Configuration Guide for EAM Solutions by Utopia

Release EAM 9.2

Document History

The following tables provide an overview of the most important document changes and approvals.

Version	Date	Description	Name
1.0	20-11-2018	EAM 9.2 updates	Nikhil Shisode; Sireesha Cheemakurthi; Vasavi Sanka; Manjunatha G; Venkata Gude; Jyoti Prasad

Approval History

Version	Date	Description	Name
1.0	20-11-2018	Final version	Lyle Snyder

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1. Introduction

This document provides the information you require to set up SAP Master Data Governance (MDG) for EAM Solutions by Utopia.

1.1. Purpose

This Configuration Guide provides the information you require to set up SAP Master Data Governance (MDG) EAM 9.2 Solutions by Utopia.

2. Prerequisites/Before You Start

Before you start to configure SAP MDG EAM, make sure that the following prerequisites are fulfilled.

The following topics are discussed in the section:

2.1. Business Functions

Use the transaction code (t-code): SFW5 to activate the following business functions:

- Master Data Governance, Generic Functions (MDG_FOUNDATION)
- Master Data Governance, Generic Functions 2 (MDG_FOUNDATION_2)
- Master Data Governance, Generic Functions 3 (MDG_FOUNDATION_3)
- Master Data Governance, Generic Functions 7.0 (MDG_FOUNDATION_4)
- Master Data Governance, Generic Functions 7.0 Feature Set (MDG_FOUNDATION_5)
- Master Data Governance, Generic Functions 8.0 (MDG_FOUNDATION_6)
- Master Data Governance, Generic Functions 9.0 (MDG_FOUNDATION_7)
- Master Data Governance, Generic Functions 9.1 (MDG_FOUNDATION_8)

The following business functions is relevant for customers who would like to make use of the enhancement for Linear Asset Management (LAM) in the EAM 9.2 Solutions by Utopia.

- Business Function for MDG EAM LAM Model (LOG_EAM_LINEAR_1)
- Business Function for MDG EAM LAM Model (LOG_EAM_LINEAR_2)
- Business Function for MDG EAM LAM Model (/UGI/MDG_EAM_LAM_01)

The following business functions needs to be activated if customers would like to make use of the enhancements in Maintenance Plan and Maintenance Item (MPMI).

- Business Function LOG_EAM_CI_3 for “Do not Release Immediately” functionality
- Business Function LOG_EAM_CI_6 for “Call Horizon Unit” functionality

The following business functions needs to be activated if customers would like to make use of the GEF Integration for MDG EAM.

- Business Function FND_GEF
- Business Function LOG_EAM_GEF (optional, but recommended to activate)

  Note: If this Business Function is not going to be activated, refer Section 4.22.1 for additional steps.
- Business Function /UGI3/MDG_EAM_GEF_920
- Business Function for MDG EAM GEF (/UGIGEO/MDG_EAM_GEF_920)

The following business functions needs to be activated if customers would like to enable DFPS (Defense Forces and Public Security) op-Equipment tab for MDG EAM (Applicable to Equipment Only).

- Business Function Enterprise Extensions > EA-DFP

The following business functions needs to be activated if Customers would like to enable IS-U Industry Solution related objects for MDG EAM (Connection Object, Device and Device Location)

- Business Function ISU_AMI_1
- Business Function ISU_AMI_2
- Business Function ISU_AMI_3
- Business Function ISU_AMI_4
- Business Function ISU_AMI_4C
- Business Function ISU_AMI_5
- Business Function ISU_CA_1
- Business Function ISU_CA_2
- Business Function ISU_CA_3
- Business Function ISU_DM_1
- Business Function ISU_EDM_1
- Business Function ISU_EDM_2
- Business Function ISU_LOC_CI_1
- Business Function ISU_UTIL_1
- Business Function ISU_UTIL_WASTE

Note

Before you activate the business functions, ensure that you have the administration authorization for MDG. The required authorization objects are delivered with the authorization role SAP_MDG_ADMIN. In t-code PFCG, it is recommended to create a copy of this role and assign the relevant authorization

values. For the authorization object USMD_DM Data Model you need to assign the values for the authorization field USMD_MODEL Data Model (for example U1) and the values for the authorization activity ACTVT Activity (for example 01: Create, or 02: Change).

2.1.1. Functional Location Alternative Labeling

Verify that Functional Location Alternative Labeling is in the required status.

- Inactive (status 1)
  T-code is OIPU. If it is active, it can be set back to inactive, if so desired. The necessary steps are described in SAP Note 359186.
- Active (status 2). Refer Section on Activate Alternative Labeling, for more details.

2.1.2. Measuring Point

Go to t-code SFW5 and activate switches LOG_EAM_CI_1 and LOG_EAM_SIMPLICITY.

2.1.3. Task List Classification (Optional)

Note: This section is not applicable for upgrade scenario.

To support Task List Classification, use the following steps:

1. Navigate to t-code SPRO > SAP Reference IMG > Cross-Application Components > Classification System > Classes > Maintain Object Types and Class Types > select PLKO table.
2. With PLKO table selected, click Objects on the left panel. Select the entries for Class Type 018 and click on “Details” button. Ensure that the field ECH (time) within Classification is unchecked.
   Note: ECH stands for “Engin. change mgmt (time-related) for classification”
3. Click on “Save” button and navigate to Class Types using the “Back” button.
4. Click Class Types on the left panel and ensure that the field ECH (time) within Classification is unchecked.
5. Click on “Save” button to save the changes.

2.1.4. Side Panel and BCV Query

The following business function need to be activated for Side Panel using t-code SFW5

- ERP_CA_SIDEPANEL (always on)

To have BCV queries executed successfully, ensure that the following business functions are activated in the system, where MDG EAM 9.2 is installed.

- /BCV/MAIN (FND, Business Context Viewer Main Application)
- /BCV/MAIN_1 (FND, Business Context Viewer Main Application 2)
- /BCV/NWBC_SIDEPANEL (FND, Business Context Viewer NWBC Side Panel (Reversible))

2.2. Setup Workflow

To use the workflow processes of MDG EAM Solutions by Utopia, you have defined general settings for SAP Business Workflow [Extern] in Customizing for SAP NetWeaver under > Application Server > Business Management > SAP Business Workflow.

To activate the workflow features, use the semi-automated configuration in t-code SWU3. You can also access these settings in Customizing under > SAP NetWeaver > Application Server > Business Management > SAP Business Workflow > Maintain Standard Settings.

Use the following mandatory steps while maintaining settings:

- When configuring the RFC destination, you need super user authorization to create the default WF-BATCH user.
- Regenerate the authorization profile for SAP_ALL or include the USMD* authorization objects into the authorizations of the user WF-BATCH.
- For the Check Entries from HR Control Tables section you may need to execute report RHSOBJCH in t-code SE38 and keep the default settings.

  Note

  Select all the table entries and click on “Adjust” button.
- You do not need to maintain the Web Server node and Guided Procedures section.

2.3. Setup Search

This release of EAM Solutions by Utopia uses the standard MDG database search. The database search is already enabled within the MDG system. No further set up action is required.

- SAP HANA-based search (side-by-side) connects MDG from any database to an SAP HANA-based system for search.

2.4. Import MDG Content for EAM

NA

2.5. Adjust Profile Parameters

Use t-code RZ11 to check and adjust the following profile parameters:

- Ensure that the profile parameter size for the Shared Objects Memory is correct. Verify that the value for parameter abap/shared_objects_size_MB is at least 300 megabytes.
- If you want to use the SAP NetWeaver Business Client with single sign on (SSO), ensure that the parameter values are set as login/create_sso2_ticket=2 and login/accept_sso2_ticket =1.
- Finally check that the host name is fully qualified for parameter icm/host_name_full.

2.6. User Roles

To successfully conduct the next steps in the configuration process, you must have the following user roles assigned in the t-code PFCG:

- SAP_MDGA_MENU – Master Data Governance: Analytics
- SAP_MDG_ADMIN – Master Data Governance: Administrator

This role contains authorization for basic tasks relevant to the configuration and administration of SAP Master Data Governance (MDG) for all domains. Some authorizations allow critical activities. If you have multiple users involved in the configuration and administration of MDG content, it is recommended that you split this role into several new roles and give each new role a subset of the authorizations for this role. This approach ensures users only complete tasks they are responsible for and reduces the risk of critical errors. Authorizations for the MDG transactions are not included in this role.

- /UGI/_MDGEAM_ALLUSR – Master Data Governance for EAM: Basic Access

- /UGI/_MDGEAM_ECC_PM – Authorizations required for maintenance of Technical Objects in ECC Backend System
- /UGI/_MDGEAM_REQ – Master Data Governance for EAM: Requester
- /UGI/_MDGEAM_SPEC – Master Data Governance for EAM: Specialist
- /UGI/_MDGEAM_STEW – Master Data Governance for EAM: Data Steward

The following role is an optional front end to the ECC transaction for Task List component allocation. This is a merely a front end and is not MDG governed.

- /UGI/_NONMDG_TSKLST - Master Data Governance for EAM: Change Task List (Non-MDG)

The following roles are relevant for customers who would like to implement Linear Asset Management (LAM) enhancements for MDG Solution for EAM 9.2 by Utopia.

- /UGI/_MDGEAM_MENU_LAM – Master Data Governance for EAM with LAM: Menu
- /UGI/_MDGEAM_REQ_LAM – Master Data Governance for EAM-LAM: Requester
- /UGI/_MDGEAM_SPEC_LAM – Master Data Governance for EAM-LAM: Specialist
- /UGI/_MDGEAM_STEW_LAM – Master Data Governance for EAM-LAM: Data Steward

This role contains a menu with the Web Dynpro applications required for users responsible for maintaining master data, requesting changes, or monitoring changes to EAM master data.

- /UGI/_MDGEAM_MENU: Master Data Governance for EAM: Menu

This role should be assigned to users, who use one of the UGI MDG EAM roles in SAP NetWeaver Business Client:

- /UGI/_MDGEAM_ALLUSR - Master Data Governance for EAM: All
- /UGI/_MDGEAM_REQ - Master Data Governance for EAM: Requester
- /UGI/_MDGEAM_SPEC - Master Data Governance for EAM: Specialist
- /UGI/_MDGEAM_STEW - Master Data Governance for EAM: Data Steward

This role contains a menu with the Web Dynpro applications required for users responsible for maintaining master data, requesting changes, or monitoring changes to EAM master data.

- /UGI/_MDGEAM_MENU_LAM: Master Data Governance for EAM with LAM: Menu

This role should be assigned to users, who use one of the UGI MDG EAM roles in SAP NetWeaver Business Client:

- /UGI/_MDGEAM_REQ_LAM - Master Data Governance for EAM with LAM: Requester
- /UGI/_MDGEAM_SPEC_LAM - Master Data Governance for EAM with LAM: Specialist
- /UGI/_MDGEAM_STEW_LAM - Master Data Governance for EAM with LAM: Data Steward

The following roles are relevant for customers who would like to implement IS-U Industry Solution for MDG-EAM 9.2 by Utopia.

- /UISU/_MDGISU_ALLUSR Master Data Governance for ISU: All
- /UISU/_MDGISU_MENU Master Data Governance for IS-Utilities: Menu
- /UISU/_MDGISU_REQ Master Data Governance for IS-Utilities: Requester
- /UISU/_MDGISU_SPEC Master Data Governance for IS-Utilities: Specialist
- /UISU/_MDGISU_STEW Master Data Governance for IS-Utilities: Steward

Note

- To control the display of the WebDynpro Application window in the same tab, use the following settings:

  PFCG > enter Role Name > Select the Menu tab> Select WebDynpro Application node> Other Node Details tab > Launch Select Standard for Launch Application.

- To control the display of the WebDynpro Application window in the new window, use the following settings:

  PFCG > enter Role Name > Select the Menu tab> Select WebDynpro Application node> Other Node Details tab > Select In Application Window/Tab for Launch Application.

Note

Refer Fiori guide for Fiori roles.

2.7. Web Dynpro Applications

For security reasons, the services delivered for Web Dynpro applications are delivered in an inactive state. You must activate the services you want to use. Use t-code SICF to activate the services. For a detailed list of the relevant services, see Services to be activated for Web Dynpro Applications [Extern].

2.7.1. Web Dynpro Application for POWL

Application: “/UGI/MDG_EAM_POWL_INBOX” is created for serving the POWL Inbox.

2.7.2. BC-Set Activation for POWL Configuration

Go to t-code SCPR20 and activate ( ) BC-Set “/UGI/MDG_EAM_POWL_920”.

2.7.3. Active Services in SICF

To use the POWL application the following service needs to be activated:

Enter t-code SICF provide Hierarchy Type as “SERVICE” and Service Name as “MDG_EAM_POWL_INBOX” and click on Execute and activate the Service.

2.8. Number Ranges

Go to t-code SNRO to review the following number ranges.

- Review the number range of the object EQUIP_NR.

  Note

  For the Harmonized key scenario, the number range in the receiving system should be set to external if the equipment data is being sent via IDoc/ALE

- Review and maintain the number range of the object /UGI/MDGEQ for equipment.
- Review and maintain the number range of the object /UGI/MDGFL for functional location.
- Review and maintain the number range of the object MPLA_NR for Maintenance Plan number. Also, maintain the grouping for Maintenance Plan category.

Note

For the Harmonized key scenario, the number range in the receiving system should be set to external if the maintenance plan data is being sent via IDoc/ALE

- Review and maintain the number range of the object MPOS_NR for Maintenance Item.
- Review and maintain the number range of the object /UGI/MDGMI for Maintenance Item MDG.
- Review and maintain the number range of the object /UGI/MPMIC for MDG MPMI Cycle list.
- Review and maintain the number range of the object /UGI/MPMIO for MDG MPMI Object list.
- Review and maintain the number range of the object /UGI/MDGMN for MDG Maintenance Plan.
- Review and maintain the number range of the object /UGI/MDGMP for MDG Measuring Point.
- Review and maintain the number range of the object ROUTING_A for General Task List.
- Review and maintain the number range of the object ROUTING_E for Equipment Task List.
- Review and maintain the number range of the object ROUTING_T for Functional Task List.
- Review and maintain the number range of the object /UGI/MDGTL for Task List.

Note

The number range must be a length of 8 without a leading zero.

- Review and maintain the number range of the /UGI/MDGOL for Object Links.
- Review and maintain the number range of the object INET for Object Links.

Note

For the Harmonized key scenario, the number range in the receiving system should be set to external if the Object Links data is being sent via IDoc/ALE.

- Review and maintain the number range of the object EAML_EVTID for Network Attribute Record IDs.
- Review and maintain the number range of the object /UGI/MDGOE for MDG Object Network Attribute Event.

For IS-U Industry Solution (optional)

- Review and maintain the number range of the object /UISU/MCO for Connection Object
- Review and maintain the number range of the object /UISU/MDL for Device Location

2.9. Prerequisite Notes

Note	Description
2603751	BRF+: Default Object branch not showing for rules
2555684	Read API: Changing the default setting
2694542	BOM Functional modules do not fetch data if deletion indicator is set
2711777	Multiple Selection field not updated while using FM IDOC_INPUT_BOMMAT
2352835	TL API: When creating/changing task lists using the APIs EAM_TASKLIST_CREATE / EAM_TASKLIST_CHANGE, relationship data not created
2371745	MPLAN_CREATE API cannot use unit Hour in cycle
2388307	TL API: Unable to update Task list with future date
2456600	TL: Multiple Task lists read in a sequence results in incorrect materials being returned
2471280	EAMS: handling of blocked customer / vendor data in technical object
2711893	MM - DMS Document: Display all version / current version
2441593	Accessing Define Validation and Derivation Rules leads to runtime error UNCAUGHT_EXCEPTION CX_FDT_INPUT(Optional – to be implemented if there is an technical error with T-code USMD_RULE)

Note	Description
2719343	Issue with BOM data with version indicator set

The following OSS notes are mandatory to ensure General Classification works as expected:

Note	Description
2662221	MDG-CLF: Characteristics with blank values are not highlighted and saved
2679193	MDG-CLF: Object dependencies are not saved in AUSP database table

The following OSS notes are mandatory for processing of DRF ALE Audit messages for EAM 9.2 objects.

Note	Description
2555531	Enhance MDG key structure for Functional Location
2692581	Dump when using object-based replication for replicating Installation Points
2406058	EAM relevant relationships between Object Type and BOR Object

2.9.1. Prerequisite Notes for HANA Search

Note	Description
2499293	Copy view does not show source view in the popup
2506783	Missing search operators in SAP HANA search
2533706	HANA search view generation won't allow partners to deliver search views
2344161	Object Type Code / Object Identifier Type Code for Maintenance Item

2.9.2. Prerequisite Notes for GEF Integration

Note	Description
2624645	SAP GEF Time related buffer functionality
2224909	Hana Query fails with: feature not supported: CONTAINS is not allowed in such predicate contexts; an OR-ed predicate, stacked column searches, etc may cause it

Note

Check if the note is valid for your SAP instance and patch level.

2.10. Activate BC-Sets for Data Model U1

The following prerequisite BC-Set must be activated before activating the BC-Set for Data Model:

- For EAM OTC Codes, go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_OTC_CODES_920 in Expert Mode.

Use the following sequencing to activate BC-Sets for Data Model U1:

1. For EAM Data Model entries, go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_DATAMODEL_920.
   Then go to t-code MDGIMG > General Settings > Data Modelling > Edit Data Model > Select U1 data model and activate ( ).

   Note

   For upgrade scenario, you must trigger the job to adjust the data model.

Go to t-code MDGIMG > General Settings > Data Modelling > Edit Data Model > Select U1 data model and press the “Adjust Staging Area of Linked Change Requests” icon  at the top to trigger the job.

2. For EAM Data Model entries for LAM,
   a. Go to t-code SCPR20 and activate () BC-Set /UGI/MDG_EAM_LAM_USMD001. (optional)
   b. Go to t-code SCPR20 and activate () BC-Set /UGI/MDG_EAM_DM_LAM_920. (optional)

   Then go t-code MDGIMG > General Settings > Data Modelling > Edit Data Model > Select U1 data model and activate ().

   Note

   For upgrade scenario, you must trigger the job to adjust the data model.
   Go to t-code MDGIMG > General Settings > Data Modelling > Edit Data Model > Select U1 data model and press the “Adjust Staging Area of Linked Change Requests” icon  at the top to trigger the job.

3. For EAM Data Model entries for GEF,

   Go to t-code SCPR20 and activate () BC-Set /UGIGEO/MDG_GEF_DATAMODEL_920. (optional)
   Then go to t-code MDGIMG > General Settings > Data Modelling > Edit Data Model > Select U1 data model and activate ().

   Note

   For upgrade scenario, you must trigger the job to adjust the data model.
   Go to t-code MDGIMG > General Settings > Data Modelling > Edit Data Model > Select U1 data model and press the “Adjust Staging Area of Linked Change Requests” icon  at the top to trigger the job.

4. For IS-U enabled system to import specific Data Model entries, the following BC-Sets must be activated as per the following sequence.
   a. Go to t-code SCPR20 and activate () BC-Set /UISU/MDG_OTC_CODES_920 in Expert Mode.
   b. Go to t-code SCPR20 and activate () BC-Set /UISU/MDG_DATAMODEL_920.

   Then go to t-code MDGIMG > General Settings > Data Modelling > Edit Data Model > Select U1 data model and activate ().

   Note

   For upgrade scenario, you must trigger the job to adjust the data model.
   Go to t-code MDGIMG > General Settings > Data Modelling > Edit Data Model > Select U1 data model and press the “Adjust Staging Area of Linked Change Requests” icon  at the top to trigger the job.

Note

You can ignore errors related to generation of data source structure related messages for LAM. These errors will be address in subsequent sections.

2.10.1. Post Data Model Activation

Use the following steps after activating the Data Model U1:

1. After activation, check if the status is “Same” in the Active Version column.
2. Assign an internal key.

   To support temporary key assignment, run the activity in Customizing for Master Data Governance under > General Settings > Data Modeling > Define Prefixes for Internal Key Assignment.

   Note
   In EAM 9.2, Maintaining prefix is mandatory for object types mentioned in the following table as both internal and external keys assignment for these objects are supported.

   For EAM 9.2 Objects:

Object Type	Prefixes for Internal Key Assignment
Equipment	ALL SAP Characters are allowed (If GEF is integrated, do not use special symbols like §, special characters like $, # etc. can be used)
Functional Location	ALL SAP Characters are allowed (If GEF is integrated, do not use special symbols like §, special characters like $, # etc. can be used)
Measuring Point	ALL SAP Characters are allowed
Maintenance Plan	ALL SAP Characters are allowed
Task List	ALL SAP Characters are allowed
Object Links	ALL SAP Characters are allowed

   For IS-U Industry Solution:

Object Type	Prefixes for Internal Key Assignment
Connection Object	ALL SAP Characters are allowed
Device Location	ALL SAP Characters are allowed
Device	ALL SAP Characters are allowed

   Note

   In EAM 9.2, authorizations cannot be defined here. Instead, the existing backend authorizations are reused.

   For more information, see Customizing under > Plant Maintenance and Customer Service > Basic Settings > Maintain Authorizations for Master Data.

   For more information about IS-Utilities see Customizing under > SAP Utilities > Master Data > Basic Settings.

2.10.2. Generate Data Model-Specific Structures

After activation of the U1 Data Model, you need to activate the following BC-Sets to generate the EAM Data Model-Specific structures.

1. For EAM Data Model specific structures, go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_STRUCT_OBJTYP_920.

   Note: Before activating the data model specific structure, ensure that the data model changes are activated. Refer Section 2.10.
2. For EAM Data Model specific structures for LAM,

   a. Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_LAM_USMD004.

   b. Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_LAM_STRUCT_DM_920.

   Note: Before activating the data model specific structure for LAM, ensure that the data model changes for LAM is activated. Refer Section 2.10.
3. For EAM Data Model specific structures for GEF, go to t-code SCPR20 and activate ( ) BC-Set /UGIGEO/MDG_GEF_DATA_STRUCT_920.

   Note: Before activating the data model specific structure for GEF, ensure that the data model changes for GEF is activated. Refer Section 2.10.
4. For EAM Data Model specific structures for IS-U, go to t-code SCPR20 and activate ( ) BC-Set /UISU/MDG_DM_BOBJ_STRUCTURE_920.

   Note: Before activating the data model specific structure for IS-U, ensure that the data model changes for IS-U is activated. Refer Section 2.10.

Other customizing activities in data modeling are only relevant for the EAM domain if your data model needs to be enhanced. For more information, see Enhancement of Master Data Governance Content.

2.11. Prerequisite BC-Set Activation

Note: Ensure to activate the BC-Set names that starts with UGI3 is activated in Target systems also.

2.11.1. BC-Set Activation for Data Replication Framework

To ensure that IDocs triggered by Data Replication Framework (DRF) for EAM objects are posted successfully in target system in either MDG Hub or Co-deploy scenarios, activation of the following BC-Set in target system is mandatory, provided the UGI3 software component version is installed. For UGI3 dependency details please refer Installation guide.

- Go to t-code SCPR20, enter BC-Set /UGI3/EAM_IDOC_INB_PROCESSCODE for Inbound processing of IDocs and choose ( ) to activate.
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI3/EAM_IDOC_INB_PROC_740 for EAM 9.2 Inbound Process Codes.
- For Message and Output Type for IDoc, go to t-code SCPR20 and activate ( ) BC-Set /UGI3/EAM_IDOC_CONFIG_920.
- For Inbound Process Code, go to SCPR20 and activate ( ) BC-Set /UGI3/EAM_IDOC_INB_PROC_CODE_920.

2.11.2. BC-Set Activation for GDPR Compliance

The following additional BC-Set activation is relevant for customers for whom GDPR compliance is required, who would like to implement EAM 9.2 Solution.

- For Application EOP check, go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_APP_EOP_920 in Expert Mode.

2.11.3. BC-Set Activation for Application Log and GenIL Component

The following additional BC-Set activation is mandatory for application log and GenIL component activation.

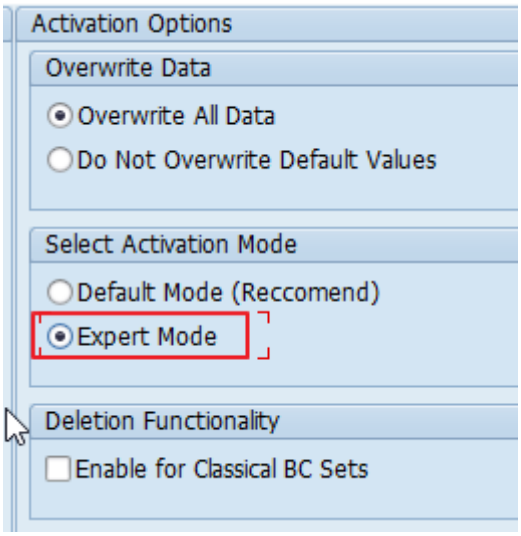
- For Application log and GenIL component, go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_APP_LOG_GENIL_920.

2.11.4. BC-Set Activation for GEF

The following additional BC-Set activation is relevant for customers, who would like to implement GEF (Geographical Enablement Framework) Integration to MDG EAM:

Before you activate the following BC-Sets, you need to ensure that the following prerequisite is met:

- Prerequisite BC-Set for GEF Data Model
- Prerequisite BC-Set for GEF Data Model Specific Structures
    - Go to SCPR20 and activate ( ) BC-Set /UGI3/MDG_EAM_GEF_TAB_ENT_920.
    - Go to SCPR20 and activate ( ) BC-Set /UGI3/MDG_EAM_GEF_CONFIG_920 in Expert Mode as shown in the following screen.



    - Go to t-code SCPR20 and activate ( ) BC-Set /UGI3/MDG_EAM_GEF_CFG_ALT_920 (only for Alternate Labelling is on).
    - Go to t-code SCPR20 and activate ( ) BC-Set /UGIGEO/MDG_EAM_GEF_TAB_ENT_920.

2.11.5. BC-Set for HANA Search

Note: Use Expert Mode to activate the following BC-Sets if you cannot activate with the Default Mode.

The following BC-Sets need to be activated if the customer is willing to enable HANA search for EAM Objects:

- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_VC_HDB_PP_FMAP_730 (Join and Mapping Information)

- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_VC_HDB_PP_FMAP_740 (Join and Mapping Information) (Join and Mapping Information)

  Note: Before activating the BC-Set (/UGI/MDG_EAM_VC_HDB_PP_FMAP_740), navigate to Utilities > User Settings > Maint. Transaction tab. Ensure that the field “Switch On” within Deletion Function is checked.

- For EAM 9.2 release, Go to SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_VC_HDB_DEL_FMAP_920 (Join and Mapping Information)

  Note: Before activating the BC-Set (/UGI/MDG_EAM_ VC_HDB_DEL_FMAP_920), navigate to Utilities > User Settings > Maint. Transaction tab. Ensure that the field “Switch On” within Deletion Function is checked. This setting is applicable only for this BC-Set and the settings should be reset.

- For EAM 9.2 release, go to SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_VC_HDB_PP_FMAP_920 (Join and Mapping Information)
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_VC_MDGHDB001_730(HANA Search View)
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_VC_MDGHDB001_740(HANA Search View)
- For EAM 9.2 release, go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_VC_MDGHDB001_920(HANA Search View)

If the customer has LAM Functionality, activate the following four BC-Sets:

- Go to SCPR20 and activate ( ) BC-Set /UGI/MDG_EAML_VC_HDB_PP_FMAP_740(Join and Mapping Info for LAM attributes)
- Go to SCPR20 and activate ( ) BC-Set /UGI/MDG_EAML_VC_MDGHDB001_730(HANA Search Views for LAM Attributes)
- Go to SCPR20 and activate ( ) BC-Set /UGI/MDG_EAML_VC_MDGHDB001_740(HANA Search Views for LAM Attributes)

Before continuing with the next BC-Sets, perform the generation of the new HANA search views as described in detail in the Section 4.7.2 on CreateSearchView using t-code MDG_HDB_GEN_UI.

- Generate the HANA Search view with t-code MDG_HDB_GEN_UI – more details see chapter “Create the Search View”
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_VC_DQ_SEARCH_C_730(Match profiles and Search Configuration)
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_VC_DQ_SEARCH_C_740(Match profiles and Search Configuration)
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_VC_DQ_SEARCH_920(Match profiles and Search Configuration)

2.11.6. BC-Set for Side Panel and BCV Query

Note: Use Expert Mode to activate the following BC-Sets, if you cannot activate with the Default Mode.

The following BC-Sets need to be activated for EAM Objects: BCV Query

- Go to t-code SCPR20 and activate () BC-Set MDGAF_BCV (BCV Content for MDG Framework)
- Go to t-code SCPR20 and activate () BC-Set /UGI/MDGEAM_BCV_740 (BCV Content for MDG EAM 9.2)
- Go to t-code SCPR20 and activate () BC-Set /UGI/MDG_EAM_BCV_920 (BCV Content for MDG EAM 9.2)
- Go to t-code SCPR20 and activate () BC-Set /UGI/MDG_EAM_BCV_QUERYCACHE (BCV Query Cache Content for MDG EAM 9.2)

The following BC-Set activation is relevant for customers, who would like to implement Side Panel Add-On display in the UI screen.

- Go to t-code SCPR20 and activate () BC-Set /UGI/MDG_EAM_SIDEPANEL_ALL. In Expert Mode.
- Go to t-code SCPR20 and activate () BC-Set /UGI/MDG_EAM_SIDEPANEL_DEL_920

  Note: Before activating the BC-Set (/UGI/MDG_EAM_SIDEPANEL_DEL_920), navigate to Utilities > User Settings > Maint. Transaction tab. Ensure that the field “Switch On” within Deletion Function is checked. This setting is applicable only for this BC-Set and the settings should be reset for the other BC-Sets.

2.11.7. BC-Set for UI Field Property

- Go to t-code SCPR20 and activate () BC-Set /UGI/MDG_EAM_UI_FLD_PROP (UI Field Properties for MDG EAM 9.2)
- For EAM 9.2 release, go to t-code SCPR20 and activate () BC-Set /UGI/MDG_EAM_UI_FLD_PROP_920 (UI Field Properties for MDG EAM 9.2)

Activate the following additional BC-Set if LAM is enabled.

- For EAM 9.2 release, go to SCPR20 and activate () BC-Set /UGI/MDG_EAM_UI_FLD_PROP_LAM_920 (UI Field Properties for LAM in MDG EAM 9.2)

2.11.8. BC-Set for Key/Value Mapping

- Go to t-code SCPR20 and activate () BC-Set /UGI/MDG_EAM_ID_MAPPING (Utopia EAM Solutions for MDG Key/Value Mapping)
- For EAM 9.2 release, go to t-code SCPR20 and activate () BC-Set /UGI/MDG_EAM_ID_MAPPING_920 (Utopia EAM Solutions for MDG Key/Value Mapping)

  Note: Before activating the BC-Set(/UGI/MDG_EAM_ID_MAPPING_920), navigate to Utilities > User Settings > Maint. Transaction tab. Ensure that the field “Switch On” within Deletion Function is checked. Click on Enter once you see the screen with entry displayed for delete.

2.11.9. BC-Set for Equipment: Serialization

- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_CR_EQUIP_SERIAL_920 (BC-Set for Equipment-Serialization Change request in EAM 9.2) - This BC-Set covers adding new CR type for Equipment Serialization.
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/EAM_IDOC_INB_PROC_SERIA_920 (BC-Set for Equi Serialization IDOC INB config EAM 9.2)- This BC-Set covers the IDoc Inbound configuration for Equipment Serialization.
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI3/MDG_EQ_MAT_SER_ACTVFLG_920 (BC- Set for Enabling Material Serialization Functionality) - This BC-Set covers the configuration required to enable Material Serialization functionality in EAM 9.2
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI3/MDG_SER_ENRICHMNT_FLAG_920 (BC -Set-Excluding Equip enrichment in Material Serialization) - This BC set covers the configuration required to exclude Equipment enrichment in Material Serialization of EAM 9.2

2.11.10. BC-Set for IS-U Industry Solution

To ensure that IDocs triggered by Data Replication Framework (DRF) for IS-U objects are posted successfully in target system in either MDG Hub or Co-deploy scenarios, activation of the following BC-Set in target system is mandatory, provided the UGI3 software component version is installed. For UGI3 dependency details, refer Installation guide.

- For Inbound Process Code, go to t-code SCPR20 and activate BC-Set - /UGI3/MDG_ISU_INB_PROC_CODE_920
- For IDoc Message type and Basic Type Mapping, go to t-code SCPR20 and activate BC-Set- /UGI3/EAM_ISU_IDOC_CONFIG_920

Before you activate the following BC-Sets, you need to ensure that the following prerequisite is met:

- Prerequisite BC-Set for IS-U Data Model
- Prerequisite BC-Set for IS-U Data Model Specific Structures
    - For Package groups, UI field properties, Change Request Type, Process Quality Metrics, DRF/DIF, and ID Mapping – Go to t-code SCPR20 and enter BC-Set - /UISU/MDG_CONFIG_920 and activate ( ) in Expert Mode.
    - For HANA Search Field Mapping and Joins, go to t-code SCPR20 and activate BC-Sets /UISU/MDG_VC_HDB_PP_FMAP_920 and activate ( ).
    - For HANA Search Views, go to t-code SCPR20 and activate BC-Sets /UISU/MDG_VC_MDGHDB001_920 and activate ( ).

Before continuing with the next BC-Sets, perform the generation of the new HANA search views as described in detail in the Chapter on CreateSearchView using t-code MDG_HDB_GEN_UI.

- For Search and Match profiles, go to t-code SCPR20 and activate BC-Set - /UISU/MDG_VC_DQ_SEARCH_920.

2.12. Prerequisite Visual Harmonization of UIs

To apply Belize themes for customers using EAM 9.2 and above, use the following instructions:

- Go to the package “USMD_GENERIC_BOLUI” that contains the Web Dynpro application using t-code SE80.
- In the package structure, locate Web Dynpro FPM Application “USMD_OVP_GEN”.

Execute the following steps for the application:

1. Select the application and switch to tab "Parameters".
2. Switch to edit mode.
3. Locate parameter "WDDISPLAYLOADINGPAGE" and set its value to 2, if already not set. Add the parameter if required.
4. Save the changes.

In S/4HANA 1809, perform the following additional step to get Belize theme.

1. Run the t-code /UI2/NWBC_CFG_SAP and maintain an entry as shown below.

   Path filter: *

   Parameter Name: THEME

   Parameter value: sap_belize

Note

A developer access key and object key will be required if changes are required.

2.13. Prerequisite Enhancement Implementations

As part of Configuration Enhancements for Classification should be manually created.

The below listed Enhancement Implementations need to be created in the Own/Customer namespace.

- Class Enhancement: Create an Overwrite-Exit for the method IF_USMD_PP_ACCESS~READ_VALUE of Class CL_MDG_BS_CLF_ACCESS_GEN

Note

Copy the code for Enhancement. Refer to the enclosed attachment for code details.

