

# Working with Standard Actions

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# JSP Standard Actions

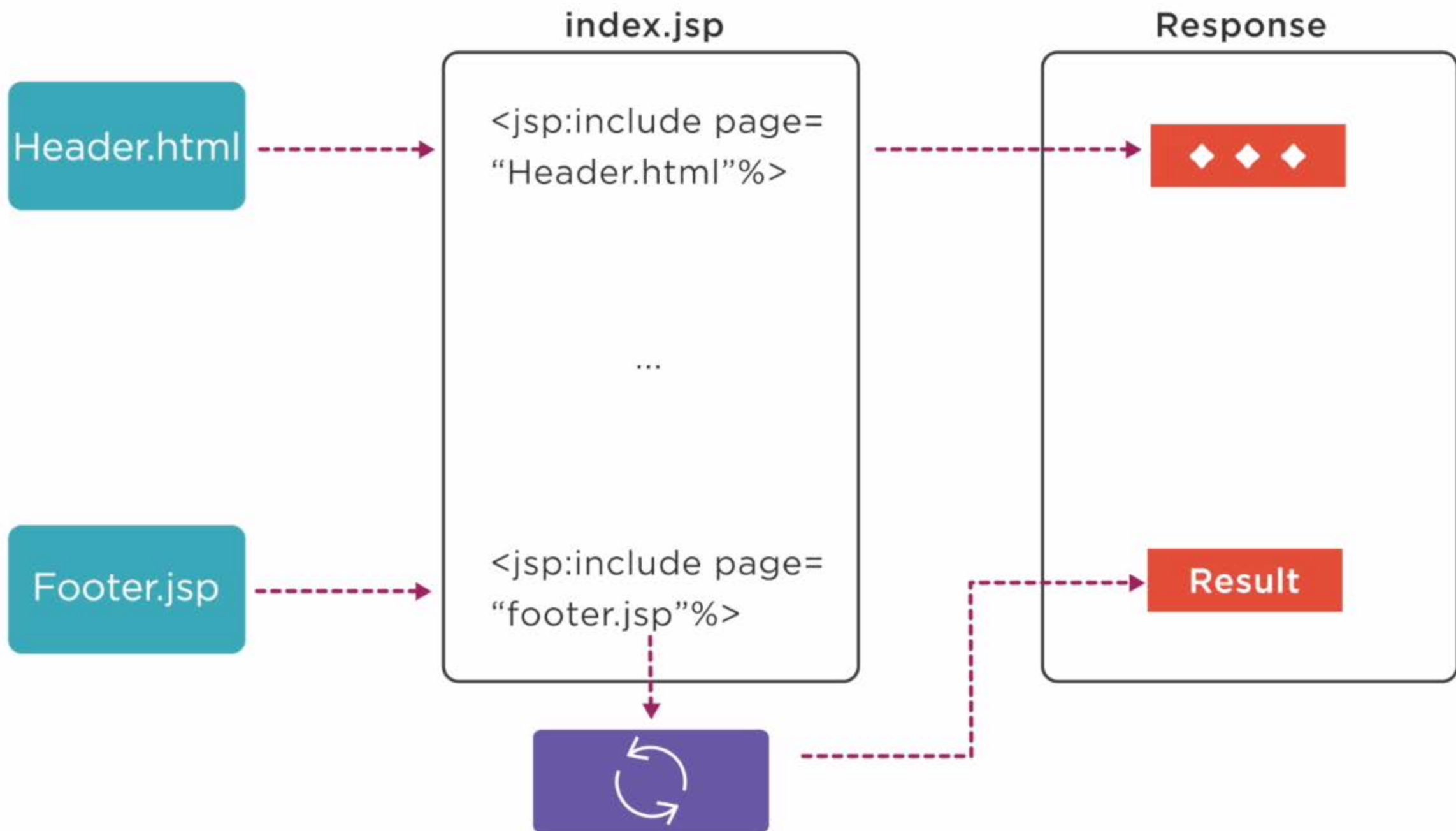
- <jsp:include>
- <jsp:forward>
- <jsp:param>
- <jsp:useBean>
- <jsp:setProperty>
- <jsp:getProperty>
- <jsp:plugins>
- <jsp:fallback>
- <jsp:attribute>
- <jsp:body>
- <jsp:invoke>
- <jsp:element>
- <jsp:text>



