ZCL ES ALV OM Release 740 System CDA Class: ZCL ES ALV OM Status: Active Attributes Description: ALV Object Model Instantiation: Abstract Not final Not released Fixed pt.arithmetic Category: General Object Type Package: ZPCABAP Original lang.: EN Created by: P000520 Created on: 09.12.2014 Last changed by: P000597 Last changed on: 21.02.2015 Attributes Public attributes Description Ref. Type Init. Attrib. Cat value REPID Inst (read only)
TITLE Inst (read only) TYPE SYREPID TYPE STRING Protected attribute Attrib. Cat Description Ref. Type Init. value ALV Inst TYPE REF TO CL\_SALV\_TABLE ALV MSG Inst TYPE REF TO CX\_SALV\_MSG\_\_\_ Methods

> Public methods AUTH\_CHECK Description: Instance mthd

```
METHOD auth check.
          ENDMETHOD.
                                        "auth check
        CONSTRUCTOR
        Description:
        Instance mthd
        Importing parameter
          I REPID TYPE SYREPID
          METHOD constructor.
           me->repid = i repid.
                                        "CONSTRUCTOR
          ENDMETHOD.
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        F4 LAYOUTS
        Description:
        Instance mthd
        CHANGING parameter
          C VARIANT TYPE SLIS_VARI
          METHOD f4 layouts.
            DATA: ls layout TYPE salv s layout info,
                  ls key TYPE salv s layout key.
            ls key-report = me->repid.
            ls layout = cl salv layout service=>f4 layouts(
              s_key = ls_key
              restrict = if_salv_c_layout=>restrict_none ).
            c_variant = ls_layout-layout.
          ENDMETHOD.
"f4 layouts
        GET DEFAULT LAYOUT
        Description:
        Instance mthd
        CHANGING parameter
          C VARIANT TYPE SLIS VARI
          METHOD get default layout.
            DATA: ls layout TYPE salv s layout info,
                  ls key TYPE salv s layout key.
```

```
ls key-report = me->repid.
            ls layout = cl_salv_layout_service=>get_default_layout(
              s_{key} = ls_{key}
              restrict = if_salv_c_layout=>restrict_none ).
            c variant = ls layout-layout.
          ENDMETHOD.
                                         "get default layout
        ON AFTER USER COMMAND
        Description:
        Event handler for: CL SALV EVENTS=>AFTER SALV FUNCTION
        Instance mthd
        Importing parameter
          E SALV FUNCTION
          METHOD on_after_user_command.
                                         "ON AFTER_USER_COMMAND
          ENDMETHOD.
        ON BEFORE USER COMMAND
        Description:
        Event handler for: CL_SALV_EVENTS=>BEFORE SALV FUNCTION
        Instance mthd
        Importing parameter
          E SALV FUNCTION
          METHOD on_before_user_command.
          ENDMETHOD.
                                         "ON BEFORE USER COMMAND
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        ON DOUBLE_CLICK
        Description:
        Event handler for: CL SALV EVENTS TABLE=>DOUBLE CLICK
        Instance mthd
        Importing parameter
         ROW
          COLUMN
          METHOD on_double_click.
         ENDMETHOD.
                                         "ON DOUBLE CLICK
        ON END OF PAGE
        Description:
        Event handler for: IF SALV EVENTS LIST=>END OF PAGE
```

```
Instance mthd
        Importing parameter
          R END_OF_PAGE
          PAGE
          METHOD on end of page.
            DATA: Ir content TYPE REF TO cl salv form element.
            DATA: lr_grid TYPE REF TO cl_salv_form_layout_grid,
                  l text TYPE
                                      string.
        *... in the cell [1,1] create header information
            MOVE 'END_OF_PAGE' TO l_text.
        *... create a grid
            CREATE OBJECT lr grid.
            lr_grid->create_header_information(
              column = 1
              text = 1 text
             tooltip = 1 text ).
            lr content = \overline{lr}_{grid}.
        *... set the content
            r end of page->set content( lr content).
          ENDMETHOD.
                                         "on end of page
        ON LINK CLICK
        Description:
        Event handler for:
CL SALV EVENTS TABLE=>IF SALV EVENTS ACTIONS TABLE~LINK CLICK
        Instance mthd
        Importing parameter
          ROW
          COLUMN
          METHOD on link click.
                                         "ON LINK CLICK
          ENDMETHOD.
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```

ON TOP OF PAGE

