How-To Guide: Extensibility of Master Data Consolidation and Mass Processing for EAM

Applies to

EAM Solutions by Prometheus Group.

Summary

SAP MDG, consolidation and mass processing help in consolidating the master data by creating/updating multiple master data records at a time based on the evaluation results of several checks hence eliminating data redundancy and ensuring completeness of data.

The process steps are workflow driven and the behavior of each individual process step type can be adapted to your requirements.

Current solution aims at extending the Master data consolidation solution to the EAM objects i.e. Functional Locations, MBOM and Equipment.

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Introduction

SAP MDG, consolidation and mass processing enable you to consolidate your master data and run mass processes to update multiple master data records at a time. This is driven by a sequence of steps each adapted to some specific requirements. This helps in data filtering and enrichment thereby reducing the redundancy and duplicates.

This document provides the information you require to extend and incorporate the new fields in the Master Data Consolidation and Mass Processing solution for EAM. You would be able to load the data to these newly added fields in customer namespace by using the excel file. The data can be loaded to MDG Change Request if the Change Request option is selected for the activation step.

The consolidation process such as the Matching or Best Record Calculation should be able to process these new fields. After consolidation, the values of the newly defined fields are stored in the backend database tables.

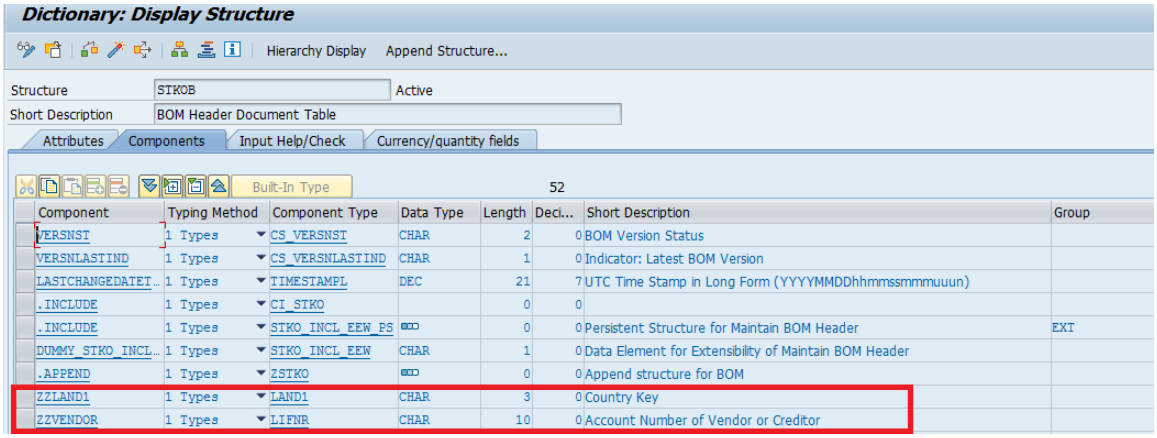
It contains information about Customizing as well as the information about additional activities that you need to execute.

Note

Business object 237 (Material BOM) has been used as an example to illustrate the extensibility. The principle and steps remain the same for other objects as well.

Add a New Field to the Material BOM screen

1. Run transaction code (t-code) SE11.
2. Click on “GOTO” button on the menu bar and click on the “Append Structure” option.
3. Enter the name of the Append structure as “ZSTKO” and provide the description.
4. Under the “Components” tab, add the new fields in the customer namespace. Add the following fields. The following screen shows the newly added fields ZZLAND1 and ZZVENDOR. Choose the required component types. For example, ZZLAND1 has the component type as LAND1 and ZZVENDOR has the component type LIFNR. The data type, length and decimal fields are derived based on the data element used.
5. Navigate to the “Extras” tab on the menu bar and choose “Enhancement Category” as “Can be enhanced (character -like or numeric)”.
6. Click on “Check” button. You can ignore the warnings, if any.
7. Click on “Activate ( )” button.



8. Enhance the Material BOM screens to add the newly added fields in the sub screen and write the corresponding logic in the functional exits provided.

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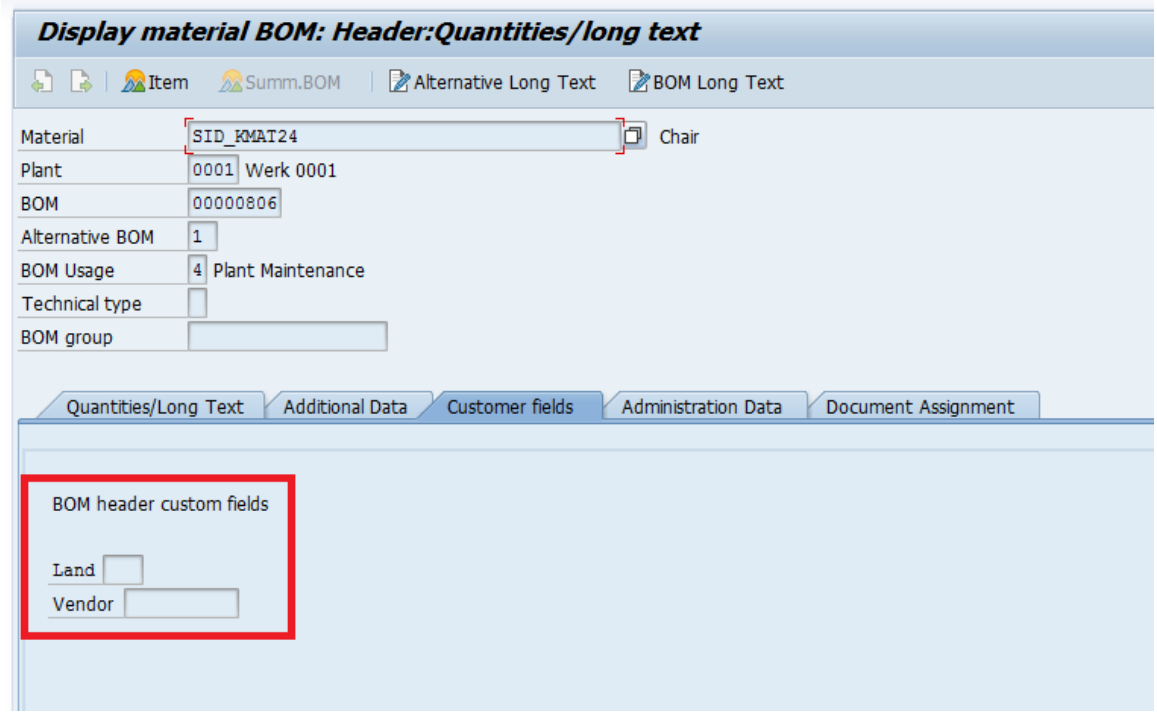
This is an optional step.

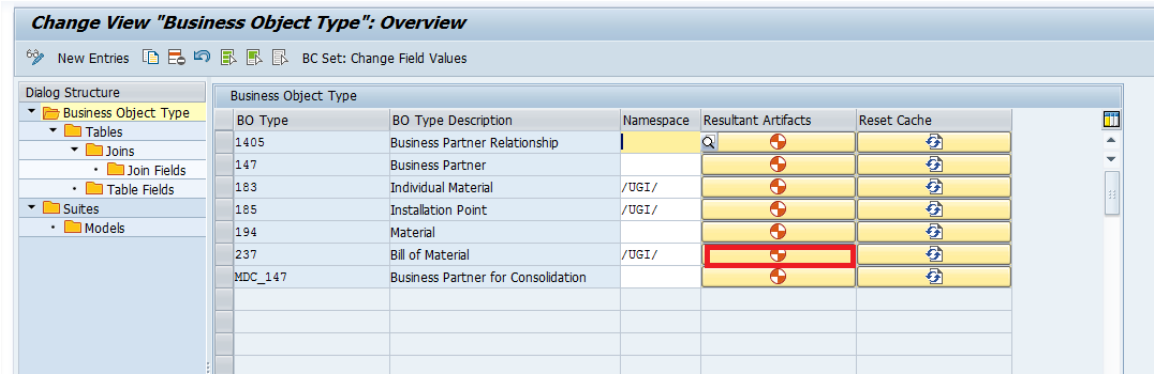
The following screen shows the newly added fields in the sub-screen “Customer Fields” of the Material BOM header.



Extend the Process Model

Use the following steps to extend the process model:

1. Run t-code MDCIMG.
2. Select the BO Type as “237” and click on the corresponding “Resultant Artifacts” column as displayed in the following screen.



3. In case there is any filter on the “Custom” field , remove the same.

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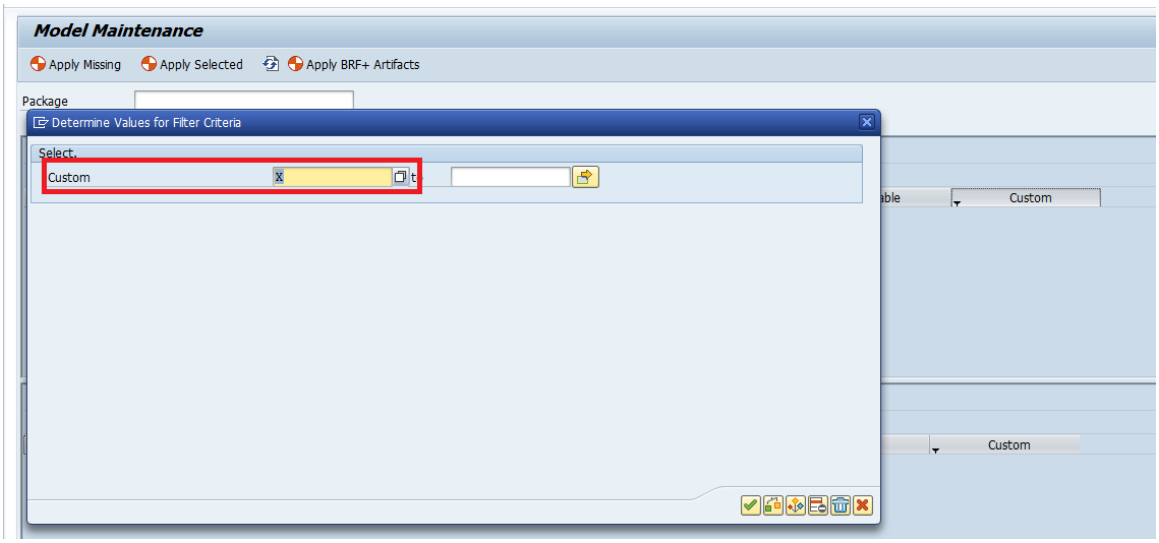
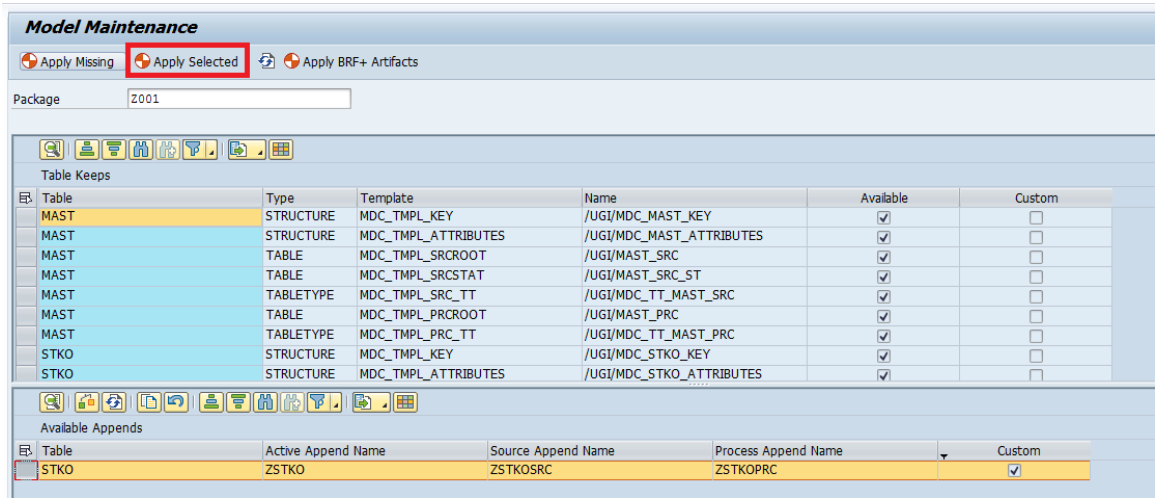
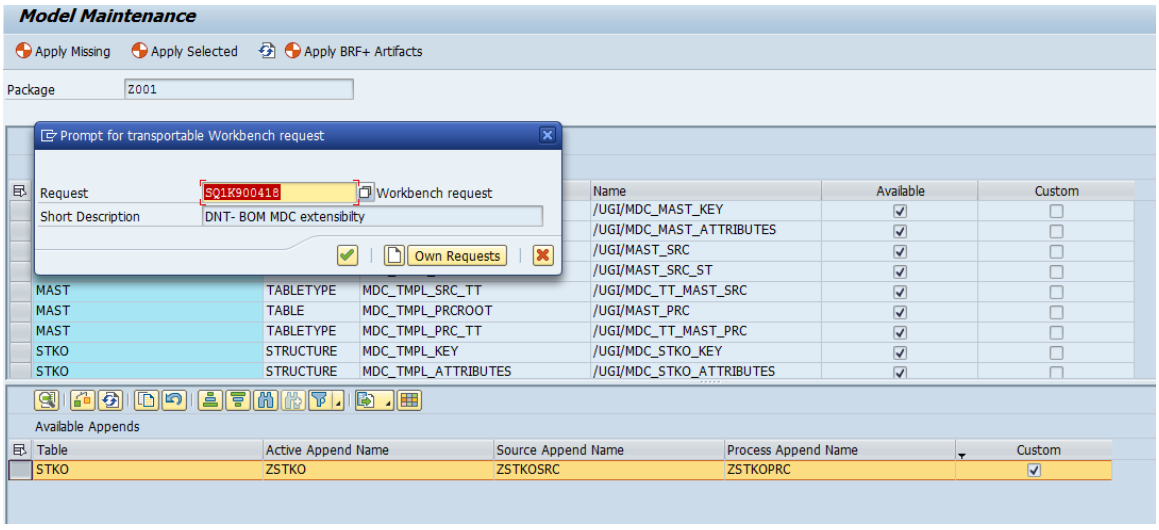


