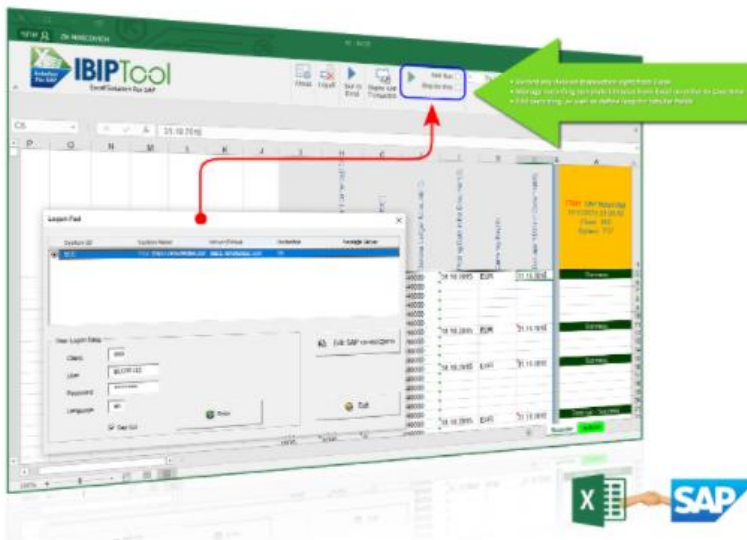


# IBIP Tool for SAP Training Guide



Deliver By

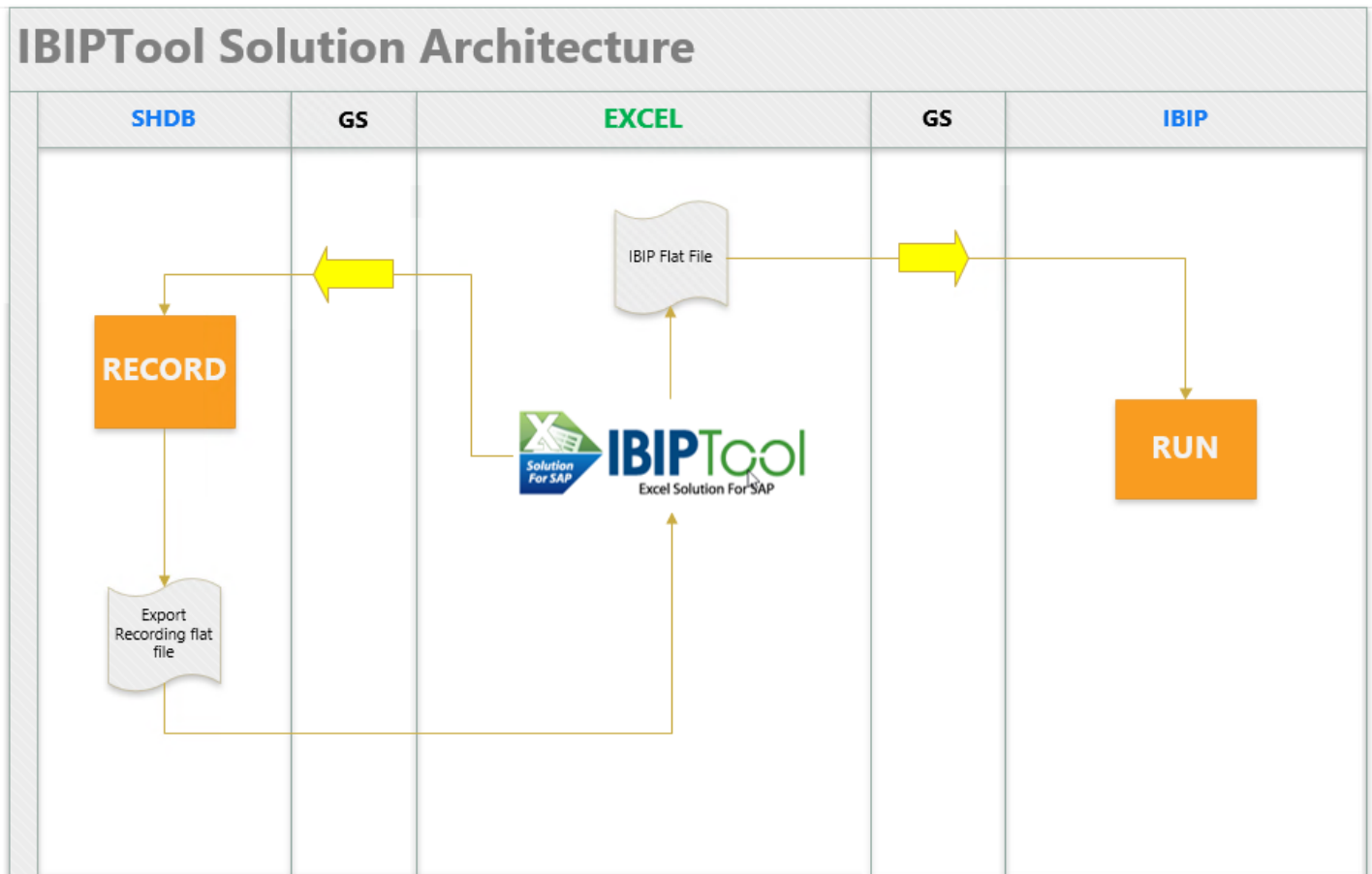


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# 1. IBIP Tool

Welcome to SY-Bright **IBIPTool** , Thank you for using SY-Bright IBIPTool , IBIPTool is a new simple tool SAP automation tool which does not require RFC Authorization . Primary function of the IBIPTool is to upload data from Excel to SAP.



Uploading Excel data to SAP Transaction is widely used. Some of the common tasks that IBIPTool can perform are :

- Uploading information to complex SAP transaction
- Templates management and much more
- Running several tasks one after another using same or separate dataset - thus executing a process. We strongly suggest that you start with Step-By-Step Tutorials

Transaction Tutorial - Introduction This Tutorial explains and walks you through basic concepts behind IBIPTool. IBIPTool can run almost any SAP R/3 transaction without any RFC Authorization using IBIP Transaction

We will take a simple example of updating material master in SAP. This example will help you understand steps involved in loading data from Excel to SAP R/3 transaction using IBIPTool. One has to perform following steps while working with IBIPTool:

- A. Decide what needs to be done. Decide which SAP transaction is most appropriate for given task.
- B. Prepare an Excel Spreadsheet “ Get ready with the data to upload.
- C. Show IBIPTool how to do it once - Record a sample transaction.
- D. Remove non required fields from the generated template
- E. Test run
- F. Production run

Once you understand the given example, you can run almost any SAP transaction using same method in IBIPTool. Also note that IBIPTool can execute transaction in any SAP modules.

For example, you may want to update material master, print an invoice, create transfer requirement, delete bills of material, change personnel record, etc. Once you broadly decide what you want to do, you then need to pin point what should happen within that transaction.

For an example, you need to change material master, further you need to decide which fields need to be update in which plant. You will also need to know exact SAP transaction code to perform this task. For example, let's presume that we have list of few hundred materials where we want to change Gross and Net weights in material master records in basic data view.

We will use SAP Transaction code MM02. Next Step Data File for Recording Data File for Upload It is presumed that you already know what you want to change and you already have all the required data in Excel file. If you do not have required data in Excel, you might want to work that out before you start.

## 1.1. Set up Step 1- Implement IBIP customer exit

The IBIP Tool Integrate Excel VBA with the IBIP transaction with SHDB and Gui Scripting

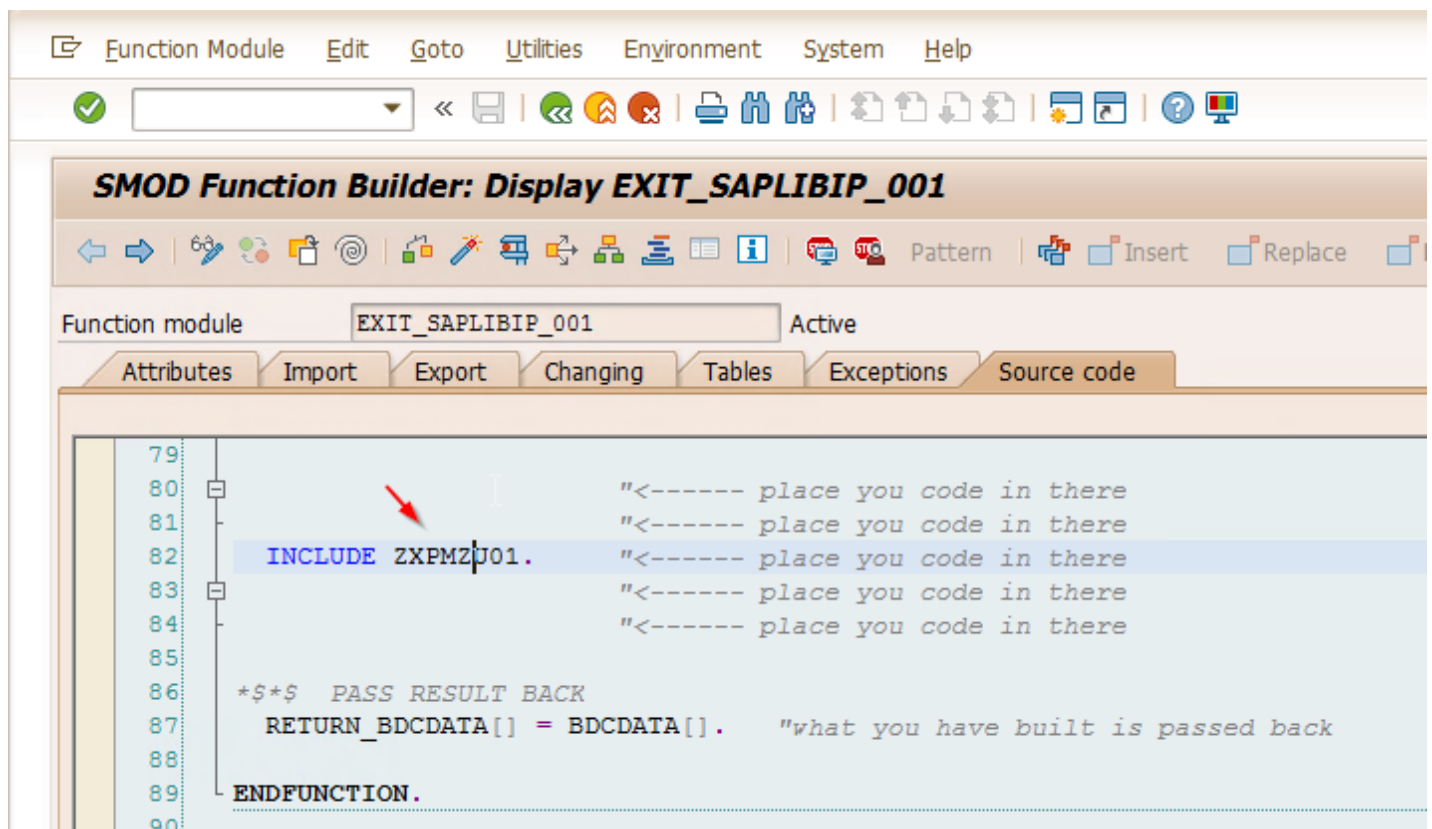
(See SAP help IBIP documentation:

*"if you want to use a transaction for data transfer which is not supported in IBIP, you can enter the coding for it in the customer exit. For this, read the customer exit documentation.*

*You also have the option of creating a program automatically for data transfer using the batch input recording tool (transaction SHDB). You can use this as a copy model for your coding in the customer exit."*)

Step 1- implement user exit IBIP ( transaction CMOD)

Step 2- implement following ABAP Code



**SMOD Function Builder: Display EXIT\_SAPLIBIP\_001**

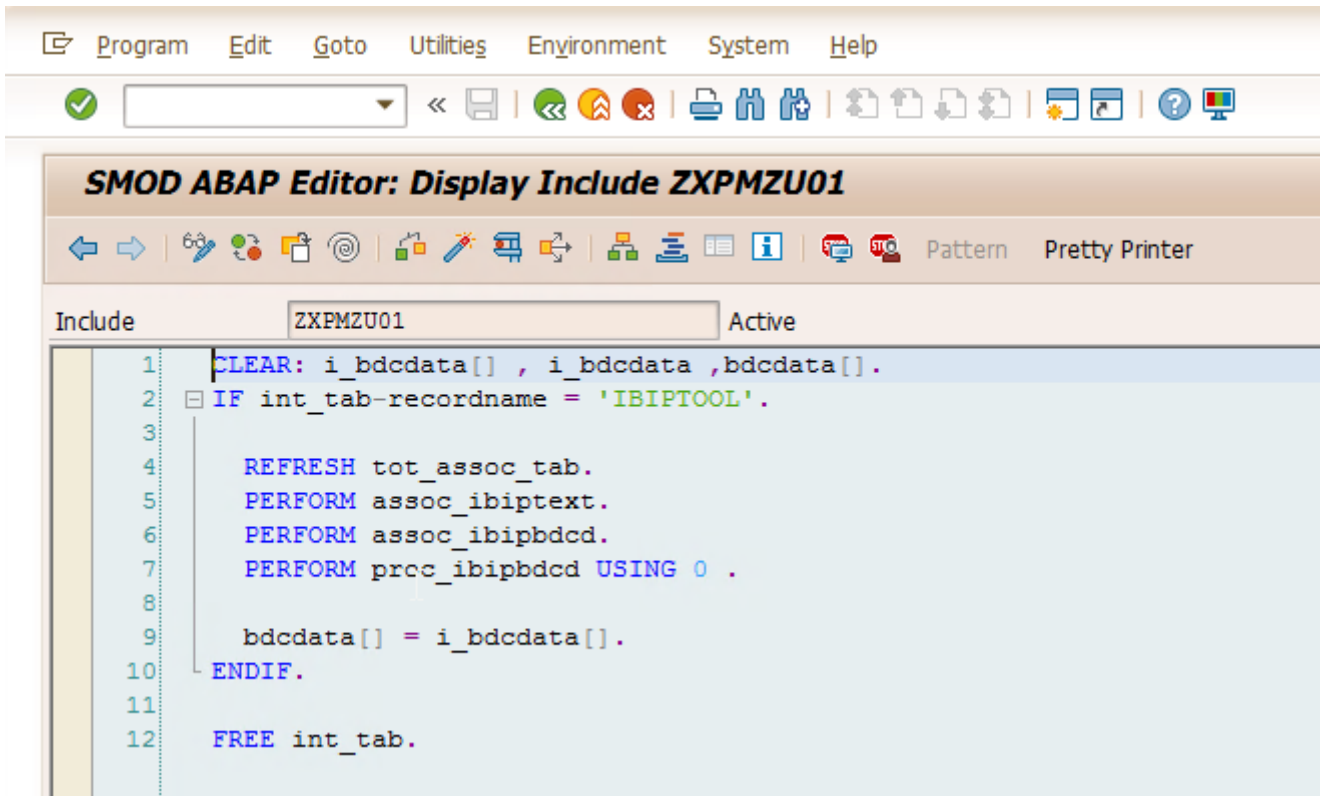
Function module: EXIT\_SAPLIBIP\_001 Active

Attributes Import Export Changing Tables Exceptions Source code

```

79
80
81
82  INCLUDE ZXPMZU01.
83
84
85
86  *$*$ PASS RESULT BACK
87  RETURN_BDCDATA[] = BDCDATA[] .    "what you have built is passed back
88
89  ENDFUNCTION.
90
  
```





```

*-----*
*& Include      ZXPMZU01
*-----*

CLEAR: i_bdcdata[] , i_bdcdata ,bdcdata[] .
IF int_tab-recordname = 'IBIPTOOL'.
  REFRESH tot_assoc_tab.
  PERFORM assoc_ibiptext.
  PERFORM assoc_ibipbdcd.
  PERFORM proc_ibipbdcd USING 0 .
  bdcdata[] = i_bdcdata[] .
ENDIF.
FREE int_tab.

