Page Editor also makes it possible to create visual templates for unknown tags.

To display the **Template** dialog for a tag, right-click on it in Visual mode and select **Setup Visual Template for <tag name>** option.

na log	gin.xhtml 🛙			
** *>	<pre>xmlns:f="http://j xmlns:h="http://j xmlns:un="http:// xmlns:rich="http://j</pre>	/java.sun.com/jsf/facelets" java.sun.com/jsf/core" java.sun.com/jsf/html" /java.sun.com/jsf/html" ://richfaces.org/rich" /template.xhtml">		
22 T	<ui:define logi<br="" name="bod&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;Ctrl+Z&lt;/th&gt;&lt;th&gt;&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;th&gt;&lt;/th&gt;&lt;th&gt;&lt;h:form id="><un:unknownt< th=""><th>Revert File</th><th>Ctrl+S</th><th></th></un:unknownt<></ui:define>	Revert File	Ctrl+S	
<b>A</b>	[]	Sho <u>w</u> In	Shift+Alt+W >	>
	) [	Cu <u>t</u>	Ctrl+X	
	h:outputText Home	<u>C</u> opy <u>P</u> aste	Ctrl+C Ctrl+V	tputText Login Logout
	h:messages +	Insert around Insert before Insert after Insert into	>	
	Please login here	Replace with Setup Visual Template for <un:unknowntag></un:unknowntag>	>	
Visua	ui:composition ui:definal/Source Source Preview	Quick Fix	Ctrl+1	

# Figure 3.69. Calling Template Dialog

The **Template** dialog is shown in the image below:

9	Unknown tag template
Set up tag attributes	
Set up parameters for the	e unknown tag
Tag Name:	un:unknowntag
Tag URI:	http://java.sun.com/jsf/html
Tag For Display:	
Allow tag children:	V
Value:	{name()}
Tag style:	
	Cancel

# Figure 3.70. Template Dialog

The Tag Name field is used to define the name of the unknown tag.

Ĺ
---

### Note:

The given field should be filled in according to the pattern: taglib:tag. Also make sure you do not surround the name with angle brackets which will cause the validation error (see the figure below).

Set up tag attributes	
Tag name ( <unknowntag)< p=""></unknowntag)<>	ag>) is not valid. The pattern is "taglib:tag"
Tag Name:	
Tag Name:	<unknowntag></unknowntag>
Tag URI:	http://java.sun.com/jsf/html
Tag For Display:	div
Allow tag children:	
Value:	{name()}
Tag style:	
	Cancel

The **Tag for Display** field in the **Template** dialog requires specifying a type of tag. It can be SPAN, DIV, TABLE or any other HTML element. Check the **Children** field if you want to mark a tag as a child element.

The Value defines a tags' value.

As for the **Style** field, you can fill it out manually or make use of the button next to the field to bring the **CSS Style** dialog (See Section 3.2.2.1, "Text Formatting" [61]) for editing styles.

You can view all defined templates in the Section 9.3, "Visual Page Editor" on the Visual Templates tab which, you can quickly access by pressing the

toolbar button (see Section 3.2.5, "VPE Toolbar").

9	P	references (Fi	itered)		
type filter text 🖉	Visual Page Edi	itor			\$~ \$~ <b>▼</b>
✓ JBoss Tools ✓ Web	General Visual 1	emplates			
	-	Tag for Display		Children	Add
Visual Page E	un:unknowntag	div	http://java.sun.com/j	sf/html yes	Edit
					Remove
< III >			Re	store <u>D</u> efaults	Apply
?				Cancel	ОК

### Figure 3.72. Templates Tab of the VPE Preferences Page

Here it's possible to add, edit or remove any listed in the table template.

## 3.2.4. Export/Import of the Templates for Unknown Tags

If you have a number of custom tags for which you have defined visual templates, you may need to share the templates definitions with other team members. In this case you can use export and import functionality for unknown tag templates.

To export all visual templates you defined for unknown tags, select File  $\rightarrow$  Export  $\rightarrow$  Other  $\rightarrow$  Unknown tags templates. Here is what the wizard looks like.

)	Export Uni	known Tags Templates	(
	Tags Templates ags templates to the		
Tag Name	Tag for Display	URI	Children
un:unknowntag	div	http://java.sun.com/jsf/html	yes
ile name:			Browse
?	< <u>B</u> ack	Next > Cancel	Einish

### Figure 3.73. Export of Unknown Tags Templates

At this point click the **Browse** button to set the path where to save the external XML file with templates, and then click the **Finish** button to complete the export.

Importing follows a similar procedure. Select File  $\rightarrow$  Import  $\rightarrow$  Other  $\rightarrow$  Unknown tags templates to open the import wizard. Click the **Browse** to point to the XML file which stores the custom tags templates, and then click the **Finish** button to complete the import.

)	Import Uni	known Tags Templates	•
-	Tags Templates		<b>I</b>
File name: /opt/cu	stom_tags/templat	es	Browse
Tag Name	Tag for Display	URI	Children
un:unknowntag	div	http://java.sun.com/jsf/html	yes
0	< <u>B</u> ack	Next > Cancel	Finish

## Figure 3.74. Import of Custom Tags Templates

## 3.2.5. VPE Toolbar

The Visual Page Editor toolbar includes the following buttons:

• Section	3.2.5.1,	"Ext	ernalize	string"	(
<ul> <li>Section</li> <li>%</li> <li>)</li> </ul>	3.2.	5.2,	"Preferen	ices"	(
<ul> <li>Section</li> <li>i</li> </ul>	3.2	2.5.3,	"Refre	sh"	(
<ul> <li>Section</li> <li>iiii</li> <li>iiii</li> </ul>	3.2.5.4,	"Page	Design	Options"	(

<ul> <li>Section</li> <li>i</li> <li>j</li> </ul>	3.2.5.5,	"Visual/So	ource	Editors	s splitting	g buttons"	(
<ul> <li>Section</li> <li>??</li> <li>)</li> </ul>	3.2.5.6,	"Show	Border	fo	or Unkno	wn Tags"	(
<ul> <li>Section</li> <li>T</li> <li>)</li> </ul>	3.2.5.7,	"	Show	N	'on-visual	Tags"	(
<ul> <li>Section</li> <li>)</li> </ul>	3.2.5.8,		"Show		Selection	Bar"	(
<ul> <li>Section</li> <li> <sup>(2)</sup> <sup></sup></li></ul>	3.2.2	2.1,	"Te	ext	Form	natting"	(
• Show	bundle's	messa	ges	as	EL	expressions	(

)

❷ ☞ ۥ؇~ │ ୬ │ < ~   ▶ ૠ ○ ⑧ │ 章
🗟 faces-config.xml 🛛 📾 inputname.jsp 🕱 📾 index.jsp 🛛 📾 greeting.jsp
<pre>&lt;%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="U &lt;%@ taglib prefix="f" uri="http://java.sun.com/jsf/core"%&gt; &lt;%@ taglib prefix="h" uri="http://java.sun.com/jsf/html"%&gt; <!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.o     @<html> @<head></head></html></pre>
<pre><meta content="text/html; charset=utf-8" http-equiv="Content-Type"/> <title>Insert title here</title>  @<body></body></pre>
↓ - Font Name -   ↓ - Font Size -   ↓ B I U / A II
Please enter name: #{personBean.name} Say Hello
 html~ head~ meta

# Figure 3.75. Buttons on the VPE Toolbar

## 3.2.5.1. Externalize string

The	Externalize	string	button	(
118n				

) provides the ability to export a selected string.

0	Externalize Strings				
Externalize Stri	ings				
<ol> <li>Please specify</li> </ol>	<ol> <li>Please specify the property key</li> </ol>				
Externalize strin	as				
	text_html_charset_UTF_8				
Property value:	text/html; charset=UTF-8				
	properties file (See details on the next page)				
Handle propertie					
Select resource					
Propert	ies file:				
Property name	Property value				
(?)	< Back Next > Cancel OK				

### Figure 3.76. Visual Page Editor Externalize string wizard page 1

The first page of the Visual Page Externalize string wizard asks you for the name of the **Property key** you wish to create and the then **Property value** for that key. You then have the choice to either have the wizard generate a new properties file for the string or to select a property file that already exists (if one is available).

۲	Externa	alize String	S	×
Externalize Strings	1			
Externalize your strin	ıgs via properties fil	e		
Enter or select the pa	rent folder:			
jsfHello/JavaSource				
IETEmitters				
$\bigtriangledown$ $\stackrel{\circ}{\simeq}$ jsfHello				
🗁 .settings				
🗁 ant				
🕨 🗁 JavaSource				
VebContent				
Simple_Portal				
🕨 🔛 test				
File name: inputnam	e.properties			
<< Advanced				
$\Box$ Link to file in the	file system			
			Browse	Variables
Chaosa filo syste		)		
Choose file syste				
?	< Back	Next >	Cancel	ок

## Figure 3.77. Visual Page Editor Externalize string wizard page 2

On the second page of the wizard enter a new or select an existing folder where the property file of the string will be stored. Be sure to also name the property file.

By clicking on the **Advanced** button you will be shown an option to link the property file that will be created, to a file already on your computer. This step is not necessary for externalizing a string.

Externalize Strings	×
Externalize Strings	
Externalize your strings via properties file	9
Bundle name: (inputname	
Select a place to register the bundle	
<ul> <li>in the faces-config.xml file</li> </ul>	
via <f:loadbundle> tag on the current page</f:loadbundle>	
Image: manually by user	
< Back	

#### Figure 3.78. Visual Page Editor Externalize string wizard page 3

The final page asks you to choose a place for the string bundle to be registered. By default the option of **manually by user** will be selected.

## 3.2.5.2. Preferences

The	Preferences	button (	
%			

) provides quick access to the Visual Page Editor preferences.

type filter text 🛛 🧳	Visual Page Editor $>$
▼ JBoss Tools	General Visual Templates
✓ Web ✓ Editors	Visual Page Editor toolbar behavior
Visual Page E	Show toolbar within the editor (otherwise in Eclipse's toolbar)
	Visual appearance
	✓ Show border for unknown tags
	Show non-visual tags
	✓ Show selection tag bar
	✓ Show text formatting bar
	Show resource bundles usage as EL expressions
	Confirmation and details
	Ask for tag attributes during tag insert
	☑ Inform if the project is not configured properly to use Visual Page E
	Default tab, splitting and editor's weights to start VPE with
	Synchronize scrolling between source and visual panes
	Select the default active editor's tab
	Visual/Source
	Visual/Source editors splitting
	Vertical splitting with Source Editor on the top
	Size of the Visual Editor pane (0-100%)
	50% <
<	Restore Defaults A
?	Cancel
<u> </u>	

Figure 3.79. Visual Page Editor Preferences Window

This page provides a number of options associated with the editor representation. For more detailed description on each option please read the "JBoss Tools Preferences" chapter under *Section 9.3, "Visual Page Editor"*.

#### 3.2.5.3. Refresh

Clicking	on	the	Refresh	button	(
et ja					
)	1				

) refreshes the displayed information.

## 3.2.5.4. Page Design Options

The	Page	Design	Options	button	(
-					

) displays a window which helps you specify necessary references of the resources. It is represented by a window with four tabs. The first one, **Actual Run-Time folders**, is used to replace absolute and relative path values when generating a preview:

۲	Page Design Options
-	sign Options
	can configure Visual Page Editor arguments, which will be used for
Actual Run	n-Time Folders Included css files Included tag libs Substituted El expressions
Absolute	Folder
Path	Browse
Scope	Page 🗸
Relative F	older
Path	Browse
Scope	Page 🗸
	Ok Cancel

### Figure 3.80. Page Design Options: Actual Run-Time folders

The second tab, **Included CSS files**, is used to add CSS files to be linked by Visual Page Editor when generating a preview:

tual Run-T	'ime Folders	Included css files	Included tag libs	Substituted El e	xpressions
cope	CSS File	Path			Add
					Edit
					Remove

### Figure 3.81. Page Design Options: Included CSS files

The third tab, **Included tag libs**, can be used to add Taglibs that can be used by the editor for getting appropriate templates to generate a preview:

)		Page De	sign Options		[
This Taglibs	ign Options s will be used ting a preview	by ∨isual Page Edi /, if this Taglibs doe	tor for getting app son't included on p	ropriate templa age	te 🚫
Actual Run-	Time Folders	Included css files	Included tag libs	Substituted El e	expressions
Scope	URI			Prefi×	Add
					Edit Remove
				ok	Cancel

Figure 3.82. Page Design Options: Included tag libs

And finally, the **Substituted El expressions** tab is used to add El expressions that will be substituted by the editor when generating a preview:

۲.		Page De	sign Options		×
Page Desig This EL expr preview		be substituted by V	visual Page Editor	when generating	a 🛞
Actual Run-Ti	ime Folders	Included css files	Included tag libs	Substituted El e	xpressions
Scope	El Expre	ssion		Value	Add
					Edit
					Remove
				Ok	Cancel

### Figure 3.83. Page Design Options: Substituted El expressions

The first two tabs of the window let you define actual runtime folders. The example below will help you understand how this can be done.

Suppose you have the following project structure:

```
WebContent/
pages/
img/
a.gif
header.jsp
main.jsp
```

The content of the header.jsp is:

```
My Header
<img src="img/a.gif"/>
```

and main.jsp content is:

```
<jsp:include page="pages/header.jsp" />
```

When you open the main.jsp file in the Visual Page Editor, it will not be able to resolve the image from the header, however it will work fine in runtime. To fix this in design time, click the **Page Design Options** button and set **Actual Run-Time Relative Folder** to [**Project Name**]  $\rightarrow$  **WebContent**  $\rightarrow$  **pages**, and you will see the image appeared.

Let's consider an example for other tabs. For instance, the definition of your CSS on the page is the next:

```
<link rel="stylesheet" type="text/css"
href="#{facesContext.externalContext.requestContextPath}/style.css"/>
```

This will work fine in runtime, but the Visual Page Editor does not know the value of requestContextPath in design time. In order to see the necessary styles applied in design time your should add a path to your stylesheet in the **CSS File Path** section.

The next URI section lets you add URI taglibs so that the editor knows where to find the tag libraries.

And the last Substituted EL expressions section is provided to specify the values for specific EL variables. It can be useful for a preview generation.

As an example look at the figure below:

<b>%</b>	° 🗆
<pre></pre>	×
✓ html ✓ Visual/Source Source Preview	×

### Figure 3.84. EL Expression

Here both in **Source** and **Visual** modes you see the EL expression #{user.name}. When you switch to **Preview** view, you will also see this expression. Now click the **Page Design Options** button and set the value for the **user.name** as **World**.

Name*	user.name
	Scope
	O Page: Only This Page
	Folder: Any Page at the Same Folder
	O Project: Any Page at the Same Project
alue	World

## Figure 3.85. Setting the Value for the EL Expression

As a result in **Visual** mode and **Preview** view the word **World** is displayed.

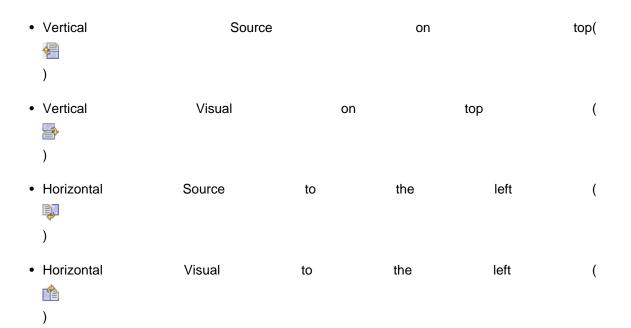
🗟 h	ello.jsp 🖾	- 8
	<pre></pre>	
<u>(n)</u>	○ - Font Name -   ◇ - Font Size -   ◇ B I U	»
	Hello, World!	
	<sup>™</sup> html <sup>™</sup>	×
Visu	al/Source Source Preview	

# Figure 3.86. The EL Expression Value

## 3.2.5.5. Visual/Source Editors splitting buttons

The **Visual/Source** Editors splitting buttons provide a way to choose one of the four possible layouts for the **Visual/Source** Editor.

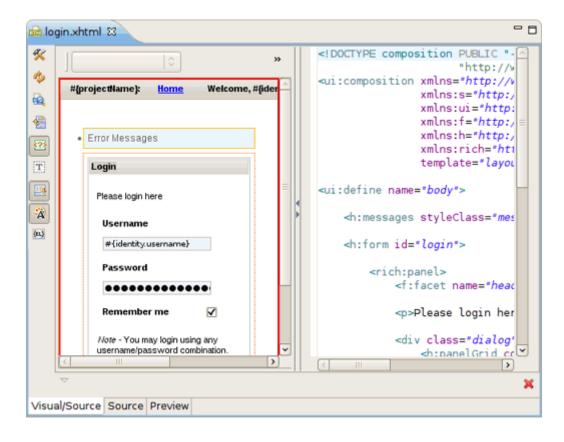
The available layouts and corresponding buttons are as follows:



💼 logi	in.xhtml 8	- 6
* *	<pre><!DOCTYPE composition PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//</th>     <th></th></pre>	
		$\mathbf{D}$
À	<a>  <a>  </a> - Font Name - </a>   <a>  <a>  <a>  <a>  <a>  <a>  <a> </a></a></a></a></a></a></a>	j »
(11)	#{projectName}: <u>Home</u> Welcome, #{identity.username}: <u>Login</u> Log	out
	• Error Messages Login	
	✓	ж
/isual	/Source Source Preview	

Figure 3.87. Visual Page Editor Before Layout Changing

Note, with the current view there is only *one* button, which provides the ability to move the **Source** and the **View** *in a clockwise direction*.



#### Figure 3.88. Visual Page Editor After Layout Changing

#### 3.2.5.6. Show Border for Unknown Tags

The	Show	border	for	unknown	tags	button	(
<b>?</b> ?							

) will display unknown tags in a border in the Visual section of the Visual Page Editor.

### 3.2.5.7. Show Non-visual Tags

The	Show	non-visual	tags	button	(
Т					

) will display non-visual tags in the Visual section of the Visual Page Editor.

In the figure you can see that the non-visual elements are displayed with gray dashed borders.

in.xhtml 🛿	
	- Font Name -  0] - Font Size -  0] B I U 🔏 A
#{projectName}: <u>Home</u>	Welcome, #{identity.username} Login Logou
ui:define	
<ul> <li>Error Messages</li> </ul>	
·	1
Login	
Please login here	
Username	#{identity:username}
Password	••••••
Remember me	
Note - You may login us	sing any username/password combination.
Login	
ullinser	
▽	
/Source Source Preview	

## Figure 3.89. Non-visual Tag in the VPE

You can also switch this option the Visual Page on in Editor preferences, having clicked on the Preferences button ( X

).

### 3.2.5.8. Show Selection Bar

At the bottom of the **Visual/Source** view there is a **Selection Tag Bar**. It's updated automatically, allowing you to see tags tree for a current component selected in Visual or Source mode. It also allows you to select tags parent and child tags.

nd lo	gin.xhtml 🖾	- 8
×	<ui:define name="body"></ui:define>	^
🤣 🗟	<h:messages styleclass="message"></h:messages>	=
	<h:form id="login"></h:form>	
229 [T]	<pre><rich:panel>     <f:facet name="header">Login</f:facet></rich:panel></pre>	
(n.)	<ul> <li>  <ul> <li>Font Name -</li> <li>  <ul> <li>Font Size -</li> <li>  <ul> <li>B I <u>U</u></li> </ul> </li> </ul></li></ul></li></ul>	**
	Login	^
	Please login here	_
	Username #{identity.username}	=
	Password •••••••••	
	Remember me 🔽	~
	<sup>▽</sup> ui:composition ~	×
Visu	al/Source Source Preview	

## Figure 3.90. Selection Tag Bar

If you want to hide the Selection Tag Bar, use the Show Selection Bar button (

) on the Visual Page Editor toolbar.

## 3.2.6. Page Preview

The Visual Page Editor comes with a design-time preview feature, which is available for:

- Struts Pages
- JSF Pages
- Seam Pages

Preview view is read-only, and it shows how the page will look like in a browser.

login.xhtml 🛙			-
#{projectName}:	Home	Welcome, #{identity.username}! Login	Logout
-	_		
Error Message	S		
Login			
Please login us	sing any userna	me and password	
Username		{identity.username}	
Osername	_		
Password	•		
Remember	me		
Login			
		Powered by Seam. Generated by seam-gen.	

### Figure 3.91. Preview View

## 3.2.7. Error Messages

The Visual Page Editor provides user friendly and effective error messages, which should make solving problems easier. The error messages contains a reference to the problem and its description. Also in the **Error** area you can find a link to Visual Page Editor forum and a **Details** button which is used to see a error trace.

If the error occurs while the editor is loading, the error message will contain information about of what might have caused the error (e.g. a missing library or errors in source code).

