

How-To Guide: Extend MDG-uEQUIP in the U1 Data Model

Applies to

MDG EAM Solutions by Prometheus Group

Summary

SAP Master Data Governance provides an out-of-the box solution for the central management of various master data objects such as financial objects, supplier and material. In addition, SAP Master Data Governance also provides the flexibility to customize the solution, in cases where the predelivered content does not fully match customer requirements. You can use this guide to extend the MDG-U1 Data Model by a new entity type. The attribute values of the new entity type will be copied to the corresponding ERP tables (reuse option) after activation of the Change Request.

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Table of Contents

Scenario		
High Level Requirements	3	
Governance Process	3	
Implementation	4	
Data Model Extension	5	
Add attributes to existing Entity Type	5	
Generate MDG Data Model-Specific Structures	7	
SMT Mapping	9	
SMT Mapping – Get Mapping Names from Data Model U1	9	
SMT Mapping - Primary Persistence to Staging	9	
SMT Mapping - Staging to Primary Persistence	11	
Adjust Staging Area of Linked Change Requests	12	
Extending the UI Configuration	13	
Testing the Configuration	15	



Scenario

High Level Requirements

The business requires the new attributes called "User Detail" as part of the MDG Equipment Data Model

You want to extend the (Type1) entity type EQUI to include attributes: ZZNAME, ZZID.

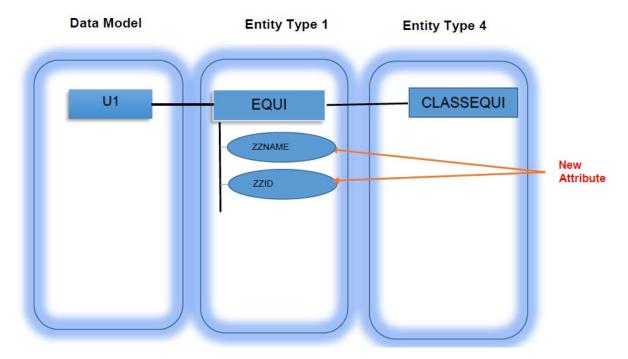


Figure: Data Model - Equipment (Scope of 2017 Delivery) with custom attributes 'ZZNAME" and "ZZID"

Governance Process

The default governance process delivered with MDG is used. No changes to the governance process are necessary as part of this scenario.

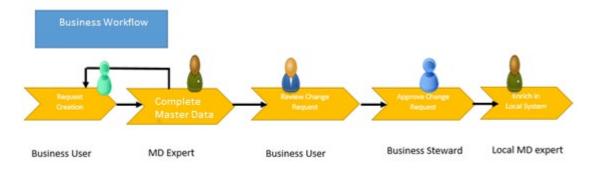


Figure: Equipment processing in Master Data Governance



Implementation

Two major building blocks make up the implementation of the entity type extension. In the first phase, you extend the MDG Data Model. In the second phase, you extend the User Interface to include the new entity type.

The following flow diagram displays the detailed implementation steps. It is recommended that you use it as an orientation.

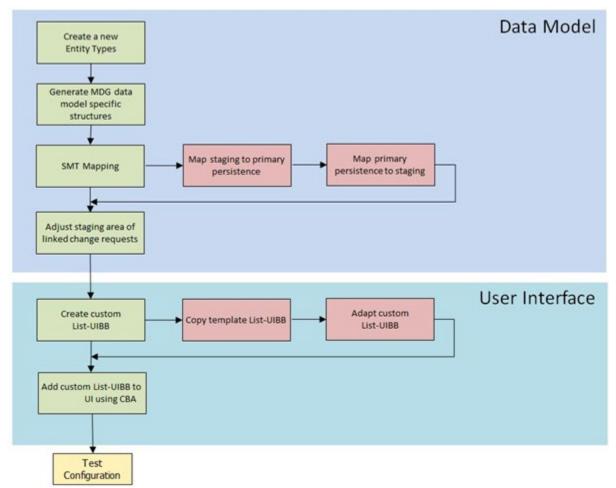
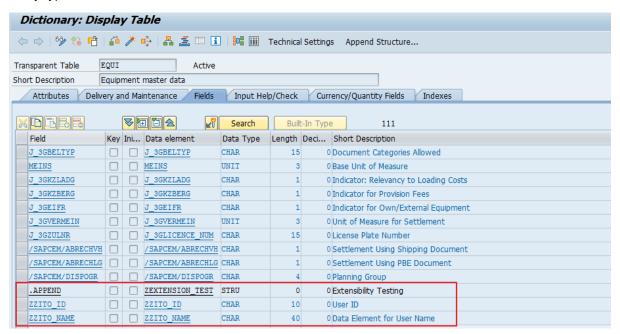


