

The „SAP RFC example“ demonstrates the RFC connection with the SAP demo tables SCARR and SFLIGHT out of the SAP Flight Data Model.

The SAP original demo can be found in transaction DWDM as report BCALV_GRID_DEMO:

Enjoy Demo Center: Display

Source code | Readme first

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Workbench Demos	
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Use as general WWW browser	SAPHTML_DEMO1
Event processing	SAPHTML_EVENTS_DEMO
Sample program for Ken doumentation	RSDEMO_HTML_VIEWER
Picture Control	
Screen display	SAP_PICTURE_DEMO
Icon display	SAP_PICTURE_DEMO_ICON
Sample program for Ken doumentation	RSDEMO_PICTURE_CONTROL
Container Controls	
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Docking Container	RSDEMO_DOCKING_CONTROL
Splitter Container	RSDEMO_SPLITTER_CONTROL
Easy Splitter Container	RSDEMO_EASY_SPLITTER_CONTROL
Dialog Box Container	RSDEMO_DIALOGBOX_CONTROL
Tree Controls	
SAP List Tree	SAPTLIST_TREE_CONTROL_DEMO
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Grid demo with menu button & detail grid	BCALV_GRID_08
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Drag and Drop	
Tree -> Tree	RSDEMO_DRAG_DROP_TREE_MULTI
Tree -> Editor	RSDEMO_DRAG_DROP_EDIT_TREE
Table Control	RSDEMO02
Context Menu	
To list	RSDEMO_CONTEXT_MENU_LIST
On screen	RSDEMO_CONTEXT_MENU_DYNPR
In control	SAPSIMPLE_TREE_CONTEXT_MEN_DEM
Interface Elements	
Table Control	RSDEMO_TABLE_CONTROL
Drop-down list box	RSDEMO_DROPDOWN_LISTBOX
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Office Integration	
Demo of ActiveX document integration	SAPRDEMOACTIVEXINTEGRATION
Demo for OLE container control	SAPRDEMODOCUMENTCONTAINER
Demo für OLE Container Control (optimize)	SAPRDEMODOCUMENTCONTAINER2
Demo for Excel97 integration	SAPRDEMOEXCELINTEGRATION
Demo for Excel97 Integration (Optimized)	SAPRDEMOEXCELINTEGRATION2
Demonstration for Word97 integration	SAPRDEMOWORD97INTEGRATION
OLE	

```
PROGRAM TEST.
DATA: OK_CODE LIKE SY-UCOMM,
      GT_SFLIGHT TYPE TABLE OF SFLIGHT,
      G_CONTAINER TYPE SCREENNAME VALUE 'BCALV_GRID_DEMO_0100_CONT1',
      GRID1 TYPE REF TO CL_GUI_ALV_GRID,
      G_CUSTOM_CONTAINER TYPE REF TO CL_GUI_CUSTOM_CONTAINER.

*-----
*      MAIN
*-----

SELECT * FROM SFLIGHT INTO TABLE GT_SFLIGHT.

CALL SCREEN 100.

*-----
*      MODULE PBO OUTPUT
*-----

MODULE PBO OUTPUT.
  SET PF-STATUS 'MAIN100'.
  IF G_CUSTOM_CONTAINER IS INITIAL.
    CREATE OBJECT G_CUSTOM_CONTAINER
      EXPORTING CONTAINER_NAME = G_CONTAINER.
    CREATE OBJECT GRID1
      EXPORTING I_PARENT = G_CUSTOM_CONTAINER.
    CALL METHOD GRID1->SET_TABLE_FOR_FIRST_DISPLAY
      EXPORTING I_STRUCTURE_NAME = 'SFLIGHT'
      CHANGING IT_OUTTAB = GT_SFLIGHT.
  ENDIF.
ENDMODULE.

*-----
*      MODULE PAI INPUT
*-----

MODULE PAI INPUT.
  * to react on oi_custom_events:
  call method cl_gui_cfw=>dispatch.
  CASE OK_CODE.
    WHEN 'EXIT'.
      PERFORM EXIT_PROGRAM.
  ENDCASE.
ENDMODULE.
```

Li 1, Co 1 Ln 1 - Ln 40 of 52 lines

To execute the XOJO MBS example it is necessary:

- Your SAP user must have the authorization to execute remote function calls (RFC).
- You must create in your SAP system the function module Z XOJO_GET_SCARR
- You must create in your SAP system the function module Z XOJO_GET_SFLIGHT
- If your SAP demo tables are empty you can create the demo data in SAP transaction SE38 with the execution of report SAPBC_DATA_GENERATOR

The function module Z XOJO_GET_SCARR for the determination of carriers fills the PopUp “Carrier”. The function module has only as export parameter the table ET_SCARR for the carrier data:

```
FUNCTION ZXOJO_GET_SCARR.
```

```
  *"--
  *""Lokale Schnittstelle:
  *""  EXPORTING
  *""      VALUE(ET_SCARR)  TYPE    SCARR_TAB
  *"--
```

```
  clear et_scarr[].
```

```
  Select * from scarr into table et_scarr.
```

```
ENDFUNCTION.
```

The function module ZXOJO_GET_SFLIGHT for receiving the flight data fills the ListBox with data of the selected carrier. The function module has the import parameter IV_CARRIER (the selected carrier), the export parameter ET_SFLIGHT (table with flight data of the selected carrier) and ES_MESSAGE (structure with message data):

```
FUNCTION ZXOJO_GET_SFLIGHT.
```

```
  *"--
  *""Lokale Schnittstelle:
  *""  IMPORTING
  *""      VALUE(IV_CARRID)  TYPE    S_CARR_ID
  *""  EXPORTING
  *""      VALUE(ET_SFLIGHT) TYPE    FLIGHTTAB
  *""      VALUE(ES_MESSAGE) TYPE    BAPIRET2
  *"--
```

```
  clear: et_sflight[], es_message.
```

```
  Select * from sflight into table et_sflight
  where carrid = iv_carrid.
```

```
  * Messages are normally into a message class or into a text symbol.
  * But this is sample is simple and should be closed.
```

```
  if sy-subrc <> 0.
    case sy-langu.
      when 'D'. "deutsch
        concatenate 'Keine Flüge zur Fluggesellschaft ' iv_carrid ' gefunden'
        into es_message-message respecting blanks.
      when 'E'. "english
        concatenate 'No flights found for airline ' iv_carrid
        into es_message-message respecting blanks.
    endcase.
  endif.
```

```
ENDFUNCTION.
```

The empty sample app on macOS looks like this:

SAP RFC example

SAP Log on data

Application server: ashost

Instance no.: sysnr

Client: client

User: user

Password: passwd

Language: EN

connect to SAP system

not connected

Carrier: [dropdown]

ID	No.	Flight date	Airfare	Currency	Plane type	Capacity	Occupied	Booking t...	Capacity BC	Occupied ...	Capacity FC	Occupied FC
----	-----	-------------	---------	----------	------------	----------	----------	--------------	-------------	--------------	-------------	-------------

You can get the logon data out of your SAP Logon:

- the application server is normally an IP address e.g. 192.168.1.1
- the instance number e.g. 10
- the client number e.g. 100
- the name of your SAP user
- the password of your SAP user
- the SAP logon language

The example uses the logon language to build the data format into the ListBox for the flight date. The sample has only for language EN the format MM-DD-YYYY and for others only DD.MM.YYYY.

The screenshot displays the 'SAP RFC Beispielschnittstelle' window. At the top, there are 'File' and 'Edit' menus. The main area is divided into two sections. The left section, titled 'SAP Anmeldedaten', contains a form for login details: 'Anwendungsserver' (Application Server), 'Instanz-Nr.' (Instance No.), 'Mandant' (Client), 'Benutzer' (User), 'Passwort' (Password), and 'Sprache' (Language). The 'Benutzer' field is highlighted in red. To the right of this form is a button labeled 'mit SAP-System verbinden' (Connect to SAP system). Below the button, the status 'verbunden' (connected) is displayed. The right section, titled 'Fluggesellschaft' (Airline), features a dropdown menu with a list of airlines. The dropdown is open, showing a list of airlines including AA American Airlines, AB Air Berlin, AC Air Canada, AF Air France, AZ Alitalia, BA British Airways, CO Continental Airlines, DL Delta Airlines, FJ Air Pacific, JL Japan Airlines, LH Lufthansa, NG Lauda Air, NW Northwest Airlines, QF Qantas Airways, SA South African Air., SQ Singapore Airlines, SR Swiss, and UA United Airlines. The dropdown menu is highlighted in blue. Below the dropdown is a table with columns: ID, Nr., typ, Kapazität, Belegt, Akt. Buch..., Kapazität ..., Belegt BC, Kapazität FC, and Belegt FC. The table is currently empty.

