|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| <Document Title>  NOTICE The information contained in this document is not to be used for any purpose other than the purposes for which this document is furnished by GENPACT, nor is this document (in whole or in part) to be reproduced or furnished to third parties or made public without the prior express written permission of GENPACT.  **Version Control**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Version No.** | **Version Date** | **Changes** | **Owner/ Author** | **Date of Review/Expiry** | |  |  |  |  |  | |  |  |  |  |  |   **10.Preventing Double Form Submission** | | |
| [Prev](http://dev.anyframejava.org/docs.en/anyframe/plugin/optional/struts/1.0.1/reference/html/ch09.html) | **III.Struts Extensions** | [Next](http://dev.anyframejava.org/docs.en/anyframe/plugin/optional/struts/1.0.1/reference/html/ch11.html) |

**10.Preventing Double Form Submission**

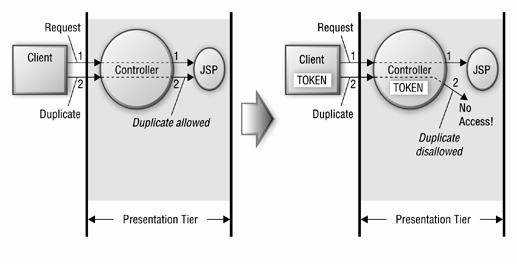
Struts Extensions of Anyframe provides a function to declaratively prevent unexpected results caused by Double Form Submission through Synchronized Token.

**10.1.Concept of Double Submit**

Double Form Submit can occur in the following cases.

* When refreshing browser
* When going back to the previous page by using the back button on browser and submitting form again.
* When going back to the previous page by using Browser History and submitting form again.
* When submitting form deliberately and maliciously to affect the server.
* When clicking on submit button more than once

The reason why Double Form Submission occurs when refreshing browser is the URL shown in the browser address bar after form submission. For example, let's assume that a form was submitted through "<form name='test' action='/submitForm.do'>". After this form is submitted, '/submitForm.do' remains in the address bar, and if you click the refresh button in this situation, then same URL will be sent again. The easiest way to prevent this situation is to use HTTP Redirect after form submission. If the page shown after test form submission is success.jsp, success.jsp will be shown on the browser address bar when HTTP Redirect is used. In this case, success.jsp will be reloaded even when refreshing browser. By using <forward name="success" path="/Success.jsp" redirect="true"/>, unexpected results caused by accidently refreshing browser can be prevented. However, form resubmit using browser back button, etc. cannot be fundamentally prevented. Therefore by providing DefaultActionMapping and AbstractActionSupport, Anyframe can handle Synchronized Token to prevent Double Form Submission declaratively. The following is a conceptual diagram of Double Form Submission prevention using Synchronized Token.



**10.2.General Token handling**

In general, Double Form Submission in Action class can be checked in the following logic.

* Action Class
* boolean valid = isTokenValid(request, true);
* if (valid) {
* // TODO: Put logic to perform when submitting.
* System.out.println("status: performed");
* } else {
* // TODO: Put logic to perform when init / reload.
* System.out.println("status: initialized or reloaded");
* }

saveToken(request);

* JSP
* <input type="hidden" name="org.apache.struts.taglib.html.TOKEN"

value="<%= session.getAttribute(org.apache.struts.Globals.TRANSACTION\_TOKEN\_KEY) %>">

UI(JSP, HTML) sends Token value assigned through Hidden Field which the key is "org.apache.struts.taglib.html.TOKEN" to server. By comparing this Token value and the Token value saved in session through calling isTokenValid method, Token is validated.

**10.3.Declarative Token handling**

To prevent the duplicate implementation of all actions that need Double Form Submit prevention handling and logic for Token handling in JSP, Anyframe provides a function to declaratively handle Sychronized Token by using AbstractActionSupport class and DefaultActionMapping class. For declarative Synchronized Token handling, the following properties must be additionally defined in action mapping within the Struts configuration file.

* **saveToken** : After performing relevant action, set whether or not to save the Token returned from Client, in Session.
* **validateToken** : Before performing the relevant Action, set whether or not to validate Token
* **resetToken** : After validating Token validation, set whether or not to reset Token saved in Session.

The following is a part of struts-config-token.xml file, an example of preventing Double Form Submission declaratively.

<action-mappings type="org.anyframe.struts.action.DefaultActionMapping">

<action path="/synchronizedTokenView"

type="org.anyframe.struts.action.DefaultForwardAction"

parameter="/extensions/token.jsp">

<**set-property property**="**saveToken**" **value**="**true"** />

</action>

<action path="/doubleSubmit"

type="org.anyframe.sample.struts.action.SampleTokenAction"

name="submitForm" scope="request">

<**set-property** **property**="**validateToken**" **value**="**true**" />

<**set-property** **property**="**resetToken**" **value**="**true**" />

<forward name="success" path="/extensions/tokenSuccess.jsp" />

</action>

</action-mappings>

Let's look into how the above three properties defined in each Action mapping are handled through AbstractActionSupport class through the following examples.

**10.3.1.Samples**

1. 1. In the case of UI where Double Form Submission prevention is necessary, Token must be saved in Session through Action execution to load UI. Therefore, saveToken properties value must be defined as true when defining Action mapping.

<set-property property="saveToken" value="true"/>

1. After executing process method of Action class, when saveToken of mapping definition is true, postProcess method in AbstractActionSupport class calls saveToken method provided by parent class and saves this Token in Session.
2. public ActionForward postProcess(ActionMapping mapping, ActionForm form,
3. HttpServletRequest request, HttpServletResponse response,
4. ActionForward forward) throws Exception {
5. boolean saveToken = false;
6. if (mapping instanceof DefaultActionMapping) {
7. DefaultActionMapping t\_mapping = (DefaultActionMapping) mapping;
8. saveToken = t\_mapping.isSaveToken();
9. }
10. if (saveToken) {
11. saveToken(request);
12. }
13. return forward;

}

1. When submitting form in the relevant UI, validateToken and resetToken property value should be defined as true in Action class mapping information for handling.
2. <set-property property="validateToken" value="true"/>

<set-property property="resetToken" value="true"/>

1. Before executing Action class process method, AbstractActionSupport preProcess method validates Token validation in Session according to validateToken and resetToken value defined in Action mapping, and removes Token in Session if validated. By doing so, error occurs in checking Token validation because Token in Session has already been removed when Double Form Submission occurs.
2. public void preProcess(ActionMapping mapping, ActionForm form,
3. HttpServletRequest request, HttpServletResponse response)
4. throws Exception {
5. boolean validateToken = false;
6. boolean resetToken = false;
7. if (mapping instanceof DefaultActionMapping) {
8. DefaultActionMapping t\_mapping = (DefaultActionMapping) mapping;
9. validateToken = t\_mapping.isValidateToken();
10. resetToken = t\_mapping.isResetToken();
11. }
13. if (validateToken) {
14. if (!isTokenValid(request, resetToken)) {
15. throw new InvalidTokenException("common.msg.invalidtoken.error");
16. }
17. }

}

**10.3.2.References**

* Use <html:form>

When creating Form using <html:form>, hidden field for Token assignment will be added without any special definition. In case <html:form> is not used, hidden field must be additionally defined as follows.

