

How to Create Enhancement Implementation in Web Dynpro ABAP



Applies to:

Enterprise portal, ECC 6.0, Web Dynpro ABAP. For more information, visit the [Web Dynpro ABAP homepage](#).

Summary

This document explains how to create enhancement implementations in Web Dynpro ABAP to enhance standard WD Components. The document states step by step procedure to create an Enhancement implementation and use that enhancement implementation to enhance UI and code of standard WD Component.

Author: Vaibhav Tiwari

Company: Wipro Technologies.

Created on: 22 July, 2009.

Author Bio



Vaibhav Tiwari is working in Wipro Technologies, India from past 2.8 years. Started career as an ABAP developer. From past two years working on WD ABAP, WD Java and SAP Interactive forms by Adobe.

Table of Contents

Introduction	3
Creating enhancement implementation	3
Enhancing UI Elements.....	5
Enhancing standard methods:	7
Create view/window as enhancement	10
Deleting enhancement implementation	11
Disclaimer and Liability Notice.....	12


Introduction

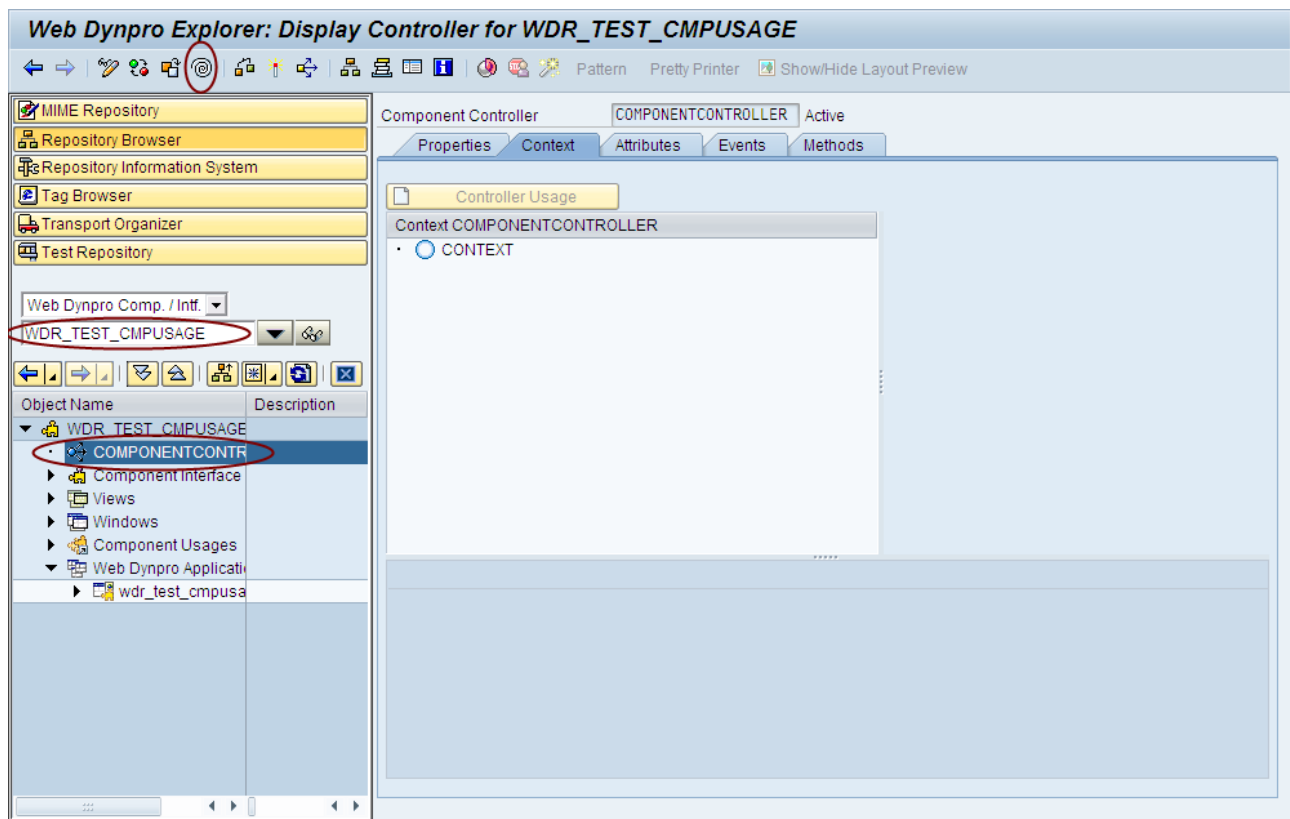
In this document we will see step by step procedure to create enhancement implementation in WD ABAP to enhance a standard WD Component by Code and UI elements. We will cover following things:


- Creating enhancement implementation in WD ABAP.
- How to use Enhancement implementation to enhance standard WD UI elements.
- How to use Enhancement implementation to enhance standard methods in views/components.
- Create view/window as enhancement.
- Deleting Enhancement Implementation.

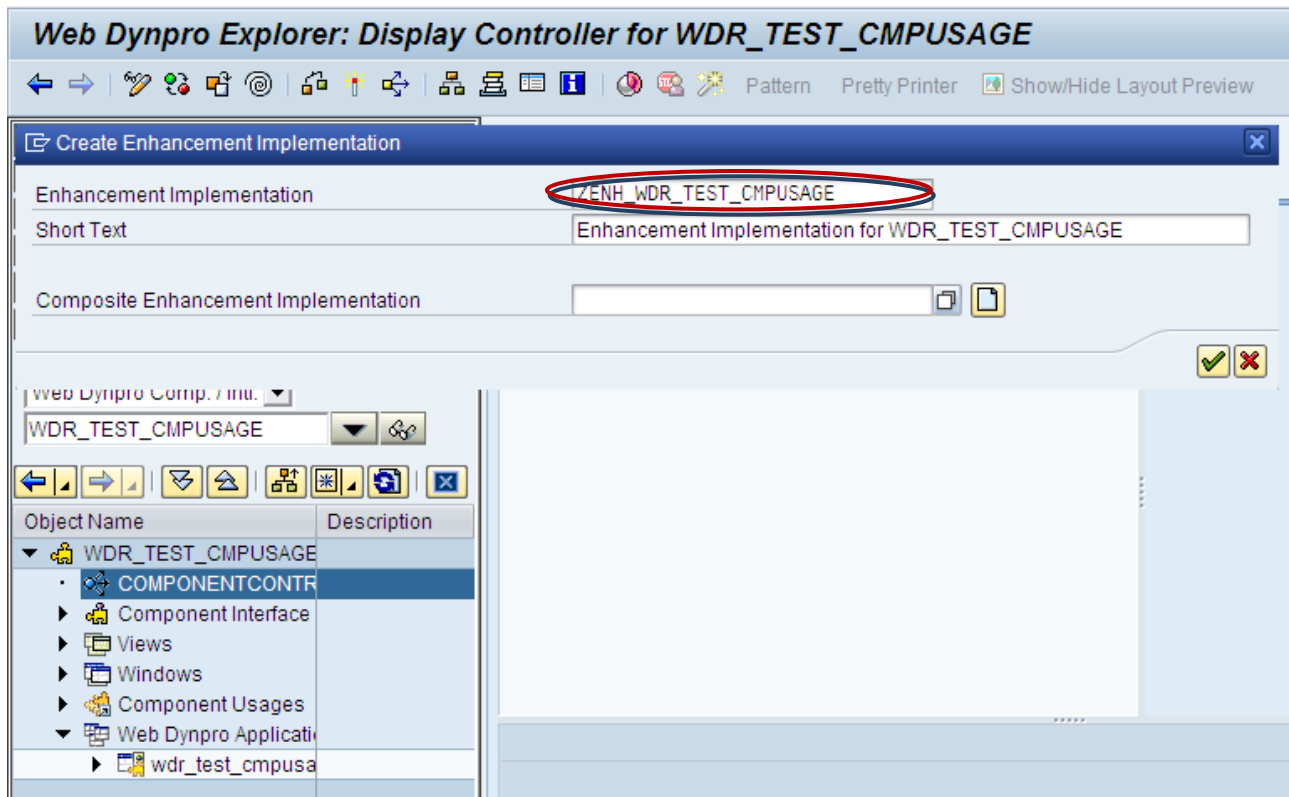
Creating enhancement implementation



To create enhancement implementation follow the steps as below:

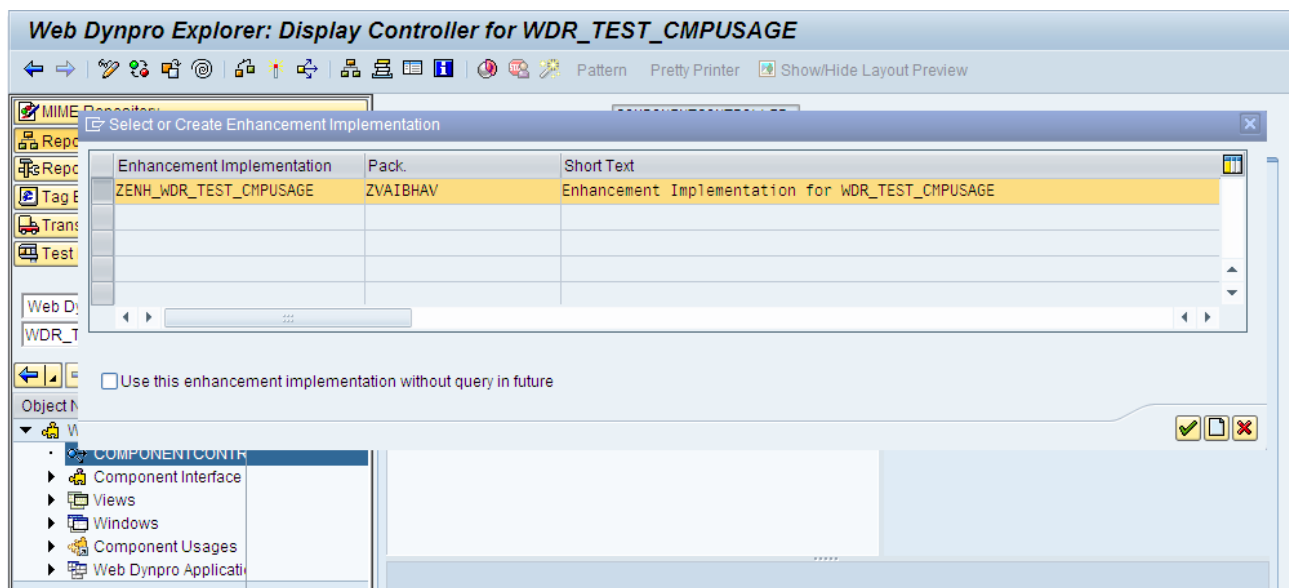
1. Open the WD component for enhancing in SE80.
2. Double click on component controller.
3. Click on  icon on the menu.



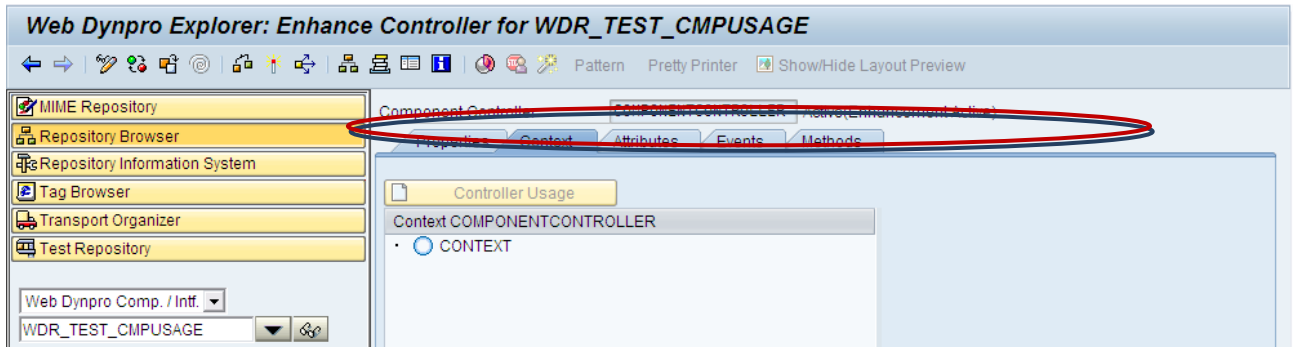
4. In the popup window give the name for the enhancement implementation and click on  button.
5. Save it in a request similar to other ABAP applications.



