

## Difference between SendRedirect() and Forward() in JSP Servlet

Difference between SendRedirect and forward is one of classical interview questions asked during java web developer interview. This is not just applicable for servlet but also for JSP in which we can use forward action or call sendRedirect() method from scriptlet. Before examining difference on forward and SendRedirect let's see what send Redirect method and forward method does.

### SendRedirect ():

This method is declared in HttpServletResponse **Interface**.

**Signature:** void sendRedirect(String url)

This method is used to redirect client request to some other location for further processing ,the new location is available on different server or different context.our web container handle this and transfer the request using browser ,and this request is **visible in browser as a new request**. Some time this is also called as client side redirect.

### Forward():

This method is declared in RequestDispatcher **Interface**.

**Signature:** forward(ServletRequest request, ServletResponse response)

This method is used to pass the request to another resource for further processing **within the same server**, another resource could be any servlet, jsp page any kind of file.This process is taken care by web container when we call forward method request is sent to another resource **without the client being informed**, which resource will handle the request it has been mention on requestDispatcher object which we can get by two ways either using ServletContext or Request. This is also called server side redirect.

```
RequestDispatcher rd = request.getRequestDispatcher("pathToResource");
rd.forward(request, response);
```

Or

```
RequestDispatcher rd =
servletContext.getRequestDispatcher("/pathToResource");
rd.forward(request, response);
```

## Difference between SendRedirect and Forward

Now let's see some difference between these two method of servlet API in tabular format.

<b>Forward()</b>	<b>SendRedirect()</b>
When we use forward method request is transferred to other resource within the same server for further processing.	In case of sendRedirect request is transferred to another resource to a different domain or different server for further processing.
In case of forward Web container handles all processes internally and client or browser is not involved.	When you use SendRedirect container transfers the request to client or browser so URL given inside the <b>sendRedirect</b> method is visible as a new request to the client.
When forward is called on <b>requestDispatcher</b> object we pass request and response object so our old request object is present on new resource which is going to process our request.	In case of SendRedirect call old request and response object is lost because it's treated as a new request by the browser.
Visually we are not able to see the forwarded address, it's transparent.	In address bar we are able to see the new redirected address it's not transparent.
Using forward () method is faster than send redirect.	SendRedirect is slower because one extra roundtrip is required because a completely new request is created and old request object is lost. Two browser requests are required.
When we redirect using forward and we want to use same data in new resource we can use request.setAttribute () as we have request object available.	But in sendRedirect if we want to use we have to store the data in session or pass along with the URL.

## Example of forward and SendRedirect in JSP Servlet:

Any kind of online payment when we use merchant site will redirect us to net banking site which is completely new request it process our request and again redirect to merchant site?

In Banking Application when we do login normally we use forward method. In case of online banking we are asked for username and password if it's a correct some another servlet or resource will handle the request other wise request has been forwarded to error page.

## Which one is good?

Its depends upon the scenario that which method is more useful.

If you want control is transfer to new server or context and it is treated as completely new task then we go for Send Redirect.

Normally forward should be used if the operation can be safely repeated upon a browser reload of the web page will not affect the result.

SendRedirect and forward method are still very useful while programming or working on any web application project using **servlet jsp**. This is still a popular interview questions so don't forget to revise **forward and sendRedirect** before appearing for any job interview.