

Reference Data Management 2407

for SAP Master Data Governance

Functional Documentation



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1 Introduction to Reference Data Management

Companies realized that the management of Reference Data (e.g. Country Code, Material Group, Unit of Measure, and many more) is as important as the management of Master Data (e.g. Business Partners, Materials or Financial Data). Without the central governance of Reference Data, a company that wants to be part of the digital world will not be successful.

Although Reference Data has a low frequency of changes, it has a high business impact as it is used in almost all business processes. Reference Data Management (RDM) for SAP MDG helps to address pain points and issues caused by non-harmonized, overlapping or unused Reference Data which lead to:

- Long and unreliable processes in Sales, Purchasing, Logistics and Finance
- Spoiled goods, inefficient storage and other commercial risks
- High project costs when IT systems need to be connected
- Wrong decisions because of reports that are based on low quality data

1.1 Usage and Main Components

Using Reference Data Management means establishing a single source of truth for Reference Data with maintenance processes driven by Data Stewards and Data Specialists. With this end users get fast, simplified and harmonized access to guided documentation based on reliable data and relevant metadata.

RDM consist of two components:

- Reference Data Governance (RDG)
- Reference Data Harmonization (RDH)

RDG is based on SAP Master Data Governance (MDG) which provides a framework with general functions for the maintenance of master data and reference data as well. It provides:

- Workflow driven maintenance processes based on "Change Requests"
- Data Transfer and Data Replication components including Monitoring
- Audit capabilities using "Change Documents"

RDH is used to consolidate and synchronize reference data based on SAP S/4 and provides:

- RDH Sender Cockpit (definition of reference data groups and replication)
- RDH Receiver Cockpit (controlled activation of reference data)

Both components are based on the Master Data Framework (MDF) with one sub-component described in this document (Local Staging Area) and other sub-components described in separate documents: "RDM Configuration" and "MDF Configuration Management".

1.2 RDG: Solution Components and Features

As an SAP MDG Add-On RDG reuses SAP MDG features and delivers content for Reference Data which includes:

- Data Model
- Rule Based Workflows
- Adjustable User Interfaces
- Data Transfer for Initial Load
- Data Replication and Local Staging Area

1.2.1 Data Model

RDM delivers the Data Model "I1" which defines the reference data objects and linkages between these objects. Data objects are defined based on technical entities which refer to other technical entities which might be part of the reference data object.

The data model can be extended as for other MDG applications based on the commonly used application framework provided by SAP.

The reference data catalog specifying all reference data objects which can be governed is provided in section 4.2 Content for Reference Data Governance.

1.2.2 Rule based Workflows

Maintenance processes in RDM are defined based on decision tables which define the configuration of the technical workflow. By reusing the Business Rule Framework (BRF) a flexible configuration and enhancement is provided which again is based on the framework delivered by SAP.

RDM delivers the following workflow template types for each object

- 3-step: Request, Process and Approve
- 2-step: Request and Approve
- 1-step: Create (Request and activation in the same step)

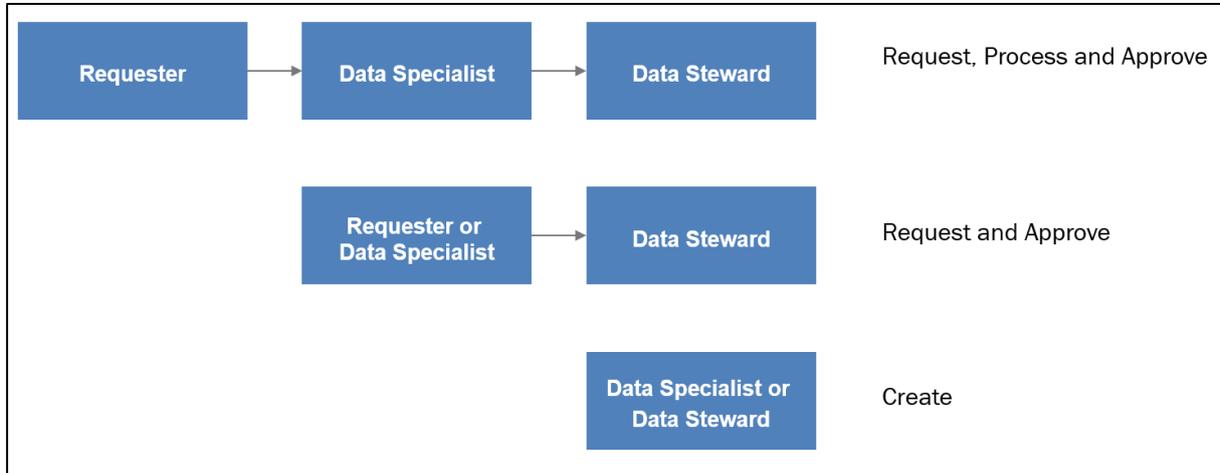


Figure 1: Change Request Types available in Itego RDM

Change Request Types are also delivered for data load (for File Upload and Data Import).

1.2.3 User Interfaces

User Interfaces in IRDM are developed based on Web Dynpro for ABAP and the Floorplan Manager (FPM). Adaptations of the user interface can be done on a configuration level (“Customizing”) or on a development level reusing the enhancement concepts which are applied in every SAP MDG based application.