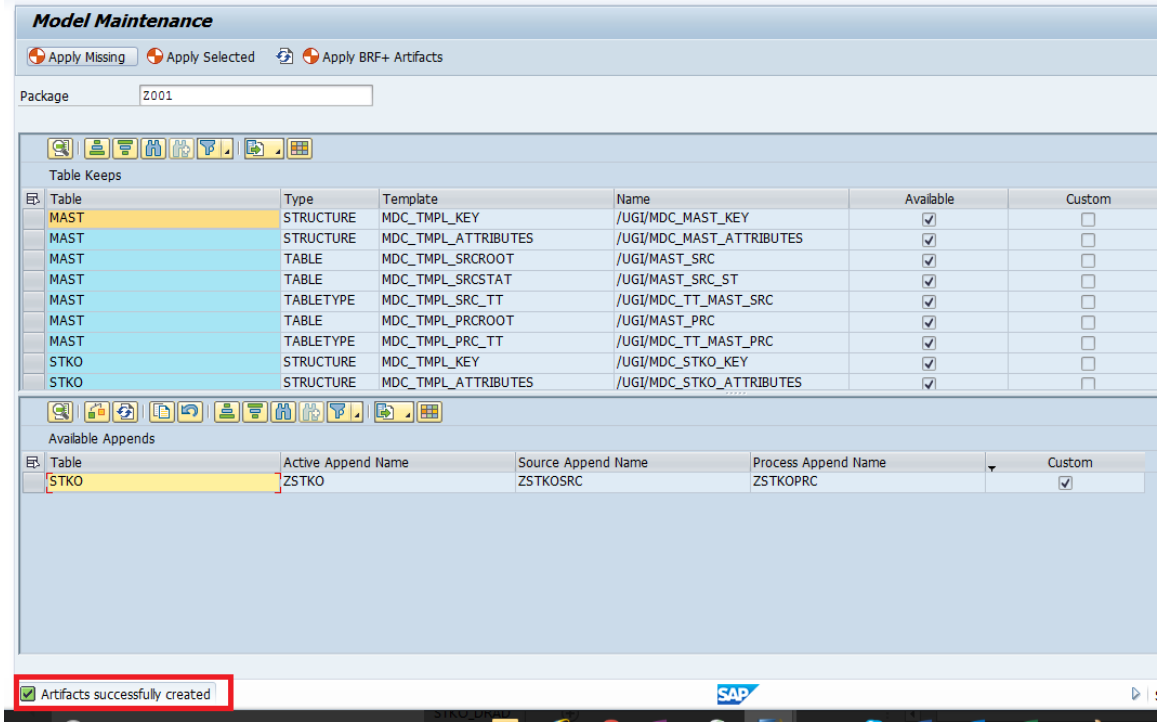
4. Enter the package name in customer namespace.
5. Choose the Active Append Name from the Availble Appends and click on the button “Apply Selected” as displayed in the following screen.



6. Enter the transport request to proceed with saving the structures to be generated. Click on “OK” button.

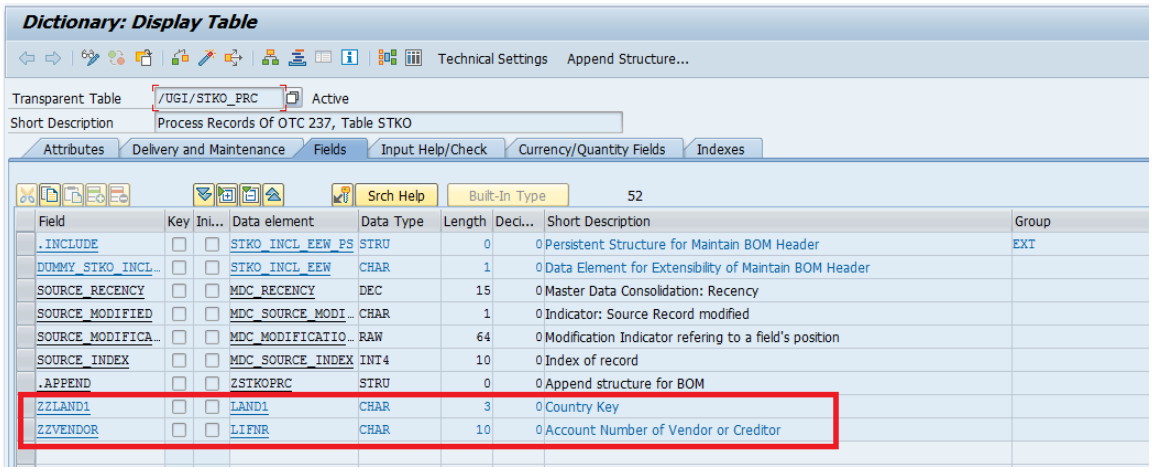


The success message appears as “Artifacts successfully created” as displayed in the following screen.

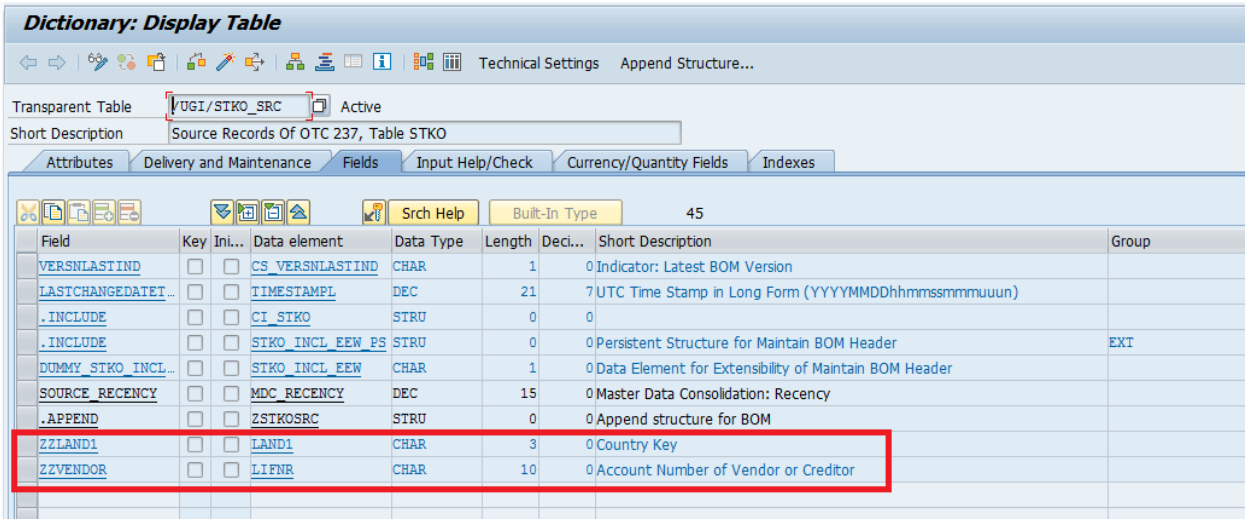


7. Verify that the newly added fields are reflected in the MDC specific structures and tables corresponding to STKO table.

   The following screen shows the process records table “/UGI/STKO_PRC” table with the newly added fields.



The following screen displayed the source record table “/UGI/STKO_SRC” table with the newly added fields.



Extend MDG Change Request With new Fields

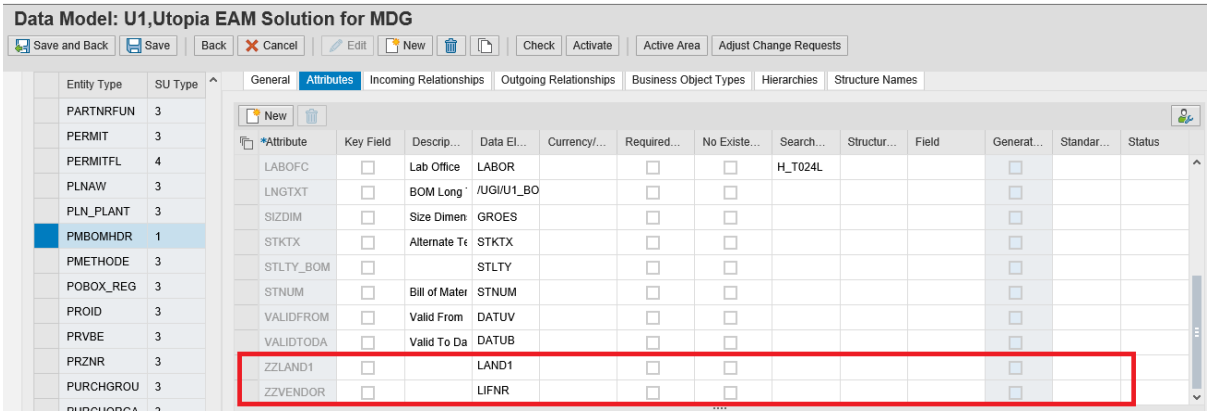
To incorporate the newly added fields in the MDG Change Request, the following steps are to be followed:

- Extend the Data Model
- Extend SMT Mapping
- UI Extensibility

Extend the Data Model

Use the following steps to add attributes to existing Entity Type.

1. Log into system for cross client maintenance.
2. Start Customizing for Master Data Governance (transaction MDGIMG). Navigate through the path: General Settings > Configuration Workbench
3. Select Data Model U1 and click on “Edit” button.
4. Choose the BOM header entity” PMBOMHDR”.
5. Navigate to the “Attributes” tab. Add the field ZZLAND1 with the data element LAND1 and field ZZVENDOR with data element LIFNR.



