A guide to use E-resource

1. Introduction

This has been mentioned in the book's introduction, and we repeat it here. You should perform the exercises in the book (demonstrative and hands-on) as you read a chapter and encounter an exercise. You should not defer the performance of exercises to the time after complete reading of the chapter or the book. The book has been written assuming the reader will follow this procedure: perform the exercises as they are encountered. The objective of the exercises is to convey more than what the textual explanations and descriptions can convey.

The E-Resource is to aid you in the performance of the exercises as they are encountered in the chapters. The E-Resource contains all the objects (except ABAP dictionary objects, message class, messages, font and bar code) we created during the performance of exercises in the book.

You can upload these objects from the E-resource into your SAP system; the uploaded objects can serve the purpose of being reference objects. You can create your objects starting with the letter Z, the rest of the characters in your object name being the same as the characters in the corresponding object name in the book. Like, for example, an object with the name YCH05_BDCRECX1 in the book can be created by you with the name ZCH05_BDCRECX1. This will enable you to correlate your objects with the corresponding objects in the book.

What follows are the structure, organization, content and procedures to upload objects from the E-resource into your SAP system.

2. E-Resource – structure and contents

What we are referring to as E-resource is a file folder of the name E_RESOURCE. The E_RESOURCE contains the following object types:

1. ABAP Source Programs - Executable, Subroutine Pool, Include and Function Module
2. Image
3. Data Element Texts
4. SAP script and Smartforms *Forms*
5. ITF File
6. SAP script *Standard Texts* and Smartforms *Text Module*
7. SAP script and Smartforms *Styles*
8. Text Files containing data for migration
9. LSMW *Project*

The E_RESOURCE is organized chapter wise, a separate folder for each chapter. Within a chapter folder, different object types like ABAP source programs, image etc. are located in separate sub folders.

The E_RESOURCE folder has a structure as shown in figure 1:

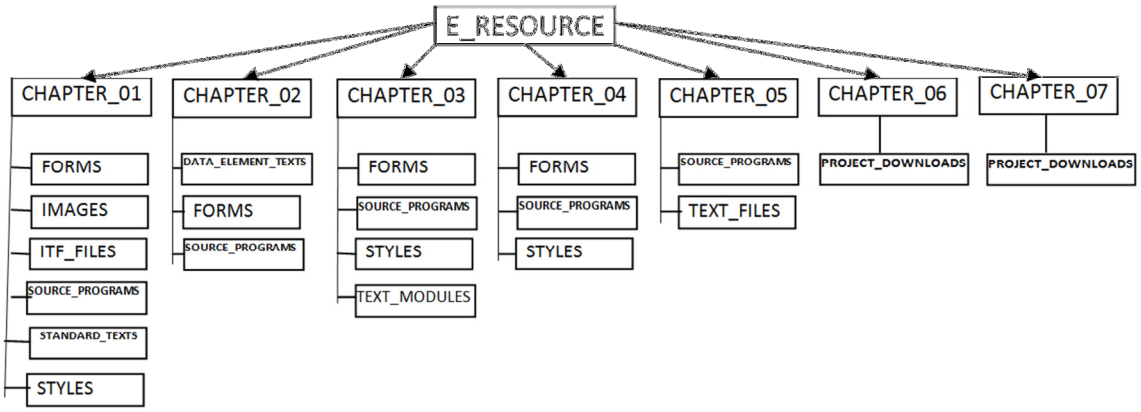

Figure 1 (E_RESOURCE structure)

The following table lists all the objects in the E_RESOURCE chapter wise

Chapter No. (Folder)	Object Type (Sub Folder)	Object Names
01 (CHAPTER01)	**SAP script *Forms* (FORMS)**	**YCH01_01_FST_FRM YCH01_02_SEC_FRM YCH01_03_MLIST1 YCH01_04_MLIST2**
	SAP script *Style* (STYLES)	**YCH01_01**
	SAP script *Standard Text* (STANDARD_TEXTS)	**YCH01_01_SEL_TABLES**
	Image (IMAGES)	**GRAPHIC_LOGO**
	ITF File (ITF_FILES)	**YCH01_01_SEL_TABLE**
	ABAP Exec Programs (SOURCE_PROGRAMS)	**YCH01_01_MLIST_ONE_MWINDOW YCH01_02_MLIST_TWO_MWINDOWS**
02 (CHAPTER02)	**Data Element Texts (DATA_ELEMENT_TEXTS)**	**List in document DATA_ELEMENT_TEXTS**
	SAP script *Forms* (FORMS)	**YCH02_01_ADR_STK YCH02_02_PORDER1 YCH02_03_PORDER2 YCH02_04_MEDRUCK YCH02_05_SALESUM**
	ABAP Exec Programs (SOURCE_PROGRAMS)	**YCH02_01_PPRG_YCH02_01_ADR_STK YCH02_02_PPRG_YCH02_02_PORDER1 YCH02_03_PPRG_YCH02_03_PORDER2 YCH02_05_PPRG_YCH02_05_SALESUM**
	ABAP Subroutine Pool (SOURCE_PROGRAMS)	**YCH02_04_SROUTINE_POOL**
	ABAP Function Module (SOURCE_PROGRAMS)	**YCH02_01_SPLIT_STRING**
03 (CHAPTER03)	**Smartforms *Forms* (FORMS)**	**YCH03_01_FST_FRM YCH03_02_SEC_FRM YCH03_03_MLIST1 YCH03_04_MLIST2**
	Smartforms *Styles* (STYLES)	**sfstyle-ych03_01 sfstyle-ych03_02**
	Smartforms *Text Module* (TEXT_MODULES)	**ych03_01_SEL_TABLE**
	ABAP Exec Programs	**YCH03_01_MLIST1**

Chapter No. (Folder)	Object Type (Sub Folder)	Object Names
	(SOURCE_PROGRAMS) +	YCH03_02_MLIST2
04 (CHAPTER04)	Smartforms *Forms* (FORMS)	ych04_01_adr_stk ych04_02_porder ysm_smb40_mmpo_a ych04_03_smb40_mmpo_a ych04_03_smb40_mmpo_a_ext ych04_04_material_bcodes ych04_05_salesum
	Smartforms *Styles* (STYLES)	sfstyle-ych04_01 sfstyle-ych04_02 sfstyle-ych04_03 sfstyle-ych04_04 sfstyle-ych04_05
	ABAP Exec Programs (SOURCE_PROGRAMS)	YCH04_01_DPRG_YCH04_01_ADR_STK YCH04_02_DPRG_YCH04_02_PORDER YCH04_04_DPRG_YCH04_04_MBCODES YCH04_05_DPRG_YCH04_05_SALESUM
	ABAP Include Programs (SOURCE_PROGRAMS)	YCH04_FM06PE02 YCH04_SAPFM06P
05 (CHAPTER05)	ABAP Exec Programs (SOURCE_PROGRAMS)	YCH05_XK01_PROGRAM_BATCH_INPUT YCH05_XK01_PROGRAM_BI_TB_SC YCH05_XK01_PROGRAM_CALL_TRAN YCH05_XK01_PROGRAM_GENERATED
	ABAP Include Program (SOURCE_PROGRAMS)	YCH05_BDCRECX1
	Text Data Files (TEXT_FILES)	MAIN_DATA BANK_DATA
06 (CHAPTER06)	*Project* Download (PROJECT_DOWNLOADS)	LSMW_DM0_YCH06_DM
07 (CHAPTER07)	*Project* Download (PROJECT_DOWNLOADS)	LSMW_DM0_YCH06_DM_PO

How to upload the various objects listed in the above table into your SAP system is described in the succeeding sections.

3. E_RESOURCE – procedures to upload objects

The different objects in the E_RESOURCE require separate procedures for uploading into the SAP system. You can upload the objects of a chapter before the commencement of reading of that chapter or upload the objects of all the chapters before the commencement of reading of the book. The following sections describe these procedures chapter and object type wise.

3.1.1 Chapter 01, SAP script *Forms*

The ABAP program RSTXSCRP enables you to export (download) SAP script *Forms*, *Styles* and *Standard Texts* to operating system files on either the presentation server (frontend) or the application server. We have used this program to export the *Forms*, *Styles* and *Standard Texts* from our SAP system to the E_RESOURCE. The same program can also be used to import (upload) into a SAP system, previously exported *Forms*, *Styles* and *Standard Texts* from files on either the presentation server (frontend) or the application server.

You will use the ABAP program RSTXSCRP to import (upload) the *Forms*, *Styles* and *Standard Texts* from the E_RESOURCE into your SAP system. To import the first of the *Forms* of chapter 1 YCH01_01_FST_FRM, execute the ABAP program RSTXSCRP in transaction code SE38. A screen like the one shown in figure 2 appears:

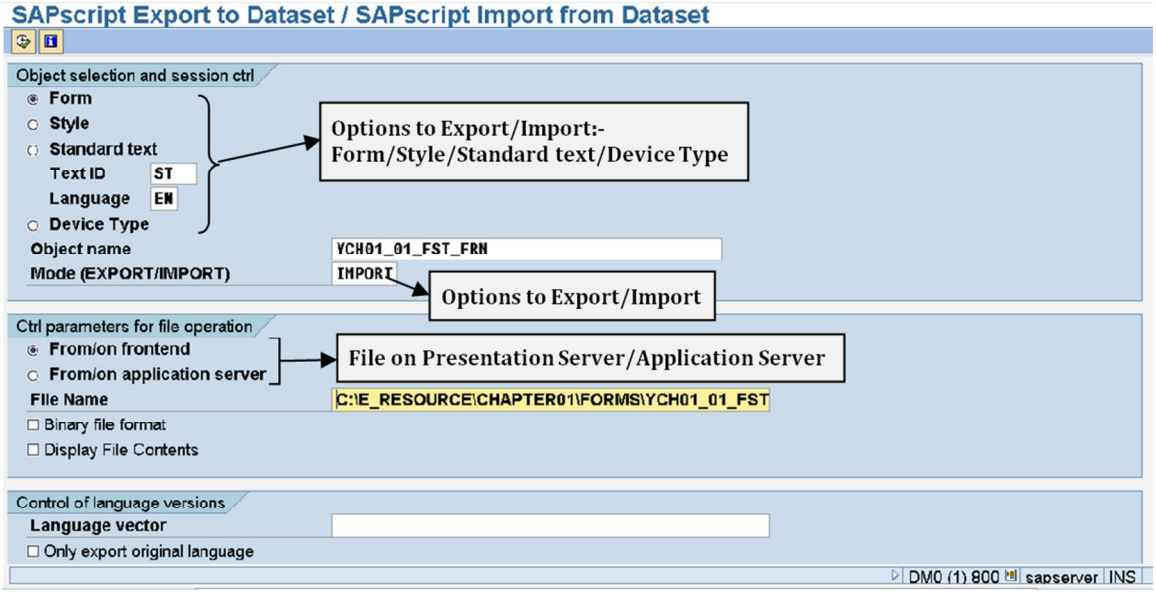

Figure 2 (Export/Import SAP script elements: *Form*, *Style* and *Standard Text*)

Which of the SAP script elements: *Form*, *Style* or *Standard Text*, you want to export/import, you indicate by enabling one of the three radio buttons. There is also a provision to export/import *Device Type* (printer) – the fourth radio button. The four radio buttons are marked in figure 2.

Since, you want to import a *Form*; you will enable the first radio button – the default.

In the field *Object name* on the screen of figure 2, you enter the name of the *Form*, *Style* or *Standard Text*; you want to export/import. Enter the name of the *Form* as YCH01_01_FST_FRM.