<input type="hidden" name="org.apache.struts.taglib.html.TOKEN"

value="<%= session.getAttribute(org.apache.struts.Globals.TRANSACTION\_TOKEN\_KEY) %>">

* Use DefaultForwardAction

When only page navigation is needed without performing any special action, ForwardAction basically provided by Struts will be used. Even in this case, however, if setting for Sychronized Token handling is needed before moving to input view, use DefaultForwardAction provided by Anyframe.

<action path="/synchronizedTokenView"

type="org.anyframe.struts.action.DefaultForwardAction"

parameter="/extensions/token.jsp">

<set-property property="saveToken" value="true" />

</action>

|  |  |  |
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| [Prev](http://dev.anyframejava.org/docs.en/anyframe/plugin/optional/struts/1.0.1/reference/html/ch09.html) | [Up](http://dev.anyframejava.org/docs.en/anyframe/plugin/optional/struts/1.0.1/reference/html/pt03.html) | [Next](http://dev.anyframejava.org/docs.en/anyframe/plugin/optional/struts/1.0.1/reference/html/ch11.html) |
| 9.View | [Home](http://dev.anyframejava.org/docs.en/anyframe/plugin/optional/struts/1.0.1/reference/html/index.html) | 11.Exception Handling |

[skip to main](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html" \l "main) | [skip to sidebar](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html#sidebar)

# [The BalusC Code](http://balusc.blogspot.co.at/)

Code depot of a Java EE developer

[http://img1.blogblog.com/img/icon18_wrench_allbkg.png](http://www.blogger.com/rearrange?blogID=5396570633771229267&widgetType=HTML&widgetId=HTML2&action=editWidget&sectionId=main)

## Monday, March 19, 2007

### POST-Redirect-GET pattern

#### Notice

This article is targeted on JSF 1.2. For JSF 2.0, this can easier be achieved using the new Flash scope.

#### Doing the PRG in JSF

The POST-Redirect-GET pattern is commonly used in web applications to prevent double submit when refreshing a POST request and navigation problems/annoyances when using browser back/forward button to page between POST requests. Basically it works as follows: after processing the POST request (unnecessarily submitted/displayed form data and/or irritating "Are you sure to resend data?" popups), but right before sending any response to the client, redirect the response to a new GET request. This way refreshing the request won't (re)invoke the initial POST request anymore, but only the GET request.

JSF also supports it, you just need to add <redirect /> line to the navigation case so that it automatically invokes a redirect to the given view after POST. This is highly recommended when you're using commandlinks instead of outputlinks to navigate between pages (which I wouldn't call a good practice; POST should not be used for plain navigation, GET should be used for it). But in case of request based forms you will lost all submitted input values and the eventual FacesMessages. Not very handy if you want to redisplay submitted values after a succesful form submit and/or use FacesMessages to display error/succes message of a form submit.

Fortunately the problem of lost input values and FacesMessages is fixable with a PhaseListener. The below PhaseListener example will implement the PRG pattern that way so that for all POST requests all submitted input values and FacesMessages are saved in session for a once and are restored in the redirected view. All you need to do is just copypaste it and define it once in the faces-config of your JSF webapplication. No need to do any other configurations or make any changes in your JSF webapp.

package mypackage;

import java.io.IOException;

import java.util.ArrayList;

import java.util.HashMap;

import java.util.Iterator;

import java.util.LinkedHashMap;

import java.util.List;

import java.util.Map;

import java.util.Map.Entry;

import javax.faces.FacesException;

import javax.faces.application.FacesMessage;

import javax.faces.component.UIComponent;

import javax.faces.component.UIInput;

import javax.faces.component.UIViewRoot;

import javax.faces.context.ExternalContext;

import javax.faces.context.FacesContext;

import javax.faces.event.PhaseEvent;

import javax.faces.event.PhaseId;

import javax.faces.event.PhaseListener;

import javax.servlet.http.HttpServletRequest;

/\*\*

\* Implement the POST-Redirect-GET pattern for JSF.

\* <p>

\* This phaselistener is designed to be used for JSF 1.2 with request scoped beans of which its

\* facesmessages and input values should be retained in the new GET request. If you're using session

\* scoped beans only, then you can safely remove the <tt>saveUIInputValues()</tt> and

\* <tt>restoreUIInputValues()</tt> methods to save (little) performance. If you're using JSF 1.1,

\* then you can also remove the <tt>saveViewRoot()</tt> and <tt>restoreViewRoot</tt> methods,

\* because it is not needed with its view state saving system.

\*

\* @author BalusC

\* @link http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html

\*/

public class PostRedirectGetListener implements PhaseListener {

// Init ---------------------------------------------------------------------------------------

private static final String PRG\_DONE\_ID = "PostRedirectGetListener.postRedirectGetDone";

private static final String SAVED\_VIEW\_ROOT\_ID = "PostRedirectGetListener.savedViewRoot";

private static final String ALL\_FACES\_MESSAGES\_ID = "PostRedirectGetListener.allFacesMessages";

private static final String ALL\_UIINPUT\_VALUES\_ID = "PostRedirectGetListener.allUIInputValues";

// Actions ------------------------------------------------------------------------------------

/\*\*

\* @see javax.faces.event.PhaseListener#getPhaseId()

\*/

public PhaseId getPhaseId() {

// Only listen during the render response phase.

return PhaseId.RENDER\_RESPONSE;

}

/\*\*

\* @see javax.faces.event.PhaseListener#beforePhase(javax.faces.event.PhaseEvent)

\*/

public void beforePhase(PhaseEvent event) {

// Prepare.

FacesContext facesContext = event.getFacesContext();

ExternalContext externalContext = facesContext.getExternalContext();

HttpServletRequest request = (HttpServletRequest) externalContext.getRequest();

Map<String, Object> sessionMap = externalContext.getSessionMap();

if ("POST".equals(request.getMethod())) {

// Save viewroot, facesmessages and UIInput values from POST request in session so that

// they'll be available on the subsequent GET request.