Figure: Implementation steps for re-use Entity-Type extension



Data Model Extension

You want to extend the MDG Data Model for Equipment (U1) with the additional attributes ZZITO_NAME and ZZITO_ID. The following fields from EQUI table should be modelled as attribute of entity type EQUI in MDG.

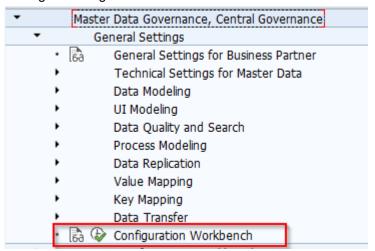


You first create the attributes ZZITO_NAME, ZZITO_IID in entity type EQUI.

Add attributes to existing Entity Type

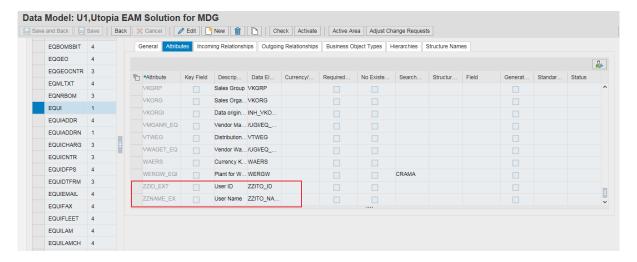
Use the following steps to add attributes to existing Entity Type.

- 1. Log into system for cross client maintenance.
- 2. Start Customizing for Master Data Governance (transaction MDGIMG). Go to > General Settings > Configuration Workbench.

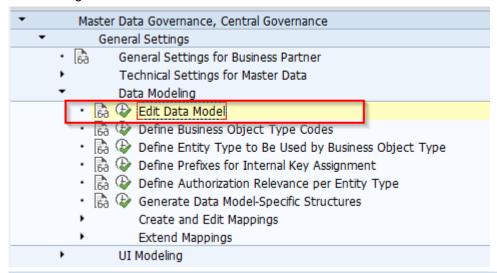


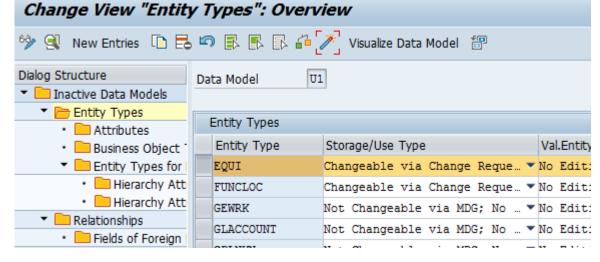
- 3. Inside the Configuration Workbench, select Data Model U1 > Click the "Edit" button > Select EQUI from the list of Entity Types in the left side table- > Click on the tab "Attributes" in the right side > Click the "New" button.
- 4. Add the new attributes of Entity Type EQUI as displayed in the following screen.





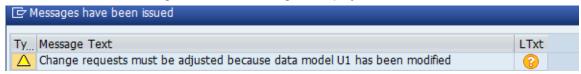
- 5. Save your settings.
 - It is recommended to assign a Search Help to a Data Element in exceptional circumstances. If you do this, the input help executes the search help instead of reading the data in the check table or the fixed values of data element's domain.
- 6. Activate the extended Data Model from MDG system via Edit Data Model option as displayed in the following screen.







After activation the following information message is displayed.



