

# Configuring Master Data Governance for Retail Article

To use SAP Master Data Governance (MDG) for Retail Article, you need to carry out the steps described below.

## Prerequisites

### *Business Function*

You have activated the following business functions:

- Business Function Set SAP Retail (ISR\_RETAILSYSYSTEM)
- 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 Feat. Pack (MDG\_FOUNDATION\_5)

#### Note

This business function is available with support package 02 and higher of MDG 7.0.

#### Note

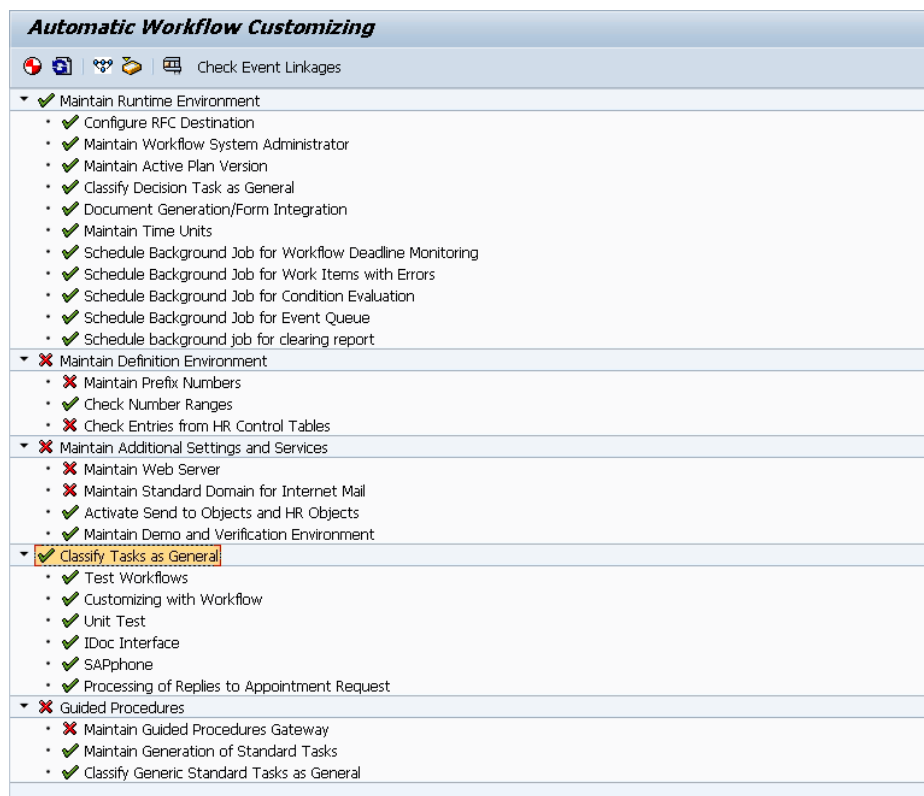
Before you activate the business functions, ensure that you have the administration authorization for MDG. The required authorization objects are delivered with the authorization role SAP\_MDG\_ADMIN. In transaction **PFCCG**, we recommend creating a copy of this role and assigning the relevant authorization 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 MM, BP, or OG) and the values for the authorization activity ACTVT *Activity* (for example 01: Create or generate, or 02: Change).

For additional BCV Content activate business function /BCV/NWBC\_SIDE\_PANEL. If you want to use the MDG for Retail Article homepage or the Business Context Viewer, activate the business functions /BCV/MAIN and /BCV/MAIN\_1. For more information on the Business Context Viewer see, [Business Context Viewer in Single Processing](#) [External].

## Set Up Workflow

To use the rule-based workflow processes of MDG for article, you have defined general settings for [SAP Business Workflow](#) [External] in Customizing for SAP NetWeaver under **▶ Application Server ▶ Business Management ▶ SAP Business Workflow ▶**. Remember to regenerate the authorization profile of SAP\_ALL or include USMD\* authorization objects into the authorization for the user WF-Batch.

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



For further information see the documentation for the Configuration activity. Note the following when maintaining the settings:

- When configuring the RFC destination you need superuser 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 transaction **SE38** and keep the default settings.
- Maintain the prefix numbers for the standard objects.
- You do not need to maintain the Web Server node and Guided Procedures section.

## Import content of MDG for Retail Article

For this activity, please refer to [MDGA Installation Guide \[External File\]](#).

## *Set Up Search*

You must have installed and connected Enterprise Search either in embedded form or as central search engine service in order to use master data governance for article. If you don't need to search for classifications you can replace the Enterprise Search with the standard database search or another search provider.

## *Adjust Profile Parameters*

Ensure that the profile parameter size for the **Shared Objects Memory** is the correct. To check this setting run transaction **RZ11** and verify that the value for parameter `abap/shared_objects_size_MB` is between 200 and 300 megabytes.

If you want to use the **SAP NetWeaver Business Client** with single sign on, ensure that the parameters `login/create_sso2_ticket` and `login/accept_sso2_ticket` are set correctly.

Use transaction **RZ11** to check that the host name is fully qualified for parameter `icm/host_name_full`.

## *User Roles*

In order to successfully conduct the next steps in the configuration process, you must have the following user roles assigned in the **PF03** transaction:

- `SAP_BC_TREX_ADMIN`
- `SAP_ESH_LOCAL_ADMIN`
- `SAP_MDGA_MENU` – Master Data Governance: Analytics
- `SAP_MDG_ADMIN` – Master Data Governance: Administrator

This role contains authorizations 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, we recommend you split this role into several new roles and give each new role a subset of the authorizations for this role. Such an 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.

