

How-To Guide: Extensibility for EAM and SAP Asset Information Workbench (End to End Process)

Applies to

SAP MDG EAM Extension by Prometheus Group.

SAP Asset Information Workbench (AIW) by Prometheus Group

Summary

SAP Master Data Governance for EAM provides an out-of-the-box solution for the central management of various master data objects such as Equipment Master, Functional Location, Material BOM, Maintenance Plan, Measuring Point, Work Center, and Task List. In addition, SAP Master Data Governance also provides the flexibility to customize the solution, in cases where the pre-delivered content does not match customer requirements entirely.

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Table of Contents

1. Introduction	3
2. Scenario	3
2.1. High-Level Requirements	3
2.2. Governance Process	4
2.3. Implementation	4
2.3.1. Data Model Extension.....	5
2.3.2. Add Attributes to Existing Entity Type	5
2.3.3. Generate MDG Data Model-Specific Structures.....	7
2.3.4. SMT Mapping.....	9
2.3.5. Adjust Staging Area of Linked Change Requests	12
2.3.6. Extending the UI Configuration.....	13
2.4. Testing the UGI EAM Equipment Configuration.....	15
2.4.1. Process	15
2.5. Adding Extended fields to Asset Information Workbench	17
2.5.1. Testing the AIW Configuration.....	18
2.5.2. Process	18
2.6. Adding Extended Fields to POWL.....	20
2.7. AIW Cross Search Extensibility	24

1. Introduction

This guide explains about the end-to-end process of extending the standard data model with custom fields.

2. Scenario

2.1. High-Level Requirements

The business requires the new attributes called “User Detail” as part of the UGI EAM /AIW for Equipment Master. You want to extend the (Type1) entity type EQUI to include attributes: ZZNAME, ZZID.

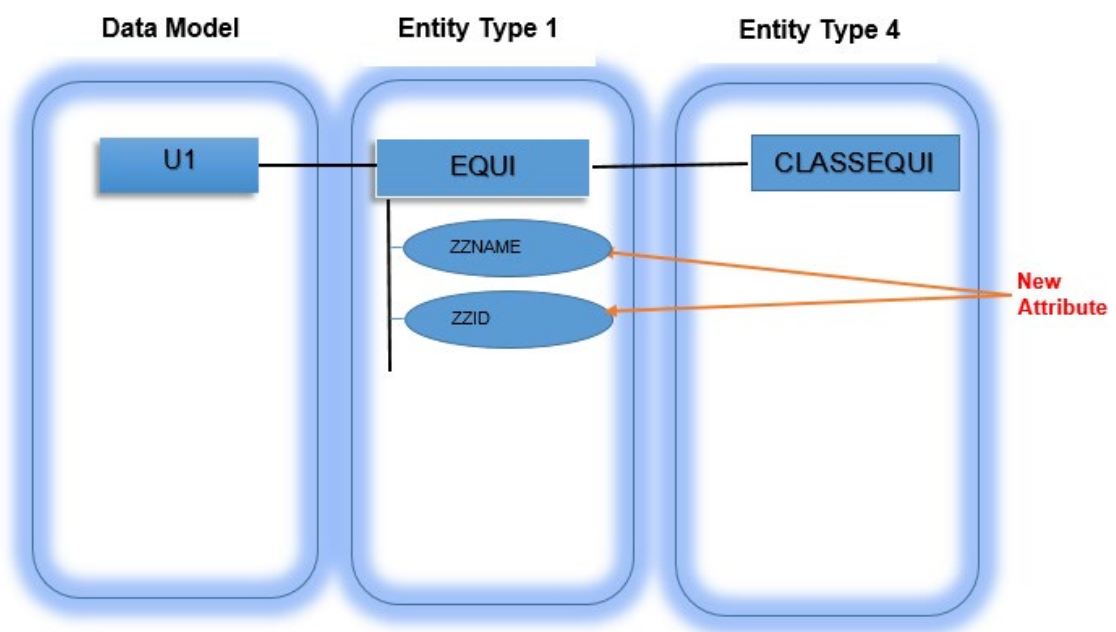


Figure 1: Data Model – Equipment (Scope of 2016 Delivery) with custom attributes ‘ZZNAME” and “ZZID”

2.2. Governance Process

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

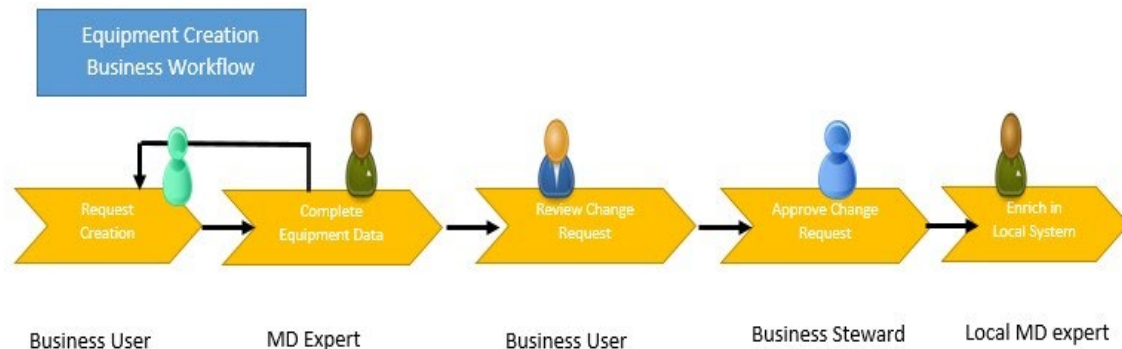


Figure 2: Equipment processing in Master Data Governance

2.3. Implementation

Two major building blocks make up the implementation of the entity type extension. In the first phase, you extend the UGI EAM 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 to use it as an orientation. Each box in the diagram corresponds to a section in this guide in which you find detailed execution instructions.

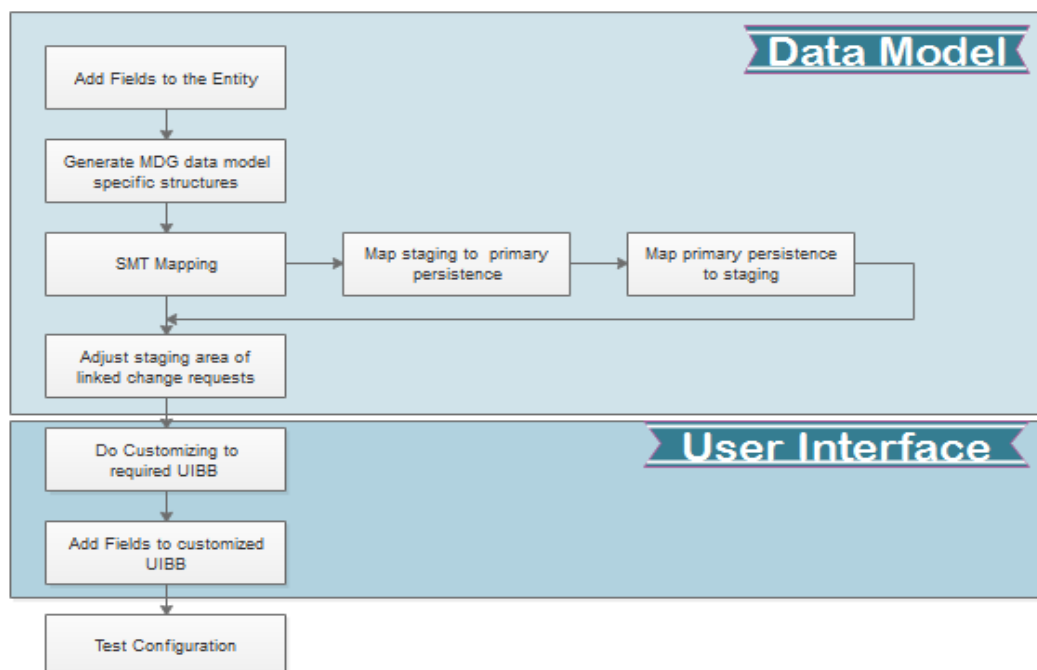
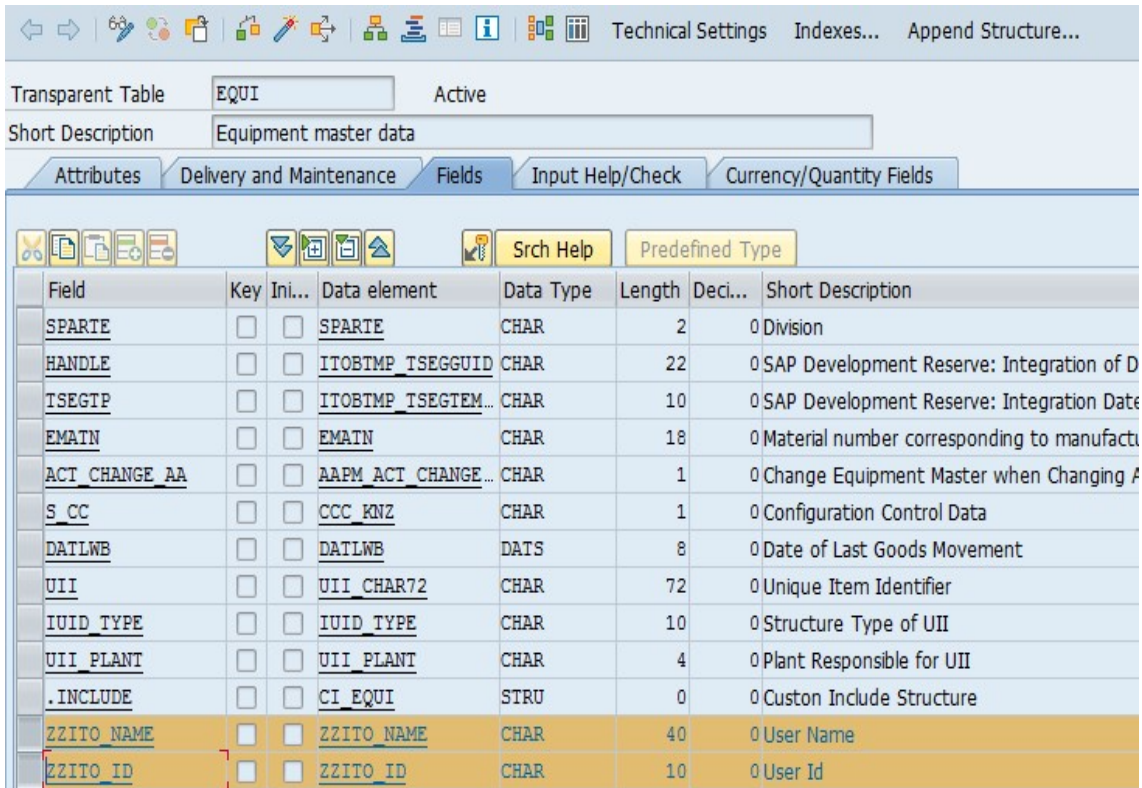


Figure 3: Implementation steps for re-use Entity-Type extension

2.3.1. Data Model Extension

To extend the AIW data model for Equipment (U1) by the additional attributes ZZNAME and ZZID. The following fields from EQUI table should be modeled as attribute of entity type in MDG.



The screenshot shows the SAP MDG configuration interface for the EQUI table. The 'Fields' tab is selected, displaying a list of fields and their attributes. The fields ZZITO_NAME and ZZITO_ID are highlighted in yellow, indicating they are the new fields to be added to the table.

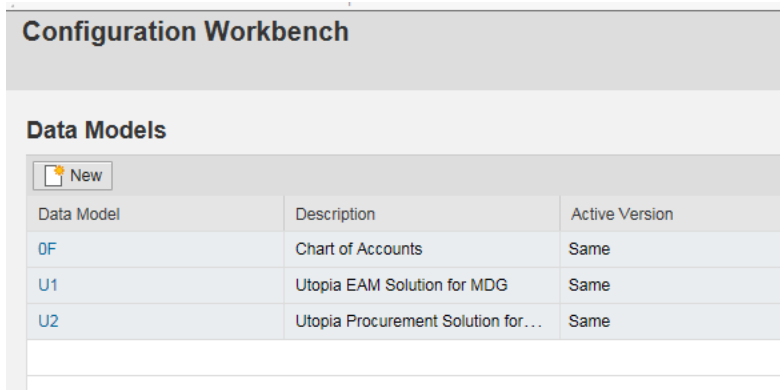
Field	Key	Ini...	Data element	Data Type	Length	Deci...	Short Description
SPARTE	<input type="checkbox"/>	<input type="checkbox"/>	SPARTE	CHAR	2	0	Division
HANDLE	<input type="checkbox"/>	<input type="checkbox"/>	ITOBIMP_TSEGUID	CHAR	22	0	SAP Development Reserve: Integration of D
TSEGT	<input type="checkbox"/>	<input type="checkbox"/>	ITOBIMP_TSEGTEM...	CHAR	10	0	SAP Development Reserve: Integration Date
EMATN	<input type="checkbox"/>	<input type="checkbox"/>	EMATN	CHAR	18	0	Material number corresponding to manufact
ACT_CHANGE_AA	<input type="checkbox"/>	<input type="checkbox"/>	AAPM_ACT_CHANGE...	CHAR	1	0	Change Equipment Master when Changing A
S_CC	<input type="checkbox"/>	<input type="checkbox"/>	CCC_KNZ	CHAR	1	0	Configuration Control Data
DATLWB	<input type="checkbox"/>	<input type="checkbox"/>	DATLWB	DATS	8	0	Date of Last Goods Movement
UII	<input type="checkbox"/>	<input type="checkbox"/>	UII_CHAR72	CHAR	72	0	Unique Item Identifier
IUID_TYPE	<input type="checkbox"/>	<input type="checkbox"/>	IUID_TYPE	CHAR	10	0	Structure Type of UII
UII_PLANT	<input type="checkbox"/>	<input type="checkbox"/>	UII_PLANT	CHAR	4	0	Plant Responsible for UII
.INCLUDE	<input type="checkbox"/>	<input type="checkbox"/>	CI_EQUI	STRU	0	0	Custon Include Structure
ZZITO_NAME	<input type="checkbox"/>	<input type="checkbox"/>	ZZITO_NAME	CHAR	40	0	User Name
ZZITO_ID	<input type="checkbox"/>	<input type="checkbox"/>	ZZITO_ID	CHAR	10	0	User Id

Figure 4: Include new fields to EQUI table

2.3.2. Add Attributes to Existing Entity Type

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

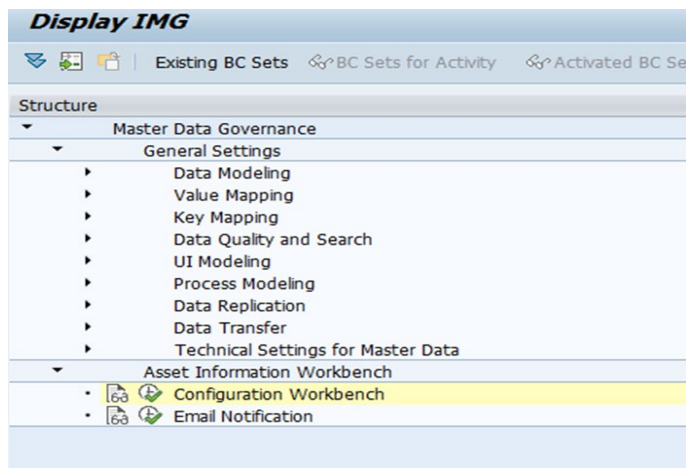
1. Log in the system for cross-client maintenance and start customizing Master Data Governance (Transaction code: MDGIMG).
2. Go to General Settings > Configuration Workbench.



