

Error Handling While Tab Navigation in Web Dynpro for ABAP



Applies to:

SAP ECC6.0 and above. For more information, visit the [WebDynpro ABAP homepage](#).

Summary

This document explains the error handling in a particular tab by preventing the navigation into another tab when an error occurs in that particular tab.

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Author Bio



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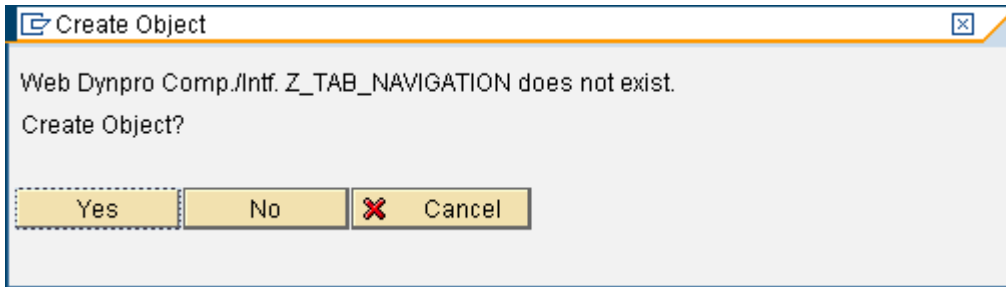
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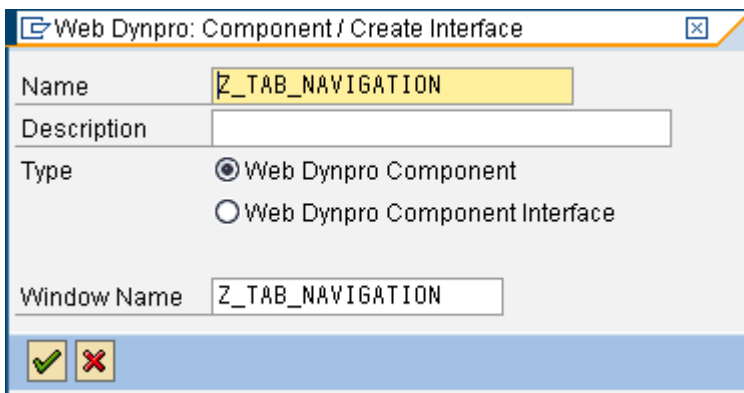
Tab Strip error handling scenario

This scenario explains the error handling in Tabstrip in WebDynpro for ABAP. It has 2 tabs TAB1 and TAB2. When ever TAB2 is pressed for tab navigation, then TAB1 checks the all field validations .If any error occurs in TAB1, it displays the error message and stops the navigation to another tab TAB2. So the result is it will stay back in the tab TAB1 when error occurred.

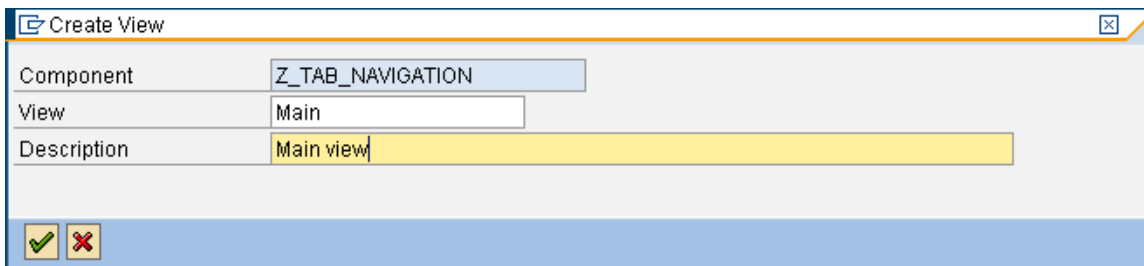
Create one Web Dynpro Component with name Z_DYNAMIC_OVS.



Select WebDynpro component and press enter.



Create a view



Context

Create a Node as below with cardinality 1..1

Web Dynpro Explorer: Change View for Z_TAB_NAVIGATION

The screenshot shows the Web Dynpro Explorer interface. On the left, the 'Object Name' tree is expanded to show 'Z_TAB_NAVIGATION' with sub-items: 'COMPONENTCONTROLLER', 'Component Interface', 'Views', and 'Windows'. The main area displays the 'Context' configuration for 'Z_TAB_NAVIGATION.COMPONENTCONTROLLER'. A context diagram shows a node named 'CONTEXT'. A context table at the bottom is visible:

| Property | Value |
|----------------------|---------|
| Nodes | |
| Node Name | CONTEXT |
| Dictionary structure | |

The 'Create Nodes' dialog box contains the following configuration:

- Node Name: TAB1
- Interface Node: No
- Input Element (Ext.): No
- Dictionary structure: vbak
- Cardinality: 1..1
- Selection: 0..1
- Init. Lead Selection: Yes
- Singleton: No
- Supply Function: (empty)

At the bottom, there is a status bar with a green checkmark, a button labeled 'Add Attribute from Structure', and a red 'X' button.

Now click on the button 'Add Attribute from structure' and select the 'VBELN' field.