In the field *Mode* on the screen of figure 2, you enter either EXPORT for download or IMPORT for upload. Since we want to upload a *Form*, enter the value IMPORT in the field *Mode*.

You can indicate whether your export/import file resides on the presentation server (frontend) or the application server by the selection of the appropriate radio button. More likely, you will locate the E_RESOURCE on the presentation server (frontend), the default.

In field *File Name* on the screen of figure 2, enter C:\E_RESOURCE\CHAPTER01\FORMS\YCH01_01_FST_FRM if you have located your E_RESOURCE folder on disk drive C. If you have located your E_RESOURCE folder on a disk drive other than C, specify that disk drive instead of C.

You can specify which language versions of the *Form*, *Style* or *Standard Text*; you want to export/import by entering the language key values in the field *Language Vector*. By default, all the available language versions of the *Form*, *Style* or *Standard Text* will be exported / imported.

If you entered all the appropriate values as shown in figure 2, click the execute button on the application tool bar. The system will prompt you for a package to be assigned to the object. Assign a package of your choice. We, on our part, are assigning the package $TMP (package for local objects) to all our objects.

After the package assignment, the system will pop up the dialogue box *SAP Custom - Open File* as shown in figure 3:

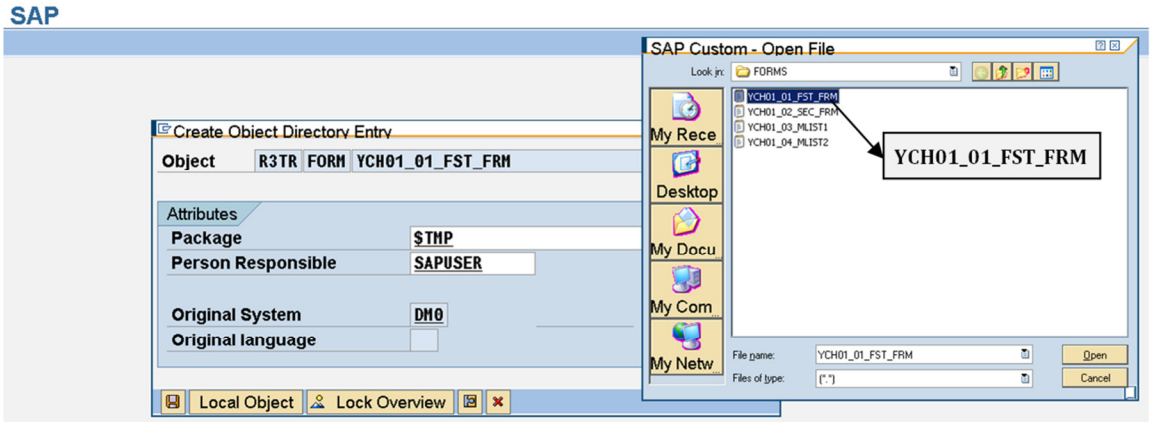

Figure 3 (*SAP Custom – Open File* Dialogue Box)

The file YCH01_01_FST_FRM is shown as selected in the dialogue box. Click the button *Open* on the dialogue box. A report on the import of the object will appear as shown in figure 4:

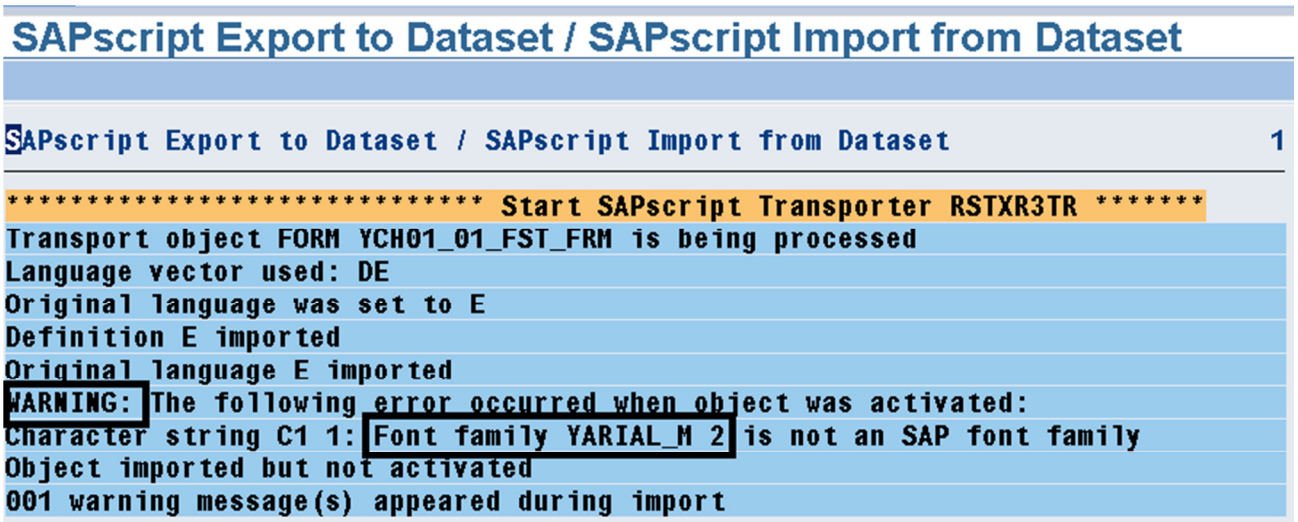

Figure 4 (Report – Import of *Form* YCH01_01_FST_FRM)

The SAP script *Forms*; when imported or uploaded, are automatically activated. If the importing process detects a *Form* definition error, the *Form* does not get activated.

During the course of reading chapter 1, you will install the font: YARIAL_M. As yet, the font is not installed, so the warning appears – figure 4. The *Form* YCH01_01_FST_FRM though imported is not activated. Activate the *Form* YCH01_01_FST_FRM after installation of the font: YARIAL_M.

This would complete the import of the *Form* YCH01_01_FST_FRM from the E_RESOURCE into the SAP system.

Press the function key F3 to return to the screen of figure 2.

In the same manner as described above, import the following three *Forms* of chapter 1:

YCH01_02_SEC_FRM
YCH01_03_MLIST1
YCH01_04_MLIST2

The *Form* YCH01_02_SEC_FRM also uses the font YARIAL_M through the *Standard Text* YCH01_01_SEL_TABLES being incorporated into the *Form* at run time. Hence the *Form* YCH01_02_SEC_FRM is activated after import automatically.

3.1.2 Chapter 01, SAP script *Style*

To import a SAP script *Style* from the E_RESOURCE into the SAP system, you execute again the ABAP program RSTXSCRP. The screen with the appropriate values entered to import the only SAP script *Style* YCH01_01 is shown in figure 5:

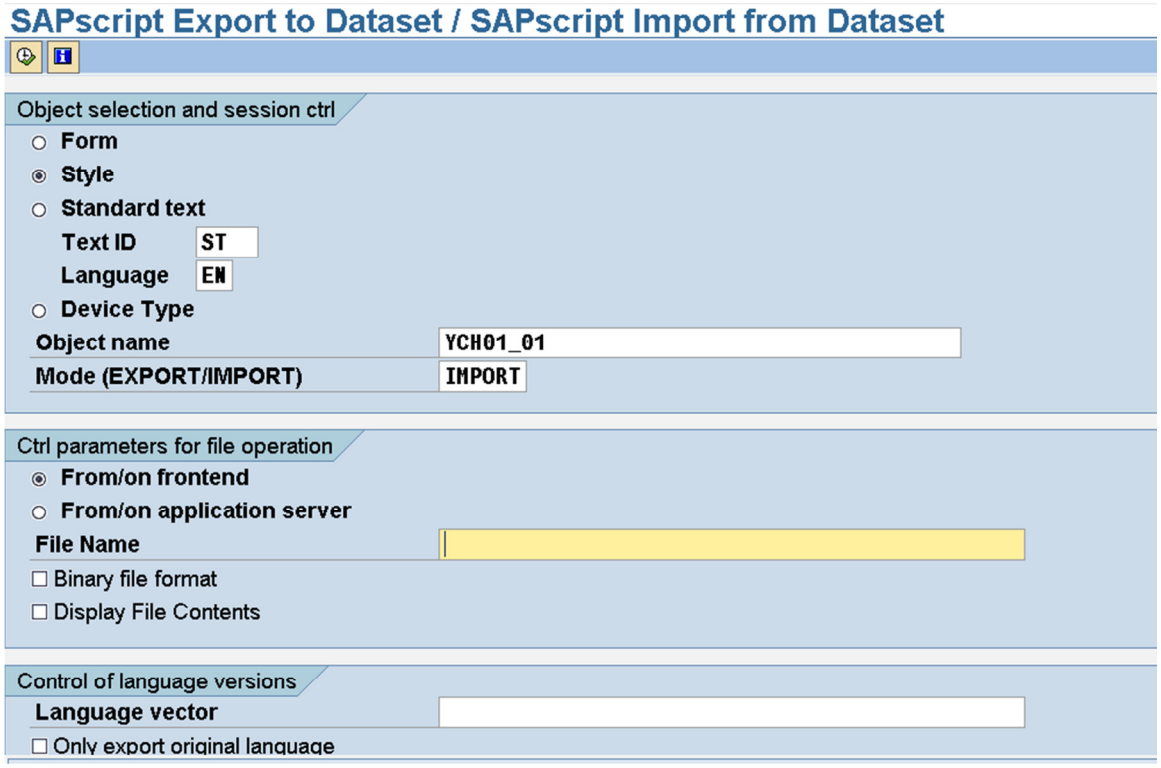

Figure 5 (Import SAP script *Style* YCH01_01)

The second radio button *Style* is to be enabled. You did not enter any value in the field *File Name*. When you click the execute button on the application tool bar, the system will prompt you for a package to be assigned to the object. After the assignment of a package, the system pops up the dialogue box *SAP Custom - Open File*. Since no value was entered in the field *File Name*, the system has navigated to the folder SapWorkDir as shown in figure 6:

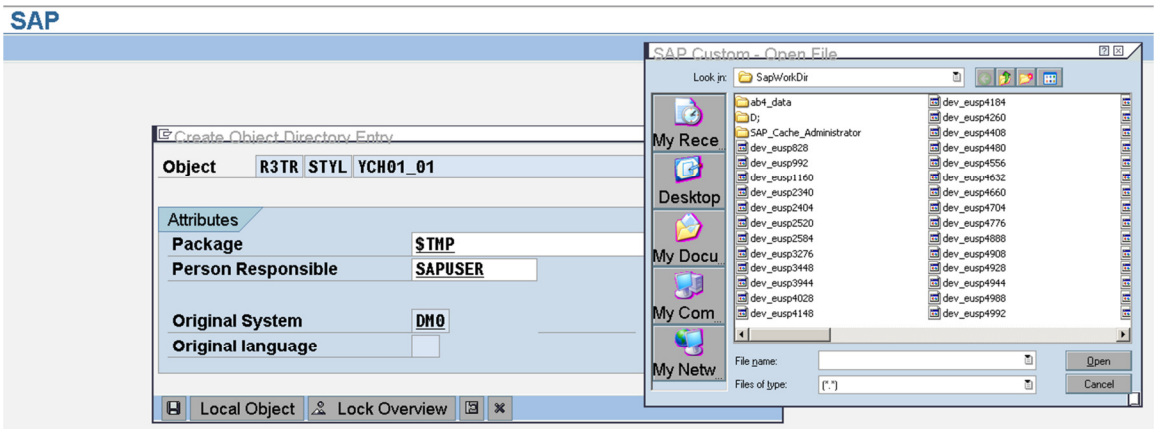

Figure 6 (Import SAP script *Style* YCH01_01 – Default Folder: SapWorkDir)