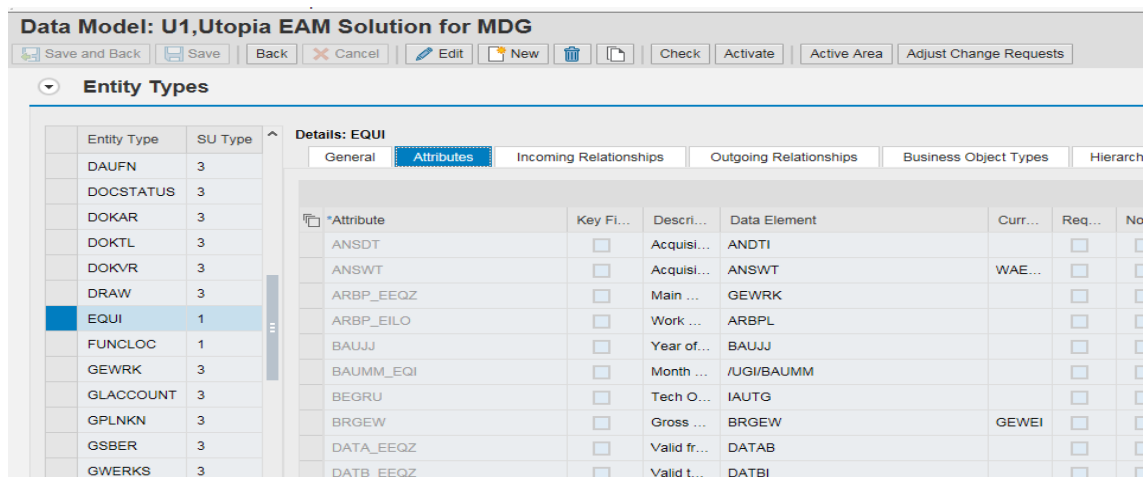
The screenshot shows the SAP Configuration Workbench interface. The 'Data Models' section is expanded, displaying a table of data models. The table has columns for Data Model, Description, and Active Version. The data models listed are 0F (Chart of Accounts), U1 (Utopia EAM Solution for MDG), and U2 (Utopia Procurement Solution for...).

Data Model	Description	Active Version
0F	Chart of Accounts	Same
U1	Utopia EAM Solution for MDG	Same
U2	Utopia Procurement Solution for...	Same

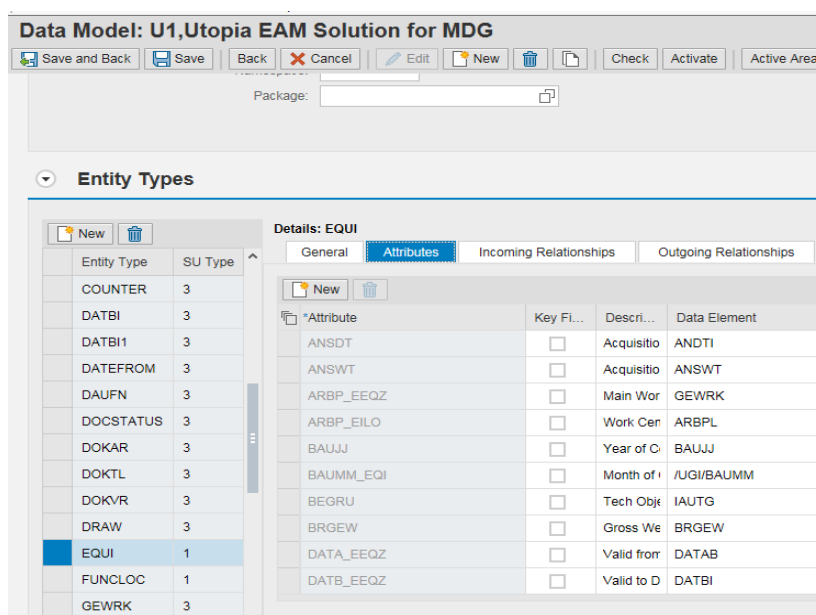
3. Select Data Model "U1" and click the hyperlink.



Entity Types are displayed on the left-hand side panel.




4. Select the entity "EQUI" and click "Edit".
5. Select the "Attributes" tab and click "New".



6. Add the attributes of Entity Type "EQUI" as displayed in the following screen:

Details: EQUI

General **Attributes** Incoming Relationships Outgoing Relationships

New 

*Attribute	Key Field	Description	Data Element	Current
REFEQ	<input type="checkbox"/>	Reference E	/UGI/EQUN	
SERGE	<input type="checkbox"/>	Manufacture	SERGE	
SERNR	<input type="checkbox"/>	Serial Numt	/UGI/GERN	
STATTEXT	<input type="checkbox"/>	Status Text	ILOM_STTX	
TIDN_EEQZ	<input type="checkbox"/>	Technical id	TIDNR	
TYPBZ	<input type="checkbox"/>	Manufacture	TYPBZ	
WAERS	<input type="checkbox"/>	Currency Ke	WAERS	
WERGW_...	<input type="checkbox"/>	Plant for Wc	WERGW	
ZZID	<input type="checkbox"/>		ZZITO_ID	
ZZNAME	<input type="checkbox"/>		ZZITO_NAM	





7. Save your settings.

i Note

It is recommended to assign a search help to Data Element in exceptional circumstances. The input helps to execute the search help instead of reading the data in the check table or the fixed values of the data element's domain.

8. Activate the extended Data Model.

Change View "Entity Types": Overview

69    Visualize Data Model 

Dialog Structure



- Inactive Data Models
 - Entity Types
 - Attributes
 - Business Object
 - Entity Types for
 - Hierarchy Att
 - Hierarchy Att
 - Relationships
 - Fields of Foreign

Data Model **U1**

Entity Type	Storage/Use Type	Val.Entity
EQUI	Changeable via Change Reque...	No Edit:
FUNCLOC	Changeable via Change Reque...	No Edit:
GEWRK	Not Changeable via MDG; No ...	No Edit:
GLACCOUNT	Not Changeable via MDG; No ...	No Edit:

9. Make Change Request adjustments.

Messages have been issued

Ty...	Message Text	LTxt
	Change requests must be adjusted because data model U1 has been modified	

2.3.3. 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 are generated automatically with the activation of the data model.

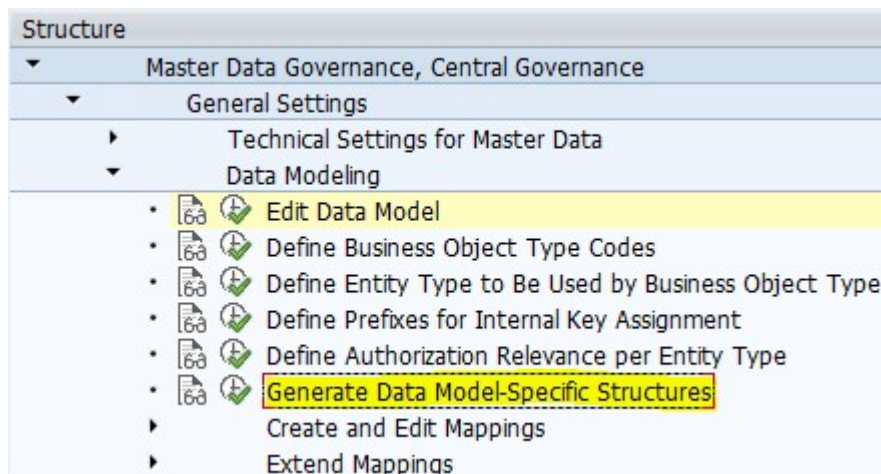
Since the MDG data model was changed, the tables need to be regenerated. In this customizing activity, for each Data Model and entity type, you generate technical structures and tables in the ABAP dictionary. The system uses these structures internally for implementing the staging area.

To generate these Data Model Specific structures, follow the steps as described.

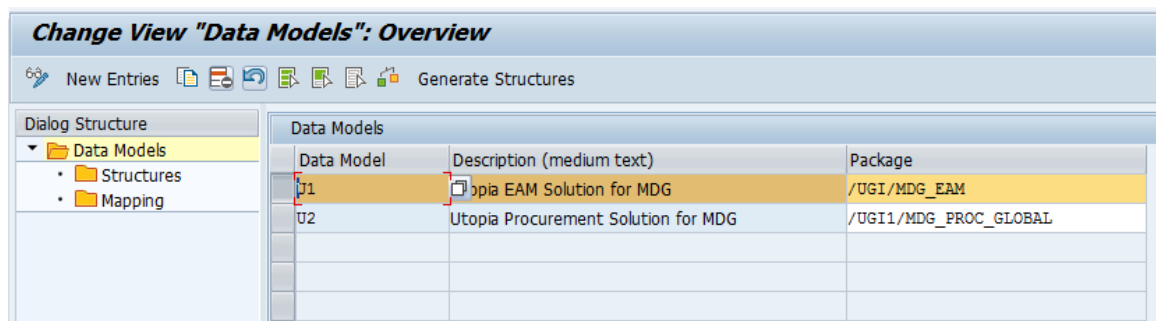
i Note

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.

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

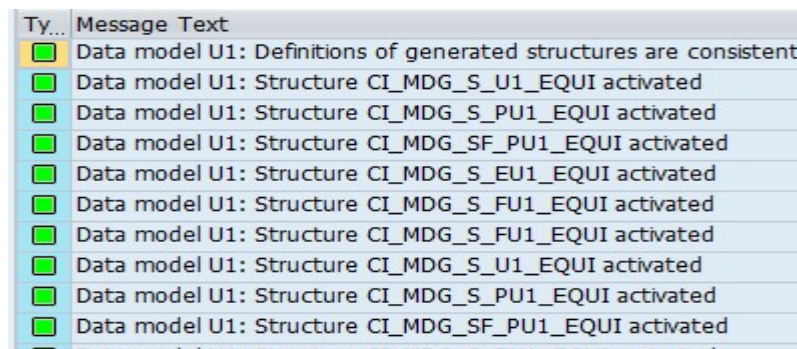


3. Select the row with the data model "U1" and click "Generate Structures".

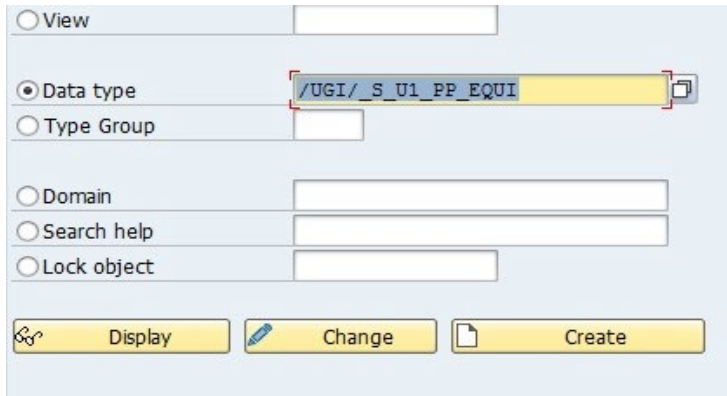


The following screen is displayed.

4. Verify that your structures are generated successfully.

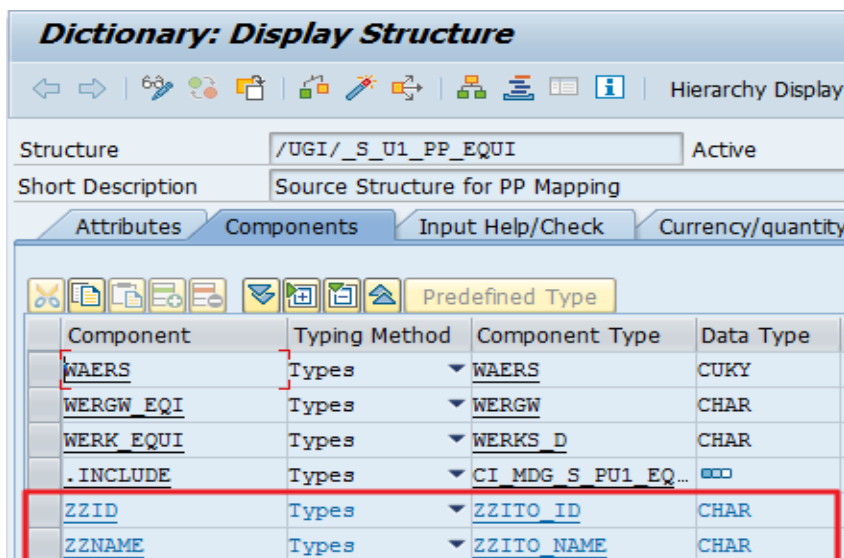


To verify that one of the active area mapping structures is successfully generated with new fields, go to the transaction code (t-code) SE11 and display structure as /UGI/_S_U1_PP_EQUI by entering the details as displayed in the following screen.



The screenshot shows the SE11 transaction screen with the 'Data type' field set to '/UGI/_S_U1_PP_EQUI'. Other fields like 'Type Group', 'Domain', 'Search help', and 'Lock object' are empty. The 'Display' button is highlighted.

You have now verified that the structure and /UGI/_S_U1_PP_EQUI has been generated as displayed in the following screen.



The screenshot shows the 'Dictionary: Display Structure' screen for the structure /UGI/_S_U1_PP_EQUI. The 'Short Description' is 'Source Structure for PP Mapping'. The 'Attributes' tab is selected, showing a table of components.

Component	Typing Method	Component Type	Data Type
WAERS	Types	WAERS	CUKY
WERGW_EQI	Types	WERGW	CHAR
WERK_EQUI	Types	WERKS_D	CHAR
.INCLUDE	Types	CI_MDG_S_PU1_EQ...	
ZZID	Types	ZZITO_ID	CHAR
ZZNAME	Types	ZZITO_NAME	CHAR

2.3.4. SMT Mapping

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

Note

When the mappings are saved, the system generates the corresponding coding. Ensure that all the relevant structures are ready before you start.