Select Components of Structure VBAK 1 / 128

| Component | Key | RTy | Component Type | Data Type | Length | Decim |
|--------------|-------------------------------------|--------------------------|-----------------|-----------|--------|-------|
| MANDT | <input checked="" type="checkbox"/> | <input type="checkbox"/> | MANDT | CLNT | 3 | 0 |
| VBELN | <input checked="" type="checkbox"/> | <input type="checkbox"/> | VBELN VA | CHAR | 10 | 0 |
| ERDAT | <input type="checkbox"/> | <input type="checkbox"/> | ERDAT | DATS | 8 | 0 |
| ERZET | <input type="checkbox"/> | <input type="checkbox"/> | ERZET | TIMS | 6 | 0 |
| ERNAM | <input type="checkbox"/> | <input type="checkbox"/> | ERNAM | CHAR | 12 | 0 |
| ANGDT | <input type="checkbox"/> | <input type="checkbox"/> | ANGDT V | DATS | 8 | 0 |
| BNDDT | <input type="checkbox"/> | <input type="checkbox"/> | BNDDT | DATS | 8 | 0 |
| AUDAT | <input type="checkbox"/> | <input type="checkbox"/> | AUDAT | DATS | 8 | 0 |
| VBTYP | <input type="checkbox"/> | <input type="checkbox"/> | VBTYP | CHAR | 1 | 0 |
| TRVOG | <input type="checkbox"/> | <input type="checkbox"/> | TRVOG | CHAR | 1 | 0 |
| AUART | <input type="checkbox"/> | <input type="checkbox"/> | AUART | CHAR | 4 | 0 |
| AUGRU | <input type="checkbox"/> | <input type="checkbox"/> | AUGRU | CHAR | 3 | 0 |
| GWLDT | <input type="checkbox"/> | <input type="checkbox"/> | GWLDT | DATS | 8 | 0 |
| SUBMI | <input type="checkbox"/> | <input type="checkbox"/> | SUBMI SD | CHAR | 10 | 0 |
| LIFSK | <input type="checkbox"/> | <input type="checkbox"/> | LIFSK | CHAR | 2 | 0 |
| FAKSK | <input type="checkbox"/> | <input type="checkbox"/> | FAKSK | CHAR | 2 | 0 |
| NETWR | <input type="checkbox"/> | <input type="checkbox"/> | NETWR AK | CURR | 15 | 2 |
| WAERK | <input type="checkbox"/> | <input type="checkbox"/> | WAERK | CUKY | 5 | 0 |
| VKORG | <input type="checkbox"/> | <input type="checkbox"/> | VKORG | CHAR | 4 | 0 |
| VTWEG | <input type="checkbox"/> | <input type="checkbox"/> | VTWEG | CHAR | 2 | 0 |
| SPART | <input type="checkbox"/> | <input type="checkbox"/> | SPART | CHAR | 2 | 0 |
| VKGRP | <input type="checkbox"/> | <input type="checkbox"/> | VKGRP | CHAR | 3 | 0 |
| VKBUR | <input type="checkbox"/> | <input type="checkbox"/> | VKBUR | CHAR | 4 | 0 |
| GSBER | <input type="checkbox"/> | <input type="checkbox"/> | GSBER | CHAR | 4 | 0 |

✓ ✗

Create another node TAB2 with cardinality 0..n and select the attributes 'VBELN' and 'POSNR' from the VBAP structure.

| | |
|----------------------|------|
| Node Name | TAB2 |
| Interface Node | No |
| Input Element (Ext.) | No |
| Dictionary structure | VBAP |
| Cardinality | 0..n |
| Selection | 0..1 |
| Init. Lead Selection | Yes |
| Singleton | No |
| Supply Function | |

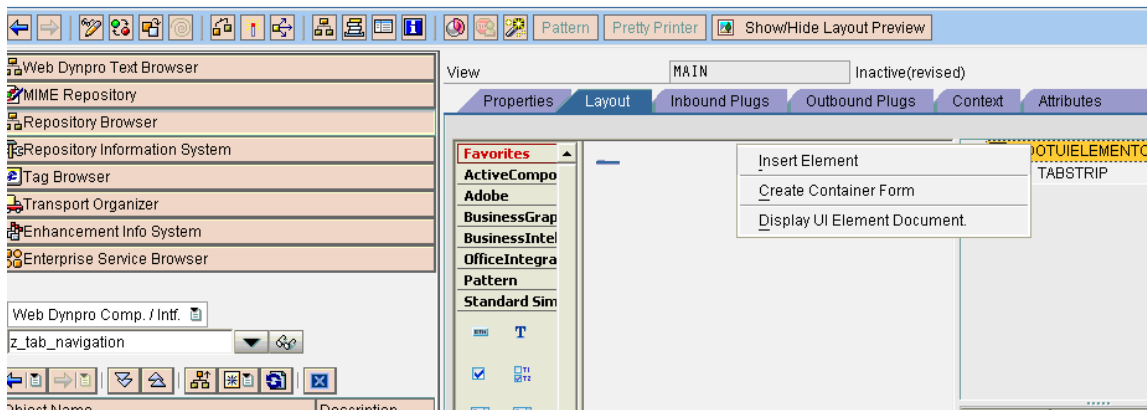
Add Attribute from Structure

Create one attribute of type string and which is used to stores the selected tab name