📾 ho	eme.xhtml 🛛			
** • •	<pre><!DOCTYPE composition PUBLIC "-//W3C//DTD XHTML 1.0 Transitiona</th>    <th>ransitional.dtd"&gt;</th><th></th></pre>	ransitional.dtd">		
<b>*</b> A	<h:messages globalonly="true" styleclass="message"></h:messages>			
(EL)	(<			
	♀ - Font Name -   ♀ - Font Size -   ♀ B ⊿	<u>u</u> <u>A</u>		
	Could not open the Visual Page Editor: nslWebBrowser is not available			
Visu	al/Source Source Preview			
	sks 🛞 Seam Components 🖓 Servers 🥺 Error Log 🛿	<b>3</b> ,	0,* 0 🗎 X	
-	filter text			
Message Plug-in			Date	
Q	Could not open the Visual Page Editor: nsIWebBrowser is not available	org.jboss.tools.vpe	3/30/10 12:23 PM	

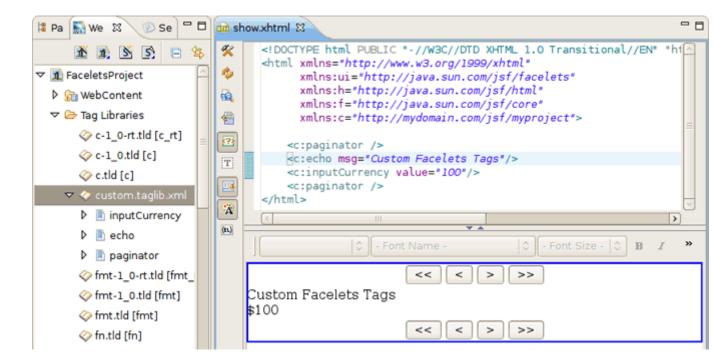
### Figure 3.92. Visual Page Error Message

## 3.2.8. Support for Custom Facelets Components

Visual Page Editor supports custom Facelets tag libraries both declared in the web.xml file (for details, see *Creating a component* [http://www.ibm.com/developerworks/java/library/j-facelets/ #N10294]) and packed into a JAR file.



Visual Page Editor recognizes the tags from the custom Facelets tag library and correctly renders them both in source and visual view of the editor.



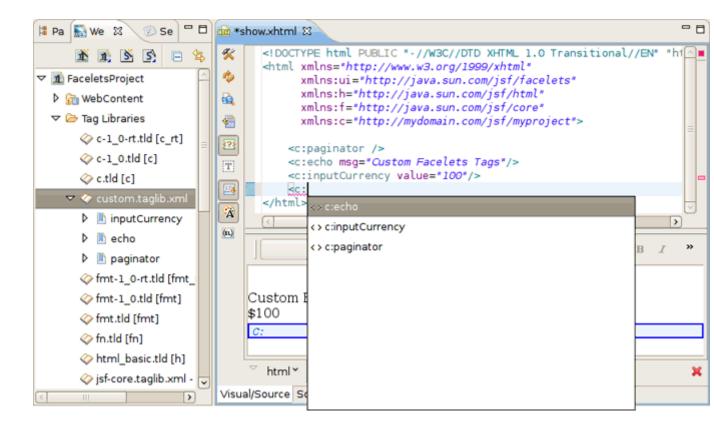
#### Figure 3.93. Custom Facelets Tags in the VPE

While editing an XHTML file that uses a custom Facelets components you can always make use of the following editor's features:

- Section 3.2.8.1, "Content Assist for Custom Facelets Components"
- Section 3.2.8.2, "OpenOn for Custom Facelets Components"

#### 3.2.8.1. Content Assist for Custom Facelets Components

Call the content assist as usual by using **Ctrl+Space** when typing a tag. You should see the custom Facelets tags defined in your Facelets tag library listed as proposals.



#### Figure 3.94. Content Assist for Custom Facelets Tags

#### 3.2.8.2. OpenOn for Custom Facelets Components

While developing using Facelets you can make use of:

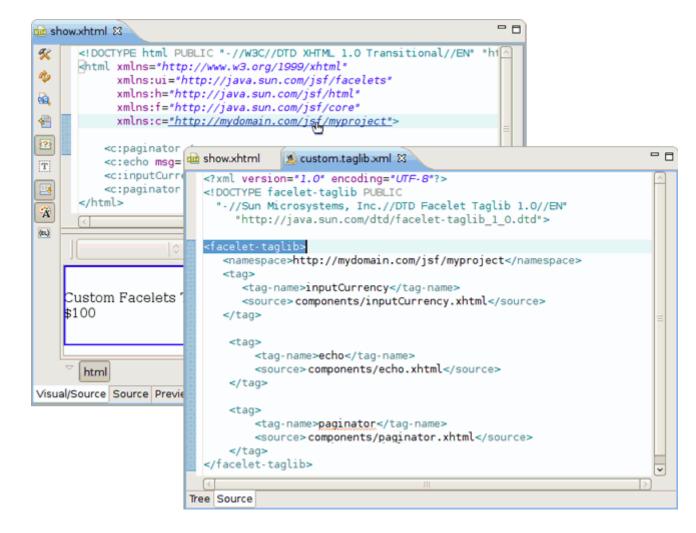
- Section 3.2.8.2.1, "OpenOn in XHTML Files That Use Custom Facelets Components"
- Section 3.2.8.2.2, "OpenOn in Custom Facelets Tag File (\*.taglib.xml)"

#### 3.2.8.2.1. OpenOn in XHTML Files That Use Custom Facelets Components

OpenOn functionality in XHTML files is available in two views of the Visual Page Editor:

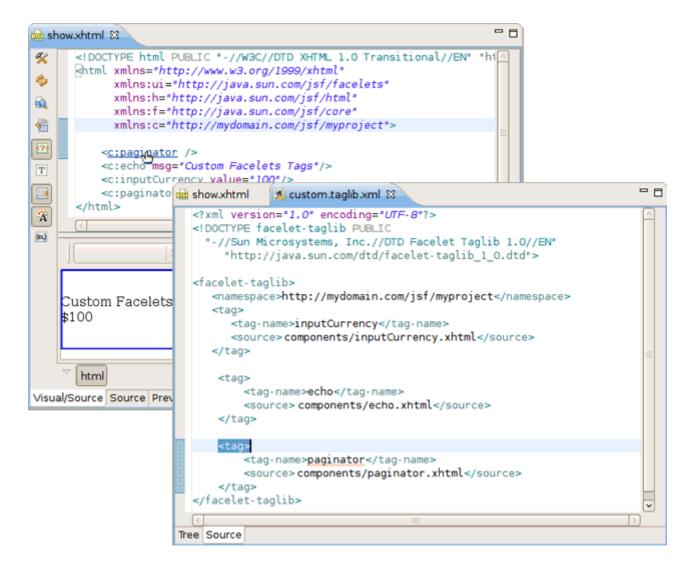
1. Source view

Using the **Ctrl+Click** keyboard shortcut on the namespace will open the Facelets tag file in a separate window.



## Figure 3.95. Opening a Custom Facelets Tag File

Using the **Ctrl+Click** keyboard shortcut on any custom Facelets tag declared on the page will do the same. The selected tag will be highlighted in the opened file.



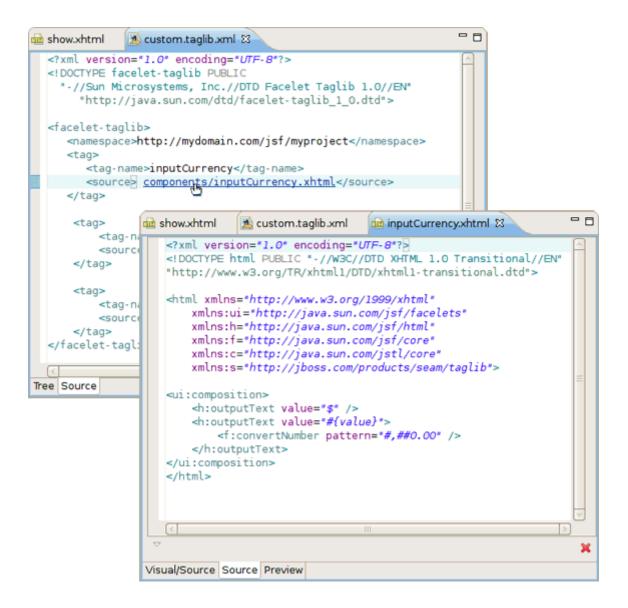
### Figure 3.96. Opening a Custom Facelets Tag File

#### 2. Visual view

In the visual view of the Visual Page Editor, double-click a custom component and the Facelets tag file (\*.taglib.xml) where it is declared will be opened.

### 3.2.8.2.2. OpenOn in Custom Facelets Tag File (\*.taglib.xml)

Using the **Ctrl+Click** keyboard shortcut on the path to source of the Facelets tag will open the component in its own editor.



### Figure 3.97. Opening a Custom Facelets Component

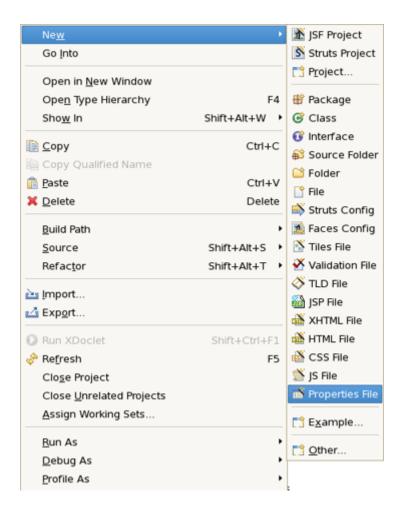
# **3.3. More Editors**

Besides Visual Page Editor JBDS is supplied with a huge range of various editors for different file types: properties, TLD, web.xml, tiles and so on.

## 3.3.1. Graphical Properties Editor

The **Properties** editor allows you to work in two different modes and also supports unicode characters.

To create a new properties file in the **Package Explorer** view, select **New**  $\rightarrow$  **Properties File** from the right-click context menu on the folder where you want to create the file.



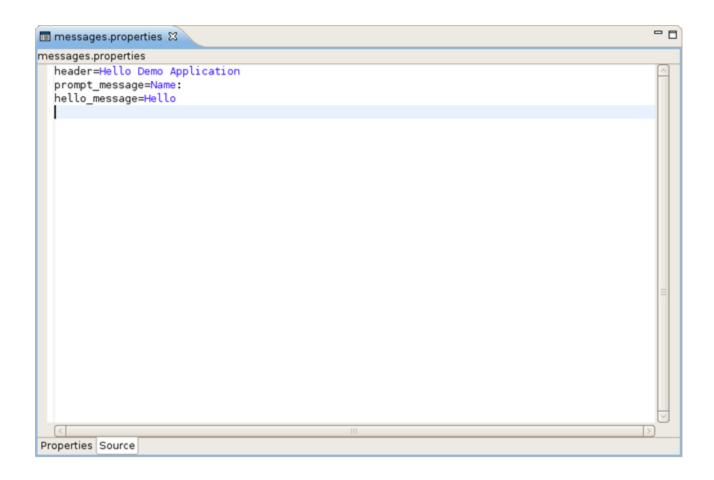
## Figure 3.98. Selecting Properties File

You can edit the file using a table-oriented "Properties" viewer:

🖬 messages.properties 🕱 🗖 🗖					
messages.properties					
▶ Filter					
name	value	Add			
header	Hello Demo Application				
prompt_message	Name:	Edit			
hello_message	Hello	Delete			
		Цр			
		Do <u>w</u> n			
Properties Source					

## Figure 3.99. "Properties" Viewer

You can also use a  $\ensuremath{\textbf{Source}}$  viewer for editing the file:



#### Figure 3.100. Source Viewer

# 3.3.2. Graphical Tag Library Editor

The **Tag Library Editor** comes with same features you will find in all other JBoss Developer Studio editors:

- Graphical and source edit modes
- Validation and error checking

# 3.3.2.1. Tree view

oss Tools Tag Librar	y Edito	or	
html_basic		▼ Tag Library	
🔷 html_basic.tld	Â	Tlibversion:	1.2
Listeners		Shortname:	h
🗹 Validator			
CommandButton		URI:	http://java.sun.com/jsf/html
👂 🧾 commandLink		Display-Name:	
👂 膨 dataTable		Small-Icon:	
👂 🔝 form		STIGITCOTT.	
👂 膨 graphicImage		Large-Icon:	
👂 🧾 inputHidden		Description:	his tag library contains JavaServer Faces 🦲
👂 膨 inputSecret			UIComponent + HTML RenderKit Renc
👂 膨 inputText			
👂 🧾 inputTextarea		- Defined	
👂 🧾 message		name	tagclass Add
👂 🧾 messages		commandButto	com.sun.faces.taglib.html_b
👂 🔝 outputFormat	-	commandLink	com.sun.faces.taglib.html_b

# Figure 3.101. Tree View

### 3.3.2.2. Source view

You can easily switch from **Tree** to **Source** by selecting the **Source** tab at the bottom of the editor.



Figure 3.102. Source View

You can easily add a new tag:

⊘ MyTLD.tld ⊠		- 8
JBoss Tools Tag Lib	rary Editor	
▼ MyTLD		Â
AyTLD.ttd      Listeners      Validator	Rename  New Validator	
<ul> <li>choose</li> <li>out</li> <li>if</li> <li>forEach</li> <li>param</li> <li>set</li> <li>when</li> <li>Functions</li> </ul>	Properties Properties Displa Tag Tag Tag File Small-rcon: Large-lcon: Description: My Tag Library	
* Functions	▼ Defined	
	name tagclass	<u>A</u> dd
		emove
	out         org.apache.taglibs.standard.tag.rt.xml.ExprTag           if         org.apache.taglibs.standard.tag.common.xml.lfTag	<u>E</u> dit
Tree Source	forEach org.apache.taglibs.standard.tag.common.xml.ForEa	<u>Up</u>

# Figure 3.103. Adding a New TLD Tag

You can also easily add a new attribute to an existing tag:

	ls Tag Library Ed			
MyTLD		▼ Tag		
🔷 Mytld	).tld	Name:	if	
📕 List 🗹 Vali		Tagclass:	org.apache.taglibs.standard.tag.common.xml.lfTa	rowse
🖪 cho	ose	Teiclass:	B	rowse
👂 🖪 out		Bodycontent:	JSP	•
<ul> <li>if</li> <li>if fore</li> <li>fore</li> <li>para</li> <li>set</li> <li>if set</li> <li>if whe</li> </ul>	Add Attribute	ragment Ctrl +		
	Paste	Ctrl +		
	X Delete Properties	Dele		
111	Verify	• ray	required	<u>A</u> dd

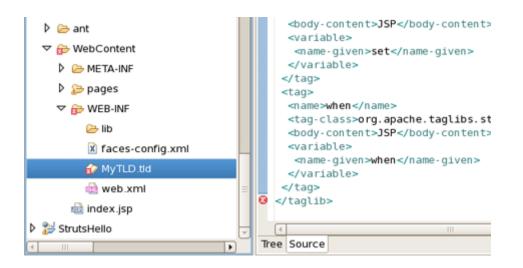
### Figure 3.104. Adding a New Attribute to TLD tag

Content assist is available when editing the file using the **Source** viewer:

Ø 1	MyTLD.tld 🕴 🔗 html_basic.tld			- 0	
	<pre>?xml version="1.0" encoding="L taglib xmlns="http://java.sun. xmlns:xsi="http://www.w3.ou xsi:schemaLocation="http:// version="2.0"&gt; <description>My Tag Library&lt;, display-name&gt;My Tag Libc/di <tlib-version>1.1<short-name>myTags</short-name>myTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyTagsmyT</tlib-version></description></pre>	.com/xml/ns/j2ee" rg/2001/XMLSchema-inst /java.sun.com/xml/ns/j /description> splay-name> ion>		 n/xml/ns/j2ee/w	
	description     display-name     function     icon     listener     short-name     tag     tag     tag-file	-	Element : short-name Defines a simple default n authoring tool to create n example, it may be used directives. Do not use whi or underscore. Data Type : string	ames with a mnemonicv as the preferred prefix v	alue; for alue in taglit
	taglib-extension     tib-version     uri	-			
6	, , , , , , , , , , , , , , , , , ,	, . 	-		
Tree	Source				

#### Figure 3.105. TLD Content Assist

In the **Source** viewer, if at any point a tag is incorrect or incomplete, an error will be indicated next to the line and also in the **Problems** view below.



### Figure 3.106. Error Reporting

# 3.3.3. Graphical Web Application File (web.xml) Editor

The deployment descriptor web.xml file is intended for describing the servlets, container-managed security constraints and various deployment properties specific for your web application.

To edit the deployment descriptor JBoss Developer Studio provides its own web.xml editor that comes with the same features you will find in all other JBoss Developer Studio editors:

- Graphical and source edit modes
- Validation and error checking

#### 3.3.3.1. Tree View

Switch to the **Tree** view if you want to edit the web.xml file in a graphical mode. All elements that web.xml could include are located in the left area of the editor in a tree format. Click a node on the left to display and edit its properties, which will appear in the right-hand area.

web	▼ Serviet		
z 💼 web.xml	Servlet-Name:	Faces Servlet	
Context Params Filters	Servlet-Class:	javax.faces.webapp.f	aces <u>B</u> rowse
👂 🔄 Listeners	Load-on-Startup:	1	
🗢 🔄 Serviets	• Init Params		
Faces Servlet:javax.faces.	param-name	param-value	<u>A</u> dd
る Faces Servlet:*.jsf			<u>R</u> emove
😂 Mime Mappings			<u>E</u> dit
le-list 🖉			Up
a Error Pages			Down
🖋 JSP Config 🧠 Security Constraints	- Security Roles	1	Domi
🧈 login-config 🍋 Security Roles	role-name	role-link	<u>A</u> dd
a Env Entries			<u>R</u> emove
🔄 ЕЈВ			<u>E</u> dit
a Services			Up
Resources			
襑 Message Destinations			Down

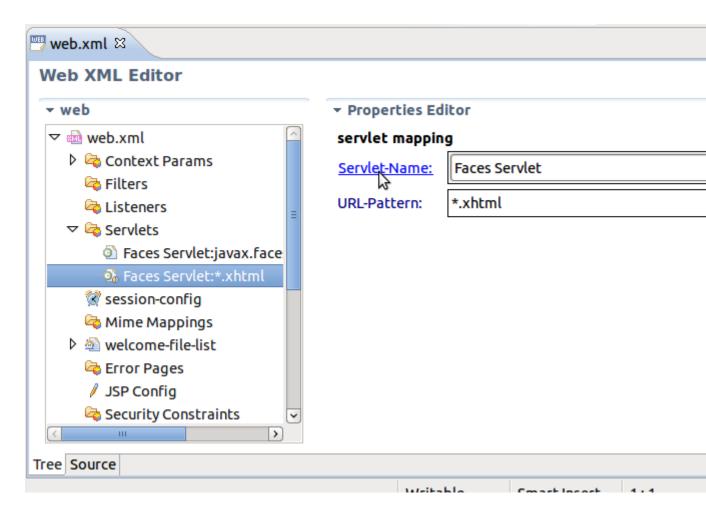
# Figure 3.107. Tree View for editing web.xml in a graphical mode

You can add any new elements right in the Tree viewer:

web		- Web Desc	riptor 2.5	
💼 web.xml 💡		Manage	unah	
👂 🔄 Context F	New	Þ	🗡 Context Param	
🧟 Filters	Rename		Filter Filter Mapping	
Listeners	🗐 Change Timestan	ηp	🚯 Listener	-
マ <sup>I</sup> Servlets	📄 Сору	Ctrl + C	Serviet	)
🖏 Faces		Ctrl + X	Servlet Mapping	
😭 session-c	where we are a second s	Ctrl + V	S Mime Mapping Error Page	<u>A</u> dd
襑 Mime Maj	Properties		Security Constraint	<u>R</u> emove
a welcome			Security Role	
a Error Page	25		🔉 Env Entry	<u>E</u> dit
/ JSP Config			苏 Ejb Ref	<u>Ш</u> р
Security (	-		🕉 Ejb Local Ref	Down
Iogin-coni			🍇 Service Ref	Down
		<ul> <li>Advanced</li> </ul>	💰 Resource Env Ref	
Security F		Small-Icon:	🕉 Resource Ref	Change
🗟 Env Entrie	25		📓 Message Destination Ref	
🔄 EJB		Large-lcon:	🖼 Message Destination	<u>C</u> hange
Services		Distributable	no	
🗟 Resource	s			
襑 Message	Destinations	Metadata-Co	mplete:	•
🥖 locale-en	coding-mapping-list	Encoding:		

#### Figure 3.108. Adding New Elements in Web XML Editor

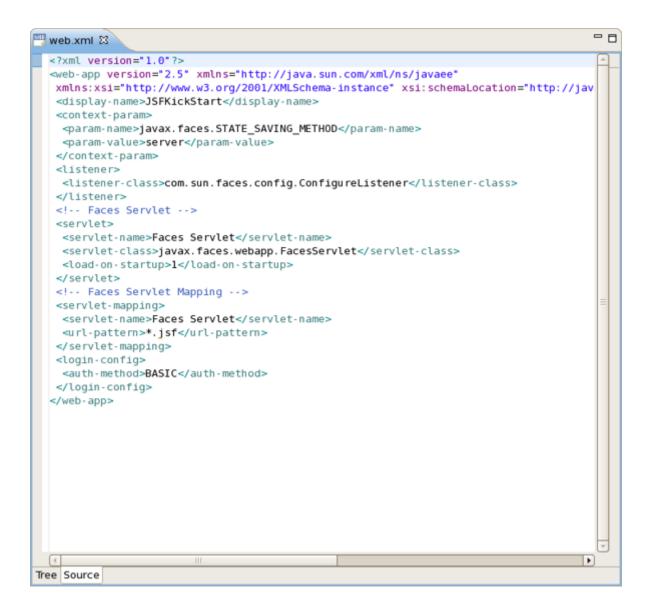
You can use the **Servlet-Name** drop-down field to select an XML element, and navigate to the location of the element within the **Source** of the XML file.