7. Make Change Request adjustments after creating the SMT mapping.

Generate MDG Data Model-Specific Structures

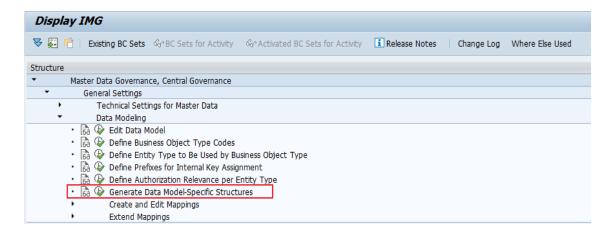
In general, if you change a Data Model (for example, if you change attributes of entity types or relationships) you need to regenerate the structures. You can assign a prefix and a package directly in the Data Model. Then the structures will be generated automatically with activation of the Data Model.

Older releases: Since the MDG Data Model was changed you need to regenerate the tables. In this Customizing activity, for each Data Model and entity type you generate technical structures and tables in the ABAP Dictionary. The system uses these structures internally for implementing the staging area. To generate these Data Model-Specific structures follow the steps below.

Note: In general, if you change a Data Model (for example, if you change attributes of entity types or relationships); you need to regenerate the structures.

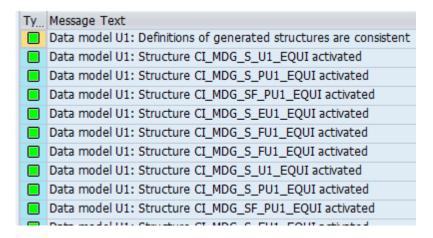
Use the following steps to generate Data Model Specific Structures.

Start Customizing for Master Data Governance (transaction MDGIMG).
 Go to > General Settings > Data Modeling > Generate Data Model-Specific Structures.

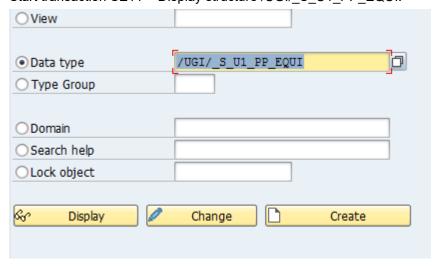


- 2. Select the row with Data Model U1 > Double-Click Structures in the left-hand panel > Choose the "Generate Selected Structures" button.
- 3. Verify that your structures were successfully generated.

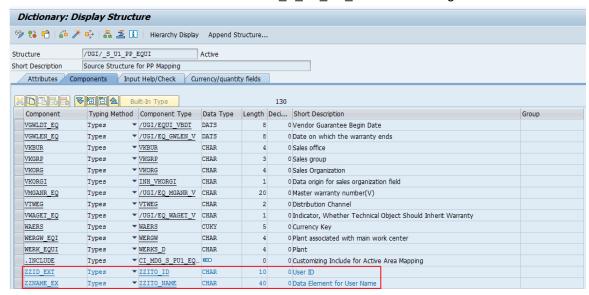




 In the following steps, you verify that one of the active area mapping structures was successfully generated with new fields.
 Start transaction SE11 > Display structure /UGI/_S_U1_PP_EQUI.



You have now verified that the structure /UGI/_S_U1_PP_EQUI has been generated.





SMT Mapping

You extend mappings by creating new transformations (complex transformations, field mappings) and field checks for them or by editing them.

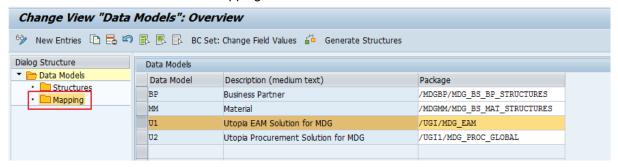
Important: When the mappings are saved, the system generates the corresponding coding. Make sure that all relevant structures are ready before you start.

SMT Mapping – Get Mapping Names from Data Model U1

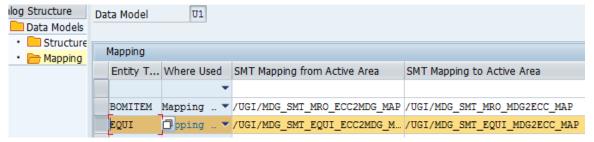
Use the following steps to get the mapping names:

1. Log into system for cross-client maintenance. Start Customizing for Master Data Governance (transaction MDGIMG).

Go to > General Settings > Data Modelling > Generate Data Model Specific Structures > Select Data Model U1 > Double-Click on Mapping.