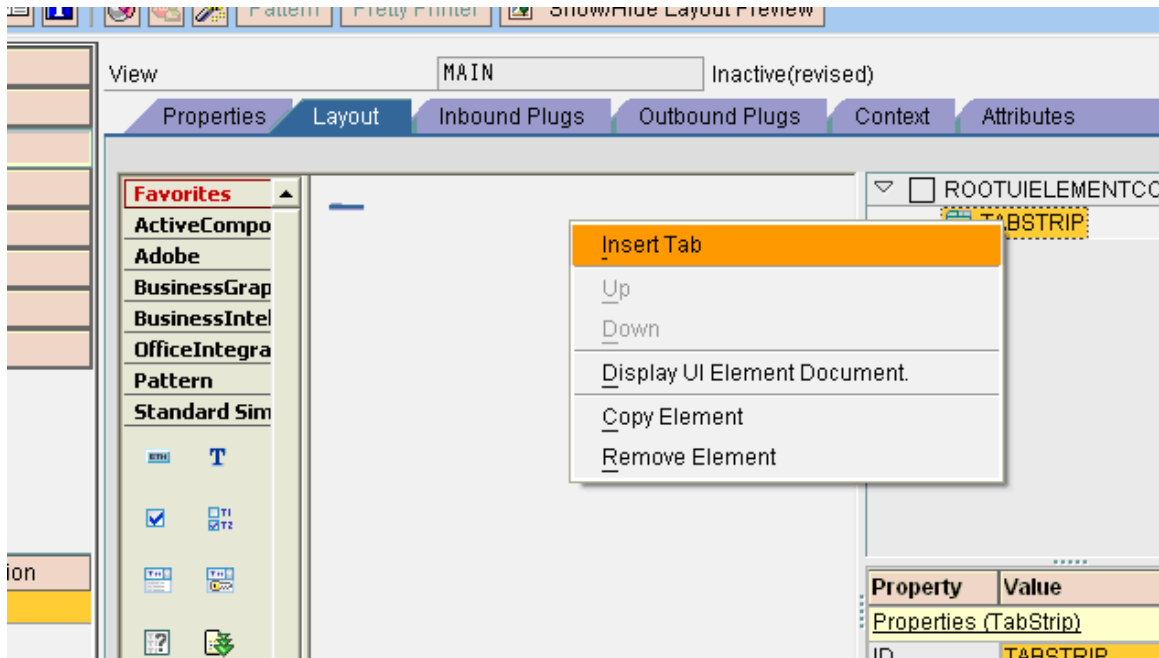
| Object Name | Description |
|---------------------|-------------|
| Z_TAB_NAVIGATION | |
| COMPONENTCONTROLLER | |
| Component Interface | |
| Views | |
| Windows | |

Layout

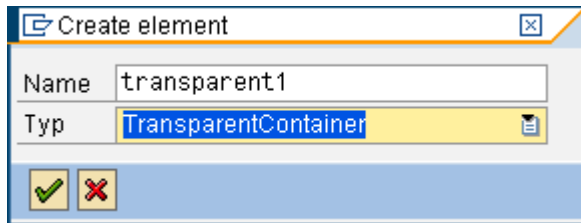
Create 'TabStrip' UI element on the layout of the main view.



Select the 'TabStrip' and right click on it. Then we will find 'Insert tab' and click on it. Name it as 'TAB1'. Similarly create another tab with name 'TAB2'.



Create a transparent container in each tab (TAB1, TAB2). In that transparent container we will be able to create more UI elements. Without transparent container we will be able to create only one UI element.



Select the transparent container under the 'TAB1' and then click the code wizard button as shown below. Now it will display a popup with context elements