```
Description:
Event handler for: IF_SALV_EVENTS_LIST=>TOP_OF_PAGE
Instance mthd
Importing parameter
 R TOP OF PAGE
 PAGE
 TABLE INDEX
 METHOD on_top_of_page.
    DATA: lr content TYPE REF TO cl salv form element.
    DATA: lr_grid TYPE REF TO cl_salv_form_layout_grid,
          l text TYPE
                             string.
*... in the cell [1,1] create header information
   MOVE 'TOP OF PAGE' TO 1 text.
*... create a grid
    CREATE OBJECT lr_grid.
    lr_grid->create_header_information(
      row = 1
      column = 1
      text = 1 text
     tooltip = l_text ).
    lr content = lr grid.
    r top of page->set content( lr content ).
  ENDMETHOD.
                                "on top_of_page
ON USER COMMAND
Description:
Event handler for: CL SALV EVENTS=>ADDED FUNCTION
Instance mthd
Importing parameter
 E_SALV_FUNCTION
 METHOD on_user_command.
                                "ON USER_COMMAND
  ENDMETHOD.
PUBLISH ALV
Description:
Instance mthd
Importing parameter
 I VARIANT TYPE SLIS VARI
CHANGING parameter
  ITAB TYPE TABLE
  METHOD publish_alv.
    TRY.
        cl salv table=>factory(
          EXPORTING
           list_display = abap_false
          IMPORTING
            r salv table = alv
```

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```
CHANGING
           t table = itab ).
      CATCH cx_salv_msg INTO alv_msg.
       MESSAGE alv msg TYPE 'I'.
       EXIT.
   ENDTRY.
   me->process_functions().
   me->set columns().
   me->process layout( i_variant ).
   me->register events().
   me->process report headers().
   alv->display().
  ENDMETHOD.
                                "publish alv
SET REPORT TITLE
Description:
Instance mthd
Importing parameter
  I TITLE TYPE CSEQUENCE
 METHOD set report title.
   me->title = i title.
  ENDMETHOD.
                                "SET REPORT TITLE
Protected methods
PROCESS FUNCTIONS
Description:
Instance mthd
 METHOD process functions.
*... Functions
*... activate ALV generic Functions
\star\dots include own functions by setting own status
 alv->set screen status(
   pfstatus = 'SAPLSLVC_FULLSCREEN'
                 = 'SAPLSLVC FULLSCREEN' "me->repid
   report
   set functions = alv->c functions all ).
   DATA: Ir functions TYPE REF TO cl salv functions list.
   lr_functions = alv->get_functions().
    lr_functions->set_all( abap_true ).
    lr functions->set_export_xml( abap_true ).
    lr_functions->set_view_lotus( abap_false ).
  ENDMETHOD.
                                "process functions
PROCESS LAYOUT
Description:
Instance mthd
Importing parameter
```

I\_VARIANT TYPE SLIS\_VARI
METHOD process layout.

```
*... set layout
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           DATA: Ir layout TYPE REF TO cl salv layout,
                 ls key TYPE salv s layout key.
           lr layout = alv->get_layout().
       *... set the Layout Key
           ls key-report = me->repid.
           lr layout->set key( ls key ).
       *... set usage of default Layouts
           lr layout->set default( abap true ).
       *... set Layout save restriction
           lr layout->set save restriction(
if_salv_c_layout=>restrict_none ).
       *... set INITIAL Layout
           IF i variant IS NOT INITIAL.
             lr layout->set initial_layout( i_variant ).
           ENDIF.
         ENDMETHOD.
                                      "process_layout
       PROCESS REPORT HEADERS
       Description:
       Instance mthd
         {\tt METHOD\ process\_report\_headers.}
           me->process_top_of_list().
           me->process_top_of_list_print().
         ENDMETHOD.
                                      "process report headers
       PROCESS TOP OF LIST
       Description:
       Instance mthd
         METHOD process top of list.
           lr_grid_1 TYPE REF TO cl_salv_form_layout_grid,
                 lr flow TYPE REF TO cl salv form layout flow,
                 Ir label TYPE REF TO cl salv form label,
                 lr text     TYPE REF TO cl salv form text,
                 l_text TYPE
                                      string.
           CREATE OBJECT lr grid.
```

```
lr_grid->create_header_information(
               row = 1
               column = 1
               text = me->title
               tooltip = me->title ).
           ENDIF.
        *... in the cell [2,1] create a grid
            lr grid 1 = lr grid->create grid(
                          row = 2
                          column = 1).
        *... in the cell [1,1] of the second grid create a label
            lr_text = lr_grid_1->create_text(
             row = \overline{1}
              column = 1
              colspan = 2
                    = 'Stemac - Grupos Geradores'(st1)
              text
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```

IF me->title IS NOT INITIAL.

