

# Working with Select Options in Web Dynpro for ABAP

## Applies to:

SAP ECC 6.0 (Release 700, SP 12).

## Summary

To show a select options screen in Web Dynpro ABAP we have to use SAP's Standard component. This article will brief you about how to use sap standard Web Dynpro component WDR\_SELECT\_OPTIONS. Select options in Web Dynpro work the same way as in ABAP reports.

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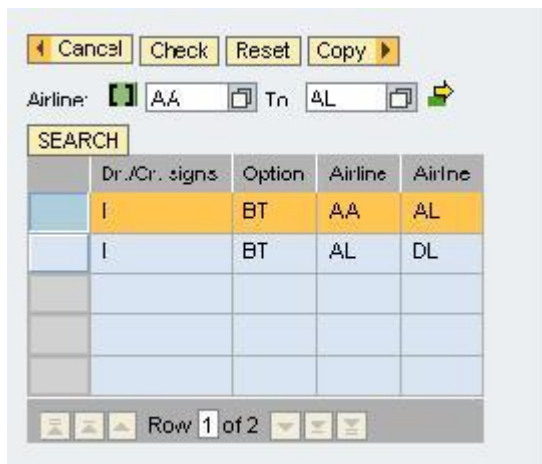
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## Introduction

Let's start with an application which shows a select-options screen field Airline ID of type S\_CARR\_ID and displays the entered values in a table control.



## Select-Options in ABAP

Using Select-Options, the user can specify complex selection criteria. If the selection criteria is complex, you need not write lengthy logical expressions in the select query, which is solved by the select-options statement. Select-Options defines a range table which is having four columns Sign, Option, Low and High.

In Reports you use select-options statement to hold range of values, which can be illustrated from the following ABAP code:

```
data: s_carr_id type s_carri d.
select-options : r_carri d for s_carr_i d.
```

This will declare a range table called r\_carri d to hold single values and ranges. The selection screen will look like this:

R\_CARRID  to

## Select-Options in Web Dynpro for ABAP

Create a Web Dynpro Component ZTEST\_SELECT\_OPTIONS.

Add the Component Usage to use the standard component WDR\_SELECT\_OPTIONS

Web Dynpro Component: ZTUTORIAL\_SELECT\_OPTIONS Active

Description:

Assistance Class:

Created By: WF\_EMP1 Created On: 14.12.2007

Last Changed By: WF\_EMP1 Changed On: 14.12.2007

Package: \$TMP

AccessibilityChecks Active

Used Components | Implemented interfaces

Used Web Dynpro Components

Component Use	Component	Description of Component
SELECT_OPTIONS	WDR_SELECT_OPTIONS	

Create a View and create the context to store the Range table.

SIGN TYPE SIGN, OPTION TYPE OPTI, LOW TYPE S\_CARR\_ID, HIGH TYPE S\_CARR\_ID

Controller Usage

Context SELECT

- CONTEXT
  - RANGE
    - SIGN
    - OPTION
    - LOW
    - HIGH

Add the Component Usage and the Interface Controller of the Select Option to the created View in Properties Tab.

The screenshot shows the Properties Tab for a View named 'SELECT'. The 'Used Controllers/Components' table is as follows:

Component Use	Component	Controller	Description
	ZTUTORIAL_SELECT_OPT	COMPONENTCONTROLLER	
SELECT_OPTIONS	WDR_SELECT_OPTIONS		
SELECT_OPTIONS	WDR_SELECT_OPTIONS	INTERFACECONTROLLER	

Design the View as shown, place a viewContainerUIElement to show the Select-Options screen, a button to fetch the entered values and a table to display the range table.

The screenshot shows the Layout Tab for a View named 'SELECT'. The layout structure is as follows:

- ROOTUIELEMENTCONTAINER
  - VIEW\_CONTAINER\_UIELEMENT
    - BTN\_SEARCH
    - TBL\_RANGE

The Properties (ViewContainerUIElement) table is as follows:

Property	Value
<b>Properties (ViewContainerUIElement)</b>	
ID	VIEW_CONTAINER_UIELEMENT
enabled	<input checked="" type="checkbox"/>
tooltip	
visible	Visible
<b>Layout Data (FlowData)</b>	
cellDesign	padless
wGutter	none

At this point of time, the selection-screen is empty as we have not supplied any data to the component WDR\_SELECT\_OPTIONS to display a selection-screen.