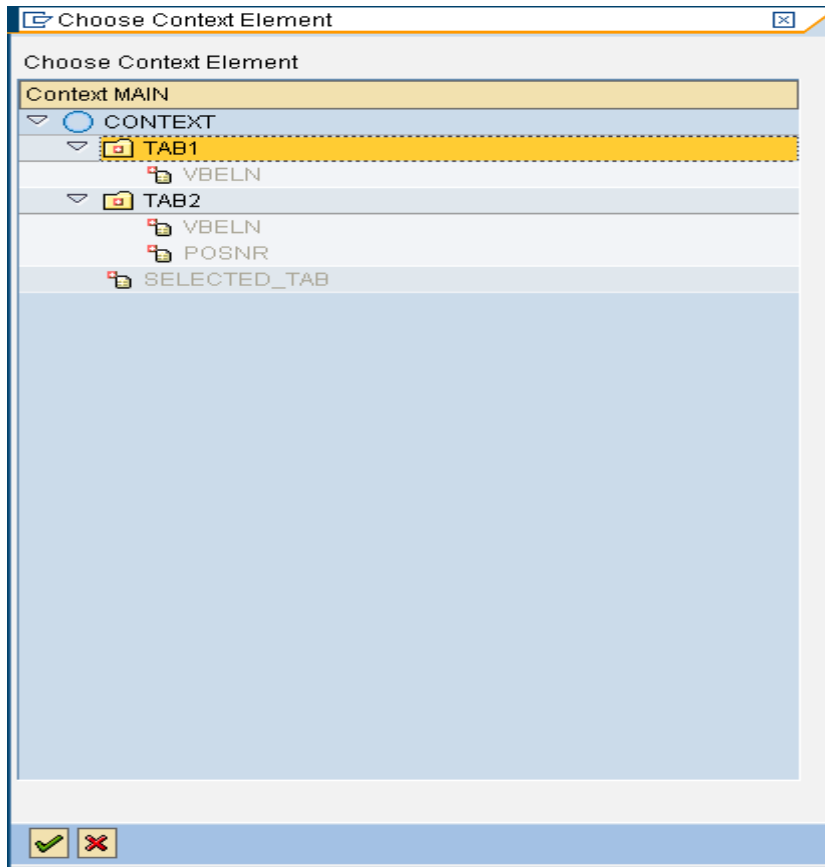
View for Z_TAB_NAVIGATION

| Property | Value |
|-----------------------------------|-------------------------------------|
| Properties (TransparentContainer) | |
| ID | TRANSPARENT1 |
| Layout | FlowLayout |
| accessibilityDes | |
| defaultButtonId | |
| enabled | <input checked="" type="checkbox"/> |
| height | |
| isLavuotContain | <input checked="" type="checkbox"/> |

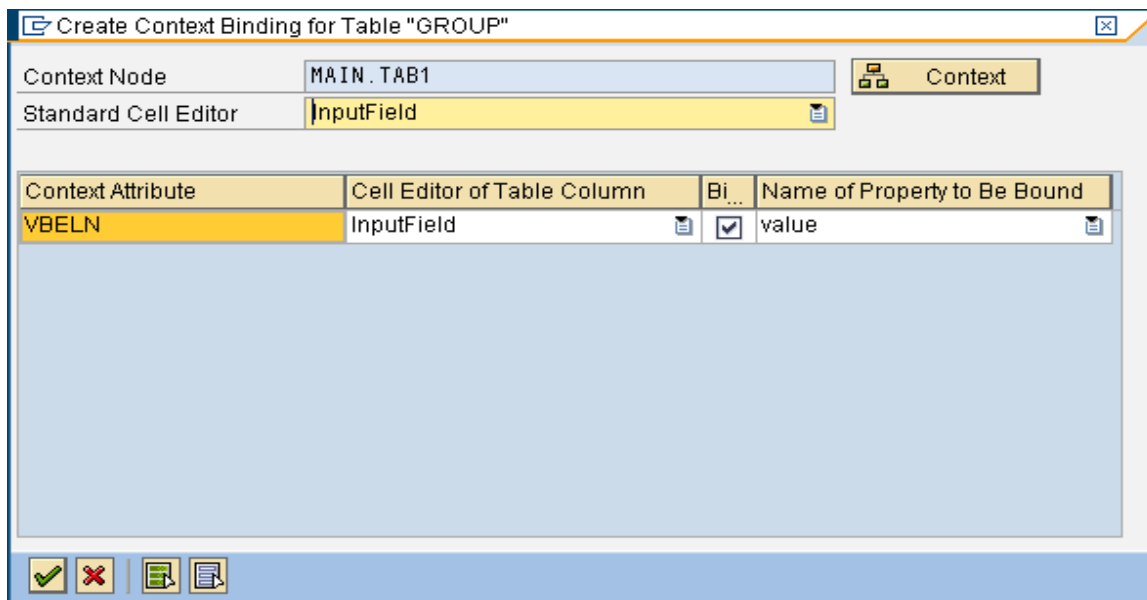
Select the form and press enter. Then one popup will display. In that popup select the 'Context' button.

| Template | Description |
|----------|-------------------------------|
| Standard | |
| Form | Dieses Template erzeugt ein F |
| Table | Table Wizard |
| Screen | Creates a Layout from Templat |

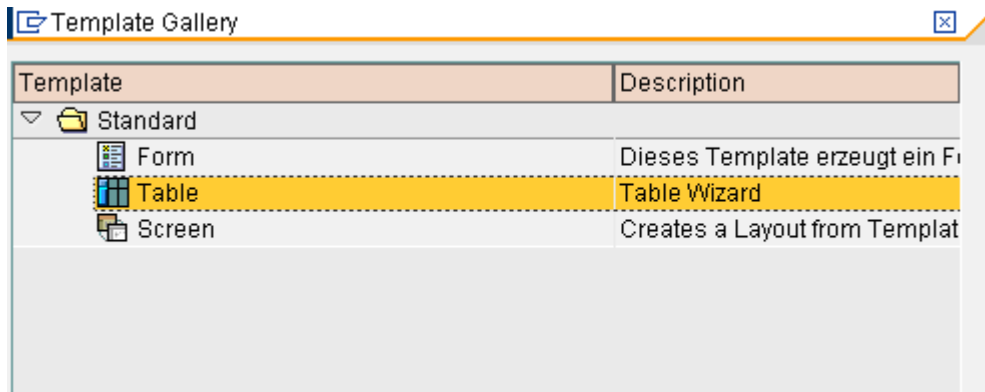
Select the 'TAB1' node and attributes under that node will automatically create as UI elements in the layout.