2.3.4.1. SMT Mapping – Get Mapping Names from Data Model U1

Use the following steps to get SMT mapping names:

1. Log in to the system for cross-client maintenance and Start Customizing for Master Data Governance (transaction MDGIMG).
2. Go to General Settings >Data Modelling >Generate Data Model Specific Structures
3. Select Data Model "U1" and double-click on "Mapping".

Dialog Structure	Packages for Generated Structures on Model Level				
<ul style="list-style-type: none"> Data Models <ul style="list-style-type: none"> Structures Mapping 	<table> <tr> <th>Data Model</th><th>Description (medium text)</th></tr> <tr> <td>U1</td><td>Utopia EAM Solution for MDG</td></tr> </table>	Data Model	Description (medium text)	U1	Utopia EAM Solution for MDG
Data Model	Description (medium text)				
U1	Utopia EAM Solution for MDG				

Note that the two SMT mappings for Entity Type “EQUI” as displayed in the following screen.

Dialog Structure		Data Model		U1
Data Models				
• Structure				
• Mapping				
Mapping				
	Entity T...	Where Used	SMT Mapping from Active Area	SMT Mapping to Active Area
	BOMITEM	Mapping ...	/UGI/MDG_SMT_MRO_ECC2MDG_MAP	/UGI/MDG_SMT_MRO_MDG2ECC_MAP
	EQUI	Mapping ...	/UGI/MDG_SMT_EQUI_ECC2MDG_M...	/UGI/MDG_SMT_EQUI_MDG2ECC_MAP

2.3.4.2. SMT Mapping – Primary Persistence for Staging

Use the following steps to extend primary persistence to staging structures:

1. Log into the system for cross-client maintenance and start Customizing for Master Data Governance (transaction MDGIMG).
2. Go to General Settings > Data Modelling > Create and Edit Mappings > Create and Edit Mappings.

▼	Create and Edit Mappings
•	Define Package Groups
•	Create and Edit Mappings
•	Check Customizing

i 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.

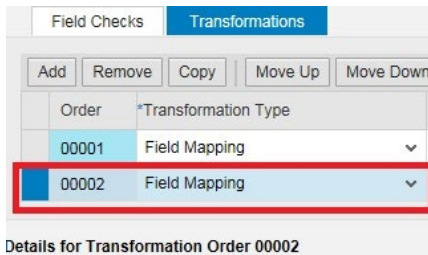
3. Extend mapping /UGI/MDG_SMT_EQUI_ECC2MDG_MAP.

Mapping	
* Name:	/UGI/MDG_SMT_EQUI_ECC2MDG_MAP
Description:	SMT Mapping from ECC to MDG
Package Group:	/UGI/EAM
Multiple Contexts:	<input type="checkbox"/>

4. Select the mapping step and choose “Details” to map the fields as displayed in the following screen.

Mapping Steps	
Details	Add Remove Copy Import Change Structure Keys Additional
*Mapping Step	Description
/UGI/MDG_SMT_EQUI_TO_STAGE	Equipment Master data Mapping
/UGI/MDG_SMT_EQUIZ_TO_STAGE	Equipment time segment
/UGI/MDG_SMT_ILOA_TO_STAGE	Object Location and Account Assignment
/UGI/MDG_SMT_MASE_TO_STAGE	Serial Number for Material

The following screen is displayed.



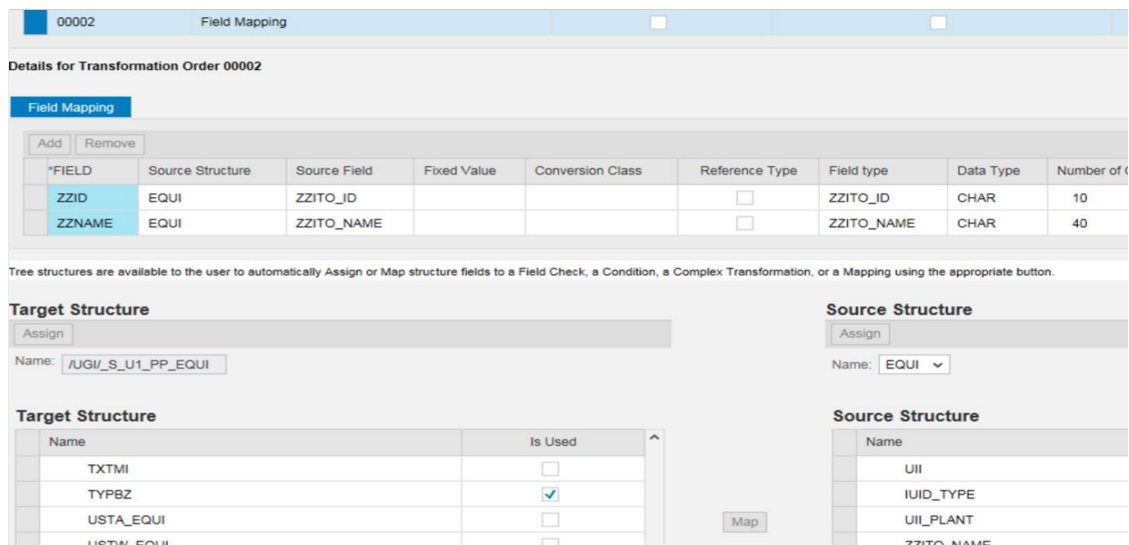
Field Checks Transformations

Add Remove Copy Move Up Move Down

Order	Transformation Type
00001	Field Mapping
00002	Field Mapping

Details for Transformation Order 00002

- Click the “Transformations” tab and click on “Add”.
- Select “Transformation Type” as “Field Mapping”.
- Assign Target Structure /UGI/_S_U1_PP_EQUI custom field to Source Structure EQUI custom fields.



00002 Field Mapping

Details for Transformation Order 00002

Field Mapping

Add Remove

*FIELD	Source Structure	Source Field	Fixed Value	Conversion Class	Reference Type	Field type	Data Type	Number of
ZZID	EQUI	ZZITO_ID			<input type="checkbox"/>	ZZITO_ID	CHAR	10
ZZNAME	EQUI	ZZITO_NAME			<input type="checkbox"/>	ZZITO_NAME	CHAR	40

Tree structures are available to the user to automatically Assign or Map structure fields to a Field Check, a Condition, a Complex Transformation, or a Mapping using the appropriate button.

Target Structure

Assign

Name: /UGI/_S_U1_PP_EQUI

Target Structure

Name	Is Used
TXTMI	<input type="checkbox"/>
TYPBZ	<input checked="" type="checkbox"/>
USTA_EQUI	<input type="checkbox"/>
ZZITO_NAME	<input type="checkbox"/>

Source Structure

Assign

Name: EQUI

Source Structure

Name
UII
IUID_TYPE
UII_PLANT
ZZITO_NAME

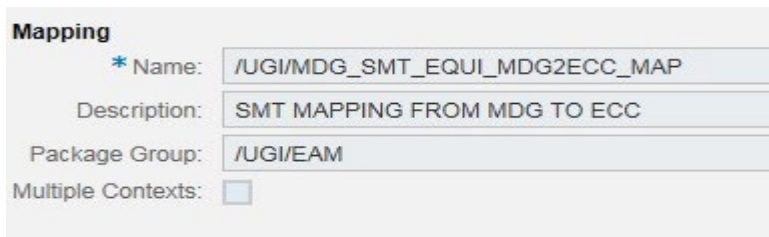
Map

- Click “Save” to save your changes.

2.3.4.3. SMT Mapping – Staging to Primary Persistence

Use the following steps for SMT mapping

- Extend mapping /UGI/MDG_SMT_EQUI_MDG2ECC_MAP.



Mapping

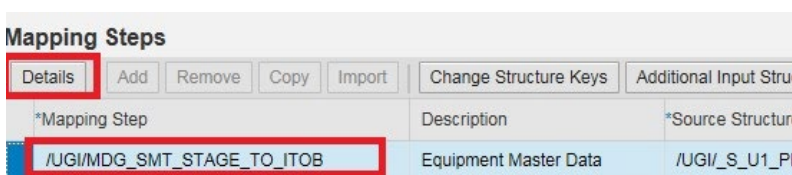
* Name: /UGI/MDG_SMT_EQUI_MDG2ECC_MAP

Description: SMT MAPPING FROM MDG TO ECC

Package Group: /UGI/EAM

Multiple Contexts: ☐

- Select the mapping step and select “Details”.
- Map the fields as displayed in the following screen.

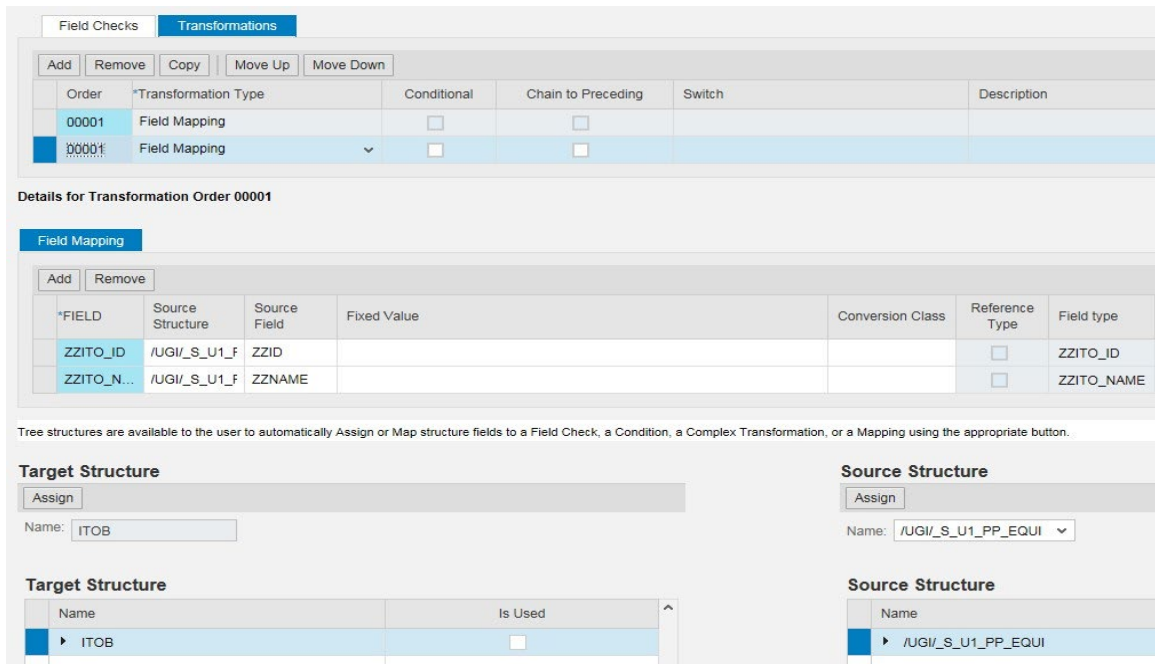


Mapping Steps

Details Add Remove Copy Import Change Structure Keys Additional Input Stru

*Mapping Step	Description	*Source Structure
/UGI/MDG_SMT_STAGE_TO_ITOB	Equipment Master Data	/UGI/_S_U1_PI

4. Add a mapping step. Assign Target Structure ITOB and assign Source Structure /UGI/_S_U1_PP_EQUI.



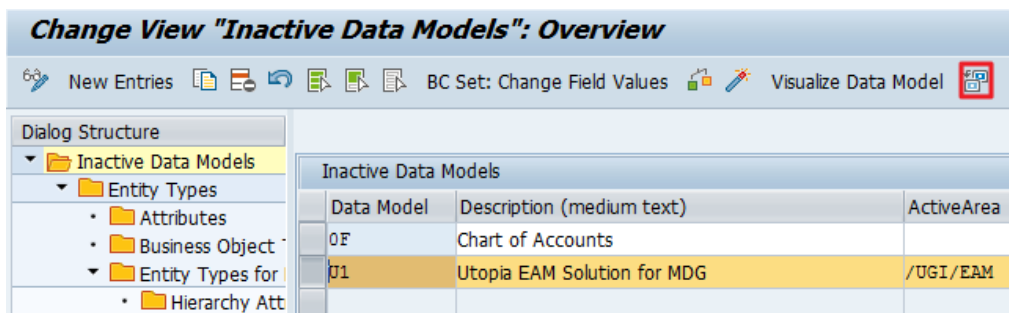
5. Click "Save" to save your changes.

2.3.5. Adjust Staging Area of Linked Change Requests

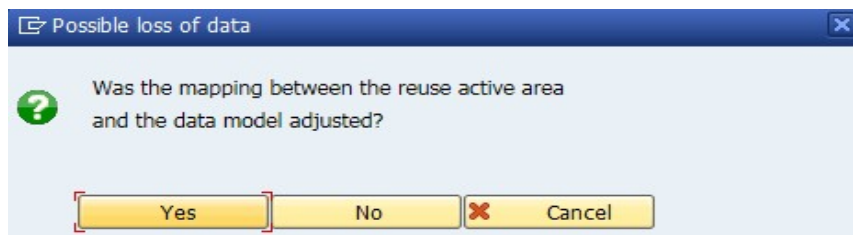
This step is necessary to adjust any open Change Requests after you have changed the data model.

Use the following steps to adjust the staging area of linked Changed Requests.

1. Start Customizing for Master Data Governance (t-code MDGIMG).
2. Go to General Settings > Data Modelling > Edit Data Model.
3. Select data model "U1" and double click on Entity Types.
4. Choose the Adjust staging area of linked "Change Request".



The pop-up window is displayed.



- Click "Yes".

The following message appears.



Note

The user DDIC should exist in all relevant clients.

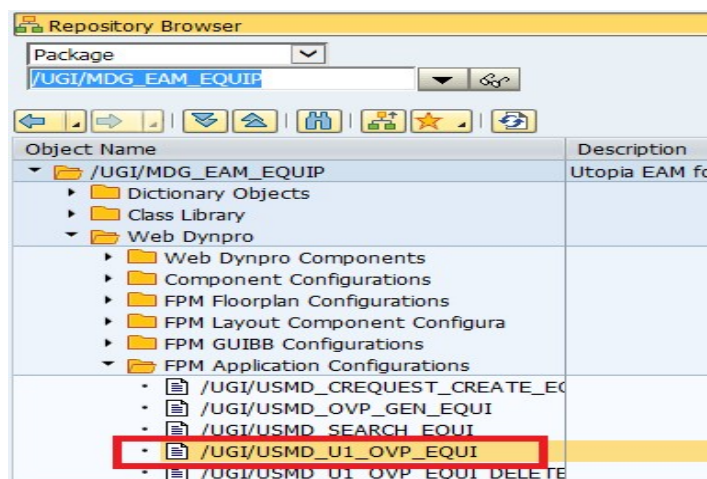
2.3.6. Extending the UI Configuration

To display the extended data model entity fields in the UI, it is required to customize the UI as explained in this section.