- `/VPCOE/MDGA_MENU_03` – Master Data Governance for Article: Menu

In addition, the authorization object `PLM_SPUSR` is needed if the **Search Object Connector** for enterprise search is created for the Enterprise Search Software Component `PLMWUI` or any Enterprise Search Software Component that includes `PLMWUI`. The role `SAP_PAGEBUILDER_DISPLAY` is required to use the Page Builder tool for accessing homepages created using Page Builder.

## 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 transaction **SICF** to activate the services. For a detailed list of the relevant services, see [Services to be Activated for Web Dynpro Applications](#) [External File].

## Number Ranges

Use transaction **SNRO** to ensure that the objects below have the listed number range values:

Object	Interval number	From Number	To Number
/VPCOE/RT	01	0000000001	9999999999
USMD_CREQ	01	000000000001	999999999999
DATLDLOGID (Only maintain if object exists in your system)	01	10000002	99999999

## Process

This process describes the minimal set of customizing steps and recommended check activities required to do the following:

- Create article
- Change article
- Multiple-record processing

You run the settings for this process in Customizing under **► Cross-Application Components ► Processes and Tools for Enterprise Applications ► Master Data Governance ►**.

1. [Activate the Data Model AR](#)
2. [Set Up Search](#)
3. [Verify Data Quality and Search Settings](#)
4. [Configure Change Request Settings](#)
5. [Configure Workflow Tasks](#)
6. [Set Up the Rule-Based Workflow](#)
7. [Choose where you want to run SAP Master Data Governance](#)
8. [Final Steps](#)

## 1. Activate the Data Model AR

Check (or enhance) and activate the **AR** data model including temporary IDs for internal number handling.

1. Check whether you can use the data model delivered by SAP for managing your article master data with MDG for article.

Activate the delivered data model *AR* in *Customizing for Master Data Governance* under ► *General Settings* ► *Data Modeling* ► *Edit Data Model* ►.

### **i** Note

You can select the governance scope at any point after you activate the Data Model. The governance scope determines which fields from the data model can be edited by the Master Data Governance application. Use this customizing activity to narrow the governance scope: ► *Master Data Governance* ► *General Settings* ► *Process Modeling* ► *Define Governance Scope* ►

By deactivating or reactivating an entity, a relationship, or an attribute you are not changing any dictionary or database object; you are only changing the ability of MDG to edit the chosen object. When you take a field out of governance scope it becomes read-only on the MDG UI and you may wish to remove it.

**Change View "Inactive Data Models": Overview**

New Entries [Icons] Visualize Data Model [Icon]

Dialog Structure		Inactive Data Models			
Inactive Data Models		Data Model	Description (medium text)	Active Area	User Name
Entity Types		AR	Article Maintenance	/VPCOE/RET	C5111405
Attributes					
Business Object					

## 2. Assign an internal key.

To support internal key assignment, run the activity in *Customizing for Master Data Governance* under ► *General Settings* ► *Data Modelling* ► *Define Prefixes for Internal Key Assignment* ►.

**MANDATORY**: All temporary IDs must be prefixed with @@. Please use the following values:

- Data Model: AR
- Entity Type: MARA
- Prefix: @@

**Change View "Prefix for Temporary Keys": Overview**

New Entries [Icons]

Prefix for Temporary Keys		
Data Model	Entity Type	Prefix
AR	MARA	@@

## 2. Set Up 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 main difference is in their capability to include classification data in the search. These are the following options:

- SAP search engine-based search (**TREX** search) offers full search capabilities.
- As of Master Data Governance 7.0 SP2, Feature Pack you can use SAP HANA-based search to connect the MDG database to an SAP HANA-based system for search. See [Configuring SAP HANA-Based Search for MDG](#) [External] for more detail.

In MDG for article the recommended search provider is the SAP search engine based on TREX.

### *TREX-Based Search*

For TREX-based search are two search options available:

- Embedded Search (included in SAP NetWeaver on a local system)
- SAP NetWeaver Enterprise Search (run centrally)

Embedded Search is limited to indexing and searching within a single SAP system (single SAPSID). In production scenarios with heavy data load it is mandatory to install a separate TREX instance that is used exclusively by Embedded Search for performance and sizing reasons. For installation information for **TREX 7.1** see SAP note [1249465](#) [External].

### *Embedded Search*

If you want to use Embedded Search, run the following activity in Customizing for SAP NetWeaver under ► **Search and Operational Analytics** ► **Embedded Search** ⌵.

If you are not familiar with TREX or TREX is not yet activated, proceed as follows to make the basic settings:

1. Connect to the TREX installation.

During TREX installation, you created an RFC-destination for the TREX. Run transaction **SM59** in the TCP/IP connections section to verify that it exists and can be linked. Link the ABAP system to this TREX destination.

For more information, see Customizing for SAP NetWeaver under ► **Search and Operational Analytics** ► **SAP NetWeaver Enterprise Search** ► **TREX** ► **Set TREX Destination** ⌵.

Alternatively, you can run report ESH\_ADM\_SET\_TREX\_DESTINATION.

**Set the RFC destination of TREX or DB connection for HANA DB**

Set the RFC destination of TREX or DB connection for HANA DB

Use TREX  
RFC Destination of TREX

Use HANA  
DB Connection Name

Specify the HTTP-Destination to SAP HANA

HTTP Host

HTTP Port (XS-Engine)

User Name

Password

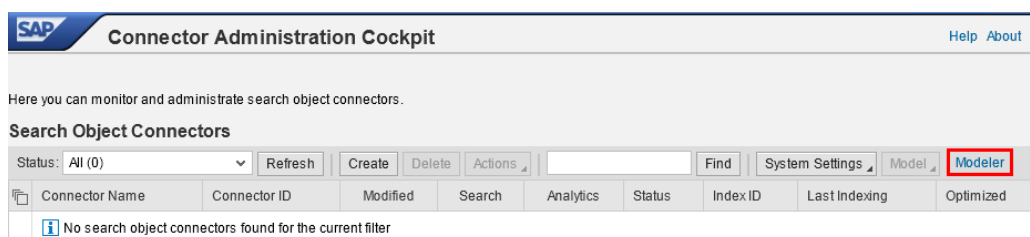
2. Create and index the connectors.