1.2.4 Data Transfer for Initial Load

RDM provides content which can be used by the “MDM Generic Extractor” (MDMGX) which is provided by SAP. With this capability reference data can be extracted as XML files from SAP systems and transferred to RDM. Another available option to load reference data into RDM is using a comma separated format (CSV) and the “File Upload” functionality of SAP MDG.

1.2.5 Data Replication and Local Staging Area

Data Replication from RDM can be based on any technical implementation. In the standard RDM supports SAP “Application Link Enabling” (ALE) by delivering content for “Intermediate Documents” (IDocs) which are connected to a “Local Staging Area” in the receiving system.

The "Local Staging Area" is delivered by Itego as a software component which receives messages from the SAP ALE framework and stores the contained reference data in data base tables. From there the reference data is transferred using the SAP Transport Management System.

1.3 RDH: Solution Components and Features

RDH delivers components which provide:

- Definition of Configuration Groups and Business Objects
- Foreign Key Management
- Field Reduction and Overwrite Protection
- Controlled Replication and Activation
- Monitoring and Logging
- Customer defined Enhancements

Note: RDH can be used without SAP MDG or RDG and helps to create consolidated reference data which can be synchronized without additional features for the controlled governance of reference data. With this it achieves to create good data quality in your reference data and provides an ideal basis for reference data governance project.

1.3.1 Definition of Configuration Groups and Business Objects

The usage Configuration Groups and Business Objects defines the scope of the Reference Data Harmonization. Using "Configuration Groups" all tables which should be harmonized can be grouped into one or many groups. Based on groups filters can be used to restrict the reference data values which should be in scope.

"Business Objects" help to define dependencies between configuration tables and with this create complete objects which can be harmonized as a complete object rather than a set of tables.

Note: Based on the generic Master Data Framework (MDF), RDH can harmonize and synchronize all SAP tables.

1.3.2 Foreign Key Management

Using Foreign Key Relations, RDH is able to automatically detect dependencies between tables and with this helps to define business objects and configuration groups.

1.3.3 Field Reduction and Overwrite Protection

The definition of the reference data harmonization scope does not stop with the usage or creation of configuration groups but can be optimized by the definition of globally and locally relevant fields (attributes of a table). In order to do this, field reductions for the data replication can be defined and an overwrite protection for receiver systems can be activated.

1.3.4 Controlled Replication and Activation

Based on filters within the configuration groups the controlled replication of reference data can be started. The system will only transfer the table entries which are within the defined filters and will follow the definition of globally relevant fields (attributes of a table). This can be started manually but is usually executed in the scheduled replications.

In the receiver system the user is enabled to control the activation of the new reference data provided. The data can be compared with data which is currently available in the receiving system and can be activated step by step. In doubt a snapshot of the current system configuration can be created, which enables the user to rebuild the configuration which existed before the activation. Note: In this case, new reference data needs to be deleted manually to avoid any side effects which could be caused by a local configuration.

1.3.5 Monitoring and Logging

RDH provide monitoring and logging features which enable the user to control the synchronization of reference data from the sender system to all receiving systems. Information about the filtering of tables and fields are provided in the sender. The monitoring of the technical interface is available in sender and receiver and activation logs are created in the receiving systems.

1.3.6 Customer defined Enhancements

Customer specific enhancements can be added using custom coding.

2 Working with Reference Data Management, Governance

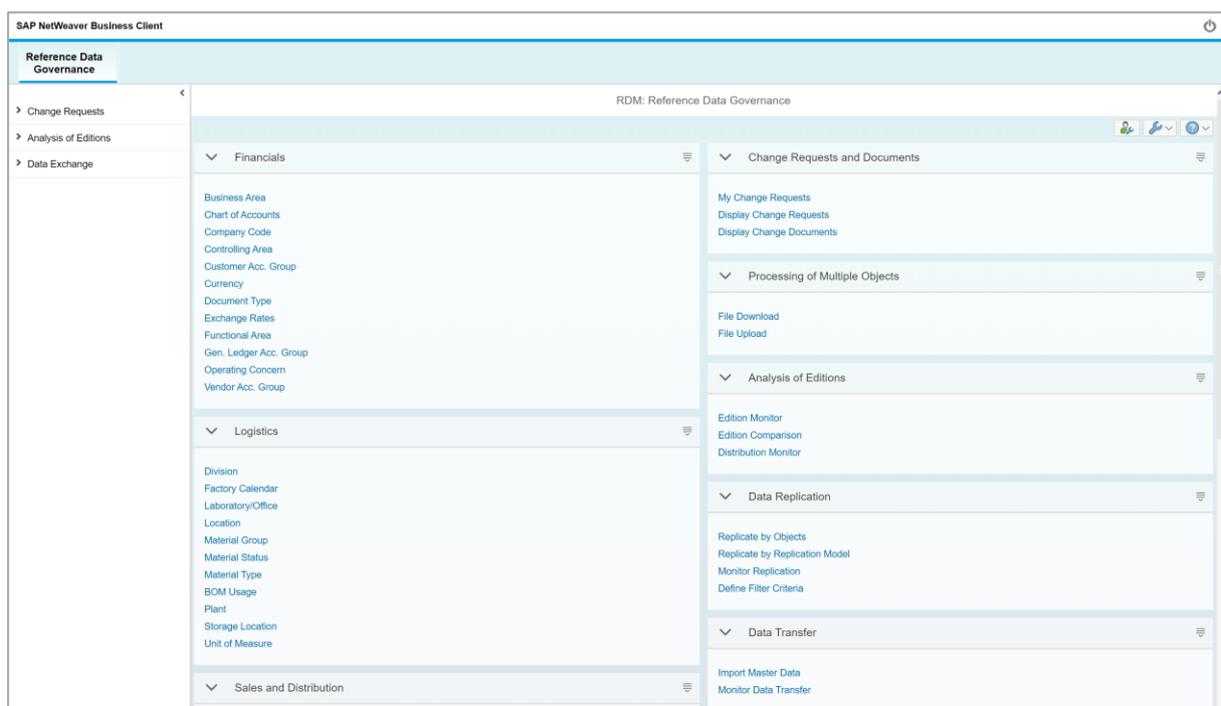
Using RDM is very similar to the usage of SAP MDG for other domains like Financials, Materials or Business Partners. The general pattern of a launchpad leading to a search and the processing of the object does not deviate from the SAP standard behavior. Anyhow, as the content is aligned with the requirements of a reference data management application details might differ and are described in the sections below.