```

## 1.2. Set up Step 2- Required SAP authorizations

- IBIP - Authorizations for transaction IBIP for data upload , step by step run ,background run , test run
- IBIPA - handling and IBIPA for log tracking and logging purpose and Error handling
- IB12 - Required for background / schedule jobs
- SHDB fro scripts Developer

**PFCG Display Role: Authorizations**

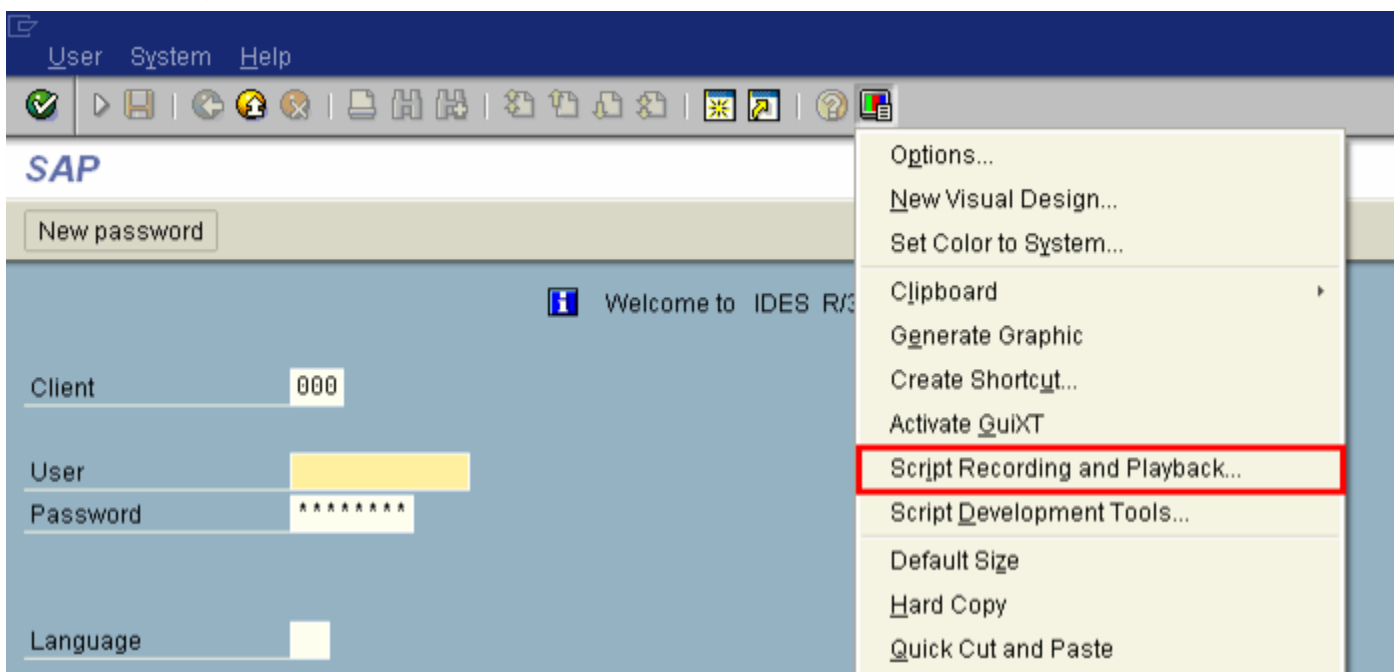
Maint. 3 unmaint. org. levels, 6 open fields, Status: Unchanged

MEK\_PM\_IBIP

- Standard Cross-application Authorization Objects AARB
  - Standard Transaction Code Check at Transaction Start S\_TCODE
    - Standard Transaction Code Check at Transaction Start T-EP57100800
      - Transaction Code IBIP, IBIPA
- Manually Basis - Central Functions BC\_Z
  - Manually Applications log S\_APPL\_LOG
    - Manually Applications log T-EP57100800
      - Activity 03
      - Application log: Object name ( IBIP, IBIPA
      - Application Log: Subobject
- Standard Plant Maintenance PM
- Standard Project System PS

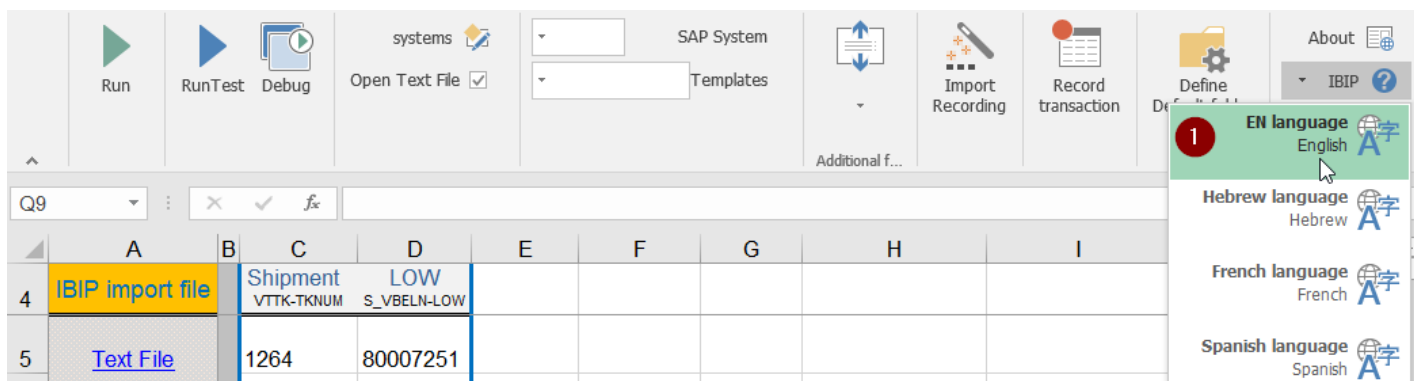
### 1.3. Set up Step 3 - GUI Scripting (Optional)

IBIPTool provides access to the SAP system using the SAP GUI Scripting mode , In order to use GUI Scripting, you SAP server must have enabled this option. Check if GUI Scripting is enabled or not, follow these simple step. Bring your SAP logon pad and click on any system that you want to perform this check. You do not need any logon information for this system. Once initial logon screen comes up, click on "Option" in you SAP GUI and check and see if you have "Scripting Recording and Playback" enabled or grayed out. Below is an example where GUI Scripting is enabled. You can use GUI Scripting process on this Open the Options dialog box from the main GUI screen.



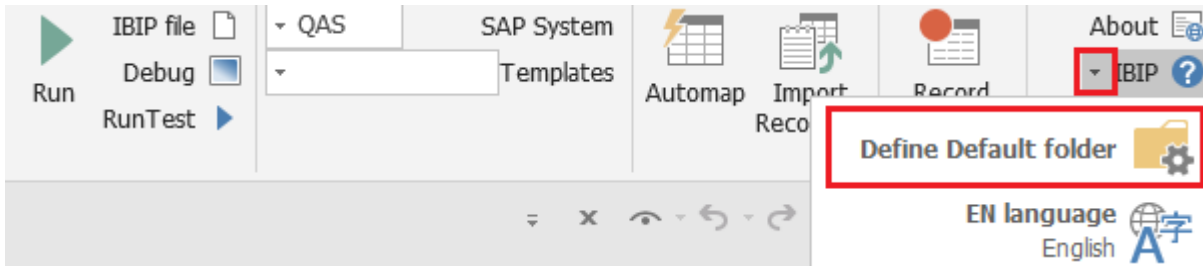
### 1.4. Set up Step 4 – Language Select