6. Click on “Check” button.
7. Click on “Activate” button.

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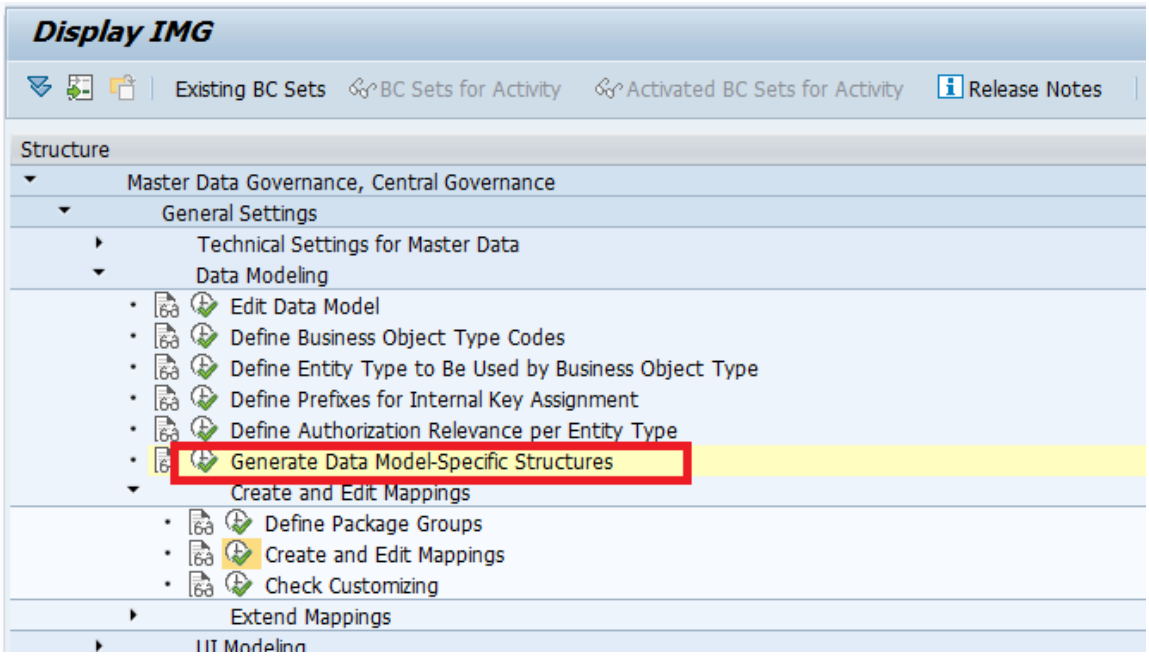
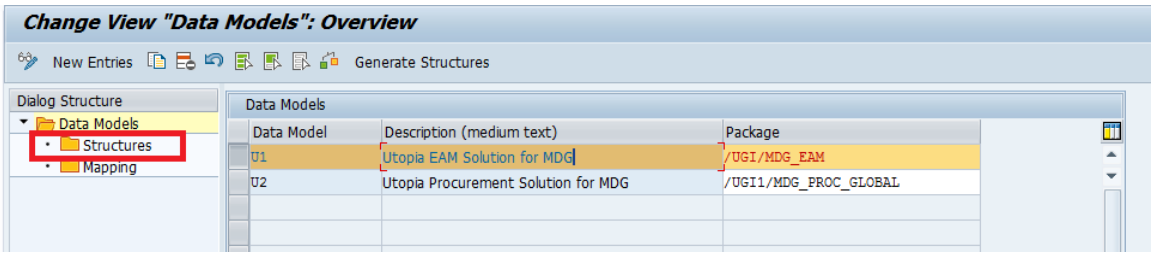
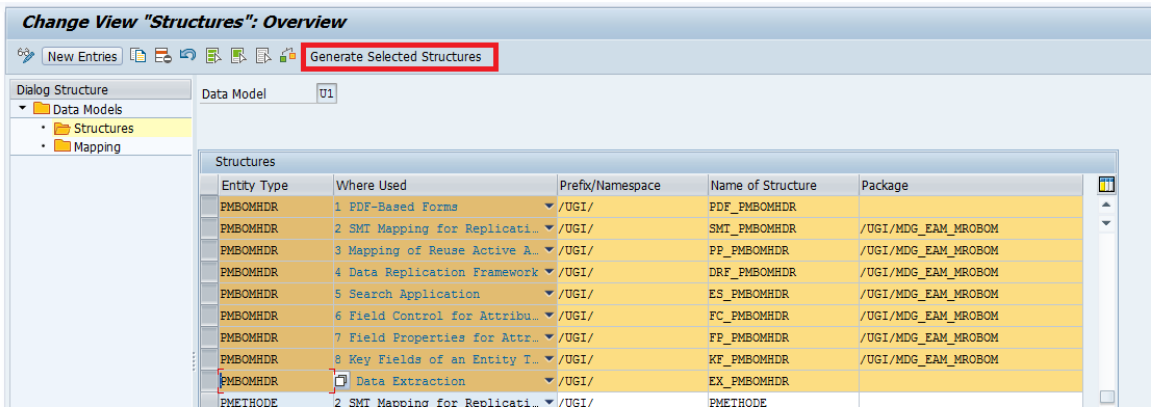
8. Click “Adjust Change Request” button to adjust the existing Change Requests.
9. Navigate through the path: Master Data Governance, Central Governance > General Settings > Data Modeling > Generate Data Model-Specific Structures.



10. Select the data model as “U1’” and click on “Structures”.



11. Select the BOM header entity “PMBOMHDR” and click on the “Generated Structures”.



You can verify that the following structures are activated successfully.

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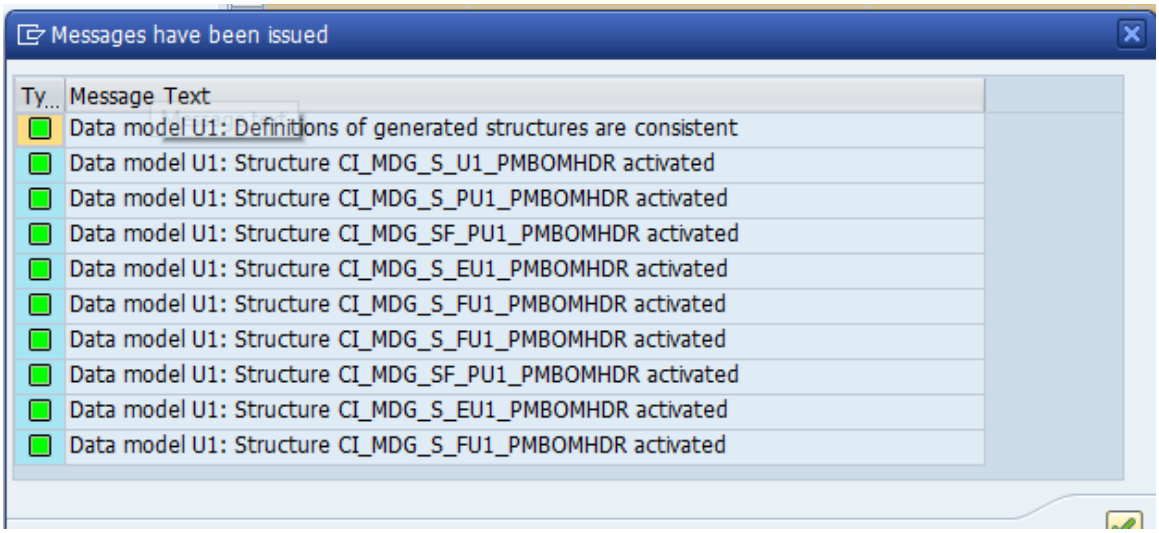
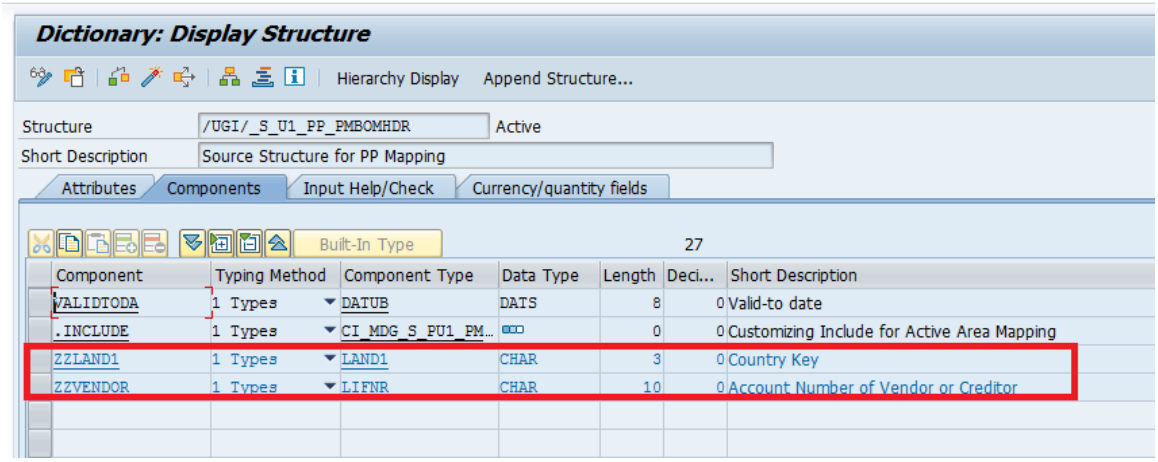


The following screen shows that the new fields are now available in the staging tables to proceed with the SMT mapping.

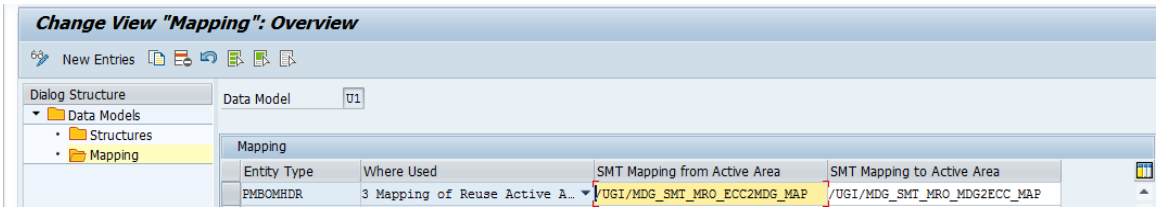


Extend SMT Mapping

You can use the following steps to map the attributes from staging to active area and vice versa.

1. Navigate through the path: Master Data Governance, Central Governance > General Settings > Data Modeling > Generate Data Model-Specific Structures.

2. Select the data model as “U1” and click on “Mapping”. Choose the entity as “PMBOMHDR”. The following screen shows the SMT Mapping values maintained for /from active area.



3. Navigate through the path: Master Data Governance, Central Governance > General Settings > Data Modeling > Create and Edit Mappings > Create and Edit Mappings.

   A new window opens in browser.