In the earlier case of importing SAP script *Forms*, you had entered a value in the field *File Name*. the system had navigated to the location of the specified file – see figure 3. From the default folder SapWorkDir, you will navigate to C:\E_RESOURCE\CHAPTER01\STYLES, select the file YCH01_01 as shown in figure 7:

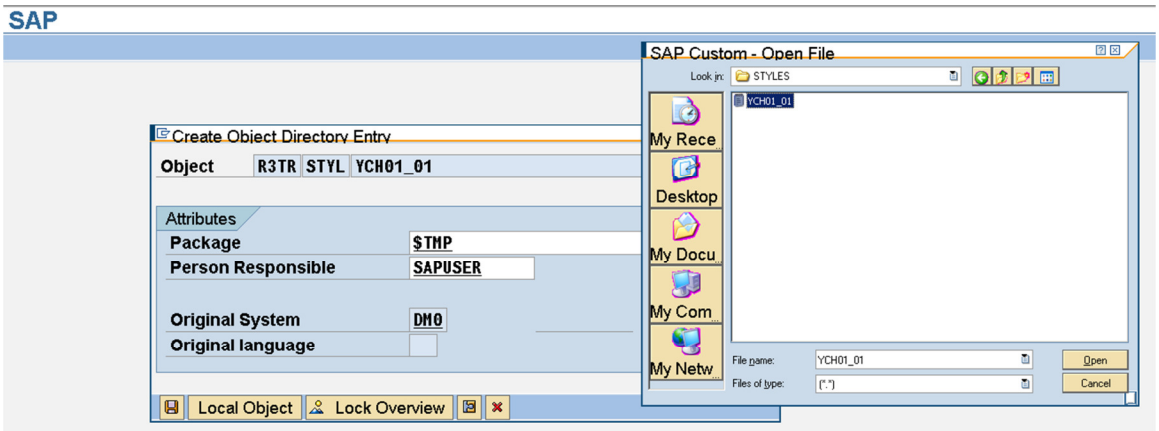

Figure 7 (Import SAP script *Style* YCH01_01 – File Selected)

Click the button *Open* on the dialogue box. A report on the import of the object will appear as shown in figure 8:

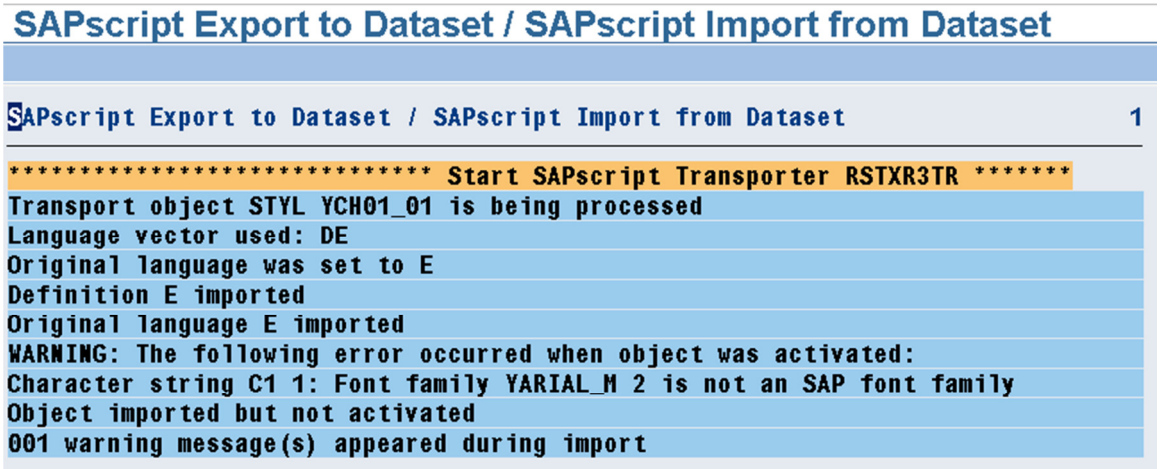

Figure 8 (Report – Import of *Style* YCH01_01)

Since the font: YARIAL_M is as yet, uninstalled, a warning appears – figure 8. So the *Style* YCH01_01 though imported is not activated. Activate the *Style* YCH01_01 after installation of the font: YARIAL_M.

This would complete the import of the *Style* YCH01_01 from the E_RESOURCE into the SAP system.
Press the function key F3 to return to the screen of figure 2.

3.1.3 Chapter 01, SAP script *Standard Text*

To import a SAP script *Standard Text* from the E_RESOURCE into the SAP system, you execute again the ABAP program RSTXSCRP. The screen with the appropriate values entered to import only the SAP script *Standard Text* YCH01_01_SEL_TABLES is shown in figure 9:

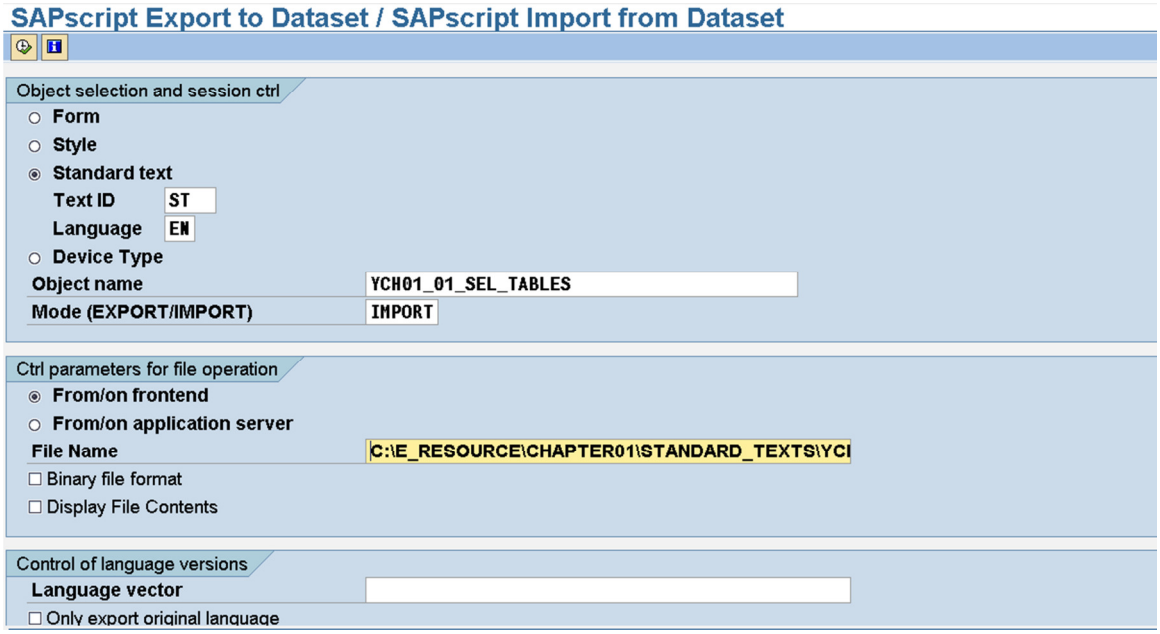

Figure 9 (Import SAP script *Standard Text* YCH01_01_SEL_TABLES)

The third radio button *Standard text* is to be enabled. The SAP script *Standard Text* is not assigned a package. When you click the execute button on the application tool bar, the system pops up the dialogue box *SAP Custom - Open File*. Since a value was entered in the field *File Name*, the system navigated to the location of the specified file as shown in figure 10:

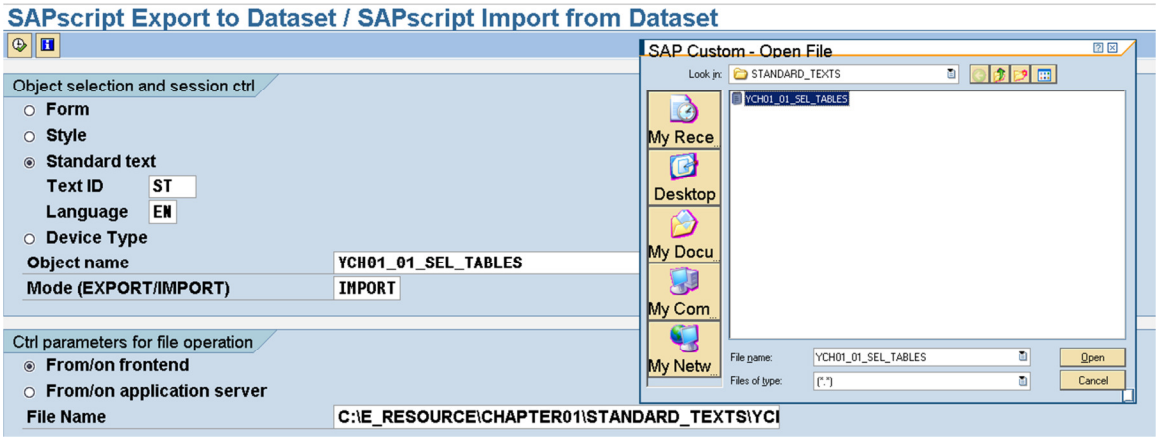

Figure 10 (Import SAP script *Standard Text* YCH01_01_SEL_TABLES – File Selected)

Click the button *Open* on the dialogue box. A report on the import of the object will appear as shown in figure 11:

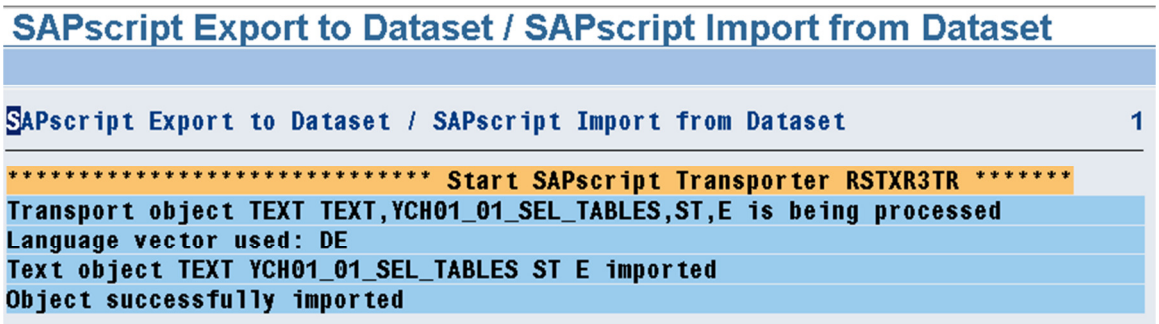

Figure 11 (Report – Import of *Standard Text* YCH01_01_SEL_TABLES)

This would complete the import of the *Standard Text* YCH01_01_SEL_TABLES from the E_RESOURCE into the SAP system.