Select the required Ribbon language

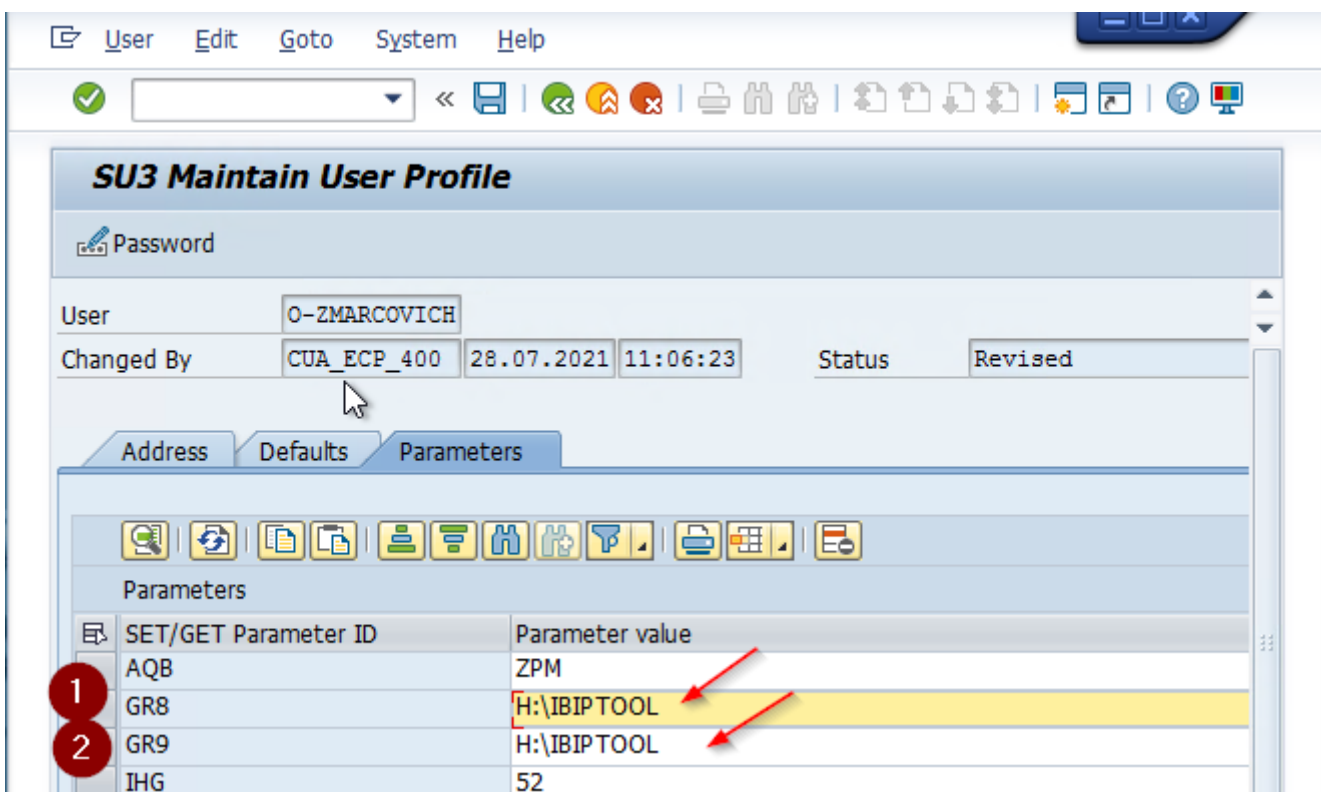




### 1.5. Set up Step 5 – Recording Default Folder

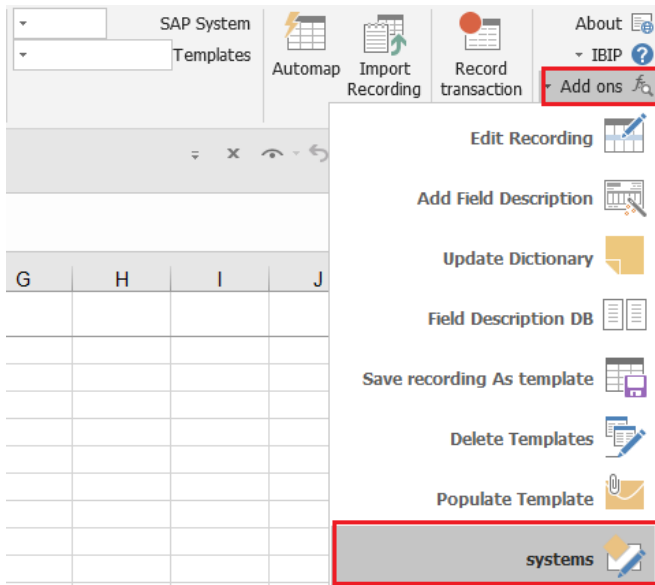


### 1.6. Set up Step 6 - SAP PARAMETR ID

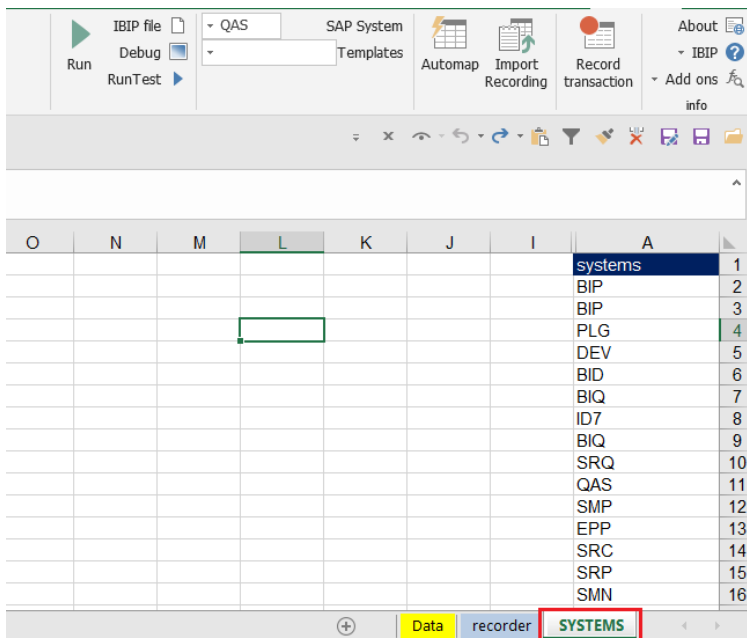


**SAP parameter ID** - update two parameter **GR8** and the **GR9** - the value of these parameters are defines in 3.2

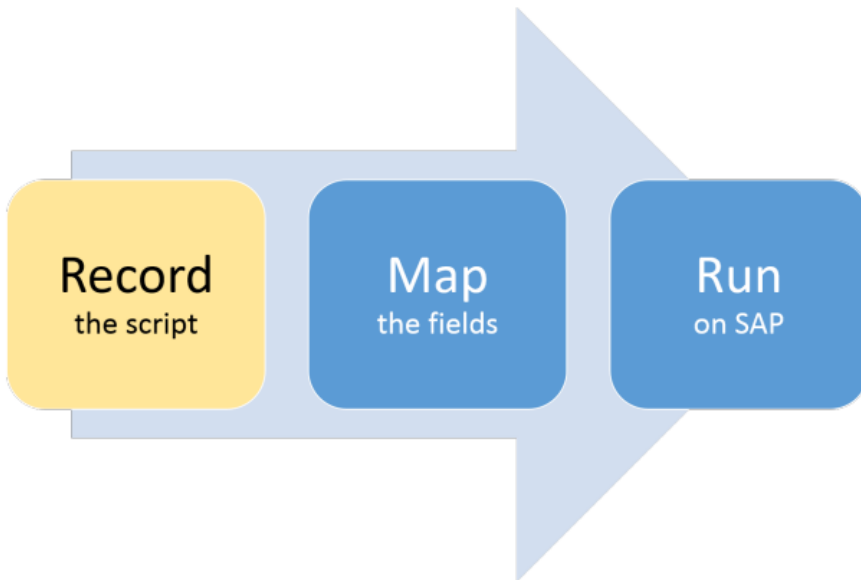
## 1.7. Set up Step 7 – System select



SAP system will be imported automatically ' it is possible to delete rows and keep just the required systems for use  
 it is possible also to change the order of the systems in Column A in the "SYSTEMS" worksheet sheet



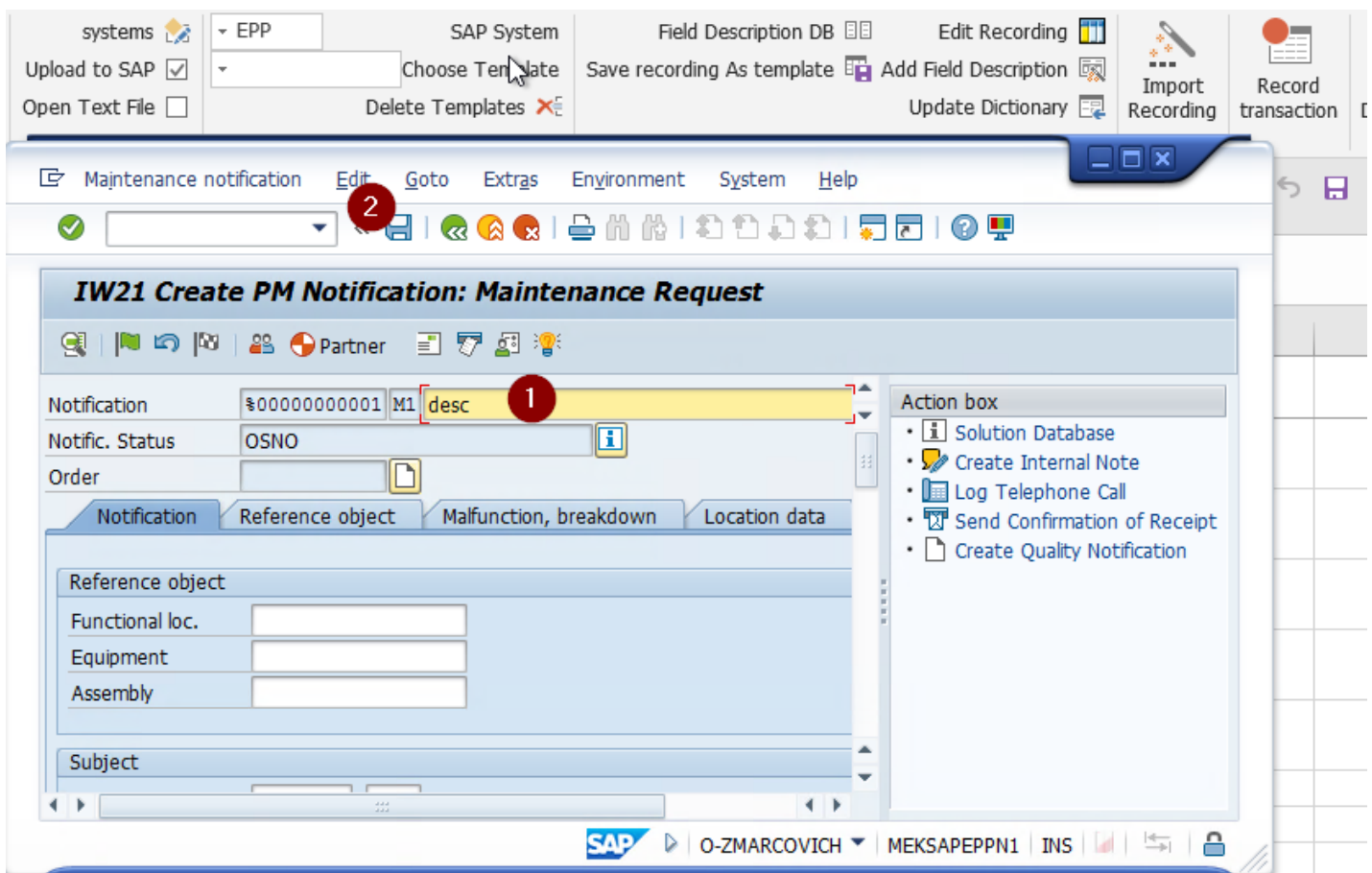
## 2. STEP A - Record scripts



A	B	C	J	K
IBIP import file		Shipment VTTK-TKNUM		
Text File		1264		
		1264		

## 2.1. Recording in SHDB

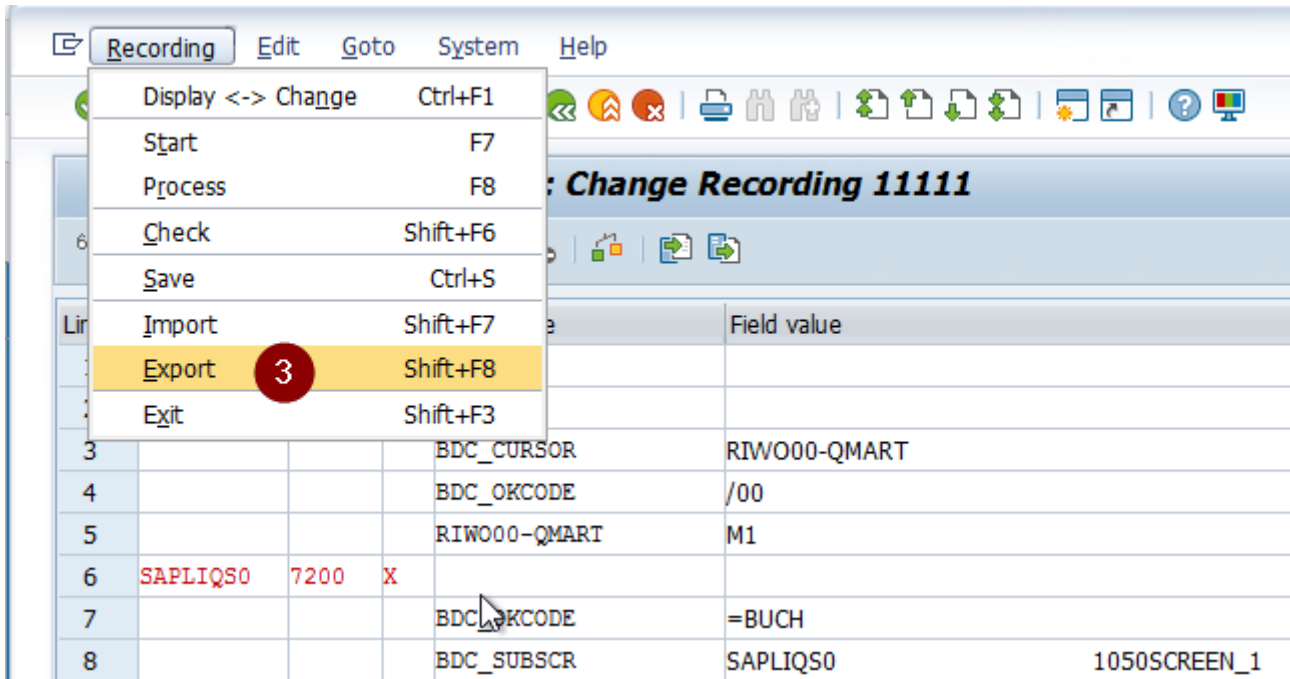
SHDB records each screen you go to and each field you change. It also captures actual data you enter into the SAP transaction. This all happens in your familiar SAP GUI. This process is called recording. Once recording is complete in SAP GUI and the recording file is exported to the default folder, After you Return back to IBIPTool and import this recording, the recording information will wukk automatically crate template in the "recorder" sheet



### Hints:

1. SAP GUI displays “Recording running..... “ at bottom left corner of the screen as you execute the transaction. You will see this progress bar throughout you execution of the transaction.
2. It is important not to make any mistake while executing recording, as IBIPTool will run this transaction exactly the way you record. For this reason, In case of any mistake, exit out of the transactions and restart the recording from “New Wizard” again.

3. The best practice is to check transaction and test data in target system, before you start recording. This will ensure that your recording of the test transaction will go without any issue.

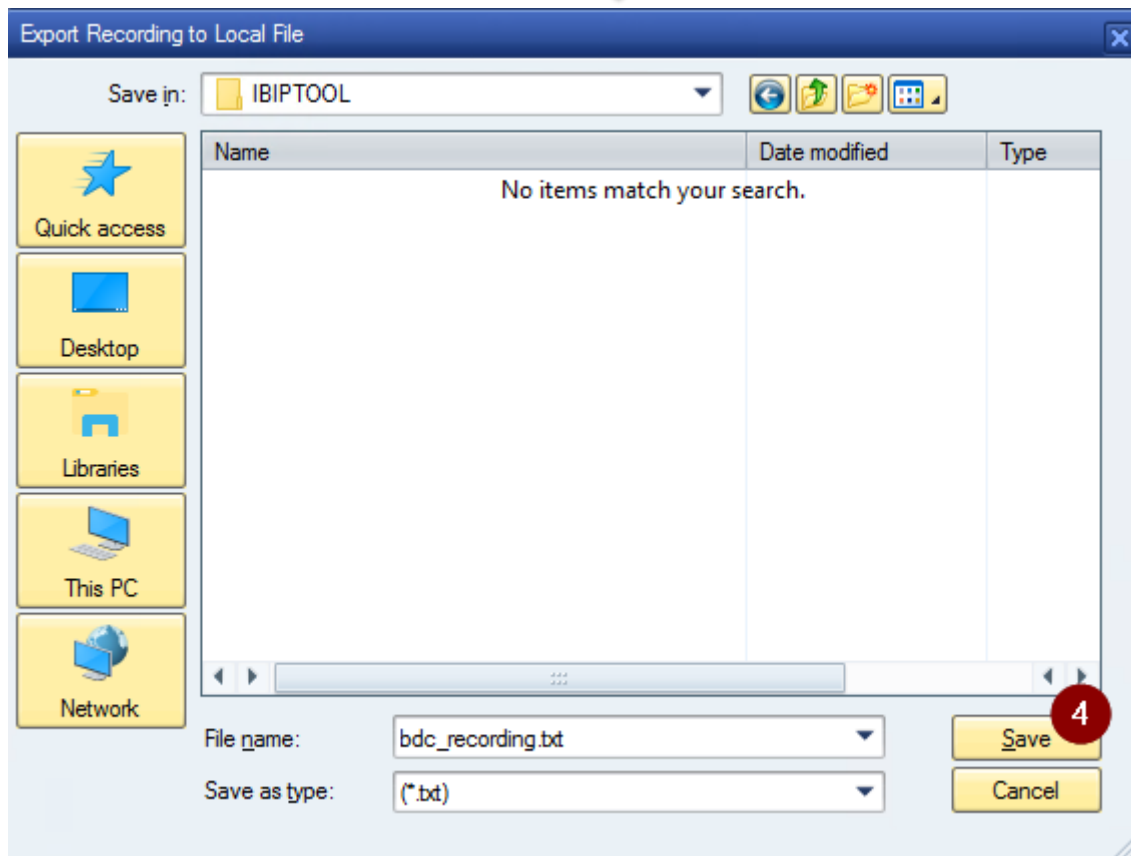


The screenshot shows the 'Recording' menu in the IBIPTool application. The menu items and their keyboard shortcuts are:

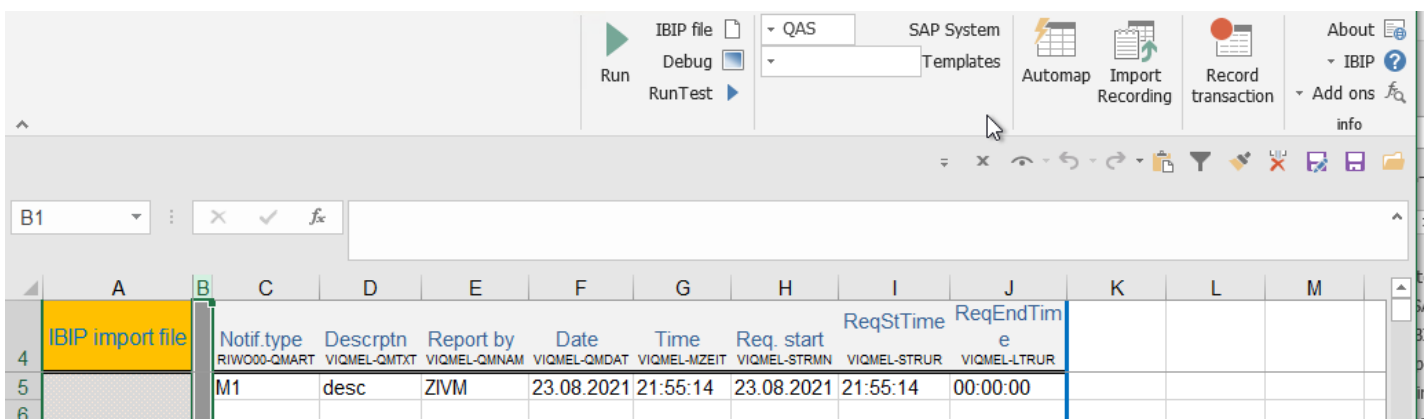
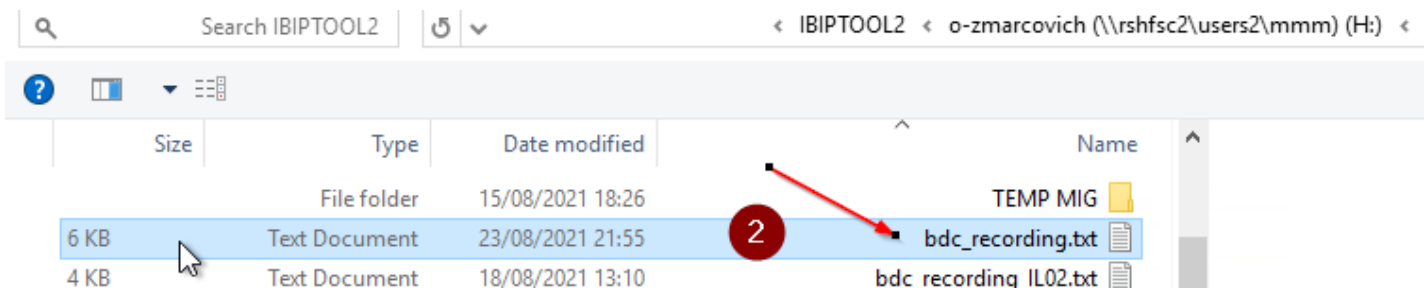
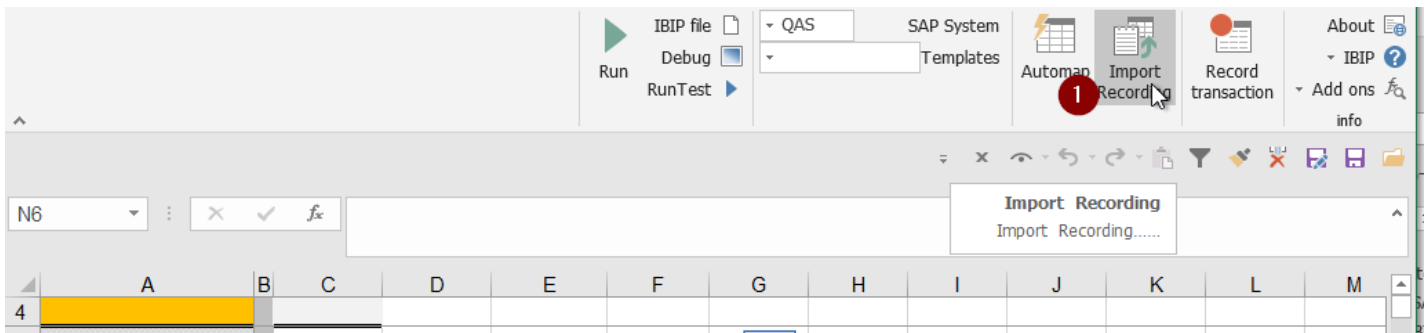
- Display <-> Change: Ctrl+F1
- Start: F7
- Process: F8
- Check: Shift+F6
- Save: Ctrl+S
- Import: Shift+F7
- Export: Shift+F8** (highlighted with a red circle containing the number 3)
- Exit: Shift+F3

The background shows a table titled 'Change Recording 1111' with the following data:

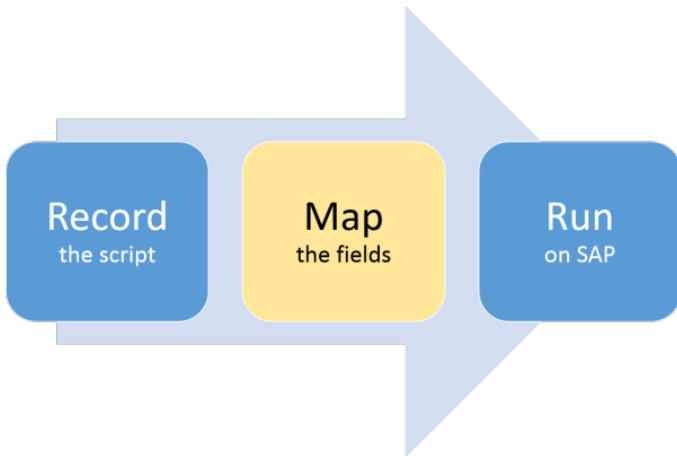
Line	Field name	Field value
3	BDC_CURSOR	RIW000-QMART
4	BDC_OKCODE	/00
5	RIW000-QMART	M1
6	SAPLIQSO	7200 X
7	BDC_OKCODE	=BUCH
8	BDC_SUBSCR	SAPLIQSO 1050SCREEN_1

The screenshot shows the 'Export Recording to Local File' dialog box. The 'Save in' field is set to 'IBIPTOOL'. The file name is 'bdc\_recording.txt' and the save as type is '\*.txt'. The 'Save' button is highlighted with a red circle containing the number 4.



### 3. STEP B - Template prepare



#### 3.1. Delete Non required Columns(Fields) – Option 1

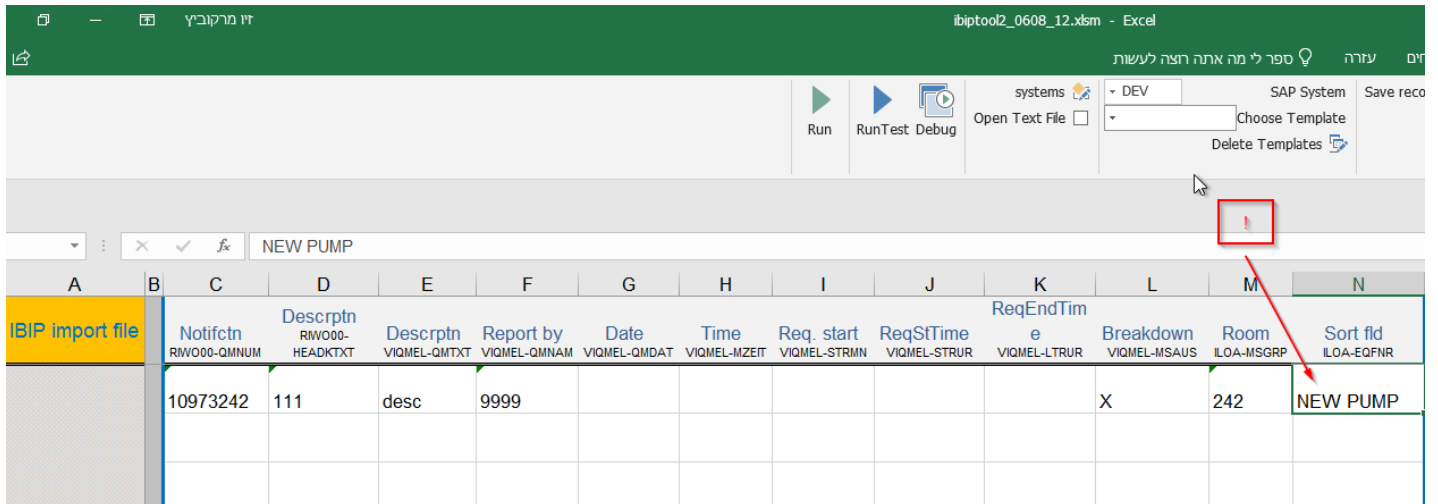
	A	B	C	D	E	F	G	H	I	J	K	L	M
4	IBIP import file	Notif.type RIW000-QMART	Descrptn VIQMEL-QMTXT	Report by VIQMEL-QMNAM		Date VIQMEL-QMDAT	Time VIQMEL-MZEIT	Req. start VIQMEL-STRMN	ReqStTime VIQMEL-STRUR	ReqEndTime VIQMEL-LTRUR			
5		M1	desc	ZIVM		23.08.2021	21:55:14	23.08.2021	21:55:14	00:00:00			



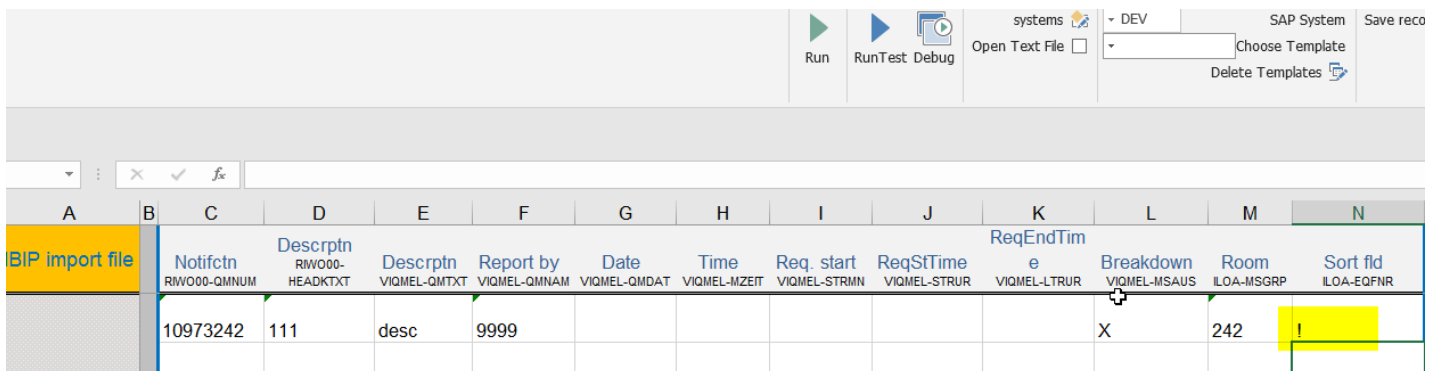
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
4	IBIP import file	Notif.type RIW000-QMART	Descrptn VIQMEL-QMTXT	Report by VIQMEL-QMNAM										
5		M1	desc	ZIVM										

### 3.2. Clear or Reset Non required fields – Option 2

If content of fields in the excel are empty from content then these fields are excluded from the update process , if it required to clear the field value , use the char "!"



IBIP import file	Notifctn RWO00-QMNUM	Descrptn RWO00-HEADKTX	Descrptn VIQEL-QMTXT	Report by VIQEL-QMNAM	Date VIQEL-QMDAT	Time VIQEL-MZEIT	Req. start VIQEL-STRMN	ReqStTime VIQEL-STRUR	ReqEndTime VIQEL-LTRUR	Breakdown VIQEL-MSAUS	Room ILOA-MSGRP	Sort fld ILOA-EQFNR
	10973242	111	desc	9999						X	242	NEW PUMP



IBIP import file	Notifctn RWO00-QMNUM	Descrptn RWO00-HEADKTX	Descrptn VIQEL-QMTXT	Report by VIQEL-QMNAM	Date VIQEL-QMDAT	Time VIQEL-MZEIT	Req. start VIQEL-STRMN	ReqStTime VIQEL-STRUR	ReqEndTime VIQEL-LTRUR	Breakdown VIQEL-MSAUS	Room ILOA-MSGRP	Sort fld ILOA-EQFNR
	10973242	111	desc	9999						X	242	!

