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Configuration Guide for EAM MDC 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	05-10-2018	Initial version	Shabana Sultana Begum

Approval History

Version	Date	Description	Name
1.0	05-10-2018	Final version	Lyle Snyder

Table of Contents

1. Introduction

This document provides the information you require to set up Master Data Consolidation and Mass Processing (MDC) for EAM Solutions by Utopia.

1.1. Purpose

This Configuration Guide provides the information you require to set up Master Data Consolidation and Mass Processing for EAM 9.2 Solutions by Utopia.

1.2. Target Audience

This guide is intended for business users who will be configuring Master Data Consolidation and Mass Processing for EAM Solutions by Utopia.

2. Prerequisites/Before You Start

i Note

Refer EAM 9.2 Configuration Guide as a prerequisite for enabling MDG for Equipment, Functional Location and Material BOM for the Change Request scenario in MDC.

Before you start using MDC for EAM, make sure that the following prerequisites are fulfilled.

- Business Function
- Set Up Workflow
- Configuration of bgRFC
- Authorization Objects and Roles
- Number Ranges
- Prerequisite OSS Notes
- Composite BC-Set for Default Configuration

2.1. Business Function

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

- MDG-CO, Consol. + Mass Pro. 9.0 (MDG_CONSOLIDATION_CUSTOBJ_2)

i Note

The following switches get activated upon successful activation of the above business function.
- o MDC_CUSTOBJ_SWITCH_2 (MDG Consolidation Custom Obj. 9)
- o MDC_FND_SWITCH (MDG Consolidation 8)
- o MDC_FND_SWITCH_2 (MDG Consolidation 9)
- o MDG_MDC_SWITCH (MDG Consolidation)

The table properties are delivered along with the BC-Sets. This can be changed if required.

2.2. Set Up Workflow

Use the following mandatory steps while maintaining settings:

- When configuring the RFC destination, you need superuser authorization to create the default SAP_WFRT user.
- Regenerate the authorization profile for SAP_ALL or include the USMD* authorization objects into the authorizations of the user SAP_WFRT.
- 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.

1 Note

Select all the table entries and click "Adjust" button.

The standard workflow template WS54500001 can be used for Master Data Consolidation and Mass Processing.

Run transaction code (t-code) SWE2 and ensure that the type linkage setting for Object category BO and Object Type BUS2240 has the following settings:

- Event as "Started"
- Receiver Type as "blank "
- Receiver Call as "Function Module"
- Receiver Function Module as "SWW_WI_CREATE_VIA_EVENT_IBF"
- Receiver Type Function Module as "MDC_RECEIVER_TYPE_GET"
- Linkage Activated as "Yes"
- Enable event queue as "No"
- Event delivery as "Using tRFC(Default)".
- Behavior Upon Error Feedback "3 – Do not change linkage"

Change View "Event Type Linkages": Details

New Entries

Object Category	BO BOR Object Type
Object Type	BUS2240
Event	STARTED
Receiver Type	

Linkage Setting (Event Receiver)

Receiver Call	Function Module
Receiver Function Module	SWW_WI_CREATE_VIA_EVENT_IBF
Check Function Module	
Receiver Type Function Module	MDC_RECEIVER_TYPE_GET
Destination of Receiver	
Event delivery	Using tRFC (Default)

☑ Linkage Activated
☐ Enable Event Queue

Behavior Upon Error Feedback	3 Do not change linkage
Receiver Status	0 No errors

ℹ Note

The Linkage Activated indicator must not be active for other receiver types of the object type BUS2240 and the event STARTED.

2.3. Configuration of bgRFC

Use the following steps to configure bgRFC

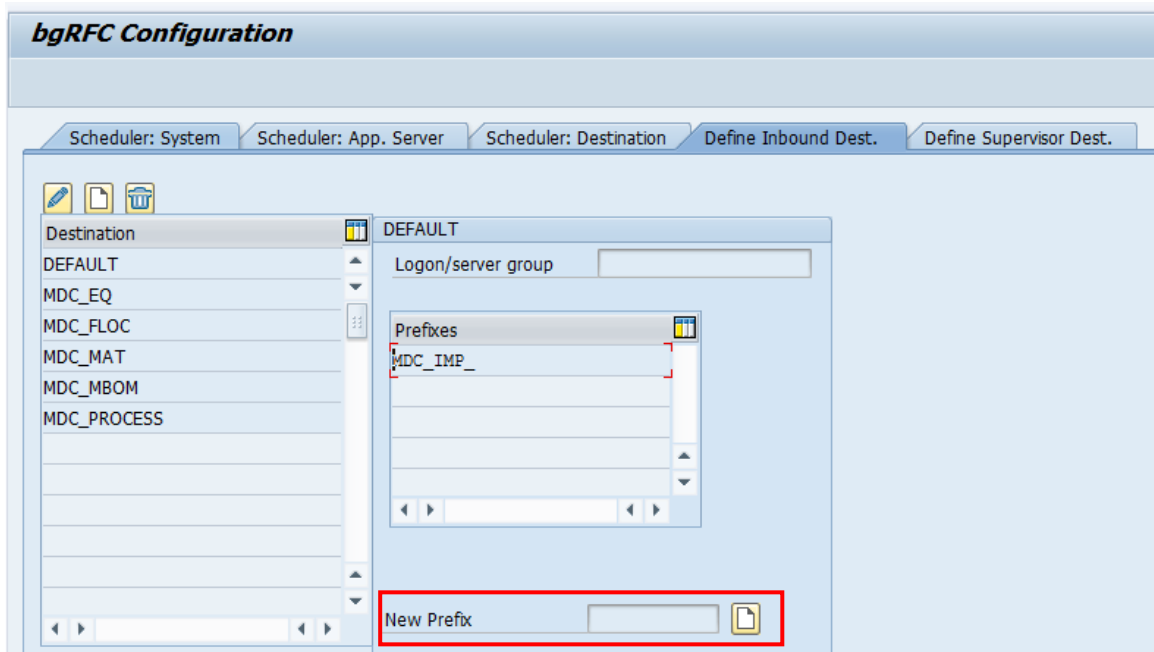1. Run transaction SBGRFCCONF and make sure that the following settings are maintained.

    ℹ Note

    To create the bgRFC inbound destination manually, the authorization object S_BGRFC with activity 02 and type 07 must be assigned.

2. Navigate to the "Define Inbound Dest" tab.
3. Click on "Create" button.
4. Maintain the following entries under the "Destination" tab.
    - DEFAULT
    - MDC_EQ
    - MDC_FLOC
    - MDC_MBOM
    - MDC_PROCESS

5. Double click on the Destination name and provide the value against the field "New Prefix" and click on "Create" button to maintain the following prefixes corresponding to the inbound destination defined. Click on Save (💾) button once the following entries are maintained.

