

Triggering Workflow from Custom Change Document Object



Summary

This article explains how to trigger a business workflow when a change document object is called in standard transaction. Whenever a change document object called, it triggers the Business object linked with change document object of the transaction, which is responsible for triggering the workflow. This is can be developed from SAP Release 4.7EE.

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Objective

Trigger workflow from custom change document object.

Description

To trigger custom change document object from standard transaction and that change document object triggers the business object linked with change document object in transaction SWEC.

The custom business object in turn triggers the workflow.

Before starting this I hope, you know how to create change document object and business object.

After creating a change document object and business object go to SWEC transaction and specify the event linkage of business object to that change document object.

Click on **NEW ENTRIES** button.

You will get the screen below:

New Entries: Details of Added Entries

Change doc. object	<input type="text"/>
Object Category	BOR Object Type
Object Type	<input type="text"/>
Event	<input type="text"/>

Trigger Event	Function Module
<input checked="" type="radio"/> On Create	Object Type <input type="text"/>
<input type="radio"/> On Change	Event ID <input type="text"/>
<input type="radio"/> On Delete	Event Container <input type="text"/>

Specify change document object name, select Object category as BOR Object Type, specify the business object created and specify the event to trigger when change document object get triggered from standard transaction as below.

Change doc. object	ZSCD01
Object Category	BOR Object Type
Object Type	Y1152_MAT1
Event	MATNR_CREATED

Trigger Event	Function Module
<input type="radio"/> On Create	Object Type <input type="text"/>
<input checked="" type="radio"/> On Change	Event ID <input type="text"/>
<input type="radio"/> On Delete	Event Container <input type="text"/>

Save you entries and specify the package if necessary.

Here the business object and the change document object specified are for MARA table details.

If the material is changed then it has to trigger the custom change document object that had been created.

Therefore, as we change the material in MM02 transaction, we need to find the USER EXIT and we need to write the necessary code to store the change details in the CDHDR and CDPOS details.

In the user exit of MM02 transaction you find the function module **EXIT_SAPLMGMU_001**, in that find the ZINCLUDE and in that include write the code.

Before we go to programming part, check the generated information of your change document object in SCDO transaction. You will find the update function module and three includes generated by the system when we create the change document object.

We have to include the TOP Include and call that update function module in the user exit.

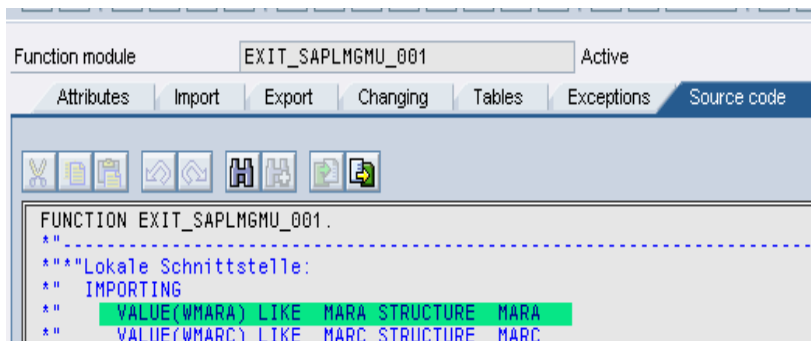
If you go through the **TOP Include** there will be the rest two includes included in it.

So on the whole we are including three includes in the programming part.

Programming Part

The below snap shot displayed has the **WMARA** defined as structure as **MARA** is an import parameter of the function module **EXIT_SAPLMGMU_001** in the user exit.

The values entered in MM02 transaction are captured in WMARA of structure same as MARA structure as shown in the below graphic. We use this structure to get the latest values of the fields specified in the MM02 transaction, which corresponds to MARA structure.

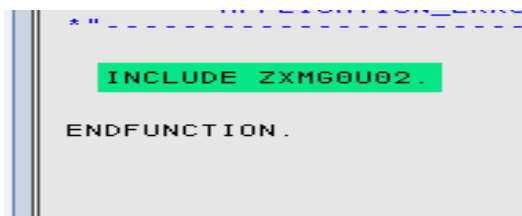


```

Function module EXIT_SAPLMGMU_001 Active
Attributes Import Export Changing Tables Exceptions Source code
FUNCTION EXIT_SAPLMGMU_001.
**
**" Lokale Schnittstelle:
** IMPORTING
** VALUE(WMARA) LIKE MARA STRUCTURE MARA
** VALUE(WMARC) LIKE MARC STRUCTURE MARC

```

The user defined code has to be written inside the INCLUDE ZXMG0U02 as highlighted in the below graphic. Double click on that include and write the necessary code as shown below.



```

**
**"
** INCLUDE ZXMG0U02.
**
ENDFUNCTION.