SAP delivers the following standard template for MDG for article. You need to activate this template and prepare it for indexing.

- Material (MATERIAL) – for the active article data residing on the standard tables **MA\*** and related objects

Open the Connector Administration Cockpit in Customizing for SAP NetWeaver under **Search and Operational Analytics > SAP NetWeaver Enterprise Search > Modeling, Administration, and Monitoring > Open Administration Cockpit**. Alternatively, you can run the transaction **ESH\_COCKPIT**. Make the following settings:

1. To open the Modeler, select the **Modeler** link.



2. In the **Software Components** menu choose **Maintain Software Components** and choose **Create**. For the new software component use the mandatory name **ZMDG ART TREX** and assign a desired package. Choose **Create**. Enter a description for the new software component and choose **Save**. Select a workbench request.

**SAP** **Modeler for Search and Analytics**

✔ Import of transported repository objects is running in background - [Display Help](#)

**List of Models**  
Here you can manage models of the software component that can be edited in this system. You can also create software components and build software components.

Import Create Copy Display Edit Delete Software Components Actions Find Administrative

Software Component/Model	Type
BCV_FND	Software Component
EA-APPL	Software Component
EA-FI	Software Component
EA-FINSERV	Software Component

Maintain Software Components  
 Include Software Component  
 Where-Used  
 Upload Metadata File  
 Export to File (XML)

**Maintain Software Components**

Software Components  
Here you can maintain software components.

Create Delete

* Software Component	Description	* Package Assignment	System S...	Version
BCV_FND	BCV Objects			

**Maintain Software Components**

Software Components  
Here you can maintain software components.

Create Delete

* Software Component	Description	* Package Assignment	System S...	Version
BCV_FND	BCV Objects			

**Create Software Component**

\* New SW Comp.: ZMDG\_ART\_TREX

\* Package Assignment: ZMDG\_A

Copy from SW Comp.:

Create Cancel

**Maintain Software Components**

Software Components  
Here you can maintain software components.

Create Delete

* Software Component	Description	* Package Assignment	System S...	Version
NWECM_SEARCH			SAP_TEST	
PLMWUI	SAP PLM Web UI		PLMWUI	747
SAPAPPLH	SAP_APPL:Logistics and Accoun...	ESH_SAPAPPLH_ES...	SAP_APPL	617
SAP_APPL	SAP_APPL:Logistics and Accoun...		SAP_APPL	617
SAP_BASIS	SAP_BASIS Content	S_ESH_CONTENT_B...	SAP_BASIS	740
SAP_BS_FND	SAP Business Suite Foundation	BS_FND_CONT_GEN_C	SAP_BS_F...	747
SBSFNDH	SAP Business Suite Foundation S...	ESH_SBSFNDH_ESSW	SAP_BS_F...	747
SRMSERVERH		ESH_SRMSEVERH	SRM_SER...	713
SRM_SERVER			SRM_SER...	713
ZMDG_ART_TREX	MDG-A Trex	ZMDG_ARTICLE_DEMO	HOME	

Save Cancel



3. Mark your new software component and choose in the **Software Component** menu select **Include Software Components**. Include the highest software component for the connector MATERIAL. For example, if the software layer hierarchy is PLMWUI > EA-APPL > SAP-APPL use the software component PLMWUI but if the software layer hierarchy is EA-APPL > SAP-APPL then use the software component EA-APPL.

The screenshot shows the SAP Modeler for Search and Analytics interface. At the top, it says 'Modeler for Search and Analytics' and 'Logged on as: Riccardo Brogi'. Below that, there's a 'List of Models' section with a table of software components. A context menu is open over the 'ZMDG\_ART\_TREX' row, with 'Include Software Component' selected. The table has columns for Software Component/Model, Type, Name in Back End, and Switched.

Software Component/Model	Type	Name in Back End	Switched
ESH_COMMON_OBJECTS	Software Compon...	ESH_COMMON_OBJECTS	<input type="checkbox"/>
ESH_SERVICES	Software Compon...	ESH_SERVICES	<input type="checkbox"/>
FS-CM	Software Compon...	FS-CM	<input type="checkbox"/>
HELP_CENTER	Software Compon...	HELP_CENTER	<input type="checkbox"/>
IS-H	Software Compon...	IS-H	<input type="checkbox"/>
IS-M	Software Compon...	IS-M	<input type="checkbox"/>
IS-PRA	Software Compon...	IS-PRA	<input type="checkbox"/>
ISHMED_PREC	Software Compon...	ISHMED_PREC	<input type="checkbox"/>
MDG_APPL	Software Compon...	MDG_APPL	<input type="checkbox"/>
MDG_FND	Software Compon...	MDG_FND	<input type="checkbox"/>
NWECM_SEARCH	Software Compon...	NWECM_SEARCH	<input type="checkbox"/>
PLMWUI	Software Compon...	PLMWUI	<input type="checkbox"/>
SAPAPPLH	Software Compon...	SAPAPPLH	<input type="checkbox"/>
SAP_APPL	Software Compon...	SAP_APPL	<input type="checkbox"/>
SAP_BASIS	Software Compon...	SAP_BASIS	<input type="checkbox"/>
SAP_BS_FND	Software Compon...	SAP_BS_FND	<input type="checkbox"/>
SBSFNDH	Software Compon...	SBSFNDH	<input type="checkbox"/>
SRMSERVERH	Software Compon...	SRMSERVERH	<input type="checkbox"/>
SRM_SERVER	Software Compon...	SRM_SERVER	<input type="checkbox"/>
ZMDG_ART_TREX	Software Compon...	ZMDG_ART_TREX	<input type="checkbox"/>