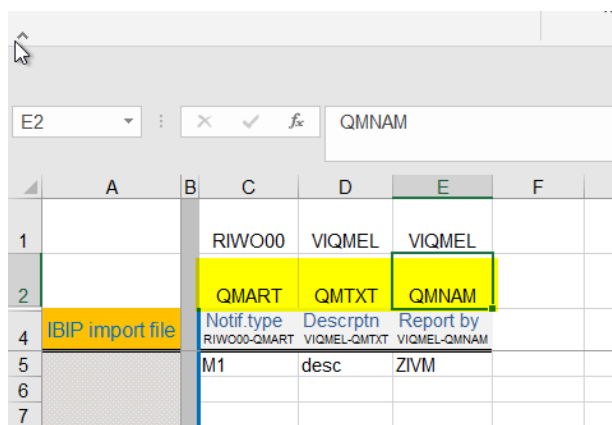
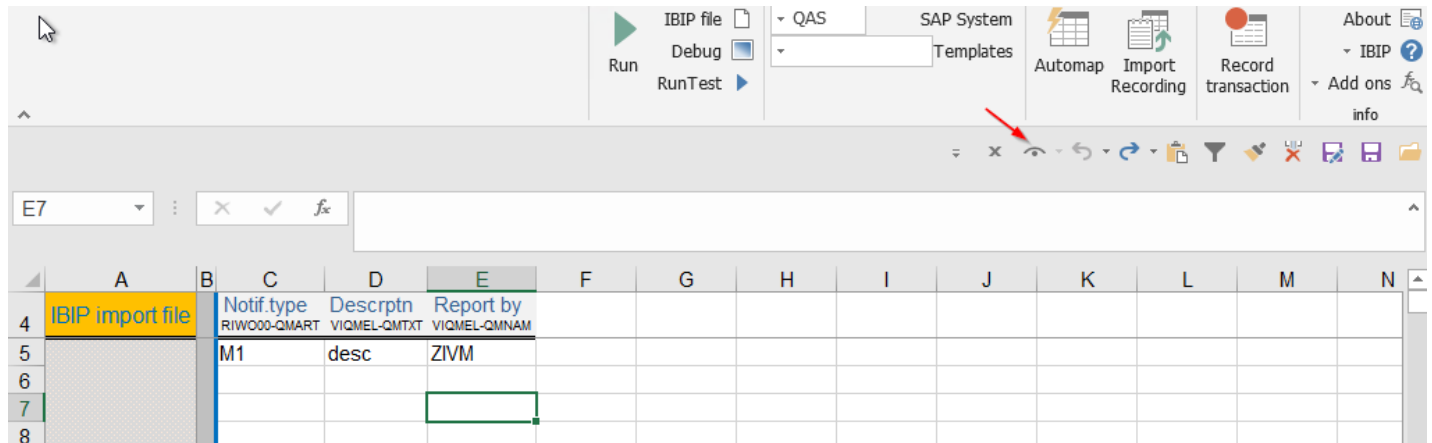


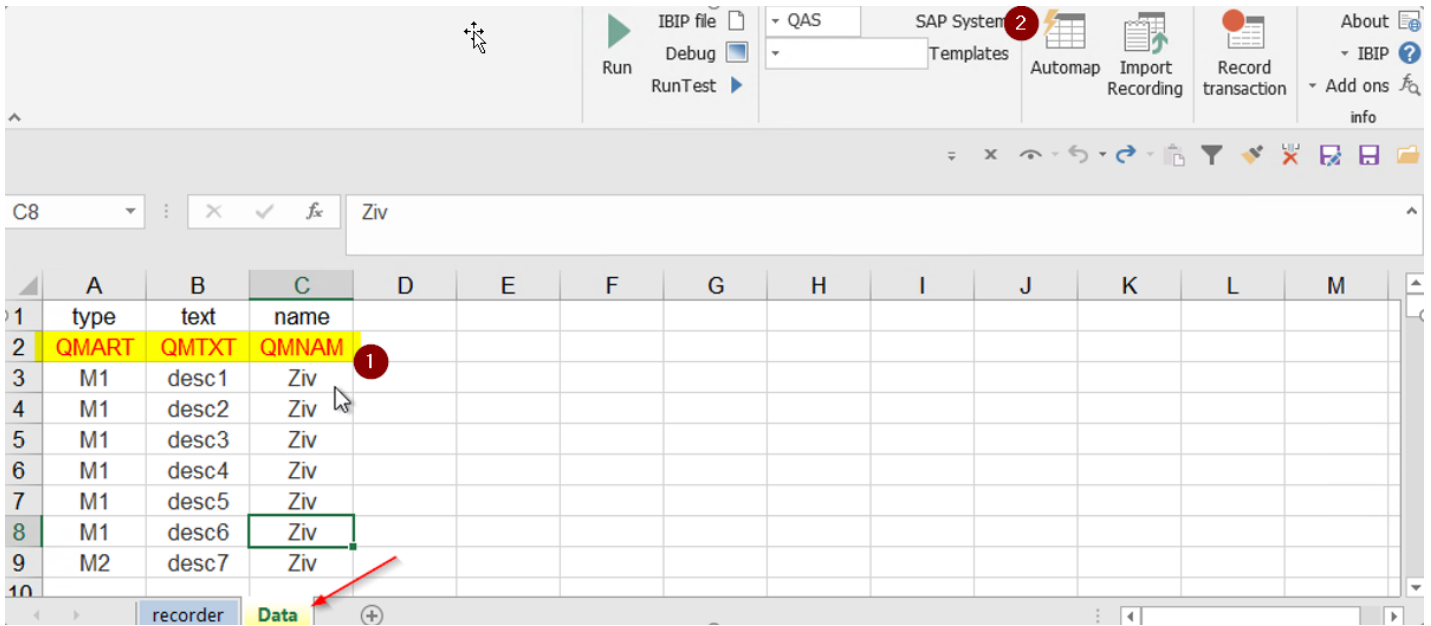
### 3.3. Automap – Optional

The button copy paste data from another sheet to the "recorder" sheet

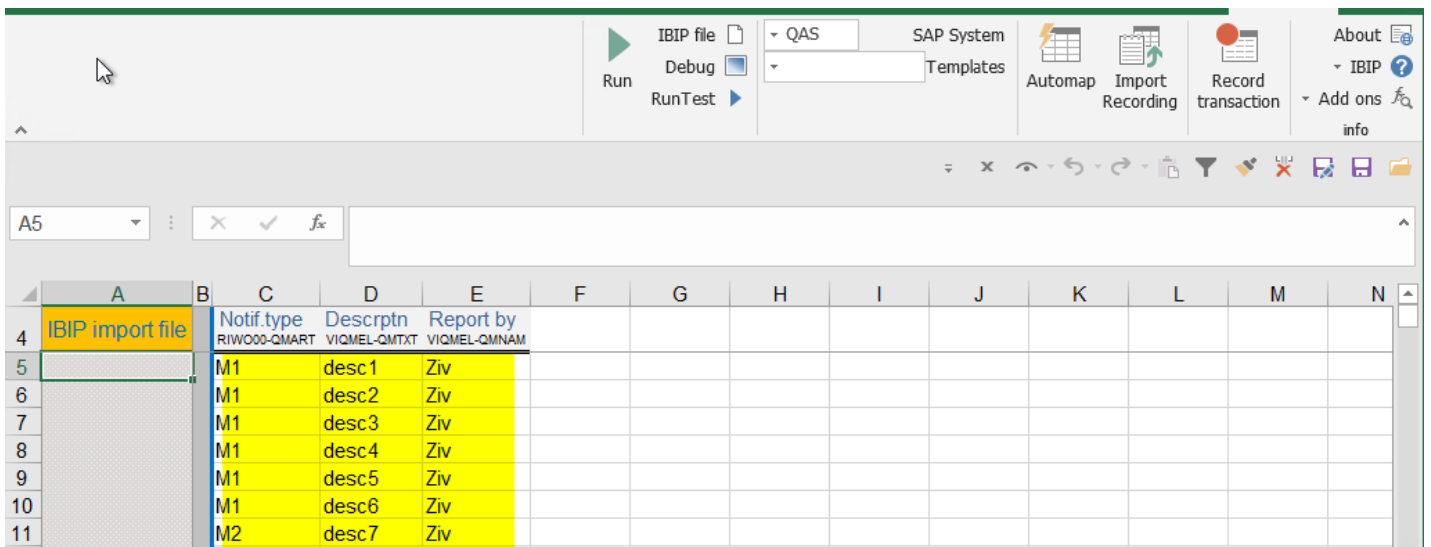
it required 2 lines header which require to be full , one of them should be

filled with the technical name of the field , The Technical field name is at row 2 ( It visible after using the "eye" button )

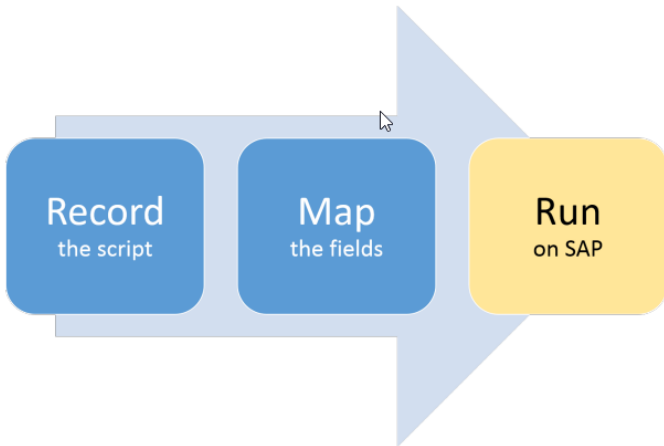




The data is filled automatically in the recorder sheet , if filed is not found in the recorder sheet then this field header at the data sheet will be marked in color .



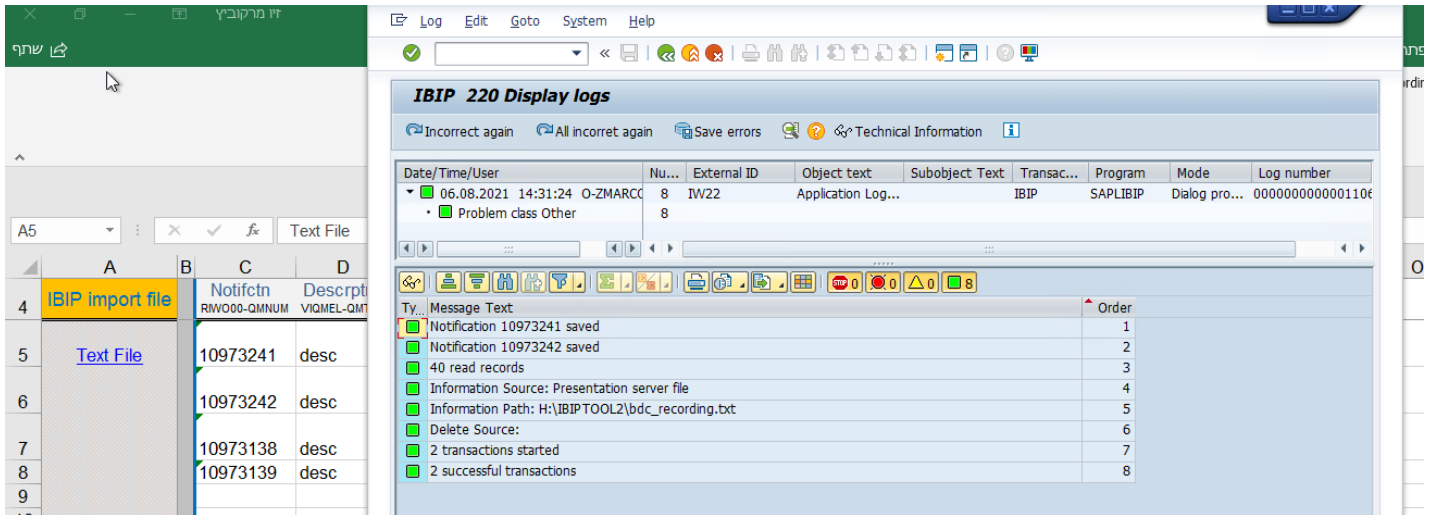
## 4. STEP C : Run



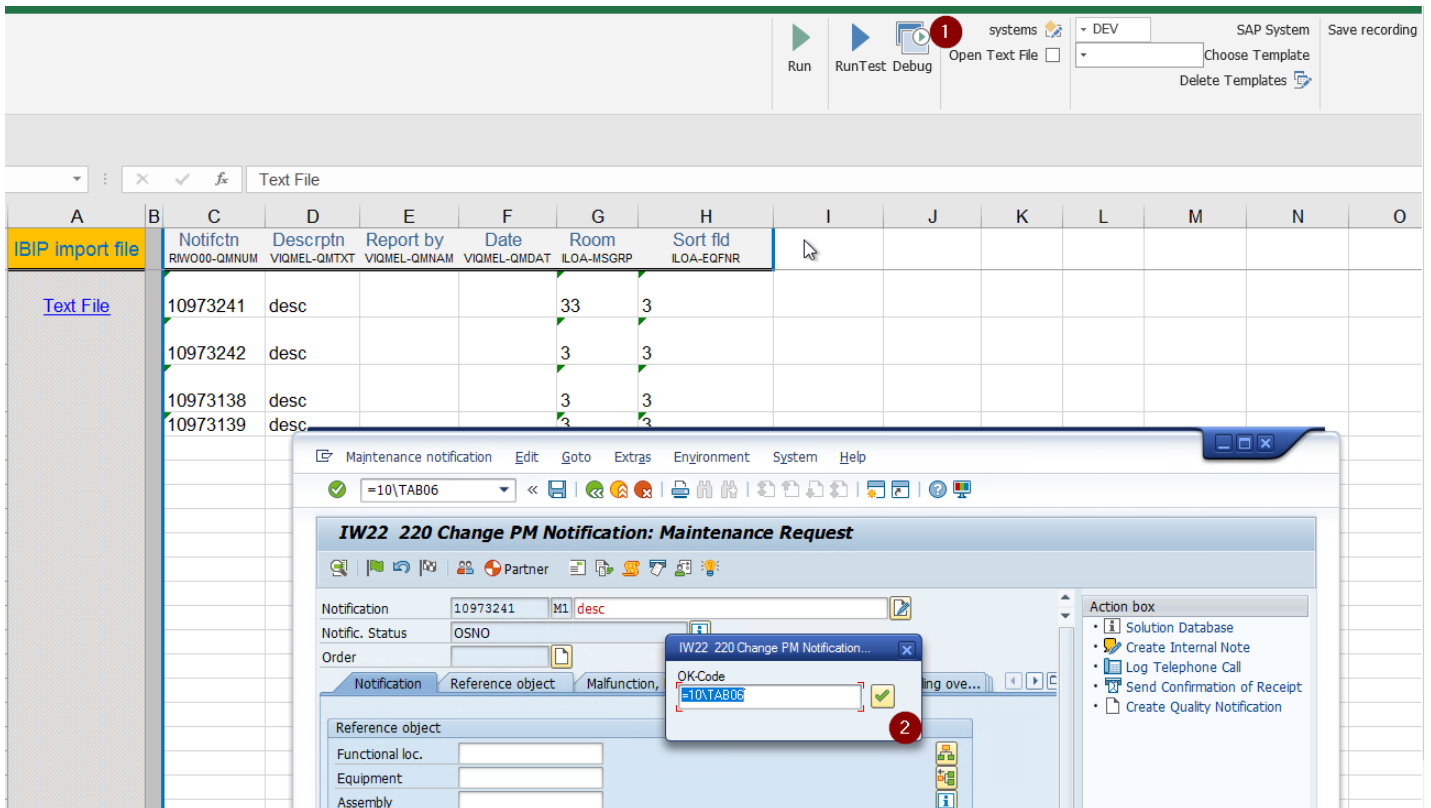
- Choose the required SAP system
- Open SAP session in this system before start .
- Selecte the require rows to be run ( if non of the row selected the all the rows will be executed )  
 this is usfull especisly fro error handleing of it is require dto run again only specific row
- Press on "run" button