The chapter starts with an overview about the delivered user interfaces and concludes with the description of roles which can be assigned to the individual user.

2.1 User Interfaces

2.1.1 RDM Launchpad

The launchpad of RDM contains shortcuts to every available RDM functionality in the MDG client. It can be accessed by executing transaction NWBC and using a standard or customized RDM role.



The drop-down menu on the left provides the same functionalities as the launchpad on the right. The guidance below will describe the access to all functionalities via the launchpad.

The launchpad itself is split into two sections and each is again split into several groups. The left part contains shortcuts to the single processing components (e.g. for Material Type, Currency, Division, ...). The right part contains shortcuts to general functionalities, such as change request monitoring, file up/download and manual data replication.

The important components on the right are:

- "My Change Requests": monitor the change requests you processed or submitted with your user (see section 2.1.3 Handling Change Requests)
- "Display Change Requests": display and (if you are authorized) process change requests (view section 2.1.3 Handling Change Requests)
- "Display Change Documents": display change documents
- "File Download": execute a file download of selected object data (explained in section 2.1.5 File Handling)
- "File Upload": execute a file upload of selected object data (explained in section 2.1.5 File Handling)
- "Replicate by Objects": replicate an object to a connected system manually
- "Import Master Data": import extracted object data from another system via an XML file

Details about the functionalities is provided the sections below.

The three    buttons on the upper right side of the screen allow for personalization, configuration and customizing of the page. You can also access the help center and quick help via them. The buttons are available on any page of the web application.

Please keep in mind that the launchpad can be replaced by any other entry point like a collection of tiles in a customer specific portal or launchpad.

2.1.2 Creating a New Object

For creating a new object, which is usually done by a requester (view section 1.2.2 – Rule Based Workflows), the user will usually open the launchpad. On the launchpad he chooses the object type he wants to create. This guide will show the process using the example of a Material Group.

After pressing "Material Group" on the launchpad, the object search of the object opens up:

Search: Material Group

Search Method:

Search Criteria Saved Searches:

Material Group is

Description (short text) is

Description (long text) is

Division is

Maximum Number of Results:

Save Search As:

Result List: 6 records found

Pend...	Material Gr...	Description (...)	Description (long te...	Divis...	Valuati...	Unit of Measure	Approved By	Approved At	Rank
	01	Material group 1					U11	21.10.2020 09:29:06	100.00
	02	Material group 2					U11	21.10.2020 09:29:06	100.00
	MATGRP001	Mat Grp 001	Material Group 001				U11	21.10.2020 09:29:06	100.00
	MATGRP002	Mat Grp 002	Mat Grp 002-scy				U11	21.10.2020 09:29:06	100.00
	MATGRP004	Mat Grp 004 chg	Material Group 004 ...				U11	21.10.2020 09:29:06	100.00
	MATGRP003	Mat Grp 003	Material Group 003				U10	15.10.2020 08:47:11	100.00

The object search page is designed to identify and quickly find already existing objects. Before creating a new object, you should use the search function to verify if the object does not already exist.

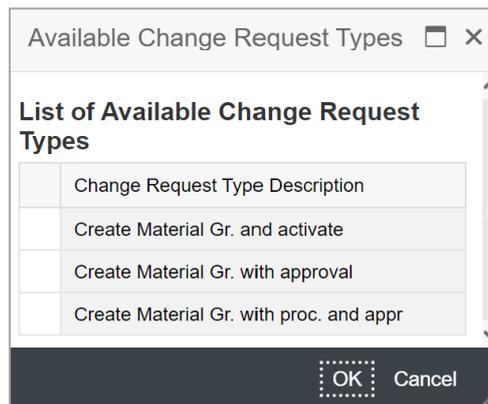
To use the search function, you can use the input fields located below "Search Criteria". Select an attribute on the left, select an operator and enter the value you wish to search for in the right field. You can also use the other lines to simultaneously define more search criteria. Once you are done, you can select your "Maximum Number of Results", and press "Search". You will now get a list of all objects, which match your search criteria.

Other functions of the object search are:

- "Copy": Create a new object, based on an already existing one
- "Mass Change": Change several objects simultaneously (change request type to be configured)
- "Replicate": Manually replicate an object to a connected system (which is usually done automatically after approval)
- "Replication Status": Check the replication status of an object
- "Change Requests": View change requests linked to an object

If the object that you want to create does not exist yet, you can press "New" or "Copy", to initiate the creation process.