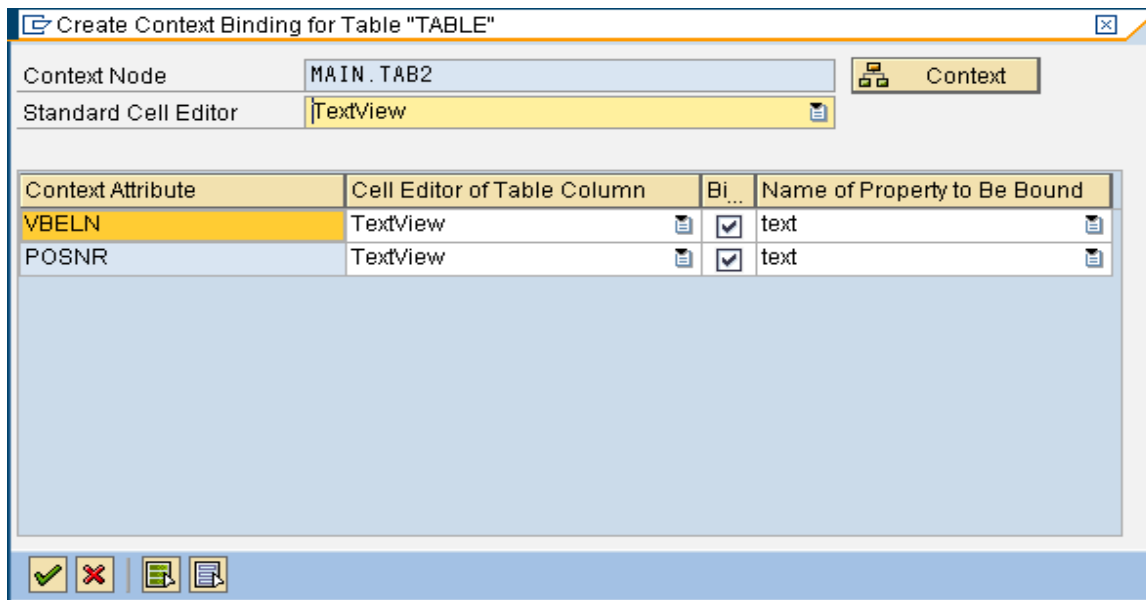
Select the 'InputField' from the drop down list so that attribute will be created as input field in the layout



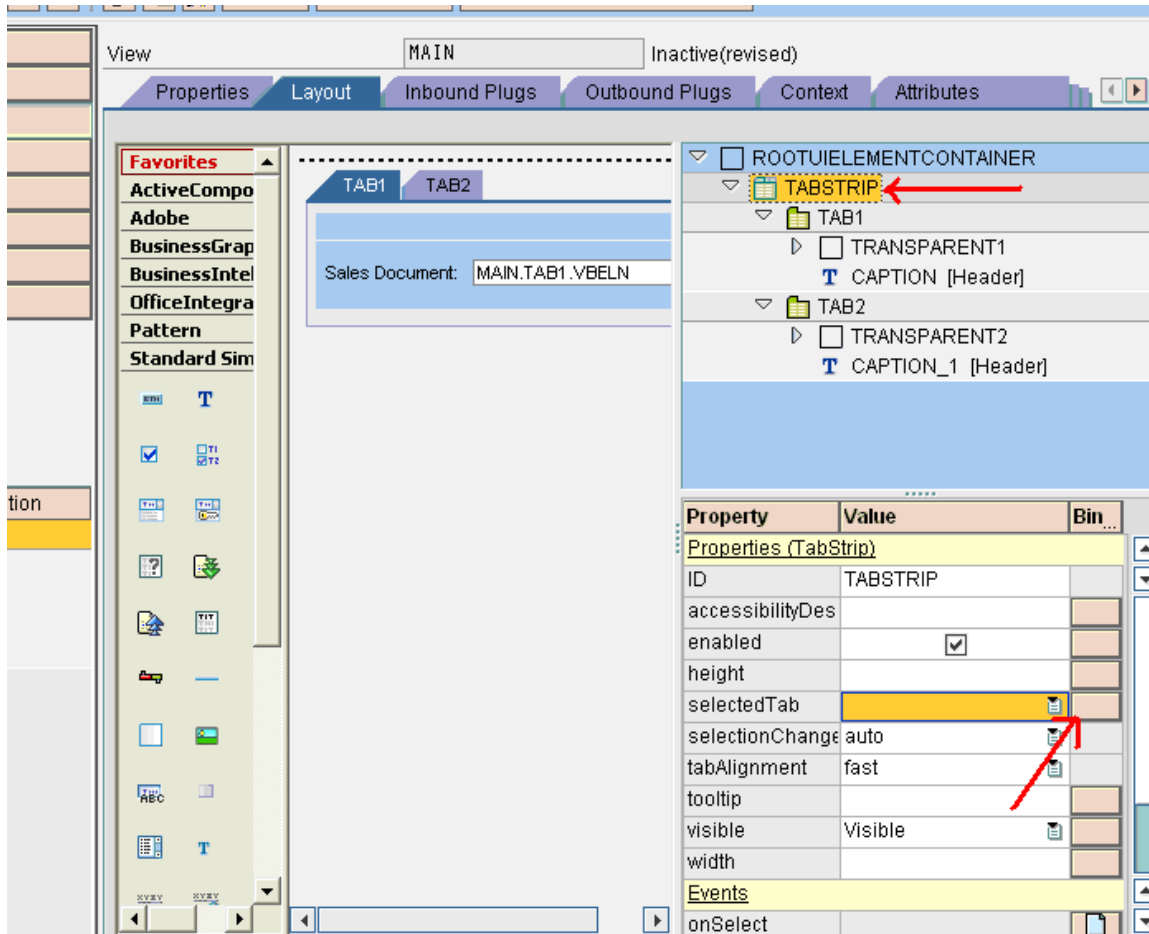
Similarly select the 'TAB2' transparent container in the layout and press the code wizard button. Then it will display the below popup. In that screen select the table and press enter (or double click it).