The SMT mappings for Entity Type EQUI as displayed in the following screen.



SMT Mapping - Primary Persistence to Staging

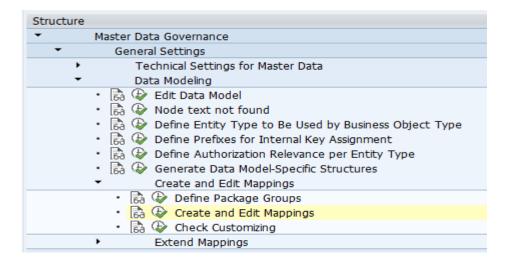
Use the following steps for SMT Mapping from Primary Persistence to Staging area.

1. Log into system for cross-client maintenance. Start Customizing for Master Data Governance (transaction MDGIMG).

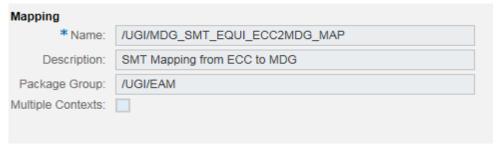
Go to > General Settings > Data Modeling > Create and Edit Mappings > Create and Edit Mappings.

Note: For new Entity Types, it is recommended to create a new mapping. When extending existing Entity Types, it is recommended to extend the existing mapping.

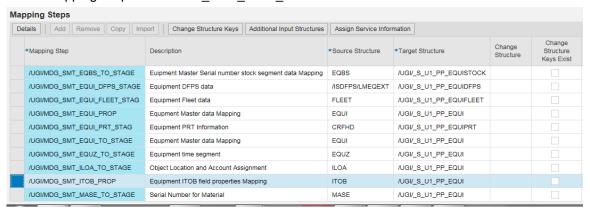




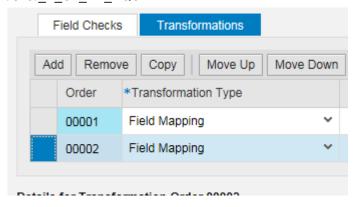
Extend mapping /UGI/MDG_SMT_EQUI_ECC2MDG_MAP.



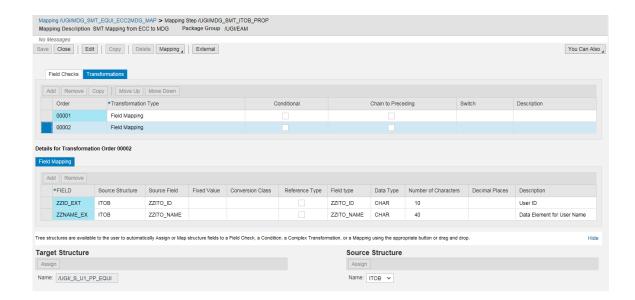
3. Select Mapping Step /UGI1/MDG_SMT_ITOB_PROP and select the "Details" button.



4. Add a mapping step – Assign Source Structure EQUI, assign target structure /UIG/_S_U1_PP_EQUI.





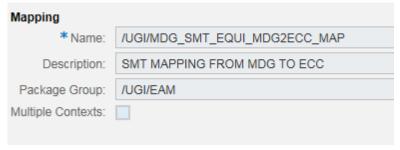


5. Save your changes.

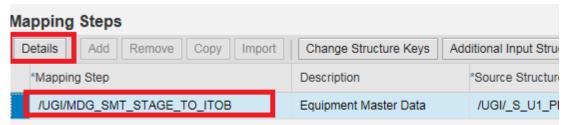
SMT Mapping - Staging to Primary Persistence

Use the following steps for SMT Mapping from Staging area to Primary Persistence.

1. Extend mapping /UGI/MDG_SMT_EQUI_MDG2ECC_MAP.

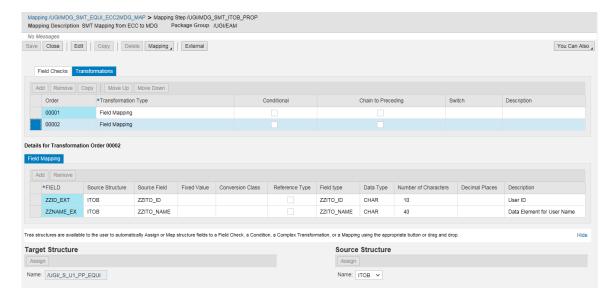


Select mapping step and choose the "Details" button. Map the fields as displayed in the following screen.