# Figure 3.109. Navigating to XML elements from the Properties Editor

# 3.3.3.2. Source View

Switch to the Source viewer to edit the web.xml file by hand at any time:



#### Figure 3.110. Web XML Source View

#### 3.3.3.3. Content Assist

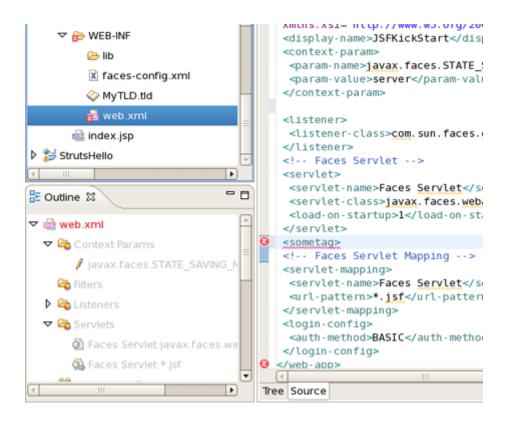
Content assist is available in the Source viewer. Simply click CTRL+Space anywhere in the file.

web.xml 🕱	
<pre><?xml version="1.0"?> </pre>	

# Figure 3.111. Web XML Content Assist

# 3.3.3.4. Errors Checking and Validation

If errors occur anywhere in the file, small red dots will appear next to the lines where the errors occurred. Also note that the file is marked by a small x in the **Package Explorer** view.



#### Figure 3.112. Errors Reporting

# 3.3.4. CSS Editor

The CSS editor comes with the same features you will find in all other JBoss Developer Studio editors.

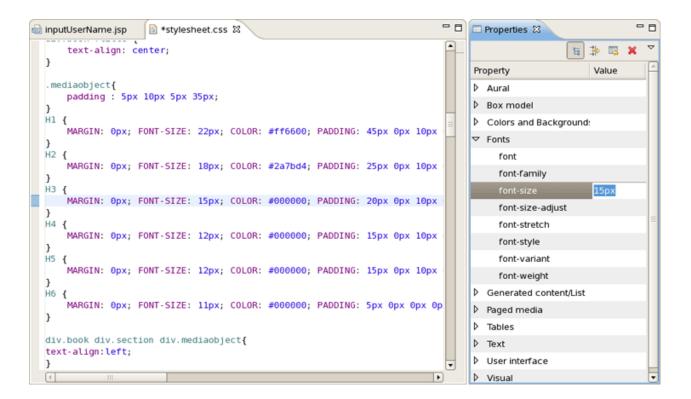
- Content assist
- Validation and error checking

With the CSS (Cascading Style Sheet) editor, you can take advantage of code prompting:

linputUserName.jsp	- 0
<pre>} .itemizedlist {    FONT-SIZE: 12px; PADDING-BOTTOM: 0px; MARGIN: 0px; PADDING-TOP: 0px;TEXT-ALIGN: just }.term {</pre>	:11)
FON   PRE.JAV   PRE.JAV   border-left-color   LIN   border-left-style   PRE.XML   border-right   border-right-color   LIN   border-right-color   LIN   border-right-style   PRE.XHT   border-right-style   PRE.XHT   border-right-style   border-right-style   border-right-style   border-right-width   LIN   border-style   border-top	
<pre>COL border-top-color } .java_keyword { FONT-WEIGHT: bold; COLOR: rgb(0,0,0) } .java_javadoc_comment { COLOR: rgb(147,147,147); FONT-STYLE: italic; BACKGROUND-COLOR: rgb(247,247,247) } </pre>	•

# Figure 3.113. CSS Editor

And you can also use the **Properties** view next to the editor to edit existing stylesheet declaration properties:

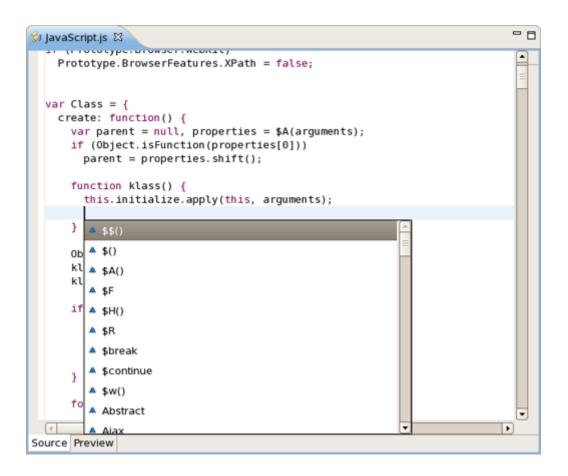


#### Figure 3.114. Properties View in CSS Editor

The **CSS** perspective is available to facilitate working on Cascading Style Sheets. For more information please read *Chapter 6, CSS Editing Perspective* 

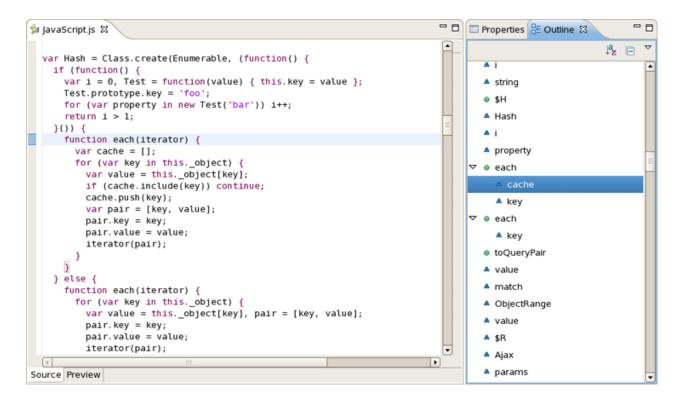
## 3.3.5. JavaScript Editor

The JavaScript editor is a Source viewer in which you can use code assist:



#### Figure 3.115. JavaScript Editor

You can also use the JavaScript editor with the **Outline** view to navigate around the file:



#### Figure 3.116. JavaScript Editor with the Outline view

## 3.3.6. XSD Editor

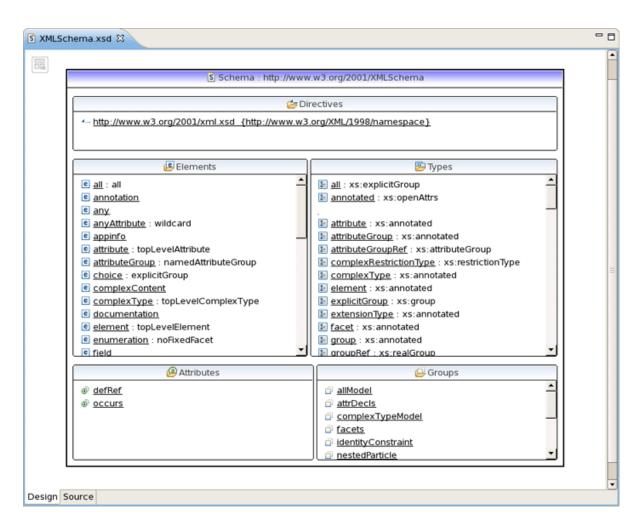
JBoss Developer Studio comes with an XSD Editor for XML Schema files. This editor comes from the Web Tools Project (WTP) (see *WTP Getting Started* [http://www.eclipse.org/webtools/ testtutorials/gettingstarted/GettingStarted.html]).

To create a new XSD file, right-click a folder in the Package Explorer view, select New  $\rightarrow$  Other... from the context menu and then select XML  $\rightarrow$  XML Schema File in the dialog box.

٥	New	×
Select a wizard		
Create a new XML schema file		
Wizards:		
type filter text		4
👂 🧀 User Assistance		^
👂 🗁 Web		
Web Services		
V 🗁 XML		
💕 DTD File		
🛣 XML File		
🗳 XML Schema File		
😼 XSL		=
👂 🗁 Examples		
Reck	Next > Cancel	Finish

# Figure 3.117. Creating New XSD file

The XSD Editor includes two viewers for working on the file, a **Design** viewer and a **Source** viewer:



#### Figure 3.118. Source Viewer in XSD Editor

In the **Design** viewer you can drill down on an element by double-clicking on it:

XMLSchema.xsd 🛙		
choice	explicitGroup	
	(a) name NCName	
	In the second	
	🔞 anyAttribute	
	🖉 annotation [01] (annotationType)	
	e group groupRef	
	element localElement	
	🚥 🙀 🐙 choice explicitGroup	
	🕵 🖉 🖉 🖉	
	🖉 any (anyType)	
sign Source		

# Figure 3.119. Design Viewer in XSD Editor

Various edit options are available when you right-click an element in the diagram:

Image: Choice       Image: Choice service serv	s) XMLSchema.xsd 🛛		- t
	E choice	Image: sequen end of the sequence end of the	

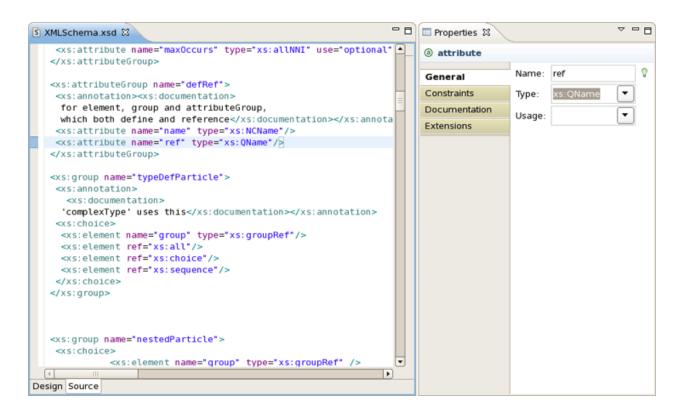
# Figure 3.120. Edit Options in XSD Editor Context Menu.

You can also use the **Properties** view to edit a selected element:

S XMLSchema.xsd	x						- 0
🗟 choice				🗈 expli	citGroup	p	
				a name		NCName	
				In the second		QName	
				🔞 anyAttribute			
				Æ annotation	[01]	(annotationType)	
			Г	c group		groupRef	
				element		localElement	=
			₽. <sub>₽.€</sub> .	choice		explicitGroup	
			0	🛃 sequence		explicitGroup	
				Æ any		(anyType)	
							v.
Design Source							
Properties							~ - 8
attribute							
General	Name:	ref					9
Constraints	Type:	xs:Ql	Name				•
Documentation	Usage:						•
Extensions							

### Figure 3.121. Properties View in XSD Editor

You can also use a **Source** viewer for the file. In this viewer, along with direct editing of the source code, you can also edit the file by using the **Properties** view on the right:



# Figure 3.122. Using Source Viewer and Properties View together for source code editing

# 3.3.7. Support for XML Schema

JBoss Developer Studio fully supports XML files based on schemas as well as DTDs:

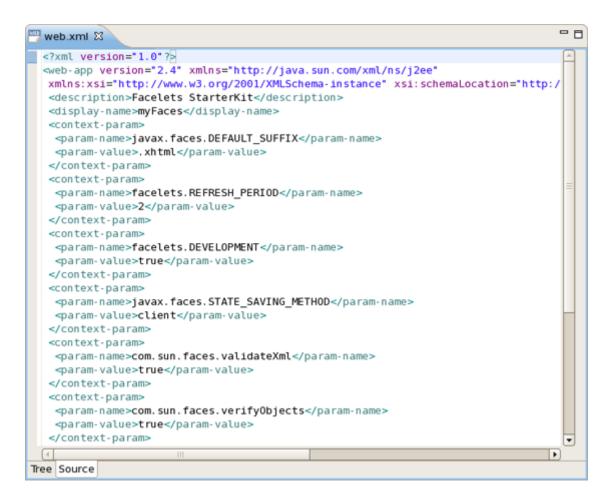


Figure 3.123. XML File



#### Note:

In case you want to use your own DTD or XML Schema make sure that this DTD or XML Schema is not listed in XML Catalog. If it is, you can't work with your DTD and XML Schema and JBoss Tool which uses this DTD or XML Schema. More information about XML Catalog you can find in *Eclipse Documentation* [http://help.eclipse.org/galileo/index.jsp?topic=/ org.eclipse.wst.xmleditor.doc.user/topics/cxmlcat.html] and on *XML Catalog Tutorial page* [http://www.eclipse.org/webtools/community/tutorials/XMLCatalog/ XMLCatalogTutorial.html].

i

# **Browsers**

Different browsers are available for testing the look of a web page or site before going to production. This chapter outlines each browser type available and how to utilize them.

#### Note

These web browsers are only for testing, contents may appear differently depending on the browser used to view your page or site outside of the workbench environment.

# 4.1. Generic web browser

A generic web browser is available for testing within your workbench environment. To access the browser, right-click on your HTML, XHTML or other web page extention file and navigate through the context menu to **Open With**  $\rightarrow$  **Web Browser**.

e Edit Navigate Sea	Open With	
<ul> <li>Edit Navigate Sea</li> <li>Sea</li> <li>Sea</li></ul>	Copy Copy Qualified Name Paste Delete Remove from Context Mark as Landmark Build Path Move	C Shift+Ctrl+Alt+ Shift+Ctrl+A
<ul> <li>B Deployment Desci</li> <li>Java Resources</li> <li>JavaScript Resources</li> <li>Deployment Desci</li> </ul>	Rename Import Export	
<ul> <li>Control Deployed Resourc</li> <li>Deployed Resourc</li> </ul>	Refresh	
<ul> <li>✓ ➢ WebContent</li> <li>▷ ➢ META-INF</li> <li>✓ ➢ WEB-INF</li> <li>➢ lib</li> <li>▷ mì test.html</li> <li>▷ inì web.xml</li> </ul>	Mark as Deployable Validate Show in Remote Systems view Run As Debug As Profile As	

# Figure 4.1. Mobile web browser simulator

A new tab will launch in your workbench, displaying the contents of the page you selected.

# 4.2. Mobile web browser

**BrowserSim** simulates a mobile web browser so you can see how your web page or site will be viewable on mobile devices.

# 4.2.1. System requirements

To run the mobile browser simulator you will require certain configurations depending on your operating system.

Linux distributions:

• WebKitGTK 1.2.0 or newer must be installed and available within the library load path. This is setup by default on Red Hat Enterprise Linux and Ubuntu. For other distributions you may need to install the libwebkitgtk package.

Windows operating systems:

- 32-bit version of JBoss tooling.
- Quicktime or iTunes. Each of these installs Apple Application Support in the folder BrowserSim assumes. Apple Application Support is necessary for BrowserSim to work correctly on Windows.

There are no specific requirements for Red Hat Enterprise Linux and Macintosh operating systems.

## 4.2.2. Using BrowserSim

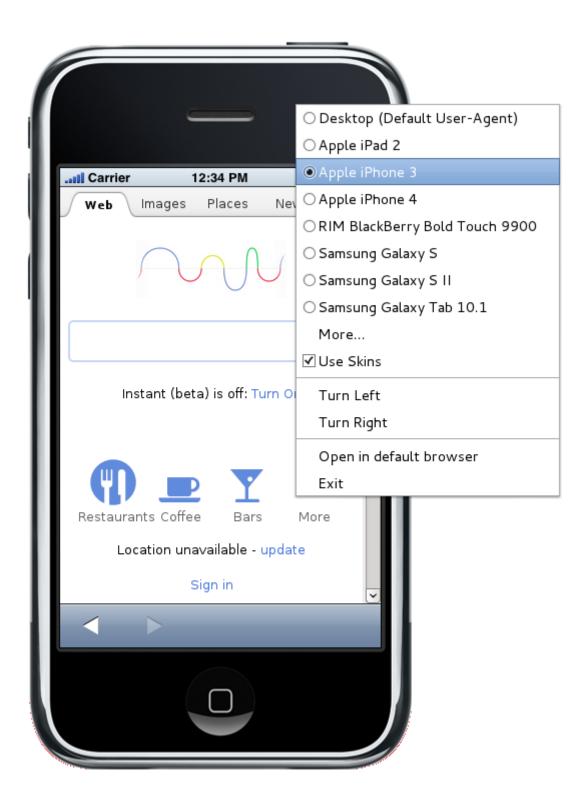
To test your page or site using **BrowserSim**, right-click on your HTML, XHTML or other web page extention file and navigate through the context menu to **Open With**  $\rightarrow$  **BrowserSim**.

e Edit Navigate Search	Open With	
	Сору	
Ĵ~ 🗄 🗟 占 ] 🏇 Y ◯ Y	Copy Qualified Name	
) 🖻 🖆 🖨 🖋 🖓 🛀	Paste	
Draiget Euglaran M	Delete	
Project Explorer 😫	Remove from Context	Shift+Ctrl+
🖹 🔄 😨	Mark as Landmark	Shift+C
🛃 dwpTest	Build Path	
JAX-WS Web Services	Move	
Deployment Descriptor.	Rename	
👂 🕮 Java Resources	Import	
👂 🛋 JavaScript Resources 👘	Export	
Deployed Resources	Refresh	
👂 🗁 build		
🗢 🗁 WebContent	Mark as Deployable	
🕨 🗁 META-INF	Validate	
🗢 🗁 WEB-INF	Show in Remote Systems view	
🕞 lib	Run As	
🕨 📠 test.html	Debug As	
👂 📠 web.xml	Profile As	

#### Figure 4.2. Mobile web browser simulator

A new window will launch, displaying the contents of the page you selected as it will appear on mobile devices.

You are able to select the type of mobile device to simulate the browser on by right-clicking on part of the theme and selecting from the context menu.



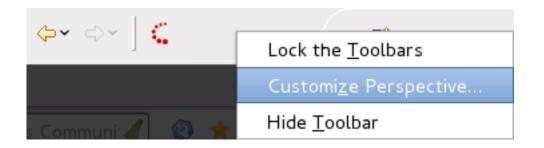
#### Figure 4.3. Mobile web browser device selection

A **View page source** is also available from the contexzt menu. This can be helpful when wishing to view the HTML code of an Internet site.

To open the **BrowserSim** without using a context menu, click on the **BrowserSim** button

in your toolbar. If the button is not in your toolbar you can add it by undertaking the following:

• Right-click on the toolbar at the top of your workspace and select **Customize Perspective** from the context menu.



#### Figure 4.4. Toolbar context menu

• Click on the **Command Groups Availability** tab and ensure the **BrowserSim** command group is checked.

Tool Bar Visibility	Menu Visibility	Cor	mmand Groups Availability	Shortcuts		
Select the command groups that you want to see added to the current perspective (Web Developm identifies which menu items and/or toolbar items are added to the perspective by the selected comm						
Available command	d groups:		Menubar details:			Toolbar details
3 %ActionSet.Pr	eviewWithSecu	il 🗠				🗢 🚍 Browser
🗹 Annotation Na	avigation					🔲 Run B
🗆 Ant Editor Pre	esentation	Ξ				
✓ Archives						
Breakpoints						
✓ BrowserSim						

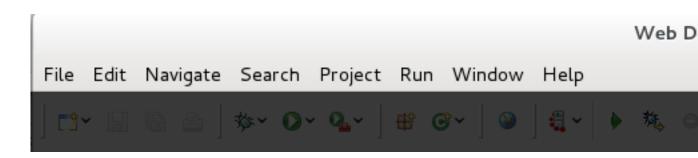
#### Figure 4.5. Command Groups Availability tab

• Click on the **Tool Bar Visibility** tab and select the **BrowserSim** toolbar items menu and click the **OK** button.

Tool Bar Visibility	Menu Visibility	Command Groups Availability	Shortcuts		
Choose which tool bar items to display.					
Tool Bar Structure	e:				
P D D Jpt Creat	tion				
🕨 🔲 🖽 Java EE					
🕨 🗆 🛅 Java Brov	wsing Task Conte	ext			
CVS					
🕨 🗆 🛅 Team					
▶ □   Window	Working Set				
▶ □   Working	Set Manipulation	1			
🕨 🗆 📰 Editor Pr	esentation				
🕨 🗆 🛅 JavaScrip	ot Element Creat	ion			
🕨 🗹 🚍 Web Bro	wser				
▶ 🗆 🖻 Server					
🕨 🗆 📰 Web Pro	ject Wizards Act	ion Set			
▶ 🗆 📰 Launch tl	he Web Services	Explorer			
🕨 🗹 🚍 JBoss To	ols WTP Server	Actions			
🕨 🖃 🔚 Search					
🔻 🗹 🚍 Browser:	Sim				
🗹 📕 Run Bi	rowserSim				
👂 🖃 🖂 Navigate					
□ Filter by comm	and group				
?				[	

# Figure 4.6. Tool Bar Visibility tab

• The **BrowserSim** toolbar button will now be present in the toolbar for your current perspective.



### Figure 4.7. Tool Bar Visibility tab

Launching **BrowserSim** from the toolbar will either present you with the simulator and a blank webpage or the webpage currently open in the **Internal Web Browser**.



Figure 4.8. Tool Bar Visibility tab

# **JBoss Tools Palette**

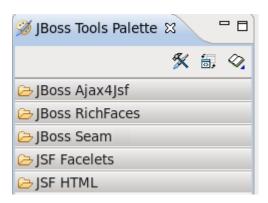
This chapter will introduce you to the functionality provided by **JBoss Tools Palette**. The Palette allows you to quickly and easily create your JSP or JSF pages.

The JBoss Tools Palette allows you to:

- Insert tags into a JSP or JSF page with one click
- Add custom and 3rd party tags

The **JBoss Tools Palette** contains a developer's project tag libraries and provides possibility to add any tag libraries to it. Also you can choose a necessary one from the list of already existing tag libraries:

- HTML
- JBoss
- JSF
- JSTL
- MyFaces
- Oracle ADF Faces
- Struts
- XHTML



#### Figure 5.1. Default View of The JBoss Tools Palette

By default the JBoss Tools Palette is not displayed. If you want to use it select Window  $\rightarrow$  Show View Other...  $\rightarrow$  JBoss Tools Web  $\rightarrow$  JBoss Tools Palette from the menu bar.

The standard Eclipse Palette is displayed by default in both Web Development and Seam perspectives. Now the standard Eclipse Palette is featured with all JBoss Tools Palette options and capabilities.

To open the standard Eclipse Palette navigate to Window  $\rightarrow$  Show View  $\rightarrow$  Others  $\rightarrow$  General  $\rightarrow$  Palette.

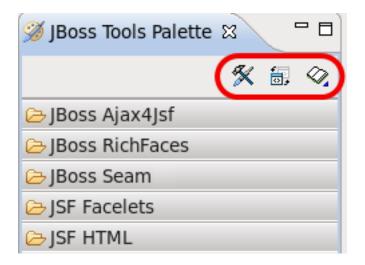
The differences between the two palettes are as follows:

- The standard Eclipse Palette is blank by default. Content of the palette is available only if Visual Page Editor is open and active, while JBoss Tools Palette always contains a predefined set of components.
- The Expanded/Collapsed state of components in the standard Eclipse Palette is not global as in JBoss Tools Palette. State is associated with an instance of Visual Page Editor. It means that the state can be different for various files and each new file opened in Visual Page Editor will have the default state of Palette with all components collapsed.

# 5.1. Palette Options

The Palette can be customized by using the following buttons on the Palette toolbar, which provide the following functionality:

- · editing the palette content by adding, removing or changing the palette elements
- · showing or hiding groups and subgroups
- importing groups and subgroups



#### Figure 5.2. Palette Buttons

#### 5.1.1. Palette Editor

The **JBoss Tools Palette** contains existing libraries of tags, and the **Palette editor** provides a way to add a new library, or edit existing libraries.

То	open	the	editor,	click	on	the	Palette	Editor	icon	(
X										
).										

The window has two parts. There is a reflected grouped list of components on the left side of the palette editor. Each group is divided into multiple groups, each of which is a tag library. To the right side of the palette editor is an editing window where it is possible to change values of group or tag library attributes that you have chosen on the left part of the window.

It can also be done by right click and using **Edit...** option.

For example, **JSF** group consists of **Core**, **Facelets**, **HTML** tag libraries and the attributes as **name**, **description** and **hidden** which are available for editing:

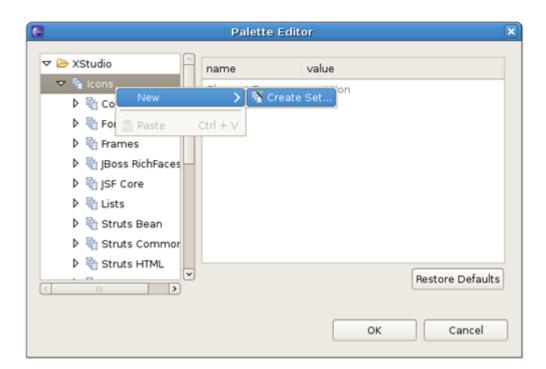
•		Palette Edi	tor		X
▽ 🗁 XStudio	A	name	value		
Icons		Element Type	group		1
⊽ 🚿 Palette		Name	JSF		
D 🧰 HTML		Description			
🕨 😑 JBoss		Hidden	no		
🗢 🚔 JSF					
🕨 🐸 Core					
Facelets					
D 😂 HTML	Ч				
ISTL					
MyFaces	~				5
	C			Restore Defaults	J
			ОК	Cancel	

#### Figure 5.3. Tag Libraries of the JSF Group

The Palette Editor provides the following functionality when working with existing tags or icons:

• To work with a set of icons. Icons is the root folder for the icon sets. The first step is creating the icon set. Right click on the Icons folder and select Create → Create Set....

Set the value of the name in the **Add Icons** window and click the **Finish** button. A new element will appear in the list.



#### Figure 5.4. Creating a Set of Icons

Also you can delete the set. Right click on the set of icons that you wish to remove and select the **Delete** option from the pop-up menu, or click the **Delete** keyboard button.

 To edit icons in the chosen set. When the set of icons is created, new icons can be imported to it. Choose the required set and select the option Create → Import Icon... from the pop-up menu that appears after you right-click on a folder.

E	Palette	Editor	×
▼ 🗁 XStudio	name	value	
マ 🖏 Icons	Element Type	e set of icons	
Rev	>	Normate Set	
🕽 🎼 Frames 📗 Copy	Ctrl + C	Number Icon	
👂 🖏 JBoss Ri 😽 Cut	Ctrl + X		
👂 🍓 JSF Core 🧰 Paste	Ctrl + V		
🕨 🖏 Lists 🗙 Delete	e Delete		
👂 🏪 Struts Bean		4	
Struts Commor			
Struts HTML	]		Restore Defaults
		ок	Cancel

## Figure 5.5. Creating Icons

Set the name of the icon and the path and click the **Finish** button.

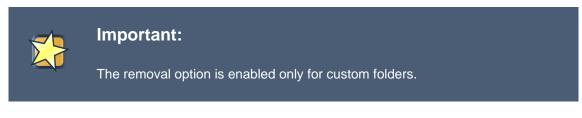
• To work with a group of tag libraries. The first step in working with the editor is creating a group of libraries. It's very easy to do, right click on the Palette folder and select Create → Create Group...

Set a name of a group in the **Create Group** window and click the **OK** button. A new element will appear at the end of the list.

6	Palette Ec	ditor	×
▼ 🗁 XStudio	name	value	
Þ 🏪 Icons	Element Type	partition	
▼ 💋 Palette New	Create		
▷		croup in the	
Paste Ctr       Image: Ctr	+ V		
Þ 🖨 jst∟			
🕨 🚊 MyFaces			
Oracle ADF Faces			
Struts			
▶ 🖨 XHTML		Restore D	Defaults
		ОК Са	incel

## Figure 5.6. Creating a Group of Tag Libraries

You are allowed to edit or delete a group as well. If you'd like to change attributes of a group, use the right editing window of the palette editor or the **Edit...** option, like it was mentioned before. In order to remove the group, right click on the group that you wish to remove and choose the **Delete** option or click the **Delete** keyboard button.



• To work with a tag library. The group maintains a list of tag libraries. If you would like to create your own library, right click on the group and select the **Create Group...** option.

	Palette E	litor	
✓ ➢ XStudio	name	value	
Icons	Element Type	group	
⊽ 🚿 Palette	Name	HTML	
🕨 🚔 HTI 💕 Create Gro	up		
D 🥃 JBo		yes	
D 🔄 JSF			
👂 📄 JST 📗 Copy	Ctrl + C		
👂 🗎 My 😽 Cut	Ctrl + X		
👂 📄 Ora 💼 Paste	Ctrl + V		
👂 🚊 Str 💥 Delete	Delete		
			Restore Defaults
,		ОК	Cancel

#### Figure 5.7. Creating a tag library

After setting the attribute name and the path of the icon, click the **OK** button.



You are allowed to edit or delete the tag library, as well. If you'd like to change attributes of the library or choose another icon, use the right editing window of the palette editor or the **Edit...** option. In order to remove the tag library, right click on the library that you wish to remove and chose the **Delete** option or click the **Delete** keyboard button.

		Important: The removal option is enabled only for custom tag libraries.
,	To work with	n a tag element. When the library folder is created, new tags can be added to

it. Choose the required library and select the **Create**  $\rightarrow$  **Create Macro...** option from the popup menu that appears after you right-click on a folder.

E		Pal	ette Edit	or	×
<ul> <li>✓</li></ul>	-	name Element Name	Туре	value sub-group Block	
	Edit	lcon >	<u> </u>	http://www.w3.org/TF e Macro	R/REC-html40
▷ 🐸 Fr 🗎 ▷ 🐸 S 😚	C <b>opy</b> Cut Paste	<b>Ctrl + C</b> Ctrl + X Ctrl + V	refix c insertio	true no	
	Delete	Delete			Restore Defaults
				ОК	Cancel

#### Figure 5.8. Creating a tag element

In the Add Palette Macro window you can configure the tag element. The Name attribute is mandatory, as it defines the name of the tag element. Other settings are optional. You can choose the icon and set the Start Text and the End Text for your tag element. If your tag text is too long, use the Change... button to see it all. The pipe ("|") symbol can be used to control the cursors position for the start text and end text values.

1	Palette Eo	ditor
▼ 🗁 XStudio	name	value
👂 🏪 Icons	Element Type	macro
🗢 🚿 Palette	Name	а
🗢 😑 HTML	Icon	%Icons%/Struts HTML/link
🕨 🐸 Block	Large Icon	
🗢 😂 Core	Description	<html></html>
ee a	Start Text	<a href=" "></a>
address	End Text	
area	Automatically Re	efo yes
ody		-
41	~	
· · · · · · · · · · · · · · · · · · ·	0	Restore Defaults
		OK Cancel
		OK Cance

#### Figure 5.9. Parameters of the Palette element

After all the attributes are set, click the **Finish** button.



You are also allowed to edit or delete the tag. If you would like to change the attributes of the tag or choose another icon for it, use the right editing window of the palette editor or the Edit... option from the pop-up menu. In order to remove the tag, right click on the tag that you wish to remove and chose the Delete option, or click the Delete keyboard button.



Important:

The removal option is enabled only for custom tags. JBoss Palette tags can not be removed but can be modified.

If you have changed any object in the tree view and you don't like the final result you can always use the Restore Defaults button. Clicking this button will restore defaults for the object selected and for its children elements. Please remember that the button will only restore data for objects defined in the default palette. If selected object is created by you, the button will be disabled. Child objects added by you will not be removed.

When updating JBoss Tools the palette content is not updated.

## 5.1.2. Show/Hide

**Show/Hide** is a very useful feature that allows you to control the number of tag groups that are shown on the palette.

• Click the **Show/Hide** button(

), at the top right side of the JBoss Tools Palette.

• In the dialog Show/Hide Drawers check the groups the libraries of which you want to be shown on the palette:

۲	Show/Hide Drawers	×
Customiz	e Palette	
<ul> <li>▷ ☑ HTM</li> <li>▷ ☑ JBos</li> <li>▷ ☑ JSF</li> <li>▷ ☑ JSTI</li> <li>▷ ☑ MyF</li> <li>▷ □ Ora</li> <li>▷ □ Stru</li> <li>▷ ☑ XHT</li> </ul>	ss - faces cle ADF Faces its	Show All Hide All
	Ok	Cancel

#### Figure 5.10. Show/Hide Drawers

If libraries are not displayed in the palette, check whether they are selected. Click the plus sign to expand the libraries of the group and make sure that a tick is put next to the wanted libraries.

• Click the **OK** button. The new groups will now be shown on the palette:

🚿 JBoss Tools Palette 🛿 🦳 🗖
🛠 🗐 🔗
🗁 HTML Block
🔁 HTML Core
🔁 HTML Form
🔁 HTML Frames
🔁 HTML Scripts
🔁 HTML Table
🔁 HTML Text
🔁 JBoss Ajax4Jsf
🔁 JBoss RichFaces
🔁 JBoss Seam
≥ JSF Facelets
≥ JSF HTML
MyFaces Extensions
🗁 MyFaces Sandbox
🗁 MyFaces Tomahawk
🔁 XHTML List
🔁 XHTML Object
➢ XHTML Structural
🔁 XHTML Table
🗁 XHTML Text
🗁 XHTML XForms Basic

## Figure 5.11. New Added Groups

The names of the elements are compound. The first part is the group name and the second is the library name.

# 5.1.3. Import

The **Import** button lets you add a custom or 3rd party tag library to JBoss Tools Palette. Find out more information on how to add particular tags see the *Section 5.2.2.2, "Import Button"* section.

# 5.2. Using the Palette

# 5.2.1. Inserting Tags into a JSP File

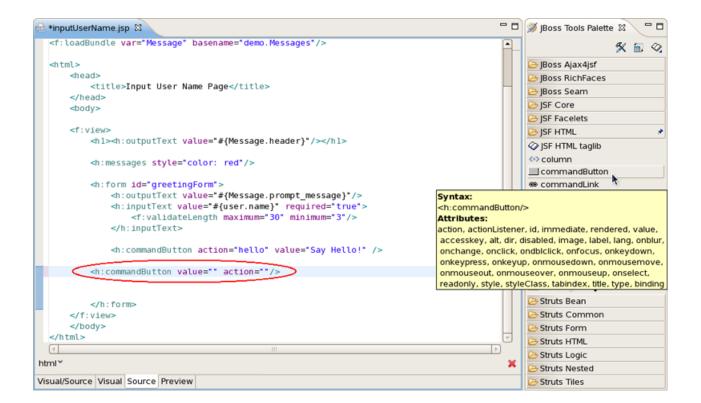
A new tag can be added into any text file including JSP, HTM, HTML and XHTML.

Open your JSP file, place the cursor in a place where you would like to add a tag, and then click that tag in the palette. In the **Insert Tag** window that appears, you can set the value of **general** and **advanced** attributes of the tag that you choose.

E	Insert Tag	, X
<h:commandbutto< th=""><th>n&gt; attributes</th><th></th></h:commandbutto<>	n> attributes	
General Advanced		
Attribute name	Value	- -
action		=
value		
accesskey		
actionListener		
alt		
binding		
dir		
disabled		
id		
image		
0		Einish Cancel

# Figure 5.12. Inserting Tag

In the example below the **commandButton** tag has been inserted.



# Figure 5.13. Inserting Tag



The cursor position after adding a tag into a file is specified by "|" symbol in the tag template on the right in the Palette Editor window.

6	Palette Edit	or:	×
✓ ➢ Form → button	Palette Edit  name Element Type Name Icon Large Icon Description	value macro input <html></html>	×
<ul> <li>↔ file</li> <li>↔ form</li> <li>↔ hidden</li> <li>↔ input</li> </ul>	Start Text End Text Automatically Refo	<input name="" type=" "/>	
input button	v	Restore Defaults OK Cancel	

## Figure 5.14. Palette Editor

Above you can see where the cursor position for  $HTML \rightarrow Form \rightarrow input$  is set. After adding this tag into your file the cursor will be in the attribute type. At this point you can straight use the **Ctrl+Space** keyboard shortcut to display a list of possible values.

🖻 home.xhtml 🛛 📾 *inputname.xhtn	ni 🛛 🖓
<ui:composition td="" templ<=""><td>ate="/templates/common.xhtml"&gt;</td></ui:composition>	ate="/templates/common.xhtml">
<ui:define name="*&lt;/td"><td>pageTitle*&gt;JSF 1.2 and Facelets under Tomcat. KickStart Application</td></ui:define>	pageTitle*>JSF 1.2 and Facelets under Tomcat. KickStart Application
<ui:define name="*&lt;/td"><td><pre>pageHeader"&gt;JSF 1.2 Hello Application</pre></td></ui:define>	<pre>pageHeader"&gt;JSF 1.2 Hello Application</pre>
<ui:define name="*&lt;/td"><td>body"&gt;</td></ui:define>	body">
	owSummary="true" showDetail="false" style="color: red; font-weight: bold;
	:form" id="helloForm">
<input button"<="" name="&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;ttribute : type&lt;/td&gt;&lt;td&gt;© " td="" type=""/>	
ata Type : ENUM numerated Values :	() "checkbox"
- text	@ "file"
- password	"hidden"
- checkbox	
- radio - submit	() "image"
- reset	(3) "password"
- file	() "radio"
- hidden	@ "reset"
- image - button	(a) "submit"
- button	
	@ "text"

# Figure 5.15. Cursor position

# 5.2.2. Adding Custom JSF Tags to the JBoss Tools Palette

There are two ways to add any custom (including custom Facelets libraries) or 3rd party tag library to the JBoss Tools Palette:

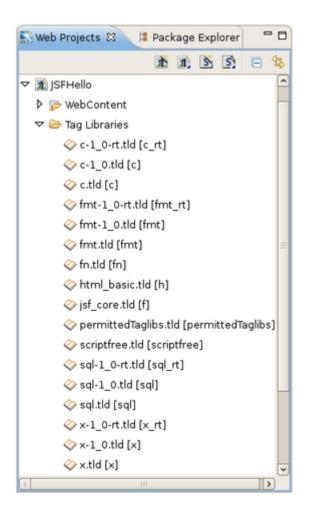
• Drag-and-drop from the Web Projects view

• The Import button on the JBoss Tools Palette

Before you add your custom component library, you need to make sure it is included in your project. You need to either place the TLD file or the JAR that includes your tag library under the lib folder in your project. Or you can just add TLD or JAR file to the classpath and the library will be added to the Tag Library List in Web Projects View.

## 5.2.2.1. Drag-and-Drop

Switch to the **Web Projects** view and expand the **Tag Libraries** folder. If the view is not active, select **Window**  $\rightarrow$  **Show View**  $\rightarrow$  **Web Projects** from the menu bar.



#### Figure 5.16. Web Projects View

Also make sure that the **JBoss Tools Palette** is open. Select the tag library that you want to add and simply drag-and-drop it on to the the **JBoss Tools Palette**.

You will see the following dialog window. As you can see JBoss Developer Studio takes care of all the details. Chosen **TLD file**, **name** and **prefix** of the library and **Library URL** are detected thus just need to set the **Group name** to which you wish to place this tag library. You can either add this tag library to an existing Group or just create a new one.

E	Import Tags from TLD File				
Create Macro from Tags in TLD file Parent group must be specified.					
TLD File*	/JSFHello//META-INF/html_basic.tld				
Name:*	html				
Default Prefix	h				
Library URI	http://java.sun.com/jsf/html				
<ul> <li>Add to Exist</li> <li>Create New</li> </ul>					
	OK Cancel				

#### Figure 5.17. Import Tags From TLD File Form

Once you are finished, you will see the new tag library added to the **JBoss Tools Palette**.



Figure 5.18. JBoss Tools Palette with New Tag Library

## 5.2.2.2. Import Button

 Tag
 libraries
 can
 also
 be
 imported
 with
 the
 Import
 button
 (

 Image: Second s

). This button is found at the top right side of the JBoss Tools Palette.

By clicking on the **Import** button you will see the **Import Tag** window a similar like in the Dragand-Drop method (see Section 5.2.2.1, "Drag-and-Drop"). Set the name and prefix of the library and Library URL. You also need to set the Group name to which you'd like to add your tag library.

Like in the previous method you can add it to an existing Group or create a new one. On this **Import Tag** form you can use **Browse...** button to locate the tag library that you want to add:

e	Import Tags from TLD File	X
Create	Macro from Tags in TLD file	
😣 Attri	Edit TLD	×
	TLD File*	- 6
TLD File	🗢 🗁 JSFHello	
Name*		
Default	🗇 sql-1_0-rt.tld [sql_rt]	h
Library (	<pre>     permittedTaglibs.tld [permittedTaglibs] </pre>	I.F.
Library	<pre>   c.tld [c] </pre>	E
Ado	◊ sql.tld [sql]	h
		H
⊖ Cre	<pre>◇ scriptfree.tld [scriptfree]</pre>	
	<pre>     fmt-1_0-rt.tld [fmt_rt]     fmt_tld (fmt_rt] </pre>	6
	<pre>◇ sql-1_0.tld [sql]</pre> ◇ fn.tld [fn]	
	<pre>     fmt-1_0.tld [fmt] </pre>	
	<pre> white i_onic (init)  whi</pre>	
	♦ jsf_core.tld [f]	
	OK Cancel	

Figure 5.19. Select TLD File

# **CSS Editing Perspective**

In this chapter we will discuss CSS Editing Perspective views. More information about style sheets can be found in *Section 3.2.2, "Pages Styling*" of Editor chapter.