In the next popup (which may show different options, depending on your workflow configuration), the change request type selection is displayed (if more than one change request type is available for the specific user).



Each selection initiates a different change request type:

- "Create [...] and activate": Instantly activates the object after creating it (1-step)
- "Create [...] with approval": A data steward needs to approve the object creation before it is activated (2-step)
- "Create [...] with proc. and appr.": A data specialist needs to check the created object and might enrich the data before the data steward is able to approve it (3-step)

Instructions on how to handle these different change request types can be found in section 2.1.3. For now, the next steps stay the same, no matter which change request type has been selected. The following window will show the "single object processing":

Process Object with MDG

Save Submit Check Undo Redo

Change Request Edit

General Notes Attachments

General Data

Change Request: 353

* Description:

Priority:

Due Date:

Reason:

Process Data

Status: Changes to Be Executed

Current Workitem: New Change Request What's Next

Created On/By: 23.10.2020 15:32:00 Felix Back

Audit Information

Created On:

Changed On:

Approved On:

Created By:

Changed By:

Approved By:

Material Group Edit

* Material Group:

Description (short text):

Description (long text):

Division:

Valuation Class:

Default unit of weight:

Material Group Descriptions

Initially, you as the user need to provide information on the change request header - marked with "Change Request". You enter information such as a description (which is the only mandatory field in this case), priority and due date. In the "Notes" tab, you can provide a free text note, and in the "Attachments" tab, you can attach files and relevant links for the change request.

The "Audit Information" section is filled-out automatically, as it contains information about the time and date of the change request steps.

The "[Object]" section needs to be filled out with information about the object itself and depends on the customer specific configuration. It also varies from object to object. For some of them, you might also find one or more additional tab in the "[Object]" section (e.g. an address-tab), which needs to be filled out as well.

In the "[Object] Descriptions" section, you can add language dependent texts, which allow users with different logon languages to view the object description in their preferred language. Simply press "New", enter the language key(s), you want to use, and enter the according description (optional).

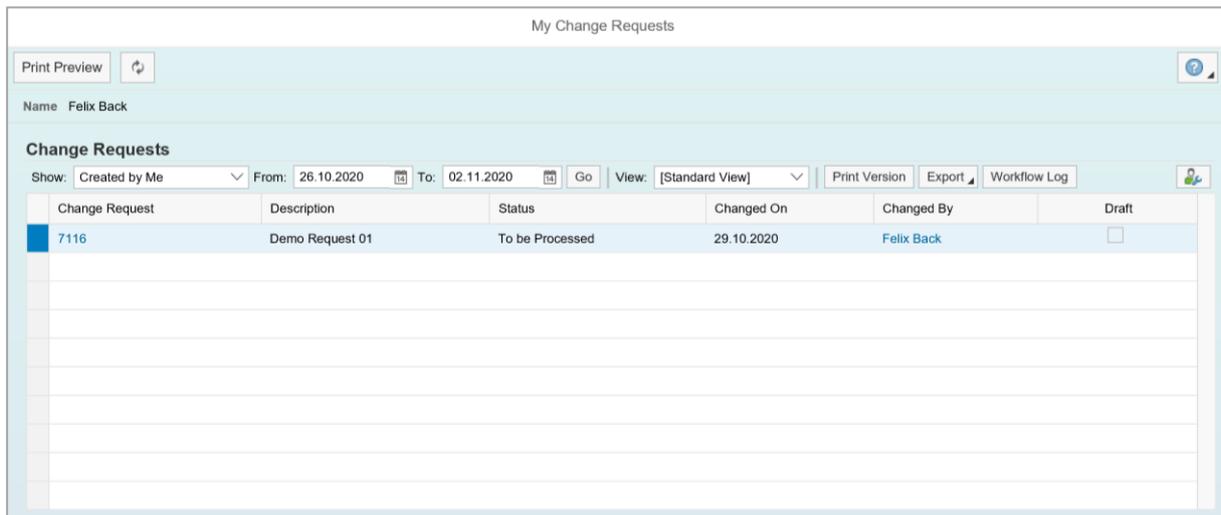
In the "Attachments" section, you can add metadata for the object itself – which allows to provide more details about the object itself. "Edit" and then either "File" or "Link".

After completing the request, you can press the "Check" button on the top left corner, to confirm that the data you entered is valid. You can then click "Submit", and your change request will be submitted. Depending on the selected change request type, the change request may need additional data and an approval. Please view the following section on "Handling Change Requests" for further instructions.

2.1.3 Handling Change Requests

Depending on your workflow configuration, some change requests need to be processed by users with special authorizations, such as data specialists and/or data stewards. If you are a user with these specific authorizations, you can follow this section for instructions on how to process change requests.

To access the change requests, which need to be processed by your user, press on "My Change Requests" under "Change Requests and Documents". You then will see a list of all change requests, which need to be processed by you or users which belong to the same role as you:



Change Request	Description	Status	Changed On	Changed By	Draft
7116	Demo Request 01	To be Processed	29.10.2020	Felix Back	<input type="checkbox"/>

In the "Status" field, you can see that the change request still needs to be processed. In order to do this, press on the change request number. You will then get to the object overview page, where you can check the change request header and the data of the object, which is yet to be activated.