3. Add Mapping Step – Assign target structure ITOB and Assign Source Structure /UGI/_S_U1_PP_EQUI.



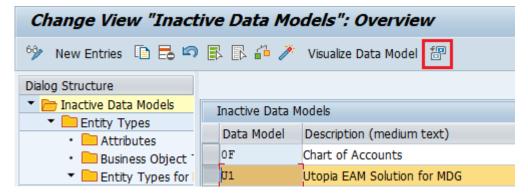


4. Save your changes.

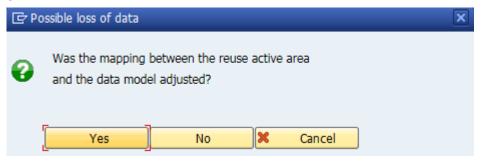
Adjust Staging Area of Linked Change Requests

Note: This step is necessary to adjust any open Change Requests after you have changed the Data Model.

Start Customizing for Master Data Governance (transaction MDGIMG).
 Go to > General Settings > Data Modeling > Edit Data Model > Select Data Model U1 > Double-Click on Entity Types > Choose the "Adjust staging area of linked Change Requests" button.



2. Choose the "Yes" button.



The following message appears.

Note: Make sure that user DDIC exist in all relevant clients.

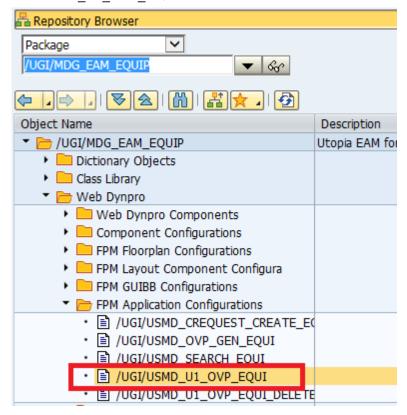




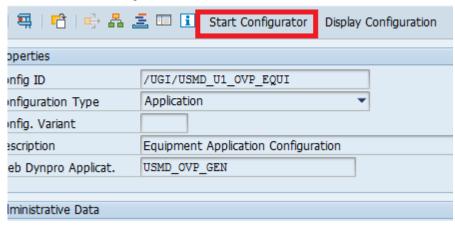
Extending the UI Configuration

Use the following steps to add customization to UI:

 Start transaction SE80 > In the drop down select Package > In the input field enter /UGI/MDG_EAM_EQUIP > Navigate to Web Dynpro > FPM Application Configurations > UGI/USMD U1 OVP EQUIP.



2. Enter the "Start Configurator" button.



3. In the web browser, click on "Continue in Display Mode".





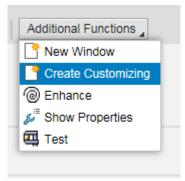
4. Click on the configuration UGI/USM_U1_EQUI_OVP.