2.3.6.1. Customizing UI: Adding Fields to Create Equipment Screen

Use the following steps to customize the UI configuration:

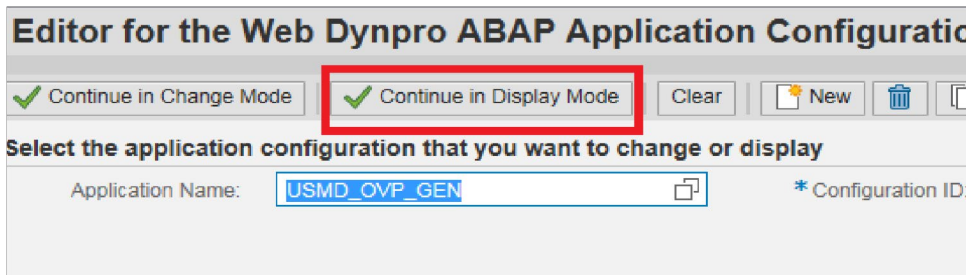
- Start t-code SE80.
- From the drop-down list, select Package and in the input field, type /UGI/MDG_EAM_EQUIP.



- Navigate to Web Dynpro > Application Configurations > /UGI/USMD_U1_OVP_EQUI.
- Click "Start Configurator".



The following screen is displayed.



Editor for the Web Dynpro ABAP Application Configuration

☒ Continue in Change Mode
 ☒ Continue in Display Mode

Select the application configuration that you want to change or display

Application Name:

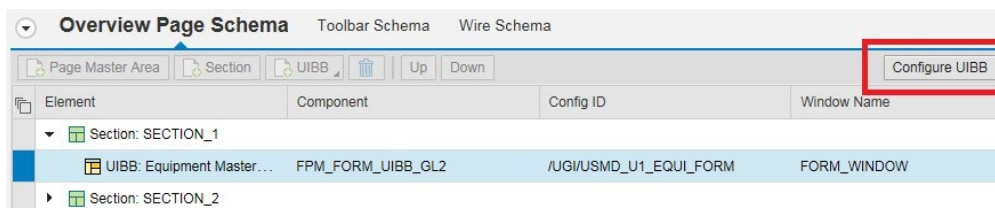
* Configuration ID:

5. Click "Continue in Display Mode".
6. Click on the Configuration Name: /UGI/USMD_U1_EQUI_OVP.

Assign Web Dynpro Component

Component Usage	Component	Implementation	Configuration Name
USMD_OVP_GEN	FPM_ADAPTABLE_OVP	FPM_ADAPTABLE_OVP	USMD_OVP_CBA
OVP	FPM_OVP_COMPONENT	FPM_OVP_COMPONENT	/UGI/USMD_U1_EQUI_OVP

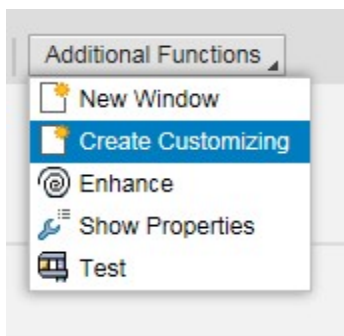
7. In the Overview Page Schema tab, select the UIBB where you want to add new attributes.
8. Click "Configure UIBB".



Overview Page Schema Toolbar Schema Wire Schema

Element	Component	Config ID	Window Name
Section: SECTION_1			
UIBB: Equipment Master...	FPM_FORM_UIBB_GL2	/UGI/USMD_U1_EQUI_FORM	FORM_WINDOW
Section: SECTION_2			

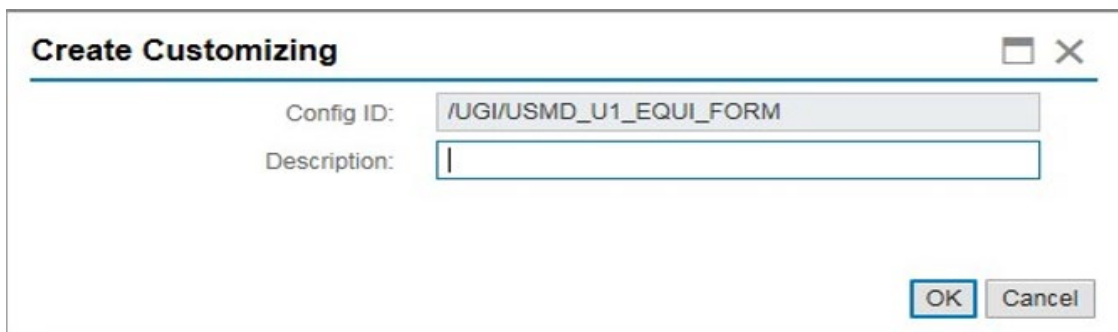
9. Click on Additional Functions > Create Customizing.



Additional Functions

- New Window
- Create Customizing
- Enhance
- Show Properties
- Test

The following pop-up screen is displayed with the Config ID displayed by default.



Create Customizing

Config ID:

Description:

10. Type the description of the Config ID and click “OK”.

The Create Equipment screen is displayed to add new fields.

Equipment Extension			
User ID:	<input type="text"/>	<input type="text"/>	<input type="text"/>
User Name:	<input type="text"/>		

2.4. Testing the UGI EAM Equipment Configuration



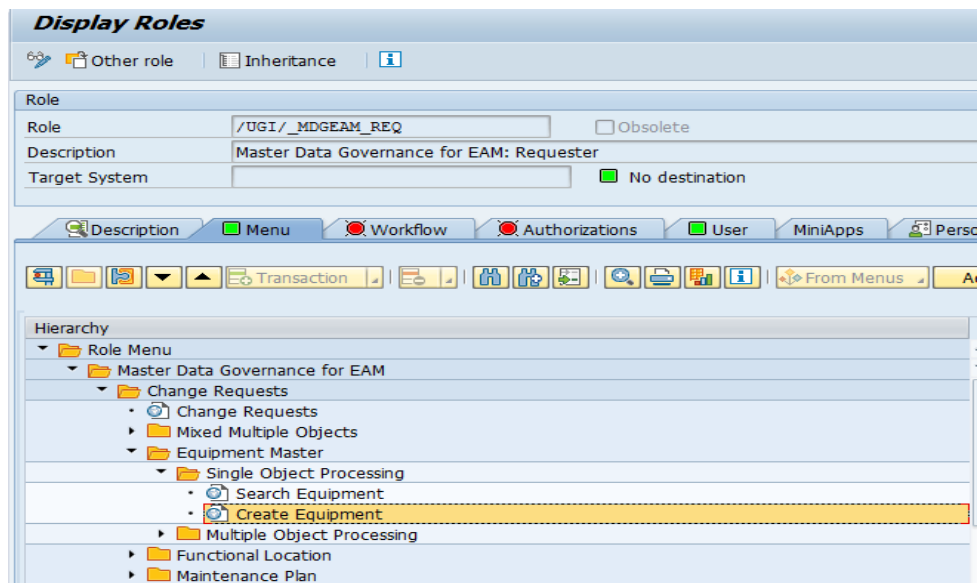
Note

If you extend the data model according to the guidelines described 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.

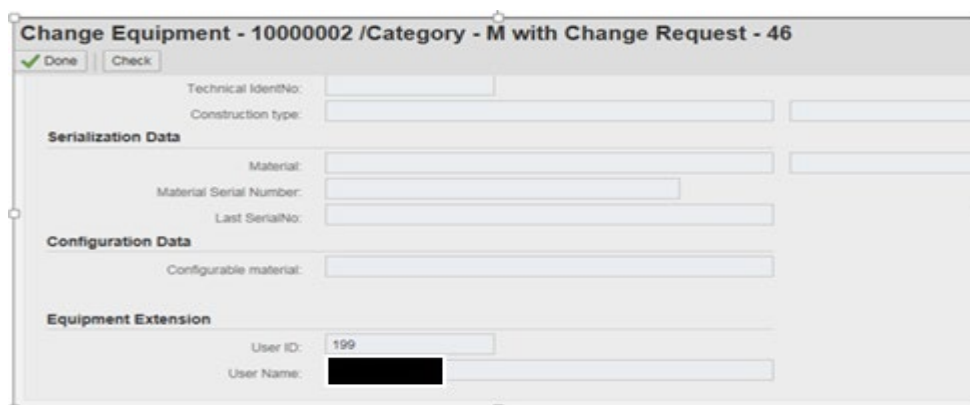
2.4.1. Process

Use the following steps to test your configuration:

1. Start the UGI Equipment 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=Z_US
MD_U1_OVP_EQUI#`
2. Start t-code PFCG and enter the role name /UGI/_MDGEAM_REQ.
3. Click “Display”.
4. Select the “Menu” tab.
5. Start transaction PFCG and enter the role name /UGI/_MDGEAM_REQ.
6. Click “Display”.
7. Select the Menu tab. In the hierarchy window navigate to Role Menu > Master Data Governance for EAM > Change Requests > Equipment Master > Single Object Processing.
8. Right-Click on Create Equipment and select “Execute” from the drop-down.

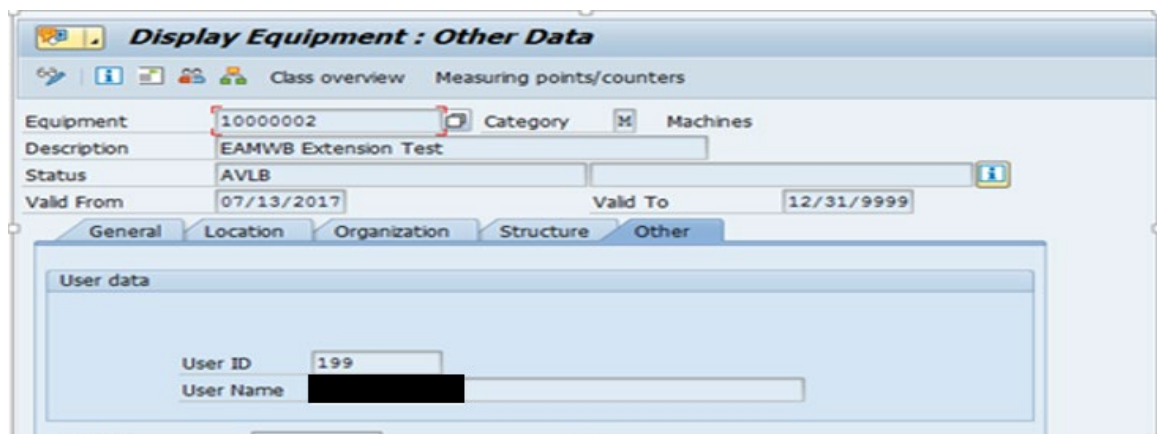


9. Create Equipment with User Name and User ID. The created equipment is displayed as in the following screen.



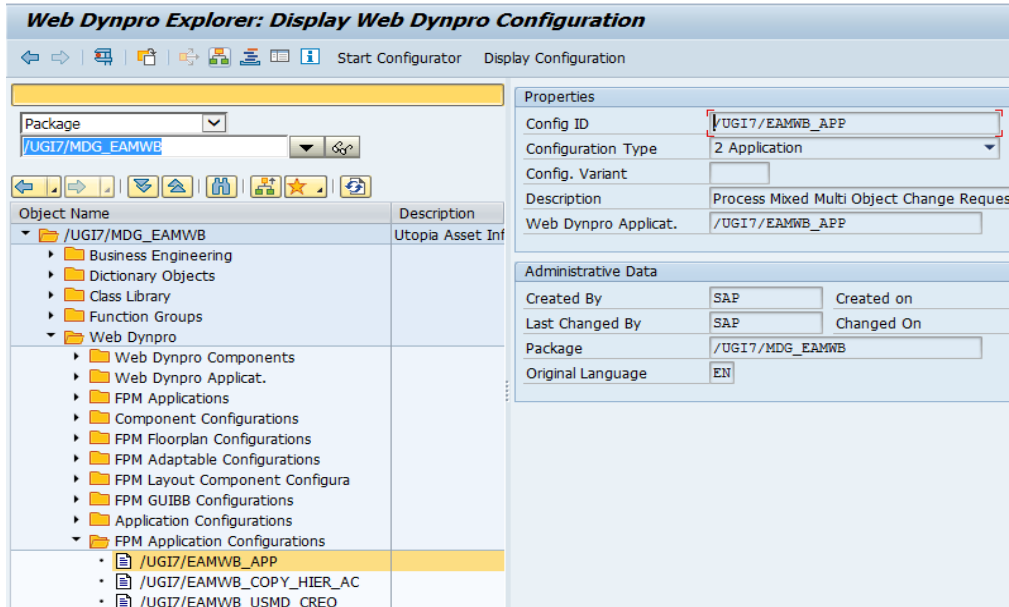
10. Save and Submit the CR.
11. Finalize processing and Approve.

After activation, use t-code IE03 to verify attributes that are transferred correctly as displayed in the following screen.



2.5. Adding Extended fields to Asset Information Workbench

1. Start t-code SE80.
2. In the drop-down, select Package and enter /UGI7/EAMWB_APP.
3. Navigate to Web Dynpro >Application Configurations >/UGI7/EAMWB_APP.



Web Dynpro Explorer: Display Web Dynpro Configuration

Start Configurator Display Configuration

Package: /UGI7/MDG_EAMWB

Object Name: /UGI7/MDG_EAMWB

Description: Utopia Asset Inf

Properties:

- Config ID: /UGI7/EAMWB_APP
- Configuration Type: 2 Application
- Config. Variant:
- Description: Process Mixed Multi Object Change Request
- Web Dynpro Applicat.: /UGI7/EAMWB_APP

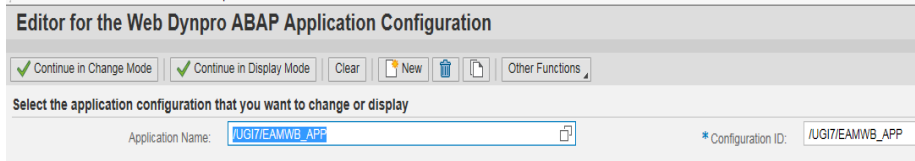
Administrative Data:

- Created By: SAP
- Last Changed By: SAP
- Package: /UGI7/MDG_EAMWB
- Original Language: EN

Object Name: /UGI7/MDG_EAMWB

- Business Engineering
- Dictionary Objects
- Class Library
- Function Groups
- Web Dynpro
 - Web Dynpro Components
 - Web Dynpro Applicat.
 - FPM Applications
 - Component Configurations
 - FPM Floorplan Configurations
 - FPM Adaptable Configurations
 - FPM Layout Component Configurations
 - FPM GUIBB Configurations
 - Application Configurations
 - FPM Application Configurations
 - /UGI7/EAMWB_APP
 - /UGI7/EAMWB_COPY_HIER_AC
 - /UGI7/EAMWB_USMD_CREQ

4. Click "Continue" in Display Mode.



Editor for the Web Dynpro ABAP Application Configuration

Continue in Change Mode Continue in Display Mode Clear New Delete Other Functions

Select the application configuration that you want to change or display

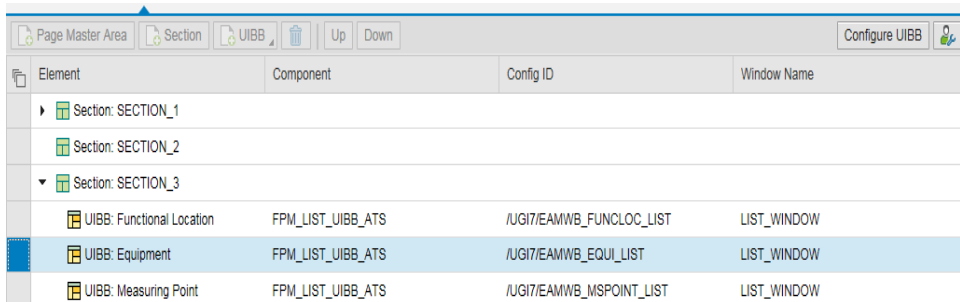
Application Name: /UGI7/EAMWB_APP Configuration ID: /UGI7/EAMWB_APP

5. Click on the configuration /UGI7/EAMWB_OVP_COMP.

Assign Web Dynpro Component

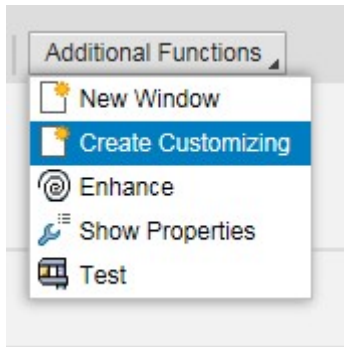
Assign Configuration Name	Component Usage	Component	Implementation	Configuration Name
/UGI7/EAMWB_APP	FPM_ADAPTABLE_OVP	FPM_ADAPTABLE_OVP	FPM_ADAPTABLE_OVP	/UGI7/EAMWB_ADAPTATION
OVP	FPM_OVP_COMPONENT	FPM_OVP_COMPONENT	FPM_OVP_COMPONENT	/UGI7/EAMWB_OVP_COMP

6. Select the UIBB where you want to add new attributes.
7. Click "Configure UIBB".

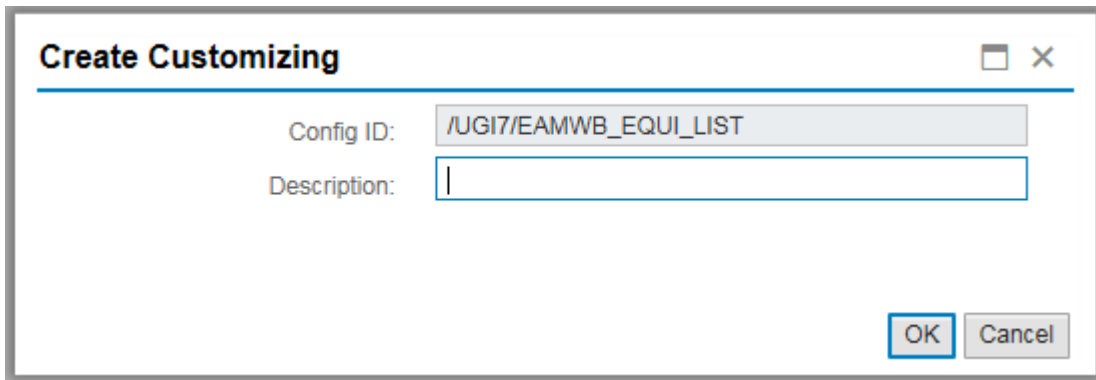


Element	Component	Config ID	Window Name
Section: SECTION_1			
Section: SECTION_2			
Section: SECTION_3			
UIBB: Functional Location	FPM_LIST_UIBB_ATS	/UGI7/EAMWB_FUNCLOC_LIST	LIST_WINDOW
UIBB: Equipment	FPM_LIST_UIBB_ATS	/UGI7/EAMWB_EQUI_LIST	LIST_WINDOW
UIBB: Measuring Point	FPM_LIST_UIBB_ATS	/UGI7/EAMWB_MSPPOINT_LIST	LIST_WINDOW

8. Click on Additional Functions > Create Customizing.



9. The following pop-up screen is displayed with the config id displayed by default.



10. Type the description of the Config ID.
11. Click "OK" to create the customizing configuration.
12. Add new columns to the list UIBB.

	Column: KOST_EILO	Input Field	▼	Cost Center
	Column: ZZNAME	Input Field	▼	User Name
	Column: ZZID	Input Field	▼	User ID

13. Click "Save" to save your changes.

2.5.1. Testing the AIW 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.

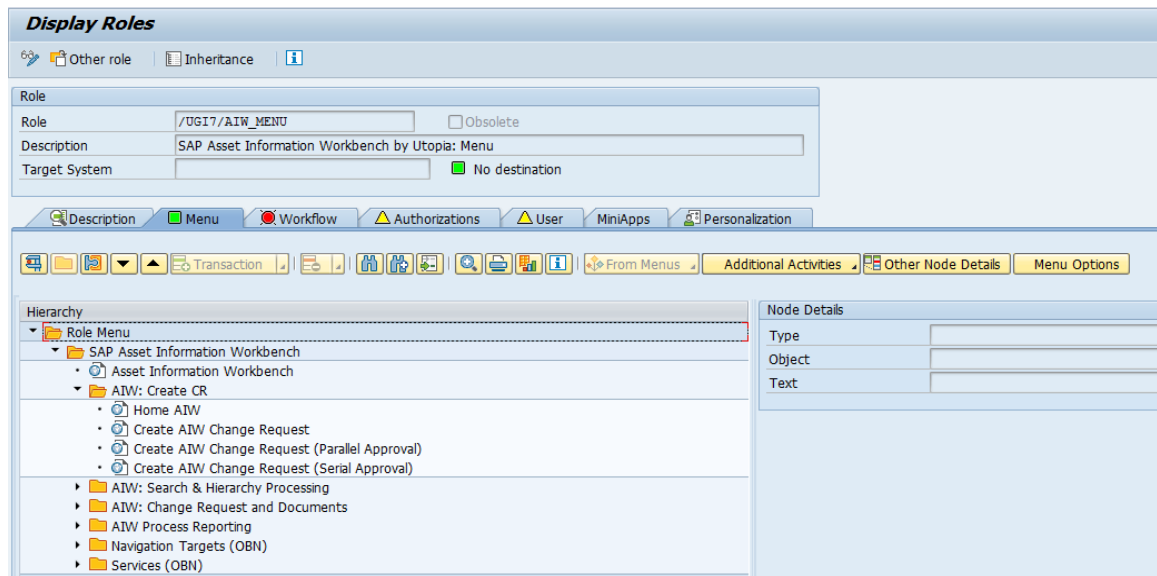
2.5.2. Process

Use the following steps to test your configuration.

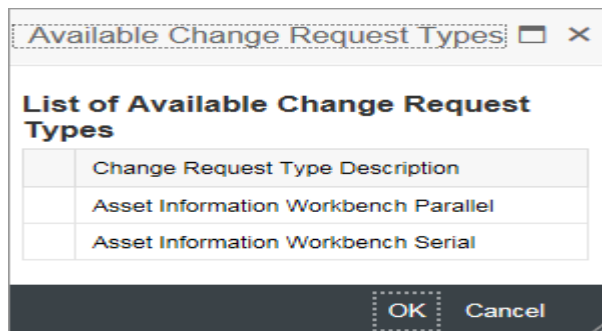
1. Start the UGI Equipment UI using the following URL (replace the parameters host, port and client-id to match your landscape):

https://<host>:<port>/sap/bc/webdynpro/sap/usmd_ovp_gen?
ACTION=CREATE&FPM_EDIT_MODE=E&saplanguage=EN&WDCONFIGURATIONID=/UGI/
MDG_EAM_EQUIP I#

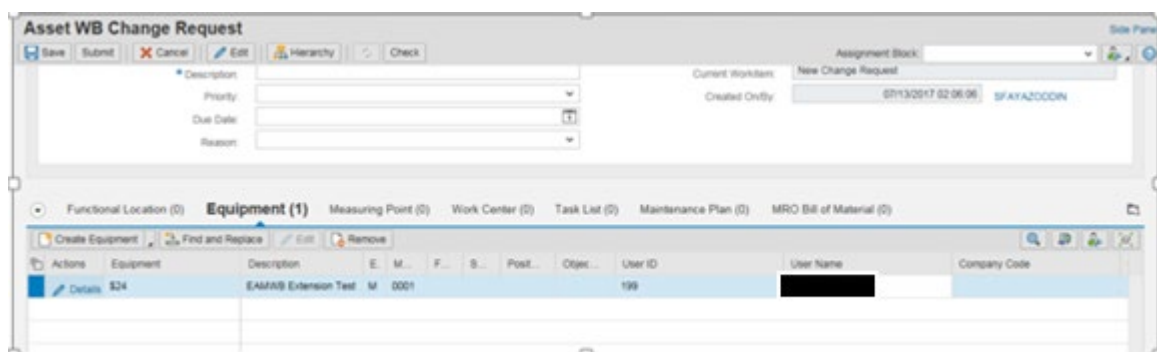
2. Start t-code PFCG and enter the role name /UGI7/AIW_MENU.
3. Click “Display”.
4. Select the “Menu” tab.
5. In the hierarchy window, navigate to Role Menu > Master Data Governance for AIW Workbench > AIW > Create AIW Change Request.
6. Right-Click on Create AIW Change Request and select “Execute” from the drop-down list.



The following pop-up screen is displayed.

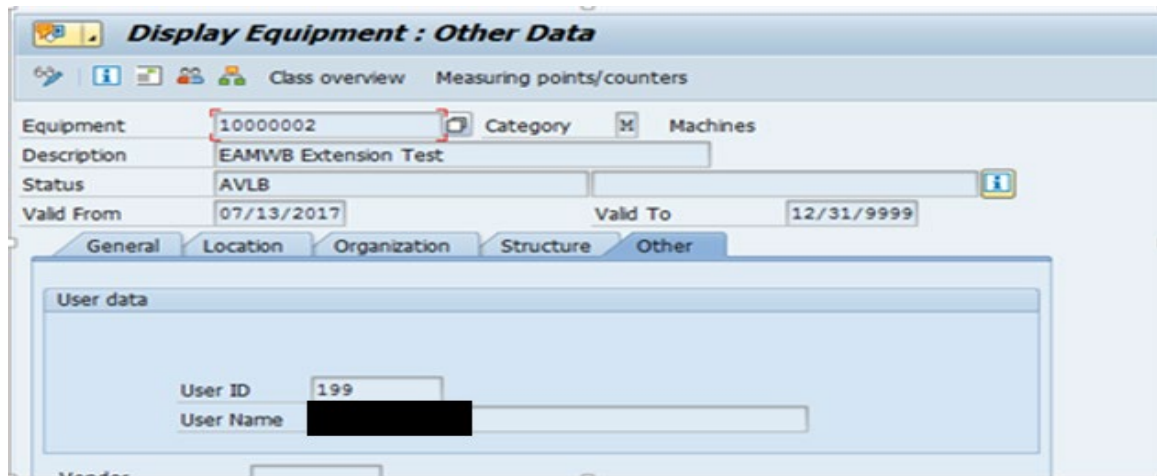


7. Select Asset Information Workbench Parallel and click “OK”. The following screen is displayed.



8. Save and Submit the CR.
9. Finalize processing and Approve.

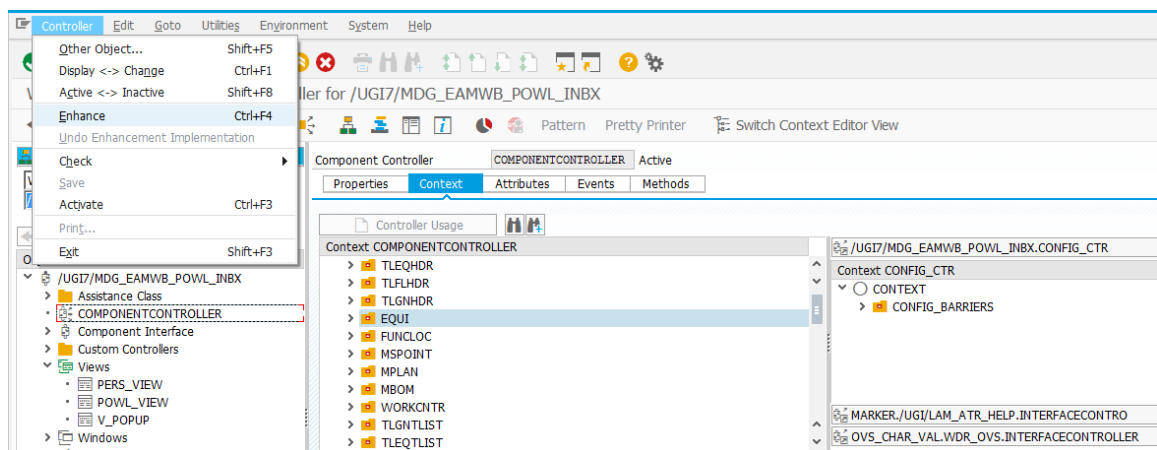
After activation use t-code IE03 to verify attributes that are transferred correctly as displayed in the following screen.



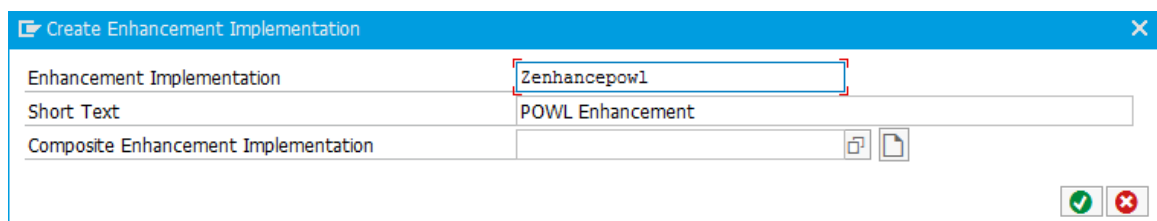
2.6. Adding Extended Fields to POWL

The POWL view can be enhanced to add columns in the UI. The following screen is the sample enhancement to add an additional field in the Equipment table/section.

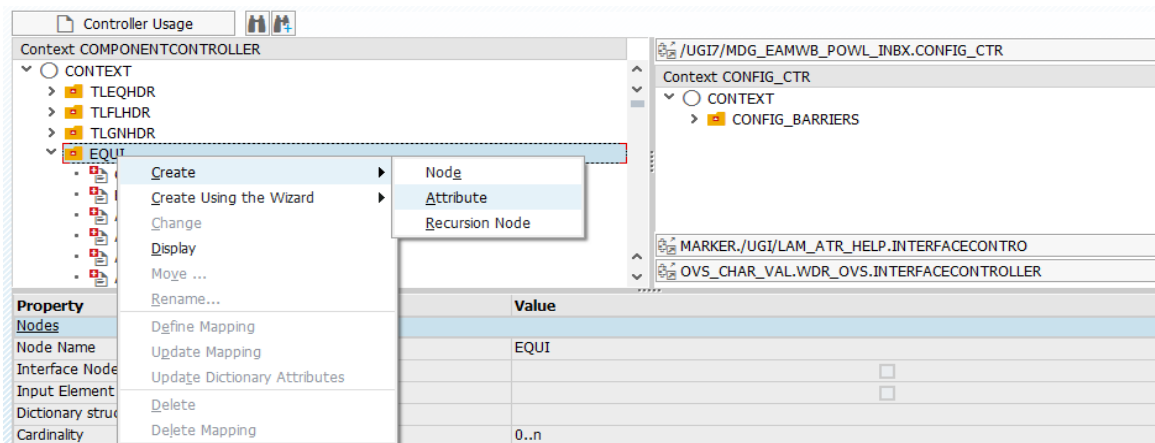
1. Start t-code SE80 and navigate to the component controller of the Web Dynpro component /UGI7/MDG_EAMWB_POWL_INBX.
2. Click on the menu option Controller > Enhance.



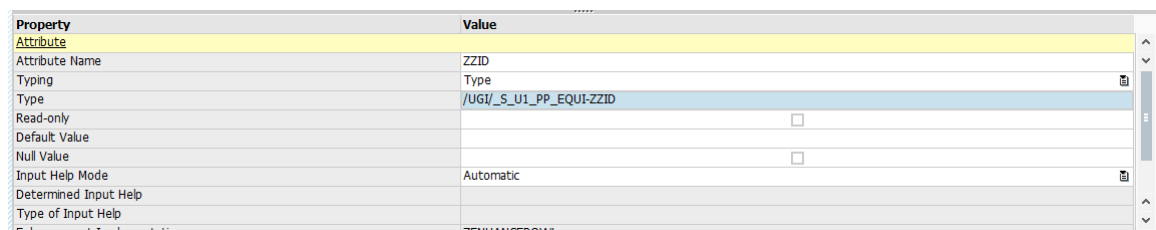
3. Create Enhancement Implementation and save in a package.



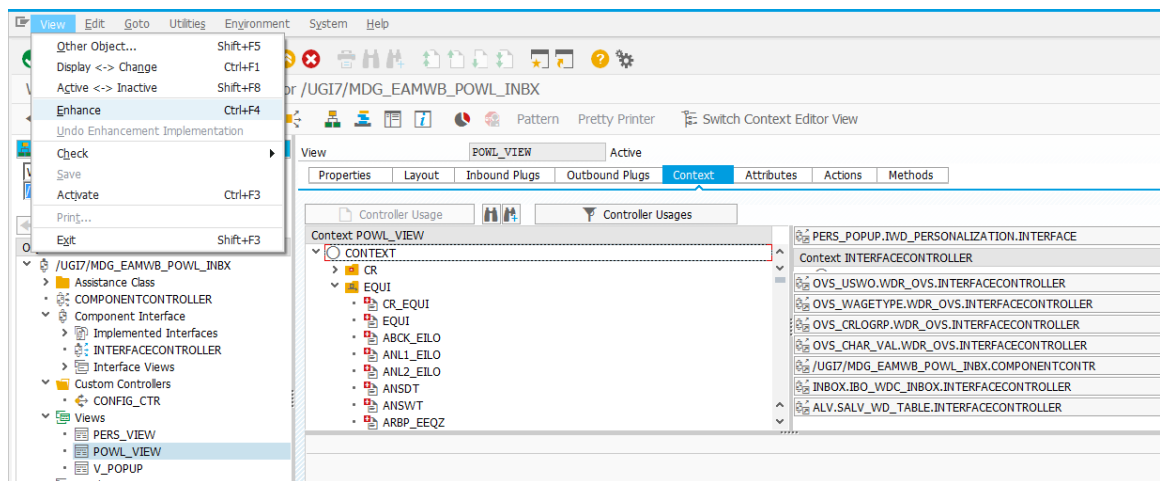
4. Select "EQUI" node and right-click on "Create" and select "Attribute".



The attribute in the "Property" section is displayed.

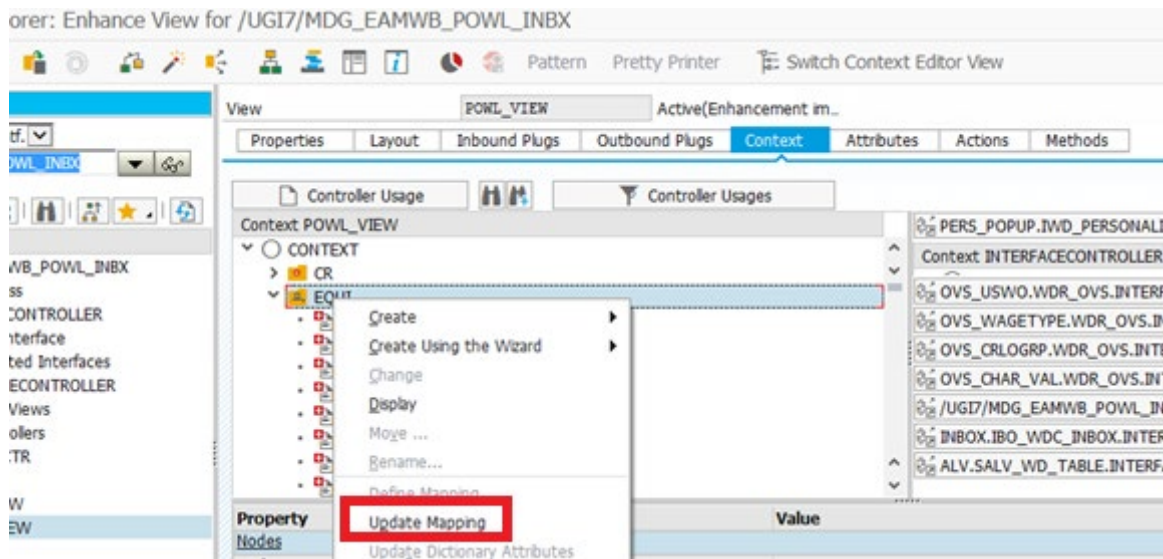


5. Enter the attribute details and save and activate the object.
6. Navigate to POWL_WINDOW and click on the menu View > Enhance and select the Enhancement implementation.

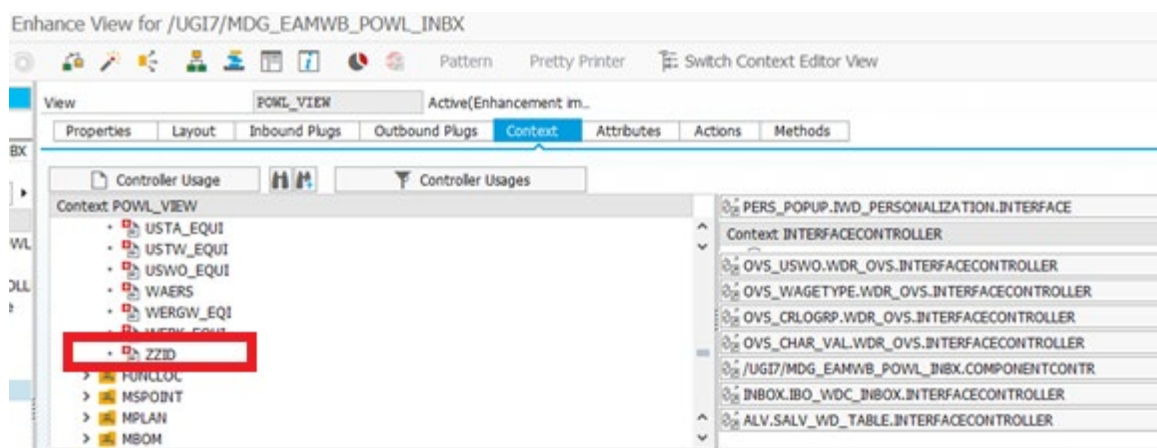


Enhancement Implementation	Package	Software Component	Beschreibung	Application Component
ZENHANCEPOWL	\$TMP	LOCAL	POWL Enhancement	

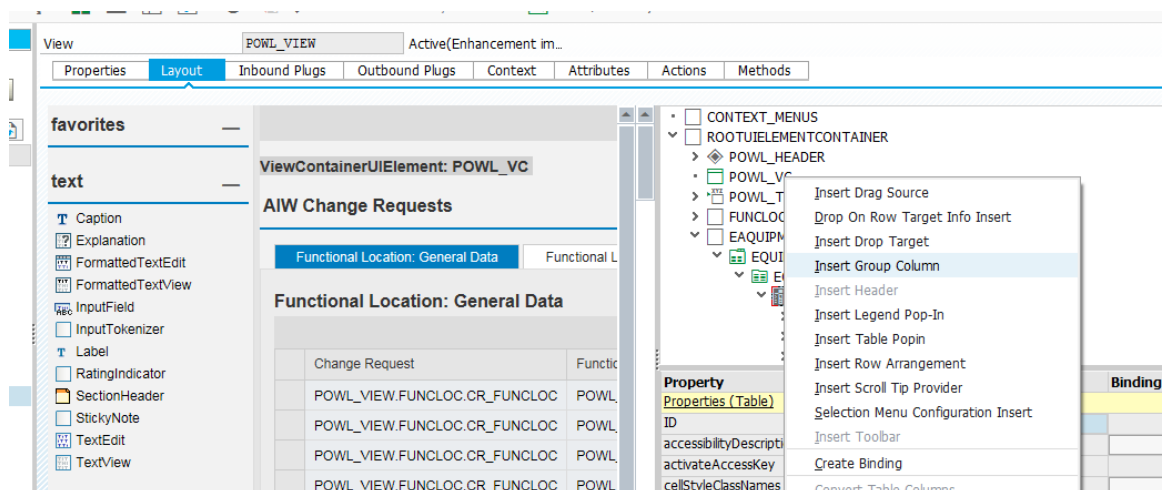
7. Navigate to the Context tab of view POWL_VIEW and right-click on Context >EQUI and click on Update Mapping.



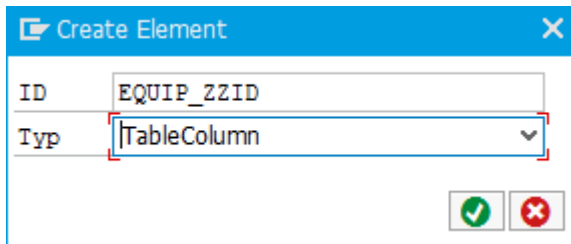
The added attribute is visible in the view within the “EQUI” node.



8. Navigate to the Layout section. Right-Click on the table where you want to add the new field in the UI and select “Insert Group Column”.



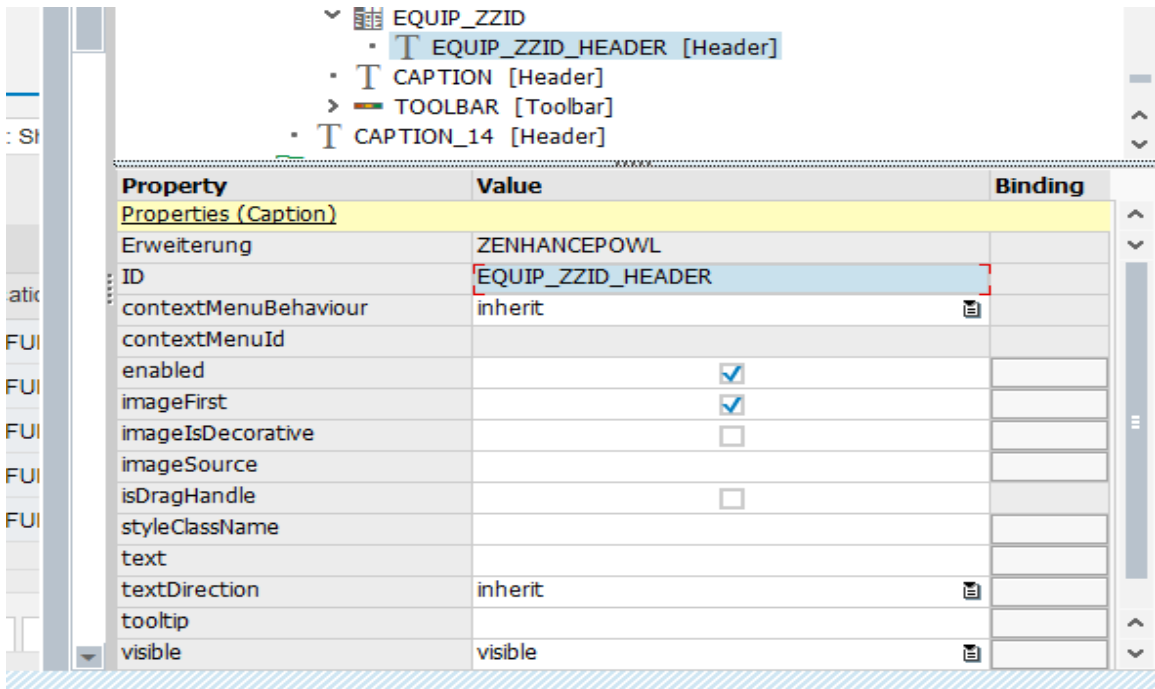
The “Create Element” pop-up window is displayed.



The “Create Element” pop-up window is shown with the following details:

- ID:** EQUIP_ZZID
- Typ:** TableColumn
- Buttons: A green checkmark button and a red X button.

9. Click “Continue”. The following screen is displayed.



The “Properties (Caption)” screen is displayed, showing a tree view on the left and a table of properties on the right.

