# How-To Guide: Extend MDG-uSRVMSTR in the U2 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 pre-delivered content does not fully match customer requirements. You can use this guide to extend the MDG-U2 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.

**Company**: Prometheus Group

**Created On**: September 03, 2018

**Version**: 1.0

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# Scenario

## High Level Requirements

The business requires the new attributes called “User Detail” as part of the MDG Service Master Data Model.
You want to extend the (Type1) entity type SERVICE to include attributes: ZZNAME, ZZID.

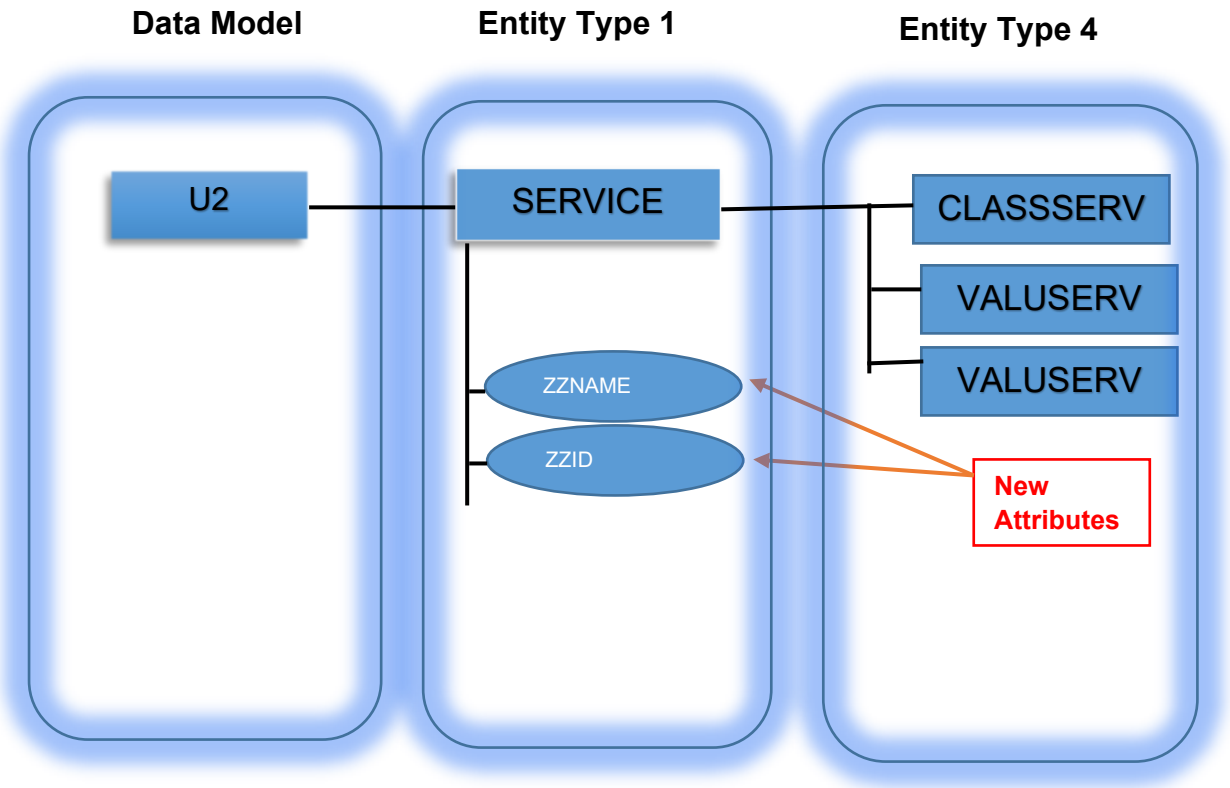



*Figure: Data Model – Service Master (Scope of 2017 Delivery) with custom attributes ‘ZZNAME” and “ZZID”*