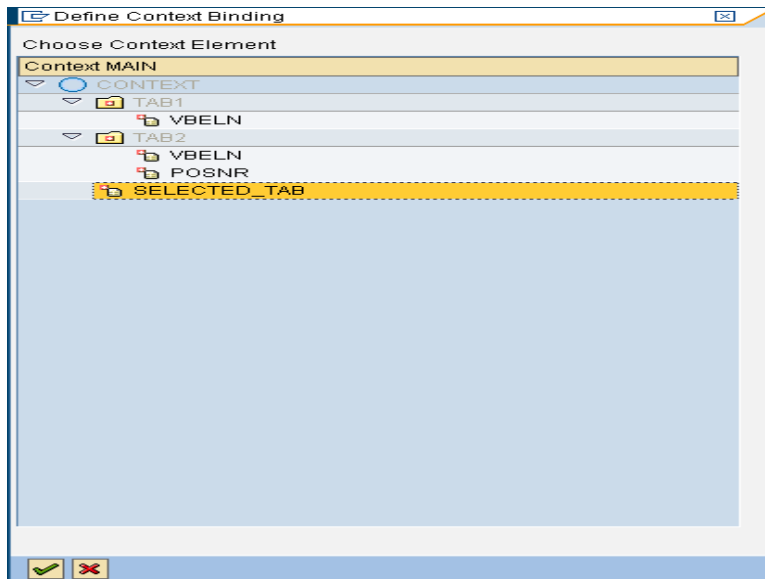
Click on the 'Context' button and select the 'TAB2'. Then below popup will be displayed. In that select the text field for displaying all the fields in the table as text.



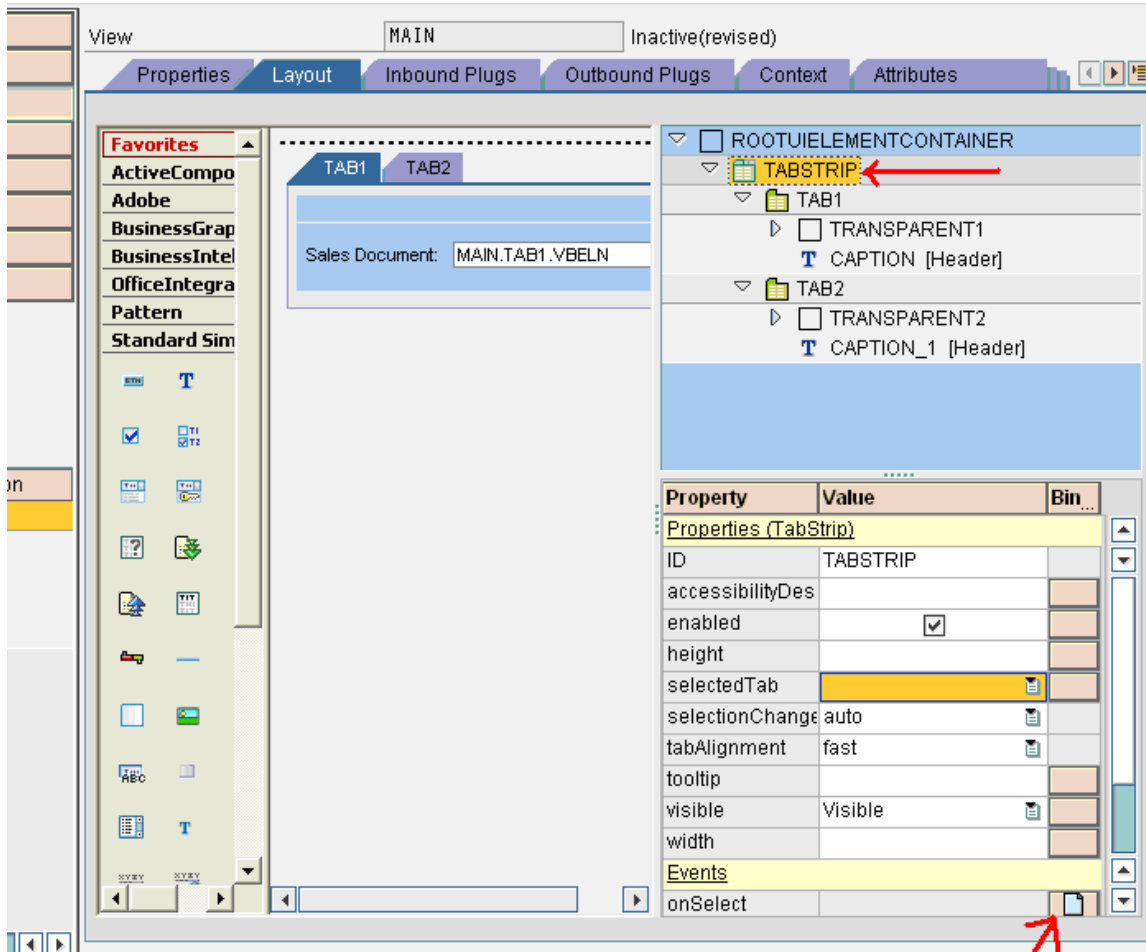
Select the properties of the 'TabStrip' and for the property 'SelectedTab' click the binding button as shown below. Then it will display the context elements.