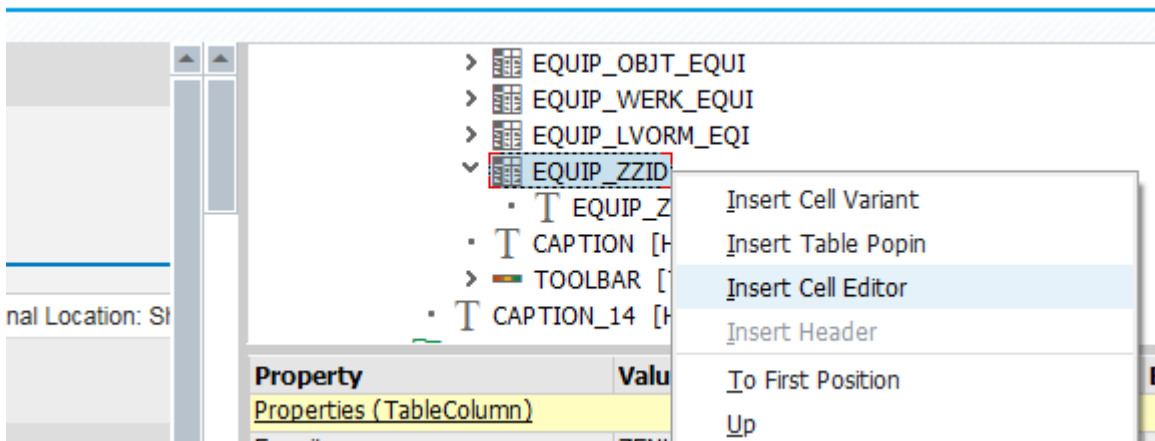
Tree View:

- EQIP_ZZID
 - EQIP_ZZID_HEADER [Header]
 - CAPTION [Header]
 - TOOLBAR [Toolbar]
 - CAPTION_14 [Header]

Properties (Caption) Table:

Property	Value	Binding
Properties (Caption)		
Erweiterung	ZENHANCEPOWL	
ID	EQUIP_ZZID_HEADER	
contextMenuBehaviour	inherit	
contextMenuId		
enabled	<input checked="" type="checkbox"/>	
imageFirst	<input checked="" type="checkbox"/>	
imageIsDecorative	<input type="checkbox"/>	
imageSource		
isDragHandle	<input type="checkbox"/>	
styleClassName		
text		
textDirection	inherit	
tooltip		
visible	visible	

10. Enter the required details in the “Property” screen and create the caption for the header.
11. Right-Click on table column and select “Insert Cell Editor” and create an input field for the table column.

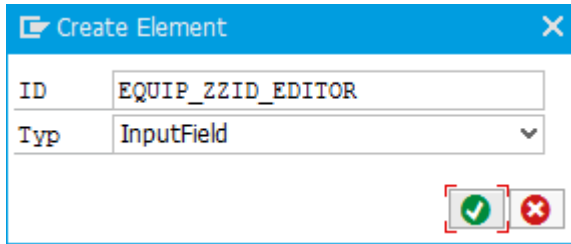


The right-click context menu is displayed over the table column. The menu options are:

- Insert Cell Variant
- Insert Table Popin
- Insert Cell Editor** (highlighted)
- Insert Header
- To First Position
- Up

The “Properties (TableColumn)” screen is visible in the background.

The “Create Element” pop-up window is displayed.



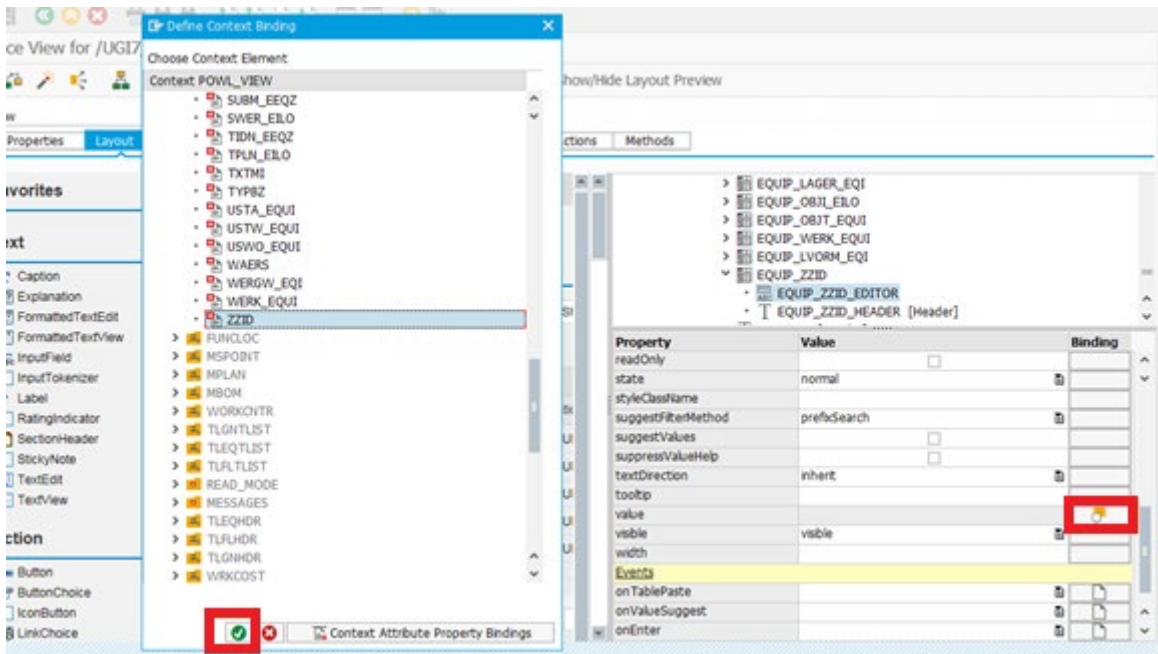
Create Element

ID:

Typ:

☐ ☐

12. Click "Continue".
13. Maintain the mandatory binding by selecting the correct field (context attribute ZZID in the context EQUI) that needs to be displayed in the UI.



Define Context Binding

Choose Context Element

Context POWL_VIEW

- SUBM_EEQZ
- SWER_EILO
- TIDN_EEQZ
- TPUN_EILO
- TXIMI
- TYPSZ
- USTA_EQUI
- USTW_EQUI
- USWO_EQUI
- WAERS
- WERGW_EQI
- WERK_EQUI
- ZZID**

FUNCTION

- MSPOBIT
- MPLAN
- MSOM
- WORKONTR
- TLGHTLIST
- TLQTLIST
- TLFLTLIST
- READ_MODE
- MESSAGES
- TLQHDR
- TLFHDR
- TLGNHDR
- WIRKOST

☐ ☐

Context Attribute Property Bindings

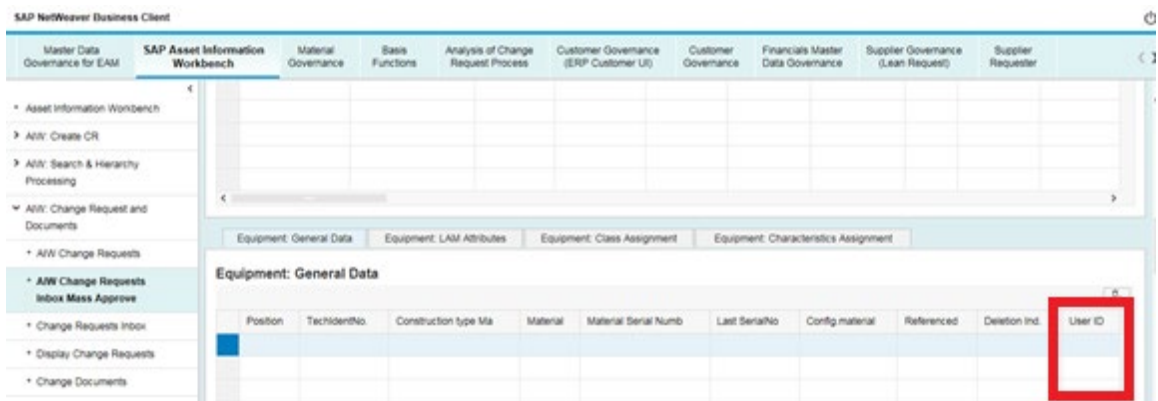
show/hide Layout Preview

Actions Methods

Property Value Binding

Property	Value	Binding
readOnly	<input type="checkbox"/>	
state	normal	
styleClassName		
suggestFilterMethod	prefixSearch	
suggestValues	<input type="checkbox"/>	
suppressValueHelp	<input type="checkbox"/>	
textDirection	inherit	
tooltip		
value		
visible	visible	
width		
Events		
onTablePaste		
onValueSuggest		
onEnter		

14. Enter the attribute details and save and activate the object.
15. Launch the POWL application to view the added field in the Equipment POWL table.



SAP NetWeaver Business Client

Master Data Governance for EAM SAP Asset Information Workbench Material Governance Basis Functions Analysis of Change Request Process Customer Governance (ERP Customer UI) Customer Governance Financials Master Data Governance Supplier Governance (Lean Request) Supplier Requester

Asset Information Workbench

- AIW: Create CR
- AIW: Search & Hierarchy Processing
- AIW: Change Request and Documents
 - AIW Change Requests
 - AIW Change Requests Inbox Mass Approve
 - Change Requests Inbox
 - Display Change Requests
 - Change Documents

Equipment: General Data

















Position	TechnidNo	Construction type Ma	Material	Material Serial Numb	Last SerialNo	Config material	Referenced	Deletion Ind.	User ID

2.7. AIW Cross Search Extensibility

The extensibility helps the user to add the attribute in the selection criteria for AIW cross-search provided the attribute is available in the HANA Search View.



1. Click on the HANA Search View "/UGI7/EAM_AIW_EQ", Master Data Governance > General Settings > Data Quality and Search > Search and Duplicate Check > Create Search View.

MDG Search View

A...	Search View	Description	Business Object T...
 	/UGI4/RFM_HA_SEARCH_SUBSTIT	Article HANA Search - Substitutions	Article (Retail)
 	/UGI4/RFM_HA_SEARCH_TEXTILE	Article HANA Search - Textile Comp...	Article (Retail)
 	/UGI7/EAM_AIW_EQ	Equipment AIW HANA Search	Individual Material
 	/UGI7/EAM_AIW_EQBOM	AIW EQ BOM HANA Search	Individual Material...
 	/UGI7/EAM_AIW_EQTL	AIW Equipment Task List HANA Search	Equipment Task List
 	/UGI7/EAM_AIW_FL	AIW Functional Location HANA Search	Installation Point
 	/UGI7/EAM_AIW_FLBOM	AIW FLBOM HANA Search	Installation Point Bi...
 	/UGI7/EAM_AIW_FLTL	AIW Functional Location Task List H...	Functional Locatio...

2. Click Edit at the top then click Next.

Display Search View: Step 1 (Enter General Data)

< Previous Next > **Edit** Save Generate Cancel  

1 2 3

Enter General Data Select Entities and Attributes Review and Generate

Search View : /UGI7/EAM_AIW_EQ Description : Equipment AIW HANA Search Business Object Type : Individual Material

General Data

* Search View: /UGI7/EAM_AIW_EQ

* Description: Equipment AIW HANA S...



* Business Object Type: 183 Individual Material

Hana Package: ZHANAPACK

Rule Set: ☐

3. Click "Expand All".

Edit Search View: Step 2 (Select Entities and Attributes)



< Previous Next > Edit Save Generate Cancel  

1 2 3

Enter General Data **Select Entities and Attributes** Review and Generate

Search View : /UGI7/EAM_AIW_EQ Description : Equipment AIW HANA Search Business Object Type : Individual Material

Select Entities and Attributes



  Select All Reset

Entities and Attributes	Include in view
▶ U1 - Utopia EAM Solution for MDG	<input checked="" type="checkbox"/>

4. Check the attribute in "Include in view" column so that it is available in F4 Help during AIW cross-search configuration. For example, Acquisition date is selected as an example.

Search View : /UGI7/EAM_AIW_EQ Description : Equipment AIW HANA Search Business Object Type : Individual Material



Select Entities and Attributes



 Select All Reset

Entities and Attributes	Include in view
U1 - Utopia EAM Solution for MDG	<input checked="" type="checkbox"/>
EQUI - Equipment	<input checked="" type="checkbox"/>
Attributes	<input type="checkbox"/>
EQUI - Equipment	<input checked="" type="checkbox"/>
ABCKZI - ABC indic. origin	<input type="checkbox"/>
ADNRN - Address	<input type="checkbox"/>
ADNRRI - Address origin	<input type="checkbox"/>
ANSDT - Acquisition date	<input checked="" type="checkbox"/>
ANSWT - Acquisition Value	<input checked="" type="checkbox"/>
ARBP_EEQZ - Main Work Center	<input checked="" type="checkbox"/>
ARBP_EILO - Work center	<input checked="" type="checkbox"/>

5. Click "Save" to save the changes in relevant TR.



Edit Search View: Step 2 (Select Entities and Attributes)

< Previous **Next >** Edit **Save** Generate Cancel  

1 Enter General Data **2 Select Entities and Attributes** 3 Review and Generate

Search View : /UGI7/EAM_AIW_EQ Description : Equipment AIW HANA Search Business Object Type : Individual Material



Select Entities and Attributes



 Select All Reset

Entities and Attributes	Include in view
U1 - Utopia EAM Solution for MDG	<input checked="" type="checkbox"/>
EQUI - Equipment	<input checked="" type="checkbox"/>
Attributes	<input type="checkbox"/>
EQUI - Equipment	<input checked="" type="checkbox"/>
ABCKZI - ABC indic. origin	<input type="checkbox"/>
ADNRN - Address	<input type="checkbox"/>
ADNRRI - Address origin	<input type="checkbox"/>
ANSDT - Acquisition date	<input checked="" type="checkbox"/>
ANSWT - Acquisition Value	<input checked="" type="checkbox"/>

6. Click Next.

Display Search View: Step 2 (Select Entities and Attributes)

< Previous **Next >** Edit Save Generate Cancel  



✓ Search view saved successfully
 ✓ Data successfully locked in transport request

1 Enter General Data **2 Select Entities and Attributes** 3 Review and Generate

Search View : /UGI7/EAM_AIW_EQ Description : Equipment AIW HANA Search Business Object Type : Individual Material

7. Click Generate to generate the search view.

Display Search View: Step 3 (Review and Generate)

< Previous Next > Edit Save **Generate** Cancel  

1 Enter General Data 2 Select Entities and Attributes **3 Review and Generate**

Search View : /UGI7/EAM_AIW_EQ Description : Equipment AIW HANA Search Business Object Type : Individual Material

Display Search View: Step 3 (Review and Generate)

✓ Search view generated successfully

1 Enter General Data 2 Select Entities and Attributes 3 Review and Generate

Search View : /UGI7/EAM_AIW_EQ Description : Equipment AIW HANA Search Business Object Type : Individual Material

8. Go to Master Data Governance > Asset Information Workbench > AIW Cross Object Search.
9. Select the Search ID as UGI7 and double-click on Search Fields.

Change View "AIW XOS Search ID": Overview

BC Set: Change Field Values

Dialog Structure

- AIW XOS Search ID
 - Search Methods
 - Search Fields**
 - Search Field Map

Search ID	Description (medium text)
UGI7	Cross Object Search On Common Fields

10. Click on "New Entries" to provide Search Attribute name and Description.

The data element and Search Help column are optional which can be provided based on business user requirement to trigger the cross-search.