```
tooltip = 'Stemac - Grupos Geradores'(st1) ).
lr_flow = lr_grid_1->create_flow(
 row
        = 2
 column = 1).
lr label = lr flow->create label(
 text = 'Program:'(t02)
 tooltip = 'Program: '(t02) ).
lr text = lr flow->create text(
 - text = - sy-cprog
 tooltip = sy-cprog ).
lr_flow = lr_grid_1->create_flow(
       = 3
 row
 column = 1).
lr label = lr flow->create label(
 text = 'System:'(t03)
 tooltip = 'System:'(t03) ).
lr text = lr flow->create text(
 \overline{t}ext = \overline{s}y-sysid
 tooltip = sy-sysid ).
lr flow = lr_grid_1->create_flow(
 row = 3
 column = 2).
lr label = lr flow->create label(
 text = 'Client:'(t04)
 tooltip = 'Client:'(t04) ).
```

```
lr_text = lr_flow->create_text(
  text = sy-mandt
  tooltip = sy-mandt ).
lr_flow = lr_grid_1->create_flow(
  row = \overline{4}
   column = 1).
DATA: date1(12) TYPE c.
DATA: time1(8) TYPE c.
WRITE sy-datum TO date1.
WRITE sy-uzeit TO time1.
DATA: tzonesys TYPE tznzonesys.
SELECT SINGLE tzonesys FROM ttzcu INTO tzonesys.
lr_label = lr_flow->create_label(
 text = 'Date:'(t05)
 tooltip = 'Date:'(t05)).
lr text = lr_flow->create_text(
  text = date1
  tooltip = date1 ).
lr flow = lr grid 1->create flow(
  row = \overline{4}
  column = 2).
lr label = lr flow->create label(
  \overline{\text{text}} = \overline{\text{Time:'(t06)}}
  tooltip = 'Time:'(t06)).
lr text = lr_flow->create_text(
  \overline{t}ext = \overline{t}ime1
  tooltip = time1 ).
lr text = lr flow->create text(
  text = tzonesys
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```
tooltip = tzonesys ).
IF sy-timlo NE sy-uzeit.
 WRITE sy-datlo TO date1.
  WRITE sy-timlo TO time1.
  lr_flow = lr_grid_1->create_flow(
    row = 5
     column = 1).
  lr label = lr flow->create label(
    \overline{\text{text}} = \overline{\text{Local Date:'(t07)}}
    tooltip = 'Local Date:'(t07) ).
  lr text = lr flow->create text(
    text = date1
    tooltip = date1 ).
```

```
lr_flow = lr_grid_1->create_flow(
    row = 5
                  column = 2).
               lr_label = lr_flow->create_label(
                text = 'Local Time:'(t08)
                tooltip = 'Local Time:'(t08) ).
               lr text = lr flow->create text(
                 text = time1
                tooltip = time1 ).
               lr text = lr flow->create text(
                 \overline{\text{text}} = \overline{\text{sy-zonlo}}
                 tooltip = sy-zonlo).
            ENDIF.
             alv->set top of list( lr grid ).
          ENDMETHOD.
                                           "process top of list
        PROCESS_TOP_OF_LIST_PRINT
        Description:
        Instance mthd
          METHOD process top of list print.
            me->process top of list().
                                           "process_top_of_list_print
          ENDMETHOD.
        REGISTER EVENTS
        Description:
        Instance mthd
          METHOD register_events.
        *... register to the events of cl salv table
            DATA: Ir events TYPE REF TO cl salv events table.
            lr events = alv->get event().
        *... register to the events (Please only register those events
you are using).
        * SET HANDLER me->on_user_command
                                                     FOR 1r events.
        * SET HANDLER me->on_before_user_command FOR lr_events.
        * SET HANDLER me->on_after_user_command FOR lr_events.
        * SET HANDLER me->on_double_click FOR lr_events.
        * SET HANDLER me->on_top_of_page FOR lr_events.

* SET HANDLER me->on_end_of_page FOR lr_events.
                                           "REGISTER EVENTS
          ENDMETHOD.
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SET COLUMNS
Description:
Instance mthd
 METHOD set columns.
*... SET the columns
   DATA: lr columns TYPE REF TO cl salv columns.
    lr_columns = alv->get_columns().
    lr columns->set optimize( abap true ).
  ENDMETHOD.
                                "set columns
Redefined Methods
Local Types
*"* use this source file for any type of declarations (class
\star"* definitions, interfaces or type declarations) you need for
*"* components in the private section
Local class definitions
"" use this source file for the definition and implementation of
"" local helper classes, interface definitions and type
Macros
*"* use this source file for any macro definitions you need
"" in the implementation part of the class
```

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| 9   | Redefined Methods         |
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