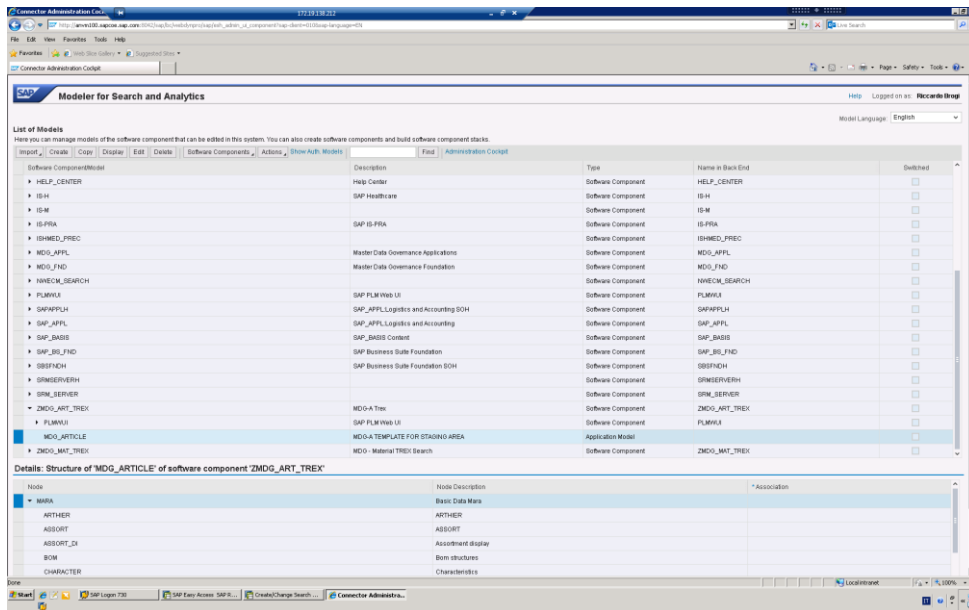
4. To create the required connector template for staging area, go back to **Customizing for Master Data Governance** under **General Settings > Data Quality and Search > Search and Duplicate Check > Create Search Object Connector Templates**.

Please use the following values:

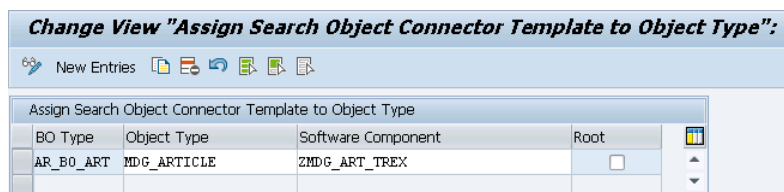
- Software Component: ZMDG\_ART\_TREX
- Business Object Type: AR\_BO\_ART
- Search Obj. Connector Template: MDG\_ARTICLE

The screenshot shows a dialog box titled 'Create/Change Search Object Connector Template for Staging Area'. It contains a form with the following fields:

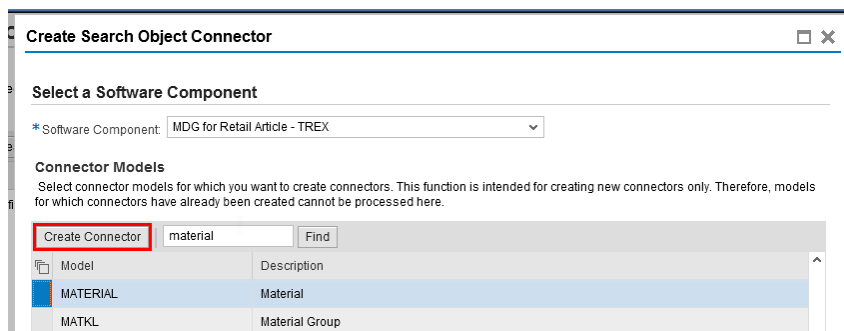
Search Object Connector Template details	
Software Component	ZMDG_ART_TREX
Business Object Type	AR_BO_ART
Search Obj. Connector Template	MDG_ARTICLE
Template Description	MDG_A - TREX Tempalte for Staging Area



- Assign the search object connector template created in the previous point to business object type AR\_BO\_ART. You can do this in Customizing for *Master Data Governance* under **General Settings > Data Quality and Search > Assign Search Object Connector Templates to Object Types**.



- Go back to the *Administration Cockpit* and select **Create**. Select the new software component ZMDO\_ART\_TREX and search for the template MATERIAL. Once you have located the template, create the connector for the *Enterprise Search*.



- Repeat the step 6 to create the connector for staging area.

## Create Search Object Connector



### Select a Software Component

\* Software Component: MDG-A Trex

#### Connector Models

Select connector models for which you want to create connectors. This function is intended for creating new connectors only. Therefore, models for which connectors have already been created cannot be processed here.

Model	Description
MDG_ARTICLE	MDG-A TEMPLATE FOR STAGING AREA
MDG_BUSINESS_PARTNER	Business Partner template for MDG

- The connectors are now visible with the status preparing and or prepared. Select the **Material** connector and from the **Actions** menu select **Schedule Indexing**. On the new screen choose **Show Input Form**. Next, choose the option for immediate indexing and the recurrence period. You can also activate real-time indexing if the sizing, parameters, and performance of the system allow for this. Select all object types and choose **Copy Settings**. This copies the default settings from the input form to all object types. The status of the connector is changed to **Indexing**.