If you select the carrier "AA" you get the flight data:

SAP RFC Beispiel

File Edit

SAP Anmeldedaten

Anwendungsserver

Instanz-Nr.

Mandant

Benutzer

Passwort

Sprache

mit SAP-System verbinden

verbunden

Fluggesellschaft

AA American Airlines

ID	Nr.	Flugdatum	Flugpreis	Währung	Flugzeugtyp	Kapazität	Belegt	Akt. Buch...	Kapazität ...	Belegt BC	Kapazität FC	Belegt FC
AA	0017	19.12.2012	422.94	USD	747-400	385	375	193596.69	31	31	21	19
AA	0017	16.01.2013	422.94	USD	747-400	385	367	191405.95	31	30	21	20
AA	0017	13.02.2013	422.94	USD	747-400	385	372	192120.77	31	29	21	21
AA	0017	13.03.2013	422.94	USD	747-400	385	366	190128.60	31	30	21	20
AA	0017	10.04.2013	422.94	USD	747-400	385	363	189781.89	31	30	21	20
AA	0017	08.05.2013	422.94	USD	747-400	385	371	193072.33	31	30	21	21
AA	0017	05.06.2013	422.94	USD	747-400	385	372	194248.06	31	31	21	21
AA	0017	03.07.2013	422.94	USD	747-400	385	372	192095.36	31	30	21	19
AA	0017	31.07.2013	422.94	USD	747-400	385	372	194370.71	31	31	21	20
AA	0017	28.08.2013	422.94	USD	747-400	385	155	79077.21	31	12	21	8
AA	0017	25.09.2013	422.94	USD	747-400	385	114	58589.93	31	10	21	5
AA	0017	23.10.2013	422.94	USD	747-400	385	28	15022.85	31	2	21	2
AA	0017	20.11.2013	422.94	USD	747-400	385	92	46608.07	31	6	21	5
AA	0017	18.12.2013	422.94	USD	747-400	385	51	26526.80	31	4	21	3
AA	0017	15.01.2014	422.94	USD	747-400	385	2	752.84	31	0	21	0
AA	0064	21.12.2012	422.94	USD	A310-300	280	271	134753.03	22	21	10	10
AA	0064	18.01.2013	422.94	USD	A310-300	280	265	131754.38	22	20	10	10
AA	0064	15.02.2013	422.94	USD	A310-300	280	264	131014.32	22	20	10	10
AA	0064	15.03.2013	422.94	USD	A310-300	280	264	130401.00	22	21	10	9
AA	0064	12.04.2013	422.94	USD	A310-300	280	271	134266.73	22	20	10	10
AA	0064	10.05.2013	422.94	USD	A310-300	280	266	132642.53	22	22	10	10
AA	0064	07.06.2013	422.94	USD	A310-300	280	271	134131.37	22	22	10	10
AA	0064	05.07.2013	422.94	USD	A310-300	280	269	132917.60	22	21	10	10
AA	0064	02.08.2013	422.94	USD	A310-300	280	271	134478.17	22	21	10	10
AA	0064	30.08.2013	422.94	USD	A310-300	280	140	67924.23	22	11	10	4
AA	0064	27.09.2013	422.94	USD	A310-300	280	70	35247.90	22	6	10	3
AA	0064	25.10.2013	422.94	USD	A310-300	280	0	0.00	22	0	10	0
AA	0064	22.11.2013	422.94	USD	A310-300	280	14	6259.52	22	1	10	0
AA	0064	20.12.2013	422.94	USD	A310-300	280	12	5345.98	22	1	10	0
AA	0064	17.01.2014	422.94	USD	A310-300	280	11	5138.72	22	1	10	0

Libraries

Please download nwrfc750P_5-70002755.zip from SAP to get the Windows DLLs in the lib folder inside the archive.

For MacOS download nwrfc750P_5-80002761.zip from SAP.

You may need The Unarchiver app from the App store to expand them as the built-in tool in MacOS may not work.

Please correct the paths in the build script steps to copy the DLL/dylib files into the right folder.

