Create ALV template program
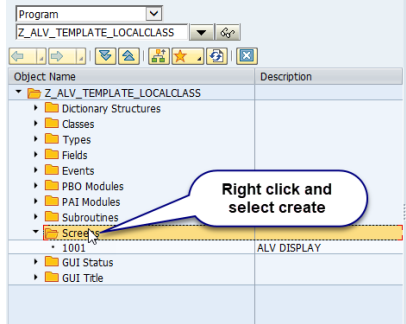
Wednesday, April 3, 2019   1:53 PM
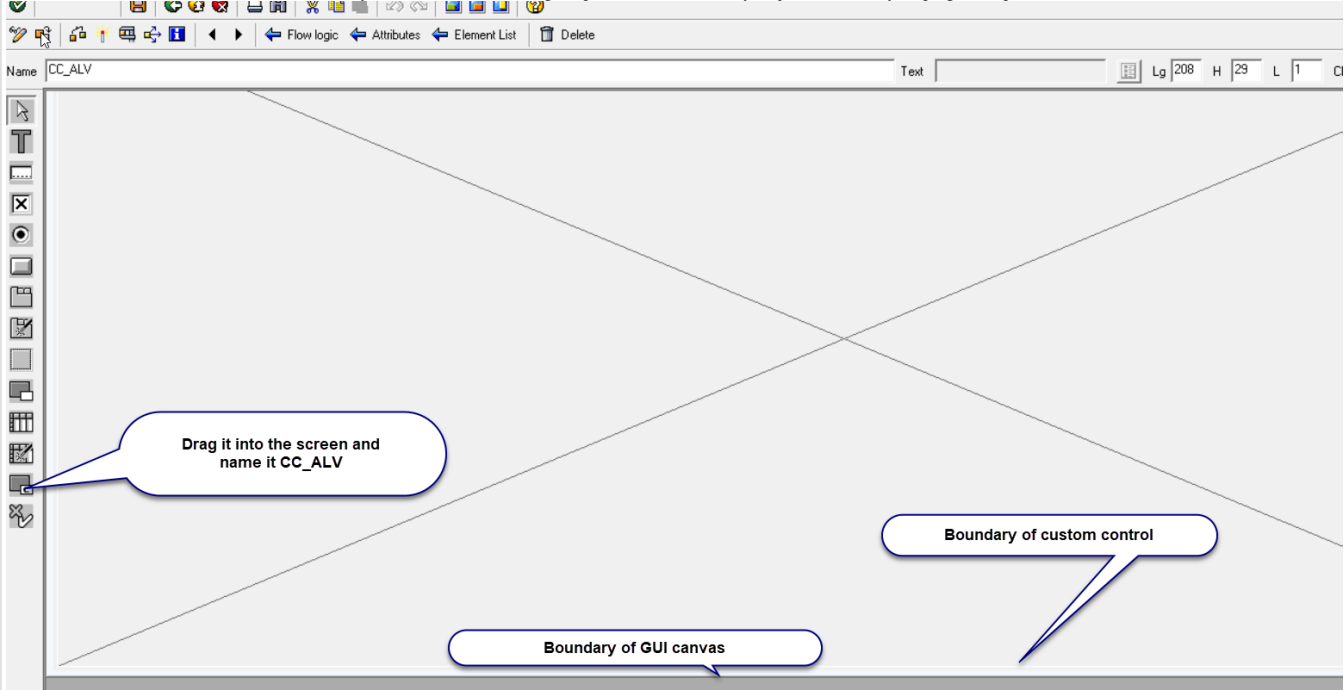
1. Create template alv program via se38, name it Z_ALV_TEMPLATE and copy source code from the Z_ALV_TEMPALTE_LOCALCLASS.txt file. You may save it as a local object without transport. This is your starting point for future ALV report.
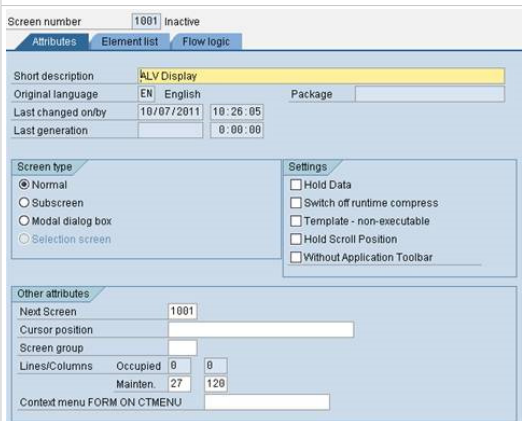
Z_ALV_TEM
PLATE_LO...

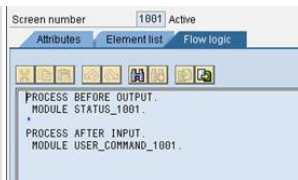2. ALV Screen. Switch to SE80, Click (ctrl+shift+F5) "display object list" icon.