New Entries: Overview of Added Entries

Dialog Structure

- AIW XOS Search ID
 - Search Methods
 - Search Fields**
 - Search Field Map

Search ID: UGI7

Search Attribute	Description (medium text)	Data element	Search help
Aquisition_Date	Aquisition Date		

11. Click Save to save the changes in the relevant TR.

New Entries: Overview of Added Entries

Dialog Structure

- AIW XOS Search ID
 - Search Methods
 - Search Fields**
 - Search Field Map

Search ID: UGI7

Search Attribute	Description (medium text)	Data element	Search help
Aquisition_Date	Aquisition Date		

12. Select the Search field and double-click on Search Field Mapping.

New Entries: Overview of Added Entries

Dialog Structure

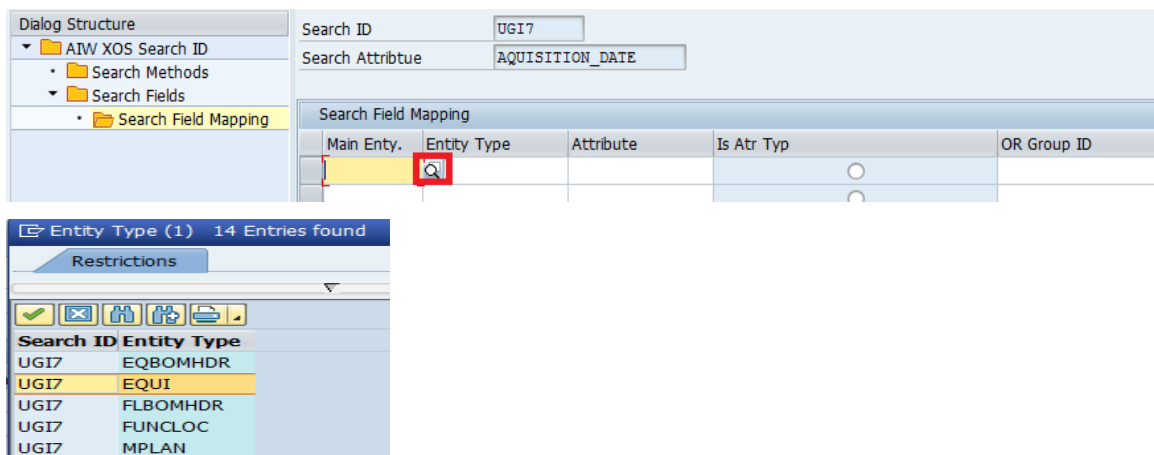
- AIW XOS Search ID
 - Search Methods
 - Search Fields**
 - Search Field Mapping

Search ID: UGI7

Search Attribute	Description (medium text)	Data element	Search help
AQUISITION_DATE	Aquisition Date		

13. Click on "New Entries" at the top to provide search field mapping through F4 search helps.

14. Select Main Entity as EQUI.



Dialog Structure

- AIW XOS Search ID
 - Search Methods
 - Search Fields
 - Search Field Mapping

Search ID: UGI7
Search Attribute: AQUISITION_DATE

Search Field Mapping

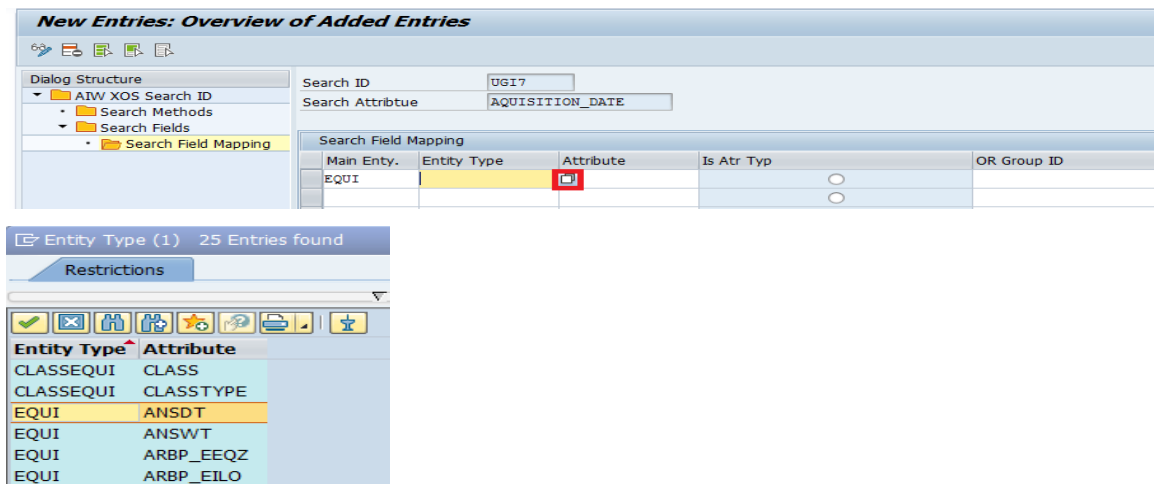
Main Enty.	Entity Type	Attribute	Is Atr Typ	OR Group ID
	<input type="text" value="EQUI"/>		<input type="radio"/>	

Entity Type (1) 14 Entries found

Restrictions

Search ID	Entity Type
UGI7	EQBOMHDR
UGI7	EQUI
UGI7	FLBOMHDR
UGI7	FUNCLOC
UGI7	MPLAN

15. Click on F4 Help for Entity type to provide the attribute that needs to be mapped.



New Entries: Overview of Added Entries

Dialog Structure

- AIW XOS Search ID
 - Search Methods
 - Search Fields
 - Search Field Mapping

Search ID: UGI7
Search Attribute: AQUISITION_DATE

Search Field Mapping

Main Enty.	Entity Type	Attribute	Is Atr Typ	OR Group ID
EQUI		<input type="text" value="ANSDT"/>	<input type="radio"/>	

Entity Type (1) 25 Entries found

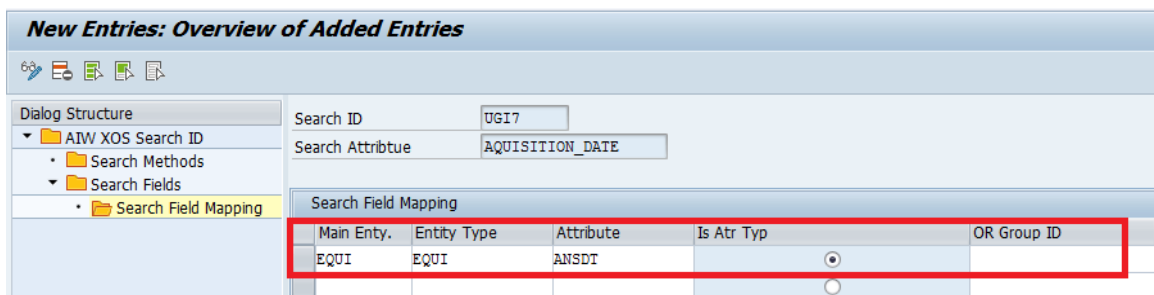
Restrictions

Entity Type	Attribute
CLASSEQUI	CLASS
CLASSEQUI	CLASSTYPE
EQUI	ANSDT
EQUI	ANSWT
EQUI	ARBP_EEQZ
EQUI	ARBP_EILO

16. Select "Is Atr Typ" radio button if no data element is entered for the search field. It is to mark the common attribute that will be searched across the entities.

i Note

OR Group ID is optional which is entered where multiple attributes with the same domain are present for one main entity. The application performs the cross-search based on the OR condition with attribute values if OR Group ID is maintained. OR Group IDs should be unique per main entity per search attribute.



New Entries: Overview of Added Entries

Dialog Structure

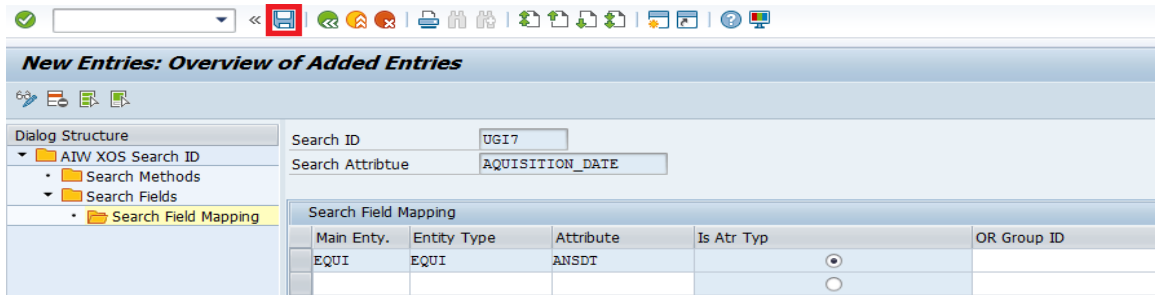
- AIW XOS Search ID
 - Search Methods
 - Search Fields
 - Search Field Mapping

Search ID: UGI7
Search Attribute: AQUISITION_DATE

Search Field Mapping

Main Enty.	Entity Type	Attribute	Is Atr Typ	OR Group ID
EQUI	EQUI	ANSDT	<input checked="" type="radio"/>	

17. Click "Save" to save the changes.



New Entries: Overview of Added Entries

Dialog Structure

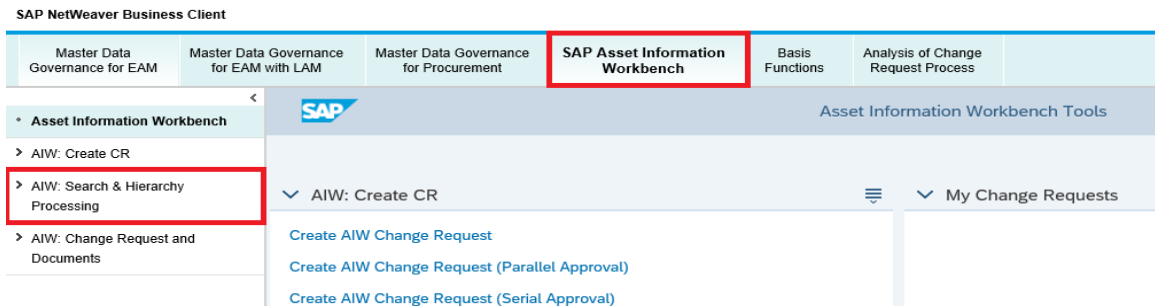
- AIW XOS Search ID
 - Search Methods
 - Search Fields
 - Search Field Mapping

Search ID: UGI7

Search Attribute: AQUISITION_DATE

Main Entry	Entity Type	Attribute	Is Attr Typ	OR Group ID
EQUI	EQUI	ANSDT	<input checked="" type="radio"/>	
			<input type="radio"/>	

18. Go to t-code NWBC > Click Asset Information Workbench > Click AIW Search & Hierarchy Processing.



SAP NetWeaver Business Client

Master Data Governance for EAM | Master Data Governance for EAM with LAM | Master Data Governance for Procurement | **SAP Asset Information Workbench** | Basis Functions | Analysis of Change Request Process

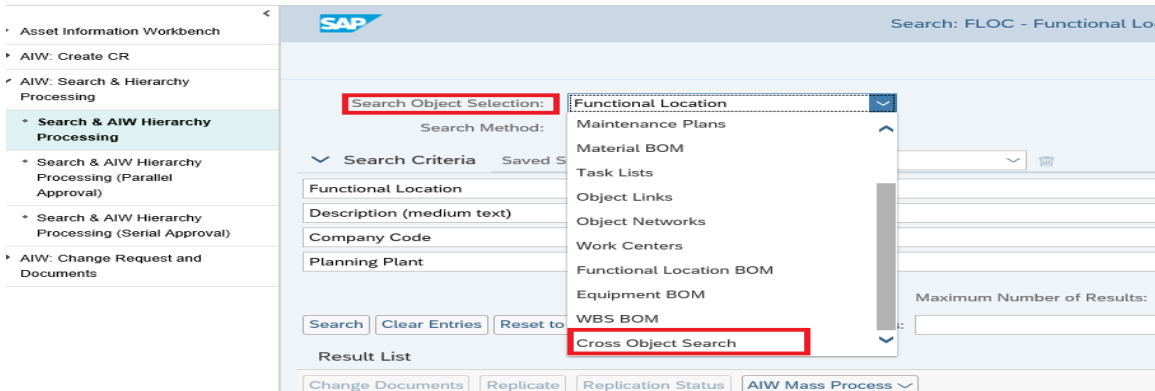
Asset Information Workbench Tools

- Asset Information Workbench
 - AIW: Create CR
 - AIW: Search & Hierarchy Processing**
 - AIW: Change Request and Documents

AIW: Create CR

- Create AIW Change Request
- Create AIW Change Request (Parallel Approval)
- Create AIW Change Request (Serial Approval)

19. Select Cross Object Search by clicking on the drop-down provided for Search Object selection.



Search: FLOC - Functional Location

Search Object Selection: **Cross Object Search**

Search Method: Functional Location

Search Criteria

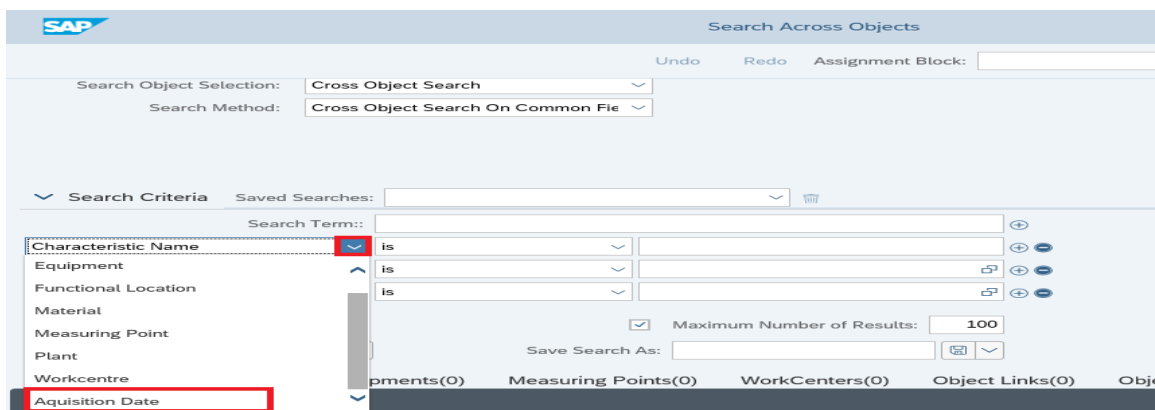
- Functional Location
- Description (medium text)
- Company Code
- Planning Plant

Search | Clear Entries | Reset to Defaults

Result List

Change Documents | Replicate | Replication Status | AIW Mass Process

20. Go to the selection criteria and click the drop-down to find the new attribute. Acquisition Date is displayed in the list.



Search Across Objects

Search Object Selection: Cross Object Search

Search Method: Cross Object Search On Common File

Search Criteria

Search Term:

Characteristic Name

- Equipment
- Functional Location
- Material
- Measuring Point
- Plant
- Workcentre
- Acquisition Date**

is

Maximum Number of Results: 100

Save Search As:

Documents(0) | Measuring Points(0) | WorkCenters(0) | Object Links(0) | Objects(0)