

What is JSTL?

JSTL stands for Java server pages standard tag library, and it is a collection of custom JSP tag libraries that provide common web development functionality.

JSTL stands for JSP Standard Tag Library. It provides the no. of tags used for iteration, condition checking, manipulating XML documents etc.

Advantages of JSTL

1. **Standard Tag:** It provides a rich layer of the portable functionality of JSP pages. It's easy for a developer to understand the code.
2. **Code Neat and Clean:** As scriptlets confuse developer, the usage of JSTL makes the code neat and clean.
3. **Automatic JavabeansInterospection Support:** It has an advantage of JSTL over JSP scriptlets. JSTL Expression language handles JavaBean code very easily. We don't need to downcast the objects, which has been retrieved as scoped attributes. Using JSP scriptlets code will be complicated, and JSTL has simplified that purpose.
4. **Easier for humans to read:** JSTL is based on XML, which is very similar to HTML. Hence, it is easy for the developers to understand.
5. **Easier for computers to understand:** Tools such as Dreamweaver and front page are generating more and more HTML code. HTML tools do a great job of formatting HTML code. The HTML code is mixed with the scriptlet code. As JSTL is expressed as XML compliant tags, it is easy for HTML generation to parse the JSTL code within the document.

JSTL Core

The core tags are most frequently used tags in JSP. They provide support for

- Iteration
- Conditional logic
- Catch exception
- url forward
- Redirect, etc.

To use core tags we need to define tag library first and below is the syntax to include a tag library.

Syntax :

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

Here,

- prefix can be used to define all the core tags and
- uri is the library of taglib from which it is imported

Advantages of JSTL:

1. Code reusability.
2. Scriptlet tags are not needed.

Types of JSTL tags:

1. JSTL Core Tags
2. JSTL Formatting tags
3. JSTL SQL tags
4. JSTL XML tags
5. JSTL Functions

JSTL Core Tags: These tags are used for iteration, condition checking, URL management etc. Core tags are most commonly used.

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

JSTL Formatting tags: These tags are used for formatting the text, date, numbers etc.

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

SQL tags: These tags are used for interacting with databases like Oracle, MySQL etc.

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

XML tags: These tags are used for creating and manipulating XML documents.

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

JSTL Functions: These function tags are mainly used for manipulating strings.

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