Depending on your role, you now have three options:

1. **Approve/Next step:** In order to simply approve the change request (or to send it to the next processor), you need to press the "Approve" or "Finalize Processing" button in the top left corner.
2. **Withdraw/Revise:** In order to withdraw or revise (send to previous processor) a change request, you have to press the "Withdraw" or "Send for Revision" button in the top left corner. To perform this step, you also need to provide a note in the change request header, explaining why you are performing this action.
3. **Next step with changes:** If you want to change the content of the change request, you can press on the "Edit" button in the "[Object]" section. The object fields are then open for input. After applying the changes, you can provide a note in the change request header, explaining your changes. You can then press "Approve" or "Finalize Processing" in the top left corner.

After performing one of the three actions above, the change request will either be released or sent (back) to the according processor, who is then able to perform similar steps.

2.1.4 Changing an Already Existing Object

Changing object data in RDM is similar to the create process described in section 2.1.2. Please refer to this before reading this section.

Starting on the launchpad, you need to navigate to the object, you want to change by clicking on the respective object type. You will get to the search result page of this object type. From there you can use the search function (explained in section 2.1.2) to locate the object that you want to change. Once you located the object, you can click on the link provided and will get to the object overview page. On this overview page, in the “[Object]” section, you have to click on “Edit”.

You may then have to select a change request type. For more details please refer to section 2.1.2. After selecting a change request type, the object data fields are open for input. You can now enter new or change current information. You can also add metadata, e.g. a file or a link which will provide more details about the object.

The screenshot displays the 'Process Object with MDG' interface. At the top, there are buttons for 'Save', 'Submit', 'Cancel', and 'Check', along with 'Undo' and 'Redo' options. The main content area is titled 'Change Request' and has an 'Edit' button. Below this, there are tabs for 'General', 'Notes', and 'Attachments'. The 'General' tab is active, showing two columns: 'General Data' and 'Process Data'.
General Data:
 Change Request ID: 7154
 *Description: [Text Field]
 Priority: [Dropdown]
 Due Date: [Date Picker]
 Reason: [Dropdown]
Process Data:
 Status: Changes to Be Executed
 Current Workitem: New Change Request
 Created On/By: 02.11.2020 11:29:32 Felix Back
Audit Information:
 Created On: 15.01.2020 05:39:10
 Created By: BACKF Felix Back
 Changed On: [Blank]
 Changed By: [Blank]
 Approved On: 15.01.2020 05:39:11
 Approved By: BACKF Felix Back
Material Group:
 Material Group: D
 Division: [Dropdown]
 Description (short text): FB Demo 01
 Valuation Class: [Dropdown]
 Description (long text): [Text Field]
 Default unit of weight: [Dropdown]
Material Group Descriptions:
 [Empty Section]
 At the bottom, there are 'New' and 'Copy' buttons.

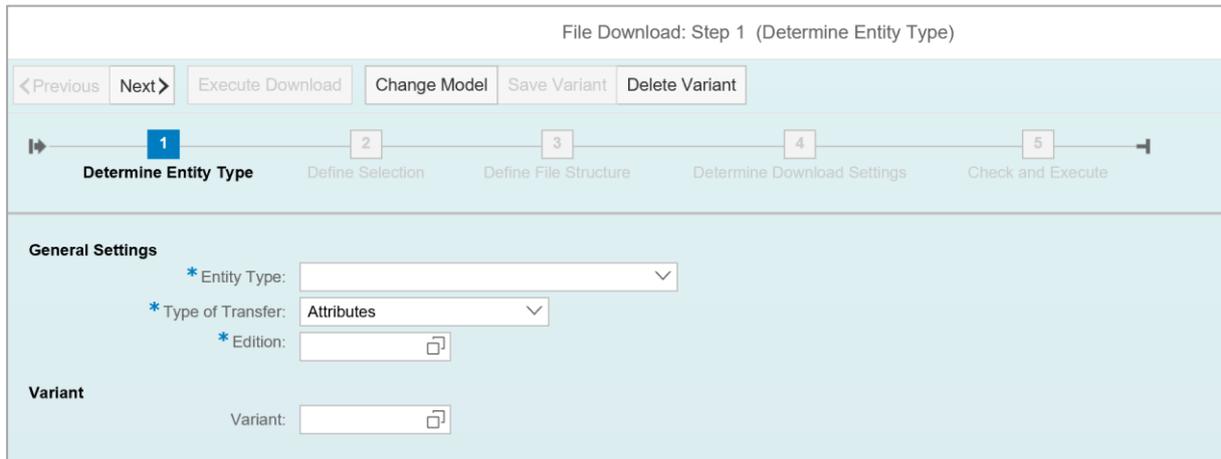
After adding or changing information, make sure that the change request header is filled out properly. Then press “Check” and/or “Submit”. Depending on the selected change request type, the change request may need approval.