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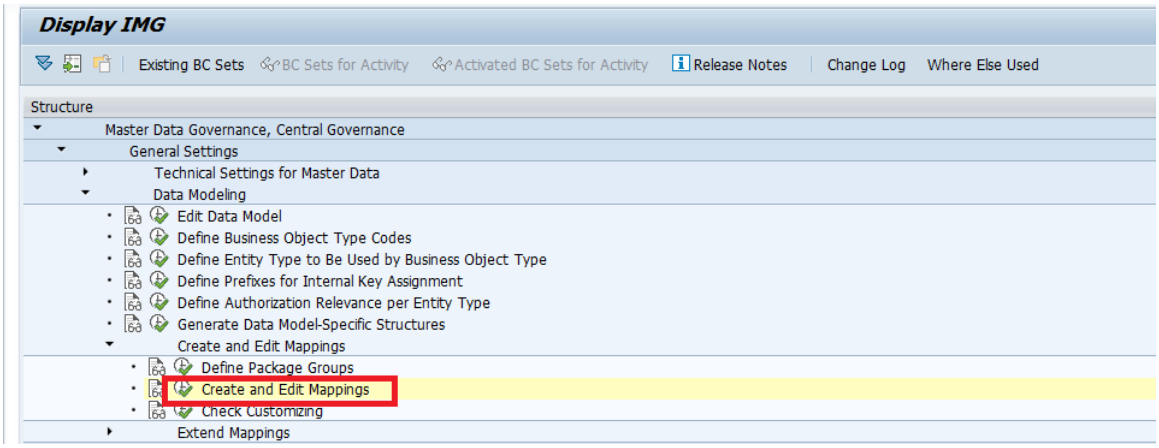
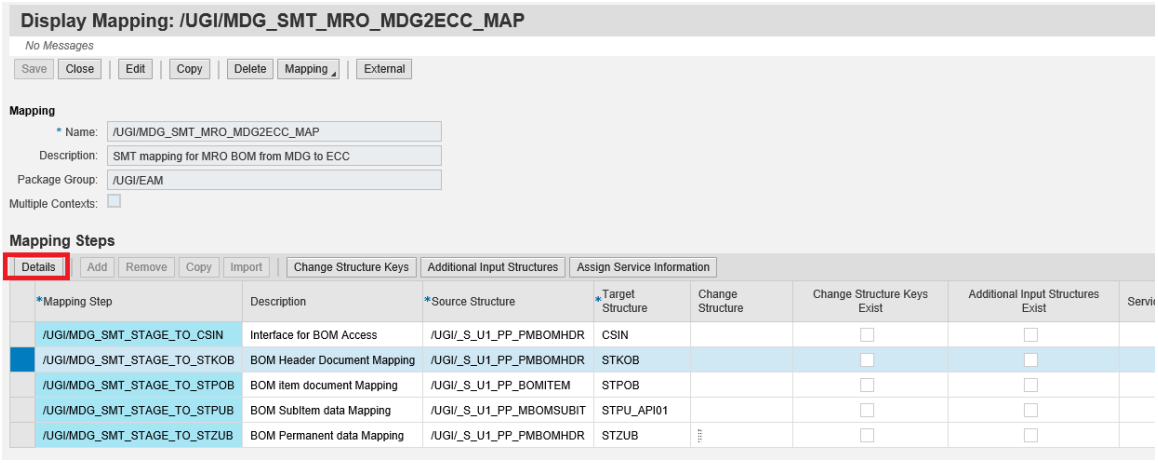
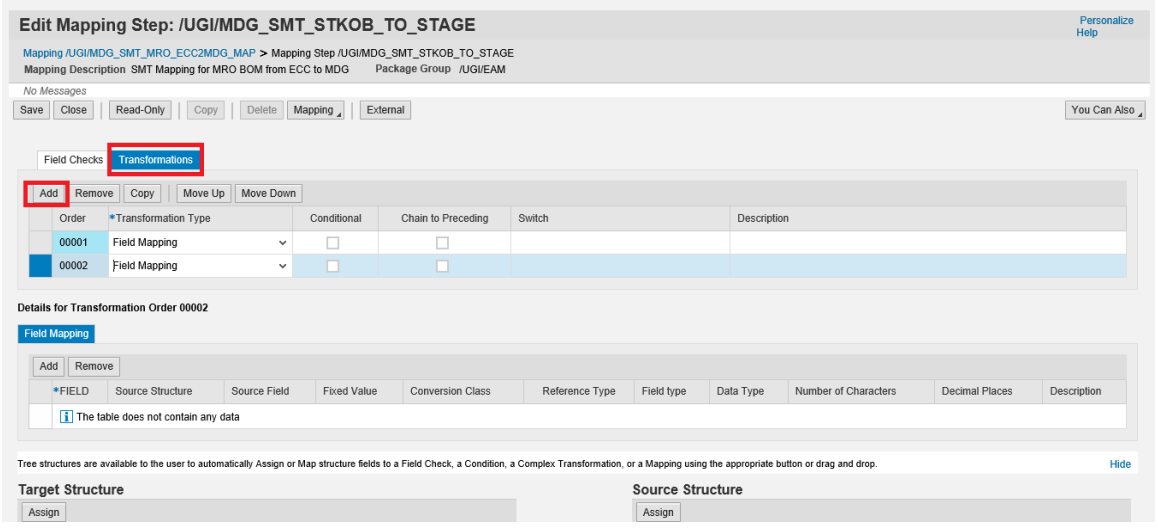


4. Choose the mapping as "/UGI/MDG_SMT_MRO_MDG2ECC_MAP" on the UI.
5. Choose the mapping step as ""/UGI/MDG_SMT_STAGE_TO_STKOB" and click on the "Details" button as displayed in the following screen.



6. Under the "Transformations" tab, click on the "Add" button to add a new step of type "Field Mapping".



7. Choose the new field "ZZLAND1" from both the target and source structures and click on "Map" button to map the fields. Repeat the same for the field "ZZVENDOR".

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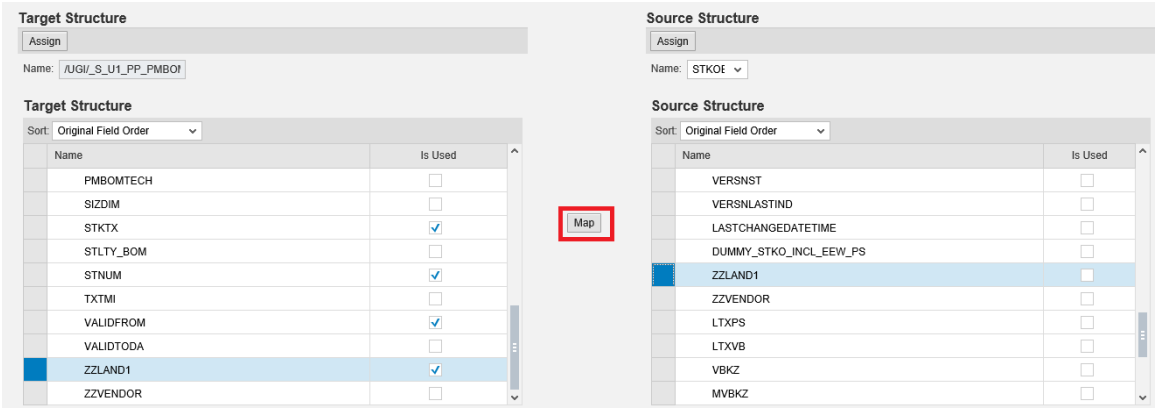
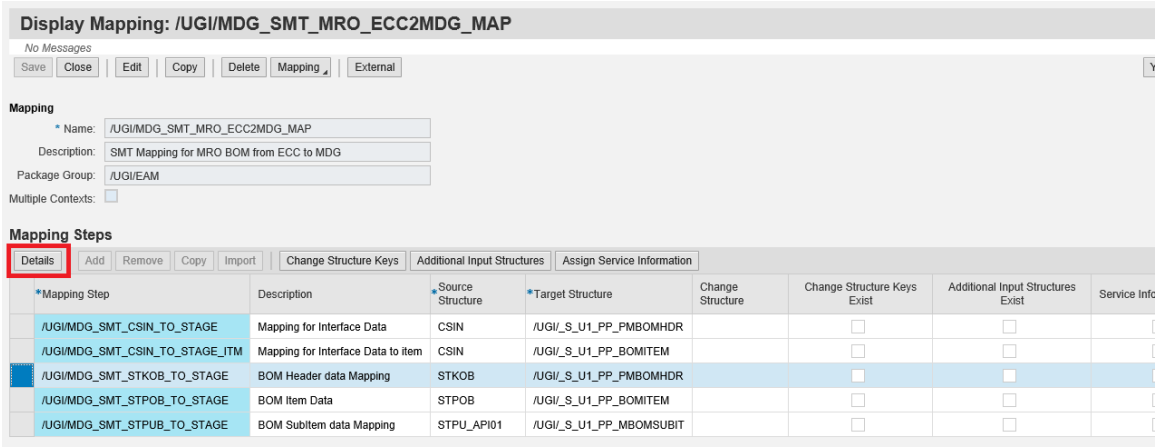
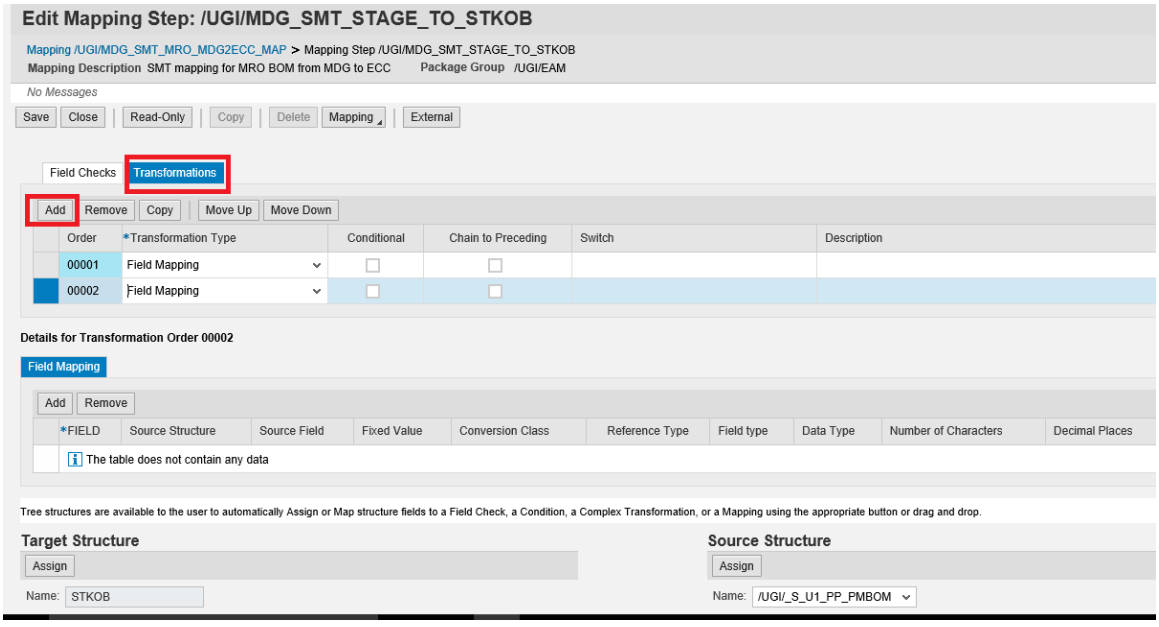


8. Choose the mapping as "/UGI/MDG_SMT_MRO_ECC2MDG_MAP" on the UI.
9. Choose the mapping step as ""/UGI/MDG_SMT_STAGE_TO_STKOB" and click on the "Details" button as displayed in the following screen.



10. Under the "Transformations" tab, click on the "Add" button to add a new step of type "Field Mapping".



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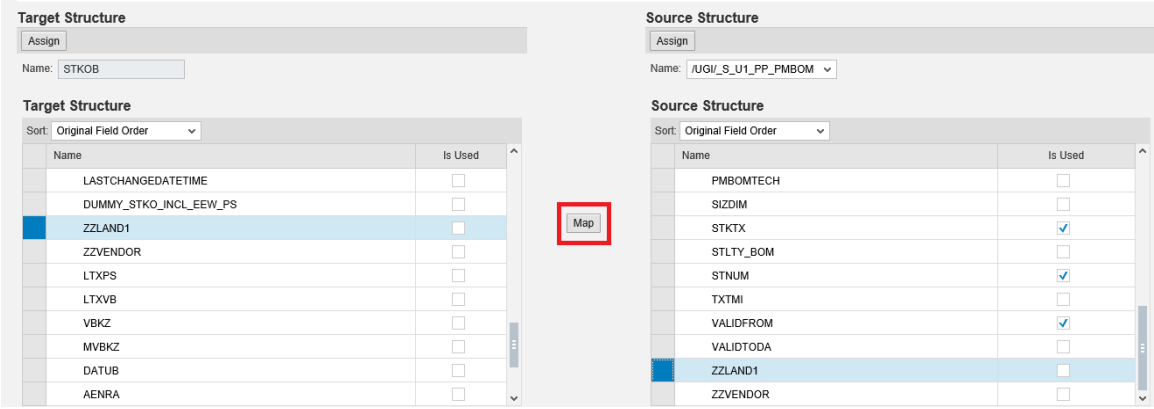
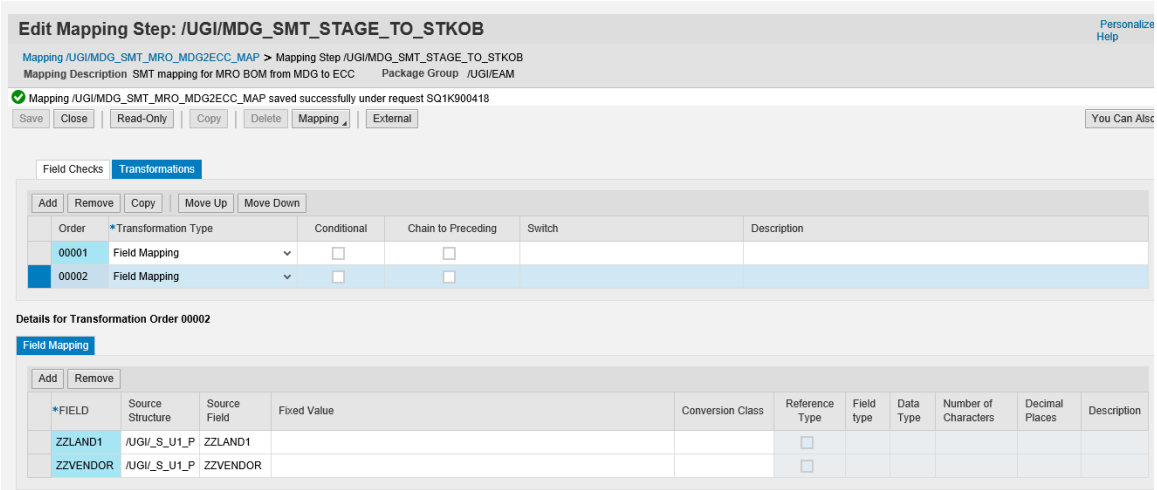
11. Choose the new field “ZZLAND1” from both the target and source structures and click on “Map” button to map the fields. Repeat the same for the field “ZZVENDOR”.