[*saveViewRoot*](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html#saveViewRoot)(facesContext);

[*saveFacesMessages*](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html#saveFacesMessages)(facesContext);

[*saveUIInputValues*](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html#saveUIInputValues)(facesContext);

// Redirect POST request to GET request.

[*redirect*](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html#redirect)(facesContext);

// Set the PRG toggle.

sessionMap.put(PRG\_DONE\_ID, true);

} else if (sessionMap.containsKey(PRG\_DONE\_ID)) {

// Restore any viewroot, facesmessages and UIInput values in the GET request.

[*restoreViewRoot*](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html#restoreViewRoot)(facesContext);

[*restoreFacesMessages*](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html#restoreFacesMessages)(facesContext);

[*restoreUIInputValues*](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html#restoreUIInputValues)(facesContext);

// Remove the PRG toggle.

sessionMap.remove(PRG\_DONE\_ID);

}

}

/\*\*

\* @see javax.faces.event.PhaseListener#afterPhase(javax.faces.event.PhaseEvent)

\*/

public void afterPhase(PhaseEvent event) {

// Do nothing.

}

// Helpers ------------------------------------------------------------------------------------

/\*\*

\* Save the current viewroot of the given facescontext in session. This is important in JSF 1.2,

\* because the viewroot would be lost in the new GET request and will only be created during

\* the afterPhase of RENDER\_RESPONSE. But as we need to restore the input values in the

\* beforePhase of RENDER\_RESPONSE, we have to save and restore the viewroot first ourselves.

\* @param facesContext The involved facescontext.

\*/

private static void saveViewRoot(FacesContext facesContext) {

UIViewRoot savedViewRoot = facesContext.getViewRoot();

facesContext.getExternalContext().getSessionMap()

.put(SAVED\_VIEW\_ROOT\_ID, savedViewRoot);

}

/\*\*

\* Save all facesmessages of the given facescontext in session. This is done so because the

\* facesmessages are purely request scoped and would be lost in the new GET request otherwise.

\* @param facesContext The involved facescontext.

\*/

private static void saveFacesMessages(FacesContext facesContext) {

// Prepare the facesmessages holder in the sessionmap. The LinkedHashMap has precedence over

// HashMap, because in a LinkedHashMap the FacesMessages will be kept in order, which can be

// very useful for certain error and focus handlings. Anyway, it's just your design choice.

Map<String, List<FacesMessage>> allFacesMessages =

new LinkedHashMap<String, List<FacesMessage>>();

facesContext.getExternalContext().getSessionMap()

.put(ALL\_FACES\_MESSAGES\_ID, allFacesMessages);

// Get client ID's of all components with facesmessages.

Iterator<String> clientIdsWithMessages = facesContext.getClientIdsWithMessages();

while (clientIdsWithMessages.hasNext()) {

String clientIdWithMessage = clientIdsWithMessages.next();

// Prepare client-specific facesmessages holder in the main facesmessages holder.

List<FacesMessage> clientFacesMessages = new ArrayList<FacesMessage>();

allFacesMessages.put(clientIdWithMessage, clientFacesMessages);

// Get all messages from client and add them to the client-specific facesmessage list.

Iterator<FacesMessage> facesMessages = facesContext.getMessages(clientIdWithMessage);

while (facesMessages.hasNext()) {

clientFacesMessages.add(facesMessages.next());

}

}

}

/\*\*

\* Save all input values of the given facescontext in session. This is done specific for request

\* scoped beans, because its properties would be lost in the new GET request otherwise.

\* @param facesContext The involved facescontext.

\*/

private static void saveUIInputValues(FacesContext facesContext) {

// Prepare the input values holder in sessionmap.

Map<String, Object> allUIInputValues = new HashMap<String, Object>();

facesContext.getExternalContext().getSessionMap()

.put(ALL\_UIINPUT\_VALUES\_ID, allUIInputValues);

// Pass viewroot children to the recursive method which saves all input values.

[*saveUIInputValues*](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html#saveUIInputValues2)(facesContext, facesContext.getViewRoot().getChildren(), allUIInputValues);

}

/\*\*

\* A recursive method to save all input values of the given facescontext in session.

\* @param facesContext The involved facescontext.

\*/

private static void saveUIInputValues(

FacesContext facesContext, List<UIComponent> components, Map<String, Object> allUIInputValues)

{

// Walk through the components and if it is an instance of UIInput, then save the value.

for (UIComponent component : components) {

if (component instanceof UIInput) {

UIInput input = (UIInput) component;

allUIInputValues.put(input.getClientId(facesContext), input.getValue());

}

// Pass the children of the current component back to this recursive method.

[*saveUIInputValues*](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html#saveUIInputValues2)(facesContext, component.getChildren(), allUIInputValues);

}

}

/\*\*

\* Invoke a redirect to the same URL as the current action URL.

\* @param facesContext The involved facescontext.

\*/

private static void redirect(FacesContext facesContext) {

// Obtain the action URL of the current view.

String url = facesContext.getApplication().getViewHandler().getActionURL(

facesContext, facesContext.getViewRoot().getViewId());

try {

// Invoke a redirect to the action URL.

facesContext.getExternalContext().redirect(url);

} catch (IOException e) {

// Uhh, something went seriously wrong.

throw new FacesException("Cannot redirect to " + url + " due to IO exception.", e);

}

}

/\*\*

\* Restore any viewroot from session in the given facescontext.

\* @param facesContext The involved FacesContext.

\*/

private static void restoreViewRoot(FacesContext facesContext) {

// Remove the saved viewroot from session.

UIViewRoot savedViewRoot = (UIViewRoot)

facesContext.getExternalContext().getSessionMap().remove(SAVED\_VIEW\_ROOT\_ID);

// Restore it in the given facescontext.

facesContext.setViewRoot(savedViewRoot);

}

/\*\*

\* Restore any facesmessages from session in the given FacesContext.

\* @param facesContext The involved FacesContext.

\*/

@SuppressWarnings("unchecked")

private static void restoreFacesMessages(FacesContext facesContext) {

// Remove all facesmessages from session.

Map<String, List<FacesMessage>> allFacesMessages = (Map<String, List<FacesMessage>>)

facesContext.getExternalContext().getSessionMap().remove(ALL\_FACES\_MESSAGES\_ID);

// Restore them in the given facescontext.

for (Entry<String, List<FacesMessage>> entry : allFacesMessages.entrySet()) {

for (FacesMessage clientFacesMessage : entry.getValue()) {

facesContext.addMessage(entry.getKey(), clientFacesMessage);

}

}

}

/\*\*

\* Restore any input values from session in the given FacesContext.