2.1.5 File Handling

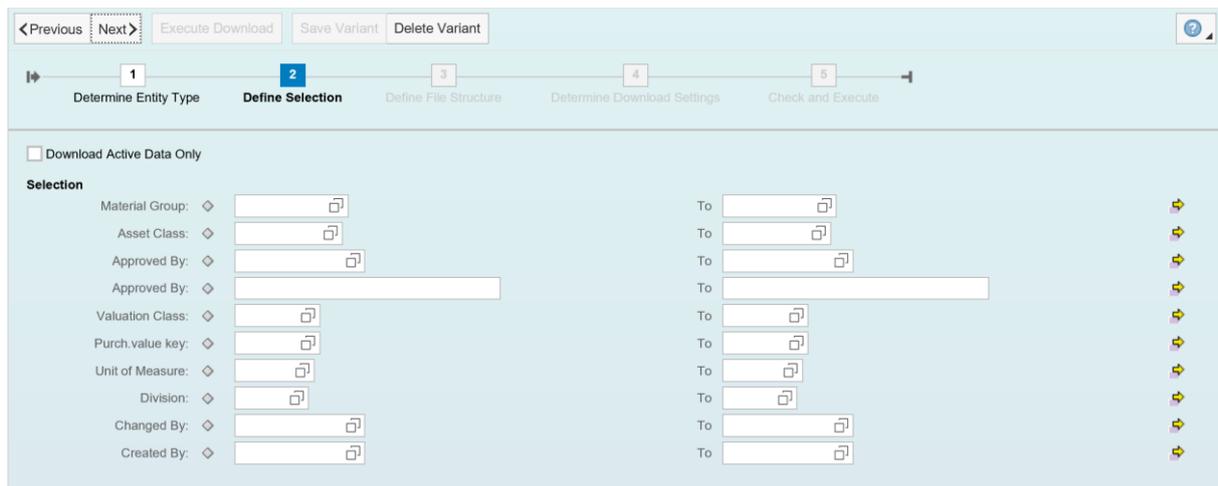
RDM offers the functionality of either importing or exporting object data via a file upload or download. These applications use a configurable file structure call “variant”. This functionality allows for a convenient data transfer of larger amounts of data between two or more systems.

2.1.5.1 File Download

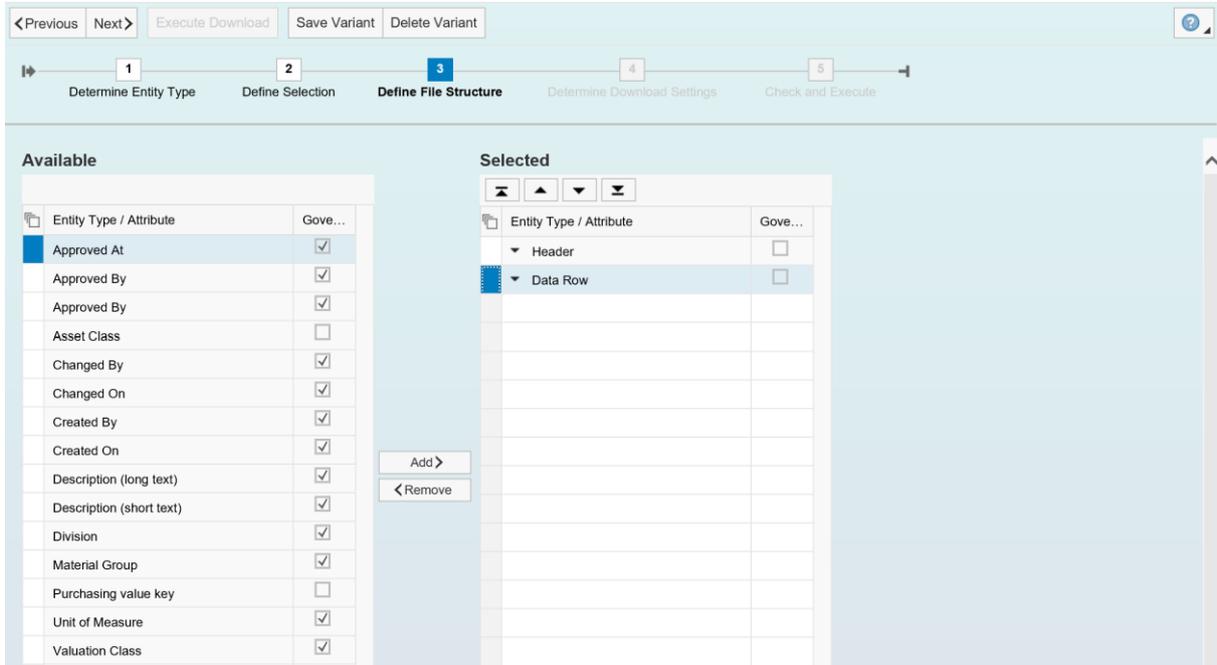
To initiate a file download, press “File Download” in section “Processing of Multiple Objects” on the launchpad. The following screen pops up:



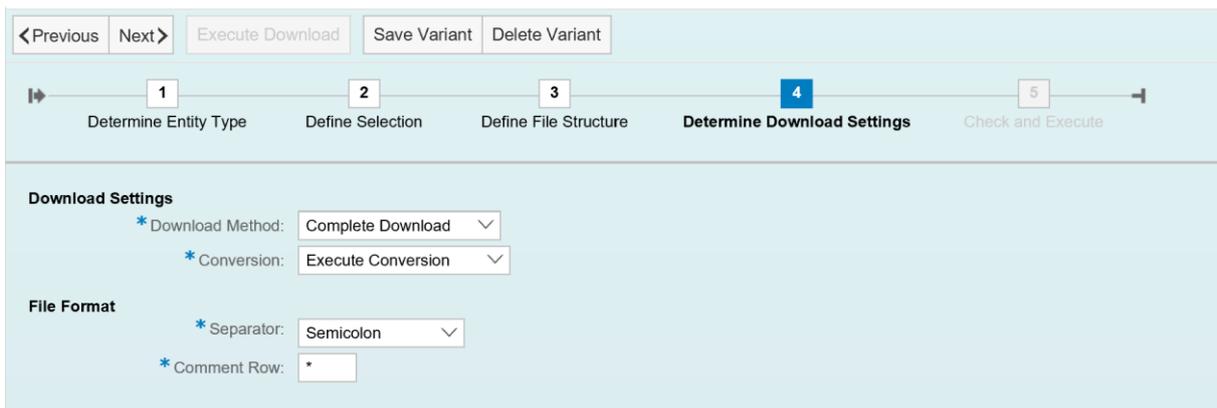
For step one, select the Entity Type (Object) for which you want to download the data. For “Type of Transfer” select “Attributes”. If provided, you could also use an existing variant. Press on “Next” and the step two pops up:



You can use the shown filter criteria to define which data objects will be downloaded. You can also choose if to download only active data which is usually advisable (as inactive data still needs approvals). Press on “Next” and step three will pop up:



If no variant has been created before you need to define a file structure. You can do this by adding the available attributes (on the left) to the Header or Data Row (on the right). It is advisable to save this file structure as a variant for later usage. Press "Next" and step four pops up:



You can select some options for the file that will be generated with the download. Press "Next" and step five will pop up and allows you to check your selection one more time. After verifying the selections, press "Execute Download" and save the generated file.

2.1.5.2 File Upload

Note: The file upload process is similar to the file download process. It is advised to read the file download section before reading this section. Also please keep in mind that you can use the file download to create file templates for a file upload.

If you get a file which contains data for objects that you want to upload you can initiate a file upload. On the launchpad, press on "File Upload" in section "Processing of Multiple Objects". A screen pops up, which is similar to the file download application.

In step one, you either need to select the object type or a variant which already contains the settings for this object type. Then press on "Next" and step two pops up.

In step two, you need to enter the file structure of the file if no variant is available. The file structure needs to match the file content. Then press on "Next" and step three pops up.

In step three you define upload settings, e.g. the upload mode, the execution of conversions and the separator. You also must select the file itself from one of your file directories - see "File Name". Then press "Next".

A pop up might ask you to select a change request type for the upload. Select it and press "OK". Step four pops up, where you can confirm your selections. Press "Execute Upload" to initiate the upload process which might create a change request which needs to be processed by other users.

2.1.6 Full IT Governance Alternative - Local Staging Area

Data can be replicated either using the “Business Controlled Governance Alternative” which will be described in the next chapter or using the “Full IT Governance Alternative”. The “Full IT Governance Alternative” involves a “Local Staging Area” (LSA) which is installed on receiving SAP business systems. The LSA serves the purpose to receive reference data objects from RDM and transfer it into the SAP configuration.

The diagram below shall provide an overview how the LSA is contributing to the flow of the reference data in the SAP system landscape.

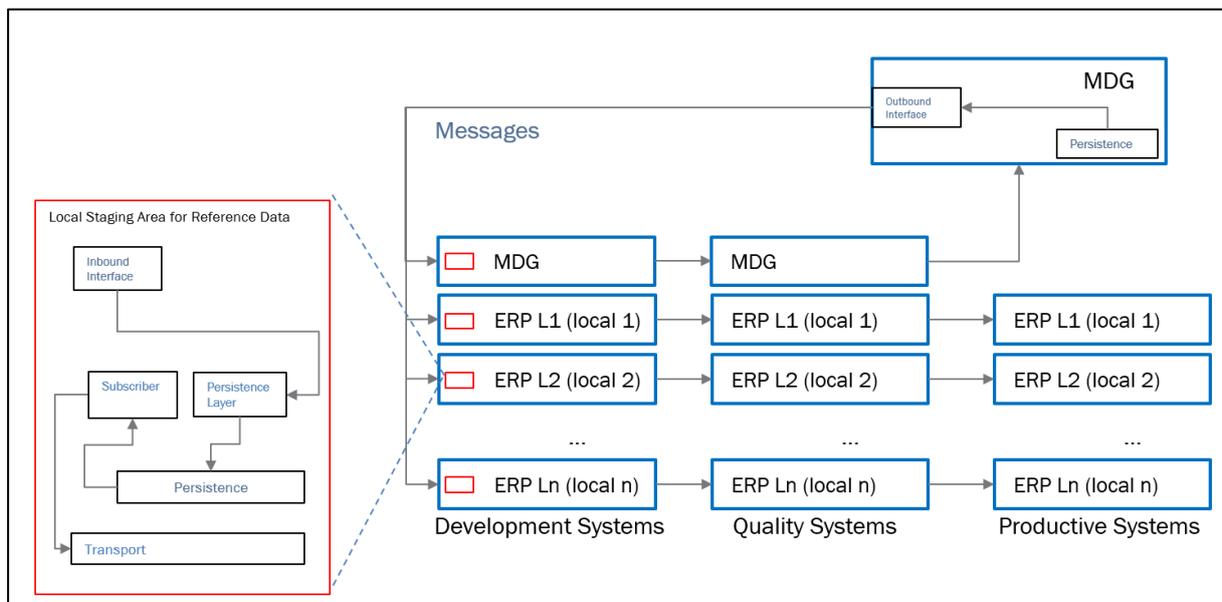


Figure 2: Data Flow (SAP Systems)

After reference data is received by the LSA, it is stored in database tables (“Persistence”) until a “Subscriber” pulls the data and stores the data in a local SAP transport request which will be transported to the quality system, which belongs to the development system hosting the LSA. Eventually, the transport will reach the productive system, which starts the productive usage of the reference data included.