After screen is created, click menu icon Layout to display the Screen Painter.
Drag the Custom Control icon and put it into the screen. Call it **CC_ALV**. This name will be used in the program. Activate it.
Make sure the custom control is within the boundary of GUI canvas and as large as possible. You can always adjust it based on your program requirement.
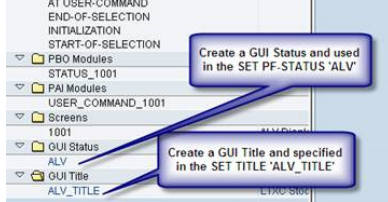
Created Screen in SE80. Activated the screen.
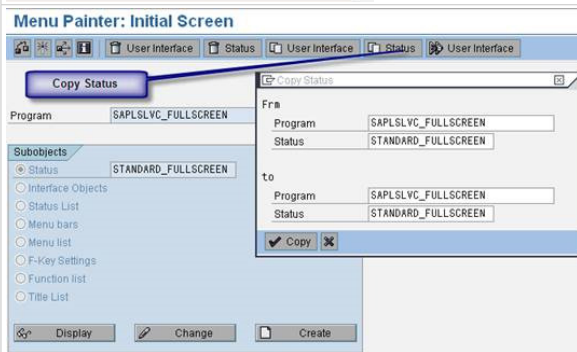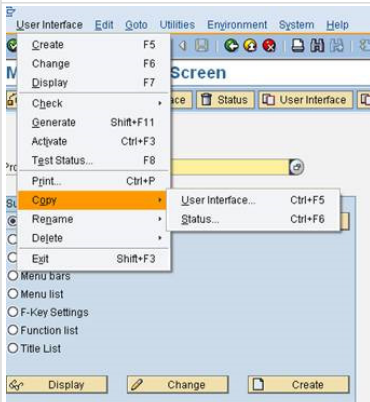
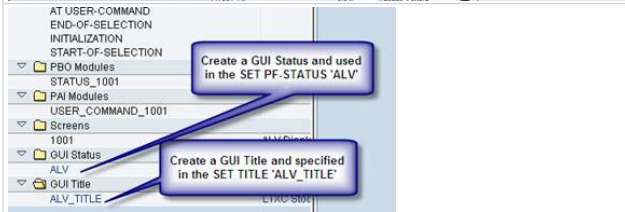Go to the tab of screen 1001

3. GUI Status and GUI Title
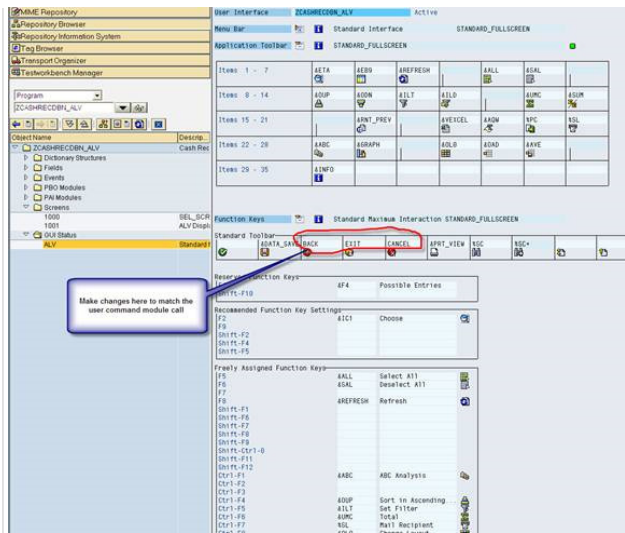   Make sure the name match the code under Module STATUS_1001 OUTPUT


```
* -----------------------------------------------------------------*
MODULE STATUS_1001 OUTPUT.
    SET PF-STATUS 'ALV'.     "Defined in the GUI Status folder
    SET TITLEBAR 'ALV_TITLE'.   "Defined in the GUI Title folder
****TODO: set your table
* display it
    CALL METHOD DIST_ALV_DISPLAY->DISPLAY_ALV
```

- Create the GUI Status. Right Click of GUI Status folder to select "create" menu to create GUI Status. The screen status will have menu bar, Application tool bar (You can hide it in the Attributes tab of the screen 1001) etc.
- Or use transaction se41 to copy (menu icon Status) the GUI STATUS. This will get you start with a standard one from one of the SAP example. I prefer this way.
    From: SAPLSLVC_FULLSCREEN
    STANDARD_FULLSCREEN
    To:
    REPORT NAME
    ALV (this name is used in the program to load the GUI Status)
    After the copy refresh the Object Tree to see GUI Status folder.
- Name the GUI Status ALV and activate it.
- Create GUI TITLE by right clicking GUI Title folder. Used in <SET TITLEBAR>

Make sure activate this GUI status and GUI Title by right click "Activate Interface"