\* @param facesContext The involved FacesContext.

\*/

@SuppressWarnings("unchecked")

private static void restoreUIInputValues(FacesContext facesContext) {

// Remove all input values from session.

Map<String, Object> allUIInputValues = (Map<String, Object>)

facesContext.getExternalContext().getSessionMap().remove(ALL\_UIINPUT\_VALUES\_ID);

// Restore them in the given facescontext.

for (Entry<String, Object> entry : allUIInputValues.entrySet()) {

UIInput input = (UIInput) facesContext.getViewRoot().findComponent(entry.getKey());

input.setValue(entry.getValue());

}

}

}

Activate this phaselistener by adding the following lines to the **faces-config.xml**:

<lifecycle>

<phase-listener>mypackage.PostRedirectGetListener</phase-listener>

</lifecycle>

Now when you submit a form by POST using commandLink or commandButton, then it will automatically be redirected to a GET request, hereby keeping the submitted input values and FacesMessages in the new GET request.

##### [Back to top](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html#top)

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Geplaatst door Bauke Scholtz op [6:03 PM](http://balusc.blogspot.co.at/2007/03/post-redirect-get-pattern.html) [http://img1.blogblog.com/img/icon18_email.gif](http://www.blogger.com/email-post.g?blogID=5396570633771229267&postID=8330189643822964162)[http://img2.blogblog.com/img/icon18_edit_allbkg.gif](http://www.blogger.com/post-edit.g?blogID=5396570633771229267&postID=8330189643822964162&from=pencil)

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Labels: [JSF](http://balusc.blogspot.co.at/search/label/JSF), [PhaseListener](http://balusc.blogspot.co.at/search/label/PhaseListener), [POST-Redirect-GET](http://balusc.blogspot.co.at/search/label/POST-Redirect-GET)

**53 comments:**

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/08923913335869887913)**

[**mitch**](http://www.blogger.com/profile/08923913335869887913) said...

This is really great code. I used it and it helped a lot. Thanks for posting it.  
  
A few comments: this will get called for all jsf pages in your application so you need to make it detect which page it is working on.  
  
For me all the searches in facesContext.getViewRoot().findComponent(paramKey);  
were returning null. So I had to just do it for all the parameters rather than ones for specific components.  
  
This was a huge help to me in my project. Thanks.

[October 18, 2007 at 1:58 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1192730280000#c803809999648508374)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/02356198483936694606)**

[**sandy**](http://www.blogger.com/profile/02356198483936694606) said...

How to call the Phase listener in from mybean.action() method. On clicking the commandButton how can the user call the redirect method.

[January 15, 2008 at 11:36 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1200411360000#c3449187683316762684)

**[http://tweakers.net/ext/f/df7fa7bf22a695901d8439cee1c759e3/full.jpg](http://www.blogger.com/profile/00299057045960008647)**

[**BalusC**](http://www.blogger.com/profile/00299057045960008647) said...

There is no need to call it. Just define the phaselistener in the faces-config.xml. It is always invoked on every request.

[January 15, 2008 at 11:42 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1200411720000#c3779253433943387770)

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[**sandy**](http://www.blogger.com/profile/02356198483936694606) said...

I did not understand. My case is in the following way. I have to submit a form from h:form to an absolute url that can read the values or the input data based on the parameter names of the form. On clicking the h:commandButton all the form data should be submitted to this url. I understand that phase listener does some work. But what should be in the action attribute of h:commadButton which will trigger this phaseListener?

[January 15, 2008 at 3:12 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1200424320000#c7564242946788380337)

**[http://tweakers.net/ext/f/df7fa7bf22a695901d8439cee1c759e3/full.jpg](http://www.blogger.com/profile/00299057045960008647)**

[**BalusC**](http://www.blogger.com/profile/00299057045960008647) said...

Your problem is a completely different subject. The PRG pattern simply isn't applicable in this. You've posted the same problem in the Sun forum. I've suggested to use a plain vanilla HTML form, or to use Javascript to change the h:form action value so that it points to another URL.

[January 15, 2008 at 3:21 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1200424860000#c5175128706255844938)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/14677592567943271220)**

[**Iceriver**](http://www.blogger.com/profile/14677592567943271220) said...

That is great post. Thanks.  
I see this as a good way to change post to get, so users can record url as bookmarks.   
I think this idea (phase listener) can be extended to handle cases to handle mapping, like  
to map http://www.abc.com/hello/action/23 to   
hello.jsf?action=23  
In phase listener, we execute some actions before rendering response page.   
  
Is this a valid thought, balusc?

[April 24, 2008 at 5:32 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1209072720000#c1008766439007767172)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/11330913415326370890)**

[**Jan**](http://www.blogger.com/profile/11330913415326370890) said...

Hi,  
I´ve have the same problem like mitch in its first post. All searches via facesContext.getViewRoot().findComponent(paramKey); return null. I think I know why - because If an navigation-case ist triggered (the action method of the form returns a defined outcome in INVOKE APPLICATION) and therefor the view changes the current view root in RENDER RESPONSE refers to "new" site which maybe does not contain the input components then the view from which the action was performed.  
  
So the solution should be to just go through all request parameters and add them to the url (which is not to good sometimes) or maybe build the url earlier then the end of INVOKE APPLICATION to refer to the original view.

[June 9, 2008 at 10:02 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1213020120000#c2279816693117412478)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/16954938875404284532)**

[**FutureMien**](http://www.blogger.com/profile/16954938875404284532) said...

This code was really helpful, thanks.  
  
However, I have a question: I am working on a project that uses JBoss Seam as well. I am in the process of implementing code to save the UIViewRoot instance after a post, before redirecting to a get request which functions in a similar manner to your example. However, the web application is raising an exception stating that the UIViewRoot instance is not serializable. I have tried the UIComponentBase#saveState(..) and related methods, but no success yet. Any ideas you may have will be greatly appreciated. Thanks.

[July 14, 2008 at 3:16 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1216062960000#c7819057047158353215)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/08344072241240910701)**

[**NCD**](http://www.blogger.com/profile/08344072241240910701) said...

BalusC,  
  
Why not just add <redirect /> in your navigation rule in faces-config.xml.  
  
The <redirect /> should accomplish the same thing as your PRG pattern and save a lot of extra work, right?

[October 16, 2008 at 6:31 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1224196260000#c4543189679246723117)

**[](http://www.blogger.com/profile/00299057045960008647)**

[**BalusC**](http://www.blogger.com/profile/00299057045960008647) said...