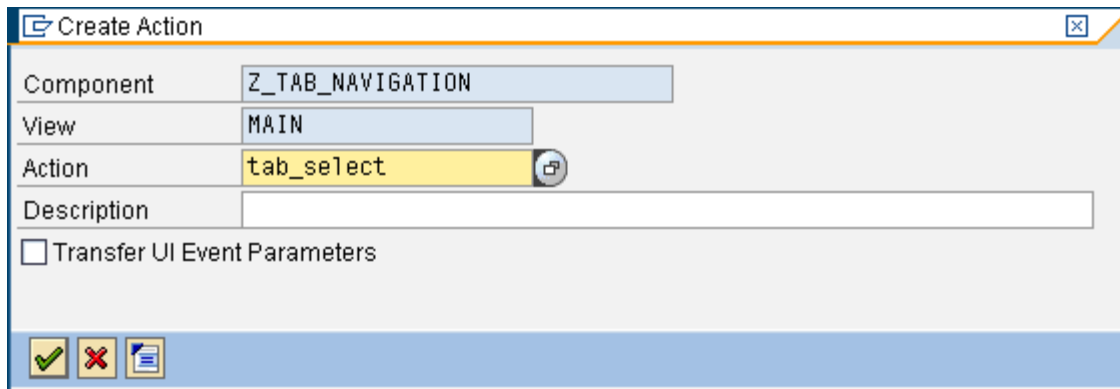
Select the attribute 'SELECTED_TAB' and press enter. Actually what ever the tab name it stores, that tab only display in the layout. So if we change the value in that attribute, then tabstrip will display another tab automatically.



Create the event for the tabstrip by clicking on the create button which is shown by arrow mark.



Enter the event name as 'tab_select'. Then automatically a method will be created.



Code in Method

In the method 'tab_select' write the below code

```

method ONACTIONTAB_SELECT .

* Types for the vbap details
types: begin of ty_vbap,
       vbeln type vbap-vbeln,
       posnr type vbap-posnr,
       end of ty_vbap.

* Data declarations
data: lv_vbeln1 type vbak-vbeln,
      it_vbap   type standard table of ty_vbap,
      wa_vbap   type ty_vbap,
      lo_nd_tab1 type ref to if_wd_context_node,
      lo_el_tab1 type ref to if_wd_context_element,
      ls_tab1   type wd_this->element_tab1,
      lv_vbeln like ls_tab1-vbeln,
      lo_nd_tab2 type ref to if_wd_context_node,
      lo_el_tab2 type ref to if_wd_context_element,
      ls_tab2   type wd_this->element_tab2,
      lo_api_controller type ref to if_wd_controller,
      lo_el_context type ref to if_wd_context_element,
      lo_message_manager type ref to if_wd_message_manager.

* navigate from <CONTEXT> to <TAB1> via lead selection
lo_nd_tab1 = wd_context->get_child_node( name = wd_this->wdctx_tab1 ).

* get element via lead selection
lo_el_tab1 = lo_nd_tab1->get_element( ).

* get single attribute
* To get the value entered in the vbeln field of
* the first tab 'TAB1
lo_el_tab1->get_attribute(
  exporting
    name = `VBELN`
  importing
    value = lv_vbeln ).

* Validate whether entered sales document existed in VBAK
select single vbeln
  from vbak
  into lv_vbeln1
  where vbeln = lv_vbeln.

if sy-subrc = 0.
* If document number existed in VBAK means getting the VBAP
* table entries for corresponding document number
select vbeln
  posnr
  into table it_vbap
  from vbap
  where vbeln = lv_vbeln.