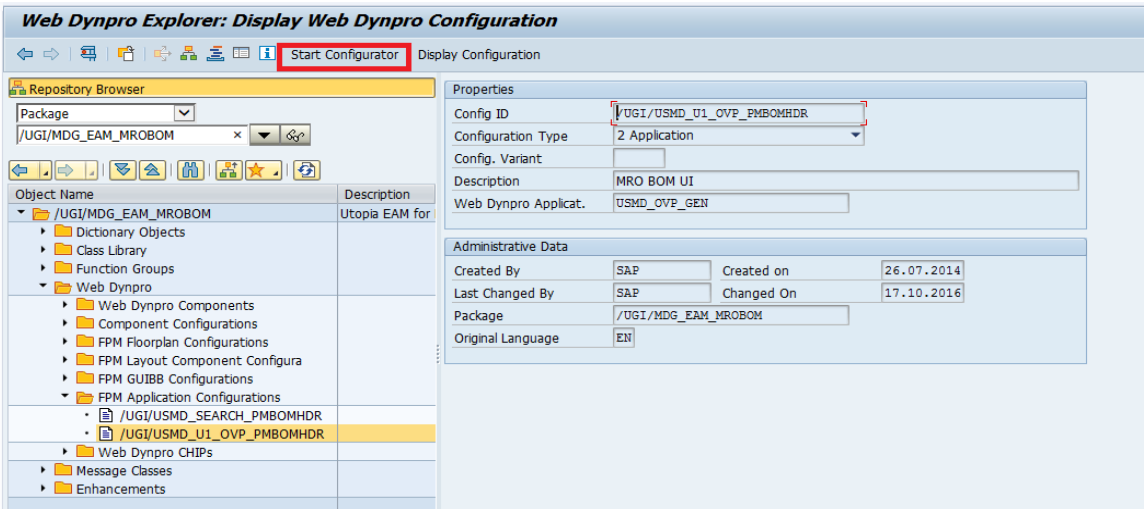
12. Click on “Save” button. A success message appears indicating that the mapping is saved successfully.



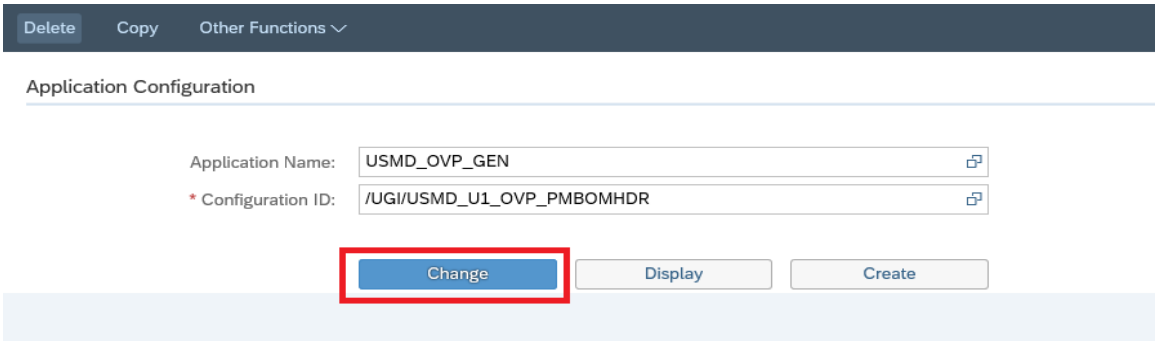
UI Extensibility

You can use the following steps to add the newly added fields to the MDG Change Request UI.

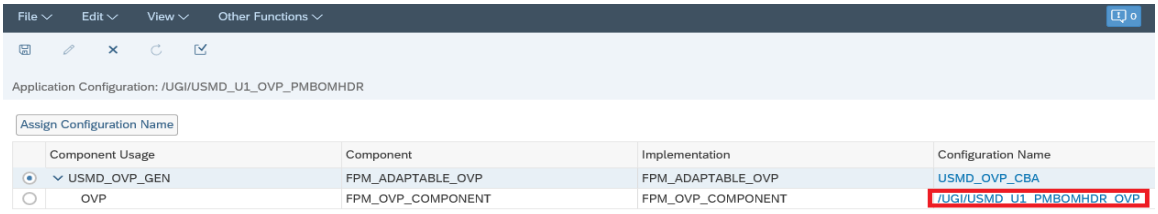
1. Run transaction code (t-code) SE80 and provide the package name as “/UGI/MDG_EAM_MROBOM”. Choose the FPM application configuration as “/UGI/USMD_U1_OVP_PMBOMHDR” and click on the button “Start Configurator”.



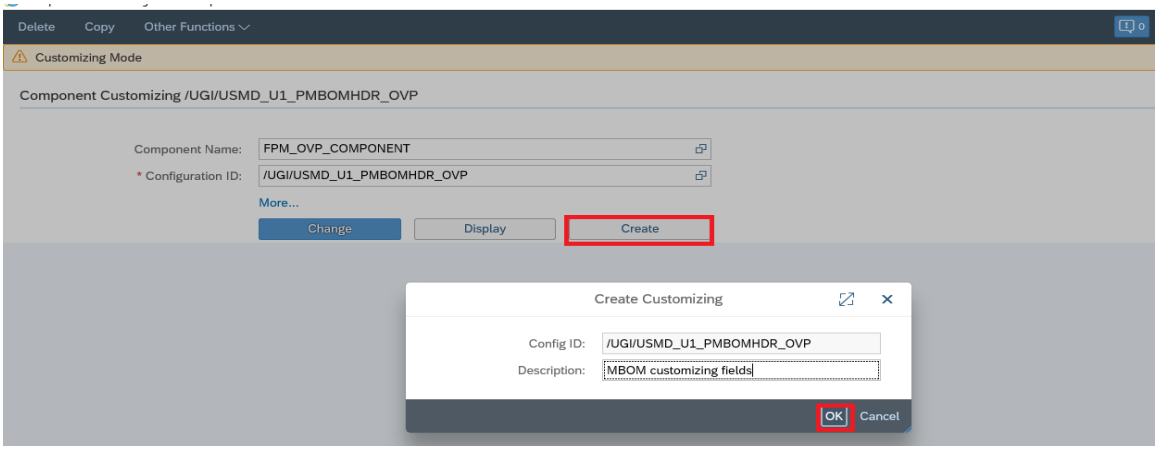
2. Click on the “Change” button for the configuration ID as “/UGI/USMD_U1_OVP_PMBOMHDR”.



3. Click on the configuration name “/UGI/USMD_U1_PMBOMHDRO_OVP”.



4. Click on “Other functions” button and select “Create customizing” option.
5. Click on “Create” button and enter the description.



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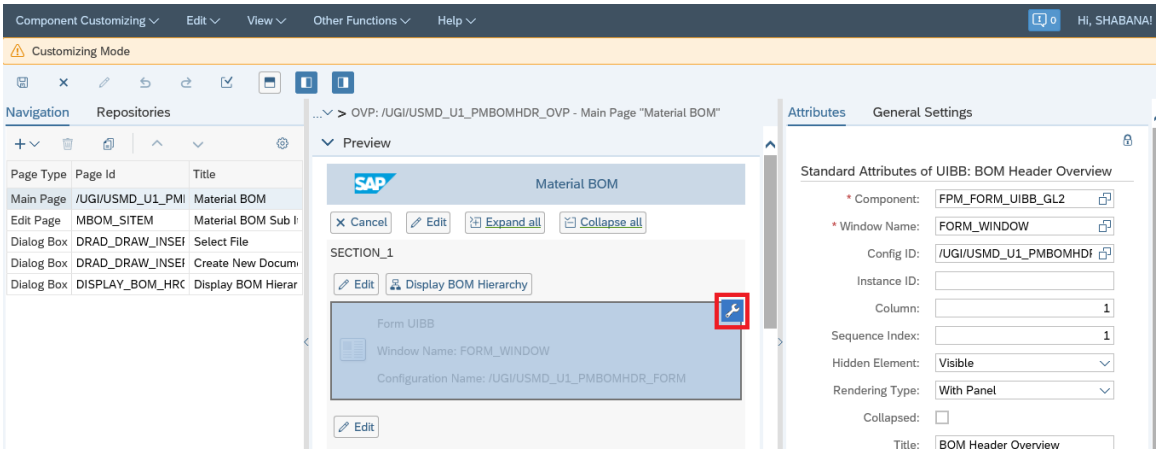
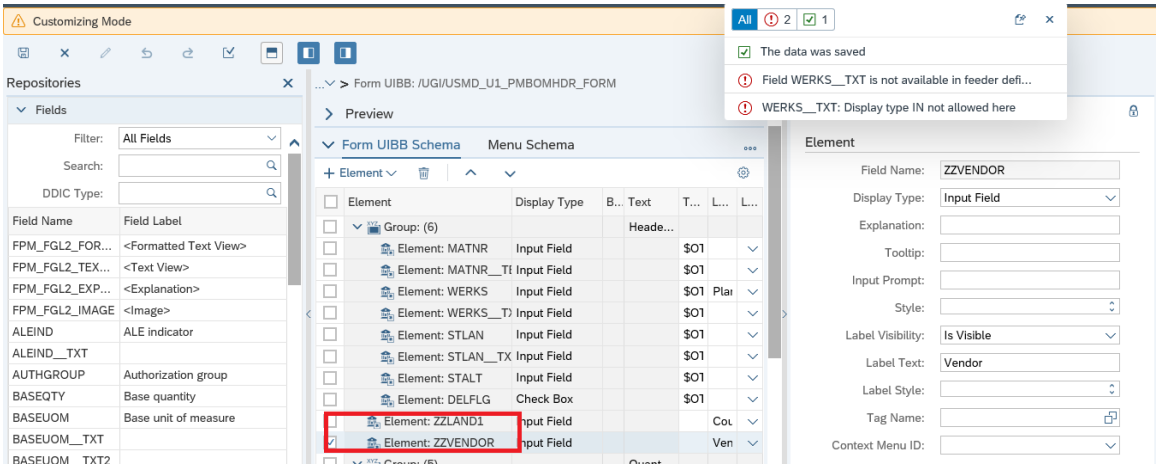
The following screen opens.