The following code is to show Airline ID as the selection screen item, put this code in the WDDOINIT method WDDOINIT .

```
DATA: LR_SELECT_OPTIONS TYPE REF TO IWCI_WDR_SELECT_OPTIONS.
DATA LR_HELPER TYPE REF TO IF_WD_SELECT_OPTIONS.
DATA: LT_RANGE TYPE REF TO DATA.
DATA: LR_COMP_USAGE TYPE REF TO IF_WD_COMPONENT_USAGE.
```

\*This code is to instantiate the component WDR\_SELECT\_OPTIONS

```
LR_COMP_USAGE = WD_THI S->WD_CPUSE_SELECT_OPTIONS( ).
IF LR_COMP_USAGE->HAS_ACTIVE_COMPONENT( ) IS INITIAL.
  LR_COMP_USAGE->CREATE_COMPONENT( ).
ENDIF.
```

\*call the interface controller method init\_selection\_screen to get the helper class

```
LR_SELECT_OPTIONS = WD_THI S->WD_CPIFC_SELECT_OPTIONS( ).
LR_HELPER = LR_SELECT_OPTIONS->INIT_SELECTION_SCREEN( ).
```

\*Use the helper class to create a range table for the data element S\_CARR\_ID

```
LT_RANGE = LR_HELPER->CREATE_RANGE_TABLE( I_TYPENAME = 'S_CARR_ID' ).
```

\*Add a Selection Screen Field

```
LR_HELPER->ADD_SELECTION_FIELD( I_ID = 'S_CARR_ID'
                               IT_RESULT = LT_RANGE ).
```

endmethod.

Create an Action and bind the action to the Button you placed in the Layout, Provide the following code in the event handler to fetch the input values that user entered at runtime.

method ONACTIONSEARCH .

```
DATA: LR_SELECT_OPTIONS TYPE REF TO IWCI_WDR_SELECT_OPTIONS.
DATA LR_HELPER TYPE REF TO IF_WD_SELECT_OPTIONS.
DATA: LT_RANGE TYPE REF TO DATA.
```

```
FIELD-SYMBOLS: <LT_RANGE_TABLE> TYPE WD_THI S->ELEMENTS_RANGE,
               <LS_FIELD> TYPE LINE OF
IF_WD_SELECT_OPTIONS=>TT_SELECTION_SCREEN_ITEM.
```

```
DATA: LR_COMP_USAGE TYPE REF TO IF_WD_COMPONENT_USAGE.
DATA: LT_FIELDS TYPE IF_WD_SELECT_OPTIONS=>TT_SELECTION_SCREEN_ITEM.
```

```
LR_COMP_USAGE = WD_THI S->WD_CPUSE_SELECT_OPTIONS( ).
IF LR_COMP_USAGE->HAS_ACTIVE_COMPONENT( ) IS INITIAL.
  LR_COMP_USAGE->CREATE_COMPONENT( ).
ENDIF.
```

```
LR_SELECT_OPTIONS = WD_THI S->WD_CPIFC_SELECT_OPTIONS( ).
LR_HELPER = LR_SELECT_OPTIONS->INIT_SELECTION_SCREEN( ).
```

```
LR_HELPER->GET_SELECTION_SCREEN_ITEMS( IMPORTING
ET_SELECTION_SCREEN_ITEMS = LT_FIELDS ).
```

```
READ TABLE LT_FIELDS ASSIGNING <LS_FIELD> INDEX 1.
```

```
ASSIGN <LS_FIELD>-MT_RANGE_TABLE->* TO <LT_RANGE_TABLE>.
```

```
DATA : LR_RANGE TYPE REF TO IF_WD_CONTEXT_NODE.
```

```
LR_RANGE = WD_CONTEXT->GET_CHILD_NODE( 'RANGE' ).
```

```
LR_RANGE->BIND_TABLE( <LT_RANGE_TABLE> ).
```

endmethod.

## Related Content

Please include at least three references to SDN documents or web pages.

- [Web Dynpro Tutorials](#)

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