FacesMessages and (submitted) input values get lost.

[October 16, 2008 at 6:32 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1224196320000#c6015339400491648799)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/08344072241240910701)**

[**NCD**](http://www.blogger.com/profile/08344072241240910701) said...

BalusC,  
  
What do you mean by "submitted" input values?

[October 16, 2008 at 6:58 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1224197880000#c613671011867991326)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/08344072241240910701)**

[**NCD**](http://www.blogger.com/profile/08344072241240910701) said...

BalusC,  
  
Thanks for your reply to my original post. I would have had problems if I had used the faces-config redirect option blindly.  
  
NCD

[October 17, 2008 at 12:24 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1224260640000#c6700184628393425032)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/02925572969644038405)**

[**iroh**](http://www.blogger.com/profile/02925572969644038405) said...

BalusC you are the man! This worked phenomenally for what I needed.

[October 17, 2008 at 3:20 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1224271200000#c9177829242476950594)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/16035687923410849377)**

[**Imre**](http://www.blogger.com/profile/16035687923410849377) said...

Saved me a day.  
  
Thank you.

[November 9, 2008 at 6:46 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1226270760000#c6218849696112341543)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/06470632593713929656)**

[**thomas**](http://www.blogger.com/profile/06470632593713929656) said...

Hi. First I would like to say that this is a really great code.  
  
But will it work with facelets and if it will, then for which phase should it be set?  
  
Should it be after the facelets have done thier job or before?  
  
Thanks

[November 18, 2008 at 3:09 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1227035340000#c875014203496571582)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/05420780351327924115)**

[**removeps-groups**](http://www.blogger.com/profile/05420780351327924115) said...

Very interesting.  
  
What is the meaning of  
  
> But this way you will lost all  
> submitted input values and the   
> eventual FacesMessages.  
  
I don't know about FacesMessage, but submitted values are not lost. When the page is submitted, it calls set functions on the managed beans. So you you had h:inputText value="#{mybean.firstValue" ... there will be a call to mybean.setFirstValue. If mybean is a session bean, no values will be lost.  
  
Where are the input values and so on saved? It looks like they're saved to facesContext.getExternalContext().sessionMap. What is this thing? Is it the place where all managed JSF session beans are stored?  
  
What does the string returned by resolveActionURL look like? I guess I should try the code, but it will take me a while to set it up.  
  
If you have pages A.jsp, B.jsp, C.jsp, and the user requests "http://localhost/A.faces", what will be the sequence of events? (From the code, it seems that the phase listener code is hit, and since the request is a GET request, the faces context is restored though there is nothing to restore for this initial request).  
  
Afterward pressing the next button on page A, faces-config.xml says to navigate to page B without a redirect. A POST request sent to the server. The phase listener code will save the input values are redirect you a new URL. What is the name of this new URL? When does the code call the set functions on the managed beans used in page A?

[November 23, 2008 at 9:21 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1227489660000#c1281147137803677903)

[**BalusC**](http://www.blogger.com/profile/00299057045960008647) said...

"submitted values are not lost"  
You used a session scoped bean for request scoped data instead of a request scoped bean. Learn about the scopes and read the article text and the javadoc/comments of the code.

[November 23, 2008 at 9:44 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1227491040000#c5420255789711021927)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/17274342322749544379)**

[**sri...**](http://www.blogger.com/profile/17274342322749544379) said...

This works well.  
But Im facing an issue with Tomahak components. For example.  
  
I am using h:inputText inside the tag **t:dataList** in this case. The text boxes inside dataList tag are lost the values, what user typed. Becoz the components are not identifed in the saveUIInputValues method.

[December 18, 2008 at 1:44 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1229622240000#c3507123436139734177)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/13514950575764127924)**

[**Leonardo Pessoa**](http://www.blogger.com/profile/13514950575764127924) said...

BalusC, that's a great code helped me a lot....  
but i am having a problem with it, now i'm using facelets to render my views when i tried to use this listener it not worked, do i have to do something else?  
  
thank you

[December 20, 2008 at 11:11 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1229785860000#c6525688304664253585)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/17179235608791286371)**

[**Mireille's Blog**](http://www.blogger.com/profile/17179235608791286371) said...

Hi,  
In my project I use Facelets too, and the listener did not work :(  
That's possible because of render response phase...

[December 23, 2008 at 2:40 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1230057600000#c4021986757941731939)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/10087759879447526528)**

[**ivan.eggel**](http://www.blogger.com/profile/10087759879447526528) said...

Very nice

[January 27, 2009 at 6:07 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1233050820000#c1012576055742814528)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/04413368275789983541)**

[**mahesh**](http://www.blogger.com/profile/04413368275789983541) said...

Hello BalusC,  
  
I tried your code its working great for double submits but the users I have are not patient so they click 4 to 5 times and when I tested your code by clicking multiple times its breaking.  
  
Will this code only work for double  
submits and not for multiple submits.

[February 13, 2009 at 11:37 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1234539420000#c5735478563003920574)

[**BalusC**](http://www.blogger.com/profile/00299057045960008647) said...

When talking about "double submits" in this article, I meant the double submit which happen when you navigate forward/backward with browser buttons or refresh the submitted page again.  
  
Pressing impatiently on a button is best to be avoided by disabling the button shortly after press using JS, or to freeze the complete window using a transparent iframe.

[February 13, 2009 at 11:41 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1234539660000#c8194625650910034485)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/13940732364250331850)**

[**jane mathew**](http://www.blogger.com/profile/13940732364250331850) said...

Hi BalusC,  
  
This works fine for me in all cases except where I am populatng data in a h:datatable. I have a file upload in the same jsp. When I submit the page, the values are not retained. Could you please help me.  
  
  
- Jain mathew

[February 24, 2009 at 11:38 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1235489880000#c953494690963643632)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/06543341783840035803)**

[**itzli**](http://www.blogger.com/profile/06543341783840035803) said...

Great!  
  
This a great code, JSF have a lot of inconsistencies. This one is the most important. Thanks to solve it and publicate!

[April 25, 2009 at 1:51 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1240681860000#c7425434626025900935)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/09927113614781094348)**

[**veena**](http://www.blogger.com/profile/09927113614781094348) said...

Can you please explain again what you mean by the following?  
  
JSF also supports it, you just need to add redirect line to the navigation case so that it automatically invokes a redirect to the given view after POST. But this way you will lost all submitted input values and the eventual FacesMessages. Not very handy if you want to redisplay submitted values after a succesful form submit and/or use FacesMessages to display error/succes message of a form submit.  
  