	A	B	C	D	E	F	G	H	I	J	K	L	M
4	IBIP import file	Notif.type	Descrptn	Report by									
		RIW000-QMART	VIQMEL-QMXTX	VIQMEL-QMNAM									
5		M1	desc1	Ziv									
6		M1	desc2	Ziv									
7		M1	desc3	Ziv									
8		M1	desc4	Ziv									
9		M1	desc5	Ziv									
10		M1	desc6	Ziv									
11		M2	desc7	Ziv									





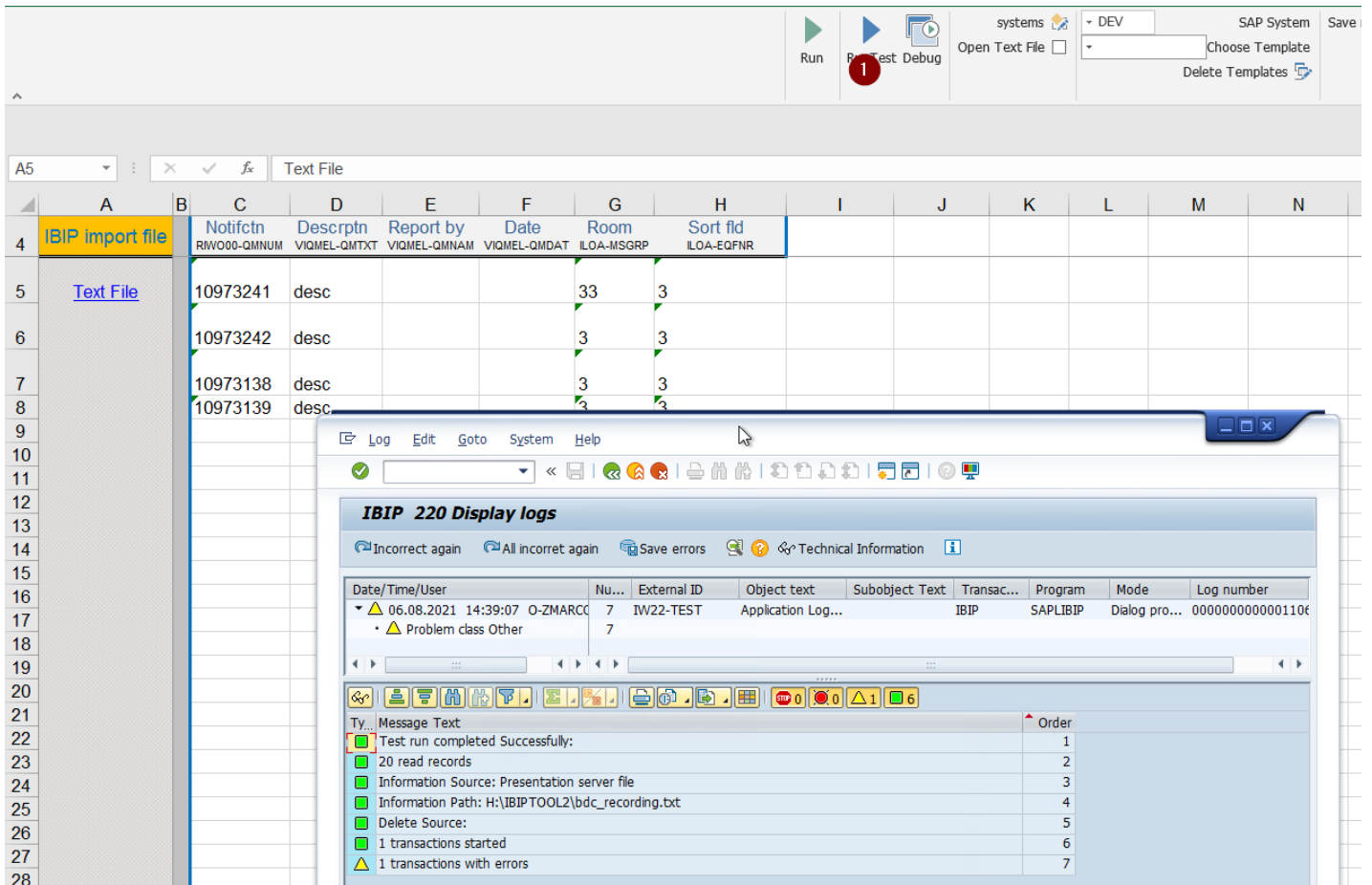
## 4.1. Debug Run



The debug option displays each recording step so it is possible to capture which value is updated step by step.

to continue press enter in the small popup window which show the function code for each screen In order to exit the processing enter in the popup window "/NIBIP"

## 4.2. Test Run

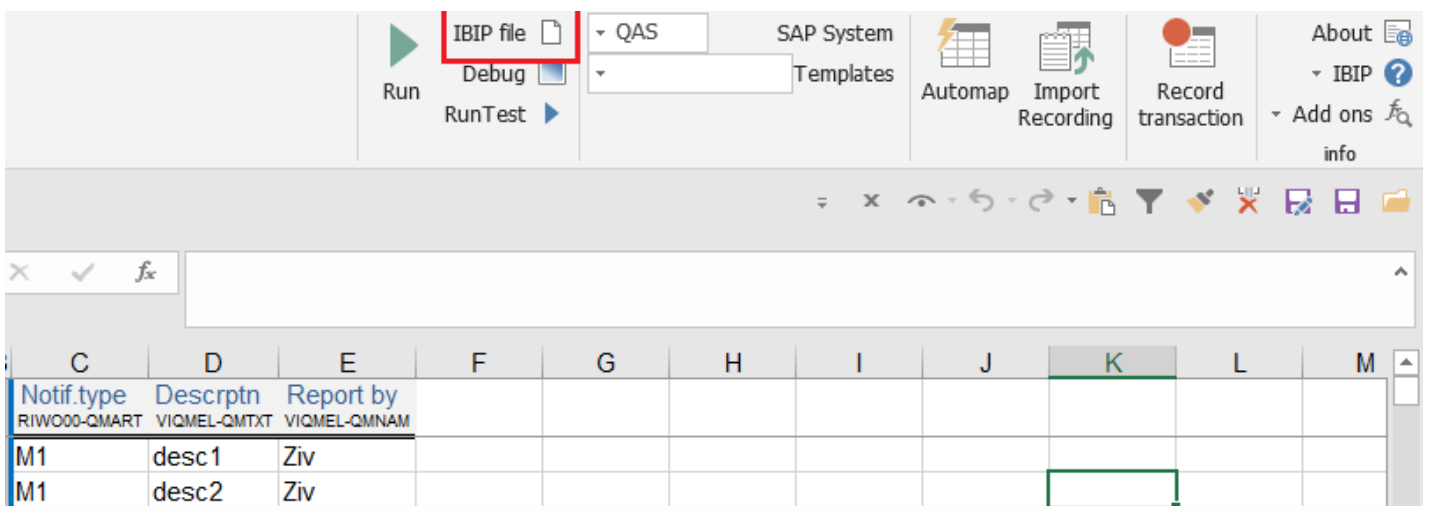


Date/Time/User	Nu...	External ID	Object text	Subsubject Text	Transac...	Program	Mode	Log number
06.08.2021 14:39:07 O-ZMARCC	7	IW22-TEST	Application Log...		IBIP	SAPLIBIP	Dialog pro...	000000000001106
<ul style="list-style-type: none"> <li>Problem class Other</li> </ul>								
Ty... Message Text								
Test run completed Successfully:								Order
20 read records								1
Information Source: Presentation server file								2
Information Path: H:\IBIP\TOOL2\bdc_recording.txt								3
Delete Source:								4
1 transactions started								5
1 transactions with errors								6

If enh. is done by (8.1) the result will be green message .

An alternative is to filter from the ALV the word "TESTRUN" which indicate Test run completed Successfully

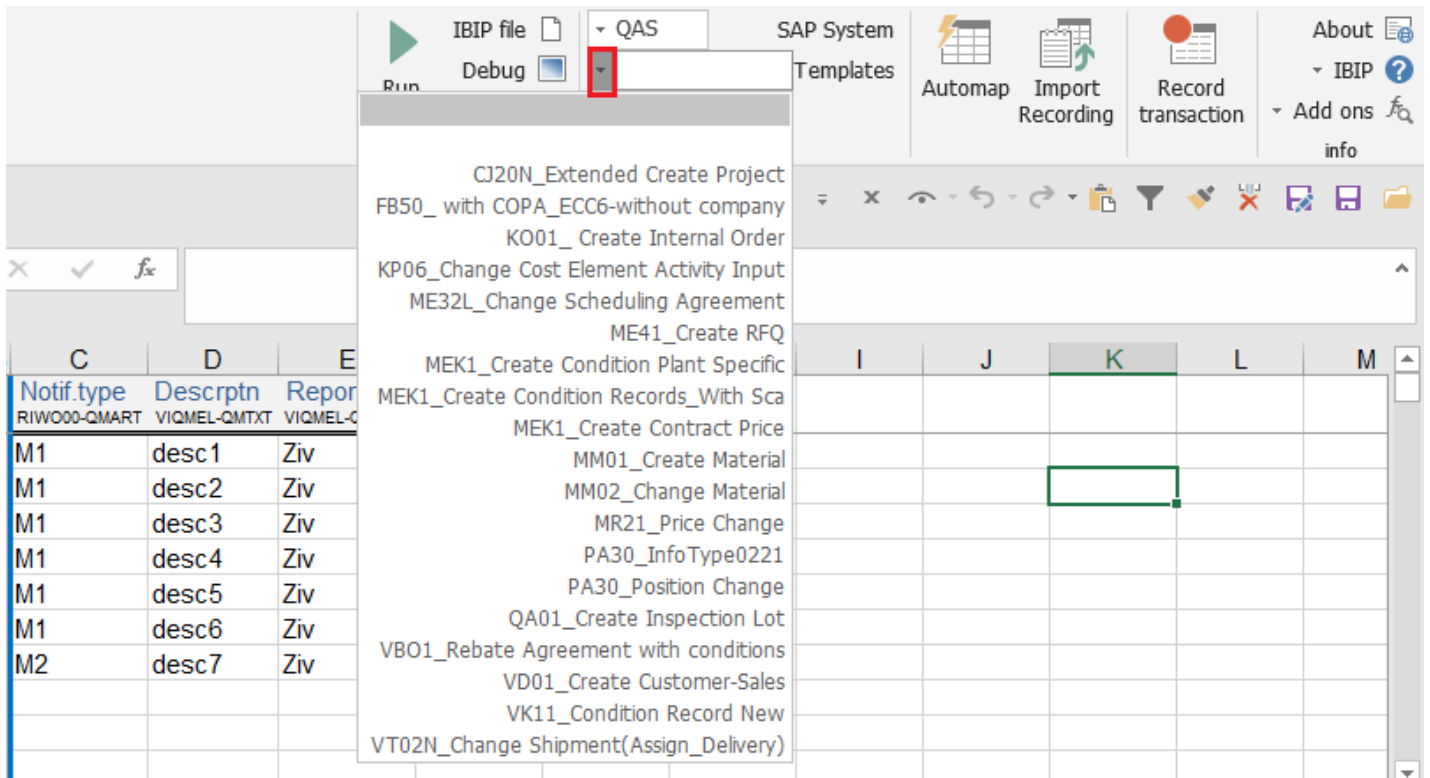
## 4.3. IBIP File



Notif.type	Descrptn	Report by
RIW000-QMART	VIQMEL-QMTXT	VIQMEL-QMNAM
M1	desc1	Ziv
M1	desc2	Ziv

