

# Conditionally Assigning Colors and Input Enable to ALV Columns in Web Dynpro ABAP



## Applies to:

SAP Net Weaver 2004s. Web Dynpro for ABAP

## Summary

This document explains how to assign colors and how to make columns editable conditionally of ALV in Web Dynpro for ABAP.

**Author:** Suman Kumar Chinnam

**Company:** YASH Technologies

**Created on:** 16 September 2008

## Author Bio

Suman Kumar is a Consultant for YASH Technologies, Pvt., and Ltd. Based in India. He has 2 years of IT experience. He has good knowledge of ABAP, BSP and Web Dynpro for ABAP.

## Table of Contents

Create Columns Editable and assign colors to the cells .....	3
1. Add attributes to context .....	3
2. Create a Method to Populate the Data .....	4
3. Populate Context attributes CELLDESIGN and READONLY and Bind the data to Context.....	4
4. Make Column Editable and Set colors to column .....	5
Result.....	6
Disclaimer and Liability Notice.....	7

## Create Columns Editable and assign colors to the cells

In this document I am trying to show the Flights details using ALV. I will make some of the cells of columns editable and colored. To do this we have to take two context attributes one is to fill the color and other is to make the editable cells conditionally.

### 1. Add attributes to context

Add attributes READONLY of type ABAP\_BOOL and CELLDESIGN of type WDUI\_TABLE\_CELL\_DESIGN to the node.

The screenshot shows the SAP Web Dynpro ABAP development environment. At the top, the 'Component Controller' is set to 'COMPONENTCONTROLLER' and is 'Active'. Below this are tabs for 'Properties', 'Context', 'Attributes', 'Events', and 'Methods'. The 'Context' tab is selected, showing a tree view of the context structure. The context is named 'CONTEXT' and contains several nodes: 'DATA', 'FUNCTION\_ELEMENTS', 'FILTER\_VALUES', 'TOP\_OF\_LIST', and 'END\_OF\_LIST'. The 'CELLDESIGN' attribute is highlighted in the tree view. Below the tree view, a table displays the properties of the selected attribute.

Property	Value
<b>Attribute</b>	
Attribute Name	CELLDESIGN
Type assignment	Type
Type	WDUI_TABLE_CELL_DESIGN
Read-only	<input type="checkbox"/>
Primary Attribute	<input type="checkbox"/>
Default Value	

## 2. Create a Method to Populate the Data

```

DATA:node_flights TYPE REF TO if_wd_context_node,
      it_flights TYPE sflight_tab1,
      ls_flights TYPE sflight,
      it_final TYPE if_componentcontroller=>elements_flights,
      ls_final TYPE if_componentcontroller=>element_flights.

SELECT * FROM sflight INTO TABLE it_flights
UP TO 100 ROWS.
node_flights = wd_context->get_child_node( 'FLIGHTS' ).

```

## 3. Populate Context attributes CELLDISIGN and READONLY and Bind the data to Context

Based on price value I am assigning Celldesign and Readonly values.

```

LOOP AT it_flights INTO ls_flights.
  MOVE-CORRESPONDING ls_flights TO ls_final.
  IF ls_final-price = '185.00'.
    ls_final-readonly = abap_true.
    ls_final-celldesign =
c1_wd_table_column=>e_cell_design-badvalue_light.

  ELSE.
    ls_final-readonly = ' '.
    ls_final-celldesign =
c1_wd_table_column=>e_cell_design-goodvalue_light.
  ENDIF.
  APPEND ls_final TO it_final.
ENDLOOP.

```

Now bind the table to Context.

```

node_flights->bind_table(
  new_items      = it_final
  set_initial_elements = abap_true
  * INDEX        = INDEX
  ).