```

```
*Binding the vbap table details to the 'TAB2' table.
lo_nd_tab2 = wd_context->get_child_node( name = wd_this->wdctx_tab2 ).

call method lo_nd_tab2->bind_table
  exporting
    new_items          = it_vbap.

* If the sales document does not exist means populate error message
* restrict the tab navigation into the present tab 'TAB1'
else.
*populate error message

lo_api_controller ?= wd_this->wd_get_api( ).

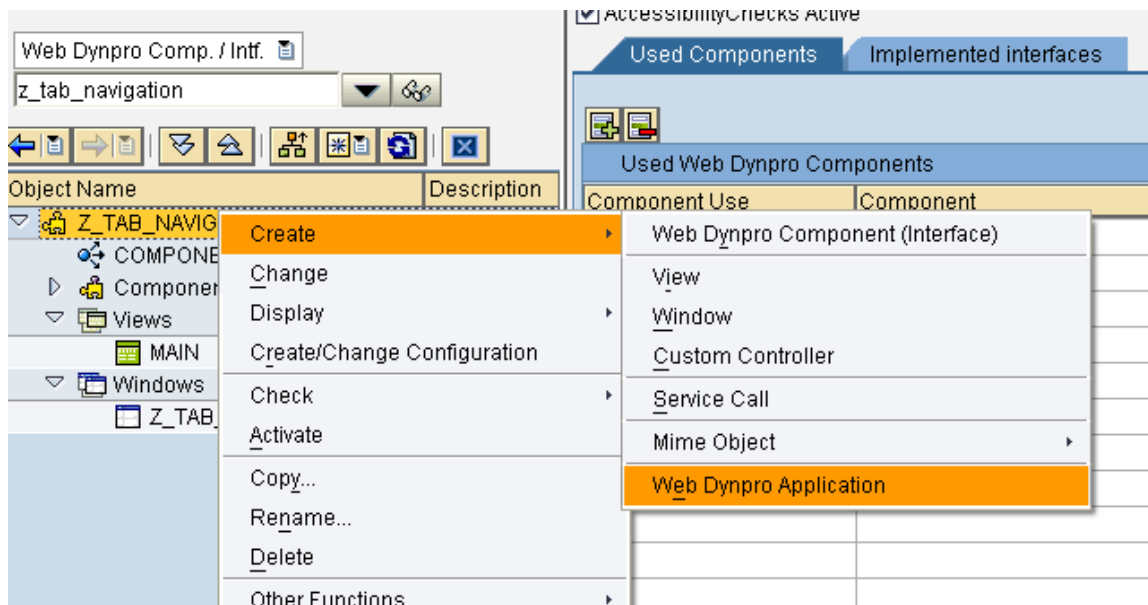
call method lo_api_controller->get_message_manager
  receiving
    message_manager = lo_message_manager .

* report message
call method lo_message_manager->report_error_message
  exporting
    message_text          = 'Document number does not exist'.
* To get the referance of the element
lo_el_context = wd_context->get_element( ).

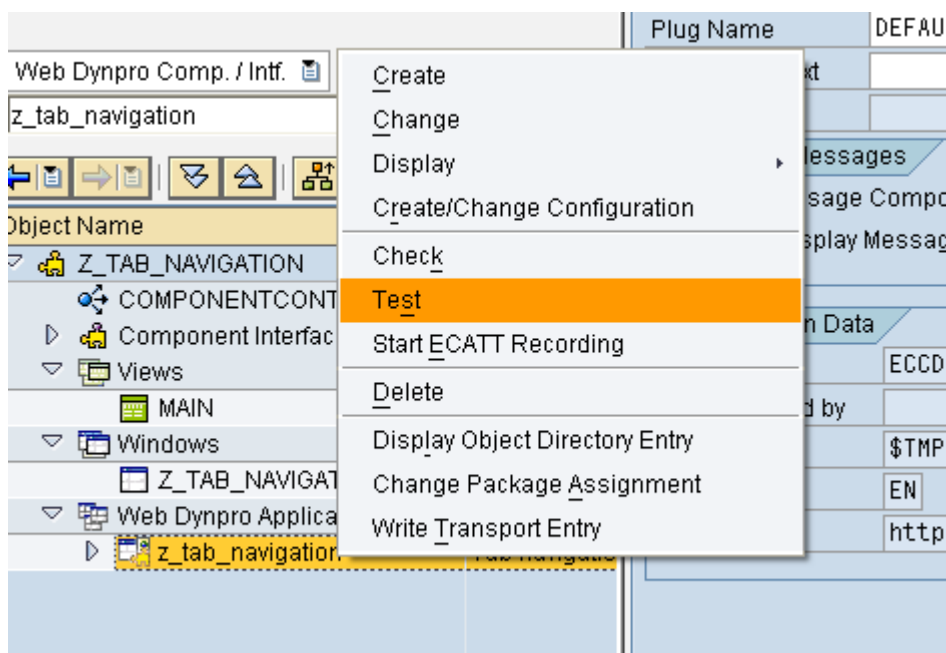
* Assign the value 'TAB1' to the attribute selected_tab
* so that it will not navigate into another tab as error occured
call method lo_el_context->set_attribute
  exporting
    value = 'TAB1'
    name  = 'SELECTED_TAB' .
  exit.
endif.
endmethod.
```

WebDynpro Application

Create an application by right click on the WebDynpro component.



Select the application and test it by right click on the application.



Testing application

Then output will display as below

Sales Document: 1

If the entered Sales document doesn't exist in VBAK table means it will display error message and stay back in the same tab 'TAB1'.

Document number does not exist

Sales Document: 1

Now entered the valid sales document

Sales Document: 4970

Then it will navigate to another tab 'TAB2' with document item details as below.

| Sales Document | Item |
|----------------|--------|
| 4970 | 000010 |
| 4970 | 000020 |
| 4970 | 000030 |
| 4970 | 000040 |

Row 1 of 4

Related Content

http://help.sap.com/saphelp_erp2005/helpdata/EN/e8/ac884118aa1709e10000000a155106/content.htm

For more information, visit the [Web Dynpro ABAP homepage](#)

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