Connector Administration Cockpit

Scheduling of indexes has been canceled

Here you can monitor and administrate search object connectors.

#### Search Object Connectors

Connector Name	Connector Type	Status	Modified	Search	Analytics	Status
MDG-A- TREX MODEL FOR STAGING AREA	WR	Prepared				Prepared
Material	WR	Prepared				Prepared
Material Group	WR	Prepared				Prepared
Purchase Info Record	WR	Prepared				Prepared

#### Schedule Indexing for "Material"

Define indexing schedules for the object types of this connector and its dependent connectors. Enter values directly in the table or use the input form.

Hide Input Form

You may use this form to conveniently define settings for multiple object types in the table below.

**Start Time**

Start Immediately Start Date: Start Time: 00:00:00

**Recurrence Period**

Real-Time Indexing Months: 00 Weeks: 00 Days: 000 Hours: 01

**Indexing Mode**

Full Indexing Mode:

**Copy Settings**

Model Name	Object Type	Type of Object Ty...	Status	Start Imm...	Start Date	Start TI...	Full Indexing...	Real-Tim...	Months	We...	Days	Hours
Purchase Info Record	PURCHASE_INF...	Business Object	Prepared	<input type="checkbox"/>		00:00:00		<input type="checkbox"/>	00	00	000	00
Vendor account group	KTOKK	Technical Object	Prepared	<input type="checkbox"/>		00:00:00		<input type="checkbox"/>	00	00	000	00
Material type basic data	MTART_BASIC	Technical Object	Prepared	<input type="checkbox"/>		00:00:00		<input type="checkbox"/>	00	00	000	00
Plant Names	PLANT	Technical Object	Prepared	<input type="checkbox"/>		00:00:00		<input type="checkbox"/>	00	00	000	00
Country of Destination	LAND1_1	Technical Object	Prepared	<input type="checkbox"/>		00:00:00		<input type="checkbox"/>	00	00	000	00
Purchasing organization	EKORG	Technical Object	Prepared	<input type="checkbox"/>		00:00:00		<input type="checkbox"/>	00	00	000	00
Company code	BUKRS	Technical Object	Prepared	<input type="checkbox"/>		00:00:00		<input type="checkbox"/>	00	00	000	00
Distribution Channel	VTWEG	Technical Object	Prepared	<input type="checkbox"/>		00:00:00		<input type="checkbox"/>	00	00	000	00
Sales Organization	VKORG	Technical Object	Prepared	<input type="checkbox"/>		00:00:00		<input type="checkbox"/>	00	00	000	00
Scales group	SCAGR	Technical Object	Prepared	<input type="checkbox"/>		00:00:00		<input type="checkbox"/>	00	00	000	00

OK Cancel

- Ensure authorization indexing. Enterprise Search requires its own authorizations. Authorizations for all MDG users must be indexed on the **Enterprise Search**

system. The system writes every new or changed user as an entry into the table ESH\_AU\_USR\_UPD that contains the user IDs that have been changed since the last indexing of the technical object type USER\_AUTHORITY.

The object type USER\_AUTHORITY and other object types which do not support real-time indexing need to be regularly scheduled for indexing on the *Enterprise Search* system. The object type USER\_AUTHORITY can be found in the connector *Material*. You cannot enable real-time indexing for USER\_AUTHORITY.

Once indexing is complete the connectors should have the status *Active*.

**NOTE** – If the connector for staging area fails the indexing, please proceed to point [1.3 Verify Data Quality and Search](#) and then re-start the indexing process for this particular connector.

3. Use the report ESH\_TEST\_SEARCH to verify the search function. In the *Search Scope* section, enter a *Connector ID*. Next, enter *Default* in the *Request* field and execute the report.
  - The connector MATERIAL returns the active article master data.
  - The connector created for business object type AR\_BO\_ART returns the inactive article master data. At least one active change request of type AR\* needs to exist with article assigned to it, otherwise you will get a message that the selected search provider does not exist during the search and in the duplicate check of any change request where this is relevant.

For more information about TREX, see [Configuration of the TREX Security Settings](#) [External].

## Search Engine Service

If you are running a central SAP NetWeaver Enterprise Search system and you connect other SAP NetWeaver systems with Embedded Search to the central system, follow the steps as described in Customizing for SAP NetWeaver under [Search > Search Engine Service](#).

## 3. Verify Data Quality and Search Settings

In the delivered standard, the SAP NetWeaver Enterprise Search is used for MDG for article. In this step, you can verify the following:

- Existence of entry *ES* and that *Freeform*, and *Fuzzy* settings are activated

This entry cannot be removed or deactivated (E-class entry delivered by SAP). You can verify these settings in Customizing for *Master Data Governance* under [General Settings > Data Quality and Search > Define Search Applications](#).

- The pre-delivered *Match Profile* for the AR data model is MATCH\_AR\_ARTICLE. You can find this *Match Profile* in Customizing for *Master Data Governance* under [General Settings > Data Quality and Search > Search and Duplicate Check > Define Search Applications](#).

If you wish you can now define your own matching fields for calculating the potential duplicates and matching values.