5. Select the UIBB where you want to add new attributes and click on "Configure UIBB" button.



6. Click on Additional Functions > Create Customizing.

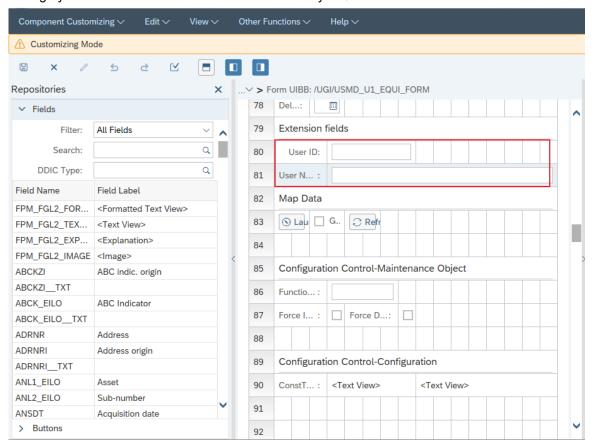


7. Click "OK" button.





8. Change your UI. Add new fields that is added in entity EQUI.



Testing the Configuration

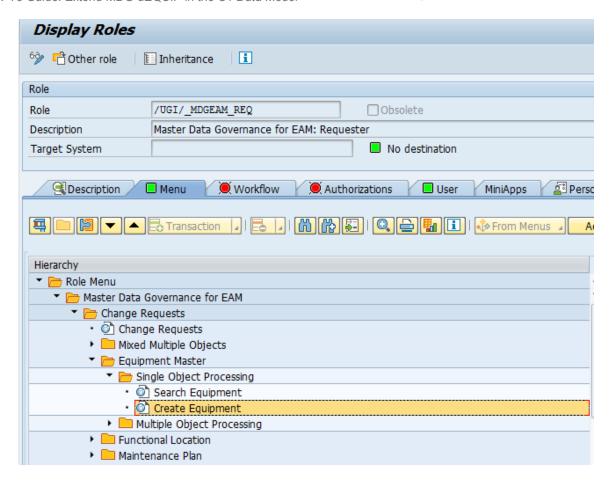
Note: If you extend the Data Model according to the guidelines shown below, but the fields are not populated when you Activate the Data Model, see SAP Note <u>1641867</u> - Values for extension field missing after CR activation.

To test your configuration, start the MDG Service Master UI using the following URL (replace the parameters host, port and client-id to match your landscape):

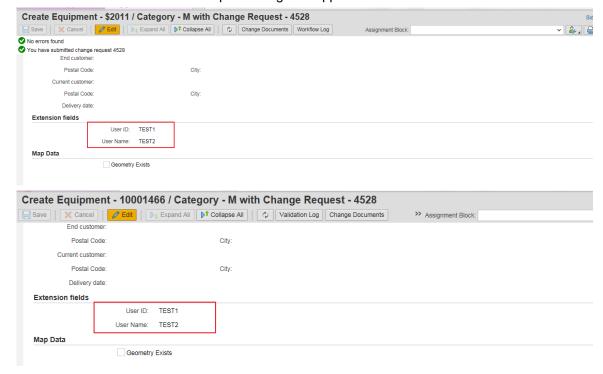
https://<host>:<port>/sap/bc/webdynpro/sap/ usmd_ovp_gen?
ACTION=CREATE&FPM_EDIT_MODE=E&saplanguage=EN&WDCONFIGURATIONID=%2fUGI1%2fUSMD_U1_OVP_EQUI#

 Start transaction PFCG > Enter role name /UGI/_MDGEAM_REQ and click the "Display" button > Select the Menu – Tab > In the hierarchy window navigate to Role Menu > Master Data Governance for EAM > Change Request > Service Master > Single Object Processing > Right-Click on Create Service and select Execute from the drop-down.





2. Save and Submit the CR. Finalize processing and Approve.



3. After activation, check table EQUI and verify that the attributes have been transferred correctly.



Table EQUI Disp	play	
Check Table		
MANDT	100	
EQUNR	10001466	
ERDAT	21.09.2018	
ERNAM	SAP_WFRT	
EQASP	EN	
AEDAT		
AENAM		
BEGRU		
EQTYP	М	
EQART		
LVORM		
INVNR		
GROES		
BRGEW	0,000	
GEWEI		
ANSDT		
ANSWT	0,00	
WAERS		
ELIEF		
GWLEN		
GWLDT		
WDBWT	0,00	
HERST		
HERLD		

Custom attributes have been populated correctly.



Table EQUI Display		
Check Table		
EQUI SNTYPE		
EQLB DUTY		
EQLB HIDE		
J 3GDISPO		
J 3GZDEQUI		
J 3GEQART		
J 3GKZMENG		
J 3GKONDE		
J 3GFIKTIV		
J 3GBELTYP		
MEINS		
J 3GKZLADG		
J 3GKZBERG		
J 3GEIFR		
J 3GVERMEIN		
J 3GZULNR		
/SAPCEM/ABRECHVH		
/SAPCEM/ABRECHLG		
/SAPCEM/DISPOGR		
ZZITO ID	TEST1	
ZZITO NAME	TEST2	
EQKTX	TESTEXT	
KZLTX		
TXASP	X	
EQKTU	TESTEXT	