6. Now whenever you need to make changes as enhancement in this WD Component. Just click on the  icon on the menu.
7. Select the enhancement implementation and click on  button.

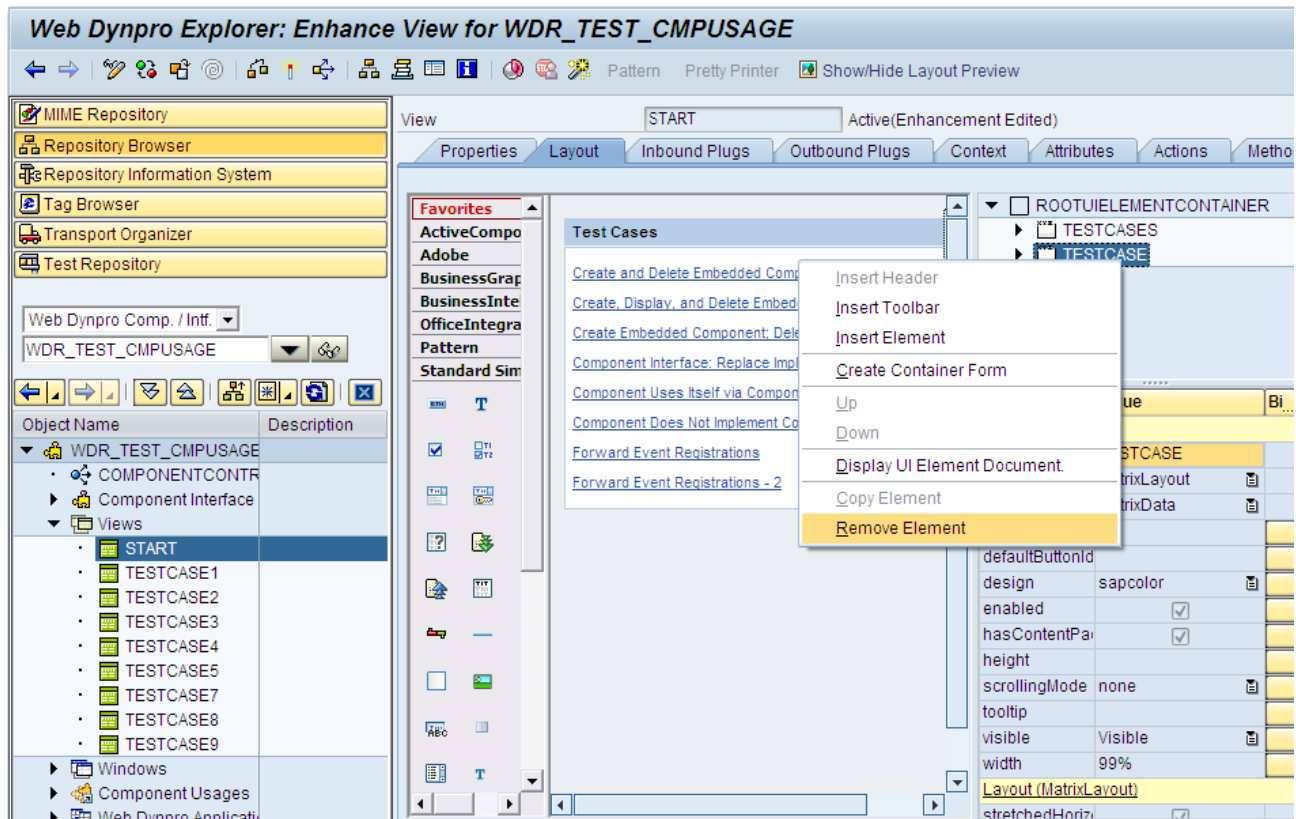