  
  
I just took the PostRedirectGetListener and implemented it, configured it in Faces-config.xml and it works like a charm. But not sure what you mean by "add a redirect "

[May 13, 2009 at 4:07 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1242245220000#c954832044654766348)

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[**BalusC**](http://www.blogger.com/profile/00299057045960008647) said...

Instead of the PostRedirectGetListener you can also add the following line to the navigation case:  
  
<redirect/>  
  
But this has thus the described disadvantages.

[May 13, 2009 at 6:32 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1242253920000#c1346400312959873234)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/09927113614781094348)**

[**veena**](http://www.blogger.com/profile/09927113614781094348) said...

After implementing this in my application, I found a problem.  
I have a navigation case to dialogs and these are getting lost. So the dialog does not pop up. Any suggestions on how to fix this problem?

[May 14, 2009 at 11:28 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1242314880000#c4410496819275229403)

**[http://img1.blogblog.com/img/blank.gif](http://www.blogger.com/profile/00299057045960008647)**

[**BalusC**](http://www.blogger.com/profile/00299057045960008647) said...

I do not understand what exactly you're talking about with 'dialogs'. This seems something 3rd-party-library-specific. Post your issue in a more generic forum, e.g. the JSF forum at SDN.

[May 14, 2009 at 11:35 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1242315300000#c6537989168113114023)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/09927113614781094348)**

[**veena**](http://www.blogger.com/profile/09927113614781094348) said...

By the way, we are using JSF 1.1.  
  
Thanks,  
  
Veena

[May 14, 2009 at 12:11 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1242317460000#c5572093779343174245)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/09927113614781094348)**

[**veena**](http://www.blogger.com/profile/09927113614781094348) said...

We are using Trinidad. A dialog page can be opened up as a pop up. Instead of page flow to a jspx, you can have a page flow to a dialog simply by returning a prefixed String dialog:String. In the faces-config you define the navigation case for dialog:String.

[May 15, 2009 at 2:45 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1242413100000#c4540298820668337417)

**[http://img1.blogblog.com/img/blank.gif](http://www.blogger.com/profile/00299057045960008647)**

[**BalusC**](http://www.blogger.com/profile/00299057045960008647) said...

Best what you can do is to let the phaselistener skip the PRG pattern based on some request parameter or attribute which indicates that such a dialog is to be fired.

[May 15, 2009 at 4:58 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1242421080000#c6738165660704033297)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/12002797854653906174)**

[**guima**](http://www.blogger.com/profile/12002797854653906174) said...

BalusC, Just adding PostRedirectGetListener to application and activating this   
phaselistener in faces-config.xml didn't worked for me. So, i tried to do this to a simple application found in the book Core JavaServer Faces called login. Changing the scope of the backing bean to request makes the application seems just like using the tag redirect. What am i doing wrong? Thanks.

[June 18, 2009 at 4:02 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1245355332408#c4153969724946526962)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/08040132146148584897)**

[**Fahad**](http://www.blogger.com/profile/08040132146148584897) said...

I think for JSF related query Balus is the correct person,   
I have probelm with </redirect> for PRG, it worked well on http, but not on https, I mean if we deploy it in secured server redirection will get timeout. please share me if you have any work arround on this.

[November 12, 2009 at 3:07 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1258009620270#c2128267196276237926)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/10558886271879137543)**

[**Michail**](http://www.blogger.com/profile/10558886271879137543) said...

Hello,  
I've tried this listener with JSF 1.2 and JSP and it doesn't work. During debugging I see that the ViewRoot before "render responce" phase is null so there is nothing to save there.  
What is wrong there?

[December 15, 2009 at 6:30 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1260873032804#c8506659988305319116)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/10491885855964039077)**

[**saleem**](http://www.blogger.com/profile/10491885855964039077) said...

Hi,  
  
I am using JSF with RichFaces & i applied the 'POST-Redirect-GET pattern', now, all my ajax requests are submiting the whole page and form. Please provide any solution to this problem.

[January 2, 2010 at 5:54 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1262426075391#c3239047514731469526)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/06621764775608336291)**

[**Jigar**](http://www.blogger.com/profile/06621764775608336291) said...

hello i have an issue, my footer is polling ajax request,  
so if i use your Phase listerner, it is handling all ajax request also, more over i have user PRG in menu navigation,i am setting some data in menu item 's action which is in request scope , but as its PGR it is getting lost in the target view, how to resolve this, i dont want to go for putting data in session scope,if i dnt use PRG then the URL on the browser is not getting updated even thoigh the page is changed..  
how to resolve.. ?  
  
Thanks BalusC in Adv.

[March 16, 2010 at 9:50 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1268747449421#c2521932336927471328)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/06621764775608336291)**

[**Jigar**](http://www.blogger.com/profile/06621764775608336291) said...

http://forums.sun.com/thread.jspa?threadID=5432075

[March 16, 2010 at 10:04 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1268748240250#c4755310614619757478)

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[**J.Naveen**](http://www.blogger.com/profile/13131590220135493721) said...

This comment has been removed by the author.

[April 16, 2010 at 2:40 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1271400047649#c8319963003384942522)

**[http://img1.blogblog.com/img/blank.gif](http://www.blogger.com/profile/13131590220135493721)**

[**J.Naveen**](http://www.blogger.com/profile/13131590220135493721) said...

Hi I am getting an exception on exactly redirect page line.  
  
WARNING: phase(RENDER\_RESPONSE 6,com.sun.faces.context.FacesContextImpl@bf711e) threw exception: java.lang.IllegalStateException null  
org.apache.catalina.connector.ResponseFacade.sendRedirect(ResponseFacade.java:435)  
com.sun.faces.context.ExternalContextImpl.redirect(ExternalContextImpl.java:419)  
bean.LifeCycleListener.redirect(LifeCycleListener.java:124)  
bean.LifeCycleListener.beforePhase(LifeCycleListener.java:67)  
com.sun.faces.lifecycle.LifecycleImpl.phase(LifecycleImpl.java:222)  
com.sun.faces.lifecycle.LifecycleImpl.render(LifecycleImpl.java:144)  
javax.faces.webapp.FacesServlet.service(FacesServlet.java:245)  
org.apache.catalina.core.ApplicationFilterChain.internalDoFilter(ApplicationFilterChain.java:290)  
org.apache.catalina.core.ApplicationFilterChain.doFilter(ApplicationFilterChain.java:206)  
org.apache.catalina.core.StandardWrapperValve.invoke(StandardWrapperValve.java:233)  
org.apache.catalina.core.StandardContextValve.invoke(StandardContextValve.java:191)  
org.apache.catalina.core.StandardHostValve.invoke(StandardHostValve.java:128)  
org.apache.catalina.valves.ErrorReportValve.invoke(ErrorReportValve.java:102)  
org.apache.catalina.core.StandardEngineValve.invoke(StandardEngineValve.java:109)  
org.apache.catalina.connector.CoyoteAdapter.service(CoyoteAdapter.java:286)  
org.apache.coyote.http11.Http11Processor.process(Http11Processor.java:845)  
org.apache.coyote.http11.Http11Protocol$Http11ConnectionHandler.process(Http11Protocol.java:583)  
org.apache.tomcat.util.net.JIoEndpoint$Worker.run(JIoEndpoint.java:447)  
java.lang.Thread.run(Thread.java:619)

[April 16, 2010 at 2:42 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1271400173282#c2700072574948781712)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/16506380045945949830)**

[**Mathieu**](http://www.blogger.com/profile/16506380045945949830) said...