- DEFAULT
  - o MDC_IMP_
- MDC_EQ
  - o MDC_EQ_ACT_Q_
  - o MDC_EQ_MAT_Q_
  - o MDC_EQ_VAL_Q_
  - o MDC_QUEUE_EQ_
- MDC_FLOC
  - o MDC_FL_ACT_Q_
  - o MDC_FL_MTC_Q_
  - o MDC_FL_VAL_Q_
  - o MDC_QUEUE_FL_
- MDC_MBOM
  - o MDC_MBOM_ACT_Q_
  - o MDC_MBOM_EDI_Q_
  - o MDC_MBOM_UPD_Q_
 - o MDC_MBOM_VAL_Q_
- MDC_PROCESS
  - o MDC_QUEUE_

6. Under the tab "Scheduler: Destination", make sure that the following destination names exist. If not, you can create manually by clicking on "Create" button. A popup appears with a message "For which type of destination do you want to create a configuration entry?" Choose "Inbound" and populate the destination as mentioned below. Click on "SAVE" button on the popup.
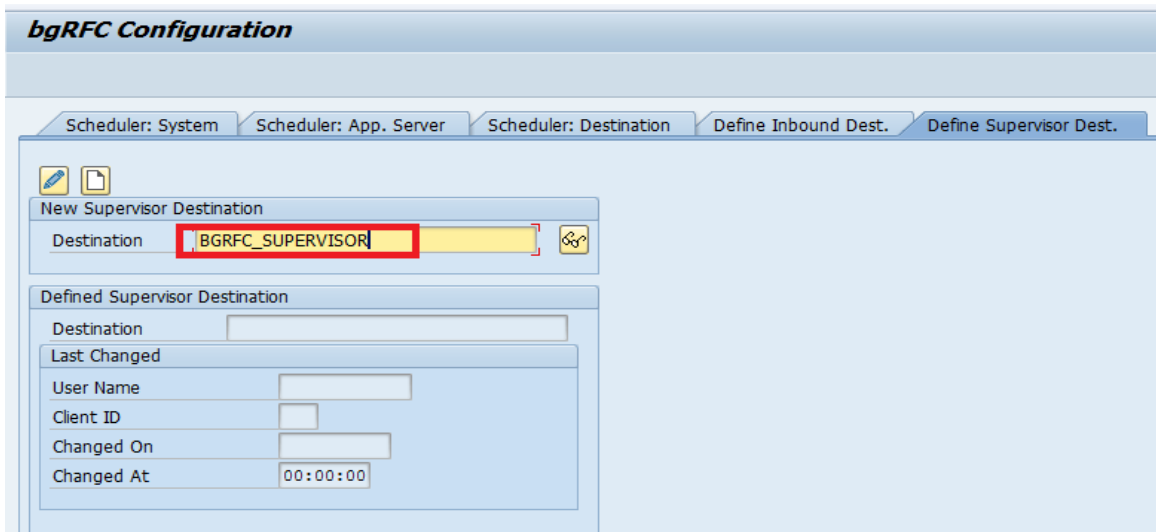
- MDC_EQ
- MDC_FLOC

- MDC_MBOM

i **Note**

Other fields in the "Define Inbound Dest", take the defaulted values. Make sure you click on "Save (💾)" button before navigating to other tab to avoid data loss.
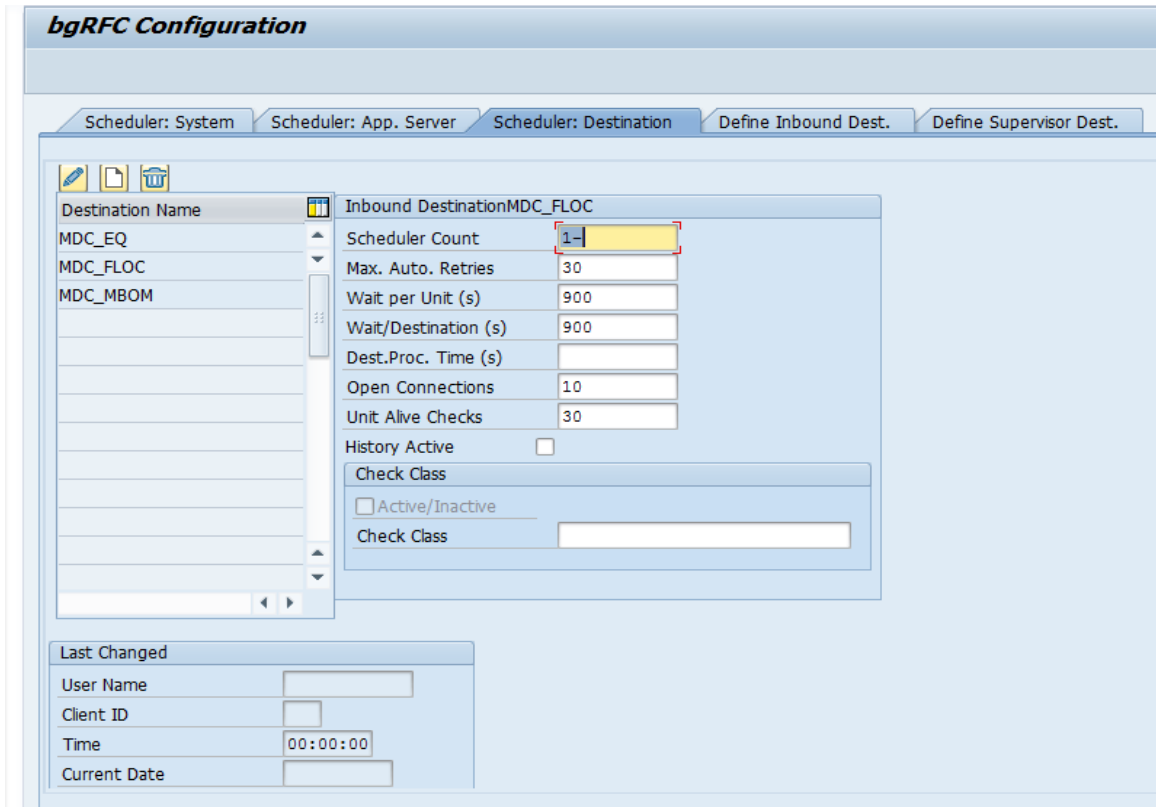
7. Provide Destination as "BGRFC_SUPERVISOR" in the "Define Supervisor Dest" tab and click Enter.
8. Click on "Save" button.

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ℹ Note

In case, it says the BGRFC_SUPERVISOR does not exist or invalid, Run t-code SM59. Check if the RFC Destination "BGRFC_SUPERVISOR" of type 3 (ABAP connection) is there, if not create the same. Under the "Logon and Security tab", maintain the Background RFC User: "BGRFC_SUSR" and set the password.

9. Click on "Save" button to save the entries.

2.4. Authorization Objects and Roles

To view the imports, manage Consolidation and mass processing, the following roles should be assigned.