## 5. -----Additional functions -----

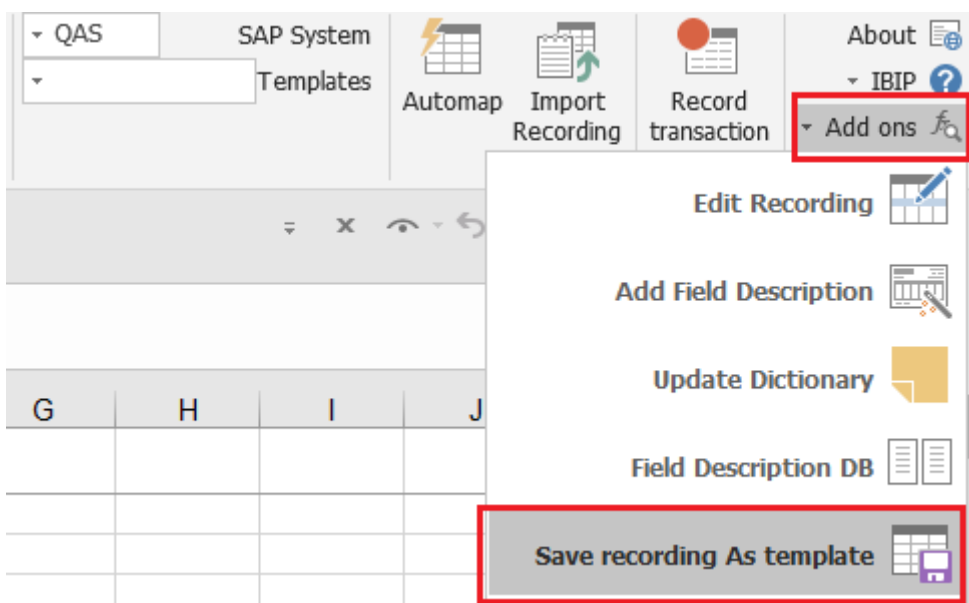
### 5.1. Choose existing template



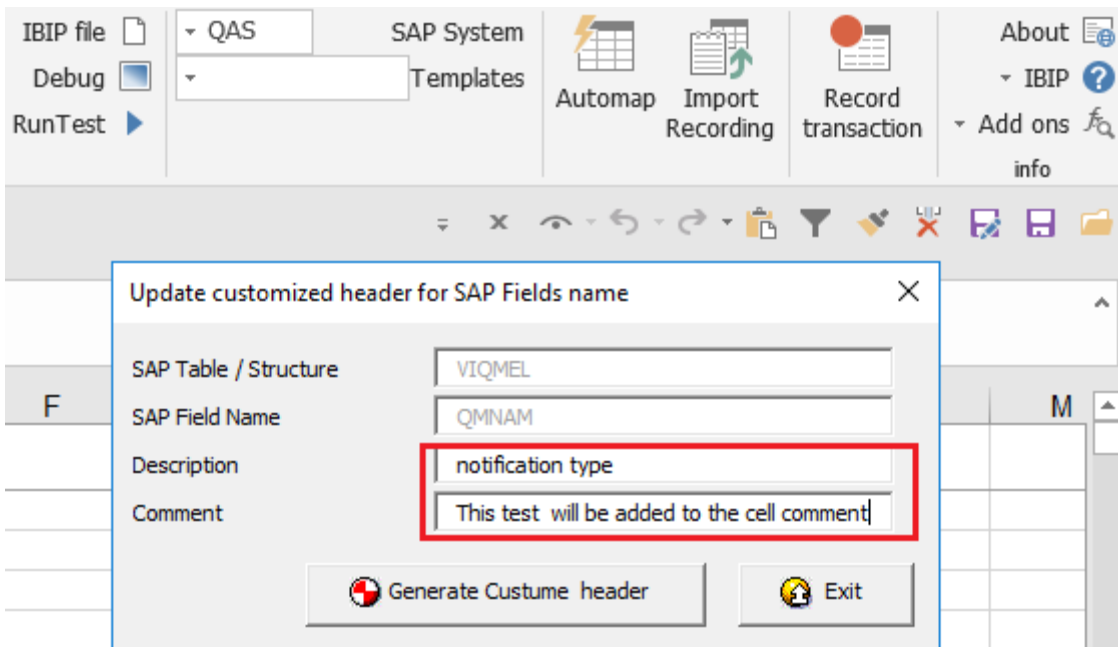
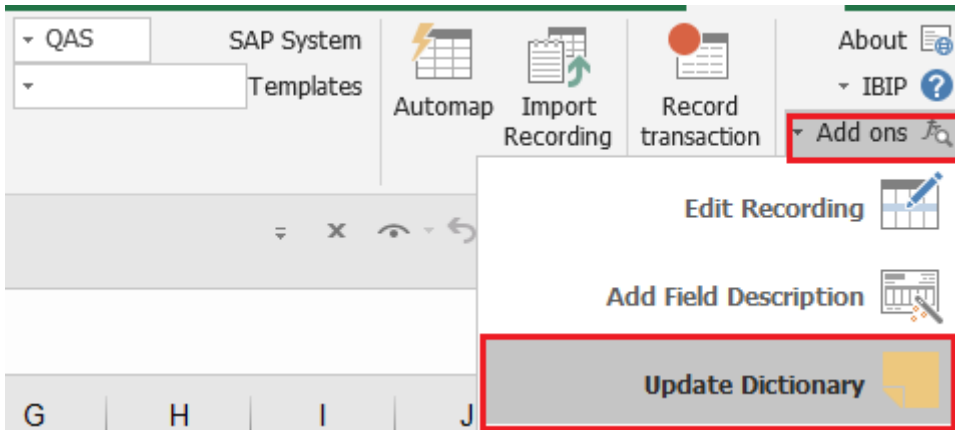
Notif.type	Descrptn	Report
M1	desc1	Ziv
M1	desc2	Ziv
M1	desc3	Ziv
M1	desc4	Ziv
M1	desc5	Ziv
M1	desc6	Ziv
M2	desc7	Ziv

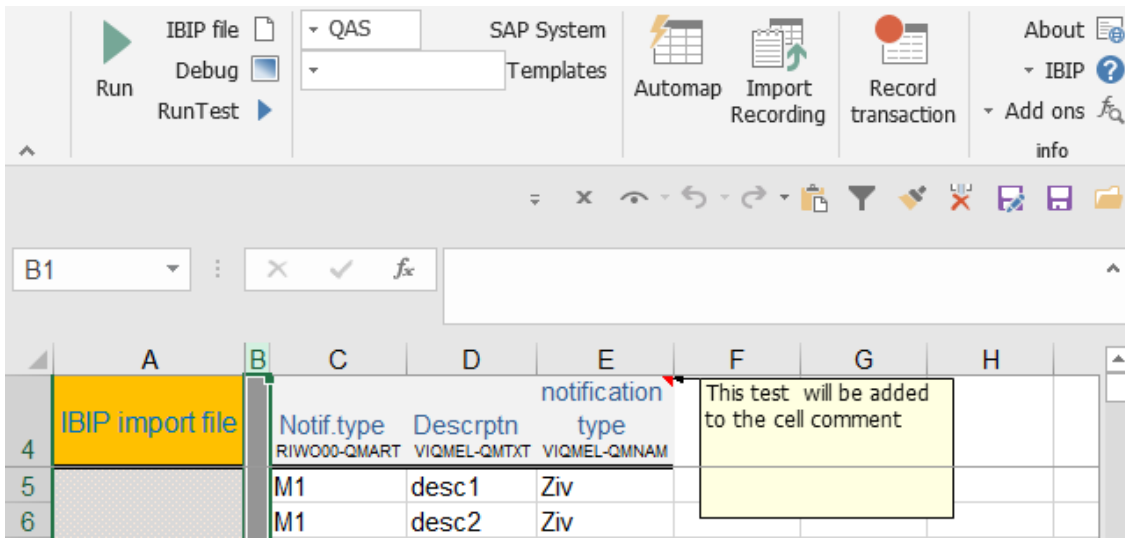
## 6. Template management

### 6.1. Save as template

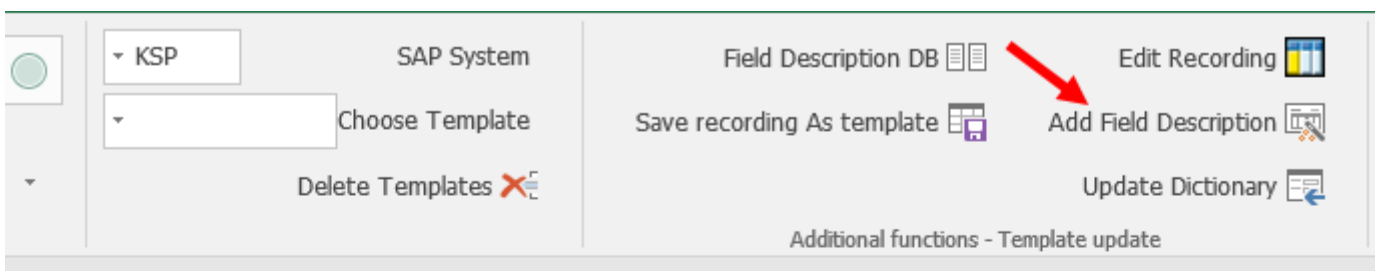


## 6.1. Add local description and comment - Optional





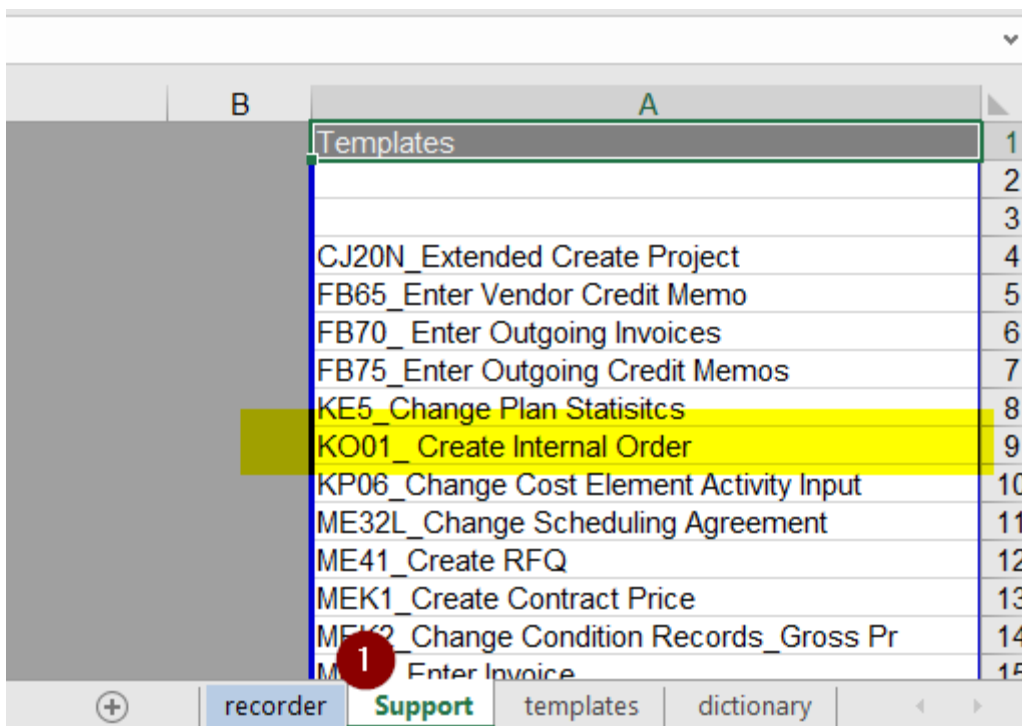
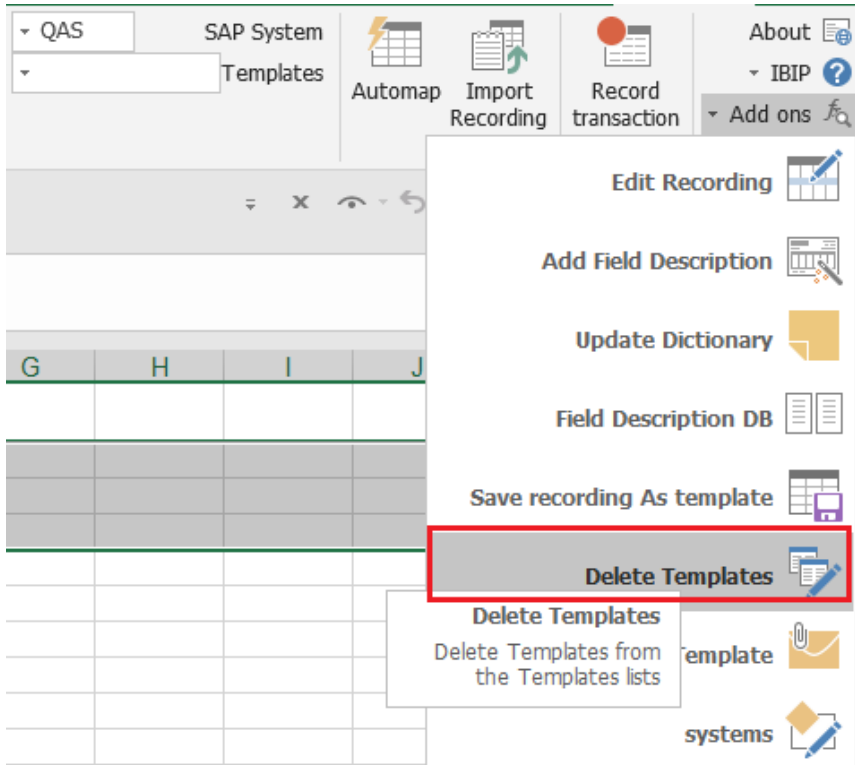
## 6.2. Load description from file – Optional



D	E	F	G	H	I	J
Description COAS-KTEXT	Company Code COAS-BUKRS	Business Area COAS-GSBER	Object Class COAS-SCOPE	Profit Center COAS-PRCTR	cost cntr COAS- KOSTV	Req.cost center COAS-AKSTL
Prototype Production Order	1000	1	PRODT	1000	1000	1000



### 6.3. Templates delete



Delete the required template from the "**support**"(1) sheet and then delete the required lines for the "**template**" sheet(2)

