

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

Applies to

SAP EAM Objects 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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Created On: September 3, 2018

Version: 1.0



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Introduction

This document describes how to extend the Data Model (U1) for Task List by adding additional attribute 'ZZMATKL', 'ZZMATNR' to the entity 'ZZGNTLCOM'.

Scenario

High Level Requirements

The business requires the new entity type called "Components" as part of the MDG Task List Data Model.

You want to extend the Data Model U1 with Type4 entity type to include components section of the task list.

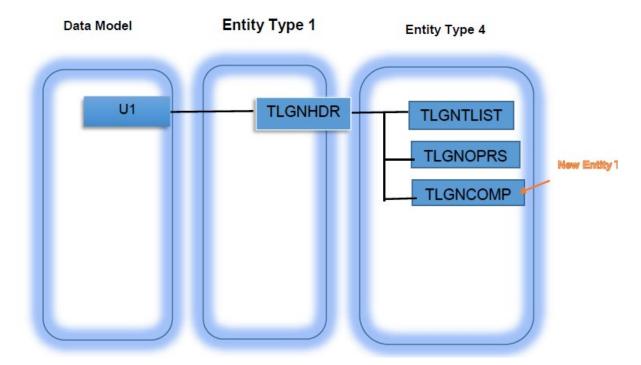


Figure: Data Model - Task List (Scope of 2017 Delivery) with custom Entity 'ZZGNTLCOM'

Governance Process

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



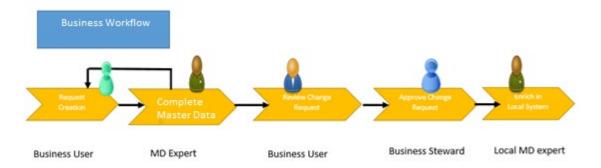


Figure: Task List processing in Master Data Governance

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 flow diagram below shows the detailed implementation steps. It is recommended that you use it as an orientation.

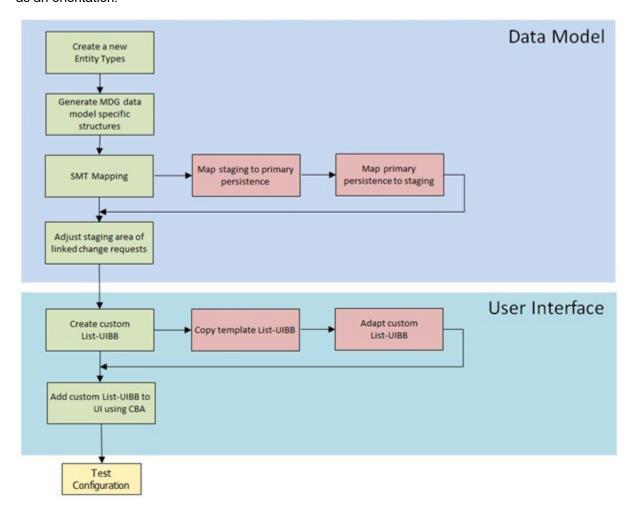


Figure: Implementation steps for re-use Entity-Type extension



Data Model Extension

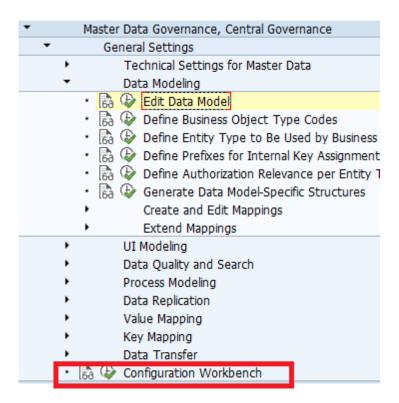
You want to extend the MDG Data Model (U1) for Task List by the additional new Entity ZZGNTLCOM. The following fields from PLPO and STPO table should be modelled as attribute of entity type in MDG.



Add custom Entity Type to existing Data Model U1

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

- 1. Log into system for cross client maintenance.
- Start Customizing for Master Data Governance (transaction MDGIMG). Go to > General Settings > Configuration Workbench > Select Data Model U1 > Click the "Edit" button -> In the left-hand table with the list of Entity Types click the "New" button.

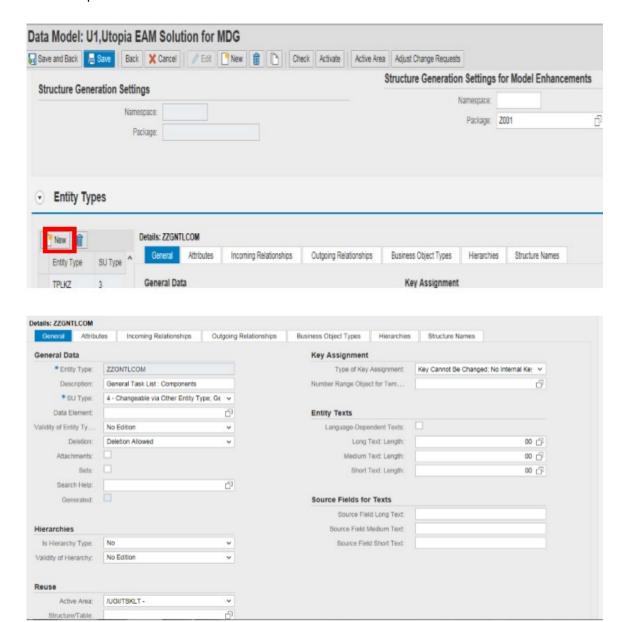


Create custom New Entity Type ZZGNTLCOM as shown in the following screen. Save your settings.



