

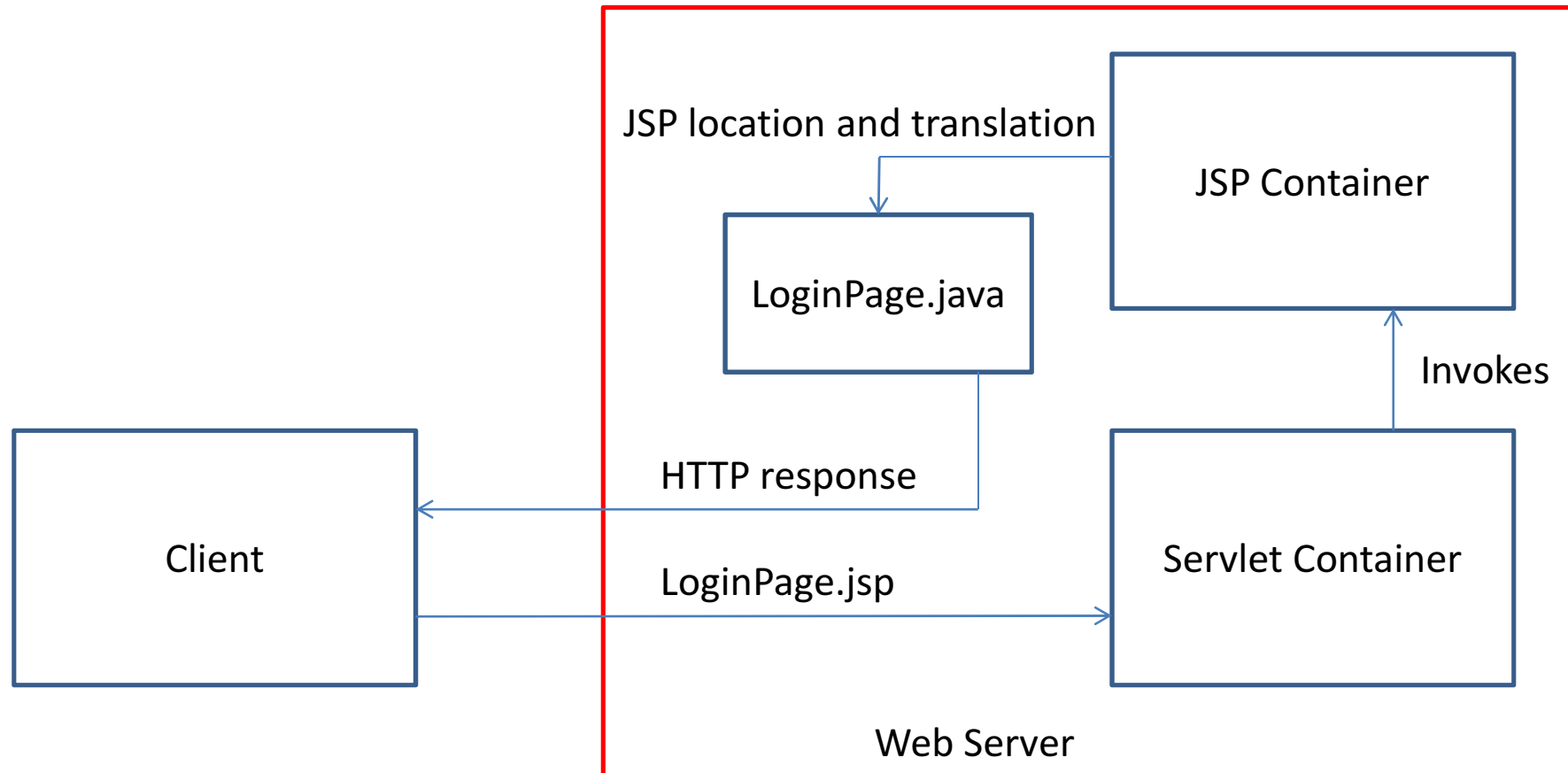
JSP

- JSP stands for Java Server Pages
- JSP simply puts Java inside HTML pages
- JSP allows software developers to create dynamically generated web pages
- JSP container is the entity that translates, executes, and processes JSP pages and delivers requests to them.

On-demand Translation

- 1) The **user requests** the JSP page through a URL ending with a `.jsp` file name
- 2) The **servlet container** invokes the JSP container
- 3) The **JSP container** locate and translate the JSP page into a servlet (only the first time)
- 4) The generated servlet will process the next **HTTP request** and generate the **HTTP response**

On-demand Translation



Scriptlet

- JSP allows writing blocks of Java code inside the JSP page, known as **Scriptlet**.
- The scriptlets are executed every time the JSP is invoked

<%

```
System.out.println( "Evaluating date now" );
```

```
java.util.Date date = new java.util.Date();
```

%>

Mixing Scriptlet and HTML

```
<TABLE BORDER=2>
```

```
<%
```

```
  for ( int i = 0; i < n; i++ ) {
```

```
    %>
```

```
    <TR>
```

```
      <TD>Number</TD>
```

```
      <TD><% = i+1 %></TD>
```

```
    </TR>
```

```
    <%
```

```
  }
```

```
%>
```

```
</TABLE>
```

JSP Directives

- How do we import other Java classes to use it in our JSP page?
- The solution is using a **JSP Directive**
- Put it at the beginning of the JSP page between the tags `<%@` and `%>`
- `<%@ page import = "ispw.*" %>`

JSP Tags

jsp:useBean

- It tries to locate an instance of the Bean class if it is easy to find it;
- Otherwise it will instantiate the bean from a class

```
<jsp:useBean id="loginBean" scope="request"  
            class="ispw.bean.LoginBean" />
```

Scope of `jsp:useBean`

scope defines the scope in which the bean is expected to exist and the variable named in the `id` field is expected to be available.

