

How-To Guide: Enable Key Mapping for Service Master

Applies to

MDG EAM Solutions by Prometheus Group

Summary

Data that the MDG system replicates to target systems is always active data. MDG system takes the active data from the SAP ERP tables or from the generated tables depending on the option in use (reuse option or flex option).

MDG for EAM include standard implementations of the Data Replication Framework (DRF) that reads the data and sends the messages to the target system. The standard implementations support Key Mapping and Value Mapping.

This guide describes the necessary configuration steps for implementing Key Mapping. This guide explains the Key Mapping for Service Master. The same steps can be followed for other EAM objects.

You can perform the configuration tasks in Customizing for ► Master Data Governance under SAP Reference IMG ► Cross Application Components ► Processes and Tools for Enterprise Applications ► Master Data Governance ►.

- Additionally, you can use the following transactions: **MDGIMG** – IMG Master Data Governance
- **DRFIMG** – IMG Data Replication Framework
- **IDMIMG** – IMG Key Mapping

Author: Sireesha Cheemakurthi

Company: Prometheus Group

Created On: September 1, 2018

Version: 1.0

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Introduction

You can use this document to create mappings between object instances by connecting their object IDs.

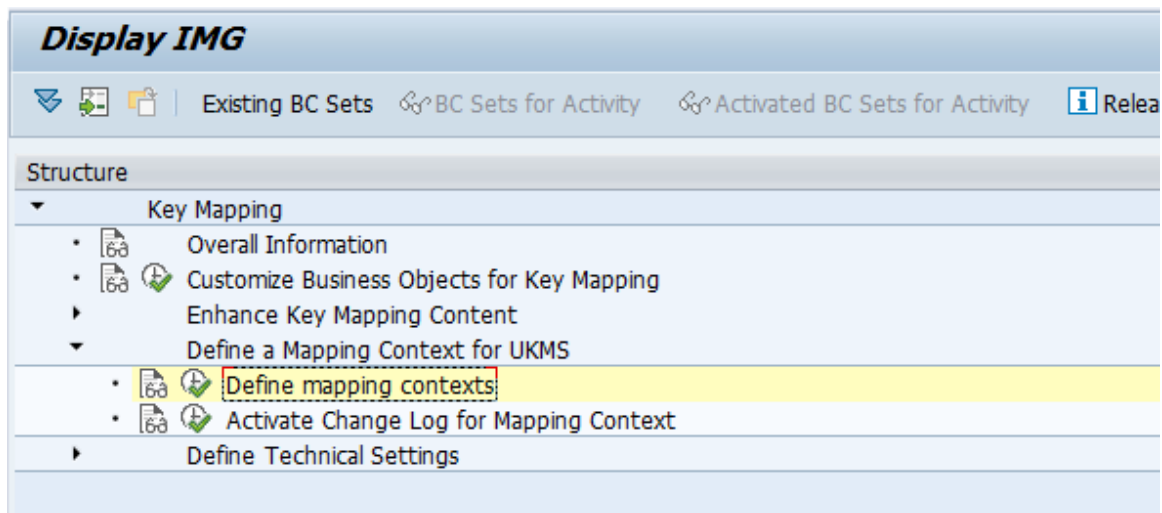
In business processes with several systems, each object instance requires one or more object IDs to ensure it can be identified and mapped to other object instances. During data replication, the object instance is replicated from a hub system to one or more client systems. In the process, each system can use its own logic to create object IDs.

Create UMKS mapping context

To generate UMKS tables for Key Mapping, mapping contexts need to be defined.