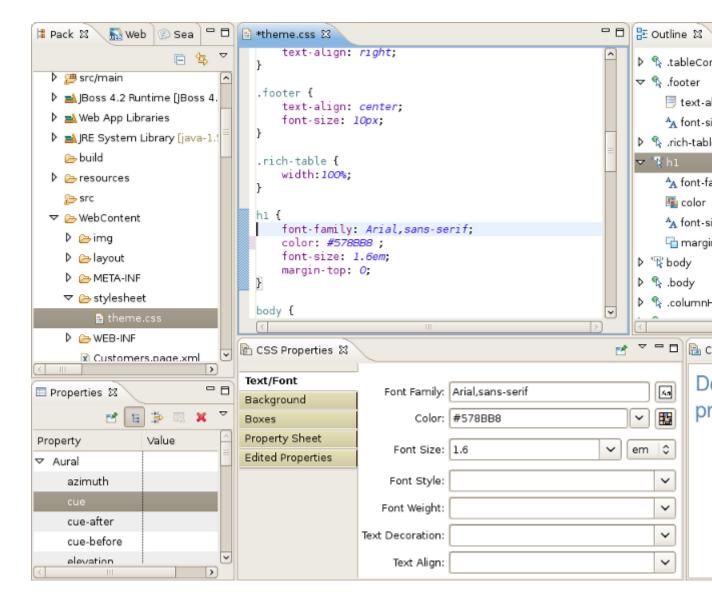
The CSS Editing Perspective combines a set of views which allow you to see the structure of your css files, edit them and see the results. To use this perspective you need to select **Window**  $\rightarrow$  **Open Perspective**  $\rightarrow$  **CSS Editing**. All of the views are fully synchronized with each other: the changes being made in one view are reflected in the others.

As you know there are three ways of inserting a style sheet:

- External style sheet (.css file)
- Internal style sheet (using the <style> tag in the head section of an HTML/XHTML/JSP page)
- Inline style (using style attribute)

Using the **CSS Editing** Perspective you can change your style sheet, inserted in any of the possible places described before in three ways:

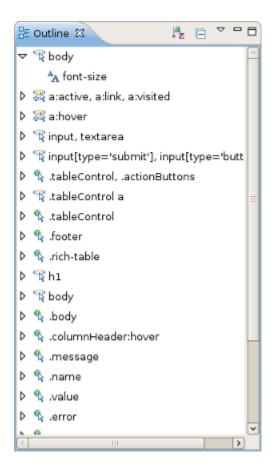
- directly in your Editor
- using Section 6.3, "CSS Properties view "
- using Section 6.2, "Properties view"



## Figure 6.1. CSS Editing Perspective

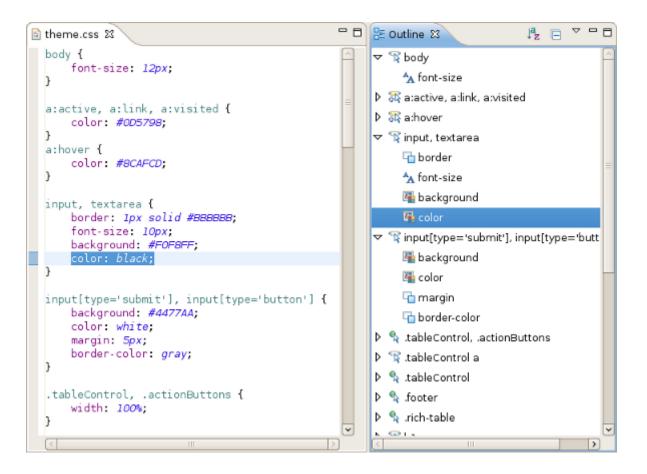
# 6.1. Outline view

Using this view you can easily skip between the selectors described in the source files. See the list of properties in any selector just by clicking the triangle near it.



#### Figure 6.2. Outline view

You can use the **Source** viewer with the **Outline** view to navigate around the file. To do this you should left click the selector or property you want and it will be automatically highlighted in the source code:



# Figure 6.3. Navigating around the file

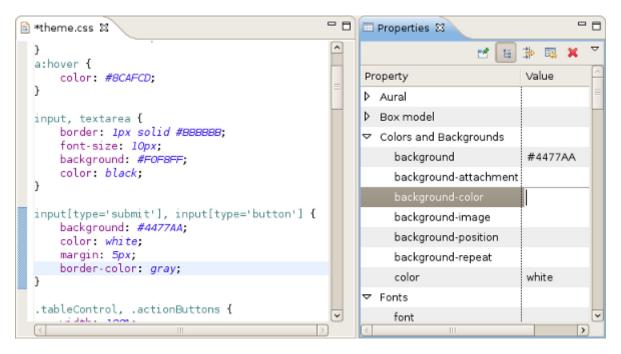
# 6.2. Properties view

**Properties** view provides a full list of properties of a chosen selector. The properties are divided into logic groups for better navigation.

🗟 theme.css 🛛		Properties 🕴	, B
} a:hover {	^	🖬 🖬 🛱 🛤 🗙	~
color: #BCAFCD;	_	Property Value	^
}	-	Aural	
input, textarea {		Box model	
border: <i>1px solid #BBBBBB;</i> font-size: <i>10px</i> ;			
background: #F0F8FF;		background #4477AA	
color: <i>black;</i>		background-attachment	
1		background-color	
<pre>input[type='submit'], input[type='button'] {</pre>		background-image	
background: #4477AA; color: white;		background-position	
margin: 5px;		background-repeat	
border-color: gray;		color white	
		▼ Fonts	
.tableControl, .actionButtons {	~	font	~
	>]		9

## Figure 6.4. Properties view

With the help of **Properties** view you have also the ability to edit the css file by adding, editing or removing properties in the selector. Left click the **Value** field near the property you want to edit and write the changes in the text field.



## Figure 6.5. Updating css using Properties view

# 6.3. CSS Properties view

CSS Properties view has five tabs:

- Text and Font properties
- Background properties
- Boxes and border properties
- Property Sheet
- Edited Properties
- **Text and Font properties.** CSS **Text/Font** properties define the appearance of text, its font family, boldness, size and the style.

CSS Properties		🛃 🗸 🗖
Text/Font		
Background	Font Family:	
Boxes	Color:	
Property Sheet	Font Size:	
Edited Properties	Fond Size.	
	Font Style:	· · · · · · · · · · · · · · · · · · ·
	Font Weight:	✓
	Text Decoration:	
	Text Align:	

## Figure 6.6. Text/Font tab

For	example,	to	define	the	font-famil	y pro	perty you
should	click		Choose		font	family	button(
Aa							

) near Font Family text field and select the fonts you want to use from the list.

E	Choose font family	×
Nimbus Mono L Nimbus Roman No9 L Nimbus Sans L Norasi OpenSymbol Ostorah Ouhod Petra Phetsarath OT Pothana2000 Purisa Rachana	Serif	
	Cancel	к

#### Figure 6.7. Choose font family

When you click the **OK** button the chosen fonts should appear in **Font Family** text field and in the source css file. To define other properties in CSS **Text/Font** tab you should just click button near the corresponding field you want and select the appropriate option in the list. Or if you are absolutely sure of the property's value to use you can just write it in the text field.

• **Background properties.** You should use CSS background properties and **Background** tab to define the background effects of an element.

**Boxes and border properties.** The **Boxes** tab is used to define CSS border properties, the box model and dimensions. The CSS border properties allow you to specify the style and color of an element's border.

As well as in Text/Font tab, it's also possible to define the property in two ways:





and choosing it from the list of options:

CSS Properties 🛿			2 7	- 8
Text/Font Background	Background Color:			
Boxes	Background Image:		~	
Property Sheet	Background Repeat:			~
Edited Properties	Ducitground hopeact	repeat		-
		repeat-x		
		repeat-y		
		no-repeat		

## Figure 6.8. Defining the property

- writing the property in the appropriate text field
- **Property Sheet.** The **Property Sheet** tab contains the categorized list of properties. Similarly to Section 6.2, "Properties view", it's possible to edit the properties values.

CSS Properties		2	Þ	- 1	E
Text/Font	Positioning				-
Background	▶ Paging				
Boxes	Tables				
Property Sheet	▷ Font				l
Edited Properties	Background				
· · · · ·	Dimension				
	▶ List				
	content				
	counter-increment				
	counter-reset				
	quotes				
	counter-increment				

#### Figure 6.9. Property Sheet tab

• Edited Properties. Edited Properties tab contains only overflow-y property which determines clipping of the element's content at the top and bottom edges.

CSS Properties 🕴		2	Δ	- 8
Text/Font	overflow-y scroll			
Background	overnow-y peron			
Boxes				
Property Sheet				
<b>Edited Properties</b>				

## Figure 6.10. Edited Properties tab

It's also possible to edit the properties in the tab.

# 6.4. CSS Preview

Using **CSS Preview** you can see how a selector affects any text.

s *theme.css ⊠	🗖 🗖 🔂 CSS Preview 🛙	- 8
.footer { text-align: center; font-size: l0px; }	Double clic to edit	
.rich-table {     width: <i>100</i> %; }	preview	
<pre>n1 {    font-family: Arial, sans-serif;    color: #578BB8;    font-size: 1.6em;    margin-top: 0; }</pre>		
<pre>body {     margin: Opx;     font-family: Arial, sans-serif;     defended:</pre>		

## Figure 6.11. CSS Preview

The preview can edited by double clicking on it. You can add any text you want, including HTML tags.

i

# **RichFaces Support**

JBoss Developer Studio comes with a tight integration with *RichFaces component framework* [http://labs.jboss.com/jbossrichfaces/].

#### Note:

*RichFaces* 3.3.X [http://www.jboss.org/jbossrichfaces/downloads/] is fully supported in the current version of JBoss Developer Studio and JBoss Tools 3.2.0.GA.

The following features are implemented and fully supported for the current version of the RichFaces components:

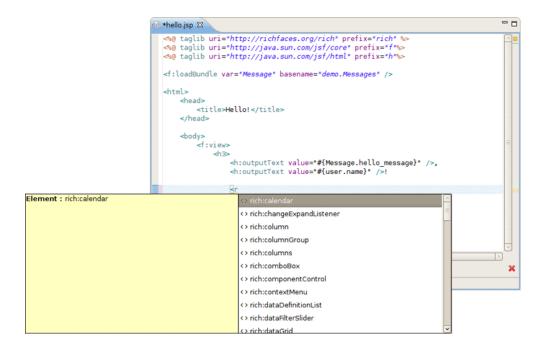
- Section 7.1, "Code Assist for RichFaces"
- Section 7.2, "OpenOn for RichFaces"
- Section 7.3, "RichFaces in the JBoss Tools Palette"

All you have to do is to *download* [http://www.jboss.org/jbossrichfaces/downloads/] and install RichFaces libraries into your project, i. e. just put richfaces-\*.jar files into the /lib project folder. For more information on how to get started with RichFaces, please read the *RichFaces documentation* [http://jboss.org/file-access/default/members/jbossrichfaces/freezone/ docs/devguide/en/html\_single/index.html#GettingStarted].

# 7.1. Code Assist for RichFaces

JBoss Developer Studio provides code completion for *RichFaces* [http://www.jboss.org/ jbossrichfaces] framework components.





#### Figure 7.1. Content Assist for RichFaces Components

# 7.2. OpenOn for RichFaces

While working with JSP and XHTML pages in the Visual Page Editor you can also take the advantage of the *OpenOn* feature with RichFaces components.

For example, the Richfaces tags <rich:insert> and <a4j:include> have OpenOn support.



## Figure 7.2. OpenOn With Richfaces Tag



## Figure 7.3. OpenOn With A4j Tag

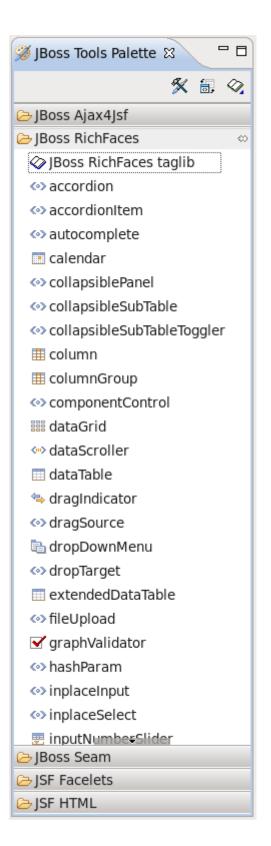
OpenOn is also supported in "ForID"-like attributes (the attributes, where the value should be ID or the list of IDs) in RichFaces.



## Figure 7.4. OpenOn With "ForID"-like attributes

# 7.3. RichFaces in the JBoss Tools Palette

RichFaces and Chapter 5, JBoss Tools Palette.



## Figure 7.5. RichFaces Components

The **JBoss RichFaces** menu in the **JBoss Tools Palette** contains all items relevant for RichFaces 4, by default. If you are using RichFaces 3 or earlier, you will need to add the **RichFaces 3** 

menu item to the **JBoss Tools Palette** through the **Show/Hide** menu. To access this menu see *Section 5.1.2, "Show/Hide"*.

<b>@</b>	Show/Hide Drawers	$\mathbf{X}$
Customize Palette		
<ul> <li>▶ ♥ HTML</li> <li>♥ JBoss</li> <li>♥ Ajax4Jsf</li> <li>□ Ajax4Jsf 3</li> <li>♥ RichFaces</li> <li>♥ RichFaces 3</li> <li>♥ Seam</li> <li>▶ ♥ JSF</li> <li>▶ □ ISTI</li> </ul>		Show All Hide All
	Cancel	Ok

# Figure 7.6. RichFaces 3 palette menu

To insert a RichFaces component on a page:

- expand JBoss RichFaces group on the palette
- click on some component
- put the needed attributes in the Insert Tag dialog and click Finish button

9	Insert Tag	×
<rich:calendar> att</rich:calendar>	ributes	
Attribute name	Value	^
oninputmouseover		
oninputselect		
ontimeselect		
ontimeselected		
popup	false	
preloadDateRangeBeg		
preloadDateRangeEnd		=
process		=
reRender		
readonly		
rendered		
requestDelay		~
?	Cancel Finish	)

## Figure 7.7. Inserting Tag

The RichFaces component will be inserted on your page and displayed in the **Source** and **Visual** modes:

<	<		July,	2008		>	>>
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
27			ŧ.	2	3	4	5
28	6	7	8	9	10	11	12
29	13	14	15	16	17	18	19
30	20	21	22	23	24	25	26
31	27	28	29	30	31		
07/0	1/200	8				Т	oday
_			ľ				

#### Figure 7.8. RichFaces Component

# 7.4. Relevant Resources Links

To get more in-depth information on RichFaces framework refer to the *RichFaces Developer Guide* [http://jboss.org/file-access/default/members/jbossrichfaces/freezone/docs/devguide/en/ html\_single/index.html].

It may be also helpful for you to view the *movies* [http://docs.jboss.org/tools/movies/] that demonstrate the usage of RichFaces components.

# **Web Projects View**

Web Projects is a special view that comes with JBoss Developer Studio.

If the Web Projects view's tab is not visible next to the Package Explorer tab, select Window  $\rightarrow$ Show View  $\rightarrow$  Other  $\rightarrow$  JBoss Tools Web  $\rightarrow$  Web Projects from the menu bar.

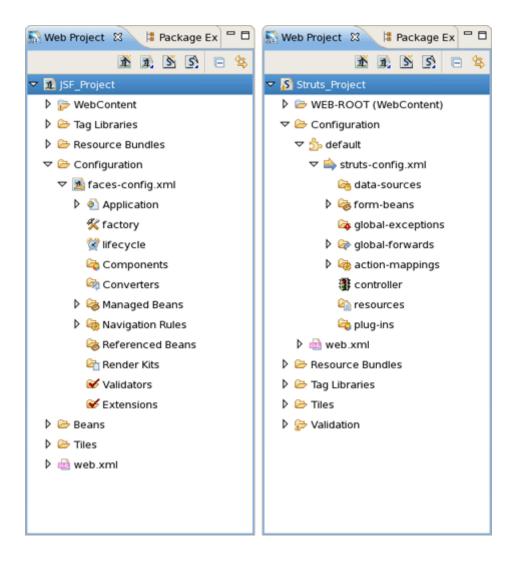
With the Web Projects view you can:

- Visualize the project better because the project artifacts for JSF, Struts and Seam projects are organized and displayed by function.
- Select these kinds of items to drag and drop into JSP pages:
  - JSF managed bean attributes
  - JSF navigation rules outcomes
  - Property file values
  - Tag library files
  - Tags from tag libraries
  - JSP page links
- Use context menus to develop the application (all create and edit functions are available)
- · Use icon shortcuts to create and import JSF and Struts projects
- Expand and inspect tag library files
- Section 5.2.2, "Adding Custom JSF Tags to the JBoss Tools Palette"

# 8.1. Project Organization

The Web Projects view organizes your project in a different way. The physical structure of course stays the same. The new organization combines common project artifacts together which makes it simpler to locate what you are looking for and develop.

The screen shot below shows a JSF project and a Struts project in Web Projects view.



## Figure 8.1. Web Projects View

# 8.2. Drag and Drop

The **Web Projects** view has a drag and drop option that can be used for property, managed bean attributes, navigation rules, tag library file declaration and JSP Pages.

# 8.2.1. For a Property

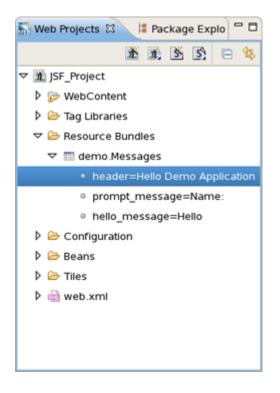
Expand the Resources Bundles folder that holds all the Property files in your project. Select the file from which you want to add the property and then select the property.

We will be dragging and dropping a property file value inside the outputText tag for the value attribute.

```
<html>
<head>
<title>Input User Name Page</title>
</head>
<body>
<f:view>
<hl><h:outputText value=""/></hl>
```

#### Figure 8.2. OutputText Tag

Select the property:



#### Figure 8.3. Selecting Property

Drag the property and drop it between the quotes for the value attribute in the JSP file. Notice that JBoss Developer Studio added the correctly formatted expression for referring to the property value #{Message.header} automatically.

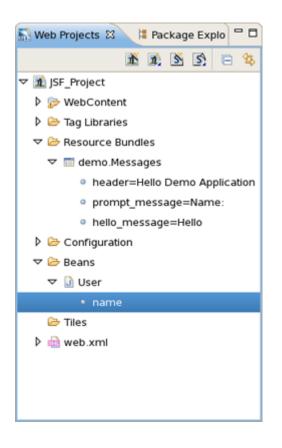
```
<html>
<head>
<title>Input User Name Page</title>
</head>
<body>
<f:view>
<hl><h:outputText value="#{Message.header}"/></hl>
<h:messages style="color: red"/>
```

#### Figure 8.4. Inserted Property

You can actually place the tag anywhere in the page, not just inside an existing tag. In this case JBoss Developer Studio will place the complete tag <h:outputText value="#{Message.header}"/> in the page.

#### 8.2.2. For Managed Bean Attributes

Select a "managed bean" attribute and then drag and drop it onto the JSP page. We are going to place it inside the value attribute of the inputText tag.



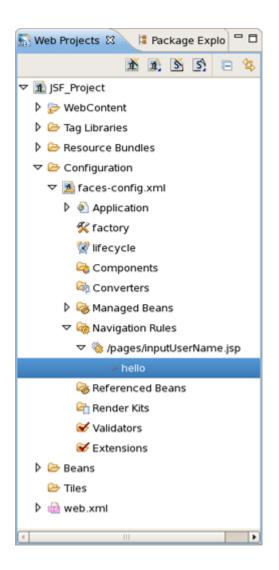
#### Figure 8.5. Selecting Managed Bean Attribute

Once again, JBoss Developer Studio adds the correct expression, #{user.name}.