- `page`: within the requested JSP page
- `request`: from any JSP page processing the same request
- `session`: in the same session as the JSP page that created the bean
- `application`: from any page in the same application as the JSP page that created the bean

JSP Tags(2)

jsp:setProperty

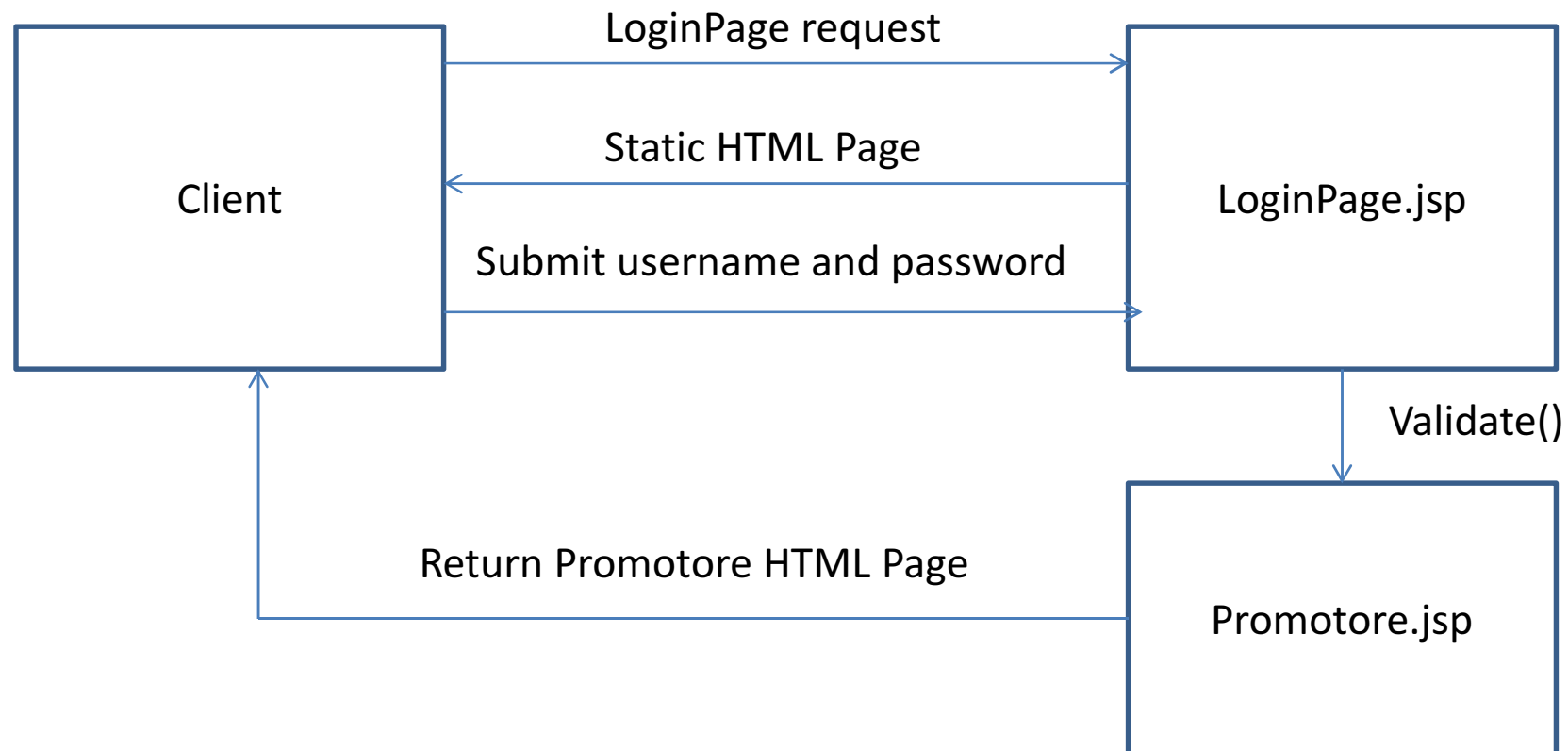
- sets the value of one or more properties in a bean, using the bean's setter methods
- must be declared after a jsp:useBean tag
- `<jsp:setProperty name="loginBean" property="*" />`

JSP Tags(3)

jsp:forward

- forwards the request object containing the client request information from one JSP page to another resource (HTML, JSP, Servlet,...)
- `<jsp:forward page="Promotore.jsp" />`

Login example



Component Communication