Manual Correction for Classification.pd

3. Configuration Process for IS-U Industry Solution (Optional)

If the current system is already configured with MDG EAM 9.2, then the following steps are required to be performed to activate IS-U Industry Solution:

- Section 2.1: Activate Business Functions for IS-U Industry Solution
- Section 2.6: User roles for IS-U Industry Solution
- Section 2.8: Number ranges for IS-U Industry Solution
- Section 2.10: Activate Data Model for IS-U Industry Solution
- Section 2.11.10: Prerequisite for BC-Set Activation for IS-U Industry Solution
- Section 4.5.1.3: Actions with UI Applications and Business Activity for IS-U Industry Solution
- Section 4.5.2.3: Link Logical Actions with Business Activity: Standard Definition for IS-U Industry Solution
- Section 4.6.1: Manage UI Configurations for IS-U Industry Solution
- Section: 4.7.2.2: Create a Search View for IS-U Industry Solution

- Section: 4.8.2: Verifying Data Quality Search settings and Duplicate Check for IS-U Industry Solution
- Section 4.8.3.2: Configuration of Duplicate Check for HANA Search for IS-U Industry Solution
- Section 4.9.2.2: Check Business Activities for IS-U Industry Solution
- Section 4.9.3.2: Verify the Change Request Type for IS-U Industry Solution
- Section 4.13.4.2: Data Replication Framework for IS-U Industry Solution
- Section 4.15.2.2: Change Request for IS-U Industry Solution
- Section 4.15.3: Reason for Rejection for IS-U Industry Solution
- Section: 4.17.2.2: OTC for BOR Mapping for IS-U Industry Solution

4. Configuration Process

4.1. More Information

- For information on functional restrictions, see SAP Note 2688397.
- SAP Master Data Governance Security Guide
- Master and Upgrade Guide for EAM Solutions by Utopia

4.2. Impact of PM/EAM Customizing

Some standard customizing activities for Plant Maintenance/Enterprise Asset Management are relevant for Master Data Governance for EAM under the Define Field Selection nodes.

All activities that change the field properties affects the field properties in Master Data Governance for EAM. The Master Data Governance fields are affected by the field selection setting (Hidden, Display, Mandatory, Optional).

- Under the Basic Settings node, all activities impact Master Data Governance for EAM. Example settings include Number Ranges for Measuring Points or Warranty Types and Measuring Point Categories.
- Under the Technical Objects node, all activities impact Master Data Governance for EAM Example settings include the definition of Types of Technical Objects, Planner Groups, and Plant Sections.
    - Fleet Management views can be configured under configuration “Settings for Fleet Management".

4.3. Activate BC-Sets for Change Request Types

For Create, Change, and Mark for Deletion and process EAM Objects, there are example Change Request types available.

Ensure that the following steps are defined in the configuration before activation of the BC-Set:

Master Data Governance (t-code MDGIMG) > General Settings > Process Modeling > Workflow > Other MDG Workflow > Define Change Request Step Number.

Workflow	Step	Description	Keys	Validation
WS54300020	0	Submission		
WS54300020	1	Processing	X	
WS54300020	2	Final Check		X

Workflow	Step	Description	Keys	Validation
WS54300020	3	Revision		

Run the BC-Set activation process (t-code SCPR20), for the BC-Sets as mentioned in the Section 4.3.1 onwards.

Note: Use Expert Mode to activate the followings BC-Sets if you cannot activate with the Default Mode.

4.3.1. Activate the following BC-Sets for Equipment and Functional Location

1. /UGI/MDG_EAM_CREQUEST_01: EAM Solutions 9.2 by Utopia Change Request Types – Equipment and Functional Location. This BC-Set contains:
    a. Change Request Types
    b. Business Activity for Equipment and Functional Location
    c. Configurable properties of Change Request Steps
2. /UGI/MDG_EAM_PQM_01: EAM Solutions 9.2 by Utopia - Process Quality Metrics for Equipment and Functional Location. This BC-Set contains:
    a. Change Request: Priorities
    b. Change Request: Reason
    c. Change Request: Reason for Rejection
3. /UGI/MDG_EAM_EQUI_SERIAL_PQM_920: Utopia EAM Solutions 9.2 by Utopia - Pro Quality Metrics - Serialization CR. This BC-Set contains:
    a. Change Request: Priorities
    b. Change Request: Reason

Note

IE4N application EQUIP_IE4N_APP should be activated. Use t-code SICF to activate. To navigate IE4N Application, enter t-code SICF provide Hierarchy Type as SERVICE and Service Name as EQUIP_IE4N_APP and click on Execute.

4.3.2. Activate the following BC-Sets for Material BOM

1. /UGI/MDG_EAM_CREQUEST_02: EAM Solutions 9.2 by Utopia Change Request Types - MBOM. This BC-Set contains:
    a. Change Request Types
    b. Business Activity for Material BOM
    c. Configurable properties of Change Request Steps
2. /UGI/MDG_EAM_PQM_02: EAM Solutions 9.2 by Utopia Process Quality Metrics - MBOM. This BC-Set contains:
    a. Change Request: Priorities
    b. Change Request: Reason
    c. Change Request: Reason for Rejection

4.3.3. Activate the following BC-Sets for Maintenance Plan and Item

1. /UGI/MDG_EAM_CREQUEST_MPMI: EAM Solutions 9.2 by Utopia Change Request Types – Maintenance Plan and Item. This BC-Set contains:
    a. Change Request Types
    b. Business Activity for Maintenance Plan/Item
    c. Configurable properties of Change Request Steps
2. /UGI/MDG_EAM_PQM_MPMI: EAM Solutions 9.2 by Utopia Quality Metrics - Maintenance Plan and Item. This BC-Set contains:
    a. Change Request: Priorities
    b. Change Request: Reason
    c. Change Request: Reason for Rejection

4.3.4. Activate the following BC-Sets for Measuring Point

1. /UGI/MDG_EAM_CREQUEST_MSPT: EAM Solutions 9.2 by Utopia Change Request Types – Measuring Point. This BC-Set contains:
    a. Change Request Types
    b. Business Activity for Measuring Point
    c. Configurable properties of Change Request Steps
2. /UGI/MDG_EAM_PQM_MSPT: EAM Solutions 9.2 by Utopia Quality Metrics - Measuring Point. This BC-Set contains:
    a. Change Request: Priorities
    b. Change Request: Reason
    c. Change Request: Reason for Rejection

4.3.5. Activate the following BC-Sets for Task List

1. /UGI/MDG_EAM_CREQUEST_TL: EAM Solutions 9.2 by Utopia Change Request Types – for all the three Task List Types i.e., General Task List, Equipment Task List and Functional Location Task List. This BC-Set contains:
    a. Change Request Types
    b. Business Activities
    c. Configurable properties of Change Request Steps
2. /UGI/MDG_EAM_PQM_TL: EAM Solutions 9.2 by Utopia for all the three types of Task Lists. This BC-Set contains:
    a. Change Request: Priorities
    b. Change Request: Reason
    c. Change Request: Reason for Rejection
3. /UGI/MDG_EAM_TASKLIST_SEARCH - MDG EAM Task List Search. This BC-Set contains the following GenIL Objects:
    a. Root Object TASKLIST

b. Dynamic Query Object DynamicQueryTASKLIST

Note

Task List search application TASKLIST_SEARCH should be activated. Use t-code SICF to activate.

To navigate Task List Search Application, enter t-code SICF provide Hierarchy Type as SERVICE and Service Name as TASKLIST_SEARCH and click on Execute.

4. /UGI/MDG_EAM_OTC_CODES_TL: BC-Set: Task List OTC and OITC. This BC-Set contains the following Objects:
   a. Object Identifiers for Task Lists
   b. Business Object Type Codes for Task Lists

4.3.6. Activate the following BC-Sets for Work Center

1. /UGI/MDG_EAM_CREQUEST_WCTR: EAM Solutions 9.2 by Utopia Change Request Types – Work Center. This BC-Set contains:
   a. Change Request Types
   b. Business Activity for Work Center
   c. Configurable properties of Change Request Steps
2. /UGI/MDG_EAM_PQM_WCTR: EAM Solutions 9.2 by Utopia - Process Quality Metrics - Work Center. This BC-Set contains
   a. Change Request: Priorities
   b. Change Request: Reason
   c. Change Request: Reason for Rejection

4.3.7. Activate the following BC-Sets for Object Links and Object Networks

1. /UGI/MDG_EAM_CREQUEST_740: BC-Set for Change Request MDG EAM 9.2 for Object Links and Object Networks. This BC-Set contains:
   a. Change Request Types
   b. Business Activity for Object Links and Object Networks
   c. Configurable properties of Change Request Steps.
2. /UGI/MDG_EAM_PQM_740: BC-Set for Process Quality Metrics MDG EAM 9.2 for Object Links and Object Networks. This BC-Set contains:
   a. Change Request: Priorities
   b. Change Request: Reason
   c. Change Request: Reason for Rejection

4.3.8. Activate the following BC-Sets for Material BOM, WBS BOM, Functional Location BOM, Equipment BOM and Address

Note: Use Expert Mode to activate the following BC-Sets if you cannot activate with the Default Mode.

1. For Governance scope, go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_GOV_SCOPE_920 in Expert Mode.
2. For Change Request type changes, go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_CR_TYPE_920 in Expert Mode

   Note: Before activating the BC-Set (/UGI/MDG_EAM_CR_TYPE_920), navigate to Utilities > User Settings > Maint. Transaction tab. Ensure that the field “Switch On” within Deletion Function is checked.
3. For Process quality metrics for BOMs, go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_PQM_BOM_920.

4.3.9. Activate the following BC-Set for Workflow Assignments (Optional)

1. Navigate to Organization and Staffing Create/Change (t-code PPOCE/PPOME) and create/update the org chart.
2. Enter the values for Agent ID and Object Type based your custom requirements in the “Enter Variable Field Values” pop-up while activating the following BC-Sets.
3. Go to t-code SCPR20 and activate ( ) BC-Set /UGI/EAM_USERAGT_ASSIGN_740: User agent assignment for MDG EAM Change Request types. This BC-Set contains:
   a. Assignment of Processors to Workflow Step Number
4. Go to t-code SCPR20 and activate ( ) BC-Set /UGI/EAM_USERAGT_ASSIGN_920: User agent assignment for MDG EAM 9.2 Change Request types.

4.3.10. Activate the following BC-Set for Data Replication Framework (DRF)

If the customers would like to use Data Replication Framework for EAM objects, activate the following BC-Set:

- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_DRF_IMPL_920 In Expert Mode.
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_DRF_920 in Expert Mode.

4.3.11. Activate the following BC-Set for Data Import Framework (DIF)

If the customers would like to use Data Import Framework for EAM objects, activate the following BC-Set:

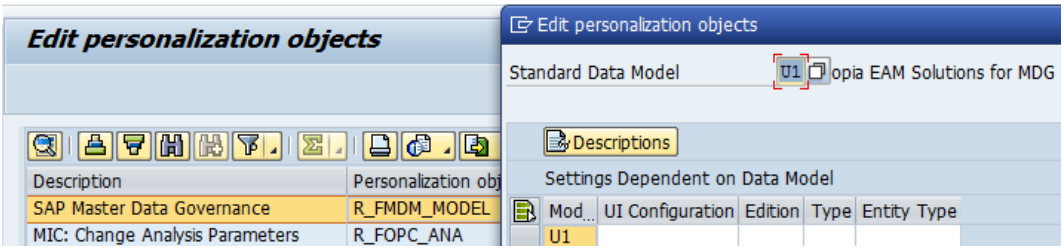
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_DIF_730 (Utopia MDG EAM Data Transfer BC-Set)
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_DIF_740 (BC-Set for DIF - EAM 9.2 for Object Links and Object Links)
- Go to t-code SCPR20 and activate ( ) BC-Set /UGI/MDG_EAM_DIF_920 (BC-Set for DIF - EAM 9.2 for BOMs and Address)

4.3.12. Enable UI Adaptations

- Go to t-code SE38 and execute the report /UGI/SET_ADAPT
- For enabling the adaptations for IS-U Object, please execute the report /UISU/SET_ADAPT

4.4. GenIL (Generic Interaction Layer) Component Adjustments

- A GenIL component is added for all EAM objects.
- Check for the component /UGI/1 in the t- code GENIL_MODEL_BROWSER in display mode, to make sure the component is present and shows no errors.
- Ensure that the Data Model U1 is the Standard Data Model for the Personalization Parameters R_FMDM_MODEL. Use t-code SPERS_MAINT or personalization for UserID (t-code SU01) to check the parameter. If it is not the default, enter U1 as the default and save.



4.5. Navigating User Interface

Manual corrections are needed for setting up UI navigations. Details of the activity are mentioned below:

- Link Log. Actions with UI Application and Bus. Act.: Standard Definition
- Link Logical Actions with Business Activity: Standard Definition

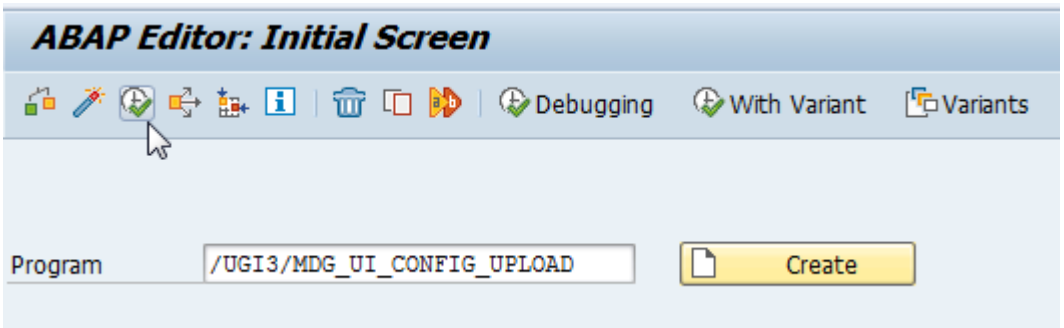
4.5.1. Link Log. Actions with UI Application and Bus. Act.: Standard Definition

Utopia has provided a report that can be leveraged to read the embedded Excel files here and update the configuration tables directly. The Logical actions with UI Application and Business Activity configuration entries can also be entered or verified manually by opening the respective Excel file and copying to the SAP MDGIMG configuration.

There are three sections with files for this configuration section:

- The first section (4.5.1.1) is for customers that will be using EAM without Linear Asset Management (LAM) enabled.
- The second section (4.5.1.2) is for those customers that require LAM support.
- The third section (4.5.1.3) is specific to customers that require IS-Utilities governance.

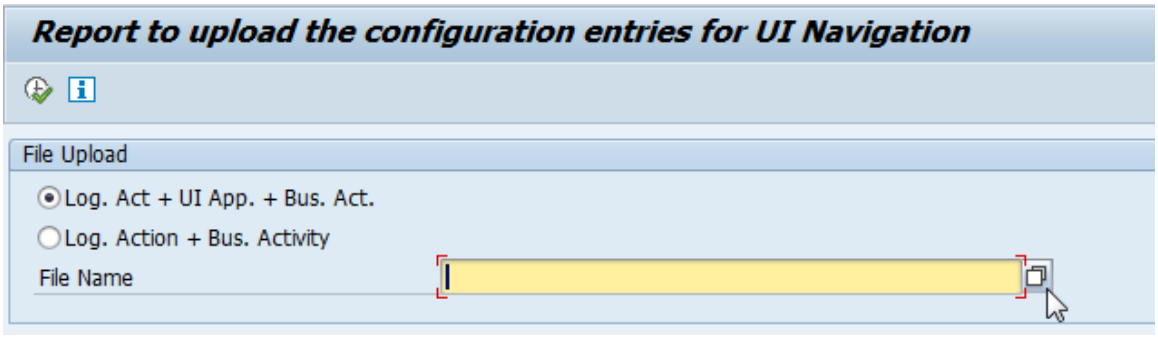
1. To run the report; run t-code SE38, then enter report /UGI3/MDG_UI_CONFIG_UPLOAD and execute or press F8.



2. Click on the file selection icon as indicated and navigate to where you stored the downloaded files from the relevant sections below for your implementation.

Note

Ensure that the relevant file is not open in another application, such as Excel before proceeding.



Note: For more information, see Customizing for Master Data Governance under > General Settings > Process Modeling > Business Activities > Link Log. Actions with UI Application and Bus. Act. Standard Definition.

3. **UI Navigations for Task List**

   Prior to running the report, maintain the following application name in MDG UI Applications.

   Application Name: /UGI/TASKLIST_SEARCH.

   - Navigate to MDGIMG > General Settings > UI Modelling > Define Available UI Applications

   Or, go to the Table/View Name: V_USMD151C using t-code SM30.

   - Click on New Entries and enter the Application Name and Save.

Note: Before adding the following Task List navigation entries, use the steps as described above.

4.5.1.1. Navigation Entries for EAM without LAM Enabled

Run the report as described in section 4.5.1 above, using the Excel file below for environments that do not require LAM UI support.

EAM Navigation entries.xlsx

Verify Customizing in Master Data Governance under > General Settings > Process Modeling > Business Activities > Link Log. Actions with UI Application and Bus. Act. Standard Definition

4.5.1.2. Navigation Entries for EAM when Linear Asset Management (LAM) is Enabled

Run the report as described in section 4.5.1 above, using the Excel file below for environments that require LAM UI support.

EAM Navigation entries(LAM).xlsx

Verify Customizing in Master Data Governance under > General Settings > Process Modeling > Business Activities > Link Log. Actions with UI Application and Bus. Act. Standard Definition

4.5.1.3. Navigation Entries for IS-U Enabled Environments for Governance

If IS-Utilities governance is required; Run the report as described in section 4.5.1 above, using the Excel file below.

ISU Navigation Entries.xlsx

Verify Customizing in Master Data Governance under > General Settings > Process Modeling > Business Activities > Link Log. Actions with UI Application and Bus. Act. Standard Definition

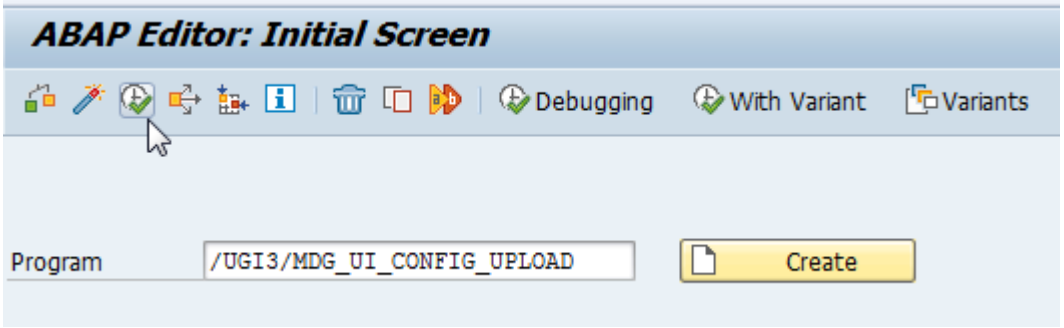
4.5.2. Link Logical Actions with Business Activity: Standard Definition

Utopia has provided a report that can be leveraged to read the embedded Excel files here and update the configuration tables directly. The Logical actions with Business Activity configuration entries can also be entered or verified manually by opening the respective Excel file and copying to the SAP MDGIMG configuration.

There are three sections with files for this configuration section:

- The first section (4.5.2.1) is for customers that will be using EAM without Linear Asset Management (LAM) enabled.
- The second section (4.5.2.2) is for those customers that require LAM support.
- The third section (4.5.2.3) is specific to customers that require IS-Utilities governance.

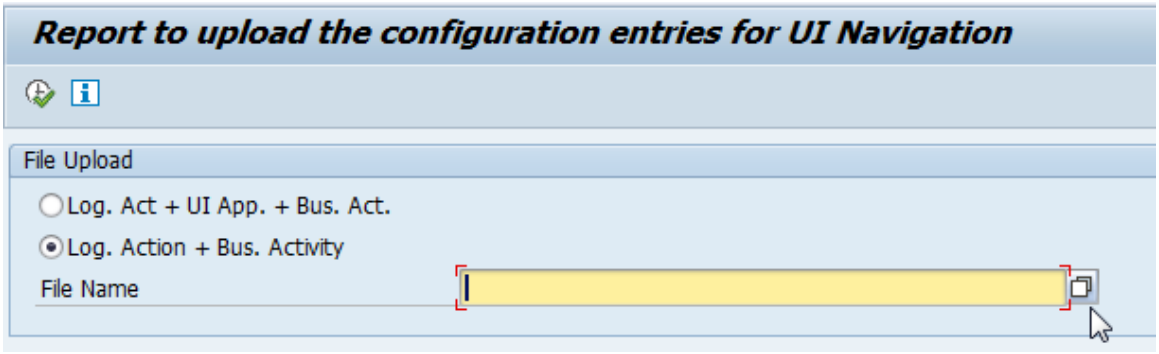
1. To run the report; run t-code SE38, then enter report /UGI3/MDG_UI_CONFIG_UPLOAD and execute or press F8.



2. Select the “Log. Action + Bus. Activity” radio button.
3. Click on the file selection icon as indicated and navigate to where you stored the downloaded files from the relevant sections below for your implementation.

   Note

   Ensure that the relevant file is not open in another application, such as Excel before proceeding.



Note: For more information, see Customizing for Master Data Governance under > General Settings > Process Modeling > Business Activities > Link Logical Actions with Business Activity: Standard Definition.

4.5.2.1. Logical Actions with Business Activity Linkage for EAM without LAM

Run the report as described in section 4.5.2 above, using the Excel file below for environments that do not require LAM UI support.

EAM Buiness Activity.xlsx

Verify Customizing for Master Data Governance under > General Settings > Process Modeling > Business Activities > Link Logical Actions with Business Activity: Standard Definition.

4.5.2.2. Logical Actions with Business Activity Linkage for EAM when Linear Asset Management (LAM) is Enabled

Run the report as described in section 4.5.2 above, using the Excel file below for environments that requires LAM UI support.

EAM Buiness Activity(LAM).xlsx

Verify Customizing for Master Data Governance under > General Settings > Process Modeling > Business Activities > Link Logical Actions with Business Activity: Standard Definition.

4.5.2.3. Logical Actions with Business Activity Linkage for IS-U Enabled Environments for Governance

If IS-Utilities governance is required; Run the report as described in section 4.5.2 above, using the Excel file below.

ISU Business Activity.xlsx

Verify Customizing for Master Data Governance under > General Settings > Process Modeling > Business Activities > Link Logical Actions with Business Activity: Standard Definition.

4.5.3. Delete Mapping of Text Helper (Mandatory)

Go to t-code SE38. Run the report USMD_TXT_FLD_MAP_DELETE. This report can be used to delete the mapping entries occur in the next UI Load.

4.6. Verify UI Modeling (Optional)

UI configuration activities are only relevant if you want to change the UI or if the U1 data model has been enhanced.

In this customizing activity, you can specify the reason and the location where the system hides the entity types for the data model U1.

Verify the pre-delivered field properties for the data model `U1` in Customizing under > General Settings > UI Modeling > Define Field Properties for UI.

The Web Dynpro application and the application configuration in the PFCG role combine with settings made in Customizing to determine the UI displayed.

You must verify the UI modeling for the data model U1 and the following Web Dynpro applications and related configurations:

4.6.1. Manage UI Configurations

Navigate to MDGIMG > General Settings > UI Modelling > Manage UI Configurations

For EAM 9.2:

Application	Application Configuration	UI Configuration
USMD_OVP_GEN	/UGI/USMD_U1_OVP_EQUI	/UGI/USMD_U1_EQUI_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_FUNCLOC	/UGI/USMD_U1_FUNCLOC_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_PMBOMHDR	/UGI/USMD_U1_PMBOMHDR_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_MSPOINT	/UGI/USMD_U1_MSPOINT_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_MPMI	/UGI/USMD_U1_MPMI_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_WORKCNTR	/UGI/USMD_U1_WORKCNTR_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_TLGNHDR	/UGI/USMD_U1_CMP_TLGNHDR_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_TASKLIST	/UGI/USMD_U1_CMP_TASKLIST_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_TASKLIST_EQ	/UGI/USMD_U1_TASKLIST_EQ_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_TASKLIST_FL	/UGI/USMD_U1_TASKLIST_FL_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_EQBOMHDR	/UGI/USMD_U1_EQBOMHDR_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_FLBOMHDR	/UGI/USMD_U1_FLBOMHDR_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_WBSBOMHDR	/UGI/USMD_U1_WBSBOMHDR_OVP
USMD_SEARCH	/UGI/USMD_SEARCH_EQUI	/UGI/USMD_SEARCH_OVP_EQUI
USMD_SEARCH	/UGI/USMD_SEARCH_FUNCLOC	/UGI/USMD_SEARCH_OVP_FUNCLOC
USMD_SEARCH	/UGI/USMD_SEARCH_PMBOMHDR	/UGI/USMD_SEARCH_OVP_PMBOMHDR
USMD_SEARCH	/UGI/USMD_SEARCH_MSPOINT	/UGI/USMD_SEARCH_OVP_MSPOINT

Application	Application Configuration	UI Configuration
USMD_SEARCH	/UGI/USMD_SEARCH_WORKCNTR	/UGI/USMD_SEARCH_OVP_WORKCNTR
USMD_SEARCH	/UGI/USMD_SEARCH_MPMI	/UGI/USMD_SEARCH_OVP_MPMI
USMD_SEARCH	/UGI/USMD_SEARCH_TLGN	/UGI/USMD_SEARCH_OVP_TLGN
USMD_SEARCH	/UGI/USMD_SEARCH_TLEQ	/UGI/USMD_SEARCH_OVP_TLEQ
USMD_SEARCH	/UGI/USMD_SEARCH_TLFL	/UGI/USMD_SEARCH_OVP_TLFL
USMD_SEARCH	/UGI/USMD_SEARCH_TSKLST	/UGI/USMD_SEARCH_OVP_TSKLST
USMD_SEARCH	/UGI/USMD_SEARCH_TSKLST_EQ	/UGI/USMD_SEARCH_OVP_TSKLST_EQ
USMD_SEARCH	/UGI/USMD_SEARCH_TSKLST_FL	/UGI/USMD_SEARCH_OVP_TSKLST_FL
USMD_SEARCH	/UGI/USMD_SEARCH_EQBOMHDR	/UGI/USMD_SEARCH_OVP_EQBOMHDR
USMD_SEARCH	/UGI/USMD_SEARCH_FLBOMHDR	/UGI/USMD_SEARCH_OVP_FLBOMHDR
USMD_SEARCH	/UGI/USMD_SEARCH_WBSBOMHDR	/UGI/USMD_SEARCH_OVP_WBSBOMHDR
USMD_OVP_GEN	/UGI/USMD_U1_OVP_OBJLINK	/UGI/USMD_U1_OBJLINK_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_OBJNETWRK	/UGI/USMD_U1_OBJNETWRK_OVP
USMD_SEARCH	/UGI/USMD_SEARCH_OBJLINK	/UGI/USMD_SEARCH_OVP_OBJLINK
USMD_SEARCH	/UGI/USMD_SRCH_OBJNETWRK	/UGI/USMD_SRCH_OVP_OBJNETWRK

For IS-U Industry Solution:

Application	Application Configuration	UI Configuration
USMD_OVP_GEN	/UGI/USMD_SEARCH_CONOBJ	/UGI/USMD_SEARCH_OVP_CONOBJ
USMD_SEARCH	/UISU/USMD_U1_OVP_CONOBJ	/UISU/USMD_U1_CONOBJ_OVP
USMD_OVP_GEN	/UISU/USMD_SEARCH_DEVICE	/UISU/USMD_SEARCH_OVP_DEVICE
USMD_SEARCH	/UISU/USMD_U1_OVP_DEVICE	/UISU/USMD_U1_DEVICE_OVP
USMD_OVP_GEN	/UISU/USMD_SEARCH_DEVLOC	/UISU/USMD_SEARCH_OVP_DEVLOC
USMD_SEARCH	/UISU/USMD_U1_OVP_DEVLOC	/UISU/USMD_SEARCH_OVP_DEVLOC

The following activity is relevant for customers, who would like to implement EAM Solutions 9.2 by Utopia Linear Asset Management (LAM)

Application	Application Configuration	UI Configuration
USMD_OVP_GEN	/UGI/USMD_U1_OVP_EQUI_LAM	/UGI/USMD_U1_EQUI_OVP_LAM
USMD_OVP_GEN	/UGI/USMD_U1_OVP_FUNCLOC_LAM	/UGI/USMD_U1_FUNCLOC_OVP_LAM
USMD_OVP_GEN	/UGI/USMD_U1_OVP_MSPOINT_LAM	/UGI/USMD_U1_MSPOINT_LAM_OVP
USMD_OVP_GEN	/UGI/USMD_U1_OVP_MPMI_LAM	/UGI/USMD_U1_MPMI_OVP_LAM
USMD_SEARCH	/UGI/USMD_SEARCH_EQUI_LAM	/UGI/USMD_SEARCH_OVP_EQUI_LAM
USMD_SEARCH	/UGI/USMD_SEARCH_FUNCLOC_LAM	/UGI/USMD_SEARCH_OVP_FUNCLOC_LAM

Application	Application Configuration	UI Configuration
USMD_SEARCH	/UGI/USMD_SEARCH_MSPOINT_LAM	/UGI/USMD_SEARCH_OVP_MSPOINT_LAM
USMD_SEARCH	/UGI/USMD_SEARCH_MPMI_LAM	/UGI/USMD_SEARCH_OVP_MPMI_LAM
USMD_OVP_GEN	/UGI/USMD_U1_OVP_OBJLINK_LAM	/UGI/USMD_U1_OBJLINK_OVP_LAM
USMD_SEARCH	/UGI/USMD_SEARCH_OBJLINK_LAM	/UGI/USMD_SEARCH_OVP_OBJLINK_LAM
USMD_OVP_GEN	/UGI/USMD_U1_OVP_OBJNETWRK_LAM	/UGI/USMD_U1_OBJNETWRK_LAM
USMD_SEARCH	/UGI/USMD_SRCH_OBJNETWRK_LAM	/UGI/USMD_SRCH_OVP_OBJNETWRK_LAM

4.7. Setup Search

MDG offers several options to search for the data in Change Requests including the active and inactive data. The search options are distinguished by their capabilities and their landscape requirements. The primary difference is in their capability to include classification data in the search.

The following options are as follows:

- Database Search using the generic search provider interface must be configured manually and does not offer classification search.
- SAP HANA-based search (side-by-side) connects MDG from any database to an SAP HANA-based system for search.

4.7.1. Scenario for EAM

MDG EAM with HANA as primary database. This is considered as an ideal scenario with no Enterprise Search and no SLT Replication to the HANA secondary database. Everything in MDG system with the HDB as default: HANA Search, Hana Duplicate Check, Analytics, HANA Drill-down Search.

MDG EAM with HANA as secondary database.

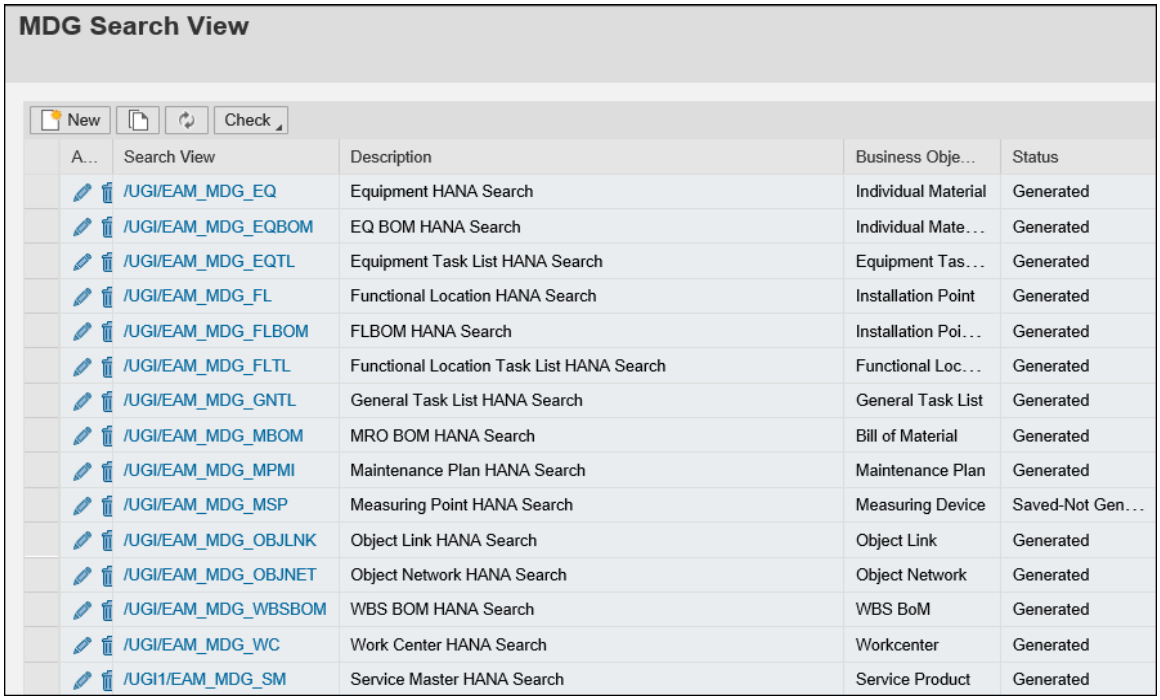
If SAP HANA is the primary database, it is not mandatory to maintain the database connection name neither the SLT settings, so you can follow the steps directly:

4.7.2. Create the Search View

4.7.2.1. Create a Search View for EAM

Use the following steps to create a search view:

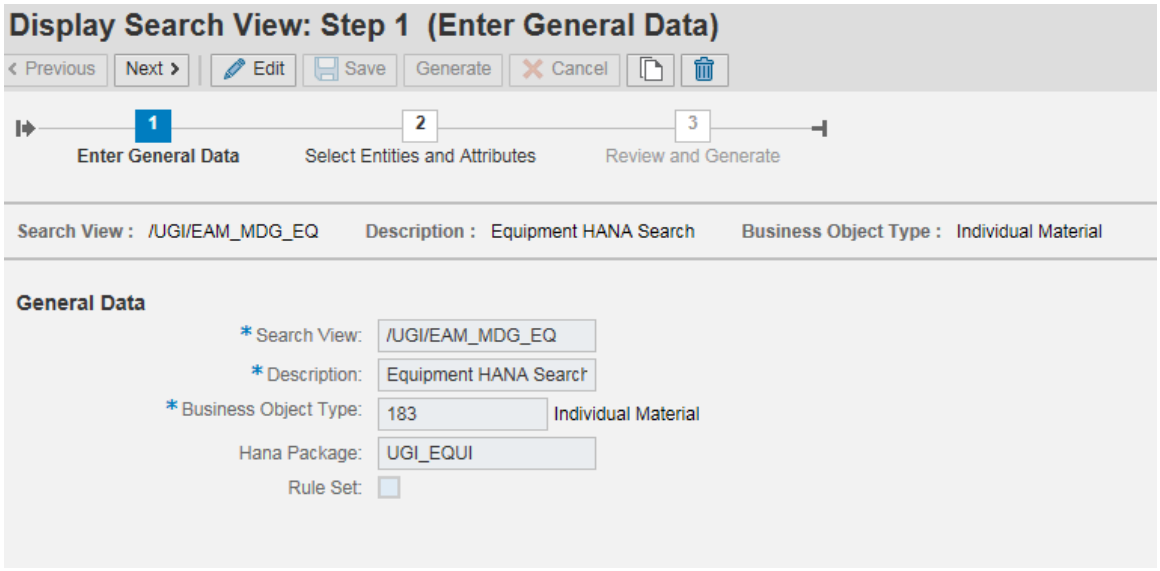
1. To activate the already delivered in the product Hana Search View “/UGI/EAM_MDG_EQ”, Master Data Governance > General Settings > Data Quality and Search > Search and Duplicate Check > Create Search View.