Transaction: **IDMIMG**

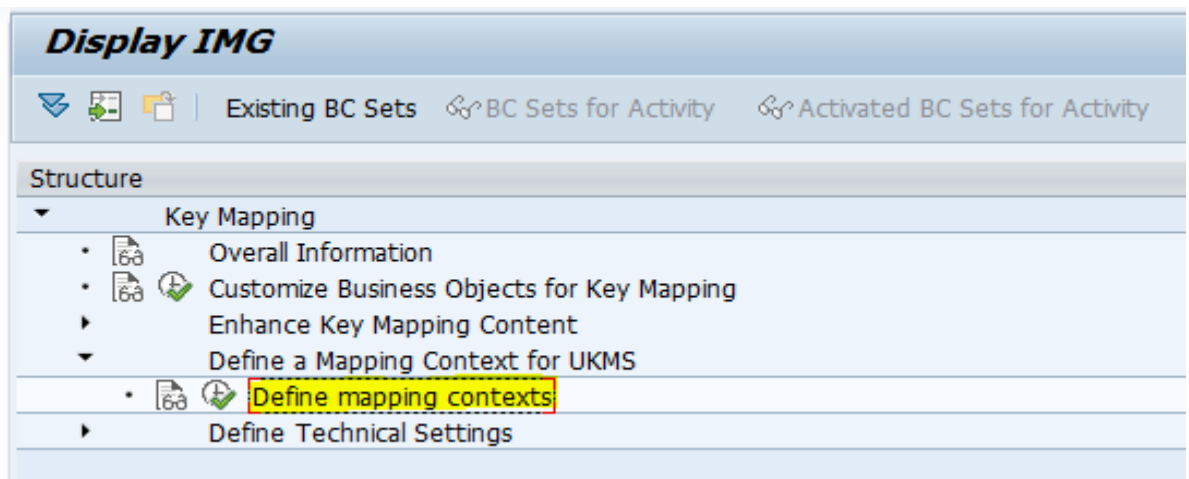
Path: Key Mapping → Define a Mapping Context for UKMS → Define mapping contexts.









Service Master

To define mapping contexts, use the following steps:

1. Create context for Service Master



2. For Service Master create context as "ServMaster".

Change View "UKM: Mapping context": Overview					
 New Entries     					
UKM: Mapping context					
Main Context	Subcontext	Main Cntxt	Subcontext	Ma	
ServMaster	SAPdefaultMapping	SVMS	0	Gr	

The system generates a set of tables (six tables) based on standard tables for each Main Context.

Note: Do not change the names of generated tables.

List of tables generated for context Service Master:

- UKMDB_AGCSVMS0
- UKMDB_KEYSVMS0
- UKMDB_MGDSVMS0
- UKMDB_MGPSVMS0
- UKMDB_SCHSVMS0
- UKMDB_V78SVMS0

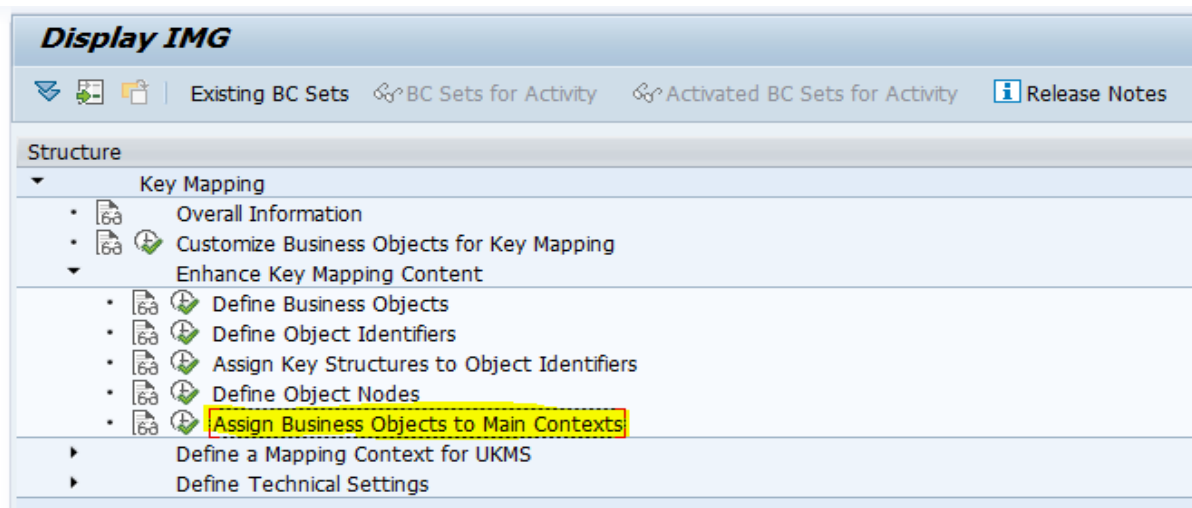
The system requires confirmation of tables to be copied. Save the generated tables to the package MDG_BS_ID_MATCHING_UKMS_DB.

Assign Business Objects to Main Contexts

For Key Mapping, you must assign each Business Object Type to a Main Context

Transaction: **IDMIMG**

Path: Key Mapping → Enhance Key Mapping Content → Assign Business Objects to Main Contexts



Service Master

Mapping Contexts created in previous step need to be assigned to Business Object Types.

Change View "Assign Business Objects to Main Contexts": Overview			
Assign Business Objects to Main Contexts			
BO Type	Description	Main Context	Secondary Mapping Context
258	Service Product	ServMaster	

BAdI: Inbound Processing of ALE Audit Messages

Go to Transaction **MDGIMG**.

Path: Data Replication → Business Add-Ins (BAdIs) → BAdI: Inbound Processing of ALE Audit Messages

Check BADI should be Active as displayed in the following screen.

Display IMG				
Existing BC Sets Existing BC Sets for Activity Activated BC Sets for Activity Release Notes Change Log Where Else Used				
Structure				
<ul style="list-style-type: none"> Technical Settings for Master Data <ul style="list-style-type: none"> Data Modeling UI Modeling Data Quality and Search Process Modeling Data Replication <ul style="list-style-type: none"> Overall Information Define Custom Set Enhance Default S Business Add-Ins (BAdIs) <ul style="list-style-type: none"> BAdI: Inbound Processing of ALE Audit Messages BAdI: Definition BAdI: Prepare BAdI: Prepare BAdI: Creation Transport of Data Value Mapping Key Mapping Overall Information Customize Business Add-Ins Enhance Key Mapping Define Business Add-Ins Define Object Assign Key Structure Define Object Assign Business Add-Ins Define a Mapping Define mapping 				
BAdI Implementations				
Implementations for BAdI Definition DRF_ALE_AUDIT_GET_KM_DATA				
Active(IMG)	Active(Im...	Enhancement Implementation	BAdI Implementation	Description
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_EM	DRF ALE Audit implementation for E
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_FLOC	DRF ALE Audit implementation for F
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_MPMI	DRF ALE Audit implementation for M
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_MITEM	DRF ALE Audit implementation for M
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_MSPT	DRF ALE Audit implementation for M
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_WC	DRF ALE Audit implementation for W
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_EQTL	DRF ALE Audit Implementation for E
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_FLTL	DRF ALE Audit Implementation for F
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_GNTL	DRF ALE Audit Implementation for G
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI1/MDG_EAM_DRF_ALE_AUDIT	/UGI1/MDG_EAM_ALE_AUDIT_SM	DRF ALE Audit Implementation for S
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_EVTID	DRF ALE Audit Implementation For O
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_OL	DRF ALE Audit Implementation For O
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/UGI/MDG_EAM_DRF_ALE_AUDIT	/UGI/MDG_EAM_ALE_AUDIT_ON	DRF ALE Audit Implementation For O

Standard settings

For more information about the standard settings (filters, single or multiple uses), see the Enhancement Spot Element Definitions tab in the BAdI Builder (transaction code SE18).

Activities

For information about implementing BAdIs as part of the Enhancement Concept, see SAP Library for SAP NetWeaver under BAdIs - Embedding in the Enhancement Framework.

Implement the DRF_ALE_AUDIT enhancement spot

Implement the DRF_ALE_AUDIT Enhancement spot with Enhancement Implementation

- /UGI1/MDG_EAM_DRF_ALE_AUDIT and with BAdI implementation
- /UGI1/MDG_EAM_ALE_AUDIT_SM as displayed in the following screen

Enhancement Spot DRF_ALE_AUDIT Display

Enhancement Spot: DRF_ALE_AUDIT Active

Attributes | Enhanc. Implementations | Technical Details | Enh. Spot Element Definitions

BAI Definitions

BAI Definition	Description
DRF_ALE_AUDIT_G	Get Key Mapping data
Interface	
Filter	
Implementation	

Implementations

BAI Definition: DRF_ALE_AUDIT_GET_KM_DATA Filter Values

14 implementations found

Active	Enhancement Implementation	BAdI Implementation	Software Component	Applic. Component	Description
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_EM	UG1	CA-MDG-APP	DRF ALE Audit implementat
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_EQTL	UG1	CA-MDG-APP	DRF ALE Audit Implementa
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_EVTID	UG1	CA-MDG-APP	DRF ALE Audit Implementa
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_FLOC	UG1	CA-MDG-APP	DRF ALE Audit Implementa
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_FLTL	UG1	CA-MDG-APP	DRF ALE Audit Implementa
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_GNTL	UG1	CA-MDG-APP	DRF ALE Audit Implementa
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_MITEM	UG1	CA-MDG-APP	DRF ALE Audit implementat
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_MPMI	UG1	CA-MDG-APP	DRF ALE Audit implementat
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_MSPT	UG1	CA-MDG-APP	DRF ALE Audit Implementa
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_OL	UG1	CA-MDG-APP	DRF ALE Audit Implementa
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_ON	UG1	CA-MDG-APP	DRF ALE Audit Implementa
	/UG1/MDG_EAM_DRF_ALE_AUDIT	/UG1/MDG_EAM_ALE_AUDIT_WVC	UG1	CA-MDG-APP	DRF ALE Audit implementat
	/UG11/MDG_EAM_DRF_ALE_AUDIT	/UG11/MDG_EAM_ALE_AUDIT_SM	UG11	CA-MDG-COB	DRF ALE Audit Implementa
	MDG_BS_MAT_DRF_ALE_AUDIT_IMPL	MDG_BS_MAT_DRF_ALE_AUDIT_BADI	MDG_APPL	CA-MDG-APP-MM	Implementation: Get Key M

BAdI Implementation

The BAdI implementation for Service Maser is /UG11/MDG_EAM_ALE_AUDIT_SM.

Enhancement Implementation /UG11/MDG_EAM_DRF_ALE_AUDIT Display

Enhancement Implementation: /UG11/MDG_EAM_DRF_ALE_AUDIT Active

Properties | History | Technical Details | Enh. Implementation Elements

BAI Implementations

BAI Implementations	Description
/UG11/MDG_EAM_ALE_AUDIT_SM	DRF ALE Audit Implementat
Implementing Class	
Filter Val.	

BAdI Implementation: /UG11/MDG_EAM_ALE_AUDIT_SM Documentation

Description: DRF ALE Audit Implementation for Service Master

☐ Default Implementation
☐ Example Implementation
☐ "Active" not switchable through Custom.(IMG)

Runtime Behavior

☒ Implementation is active

Runtime Behavior: Execution depends on runtime filter values

Properties of BAdI Definition

BAdI Definition Name: DRF_ALE_AUDIT_GET_KM_DATA

Description: Get Key Mapping data from ALE Audit IDOC

Interface: IF_DRF_ALE_AUDIT_GET_KM_DATA

Instance Creation Mode: No Reuse of BAdI Instance

Implementation classes and Filter Values

Service Master

The Implementing class and Filter values for Service Master are as below.

Implementing class: /UG11/CL_MDG_EAM_ALE_AUDIT_SM

Enhancement Implementation /UG11/MDG_EAM_DRF_ALE_AUDIT Display

Enhancement Implementation: /UG11/MDG_EAM_DRF_ALE_AUDIT Active

Properties | History | Technical Details | Enh. Implementation Elements

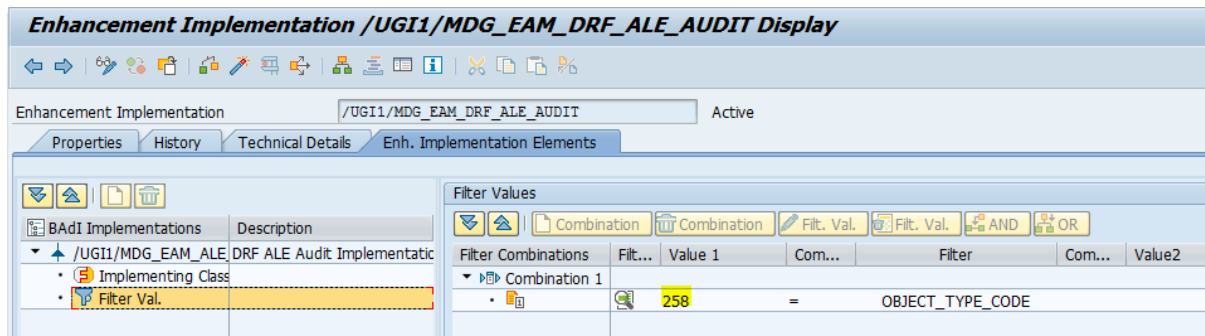
Implementing Class

Interface: IF_DRF_ALE_AUDIT_GET_KM_DATA

Implementing Class: /UG11/CL_MDG_EAM_ALE_AUDIT_SM

Method: IF_DRF_ALE_AUDIT_GET_KM_DATA~GET_KM_INFO_FROM_AUDIT_IDOC Short Description: Determine KM relevant information from AUDIT IDoc

Filter Values: OBJECT_TYPE_CODE = 258.