#### Figure 8.6. Added Expression

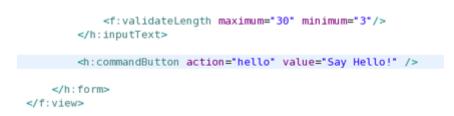
#### 8.2.3. Navigation Rules

Select the navigation rule under Configuration  $\rightarrow$  faces-config.xml  $\rightarrow$  Navigation Rules:



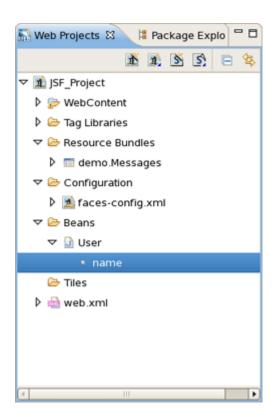
### Figure 8.7. Selecting Navigation Rule

Drag and drop it inside the commandButton tag:



### Figure 8.8. Navigation Rule in CommandButton Tag

You could do the same if the navigation rule was defined inside an action method:



### Figure 8.9. Navigation Rule in Action Method

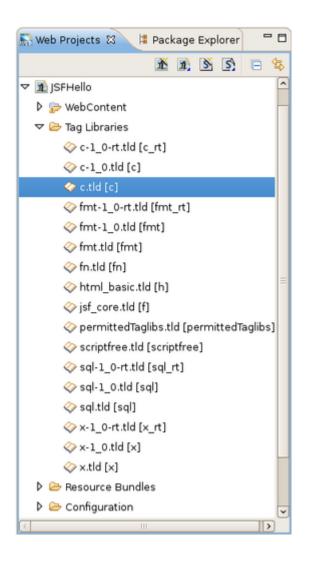
Here is how it would look after drag and drop:

```
<f:validateLength maximum="30" minimum="3"/>
</h:inputText>
<h:commandButton action="#{user.name}" value="Say Hello!" />
</h:form>
```

### Figure 8.10. Inserted Navigation Rule

## 8.2.4. For a Tag Library File Declaration

Select a TLD file:



## Figure 8.11. Selecting TLD File

Then drag and drop it onto the JSP page to add a declaration at the top of the page:

```
InputUserName.jsp 
InputUserName.jsp 
InputUserName.jsp 
InputUserName.jsp 
InputUserName.jsp 
InputUserName.jsf 
InputUse
```

### Figure 8.12. Inserted TLD File

## 8.2.5. For JSP Pages

You can also drag and drop a JSP page path to a JSP page to create a forward as shown:

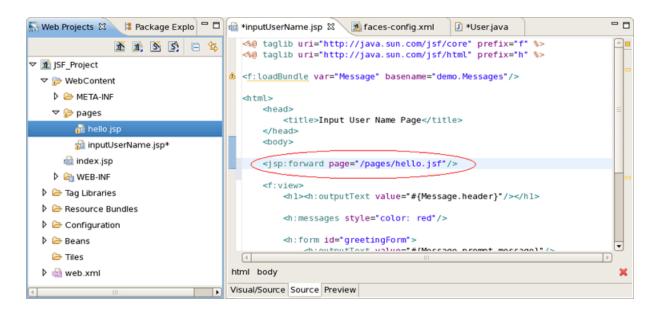


Figure 8.13. Creating JSP Forward

# 8.3. Developing the Application

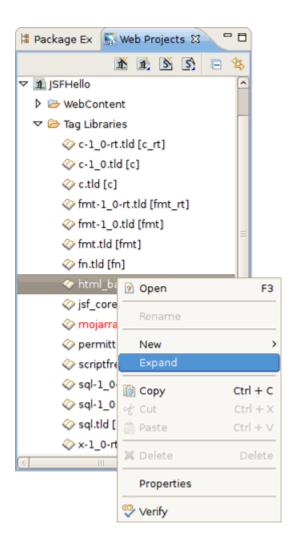
It is also possible to develop your application right from the Web Projects view. Simply right-click any node in the tree and select an appropriate action from the context menu. For instance, this screen capture shows creating a new navigation rule.

🔝 *Web Proje 🕴 😫 Package B	Ex 🗖 🗖	🔊 *faces-config.xml 🕅		- 8
<ul> <li>▶ Decontent</li> <li>&gt; Tag Libraries</li> <li>&gt; Persource Bundles</li> <li>&gt; PersourceBundles</li> <li>&gt; PersourceBundles</li> <li></li></ul>		/pages/inputUserM	Name.jsp /pages/hello.jsp	
Navigation Rules	New	•	🐞 Rule	
Referenced Beans				
🔄 Render Kits	📌 Cut	Ctrl + X		
S Validators	[ Сору	Ctrl + C		
Section Sectio	💼 Paste	Ctrl + V		
🕨 🗁 Beans	💢 Delete	e Delete		
👂 🗁 Tiles				
🕨 📾 web.xml	Prope	rties		
D 🔊 StrutsHello	Verify	Diagram Tree Source		
	•	Diagram nee Source		

## Figure 8.14. Creating New Navigation Rule

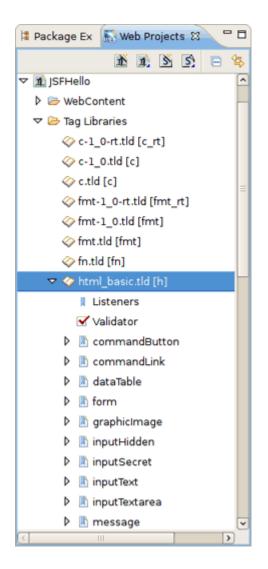
# 8.4. Expanding Tag Library Files

You can easily expand any TLD file in the project. Browse to the Tag Libraries folder. Right-click a TLD file and select **Expand**:



## Figure 8.15. Expanding Tag Library File

The  ${\tt TLD}$  file will now be expanded:



## Figure 8.16. Expanded File

You can then select any tag and drag it onto a JSP page.

# 8.5. Drag and Drop Tag Libraries on to JBoss Tools Palette

Read Section 5.2.2, "Adding Custom JSF Tags to the JBoss Tools Palette" to learn about this.

## 8.6. Create and Import JSF and Struts Projects

You can also create and import JSF and Struts project from Web Projects view by selecting the buttons below.

From left to right:

1. Create New JSF Project

- 2. Import JSF Project
- 3. Create New Struts Project
- 4. Import Struts Project

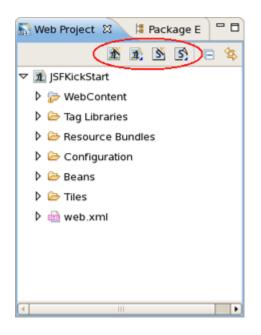


Figure 8.17. Web Projects View Buttons

# **JBoss Tools Preferences**

Configuring the various JBoss Developer Studio features is done via the **Preferences** screen by selecting **Window**  $\rightarrow$  **Preferences**  $\rightarrow$  **JBoss Tools** from the menu bar.

			Preferences
y	pe filter text	4	JBoss Tools
>	General		JBossTools preferences
⊳	Ant		
Þ	BPEL		
⊳	BPMN Diagrams		
⊳	Data Management		
⊳	Drools		
	Drools Task		
	FreeMarker Editor		
	Guvnor		
⊳	Help		
	HQL editor		
⊳	Install/Update		
⊳	Java		
⊳	Java EE	Ξ	
⊳	Java Persistence		
⊳	JavaScript		
⊳	JBoss jBPM		
~	JBoss Tools		
	ESB Validator		
	JBoss ESB Runtimes		
	JBoss Portlet		
	JBoss Tools Runtime Detection		
	Project Examples		
	Usage Reporting		
	∀ Web		
	CDI (Context and Dependency Injection)		
	Editors		
	Validation		
	Variables		
	▷ JSF		
	Label Decorations		
	▷ Seam		
	Struts		
	Verification		
ig	ure 9:451 Bpeferences are included in this dialog	g.	
⊳	Plug-in Development		
	Project Archives	~	

From this screen, you can select these more specific sets of JBoss Tools preferences:

- Section 9.1, "Project Archives"
- Section 9.2, "Editors"
- Section 9.3, "Visual Page Editor"
- Section 9.5, "EL Variables"
- Section 9.6, "JSF"
- Section 9.7, "JSF Project"
- Section 9.8, "JSF Flow Diagram"
- Section 9.10, "Seam"
- Section 9.11, "Seam Validator"
- Section 9.13, "Struts"
- Section 9.14, "Struts Automation"
- Section 9.15, "Plug-in Insets"
- Section 9.16, "Resource Insets"
- Section 9.17, "Struts Customization"
- Section 9.18, "Struts Project"
- Section 9.19, "Struts Support"
- Section 9.20, "Struts Flow Diagram"
- Section 9.21, "Tiles Diagram"

The **Preferences** dialog (**Window**  $\rightarrow$  **Preferences** ) also allows to adjust settings for Section 9.22, "Server Preferences" and Section 9.23, "XDoclet" module.

## 9.1. Project Archives

Click on the **Project Archives** to open the page for changing Project Archives preferences.

Here you can determine settings for Core Preferences, Project Archives View, Project Explorer Preferences and Fileset Preferences.

)	Preferences
type filter text 🔏	Project Archives
type filter text         > General         > Ant         > BPEL         > BPMN Diagrams         > Data Management         > Drools         Drools Task         FreeMarker Editor         Guvnor         > Help         HQL editor         > Install/Update         > Java EE         > Java Persistence         > Java Script         > JBoss jBPM         > Plug-in Development         Project Archives         > Remote Systems         > Report Design	<ul> <li>Project Archives</li> <li>Core Preferences</li> <li>Enable incremental builder</li> <li>Show build error dialog</li> <li>Project Archives View</li> <li>Show output path next to package</li> <li>Show the root directory of filese</li> <li>Show project at the root</li> <li>Show all projects that contain participation</li> <li>Project Explorer Preferences</li> <li>Show node in all projects</li> <li>Fileset Preferences</li> <li>✓ Enable Default Excludes</li> <li>**/*~,**/#*#,**/.#*,**/%*%,**/*</li> </ul>
<ul> <li>Run/Debug</li> <li>SCA Tools</li> <li>Screenshot Utility</li> </ul>	
<ul> <li>Server</li> <li>Spring</li> <li>Team</li> <li>Teiid Designer</li> <li>Terminal</li> <li>TestNG</li> <li>Validation</li> <li>Web</li> <li>Web Services</li> <li>igures9F2JiFyrejectr Archives</li> <li>XML</li> </ul>	

The next table lists all available preferences for Project Archives and their description.

Option	Description	Default
Enable incremental builder	Uncheck this option if you don't want to enable incremental builder for your resources	On
Show build error dialog	If on, the Project Archives will show an error dialog in case of a build or incremental update fails.	On
Show output path next to packages	This option allows you to show or hide an output path next to packages .	On
Show the root directory of filesets	If on, the root directory is displayed next to filesets. Otherwise, it's hidden .	On
Show project at the root	This option allows you to choose whether to display a project name at the root of the packages or not. When checked, 'Show all projects that contain packages' is enabled.	On
Show all projects that contain packages	Selecting this setting enables the Projects Archiving view to show or hide all projects that contain packages. The option is available when the previous one is checked.	Off
Show node in all projects	Selecting this setting enables the Projects Archiving view to show node in all projects.	Off
Enable Default Excludes	You can set the list of files which will be excluded by default. Other files will be omitted.	On

**Table 9.1. Project Archives Preferences** 

## 9.2. Editors

To adjust settings common for all editors supplied with JBoss Developer Studio you should select **JBoss Tools**  $\rightarrow$  **Web**  $\rightarrow$  **Editors**.

9		Preferences
type filter text	4	Editors
General		
▷ Ant		Always use JBoss Tools editors with
▷ BPEL		Show warning when project has no
BPMN Diagrams		Use Source tab as a default for mu
Data Management		
▷ Drools		
Drools Task		
FreeMarker Editor		
Guvnor		
> Help		
HQL editor		
Install/Update		
Java		
Java EE	=	
Java Persistence		
JavaScript		
JBoss jBPM		
✓ JBoss Tools		
ESB Validator		
JBoss ESB Runtimes		
JBoss Portlet		
JBoss Tools Runtime Detection		
Project Examples		
Usage Reporting		
✓ Web		
<ul> <li>CDI (Context and Dependency Injection)</li> <li>Editors</li> </ul>		
<ul> <li>Expression Language</li> </ul>		
ISF		
Label Decorations		
Seam		
<ul> <li>Struts</li> </ul>		
Verification		
ModeShape		
Plug-in Development		
igureojeat Editors		
Remote Systems		
Report Design		

On the Editors page the following preferences are available:

**Table 9.2. Editors Preferences** 

Option	Description	Default
Always use JBoss Tools editors with Open option		On
Show warning when project has no JBoss Tools capabilities	Check this option to be sure that any JBoss Tools editor is fully available for a particular type of file. If no, you'll be warned about this.	On
Use Source tab as a default for multi-tab editors	If on, an editor will open the files in the Source view by default	Off

# 9.3. Visual Page Editor

JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Editors  $\rightarrow$  Visual Page Editor screen allows you to control some aspects of the behavior of the Visual Page Editor (VPE) for JSF/HTML files.

type filter text 🔏	Visual Page Editor					
JBoss Maven Integration	General Visual Templates					
JBoss Portlet	Visual Page Editor toolbar behavior					
JBoss Tools Runtime Detectior	Show toolbar within the editor (otherwise in Ec					
Project Examples						
Remote Debug	Visual appearance					
Usage Reporting	☑ Show border for unknown tags					
∀ Web	□ Show non-visual tags					
✓ Editors	✓ Show selection tag bar					
JSF Flow Diagram	✓ Show text formatting bar					
Seam Pages Diagram						
Struts Flow Diagram	Show resource bundles usage as EL expressions					
Tiles Diagram	Confirmation and details					
Visual Page Editor	Ask for tag attributes during tag insert					
▷ Expression Language 🛛 🛓	Inform if the project is not configured properly to use					
Þ JSF						
Knowledge Base	Default tab, splitting and editor's weights to start VPE w					
Label Decorations	Synchronize scrolling between source and visual panel					
▷ Seam	Select the default active editor's tab					
▷ Struts	Visual/Source					
Web XML Validation	Visual/Source editors splitting					
Maven	Vertical splitting with Source Editor on the top					
▷ Mylyn	Size of the Visual Editor pane (0-100%)					
Plug-in Development	50% <					
Project Archives						
Remote Systems	Besters D					
	Restore De					
( <b>?</b> )	Canc					

Figure 9.4. Visual Page Editor

The next table lists the possible settings that you can adjust on the General tab of the VPE Preferences page.

Option	Description	Default
Show toolbar within the editor (otherwise in Eclipse's toolbar)	The option allows to select where the Visual Page Editor toolbar appears. By default it appears as part of the Eclipse toolbar.	Off
Show border for unknown tags	The option allows to place the border around unknown tags or undo this	On
Show non-visual tags	Check this box, if you want the editor shows non-visual elements on the page you're editing	Off
Show selection tag bar	The option allows to show/hide the Selection Bar	On
Show text formatting bar	Check this box in order to show/hide the Text Formatting bar	On
Show resource bundles usage as EL expressions	If the option is checked, the editor will show EL expressions instead of the resource values	Off
Ask for tag attributes during tag insert	Having this option off, the dialog with possible attributes for inserting tag won't appear if all its attributes are optional	On
Inform if the project is not configured properly to use Visual Page Editor	If this option is deselected you will not be notified that a project is not configured for use with the Visual Page Editor. This may cause unexpected results.	On
Synchronize scrolling between source and visual panes	This option allows you to set the scrollbars of the source and visual panes of the editor to be synchronized by default. An option to activate and deactivate this option exists as part of the toolbar.	Off
Select the default active editor's tab	The option provides possibility to choose one of the following views - Visual/Source, Source or Preview, as default when opening the editor	Visual/Source
Visual/Source editors splitting	The option allows to choose one of the following Visual,Source layouts - Vertical Source on top, Vertical Visual on top,Horizontal Source to the left or Horizontal Visual to the left, as a default one when opening the Visual/ Source view	Vertical splitting with Source Editor on the top

## Table 9.3. VPE General Preferences

#### Chapter 9. JBoss Tools Prefer...

Option	Description	Default
Size of the Visual	With the help of this scroll bar you can adjust	50%
Editor pane (0 –	the percentage rating between the Source and	
100%)	Visual modes of the Visual/Source view	

On the Visual Templates tab you can add, edit or remove Section 3.2.3, "Visual Templates for Unknown Tags".

)					Preferences	
ty	ype filter text 🛛		١	Visual Page	Editor	
>	General	^	6		1- 1.	
>	Ant			General Visi	ual Templates	
>	BPEL			Tag Name	Tag for Display	
>	BPMN Diagrams					
>	Data Management					
>	Drools					
	Drools Task					
	FreeMarker Editor					
	Guvnor					
>	Help					
	HQL editor					
>	Install/Update					
>	Java	=				
>	Java EE					
>	Java Persistence					
>	JavaScript					
>						
	JBoss Tools					
	ESB Validator					
	JBoss ESB Runtimes					
	JBoss Portlet					
	JBoss Tools Runtime Detection					
	Project Examples					
	Usage Reporting					
	✓ Web					
	<ul> <li>CDI (Context and Dependency Injection)</li> </ul>					
	✓ Editors					
	JSF Flow Diagram					
	Seam Pages Diagram					
	Struts Flow Diagram					
	Tiles Diagram					
	✓ Visual Page Editor					
	Code Templates					
	Content Assist					
	<ul> <li>Expression Language</li> </ul>					
	ure 9.55 Visual Page Editor Templates					
JU	Label Decorations					
	Seam					

Select a template for editing from the available list and press *Edit* button. It will pick up the *Section 3.2.3, "Visual Templates for Unknown Tags"* [72] where you can adjust new settings.

## 9.4. Visual Page Editor Code Templates

On the JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Editors  $\rightarrow$  Visual Page Editor  $\rightarrow$  Code Templates preferences page you can create new and edit existing XHTML templates. Such a template allows you to quickly insert an often used snippet of XHTML code.

	Preferences	
ype filter text 🧳	Templates	
General	<u>C</u> reate, edit or remove template	es:
Ant	Name	Cont
BPEL	✓ Blank Facelet Page	New
BPMN Diagrams	✓ Blank JSF Page	New
Data Management	✓ Blank RichFaces Page	Nev
Drools	✓ Common Facelet Page	Nev
Drools Task	✓ Form Facelet Page	Nev
FreeMarker Editor	✓ JSF Composite Component	Nev
Guvnor		
Help		
HQL editor		
Install/Update		
Java		
Java EE		
Java Persistence		
JavaScript		
JBoss jBPM		
JBoss Tools		
ESB Validator		
JBoss ESB Runtimes		
JBoss Portlet		
JBoss Tools Runtime Detection	Previe <u>w</u> :	
Project Examples		
Usage Reporting		
マ Web		
CDI (Context and Dependency Injection)		
✓ Editors		
JSF Flow Diagram		
Seam Pages Diagram		
Struts Flow Diagram		
Struts Flow Diagram Tiles Diagram		
Struts Flow Diagram Tiles Diagram ▽ Visual Page Editor		
Struts Flow Diagram Tiles Diagram ♥ Visual Page Editor Code Templates		
Struts Flow Diagram Tiles Diagram ✓ Visual Page Editor Code Templates Content Assist		
Struts Flow Diagram Tiles Diagram ✓ Visual Page Editor Code Templates Content Assist ♦ Expression Language		
Struts Flow Diagram Tiles Diagram ✓ Visual Page Editor Code Templates Content Assist ▷ Expression Language Jure 19.65 Visual Page Editor Code Templates		
Struts Flow Diagram Tiles Diagram ✓ Visual Page Editor Code Templates Content Assist ♦ Expression Language	<	

VPE provides four predefined templates:

- XHTML blank facelet page template
- Common facelet page template
- Form facelet page template
- New JSF composite component template

The following table lists the configuration options for the code templates.

### Table 9.4. VPE Code Templates Options

Option	Description	
New	Opens the dialog to create a new template.	
Edit	Opens the dialog to edit the currently selected template.	
Remove	Removes all selected templates.	
Restore Removed	Restores the removed templates.	
Revert to Default	Reverts the code templates list to default.	
Import	Allows you to import templates from the file system.	
Export	Allows you to export all selected templates to the file system.	

## 9.5. EL Variables

To specify necessary EL variables globally, i. e. for all projects and resources in your workspace, you should go to JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Expression Language  $\rightarrow$  Variables.

<b>9</b>	Preferences
type filter text	Variables
> Help	
HQL editor	Scope El Expression
Install/Update	
▷ Java	
Java EE	
Java Persistence	
JavaScript	
JBoss jBPM	
▼ JBoss Tools	
ESB Validator	
JBoss ESB Runtimes	
JBoss Portlet	
JBoss Tools Runtime Detection	
Project Examples	
Usage Reporting	
▽ Web	
CDI (Context and Dependency Injection)	
Editors	
Validation	
Variables	
▷ JSF	
Label Decorations	
▷ Seam	
◊ Struts	
Verification	
ModeShape	
Plug-in Development	
Project Archives	
Remote Systems	
Report Design	
Run/Debug	
SCA Tools	
Screenshot Utility	
> Server	
igure 9.17. EL Variables	
▷ Team	
Teiid Designer	

Click **Add...** to set value for a new EL variable. In the appeared wizard you should specify the global values and press **Finish**.

<b>9</b>	Add EL Reference	×
	Reference al El variable, which will be substituted in a visual part for generating a preview	
El Name*		
	Scope	
	<ul> <li>Global: For all projects in workspace</li> </ul>	
Value		
	Cancel Finish	

### Figure 9.8. Adding a Global EL Variable



## 9.6. JSF

Select **JBoss Tools**  $\rightarrow$  **Web**  $\rightarrow$  **JSF** to get to the JSF Project specific preferences.