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.

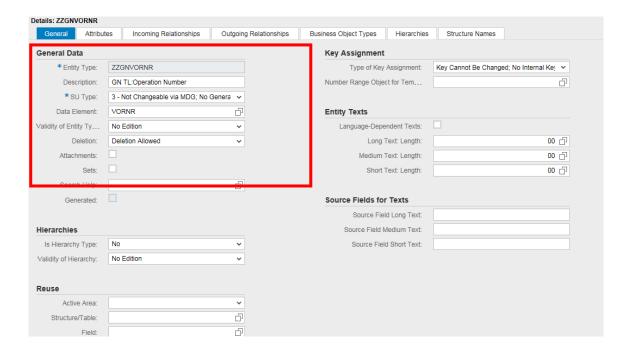


4. Enter Attributes as displayed in the screen.

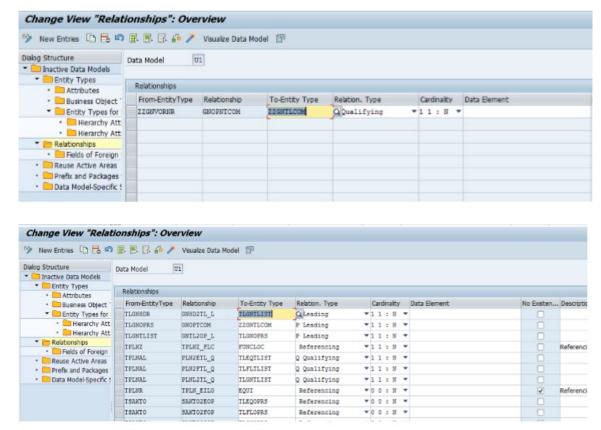


5. Define entity type ZZGNVORNR Type 3 for key field purpose.



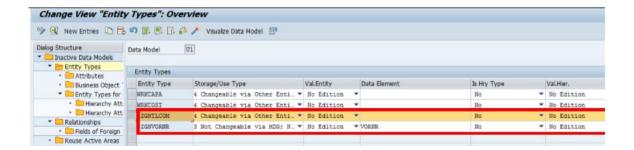


Select Relationships and define as shown in the following screen.Define the relationship between custom and existing entity types.



7. Activate the extended Data Model.





After activation the following information message is displayed.



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

Refer: Adjust Staging area of Linked Change Requests.

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.

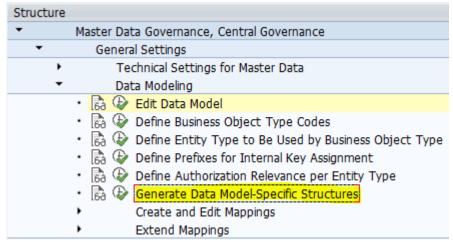
Older releases: Since the MDG Data Model was changed you need to regenerate the tables. In this Customizing activity, for each Data Model and entity type you generate technical structures and tables in the ABAP Dictionary.

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.

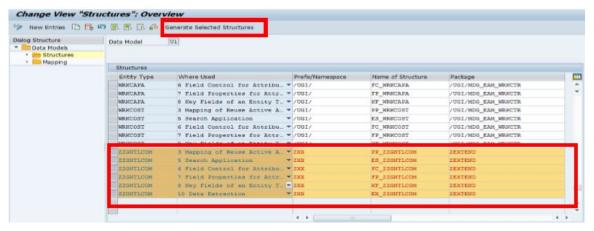
Use the following steps to generate Data Model Specific Structures.

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

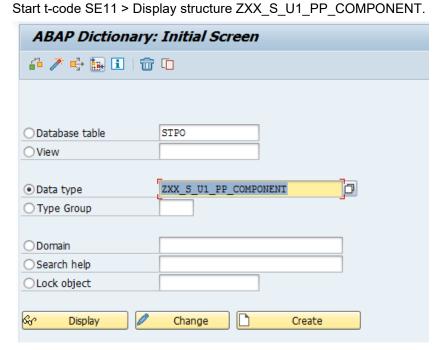




2. Select the row with Data Model U1 > Double-Click Structures in the left-hand panel > Choose the "Generate Selected Structures" button.

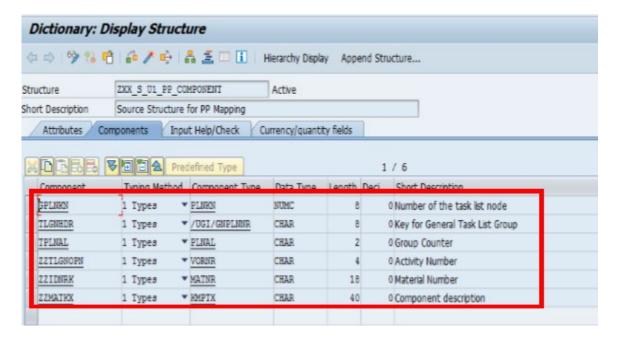


- 3. Verify that your structures were successfully generated.
- 4. In the following steps, you verify that one of the active area mapping structures was successfully generated with new fields.



You have now verified that the structure ZXX_S_U1_PP_COMPONENT 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.

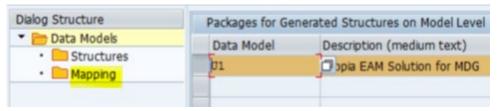
Important: When the mappings are saved, the system generates the corresponding coding. Make sure that all relevant structures are ready before you start.

SMT Mapping - Get Mapping names from Data Model U1

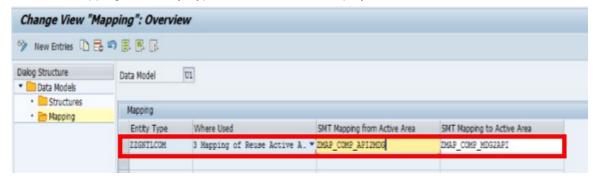
Use the following steps to get the mapping names:

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 ZZGNTLCOM as displayed.

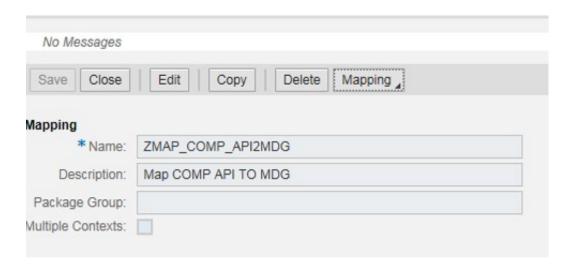




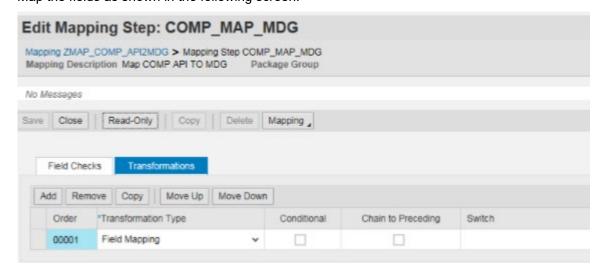
SMT Mapping - Primary Persistence to Staging

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

- 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.
- 2. Create mapping ZMAP_COMP_ API2MDG.



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



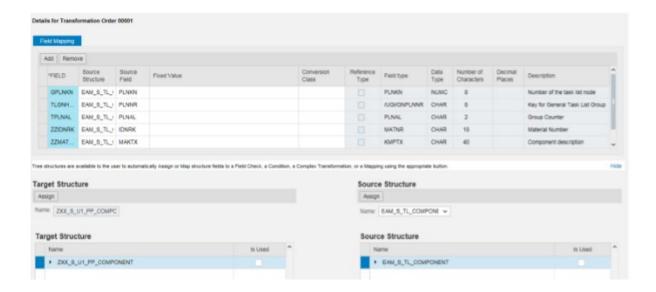
4. Add a mapping step.

Assign Target Structure EAM_S_TL_ COMPONENT.

Assign Source Structure ZXX_S_U1_PP_ COMPONENT.







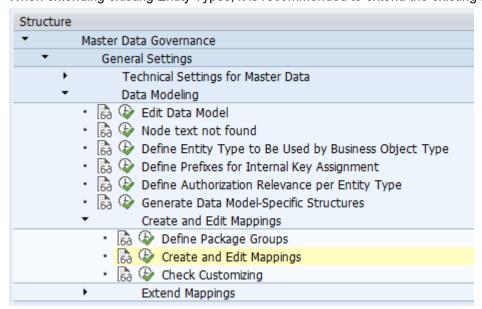
5. Save your changes.

SMT Mapping - Staging to Primary Persistence

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.

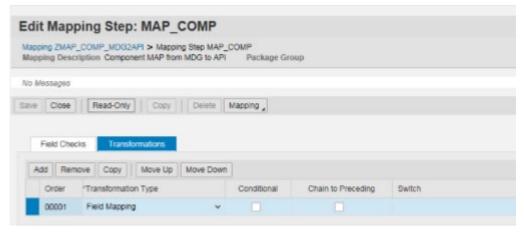


2. Create New mapping step ZMAP COMP MDG2API.





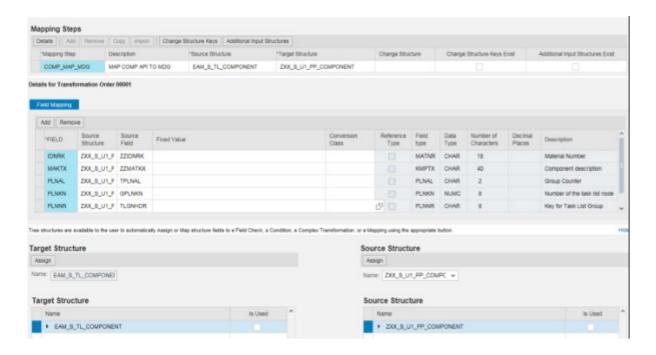
Select mapping step and choose the "Details" button.Map the fields as displayed in the following screen.



4. Add a mapping step.

Assign Source Structure EAM_S_TL_ COMPONENT.

Assign Target Structure ZXX_S_U1_PP_ COMPONENT.



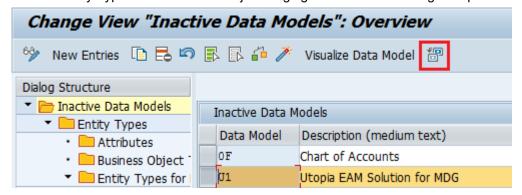


5. Save your changes

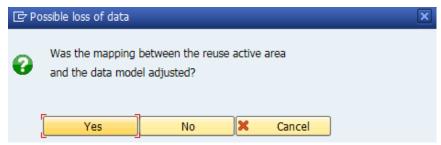
Adjust Staging Area of Linked Change Requests

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

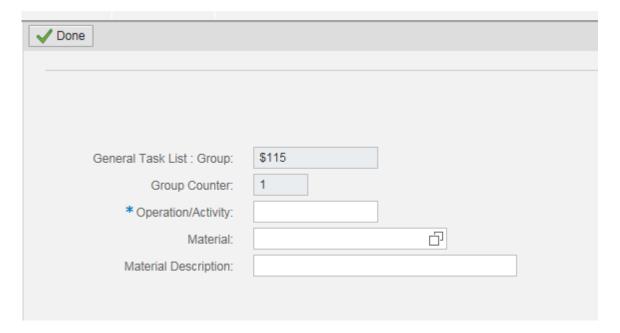
Create Custom List-UIBB

This section describes how you create a List-UIBB to display the entity type ZZGNTLCOM attributes in a table. The result looks like the following screen.



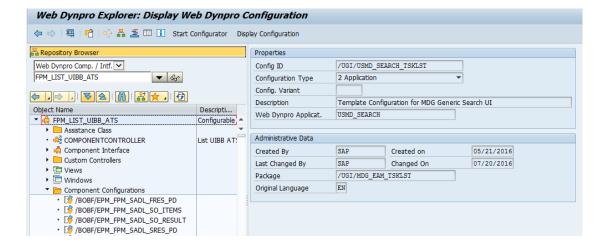
Click "New" button is displayed as in the following screen.





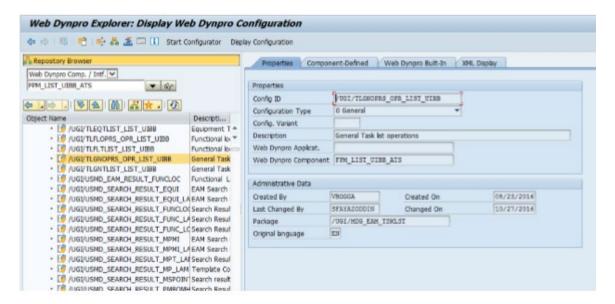
Copy LIST-UIBB

Start t-code SE80. In the drop down select Web Dynpro Comp. / Intf.
 In the input field enter FPM_LIST_UIBB_ ATS and Press the Display button. Below the object name expand the tree node called Component Configurations. Double click the component configuration /UGI/TLGNOPRS_ OPR_LIST_UIBB.

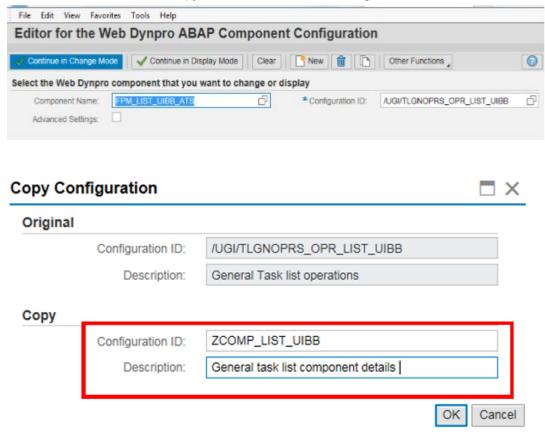


2. Click the "Start Configurator" button.



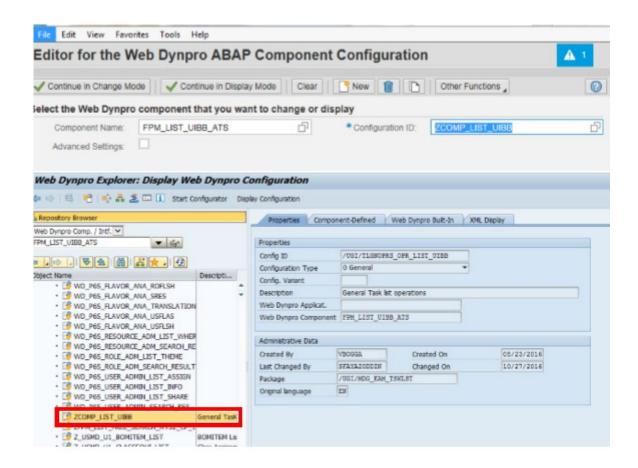


3. In the web browser, click on "Copy" button and enter List Configuration Id.

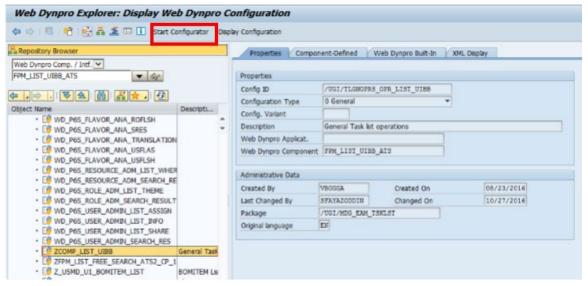


4. Double-Click on the configuration Id ZCOMP LIST UIBB.





5. Click on the "Start Configurator".

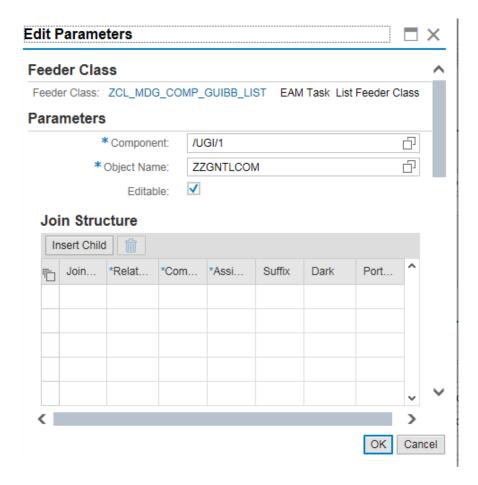


6. In the web browser, choose the "Continue in Change Mode" button.



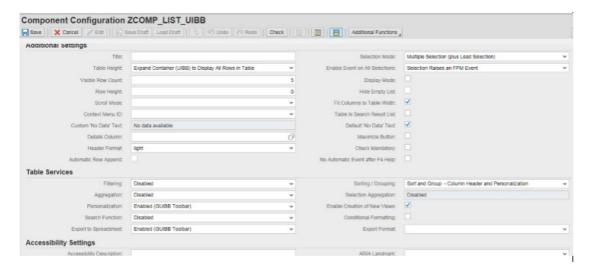


7. Choose the "Feeder Class" button in the input field enter ZCL_MDG_COMP_ GUIBB_LIST and choose the Edit Parameters and enter GenIL component and Custom Entity type and click "Editable" checkbox.



8. In the General Settings section of the UIBB configuration enter the details as displayed in the following screen.



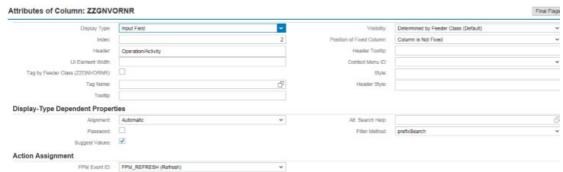


9. Click "Column" button and enter columns for the list UIBB.



10. Choose the "Attributes" icon as shown in the following screen to display the attribute details box at the bottom of the screen.

For each element in the table, set the attributes FPM Event ID and Suggest Values as displayed in the screen and save.

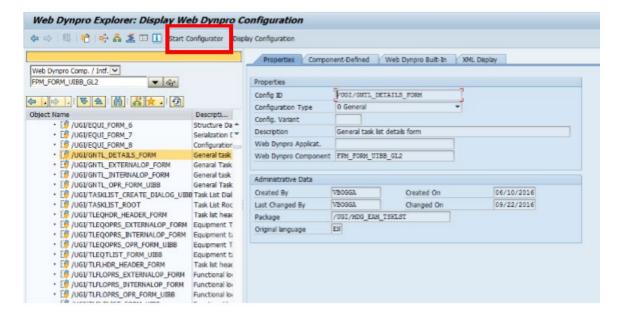


Copy Form UIBB

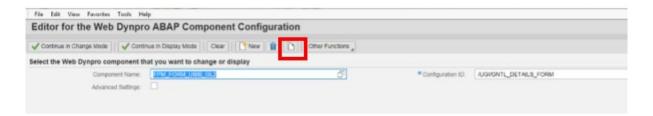
Use the following steps to copy Form UIBB:

1. Double-Click the component configuration /UGI/GNTL_DETAILS _FORM and Click on "Start Configurator".

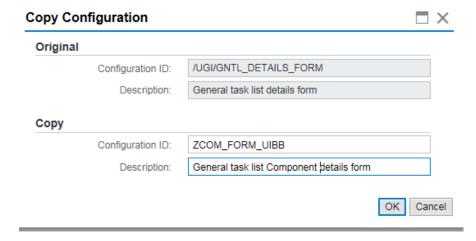




2. Click on "Copy" button.

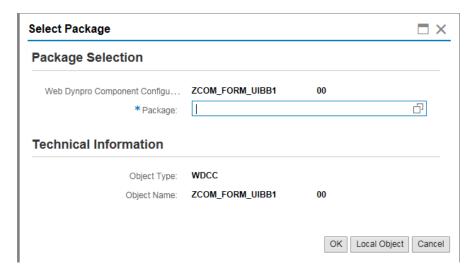


3. Enter Configuration ID and description.

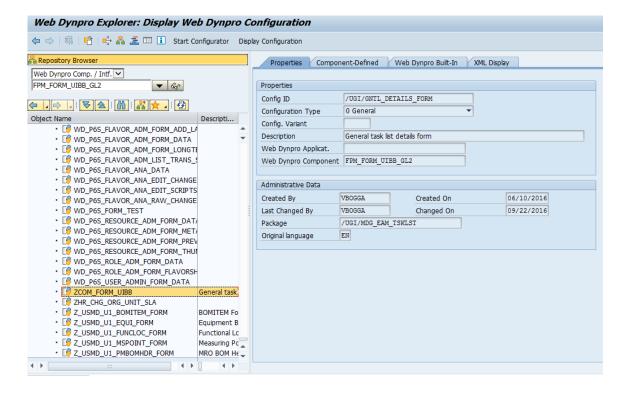


4. Enter package \$TMP or Package name.



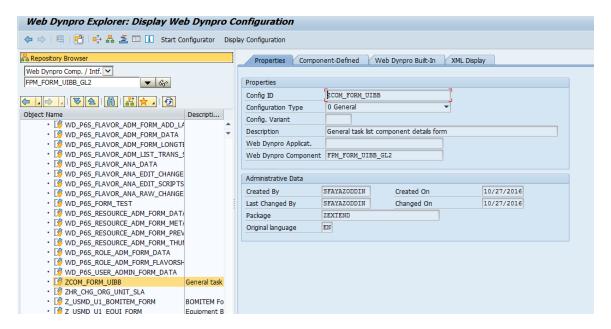


5. In the SAP GUI, refresh the object list. Confirm that your new configuration is there.

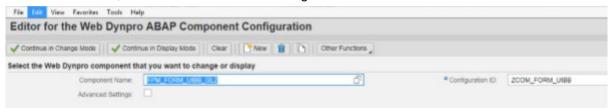


6. Double-Click on the new configuration (for example ZCOM_FORM_UIBB and click on "Start Configurator").

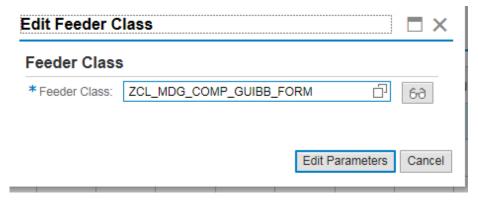




7. In the web browser, choose the "Continue in Change Mode" button.

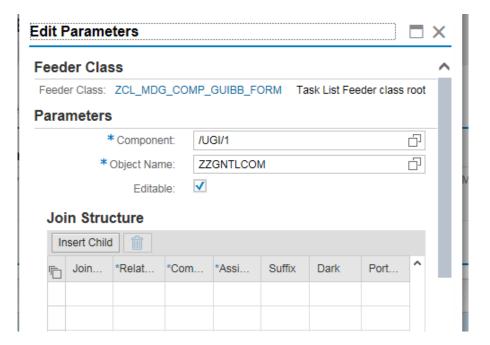


8. Choose the "Feeder Class" button. In the input field enter ZCL_MDG_COMP_GUIBB_FORM and choose the "Edit Parameters" button.

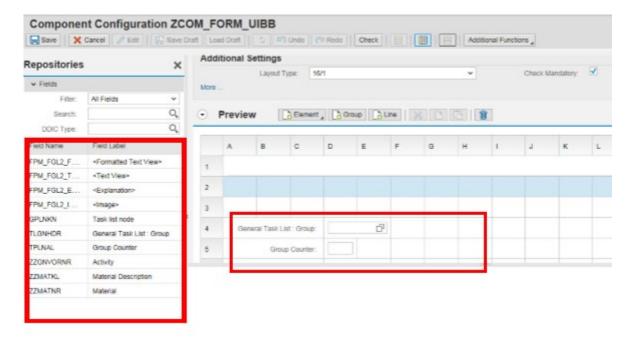


9. Enter Feeder class, GenIL component and custom entity type.



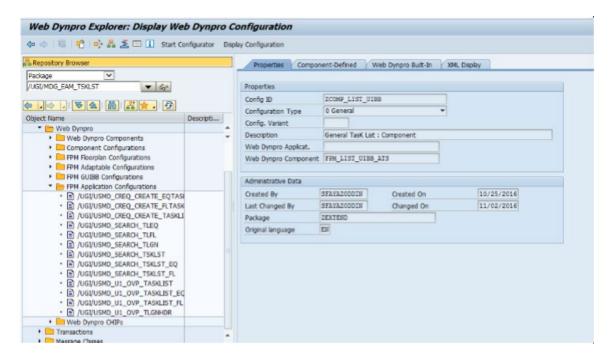


10. Drag and Drop required form element from left hand side panel as displayed in the following screen.

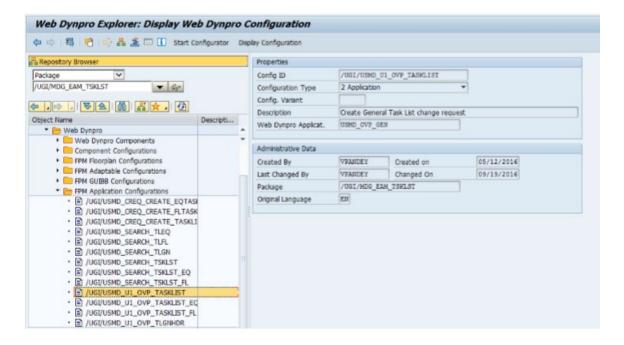


Start t-code SE80. In the dropdown, select Package.
 Enter /UGI/MDG_EAM_ TSKLST in the input field. Navigate the Application Configuration as displayed in the screens. Double-Click on the "Application Configuration".





12. Double-Click application configuration /UGI/USMD_U1_OVP _TASKLIST and click "Start Configuration".

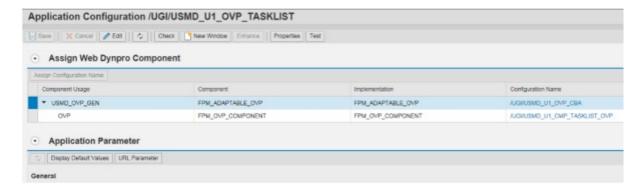


13. In the browser window, choose the "Continue in Display Mode" button.

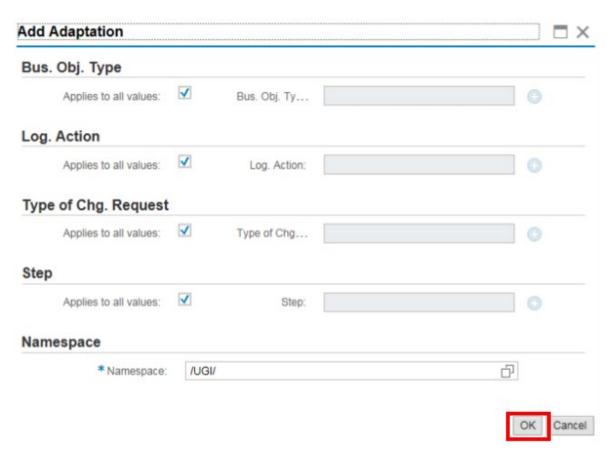


14. Click on the link for Configuration Name /UGI/USMD_U1_CMP _TASKLIST_OVP.





15. Choose the icon as displayed in the screenshot to display the Adaptations and Comparisons.

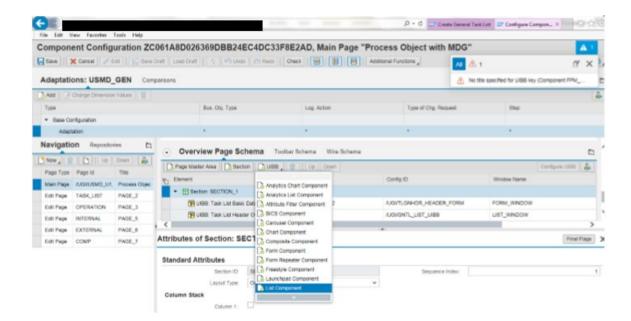


16. Select "Adaptation" tab.



17. Click on "UIBB" button and select List Component.

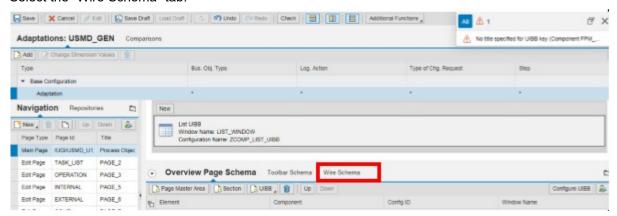




18. Enter attributes as displayed in the following screen.

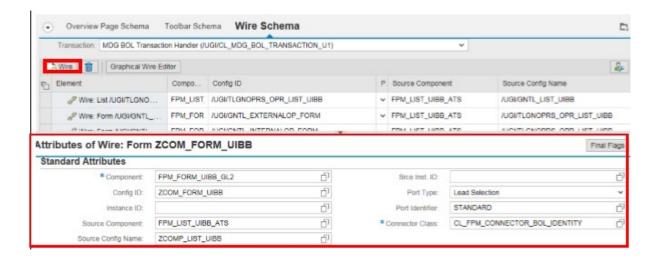


19. Select the "Wire Schema" tab.

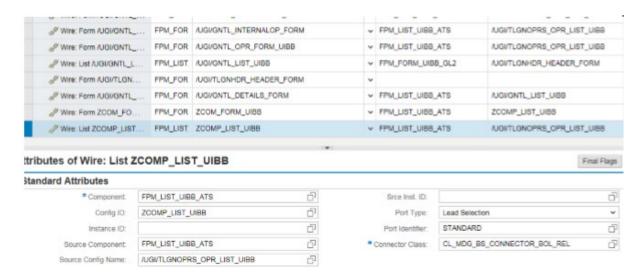


20. Click the "Wire Schema" button to connect your custom List-UIBB to the rest of the UI.

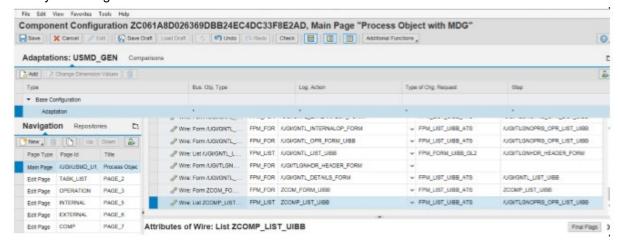




21. Same for LIST UIBB and Form UIBB.



22. Save your changes.





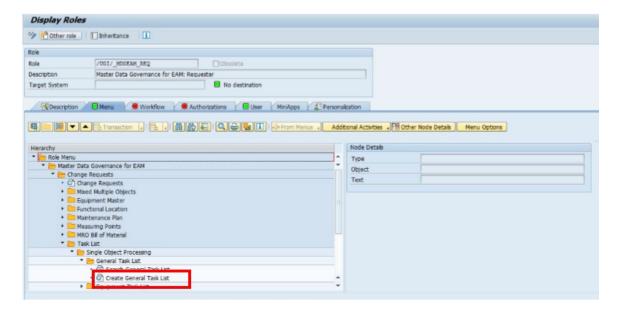
Testing the Configuration

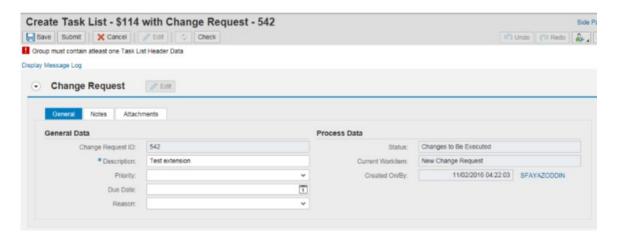
Note: If you extend the Data Model according to the guidelines shown below, but the fields are not populated when you activate the Data Model, see SAP Note <u>1641867</u>- Values for extension field missing after CR activation.

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

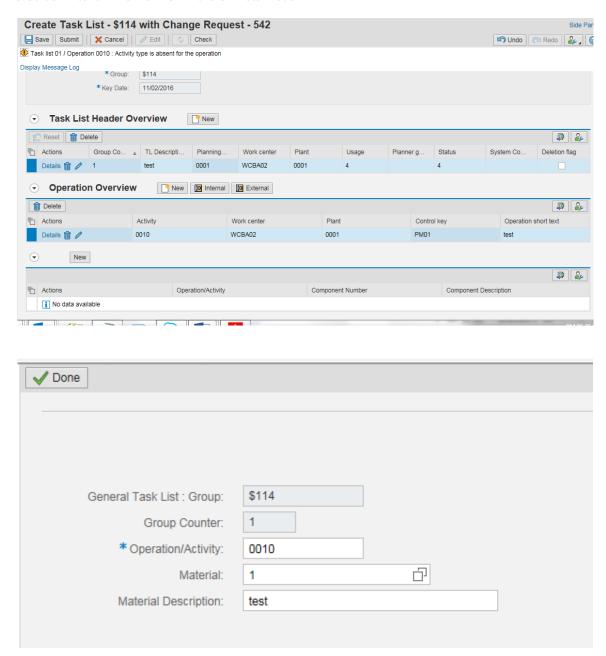
https://<host>:<port>/sap/bc/webdynpro/sap/ usmd_ovp_gen?
ACTION=CREATE&FPM_EDIT_MODE=E&saplanguage=EN&&WDCONFIGURATIONID=%2fUGI%2fUSMD_U1_OVP_TASKLIST#

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 >Task List >Single Object Processing. Right-Click on Create General Task List and select Execute from the drop-down.









Save and Submit the CR. Finalize processing and Approve.

After activation use t-code IA06 and verify attributes have been transferred correctly.