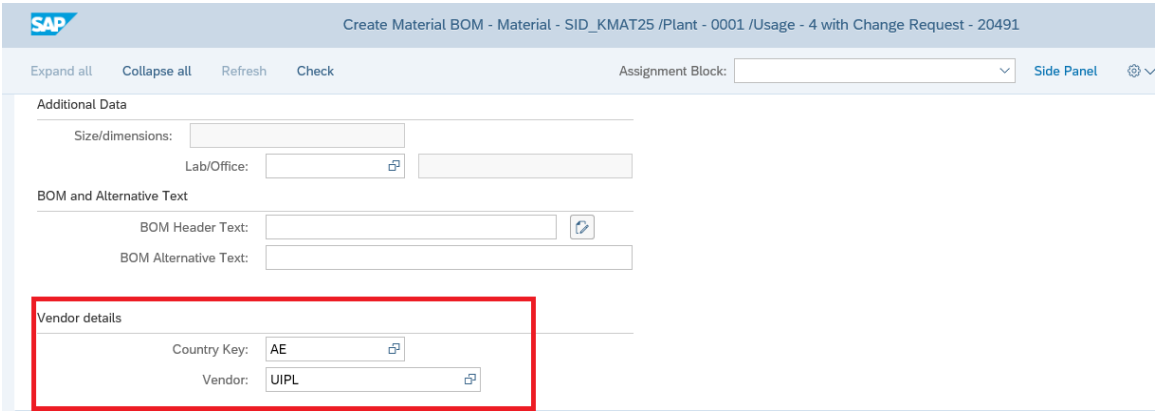
6. Choose the UIBB for BOM header “/UGI/USMD_U1_PMBOMHDR_FORM” and click on the “Configure UIBB” button as highlighted in the following screen.



7. Under the “Form UIBB Schema”, add a new Group with the description “Vendor” and add the newly added fields under the group by selecting “+Element” option.
8. Click on “Save” button once the fields are added.



The fields are added to the MDG Change Request and backend and ready for the use.



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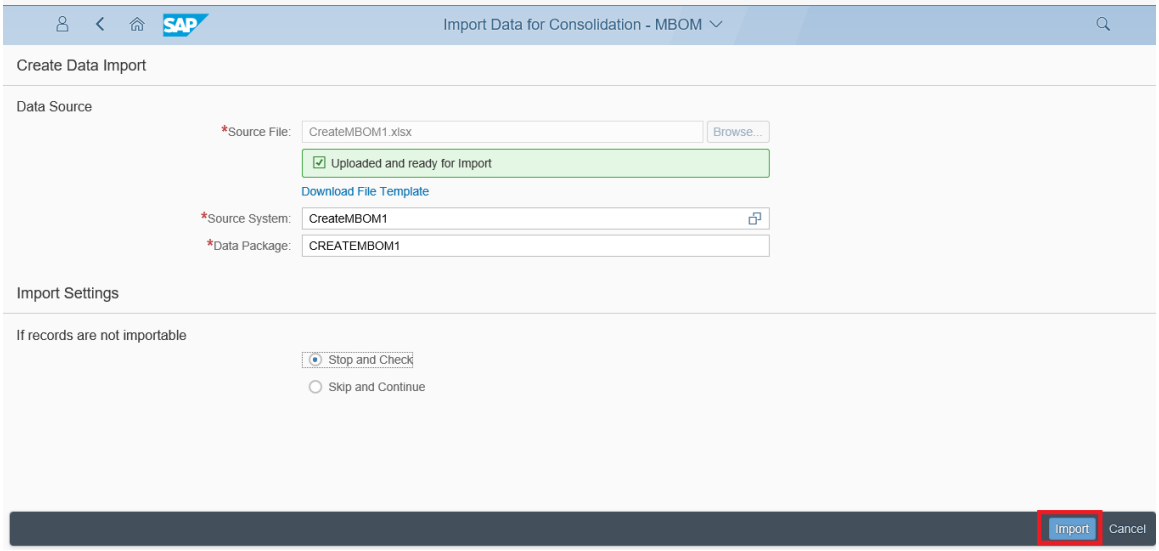
Result

You can use the following steps to test the Master Data Consolidation and Mass Processing for the newly added fields.

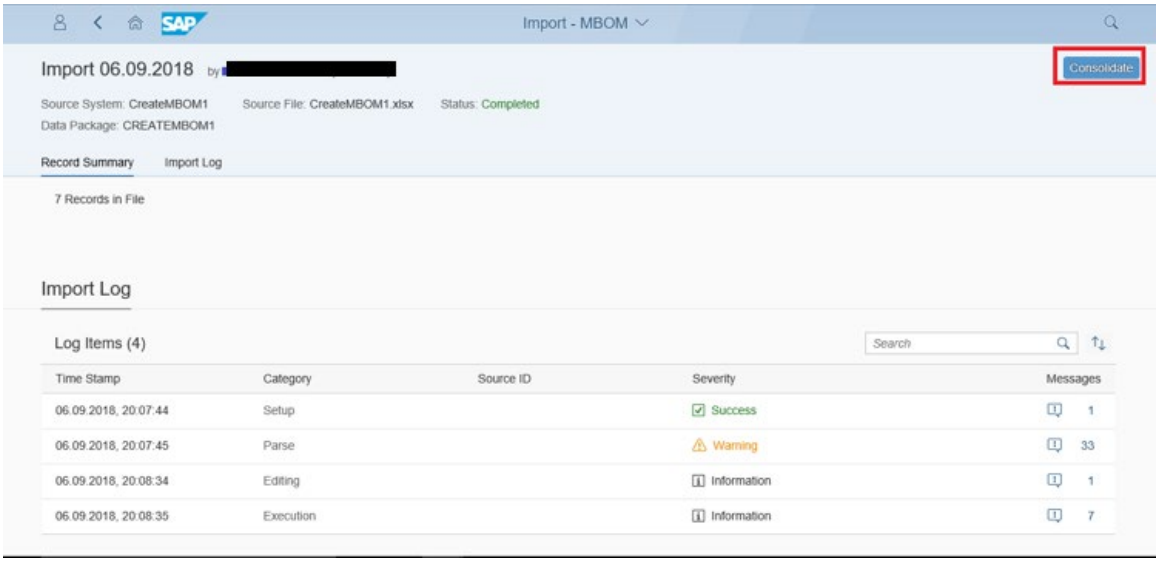
Note

The following example is for the mass create for MBOM though MDC.

1. Launch t-code “/UI2/FLP”. Click on the “Import Data for Consolidation-MBOM” fiori application.
2. Choose the MBOM file prepared for mass create and upload the same using “Browse” button.



3. Once the import is completed, the following screen appears with the Import log.
4. Click on “Consolidate “button to initiate the process or alternatively, you can use the “Create Consolidation” Fiori application.



5. Choose the “Process Template” from the drop down, enter description and click on “Save” button.

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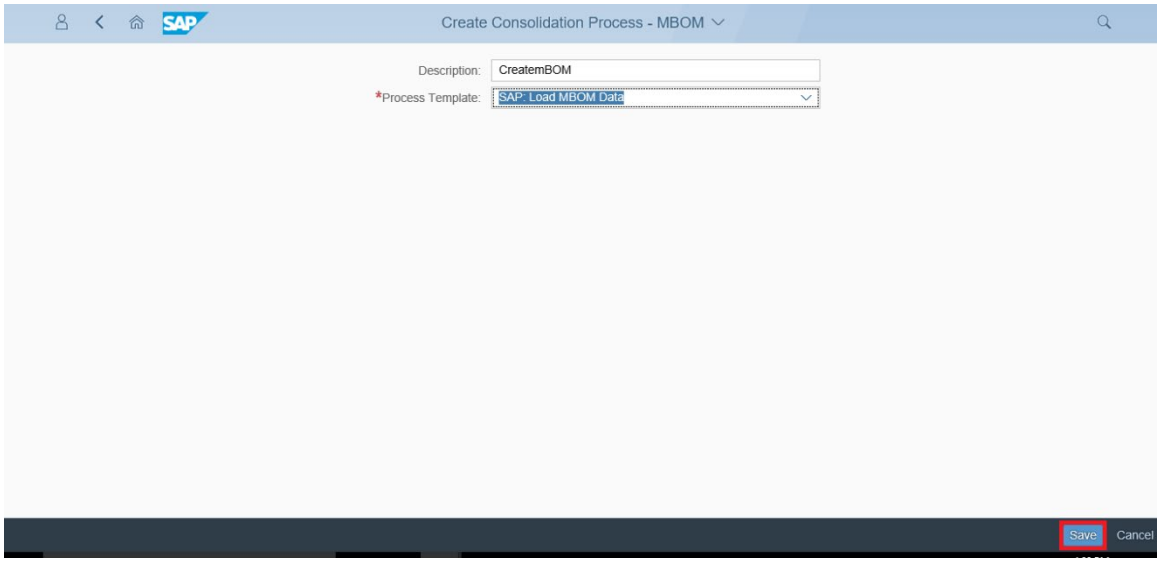
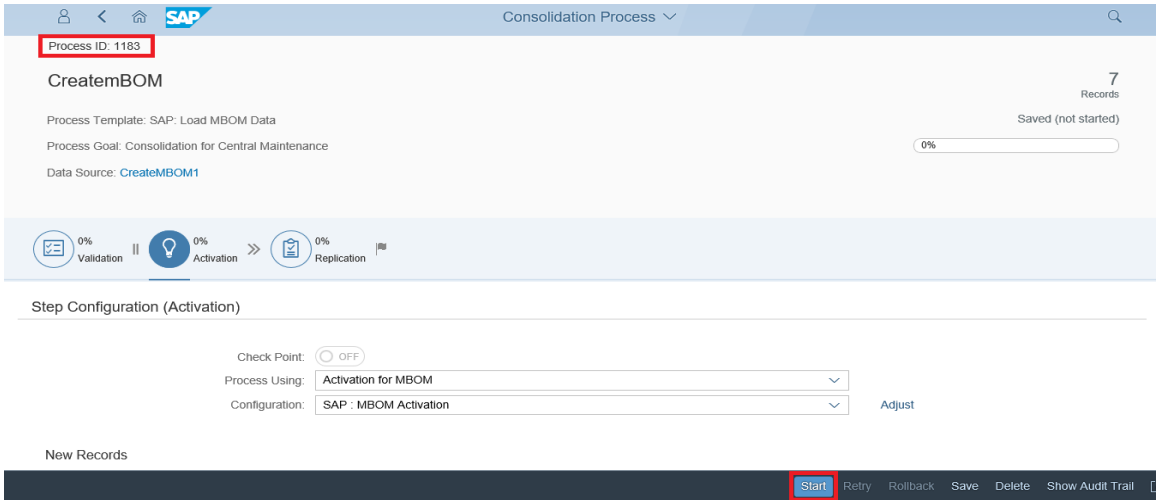
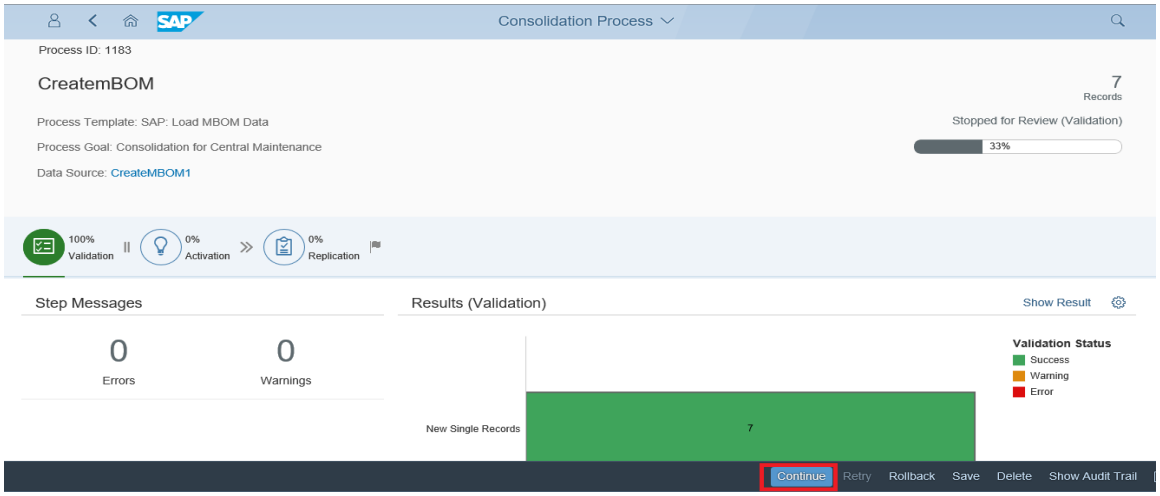


A new process ID is created.