8. Now it will show the selected component name with enhancement status as in the below diagram:

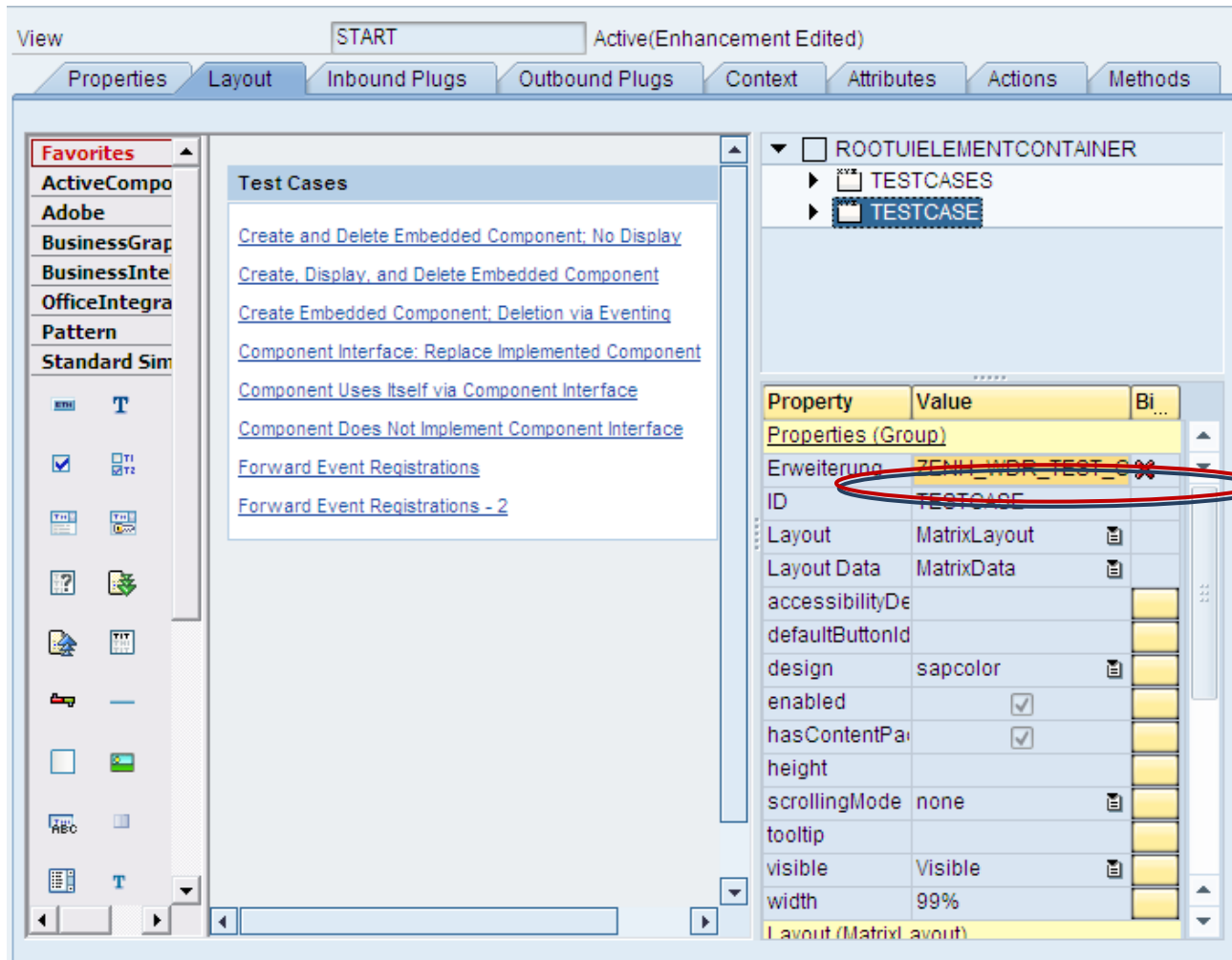


Enhancing UI Elements

The only thing which can be done to standard UI elements through layout editor is to remove them as shown below:

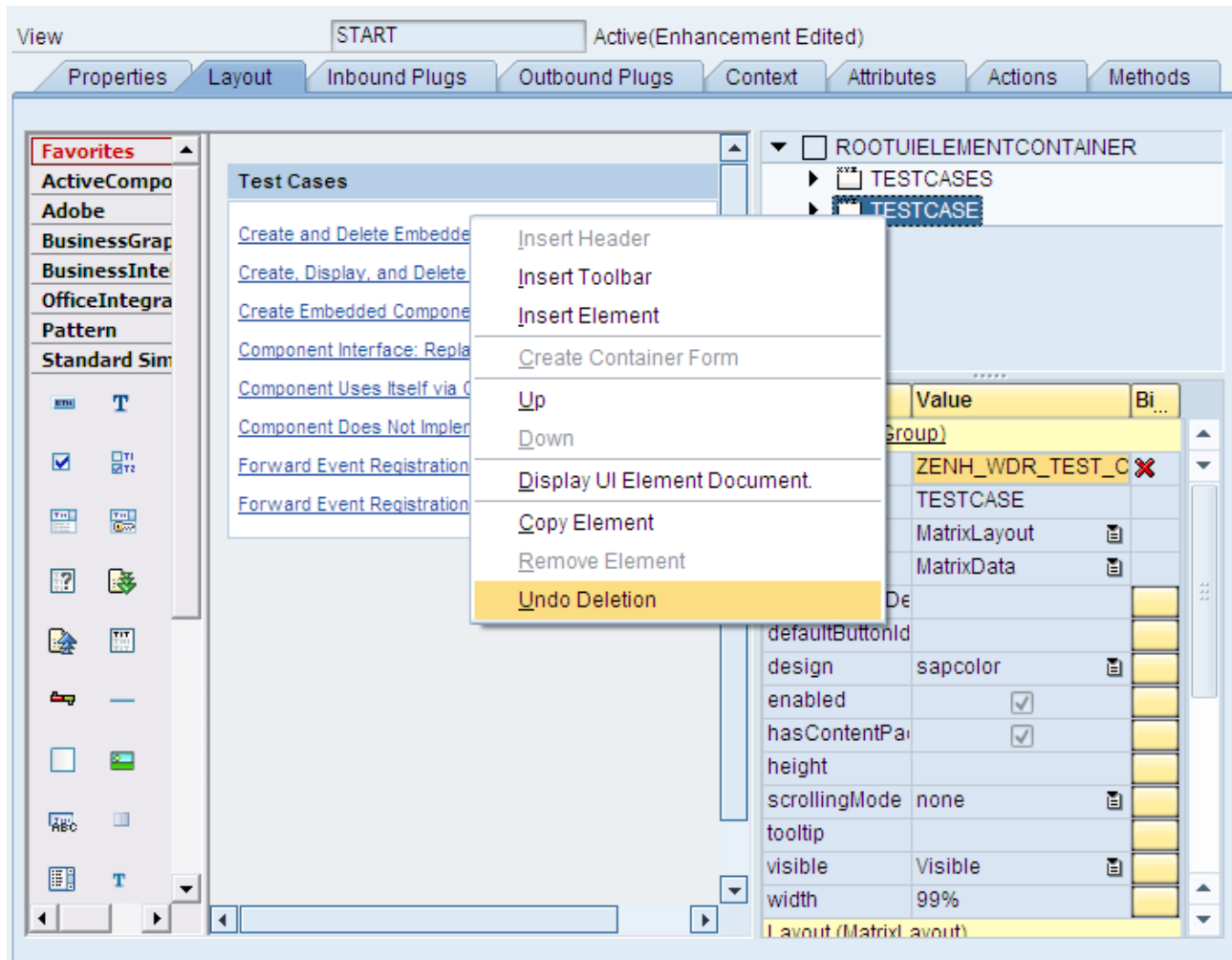


After deletion a  mark will appear against the removed UI Element.




After deleting the UI element, you can create another UI element under enhancement, with same properties as of the deleted one, adding the changes you want, to this.

To recover the deleted item right click on the UI element in the hierarchy and click on undo deletion as shown below:



After making these changes save the enhancement and activate it.

Enhancing standard methods:

Open the component/view to be enhanced and click on the  button in the menu. Choose the enhancement implementation under which you want to enhance the WD Component.

To enhance the standard methods scroll to left in the methods tab to pre-exit, post-exit and overwrite-exit columns. You can write your own code to be executed before/after these methods in pre-exit/post-exit methods created as enhancements.

Against the method to enhance click on pre-exit button to create pre-exit method if you want to write the code before the code in method is executed or post-exit button to create post-exit method if you want to write the code after the code in method is executed.

In case you want to remove the standard method completely with your own code, click on overwrite-exit button under overwrite-exit column. This will overwrite the code in the standard method with newly created overwrite-exit method.