<b>9</b>	
type filter text 🔏	JSF
Drools Task	JSF Projects sp
FreeMarker Editor	jor Projecto op
Guvnor	
▷ Help	
HQL editor	
Install/Update	
▷ Java	
Java EE	
Java Persistence	
JavaScript	
JBoss jBPM	
ESB Validator	
JBoss ESB Runtimes	
JBoss Portlet	
JBoss Tools Runtime Detection	
Project Examples	
Usage Reporting	
▼ Web	
CDI (Context and Dependency Injection)	
Editors	
Expression Language	
▶ JSF	
Label Decorations	
▷ Seam	
▷ Struts Figure 9.9. JSF	
Verification	
ModeShape	
Plug-in Development	
Project Archives	

# 9.7. JSF Project

Select **JBoss Tools**  $\rightarrow$  **Web**  $\rightarrow$  **JSF**  $\rightarrow$  **Project** to see JSF Project preferences page.

On the New Project tab you can set default values for New JSF Project wizard:

- Version for setting the default JSF Environment
- **Project Template** so as New JSF Project wizard shows this template as default for the chosen JSF Environment
- Project Root for specifying default location for a new JSF project

If you check **Use Default Path** here, this box will be also checked in the **New JSF Project** wizard.

• Servlet Version for setting the default Servlet version of a new JSF project

Here it's also possible to define whether to register Web Context in server.xml while organizing a new project or not. Check the proper box in order to do that.

<b>9</b>	
type filter text	Project
Drools Task	
FreeMarker Editor	New Project
Guvnor	Version:
▷ Help	Project Templ
HQL editor	rioject lempi
Install/Update	
▷ Java	Projects Root
Java EE	Servlet Versio
Java Persistence	
▷ JavaScript	
▷ JBoss jBPM	
✓ JBoss Tools	
ESB Validator	
JBoss ESB Runtimes	
JBoss Portlet	
JBoss Tools Runtime Detection Project Examples	
Usage Reporting	
∀ Web	
<ul> <li>CDI (Context and Dependency Injection)</li> </ul>	
<ul> <li>Editors</li> </ul>	
Expression Language	
⊽ JSF	
Project	
Label Decorations	
<ul> <li>Seam</li> <li>Figure 9.10. New JSF Project Preferences</li> <li>Struts</li> </ul>	
Verification	
ModeShape	
Plug-in Development	

On the **Import Project** tab in the JSF Project screen you can determine the default Servlet version for the Import JSF Project wizard and also whether to register Web Context in <a href="mailto:server.xml">server.xml</a> or not.

<b>9</b>	
type filter text	Project
Drools Task	f
FreeMarker Editor	New Project
Guvnor	Servlet Versio
▷ Help	
HQL editor	
Install/Update	
▷ Java	
Java EE	
Java Persistence	
D JavaScript	
JBoss jBPM	
ESB Validator	
JBoss ESB Runtimes	
JBoss Portlet	
JBoss Tools Runtime Detection	
Project Examples	
Usage Reporting	
✓ Web CDL (Context and Dependency Injection)	
<ul> <li>CDI (Context and Dependency Injection)</li> <li>Editors</li> </ul>	
<ul> <li>Expression Language</li> </ul>	
✓ JSF	
Project	
Label Decorations	
Seam     Figure 9.11. Import JSF Project Preferences     Struts	
Verification	
ModeShape	
Plug-in Development	

# 9.8. JSF Flow Diagram

Selecting JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Editors  $\rightarrow$  Editors  $\rightarrow$  JSF Flow Diagram allows you to specify some aspects of the Diagram mode of the JSF configuration file editor.

)			Pr	eferences
type filter text			JSF Flow Diagram	n
Drools Task	^	_	ISE Flow Diagram	Add Mary
FreeMarker Editor			JSF Flow Diagram	Add View
Guvnor				Show grid
> Help			Grid Step:	16
HQL editor Install/Update			Link Path Font:	default,size=8,style
> Java				
> Java EE			View Path Font:	default,size=8,style
> Java Persistence				Do not create a n
> JavaScript				Switch to standar
JBoss jBPM				Show shortcut icc
✓ JBoss Tools				Show shortcut pa
ESB Validator				- ·
JBoss ESB Runtimes				
JBoss Portlet				
JBoss Tools Runtime Detection				
Project Examples	=			
Usage Reporting				
∀ Web				
CDI (Context and Dependency Injection)				
JSF Flow Diagram				
Seam Pages Diagram				
Struts Flow Diagram				
Tiles Diagram				
Visual Page Editor				
Expression Language				
▷ JSF				
Label Decorations				
Seam				
Struts				
Verification				
ModeShape				
> Plug-in Development				
Project Archives				
gure 9.42.515R Flow Diagram				
> Report Design				
> Run/Debug	~			

The first two items control the background grid for the diagram. The next two items allow you to control the appearance of the labels for views (pages) and the transitions between views. For these two items clicking the **Change...**button allows you to assign a font with a dialog box.

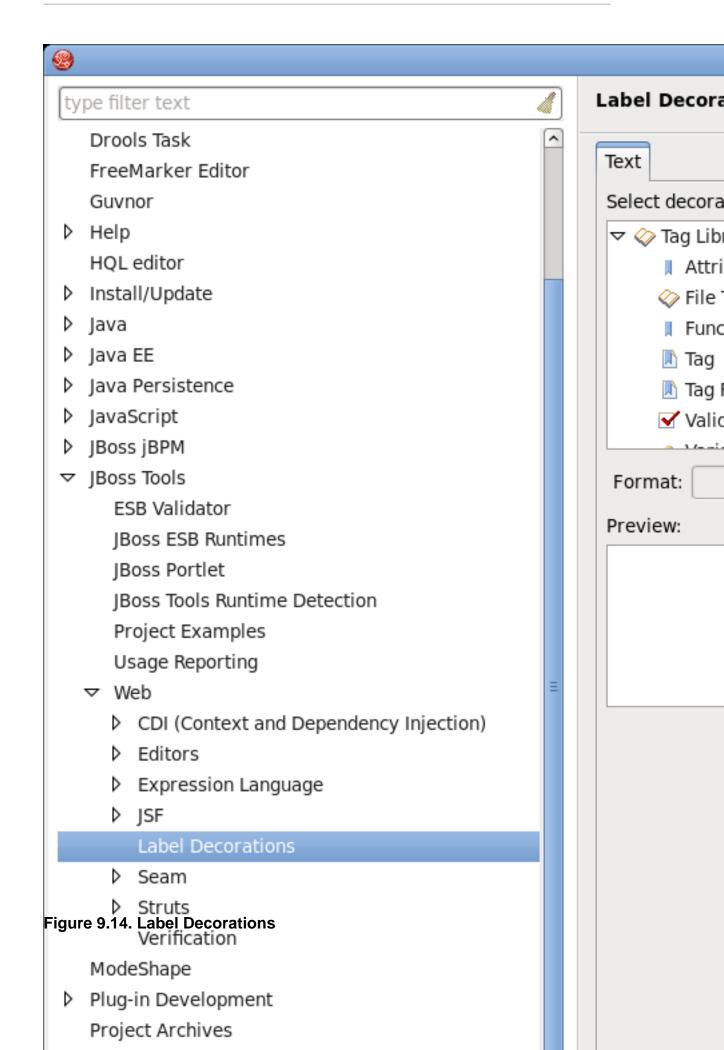
The first check box determines whether a view in the diagram that doesn't have a transition connecting it to another view yet should be written to the source code as a partial navigation rule. The next check box determines whether the diagram cursor reverts immediately to the standard selection mode after it's used in the transition-drawing mode to draw a transition. Finally the last two check boxes concern shortcuts. A shortcut is a transition that is there but isn't actually displayed in the diagram as going all the way to the target view it's connected to, in order to make the diagram clearer. With the check boxes you can decide whether to display a small shortcut icon as part of the shortcut and also whether to display the target view as a label or not.

)		Preferences
type filter text		JSF Flow Diagram
Drools Task	^	
FreeMarker Editor		JSF Flow Diagram Add View
Guvnor		Page Template: New JavaServer
> Help		Extension: isp
HQL editor		Extension: jsp
> Install/Update		
> Java		
> Java EE		
> Java Persistence		
> JavaScript		
> JBoss jBPM		
マ JBoss Tools		
ESB Validator		
JBoss ESB Runtimes		
JBoss Portlet		
JBoss Tools Runtime Detection		
Project Examples	≡	
Usage Reporting		
▼ Web		
CDI (Context and Dependency Injection)		
JSF Flow Diagram		
Seam Pages Diagram		
Struts Flow Diagram		
Tiles Diagram		
Visual Page Editor		
Expression Language		
▷ JSF		
Label Decorations		
Seam		
Struts		
Verification		
ModeShape		
Plug-in Development		
Project Archives		
gure9.43.54ddrView		
Report Design		
Run/Debug	~	

Selecting the Add View tab in the JSF Flow Diagram screen allows you to determine the default template and file extension for views (pages) you add directly into the diagram using a context menu or the view-adding mode of the diagram cursor.

## 9.9. Label Decorations

The Label Decorations page is opened from JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Label Decorations.



On this page you can determine the format for a text output near to the decoration label for different Web resources. To change the value for selected element, click **Add Variable...** button next to **Format** field. Appeared wizard will prompt you to select one from the available list.

۲	Select Variable			
	🔲 name - default label			
	validator-class - attribute of validator node			
	Select All Deselect All			
	Cancel OK			

Figure 9.15. Label Decoration for Validator

#### 9.10. Seam

The following preferences can be changed on the JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Seam page.

On Seam screen you can add and remove Seam runtimes.

Here is what Seam preference page looks like:

type filter text	Seam
Drools Task	
FreeMarker Editor	Name
Guvnor	Seam 2.2
▶ Help	
HQL editor	
Install/Update	
▷ Java	
▷ Java EE	
Java Persistence	
▷ JavaScript	
JBoss jBPM	
ESB Validator	
JBoss ESB Runtimes	
JBoss Portlet	
JBoss Tools Runtime Detection	
Project Examples	
Usage Reporting	
▼ Web	
CDI (Context and Dependency Injection)	
Editors	
Expression Language	
▷ JSF	
Label Decorations	
Seam	
<ul> <li>Struts</li> <li>Figure 9.16. Seam preference page Verification</li> </ul>	
ModeShape	
Plug-in Development	
Project Archives	

#### 9.11. Seam Validator

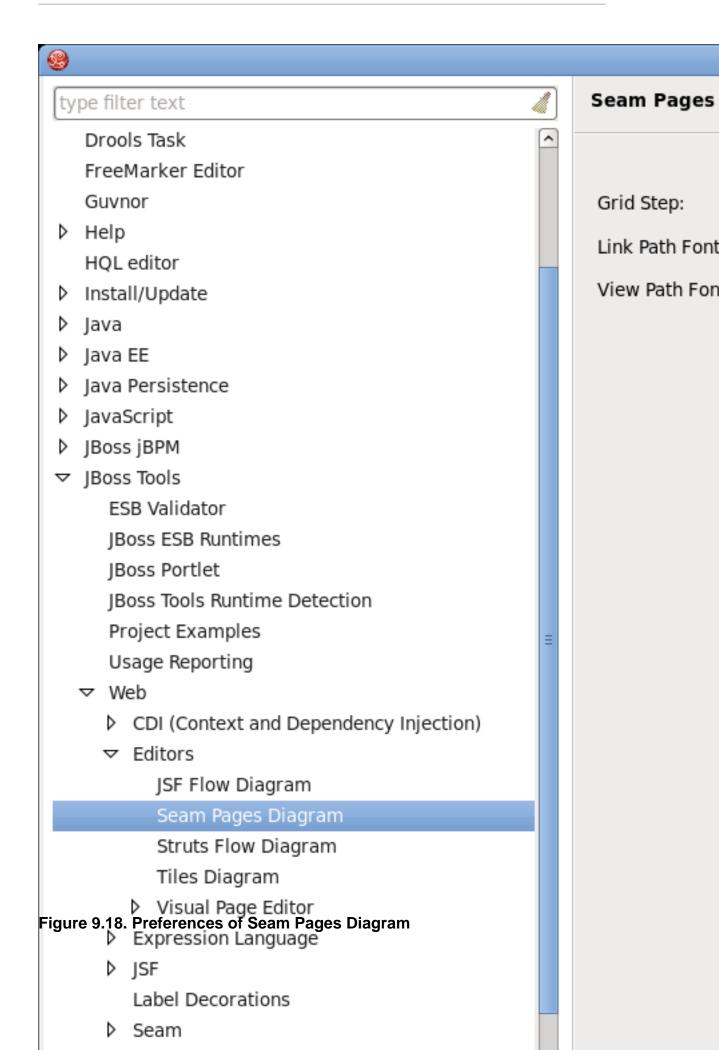
The following preferences can be changed on the JBoss Tools  $\rightarrow$  Seam  $\rightarrow$  Validator page.

In Validator panel you configure seam problems that will be processed by validator.

Sector 2010	
type filter text 🧳	Validator
Drools Task	
FreeMarker Editor	T Fraklaus
Guvnor	🗹 Enable val
▶ Help	Maximum nur
HQL editor	Select the sev
Install/Update	- Compone
▷ Java	Duplicate of
Java EE	
Java Persistence	Stateful co
▷ JavaScript	Stateful co
▷ JBoss jBPM	Stateful co
	Componen
JBoss ESB Runtimes	componen
JBoss Portlet	Componen
JBoss Tools Runtime Detection	Entities
Project Examples	Componer
Usage Reporting	→ Factories
⊽ Web	▶ Bijections
CDI (Context and Dependency Injection)	Context v
▷ Editors	▶ pages.xm
Expression Language	Project Se
▷ JSF	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Label Decorations	
⊽ Seam	
Validator Figure 9.17. Seam Validator Struts	
Verification	
ModeShape	
Plug-in Development	

## 9.12. Seam Pages Diagram

In order to customize the layout of the Diagram used for editing and composing page.xml file in Graphical mode of Seam Pages Editor you can go to Window  $\rightarrow$  Preferences  $\rightarrow$  JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Editors  $\rightarrow$  Seam Pages Diagram.



### 9.13. Struts

By selecting JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Struts you can configure Struts projects specific preferences.

type filter text	Struts
Drools Task	Struts Projects
FreeMarker Editor	Strats Projects
Guvnor	
▶ Help	
HQL editor	
▷ Install/Update	
⊅ Java	
▷ Java EE	
Java Persistence	
▷ JavaScript	
JBoss jBPM	
ESB Validator	
JBoss ESB Runtimes	
JBoss Portlet	
JBoss Tools Runtime Detection	
Project Examples	
Usage Reporting	
▼ Web	
CDI (Context and Dependency Injection)	
Editors	
Expression Language	
▷ JSF	
Label Decorations	
Seam	
Struts Figure 9.19. Struts projects preferences Page. Verification	
ModeShape	
Plug-in Development	
Project Archives	

### 9.14. Struts Automation

On **Automation** panel you can modify default text for the Title Struts plug-in element, the Validator Struts plug-in element, and error message resource files.

type filter text		Automation
Drools Task	^	Here you can r
FreeMarker Editor		the Validator S
Guvnor		
▶ Help		
HQL editor		
Install/Update		
▷ Java		
Java EE		
Java Persistence		
JavaScript		
JBoss jBPM		
ESB Validator		
JBoss ESB Runtimes		
JBoss Portlet		
JBoss Tools Runtime Detection		
Project Examples	=	
Usage Reporting → Web		
<ul> <li>CDI (Context and Dependency Injection)</li> </ul>		
<ul> <li>Editors</li> </ul>		
<ul> <li>Expression Language</li> </ul>		
ISF		
Label Decorations		
Seam		
✓ Struts		
Figure 9.20. Struts Automatic  Automation		
Customization		
Project		
Verification		

## 9.15. Plug-in Insets

By selecting  $Web \rightarrow Struts \rightarrow Automation \rightarrow Plug-in Insets$  on tab Tiles you can define a default text for tiles plugin.

<b>9</b>		
type filter text		Plug-in Inset
Drools Task	•	
FreeMarker Editor		Tiles Validat
Guvnor		Text:
▶ Help		<plug-in clas<="" td=""></plug-in>
HQL editor		<set-proper <set-propert< td=""></set-propert<></set-proper 
Install/Update		
▷ Java		
Java EE		
Java Persistence		
▷ JavaScript		
JBoss jBPM		
ESB Validator		
JBoss ESB Runtimes		
JBoss Portlet		
JBoss Tools Runtime Detection		
Project Examples	=	
Usage Reporting		
<ul> <li>CDI (Context and Dependency Injection)</li> </ul>		
<ul> <li>Editors</li> </ul>		
<ul> <li>Expression Language</li> </ul>		
▷ JSF		
Label Decorations		
Seam		
<ul> <li>✓ Struts</li> <li>Figure 9.21. Plug-in Insets</li> <li>✓ Automation</li> </ul>		
Plug-in Insets		
Resource Insets		
Customization		

The same is done but for validator plugin on the tab Validators.

Sector 10 (1998)		
type filter text		Plug-in Inset
Drools Task	^	
FreeMarker Editor		Tiles Validat
Guvnor		Text:
▶ Help		<plug-in clas<="" td=""></plug-in>
HQL editor		<set-proper </set-proper 
Install/Update		
⊅ Java		
Java EE		
Java Persistence		
JavaScript		
JBoss jBPM		
ESB Validator		
JBoss ESB Runtimes		
JBoss Portlet		
JBoss Tools Runtime Detection		
Project Examples	Ξ	
Usage Reporting		
▽ Web		
CDI (Context and Dependency Injection)		
Editors		
Expression Language		
▷ JSF		
Label Decorations		
▷ Seam		
<ul> <li>✓ Struts</li> <li>Figure 9.22. Plug-in Insets of Validators</li> <li>✓ Automation</li> </ul>		
Plug-in Insets		
Resource Insets		
Customization		

#### 9.16. Resource Insets

To see Resource Insets preference page select JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Struts  $\rightarrow$  Automation  $\rightarrow$  Resource Insets.

On Resource Insets panel you determine default error messages for error resource files.

<b>9</b>	
type filter text	Resource Ins
Drools Task	
FreeMarker Editor	Default Error
Guvnor	Text:
▷ Help	errors.requir
HQL editor	errors.minler errors.maxle
Install/Update	errors.invalio
▷ Java	and the second sec
Java EE	errors.byte= errors.short=
Java Persistence	errors.intege
▷ JavaScript	errors.long= errors.float=
JBoss jBPM	errors.double
ESB Validator	errors.date= errors.range
JBoss ESB Runtimes	errors.credito
JBoss Portlet	errors.email=
JBoss Tools Runtime Detection	
Project Examples	
Usage Reporting	
▼ Web	
CDI (Context and Dependency Injection)	
▷ Editors	
Expression Language	
▷ JSF	
Label Decorations	
▷ Seam	
Plug-in Insets	
Resource Insets	
Customization	

### 9.17. Struts Customization

The following preferences can be changed on the JBoss Tools  $\to$  Web  $\to$  Struts  $\to$  Customization page.

In the **Customization** screen you configure Link Recognizer for Struts tags.

<b>9</b>		
type filter text	🥖 с	ustomizatio
Drools Task		
FreeMarker Editor	1	Link Recogniz
Guvnor		Tag
▷ Help		html:link
HQL editor		html:link
Install/Update		html:link
▷ Java		html:frame
Java EE		html:frame
Java Persistence		html:frame
JavaScript		html:form
JBoss jBPM		logic:forward
		logic:redirect
ESB Validator		
JBoss ESB Runtimes		
JBoss Portlet		
JBoss Tools Runtime Detection		
Project Examples	Ξ	
Usage Reporting		
⊽ Web		
CDI (Context and Dependency Injection)		
Editors		
Expression Language		
▷ JSF		
Label Decorations		
Seam		
<ul> <li>✓ Struts</li> <li>Figure 9.24. Struts Customization</li> <li>✓ Automation</li> </ul>		
Plug-in Insets		
Resource Insets		
Customization		

## 9.18. Struts Project

You can change the following preferences on the JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Struts  $\rightarrow$  Project preference page:

On **Project** panel you define a template for a new Struts created project: servlet version, page template and so on.

1 🧐		
type filter text		Project
Drools Task	^	
FreeMarker Editor		New Project
Guvnor		Struts Version
▶ Help		Project Templ
HQL editor		rioject lempi
Install/Update		
▷ Java		Projects Root
Java EE		Servlet Versio
Java Persistence		
JavaScript		
▷ JBoss jBPM		
✓ JBoss Tools ESB Validator		
JBoss ESB Runtimes JBoss Portlet		
JBoss Tools Runtime Detection		
Project Examples		
Usage Reporting	=	
⊽ Web		
CDI (Context and Dependency Injection)		
Editors		
Expression Language		
▷ JSF		
Label Decorations		
Seam		
<ul> <li>✓ Struts</li> <li>Figure 9.25. Struts Project</li> <li>✓ Automation</li> </ul>		
Plug-in Insets		
Resource Insets		
Customization		

Selecting the Import Project tab in the Struts Project screen allows you to determine the default servlet version and whether to register Web Context in server.xml.