3.1.4 Chapter 01, Image

The import of graphics or images into the document server of a SAP system is covered under the section '*Form* Graphics – import graphics' of chapter 1. Even so, if you now want to import the image in the E_RESOURCE, run the transaction code SE78. On the opening screen of the transaction code SE78, select the sub node *BMAP* under the node *GRAPHICS* as shown in figure 12, Click the import button on the application tool bar – the first button from the left side, A dialogue box pops up as shown in figure 12:

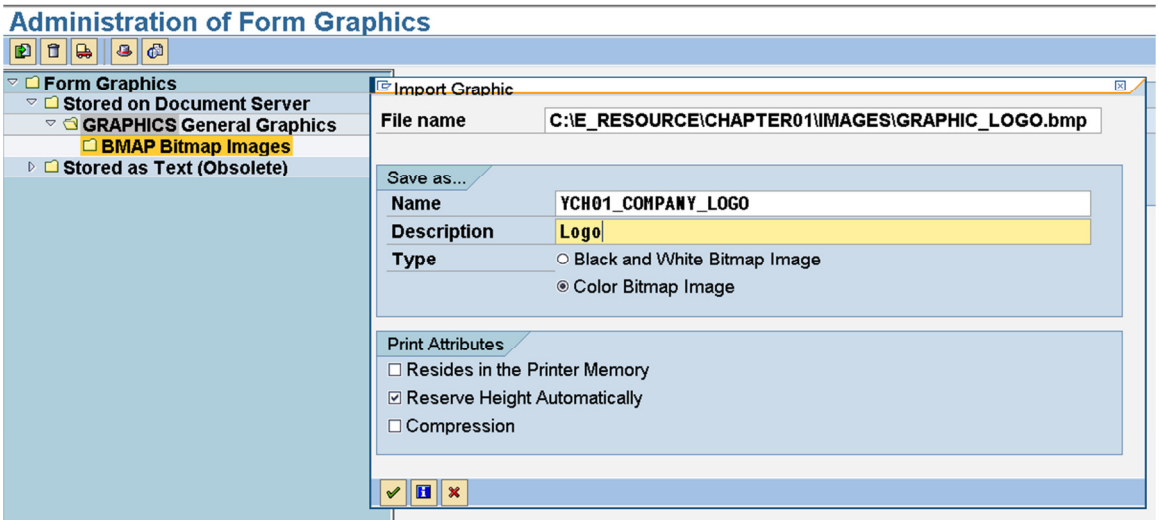

Figure 12 (Import of Image/Graphic into SAP Document Server)

You can select the BMP file GRAPHIC_LOGO.bmp from C:\E_RESOURCE\CHAPTER01\IMAGES\ as shown in the figure 12. You can enter YCH01_COMPANY_LOGO in the field: *Name*, enter suitable text in the field *Description*. You will enable the radio button *Color Bitmap Image*, accept the defaults in the area *Print Attributes*, click the continue button. The image GRAPHIC_LOGO.bmp is imported into the document server of your SAP system.

The imported image is being incorporated into SAP script and Smartforms *Forms* during performance of exercises.

3.1.5 Chapter 01, ITF File

The ITF files can be imported only in the environments of SAP script *Form Text Element* and the SAP script *Standard Text.* The import of ITF file is performed during Demonstration II exercise of chapter 1.

3.1.6 Chapter 01, ABAP Executable Programs

The source lines of each of the ABAP program – executable or include or subroutine pool or function module is stored as a separate text file in the appropriate sub folders of the E_RESOURCE folder. The name of each of these text files containing the source lines is same as the name of the corresponding ABAP program.

For example, the following two executable ABAP programs are created during performance of exercises in chapter 1:

YCH01_01_MLIST_ONE_MWINDOW
YCH01_02_MLIST_TWO_MWINDOWS

Corresponding to these two ABAP programs, there are two text files bearing the same names as the ABAP programs. The two text files containing the source lines of ABAP programs are located in C:\E_RESOURCE\CHAPTER01\SOURCE_PROGRAMS\

The text file YCH01_01_MLIST_ONE_MWINDOW contains the source lines of the ABAP program YCH01_01_MLIST_ONE_MWINDOW and so on.

Import of program lines of a text file into an ABAP program will involve copying and pasting from a text file into an ABAP program.

To import program lines of the text file YCH01_01_MLIST_ONE_MWINDOW, use the transaction code SE38 to create a new ABAP program with the same name: YCH01_01_MLIST_ONE_MWINDOW. In the editor mode of the newly created ABAP program YCH01_01_MLIST_ONE_MWINDOW, replace the generated lines by the ABAP editor with the lines from the text file. Perform a syntax check – ctrl+F2. Activate the program - ctrl+F3.

Repeat the steps described above to import lines from the second text file YCH01_02_MLIST_TWO_MWINDOWS into a corresponding ABAP program.

This would complete the import of the text files:

YCH01_01_MLIST_ONE_MWINDOW
YCH01_02_MLIST_TWO_MWINDOWS

into the corresponding ABAP programs. Activate the programs.

3.2.1 Chapter 02, Data Element Texts

The hands-on exercises II and III of chapter 2 produce standard purchase orders through custom SAP script *Forms*. While performing the hands-on exercises II and III in chapter 2, we adopted the practice of locating text to be output in data elements instead of literal text. The practice of locating text in data elements enabled us to output standard purchase orders in multiple languages with a single language version of a *Form*.

Most of the text to be output in the hands-on exercises II and III of chapter 2; is related to labels or nomenclatures of fields of SAP database tables. Data elements of the fields of SAP database tables already exist. But the texts in the existing data elements do not correspond with the texts we desire to output. Hence the requirement to create new data elements to contain the text we desire to output.

The folder C:\E_RESOURCE\CHAPTER02\DATA_ELEMENT_TEXTS\ contains the document DATA_ELEMENT_TEXTS. This document lists the data elements to be created with the domains to be assigned, the English and German texts. For data elements related to fields of SAP database tables, we have pre-fixed the original data element names with YCH02_/YCH04_ and retained the domains of the original data elements.

There are a total of seventeen data elements to be created by you – sixteen to be deployed in two hands-on exercises of chapter 2 and all seventeen to be deployed in one hands-on exercise of chapter 4. The texts are to be entered in the field *Long – Field Label*, since the texts are being retrieved from this field in the print program. We are elaborating on the procedure to create the first of the listed data elements. You can repeat the procedure to create the remaining sixteen data elements.

Using the transaction code SE11, create the first data element YCH02_EKNAM. The screen of the tab *Data Type* with the entered values is shown in figure 13:

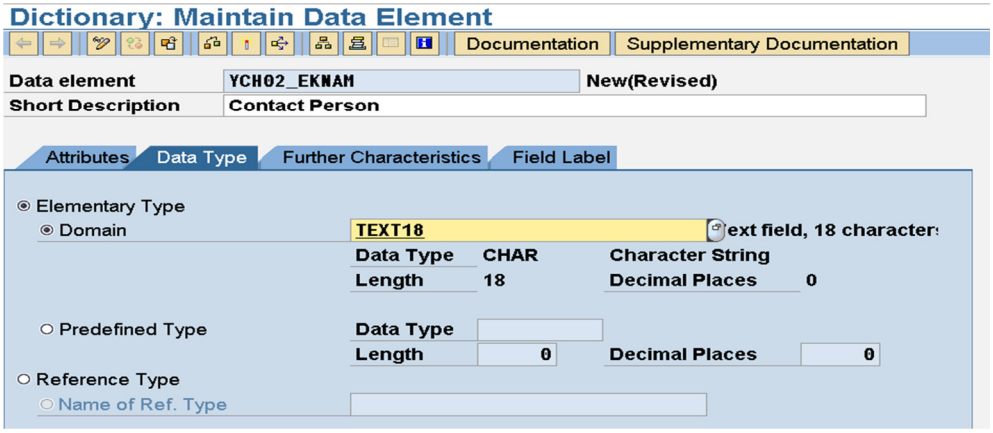

Figure 13 (Data Element YCH02_EKNAM – Tab: *Data Type*)

Click the tab *Field Label*; enter the text in the field: *Long – Field Label* as shown in figure 14:

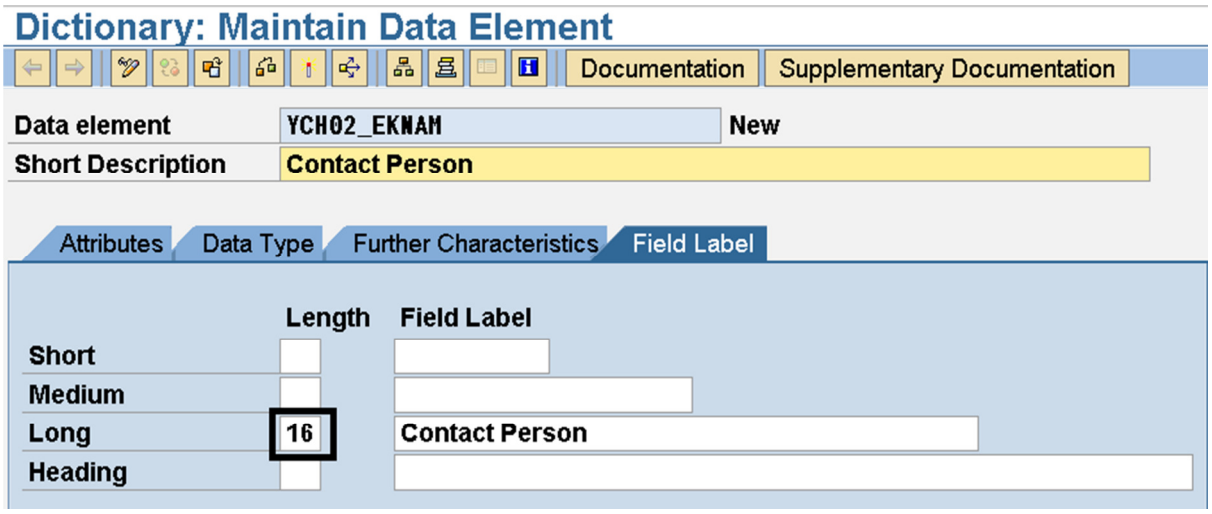

Figure 14 (Data Element YCH02_EKNAM – Tab: *Field Label*)

In the field *Length*; a value is entered automatically as per the number of characters you entered in the field: *Field Label*. This is the length of the text in English. If the German text length happens to be greater than the English text, adjust the length as per the length of the German text. This is what we have done. The English text is 14. The German text length is 16. We adjusted the length to 16 as marked and shown in figure 14.

For your convenience, in the data element list, if the German text length is greater than the English text length, this is indicated with the German text length appearing in parenthesis.