- /UGI/_MDC_DISP_EAM_APP_920
- /UGI/_MDC_SPEC_EAM_APP_920

The roles have the following authorization objects:

- MDC_ADMIN (Administrative Permissions)
- MDC_MASS (Mass Processing Permissions)
- MD_PFILT (Consolidation Cluster Permissions)
- MDC_PROOT (Consolidation Root Permissions)

ℹ Note

Make sure that the MDC_OBTYP field for the above authorization object has the 183. 185 and 237 assigned values.

The following screen displays the authorizations maintained as a part of the above roles.

ℹ Note

Fiori roles can be found in the Fiori guide.

Ensure that the following roles are assigned to view, review and approve the MDG Change Requests.

- With LAM:

- o /UGI/_MDGEAM_REQ_LAM
- o /UGI/_MDGEAM_SPEC_LAM
- o /UGI/_MDGEAM_STEW_LAM
- Non-LAM:
  - o /UGI/_MDGEAM_REQ
  - o /UGI/_MDGEAM_SPEC
  - o /UGI/_MDGEAM_STEW

2.5. Number Ranges

Run t-code SNRO and review the number range of the objects Equipment Master (/UGI/MDGEQ), Functional Location Master (/UGI/MDGFL), Material BOM (STUEM) and Material Master (MATERIALNR).

2.6. Prerequisite OSS Notes

- 2679057 Problem during creation of an SAP HANA match configuration with multiple key fields (follow-on note to 2677913)

  i Note

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

2.7. Composite BC-Set for Default Configuration

Run transaction code SCPR20 and activate the BC-Set /UGI/MDC_EAM_CONFIG_920 in Expert Mode to enable all the configurations as described under section 3.

i Note

Once this is activated successfully, it is not required to activate the individual BC-Sets provided under section 3.

Alternatively, you can choose to activate the individual BC-Sets as provided under section 3 using the following sequence and mode.

BC-Set	Sequence	Mode
/UGI/MDC_EAM_PROC_MODEL_920	1	Expert
/UGI/MDC_EAM_ADAPTERS_920	2	Default
/UGI/MDC_EAM_CONFIG_MATCH_920	3	Expert
/UGI/MDC_EAM_BR_CONFIG_920	4	Default
/UGI/MDC_EAM_VF_CONFIG_920	5	Default
/UGI/MDC_EAM_ACT_CONFIG_920	6	Default
/UGI/MDC_EAM_PT_CONFIG_920	7	Default

3. Configuration Process

3.1. Process Model

Run transaction code SCPR20 and Activate (✎) BC-Set /UGI/MDC_EAM_PROC_MODEL_920 in Expert Mode.

The following business objects are added along with the tables.

- 237
- 183
- 185

3.2. Specify Adapters

Adapters are the classes provided to support the functionalities related to consolidation and mass processing such as Validation, Activation, Matching, Best record calculation, Update, Edit, Standardization, Replication etc. These are required to setup the process template defining the flow of a process id.

To activate the adapters provided for the business object 237 (Material BOM), Equipment Master (183) and Functional Locations (185), follow the below steps.

- Run t-code SCPR20 and activate (✎) BC-Set /UGI/MDC_EAM_ADAPTERS_920.
- Run t-code MDCIMG. Navigate through the IMG path: Master Data Governance, Consolidation and Mass Processing> Specify Adapters.
- Ensure that the below entries are getting added upon successful activation of BC-Set(/UGI/MDC_EAM_ADAPTERS_920).

Business Object Type	Process Step Type	Process Step Adapter	Adapter Description
183	ACT	/UGI/CL_MDC_ADAPTER_EQ_ACT	Activation for EQ
183	BRC	/UGI/CL_MDC_ADAPTER_EQ_BRC	Equipment Best Record Calculation
183	EDI	CL_MDC_ADAPTER_EDI	Interactive Mass Processing
183	FAR	CL_MDC_ADAPTER_FAR	Filter and Remove
183	MTC	/UGI/CL_MDC_ADAPTER_EAM_MTC	EAM Hana Matching
183	MTC	CL_MDC_ADAPTER_FUZZY_MTC	CL_MDC_ADAPTER_FUZZY_MTC
183	MTC	CL_MDC_ADAPTER_MTC	CL_MDC_ADAPTER_MTC
183	STD	/UGI/CL_MDC_ADAPTER_EQ_VALMAP	Evaluate value mapping for EQ
183	STD	/UGI/CL_MDC_ADAPT_EQ_KEYMAP	Evaluate Key Mapping for EQ
183	STD	CL_MDC_ADAPTER_BRF_STD	BRFplus
183	VAL	/UGI/CL_MDC_ADAPTER_EQ_VAL	EQ Validations (Business Suite)
185	ACT	/UGI/CL_MDC_ADAPTER_FL_ACT	Activation for FL
185	BRC	/UGI/CL_MDC_ADAPTER_FL_BRC	Functional Location Best Record Calculation

Business Object Type	Process Step Type	Process Step Adapter	Adapter Description
185	EDI	CL_MDC_ADAPTER_EDI	Interactive Mass Processing
185	FAR	CL_MDC_ADAPTER_FAR	Filter and Remove
185	MTC	/UGI/CL_MDC_ADAPTER_EAM_MTC	EAM Hana Matching
185	MTC	CL_MDC_ADAPTER_FUZZY_MTC	CL_MDC_ADAPTER_FUZZY_MTC
185	MTC	CL_MDC_ADAPTER_MTC	CL_MDC_ADAPTER_MTC
185	STD	/UGI/CL_MDC_ADAPTER_FL_VALMAP	Evaluate value mapping for FL
185	STD	/UGI/CL_MDC_ADAPT_FLOC_KEYMAP	Evaluate Key mapping for FL
185	STD	CL_MDC_ADAPTER_BRF_STD	BRFplus
185	UPD	CL_MDC_ADAPTER_BRF_UPD	BRFplus
185	VAL	/UGI/CL_MDC_ADAPTER_FL_VAL	FL Validations (Business Suite)
237	ACT	/UGI/CL_MDC_ADAPTER_MBOM_ACT	Activation for MBOM
237	BRC	/UGI/CL_MDC_ADAPTER_MBOM_BRC	MBOM Best Record Calculation
237	EDI	CL_MDC_ADAPTER_EDI	Interactive Mass Processing
237	FAR	CL_MDC_ADAPTER_FAR	Filter and Remove
237	MTC	/UGI/CL_MDC_ADAPTER_MBOM_MTC	MBOM Matching
237	MTC	CL_MDC_ADAPTER_FUZZY_MTC	CL_MDC_ADAPTER_FUZZY_MTC
237	MTC	CL_MDC_ADAPTER_MTC	CL_MDC_ADAPTER_MTC
237	REP	/UGI/CL_MDC_ADAPTER_MBOM_REP	MBOM Replication with DRF
237	STD	/UGI/CL_MDC_ADAPTER_BOM_VALMAP	Evaluate value mapping for MBOM
237	STD	/UGI/CL_MDC_ADAPT_MBOM_KEYMAP	Evaluate Key Mapping for MBOM
237	STD	CL_MDC_ADAPTER_BRF_STD	BRFplus
237	STD	CL_MDC_ADAPTER_BRF_UPD	BRFplus
237	VAL	/UGI/CL_MDC_ADAPTER_MBOM_VAL	MBOM Validations (Business Suite)

3.3. Define Rules Using the Business Rule Framework plus (optional)

The system generates the required BRFPLUS application for the business object once you run the "Apply BRFplus "artifacts function from the process model. This creates all the functions, expressions, tables etc. required to be used for defining the ruleset and rules. The naming convention is MDC_<abbreviation of process step>_FOR__<table name>, for example: MDC_STD_FOR__MAST_PRC.
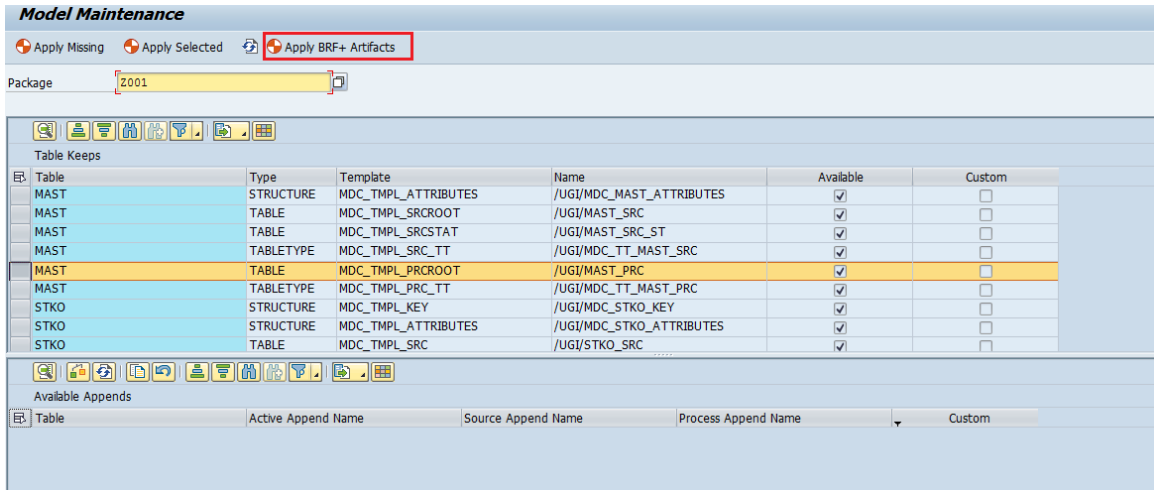
Use the following steps to define BRFplus rules for the following process step types.

- Standardization: Select the corresponding adapter in the Process Template Step view in the Customizing Activity Specify Process Template.

- Validation: Set the Execute BRFplus indicator for a specific adapter configuration in the Customizing Activity Configure Validation.
- Best record calculation: Run the Customizing Activity Specify Order of Rules for Best Record Calculation and select an entry. In the Order of Rules for Tables view select the Rule ID BRF+ for specific tables.

To generate the BRFplus application for a business object, use the following steps:

1. Run t-code MDCIMG. Navigate to the customizing path - Master Data Governance, Consolidation and Mass Processing > Configure Process Models and Field Properties > Configure Process Models.

2. Select the business object say 237 and click on the symbol ⊕ against the column, resultant artifacts. In case the structures are not visible, remove the filters, if any.

3. Provide the package in customer namespace say Z001.

4. Select any PRC table say /UGI/MAST_PRC and click on the button "Apply BRF+ Artifacts".
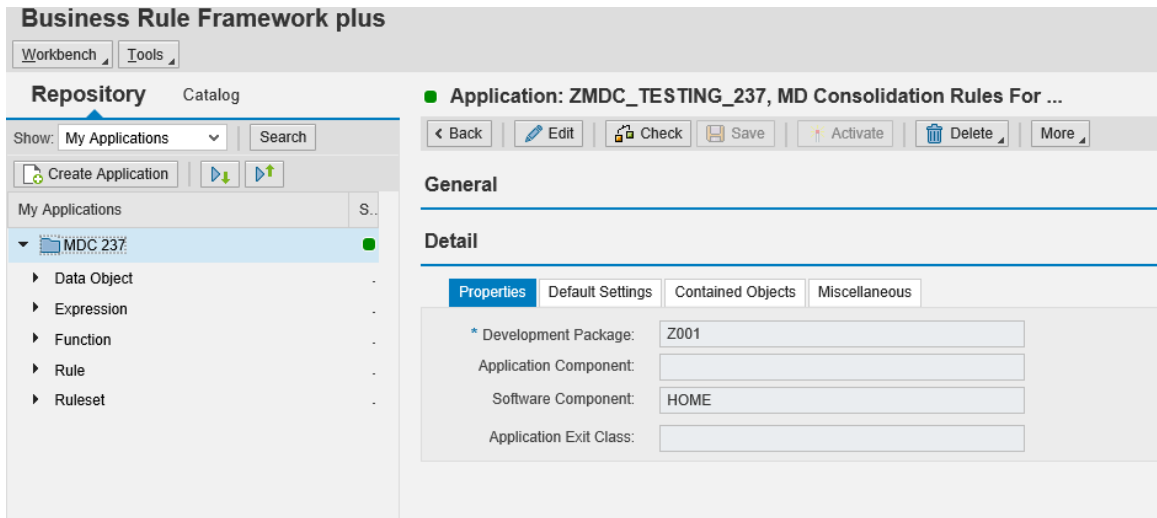
   This generates the BRFplus application automatically.

The log captures if there are any errors while generation of the BRFplus application.

Ty...	Name of the column	Message Text
☐		Created BRF+ application ZMDC_TESTING_237
☐		Object ZMDC_TESTING_237 successfully activated
☐		Object ZMDC_TESTING_237 successfully activated
☐		Object MDC_INITIALIZE_NUMBER successfully activated
☐		Object MDC_LOG_EXT_ID successfully activated
☐		Object MDC_VALIDATION_STATUS successfully activated
☐		Object MDC_TABLE_OF__UGI_MAST_PRC successfully activated
☐		Object MDC_VAL_FOR__UGI_MAST_PRC successfully activated
☐		Object MDC_STD_FOR__UGI_MAST_PRC successfully activated
☐		Object MDC_BRC_FOR__UGI_MAST_PRC successfully activated
☐		Object MDC_UPD_FOR__UGI_MAST_PRC successfully activated
☐		Object MDC_LOOP_AT__UGI_MAST_PRC successfully activated
☐		Object MDC_BEST_OF__UGI_MAST_PRC successfully activated
☐		Object MDC_GET_BEST__UGI_MAST_PRC successfully activated
☐		Object MDC_TABLE_OF__UGI_STKO_PRC successfully activated
☐		Object MDC_VAL_FOR__UGI_STKO_PRC successfully activated
☐		Object MDC_STD_FOR__UGI_STKO_PRC successfully activated
☐		Object MDC_BRC_FOR__UGI_STKO_PRC successfully activated
☐		Object MDC_UPD_FOR__UGI_STKO_PRC successfully activated
☐		Object MDC_LOOP_AT__UGI_STKO_PRC successfully activated
☐		Object MDC_BEST_OF__UGI_STKO_PRC successfully activated
☐		Object MDC_GET_BEST__UGI_STKO_PRC successfully activated
☐		Object MDC_TABLE_OF__UGI_STPO_PRC successfully activated
☐		Object MDC_VAL_FOR__UGI_STPO_PRC successfully activated
☐		Object MDC_STD_FOR__UGI_STPO_PRC successfully activated
☐		Object MDC_BRC_FOR__UGI_STPO_PRC successfully activated
☐		Object MDC_UPD_FOR__UGI_STPO_PRC successfully activated
☐		Object MDC_LOOP_AT__UGI_STPO_PRC successfully activated
☐		Object MDC_BEST_OF__UGI_STPO_PRC successfully activated
☐		Object MDC_GET_BEST__UGI_STPO_PRC successfully activated
☐		Object MDC_TABLE_OF__UGI_STPU_PRC successfully activated
☐		Object MDC_VAL_FOR__UGI_STPU_PRC successfully activated
☐		Object MDC_STD_FOR__UGI_STPU_PRC successfully activated
☐		Object MDC_BRC_FOR__UGI_STPU_PRC successfully activated
☐		Object MDC_UPD_FOR__UGI_STPU_PRC successfully activated
☐		Object MDC_LOOP_AT__UGI_STPU_PRC successfully activated

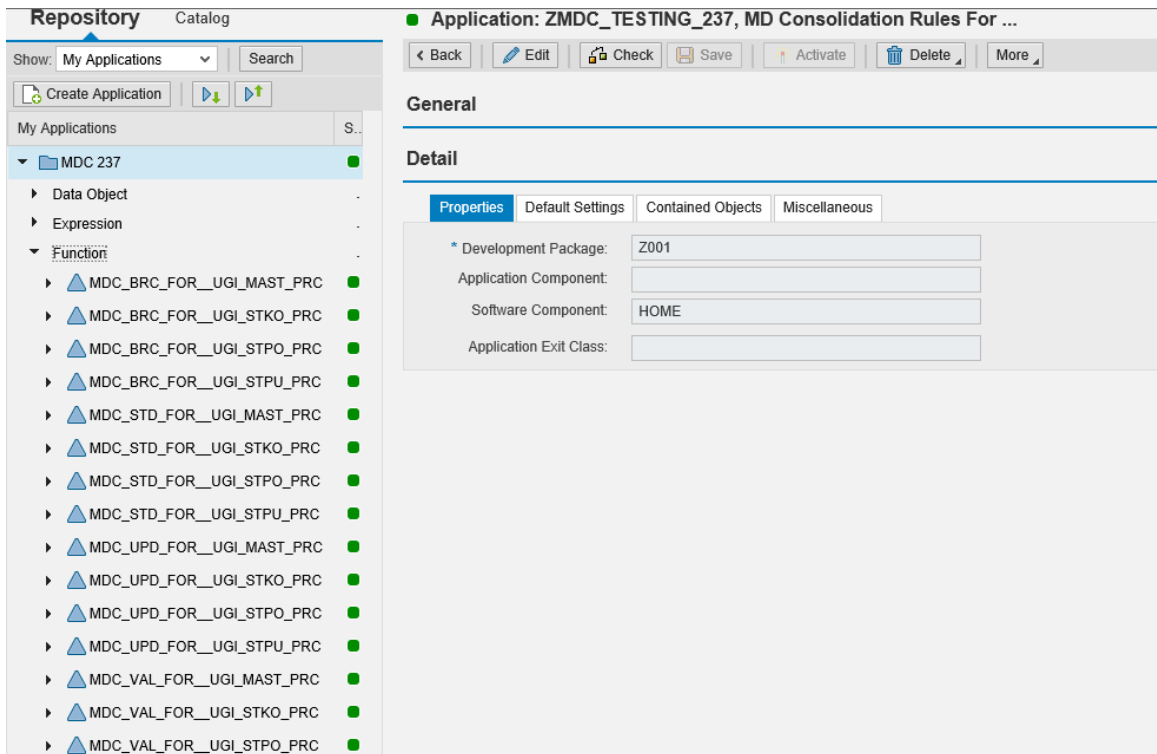| ☐		Object MDC_UPD_FOR__UGI_STPU_PRC successfully activated
☐		Object MDC_LOOP_AT__UGI_STPU_PRC successfully activated
☐		Object MDC_BEST_OF__UGI_STPU_PRC successfully activated
☐		Object MDC_GET_BEST__UGI_STPU_PRC successfully activated

5. Launch t-code BRFplus. Alternatively, you can run t-code MDCIMG and navigate through the path: Master Data Governance, Consolidation and Mass Processing > Define Rules Using the Business Rule Framework plus.

6. Ensure that the following application named "MDC_237" is generated.

ⓘ Note

Naming convention for the BRFplus application created is "MDC_<BO_type>".

7. Navigate to the function corresponding for which the rule needs to be defined.

8. Use the following steps to define a rule:

   a. Choose any function say "MDC_VAL_FOR__UGI_STKO_PRC".

   b. Navigate to "Assigned Rulesets" and click on "Create Ruleset".

   c. Enter the name and description of the Ruleset.

Ruleset is created as displayed in the following screen. The Ruleset holds the set of rules defined as per the business scenarios.

d. Save and activate the Ruleset.

e. Click on "Insert Rule" to create a new rule within a Ruleset.

The following screen shows a simple rule to display an error message "Please maintain the labor field" when the "Labor/Office" field is not provided.

The following screen shows sample message action used for validation.

Make sure that the "Application sub object" is selected as per the process step and "External Identification field" is set as "By external object".

3.4. Configure Scope

You can use the Configure Scope customizing activity to configure the default scope for your mass processing on the Fiori UI. This default scope is displayed on the initial screen of mass processing on the UI and determines the fields that are available in the Edit step. This is customizable and can be navigated through the path as given below.

Master Data Governance, Consolidation and Mass Processing > Configure Scope.

Run the transaction code SCPR20 and activate the BC-Set /UGI/MDC_EAM_ADAPTERS_920 for default configurations delivered for business objects 237, 183 and 185.

3.5. Configure Standardization

This process step can be used for data enrichment and normalization using the key mapping, value mapping and BRFplus applications. Each of these functionalities is carried out by the specific adapters meant for that purpose.

For example, if the material does not exist in the target system but the source file has the key mapped material, instead of throwing the error that material does not exist or activated, it assigns the material BOM data to the key mapped material in the target system.