```

Code to be written inside the above specified include of user-exit:

```

INCLUDE zscdo1_testcdt.      " Top include of CDO

*" Data declarations.....
*"-----*
* work variables                *
*"-----*
DATA:
  t_mara LIKE                  " Internal table for material
  STANDARD TABLE OF mara,

  icdtx TYPE cdtxt            " Change documents: Text changes
  OCCURS 0 WITH HEADER LINE.

DATA:
  wa_mara1
  LIKE LINE OF t_mara.      " workarea of mara

SELECT *
  FROM mara
  INTO TABLE t_mara
  WHERE matnr = wmara-matnr.

MOVE wmara-matnr TO objectid.

READ TABLE t_mara INTO wa_mara1 INDEX 1.

CALL FUNCTION 'ZSCDO1_WRITE_DOCUMENT'
  EXPORTING
    objectid                = objectid
    tcode                   = sy-tcode
    utime                   = sy-uzeit
    udate                   = sy-datum
    username                = sy-uname
    object_change_indicator = 'U'
    n_mara                  = wmara
    o_mara                  = wa_mara1
    upd_mara                = 'U'
  TABLES
    icdtx_zscdo1            = icdtx.

```

Now before starting the MM02 transaction go to transaction **SWELS** (Event Trace On).

Now go to **MM02** transaction and change the material and after that, you **switch off the Event trace (SWELS)**.

Go to transaction **SWEL**, check the business object triggered, its corresponding event, and the workflow linked to it.

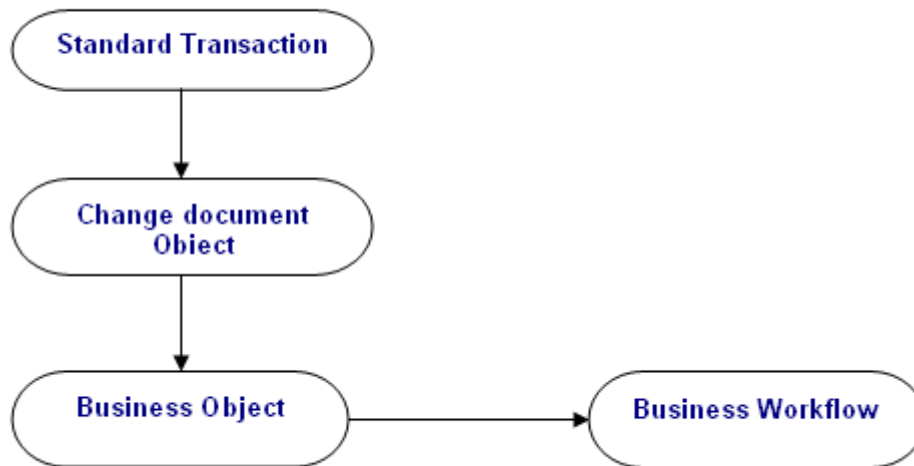
Display Event Trace						
Object Type	Event	Current Date	Time	Receiver Type	Infor...	Handler/Action
	Trace deleted	07/17/2008	14:07:37	SAPDEV02		Up to 07/17/2008 14:07:34
	Trace ON	07/17/2008	14:07:42	SAPDEV02		
Y1152_MAT1	MATNR_CREATED	07/17/2008	14:08:13	WS99900640	<input checked="" type="checkbox"/>	SWW_WM_CREATE_VIA_EVENT_BF
	Trace OFF	07/17/2008	14:08:15	SAPDEV02		

Hence, the change document has triggered first and then the business object linked to it and the workflow linked to the business object.

Now go to transaction **SBWP** (Business Workplace) and find the mail that has generated by the workflow.

Inbox					
Class	Title	Date receiv...	Author	Atta...	Status
	Change Doc triggering WF	07/17/2008	Workflow-System		
	Change Doc triggering WF	07/17/2008	Workflow-System		

The flow of triggering the workflow from standard transaction is shown below.



Related Content

The Business object can also be triggered based on the condition maintained during the event linkage of Business object and change document object in **SWEC** transaction code.

For further information please see the documentation below:

[SAP Help for Creation of Events when Change Documents are written](#)

[SAP Help for Maintaining Assignment between Event without Field Restrictions and Change Document](#)

[SAP Help for Maintaining the Assignment between Event with Field Restrictions and Change Document](#)

For more information, visit the [Business Process Modeling homepage](#).

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