Activate the data element YCH02_EKNAM. Once the data element is activated, make the menu selection to enter the text in the target language - German as shown in figure 15:

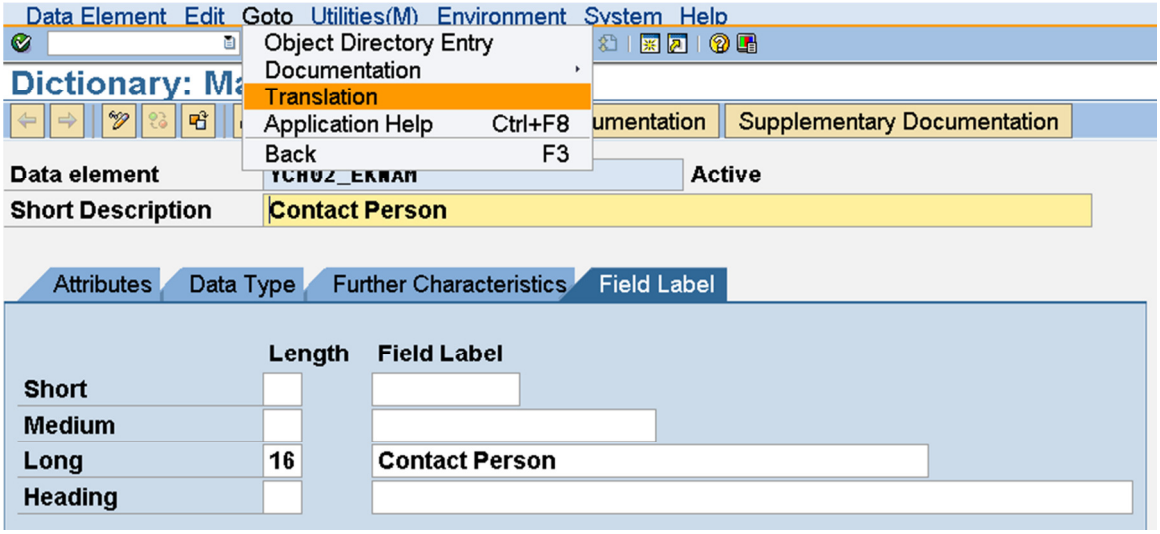

Figure 15 (Menu Selection to Enter Text in Target Language - German)

When you make the menu selection: Goto-> Translation, a dialogue box to input *Target language for translation* appears as shown in figure 16:

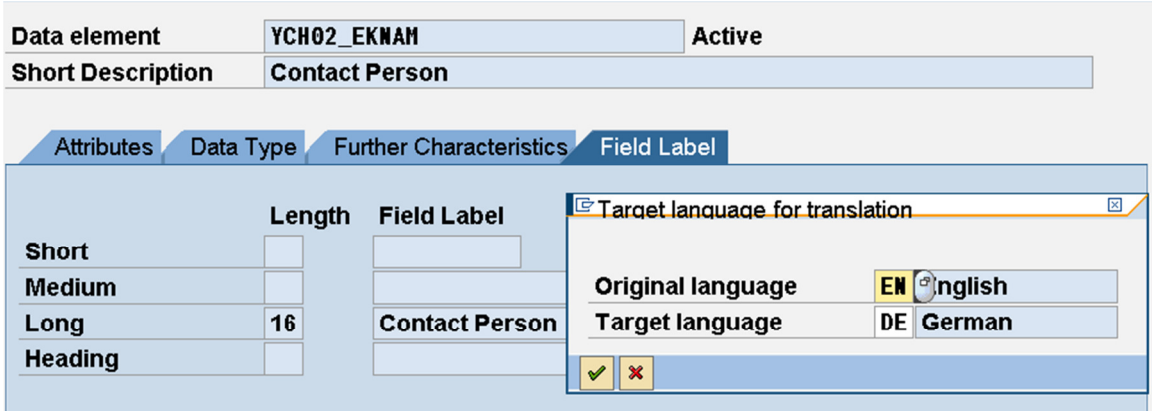

Figure 16 (Dialogue Box to Input *Target language for translation*)

Click the continue button on the dialogue box *Target language for translation*. A screen to enter the text in the target language – German appears. The screen with the text entered in the target language – German is shown in figure 17:

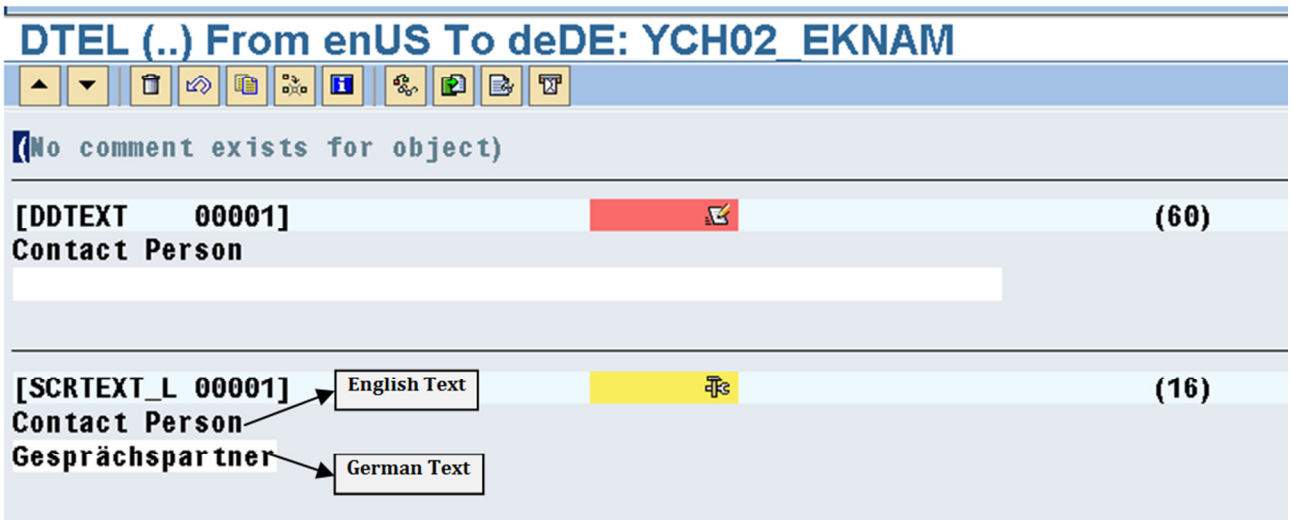

Figure 17 (Text Entered in the Target Language - German)

Save the screen. You have created the data element YCH02_EKNAM with English and German texts in the field: *Long – Field Label*.

In this manner, create the rest of the sixteen data elements with English and German texts in the field: *Long – Field Label*.

(2) YCH02_EKTEL
(3) YCH02_LIFNR
(4) YCH02_VERKF
(5) YCH02_CONSG
(6) YCH02_EINDT
(7) YCH02_INCO1
(8) YCH02_ZBTXT
(9) YCH02_MATNR
(10) YCH02_MAKTX
(11) YCH02_MENGE
(12) YCH02_MEINS
(13) YCH02_NETPR
(14) YCH02_TOTAL_NET_ETAX
(15) YCH02_PAGE
(16) YCH02_INWORDS
(17) YCH04_EBELP

This would conclude the creation of data element texts.

3.2.2 Chapter 02, SAP script *Forms*

Execute the ABAP program RSTXSCRP, use the procedure described in section 3.1.1; upload the following SAP script *Forms* into your SAP system from the folder C:\E_RESOURCE\CHAPTER02\FORMS\

YCH02_01_ADR_STK
YCH02_02_PORDER1
YCH02_03_PORDER2
YCH02_04_MEDRUCK

YCH02_05_SALESUM

As part of uploading process, these *Forms* will be activated. Only the German (D) and English (E) language versions of the *Form* YCH02_04_MEDRUCK were downloaded by us. After this *Form* is uploaded, a warning will appear to the effect that it is unable to import language versions other D and E. Ignore the warning.

3.2.3 Chapter 02, ABAP Executable Programs

Use the procedure described in section 3.1.6 to upload the following ABAP executable programs into your SAP system from the folder C:\E_RESOURCE\CHAPTER02\SOURCE_PROGRAMS\. Activate the programs.

YCH02_01_PPRG_YCH02_01_ADR_STK (activate after creation of database view YCH02_LFA1_LFB1)

YCH02_02_PPRG_YCH02_02_PORDER1 (activate after creation of database view YCH02_EKPO_MAKT)
(Ensure the database view YCH02_EKKO_LFA1 and the search help YCH02_01_EKKO_LFA1_SH, are created before execution of this program)

YCH02_03_PPRG_YCH02_03_PORDER2 (activate after creation of database view YCH02_EKPO_MAKT)
YCH02_05_PPRG_YCH02_05_SALESUM (activate after creation of database view YCH02_VBRK_KNA1)

3.2.4 Chapter 02, ABAP Subroutine Pool

External subroutines invoked from within the Text Element environment of SAP script *Forms* can be located either in an executable ABAP program or a subroutine pool ABAP program (more apt).

To import program lines of the text file YCH02_04_SROUTINE_POOL in the folder C:\E_RESOURCE\CHAPTER02\SOURCE_PROGRAMS\, use the transaction code SE38 to create a new ABAP program with the same name: YCH02_04_SROUTINE_POOL. The program type can be either executable or subroutine pool. In the editor mode of the newly created ABAP program YCH02_04_SROUTINE_POOL, replace the generated lines by the ABAP editor with the lines from the text file. Perform a syntax check – ctrl+F2. Activate the program - ctrl+F3.

3.2.5 Chapter 02, ABAP Function Module

Using transaction code SE37 or SE80, create and activate a function pool. Using transaction code SE37, create a function module with the name YCH02_01_SPLIT_STRING assigning the function pool created earlier. In the interface of the function module, create the following:

- An import parameter of name STRING_TO_SPLIT, with the check box *Pass Value* enabled - pass by value.
- A tables parameter of name STABLE
- An exception of name IMPORT_PARAMETER_TYPE_INVALID
- An exception of name RETURN_TABLE_ELEMENT_NOT_TYPEC

When you open the function module source (SE37) in the ABAP editor, it should be like:

```
FUNCTION YCH02_01_SPLIT_STRING.
*"  IMPORTING
*"     VALUE(STRING_TO_SPLIT)
*"  TABLES
*"      STABLE
*"  EXCEPTIONS
*"      IMPORT_PARAMETER_TYPE_INVALID
*"      RETURN_TABLE_ELEMENT_NOT_TYPEC

ENDFUNCTION.
```

Replace these source lines with lines from the text file YCH02_01_SPLIT_STRING from the folder C:\E_RESOURCE\CHAPTER02\SOURCE _PROGRAMS\. Perform a syntax check (ctrl+F2) and activate the function module (ctrl+F3).

3.3.1 Chapter 03, Smartforms *Forms*

We used the menu option Utilities(M)-> Download Form/Style/Text Module on the opening of the transaction code SMARTFORMS, to download the *Forms*, *Styles* and *Text Module* from our SAP system to the E_RESOURCE.

The downloaded *Forms*, *Styles* and *Text Module* can be subsequently uploaded into SAP systems.

To upload Smartforms *Form* YCH03_01_FST_FRM into your SAP system, execute the transaction code SMARTFORMS, ensure the radio button *Form* on the opening screen is enabled, make the menu selection Utilities(M)-> Upload Form as shown in figure 18:

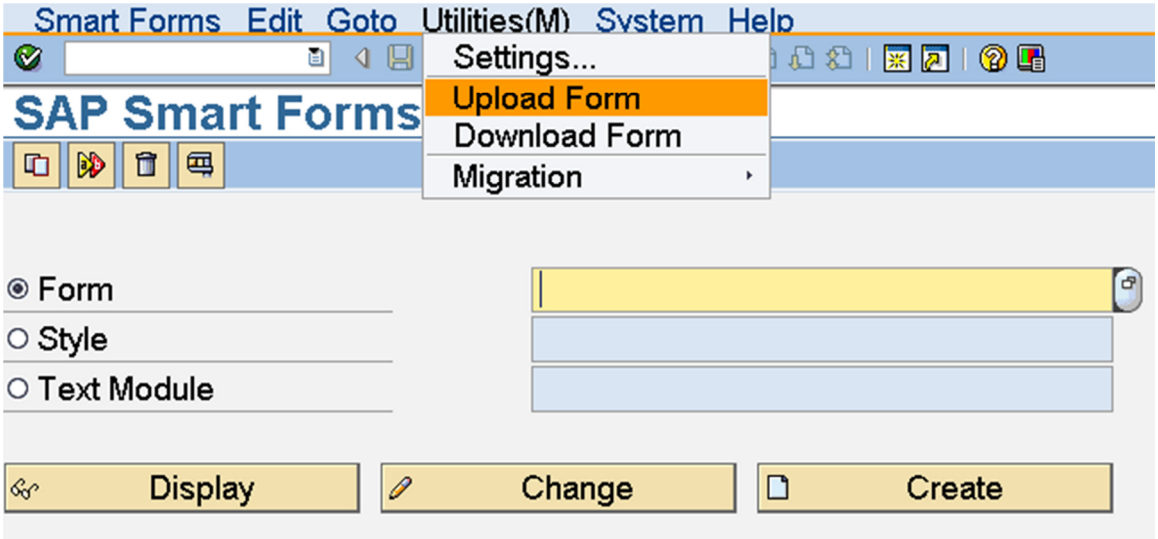

Figure 18 (Menu Selection to Upload Smartforms *Form*)