6. Click on the “Start” button to start the processing.



7. Once the validation is completed successfully, click on “Continue” button to move to the next step.



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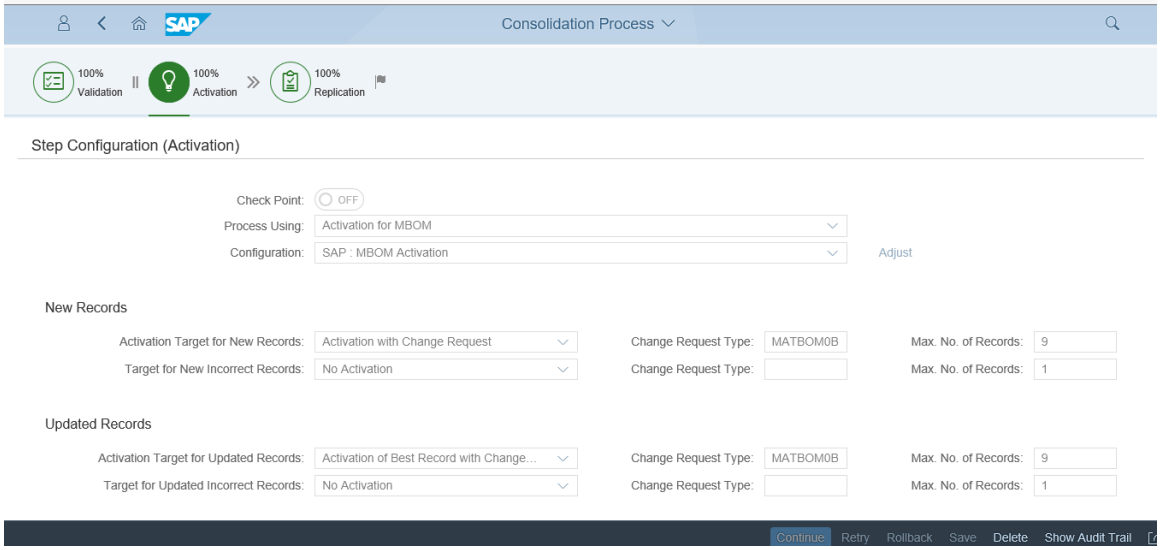
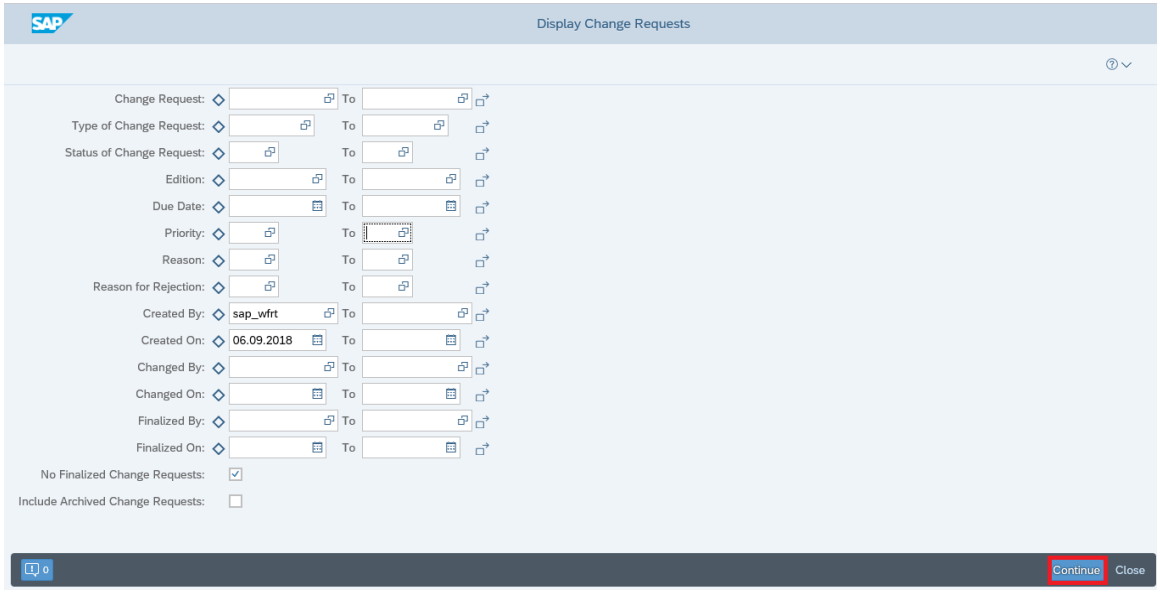
8. Once the activation step is completed, the status of the process ID changes to finished.

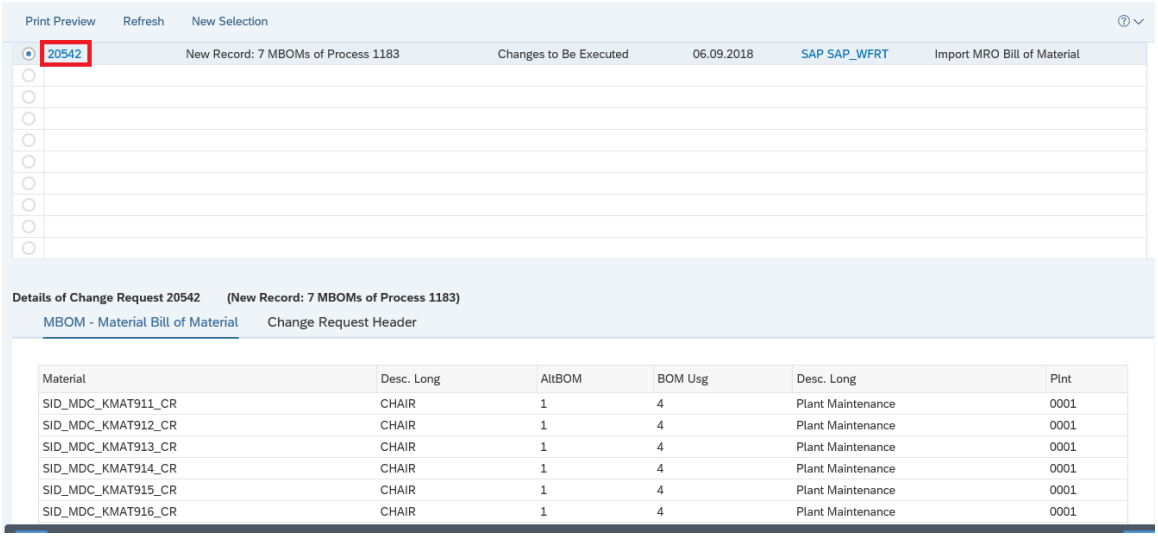


9. Launch t-code NWBC and use the role “/UGI/_MDGEAM_MENU” to view the Change Request created in case you have selected “Activation though Change Request” option from New Records as displayed in the above screen.
10. Enter the “Created By” as “SAP_WFRT” and “Created On” as the date on which the process is created.

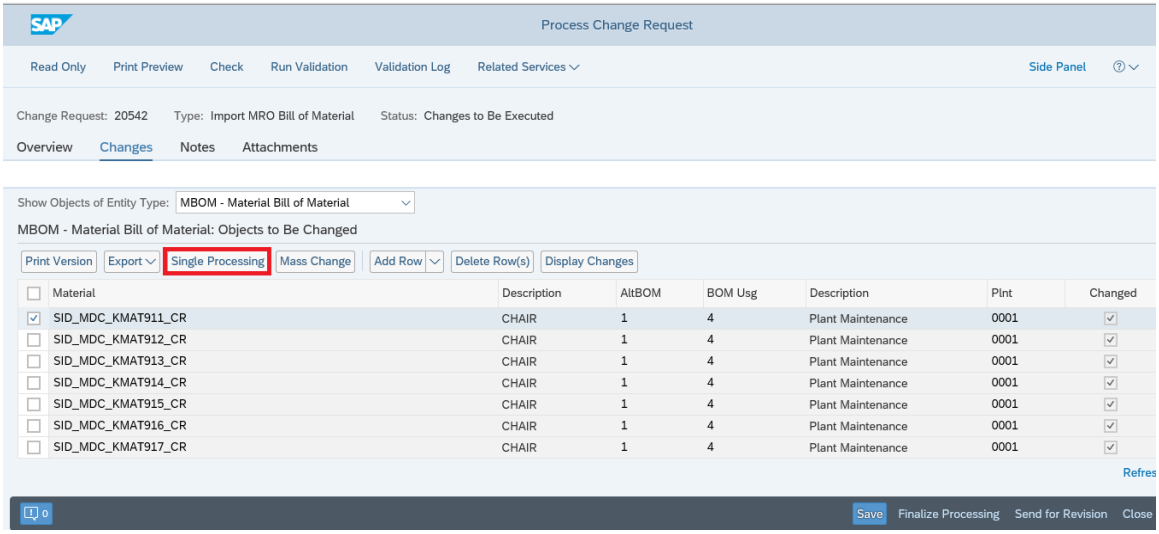


The Change Request of type MATBOM0B is created.

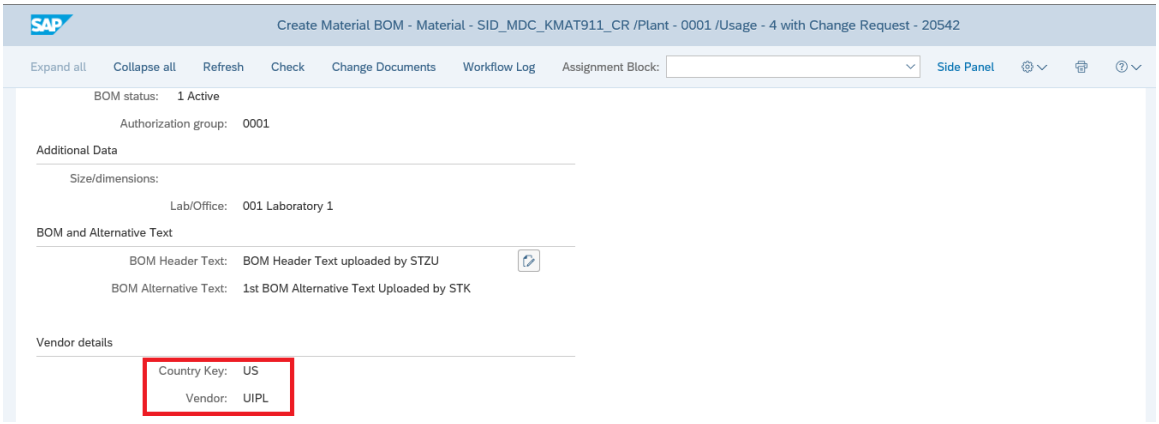
11. Click on the Change Request number.



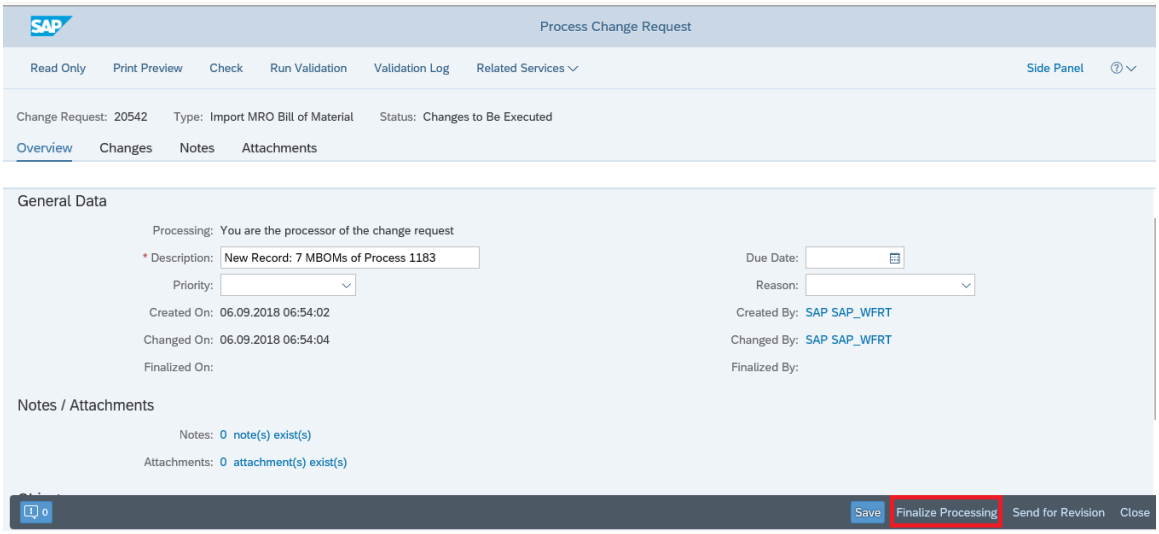
12. Click on the “Single Processing” button to view the individual objects.



