

Date: 23-07-2020

JSTL <fmt:timeZone> tag

This tag specifies the passing action nested in its body or the time zone for any time formatting.

Syntax:-

```
<fmt:timeZone attribute > body content </fmt:timeZone>
```

Let us try to do the following example to demonstrate this

Tag:-

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>
<%@ taglib uri="http://java.sun.com/jsp/jstl/fmt" prefix="fmt"%>
<html> <head> <title> fmt:timeZone tag example </title>
</head>
<body>
<c:set var="date" value="<%= new java.util.Date() %>" />
```

```
<table border="2" width="100%">
<tr> <td width="100%" colspan="2" bgcolor="#EE6F60">
< p align="center"> <b> <font color="black" size="6">
Formatting of today date:
<fmt:formatDate value="{date}" type="both" timeStyle="long"
dateStyle="long" /> </font> </b> </p> </td>
```

```
</tr>
```

```
<c:forEach var="zone" items="<%= java.util.TimeZone.
getAvailableIDs() %>">
<tr> <td width="50%" bgcolor="#COCOCO">
<c:out value="{zone}" /> </td>
<td width="50%" bgcolor="#FFEECD">
<fmt:timeZone value="{zone}">
```

```
<fmt:formatDate value="{date}" timeZone="{zone}" type="both"/>
```

```
</fmt:timeZone> </td> </tr>
```

```
</c:forEach>
```

```
</table>
```

```
</body>
```

```
</html>
```

The output like :-

Formatting of today date: July 23, 2020 11:00:05 AM IST	
Etc/GMT+12	July 23, 2020.PM
Etc/GMT+11
Pacific/Midway
Pacific/Pago-Pago
Pacific/Samoa

JSTL formatting tag :- <fmt:formatNumber> tag :-

Used to format the numeric value using the specific format or precision.

Syntax :-

```
<fmt:formatNumber attributes> body content </fmt:formatNumber>
```

Example :-

```
<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
<%@ taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt" %>
<html> <head> <title> fmt:formatNumber tag example </title>
</head> <body>
<h2> Formatting of Numbers : </h2>
<c:set var="amount" value="76923.12345" />
<p> Formatted Number 1 :
<fmt:formatNumber value="{amount}" type="currency" />
</p>
```


<p> Formatted Number 2 :

<fmt:formatNumber type="number" groupingUsed="true"
value="{amount}" /> </p>

<p> Formatted Number 3 :

<fmt:formatNumber type="number" maxIntegerDigits="3"
value="{amount}" /> </p>

<p> Formatted Number 4 :

<fmt:formatNumber type="number" maxFractionDigits="6"
value="{amount}" /> </p>

<p> Formatted Number 5 :

<fmt:formatNumber type="percent" maxIntegerDigits="4"
value="{amount}" /> </p>

<p> Formatted Number 6 :

<fmt:formatNumber type="number" pattern="###.###\$"
value="{amount}" /> </p>

</body>

</html>

Output will be as follows: -

Formatting of Numbers :

Formatted Number 1 : 76,923.12

Formatted Number 2 : 76923.123

Formatted Number 3 : 923.123

Formatted Number 4 : 76,923.12345

Formatted Number 5 : 2,312 %

Formatted Number 6 : 76923.123\$

<fmt:parseDate> tag:- parses the string representation of a time and date.

Syntax:- <fmt:parseDate attributes/>

Example:-

```
<%@taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core"%>
<%@taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt"%>
<html> <head> <title> fmt:parseDate tag example </title>
</head>
<body> <h2> Different formats of Date by parsing </h2>
<c:set var="date" value="27-09-2020"/>
<fmt:parseDate value="{date}" var="parsedDate"
pattern="dd-MM-yyyy"/>
<p> <c:out value="{parsedDate}"/> </p>
</body>
</html>
```

output will be as:-

Sun Sep 27 00:00:00 IST 2020

<fmt:bundle> tag — loads the resource bundle which is used by its tag body. In other words, this tag is used to make the bundles available for all.

Syntax:-

```
<fmt:bundle basename="Name" prefix="msg">
Body of the page(tag) </fmt:bundle>
```

Let us consider the following example:-

Simple.java file: -

```

package com.ssc;
import java.util.ListResourceBundle;
public class Simple extends ListResourceBundle {
    public Object [][] getContents() {
        return contents;
    }
    static final Object [][] contents = {
        {"colour.Violet", "Violet"},
        {"colour.Indigo", "Indigo"},
        {"colour.Blue", "Blue"},
    };
}

```

Now, compile it, and make it available to your web application folder. That means copy the class file to your web application folder.

Use the above class in the following file: -

```

<%@ taglib uri="http://java.sun.com/jsp/jstl/fmt prefix="fmt"%>
<html> <head> <title> fmt:bundle tag example </title>
</head> <body>
<fmt:bundle basename="com.ssc.Simple" prefix="colour">
<fmt:message key="Violet"/> <br/>
<fmt:message key="Indigo"/> <br/>
<fmt:message key="Blue"/> <br/>
</fmt:bundle>

```

<fmt:setTimeZone> tag :- Used to set the time zone inside a time zone configuration variable.

Syntax:- `<fmt:setTimeZone value="value" var="var_name" scope="scope" />`

Example:-

`<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c"%>`

`<%@ taglib uri="http://java.sun.com/jsp/jstl/fmt" prefix="fmt"%>`

`<html> <head> <title> fmt:setTimeZone tag example </title>`

`</head>`

`<body>`

`<c:set var="date" value="<% = new java.util.Date() %>" />`

`<p> Date and Time in IST Style : `

`<fmt:formatDate value="{date}" type="both" timeStyle="long" dateStyle="long" />`

`</p>`

`<fmt:setTimeZone value="GMT-7" />`

`<p> Date and Time in GMT-7 time zone : `

`<fmt:formatDate value="{date}" type="both" timeStyle="long" dateStyle="long" />`

`</p>`

`</body>`

`</html>`

Output will be get according to IST time zone and GMT-7 time zone both.

In next class fmt:setBundle, fmt:message tags will be explained by examples.