A dialogue box appears to enter the name of the *Form*. You cannot enter a name of an existing *Form* – no overwriting. Enter the name of the *Form* as YCH03_01_FST_FRM and click the continue button. A dialogue box appears to select the operating system file to be uploaded as shown in figure 19:

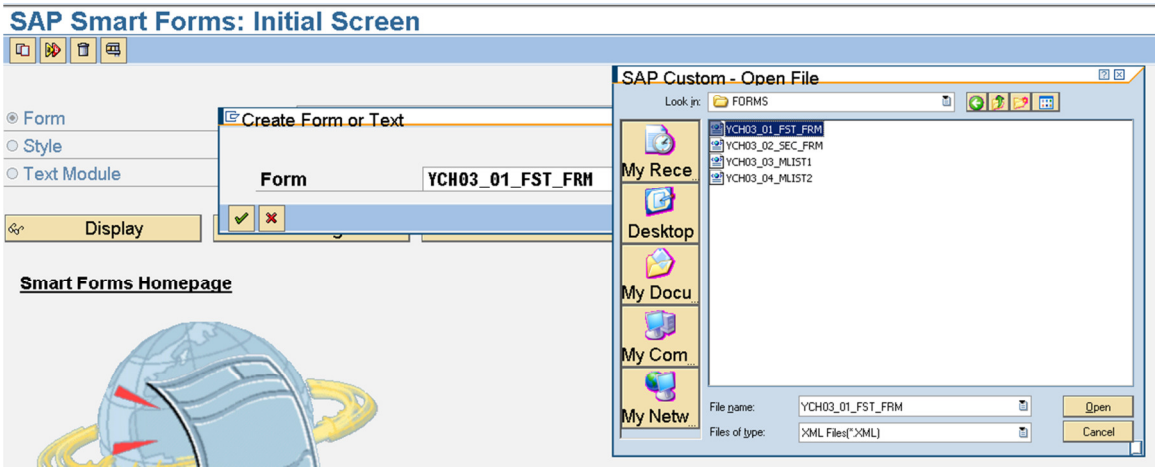

Figure 19 (Operating System File to be Uploaded as a Smartforms *Form*)

You must select the file YCH03_01_FST_FRM in the folder C:\E_RESOURCE\CHAPTER03\FORMS\. The system will prompt for a package to be assigned, Assign a package of your choice. The *Form* YCH03_01_FST_FRM will be uploaded.

In the same manner as described above, upload the remaining three *Forms* of chapter 3:

YCH03_02_SEC_FRM
YCH03_03_MLIST1
YCH03_04_MLIST2

This would complete the upload of all the *Forms* of chapter 3.

3.3.2 Chapter 03, Smartforms *Styles*

To upload Smartforms *Style* YCH03_01 into your SAP system, execute the transaction code SMARTFORMS, ensure the radio button *Style* on the opening screen is enabled, make the menu selection Utilities(M)-> Upload Style as shown in figure 20:

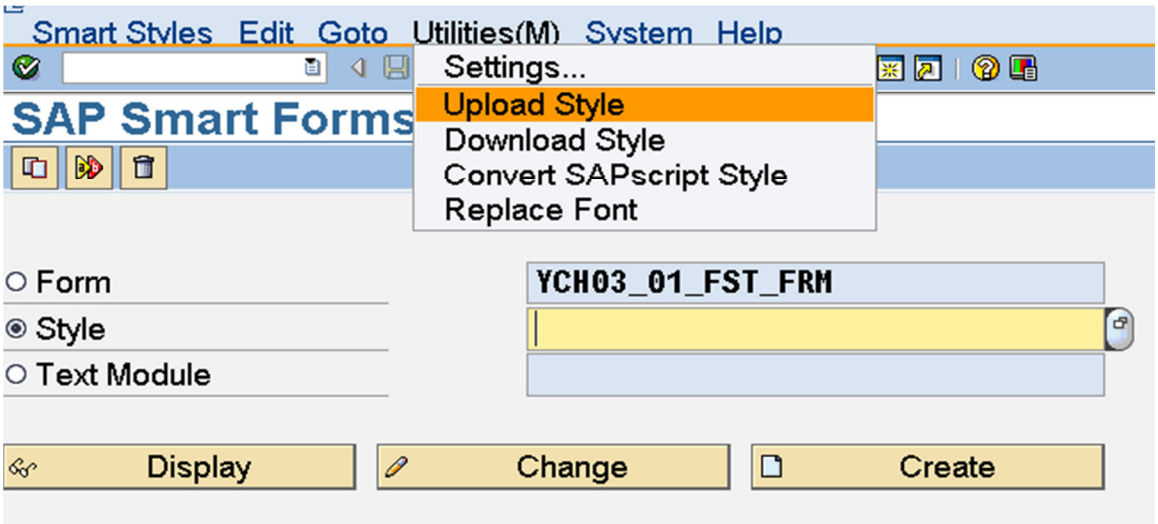

Figure 20 (Menu Selection to Upload Smartforms *Style*)

A dialogue box appears to enter the name of the *Style*. You cannot enter a name of an existing *Style* – no overwriting. Enter the name of the *Style* as YCH03_01 and click the continue button. A dialogue box appears to select the operating system file to be uploaded as shown in figure 21:

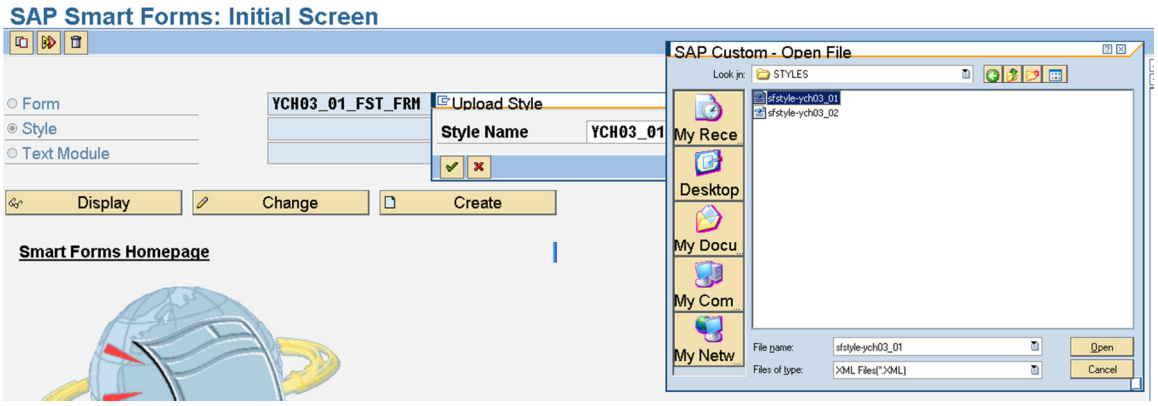

Figure 21 (Operating System File to be Uploaded as a Smartforms *Style*)

You must select the file sfstyle-ych03_01 in the folder C:\E_RESOURCE\CHAPTER03\STYLES\. The system will prompt for a package to be assigned, Assign a package of your choice. The file sfstyle-ych03_01 will be uploaded as *Style* YCH03_01.

In the same manner as described above, upload the remaining one *Style* YCH03_02 of chapter 3 from the file:

sfstyle-ych03_02

When Smartforms *Styles* are downloaded, the downloading process appends a pre-fix: sfstyle- to the name of the *Style* as the name of the downloaded operating system file. The downloading process also creates the file name in lower case. So the *Style* YCH03_01 was downloaded as sfstyle-ych03_01. The uploading process of a *Style* will drop the pre-fix sfstyle- and convert the rest of the characters of the file name to upper case.

When Smartforms *Forms* and *Styles* are uploaded from operating system files into SAP systems, they are not activated. You need to activate them individually after uploading them, the *Styles* first, followed by the *Forms*.
Ensure the font YARIAL_M is installed. (Transaction code SE73) Also ensure the font YARIAL_M is assigned to *Character Format* C1 in the *Styles* YCH03_01 and YCH03_02. Then activate these *Styles*.

Activate the *Forms*:

YCH03_01_FST_FRM
YCH03_02_SEC_FRM
YCH03_03_MLIST1
YCH03_04_MLIST2

This would complete the upload and activation of all the *Forms* and *Styles* of chapter 3.

3.3.3 Chapter 03, Smartforms *Text Module*

To upload Smartforms *Text Module* YCH03_01_SEL_TABLE into your SAP system, execute the transaction code SMARTFORMS, ensure the radio button *Text Module* on the opening screen is enabled, make the menu selection Utilities(M)-> Upload Text Module as shown in figure 22:

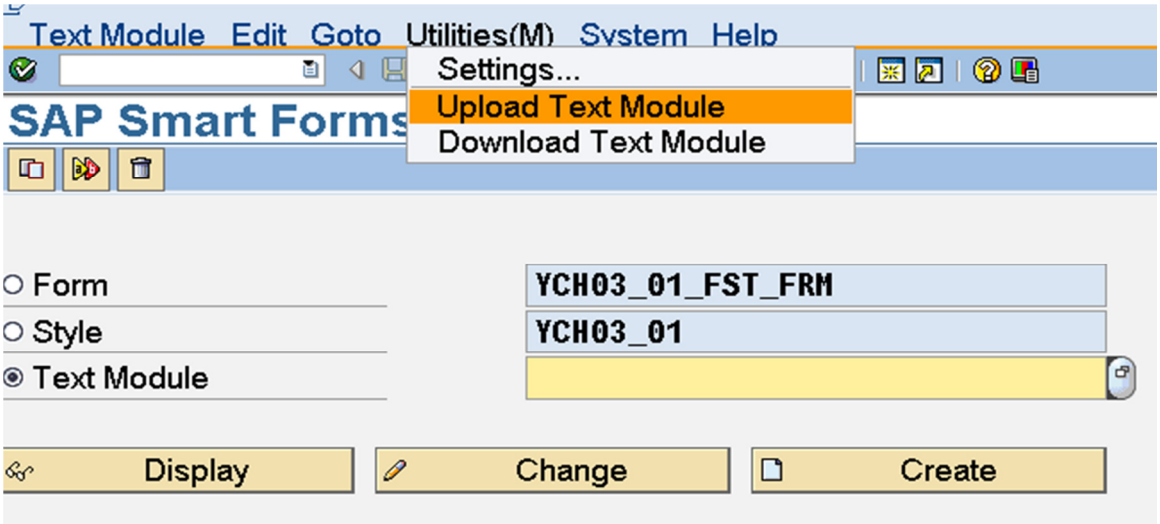

Figure 22 (Menu Selection to Upload Smartforms *Text Module*)

A dialogue box appears to enter the name of the *Text Module*. You cannot enter a name of an existing *Text Module* – no overwriting. Enter the name of the *Text Module* as YCH03_01_SEL_TABLE and click the continue button. A dialogue box appears to select the operating system file to be uploaded as shown in figure 23:

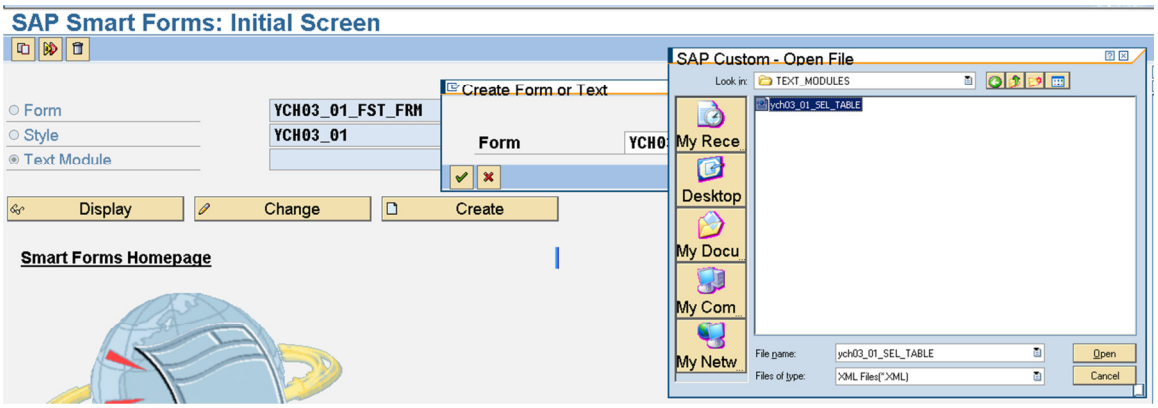

Figure 23 (Operating System File to be Uploaded as a Smartforms *Text Module*)

You must select the file ych03_01_SEL_TABLE in the folder C:\E_RESOURCE\CHAPTER03\TEXT_MODULES\. The system will prompt for a package to be assigned, Assign a package of your choice. The file ych03_01_SEL_TABLE will be uploaded as *Text Module* YCH03_01_SEL_TABLE.