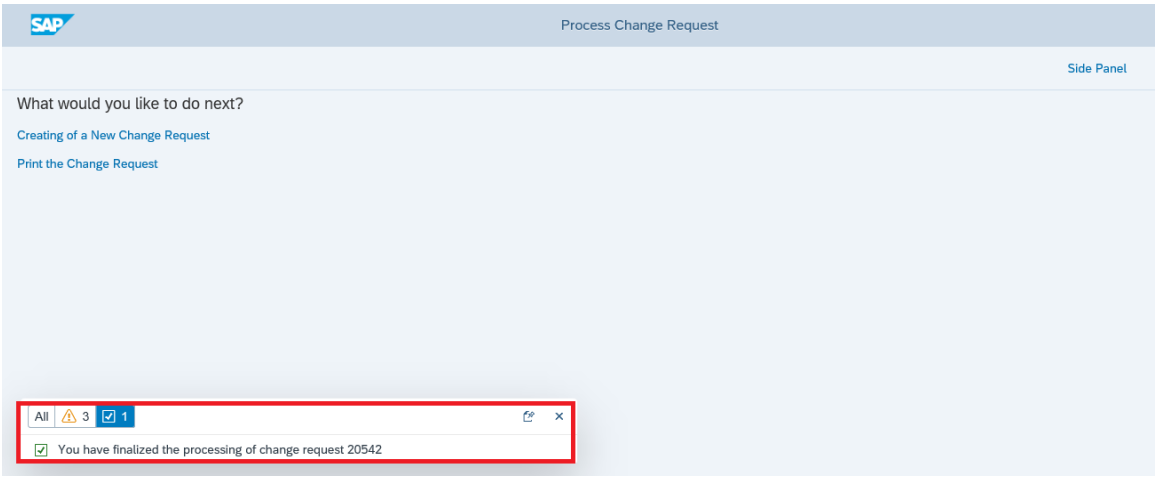
13. You can verify that the newly added fields are passed to the Change Request.



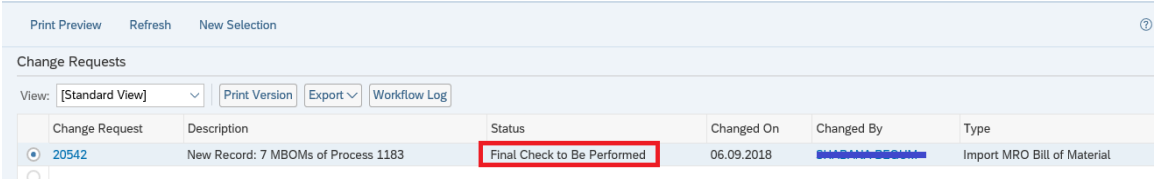
14. Click on the “Finalize Processing” button.



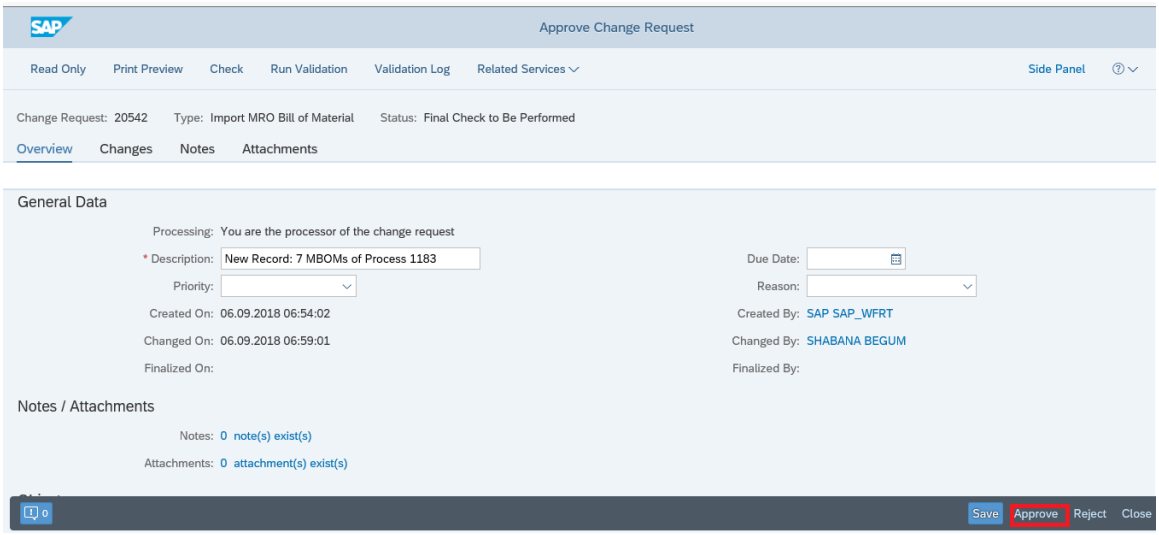
A success message appears as “You have finalized the processing of Change Request XX”.



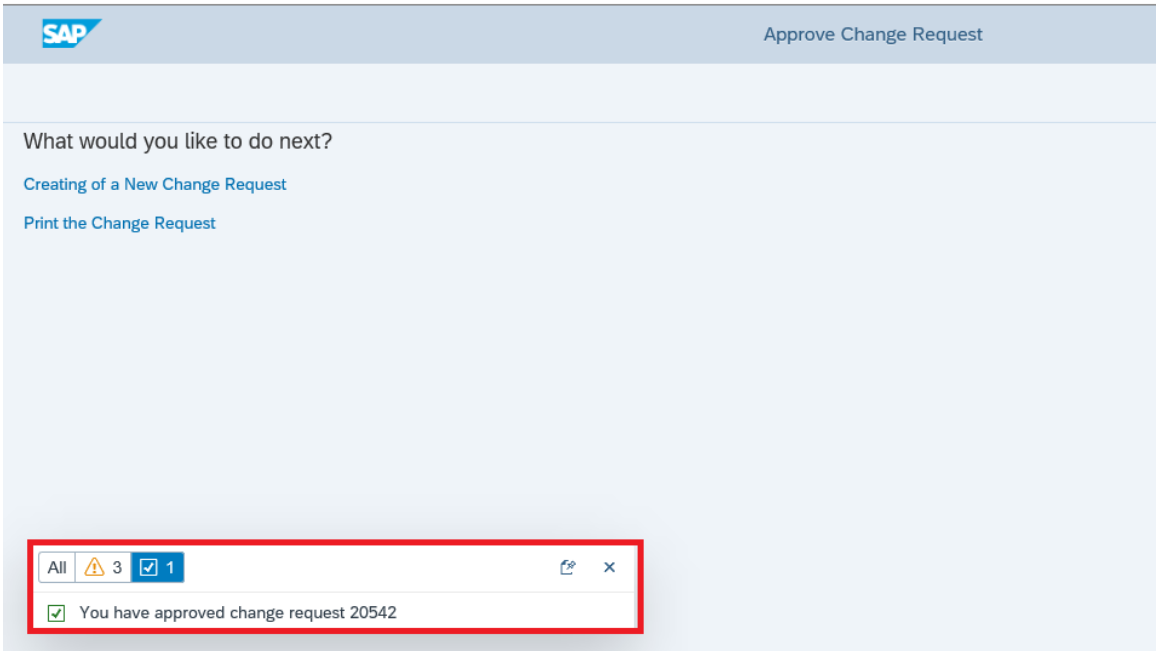
The status of the Change Request changes to the “Final Check to be Performed”.



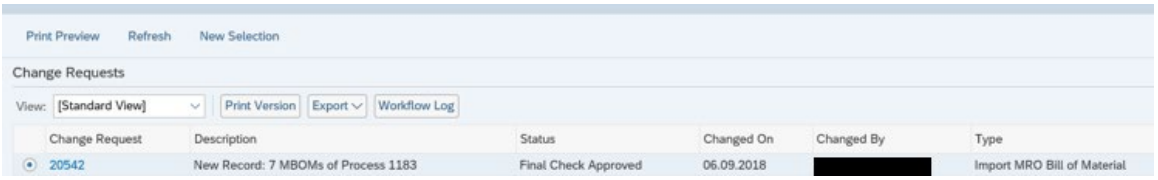
15. Click on the “Approve” button.



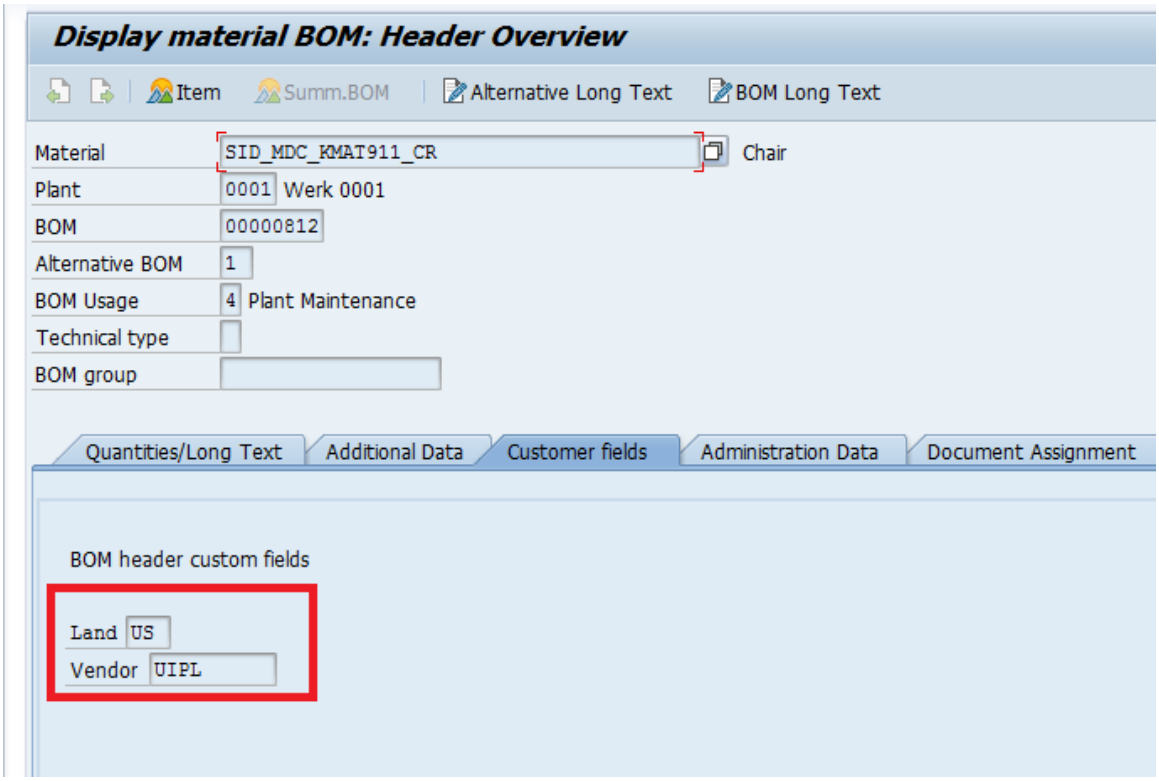
A success message appears as “You have approved change request XX”.



The status of the Change Request is changed to “Final Check Approved”.



You can validate that the newly added fields data are reflected in backend by using the t-code “CS03” to display the BOM.



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