<jsp:include>

---





```
<jsp:include page="url flush="true| false"/>
```

## Syntax

```
<jsp:include>
```



## main.jsp

```
<%page language="java"%>
<html>
<head>
<title>The include Action Example</title>
</head>
<body>
<center>
<h2>The include Action Example</h2>
<jsp:include page="date.jsp"
flush="true"/>
</center>
<p>Copyright&copy;Pluralsight</p>
</body>
</html>
```

## date.jsp

```
<p>
Date:<%= (new
    java.util.Date()).toLocaleString() %>
</p>
```



? What is the difference between include action and include directive



## Include directive

(<%@include%>)

Copies the code from one page to another page

Copies the code during the translation time

Generates only one Servlet

Static Binding

## Include action

(jsp:include)

Copies the results from one page to another page

Copies the output during the runtime

Generates two Servlets

Performs Dynamic Binding

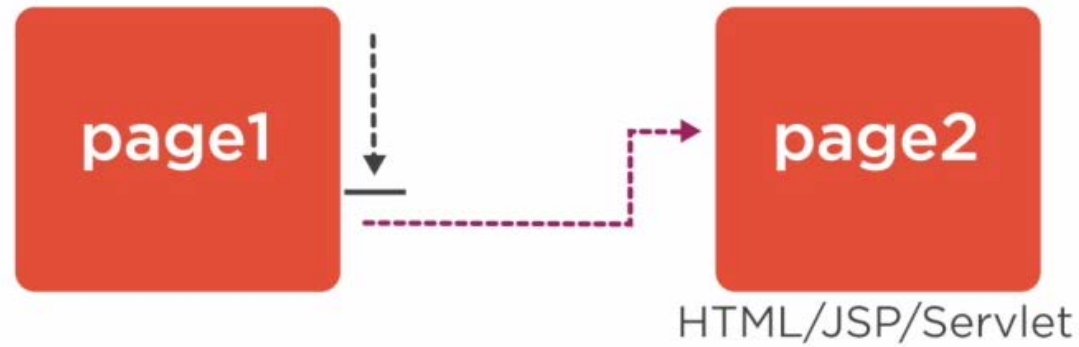




<jsp:forward>

---





```
<jsp:forward=getRequestDispatcher().forward()
```



JSP page must be buffered to use a `<jsp:forward >` tag

```
<jsp:forward page="url"/>
```

## Syntax

<jsp:forward> action tag



## main.jsp

```
<%page language="java"%>
<html>
<head>
<title>The forward Action Example</title>
</head>
<body>
<center>
<h2>The forward Action Example</h2>
<jsp:forward page="date.jsp"
flush="true"/>
</center>
<p>Copyright&copy;Pluralsight</p>
</body>
</html>
```

## date.jsp

```
<p>
Date:<%= (new
    java.util.Date()).toLocaleString() %>
</p>
```



## <jsp:forward>

Direct communication between source and destination pages

Uses same request and response object

Source and destination pages should belong to same application

## Sendredirect

Indirect communication between source and destination page

Uses separate request and response object

Can be in one same application/different application/same server/different server



<jsp:param>

---



```
<jsp:param name="..." value="..." />
```

## Syntax

```
<jsp:param>
```



Used as a sub-tag for include, forward or plugin action



## main.jsp

```
<%page language="java"%>
<html>
<head>
<title>The include Action
Example</title>
</head>
<body>
<jsp:forward page="course.jsp">
<jsp:param name="courseName"
value="JAVA">
<jsp:param name="trainer
"value="Sekhar Srinivasan">
</jsp forward>
</body>
</html>
```

## course.jsp

```
<%page language="java"%>
<html>
<head>
<title>The include Action
Example</title>
</head>
<body>
<h2>Course Details:</h2>
<p>Course
Name:<%request.getParameter
("courseName")%></p>
<p>Trainer:<%request.getParameter
("trainer")%></p>
</body>
</html>
```





<jsp:useBean>

---



## <jsp:useBean>

useBean action is a way for declaring and initializing the actual java bean component object



```
public class JavaBeanName implements Serializable
{
    public JavaBeanName(){}
    private String propertyName;
    public void setPropertyName(String value){this.propertyName=value;}
    public void getPropertyName(){return this.propertyname;}
}
```