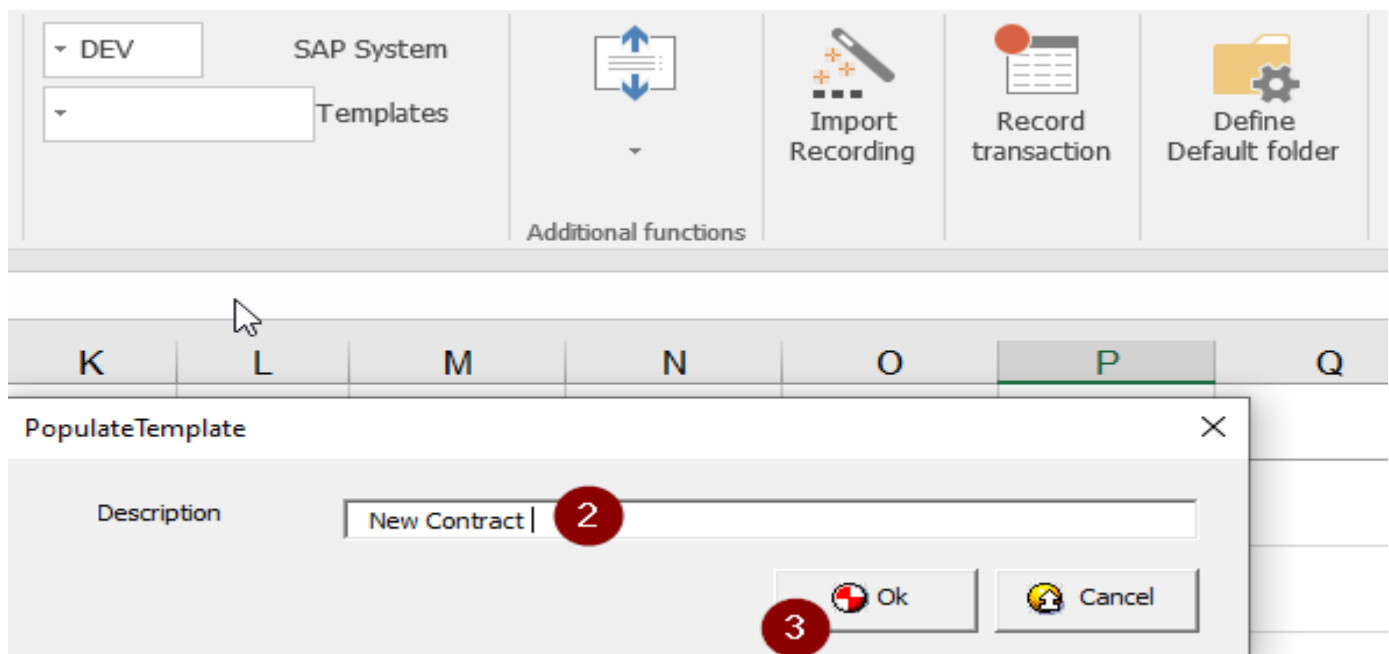
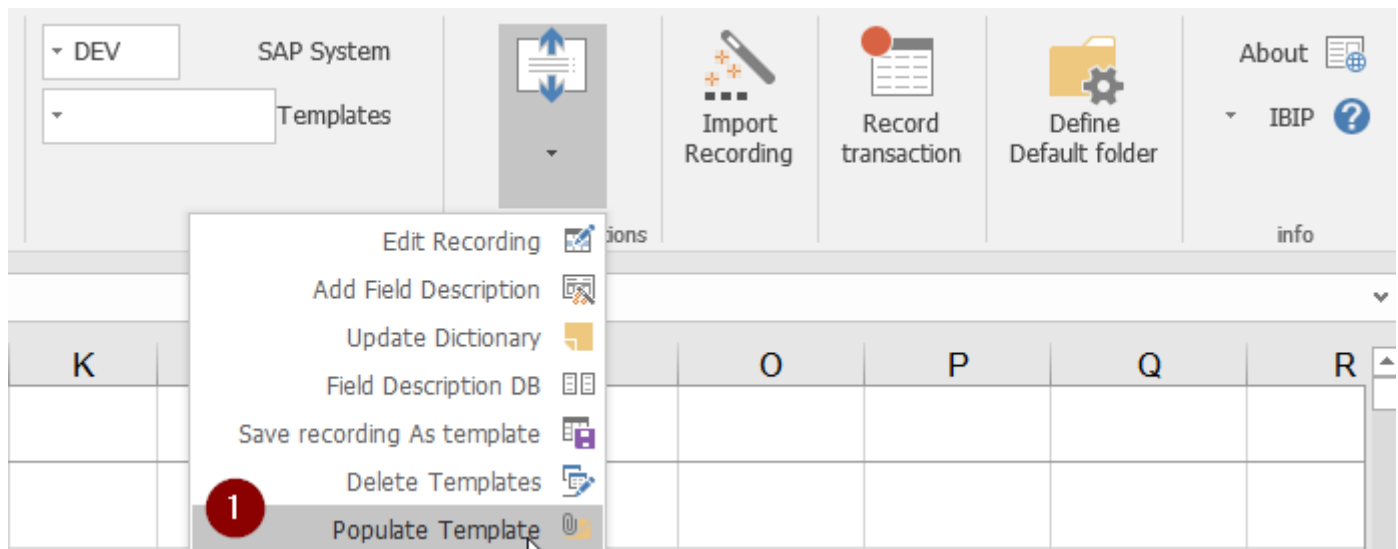
Internal Order

D	C	B	A	
X	1000	SAPLKPP0	KE5_Change Plan Statisitcs	1517
	0		KE5_Change Plan Statisitcs	1518
	0		KE5_Change Plan Statisitcs	1519
T			KO01_ Create Internal Order	1520
X	100	SAPMKAUF	KO01_ Create Internal Order	1521
	0		KO01_ Create Internal Order	1522
	0		KO01_ Create Internal Order	1523
	0		KO01_ Create Internal Order	1524
X	300	SAPLSPO4	KO01_ Create Internal Order	1525
	0		KO01_ Create Internal Order	1526
	0		KO01_ Create Internal Order	1527
	0		KO01_ Create Internal Order	1528
X	600	SAPMKAUF	KO01_ Create Internal Order	1529

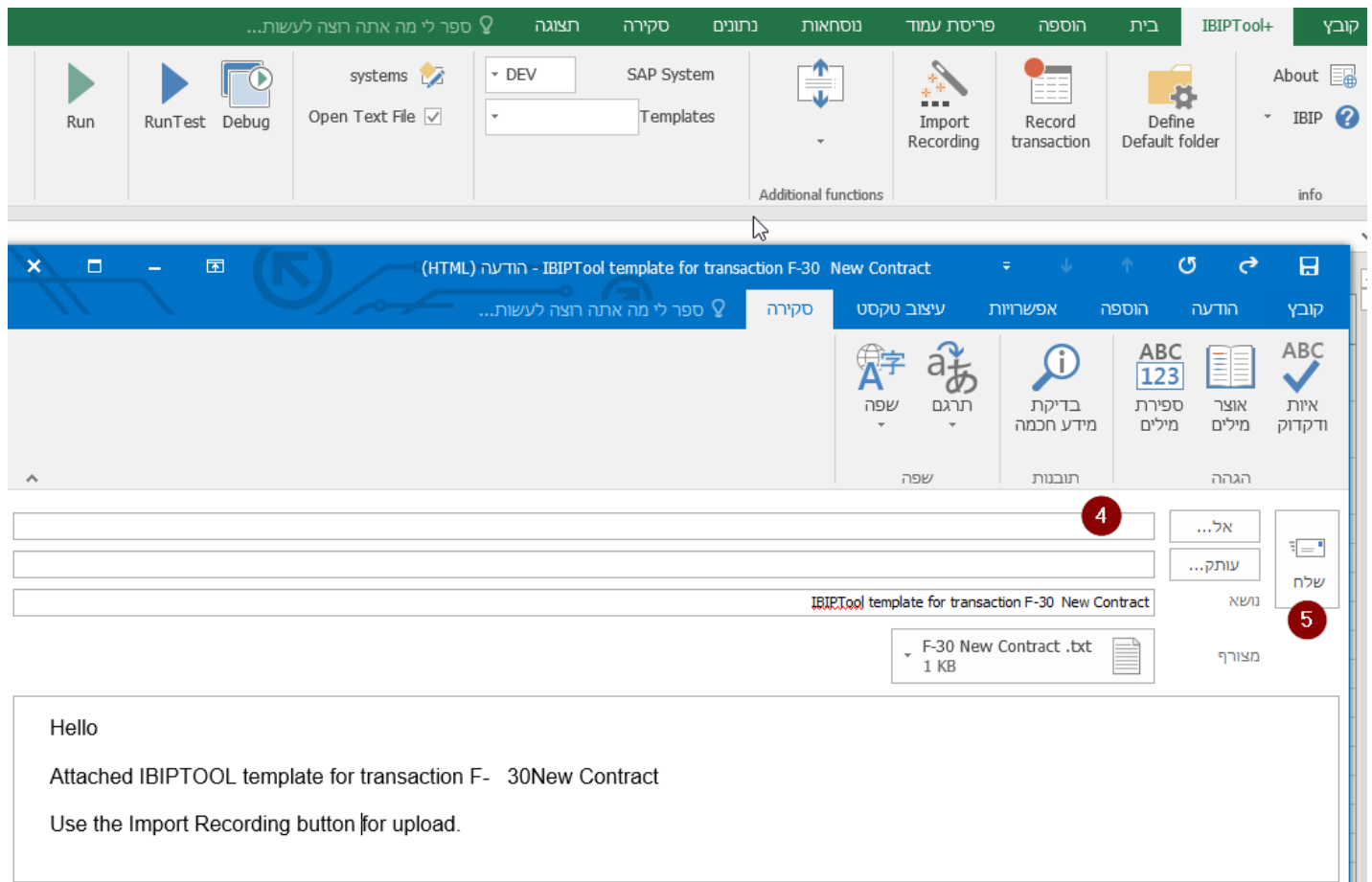
+ recorder Support **templates** dictionary

## 6.4. Populate Template to other users

This function save the current template as text file template in the default folder and end it added as attachment to outlook mail which is lunched in foreground



Make sure outlook is open before using this option ,fill the mail address and send the template to the required end users



The screenshot shows the IBIPTool interface at the top with various buttons like Run, RunTest, Debug, and SAP System selection. Below it, an Outlook email composition window is open. The email subject is "(HTML) הודעה - IBIPTool template for transaction F-30 New Contract". The email body contains the following text:

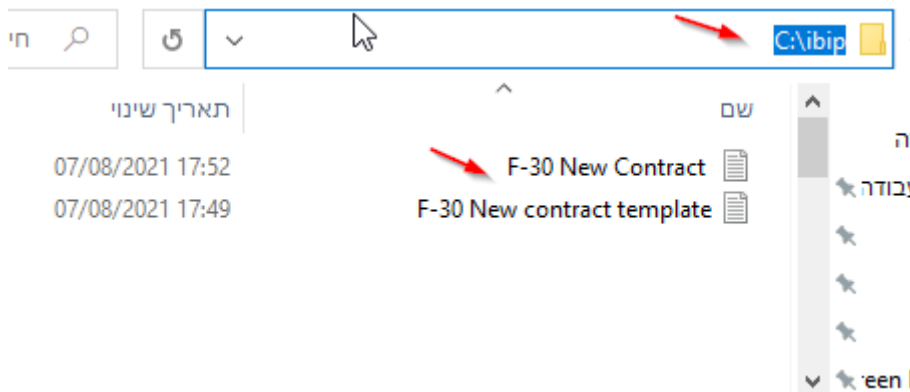
Hello

Attached IBIPTOOL template for transaction F- 30New Contract

Use the Import Recording button for upload.

The Outlook interface shows a list of attachments, including "IBIPTool template for transaction F-30 New Contract" and "F-30 New Contract .txt" (1 KB). Red circles with numbers 4 and 5 highlight specific elements in the Outlook interface.

Back up template are saved in the default folder

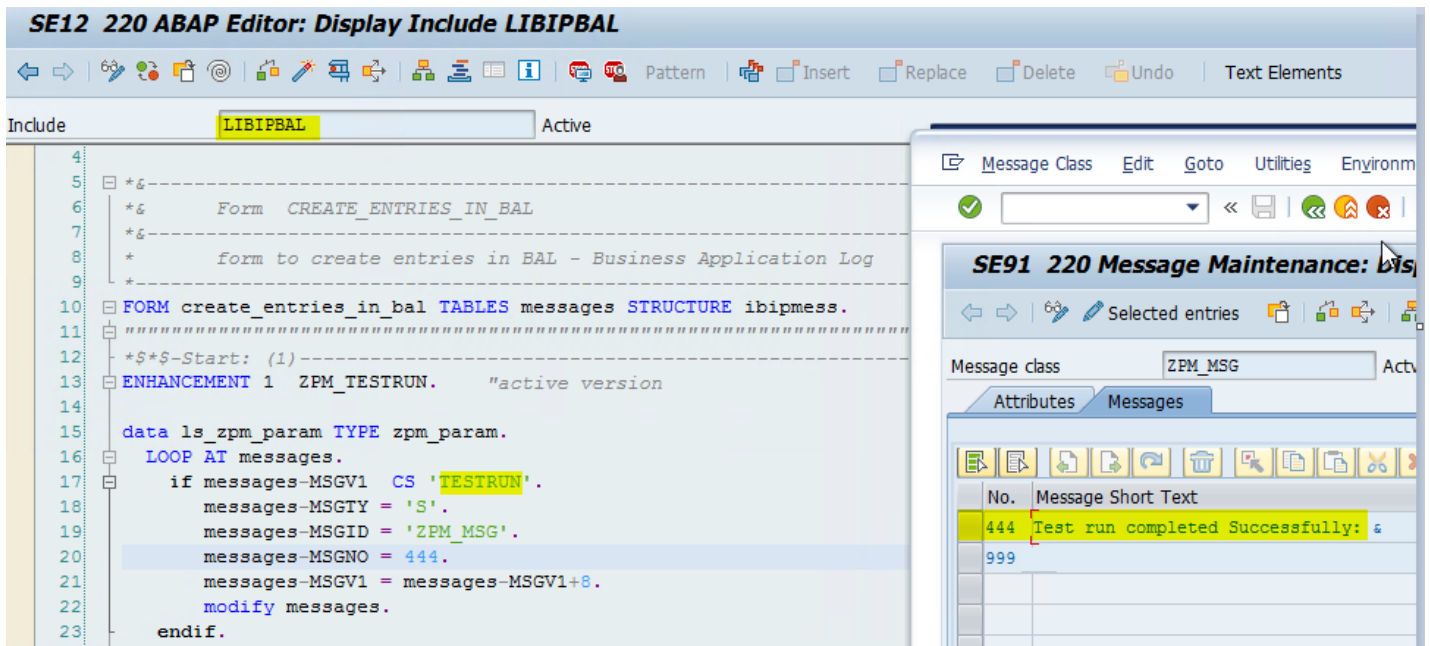


The screenshot shows a Windows File Explorer window with the address bar set to "C:\ibip". The file list shows two files:

- F-30 New Contract
- F-30 New contract template

Red arrows point to the "C:\ibip" address bar and the "F-30 New Contract" file name.

## 6.5. Test Run – ABAP Enhancement - Optional



The screenshot displays the SAP ABAP Editor and the Message Maintenance (SE91) window. The ABAP Editor shows the following code for the enhancement:

```

4
5 *-----
6 *      Form  CREATE_ENTRIES_IN_BAL
7 *-----
8 *      form to create entries in BAL - Business Application Log
9 *-----
10 FORM create_entries_in_bal TABLES messages STRUCTURE ibipmess.
11
12 *****Start: (1)*****
13 ENHANCEMENT 1 ZPM_TESTRUN.      "active version
14
15 data ls_zpm_param TYPE zpm_param.
16 LOOP AT messages.
17   if messages-MSGV1 CS 'TESTRUN'.
18     messages-MSGTY = 'S'.
19     messages-MSGID = 'ZPM_MSG'.
20     messages-MSGNO = 444.
21     messages-MSGV1 = messages-MSGV1+8.
22     modify messages.
23   endif.
  
```

The Message Maintenance window (SE91) shows the configuration for the message class **ZPM\_MSG**. The message class is set to **ZPM\_MSG**. The message list shows the following entries:

No.	Message Short Text
444	Test run completed Successfully: *
999	

This code deals with changing the color of the test run message in the log from red to green - this is optional