View START Active(Enhanced Implemtn ZENH_WDR_TEST_CMPUSAGE Inactive

Properties Layout Inbound Plugs Outbound Plugs Context Attributes Actions Methods

Pre-Exit Post-Exit Overwrite Exit

Method	Method Type	Pre-Exit	Post-Exit	Overwrite Exit	Enh.Impl.
ONACTIONTESTCASE1	1 Event				
ONACTIONTESTCASE2	1 Event				
ONACTIONTESTCASE3	1 Event				
ONACTIONTESTCASE4	1 Event				
ONACTIONTESTCASE5	1 Event				
ONACTIONTESTCASE6	1 Event				
ONACTIONTESTCASE7	1 Event				
WDDOBEFOREACTION	0 Method				
WDDOEXIT	0 Method				
WDDOINIT	0 Method				
WDDOMODIFYVIEW	0 Method				
	0 Method				
	0 Method				
	0 Method				
	0 Method				
	0 Method				
	0 Method				
	0 Method				

To delete pre-exit, post-exit and overwrite-exit methods against any standard method click on the method and choose the delete pre-exist button Pre-Exit, delete post-exit button Post-Exit or delete overwrite-exit button Overwrite Exit. This will delete the enhanced code.

View START Active(Enhanced Implemtn ZENH_WDR_TEST_CMPUSAGE Inactive

Properties Layout Inbound Plugs Outbound Plugs Context Attributes Actions Methods

Pre-Exit Post-Exit Overwrite Exit

Method	Method Type	Pre-Exit	Post-Exit	Overwrite Exit	Enh.Impl.
ONACTIONTESTCASE1	1 Event				
ONACTIONTESTCASE2	1 Event				
ONACTIONTESTCASE3	1 Event				
ONACTIONTESTCASE4	1 Event				
ONACTIONTESTCASE5	1 Event				
ONACTIONTESTCASE6	1 Event				
ONACTIONTESTCASE7	1 Event				
WDDOBEFOREACTION	0 Method				
WDDOEXIT	0 Method				
WDDOINIT	0 Method				
WDDOMODIFYVIEW	0 Method				
	0 Method				
	0 Method				
	0 Method				
	0 Method				
	0 Method				
	0 Method				
	0 Method				
	0 Method				

Create view/window as enhancement

To create a view as enhancement, right click on the views select “Create as Enhancement”, choose the enhancement implementation under which you want to enhance the component.

The screenshot shows the Web Dynpro Explorer interface for the component 'WDR_TEST_CMPUSAGE'. The 'Views' folder is expanded, and a context menu is open over it. The menu options are 'Create' and 'Create as Enhancement'. The 'Create as Enhancement' option is highlighted in yellow. The main pane shows a table of methods for the 'START' view.

Method	Method Type	Pre-Exit	Post-Exit	Overwrite Exit	Enh.Impl.
ONACTIONTESTCASE1	1 Event				
ONACTIONTESTCASE2	1 Event				
ONACTIONTESTCASE3	1 Event				
ONACTIONTESTCASE4	1 Event				
ONACTIONTESTCASE5	1 Event				
ONACTIONTESTCASE6	1 Event				
ONACTIONTESTCASE7	1 Event				
WDDOBEFOREACTION	0 Method				
WDDOEXIT	0 Method				
WDDOINIT	0 Method				
WDDOMODIFYVIEW	0 Method				
WDDOONCONTEXTMENU	0 Method				

Similarly to create a window as enhancement, right click on the windows select “Create as Enhancement”, choose the enhancement implementation under which you want to enhance the component.

The screenshot shows the Web Dynpro Explorer interface for the component 'WDR_TEST_CMPUSAGE'. The 'Windows' folder is expanded, and a context menu is open over it. The menu options are 'Create' and 'Create as Enhancement'. The 'Create as Enhancement' option is highlighted in yellow. The main pane shows a table of methods for the 'TESTCASE1' view.