## What is Java Bean?



```
<jsp:useBean attributes/>
```

## Syntax

```
<jsp:useBean>
```



# Attributes of <jsp:useBean>

**id**

**class**

**scope**

page

request

session

application

**type**

**beanName**



<jsp:setProperty>

---



```
<jsp:setProperty name= "  
property="propertyName|*"  
value="..."param="..." />
```

## Syntax

```
<jsp:setProperty>
```



## main.jsp

```
<form name="f1"
action="setName.jsp">
<p>First Name:<input type="text"
name="firstName"
id="lastName"/></p>
<p>LastName:<input type="text"
name="lastName" id="lastName"/>
</p>
<p><input
type="submit" value="Submit"/>
</p>
</form>
```

## setName.jsp

```
<jsp:useBean id="nameBean"
class="com.psdemos.model.Name"
scope="session">

<jsp:setProperty name="nameBean"
property="firstName"
params="firstName"/>

<jsp:setPropertyname="nameBean"
property="lastName"
params="lastName"/>
</jsp:useBean>
```





## main.jsp

```
<form name="f1"
action="setName.jsp">
<p>First Name:<input type="text"
name="firstName"
id="lastName"/></p>
<p>lastName:<input type="text"
name="lastName" id="lastName"/>
</p>
<p><input
type="submit" value="Submit"/>
</p>
</form>
```

## setName.jsp

```
<jsp:useBean id="nameBean"
class="com.psdemos.model.Name"
scope="session">

<jsp:useBean id="nameBean"
property="*/>

</jsp:useBean>
```



<jsp:getProperty>

---



```
<jsp:getProperty name="..." property="..." />
```

## Syntax

```
<jsp:getProperty>
```



# setName.jsp

```
<jsp:useBean id="nameBean" class="com.psdemos.model.Name"  
scope="session">
```

```
<jsp:useBean id="nameBean" property="*/>
```

```
</jsp:useBean>
```

```
<p>First Name : <jsp:setProperty name="nameBean"property="firstName"/></p>
```

```
<p>Last Name :<jsp:setProperty name="nameBean"property="lastName"/></p>
```

```
<p><a href="getName.jsp">Read Value</a></p>
```



# getName.jsp

```
<jsp:useBean id="nameBean" class="com.psdemos.model.Name"  
scope="session">
```

```
<p>First Name:<jsp:getProperty name="nameBean" property="firstName"/></p>
```

```
<p>Last Name :<jsp:getProperty name="nameBean" property="lastName"/><p>
```

```
</jsp:useBean>
```

```
<hr/>
```

```
<p>First Name :<jsp:getProperty name="nameBean"property="firstName"/></p>
```

```
<p>Last Name :<jsp:getProperty name="nameBean"property="lastName"/></p>
```



<jsp:plugins> and <jsp:fallback>

---



```
<jsp:plugin type="bean | applet " code="..."codebase="...">
```

```
<jsp:params>
```

```
<jsp:param name="..." value="...">
```

```
</jsp:params>
```

```
</jsp:plugin>
```

## Syntax

```
<jsp:plugin>
```



Optional attributes type,align,height,width,name,title



<jsp:plugins> and <jsp:fallback>

---





## <jsp:fallback>

used to provide some meaning information to the client's browser if the requested plugin cannot be started



```
<jsp:plugin type ="bean | applet" code="..."codebase="...">
```

```
<jsp:fallback>
```

```
<p> Error while loading the applet</p>
```

```
</jsp:fallback>
```

```
</jsp:plugin>
```

## Syntax

```
<jsp:fallback>
```



<jsp:element>, <jsp:attribute> and  
<jsp:body>

---



# Element Action

Without a body

With a body



```
<jsp:element name="elementName"/>
```

## Syntax

<jsp:element> without a body



```
<jsp:element name="elementName">  
<jsp:attribute>...</jsp:attribute>  
<jsp:body>...</jsp:body>  
</jsp:element>
```

## Syntax

<jsp:element> with a body



Demo



## Working with Standard Actions



# Summary



<jsp:include>  
<jsp:forward>  
<jsp:param>  
<jsp:useBean>  
<jsp:setProperty>  
<jsp:getProperty>  
<jsp:plugins>  
<jsp:fallback>  
<jsp:attribute>  
<jsp:body>  
<jsp:invoke>  
<jsp:element>  
<jsp:text>