- Configuration of the duplicate check

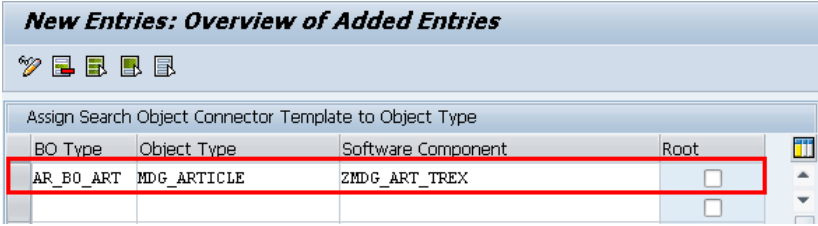
If you want to run a duplicate check you have to assign the predelivered match profile `MATCH_AR_ARTICLE` or your own match profile to the data model `AR` and the `MARA` entity type. Navigate to **General Settings > Data Quality and Search > Search and Duplicate Check > Configure Duplicate Check for Entity Types**. For search mode `ES` and data model `AR` select the field `MPbased UI`. Thresholds are not considered.

You can configure this check in Customizing for *Master Data Governance* under **Data Quality and Search > Define Search Applications > Configure Duplicate Check for Entity Types**.

- Assignment of the delivered search object connector templates

Assign the search object container and the software component created in point [1.2 Set Up Search](#) to business object type `AR_BO_ART`,

You can check this in Customizing for *Master Data Governance* under **General Settings > Data Quality and Search > Assign Search Object Connector Templates to Object Types**.



The screenshot shows a table titled "Assign Search Object Connector Template to Object Type" with the following data:

BO Type	Object Type	Software Component	Root
AR_BO_ART	MDG_ARTICLE	ZMDG_ART_TREX	<input type="checkbox"/>
			<input type="checkbox"/>

## 4. Configure Change Request Settings

Depending on your requirements you might want to adjust and enhance the default change request values.

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

1. Review and/or define which statuses 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 statuses are delivered for the SAP standard processes.

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
99	No Status Set	No Processing

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

- AR01 Article Master Create
- AR02 Article Master Change
- AR03 Article Master Display
- AR0A Article Master Mass Change

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

3. Create new change request types for data model *AR*, or validate after import MDG for Retail Article.

For more information, see Customizing for Master Data Governance under [General Settings > Process Modeling > Change Requests > Create Change Request](#).

The following table shows the change request types for data model *AR*. Only the relevant columns are included.

Change Request Type	Data Model	Description	Single Object	Main Entity Type	Workflow
AR01	AR	Article Create	Yes	MARA	WS60800086
AR02	AR	Article Change	Yes	MARA	WS60800086
AR03	AR	Article Display	Yes	MARA	WS60800086
AR0A	AR	Article Mass Change		MARA	WS60800086

The standard workflow template used by Master Data Governance for article is WS60800086. This template is a rule-based workflow which uses **BRF+** decision tables.

There is also a workflow template without **BRF+**, which covers the same processes. If you want to use this template, replace template WS60800086 with template WS46000057 in the relevant change request type.

The following settings should exist in the substructures of the change request types:

- **AR01**
    - Entity type: MARA
    - UI Configuration ID: /VPCOE/USMD\_ENTITY\_VALUE2
    - Msg. output: *Standard*
    - Business Activity: Article Master Create (AR01)
    - Service Level Agreement for Change Request Types: <leave empty>
  - **AR02**
    - Same as AR01
    - Business Activity: Article Master Change (AR02)
  - **AR03**
    - Same as AR01
    - Business Activity: Article Master Display (AR03)
  - **AR0A**
    - Same as AR01
    - Msg. output: *W Issue Error Messages as Warnings*
    - Business Activity: Article Master Mass Change (AR0A)
4. Optionally, you can define priorities, reasons, or rejection reasons for change requests. You can enter codes and a short description to tag or classify your change requests. These 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.

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 ►**.

5. Optionally, you can define print forms for change requests. By default, the form *USMD\_EDITION\_CREQUEST* is used. This is relevant only if your own or multiple print forms are required.

For more information, see Customizing for *Master Data Governance* under **► General Settings ► Process Modeling ► Change Requests ► Define Print Form for Change Requests ►**.

## 5. 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 under **► Application Server ► Business Management ► SAP Business Workflow ►**. Ensure that the active type linkages for Article (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. In addition, check that the *Enable Event Queue* indicator is active for the events ACTIVATED, and ROLLED\_BACK, but not for the event CREATED.

Change View "Event Type Linkages": Overview						
Event Type Linkages						
Object Category	ObjectType	Event	Receiver Type	Type linka...	Enable ev...	Status
BOR Object T...	BUS2209	SAVED	WS14500019	<input type="checkbox"/>	<input type="checkbox"/>	No errors
BOR Object T...	BUS2250	ACTIVATED	ACTIVATED	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No errors
BOR Object T...	BUS2250	CREATED		<input checked="" type="checkbox"/>	<input type="checkbox"/>	No errors
BOR Object T...	BUS2250	ROLLED BACK	ROLLED_BACK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	No errors
BOR Object T...	BUS4101	SAVED	WS10000192	<input type="checkbox"/>	<input type="checkbox"/>	No errors
BOR Object T...	BUS4101	SAVED	WS10000205	<input type="checkbox"/>	<input type="checkbox"/>	No errors

The standard workflow template used by Master Data Governance for article is WS60800086.

In order to ensure the general assignment of processors using the rule-based workflow, run the following activity in Customizing for Master Data Governance under **General Settings** **Process Modeling** **Workflow** **Configure Workflow Tasks**.

1. Go to application component **CA-MDG-AF** and choose **Assign Agents**.
2. 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**.

Tasks of an Application Component: Assign Agents		
Name	ID	General or Background Task
Application Framework	FA CA-MDG-AF	
Process Change Req	TS 54307931	General Task
Get Change Request	TS 60807944	Background task
Path and Processor F	TS 60807945	Background task
Check it is single age	TS 60807946	Background task
Get Process Pattern	TS 60807947	Background task
Set Completion Time	TS 60807948	Background task
Synch. System Meth	TS 60807949	Background task
Get Change Request	TS 60807950	Background task
Default Handler	TS 60807951	Background task
Parallel Step Result N	TS 60807952	Background task
Get Agent Group	TS 60807953	Background task
Dialog Processing	TS 60807954	General Task
Get Parallel Change F	TS 60807955	Background task
Get Recipients of Exj	TS 60807956	Background task
Assign Action Code	TS 60807957	Background task
Clear Step-Action Ta	TS 60807958	Background task

Alternative procedure using the generic workflow maintenance transaction:

1. Run transaction **SWDD**
2. In the **Workflow** field, enter the workflow template **WS60800086**, the highest version is automatically chosen.
3. In the **Navigation** area go to step **000073 Dialog Processing** and select it.
4. In the **Task Properties** area, choose **Agent Assignment for Task**. Choose the **Agent Assignment for Task** button.
5. On the next screen select **Dialog Processing** and choose the **Attributes** button.
6. In the **Task** popup select **General Task** and choose **Transfer**.
7. Return to the **Task Properties** list and verify that the status icon beside **Agent Assignment** is green or yellow.



## 6. Set Up the Rule-Based Workflow

MDG for article uses advanced workflow capabilities by combining the SAP Business Workflow with the SAP Business Rule Framework plus (BRFplus) tool. This section describes how to activate and load the necessary settings for BRFplus.

Check that the steps for Rule-Based Workflow are correctly imported by running the following activity in Customizing: [▶ General Settings ▶ Process Modeling ▶ Workflow ▶ Rule-based Workflow ▶ Define Change Request Steps for Rule-Based Workflow ▶](#).

The following are the default steps required for all change request types:

Type of Change Request	Change Request Step	Keys	Successful Validation Required	Description
AR01	0	Empty	Empty	Processing
AR01	90	Empty	Checked	Final Check
AR01	91	Empty	Empty	Activation
AR01	92	Empty	Empty	Revision/Cancel BG
AR01	93	Empty	Empty	Validation
AR01	95	Empty	Empty	Revision Processing
AR01	99	Empty	Empty	Complete

Perform the following checks and take action as required:

1. Check for existing decisions tables and generate the decision tables and rules for each change request type either in Customizing or by running the system transaction **USMD\_SSW\_RULE**. If this step is not possible, go to step 2, otherwise go to step 3.
2. Export the content from client 000 and import it into your hub client.
3. Maintain your content in the decision tables, reflecting your governance process. You can use the pre-delivered SAP content as a starting point.

More detail on these steps is available below.

To activate and load the necessary settings for BRFplus proceed as follows:

1. Check for existing decisions tables and generate the decision tables and rules for each change request type in Customizing under [▶ General Settings ▶ Process Modelling ▶ Workflow ▶ Rule-Based Workflow ▶ Configure Rule-Based Workflow ▶](#)

Enter the change request types one after the other and choose the *Continue* button. After reviewing the decision tables you can leave this step without any further activities. If you get an error that the object is not available, proceed to the next step, otherwise skip to step 3. You can also make these settings using the transaction **USMD\_SSW\_RULE**.

2. Export the content from client 000 and import it into your hub client.
  1. Call transaction **BRFplus** in the 000 client.

2. Choose the **Personalise** button and then choose **Expert** from the drop-down menu in the **User Mode** field or activate the flag **Show Technical Aspects** on the **General** tab.
3. Search for the object **USMD\_SSW\_CATA\_AR01** using the **Workbench** menu by choosing **Open Object**. Use the following values to search:
  - Object Type CA: Catalog
  - Name: USMD\_SSW\_CATA\_AR\*
4. From the search result select **USMD\_SSW\_CATA\_AR01**
5. To export the content from client 000, select the application in the repository (not the catalog entry) then choose **Tools > XML Export**. Select the object and then select **Export XML for Entire Application** from the **Export XML** menu. Generate the XML file and download it. You can ignore the warnings on missing values not in the value list. The file size of each XML file should be approximately 101kb. The system may require you to assign the import to a transport.
6. To Import the content into your MDG main client run the **BRFplus** transaction, from the **Tools** menu choose **XML Import**, select your XML file, and choose **Upload File**.
7. Repeat these steps for all relevant change request types.

The structure import will also include the values in the three pre-delivered decision tables. For testing the standard workflow configuration you need to copy and activate the two entries in the **DT\_USR\_AGT\_GRP\_ARXX** from user **ANZEIGER** to one or two existing user IDs in your system.

3. Maintain your content in the decision tables, reflecting your governance process. You can use the pre-delivered SAP content as a starting point.

**i Note**

If you extend the BRFplus decision tables make sure that the status of the final step is set to **05 Final Check Approved** or **06 Final Check Rejected**.

The following are the minimal settings for the relevant change request types.

- DT\_SINGLE\_VAL\_AR01
- DT\_NON\_USER\_AGT\_GRP\_AR01
- DT\_USER\_AGT\_GRP\_AR01

**DT\_NON\_USER\_AGT\_GRP\_AR01** and **DT\_SINGLE\_VAL\_AR01** contain the automated steps and follow-up logic used by the BRFplus. The follow-up logic can either result in an automated step or in a user task that will be made visible as a workflow.

The users involved in the Master Data Governance process need to be included in table **DT\_USER\_AGT\_GRP\_AR01** so that they can receive and execute the workflow tasks. Maintain agents (for example the users or organizations in the Portal Content and Portal Role Assignment sections of this document) for all change request types and their associated workflow steps. Each condition alias that appears in the **DT\_SINGLE\_VAL\_AR01** table needs at least one processor, either automatic or user (group). Therefore, for all non-automated steps at least one entry needs to exist in **DT\_USER\_AGT\_GRP\_AR01**.

Conduct this maintenance for all relevant change request types. Further details on the workflow concepts can be found [here](#) [External]. The following change request types appear in the standard delivery: AR01, AR02, AR0A, AR0A.

The following step types are pre-delivered by SAP:

Step Type	Short Description	Actions
1	Check Change Request	01 Agree; 02 Disagree
2	Approve Change Request	03 Approve; 04 Reject
3	Process Change Request	05 Finalize Processing; 06 Send for Revision
4	Revise Change Request	07 Resubmit; 08 Withdraw
5	Activate Change Request	09 Activate; 10 Send for Revision
6	Approve Change Request (Without Rejection)	03 Approve; 06 Send for Revision
7	Revise Change Request (Without Rejection)	05 Finalize Processing
8	Activate Change Request	09 Activate; 04 Reject

The following agent types exist:

User Agent Type	Short Description
US	User
O	Organizational Unit
C	Job
S	Position
AG	Role
SU	Special User (Value for requestor: INIT. Value for previous-step user: LAST.)

The following is the standard content pre-delivered by SAP:

DT\_SINGLE\_VAL\_AR01/2/2/A

Previous Step	Previous Action	Condition Alias	New Step	New Change Request Status
00 (Create Change Request)	No value	1	90 (Final Check)	02 (Changes to be executed)
90 (Final Check)	09 (Activate)	2	91 (Final Approval)	02 (Changes to be executed)
90 (Final Check)	04 (Reject)	3	95 (Revision Processing)	10 (To Revise: Perform Changes)
91 (Final Approval)	31 (Activation Successful)	4	99 (Complete)	05 (Final Check Approved)
91 (Final Approval)	<>31 (Activation Successful)	5	90 (Final Check)	11 (Process Errors After Activation)
92 (Revision/Cancel BG)	No value	6	99 (Complete)	06 (Final Check Rejected)
95 (Revision Processing)	07 (Request Again)	7	90 (Final Check)	02 (Changes to be executed)

95 (Revision Processing)	08 (Withdraw)	8	92 (Revision/Cancel BG)	02 (Changes to be executed)
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DT\_USER\_AGT\_GRP\_AR01/2/3/A

COND_ALIAS	AGENT_GROUP	STEP_TYPE	USER_TYPE	USER_VALUE
1;5;7	001	8 (Activate Change Request)	SU	INIT
3	001	4 (Revise)	SU	INIT

DT\_NON\_USER\_AGT\_GRP\_AR01/2/3/A

COND_ALIAS	AGENT_GROUP	PROCESS_PATTERN
2	001	06 (Activation (Bypass Snapshot))
4;6	001	99 (Complete (Sub-)Workflow)
8	001	08 (Roll back change request)

### Notes

- It is necessary to activate your new entries for each of the three decision tables.
- The quickest way to allow users to participate in any workflow step for testing purposes is to copy the two default entries in the DT\_USER\_AGT\_GRP\_AR01/2/3/A tables and change the entries as follows:
  - User Type: **AG** (Role)
  - User Value: **/VPCOE/MDGA\_MENU\_03** (The MDGA role of **PFCG/SU01**)
- If the system cannot find a processor for your change requests check the background steps of the change requests workflow log to see if a work item with the description *Set Status x for Change Request y* is in process or in error. If this is the case regenerate the authorization profile of SAP\_ALL or include USMD\* authorization objects into the authorization for the user WF-Batch.
- Choosing the process pattern **06 Activation (Bypass Snapshot)** means that the article will be activated, even if the article record was changed in the backend system since the change request was created. Any backend changes are lost upon activation.

## 7. Choose where you want to run SAP Master Data Governance

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

- SAP NetWeaver Portal
- SAP NetWeaver Business Client

### SAP NetWeaver Portal

The SAP NetWeaver Portal content for MDG for material 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 Back End*.
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 MARA 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](#) [External].

### *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 four roles containing authorization and navigation information and one role (/VPCOE/MDGA\_MENU\_03) containing only navigation information.

To assign and personalize the role Master Data Governance for Material: Menu (/VPCOE/MDGA\_MENU\_03) proceed as follows:

1. On the SAP Easy Access screen, choose ► *Tools* ► *Administration* ► *User Maintenance* ► *Role Administration* ► *Roles* or alternatively, run transaction **PF03** (Role Maintenance). Choose role /VPCOE/MDGA\_MENU\_03.  
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.
2. Assign and personalize the role /VPCOE/MDGA\_MENU\_03 to your users. In the role /VPCOE/MDGA\_MENU\_03 on the *Personalization* tab, edit the *Personalization Key* SAP Master Data Governance (R\_FMDM\_MODEL): Define the standard model AR and the related UI configuration.
3. Verify the setting of the authorization objects within the roles and restrict them if required.
4. On the SAP Easy Access screen, choose ► *Tools* ► *Administration* ► *User Maintenance* ► *Users*. Run transaction **SU01** (User Maintenance) and assign the Master Data Governance for Material: Menu role (/VPCOE/MDGA\_MENU\_03) for application to the MDG user.

Repeat these steps to assign additional authorization roles to your users.

## 8. Final Steps

SAP recommends to regenerate the data model again at the end of these setup steps to ensure clear code generation.

Before you can run Master Data Governance services like *Display Article*, you need to assign the data model *AR* to your user. Alternatively, the user administrator can update the following *Personalization Object* for your user profile: R\_FMDM\_MODEL and add the *AR* data model as your standard data model.