3.3.4 Chapter 03, ABAP Executable Programs

Use the procedure described in section 3.1.6 to upload the following ABAP executable programs into your SAP system from the folder C:\E_RESOURCE\CHAPTER03\SOURCE_PROGRAMS\. Activate the programs.

YCH03_01_MLIST1	(change the function module name in the ABAP statement: CALL FUNCTION…..)
YCH03_02_MLIST2	(change the function module name in the ABAP statement: CALL FUNCTION…..)
	(Ensure ABAP dictionary structure YCH03_2REC_MAKT_STRU is created)

3.4.1 Chapter 04, Smartforms *Forms*

Using the procedure described in section 3.3.1; upload the following Smartforms *Forms* into your SAP system from the folder C:\E_RESOURCE\CHAPTER04\FORMS\

ych04_01_adr_stk	(Ensure ABAP dictionary structure YCH04_LFA1_ADRNR_STRU is created)
ych04_02_porder	(Ensure ABAP dictionary structure YCH04_ITEM_STRU is created)
ysm_smb40_mmpo_a	
ych04_03_smb40_mmpo_a	
ych04_03_smb40_mmpo_a_ext	
ych04_04_material_bcodes	(Ensure ABAP dictionary structure YCH04_MATR_STRU is created)
ych04_05_salesum	(Ensure ABAP dictionary structure YCH04_SALES_SUMM_STRU is created)

This would complete the upload of all the *Forms* of chapter 4.

3.4.2 Chapter 04, Smartforms *Styles*

Using the procedure described in section 3.3.2; upload the following Smartforms *Styles* into your SAP system from the folder C:\E_RESOURCE\CHAPTER04\STYLES\\

sfstyle-ych04_01
sfstyle-ych04_02
sfstyle-ych04_03
sfstyle-ych04_04
sfstyle-ych04_05

Activate the five *Styles*. The *Style* YCH04_04 gets activated even though the bar code YCH_04BC in the *Style* might not have been installed

Activate the seven *Forms*.

This would complete the upload and activation of all the *Forms* and *Styles* of chapter 4.

3.4.3 Chapter 04, ABAP Executable Programs

Use the procedure described in section 3.1.6 to upload the following ABAP executable programs into your SAP system from the folder C:\E_RESOURCE\CHAPTER04\SOURCE_PROGRAMS\

YCH04_01_DPRG_YCH04_01_ADR_STK (change the function module name in the ABAP statement: CALL FUNCTION…..)
YCH04_02_DPRG_YCH04_02_PORDER
YCH04_04_DPRG_YCH04_04_MBCODES
YCH04_05_DPRG_YCH04_05_SALESUM

Activate the programs.

3.4.4 Chapter 04, ABAP Include Programs

Use the procedure described in section 3.1.6 to upload the following ABAP include programs into your SAP system from the folder C:\E_RESOURCE\CHAPTER04\SOURCE_PROGRAMS\

YCH04_FM06PE02
YCH04_SAPFM06P

Activate the programs.

3.5.1 Chapter 05, ABAP Executable Programs

Use the procedure described in section 3.1.6 to upload the following ABAP executable programs into your SAP system from the folder C:\E_RESOURCE\CHAPTER05\SOURCE_PROGRAMS\

YCH05_XK01_PROGRAM_BATCH_INPUT
YCH05_XK01_PROGRAM_BI_TB_SC
YCH05_XK01_PROGRAM_CALL_TRAN
YCH05_XK01_PROGRAM_GENERATED

Activate the programs.

3.5.2 Chapter 05, ABAP Include Program

Use the procedure described in section 3.1.6 to upload the following ABAP include program into your SAP system from the folder C:\E_RESOURCE\CHAPTER05\SOURCE_PROGRAMS\

YCH05_BDCRECX1

Activate the program.

3.5.3 Chapter 05, Text Data Files

The text data files MAIN_DATA and BANK_DATA in the folder C:\E_RESOURCE\CHAPTER05\TEXT_FILES\ contain ready to use vendor data for migration. This ready to use vendor data is for the case when the number of vendor banks exceeding the number of visible rows in the table control area. You can access the text files directly from the E_RESOURCE sub folder or copy them into an appropriate location of your choice.

3.6.1 Chapter 06, LSMW *Project*

To import or upload the LSMW *Project* YCH06_DM into your SAP system, execute the transaction code LSMW, make the menu selection Extras-> Import Projects on the opening screen LSMW as shown in figure 24:

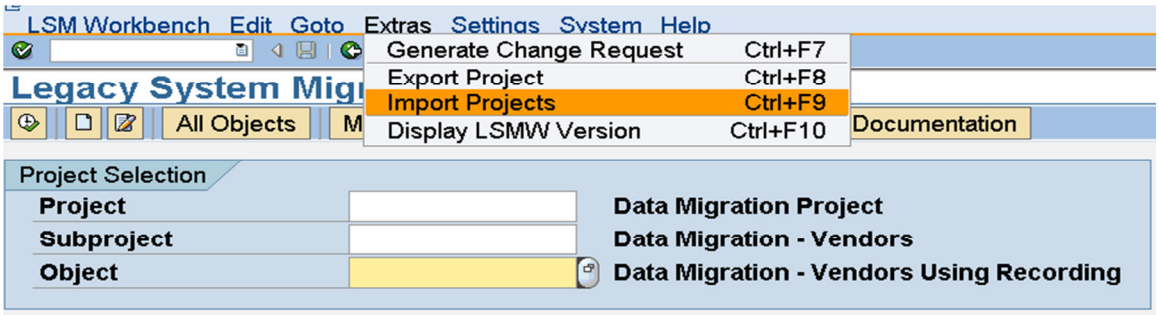

Figure 24 (Menu Selection to Import/Upload LSMW *Project*)

(We used the menu option Extras-> Export Project to export/download the *Project* YCH06_DM from our SAP system to the E_RESOURCE. When a *Project* is downloaded, the downloading process appends the pre-fix LSMW_ + system id. to the *Project* name as the operating system file name. Hence the operating system file name of the exported/downloaded *Project* YCH06_DM is YCH06_DM_LSMW_DM0; DM0 is the system id. of our SAP system)

A dialogue box appears to select the operating system file to be imported / uploaded as shown in figure 25:

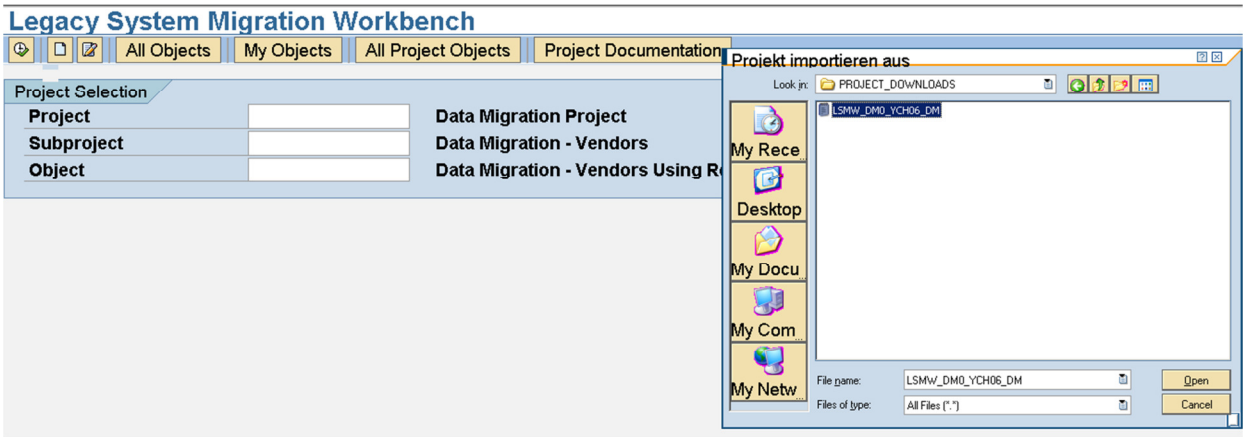

Figure 25 (Select Operating System File to be Imported into a LSMW *Project*)

You must select the file LSMW_DM0_YCH06_DM in the folder C:\E_RESOURCE\CHAPTER06\PROJECTS\.On selection of the file, the system pops up the alert dialogue box as shown in figure 26:

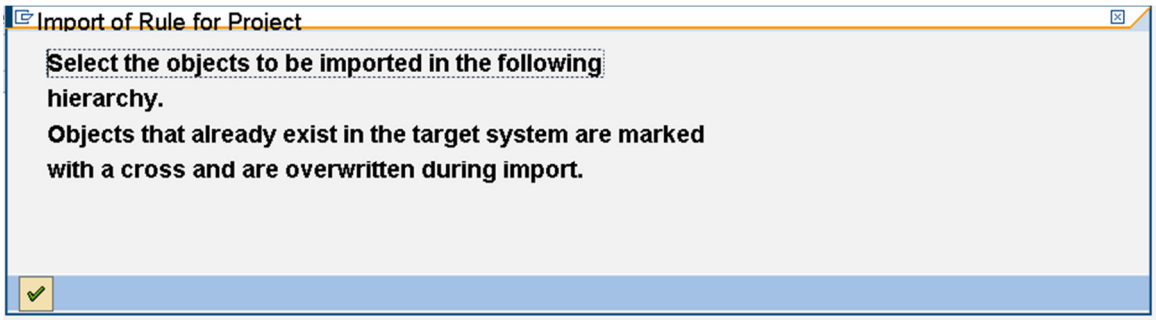

Figure 26 (Dialogue Box: *Import of Rule for Project*)

Click the continue button on the dialogue box. The next screen: *Importing Rules of a Project* appears; where you can select/deselect components of a *Project* as shown in figure 27:

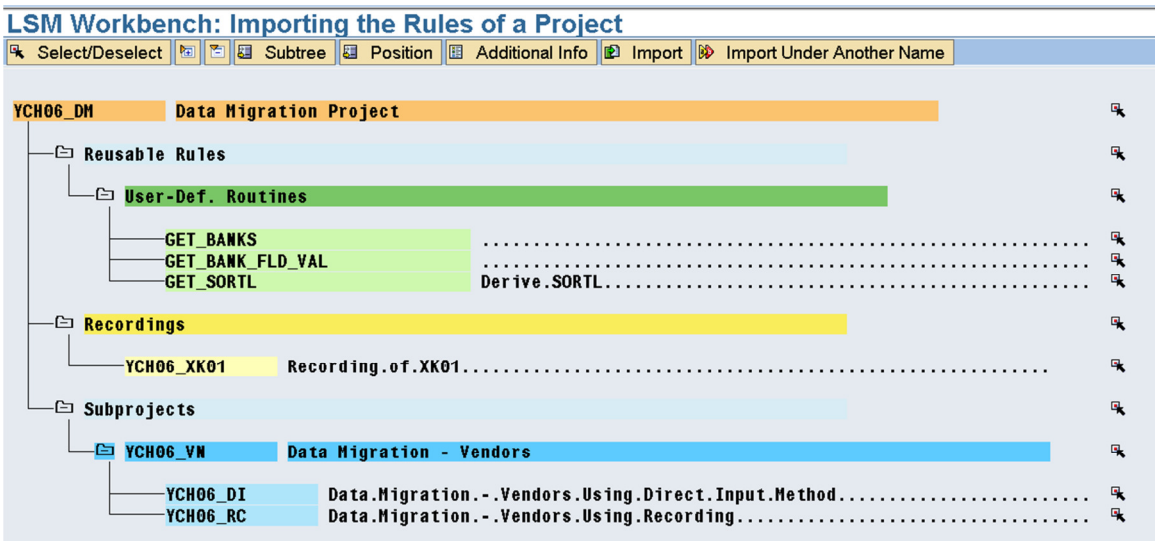

Figure 27 (Screen: *Importing the Rules of a Project*)

As shown in figure 27, you can position the cursor on a component of the *Project* and select it or deselect it by clicking the *Select/Deselect* button on the application tool bar. (first button from the left) By default, all components are selected. Against the selected components, the icon appears on the extreme right as shown in figure 27.

To import the selected components of a *Project*, in the present context, by default, all the components, click the *Import* button on the application tool bar – second button from the right. A successful import will pop up the information alert as shown in figure 28:

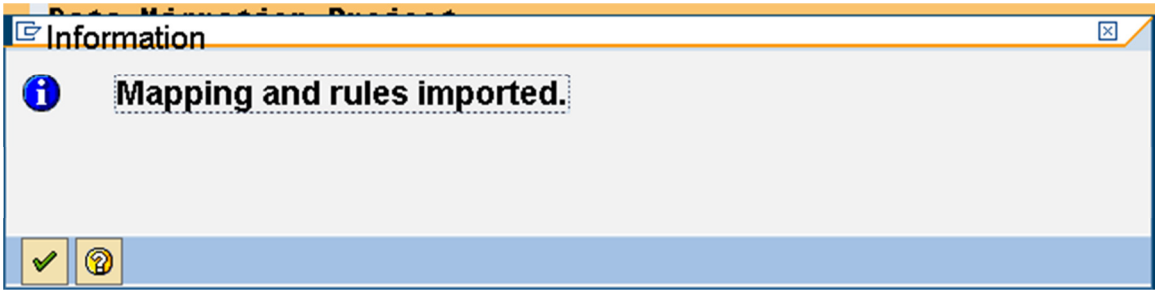

Figure 28 (Information Alert - Components of a *Project* Imported)

The selected components from the file LSMW_DM0_YCH06_DM are imported into the *Project* YCH06_DM.

3.7.1 Chapter 07, LSMW *Project*

The *Project* YCH06_DM created in chapter 6 contained the *Subproject* YCH06_VN. We had exported *Project* YCH06_DM containing the *Subproject* YCH06_VN into the E_RESOURCE as LSMW_DM0_YCH06_DM. You imported this into your SAP system in section 3.6.1.

In chapter 7, we further inserted the *Subproject* YCH07_PO into the existing *Project* YCH06_DM created in chapter 6. We had exported *Project* YCH06_DM containing the *Subproject* YCH07_PO into the E_RESOURCE as LSMW_DM0_YCH06_DM_PO.

You need to import the *Subproject* YCH07_PO into the existing *Project* YCH06_DM. To import LSMW *Project* YCH06_DM containing the *Subproject* YCH07_PO into your SAP system, you execute the transaction code LSMW, make the menu selection Extras-> Import Projects on the opening screen LSMW. The dialogue box to select the operating system file to be imported / uploaded appears, as shown in figure 25:

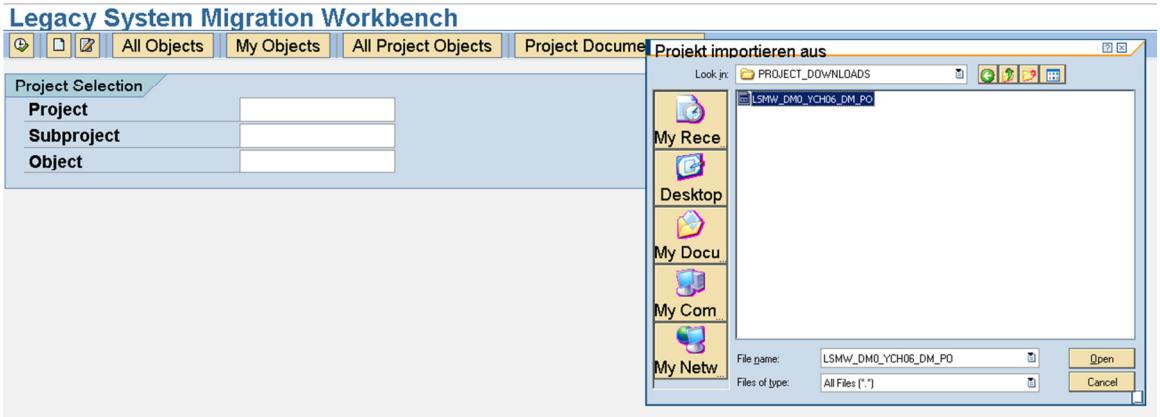

Figure 29 (Select Operating System File to be Imported into a LSMW *Project*)

You must select the file LSMW_DM0_YCH06_DM_PO in the folder C:\E_RESOURCE\CHAPTER07\PROJECTS\.On selection of the file, the system pops up the alert dialogue box as shown in figure 30:

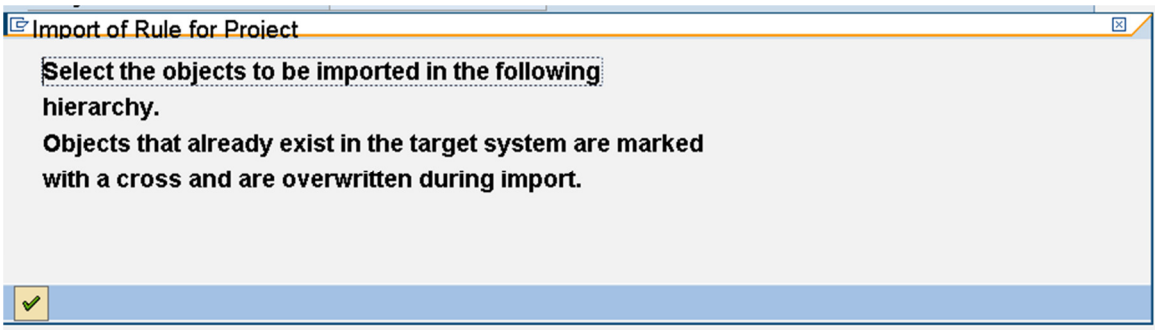

Figure 30 (Dialogue Box: *Import of Rule for Project*)

Click the continue button on the dialogue box. The next screen: *Importing Rules of a Project* appears; where you can select/deselect components of a *Project* as shown in figure 31:

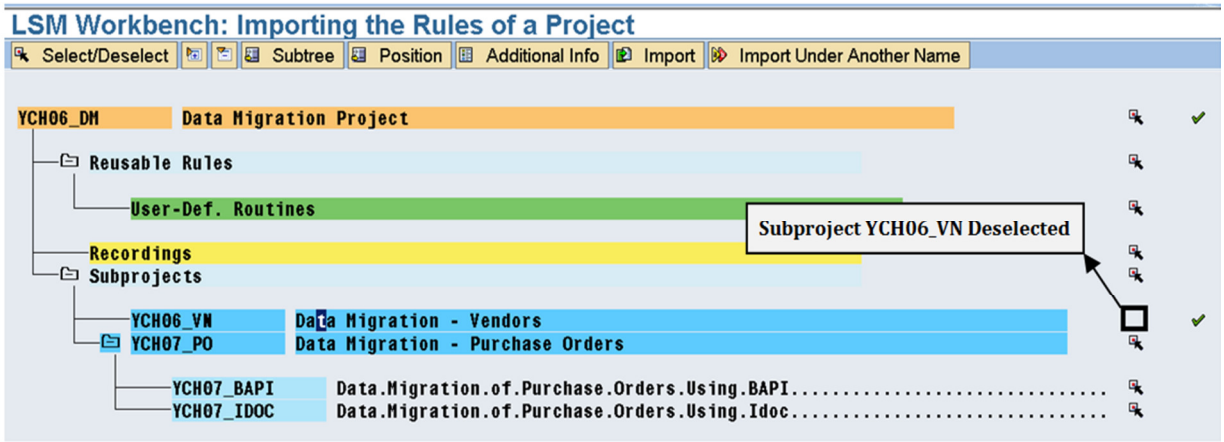

Figure 31 (Screen: *Importing the Rules of a Project*)

Deselect the *Subproject* YCH06_VN as marked in figure 31.

To import the selected components of a *Project*, in the present context, all the components except the *Subproject* YCH06_VN, click the *Import* button on the application tool bar – second button from the right. A successful import will pop up the information alert as shown in figure 32:

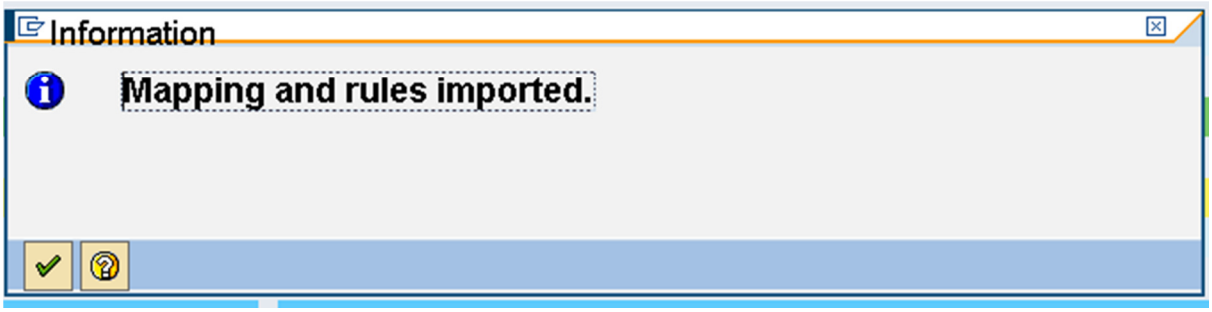

Figure 32 (Information Alert - Components of a *Project* Imported)

The selected components from the file LSMW_DM0_YCH06_DM_PO are imported into the *Project* YCH06_DM.

4. Conclusion

We hope you are able to upload all of the diverse objects from the E-Resource into your SAP systems and perform the exercises in the book quickly and effectively.