

# How-To Guide: Enhancement to create a Material BOM follow up change request from MDG for Material

Author: Phani Ranjan

CompanyPrometheus Group

Created On: May 21, 2020

Version: 1.0



## Contents

1.	Business Scenario	3
2.	SAP Notes references	3
3.	Background Information	3
	3.1. Information:	3
	3.2. Standard settings	3
	3.3. Activities	3
4.	Functional Restrictions	4
5.	Step by Step Explanation	4
	5.1. Create new Change Request Type	4
	5.2. Define Change Request Steps	5
	5.3. Define Service Names	6
	5.4. BRF+ Tables	6
	5.4.1. Single Value Decision Table	7
	5.4.2. User Agent Decision Table	7
	5.4.3. Non-User Agent Decision Table	8
	5.5. Enhancement Spot	8
	5.5.1. Customizing	8
	5.6. Create the Filter	11
	5.7. Create the Interface method	12
	5.8. Create a Function group in SE80	13
	5.9. Create an RFC Function module	14
	5.9.1. Code Snippets:	15
6.	Process test	16



## 1. Business Scenario

SAP Master Data Governance for Material (MDG-M) provides business processes to find, create, change, and mark material master data for deletion. It supports the governance of material master data in a central hub and the distribution to connected operational and business intelligence systems.

The processes are workflow-driven and can include several approval and revision phases, and the collaboration of all users participating in the master data maintenance.

This How to Guide describes the solution to create automatically a new material BOM change request after the activation of the material create change request.

## 2. SAP Notes references

In addition to the detailed explanations written in this document, please see the following SAP Notes for further important information about creating a follow up Change request:

Note Number	Note Description
<u>1597746</u>	Example coding for WF
<u>1700197</u>	Rework example BAdI implementations
<u>1837696</u>	BAdI enhancement with inactive data for change request

# 3. Background Information

# 3.1. Information:

- 1. The Business Add-In (BAdI) 'Calling of System Method for Rule-Based Workflow' is used to create the new change request automatically.
- 2. This Business Add-In (BAdI) is used in the Master Data Governance (CA-MDG) component. You can use this BAdI to implement the calling of a system method in the rule-based workflow.
- The BAdI uses the method CALL\_SYSTEM\_METHOD. The input for this BAdI is the change request number and the service name. The method uses the change request number to retrieve data from the change request.
- 4. By using the service name, it is possible to reuse the same BAdI implementation for multiple service names. For example when two service names are used in the configuration of the same change request workflow, and the user wants to create only one BAdI implementation, having the service name as the input parameter enables you to separate the processing logic based on the service name input.

# 3.2. Standard settings

- 1. For more information about the standard settings (filters, single or multiple uses), see the Enh. Spot Element Definitions tab in the BAdl Builder (transaction SE18).
- No default BAdI implementation is pre-activated in the standard system. The BAdI is filter dependent. You need to create a separate implementation for your specific calling of a system method. The BAdI is not designed for multiple use.

#### 3.3. Activities

1. For information about implementing BAdIs in the context of the Enhancement Concept, see the SAP Library for SAP NetWeaver under BAdIs - Embedding in the Enhancement Framework.



#### 4. Functional Restrictions

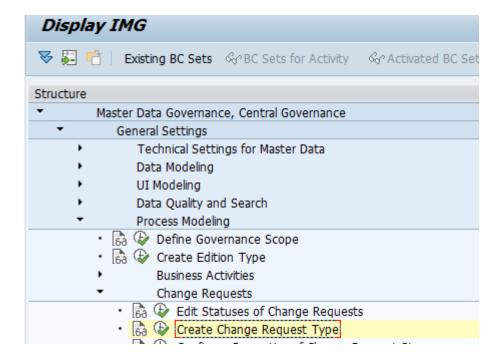
The following restrictions apply:

 Applicable only when Utopia EAM Master data governance (U1 data model) is present and configured in the system

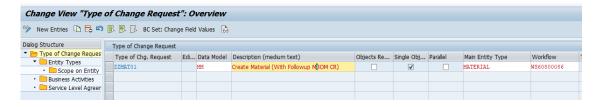
# 5. Step by Step Explanation

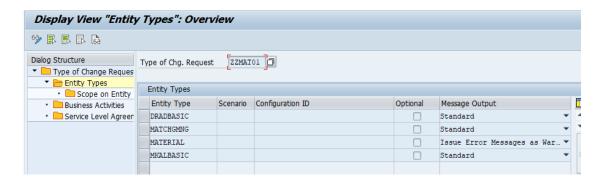
The following explanation shows you how to:

## 5.1. Create new Change Request Type

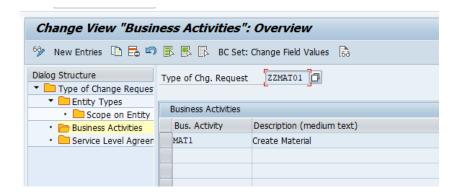


Create a new Change Request Type for Material Main Entity

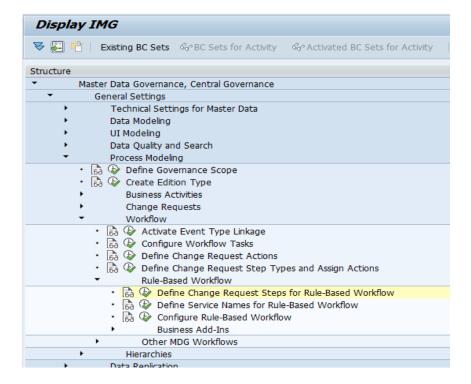




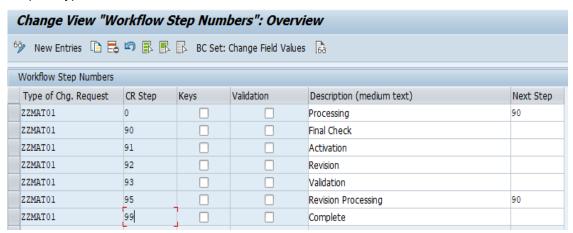




# 5.2. Define Change Request Steps



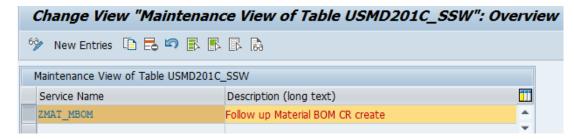
Maintain the Next Step Configuration to enable the What's Next Functionality for the Change Request type.





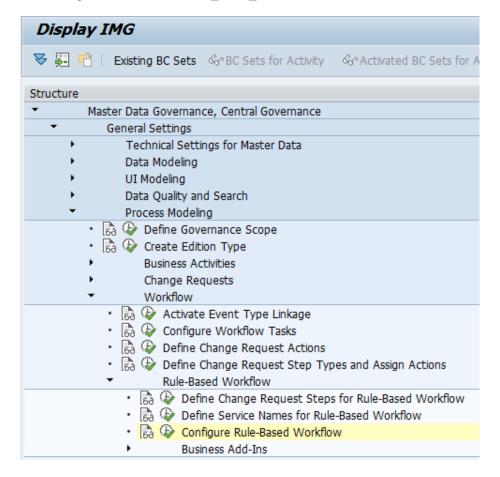
#### 5.3. Define Service Names





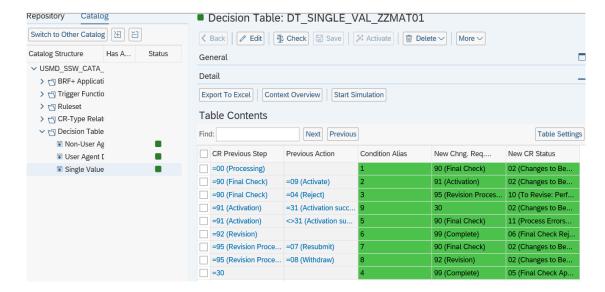
#### 5.4. BRF+ Tables

Use Customizing or transaction USMD\_SSW\_RULE - Process Definition of RBWF





#### 5.4.1. Single Value Decision Table



Excel Worksheet for Single value decision table



# 5.4.2. User Agent Decision Table

Maintain the User agent value with MDGM MENU role i.e. SAP\_MDGM\_MENU\_0x



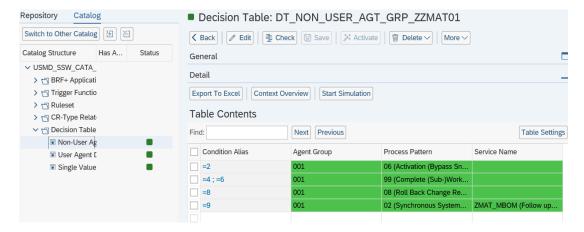
Excel worksheet for user agent decision table





#### 5.4.3. Non-User Agent Decision Table

Service name should be same as the configuration maintained in section 5.2



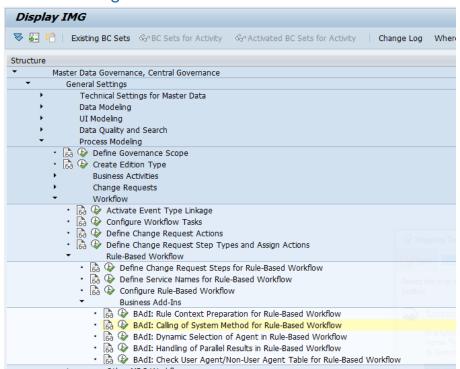
Excel worksheet for Non-User agent decision table



# 5.5. Enhancement Spot

Enhancement to USMD\_SSW\_SERVICE\_PROCESSOR

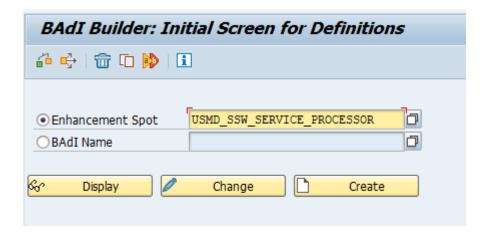
#### 5.5.1. Customizing



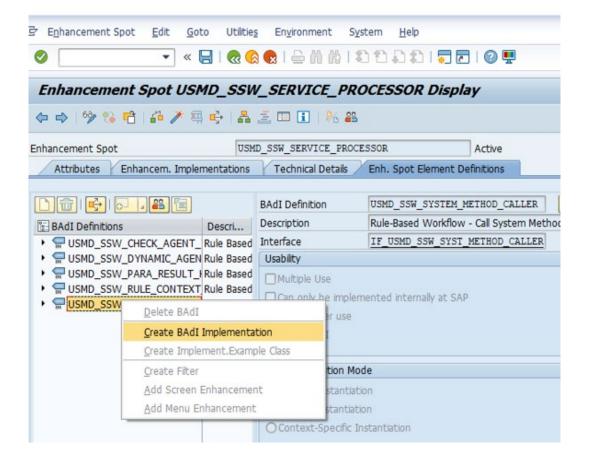


Or Transaction SE18 - Business Add-Ins: Definitions

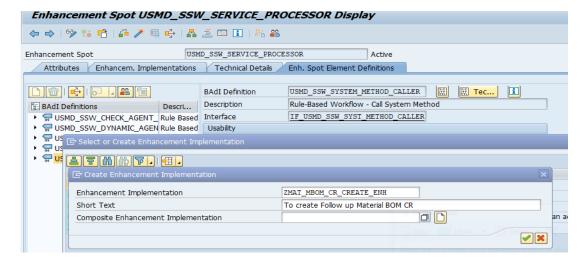
Enter Enhancement Spot USMD SSW SERVICE PROCESSOR and Click on Display.



#### 5.5.1.1. Create the Enhancement Implementation

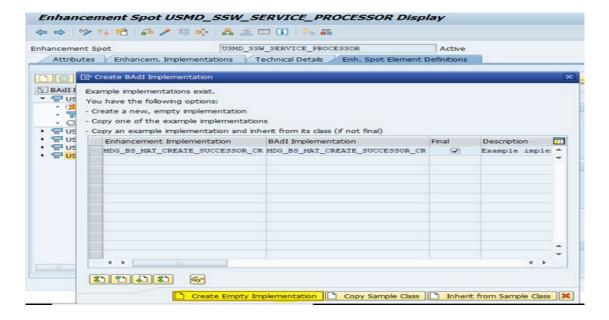




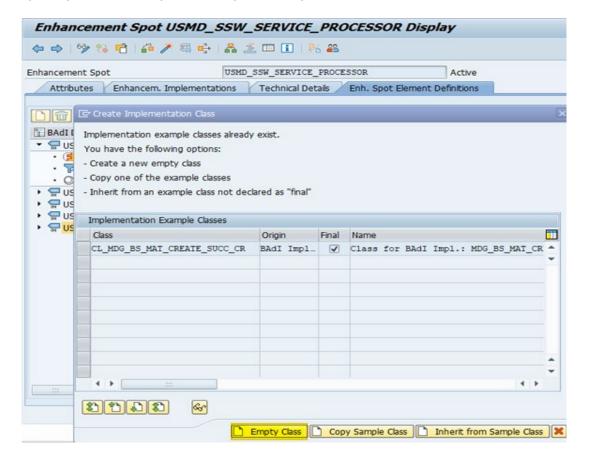


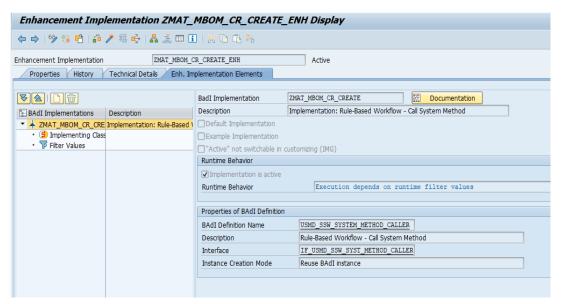
#### 5.5.1.2. Create the BADI Implementation







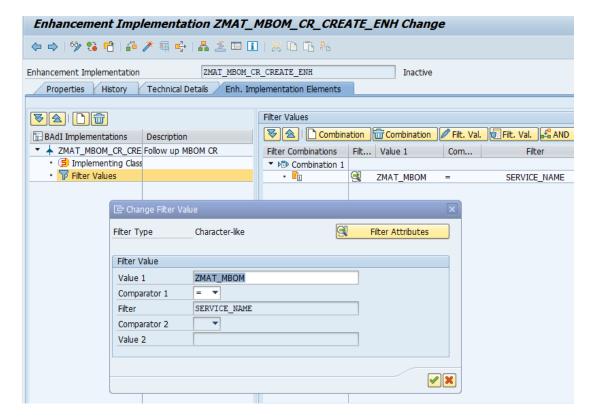


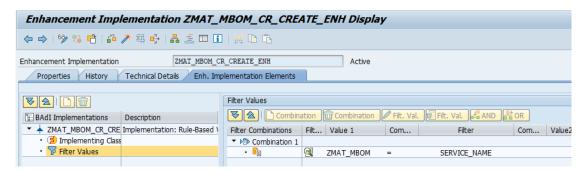


#### 5.6. Create the Filter

The Filter is the service name

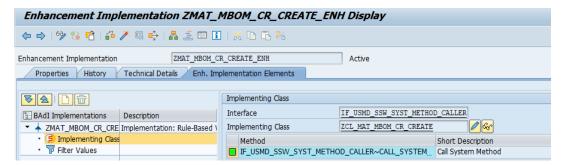






#### 5.7. Create the Interface method

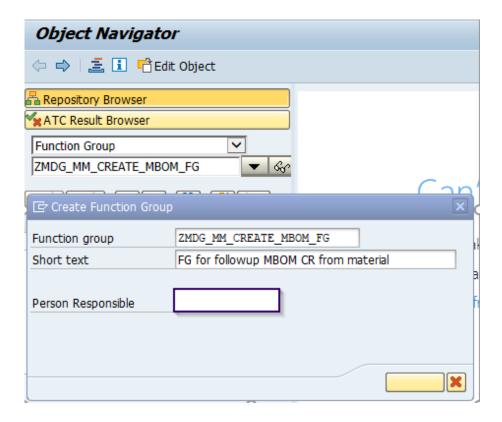
if\_usmd\_ssw\_syst\_method\_caller~call\_system\_method





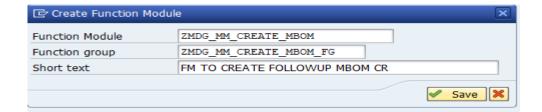
```
Class Builder Class ZCL_MAT_MBOM_CR_CREATE Display
💠 🖒 😘 😘 🕝 🌖 🚰 🧪 👫 👺 🖟 🖁 🚅 🗀 🗓 । 👰 👊 Pattern Pretty Printer | Signature | 🔁 Pu
        IF_USMD_SSW_SYST_METHOD_CALLER~CALL_SYSTEM_METHOD
Method
       DATA: 1v new task TYPE char12,
                 lv model TYPE usmd model.
    4
       *Check if U1 is valid active model
           SELECT SINGLE usmd_model
    8
              FROM usmd001c
              INTO lv_model
              WHERE usmd model = 'Ul' AND
                   usmd_objstat = 'A'.
    11
    12
    13
           CHECK sy-subrc IS INITIAL.
        *Create Material BOM Change Request in a new task
    14
    15 卓
          CASE iv service name.
            WHEN 'ZMAT MBOM'.
    16
    17
               CONCATENATE 'NT' sy-uzeit INTO lv new task.
    18
    19
              CALL FUNCTION 'ZMDG MM CREATE MBOM' STARTING NEW TASK 1v new task
    20
                DESTINATION 'NONE'
   21
                EXPORTING
                  iv cr number = iv cr number
   22
    23
                  iv_service_name = iv_service_name.
           ENDCASE.
    24
          ENDMETHOD.
```

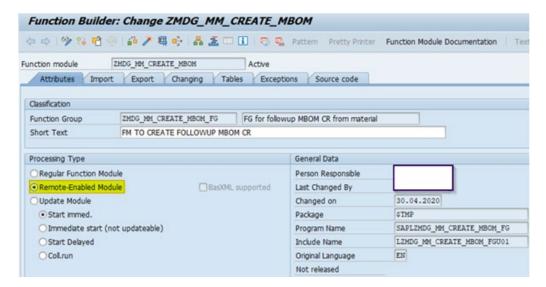
# 5.8. Create a Function group in SE80





#### 5.9. Create an RFC Function module



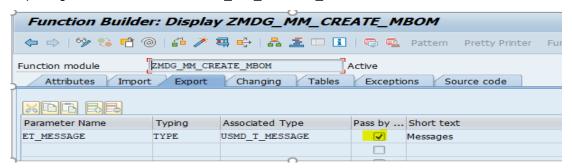


Importing Parameters for FM ZMDG\_MM\_CREATE\_MBOM:

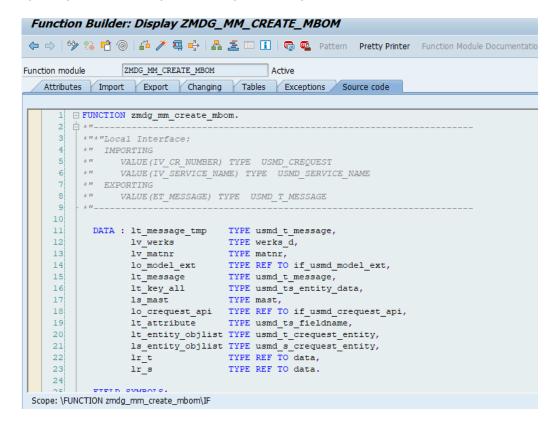
Enable the Pass by value check box as shown below.



Exporting Parameters for FM ZMDG\_MM\_CREATE\_MBOM:







#### 5.9.1. Code Snippets:





# i Note

This sample code is to create Material BOM Change request with default BOM usage type '4' (Plant Maintainance) and Alt BOM '1'.

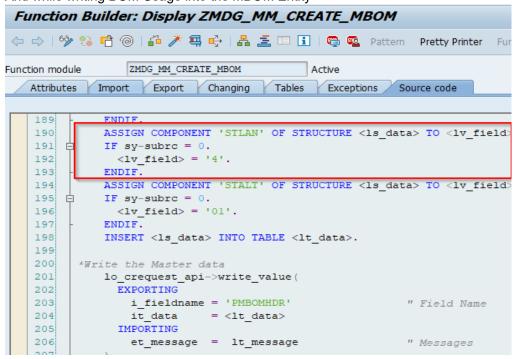
If the user wants to create Material BOM change request with different BOM Usage type then it requires code changes in the below two places,

While writing the BOM Usage into the object list



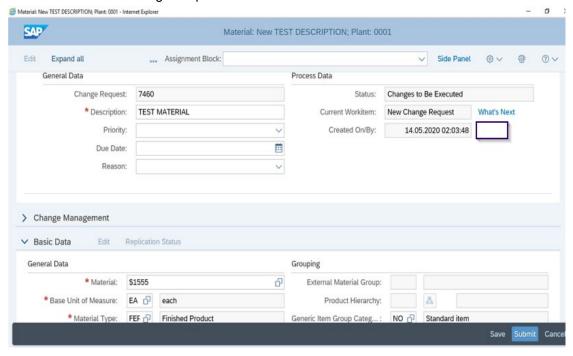


And while writing BOM Usage into the MBOM Entity



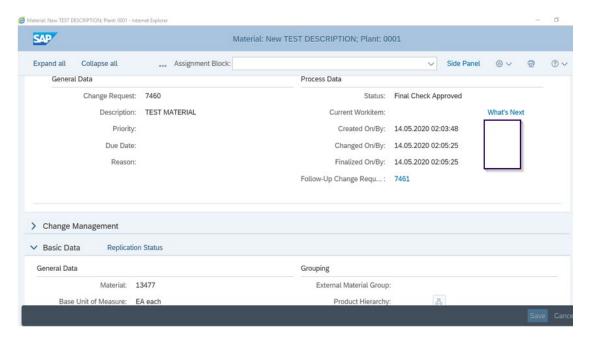
## 6. Process test

1. Create a Material Change Request

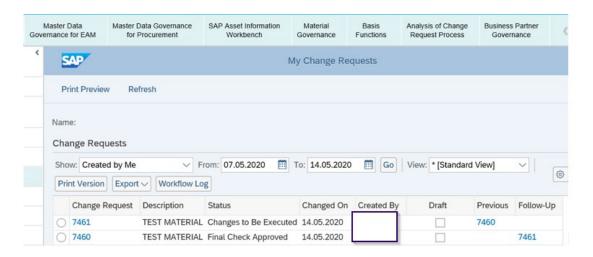


- 2. Submit and Activate the Change Request
- Note Follow-Up Change Request field is available from S/4 1909 Release.



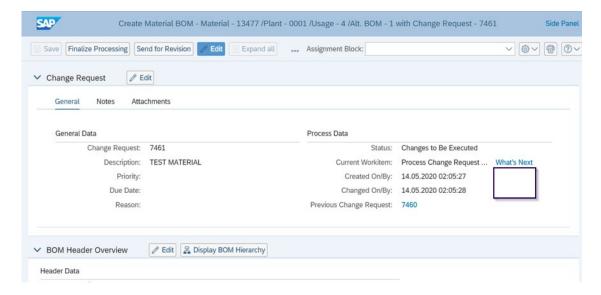


- After the Material CR is activated, A Successor (Follow-up) Material BOM Change Request is created automatically
- Note Previous and Follow-Up fields are available from S/4 1909 Release.



4. Material BOM Change Request created automatically:





#### 5. Check Workflow log:

You can check with Transaction SWI6 if the synchronous system method was successful.