4. PAI/PBO Modules – STATUS/USER_COMMAND Module
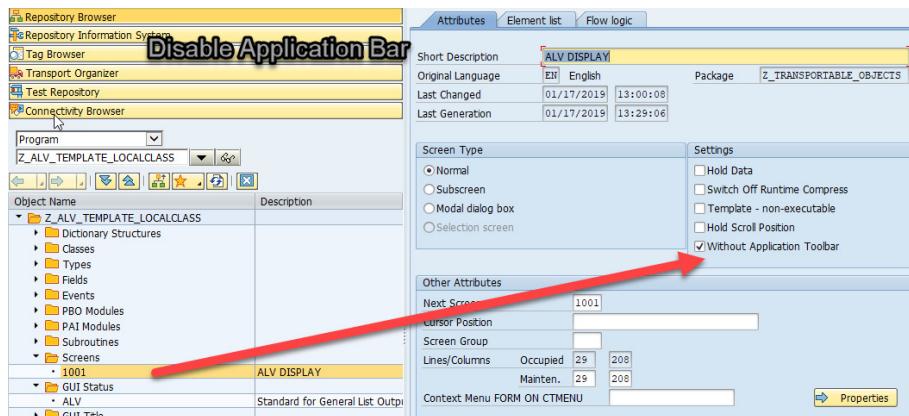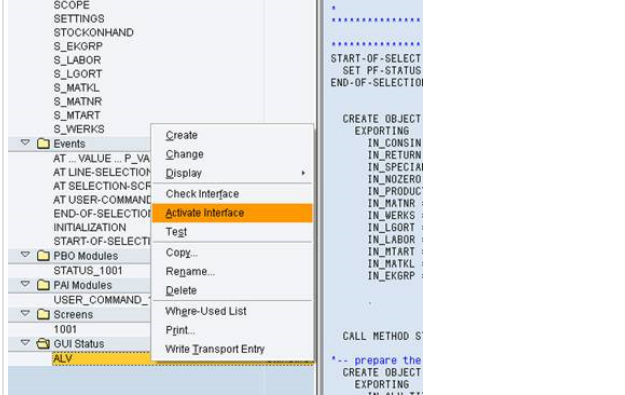
```
656 ⊟MODULE STATUS_1001 OUTPUT.
657     SET PF-STATUS 'ALV'. "Defined in the GUI Status folder
658     SET TITLEBAR 'ALV TITLE'. "Defined in the GUI Title folder
659 ⊟****TODO: set your table
    *  display it
660     CALL METHOD DIST_ALV_DISPLAY->DISPLAY_ALV
662       CHANGING
663         GT_FIELDCAT = GT_FIELDCAT
664         GS_LAYOUT  = GS_LAYOUT
665         GS_TAB     = ITAB_ALVTABLE[]
666         GS_VARIANT = P_VARI.
667   ENDMODULE.                    " STATUS_1001  OUTPUT
668 ⊟*&---------------------------------------------------------------------*
669 *&      Module  USER_COMMAND_1001  INPUT
670 *&---------------------------------------------------------------------*
671 *      text
672 *----------------------------------------------------------------------*
673 ⊟MODULE USER_COMMAND_1001 INPUT.
674 ⊟  CASE SY-UCOMM.
675     WHEN 'BACK' OR 'EXIT' OR 'RETURN' OR 'CANCEL' OR '&F03' OR '&F12' OR '&F15'.
676       LEAVE TO SCREEN '0'.
677       CALL METHOD DIST_ALV_DISPLAY->FREE.
678     WHEN 'DISPLAY'.
679       LEAVE TO SCREEN 1001.
680   ENDCASE.
681   ENDMODULE.                    " USER_COMMAND_1001  INPUT
```

PROCESS BEFORE OUTPUT.
MODULE STATUS 1001.
*
PROCESS AFTER INPUT.
MODULE USER_COMMAND_1001.

5. Create message class ZALV. Double click the ZALV to create one if not existing.

```
1 ⊟*&---------------------------------------------------------------------
2 *&  Report  Z_ALV_TEMPLATE
3 *&
4 *&---------------------------------------------------------------------
5 *&   Use ALV Grid Control - CL_GUI_ALV_GRID
6 *&   MVC Design Pattern
7 *&   Model - ZCL_ALV_DATA
8 *&   Controller -
9 *&
10 *&
11 *&
12 *&
13 *&---------------------------------------------------------------------
14
15   REPORT  Z_ALV_TEMPLATE
16          MESSAGE-ID ZALV
17          NO STANDARD PAGE HEADING
18          LINE-SIZE 276
19          LINE-COUNT 65.
20
```

Double click ZALV to create message class

Message Maintenance: Display Message (Compressed)

Message class: ZALV   Actv.

No.	Message Short Text	Self-Explanatory	Last Changed By	Changed On
000	&	✓	JLU	01/14/2019
001	& &	✓	JLU	01/14/2019
002	& & &	✓	JLU	01/14/2019
003	Internal table & is empty. No data to display.	✓	JLU	01/14/2019

6. Activate the program and run the sample alv. See the link below to generate demo data for sflight.
   Now you have the template ALV code ready.
   https://wiki.scn.sap.com/wiki/display/ABAP/Flight+Data+Application+-+Demo+Example+for+Integration+Technologies

Z_ALV_TEMPLATE_LOCALCLASS

Flight Info

Carrier ID		to	
Connection ID		to	
Flight Date		to	

Customer Filter

Currency
☐ Is smoker?

Customer Type
◉ Customer Type P
○ Customer Type B

Output Options

◉ ALV Display
○ Download
File Path   /sap/saptools/
File Name   zsflight.txt

ALV Layout