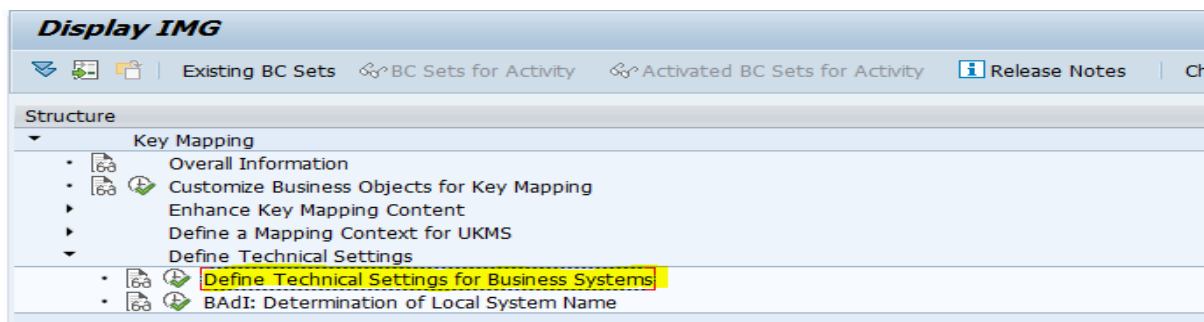


Define Technical settings

You must complete this activity if you want to replicate data using a replication model within the data replication framework (DRF), or if you want to customize business systems for Key Mapping or Value Mapping.

Transaction: **IDMIMG**

Path: Key Mapping → Define Technical Settings → Define Technical Settings for Business Systems

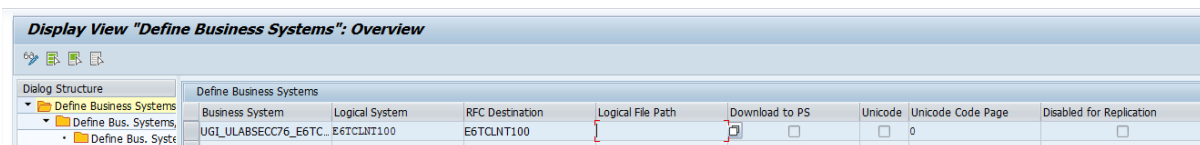


In this customizing activity, the following tasks are defined:

- Define Business Systems
- Define Business Systems, Business Object Types
- Define Business Systems, Business Object Types, Communication Channel

Define Business Systems

In this step, define the business systems and RFC destination for the business system.



Define Business Systems, Business Object Types

Service Master

In this step add Business Object types 258 to be replicated to business system.

Change View "Define Bus. Systems, BOs": Overview

Dialog Structure

- Define Business Systems
 - Define Bus. Systems
 - Define Bus. Systems

Business System: UGI_ULABSECC76_E6TCLNT100

BO Type	Description	Sys. Fil.	Outp.Mode
258	Service Product	<input type="checkbox"/>	Object-Dependent

Define Business Systems, Business Object Types, Communication Channel

Service Master

In this step, you define how Business Objects type should be replicated and Key Handling.

Change View "Define Bus. Systems, BOs, Communication Channel": Overview

Dialog Structure

- Define Business Systems
 - Define Bus. Systems
 - Define Bus. Systems

Business System: UGI_ULABSECC76_E6TCLNT100

Bus. Obj. Type: 258

Description: Service Product

C. Channel	Key Harm.	Upd. KM	Storage	Time Dep.
Replication via IDoc	Key Mapping	<input checked="" type="checkbox"/>	Not Defined	Not Defined

Relationship between Object type and BOR Object

In order to process ALE ADUIT message successfully, OTC to BOR relationship must exist. Check whether the below entries are available or not. If not maintain the entries.

Prerequisite Note

[2406058](#): EAM relevant relationships between Object Type and BOR Object

Transaction Code: **SM30**

Table/View name: **MDGV_OTC_BOR**

Display View "Define relationship between Object Type and BOR Object":

Define relationship between Object Type and BOR Object

BO Type	Description	Object Type	Description
258	Service Product	BUS1005	Service

Prerequisites for Key Mapped Value updation in HUB system

- Set up background job for report **RBDSTATE** in client system

Prerequisites for Classification IDocs

- Set up background job for report **/UGI/EAM_IDOC_REP** and **RBDMANI2** in hub system

Troubleshooting Key Mapping

Service Master

Navigate to NWBC and select the respective role. Go to Data Exchange → Data Replication → Edit Key Mapping.

Alternatively, you can use the backend transaction with the transaction code **MDG_KM_MAINTAIN**

- Select hub system as Business system for DRF.
- Select client system as Business system for DIF.
- Enter object id value without leading zeros.