```

#### 4. Make Column Editable and Set colors to column

To make column editable first we need to get the column reference from ALV for that create an instance of ALV .We will get Interface Controller reference then call the method GET\_MODEL to get the table reference.

```

* Instantiate ALV
DATA: l_ref_cmp_usage TYPE REF TO if_wd_component_usage.

l_ref_cmp_usage = wd_this->wd_cpuse_alv( ).
IF l_ref_cmp_usage->has_active_component( ) IS INITIAL.
  l_ref_cmp_usage->create_component( ).
ENDIF.

DATA: l_ref_interfacecontroller TYPE REF TO iwci_salv_wd_table .
l_ref_interfacecontroller = wd_this->wd_cpifc_alv( ).
DATA:
  l_value TYPE REF TO cl_salv_wd_config_table.
* Call the method get_model to get the reference of table
l_value = l_ref_interfacecontroller->get_model(
  ).

* Make Price column editable
DATA:l_column TYPE REF TO cl_salv_wd_column,
      l_column1 TYPE REF TO cl_salv_wd_column,
      lr_input TYPE REF TO cl_salv_wd_uie_input_field,
      l_input1 TYPE REF TO cl_salv_wd_uie_input_field.

*Get Column reference
l_column = l_value->if_salv_wd_column_settings~get_column( 'PRICE' ).
*Create Input field
CREATE OBJECT lr_input
EXPORTING
  value_fieldname = 'PRICE'

* Make column editable
l_column->set_cell_editor( value = lr_input ).

* To make some cells non editable
* Assign attribute READONLY to the Input
lr_input->set_read_only_fieldname( value = 'READONLY' ).

l_value->if_salv_wd_column_settings~delete_column( id = 'READONLY' ).

*Set colors to cells
*Get Column reference
l_column1 = l_value->if_salv_wd_column_settings~get_column( 'CARRID' ).
* Assign attribute CELLDESIGN to the column
* Now the column shows 2 colors
l_column1->set_cell_design_fieldname( value = 'CELLDESIGN' ).

l_value->if_salv_wd_column_settings~delete_column( id = 'CELLDESIGN' ).

```

## Result

In the below output Price column is editable and Airline column is colored conditionally.

Client	Airline	Flight No.	Date	Price	Currency	Pltype	Capacity	Occupied	Total	Capacity	Occupied	Capacity	Occupied
800	AA	0017	05.03.2008	422.94	USD	747-400	385	375	192,856.74	31	31	21	19
800	AA	0017	02.04.2008	422.94	USD	747-400	385	372	192,772.05	31	30	21	20
800	AA	0017	30.04.2008	422.94	USD	747-400	385	372	193,490.97	31	29	21	21
800	AA	0017	28.05.2008	422.94	USD	747-400	385	371	192,120.69	31	30	21	20
800	AA	0017	25.06.2008	422.94	USD	747-400	385	372	194,861.44	31	31	21	21
800	AA	0017	23.07.2008	422.94	USD	747-400	385	373	193,000.36	31	30	21	19
800	AA	0017	20.08.2008	422.94	USD	747-400	385	369	191,744.35	31	31	21	20
800	AA	0017	17.09.2008	422.94	USD	747-400	385	374	192,996.31	31	28	21	21
800	AA	0017	15.10.2008	422.94	USD	747-400	385	199	102,871.78	31	17	21	10
800	AA	0017	12.11.2008	422.94	USD	747-400	385	122	64,147.33	31	10	21	7

If Price value is 185 then I made those cells input disabled and changed the color of Airline cells to red.

Client	Airline	Flight No.	Date	Price	Currency	Pltype	Capacity	Occupied	Total	Capacity	Occupied	Capacity	Occupied
800	AZ	0555	30.04.2008	185.00	EUR	A319	220	213	49,285.85	22	22	10	10
800	AZ	0555	28.05.2008	185.00	EUR	A319	220	213	48,174.00	22	20	10	10
800	AZ	0555	25.06.2008	185.00	EUR	A319	220	208	47,785.50	22	21	10	10
800	AZ	0555	23.07.2008	185.00	EUR	A319	220	215	48,190.65	22	20	10	9
800	AZ	0555	20.08.2008	185.00	EUR	A319	220	213	48,699.40	22	21	10	10
800	AZ	0555	17.09.2008	185.00	EUR	A319	220	203	46,651.45	22	20	10	10
800	AZ	0555	15.10.2008	185.00	EUR	A319	220	100	23,495.00	22	11	10	5
800	AZ	0555	12.11.2008	185.00	EUR	A319	220	39	8,669.10	22	3	10	2
800	AZ	0555	10.12.2008	185.00	EUR	A319	220	72	15,336.50	22	6	10	2
800	AZ	0555	07.01.2009	185.00	EUR	A319	220	69	15,836.00	22	7	10	3

## 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.