Dynamically Make the Columns Editable/Non-Editable on an Action of Cell Edit in ALV

Applies to:
SAP Net Weaver 2004s, Web Dynpro for ABAP. For more information, visit the User Interface Technology homepage.

Summary
This Article explains how to make the some columns editable and some are non editable when the on an action of cell edit.

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Introduction

In my previous Articles/Wiki’s I have explained how to make conditionally edit and color the cells of an ALV and How to make conditionally entire row is editable.

https://wiki.sdn.sap.com/wiki/x/QIDWAw

In this Article I am going to explain. How to change the some columns editable and some are non editable on an action of cell edit.

To do this initially I am making the entire table is editable for reference follow the logic in the mentioned Wiki above. Then when I change the value and press enter of a cell in one particular column, the changed cell of that row should be editable. But the columns before the changed cell column and itself are non editable and columns after the changed cell are editable.

Check the below screen how the application looks like initially. All rows are editable.

Now If I change the value in Airfare and press enter I want to make first 5 columns are non editable including the Airfare column and remaining columns are editable. But the changed value in cell row is editable.
Here I am implementing one event handler method ON_ACTION_ENTER of event type ON_DATA_CHECK of interface controller (ALV) to handle the event ‘Enter’, when user changed the value and press enter in the cell. Write the code shown below to get the required output.

Method ON_ACTION_ENTER.

data:
lo_nd_flights type ref to if_wd_context_node,
lt_flights type if_main=>elements_flights,
ls_flights type if_main=>element_flights,
ls_final type if_main=>element_flights,
lt_final type if_main=>elements_flights,
ls_mod_cell type SALV_WD_S_TABLE_MOD_CELL,
lv_tabix type sy-tabix.

* navigate from <CONTEXT> to <FLIGHTS> via lead selection
lo_nd_flights = wd_context->get_child_node( name = wd_this->wdctx_flights ).

* Get the table data
call method lo_nd_flights->get_static_attributes_table
importing
  table = lt_flights.

* Populate READ_ONLY attribute
* The changed cell row is editable and remaining are non editable
read table r_param->T_MODIFIED_CELLS into ls_mod_cell
  with key attribute = 'PRICE'.
  if sy-subrc eq 0.
    loop at lt_flights into ls_flights.
      lv_tabix1 = sy-tabix.
      if lv_tabix = ls_mod_cell-index.
        ls_flights-read_only = abap_false.
      else.
        ls_flights-read_only = abap_true.
      endif.
      modify lt_flights from ls_flights index lv_tabix1 transporting read_only.
    endloop.
  endif.

* Bind intrenal table to context node
call method lo_nd_flights->bind_table
  exporting
    new_items = lt_flights
*    set_initial_elements = ABAP_TRUE
*    index = .

* Instantiate ALV and call GET_MODEL method
data lo_cmp_usage type ref to if_wd_component_usage.

  lo_cmp_usage = wd_this->wd_cpuse_alv( ).
  if lo_cmp_usage->has_active_component( ) is initial.
Dynamically Make the Columns Editable/Non-Editable on an Action of Cell Edit in ALV

```plaintext
lo_cmp_usage->create_component( ).
endif.

data lo_interfacecontroller type ref to iwci_salv_wd_table .
lo_interfacecontroller = wd_this->wd_cpifc_alv( ).

data lo_value type ref to cl_salv_wd_config_table.
lo_value = lo_interfacecontroller->get_model( ).

data:
lt_columns type SALV_WD_T_COLUMN_REF,
ls_columns type SALV_WD_S_COLUMN_REF,
lr_input type ref to CL_SALV_WD_UIE_INPUT_FIELD,
lr_text type ref to CL_SALV_WD_UIE_TEXT_VIEW,
lr_column type ref to cl_salv_wd_column,
lt_node_info type WDR_CONTEXT_ATTR_INFO_MAP,
ls_node_info type WDR_CONTEXT_ATTRIBUTE_INFO,
lv_tabix type sy-tabix,
lr_info type ref to IF_WD_CONTEXT_NODE_INFO.

types:
begin of ty_name,
   name type string,
end of ty_name.

data:
lt_name type table of ty_name,
ls_name type ty_name.

lr_info = lo_nd_flights->get_node_info( ).
lt_node_info = lr_info->get_attributes( ).

loop at lt_node_info into ls_node_info.
   ls_name-name = ls_node_info-name.
   append ls_name to lt_name.
endloop.

call method lo_value->if_salv_wd_table_settings~set_visible_row_count
   exporting
      value  = 50
   .

* Get all the columns references
   call method lo_value->if_salv_wd_column_settings~get_columns
      receiving
         value  = lt_columns .

* Make the first five column editable and remaining are non editable
   loop at lt_columns into ls_columns.
      lr_column = ls_columns-r_column.
      lv_tabix = sy-tabix.
```

© 2008 SAP AG
read table lt_name into ls_name index lv_tabix.
case ls_name-name.
  when 'CARRID'.
    create object lr_input
    exporting
      value_fieldname =  ls_name-name.
    call method lr_column->set_cell_editor
    exporting
      value = lr_input.
    call method lr_input->set_read_only
    exporting
      value = ABAP_TRUE
     .
  when 'CONNID'.
    create object lr_input
    exporting
      value_fieldname =  ls_name-name.
    call method lr_column->set_cell_editor
    exporting
      value = lr_input.
    call method lr_input->set_read_only
    exporting
      value = ABAP_TRUE
     .
  when 'FLDATE'.
    create object lr_input
    exporting
      value_fieldname =  ls_name-name.
    call method lr_column->set_cell_editor
    exporting
      value = lr_input.
    call method lr_input->set_read_only
    exporting
      value = ABAP_TRUE
     .
  when 'PRICE'.
    create object lr_input
    exporting
      value_fieldname =  ls_name-name.
    call method lr_column->set_cell_editor
    exporting
      value = lr_input.
    call method lr_input->set_read_only
    exporting
      value = ABAP_TRUE
     .
  when 'CURRENCY'.
    create object lr_input
    exporting
      value_fieldname =  ls_name-name.
value_fieldname = ls_name-name.
call method lr_column->set_cell_editor
exporting
  value  = lr_input .
call method lr_input->set_read_only
exporting
  value  = ABAP_TRUE .

when 'OTHERS'.
create object lr_input
exporting
  value_fieldname = ls_name-name.

call method lr_column->set_cell_editor
exporting
  value  = lr_input .
call method lr_input->set_read_only
exporting
  value  = ABAP_FALSE .
endcase.

* To make the required row is editable
  lr_input->set_read_only_fieldname( value = 'READ_ONLY' ).
endloop.

* Set the table Editable
  lo_value->if_salv_wd_table_settings~set_read_only( value = abap_false ).

* delete column
  call method lo_value->if_salv_wd_column_settings~delete_column
  exporting
    id     = 'READ_ONLY'.

Endmethod.
Output

Check the below output. The columns before the changed cell value and itself are not editable except the changed value in cell row and columns after the changed cell values are editable.

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Related Content

SAP List Viewer in Web Dynpro for ABAP

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