Hi,  
  
I'm trying to implement PRG in my JSF 1.2 app. I have some troubles retrieving request attributes.   
  
I have a MyDataBean request scoped which provide a DataModel property to a t:datatable.  
When the action handler is called, it retrive the data with the DataModel.getRowData() function. But it seams that the redirect handle another request dans the retrieved data is null at render phase.  
  
I tried to save it in Session the same way you've done for POST data, but it's set to null ( the context seams to keep the reference and write into my saved HttpRequest object).  
  
Is there a way to combine PRG with normal JSF processing ?  
  
Tks.

[June 21, 2010 at 8:02 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1277121759705#c506698748795204990)

**[http://img1.blogblog.com/img/blank.gif](http://www.blogger.com/profile/03789466609919560549)**

[**Carlos E. R. Diógenes**](http://www.blogger.com/profile/03789466609919560549) said...

Hi BalusC,  
  
Your code is working fine, but in one situation I'm having a problem.  
  
I have a page that render a data list with commandlinks to delete the data.  
  
The first delete works fine and the page is re-rendered. The next time I try to delete a item I get the following error:  
  
com.sun.faces.application.view.StateHolderSaver cannot be cast to [Ljava.lang.Object;  
  
Removing your listener solve the problem. Do you have any idea what could be wrong.

[July 1, 2010 at 10:13 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1277993631801#c2808976283061515028)

**[http://img1.blogblog.com/img/blank.gif](http://www.blogger.com/profile/03789466609919560549)**

[**Carlos E. R. Diógenes**](http://www.blogger.com/profile/03789466609919560549) said...

I removed the code to save and restore the ViewRoot and now it's working. I'm using JSF 2. If you could explain why I will be very thankfull.

[July 1, 2010 at 10:25 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1277994335290#c6971736104297537400)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/04766202004569249781)**

[**Yogeen**](http://www.blogger.com/profile/04766202004569249781) said...

can you please suggest a solution to double-click problem in JSF.  
  
i.e when a commandlink is double clicked it submits the request twice. can this be solved using PRG ? pls suggest a solution.

[August 26, 2010 at 4:50 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1282812656335#c3000135013091103644)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/01015371201279887066)**

[**Erik**](http://www.blogger.com/profile/01015371201279887066) said...

This is a really great concept and I like the implementation! I've spent a week trying various approaches to get post-redirect-get to work in a JSF application where all managed beans are managed by Spring. I really didn't want to use the flash scope and lose the automatic property mapping that JSF offers so I tried creating custom scopes and other techniques to try and hang onto my managed beans after the redirect without much success. So far this works great.  
  
I did add support for saving and restoring request attributes so that any initialization of form properties that I do in managed beans gets retained. Your code is pretty easy to add on to as well! Thanks!

[February 27, 2011 at 11:39 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1298864342196#c6331665418775904325)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/03991115196085819299)**

[**Archan Mishra**](http://www.blogger.com/profile/03991115196085819299) said...

Hi BalusC,  
I am using your Phase Listener in my code.   
I want to know a bit more about the copyright of code.  
Can it be used for both free and commercial purposes.  
Thank you once Again

[June 27, 2011 at 2:40 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1309156824180#c3400119771557645344)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/04245119417670551316)**

[**Alfonssocken**](http://www.blogger.com/profile/04245119417670551316) said...

Just want to say thank you!  
  
@Archan: As it is written in the text: "Copyright - There is no copyright on the code. You can copy, change and distribute it freely. Just mentioning this site should be fair."

[August 22, 2011 at 2:21 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1313994091647#c2689388774742070006)

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[**smithh032772**](http://www.blogger.com/profile/01594886342056798831) said...

BalusC, I arried to this post and solution of yours after experiencing problems with my PrimeFaces 3.0M3, Mojarra 2.1.2 JSF web app, copied and pasted this as you stated in this post, and it solved my problem. I also configured the faces.STATE\_SAVING\_METHOD, PARTIAL\_STATE and FULL\_STATE in web.xml per other related posts I found on primefaces.org site, and other posts you posted on stackoverflow.  
  
Thank you very much for all your contribution to the world of JSF; i'm a newbie to java AND JSF, and i'm loving the experience and glued to my desk/seat/computer, primarily, because of all your posts out there.  
  
Thanks again,  
Howard

[September 18, 2011 at 8:22 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1316348525672#c8234647057826260194)

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[**smithh032772**](http://www.blogger.com/profile/01594886342056798831) said...

BalusC,  
  
I've been getting the following error message ever since I renamed my NetBeans (v7.0.1) JSF web app (context-root), persistent unit, etc...  
  
My app is Ajaxified, i'm using commandLink/Button actionListener and returning NULL outcome (always) and dynamic ui:include to display JSF pages. I read this post and related posts on stackoverflow, and I don't think I need this code anymore, but I could be wrong. I'm about to remove this listener from faces-config and see what happens. Please let me know your thoughts. Thanks, Howard.  
  
  
WARNING: JSF1063: WARNING! Setting non-serializable attribute value into HttpSession (key: PostRedirectGetListener.savedViewRoot, value class: javax.faces.component.UIViewRoot).

[September 28, 2011 at 12:11 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1317226288448#c2728654292929495816)

**[http://img2.blogblog.com/img/b16-rounded.gif](http://www.blogger.com/profile/01594886342056798831)**

[**smithh032772**](http://www.blogger.com/profile/01594886342056798831) said...

BalusC,  
  
I attempted to remove the listener (as I said I would in my previous post on this page), and my ajax behavior stopped working, and PrimeFaces commandbuttons were NOT rendered correctly, as they are rendered, when I have this listener of yours in place. So, the listener stays. :)  
  
Howard

[September 28, 2011 at 5:01 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1317243665768#c3153401843022511402)

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[**M**](http://www.blogger.com/profile/06659920029358894485) said...

