

JSTL (JSP Standard Tag Library)

JSTL is part of the Java EE API and included in most servlet containers. But to use JSTL in our JSP pages, we need to download the JSTL jars for your servlet container. Most of the times, you can find them in the example projects of server download and you can use them. You need to include these libraries in your web application project WEB-INF/lib directory. JSTL jars are container specific, for example in Tomcat, we need to include jstl.jar and standard.jar jar files in project build path. If they are not present in the container lib directory, you should include them into your application.

If you have maven project, below dependencies should be added in pom.xml file or else you will get following error in JSP pages – eclipse Can not find the tag library descriptor for “http://java.sun.com/jsp/jstl/ core”

```
<dependency>
    <groupId>jstl</groupId>
    <artifactId>jstl</artifactId>
    <version>1.2</version>
</dependency>
<dependency>
    <groupId>>taglibs</groupId>
    <artifactId>standard</artifactId>
    <version>1.1.2</version>
</dependency>
```

➤ **Based on the JSTL functions, they are categorized into five types.**

1. JSTL Core Tags

JSTL Core tags provide support for iteration, conditional logic, catch exception, url, forward or redirect response etc. JSTL Formatting tags are provided for formatting of Numbers, Dates and i18n support through locales and resource bundles.

To use JSTL core tags, we should include it in the JSP page like below.

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

In this article, we will look into important JSTL core tags.

```
</li>
```

```
<li><strong>JSTL Formatting and Localisation Tags</strong>: JSTL Formatting tags
```

```
<pre class="prettyprint">
```

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

2. JSTL SQL Tags

JSTL SQL Tags provide support for interaction with relational databases such as Oracle, MySql etc. Using JSTL SQL tags we can run database queries, we include these JSTL tags

in JSP with below syntax:

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

3. JSTL XML Tags

JSTL XML tags are used to work with XML documents such as parsing XML, transforming XML data and XPath expressions evaluation. Syntax to include JSTL XML tags in JSP page is:

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

4. JSTL Functions Tags

JSTL tags provide a number of functions that we can use to perform common operation, most of them are for String manipulation such as String Concatenation, Split String etc. Syntax to include JSTL functions in JSP page is:

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

➤ JSTL Core Tags

JSTL Core Tag	Description
<c:out>	To write something in JSP page, we can use EL also with this tag
<c:import>	Same as <jsp:include> or include directive
<c:redirect>	redirect request to another resource
<c:set>	To set the variable value in given scope.
<c:remove>	To remove the variable from given scope
<c:catch>	To catch the exception and wrap it into an object.

<c:if>	Simple conditional logic, used with EL and we can use it to process the exception from <c:catch>
<c:choose>	Simple conditional tag that establishes a context for mutually exclusive conditional operations, marked by <c:when> and <c:otherwise>
<c:when>	Subtag of <c:choose> that includes its body if its condition evalutes to 'true'.
<c:otherwise>	Subtag of <c:choose> that includes its body if its condition evalutes to 'false'.
<c:forEach>	for iteration over a collection
<c:forTokens>	for iteration over tokens separated by a delimiter.
<c:param>	used with <c:import> to pass parameters
<c:url>	to create a URL with optional query string parameters