Also, for enrichment some of the fields can be derived based on the existing data. Such rules can be defined at the BRFplus application level.

3.6. Configure Parallelization for Update

Within the process step update data is updated by the system using BRF+ rules. For the process step update, you can configure the number of parallel processes to improve the performance of the consolidation process.

To use parallelization in SAP MDG, consolidation you must set up an RFC destination.

This is available in the Customizing activity under the path.

Master Data Governance, Consolidation and Mass Processing> Configure Parallelization for Update.

You can specify the number of processes that you want to run in parallel along with the queue name. Configure Matching

3.7. Configure Matching

Within this process, you can define and generate the match configurations and matching rules and rulesets to group the data in clusters called match groups based on certain rules.

You can configure matching by running the t-code MDCIMG and maintain the required settings using the navigation path: Master Data Governance, Consolidation and Mass Processing > Configure Matching.

Run t-code SCPR20 and activate the BC-Set /UGI/MDC_EAM_CONFIG_MATCH_920 In Expert mode to enable the default configurations for matching for business objects 237, 183 and 185.

ℹ Note

Matching and Best Record Calculations for Material BOM is not supported as part of EAM 9.2.

3.7.1. Add Configuration for Matching

To add configuration for matching, use the following steps:

- Configure Parallelization
- Configure SAP HANA Fuzzy Matching
- Create Match Configuration for Fuzzy Matching

3.7.1.1. Configure Parallelization

Use the following steps to configure parallelization:

1. Run t-code MDCIMG and navigate through the customizing path Master Data Governance, Consolidation and Mass Processing > Configure Matching > Configure Parallelization for <Bo_type> say Equipment Matching>.
2. Click on "New Entries".
3. Provide the description for the config ID.
4. Provide the number of parallel steps allowed.

   The following points should be considered for assigning this value:

- This indicates the number of allowed parallel processes to be triggered when this adapter step gets started.
- In case you wish to restrict the number of queues that are created for this step, you enter the wished number of processes here. Make sure not to enter a number higher than the allowed number of parallel tasks, since this might result in poor performance.
- In case of activation, it is recommended to enter a few parallel processes that is lower than the number of allowed parallel tasks. Due to fact, that during activation the writing of key mapping is conducted using a queue by its own to optimize runtime, the number of parallel processes sums up to the configured number of parallel process plus one.

3.7.1.2. Configure SAP HANA Fuzzy Matching

Use the following steps to configure SAP HANA fuzzy Matching:

1. Run t-code MDCIMG and navigate through the customizing path Master Data Governance, Consolidation and Mass Processing > Configure Matching > Configure SAP HANA Fuzzy Matching.
2. Click on "New Entries".
3. Provide the name of the config ID.
4. Provide the Adapter Config Description.
5. Assign the BO type as 237 for Material BOM, 183 for equipment master and 185 for functional locations.
6. Click on "Save" button.
7. Mark the row for config ID and click on the "Fuzzy Ruleset Fields".
8. List down the table and table fields for consideration for matching weightage.
9. To configure the, Fuzzy Ruleset Rules, Run t-code "/UI2/FLP" and navigate to the Fiori application "Configure Matching" and define the rules as explained:

   The rulesets are created in the SAP HANA studio to define certain rules based on the business scenarios. The ruleset can be found in the package used for creating the match configuration. The ruleset naming convention is as follows: <MatchConfigurationName>_RULESET.

   a. When selecting the row for a match configuration, the following details are needed:

      - Configuration Name
      - Business Object

- Score Selection -This defines, the score from which rule is to be used for the match result:
- Highest Score: Score of the rule with the highest score
- First Rule: Score of the first rule that matches. This can be influenced by the sequence of rules.
- Approval Score
- Assigned rules with number of relevant attributes

b. When selecting the attribute details, the following information is shown:

o Properties
- Table Name: Technical table name for the assigned match attribute
- Field Name: Technical field name for the assigned match attribute
- Weight: Weight for this attribute used for the calculation of the result score of a rule (value between 0 and 1)
- Fuzziness: Fuzziness value for an attribute to check, if the values are similar (value between 0 and 1, 1 means: only exact values for duplicate detection)
o Options:
- Empty Matches Null: When switched on, null values also match empty values in database tables
- Score, if empty: This score is applied for the attribute if the field value is empty and would not match against a record with a value in the same field. (e.g. a business partner record would not match, if the field "Region" is empty, against a similar record with a filled region field. When assigning a value in this option, this score is used, and the attribute would match)
- Spellcheck Factor: Defines the score of terms that get a fuzzy score of 1.0 but are not equal.
- Similar Calculation Mode: Defines how the score is calculated when comparing terms. Defines options to search with substrings of terms.

c. The following types of conditions are supported for attributes

- If Missing: This can be ignored in consolidation
- If Equal: Checks, if there is a specific value for an attribute (use the field value)
- If Not Equal: Checks, if there is NOT a specific value for an attribute (use the field value) Based on these conditions, the following actions can be triggered
- Skip Column: This attribute is not taken in consideration for the matching
- Skip Rule: The complete rule is not taken in consideration for the matching
- Replace: The value for the attribute is replaced by another value

3.7.1.3. Create Match Configuration for Fuzzy Matching

Use the following steps to create match configuration for Fuzzy Matching:

1. Run t-code MDCIMG and navigate through the customizing path Master Data Governance, Consolidation and Mass Processing > Configure Matching > Create Match Configurations for Fuzzy Matching.

   This Customizing activity calls the Web Dynpro application Match Configuration (MDC_HDB_MATCH). You can use this screen to create, change, copy, and delete a match configuration.

   a. To create a match configuration, choose New.

   b. On the General Data screen, proceed as described:

   - Enter a name in the Match Configuration field.

- Enter a description in the Description field.
- Enter the business object type in the Business Object Type field.
- Enter a name for the SAP Hana package in the *HANA* package field.
- The SAP HANA package is generated with this name in the SAP Hana database when the match configuration is created. After the generation of the package its name cannot be changed anymore.
- Enter an ABAP package in the *ABAP* packag*e* field.

c. On the "Select Attributes" screen, the tables from the process model are presented in tree form. You can select the attributes that you want to include in your match configuration.

d. On the "Review and Generate" screen, you can review your choices from the previous screens, and if necessary, you can go back to the previous screens to make changes.

e. Click on "Save" to save the configuration.

f. Click on "Generate" button to generate the match configuration.

1 Note

To use the generated match configuration for matching, ensure that fuzzy search adapter CL_MDC_ADAPTER_FUZZY_MTC is assigned to a business object in the customizing path: Master Data Governance, Consolidation and Mass Processing > Specify Adapters.

3.8. Configure Best Record Calculation

Once the matching is completed, the data is divided into separate match groups.

To configure the Best Record Calculation for MDG consolidation, run the Customizing activities under the navigation path as: Master Data Governance, Consolidation and Mass Processing >Configure Best Record Calculation.