On IBM WAS, using JSF 1.1 the code causes an exception. After the reponse is rendered, the next interaction with the page generates the exception:   
  
[INFO] [Servlet Error]-[Faces Servlet]: java.lang.NullPointerException  
[INFO] at com.ibm.ws.webcontainer.srt.SRTServletRequest$SRTServletRequestHelper.access$1600(SRTServletRequest.java:2573)  
[INFO] at com.ibm.ws.webcontainer.srt.SRTServletRequest.parseParameters(SRTServletRequest.java:1758)  
[INFO] at com.ibm.ws.webcontainer.srt.SRTServletRequest.getParameterNames(SRTServletRequest.java:1449)  
[INFO] at javax.servlet.ServletRequestWrapper.getParameterNames(ServletRequestWrapper.java:223)  
[INFO] at com.sun.faces.context.RequestParameterMap.entrySet(ExternalContextImpl.java:682)  
[INFO] at java.util.AbstractMap.toString(AbstractMap.java:599)  
[INFO] at com.ibm.ws.webcontainer.util.SimpleHashtable.toString(SimpleHashtable.java:390)  
[INFO] at com.ibm.ws.webcontainer.httpsession.SessionData.toString(SessionData.java:1092)  
[INFO] at com.ibm.ws.webcontainer.httpsession.HttpSessionFacade.toString(HttpSessionFacade.java:195)  
[INFO] at java.lang.String.valueOf(String.java:1505)  
[INFO] at java.lang.StringBuilder.append(StringBuilder.java:194)  
[INFO] at com.ibm.ws.webcontainer.filter.FilterInstanceWrapper.doFilter(FilterInstanceWrapper.java:190)  
[INFO] at com.ibm.ws.webcontainer.filter.WebAppFilterChain.doFilter(WebAppFilterChain.java:130)  
[INFO] at com.ibm.ws.webcontainer.filter.FilterInstanceWrapper.doFilter(FilterInstanceWrapper.java:190)  
[INFO] at com.ibm.ws.webcontainer.filter.WebAppFilterChain.doFilter(WebAppFilterChain.java:130)  
[INFO] at com.ibm.ws.webcontainer.filter.WebAppFilterChain.\_doFilter(WebAppFilterChain.java:87)  
[INFO] at com.ibm.ws.webcontainer.filter.WebAppFilterManager.doFilter(WebAppFilterManager.java:848)  
[INFO] at com.ibm.ws.webcontainer.filter.WebAppFilterManager.doFilter(WebAppFilterManager.java:691)  
[INFO] at com.ibm.ws.webcontainer.servlet.ServletWrapper.handleRequest(ServletWrapper.java:588)  
[INFO] at com.ibm.ws.wswebcontainer.servlet.ServletWrapper.handleRequest(ServletWrapper.java:525)  
[INFO] at com.ibm.ws.webcontainer.servlet.CacheServletWrapper.handleRequest(CacheServletWrapper.java:90)  
[INFO] at com.ibm.ws.webcontainer.WebContainer.handleRequest(WebContainer.java:764)  
[INFO] at com.ibm.ws.wswebcontainer.WebContainer.handleRequest(WebContainer.java:1478)  
[INFO] at com.ibm.ws.webcontainer.channel.WCChannelLink.ready(WCChannelLink.java:133)  
[INFO] at com.ibm.ws.http.channel.inbound.impl.HttpInboundLink.handleDiscrimination(HttpInboundLink.java:450)  
[INFO] at com.ibm.ws.http.channel.inbound.impl.HttpInboundLink.handleNewRequest(HttpInboundLink.java:508)  
[INFO] at com.ibm.ws.http.channel.inbound.impl.HttpInboundLink.processRequest(HttpInboundLink.java:296)  
[INFO] at com.ibm.ws.http.channel.inbound.impl.HttpICLReadCallback.complete(HttpICLReadCallback.java:102)  
[INFO] at com.ibm.ws.tcp.channel.impl.AioReadCompletionListener.futureCompleted(AioReadCompletionListener.java:165)  
[INFO] at com.ibm.io.async.AbstractAsyncFuture.invokeCallback(AbstractAsyncFuture.java:217)  
[INFO] at com.ibm.io.async.AsyncChannelFuture.fireCompletionActions(AsyncChannelFuture.java:161)  
[INFO] at com.ibm.io.async.AsyncFuture.completed(AsyncFuture.java:136)  
[INFO] at com.ibm.io.async.ResultHandler.complete(ResultHandler.java:196)  
[INFO] at com.ibm.io.async.ResultHandler.runEventProcessingLoop(ResultHandler.java:751)  
[INFO] at com.ibm.io.async.ResultHandler$2.run(ResultHandler.java:881)  
[INFO] at com.ibm.ws.util.ThreadPool$Worker.run(ThreadPool.java:1497)  
  
The workaround is to create a POJO to be used for parameter passing, then replace the existing save/restore methods, with save/restore methods that temporarily store the POJO as a session attribute. Of course the managed beans will have to be adjusted to store/retrieve information out of the POJO.  
  
Also, if you are using server side state saving, you may have to clear the view list, view id from the session to prevent "caching".

[April 10, 2012 at 11:36 AM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1334072198423#c4759012888470555234)

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[**Don Kleppinger**](http://www.blogger.com/profile/02266023115878336856) said...

This looks like it will not work if the user has multiple browser tabs/windows open on the same session. If page loads is slow, user could switch tabs and navigate in other tab and could get the wrong saved values.

[March 24, 2014 at 3:37 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1395689865498#c897740710744461882)

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[**Diego R. Ferreira**](http://www.blogger.com/profile/16247075358695442744) said...

Thank you so much! This fits perfectly in my solution.  
  
Regards,

[November 12, 2014 at 2:49 PM](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?showComment=1415818195915#c4943394750550410749)

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Deaf webapp specialist.

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  + [►](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?widgetType=BlogArchive&widgetId=BlogArchive1&action=toggle&dir=open&toggle=MONTHLY-1354334400000&toggleopen=MONTHLY-1172721600000) [December](http://balusc.blogspot.co.at/2012_12_01_archive.html) (1)
  + [►](http://balusc.blogspot.com/2007/03/post-redirect-get-pattern.html?widgetType=BlogArchive&widgetId=BlogArchive1&action=toggle&dir=open&toggle=MONTHLY-1351742400000&toggleopen=MONTHLY-1172721600000) [November](http://balusc.blogspot.co.at/2012_11_01_archive.html) (1)
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