

STRUTS 2 - THE GENERATOR TAG

http://www.tutorialspoint.com/struts_2/struts_generator_tag.htm

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Often we come across situation where we have to create a list or array on the fly and iterate through the list. You could create the list or array using scriptlets or you can use the **generator** tag.

Create action class

```
package com.tutorialspoint.struts2;

public class HelloWorldAction{
    private String name;

    public String execute() throws Exception {
        return "success";
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }
}
```

Create views

Let us have **HelloWorld.jsp** to demonstrate the use of the **generator** tag:

```
<%@ page contentType="text/html; charset=UTF-8" %>
<%@ taglib prefix="s" uri="/struts-tags" %>
<html>
<head>
<title>Hello World</title>
</head>
<body>

<h2>Example of Generator Tag</h2>
<h3>The colours of rainbow:</h3>

<s:generator val="%{'Violet,Indigo,Blue,
    Green,Yellow,Orange,Red '}" count="7"
    separator=", ">
    <s:iterator>
        <s:property /><br/>
    </s:iterator>
</s:generator>

</body>
</html>
```

Here we are creating a **generator** tag and we ask it to parse the string that contains comma separated list of colours that form a rainbow. We tell the generator tag that the separator is "," and we want all seven values in the list. If we are only interested in the first three values, then we would set the count to 3. In the body of the generator tag, we used the iterator to go through the values created by the generator tag and we print the value of the property.

Configuration Files

Your **struts.xml** should look like:

```
<?xml version="1.0" encoding="UTF-8"?>
```

```

<!DOCTYPE struts PUBLIC
    "-//Apache Software Foundation//DTD Struts Configuration 2.0//EN"
    "http://struts.apache.org/dtds/struts-2.0.dtd">
<struts>
<constant name="struts.devMode" value="true" />
    <package name="helloworld" extends="struts-default">

        <action name="hello"

            method="execute">
                <result name="success">/HelloWorld.jsp</result>
            </action>

    </package>
</struts>

```

Your **web.xml** should look like:

```

<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns="http://java.sun.com/xml/ns/javaee"
    xmlns:web="http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd"
    xsi:schemaLocation="http://java.sun.com/xml/ns/javaee
        http://java.sun.com/xml/ns/javaee/web-app_3_0.xsd"
    >

    <display-name>Struts 2</display-name>
    <welcome-file-list>
        <welcome-file>index.jsp</welcome-file>
    </welcome-file-list>
    <filter>
        <filter-name>struts2</filter-name>
        <filter-class>
            org.apache.struts2.dispatcher.FilterDispatcher
        </filter-class>
    </filter>

    <filter-mapping>
        <filter-name>struts2</filter-name>
        <url-pattern>/*</url-pattern>
    </filter-mapping>
</web-app>

```

Right click on the project name and click **Export > WAR File** to create a War file. Then deploy this WAR in the Tomcat's webapps directory. Finally, start Tomcat server and try to access URL <http://localhost:8080/HelloWorldStruts2/hello.action>. This will give you following screen: