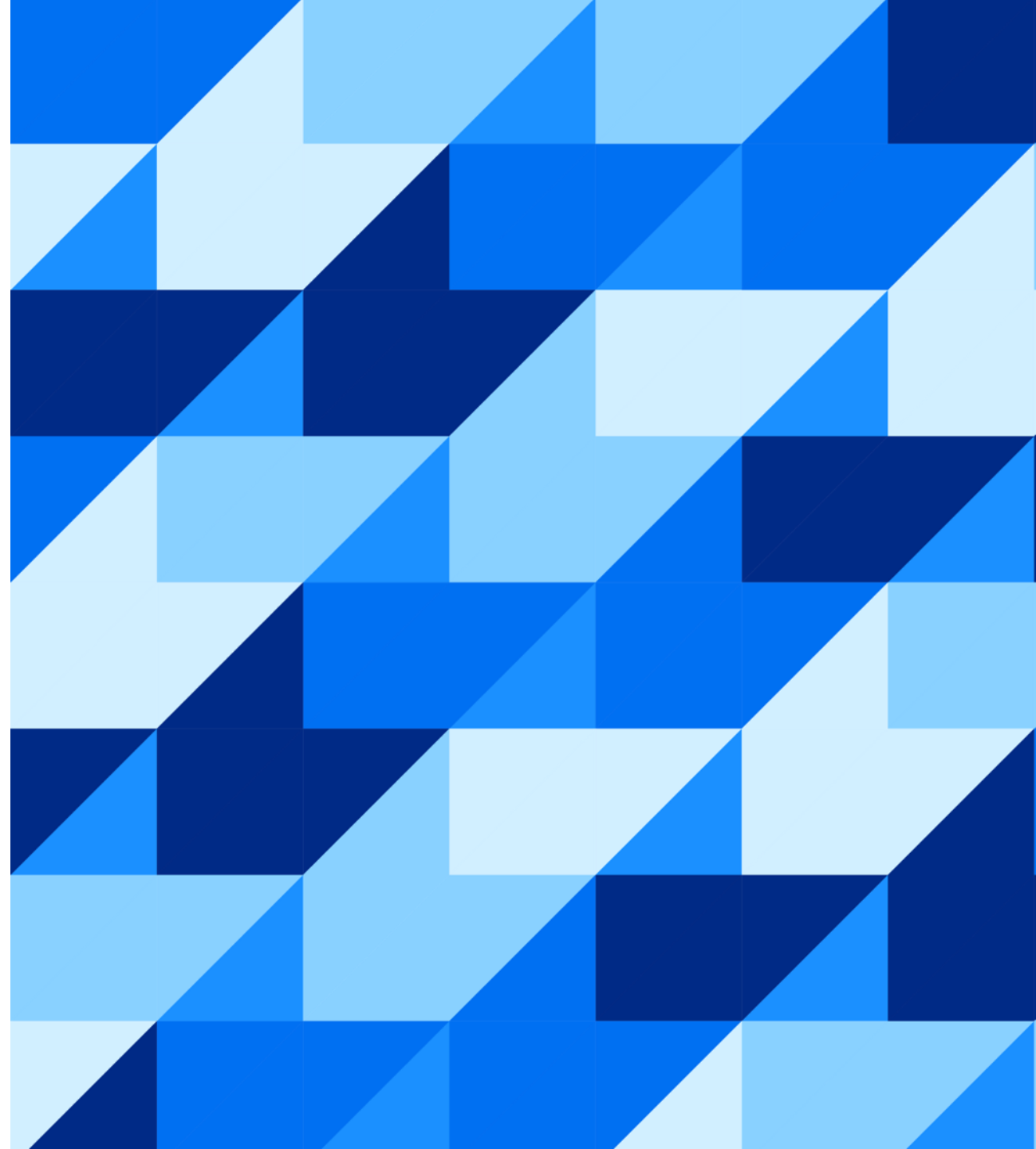




# Integration of Material and BOM Maintenance in MDG, Central Governance

MDG Product Management, SAP  
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Public



# Solutions to Support Different Requirements

## In terms of function, scope, and governance process

As a master data steward, I want to have a linked governance process while creating a material and its Bill of Materials (BOM) in Master Data Governance (MDG).

There are diverse ways to support the creation of BOM while utilizing MDG Material depending on the requirements to be met:

1. SAP PLM and SAP Master Data Governance for Material
  - Available as SAP consulting solution
2. Simple BOM in enhanced data model/process for MDG for Material
  - [How To Guide](#), [How-To Guide](#) for Side Panel, SAP Help Portal for [Business Context Viewer \(BCV\)](#)
3. Additional steps after activation in material change request (CR)
  - SAP Note [2765664](#) and [2742813](#) starting from S/4HANA 1511 and MDG 8.0
4. Material change request triggers follow-up BOM change request
  - [How to Guide](#), available with SAP MDG, EAM extension by Utopia starting from S/4HANA 1909 SP01
5. BOM change request triggers change request for material
  - SAP Help Portal for [SAP MDG, EAM extension by Utopia](#), available with SAP MDG, EAM extension by Utopia starting from S/4HANA 1909 SP01

# 1. SAP PLM and SAP Master Data Governance for Material (1 of 2)

## Joint Value Proposition

**SAP PLM** allows customers to manage their product data along the **entire product life cycle** from idea through portfolio management, engineering, release processes, and costing to handover to manufacturing and service.

**SAP MDG** provides **central governance** of master data material, supplier, customer, financial and custom domains.

For many customers looking for a **complete solution in the product space**, both solutions are needed.

- SAP PLM orchestrates the processes of managing product data.
- MDG provides detailed governance, control and data quality over the creation and update of data material data used in transactional, analytical and reporting systems.

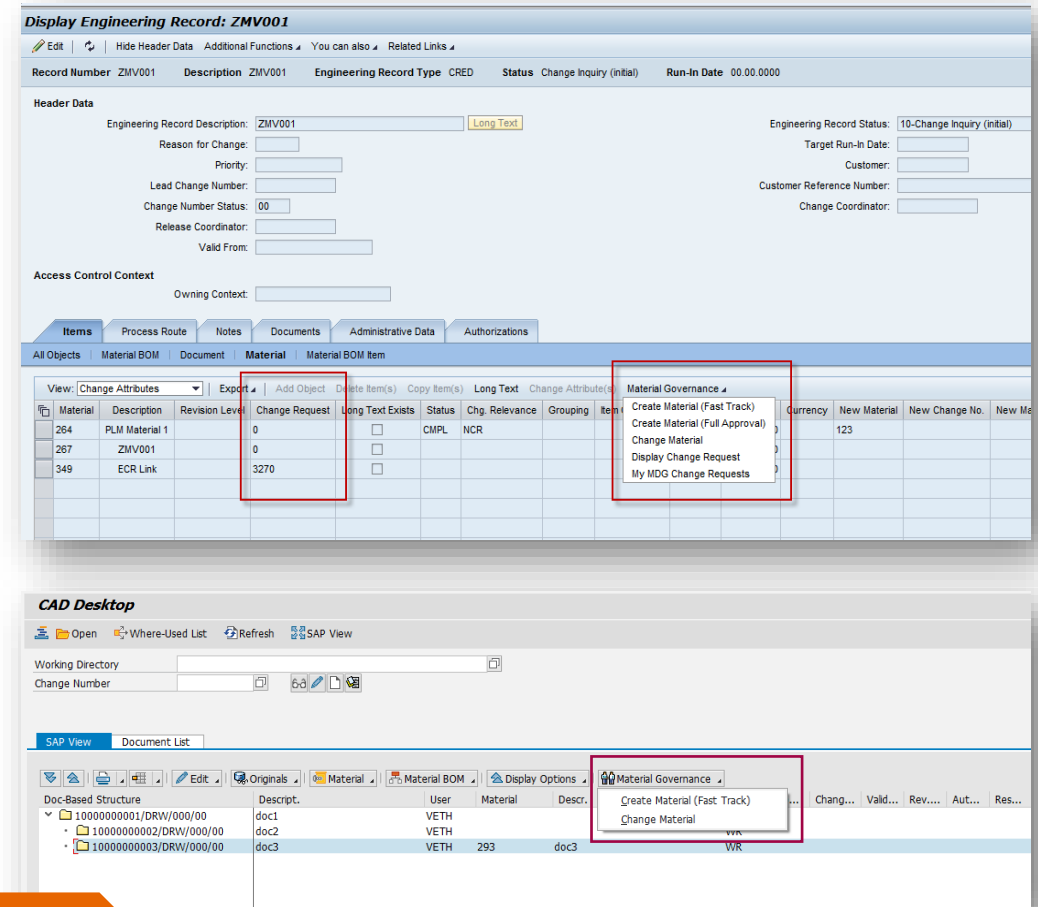
# 1. SAP PLM and SAP Master Data Governance for Material (2 of 2)

## Process Integration Scenarios

In this solution, PLM integration scenarios are enabled:

- PLM Engineering Record
  - Create new material
  - Change existing material
  - Check status change request
- CAD Desktop
  - Create new material
  - Change existing material

It is available as SAP Consulting solution and the concept is reusable for integration into other objects.



PLM Engineering Record

MDG-M CR

PLM Engineering Record

## 2. Simple BOM in Enhanced Data Model/Process for MDG for Material

In this solution, the data model “MM” is extended. This is only recommended for simple BOMs.

- Option 1: Entity type 1 and own access class
- Option 2: Entity type 4 using BAdI MDG\_BS\_MAT\_API\_SEGMENTS\_EXT ([How To Guide](#))

In addition, the side panel can be used to show additional BOM information (for example: structure and quantity information of the sales BOM, validity of BOM, display BOM) in Master Data Governance for Material processes. More information can be found here: [How-To Guide](#) and SAP Help Portal for [Business Context Viewer \(BCV\)](#).



### 3. Additional Steps After Activation in Material Change Request

# Demo

In this solution, additional steps after the activation step are defined. In other words, the workflow no longer has to end after a CR has been activated successfully.

Instead, after a CR has been activated, further actions can be performed to trigger additional dialog workflow steps. A workflow item for these additional steps can then be found in the workflow inbox of the user who has been assigned accordingly. In this additional step a link to the BOM maintenance UI can be shown on the UI and the user can maintain the BOM and confirm this in the CR.

This is available starting from S/4HANA 1511 and from MDG 8.0 with SAP Note [2765664](#) and [2742813](#).

The top screenshot shows the 'Change Request Tracker' table with the following data:

Step	Description	Status	Action	Date	Time	Processor
00	Processing	02 Changes to Be Executed	Submit	19.04.2019	15:51:15	Julie Armstrong
10	Enrich Dimension	Z1 to be extended with dimensions	Finalize Processing	19.04.2019	15:11:51	Stefan Bosch
20	Approve Dimension	01 To Be Considered and Approved	Finalize Processing	10.06.2019	12:22:01	Elena Petrova
30	Maintain Plant 0001	Z2 to be extended for plant 0001	Finalize Processing	10.06.2019	12:53:34	Stefan Bosch
40	Approve Plant 0001	01 To Be Considered and Approved	Finalize Processing	12.05.2019	15:54:53	Elena Petrova
50	Controlling	Z5 to be extended for controlling	Finalize Processing	13.05.2019	15:56:19	Julie Armstrong
90	Final Check	02 Changes to Be Executed				
97	Maintain BOM					
98	Maintain local data and Final					

The bottom screenshot shows the 'Material: New Pump' interface. Under the 'Change Request' section, the 'General' tab is active. The 'General Data' section shows:

- Change Request: 10443
- Description: Process Material P-060619-01
- Priority: Very High

The 'Process Data' section shows:

- Status: Final Check Approved
- Current Workitem: Process Change Request 10443 (P...)
- Created On/By: 06.06.2019 12:00:52
- Changed On/By: 13.09.2019 10:19:32
- Finalized On/By: 13.09.2019 10:19:34
- Follow-Up Change Request: 11548
- Type of Change Request: ZEMATL01 Create (Plant, Contr., BOM) + Follow CR
- Step Type: Step Type for Maintain BOM

Under the 'Basic Data' section, the 'Link to BOM transaction' button is highlighted with a red arrow.

CR Basic Data

...

CR Activation

CR Link to BOM Transaction

CR Final Step

## 4. Material Change Request Triggers Follow-Up BOM Change Request

SAP MDG, EAM extension by Utopia with S/4HANA 1909 SP01 can be used to request, approve, and execute changes for BOM objects as well as replicate those changes to decentralized systems.

In this solution scenario, the process starts in MDG for Material with a request for the creation of a material. The governance processes are being executed in MDG for Material until final activation of the material.

After activation, a follow-up change request is being created for the BOM of this material using SAP MDG, EAM extension by Utopia.

The governance process for the BOM continues in SAP MDG, EAM extension by Utopia until activation. This [How to Guide](#) describes the solution to automatically trigger a new material BOM change request after the activation of the material change request.



## 5. BOM Change Request Triggers Change Request for Material

[SAP MDG, EAM extension by Utopia](#) with S/4HANA 1909 SP01 can be used to request, approve, and execute changes for BOM objects as well as replicate those changes to decentralized systems.

In this solution scenario the process starts in SAP MDG, EAM extension by Utopia with a change request for a new BOM. The user can request new components using a material change request if the components don't exist in active area.

The BOM change request can be activated only after all the dependent material change requests are approved. The BOM change request activation process will trigger the activation of dependent material change requests. All approved material change requests will get activated first and then BOM change request will get activated.





## 4./5. Integration of Material and BOM Governance Processes

# Demo

Material CR triggers follow-up BOM CR ->  
[How to Guide](#), available with SAP MDG, EAM extension by Utopia starting from S/4HANA 1909 SP01.

The screenshot shows the SAP MDG 'Create Material BOM' screen for Material P-080720-PACKED. The 'Change Request' section is active, showing details for CR 4985: 'Create new packed Pump with BOM'. The 'General Data' tab is selected, displaying fields like Change Request, Description, Priority, Due Date, and Reason. The 'Process Data' tab shows the status as 'Final Check Approved' and the current workitem. Below the tabs, there are links for 'BOM Header Overview', 'BOM Item Overview', 'Header Document Assignment', and 'Header Document Assignment Text'. At the bottom, a table lists change requests, with CR 4985 highlighted.

Change Request	Description	Status	Created On	Created At	Created By	Type	Previous	Follow-Up	Finalized On	Finalized At	Finalized By
4984	Create new packed Pump with BOM	Final Check Approved	08.07.2020	14:51:59	Michael Moore	Create Material with Follow Up BOM CR		4985	08.07.2020	14:57:32	Richard Wilson
4985	Create new packed Pump with BOM	Final Check Approved	08.07.2020	14:57:44	Michael Moore	Create Material BOM with Material Create	4984		08.07.2020	15:26:34	Julie Armstrong

BOM CR triggers CR for Material ->  
available with SAP MDG, EAM extension by Utopia starting from S/4HANA 1909 SP01. SAP Help Portal for [SAP MDG, EAM extension by Utopia](#).

This screenshot is similar to the first one, but it highlights the 'Display Material CR's' button in the 'BOM Item Overview' section. Below this, a table lists BOM items, including '0010 L P-080720 Pump 0807 PRECISION...' and '0020 L P-080720 P-080720 Packing...'. A pop-up window titled 'Material Change Requests' is also visible, showing a list of open CRs.

Item	Item Category	Item ID	Component
0010	L	P-080720	Pump 0807 PRECISION...
0020	L	P-080720	P-080720 Packing

Change Request	Material Number	Status	Workflow Tracker
4973	P-070720-PACKING	02 Changes to Be Executed	<a href="#">What's Next</a>

# Thank you.

Contact information:

SAP Master Data Governance Community: <https://community.sap.com/topics/master-data-governance>

SAP Master Data Governance Features: <https://www.sap.com/products/master-data-governance/features.html>

MDG Roadmap: <https://roadmaps.sap.com/board?PRODUCT=901B0ED1A0641EDA9FF75276E440C0EF&>

SAP Help Portal for MDG: [https://help.sap.com/viewer/product/MASTER\\_DATA\\_GOVERNANCE/OVERVIEW/en-US](https://help.sap.com/viewer/product/MASTER_DATA_GOVERNANCE/OVERVIEW/en-US)