<b>9</b>		
type filter text		Project
Drools Task	^	f
FreeMarker Editor		New Project
Guvnor		Servlet Versio
▶ Help		
HQL editor		
Install/Update		
▷ Java		
Java EE		
Java Persistence		
JavaScript		
JBoss jBPM		
ESB Validator		
JBoss ESB Runtimes		
JBoss Portlet		
JBoss Tools Runtime Detection		
Project Examples	≡	
Usage Reporting		
✓ Web		
CDI (Context and Dependency Injection)		
Editors		
Expression Language		
JSF Label Decorations		
Seam		
✓ Struts		
Figure 9.26. Import Struts Pages		
Plug-in Insets		
Resource Insets		
Customization		

## 9.19. Struts Support

The following preferences can be changed on the JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Struts  $\rightarrow$  Project  $\rightarrow$  Struts Support page.

Select Struts Support screen if you want to configure Struts versions support settings.

<b>9</b>		
type filter text		Struts Suppo
Drools Task	^	
FreeMarker Editor		Struts Suppor
Guvnor		Servlet Class
▷ Help		URL Pattern:
HQL editor		UKL Pattern.
Install/Update		TLD Files:
▶ Java		
Java EE		
Java Persistence		
JavaScript		
▷ JBoss jBPM		
ESB Validator		
JBoss ESB Runtimes		
JBoss Portlet		
JBoss Tools Runtime Detection	_	
Project Examples Usage Reporting	=	
✓ Web		
<ul> <li>CDI (Context and Dependency Injection)</li> </ul>		
<ul> <li>Editors</li> </ul>		
<ul> <li>Expression Language</li> </ul>		
▷ JSF		
Label Decorations		
Seam		
<ul> <li>✓ Struts</li> <li>Figure 9.27. Struts Support</li> <li>✓ Automation</li> </ul>		
Plug-in Insets		
Resource Insets		
Customization		

### 9.20. Struts Flow Diagram

Similarly to the JSF Flow Diagram screen, selecting JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Editor  $\rightarrow$  Struts Flow Diagram page allows you to specify aspects of the Diagram mode of the Struts configuration file editor. The Struts Flow Diagram screen adds an option to hide the Diagram tab and labeling settings for additional artifacts.

O				Preferen	ces		
ty	pe filter text	4	)	Struts Flow Dia	gra	m	<b>⇔</b> •
⊳	JavaScript	^					
⊳	JBoss jBPM			Struts Flow Diagr	am	Add Page	
$\bigtriangledown$	JBoss Tools					Do not show diagram tab	
	ESB Validator				$\checkmark$	Show grid	
	JBoss ESB Runtimes			Grid Step:	16	-	
	JBoss Maven Integration			ond step.	2		
	JBoss Portlet			Action Font:	de	fault,size=8,style=1	B <u>r</u> ows
	JBoss Tools Runtime Detect	-		Forward Font:	de	fault,size=7,style=1	B <u>r</u> ows
	Project Examples			Path Font:	de	fault,size=8,style=1	B <u>r</u> ows
	Usage Reporting				2		
	<ul> <li>V Web</li> <li>CDI (Context and Depen</li> </ul>			Comment Font:	de	fault,size=10,style=0	B <u>r</u> ows
	✓ Editors	1			$\checkmark$	Switch to control mode after tra	nsition is
	JSF Flow Diagram				$\checkmark$	Show shortcut icon	
	Seam Pages Diagram				$\checkmark$	Show shortcut path	
	Struts Flow Diagram					·	
	Tiles Diagram	=					
	Visual Page Editor						
	Expression Language						
	▷ JSF						
	Knowledge Base						
	Label Decorations						
	Seam 2						
	Struts						
	Verification						
Þ	Maven						
Þ	ModeShape						
Þ	Mylyn Nurs is Development						
⊳	Plug-in Development						
⊳	Project Archives Remote Systems	~				Postara Defaulta	A
<	iii >	-				Restore <u>D</u> efaults	App
(	?					Cancel	OK

Figure 9.28. Struts Flow Diagram

Selecting the Add Page tab in the Struts Flow Diagram screen allows you to determine the default template and file extension for views (pages) you add directly into the diagram using a context menu or the view-adding mode of the diagram cursor.

0	Preference	ces
type filter text	Struts Flow Diagram	1
JBOSS TOOIS KUNLIME DELECT		
Project Examples	Struts Flow Diagram	Add Page
Usage Reporting	Page Template: Stru	tsForm
▼ Web		
CDI (Context and Depen Editors	Extension: jsp	
✓ Editors     ISE Flow Diagram		
JSF Flow Diagram		
Seam Pages Diagram Struts Flow Diagram		
Tiles Diagram		
<ul> <li>Visual Page Editor</li> </ul>		
<ul> <li>Expression Language</li> </ul>		
▷ JSF		
Knowledge Base		
Label Decorations		
Seam 2		
Struts		
Verification		
Maven		
ModeShape		
Þ Mylyn	Ξ	
Plug-in Development		
Project Archives		
Remote Systems		
Report Design		
Run/Debug		
Savara		
Server		
▷ Team		
Teiid Designer		
Terminal		Restore <u>D</u> efaults
?		Cancel

#### Figure 9.29. Adding Page

## 9.21. Tiles Diagram

JBoss Tools  $\rightarrow$  Web  $\rightarrow$  Editors  $\rightarrow$  Title Diagram screen allows you control some settings for the placement of Tiles definitions in the Diagram mode of the JBoss Tools Tiles editor.

٢	Preferences	
type filter text	Tiles Diagram	
јвоззпоотя кипите рецеси Project Examples	Tiles Diagram	
Usage Reporting	Vertical Spacing: default(20)	
CDI (Context and Depen	Horizontal Spacing: default(185)	
✓ Editors JSF Flow Diagram	Definition Name Font: default,size=	
Seam Pages Diagram Struts Flow Diagram		indion
Tiles Diagram         ▷ Visual Page Editor         ▷ Expression Language         ▷ JSF		
Knowledge Base Label Decorations		
▷ Seam 2 ▷ Struts		
Verification Maven		
▷ ModeShape ▷ Mylyn	=	
Plug-in Development Project Archives		
<ul> <li>Remote Systems</li> <li>Report Design</li> </ul>		
Run/Debug		
▷ Savara ▷ Server		
<ul><li>Team</li><li>Teiid Designer</li></ul>		
Terminal	✓	Restore <u>D</u> efaults
?		Cancel

#### Figure 9.30. Tiles Diagram

# 9.22. Server Preferences

Preferences for JBoss Server and other servers can be changed on the **Server** page.

er text 🛛 🦪	Server
	Show Servers view when server state changes
e	Show Servers view when server state changes
Marker Editor	
nor	
editor	
II/Update	
EE	
Persistence	
Script	
s jBPM	
s Tools	
en	
eShape	
'n	
in Development	
ect Archives	
ote Systems	
ort Design	
Debug	
ira	
er	
1 I	
Designer	
inal	
je Data Collector	
lation	
Services	
~	Restore <u>D</u> ef
III >	
	V

#### Figure 9.31. Server Preferences

On the Server  $\rightarrow$  Runtime Environments page you can add new or modify already defined Server Runtime.

	Prefe	rences
pe filter text 🛛 🦪	Server Runtime Environm	ents
	Add, remove, or edit server rur	ntime environments.
Forge		
reeMarker Editor	Server runtime environments:	
iuvnor	Name	Туре
elp QL editor	🕻 JBoss 7.0 Runtime	JBoss 7.x Runtime
	JBoss EPP 5.x Runtime	JBoss Enterprise A
/Update	JBoss SOA-P 5.x Runtime	JBoss Enterprise A
-		
EE		
Persistence		
ript		
jBPM Tools		
JIS		
ape		
nape		
n Development =		
t Archives		
e Systems		
rt Design		
ebug		
ra		
r		
udio		
efault Filesets		
aunching		
ofilers		
Runtime Environments		
am		
id Designer		
minal 🗸		
[*	/home/irooskov/Work/JBT/Serv	ers/iboss-as-web-7.0.0 Final

Figure 9.32. Runtime Environments

Server Launching preferences can be configured on the  $\textbf{Server} \rightarrow \textbf{Launching}$  page.

)		Preferences
type filter te	ext 🔏	Launching 🔶 🗸
Droois ia	sk 🔼	Automatically publish when starting servers
Forge		Automatically publish when starting servers
FreeMark	er Editor	
Guvnor		Save dirty editors before starting the server
Help HQL edito	or and	○ A <u>l</u> ways ○ <u>N</u> ever <b>●</b> <u>P</u> rompt
<ul> <li>Install/Up</li> </ul>		When switching to a different server mode
⊅ Java	Juare	○ Restart ○ Continue ● Prompt
≥ Java EE		
> Java EE > Java Pers	istence	When switching the server out of debug mode
▷ Java Pers ▷ JavaScrip		○ Rest <u>a</u> rt ○ Disable <u>b</u> reakpoints ○ Contin <u>u</u> e ④ Pr <u>o</u> mpt
<ul> <li>JBoss jBP</li> </ul>		When switching the server into debug mode, re-enable break
JBoss Too		$\bigcirc$ Always $\bigcirc$ Never $\textcircled{o}$ Prompt
▷ Maven		
ModeSha	pe	When required, restart the server
> Mylyn	F -	○ Always ○ Never
	evelopment =	
Project A		
Remote S		
Report De	-	
Run/Debu	g	
Savara		
✓ Server		
Audio		
Defaul	t Filesets	
Launch	ning	
Profile	rs	
▷ Runtim	ne Environments	
Team		
Teiid Desi	igner	
Terminal	~	Restore <u>D</u> efaults
< III	>	
(?)		Cancel
J		

Figure 9.33. Server Launching Preferences

Going to **Server**  $\rightarrow$  **Audio** you can enable or disable the sound notification for different Server states and actions and set the sound volume as well.

)		Preferences		
type filter text 🛛 🤞	<b>^</b>	udio		<b>⇔</b> ~
Droois lask	<u> </u>	Enable sounds		
> Forge				
FreeMarker Editor		Volume: 0		
Guvnor				
> Help	<u>s</u>	ounds:		
HQL editor		Sound	Audio File	E
> Install/Update		🗹 🧊 Publishing		
> Java		🗹 🎝 Publish Finished	(none)	Bro
> Java EE		Server		
> Java Persistence		Server Started	(none)	Re
> JavaScript		Server Stopped	(none)	
JBoss jBPM		•••		
JBoss Tools				
Maven				
ModeShape				
Mylyn	_			
Plug-in Development Project Archives	=			
Project Archives				
Remote Systems				
Report Design     Rup/Debug				
> Run/Debug > Savara				
7 Server				
Audio				
Default Filesets				
Launching				
Profilers				
Runtime Environments				
> Team				
Teiid Designer				
Terminal		III	>	
	~		Restore <u>D</u> efaults	A
			Cancel	C

Figure 9.34. Sound Notification Adjustment

#### 9.23. XDoclet

The preferences for XDoclet can be changed if you click **Java EE**  $\rightarrow$  **XDoclet** on the left navigation bar.

On the **XDoclet** screen it is possible to enable or disable XDoclet builder by checking proper box, specify XDoclet home and determine XDoclet module version as well.

$\odot$		Preferences	
ty	vpe filter text 🦼	Missing library: xdocletctory for XDoclet. 1.2.1	<b>⇔</b> ∙ ⊲)
⊳⊳	General Ant	Set XDoclet runtime preferences.	
	BPELChoreographyData ManagementDeltacloudDroolsDrools TaskForgeFreeMarker EditorGuvnorHelpHQL editorInstall/UpdateJava	Enable XDoclet builder:  XDoclet home: Version: 1.2.1	Bro
	Java EE      XDoclet  Java Persistence JavaScript JBoss jBPM JBoss Tools Maven ModeShape Mylyn Plug-in Development Project Archives Remote Systems Report Design Run/Debug Savara Server      X	Restore Defaults	Арр
	?	Cancel	ОК

Figure 9.35. XDoclet Runtime Preferences Page

Switch to **Java EE**  $\rightarrow$  **XDoclet**  $\rightarrow$  **ejbdoclet** page in order to adjust settings for EJB-specific subtasks.

O			Pre	eferences		
ty	rpe filter text 🛛 🦼	e	jbdoclet		<b>~</b> ~	
⊳	General		Tasks —			
⊳	Ant					_
⊳	BPEL		Include	Task		E
⊳	Choreography		<ul> <li>✓</li> </ul>	DeploymentDescriptor		
⊳	Data Management		<ul> <li>✓</li> </ul>	RemoteInterface		
	Deltacloud		<ul> <li>✓</li> </ul>	HomeInterface		
⊳	Drools		<ul><li>✓</li></ul>	LocalInterface		
	Drools Task		$\checkmark$	LocalHomeInterface		
⊳	Forge		<	UtilObject		
	FreeMarker Editor		$\checkmark$	DataObject		
	Guvnor		$\checkmark$	Dao		
⊳	Help =		$\checkmark$	valueobject		
	HQL editor		$\checkmark$	Entitypk		
⊳	Install/Update		$\checkmark$	Entitycmp		
⊳	Java		$\checkmark$	Entitybmp		
$\nabla$	Java EE		$\checkmark$	Session		
	✓ XDoclet		$\checkmark$	Mdb		
	ejbdoclet			Weblogic		
	webdoclet			JBoss		
⊳	Java Persistence			JOnAS		
⊳	JavaScript			WebSphere		
⊳	JBoss jBPM					
⊳	JBoss Tools					
⊳	Maven					
⊳	ModeShape					
⊳	Mylyn					
⊳	Plug-in Development					
	Project Archives					
⊳	Remote Systems					
.⊳	Report Design					
⊳	Run/Dehura			Restore <u>D</u> efau	lts	<u>A</u> pp
(	?			Cancel		ок

Figure 9.36. ejbdoclet

To configure settings for various web-specific XDoclet sub-tasks, follow to **Java EE**  $\rightarrow$  **XDoclet**  $\rightarrow$  **webdoclet** page.

0				Pre	ferences		
ty	pe filter text		v	vebdocle	t		<b>⇔</b> ~ ⊂
⊳	General	^		Tala			
⊳	Ant			Tasks —			
⊳	BPEL			Include	Task		E
⊳	Choreography			$\checkmark$	DeploymentDescripto	r	
⊳	Data Management				WebLogic		
	Deltacloud				JBoss		
⊳	Drools				JOnAS		
	Drools Task				Websphere		
⊳	Forge						
	FreeMarker Editor						
	Guvnor						
⊳	Help	Ξ					
	HQL editor						
⊳	Install/Update						
⊳	Java						
$\nabla$	Java EE						
	✓ XDoclet						
	ejbdoclet						
	webdoclet						
⊳	Java Persistence						
⊳	JavaScript						
⊳	JBoss jBPM						
⊳	JBoss Tools						
⊳	Maven						
⊳	ModeShape						
⊳	Mylyn						
⊳	Plug-in Development						
	Project Archives						
⊳	Remote Systems						
⊳	Report Design						
<b>Þ</b>	Run/Debug	~				Restore <u>D</u> efaults	<u>A</u> p
	_						
(	?					Cancel	OK

Figure 9.37. webdoclet

# Context Menu Preferences and Options

To adjust the project specific preferences, you should bring the context menu for your project and select the **Properties** option. More details on what adjustments you can perform in the Preferences screen, see in the *Chapter 9, JBoss Tools Preferences* chapter.

Under the **Configure** option in the context menu there are also several actions provided by JBDS:

- Add/Remove Struts Capabilities
- Add/Remove JSF Capabilities
- Add Custom Capabilities

#### **10.1. Add/Remove Struts Capabilities**

Please, for details refer to the Struts Tools Reference Guide.

#### **10.2. Add/Remove JSF Capabilities**

Please, for details refer to the JSF Tools Reference Guide.

#### **10.3. Add Custom Capabilities**

You can add custom capabilities to any JSF, Struts or Seam project made within JBDS, i.e. add a support of additional frameworks built on top of JSF, such as

- ADF
- Facelets
- JBoss Rich Faces (versions 3.1, 3.2, 3.3)

When the option is selected, the Add Custom Capabilities dialog appears. You should check the needed modules and press the **Finish** button.

See Add Cu	ıstom Capabilities 🛛 🕅
Select Custom Capabilitie	es 🛞
<ul> <li>▷ □ Facelets</li> <li>▷ □ JBoss RichFaces 3.1</li> <li>▷ ☑ JBoss RichFaces 3.3</li> </ul>	
	Finish Cancel

#### Figure 10.1. Adding Custom Capabilities

The next page displays all the updates that have been made to the project.

#### Add Custom Capabilities

#### Added Custom Capabilities

2

The following updates have been made to the project.



JBoss RichFaces 3.3: Added "Ajax4jsf Filter" to /WEB-INF/web.xml JBoss RichFaces 3.3: Added "Ajax4jsf Filter mapping" to /WEB-INF/web.xml JBoss RichFaces 3.3: Added "Skin Parameter" to /WEB-INF/web.xml JBoss RichFaces 3.3: Added richfaces-api-3.3.3.Final.jar to WEB-INF/lib JBoss RichFaces 3.3: Added richfaces-impl-3.3.3.Final.jar to WEB-INF/lib JBoss RichFaces 3.3: Added richfaces-ui-3.3.3.Final.jar to WEB-INF/lib

Close

Figure 10.2. Updates Displayed

### FAQ

### 11.1. What should I do if Visual Page Editor does not start under Linux?

The Visual Page Editor requires the library libstdc++.so.5. This library is contained in the compat-libstdc++-33.i386 package.

• To install this package on Fedora Core or Red Hat Enterprise Linux run the following command:

```
yum install compat-libstdc++-33.i386
```

• On any other rpm based distributions download libstdc++.so.5 and run the following command:

rpm -Uvh compat-libstdc++-33.i386

• On Debian based distributions run the following command:

apt-get install compat-libstdc++-33.i386

In case you have the library installed and you still have issue with starting the Visual Page Editor then close all browser views/editors and leave one Visual Page Editor open and restart eclipse. This should force a load of the right XULRunner viewer.

you use Fedora Core Linux and Eclipse Version: If it doesn't help and 3.4.1, the issue be produced because libswt-xulrunner-gtk-3449.so can eclipse-swt-3.4.1-5.fc10.x86\_64.rpm/eclipse/plugins/ file doesn't present in org.eclipse.swt.gtk.linux.x86\_64\_3.4.1.v3449c.jar. To add this file to eclipse you should:

• Decompress eclipse/plugins/org.eclipse.swt.gtk.linux.x86\_3.4.1.v3449c.jar from eclipse-SDK-3.4.1-linux-gtk-x86\_64.tar.gz

- Copy libswt-xulrunner-gtk-3449.so file to your Fedora Eclipse location.
- Open the file eclipse.ini,which can be found in your Fedora Eclipse location and add the following line:



,where  $\ensuremath{\mathsf{/usr/lib/eclipse}}$  is the path to your eclipse folder.

# **11.2. How do I change the auto-formating preferences** for the Visual Page Editor?

JBoss HTML/JSP editor uses basic eclipse HTML formatter to format files. So if you want to change preferences of formatter for the Visual Page Editor, you should change it for eclipse html editor (open Window  $\rightarrow$  Preferences then choose Web  $\rightarrow$  HTML Files  $\rightarrow$  Editor).

## **11.3. Visual Editor starts OK, but the Missing Natures dialog appears**

E	Missing M	latures 🗙				
Q	JBoss Tools Visual Editor might not fully work in project "WebProject" because it does not have JSF and code completion enabled completely.					
	Please use the Configure menu on th features of the editor working.	e project to enable JSF if you want all				
🗆 Do r	not show this dialog again!	See JBoss Tools Visual Editor FAQ				
		ОК				

#### Figure 11.1. Missing Nature

Some functionality of Visual Editor may not work if a project doesn't have org.jboss.tools.jsf.jsfnature or org.jboss.tools.jst.web.kb.kbnature in .project configuration. To fix this problem and turn off the message box execute next steps:

- 1. Right mouse button click on a project in Package Explorer.
- <sup>2.</sup> Select **Configure**  $\rightarrow$  **Add JSF Capabilities** from the context menu.

3. Configure your project using Add JSF Capabilities wizard and press Finish.

If you are sure that your project does not need JSF capabilities, just disable this message box by checking **Do not show this dialog again!** checkbox.

### Conclusion

On the whole, this document should guide you to those parts of JBoss Tools which you specifically need to develop Web Applications. It covers different aspects of visual components such as editors, views, etc. for browsing, representing and editing web resources you are working with.

If there's anything we didn't cover or you can't figure out, please feel free to visit our *JBoss Developer Studio Users Forum* [http://www.jboss.com/index.html? module=bb&op=viewforum&f=258] or *JBoss Tools Users Forum* [http://www.jboss.com/ index.html?module=bb&op=viewforum&f=201] to ask questions. There we are also looking for your suggestions and comments.