The standard delivery contains the following rules to determine the best record:

- COMPLETENESS: Determines that on field level completely maintained record win.
- RECENCY: Determines that on table level the most recent record wins.
- SOURCE_SYSTEM: Determines that on table level the record from a specified source system wins.
- BRF+: Best record calculation is up to the Business Rule Framework (BRFplus).

For a specific table the source system or the recency can be considered to have higher priority. Depending on this setting the corresponding data is considered for the best record.

You can view and define the rules under the customizing path: Master Data Governance, Consolidation and Mass Processing >Configure Best Record Calculation >Specify Rules for Best Record Calculation.

To specify the order of rules with respect to the system ID, you can navigate to the customizing path: Master Data Governance > Consolidation and Mass Processing >Configure Best Record Calculation >Specify Order of Rules for Best Record Calculation.

The information, what source system has a certain priority for a specific table is maintained in the Order of Source Systems view. In a second step the preliminary best record is processed on field level. If a field does not contain data but completeness is assigned to this field as highest priority, then the data is completed with data derived from the record with the next highest order.

To enable the default configuration for Best Record calculations, you can run transaction code SCPR20 and activate the BC-Set /UGI/MDC_EAM_BR_CONFIG_920.

3.9. Configure Validation

Within the process step validation, the consolidation checks whether the quality of a record is sufficient to meet the requirements defined in the back-end system. If the quality requirements are met the data can be saved, if not corrections and data enrichment might be required.

This process step can be used to carry out the data validation and the initial check. This can call the validation BAdI for MDG and the BRFplus application based on the checkbox settings. There is a separate adapter provided for each of the business objects.

Run t-code SCPR20 and activate the BC-Set /UGI/MDC_EAM_VF_CONFIG_920 for enabling the default configurations.

Use the following steps to add configurations for validation.

Run t-code MDCIMG and navigate through the customizing path: Master Data Governance, Consolidation and Mass Processing > Configure Validation.

1. Click on "New Entries".
2. Provide the name for configuration ID.
3. Provide the Adapter Config Description.
4. Enter the Prefix for queue name such as MDC_MBOM_VAL_Q_. Make sure that the same is defined under the section 2.3.
5. Mark the checkbox "MDG Checks" if the MDG checks are to be executed for validation.
6. Mark the checkbox "BRF+ Checks" if the BRF+ validation checks are to be called for data validation.
7. Selecting the "Worklist" checkbox indicates that the master data objects identified with errors in the validation step of the consolidation process are transferred to the master data quality worklist.

    This validation step is used in a process with the process goal Data Quality Remediation as defined in the process template configuration.

8. Select the "Remove Unchanged" checkbox to ensure that the unchanged records are removed from the consolidation process.

    The following points should be considered before marking this checkbox:

*   Do not set the indicator for initial validations.
*   It is recommended to set the indicator for validation steps before the final activation step for clarity reasons.
*   The number of the removed records is displayed in the UI.
*   Removing unchanged records could also improve the performance.

The following screen displays the configuration screen for validation.

3.10. Configure Filter and Remove

You can use this process step to configure the adapter CL_MDC_ADAPTER_FAR for filter and remove.

Within this process step, selection of records is removed from the current consolidation process. According to your settings this selection of records then is moved to a new consolidation process or in case of records with errors, further options can be applied.

The process step Filter and Remove can be used only as successor of the following process steps:

- Matching
- Best record calculation
- Validation

You can filter records with errors using the same criteria and select one of following actions using the input help:

- Move records to new duplicate process
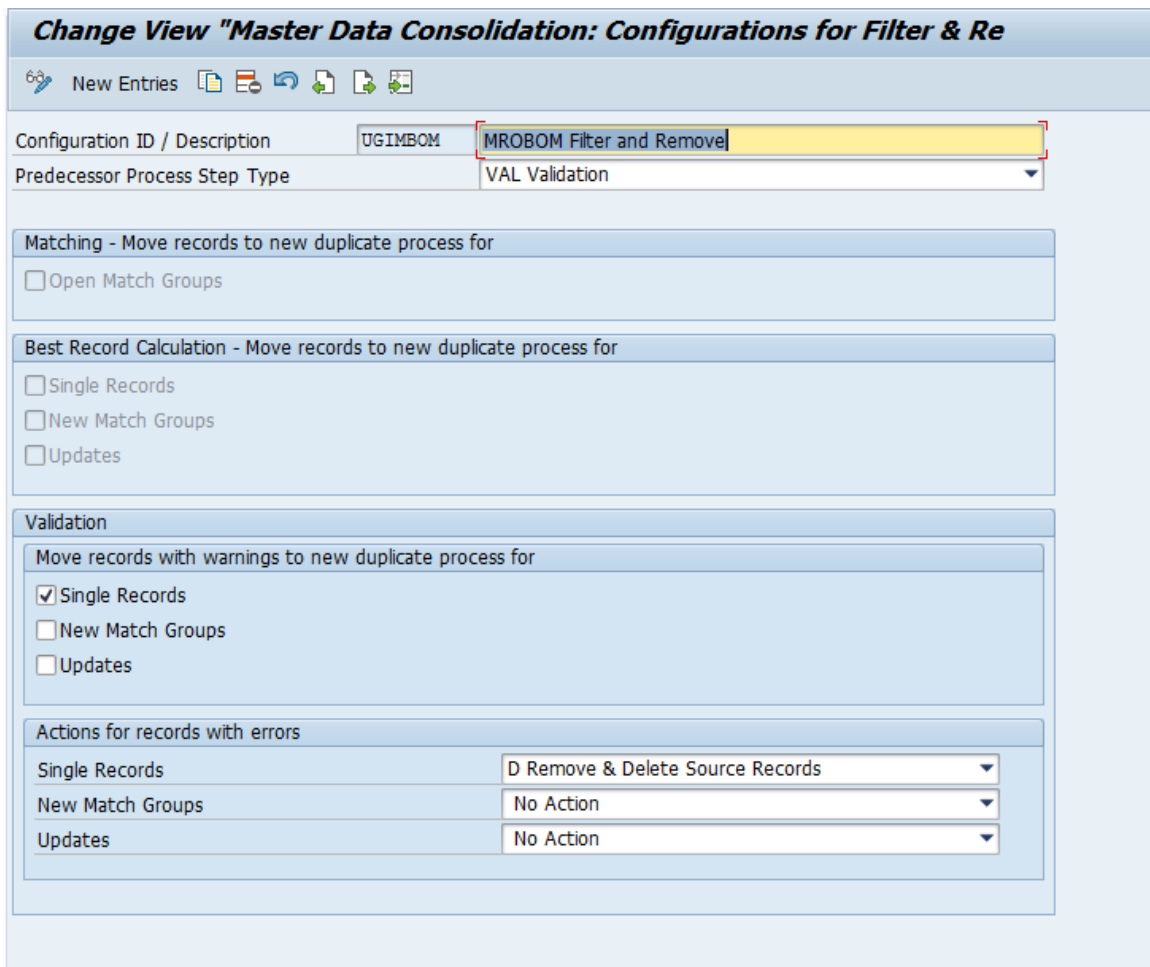- Remove and Delete Source Records
- No Action

Run transaction code SCPR20 and validate if the BC-Set /UGI/MDC_EAM_VF_CONFIG_920 is already activated for enabling the sample configurations provided for the BO types 237, 185 and 183.