## Governance Process

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

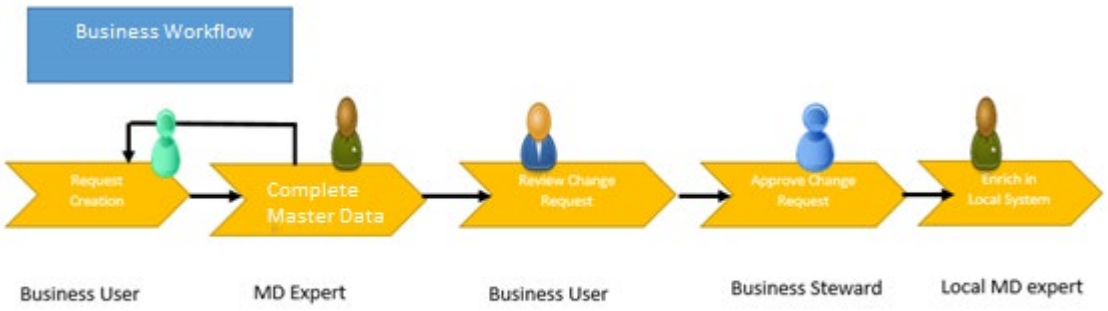



*Figure: Service Master processing in Master Data Governance*

# 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.

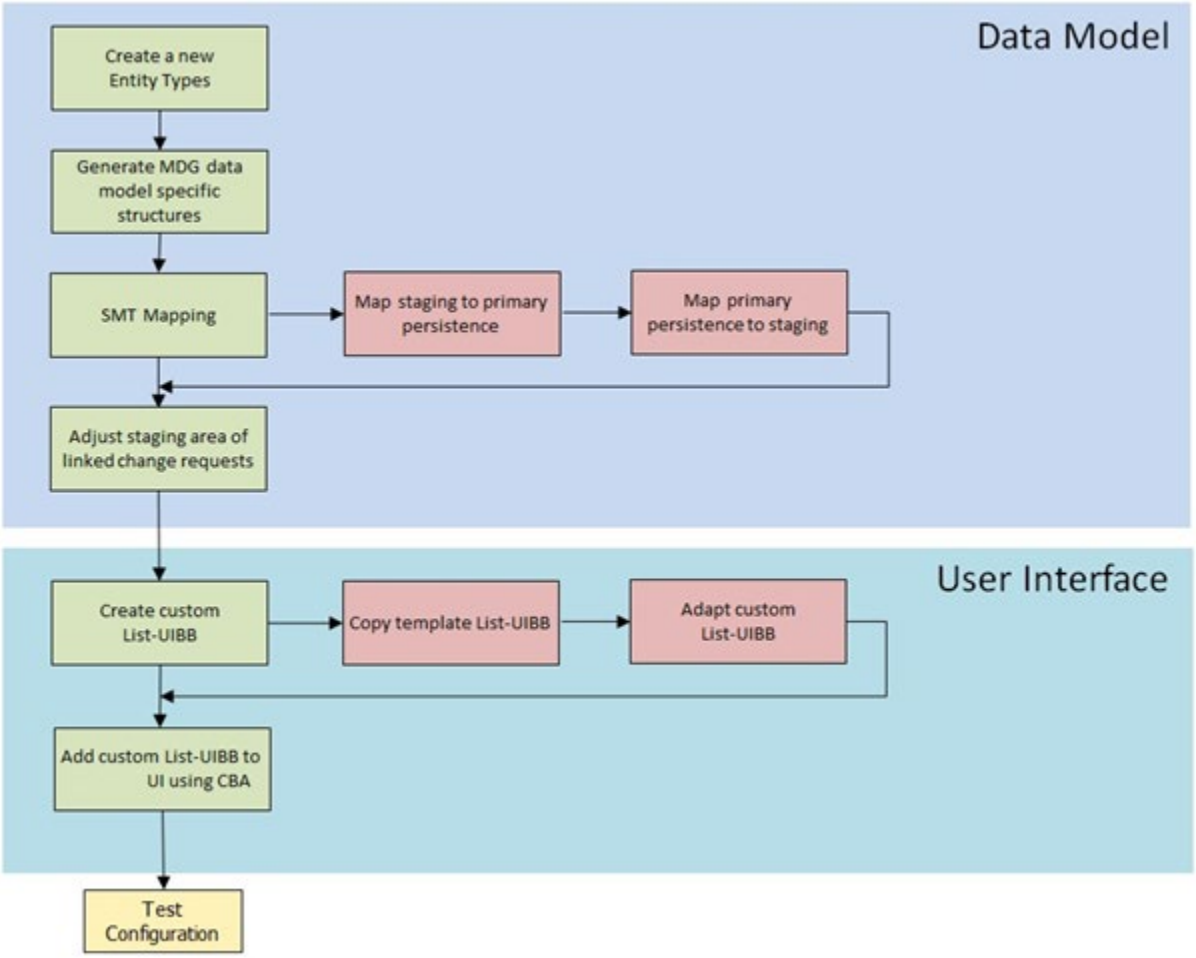
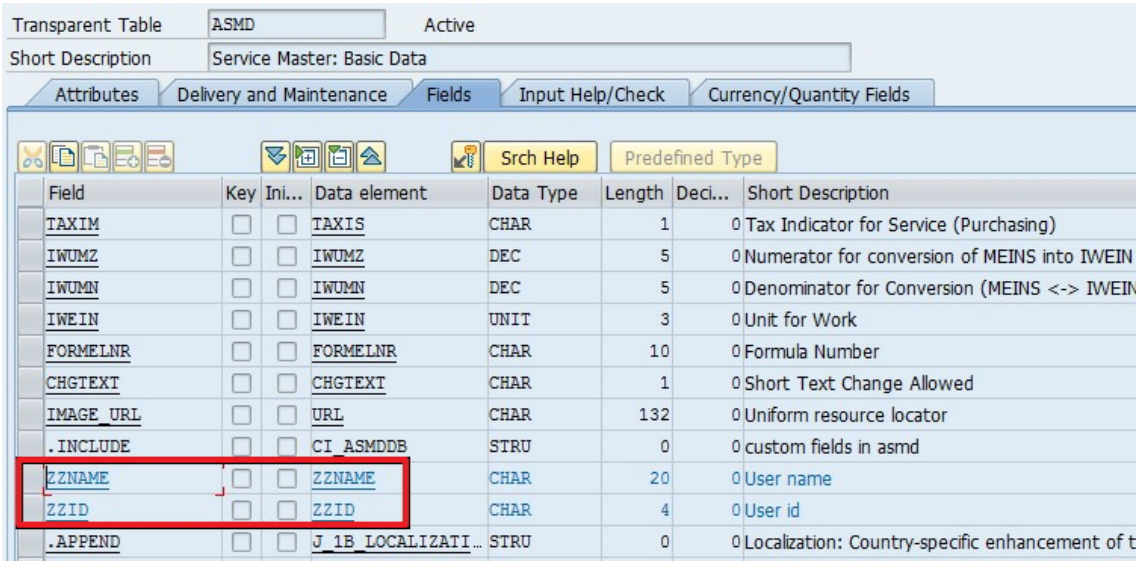



*Figure: Implementation steps for re-use Entity-Type extension*

# Data Model Extension

You want to extend the MDG Data Model (U2) for Service Master by the additional attributes ZZNAME and ZZID. The following fields from ASMD table should be modelled as attribute of entity type in MDG.



Transparent Table ASMD Active

Short Description Service Master: Basic Data

Attributes | Delivery and Maintenance | Fields | Input Help/Check | Currency/Quantity Fields

Srch Help | Predefined Type

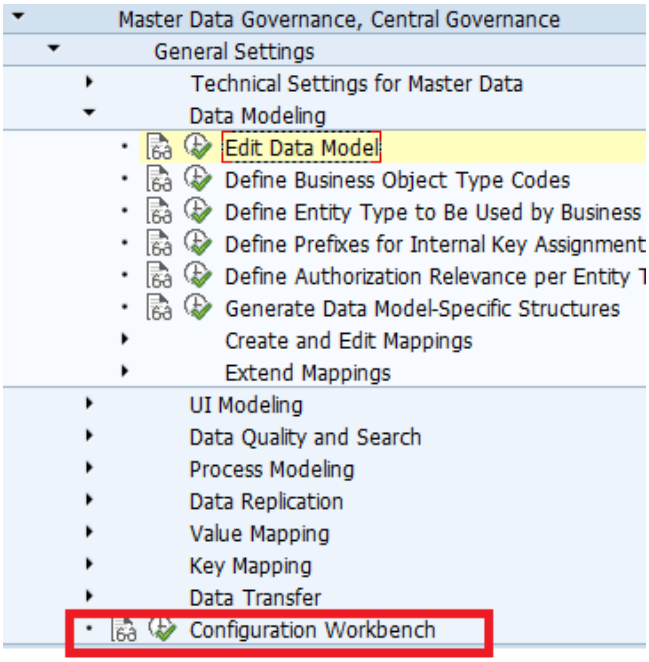
| Field | Key | Ini... | Data element | Data Type | Length | Deci... | Short Description |
|---|---|---|---|---|---|---|---|
| TAXIM | | | TAXIS | CHAR | 1 | 0 | Tax Indicator for Service (Purchasing) |
| IWUMZ | | | IWUMZ | DEC | 5 | 0 | Numerator for conversion of MEINS into IWEIN |
| IWUMN | | | IWUMN | DEC | 5 | 0 | Denominator for Conversion (MEINS <-> IWEIN |
| IWEIN | | | IWEIN | UNIT | 3 | 0 | Unit for Work |
| FORMELNR | | | FORMELNR | CHAR | 10 | 0 | Formula Number |
| CHGTEXT | | | CHGTEXT | CHAR | 1 | 0 | Short Text Change Allowed |
| IMAGE_URL | | | URL | CHAR | 132 | 0 | Uniform resource locator |
| .INCLUDE | | | CI_ASMDDB | STRU | 0 | 0 | custom fields in asmd |
| ZZNAME | | | ZZNAME | CHAR | 20 | 0 | User name |
| ZZID | | | ZZID | CHAR | 4 | 0 | User id |
| .APPEND | | | J_1B_LOCALIZATI... | STRU | 0 | 0 | Localization: Country-specific enhancement of t |

You first create the attributes ZZNAME, ZZIID in entity type ASMD.

## Add attributes to existing Entity Type

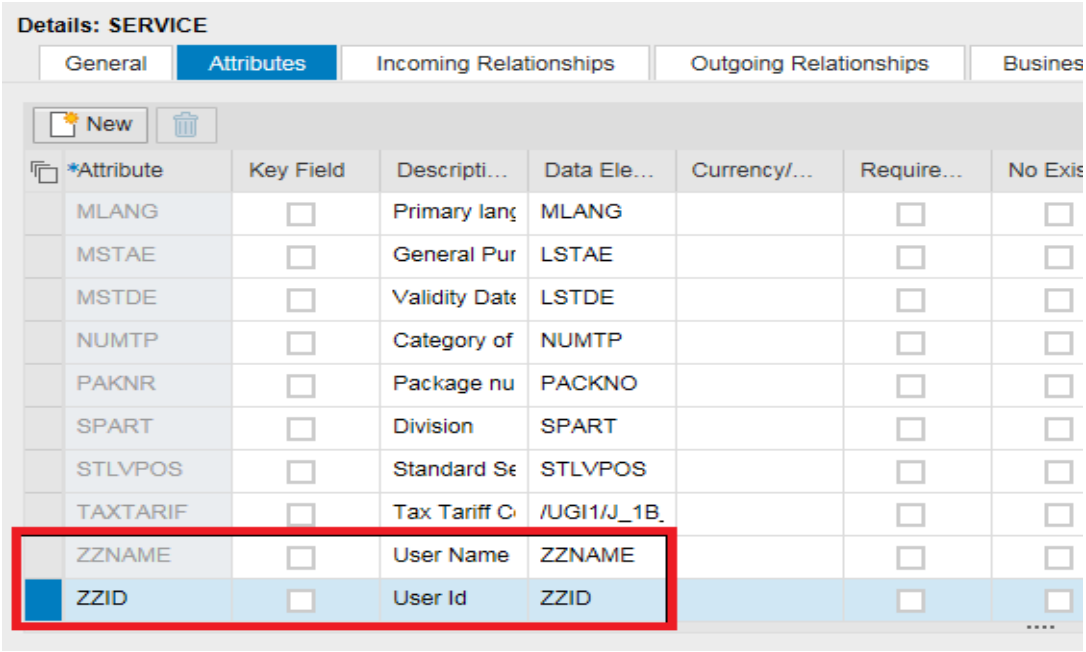
Use the following steps to add attributes to existing Entity Type.

1. Log into the system for cross client maintenance.
2. Start Customizing for Master Data Governance (t-code MDGIMG).
   Go to > General Settings > Configuration Workbench > Select Data Model U2 > Click the “Edit” button > In the left-hand table with the list of Entity Types click the “New” button.

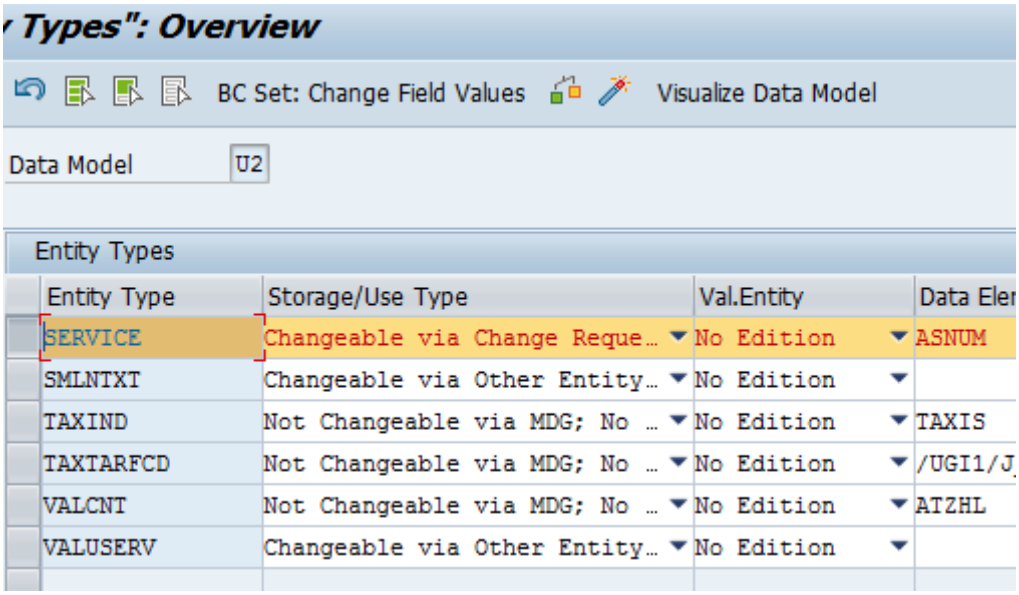


3. Add the attributes of Entity Type SERVICE as displayed in the following screenshot.
4. Save your settings.
   It is recommended to assign a Search Help to a Data Element in exceptional circumstances. If you do this, the input help executes the search help instead of reading the data in the check table or the fixed values of data element's domain.

   In the following steps, you define new entity types that are needed to define the key fields using relationships.




5. Activate the extended Data Model.




6. 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.

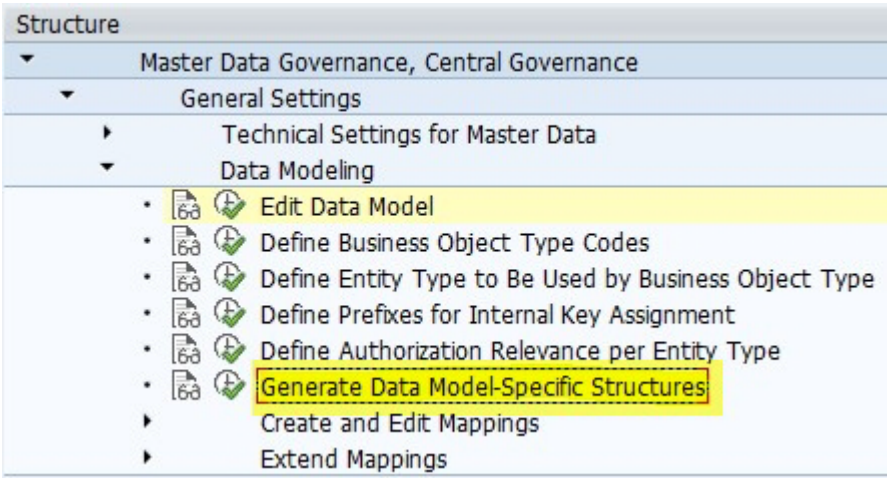
Older releases: Since the MDG Data Model was changed you need to regenerate the tables. In this Customizing activity, for each Data Model and entity type you generate technical structures and tables in the ABAP Dictionary. The system uses these structures internally for implementing the staging area.

***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.

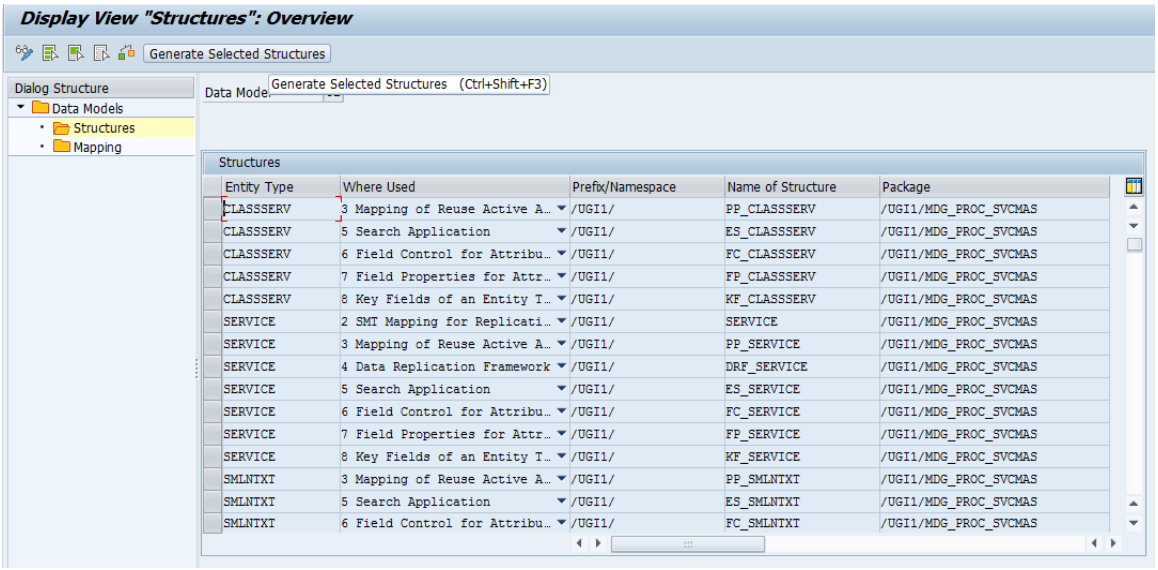
To generate the Data Model-Specific structures use the following steps.

1. Start Customizing for Master Data Governance (t-code MDGIMG).

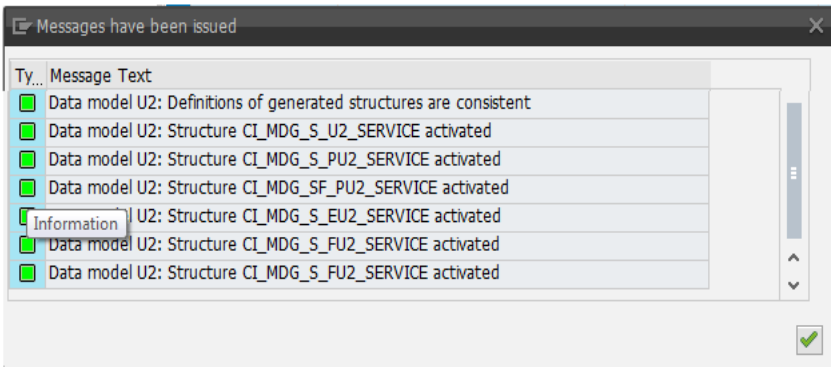
   Go to > General Settings > Data Modeling > Generate Data Model-Specific Structures.



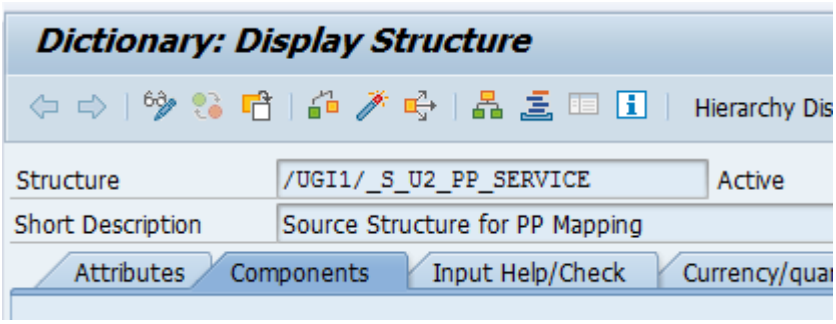

2. Select the row with Data Model U2 > Double-Click Structures in the left-hand panel > Choose the “Generate Selected Structures” button.



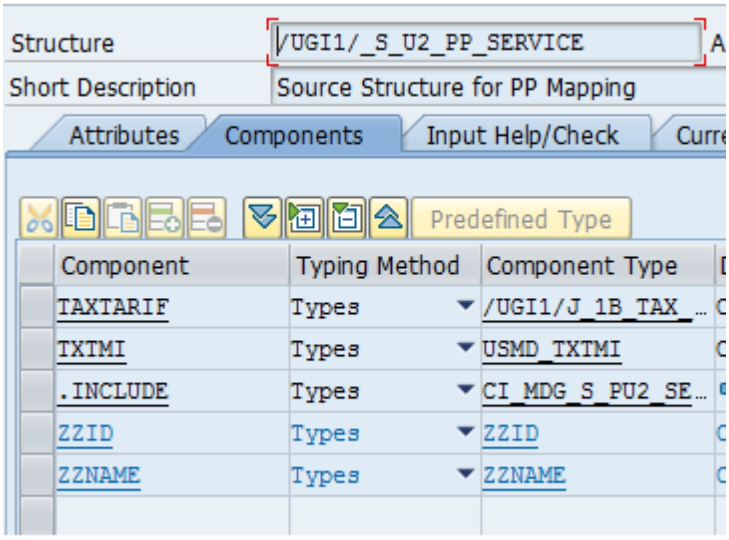

3. Verify that your structures are successfully generated.




4. In the following steps, you verify that one of the active area mapping structures was successfully generated with new fields.
   Start t-code SE11 > Display structure /UGI1/_S_U2_PP_SERVICE.




   You have now verified that the structure /UGI1/_S_U2_PP_SERVICE has been generated.




# SMT Mapping

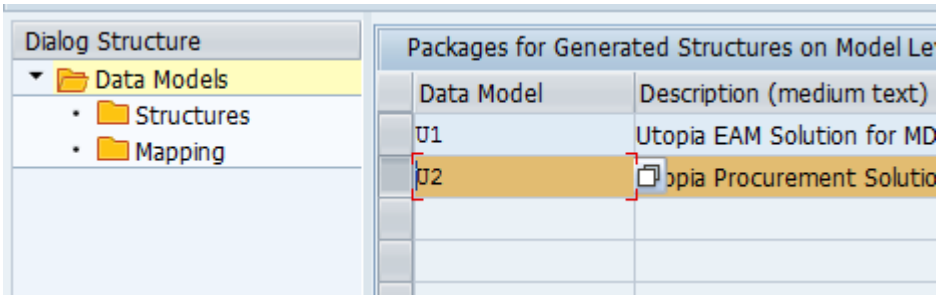
You extend mappings by creating new transformations (complex transformations, field mappings) and field checks for them or by editing them.

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

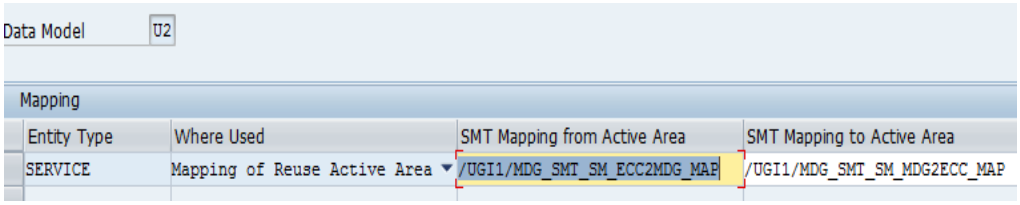
# SMT Mapping – Get Mapping names from Data Model U2

Use the following steps for SMT Mapping.

1. Log into the system for cross-client maintenance. Start Customizing for Master Data Governance (t-code MDGIMG).
   Go to > General Settings > Data Modelling-> Generate Data Model Specific Structures > Select Data Model U2 > Double-Click on Mapping.



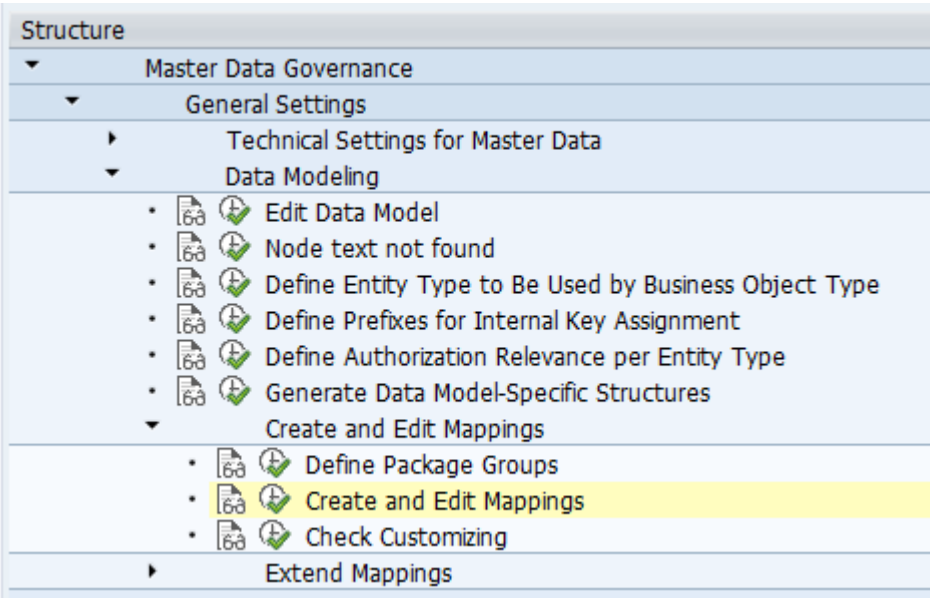

   The SMT mappings for Entity Type SERVICE is displayed in the following screen.



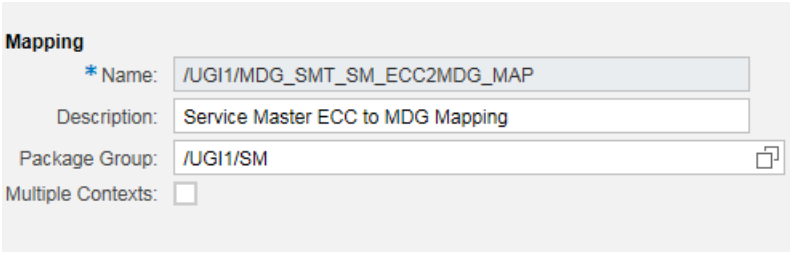

# SMT Mapping - Primary Persistence to Staging

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

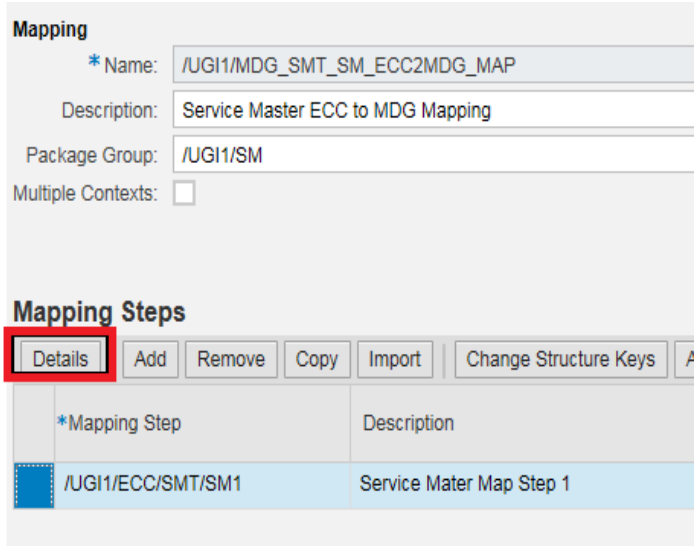
1. Log into the system for cross-client maintenance. Start Customizing for Master Data Governance (t-code MDGIMG).
   Go to > General Settings > Data Modeling > Create and Edit Mappings > Create and Edit Mappings.
   ***Note***: For new Entity Types, it is recommended to create a new mapping. When extending existing Entity Types, it is recommended to extend the existing mapping.



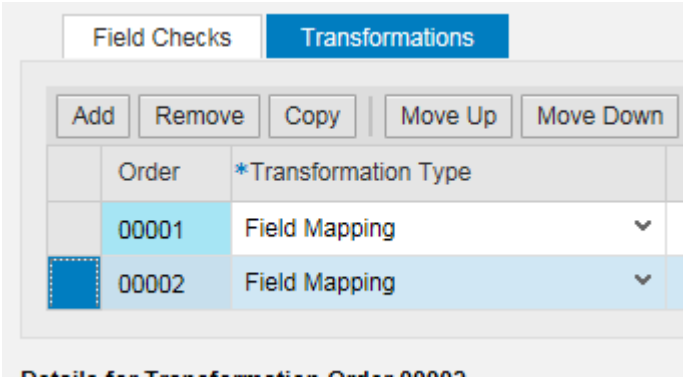
2. Extend mapping /UGI1/MDG_SMT_SM_ECC2MDG_MAP.

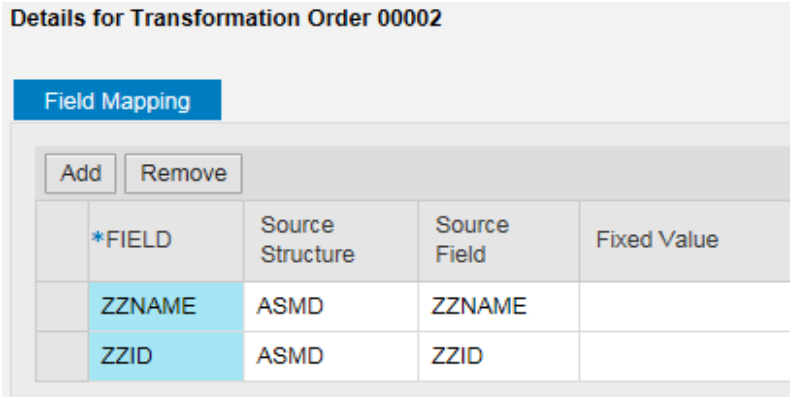



3. Select Mapping Step /UGI1/ECC/SMT/SM1 and choose the “Details” button.




4. Click on the “Add” button and add a new Transformation of type Field Mapping. Perform mapping for the new fields.



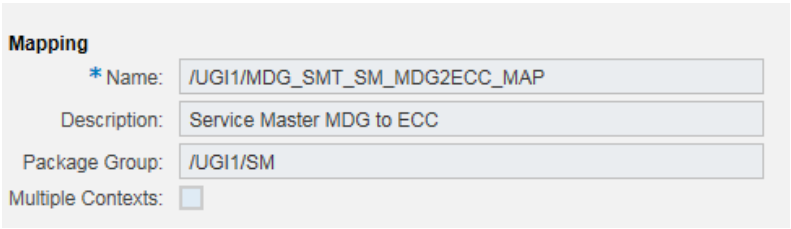



5. Save your changes.

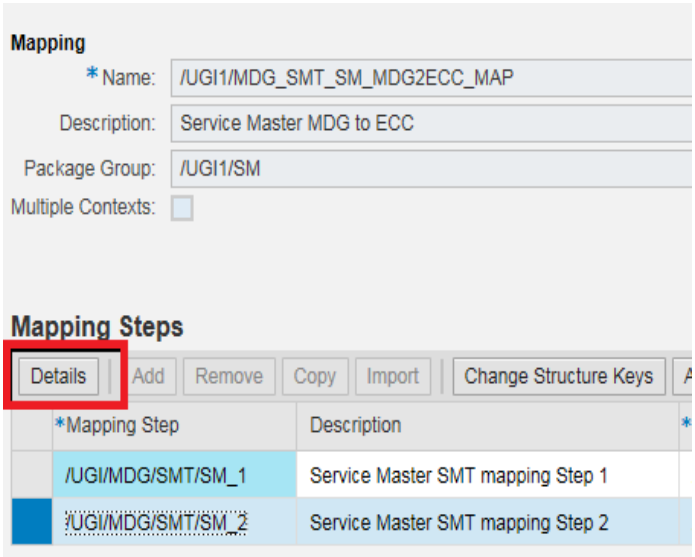
## SMT Mapping - Staging to Primary Persistence

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

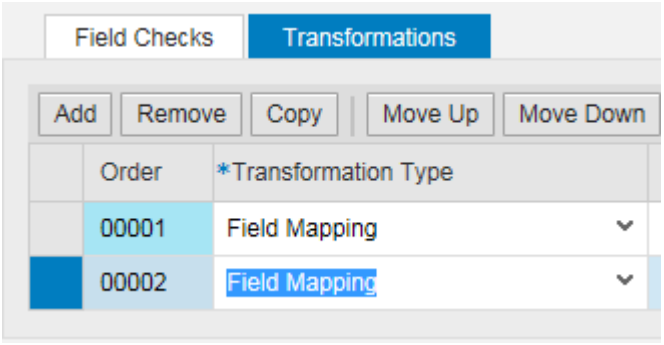
1. Extend mapping /UGI1/MDG_SMT_SM_MDG2ECC_MAP.

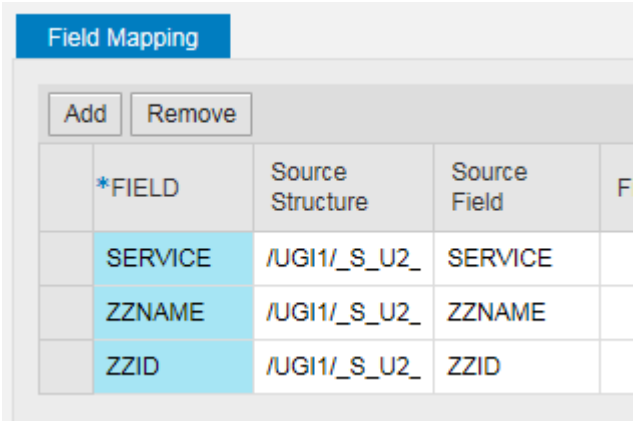



2. Select mapping step UGI/MDG/SMT/SM_2 and select the “Details” button.
   Map the fields as displayed in the following screen.




3. Click on the “Add” button and add a new Transformation of type Field Mapping.
   Perform mapping from source structure /UGI1/_S_U2_PP_SERVICE to target structure BAPISRV_TE_ASMD.



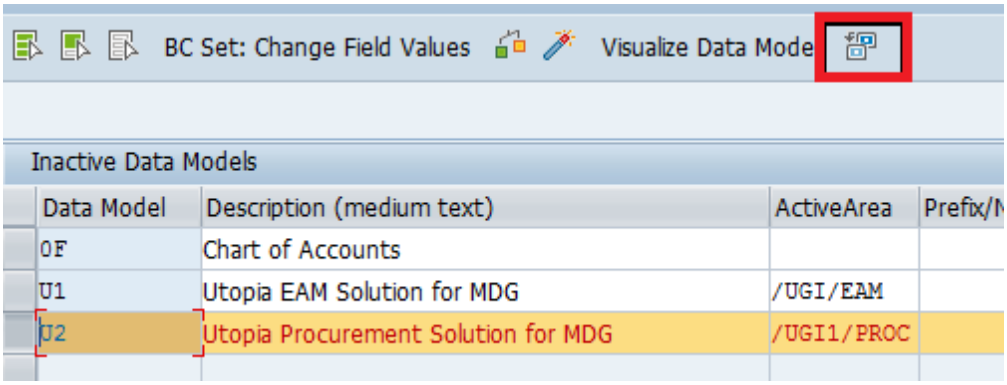

4. Save your changes.

# Adjust Staging Area of Linked Change Requests

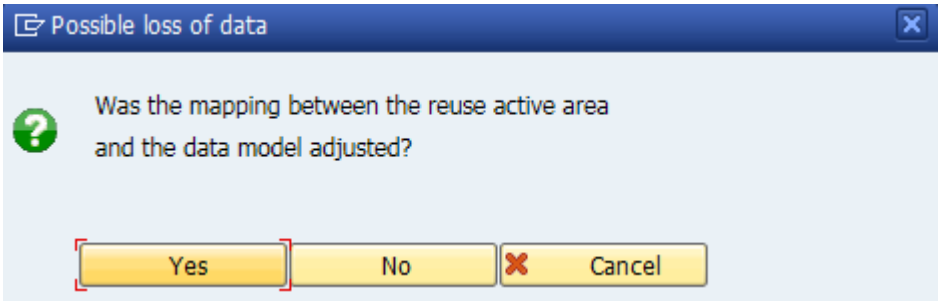
***Note***: This step is necessary to adjust any open Change Requests after you have changed the Data Model.

1. Start Customizing for Master Data Governance (t-code MDGIMG).

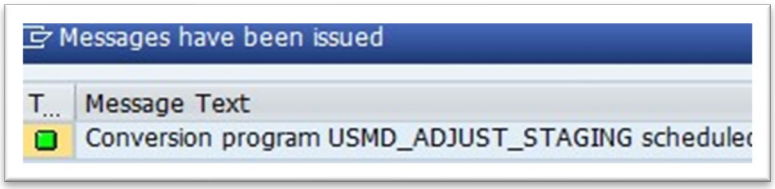
   Go to > General Settings > Data Modeling > Edit Data Model > Select Data Model U2 > Double-Click on Entity Types > Choose the “Adjust staging area of linked Change Requests” button.




2. Choose the “Yes” button.




The following message appears.



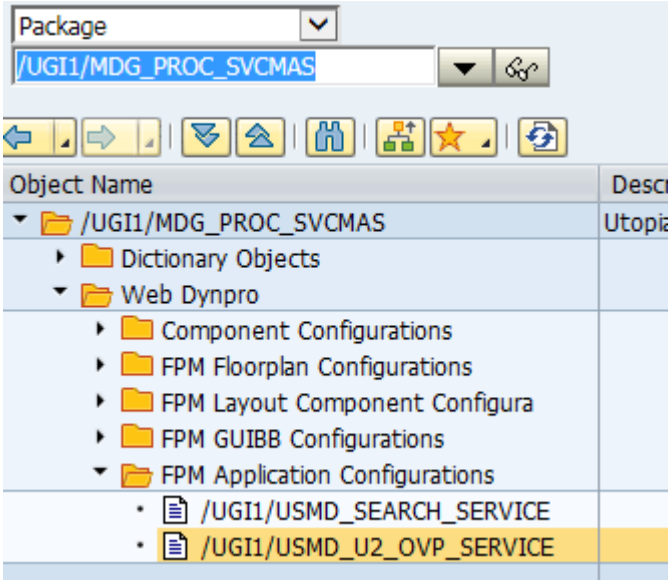

***Note***: Make sure that user DDIC exist in all relevant clients.

# Extending the UI Configuration

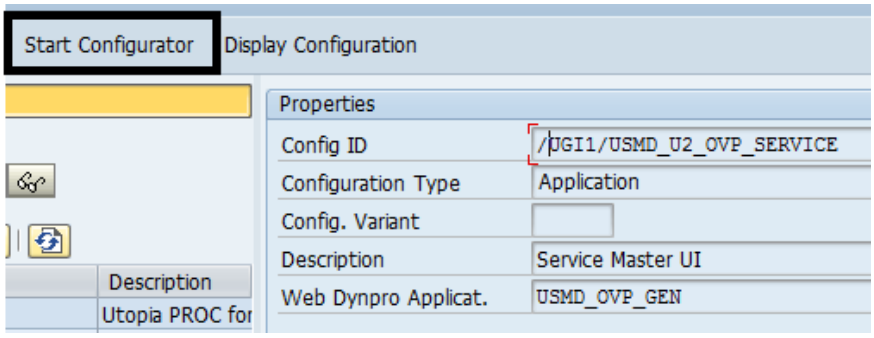
## Add Customization to UI

Use the following steps to add customization to UI.

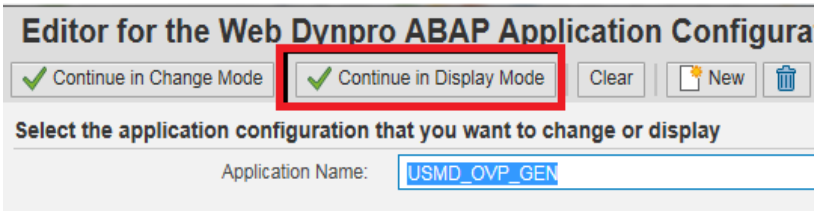
1. Start t-code SE80 > In the drop down select Package > In the input field enter /UGI1/MDG_PROC_SVCMAS -> Navigate to Web Dynpro > FPM Application Configurations > UGI1/USMD_U2_OVP_SERVICE.



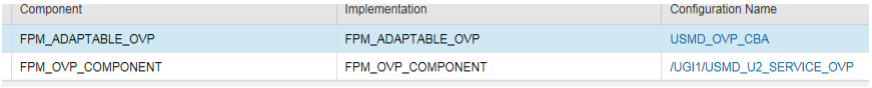

2. Click the “Start Configurator” button.



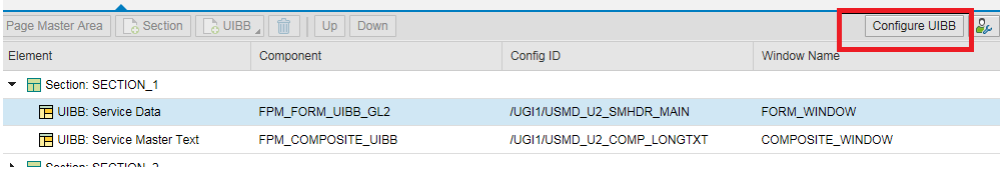

3. In the web browser, click on Continue in Display Mode.



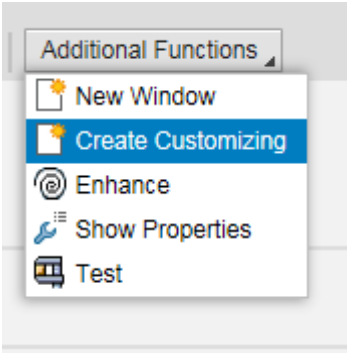

4. Click on the configuration UGI1/USMD_U2_SERVICE_OVP.



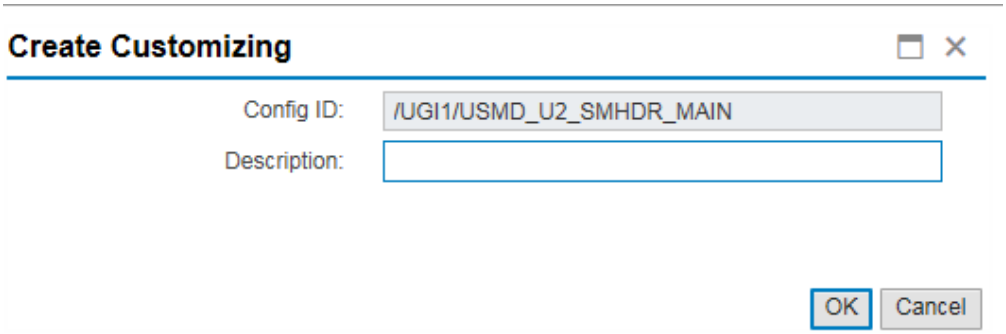

5. Select the UIBB where you want to add new attributes and click on “Configure UIBB” button.




6. Click on Additional Functions > Create Customizing.




7. Click on OK.




8. Change your UI. Add new fields that we added in entity SERVICE.

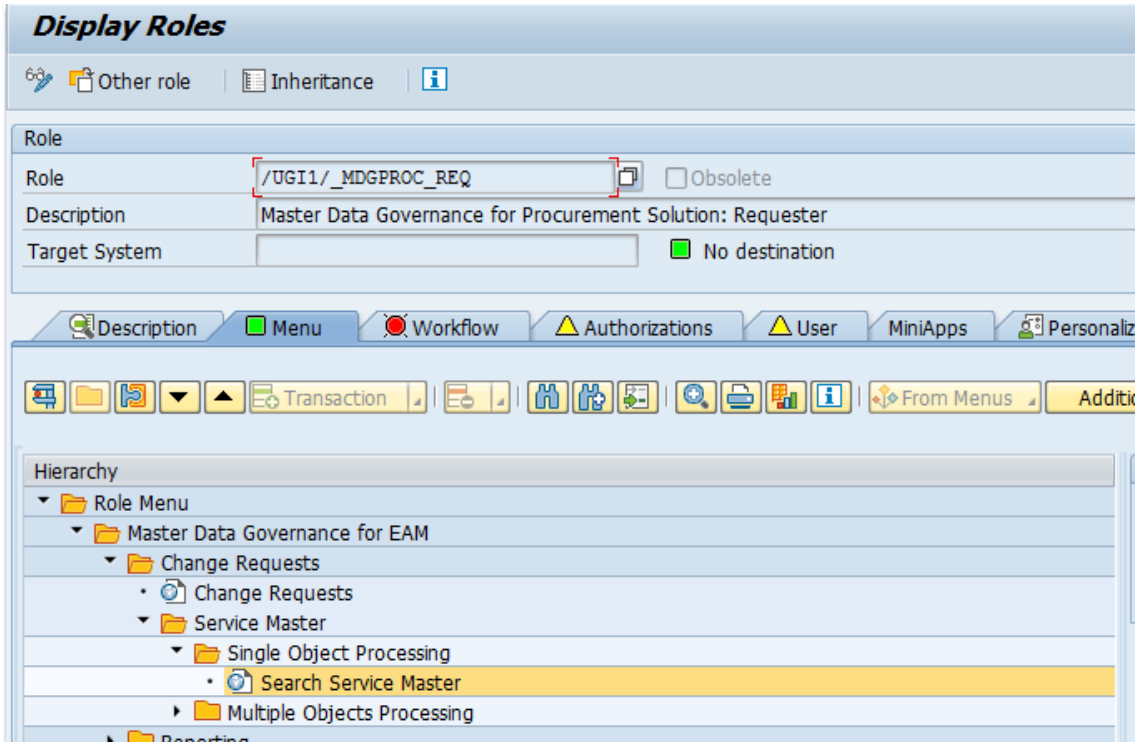

# Testing the Configuration

***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 1641867- Values for extension field missing after CR activation.

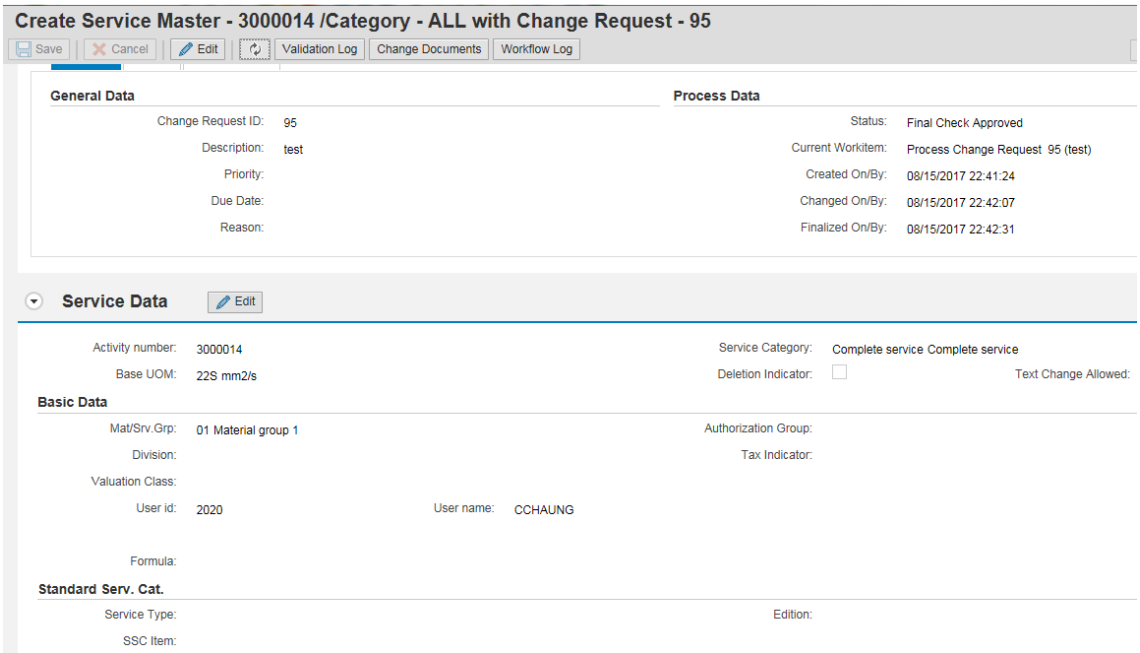
To test your configuration, start the MDG Service Master UI using the following URL (replace the parameters host, port and client-id to match your landscape):

https://<host>:<port>/sap/bc/webdynpro/sap/ usmd_ovp_gen?
ACTION=CREATE&FPM_EDIT_MODE=E&saplanguage=EN&WDCONFIGURATIONID=
%2fUGI1%2fUSMD_U2_OVP_SERVICE#

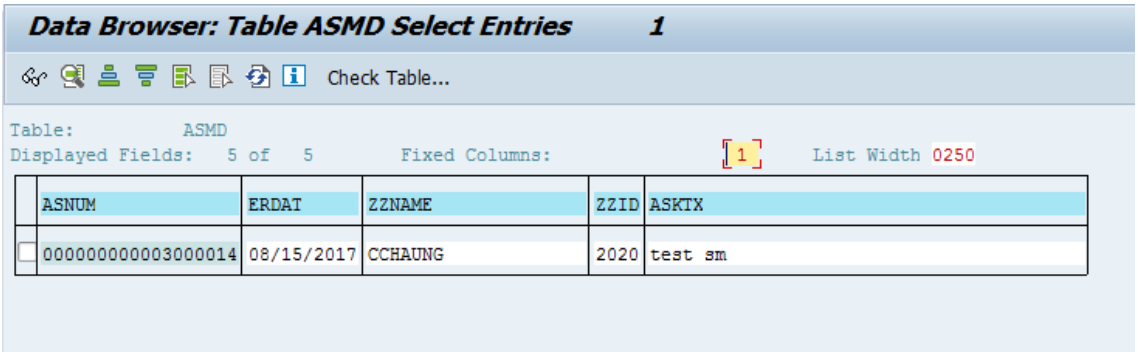
Start t-code PFCG > enter role name /UGI1/_MDGPROC_REQ and click the “Display” button > Select the Menu – Tab > In the hierarchy window navigate to Role Menu > Master Data Governance for EAM > Change Request > Service Master > Single Object Processing > Right-Click on Create Service and select Execute from the drop-down.




Save and Submit the CR. Finalize processing and Approve.




After activation use t-code SE11 to display table ASMD and verify attributes have been transferred correctly.




# Custom Validations/Derivations for lean classification

As part of SAP OSS Note 2479869 customers can implement the CROSS_ENTITY_BADI for adding customized error handling/derivations for their scenarios.

BADI definition provided by SAP is USMD_RULE_SERVICE_CROSS_ET