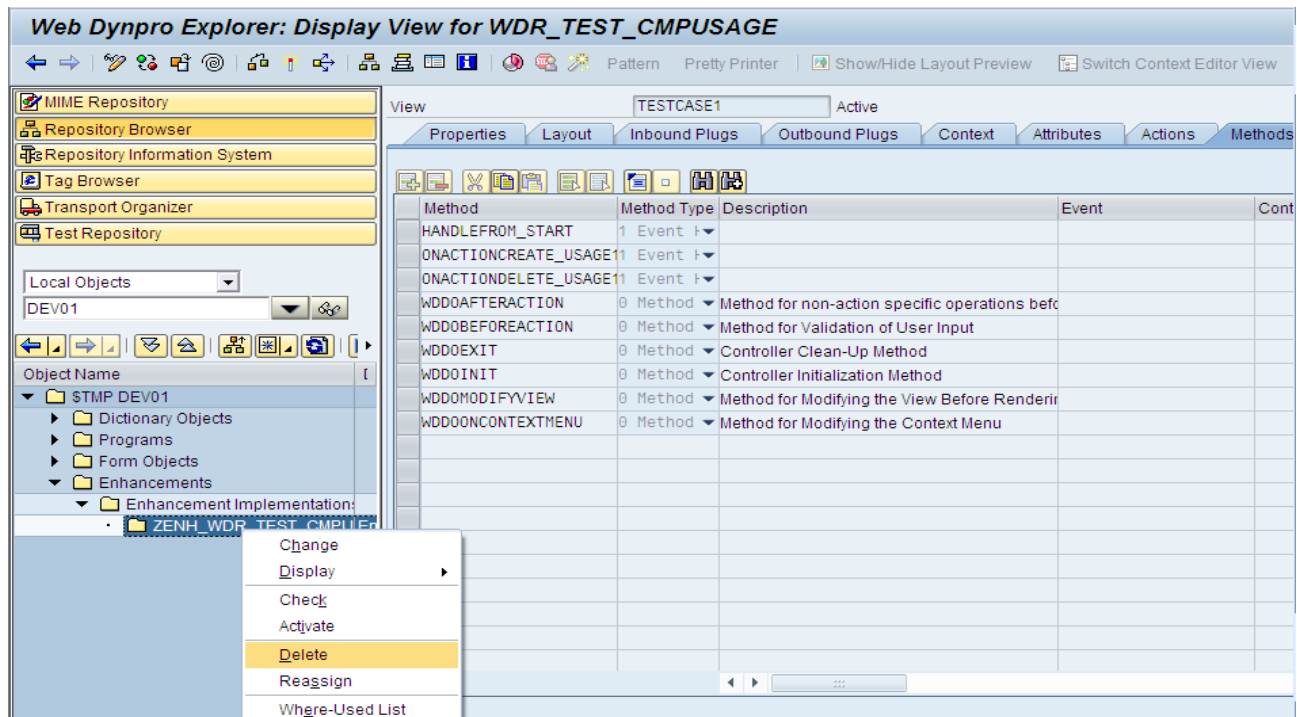
Method	Method Type	Description	Event
HANDLEFROM_START	1 Event		
ONACTIONCREATE_USAGE	1 Event		
ONACTIONDELETE_USAGE	1 Event		
WDDOBEFOREACTION	0 Method	Method for non-action specific operations before	
WDDOEXIT	0 Method	Method for Validation of User Input	
WDDOINIT	0 Method	Controller Clean-Up Method	
WDDOONCONTEXTMENU	0 Method	Controller Initialization Method	
WDDOMODIFYVIEW	0 Method	Method for Modifying the View Before Rendering	
WDDOONCONTEXTMENU	0 Method	Method for Modifying the Context Menu	

Deleting enhancement implementation

To delete enhancement implementation locate it in the package.

To do that:

1. Go to SE80.
2. Select package in which the enhancement implementation is stored.
3. Select enhancement implementation under enhancements and delete it as shown:



Once deleted the enhancement implementation, changes done under enhancement will be reverted back in the WD Component.

Disclaimer and Liability Notice

This document may discuss sample coding or other information that does not include SAP official interfaces and therefore is not supported by SAP. Changes made based on this information are not supported and can be overwritten during an upgrade.

SAP will not be held liable for any damages caused by using or misusing the information, code or methods suggested in this document, and anyone using these methods does so at his/her own risk.

SAP offers no guarantees and assumes no responsibility or liability of any type with respect to the content of this technical article or code sample, including any liability resulting from incompatibility between the content within this document and the materials and services offered by SAP. You agree that you will not hold, or seek to hold, SAP responsible or liable with respect to the content of this document.