The following steps can be followed for adding a configuration for Filter and Remove:
1. Click on "New Entries".
2. Provide the name of the config ID and provide a suitable description against the same.
3. Under the "Matching-Move records to new duplicate process for" tab, mark the check box, open match groups to get the records from open match groups moved to the new process id.
4. Under the "Best Record Calculation, move records to new duplicate process for" tab, select from the following options to enable this behavior:
   - Single Records
   - New Match Groups
   - Updates

5. Under the "Validation Move records with warnings to new duplicate process for" tab, select from the following options to enable this behavior:
   - Single Records

- o New Match Groups
- o Updates

6. Under the "Action for records with error" tab, make the following selections against the single records, new match groups and updates options:
    - o No action
    - o Remove and Delete the source records. This clears the value in the source tables once the process is completed.
    - o Move records to new duplicate records. This moves the records to new process ID for separate processing.

The following screen displays the configuration for Filter and Remove.

3.11. Configure Activation

This process step helps in the configuration of the activation once the process is completed.
The activation can be either Direct activation of cleansing case or through the MDG Change Request.

Upon activation, the records are created in backend. This also provides the settings to enable the replication of data along with the BRFplus validation and validation BAdI to be called.

This can be navigated through the path: Master Data Governance, Consolidation and Mass Processing > Configure Activation > Configuration of MBOM (or EQ or FLOC)

You can enable the default configuration for activation by running transaction code SCRPR20 and activating the BC-Set /UGI/MDC_EAM_ACT_CONFIG_920.

Use the following steps to create a config ID for Activation.

1. Click on New Entries
2. Provide the name of the config ID.
3. Maintain the adapter config description.
4. Provide prefix for the queue MDC_MBOM_ACT_Q_. Make sure that this matches with the convention maintained against section 2.3.
5. Double-Click and navigate to the detailed view of the configuration.
6. Under the tab, "New Records", maintain the following settings:

    a. Activation Target for new records - Direct activation, Activation with Change Request, or no activation.

    b. Type of Change Request: Choose dropdown to select the type of Change Request in case the option is selected as "Activation with change request".

7. Maintain the value for Max. Records. This is the maximum number of objects that can be part of each Import Type Change request.
8. Maintain the activation settings under the tab, "Updated Records" for consideration for mass processing.
9. For match groups, maintain the settings under the tab "Match Group".
10. Under the tab, Replication, mark the check box "Call DRF after Activation" in case the data must be replicated after successful activation.
11. Under the Tab Validation, Mark the below checkbox for additional validations as needed
    a. Execute Central Governance Checks (Validation Rules and BAdi Validation)

    b. Execute BRF+ checks

12. Under the tab Retention time, specify a period between 0 to 999 days in which the records and the history of the process are retained to be displayed even after the final process step, typically the activation. During this period the records are locked.
13. This is further extended to hours.

3.12. Configure Process Template

Process template is used to define the flow of the process id. The setup of process templates is tied to certain rules concerning the order and recurrence of the individual process steps.

The process goal defines the type of template. For example, the following process goal for mass processing is M. It is customizable based on the business requirement. A simple flow can have the steps in the following sequence.

Initial check (validation) >Standardization > Validation > Matching > Best Record Calculation > Activation

You can enable the default configurations provided for the business object 237 (MBOM), Equipment Master (183) and Functional Location (185) through following steps: -

The following table has the process steps and their recurrence and limitations.

Process Step	Recurrence	Order	Used by Consolidation	Used by Mass Processing
Standardization	No Limitation		X	X
Update	No Limitation		X	X
Matching	Once		X	
Best Record Calculation	Once	After Matching	X	
Validation	No Limitation		X	X
Filter and Remove	No Limitation	After: - BRC Validation Matching	X	X
Activation	Once	Last or last but one	X	X
Replication	Once	Last	X	X

Run t-code MDCIMG and navigate through the customising path: Master Data Governance, Consolidation and Mass Processing > Configure Activation > Configure Activation for <BO_OBJECT(MBOM).

Use the following steps to configure the process template:

1. Choose New Entries.
2. Enter a Process Template ID, a corresponding Description, select the Business Object Type (237 Material BOM, 183 for Equipment Master and 185 for functional location), and the Workflow Template WS54500001.
3. In the Process Goal field, use the input help to select the goal of the process.

4. The following types of process goals are available for selection:

    *   Consolidation of Source Records: Records can be loaded repeatedly to be consolidated. The records are not replicated to the source systems.
    *   Consolidation for Central Maintenance: Records are loaded only once in the hub system. After being consolidated the records are replicated to the source systems. You can use SAP MDG, central governance to perform the central maintenance.
    *   Mass Processing: A selection of active records is updated. The process steps matching, and best record calculation are not supported.
    *   Consolidation of Active Records: Your active master data records are checked for duplicates and best records are defined according to your settings. You select a certain process strategy for duplicate records to be applied:

        *   Remove Duplicates: The duplicates are marked for deletion. The key mapping is directed to the best record.
        *   Improve Best Record: The duplicates are kept unchanged. The key mapping remains unchanged.
        *   Improve All Records: The duplicates are kept but become copies of the best record. The key mapping remains unchanged.

5. The Delete Source indicator enables you to configure a default value for the UI. If you want as default value on the UI that source data is deleted after finalizing the process set the "Delete" flag.
6. Save your entries.

Use the following steps to Configure Process Template Step:
1. Mark a process template and choose Process Template Step
2. Select New Entries.
3. Enter a Step Number.
4. Select a Step Type using the input help.
5. Select a corresponding Adapter using the input help.
6. Select a corresponding Configuration ID.
7. If you want the process to stop to review the data after finalizing this process step set the Check Point active indicator.
8. In case you have set the Check Point indicator, choose one of the following options using the input help:

    *   No action control: The process can be continued by a user assigned to a role with the required authorization.
    *   Apply the four-eyes-principle: The process can be continued by a user assigned to a role with the required authorization except the requestor.
    *   Action is only allowed for requestor: The process can exclusively be continued by the requestor.

i Note

The users must be assigned to roles that contain the authorization object MDC_PROOT:

*   The activity 31 Confirm must be assigned to continue processes.
*   The activity 37 Accept must be assigned to continue processes despite unfinished match reviews.

9. To enable the default configurations delivered, use the following step:

    a. Run t- code SCPR20 and activate the BC-Set /UGI/MDC_EAM_PT_CONFIG_920.