A...	Search View	Description	Business Obje...	Status
	/UGI/EAM_MDG_EQ	Equipment HANA Search	Individual Material	Generated
	/UGI/EAM_MDG_EQBOM	EQ BOM HANA Search	Individual Mate...	Generated
	/UGI/EAM_MDG_EQTL	Equipment Task List HANA Search	Equipment Tas...	Generated
	/UGI/EAM_MDG_FL	Functional Location HANA Search	Installation Point	Generated
	/UGI/EAM_MDG_FLBOM	FLBOM HANA Search	Installation Poi...	Generated
	/UGI/EAM_MDG_FLTL	Functional Location Task List HANA Search	Functional Loc...	Generated
	/UGI/EAM_MDG_GNTL	General Task List HANA Search	General Task List	Generated
	/UGI/EAM_MDG_MBOM	MRO BOM HANA Search	Bill of Material	Generated
	/UGI/EAM_MDG_MPMI	Maintenance Plan HANA Search	Maintenance Plan	Generated
	/UGI/EAM_MDG_MSP	Measuring Point HANA Search	Measuring Device	Saved-Not Gen...
	/UGI/EAM_MDG_OBJLNK	Object Link HANA Search	Object Link	Generated
	/UGI/EAM_MDG_OBJNET	Object Network HANA Search	Object Network	Generated
	/UGI/EAM_MDG_WBSBOM	WBS BOM HANA Search	WBS BoM	Generated
	/UGI/EAM_MDG_WC	Work Center HANA Search	Workcenter	Generated
	/UGI1/EAM_MDG_SM	Service Master HANA Search	Service Product	Generated

2. Click on Edit to activate the HANA Search View and provide the following details to Enter General Data.

Field	Value
Search View	/UGI/EAM_MDG_EQ
Description	Equipment Hana Search
Business Object Name	183
HANA Package	Package Name (It should be always saved in the customer Namespace Package)



Note

You can activate the Rule Set if you want to adjust your HANA Search later in the HANA Studio. With this, you can go attribute by attribute and give your decided attribute characteristics like fuzziness etc. (The Rule set is for saving your manual changes in the HANA studio so next time you generate the view the manual changes are not overwritten)

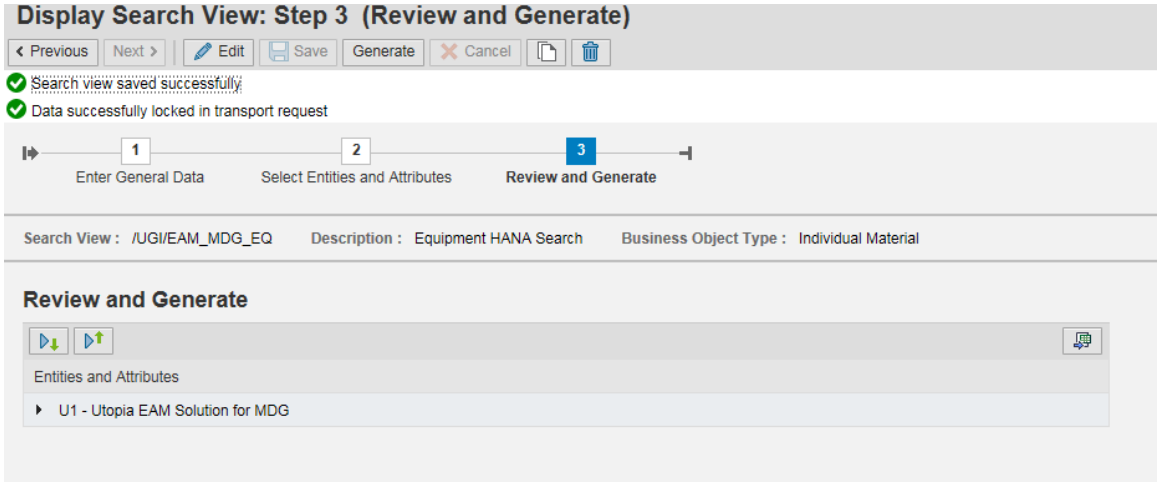
3. Click on Next and move to the next guided step called Select Entities and Attribute, in which select the needed entity and attribute at the Hana database, by default few attribute and entity are selected.

   Note

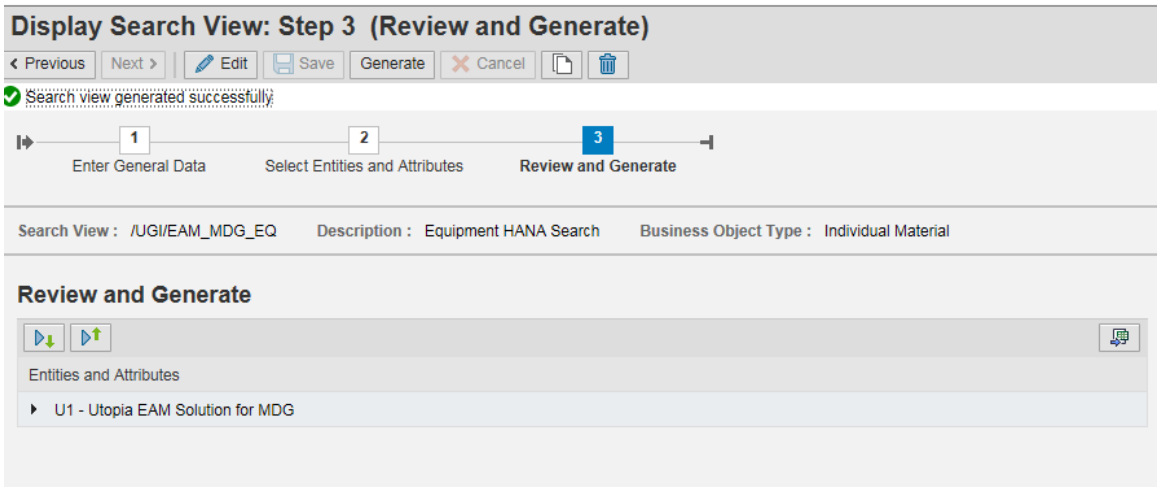
   As the field Description (TEXTBEZ) is wrongly mapped and added in the search view to search based on the characteristic values, remove this field from the search view and regenerate it.

   If you want to search based on the characteristic values, then add the attribute 'ATWRT' for non-numeric characteristic values and the attributes 'ATFLV', 'ATFLB' for numeric characteristic values.

4. Click on Next and Move to the next guided step called Review and Generate, in which review the selected Entity and Attribute in the previous step.
5. Click on Save.



6. Click on Generate in Review and Generate step.



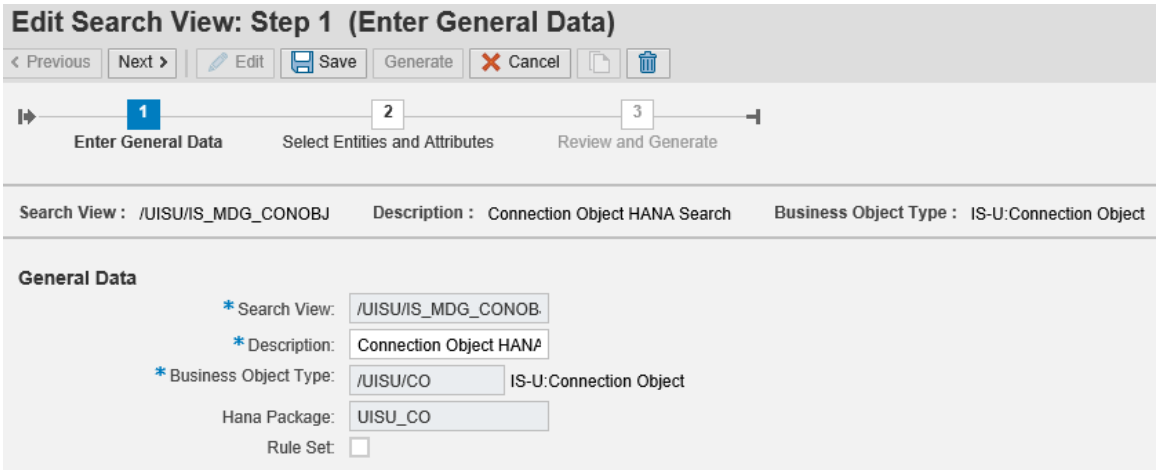
4.7.2.2. Create a Search View for IS-U Industry Solution

Use the following steps to create a search view:

1. To activate the already delivered in the product Hana Search View" /UISU/IS_MDG_CONOBJ", Master Data Governance > General Settings > Data Quality and Search > Search and Duplicate Check > Create Search View.

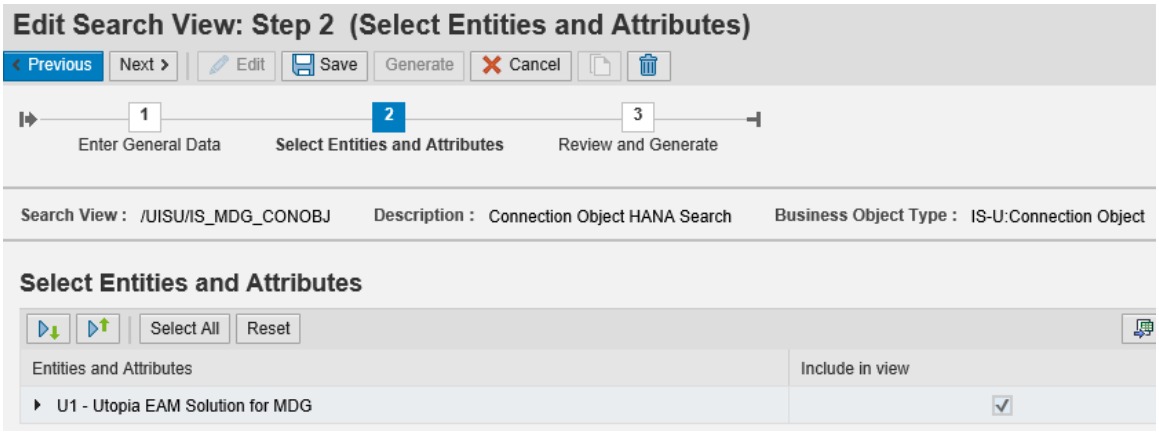
2. Click on Edit to activate the HANA Search View and provide the following details to enter General Data.

Field	Value
Search View	/UISU/IS_MDG_CONOBJ
Description	Connection Object Hana Search
Business Object Name	/UISU/CO
HANA Package	Package Name (It should be always saved in the customer Namespace Package)

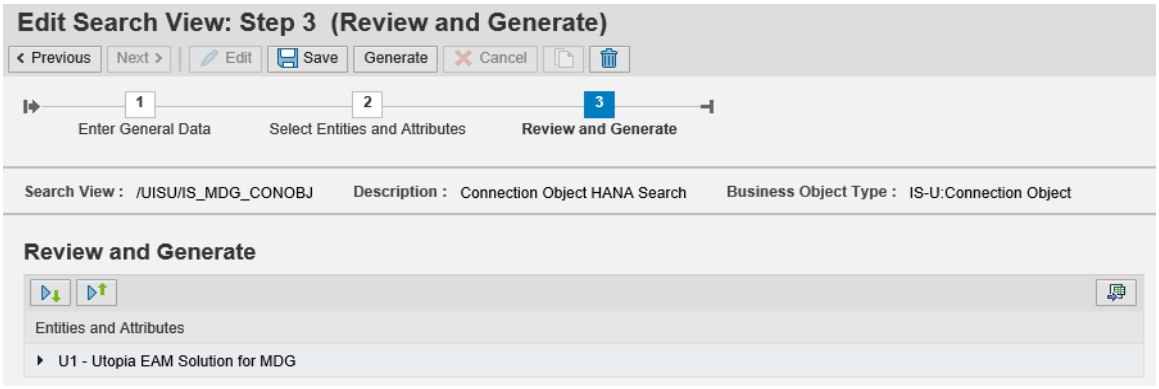


3. You can activate the Rule Set if you want to adjust your HANA Search later in the HANA Studio. With this, you can go attribute by attribute and give your decided attribute characteristics like fuzziness etc. (The Rule set is for saving your manual changes in the HANA studio so next time you generate the view the manual changes are not overwritten).

4. Click on Next and move to the next guided step called Select Entities and Attribute, in which select the needed entity and attribute at the HANA database. By default, a few attribute and entity are selected.



2. Click on Next and Move to the next guided step called Review and Generate, in which review the selected Entity and Attribute in the previous step.



3. Click on Save.

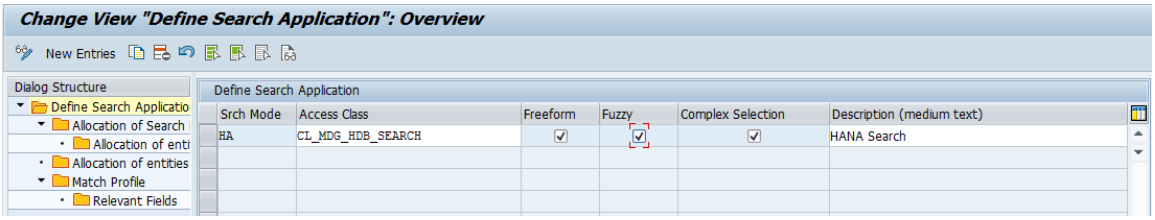
4.8. Verify Data Quality, Search Settings and Duplicate Check

4.8.1. Verify Data Quality, Search Settings and Duplicate Check for EAM

Use the following steps for HANA Search verification and HA Duplicate Check Configuration:

After Search View Generation, you can verify in the following steps:

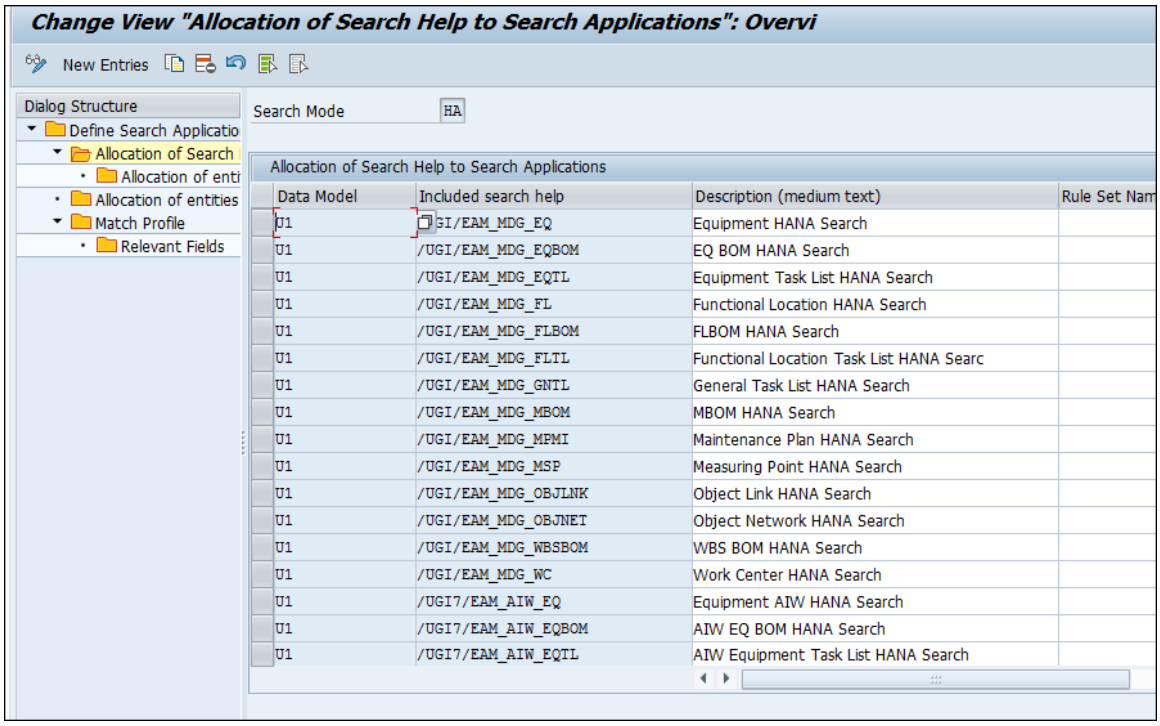
1. Existence of entry HA and that Freeform settings are activated if this feature is planned to be used.



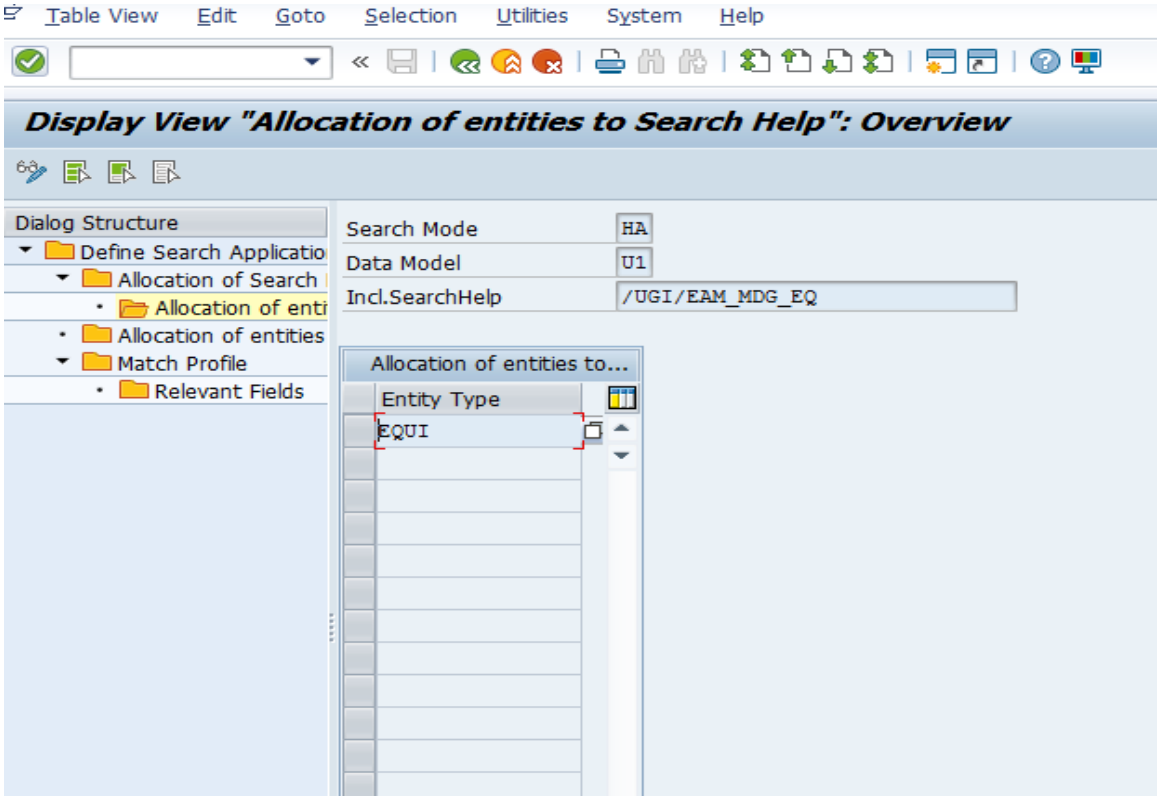
This entry cannot be removed or deactivated (E-class entry delivered by SAP). You can verify these settings in Customizing by Navigating to Master Data Governance > General Settings> Data Quality and Search>Search and Duplicate Check->Define Search Application.

2. Allocation of Search help “/UGI/EAM_MDG_EQ” to Search Application for HANA Search, you can verify the setting for Allocation of Search help to Search Application for HANA Search by navigating to:

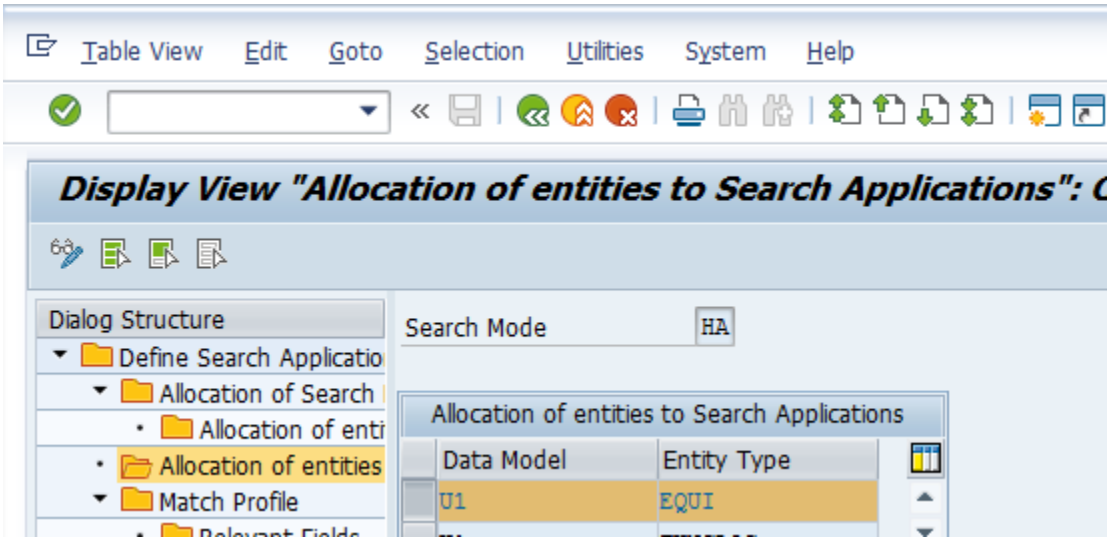
   Master Data Governance > General Settings > Data Quality and Search >Search and Duplicate Check > Define Search Application > Allocation of Search help to Search Application.



3. As part of standard, Main Entity is allocated to the Search help. Refer the following screen to verify.



4. As a part of standard Main Entity is allocated to the Search Application, use the following screen for verifying the same.



The Search is ready to run.

The following Search views are delivered with BC-Set:

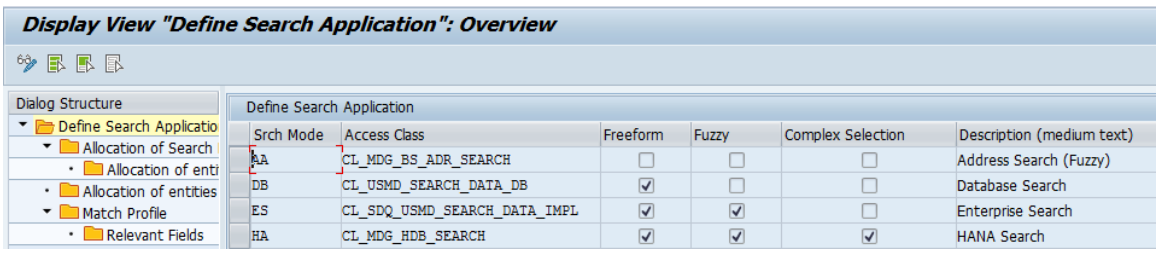
Object	Search Views
Equipment	/UGI/EAM_MDG_EQ
Functional Location	/UGI/EAM_MDG_FL
Maintenance Plan	/UGI/EAM_MDG_MPMI
Measuring Point	/UGI/EAM_MDG_MSP
Task List (Equipment)	/UGI/EAM_MDG_EQTL
Task List (General)	/UGI/EAM_MDG_GNTL
Task List (Functional Location)	/UGI/EAM_MDG_FLTL
Work Center	/UGI/EAM_MDG_WC
MBOM	/UGI/EAM_MDG_MBOM
EQ BOM	/UGI/EAM_MDG_EQBOM
FL BOM	/UGI/EAM_MDG_FLBOM
WBS BOM	/UGI/EAM_MDG_WBSBOM
Object Link	/UGI/EAM_MDG_OBJLNK
Object Network	/UGI/EAM_MDG_OBJNET

4.8.2. Verify Data Quality, Search Settings and Duplicate Check for IS-U Industry Solution

Use the following steps for HANA Search verification and HA Duplicate Check Configuration:

After Search View Generation, you can verify in the following steps:

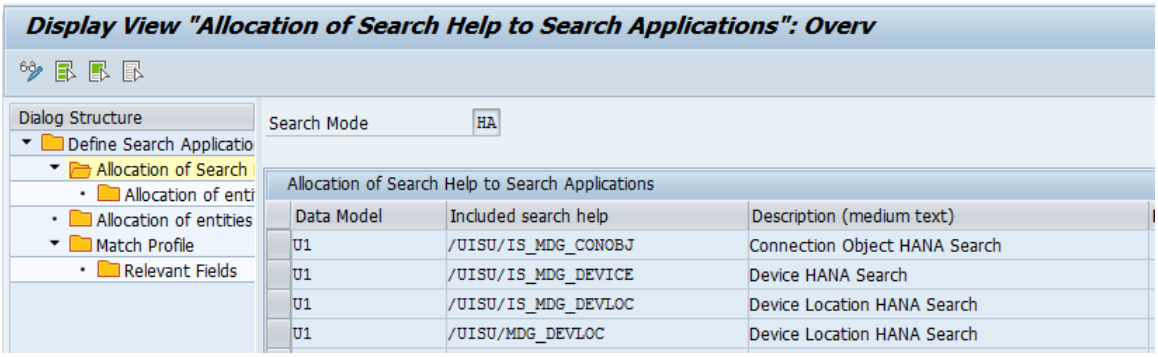
1. Existence of entry HA and that Freeform settings are activated if this feature is planned to be used.



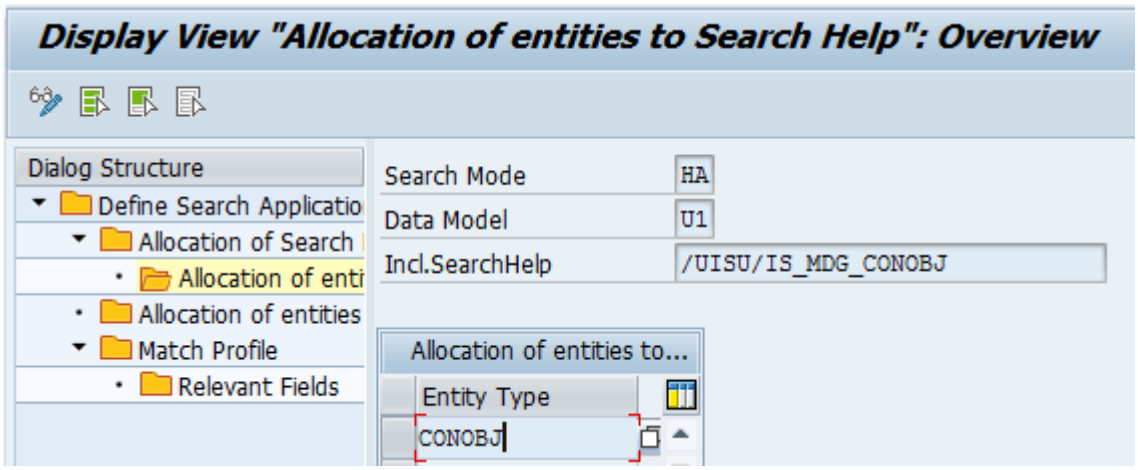
This entry cannot be removed or deactivated (E-class entry delivered by SAP). You can verify these settings in Customizing by Navigating to Master Data Governance > General Settings> Data Quality and Search>Search and Duplicate Check->Define Search Application.

2. Allocation of Search help "/UISU/IS_MDG_CONOBJ" to Search Application for Hana Search, you can verify the setting for Allocation of Search help to Search Application for Hana Search by navigating to:

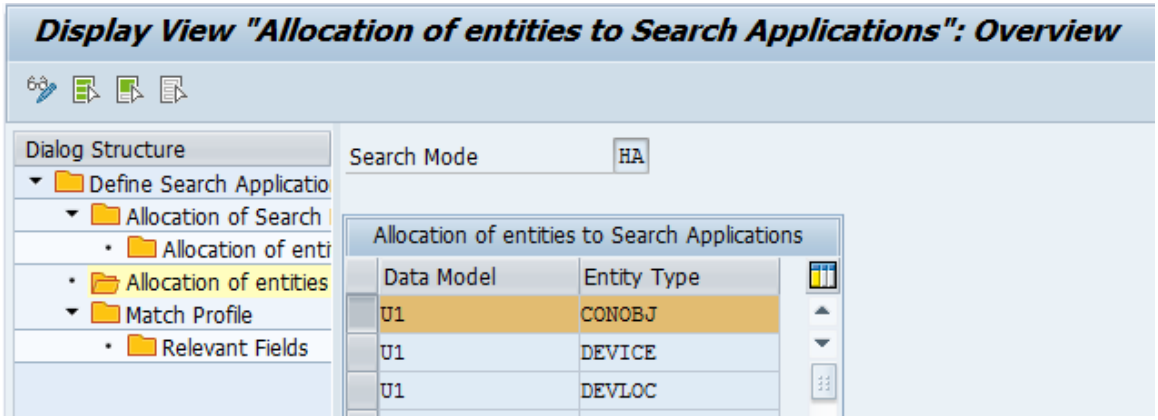
   Master Data Governance > General Settings > Data Quality and Search >Search and Duplicate Check > Define Search Application > Allocation of Search help to Search Application.



3. As part of standard, Main Entity is allocated to the Search help. Refer the following screen to verify.



5. As a part of standard Main Entity is allocated to the Search Application, use the following screen for verifying the same.



The Search is ready to run.

The following Search views are delivered with BC-Set:

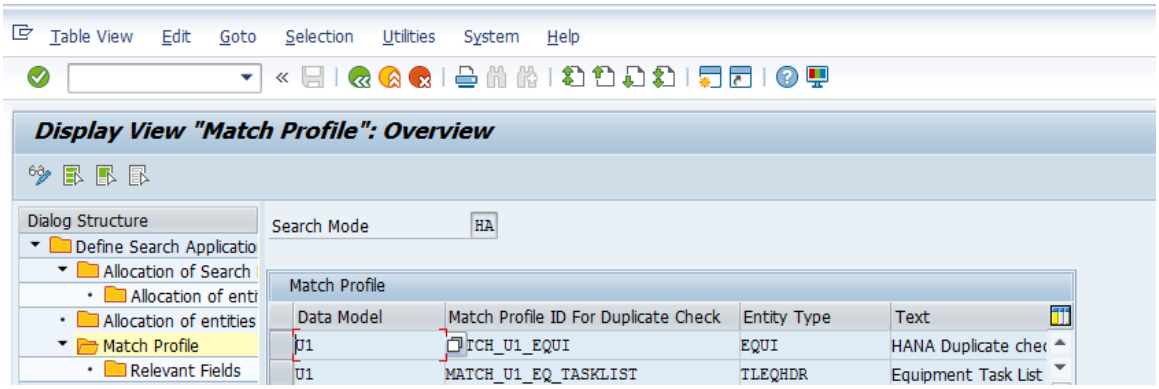
Object	Search Views
Connection Object	/UISU/IS_MDG_CONOBJ
Device Location	/UISU/IS_MDG_DEVLOC
Device	/UISU/IS_MDG_DEVICE

4.8.3. Configuration of the Duplicate Check for HANA Search

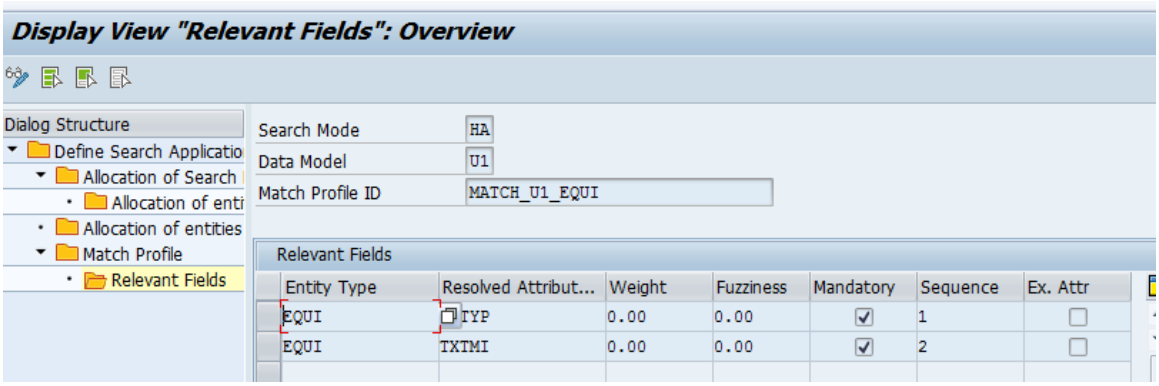
4.8.3.1. Configuration of Duplicate Check for HANA Search - EAM

Use the following steps to configure duplicate check for HANA search:

1. Select the Search Mode “HA” by Navigating to Master Data Governance-> General Settings > Data Quality and Search > Search and Duplicate Check > Define Search Application
2. After navigating select the Search mode “HA” and click on the Match Profile.



3. If you want to run a duplicate check, assign the pre-delivered match profile. MATCH_U1_EQUI or your own match profile to the data model U1 and the EQUI entity type. Navigate to General Settings > Data Quality and Search > Search and Duplicate Check > Match Profile.
4. Duplicate Check relevant fields are added as per the standard delivery, follow the screenshot for verifying the same.



5. For activating the Duplicate Check in EAM done with HANA Search provider do the following:
   - Navigate to General Settings > Data Quality and Search > Search and Duplicate Check > Configure Duplicate Check for Entity Types.

Note

The configuration should be done for all the entities which are to be enabled for HANA Duplicate Check.

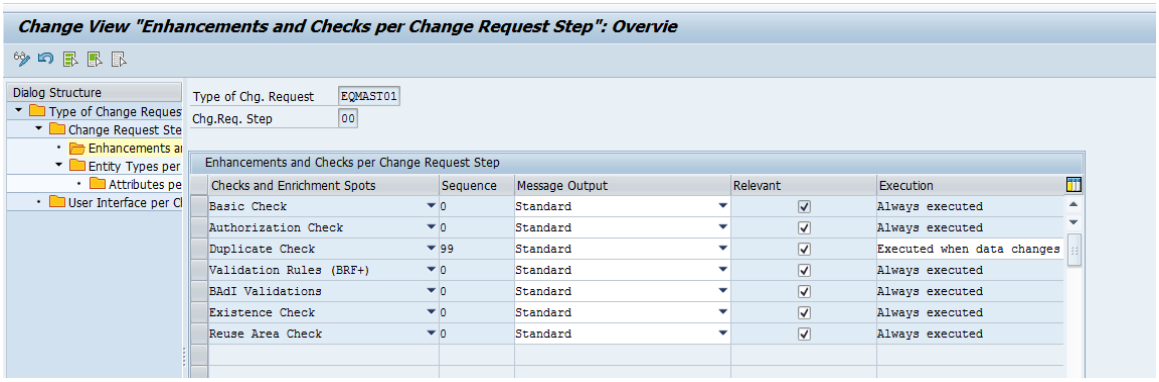
Table for Duplicate Check Mode of Data Model:

Data Model	Entity Type	Search Mode	Low Threshold	High Threshold	Match Profile ID for Duplicate Check	Included Search Help	MP Based UI
U1	EQUI	HA	50.0	85.0	MATCH_U1_EQUI	/UGI/EAM_MDG_EQ	Yes
U1	FUNCLOC	HA	50.0	85.0	MATCH_U1_FUNCLOC	/UGI/EAM_MDG_FL	Yes
U1	MPLAN	HA	50.0	85.0	MATCH_U1_MPMI	/UGI/EAM_MDG_MPMI	Yes
U1	MSPOINT	HA	50.0	85.0	MATCH_U1_MSPOINT	/UGI/EAM_MDG_MSP	Yes
U1	OBJLINK	HA	50.0	85.0	MATCH_U1_OBJECTLINK	/UGI/EAM_MDG_OBJLNK	Yes
U1	OBJNETWRK	HA	50.0	85.0	MATCH_U1_OBJNETWRK	/UGI/EAM_MDG_OBJNET	Yes
U1	PMBOMHDR	HA	50.0	85.0	MATCH_U1_PMBOMHDR	/UGI/EAM_MDG_MBOM	Yes
U1	EQBOMHDR	HA	50.0	85.0	MATCH_U1_EQBOMHDR	/UGI/EAM_MDG_EQBOM	Yes
U1	FLBOMHDR	HA	50.0	85.0	MATCH_U1_FLBOMHDR	/UGI/EAM_MDG_FLBOM	Yes
U1	WBSBOMHDR	HA	50.0	85.0	MATCH_U1_WBSBOMHDR	/UGI/EAM_MDG_WBSBOM	Yes
U1	TLEQHDR	HA	50.0	85.0	MATCH_U1_EQ_TASKLIST	/UGI/EAM_MDG_EQTL	Yes
U1	TLFLHDR	HA	50.0	85.0	MATCH_U1_FL_TASKLIST	/UGI/EAM_MDG_FLTL	Yes
U1	TLGNHDR	HA	50.0	85.0	MATCH_U1_GN_TASKLIST	/UGI/EAM_MDG_GNTL	Yes
U1	WORKCNTR	HA	50.0	85.0	MATCH_U1_WC	/UGI/EAM_MDG_WC	Yes

6. Cross check if the relevant check box for Duplicate check sequence 99 is checked or not.
    - Navigate to General Settings > Process Modelling > Change Requests > Configure Properties of Change Request Step.

Note

The Configuration must be performed for all the create change steps which are to be enabled for HANA Duplicate Check.



The following Match Profiles are available with BC-Set:

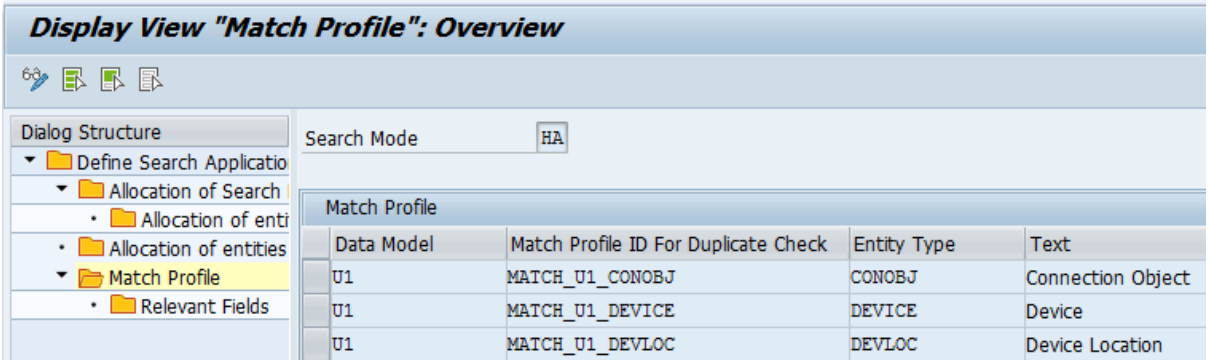
Object	Match Profile
Equipment	MATCH_U1_EQUI

Object	Match Profile
Functional Location	MATCH_U1_FUNCLOC
MBOM	MATCH_U1_PMBOMHDR
FL BOM	MATCH_U1_FLBOMHDR
EQ BOM	MATCH_U1_EQBOMHDR
WBS BOM	MATCH_U1_WBSBOMHDR
Work Center	MATCH_U1_WC
Maintenance Plan	MATCH_U1_MPMI
Measuring Point	MATCH_U1_MSPOINT
Task List (Equipment)	MATCH_U1_EQ_TASKLIST
Task List (General)	MATCH_U1_GN_TASKLIST
Task List (Functional Location)	MATCH_U1_FL_TASKLIST
Object Link	MATCH_U1_OBJECTLINK
Object Network	MATCH_U1_OBJNETWRK

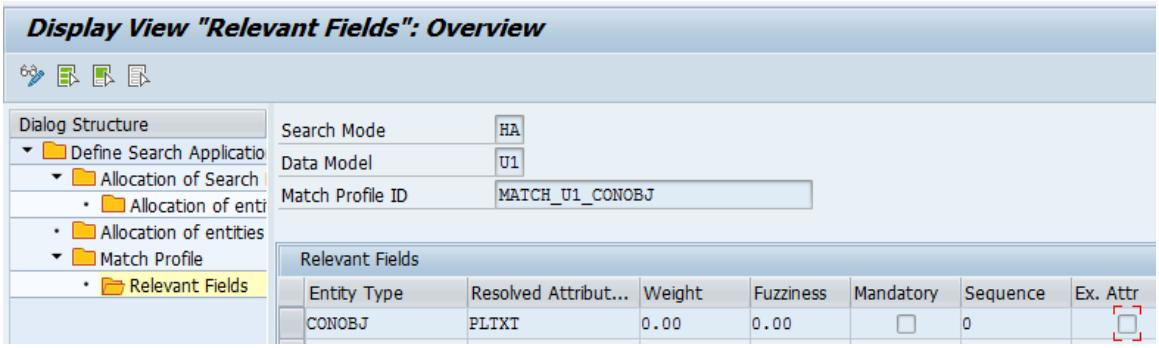
4.8.3.2. Configuration of Duplicate Check for HANA Search - IS-U Industry Solution

Use the following steps to configure duplicate check for HANA search:

1. Select the Search Mode “HA” by Navigating to Master Data Governance-> General Settings > Data Quality and Search > Search and Duplicate Check > Define Search Application
2. After navigating select the Search mode “HA” and click on the Match Profile.



3. If you want to run a duplicate check, assign the pre-delivered match profile. MATCH_U1_CONOBJ or your own match profile to the data model U1 and the CONOBJ entity type. Navigate to General Settings > Data Quality and Search > Search and Duplicate Check > Match Profile.
4. Duplicate Check relevant fields are added as per the standard delivery, use the following screen for verifying the same.



5. For activating the Duplicate Check in ISU with HANA Search provider do the following:
   - Navigate to General Settings > Data Quality and Search > Search and Duplicate Check > Configure Duplicate Check for Entity Types.

Note

The configuration should be done for all the entities which are to be enabled for HANA Duplicate Check.

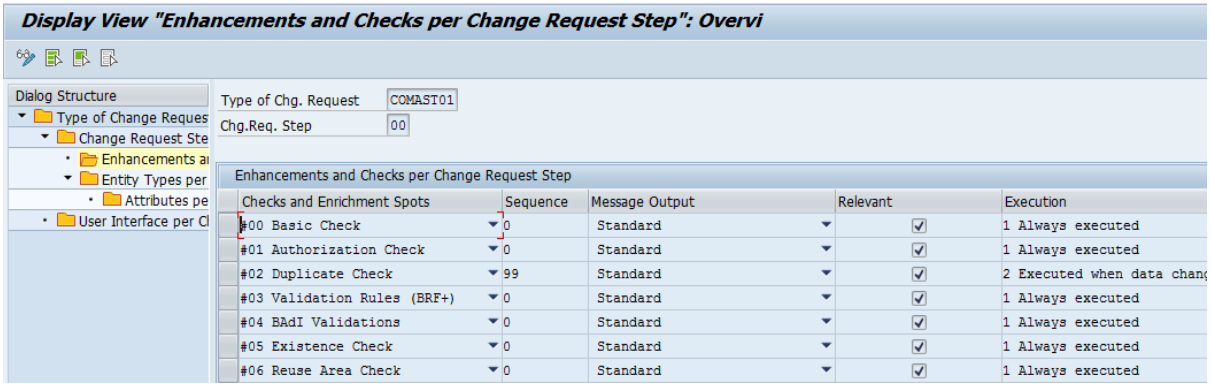
Table for Duplicate Check Mode of Data Model:

Data Model	Entity Type	Search Mode	Low Threshold	High Threshold	Match Profile ID for Duplicate Check	Included Search Help	MP Based UI
U1	CONOBJ	HA	50.0	85.0	MATCH_U1_CONOBG	/UISU/IS_MDG_CONOBJ	U1
U1	DEVLOC	HA	50.0	85.0	MATCH_U1_DEVLOC	/UISU/IS_MDG_DEVLOC	U1
U1	DEVICE	HA	50.0	85.0	MATCH_U1_DEVICE	/UISU/IS_MDG_DEVICE	U1

6. Cross check if the relevant check box for Duplicate check sequence 99 is checked or not.
    - Navigate to General Settings > Process Modelling > Change Requests > Configure Properties of Change Request Step.

Note

The Configuration must be performed for all the create change steps which are to be enabled for HANA Duplicate Check.



The following Match Profiles are available with BC-Set:

Object	Match Profile
Connection Object	MATCH_U1_CONOBJ
Device Location	MATCH_U1_DEVLOC
Device	MATCH_U1_DEVICE

4.9. Verify Remaining Process Modeling Settings

Depending on your company's requirements you might want to adjust and enhance the default change request values loaded in step 2 above.

The following information describes the minimal settings for a basic governance process. For more information about each customizing activity, see the relevant documentation for customizing activity.

4.9.1. Review Change Request Status

1. Review and/or define which status the change requests can have, and which processing options are enabled for those statuses. Optionally, you can add new statuses to be used in the change request types.

For more information, see Customizing for Master Data Governance under > General Settings > Process Modeling > Change Requests > Edit Statuses of Change Requests.

The following status are required for the SAP standard process. You should maintain any the missing ones manually:

Status Value	Description	Permitted Processing
00	To Be Evaluated	Change of Object List
01	To Be Considered and Approved	Change of Object List
02	Changes to Be Executed	Execution of Changes
03	To Be Revised	Change of Object List
04	Final Check to Be Performed	No Processing
05	Final Check Approved	No Processing
06	Final Check Rejected	No Processing
07	Activation Failed	No Processing
08	Approved; to Be Replicated	No Processing
09	Dependent Data to Be Processed/Approved	Execution of Changes
10	To Revise: Perform Changes	Execution of Changes
11	Process Errors After Activation	Execution of Changes
12	Approved, Contact Person to be Processed	No Processing
13	In Business Partner Screening	No Processing
30	To Be Revised with Changes	Execution of Changes
99	No Status Set	No Processing

4.9.2. Check Business Activities

4.9.2.1. Check Business Activities for EAM

Navigate to MDGIMG > General Settings > Process Modelling > Business Activities.

Check that the following business activities are in your system and that they are assigned to the default data model U1.

Equipment Master

1. UEQ1 Create Equipment Master
2. UEQ2 Change Equipment Master
3. UEQ3 Display Equipment Master
4. UEQ6 Mark Equipment Master for Deletion
5. UEQA Mass Update Equipment Master
6. UEQB Import Equipment Master

Functional Location

1. UFL1 Create Functional Location

2. UFL2 Change Functional Location
3. UFL3 Display Functional Location
4. UFL6 Mark Functional Location for Deletion
5. UFLA Mass Change Functional Locations
6. UFLB Import Functional Locations

Material BOM

1. UMB1 Create MBOM
2. UMB2 Process MBOM
3. UMB3 Display MBOM
4. UMB6 Mark MBOM for Deletion
5. UMBA Mass Update MBOM
6. UMBB Import MBOM

Equipment BOM

1. UEB1 Create Equipment BOM
2. UEB2 Process Equipment BOM
3. UEB3 Display Equipment BOM
4. UEB6 Mark Equipment BOM for Deletion
5. UEBA Mass Update Equipment BOM
6. UEBB Import Equipment BOM

Functional Location BOM

1. UFB1 Create Floc BOM
2. UFB2 Process Floc BOM
3. UFB3 Display Floc BOM
4. UFB6 Mark Floc BOM for Deletion
5. UFBA Mass Update Floc BOM
6. UFBB Import Floc BOM

WBS BOM

1. UWB1 Create WBS BOM
2. UWB2 Process WBS BOM
3. UWB3 Display WBS BOM
4. UWB6 Mark WBS BOM for Deletion
5. UWBA Mass Update WBS BOM
6. UWBB Import WBS BOM

Measuring Point

1. UMS1 Create Measuring Point
2. UMS2 Change Measuring Point
3. UMS3 Display Measuring Point

4. UMS6 Mark Measuring Point for Deletion
5. UMSA Mass Update Measuring Point Masters
6. UMSB Import Measuring Point Master

Maintenance Plan

1. UMP1 Create Maintenance Plan
2. UMP2 Change Maintenance Plan
3. UMP3 Display Maintenance Plan
4. UMP6 Mark Maintenance Plan for Deletion
5. UMPA Mass Update Maintenance Plan Masters
6. UMPB Import Maintenance Plan Master

General Task List

1. UTL1 Create General Task List
2. UTL2 Change General Task List
3. UTL3 Display General Task List
4. UTL6 Mark General Task List for Deletion
5. UTLA Mass Update General Task List
6. UTLB Import General Task List

Equipment Task List

1. ETL1 Create Equipment Task List
2. ETL2 Change Equipment Task List
3. ETL3 Display Equipment Task List
4. ETL6 Mark Equipment Task List for Deletion
5. ETLA Mass Change Equipment Task List
6. ETLB Import Equipment Task List

Functional Location Task List

1. FTL1 Create Functional Location Task List
2. FTL2 Change Functional Location Task List
3. FTL3 Display Functional Location Task List
4. FTL6 Mark Functional Location Task List for Deletion
5. FTLA Mass Update Functional Location Task
6. FTLB Import Functional Location Task

Work Center

1. UWC1 Create Work Center
2. UWC2 Process Work Center
3. UWC3 Display Work Center
4. UWC6 Mark Work Center for Deletion
5. UWCA Mass Update Work Center

6. UWCB Import Work Center

Object Networks

1. UON1 Create Object Networks
2. UON2 Process Object Networks
3. UON3 Display Object Networks
4. UON6 Mark Object Networks for Deletion
5. UONA Mass Update Object Networks
6. UONB Import Object Networks

Object Links

1. UOL1 Create Object Links
2. UOL2 Process Object Links
3. UOL3 Display Object Links
4. UOL6 Mark Object Link for Deletion
5. UOLA Mass Update Object Links
6. UOLB Import Object Links

Mixed Multi-Object Change Request (MOCR)

UEAM Mixed Mass Processing

For more information, see Customizing for Master Data Governance under > General Settings > Process Modeling > Business Activities > Create Business Activity.

4.9.2.2. Check Business Activities for IS-U Industry Solution

Navigate to MDGIMG > General Settings > Process Modelling > Business Activities.

Check that the following business activities are in your system and that they are assigned to the default data model U1.

ISU-Connection Object

1. UCO1 Create Connection Object
2. UCO2 Process Connection Object
3. UCO3 Display Connection Object
4. UCO6 Mark Connection Object Master for Deletion
5. UCOA Mass Update Connection Object
6. UCOB Import Connection Object

ISU-Device Location

1. UDL1 Create Device Location
2. UDL2 Process Device Location
3. UDL3 Display Device Location

4. UDL6 Mark Device Location for Deletion
5. UDLA Mass Update Device Location
6. UDLB Import Device Location

ISU-Device

1. UDV1 Create Device
2. UDV2 Process Device
3. UDV3 Display Device
4. UDV6 Mark Device for Deletion
5. UDVA Mass Update Device
6. UDVB Import Device

4.9.3. Verify the Change Request Types

4.9.3.1. Verify the Change Request Types for EAM

1. Create new Change Request types for data model U1 or validate after import using business configuration sets (BC-Sets).

For more information, see Customizing for Master Data Governance under > General Settings > Process Modeling > Change Requests > Create Change Request Type.

The following table shows the proposed Change Request types for data model U1. Only the relevant columns are included.

Change Request Type	Data Model	Description	Single Object	Main Entity Type	Workflow
EQMAST01	U1	Create Equipment	Yes	EQUI	WS54300020
EQMAST02	U1	Change Equipment	Yes	EQUI	WS54300020
EQMAST06	U1	Mark Equipment for Deletion	Yes	EQUI	WS54300020
EQMAST0A	U1	Process Multiple Equipment Masters	No	EQUI	WS54300020
EQMAST0B	U1	Import Equipment Master	No	EQUI	WS54300020
FUNCLO01	U1	Create Functional Location	Yes	FUNCLOC	WS54300020
FUNCLO02	U1	Change Functional Location	Yes	FUNCLOC	WS54300020
FUNCLO06	U1	Delete Functional Location	Yes	FUNCLOC	WS54300020
FUNCLO0A	U1	Process Multiple Functional Locations	No	FUNCLOC	WS54300020
FUNCLO0B	U1	Import Functional Location	No	FUNCLOC	WS54300020
MATBOM01	U1	Create MBOM Bill of Material	Yes	PMBOMHDR	WS54300020

Change Request Type	Data Model	Description	Single Object	Main Entity Type	Workflow
MATBOM02	U1	Change MBOM Bill of Material	Yes	PMBOMHDR	WS54300020
MATBOM06	U1	Delete MBOM Bill of Material	Yes	PMBOMHDR	WS54300020
MATBOM0A	U1	Process Multiple MBOM Bill of Material	No	PMBOMHDR	WS54300020
MATBOM0B	U1	Import MBOM Bill of Material	No	PMBOMHDR	WS54300020
EAMAST0Z	U1	Process Multiple EAM Masters	No		WS54300020
EQBOM01	U1	Create Equipment BOM	Yes	EQBOMHDR	WS54300020
EQBOM02	U1	Change Equipment BOM	Yes	EQBOMHDR	WS54300020
EQBOM06	U1	Delete Equipment BOM	Yes	EQBOMHDR	WS54300020
EQBOM0A	U1	Process Equipment BOM	No	EQBOMHDR	WS54300020
EQBOM0B	U1	Import Equipment BOM	No	EQBOMHDR	WS54300020
FLBOM01	U1	Create Functional Location BOM	Yes	FLBOMHDR	WS54300020
FLBOM02	U1	Change Functional Location BOM	Yes	FLBOMHDR	WS54300020
FLBOM06	U1	Delete Functional Location BOM	Yes	FLBOMHDR	WS54300020
FLBOM0A	U1	Process Functional Location BOM	No	FLBOMHDR	WS54300020
FLBOM0B	U1	Import Functional Location BOM	No	FLBOMHDR	WS54300020
WBSBOM01	U1	Create WBS Bill of Material	Yes	WBSBOMHDR	WS54300020
WBSBOM02	U1	Change WBS Bill of Material	Yes	WBSBOMHDR	WS54300020
WBSBOM06	U1	Delete WBS Bill of Material	Yes	WBSBOMHDR	WS54300020
WBSBOM0A	U1	Process WBS Bill of Material	No	WBSBOMHDR	WS54300020
WBSBOM0B	U1	Import WBS Bill of Material	No	WBSBOMHDR	WS54300020
MEASPT01	U1	Create Measuring Point	Yes	MSPOINT	WS54300020
MEASPT02	U1	Process Measuring Point	Yes	MSPOINT	WS54300020
MEASPT06	U1	Delete Mark Measuring Point	Yes	MSPOINT	WS54300020
MEASPT0A	U1	Process Multiple Measuring Point	No	MSPOINT	WS54300020

Change Request Type	Data Model	Description	Single Object	Main Entity Type	Workflow
MEASPT0B	U1	Import Measuring Point	No	MSPOINT	WS54300020
MPLAN01	U1	Create Maintenance Plan	Yes	MPLAN	WS54300020
MPLAN02	U1	Process Maintenance Plan	Yes	MPLAN	WS54300020
MPLAN06	U1	Delete Mark Maintenance Plan	Yes	MPLAN	WS54300020
MPLAN0A	U1	Process Multiple Maintenance Plan	No	MPLAN	WS54300020
MPLAN0B	U1	Import Maintenance Plan	No	MPLAN	WS54300020
TSLIST01	U1	Create General Task List	Yes	TLGNHDR	WS54300020
TSLIST02	U1	Process General Task List	Yes	TLGNHDR	WS54300020
TSLIST06	U1	Delete Mark General Task List	Yes	TLGNHDR	WS54300020
TSLIST0A	U1	Process Multiple General Task List	No	TLGNHDR	WS54300020
TSLIST0B	U1	Import General Task List	No	TLGNHDR	WS54300020
TLEQ01	U1	Create Equipment Task List	Yes	TLEQHDR	WS54300020
TLEQ02	U1	Process Equipment Task List	Yes	TLEQHDR	WS54300020
TLEQ06	U1	Delete Equipment Mark Task List	Yes	TLEQHDR	WS54300020
TLEQ0A	U1	Process Multiple Equipment Tsk List	No	TLEQHDR	WS54300020
TLEQ0B	U1	Import Equipment Task List	No	TLEQHDR	WS54300020
TLFL01	U1	Create Functional Loc Task List	Yes	TLFLHDR	WS54300020
TLFL02	U1	Process Functional Loc Task List	Yes	TLFLHDR	WS54300020
TLFL06	U1	Delete Functional Loc Mark Task List	Yes	TLFLHDR	WS54300020
TLFL0A	U1	Process Multiple Functional Loc Tsk List	No	TLFLHDR	WS54300020
TLFL0B	U1	Import Functional Loc Task List	No	TLFLHDR	WS54300020
WRKCTR01	U1	Create Work Center	Yes	WORKCNTR	WS54300020
WRKCTR02	U1	Process Work Center	Yes	WORKCNTR	WS54300020
WRKCTR06	U1	Mark Work Center for Deletion	Yes	WORKCNTR	WS54300020

Change Request Type	Data Model	Description	Single Object	Main Entity Type	Workflow
WRKCTR0A	U1	Process Multiple Work Center	No	WORKCNTR	WS54300020
WRKCTR0B	U1	Import Work Center	No	WORKCNTR	WS54300020
OBJLNK01	U1	Create Object Links	Yes	OBJLINK	WS54300020
OBJLNK02	U1	Process Object Links	Yes	OBJLINK	WS54300020
OBJLNK06	U1	Delete Object Links	Yes	OBJLINK	WS54300020
OBJLNK0A	U1	Process Multiple Object Networks	No	OBJLINK	WS54300020
OBJLNK0B	U1	Import Object Networks	No	OBJLINK	WS54300020
OBJNET01	U1	Create Object Networks	Yes	OBJNETWRK	WS54300020
OBJNET02	U1	Process Object Networks	Yes	OBJNETWRK	WS54300020
OBJNET06	U1	Delete Object Networks	Yes	OBJNETWRK	WS54300020
OBJNET0A	U1	Process Multiple Object Networks	No	OBJNETWRK	WS54300020
OBJNET0B	U1	Import Object Networks	No	OBJNETWRK	WS54300020
EQSERIAL	U1	Create Equipment Master (Serialization)	Yes	EQUI	WS60800086

The standard workflow template used by Utopia EAM Solutions for MDG is WS54300020. This template is a simple workflow which does not use BRF+ decision tables.

Refer to the workflow template in section on Workflow Template WS54300020.
The following settings should exist in the substructures of the Change Request types:

Equipment Master

- EQMAST01
  - Entity type: DRADEQUI, EQUI, EQUIADDRN
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Equipment Master (UEQ1)
  - Service Level Agreement for Change Request Types: <leave empty>

- EQMAST02
  - Same as for EQMAST01
  - Business Activity: Change Equipment Master (UEQ2)

- EQMAST06
  - Same as for EQMAST01
  - Business Activity: Mark Equipment Master for Deletion (UEQ6)

- EQMAST0A
  - Same as for EQMAST01

    - Business Activity: Process Multiple Equipment Masters (UEQA)

- EQMAST0B
    - Same as for EQMAST01
    - Business Activity: Import Equipment Master (UEQB)
- EQSERIAL
    - Same as for EQMAST01
    - Business Activity: Import Equipment Master (UEQB)

Functional Location

- FUNCLO01
    - Entity type: DRADFLOC, FUNCLOC, FUNCLOCAN
    - UI Config <leave empty>
    - Msg. Output: Standard
    - Business Activity: Create Functional Location (UFL1)
    - Service Level Agreement for Change Request Types: <leave empty>

- FUNCLO02
    - Same as for FUNCLO01
    - Business Activity: Change Functional Location (UFL2)

- FUNCLO06
    - Same as for FUNCLO01
    - Business Activity: Mark Functional Location for Deletion (UFL6)

- FUNCLO0A
    - Same as for FUNCLO01
    - Business Activity: Process Multiple Functional Locations (UFLA)

- FUNCLO0B
    - Same as for FUNCLO01
    - Business Activity: Import Functional Location (UFLB)

Material BOM

- MATBOM01
    - Entity type: DRADMBOM, PMBOMHDR
    - UI Config <leave empty>
    - Msg. Output: Standard
    - Business Activity: Create MBOM (UMB1)
    - Service Level Agreement for Change Request Types: <leave empty>

- MATBOM02
    - Same as for MATBOM01
    - Business Activity: Change MBOM (UMB2)

- MATBOM06
    - Same as for MATBOM01
    - Business Activity: Mark MBOM for Deletion (UMB6)

- MATBOM0A

- Same as for MATBOM01
- Business Activity: Mass Update MBOM (UMBA)

- MATBOM0B
  - Same as for MATBOM01
  - Business Activity: Import MBOM (UMBB)

Equipment BOM

- EQBOM01
  - Entity type: EQBOMHDR
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Equipment BOM (UEB1)
  - Service Level Agreement for Change Request Types: <leave empty>

- EQBOM02
  - Same as for EQBOM01
  - Business Activity: Process Multiple Object Network (UEB2)

- EQBOM06
  - Same as for EQBOM01
  - Business Activity: Process Multiple Object Network (UEB6)

- EQBOM0A
  - Same as for EQBOM01
  - Business Activity: Process Multiple Object Network (UEBA)

- EQBOM0B
  - Same as for EQBOM01
  - Business Activity: Process Multiple Object Network (UEBB)

Functional Location BOM

- FLBOM01
  - Entity type: FLBOMHDR
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Equipment BOM (UFB1)
  - Service Level Agreement for Change Request Types: <leave empty>

- FLBOM02
  - Same as for FLBOM01
  - Business Activity: Process Multiple Object Network (UFB2)

- FLBOM06
  - Same as for FLBOM01
  - Business Activity: Process Multiple Object Network (UFB6)

- FLBOM0A
  - Same as for FLBOM01
  - Business Activity: Process Multiple Object Network (UFBA)

- FLBOM0B
  - Same as for FLBOM01
  - Business Activity: Process Multiple Object Network (UFBB)

WBS BOM

- WBSBOM01
  - Entity type: WBSBOMHDR
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Equipment BOM (UWB1)
  - Service Level Agreement for Change Request Types: <leave empty>

- WBSBOM02
  - Same as for WBSBOM01
  - Business Activity: Process Multiple Object Network (UWB2)

- WBSBOM06
  - Same as for WBSBOM01
  - Business Activity: Process Multiple Object Network (UWB6)

- WBSBOM0A
  - Same as for WBSBOM01
  - Business Activity: Process Multiple Object Network (UWBA)

- WBSBOM0B
  - Same as for WBSBOM01
  - Business Activity: Process Multiple Object Network (UWBB)

Process Multiple EAM Masters

- EAMAST0Z
  - Entity type: DRADEQUI, DRADFLOC, DRADMBOM, DRADMSPT, DRADOL, DRADTLEQ, DRADTLFL, DRADTLGN, EQUI, FUNCLOC, PMBOMHDR, MPLAN, MSPOINT, TLEQHDR, TLFLHDR, TLGNHDR, WORKCNTR, OBJLINK, OBJNETWRK, EQUIADDRN, FUNCLOCAN
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Mass Update Different EAM Objects (UEAM)
  - Service Level Agreement for Change Request Types: <leave empty>

Measurement Point

- MEASPT01
  - Entity type: DRADMSPT, MSPOINT
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Measurement Point (UMS1)
  - Service Level Agreement for Change Request Types: <leave empty>

- MEASPT02
  - Same as for MEASPTT01

- Business Activity: Change Measurement Point (UMS2)

- MEASPT06
  - Same as for MEASPT01
  - Business Activity: Mark Measurement Point for Deletion (UMS6)

- MEASPT0A
  - Same as for MEASPT01
  - Business Activity: Process Multiple Measurement Points (UMSA)

- MEASPT0B
  - Same as for MEASPT01
  - Business Activity: Import Measurement Point (UMSB)

Maintenance Plan

- MPLAN01
  - Entity type: MPLAN
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Maintenance Plan (UMP1)
  - Service Level Agreement for Change Request Types: <leave empty>

- MPLAN02
  - Same as for MPLAN01
  - Business Activity: Change Maintenance Plan (UMP2)

- MPLAN06
  - Same as for MPLAN01
  - Business Activity: Mark Maintenance Plan for Deletion (UMP6)

- MPLAN0A
  - Same as for MPLAN01
  - Business Activity: Process Multiple Maintenance Plan (UMPA)

- MPLAN0B
  - Same as for MPLAN01
  - Business Activity: Import Maintenance Plan (UMPB)

General Task List

- TSLIST01
  - Entity type: DRADTLGN, TLGNHDR
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create General Task List Master (UTL1)
  - Service Level Agreement for Change Request Types: <leave empty>

- TSLIST02
  - Same as for TSLIST01

- Business Activity: Change General Task List (UTL2)

- TSLIST06
  - Same as for TSLIST01
  - Business Activity: Mark General Task List for Deletion (UTL6)

- TSLIST0A
  - Same as for TSLIST01
  - Business Activity: Process Multiple General Task List (UTLA)

- TSLIST0B
  - Same as for TSLIST01
  - Business Activity: Import General Task List (UTLB)

Equipment Task List

- TLEQ01
  - Entity type: DRADTLEQ, TLEQHDR
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Equipment Task List (ETL1)
  - Service Level Agreement for Change Request Types: <leave empty>

- TLEQ02
  - Same as for TLEQ01
  - Business Activity: Change Equipment Task List (ETL2)

- TLEQ06
  - Same as for TLEQ01
  - Business Activity: Mark Equipment Mark Task List for Deletion (ETL6)

- TLEQ0A
  - Same as for TLEQ01
  - Business Activity: Process Multiple Equipment Task List (ETLA)

- TLEQ0B
  - Same as for TLEQ01
  - Business Activity: Import Equipment Task List (ETLB)

Functional Location Task List

- TLFL01
  - Entity type: DRADTLFL, TLFLHDR
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Functional Location Task List (FTL1)
  - Service Level Agreement for Change Request Types: <leave empty>

- TLFL02
  - Same as for TLFL01
  - Business Activity: Change Functional Location Task List (FTL2)

- TLFL06
  - Same as for TLFL01
  - Business Activity: Active or Inactive Functional Location Task List (FTL6)

- TLFL0A
  - Same as for TLFL01
  - Business Activity: Process Multiple Functional Location Task List (FTLA)

- TLFL0B
  - Same as for TLFL01
  - Business Activity: Import Functional Location Task List (FTLB)

Work Center

- WRKCTR01
  - Entity type: WORKCNTR
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Work Center (UWC1)
  - Service Level Agreement for Change Request Types: <leave empty>

- WRKCTR02
  - Same as for WRKCTR01
  - Business Activity: Process Work Center (UWC2)

- WRKCTR06
  - Same as for WRKCTR01
  - Business Activity: Mark Work Center for Deletion (UWC6)

- WRKCTR0A
  - Same as for WRKCTR01
  - Business Activity: Process Multiple Work Center (UWCA)

- WRKCTR0B
  - Same as for WRKCTR01

Object Links

- OBJLNK01
  - Entity type: DRADOL, OBJLINK
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Object Link (UOL1)
  - Service Level Agreement for Change Request Types: <leave empty>

- OBJLNK02
  - Same as for OBJLNK01
  - Business Activity: Process Multiple Object Link (UOL2)

- OBJLNK06
  - Same as for OBJLNK01
  - Business Activity: Process Multiple Object Link (UOL6)

- OBJLNK0A
  - Same as for OBJLNK01
  - Business Activity: Process Multiple Object Link (UOLA)

- OBJLNK0B
  - Same as for OBJLNK01
  - Business Activity: Process Multiple Object Link (UOLB)

Object Networks

- OBJNET01
  - Entity type: OBJNETWRK
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Object Network (UON1)
  - Service Level Agreement for Change Request Types: <leave empty>

- OBJNET02
  - Same as for OBJNET01
  - Business Activity: Process Multiple Object Network (UON2)

- OBJNET06
  - Same as for OBJNET01
  - Business Activity: Process Multiple Object Network (UON6)

- OBJNET0A
  - Same as for OBJNET01
  - Business Activity: Process Multiple Object Network (UONA)

- OBJNET0B
  - Same as for OBJNET01
  - Business Activity: Process Multiple Object Network (UONB)

4.9.3.2. Verify the Change Request Types for IS-U Industry Solution

1. Create new Change Request types for data model U1 or validate after import using business configuration sets (BC-Sets).

For more information, see Customizing for Master Data Governance under > General Settings > Process Modeling > Change Requests > Create Change Request Type.

The following table shows the proposed Change Request types for data model U1. Only the relevant columns are included.

Change Request Type	Data Model	Description	Single Object	Main Entity Type	Workflow
COMAST01	U1	Create Connection Object	Yes	CONOBJ	WS54300020
COMAST02	U1	Change Connection Object	Yes	CONOBJ	WS54300020
COMAST0A	U1	Process Multiple Connection Obj Masters	No	CONOBJ	WS54300020

Change Request Type	Data Model	Description	Single Object	Main Entity Type	Workflow
COMAST0B	U1	Import Connection Object Master	No	CONOBJ	WS54300020
DLMAST01	U1	Create Device Location	Yes	DEVLOC	WS54300020
DLMAST02	U1	Change Device Location	Yes	DEVLOC	WS54300020
DLMAST06	U1	Delete Mark Device Location Master	Yes	DEVLOC	WS54300020
DLMAST0A	U1	Process Multiple Device Location Masters	No	DEVLOC	WS54300020
DLMAST0B	U1	Import Device Location Master	No	DEVLOC	WS54300020
DVMAST01	U1	Create Device Master	Yes	DEVICE	WS54300020
DVMAST02	U1	Change Device Master	Yes	DEVICE	WS54300020
DVMAST06	U1	Delete Mark Device Master	Yes	DEVICE	WS54300020
DVMAST0A	U1	Process Multiple Device Masters	No	DEVICE	WS54300020
DVMAST0B	U1	Import Device Master	No	DEVICE	WS54300020

The standard workflow template used by Utopia EAM Solutions for MDG is WS54300020. This template is a simple workflow which does not use BRF+ decision tables.

Refer to the workflow template in section on Workflow Template WS54300020.
The following settings should exist in the substructures of the Change Request types:

Connection Object

- COMAST01
  - Entity type: CONOBJ
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Connection Object (UCO1)
  - Service Level Agreement for Change Request Types: <leave empty>

- COMAST02
  - Same as for COMAST01
  - Business Activity: Change Connection Object (UCO2)

- COMAST0A
  - Same as for COMAST01
  - Business Activity: Process Multiple Connection Object (UCOA)

- COMAST06
  - Same as for COMAST01
  - Business Activity: Process Multiple Connection Object (UCO6)

- COMAST0B
  - Same as for COMAST01
  - Business Activity: Import Connection Object (UCOB)

Device Location

- DLMAST01
  - Entity type: DEVLOC
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Connection Object (UDL1)
  - Service Level Agreement for Change Request Types: <leave empty>

- DLMAST02
  - Same as for DLMAST01
  - Business Activity: Change Connection Object (UDL2)

- DLMAST0A
  - Same as for DLMAST01
  - Business Activity: Process Multiple Connection Object (UDLA)

- DLMAST06
  - Same as for DLMAST01
  - Business Activity: Process Multiple Connection Object (UDL6)

- DLMAST0B
  - Same as for DLMAST01
  - Business Activity: Import Connection Object (UDLB)

Device

- DVMAST01
  - Entity type: DEVICE
  - UI Config <leave empty>
  - Msg. Output: Standard
  - Business Activity: Create Connection Object (UDV1)
  - Service Level Agreement for Change Request Types: <leave empty>

- DVMAST02
  - Same as for DVMAST01
  - Business Activity: Change Connection Object (UDV2)

- DVMAST0A
  - Same as for DVMAST01
  - Business Activity: Process Multiple Connection Object (UDVA)

- DVMAST06
  - Same as for DVMAST01
  - Business Activity: Process Multiple Connection Object (UDV6)

- DVMAST0B
  - Same as for DVMAST01
  - Business Activity: Import Connection Object (UDVB)

4.10. Configure Workflow Tasks

As a prerequisite, you have made the necessary general settings for workflows and defined the organizational plan in Customizing for SAP NetWeaver > Application Server > Business Management > SAP Business Workflow > Maintain Standard settings. Alternatively, run t-code SWU3.

Ensure that the active type linkages for Change Request (BUS2250) are set correctly. Follow the instructions in Customizing for MDG under > General Settings > Process Modeling > Workflow > Activate Type Linkage.

For object type BUS2250 check that the Type Linkage Active indicator is active for the events CREATED, ACTIVATED, and ROLLED_BACK.

If entries do not exist, add them with the following values:

- Object Category: BOR Object Type
- Object Type: 2250

Event	CREATED	ACTIVATED	ROLLED_BACK
Receiver Type		ACTIVATED	ROLLED_BACK
Receiver Call	Function Module	Function Module	Function Module
Receiver Function Module	SWW_WI_CREATE_VIA_EVENT_IBF	MDG_BS_CC_CREQUEST_FINALIZED	MDG_BS_CC_CREQUEST_FINALIZED
Check Function Module			
Receiver Type Function Module	USMD_WF_RECEIVER_TYPE		
Destination of Receiver			
All others	Default value	Default value	Default value

In addition, check that the Enable Event Queue indicator is active for the events ACTIVATED, and ROLLED_BACK, but not for the event CREATED.

The following result is displayed:

Object Category	Obj. Type	Event	Receiver Typer	Type linkage	Enable event
BOR	BUS2250	ACTIVATED	ACTIVATED	X	X
BOR	BUS2250	CREATED		X	
BOR	BUS2250	ROLLED_BACK	ROLLED_BACK	X	X

The standard workflow template used by Master Data Governance for EAM is WS54300020.

Optionally, the rule-based workflow can be used where the template is WS60800086.

To ensure the general assignment of processors using the workflow, run the following activity in Customizing for Master Data Governance under > General Settings > Process Modeling > Workflow > Configure Workflow Tasks.

- Go to application component CA-MDG-AF and choose Assign Agents.
- Set the Dialog Processing (TS 60807954) task as a General Task if it not already set. To do so, select the task, choose Attributes and change it to General Task.
- Set the Process Change Request (TS 75707943) task as a General Task if it not already set. To do so, select the task, choose Attributes and change it to General Task.

- Set the Approve Change Request (TS 75707980) task as a General Task if it not already set. To do so, select the task, choose Attributes and change it to General Task.
- Set the Revise Change Request (TS 75707981) task as a General Task if it not already set. To do so, select the task, choose Attributes and change it to General Task.

The EAM Solution for MDG by Utopia provides a set of Agent Determination entries for the standard workflow template WS54300020. You can assign one User ID (type “US”) to each task in the workflow which requires agent determination.

Both SAP and Utopia recommend using the Organizational Management functionality which offers more flexibility and simplifies maintenance if allowed in the productive system. Depending upon the Org Structure or Single User, manually assign any type of Organizational Unit, e.g. Positions (“S”) to the CR Type and Step.

Master Data Governance under > General Settings > Process Modeling > Workflow > Other MDG Workflows > Assign Processor to Change Request Step Number (Simple Workflow).

Example: You make the entries listed below to determine that change request type 01 has the following properties: (a) evaluation is done by organizational units GROUPACC, GLACC, and GROUPMD; (b) approval is done by user X; (c) changes are executed by organizational unit GROUPMD; and (d) the final approval is done by user Y:

Step	Description	Object Type	Processor ID
1	Evaluation	O	GROUPACC
1	Evaluation	O	GLACC
1	Evaluation	O	GROUPMD
2	Consider and Approve	US	X
3	Edit	O	GROUPMD
4	Approval	US	Y

Hint: Usage of MDG-EAM by Utopia together with Extended ECM by OpenText™.

If you have defined your own workflow templates, ensure that for the activation step the improved task TS60808002 is used as well.

4.11. Adjust Data Model U1 BRF+ Objects

The OOTB (Out of the Box) core validations and derivations for Equipment Master has been migrated from BRF+ to the Access Class as of release 710-SP02.

Note

For a fresh installation, do not perform any steps related to BRF+.

If you are upgrading from 710-SP01, there are several options available depending on your situation:

There are no custom business rules that have been added for Equipment Master, Functional Location, or MBOM. You can perform the following in this scenario:

- Using t-code BRF+ or BRFPUS:
  - Delete Catalog FMDM_MODEL_U1
  - Delete Application FMDM_MODEL_U1
- Create a Customizing Transport Request
  - Using t-code USMD_RULE:
    - Select Data Model U1 when prompted

- Select Transport Request created in step 1.2. This will recreate a new clean Application FMDM_MODEL_U1 for any client-specific business rules.

There are custom business rules that have been added for Equipment Master, Functional Location, or MBOM. In this case, you can either disable the OOTB rulesets or delete the rulesets and associated objects (rules, DB lookups, etc.).

4.12. Setup the Rule-Based Workflow

NA

4.13. Setup of Data Replication

Note

In the following sections, there are multiple references to Business Object Types (BO Types), Object ID Types, Messages, etc. which correspond to the various EAM Objects included within the EAM Solutions for MDG by Utopia domain. For ease of reference, each of the main entities within the domain is listed.

4.13.1. EAM Business Object Types and Messages

Element	Equipment: ID (Description)	Functional Location: ID (Description)	MBOM Bill of Material: ID (Description)	Measuring Points: ID (Description)	Maintenance Plan: ID (Description)
Object Type	183 (Equipment)	185 (Installation Point)	237 Bill of Material	1230	1223
Object ID Type	451 Individual Material ID (ERP)	450 Installation Point ID (ERP)	964 Bill of Material Internal ID (ERP)	975	ERP_0008
Messages	/UGI3/EQUIPMENT_DATA	/UGI3/EAM_FUNC_LOC	BOMMAT (message type)	/UGI3/MEASURINGPOINT	/UGI3/MAINTENANCE_PLAN
IDoc (Release / Version)	/UGI3/EQUIPMENT_DATA03 (Version EAM 9.2)	/UGI3/EAM_FUNC_LOC04 (Version EAM 9.2)	BOMMAT07 (Version EAM 9.1)	/UGI3/MEASURINGPOINT_CR01	/UGI3/MAINTENANCE_PLAN_02 (Version EAM 9.1)
Filter Object	/UGI/EQUI (Equipment)	/UGI/FLOC (Functional Location)	/UGI/MBOM (MBOM Bill of Material)	/UGI/MSP	/UGI/MPMI
Outbound Implementation	/UGI/I_EM (Equipment via IDoc (MDG))	/UGI/I_FL (Functional Location via IDoc (MDG))	/UGI/MBOM (Outbound Implementation for MBOM Bill of Material)	/UGI/I_MSP	/UGI/I_MP

Element	Equipment: ID (Description)	Functional Location: ID (Description)	MBOM Bill of Material: ID (Description)	Measuring Points: ID (Description)	Maintenance Plan: ID (Description)
Outbound Implementation Class	/UGI/CL_MDG_EAM_IDOC_DRF_EM	/UGI/CL_MDG_EAM_IDOC_DRF_FL	/UGI/CL_MDG_BOM_IDOC_DRF	/UGI/CL_MDG_EAM_IDOC_DRF_MSP	/UGI/CL_MDG_EAM_MPMI_IDOC_DRF
Key Structure	COMES_S_DRF_EQU_KEY	MDG_BS_FUNCLOC_KEY_TPLNR	MDG_BS_BOM_KEY_STNUM	MDG_BS_MEASDEV_KEY_IMRC_POINT	MDG_BS_MPLAN_KEY_WARPL

Element	General Task List: ID (Description)	Equipment Task List: ID (Description)	Functional Location Task List: ID (Description)
Object Type	/UGI/TL (General Task List)	/UGI/TLEQ (Equipment Task List)	/UGI/TLFL (Functional Location Task List)
Object ID Type	/UGI/TL_ID (Equipment Task List ID)	/UGI/TLEQ_ID (Equipment Task List ID)	/UGI/TLFL_ID (Functional Location Task List ID)
Messages	/UGI3/EAM_TASKLIST_01	/UGI3/EAM_TASKLIST_01	/UGI3/EAM_TASKLIST_01
IDoc(Release/Version)	/UGI3/EAM_TASKLIST_02 (Version EAM 9.1)	/UGI3/EAM_TASKLIST_02 (Version EAM 9.1)	/UGI3/EAM_TASKLIST_02 (Version EAM 9.1)
Filter Object	/UGI/TL (General Task List)	/UGI/TLEQ (Equipment Task List)	/UGI/TLFL (Functional Location Task List)
Outbound Implementation	/UGI/I_TL (General Task List via IDoc (MDG))	/UGI/I_TLE (Equipment Task List via IDoc (MDG))	/UGI/I_TLF (Functional location Task List via IDoc (MDG))
Outbound Implementation Class	/UGI/CL_MDG_EAM_IDOC_DRF_TL	/UGI/CL_MDG_EAM_IDOC_DRF_TL	/UGI/CL_MDG_EAM_IDOC_DRF_TL
Key Structure	/UGI/_S_U1_DRF_TASKLIST	/UGI/_S_U1_DRF_TASKLIST	/UGI/_S_U1_DRF_TASKLIST

Element	Work Center: ID (Description)	Object Links: ID (Description)	Object Networks: ID (Description)
Object Type	493 (Work Center)	DRF_0039 (Object Link)	DRF_0038 (Object Networks)

Element	Work Center: ID (Description)	Object Links: ID (Description)	Object Networks: ID (Description)
Object ID Type	462 (ERP)	ERP_0018 (Object Link ID)	ERP_0017 (Object Networks ID)
Messages	/UGI3/WRKCNTR	/UGI3/OBJECTLINK	/UGI3/OBJNETWORK
IDoc (Release/Version)	/UGI3/WRKCNTR02 (Version EAM 9.1)	/UGI3/OBJECTLINK_01	/UGI3/EAM_OBJLINKNETWORK_01, /UGI3/EAM_NETWORKEVT_01
Filter Object	/UGI/WC	/UGI/OBJL	/UGI/NETID
Outbound Implementation	/UGI/WRKCN	/UGI/I_OL	/UGI/I_ON
Outbound Implementation Class	/UGI/CL_MDG_EAM_IDOC_DRF_WCTR	/UGI/CL_MDG_EAM_IDOC_DRF_OL	/UGI/CL_MDG_EAM_OBJNET_DRF
Key Structure	COMES_S_DRF_WORKCENTER_KEY	EAML_S_OBJ_LNK_ID	EAML_S_NETID

Element	EQ BOM: ID (Description)	FL BOM: ID (Description)	WBS BOM: ID (Description)
Object Type	1345 (EQ BOM)	DRF_0013 (FL BOM)	/UGI/WBSBM (WBS BOM)
Object ID Type	966	972	/UGI/WBSBOM_ID
Messages	/UGI3/BOMEQ	/UGI3/BOMFL	/UGI3/BOMWBS
IDoc (Release/Version)	/UGI3/BOMEQU01	/UGI3/BOMTPL01	/UGI3//UGI3/BOMWBS01
Filter Object	/UGI/EQBOM	/UGI/FLBOM	/UGI/WBBOM
Outbound Implementation	/UGI/EQBOM	/UGI/FLBOM	/UGI/WBBOM
Outbound Implementation Class	/UGI/CL_MDG_BOM_IDOC_DRF	/UGI/CL_MDG_BOM_IDOC_DRF	/UGI/CL_MDG_BOM_IDOC_DRF
Key Structure	MDG_BS_BOM_KEY_STNUM	MDG_BS_BOM_KEY_STNUM	MDG_BS_BOM_KEY_STNUM

Element	Connection Object	Device Location	Device
Object Type	/UISU/CO	/UISU/DL	/UISU/DV
Object ID Type	/UISU/CO	/UISU/DL	/UISU/DV

Element	Connection Object	Device Location	Device
Messages	/UGI3/EAM_FUNC_LOC	/UGI3/EAM_FUNC_LOC	/UGI3/EQUIPMENT_DATA
IDoc (Release/Version)	/UGI3/EAM_ISU_CONOBJ01	/UGI3/EAM_ISU_DEVLOC01	/UGI3/EAM_ISU_DEVICE01
Filter Object	/UISU/CON	/UISU/DEVL	/UISU/DEVV
Outbound Implementation	/UISU/I_CO	/UISU/I_DL	/UISU/I_DV
Outbound Implementation Class	/UISU/CL_MES_DRF_CO_EXPL_FILT	/UISU/CL_MES_DRF_DL_EXPL_FILT	/UISU/CL_MES_DRF_DV_EXPL_FILT
Key Structure	/UISU/COMES_S_DRF_CONOBJ_FILT	/UISU/COMES_S_DRF_DEVLOC_FILT	/UISU/COMES_S_DRF_DEVICE_FILT

For EAM Solutions by Utopia you have two options for replicating data from the MDG hub to the connected systems and clients:

1. Setup Data Replication Using ALE
2. Setup Data Replication Using ALE with DRF

For more information, see in Customizing under > Application Server > IDoc Interface / Application Link Enabling (ALE) > SAP Business Workflow.

4.13.2. Setup Data Replication Using ALE

The following process briefly describes the minimal settings required for the main message types of the EAM Object.

- Refer Table for EAM objects
- Refer Table for IS-U Industry Solution

1. Verify logical systems

   Run t-code SALE and choose > Basic Settings > Logical Systems. Both clients (source and target) need to be defined as logical systems and need to be assigned to the relevant clients.

2. Check communication

   Run t-code SALE and choose > Communication > Create RFC Connections. The target partner system must be defined here as an ABAP connection with a connection type of 3 and with same name as the target logical system. Perform a connection test.

   Define an ALE tRFC port using t-code WE21. Created port will use the RFC connection created in the earlier step.

3. Maintain distribution model

Run t-code SALE (Display ALE Customizing) and choose > Modeling and Implementing Business Processes > Maintain Distribution Model and Distribute Views. Alternatively, run t-code BD64 (Maintenance of Distribution Model).

The related message types should be available if the /UGI3/ package is installed and BC-Set /UGI3/EAM_IDOC_INB_PROCESSCODE" was activated successfully.

- In change mode, create a new model.

4. Choose the Create Model View pushbutton. Enter a short text and a technical name.
   For each of the active object types choose the Add Message Type pushbutton for the newly created model. Enter names for the logical source and destination systems and choose the related message type:

For EAM:

Object Type	ALE Message Type
Equipment	/UGI3/EQUIPMENT_DATA
Functional Location	/UGI3/EAM_FUNC_LOC
Measuring Point	/UGI3/MEASURINGPOINT
Maintenance Plan	/UGI3/MAINTENANCE_PLAN
Maintenance Item	/UGI3/MAINTENANCE_ITEM
Maintenance BOM	BOMMAT
Functional Location BOM	/UGI3/BOMFL
Equipment BOM	/UGI3/BOMEQ
WBS BOM	/UGI3/BOMWBS
Work Center	/UGI3/WRKCNTR
Task List	/UGI3/EAM_TASKLIST_01
Object Link	/UGI3/OBJECTLINK
Object Network	/UGI3/OBJNETWORK
Object Links Network event ID	/UGI3/NETWORKEVTID

For IS-U Industry Solution:

Object Type	ALE Message Type
ISU Connection Object	/UGI3/EAM_FUNC_LOC
ISU Device Location	/UGI3/EAM_FUNC_LOC
ISU Device	/UGI3/EQUIPMENT_DATA

If you use the classification for any of the EAM object types in EAM Solutions by Utopia, then add one additional message type as well that is reused to distribute the class assignment data.

Object Type	ALE Message Type
1 message type for all classification-relevant	CLFMAS

Note

For the distribution of the classes and characteristics, proceed according to the guides available for this topic.

If the Linear Asset Management (LAM) functionality is activated in Utopia EAM Solutions, then add one additional message type that is reused to distribute the LAM data:

Object Type	ALE Message Type
1 message type for all LAM-relevant	/UGI3/LAMCLF

If you use the address for Equipment or Functional Location in EAM Solutions by Utopia, then add one additional message type as well that is reused to distribute the Address data.

Object Type	ALE Message Type
1 message type for all Address	ADRMAS

Note

If partner profiles are getting generated through t-code BD64, Add BAPI to required distribution model Object name as "AddressOrg".

Method name as "SaveReplica".

If you use the Material Serialization for Equipment in EAM Solutions by Utopia, configure an additional message type.

Object Type	ALE Message Type
1 message type for Equipment Serialization	/UGI3/EQUI_SERIAL_DATA

5. Create partner profile
   a. Run t-code SALE and choose Modeling and Implementing Business Processes > Partner Profiles > Generate Partner Profiles. Alternatively, run t-code BD82. If there is issue in generating partner profile through BD82 then manually add partner profile through t-code WE20.
   b. Select the newly created model and in the Partner System field, enter the logical destination system.
   c. Enter the ALE-User (the default value is ALEREMOTE) and the following values and execute.

Field	Value
Version	3
Pack Size	100
Output Mode	Pass IDoc immediately
Inb. Parameters: Processing	Trigger Immediately

   d. To verify your settings, run transaction WE20 and from the Partner Profiles menu, choose Partner Type LS. Verify that Partner type LS is the logical destination system.
   e. In the detail screen, the chosen message types should appear.
6. Distribute model view to receiving system.
   a. Run t-code SALE and choose > Modeling and Implementing Business Processes > Maintain Distribution Model and Distribute Views. Alternatively, run t-code BD64.
   b. Select the new model and choose > Edit > Model view > Distribute.
   c. Verify that the correct receiving system is marked and choose Enter.
   d. Verify within the receiving system that the model view was created.
7. Create partner profile (in receiving client).

a. Run t-code SALE and choose > Modeling and Implementing Business Processes > Partner Profiles > Generate Partner Profiles. Alternatively, run t-code BD82. If there is issue in generating partner profile through BD82 then manually add partner profile through t-code WE20.

b. Select the distributed model.

c. Enter the ALE-User, and the following values, and execute.

Field	Value
Version	3
Pack Size	100
Output Mode	Pass IDoc immediately
Inb. Parameters: Processing	Trigger Immediately

d. If the protocol contains the error Port could not be created this can be ignored. If you get warning “Inb. Parameters Process code created with BAPP”, check that the correct process code is being used. To do this, either click on the message or run t-code WE20 on the target system and choose > LS Partner Type (which corresponds to the MDG Hub system) > Inbound Parameters > select <Message Type> Detail Screen Inbound Parameter ( ) Check that the parameter Process Code is as follows for the associated message type:

Message	Process Code
/UGI3/EQUIPMENT_DATA	/UGI3/EQUI
/UGI3/EAM_FUNC_LOC	/UGI3/FLOC
BOMMAT	BOMM
/UGI3/MEASURINGPOINT	/UGI3/MDG_MSP
/UGI3/MAINTENANCE_PLAN	/UGI3/MPMI
/UGI3/MAINTENANCE_ITEM	/UGI3/MITEM
/UGI3/WRKCNTR	/UGI3/WC
/UGI3/EAM_TASKLIST_01	/UGI3/EAM_TL
/UGI3/OBJECTLINK	/UGI3/OBJLNK
/UGI3/OBJNETWORK	/UGI3/NETWR
/UGI3/NETWORKEVTID	/UGI3/EVTID
/UGI3/BOMEQ	/UGI3/BOMEQ
/UGI3/BOMFL	/UGI3/BOMFL
/UGI3/BOMWBS	/UGI3/BOMWBS

Note

If you use the classification for any of the EAM object types in EAM Solutions by Utopia, then add the inbound message type as well and the following process code.

Message	Process Code

CLFMAS	CLFM

If the Linear Asset Management (LAM) functionality is activated and LAM classification is used in Utopia EAM Solutions, then add the inbound message type and the following process code.

Message	Process Code
/UGI3/LAMCLF	/UGI3/LAM

If you use the Address for any of the Equipment or Functional Location object types in EAM Solutions by Utopia, then add the inbound message type as well and the following process code.

Message	Process Code
ADRMAS	BAPI

If you use the Material Serialization functionality for Equipment object in EAM Solutions by Utopia, add the inbound message type as well and the following process code.

Message	Process Code
/UGI3/EQUI_SERIAL_DATA	/UGI/EQUI_SER

Note

In the Configuration Activity Define Technical Settings for Business Systems SAP recommends that you select the checkbox Status System Filter for the corresponding business object. This ensures that if an object instance was previously sent to a target system, it continues to be sent in the future, independent of filter settings.

Validate and Perform the following steps for adding ALE attributes for Equipment Serialization Inbound FM:

a. Go to t-code SM30,

b. Enter name as V_TBD51

c. Populate FM name as /UGI/IDOC_EQUI_SERI_CR_CREATE and Input as 1 and save entries.

4.13.3. Setup Data Replication Using ALE with DRF

In Master Data Governance for the EAM Objects, the replication of master data from MDG Hub to connected client systems can be scheduled, triggered, and monitored using the Data Replication Framework (DRF) in concert with the ALE.

Note

If you are using ALE and DRF together to replicate EAM Objects you can improve performance by deselecting the change pointers for the corresponding message type.

You can do this in the Activate Change Pointers for Message Types configuration activity. You should only do this if all your MDG systems are integrated using ALE and DRF together. If you use ALE without DRF in one or more connected systems do not disable the change pointers.

The following customizing is relevant for data replication:

1. ALE (Refer section on Setup Data Replication Using ALE)
2. Key Mapping (Refer section on Key Mapping)
3. ALE Audit (Refer section on Customizing for ALE Audit)
4. Data Replication Framework (Refer section on DRF)

Note

Key Mapping is always required for Maintenance Item

The following process outlines the steps required to perform the customizing for the above points from 1 to 3.

4.13.4. Customizing for Data Replication Framework (DRF)

4.13.4.1. Data Replication Framework for EAM

Use the following steps to customize DRF:

1. Use t-code DRFIMG to check if the filter objects below have been defined. Select > Enhance Default Settings for Outbound Implementation > Define Filter Objects to view the filter object definitions.

Filter Object	Table	Assign Filter	Filter Type	General Filter Parameter	Filter Class
/UGI/EQUI	EQUI	10	2	COMES_S_DRF_EQU_FILT_ALL	/UGI/CL_MES_DRF_EQ_EXPL_FILT
/UGI/FLOC	IFLOT	10	2	/UGI/COMES_S_DRF_FUNCLOC_FILT	/UGI/CL_MES_DRF_FLOC_EXPL_FILT
/UGI/MBOM	MAST	82	2	/UGI/_S_U1_DRF_PMBOMHDR	/UGI/CL_MES_DRF_BOM_EXPL_FILT
/UGI/FLBOM	TPST	1	2	/UGI/_S_U1_DRF_FLBOMHDR	/UGI/CL_MES_DRF_FBOM_EXPL_FILT
/UGI/EQBOM	EQST	1	2	/UGI/_S_U1_DRF_EQBOMHDR	/UGI/CL_MES_DRF_EBOM_EXPL_FILT
/UGI/WBBOM	PRST	1	2	/UGI/_S_U1_DRF_WBSBOMHDR	/UGI/CL_MES_DRF_WBOM_EXPL_FILT
/UGI/TLEQ	PLKO	1	2	/UGI/COMES_S_DRF_TL_FILT_ALL	/UGI/CL_MES_DRF_TLEQ_EXPL_FILT
/UGI/TLFL	PLKO	1	2	/UGI/COMES_S_DRF_TL_FILT_ALL	/UGI/CL_MES_DRF_TLFL_EXPL_FILT
/UGI/WC	CRHD	1	2	/UGI/_S_U1_DRF_WORKCNTR	/UGI/CL_MES_DRF_WC_EXPL_FILT
/UGI/OBJL	INET	1	2	/UGI/COMES_S_DRF_OL_FILT	/UGI/CL_MES_DRF_OL_EXPL_FILT
/UGI/NETID	T372I	1	2	/UGI/COMES_S_DRF_ONET_FILT_ALL	/UGI/CL_MES_DRF_ON_EXPL_FILT

2. Go to t-code DRFIMG and expand Enhance Default Settings for Outbound Implementation > Define Outbound Implementations.
3. Configure the Outbound Implementation as in following table:

Business Object Type	Main Filter Object	Outbound Implementation	Table Name	Data Model / Entity Type
183	/UGI/EQUI	/UGI/I_EM	EQUI	U1 / EQUI
185	/UGI/FLOC	/UGI/I_FL	IFLOT	U1 / FUNCLOC
237	/UGI/MBOM	/UGI/MBOM	MAST	U1 / PMBOMHDR
DRF_0013	/UGI/FLBOM	/UGI/FLBOM	TPST	U1 / FLBOMHDR
1345	/UGI/EQBOM	/UGI/EQBOM	EQST	U1 / EQBOMHDR
/UGI/WBSBM	/UGI/WBBOM	/UGI/WBBOM	PRST	U1 / WBSBOMHDR
1230	/UGI/MSP	/UGI/I_MSP	IMPTT	U1 / MSPOINT
1223	/UGI/MPMI	/UGI/I_MP	MPLA	U1 / MPLAN
/UGI/TL	/UGI/TL	/UGI/I_TL	PLKO	U1 / TLGNHDR
/UGI/TLEQ	/UGI/TLEQ	/UGI/I_TLE	PLKO	U1 / TLEQHDR
/UGI/TLFL	/UGI/TLFL	/UGI/I_TLF	PLKO	U1 / TLFLHDR
493	/UGI/WC	/UGI/WRKCN	CRHD	U1 / WORKCNTR
DRF_0039	/UGI/OBJL	/UGI/I_OL	INET	U1 / OBJLINK
DRF_0038	/UGI/NETID	/UGI/I_ON	T372I	U1 / OBJNETWRK

4. Optionally, you can check the correct assignment of Object ID Type, BO Types and Object Node Types and via > Enhance Default Settings for Outbound Implementation > Define Business Objects and Object Identifiers > Define Object Identifiers. Compare the entries with the values of Section: 4.13.4.1: Table 1.
5. Check that the Key Structure Assignment for all entity types exist. Refer Section: 4.13.4.1: Table 1.
   If not, create the entry. via > Enhance Default Settings for Outbound Implementation > Define Business Objects and Object Identifiers > Assign Key Structures to Object Identifiers.
   a. Assign the Key Structure COMES_S_DRF_EQU_KEY to Object ID Type 451
   b. Assign the Key Structure MDG_BS_FUNCLOC_KEY_TPLNR to Object ID Type 450
   c. Assign the Key Structure MDG_BS_BOM_KEY_STNUM to Object ID Type 964
   d. Assign the Key structure MDG_BS_MEASDEV_KEY_IMRC_POINT to Object ID Type 975
   e. Assign the Key structure MDG_BS_MPLAN_KEY_WARPL to Object ID Type ERP_0008
   f. Assign the Key Structure COMES_S_DRF_WORKCENTER_KEY to Object ID Type 462
   g. Assign the Key Structure /UGI/_S_U1_DRF_TASKLIST to Object ID Type /UGI/TL_ID
   h. Assign the Key Structure /UGI/_S_U1_DRF_TASKLIST to Object ID Type /UGI/TLEQ_ID
   i. Assign the Key Structure /UGI/_S_U1_DRF_TASKLIST to Object ID Type /UGI/TLFL_ID
   j. Assign the Key Structure EAML_S_OBJ_LNK_ID to Object ID Type ERP_0018
   k. Assign the Key Structure EAML_S_NETID to Object ID Type ERP_0017

l. Assign the Key Structure MDG_BS_BOM_KEY_STNUM to Object ID Type /UGI/WBSBOM_ID

m. Assign the Key Structure MDG_BS_BOM_KEY_STNUM to Object ID Type 972

n. Assign the Key Structure MDG_BS_BOM_KEY_STNUM to Object ID Type 966

6. Define the technical settings for the business system.
   a. Enter t-code DRFIMG and navigate to > Define Custom Settings for Data Replication > Define Technical Settings > Define Technical Settings for Business Systems>.
   b. In the Business System field specify the receiver system. In the Logical System field enter the Logical System used for IDoc communication. In the RFC Destination field enter the RFC destination to be used for RFC communication with the receiver system.
   c. Select the entry and click on Define Bus. Systems, BOs.
   d. In the BO Type field enter the business object types from above table
   e. Select each of the entries and double-click on Define Bus. Systems, BOs, Communication Channel. In the Communication Channel field enter the means you want to use to transmit data to the applications. In the Key Harm. Field specify if you want your keys harmonized between the hub and the client systems.

The following are the default settings:

C. Channel	Key Harm.	Upd. KM	Storage Repl. Data	Sup. Time Dep.
Replication via IDoc	Harmonized IDs/Key Mapping	Checked/Unchecked	Active Area	Not defined / Does not support

7. Create the replication model and assign it to the outbound implementation as follows:
   a. Enter t-code DRFIMG.
   b. Navigate to Data Replication > Define Custom Settings for Data Replication > Define Replication Models.
   c. Select Define Replication Model and then select New Entries.
   d. Enter a replication model and a description. In the Log Days field, you may enter the number of days after which you want an Application Log to expire. In the Data Model field, enter U1.
   e. Select the newly defined replication model and choose Assign Outbound Implementation.
   f. Choose New Entries.
   g. Assign the appropriate outbound implementation.
      For all of them the Communication Channel should be “Replication via IDoc”
      For all of them the Filter Time should be “Filter after Change Analysis”
   h. For each of the outbound implementations, assign the target systems
   i. For each of the outbound implementations, assign and define the outbound parameters. Pick the available parameters via the drop-down value list / F4 help, e.g. “Package Size for Bulk Messages” and assign a value that fits your requirements.

Outbound Implementation	Communication Channel	Filter Time	Outbound Parameter
/UGI/I_EM	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/I_FL	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/I_MP	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/I_MSP	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/I_TL	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/I_TLE	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/I_TLF	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/MBOM	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/WRKCN	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/I_OL	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/I_ON	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/FLBOM	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/EQBOM	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UGI/WBBOM	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK

4.13.4.2. Data Replication Framework for IS-U Industry Solution

Use the following steps to customize DRF:

1. Use t-code DRFIMG to check if the filter objects below have been defined. Select > Enhance Default Settings for Outbound Implementation > Define Filter Objects to view the filter object definitions.

Filter Object	Table	Assign Filter	Filter Type	General Filter Parameter	Filter Class
/UISU/CON	EHAU	10	2	/UISU/COMES_S_DRF_CONOBJ_FILT	/UISU/CL_MES_DRF_CO_EXPL_FILT
/UISU/DEVL	EGPL	10	2	/UISU/COMES_S_DRF_DEVLOC_FILT	/UISU/CL_MES_DRF_DL_EXPL_FILT
/UISU/DEVV	V_EGER	10	2	/UISU/COMES_S_DRF_DEVICE_FILT	/UISU/CL_MES_DRF_DV_EXPL_FILT

2. Check that the main filter object is available for each EAM object. T-code DRFIMG expand Enhance Default Settings for Outbound Implementation > Define Outbound Implementations.

Business Object Type	Main Filter Object	Outbound Implementation	Table Name	Data Model / Entity Type
/UISU/CO	/UISU/CON	/UISU/I_CO	EHAU	U1/CONOBJ
/UISU/DL	/UISU/DEVL	/UISU/I_DL	EGPL	U1/DEVLOC
/UISU/DV	/UISU/DEVV	/UISU/I_DV	V_EGER	U1/DEVICE

3. Maintain the following table entries for DRF Address in IS-U:

   Table name: TSADRV

Table	Field	Obj. Type	DDIC Table Name	DDIC field name	Group	BAPI address type 1 FM
EQUI	EQUNR	EQUI	ILOA	ADRNR	PM01	/UGI3/EAM_EQ_GET_ADDR1_KEY
IFLOT	TPLNR	BUS0010	ILOA	ADRNR	PM01	/UGI3/EAM_FL_GET_ADDR1_KEY

   Table name: TSADOBJ

Owner type	Type	Context	Table	Field
BUS0010	1	1	IFLOT	TPLNR
EQUI	1	1	EQUI	EQUNR

4. Optionally, you can check the correct assignment of Object ID Type, BO Types and Object Node Types and via > Enhance Default Settings for Outbound Implementation > Define Business Objects and Object Identifiers > Define Object Identifiers. Compare the entries with the values of Section: 4.13.4.2: Table 1.
   Check that the Key Structure Assignment for all entity types exist. Refer Section: 4.13.4.2: Table 1.
   If not, create the entry. via > Enhance Default Settings for Outbound Implementation > Define Business Objects and Object Identifiers > Assign Key Structures to Object Identifiers.
   - Assign the Key Structure /UISU/COMES_S_DRF_CONOBJ_FILTto Object ID Type /UISU/CO
   - Assign the Key Structure /UISU/COMES_S_DRF_DEVLOC_FILT to Object ID Type /UISU/DL
   - Assign the Key Structure /UISU/COMES_S_DRF_DEVICE_FILT to Object ID Type /UISU/DV
5. Define the technical settings for the business system.
   a. Enter t-code DRFIMG and navigate to > Define Custom Settings for Data Replication > Define Technical Settings > Define Technical Settings for Business Systems>.
   b. In the Business System field specify the receiver system. In the Logical System field enter the Logical System used for IDoc communication. In the RFC Destination field enter the RFC destination to be used for RFC communication with the receiver system.
   c. Select the entry and click on Define Bus. Systems, BOs.
   d. In the BO Type field enter the business object types from above table
   e. Select each of the entries and double-click on Define Bus. Systems, BOs, Communication Channel. In the Communication Channel field enter the means you want to use to transmit data to the applications. In the Key Harm. Field specify if you want your keys harmonized between the hub and the client systems.

The following are the default settings:

C. Channel	Key Harm.	Upd. KM	Storage Repl. Data	Sup. Time Dep.
Replication via IDoc	Harmonized IDs/Key Mapping	Checked/Unchecked	Active Area	Not defined / Does not support

6. Create the replication model and assign it to the outbound implementation as follows:
   a. Enter t-code DRFIMG.
   b. Navigate to Data Replication > Define Custom Settings for Data Replication > Define Replication Models.
   c. Select Define Replication Model and then select New Entries.
   d. Enter a replication model and a description. In the Log Days field, you may enter the number of days after which you want an Application Log to expire. In the Data Model field, enter U1.
   e. Select the newly defined replication model and choose Assign Outbound Implementation.
   f. Choose New Entries.
   g. Assign the appropriate outbound implementation.
      For all of them the Communication Channel should be “Replication via IDoc”
      For all of them the Filter Time should be “Filter after Change Analysis”
   h. For each of the outbound implementations, assign the target systems
   i. For each of the outbound implementations, assign and define the outbound parameters. Pick the available parameters via the drop-down value list / F4 help, e.g. “Package Size for Bulk Messages” and assign a value that fits your requirements.

Outbound Implementation	Communication Channel	Filter Time	Outbound Parameter
/UISU/I_CO	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UISU/I_DL	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK
/UISU/I_DV	Replication via IDoc	Filter after Change Analysis	PACK_SIZE_BULK

4.13.5. Additional DRF Settings for Address

Maintain the following table entries for Address in Equipment and Functional Location:

Table name: TSADRV

Table	Field	Obj. Type	DDIC Table Name	DDIC field name	Group	BAPI address type 1 FM
EQUI	EQUNR	EQUI	ILOA	ADRNR	PM01	/UGI3/EAM_EQ_GET_ADDR1_KEY
IFLOT	TPLNR	BUS0010	ILOA	ADRNR	PM01	/UGI3/EAM_FL_GET_ADDR1_KEY

Table name: TSADOBJ

Owner type	Type	Context	Table	Field
BUS0010	1	1	IFLOT	TPLNR
EQUI	1	1	EQUI	EQUNR

4.14. Choose where you want to run SAP MDG

You can run SAP Master Data Governance in either of the following environments:

- SAP NetWeaver Portal
- SAP NetWeaver Business Client

4.14.1. SAP NetWeaver Portal

The SAP NetWeaver Portal content for EAM Solutions for MDG by Utopia is derived directly from the system PFCG roles. To create SAP NetWeaver Portal roles for your users you must log on to your portal and upload the content information from your back-end system PFCG roles.

To upload your portal content to the portal, do the following:

1. Set up your SAP NetWeaver Portal for MDG.
2. In the Content Administration work center choose > Portal Content Management > Portal Content and select a portal content folder to upload the portal content to.
3. Right-click on the folder and choose > New > Role > Role from Backend.
4. Select the system and client (or the connected system alias) you want to upload the role information from. This should be your MDG system.
5. From the list displayed select the PFCG roles you want to upload the content from and begin the upload.

Once uploaded, you must assign and personalize the MDG portal roles as follows:

1. Log on to the portal.
2. Choose Delegated User Administration.
3. Enter your User ID and choose Go.
4. Mark the line of your user and choose Modify.
5. Select the Assigned Roles tab.
6. Enter MDG as the search criteria.
7. Select the portal role you want to add.
8. Choose Add and save.

After assigning the user role you need to log off and log on again to the portal. For more information on uploading role information see SAP Note 1685257.

4.14.2. SAP NetWeaver Business Client

If you are running SAP Master Data Governance on the SAP NetWeaver Business Client (and not on the SAP NetWeaver Portal), you need to create, define, and configure the roles for the Business Client in the SAP ERP system. There are three roles containing authorization and navigation information and one role (/UGI/_MDGEAM_ALLUSR) containing basic access

To assign and personalize the role Master Data Governance for EAM (/UGI/_MDGEAM_ALLUSR) proceed as follows:

1. On the SAP Easy Access screen, choose > Tools > Administration > User Maintenance > Role Administration > Roles > or alternatively, run t-code PFCG (Role Maintenance). Choose role /UGI/_MDGEAM_ALLUSR.
2. This role ensures that the necessary steps can be started without using the SAP NetWeaver Portal. This can be used for testing or if the portal is inactive.
3. Assign and personalize the role /UGI/_MDGEAM_ALLUSR to your users. In the role /UGI/_MDGEAM_ALLUSR on the Personalization tab, edit the Personalization Key SAP Master Data Governance (R_FMDM_MODEL): Define the default model U1 and the related UI configuration.
4. Verify the setting of the authorization objects within the roles and restrict them if required.
5. On the SAP Easy Access screen, choose > Tools > Administration > User Maintenance > Users. Run t-code SU01 (User Maintenance) and assign the Master Data Governance for EAM: All Users (/UGI/_MDGEAM_ALLUSR) for application to the MDG user.
6. Repeat these steps to assign additional authorization roles to your users

4.15. Configure Process Quality Metrics (Optional)

For the priorities, reasons, or rejection reasons for change requests, there are example values available.

Run the BC-Set activation process (t-code SCPR20), using the following BC-Sets.

Object	BC-Set
Equipment	/UGI/MDG_EAM_PQM_01
Functional Location	/UGI/MDG_EAM_PQM_01
MBOM-BOM	/UGI/MDG_EAM_PQM_02
Maintenance Plan	/UGI/MDG_EAM_PQM_MPMI
Measuring Point	/UGI/MDG_EAM_PQM_MSPT
Task List	/UGI/MDG_EAM_PQM_TL
Work Center	/UGI/MDG_EAM_PQM_WCTR
Object Links	/UGI/MDG_EAM_PQM_740
Equipment -Serialization	/UGI/MDG_EAM_EQUI_SERIAL_PQM_920

To start, choose Activate and keep the default settings.

The codes can be used later for change request analytics (process quality analysis). They also can be used to influence the workflow-driven processes. For example, depending on the priority of a change request, you can mark it for special processing.

To update any of the Process Quality Metrics (PQM), perform the following activity in Customizing for Master Data Governance under > General Settings > Process Modeling > Change Requests > Define Priorities/Reasons/Rejection Reasons for Change Requests.

The values for these PQM values delivered in the BC-Set are as follows:

4.15.1. Change Request Priorities

Priority	Description
1	High Priority
2	Medium Priority
3	Low Priority

4.15.2. Change Request Reason

4.15.2.1. Change Request Reason for EAM

CR Type	Reason	Description
EAMAST0Z	01	Process Mixed Multiple - All Objects
EQMAST01	01	New Equipment Master
EQMAST02	01	Change Equipment Master (Core)
EQMAST02	02	Change Equipment Master (Text)
EQMAST02	03	Change Equipment Master (Classification)
EQMAST06	01	Delete-Mark Equipment Master (Core)
EQMAST0A	01	Process Multiple Equipment Masters
EQMAST0B	01	Import Equipment Masters
FUNCLO01	01	New Functional Location
FUNCLO02	02	Change Functional Location
FUNCLO06	06	Delete Functional Location
FUNCLO0A	0A	Process Multiple Functional Location
FUNCLO0B	0B	Import Functional Location
MATBOM01	01	New Material BOM
MATBOM02	01	Change Material BOM
MATBOM06	01	Delete-Mark Material BOM (Core)
MATBOM0A	01	Process Multiple Material BOMs
MATBOM0B	01	Import Material BOMs
FLBOM01	01	New Floc BOM
FLBOM02	01	Change Floc BOM
FLBOM06	01	Delete-Mark Floc BOM (Core)
FLBOM0A	01	Process Multiple Floc BOMs
FLBOM0B	01	Import Floc BOMs
EQBOM01	01	New Equipment BOM
EQBOM02	01	Change Equipment BOM
EQBOM06	01	Delete-Mark Equipment BOM (Core)
EQBOM0A	01	Process Multiple Equipment BOMs
EQBOM0B	01	Import Equipment BOMs
WBSBOM01	01	New WBS BOM
WBSBOM02	01	Change WBS BOM
WBSBOM06	01	Delete-Mark WBS BOM (Core)
WBSBOM0A	01	Process Multiple WBS BOMs
WBSBOM0B	01	Import WBS BOMs
MEASPT01	01	New Measuring Point
MEASPT02	02	Change Measuring Point
MEASPT06	06	Delete Measuring Point
MEASPT0A	0A	Process Multiple Measuring Point
MEASPT0B	0B	Import Measuring Point
MPLAN01	01	New Maintenance Plan
MPLAN02	01	Change Maintenance Plan (Core)
MPLAN02	02	Change Maintenance Plan (Text)
MPLAN02	03	Change Maintenance Plan (Cycles)
MPLAN02	04	Change Maintenance Plan (Items)
MPLAN06	1	Set Deletion Flag
MPLAN06	2	Reset Deletion Flag
MPLAN0A	01	Process Multiple Maintenance Plans
MPLAN0B	01	Import Maintenance Plans
OBJLNK01	01	New Object Link
OBJLNK02	01	Change Network Object (Core)
OBJLNK02	02	Change Network Object (Text)
OBJLNK02	03	Change Network Object (Object)
OBJLNK02	04	Change Network Object (Object Links)
OBJLNK06	1	Set Deletion Flag
OBJLNK06	2	Reset Deletion Flag
OBJLNK0A	01	Process Multiple Object Links
OBJLNK0B	01	Import Object Links
OBJNET01	01	New Network Object
OBJNET02	01	Change Object link (Core)

CR Type	Reason	Description
OBJNET02	02	Change Object link (Text)
OBJNET02	03	Change Object link (Object)
OBJNET02	04	Change Object link (Object Links)
OBJNET06	1	Set Deletion Flag
OBJNET06	2	Reset Deletion Flag
OBJNET0A	01	Process Mulitple Network Object
OBJNET0B	01	Import Network Object
TLEQ01	01	New Equi Task List
TLEQ02	01	Change Equi Task List (Core)
TLEQ02	02	Change Equi Task List(Opr - Internal)
TLEQ02	03	Change Equi Task List(Header data)
TLEQ02	04	Change Equi Task List(Opr - External)
TLEQ02	05	Change Equi Task List(Operation data)
TLEQ06	1	Set Deletion Flag
TLEQ06	2	Reset Deletion Flag
TLEQ0A	01	Process Multiple Equi Task List
TLEQ0B	01	Import Equi Task List
TLFL01	01	New Floc Task List
TLFL02	01	Change Floc Task List(Core)
TLFL02	02	Change Floc Task List(Opr - Internal)
TLFL02	03	Change Floc Task List(Header data)
TLFL02	04	Change Floc Task List(Opr - External)
TLFL02	05	Change Floc Task List(Operation data)
TLFL06	1	Set Deletion Flag
TLFL06	2	Reset Deletion Flag
TLFL0A	01	Process Multiple Floc Task Lis
TLFL0B	01	Import Floc Task List
TSLIST01	01	New General Task List
TSLIST02	01	Change General Task List(Core)
TSLIST02	02	Change General Task List(Opr - Internal)
TSLIST02	03	Change General Task List(Header data)
TSLIST02	04	Change General Task List(Opr - External)
TSLIST02	05	Change General Task List(Operation data)
TSLIST06	1	Set Deletion Flag
TSLIST06	2	Reset Deletion Flag
TSLIST0A	01	Process Multiple General Task List
TSLIST0B	01	Import General Task List
WRKCTR01	01	New Work Center
WRKCTR02	01	Change Work Center
WRKCTR06	01	Mark Workcenter for Deletion
WRKCTR06	02	Reset Deletion Flag
WRKCTR0A	01	Process Multiple Work Centers
WRKCTR0B	01	Import Work Centers
EQSERIAL	01	New Equipment Master Via MSerialization
EQSERIAL	01	Change EquipmentMastervia Mserialization

4.15.2.2. Change Request Reason for IS-U Industry Solution

CR Type	Reason	Description
COMAST01	01	New Connection Object Master
COMAST02	01	Change Connection Object Master (Core)
COMAST02	02	Change Connection Object Master (Text)
COMAST02	03	Change ConnectionMaster (Classification)
COMAST06	01	Delete-Mark Connection Obj Master (Core)
COMAST0A	01	Process Multiple Connection Obj Masters
COMAST0B	01	Import Connection Object Masters
DLMAST01	01	New Device Location Master
DLMAST02	01	Change Device Location (Core)
DLMAST02	02	Change Device Location (Text)
DLMAST02	03	Change Device Location (Classification)
DLMAST06	01	Delete-Mark Device Location (Core)

CR Type	Reason	Description
DLMAST0A	01	Process Multiple Device Location Masters
DLMAST0B	01	Import Device Location Masters
DVMAST01	01	New Device Master
DVMAST02	01	Change Device (Core)
DVMAST02	02	Change Device (Text)
DVMAST06	01	Delete-Mark Device (Core)
DVMAST0A	01	Process Multiple Device Masters
DVMAST0B	01	Import Device Masters

4.15.3. Reason for Rejection

For EAM Objects:

CR Type	Reason	Description
EAMAST0Z	01	Incomplete information
EAMAST0Z	02	Does not suit business requirements
EAMAST0Z	03	No proper Justification
EQMAST01	01	Incomplete information
EQMAST01	02	Does not suit business requirements
EQMAST01	03	No proper Justification
EQMAST02	05	Revision of several fields Information
EQMAST02	06	Workcenter has to be changed
EQMAST02	07	Maintenance Plant has to be revised
EQMAST06	08	No business Justification
EQMAST06	09	Requirement withdrawn
EQMAST06	10	Already similar Equipment exists
FUNCLO01	01	Incomplete information
FUNCLO01	02	Does not suit business requirements
FUNCLO01	03	No proper Justification
FUNCLO02	05	Revision of several fields Information
FUNCLO02	06	Workcenter has to be changed
FUNCLO02	07	Maintenance Plant has to be revised
FUNCLO06	08	No business Justification
FUNCLO06	09	Requirement withdrawn
FUNCLO06	10	Already similar Func.Loc. exists
MATBOM01	01	Incomplete information
MATBOM01	02	Does not suit business requirements
MATBOM01	03	No proper Justification
MATBOM02	05	Revision of several fields Information
MATBOM02	06	Workcenter has to be changed
MATBOM02	07	Maintenance Plant has to be revised
MATBOM06	08	No business Justification
MATBOM06	09	Requirement withdrawn
MATBOM06	10	Already similar Service exists
FLBOM01	01	Incomplete information
FLBOM01	02	Does not suit business requirements
FLBOM01	03	No proper Justification
FLBOM02	05	Revision of several fields Information
FLBOM02	06	Workcenter has to be changed
FLBOM02	07	Maintenance Plant has to be revised
FLBOM06	08	No business Justification
FLBOM06	09	Requirement withdrawn
FLBOM06	10	Already similar Service exists
EQBOM01	01	Incomplete information
EQBOM01	02	Does not suit business requirements
EQBOM01	03	No proper Justification
EQBOM02	05	Revision of several fields Information
EQBOM02	06	Workcenter has to be changed
EQBOM02	07	Maintenance Plant has to be revised
EQBOM06	08	No business Justification
EQBOM06	09	Requirement withdrawn
EQBOM06	10	Already similar Service exists

CR Type	Reason	Description
WBSBOM01	01	Incomplete information
WBSBOM01	02	Does not suit business requirements
WBSBOM01	03	No proper Justification
WBSBOM02	05	Revision of several fields Information
WBSBOM02	06	Workcenter has to be changed
WBSBOM02	07	Maintenance Plant has to be revised
WBSBOM06	08	No business Justification
WBSBOM06	09	Requirement withdrawn
WBSBOM06	10	Already similar Service exists
MEASPT01	01	Incomplete information
MEASPT01	02	Does not suit business requirements
MEASPT01	03	No proper Justification
MEASPT02	05	Revision of several fields Information
MEASPT02	06	Workcenter has to be changed
MEASPT02	07	Maintenance Plant has to be revised
MEASPT06	08	No business Justification
MEASPT06	09	Requirement withdrawn
MEASPT06	10	Already similar Equipment exists
MPLAN01	01	Incomplete information
MPLAN01	02	Does not suit business requirements
MPLAN01	03	No proper Justification
MPLAN02	05	Revision of several fields Information
MPLAN02	06	Workcenter has to be changed
MPLAN02	07	Maintenance Plant has to be revised
MPLAN06	08	No business Justification
MPLAN06	09	Requirement withdrawn
MPLAN06	10	Already similar maintenance plan exists
OBJLNK01	01	Incomplete information
OBJLNK01	02	Does not suit business requirements
OBJLNK01	03	No proper Justification
OBJLNK02	05	Revision of several fields Information
OBJLNK02	06	Object Link has to be changed
OBJLNK02	07	Object Link has to be revised
OBJLNK06	08	No business Justification
OBJLNK06	09	Requirement withdrawn
OBJLNK06	10	Already similar Service exists
OBJNET01	01	Incomplete information
OBJNET01	02	Does not suit business requirements
OBJNET01	03	No proper Justification
OBJNET02	05	Revision of several fields Information
OBJNET02	06	Object Network has to be changed
OBJNET02	07	Object network has to be revised
OBJNET06	08	No business Justification
OBJNET06	09	Requirement withdrawn
OBJNET06	10	Already similar Service exists
TLEQ01	01	Incomplete information
TLEQ01	02	Does not suit business requirements
TLEQ01	03	No proper Justification
TLEQ02	05	Revision of several fields Information
TLEQ02	06	Equipment task list has to be changed
TLEQ02	07	Equipment task list has to be revised
TLEQ02	08	No business Justification
TLEQ06	09	Requirement withdrawn
TLEQ06	10	Already similar Equi task list exists
TLFL01	01	Incomplete information
TLFL01	02	Does not suit business requirements
TLFL01	03	No proper Justification
TLFL02	05	Revision of several fields Information
TLFL02	06	Functional task list has to be changed
TLFL02	07	Functional task list has to be revised
TLFL02	08	No business Justification
TLFL06	09	Requirement withdrawn
TLFL06	10	Already similar Floc task list exists

CR Type	Reason	Description
TSLIST01	01	Incomplete information
TSLIST01	02	Does not suit business requirements
TSLIST01	03	No proper Justification
TSLIST02	05	Revision of several fields Information
TSLIST02	06	Workcenter has to be changed
TSLIST02	07	Maintenance Plant has to be revised
TSLIST06	08	No business Justification
TSLIST06	09	Requirement withdrawn
TSLIST06	10	Already similar Equipment exists
WRKCTR01	01	Incomplete information
WRKCTR01	02	Does not suit business requirements
WRKCTR01	03	No proper Justification
WRKCTR02	05	Revision of several fields Information
WRKCTR02	06	Workcenter has to be changed
WRKCTR02	07	Maintenance Plant has to be revised
WRKCTR06	08	No business Justification
WRKCTR06	09	Requirement withdrawn
WRKCTR06	10	Already similar Service exists

For IS-U Industry Solution:

CR Type	Reason	Description
COMAST01	01	Incomplete information
COMAST01	02	Does not suit business requirements
COMAST01	03	No proper Justification
COMAST02	05	Revision of several fields Information
COMAST02	06	Workcenter has to be changed
COMAST02	07	Maintenance Plant has to be revised
COMAST06	08	No business Justification
COMAST06	09	Requirement withdrawn
COMAST06	10	Already similar Equipment exists
DLMAST01	01	Incomplete information
DLMAST01	02	Does not suit business requirements
DLMAST01	03	No proper Justification
DLMAST02	05	Revision of several fields Information
DLMAST02	06	Workcenter has to be changed
DLMAST02	07	Maintenance Plant has to be revised
DLMAST06	08	No business Justification
DLMAST06	09	Requirement withdrawn
DLMAST06	10	Already similar Device Location exists
DVMAST01	01	Incomplete information
DVMAST01	02	Does not suit business requirements
DVMAST01	03	No proper Justification
DVMAST02	05	Revision of several fields Information
DVMAST02	06	Workcenter has to be changed
DVMAST02	07	Maintenance Plant has to be revised
DVMAST06	08	No business Justification
DVMAST06	09	Requirement withdrawn
DVMAST06	10	Already similar Device exists

4.16. Data Import Framework (DIF)

Define File Source and Archive Directories for Data Transfer

Maintain Source and archive directories for all objects using navigation path: Master Data Governance > General Settings > Data Transfer > Define File Source and Archive Directories for Data Transfer.

4.17. Customizing for ALE Audit (Optional)

You can configure your client and hub systems so that your client systems send confirmation of replicated objects back to the MDG hub.

Use the following steps to set up this confirmation process. In the client system make the following settings:

Note

ALE Audit is generally optional, but it is required for Maintenance Item or Functional Location if alternate label is active.

4.17.1. Client System

In the client system make the following settings:

1. Select Distribution Model
    a. Run t-code BD64 and choose Change/Display.
    b. Select the distribution model you created above and choose Add Message Type.
    c. In the Add Message Type screen enter the following:
        i. In the Sender field, enter the logical system from which the acknowledgement is sent (The client system).
        ii. In the Receiver field, enter the logical system to which the acknowledgement is sent (The hub system).
        iii. In the Message Type field, enter ALEAUD.
    d. Choose Ok.
2. Select Partner Profile
    a. Run t-code SALE and choose > Partner Profiles > Generate Partner Profiles. Alternatively, run t-code BD82 (Generate Partner Profiles).
    b. Select the distribution model and in the Partner System field, enter the hub logical system name.
    c. Enter the ALE-User (the default value is ALEREMOTE) and the following values.

Field	Value
Version	3
Pack Size	100
Output Mode	Pass IDoc Immediately
Inb. Parameters: Processing	Trigger Immediately

    d. Click on the “Execute” button. The log for partner profile generation appears showing the new sender and receiver systems
    e. To verify your settings, run t-code WE20 and from the Partner Profiles menu, choose Partner Type LS. Verify that Partner type LS is the logical destination system.
    f. In the detail screen, the message type, ALEAUD must appear.

g. In the Outbound Options tab, in the Process Code field enter ALEAUD01.

h. Select the Cancel Processing after Syntax Error checkbox.

i. In the Processing by Function Module section, select the Pass IDoc Immediately radio button.

j. Choose Save.

3. Schedule Batch Job
   a. Schedule a batch job for program RBDSTATE for periodic intervals

4.17.2. Hub System

In the hub system make the following settings:

1. Partner Profile
   a. Run t-code WE20 and check that the partner profile with logical name of the receiver system (Client system) exists below the Partner Type LS folder.

   b. Select Receiver Logical System (Client system) and choose Change.

   c. Choose Create Inbound Parameter.

   d. In the Message Type field enter ALEAUD.

   e. In the Basic Type field enter AUD2.

   f. Select the Cancel Processing after Syntax Error checkbox.

   g. In the Output Mode list, select Trigger Immediately.

   h. Choose Save.

2. Configure DRF Customizing
   a. Run t-code DRFIMG.

   b. Navigate to Data Replication > Define Custom Settings for Data Replication > Define Technical Settings for Business Systems.

   c. Select the receiver system (Hub system) and double-click on Define Bus. Systems, BOs, Communication Channel.

   d. Enter the business object type 183 for Equipment, 185 for Functional location, 237 for MBOM, 1230 for Measuring Device, 1223 for Maintenance Plan, /UGI/TL for General Task List, /UGI/TLEQ for Equipment Task and /UGI/TLFL for Functional Loc Task, 493 for Work Center, DRF_0038 for Object Network, DRF_0039 for Object Link /UGI/WBSBM for WBS BOM, DRF_0013 for FLBOM , 1345 for EQ BOM and choose OK.

   e. Select the checkbox Upd.KM.

   f. Choose Save.

3. Configure Key Mapping
   a. Run t-code SM30 and enter view name MDGV_OTC_BOR, then click on display

   b. Ensure that EAM object relevant Object type code (OTC) to Business Object (BO) relationship is maintained.

Note

For additional steps refer to Key Mapping How-To Guide.

4.17.2.1. OTC to BOR Mapping for EAM

The following table provides details of OTC to BOR mapping:

Object	OTC	BOR
Equipment	183	EQUI
Functional Location	185	BUS0010
Maintenance Plan	1223	BUS1020
Maintenance Item	DRF_0022	EAM_MTI
Measuring Point	1230	SAP_65106
Work Center	493	BUS0011
General Task List	/UGI/TL	/UGI3/GNTL
Equipment Task List	/UGI/TLEQ	/UGI3/EQTL
Functional Location Task List	/UGI/TLFL	/UGI3/FLTL
Object Link	DRF_0039	INET
Object Network	DRF_0038	/UGI3/ONET
Object Links Network Event Id	/UGI/NEVT	/UGI3/NEVT

4.17.2.2. OTC to BOR Mapping for IS-U Industry Location

Object	OTC	BOR
Connection Object	/UISU/CO	CONNOBJ
Device Location	/UISU/DL	DEVLOC
Device	/UISU/DV	DEVICE

4. Schedule Batch Job
    a. Schedule a batch job for program /UGI/EAM_IDOC_REP_740 for periodic intervals to reprocess IDocs with status 29.
    b. Schedule a Background job for program /UGI/MDG_HDB_TL_MIGRATE for periodic to update Classification Keys in the table /UGI/MDGHDB_TL.
    c. If Equipment Material Serialization functionality is enabled, then program /UGI3/CREATE_IDOC_EQUIP_SERIAL should be scheduled to create respective Material Serialization IDoc's and subsequently create Change Requests.

       This program is scheduled in source system in case of Co-deployment scenario and in Target system in case of Hub-Target scenario.

4.18. Workflow Templates for EAM Solutions

The following workflow template is available for EAM Solutions by Utopia.

4.18.1. Workflow Template WS54300020

Utopia leverages the SAP standard workflow template WS54300020 for the approval process. This enables you to forward the change request as a work item to the appropriate processors. The status of the change request is automatically updated in the background.

This workflow template consists of the following steps:

1. Start workflow
   The workflow starts when a change request is created by the user, for example, a Plant Maintenance technician.

2. Execute changes
   The master data specialist receives a work item to execute the changes:
   - If they do not want to execute the changes, they can send the change request back to the maintenance technician. In this case, a work item with the change request is sent to the maintenance technician for revision (--> Step 3).
   - If they want to execute the changes, the changes made to the master data are then checked (--> Step 4).

3. Revision after rejection
   User responsible for processing the change request when it is rejected, such as the plant maintenance technician, decides whether to revise the change request:
   - If the user revises the change request, a work item with the change request is again sent to the master data specialist for processing (→ Step 2).
   - If the user withdraws the change request, the status of the change request is set to Final Check Rejected. If changes have already been made to the master data, these are reset, and the workflow ends (→ Step 6).

4. Perform final check
   The system checks the change request, using validation rules for Consistency, and saves the check results in a log. The master data steward receives a work item to do a final check of the change request. They check the validation results in the log and either approve or reject the final check:
   - If the user rejects the change request, a work item with the change request is sent back for revision to the maintenance technician (→ Step 3).
   - If the user approves the change request, the system activates the changes (→ Step 5).

5. Activate changes
   The system activates the master data in the database tables of the modified objects according to the changes entered in step 4.

Note
The changes are then activated in the central system. When the workflow has been completed, if DRF is enabled in concert with ALE, the system will then send the changes to the target system(s). Manual replication is also available if desired.

4.19. Activate Alternate Labeling (Optional)

- Alternative Labelling is supported with the EAM 9.2.
- Activate Alternative Labeling using t-code OIPU.
- A conversion program is started. If not, all Functional Locations are converted, you can manually start the report RI_IFLOT2IFLOS.

- If all Functional Locations (IFLOT) can be converted, indicator ALCNV can be set to “X” in table ITOBCUST.
- Refer SAP Note 213332
- Run the report "RBONRRP1" in both the hub and target system and schedule a batch job for every 60 seconds. You may want to limit it for alternate label only for object type "IF" - define a variant accordingly.

Note

Key Mapping is required for functional location if Alternate Label is active.

4.20. Geo Location for LAM attribute (Optional)

Geo location LAM attributes for Equipment and Functional location are part of the Utopia MDG EAM 9.2 solution. If customers prefer not to leverage this functionality, it can be achieved by Context Based Adaptations, hiding the Geo Location fields when a custom component configuration for LAM attributes is used or by implementing BADI. USMD_ACC_FLD_PROP_CUST_DEP_SET to control field properties. None of these approaches will have any side effects to other features provided in this release.

4.21. Document Management System (DMS) Integration (Optional)

You can use SAP Document Management System (DMS) with MDG for EAM 9.2. You can use DMS to link documents to EAM master records in MDG. You can also create new documents using the MDG UI. To use DMS you must perform a number of customizing activities. You can find DMS customizing in the implementation guide under > Cross-Application Components > Document Management.

You can find the necessary information on DMS configuration in the SAP Library under http://help.sap.com. Follow this path:> SAP ERP Cross-Application Functions > Cross-Application Components > Document Management.

To integrate DMS with MDG you must set up a storage system. You can do this in customizing under > Cross-Application Components > Document Management > General Data > Settings for Storage Systems.

Note

If you want to replicate document links into other target systems, you will need to distribute the documents and document links manually. There is no integration of ALE message types DOCMAS and DOLMAS into the data replication framework.

For more information, refer How-To Guide for DMS Setup and Configuration.

4.22. Geographical Enablement Framework (GEF) Integration

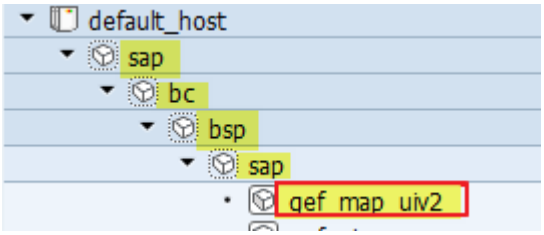
Note: This is an optional configuration.

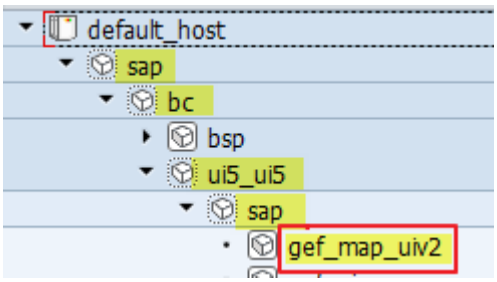
As a prerequisite to enable GEF integration, ensure that you have performed the following:

- Install GEF UI component UIGEF001 in Section 4.26.
- Activate the business functions as in Section 2.1
- Activate the BC-Sets in Section 2.11

Use the following steps to enable GEF Integration with MDG EAM:

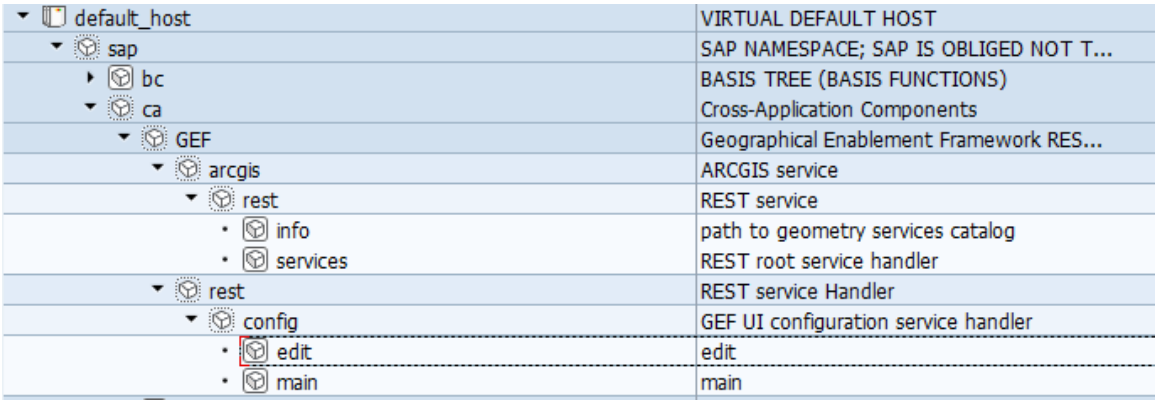
1. Go to t-code SICF and activate the following services.



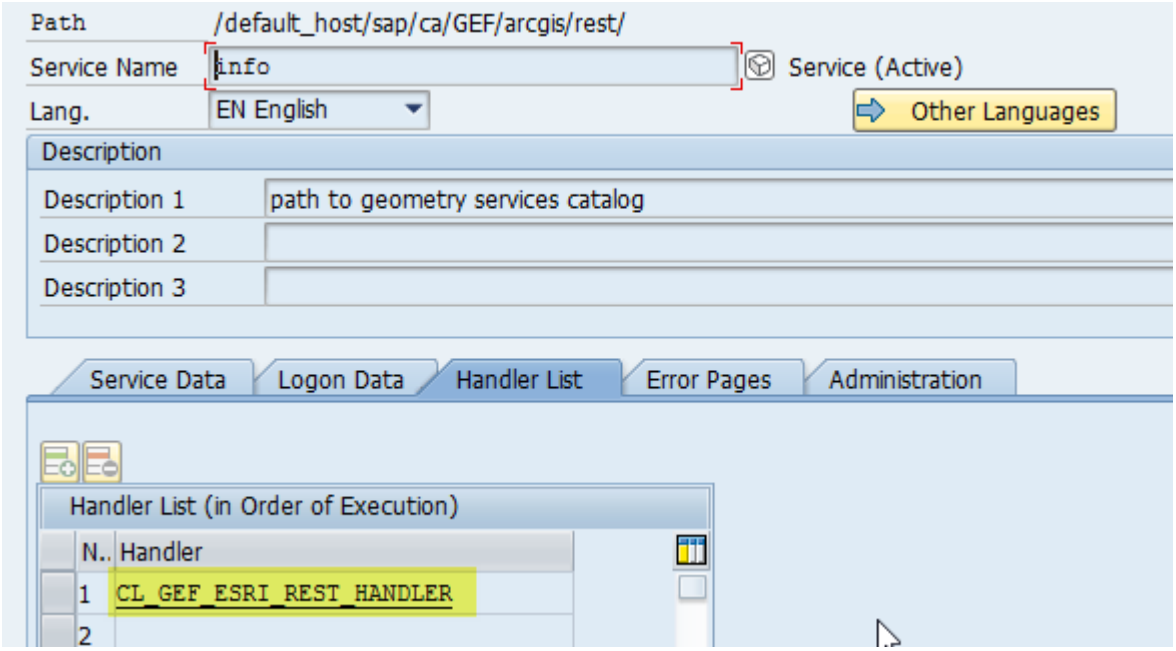


Note: To navigate to above nodes, once after going to SICF transaction, provide Hierarchy Type as SERVICE and Service Name as gef_map_uiv2 and click on Execute.

2. Go to t-code SICF and add the following nodes:



   a. Add the Handler as displayed in the following screen for the nodes “info” and “services”.

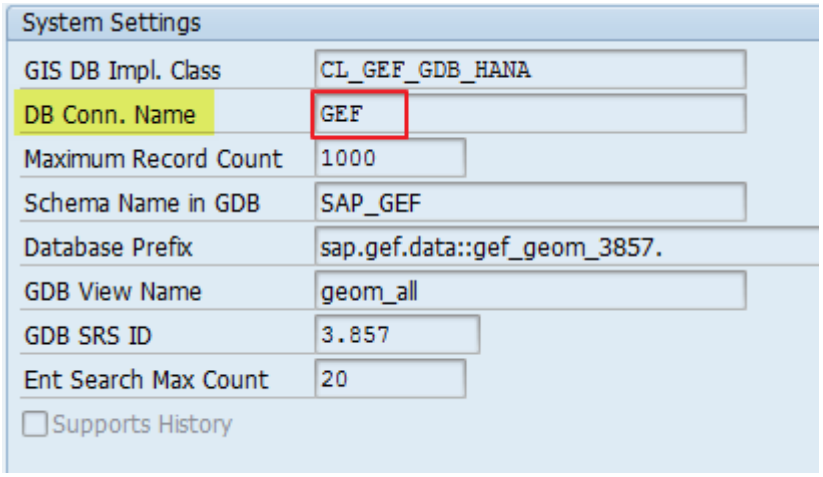


b. Similarly, add the Handler “CL_GEF_UI_REST_HANDLER” for the nodes “config”, “edit” and “main”.

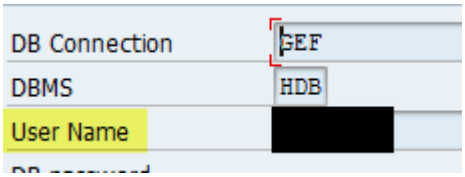
3. Create a DB Connection (transaction DBCO) for HDB with a name that is maintained in system settings of Geographical Framework Configuration (Transaction GEF_FRW_CONFIG).

   If the DB Connection Name is different from the configuration, maintain this DB Connection Name in system settings of Geographical Framework Configuration.

   Basis Team can help in creating the DB Connection.



4. Provide Access to the schema where the Geometry Tables and Views are present, to the user in DB Connection. (Basis/Security Team can provide the access).

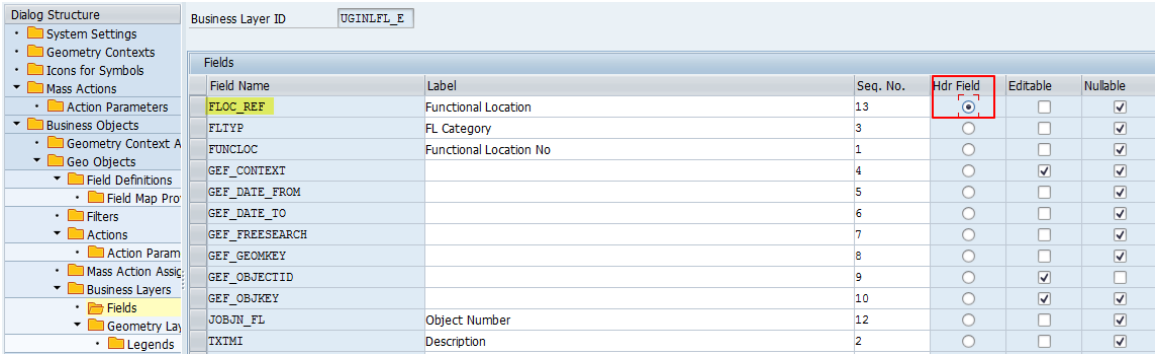


5. Check for the business function LOG_EAM_GEF activation.

- If the business function LOG_EAM_GEF is activated, use the additional step as explained in the Section 4.22.2.
- If the business function LOG_EAM_GEF is not activated, use the additional steps as explained in the Section 4.22.1.

6. This is an optional step.

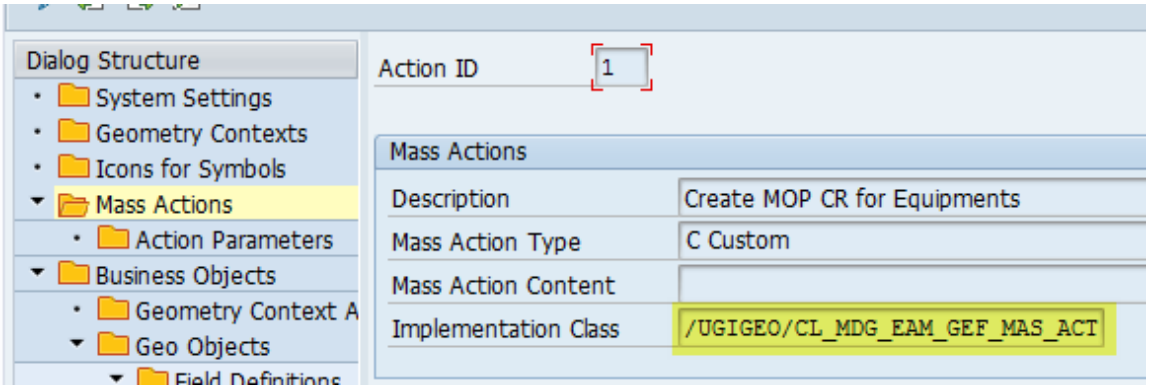
   Use this step If Alternate Labelling is enabled, ensure “FLOC_REF” as the Hdr Field. Navigate to t-code “GEF_FRW_CONFIG” > Business Objects (UGIMDGFL) > GeoObjects (UGIGLFL and UGIGNLFL) > Business Layers (all business layers related to FLOC) > Fields.

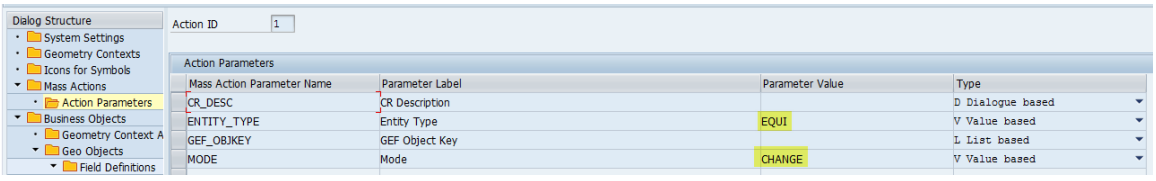


Field Name	Label	Seq. No.	Hdr Field	Editable	Nullable
FLOC_REF	Functional Location	13	●	☐	☑
FLTYP	FL Category	3	○	☐	☑
FUNCLOC	Functional Location No	1	○	☐	☑
GEF_CONTEXT		4	○	☑	☑
GEF_DATE_FROM		5	○	☐	☑
GEF_DATE_TO		6	○	☐	☑
GEF_FREESEARCH		7	○	☐	☑
GEF_GEOMKEY		8	○	☐	☑
GEF_OBJECTID		9	○	☑	☐
GEF_OBJKEY		10	○	☑	☑
JOBJN_FL	Object Number	12	○	☐	☑
TXTMI	Description	2	○	☐	☑

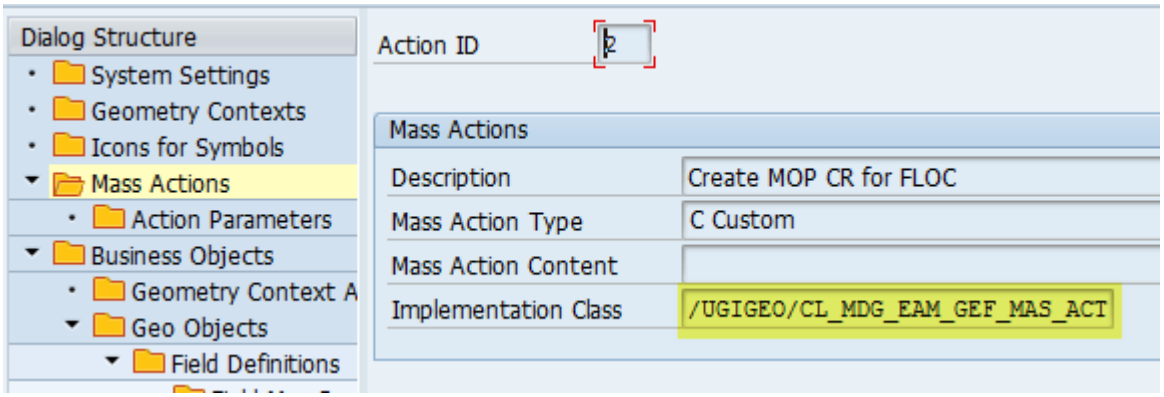
7. Go to t-code “GEF_FRW_CONFIG” and add the mass actions and action parameters as shown in the following screen.

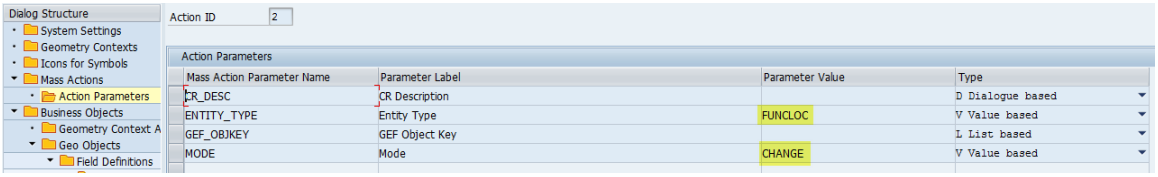
   Note: Action ID can be any number between 1 and 999 (should be a number which is not used in the system yet).





Mass Action Parameter Name	Parameter Label	Parameter Value	Type
CR_DESC	CR Description		D Dialogue based
ENTITY_TYPE	Entity Type	EQUI	V Value based
GEF_OBJKEY	GEF Object Key		L List based
MODE	Mode	CHANGE	V Value based

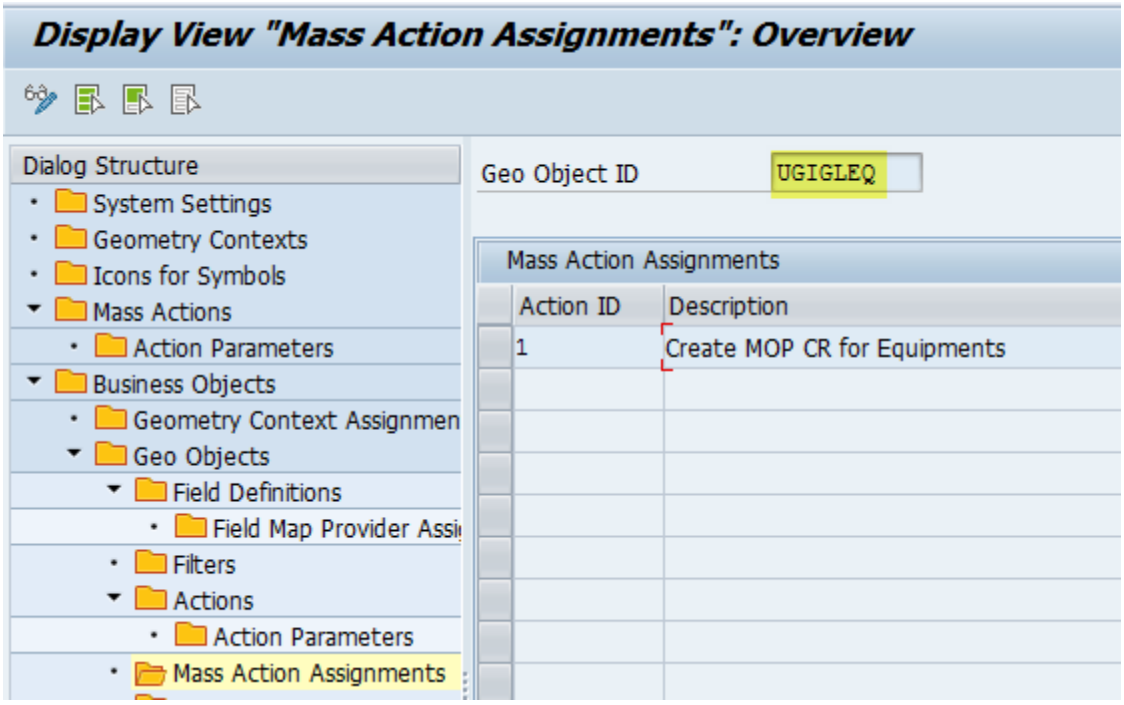




8. Assign the Mass Actions created above for the Geo Objects.

   For Geo Objects UGIGNLEQ and UGIGLEQ > assign the mass action created for Equipment.

   Similarly, for Geo Objects UGIGNLFL and UGIGLFL > assign the mass action created for Functional Location.



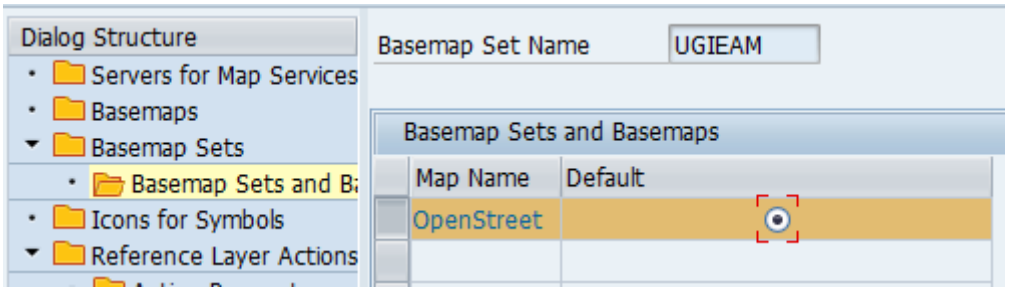
9. This is an optional step.

   If the Basemap is other than “Openstreet” as explained in Section 4.22.1, use this step:

   a. Go to t-code GEF_UI_CONFIG and double-click on Basemap Sets on the left-panel. Select UGIEAM> Basemap Sets and Basemaps.

   b. Delete the existing Map Name.

   c. Click on New Entries and add the Map Name.

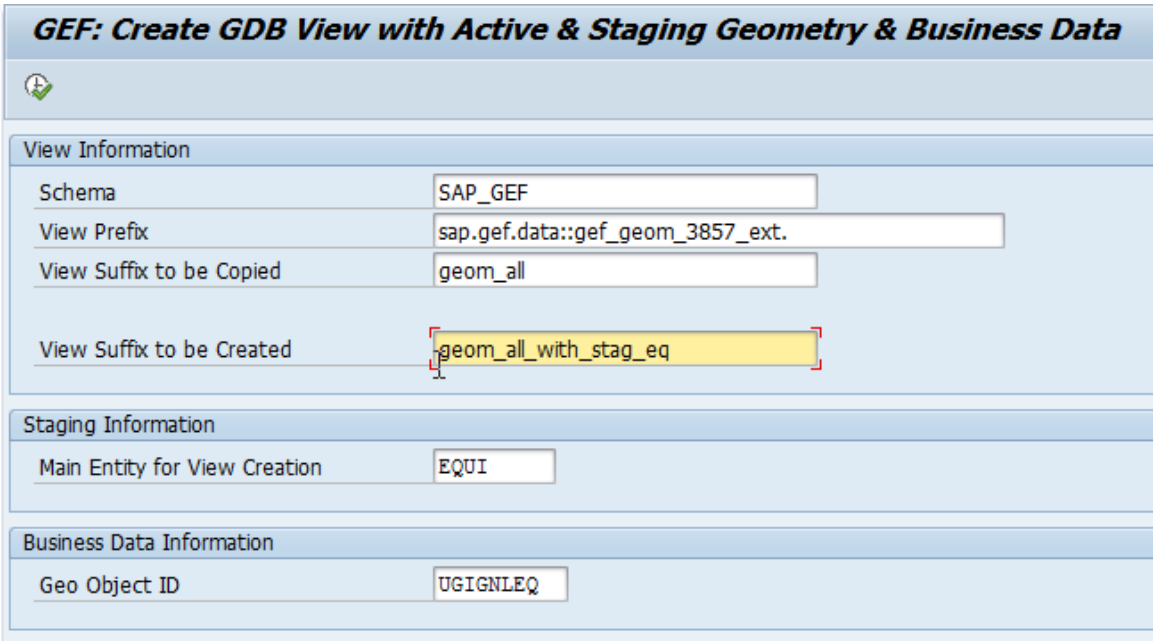


10. Ensure all the required tables are replicated to HANA system, before generating the views.
Note: Contact Basis team for replication.

    Tables to be replicated with default UGI configuration:

    - EQUI
    - EQKT
    - GEFC_GEO
    - IFLOT
    - IFLOTX
    - IFLOS
    - MDG Tables for EQ and FL (Mapping Table, Check Table, Text Table, EQGEO and FLGEO tables).

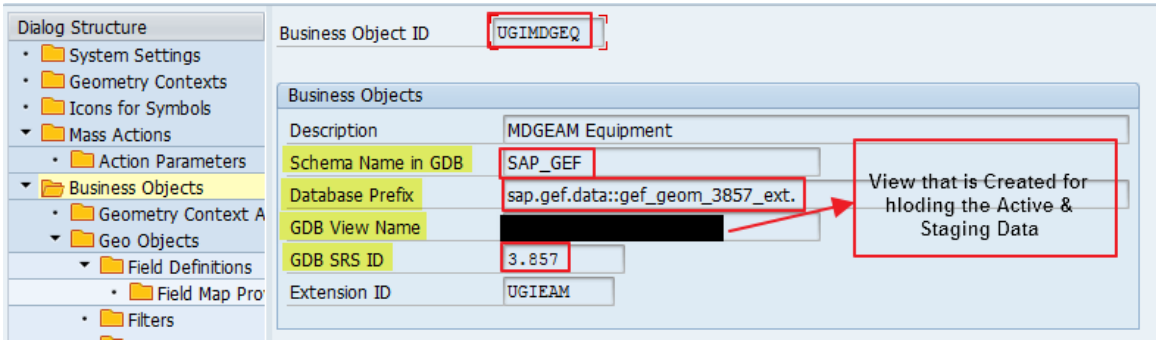
11. Execute t-code /UGIGEO/GDB_VIEW_CRT to create a view with Active and Staging Geometry Data along with Business Data for Equipment by providing the input as required.



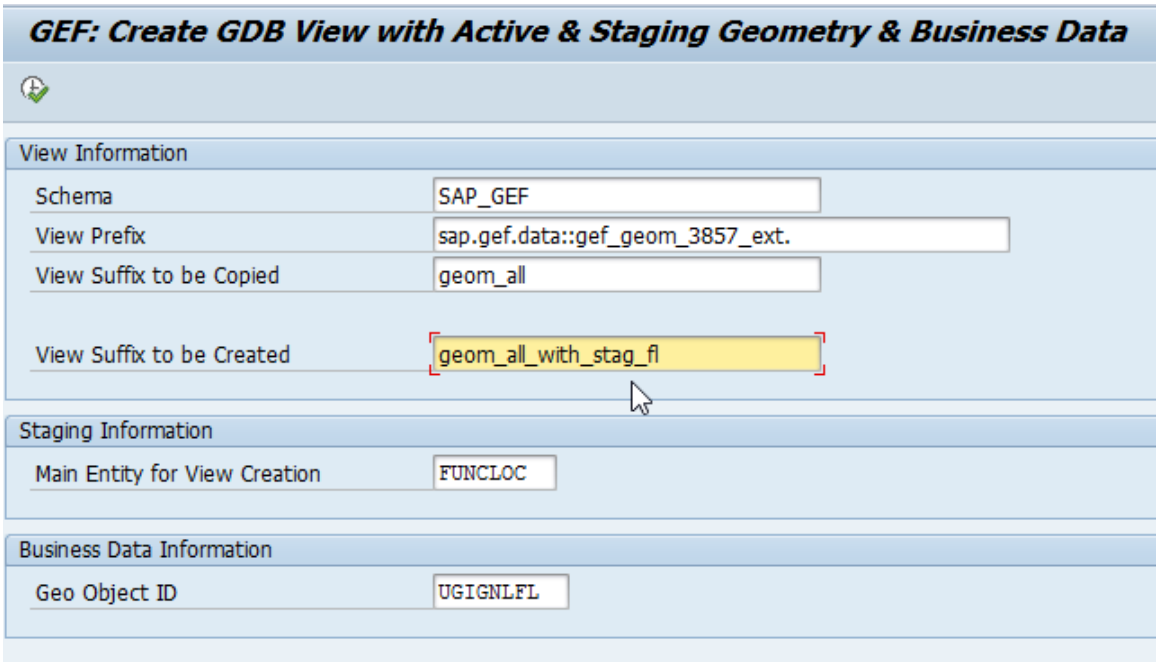
- Schema, View Prefix and View Suffix to be copied: Details of View having the Active Geometry Data.
- View Suffix to be created: View Name that is to be created for holding the Active and Staging Geometry and Business Data
- Main Entity for View Creation: Main Entity of the Object for which View is to be created
- Geo Object ID: Geo Object ID

Note: If all the Geo Object IDs of a Business Object are configured with same Implementation class and Geo Object structure, executing the program with any one of the Geo Object ID is enough.

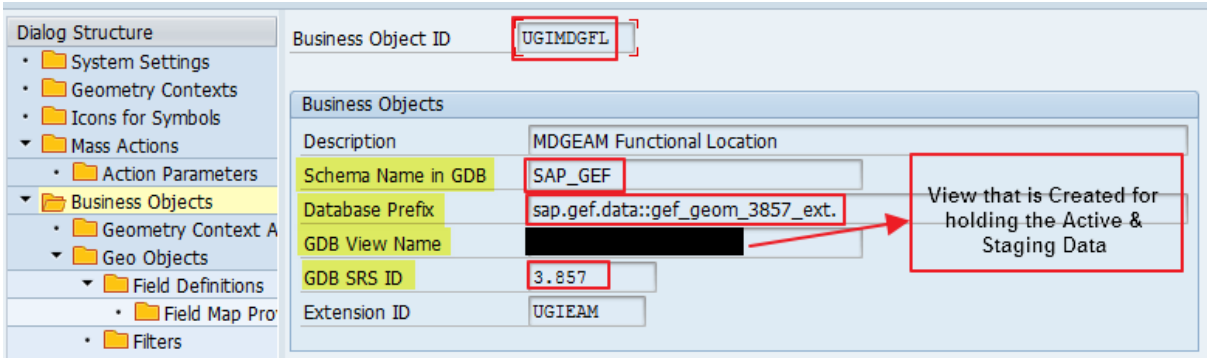
12. Go to t-code GEF_FRW_CONFIG, and update the Schema Name, Database Prefix, GDB View Name and GDB SRS ID for the BO object (or) Geo Objects of MDGEAM Equipment.



13. Execute t-code /UGIGEO/GDB_VIEW_CRT to create a view with Active and Staging Geometry Data along with Business Data for Functional Location.



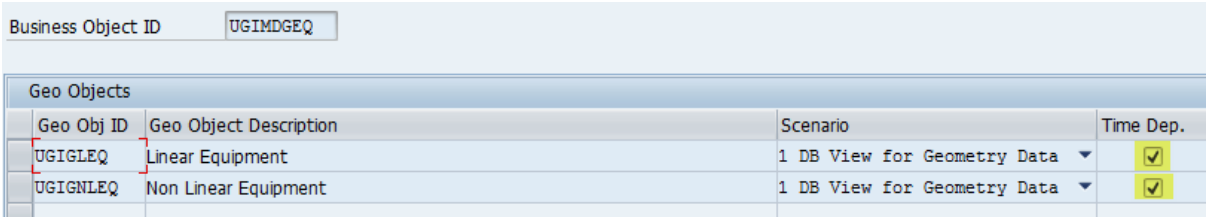
14. Go to t-code GEF_FRW_CONFIG, and update the Schema Name, Database Prefix, GDB View Name and GDB SRS ID for the BO object MDGEAM Functional Location.



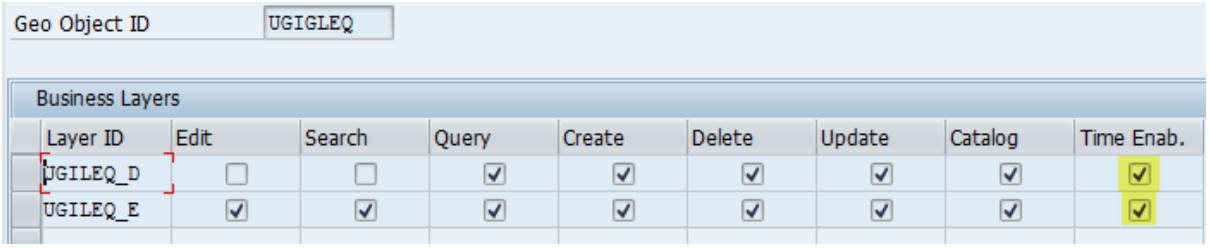
The profile Parameter GEF_PROFILE with value UGIEAMALL needs to be assigned to the user. In addition, the role needs to be created for displaying Geometry Explorer and Geometry Editor.

Note: If the history of the Geometry Data needs to be supported, use the following the steps.

15. Go to Geo Object level in GEF_FRW_CONFIG and mark the checkbox “Time Dep.” as shown in the following screen.



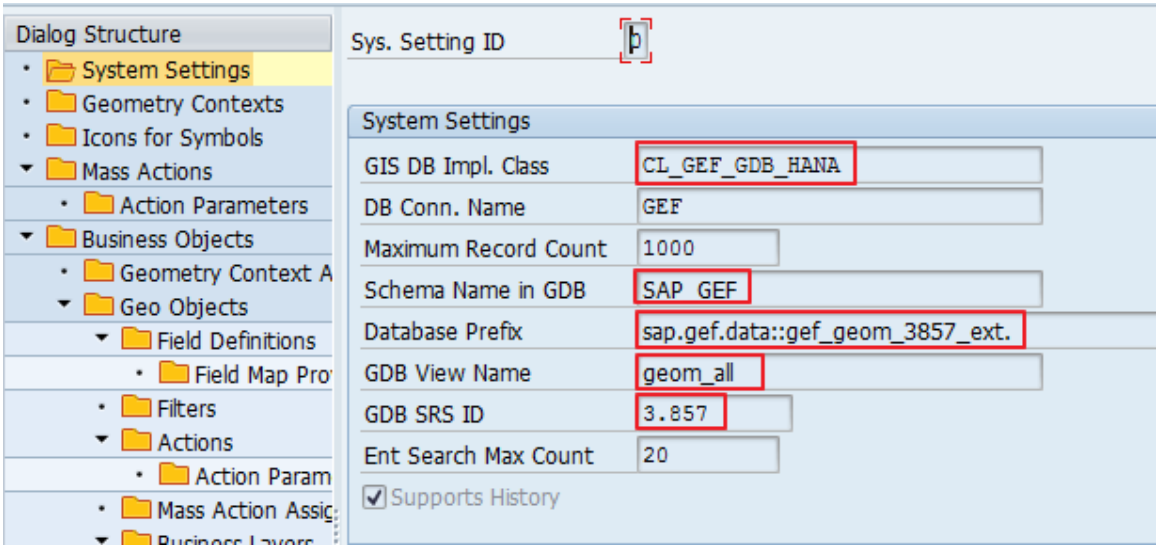
16. Go to Business Layer Level in GEF_FRW_CONFIG and mark the “Time Enab.” checkbox as in the following screen.



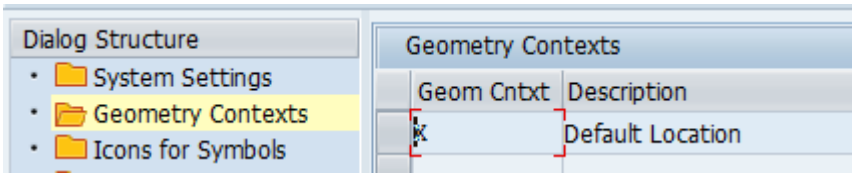
4.22.1. Configure GEF if the Business Function is not Activated

Use the following steps to configure GEF if the business function LOG_EAM_GEF is not activated.

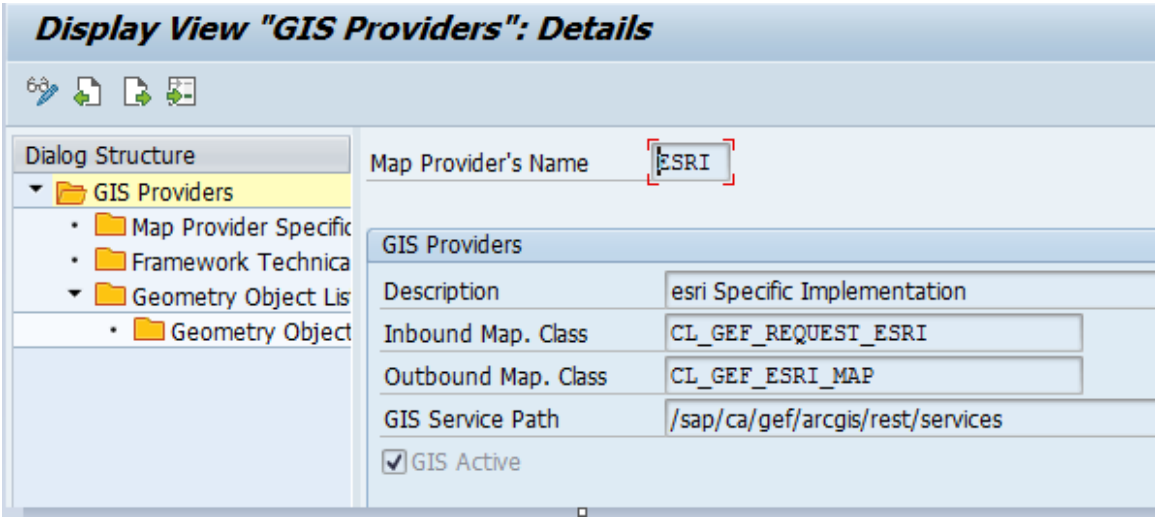
1. Go to t-code GEF_FRW_CONFIG and add a Setting ID as in the following screen.



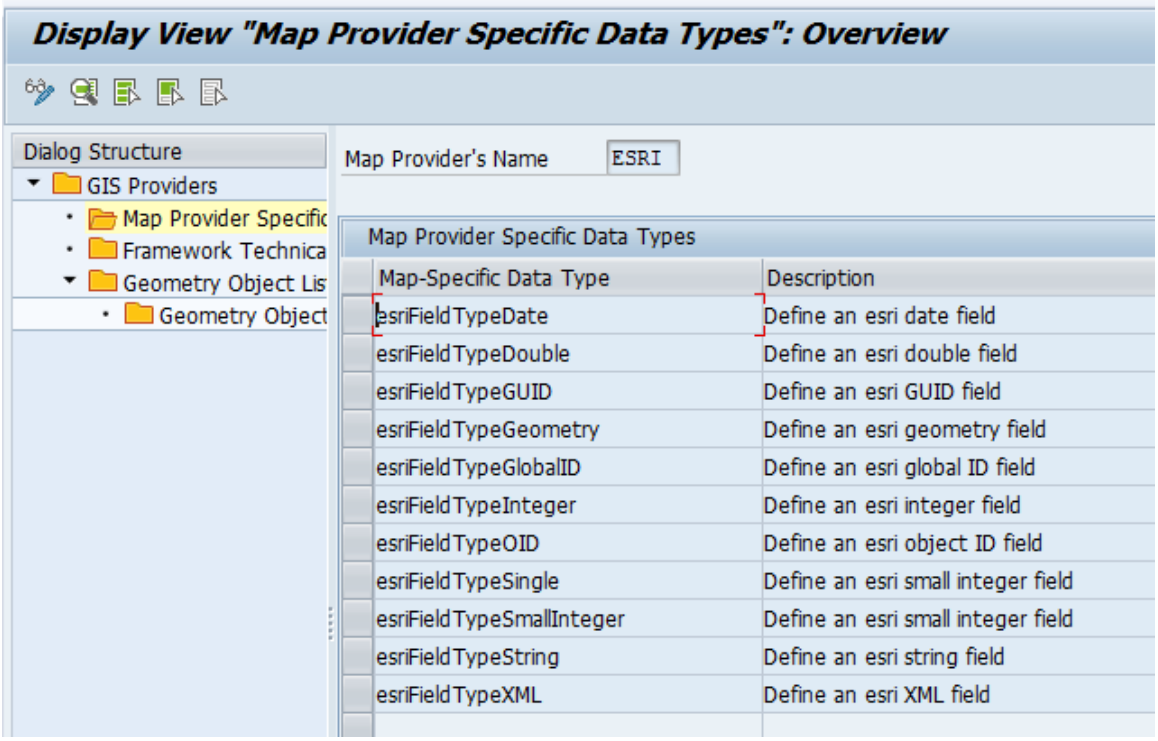
2. In the same transaction (GEF_FRW_CONFIG), add a Geometry Context as displayed in the following screen.



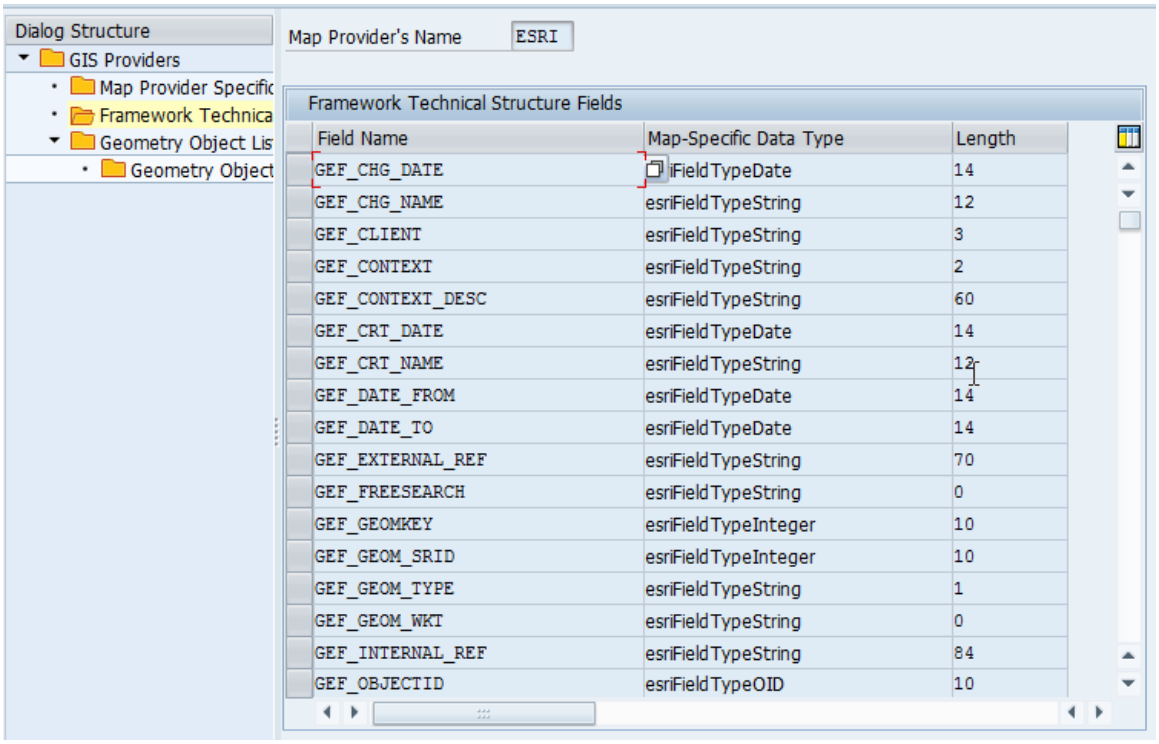
3. Go to t-code GEF_GIS_CONFIG and click on New Entries and add the entries as displayed in the following screen.



4. Go to Map Provider Specific Data Types and click on New Entries and add the entries as displayed in the following screen.

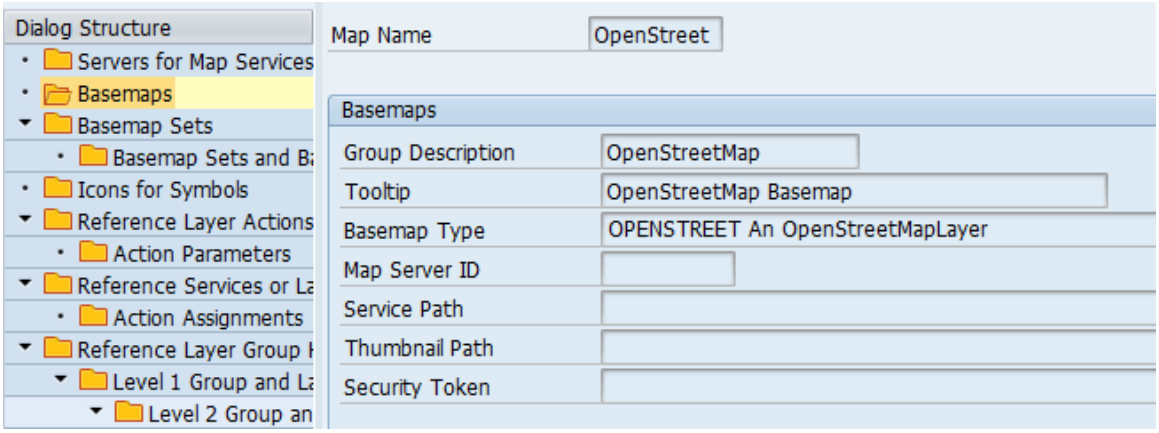


5. Go to Framework Technical Structure Fields and click on New Entries and add the entries as displayed in the following screen.



6. Go to t-code GEF_UI_CONFIG and double-click on Basemaps and click on New Entries and add the Map Name and the Basemap detail.

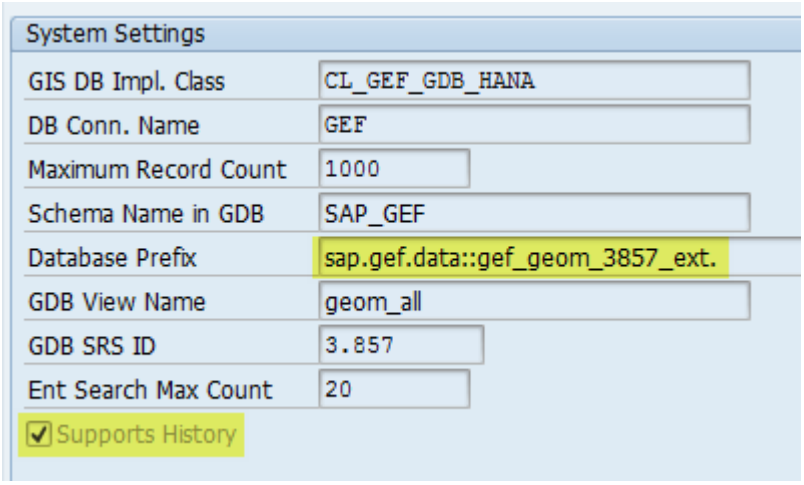
   Note: As an example, “OpenStreet” is entered as the Map Name as displayed in the following screen.



4.22.2. Configure GEF if the Business Function is Activated

Use the following step to configure GEF if the business function LOG_EAM_GEF is activated.

1. If the Business Function LOG_EAM_GEF is activated, go to t-code GEF_FRW_CONFIG, and change the Database Prefix to “sap.gef.data::gef_geom_3857_ext” (or any other name which supports history), and save. Once the entry is saved, we can see the “Supports History” checkbox is checked.



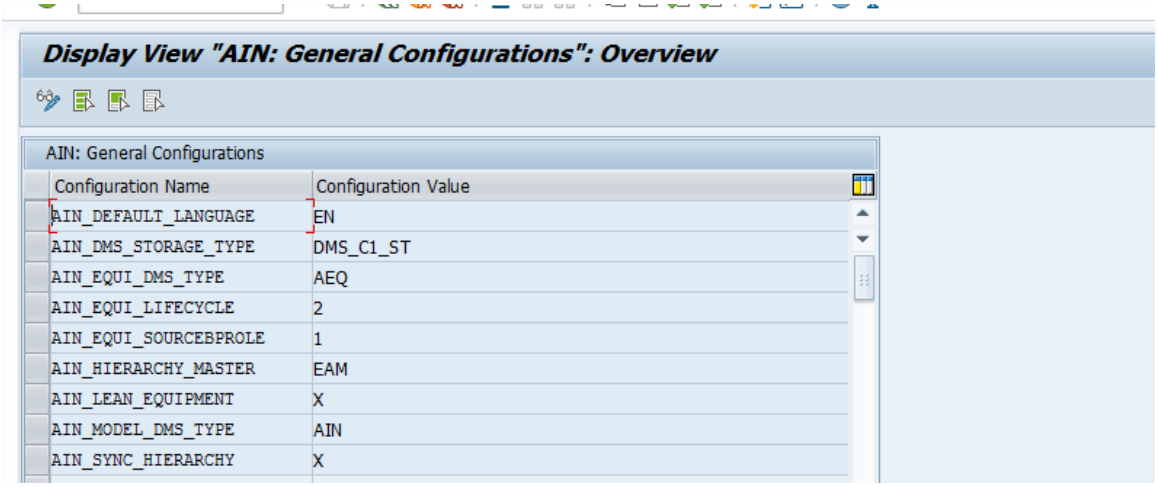
4.23. AIN Integration (Optional)

For enabling the AIN to S/4HANA integration, follow the AIN Configuration Guide as attached.

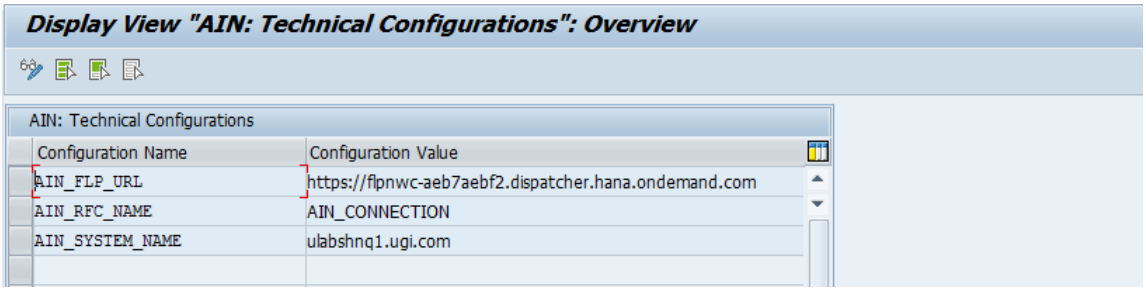
EAM-AIN Integration Functior

The following summary of steps needs to be executed from the standard AIN Integration guide attached above.

1. In t-code SM59, create the RFC Connection (HTTP Connections to External Server) to the AIN system with the user credentials.
2. In t-code SM30, maintain the relevant general configuration parameters for the AIN integration in the view AIN_V_GEN_CONFIG (Refer Section 1.4.1 of the AIN Integration Guide).



3. In t-code SM30, maintain the relevant technical configuration parameters for the integration in the view AIN_V_TEC_CONFIG (Refer Section 1.1 of the AIN Integration Guide).



4. In t-code SM30, create a new characteristic group in the view V_CMG (Refer Section 1.3.1 of the AIN Integration Guide).
5. In t-code SM30, create a new class group in the view V_CLG (Refer Section 1.3.1 of the AIN Integration Guide).
6. In t-code CT04, create the AIN integration related characteristics SAP_AIN_01, SAP_AIN_02 and SAP_AIN_03 as per the specifications (Refer Section 1.3.1 of the AIN Integration Guide)
7. In t-code CL01, create the class ZSAP_AIN for class types 002(Equipment class type) and 017(Document Management) and assign the characteristics SAP_AIN_01, SAP_AIN_02 and SAP_AIN_03 for the class ZSAP_AIN for both class types 002 and 017(Refer Section 1.3.1 of the AIN Integration Guide).
8. In t-code DC10, create a Document Type AIN (Refer Section 1.5.1 of the AIN Integration Guide).

Other Custom Configurations are listed in the following section.

4.23.1. AIN Header Data Mapping

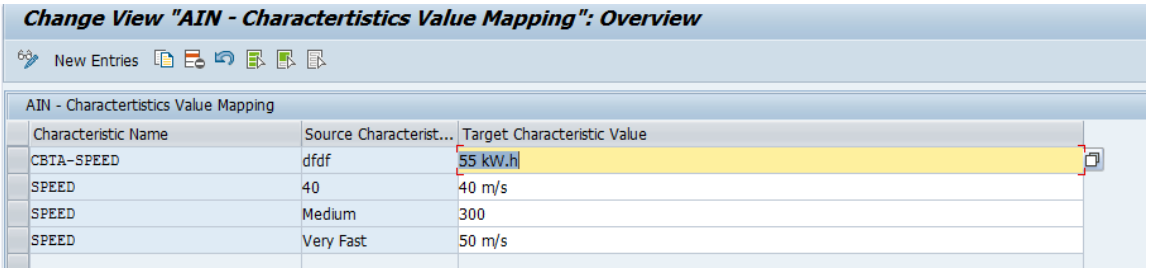
Use the t-code /UGI/AIN_EQ_HDR_MAP to map the fields from AIN Model to Equipment. The following entries needs to be maintained.

4.23.1.1. AIN -EAM Header Fields Mapping

AIN-EAM Header Fields Mapping							
Obj. Type	**Field Name**	**EAM Structure Name**	**EAM Field Name**	**Alternative Structure Name**	**Alternative Field Name**	**Owrite EAM**	**Owrite AIN**
Equipment	MANUFACTURER	EQUI	HERST			Yes	No
Equipment	NAME	EQUI	TYPBZ			Yes	No

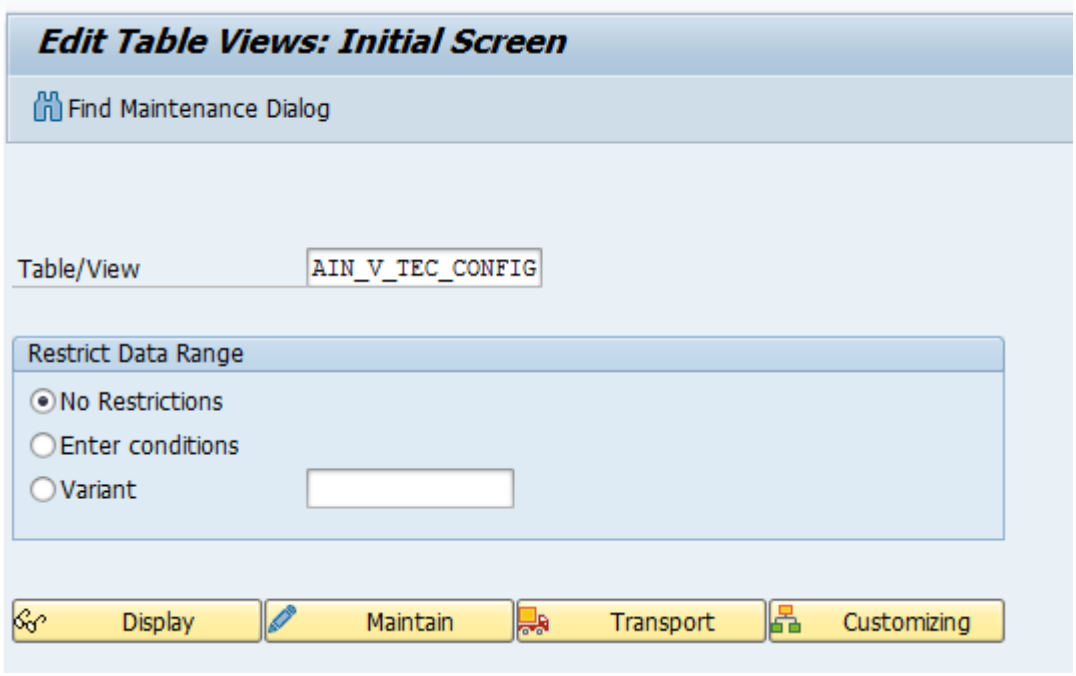
4.23.2. AIN Characteristics Value Mapping (Optional)

Use transaction code /UGI/AIN_CHAR_VALMAP to map the AIN attribute values to the S/4 system characteristics values. This is an optional configuration and hence no default entries need to be maintained.

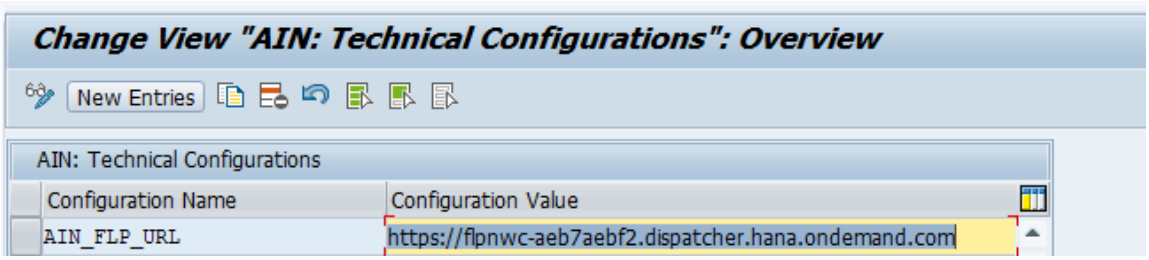


4.23.3. AIN FLP URL Parameter Maintenance

Go to t-code SM30. Enter View name AIN_V_TEC_CONFIG and maintain the following parameter with the FLP URL of the AIN System (URL varies based on the AIN system connection).



AIN_FLP_URL is https://<account_ID>.hana.ondemand.com.



4.24. Configuration Control and iPPE/IE4N

4.24.1. MDG iPPE/IE4N – Maintain Technical Settings

Note: The following settings are applicable for the business user and run the transaction in Co-deployment mode or Hub mode. The system checks the user profile parameter ID"s

(/UGI/IPPE_CONFIG_ID) / parameter value with the IPPE Config ID/Value and the iPPE and IE4N checks are set accordingly.

Go to the t-code SM30. Enter the View name as /UGI/V_IPPE_CNFG.

Maintain the technical settings with the following details.

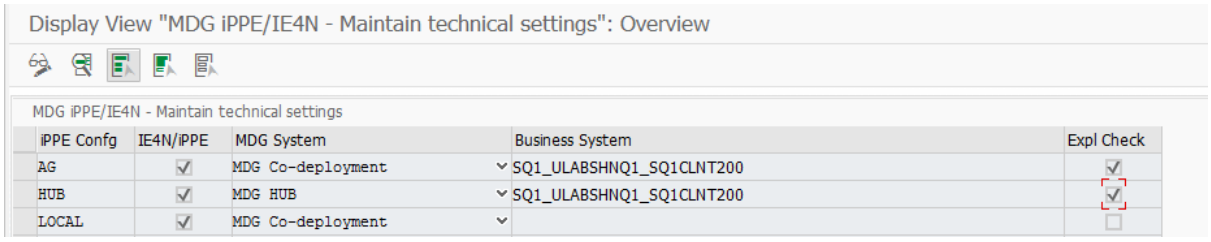
- iPPE Config – Provide the name of the iPPE config. This name will be provided in the parameters of the user data
- IE4N/iPPE – This indicator determines whether the IE4N/iPPE Functions are active or inactive
- MDG System – This parameter determines whether the landscape is Co-deployment or MDG Hub and Target
- Business System – This specifies the logical name of the business system. RFC destination is determined based on this field
- Expl Check – This determines whether the explicit iPPE checks are allowed for the MDG Change Request

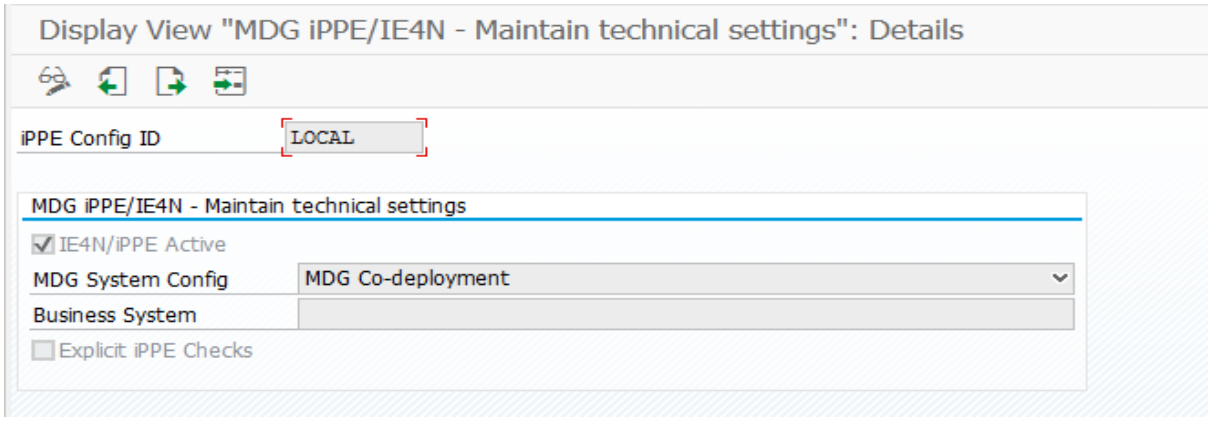
4.24.2. User Parameter

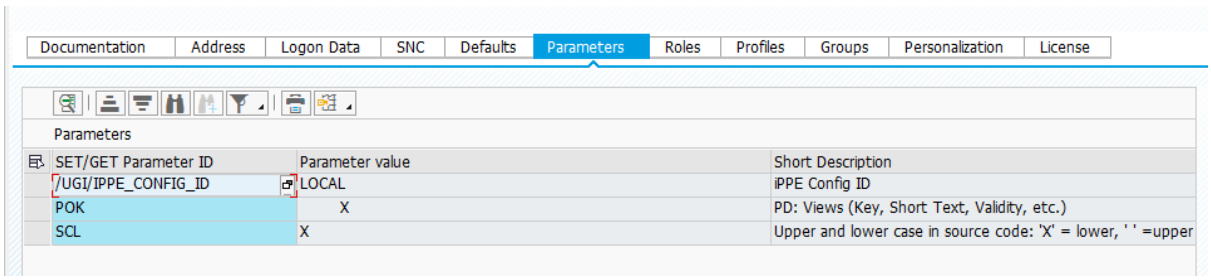
Maintain the SET/GET Parameter ID in the user profile.

Mention the above defined iPPE Config name in the Parameter value of the User profile data with SET/GET Parameter ID as /UGI/IPPE_CONFIG_ID.

The system determines the IPPEGUID of the transactional system based on this configuration.







4.25. Material Serialization

4.25.1. Manage Equipment Enrichment for Serialization

Governance of Equipment created through Serial number profile settings.

Equipment created automatically through serial number profile-procedures set as “Serials with equipment" can be governed through Utopia MDG EAM.

The following functionalities are supported:

- Support Co-Deployment and Hub System landscapes
- Support data enrichment of equipment data depends the process in which equipment gets created and the flag settings as noted below.

Maintain configuration table /UGI3/EQU_SERCON through t-code SM30 as desired.

Origin Document	Document Type Description	Indicator
DELIVERY	Delivery documents	Set as desired
SALES	Sales Documents	Set as desired
MATERIAL	Material Master	Set as desired
MATMOVE	Material Movement	Set as desired
PURORDER	Purchase Order	Set as desired

- Based on the flags set in the configuration table above, the relevant fields listed below will be enriched in the hub.

Origin	Document Type	Mapped Fields
DELIVERY	**Delivery Documents**	**Equipment Fields**
	VBAK-VKORG	ITOB-VKORG
	VBAK-VTWEG	ITOB-VTWEG
	VBAK-SPART	ITOB-SPART
	VBAK-VKBUR	ITOB-VKBUR
	VBAK-VKGRP	ITOB-VKGRP
SALES	**Sales Documents**	**Equipment Fields**
	VBAK-VKORG	ITOB-VKORG
	VBAK-VTWEG	ITOB-VTWEG
	VBAK-SPART	ITOB-SPART
	VBAK-VKBUR	ITOB-VKBUR
	VBAK-VKGRP	ITOB-VKGRP
MATERIAL	**Material Master**	**Equipment Fields**
	MARA-MFRPN	ITOB-HERST
	MARA-MFRNR	ITOB-MAPAR
MATMOVE	**Goods Movement**	**Equipment Fields**
	MSEG-LIFNR	ITOB-ELIEF
	MSEG-BLDAT	ITOB-AULDT
PURORDER	**Purchase Order**	**Equipment Fields**
	MSEG-LIFNR	ITOB-ELIEF
	EKPO-NETPR	ITOB-ANSWT
	MSEG-BLDAT	ITOB-AULDT

Governance supported for equipment created during goods movement, Asset, Inspection lot, Production order, Inventory count, Sales order, Sales delivery business processes and manual serial number creation.

4.25.2. Setup the Rule-Based Workflow for Material Serialization

Serial CR is designed to use BRF+ controlled workflow to determine approver, workflow step, assign CR status and execute background actions (standard workflow template WS60800086 is used)

The standard MDG framework offers BRF+ application that can be configured for each change request type from the following menu path (MDGIMG).

Customizing activity using transaction path MDGIMG > General Settings > Process Modeling Workflow > Rule-Based Workflow > Configure Rule-Based Workflow.

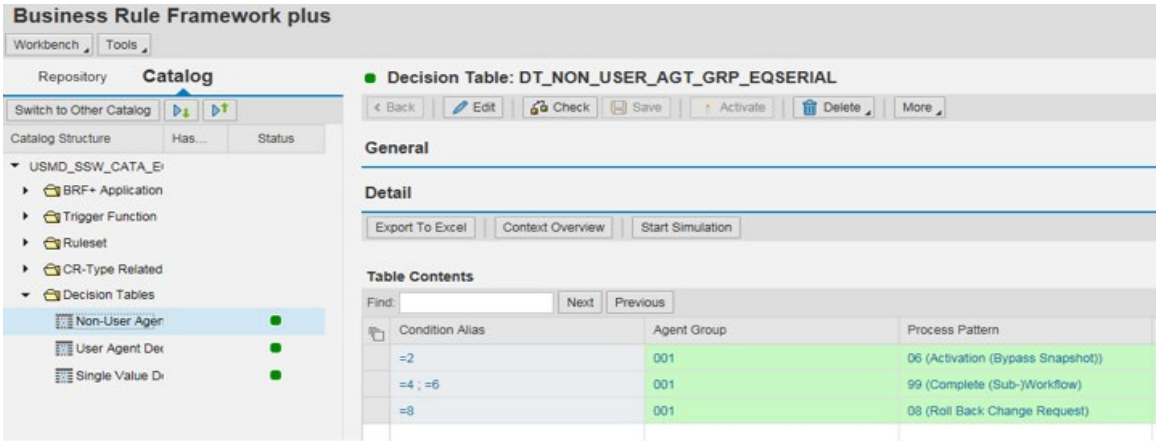
This will launch the Process Definition of Rule-Based Workflow in web browser. The following configuration is applicable for CR type EQSERIAL.

4.25.2.1. Configure Rule-Based workflow for CR type 'EQSERIAL'

Use the following steps to configure rule-based workflow if Material Serialization functionality is enabled:

1. Launch the application and enter the Change Request type “EQSERIAL” and click “Continue” button.

Business Rule framework plus screen is displayed.



2. From the left pane, expand Decision Table, select the Non-User Agent Decision Table, click “Edit”.
3. Click on Additional Actions > Import From Excel.
4. Upload the Non-User Agent Decision Table.
5. Save and Activate.

The workflow uses the following decision tables for Rule Based Workflow:

- Single Value Decision Table
- User Agent Decision Table
- Non-User Agent Decision Table

DT_USER_AGT_GRP_EQSERIAL.xlsx

DT_SINGLE_VAL_EQSERIAL.xlsx

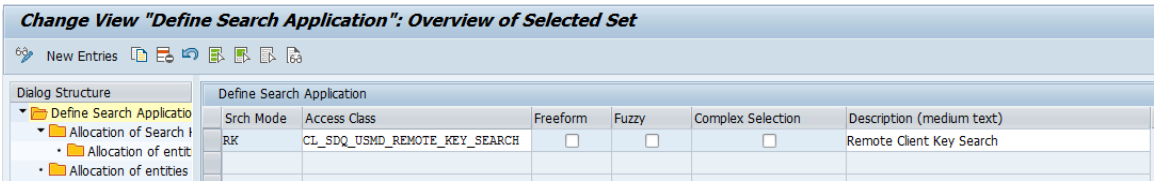
DT_NON_USER_AGT_GRP_EQSERIAL.xlsx

6. Download the attached Excel file from the link EAM Help Portal on Utopia's website.
7. Upload the entries from Excel to the respective decision tables to have single level approval for Material Serialization functionality.

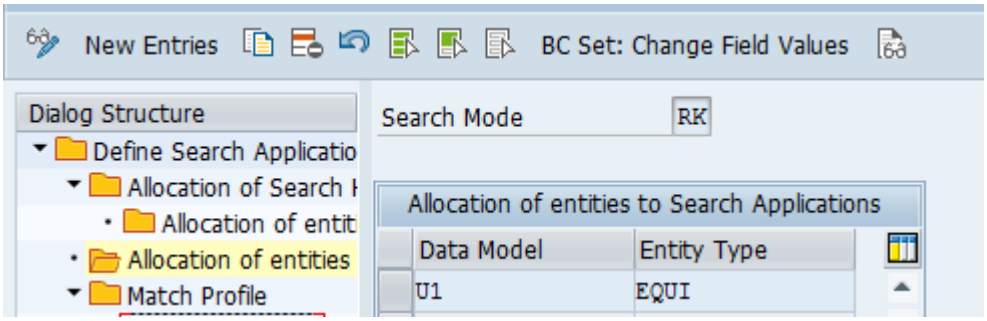
4.25.3. Setup the Remote Key Search for Equipment-Material Serialization

Use the following steps to configure the remote key search:

1. Run t-code MDGIMG.
2. Navigate to General Settings > Data Quality and Search > Search and Duplicate Search > Define Search Applications > Select "New Entries".
3. Enter the following details:
   - Search Mode: RK
   - Access Class: CL_SDQ_USMD_REMOTE_KEY_SEARCH
   - Description: Remote Client Key search



4. Save the configuration.
5. Select the row with search mode as RK and click on "Allocation of entities to search Applications" and select "New Entries".
6. Enter the following details.
   - Data Model: U1
   - Entity type: EQUI

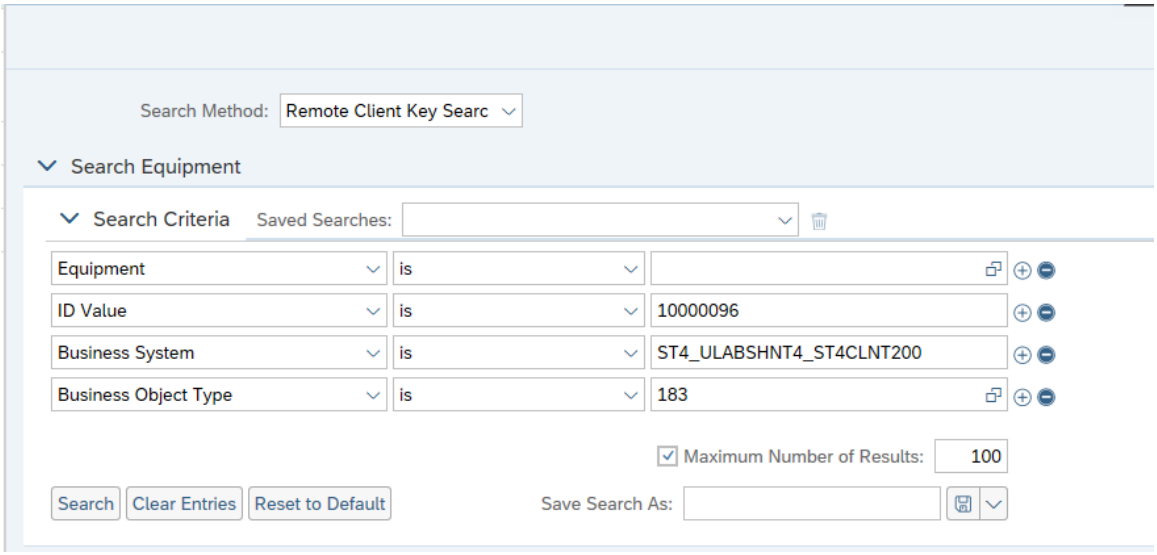


7. Save the configuration.

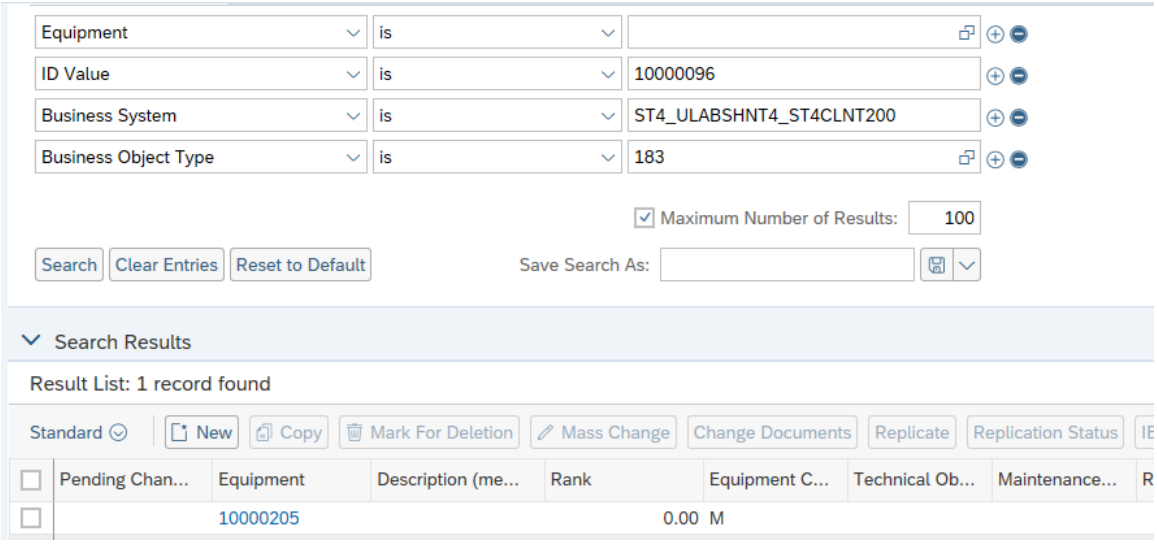
   Note:

   You can perform Remote search using the following steps.

   Enter the following details.
   - Select Remote Client Key Search method
   - ID value as Equipment from target system
   - Business System as target business system
   - Business Object Type as 183.



The search result displays the corresponding equipment number in the MDG Hub as displayed in the following screen.



4.26. System Compatibility

Product		Release	Vendor	Short Description of Product Version
S/4HANA ON PREMISE		1709	sap.com	SAP S/4HANA 1709
SAP_UI		7.52	sap.com	User Interface Technology
Component	**Release**	**SP-Level**	**Support Package**	**Short Description of Package**
SAP_BASIS	752	0002	SAPK-75202INSAPBASIS	SAP Basis Component
S4CORE	102	0002	SAPK-10202INS4FND	S4CORE
SAP_ABA	75C	0002	SAPK-75C02INSAPABA	Cross-Application Component
MDG_FND	802	0002	SAPK-80202INMDGFND	MDG Foundation
MDG_APPL	802	0002	SAPK-80202INMDGAPPL	MDG Applications
MDG_UX	802	0002	SAPK-80202INMDGUX	MDG Additional User Interface
SAP_GWFND	752	0002	SAPK-75202INSAPGWFND	SAP Gateway Foundation 7.40
UIGEF001	100	0005	SAPK-10005INUIGEF001	UI for GEO Enablement

Product		Release	Vendor	Short Description of Product Version
S/4HANA ON PREMISE		1809	sap.com	SAP S/4HANA 1809
SAP_UI		7.53	sap.com	User Interface Technology
Component	**Release**	**SP-Level**	**Support Package**	**Short Description of Package**
SAP_BASIS	753	0000		SAP Basis Component
S4CORE	103	0000		S4CORE
SAP_ABA	75D	0000		Cross-Application Component
MDG_FND	803	0000		MDG Foundation
MDG_APPL	803	0000		MDG Applications
MDG_UX	803	0000		MDG Additional User Interface
SAP_GWFND	753	0000		SAP Gateway Foundation 7.40
UIGEF001	100	0005		UI for GEO Enablement

4.27. Final Steps

SAP and Utopia recommend regenerating the data model again at the end of these setup steps to ensure clear code generation.

Note

Before you can run all Master Data Governance processes like Create Equipment, you need to assign the data model U1 to your user. Alternatively, the user administrator can maintain the following Personalization Parameter for your user profile: SAP Master Data Governance R_FMDM_MODEL.

If there are other data model's active in your system, such as Financials (0G), Material Master (MM), or Business Partner/Customer/Supplier (BP) additional entries may appear in this list.