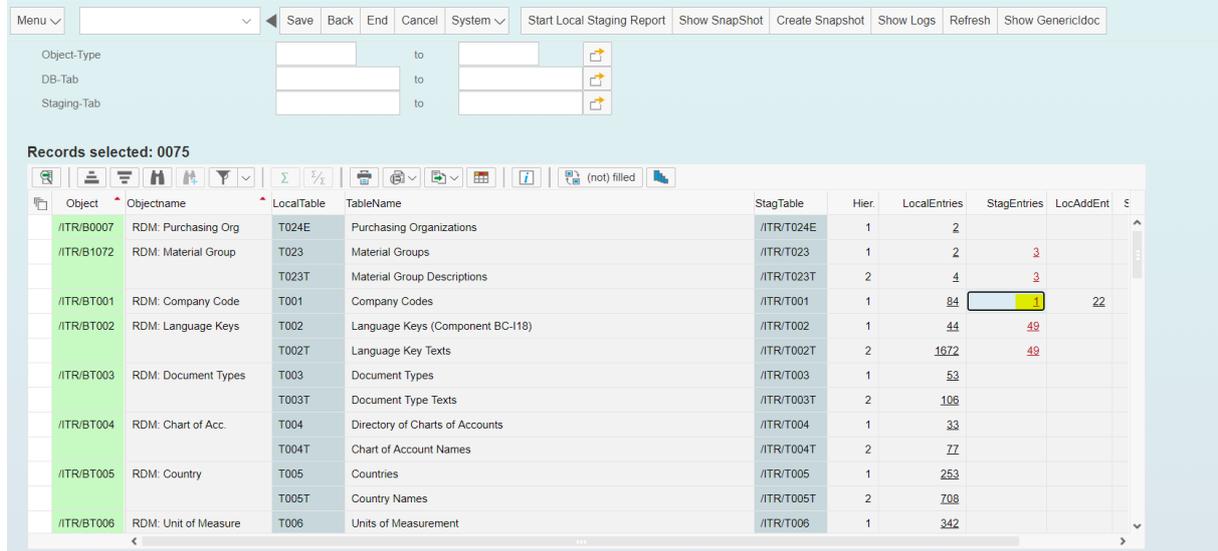
Note: the MDG system hosting the RDM application will also receive the reference data through SAP transport requests. As long as this transport did not reach the productive MDG system, other MDG applications like MDG for Material (which might be running on the same system) will not be aware of this data. The purpose of this behavior is the consistency of reference data across the complete system landscape. New reference data objects can only be used

in the production system landscape after a consistent transport to all productive systems, including SAP MDG.

2.1.6.1 LSA – Administration

The administration cockpit (transaction /ITR/ADMIN_STAGING) offers the user a well-structured system interface. Administrators have an overview of all processes (status of the Local Staging Area) and have the ability to react appropriately in certain cases.

Admin Staging Content



Menu ▾ [] Save Back End Cancel System ▾ Start Local Staging Report Show SnapShot Create Snapshot Show Logs Refresh Show GenericIdoc

Object-Type [] to []
 DB-Tab [] to []
 Staging-Tab [] to []

Records selected: 0075

Object	Objectname	LocalTable	TableName	StagTable	Hier.	LocalEntries	StagEntries	LocAddEnt
/ITR/B0007	RDM: Purchasing Org	T024E	Purchasing Organizations	/ITR/T024E	1	2		
/ITR/B1072	RDM: Material Group	T023	Material Groups	/ITR/T023	1	2	3	
		T023T	Material Group Descriptions	/ITR/T023T	2	4	3	
/ITR/BT001	RDM: Company Code	T001	Company Codes	/ITR/T001	1	84	1	22
/ITR/BT002	RDM: Language Keys	T002	Language Keys (Component BC-118)	/ITR/T002	1	44	49	
		T002T	Language Key Texts	/ITR/T002T	2	1672	49	
/ITR/BT003	RDM: Document Types	T003	Document Types	/ITR/T003	1	53		
		T003T	Document Type Texts	/ITR/T003T	2	106		
/ITR/BT004	RDM: Chart of Acc.	T004	Directory of Charts of Accounts	/ITR/T004	1	33		
		T004T	Chart of Account Names	/ITR/T004T	2	77		
/ITR/BT005	RDM: Country	T005	Countries	/ITR/T005	1	253		
		T005T	Country Names	/ITR/T005T	2	708		
/ITR/BT006	RDM: Unit of Measure	T006	Units of Measurement	/ITR/T006	1	342		

On top of the page, you are able to provide search attributes and you will find shortcuts to other functionalities described in the following sections.

- **Start Local Staging Report:** To start a staging transport (See following section 2.1.6.2 LSA – Maintain Local Staging Area)
- **Show SnapShot:** Shows the snapshot content. From there you can display the snapshots as well as restore configuration tables (See section 2.2.5 Local Staging Administrator). Important: Make sure that you are restoring the correct data (for more information read Section 2.1.6.5 LSA – Snapshot Management)
- **Create Snapshot:** Manual creation of a Snapshot (See Section 2.1.6.4 LSA – Creation of Snapshots)
- **Show Logs:** Displays the application logs (See Section 2.1.6.6 LSA – Logging)

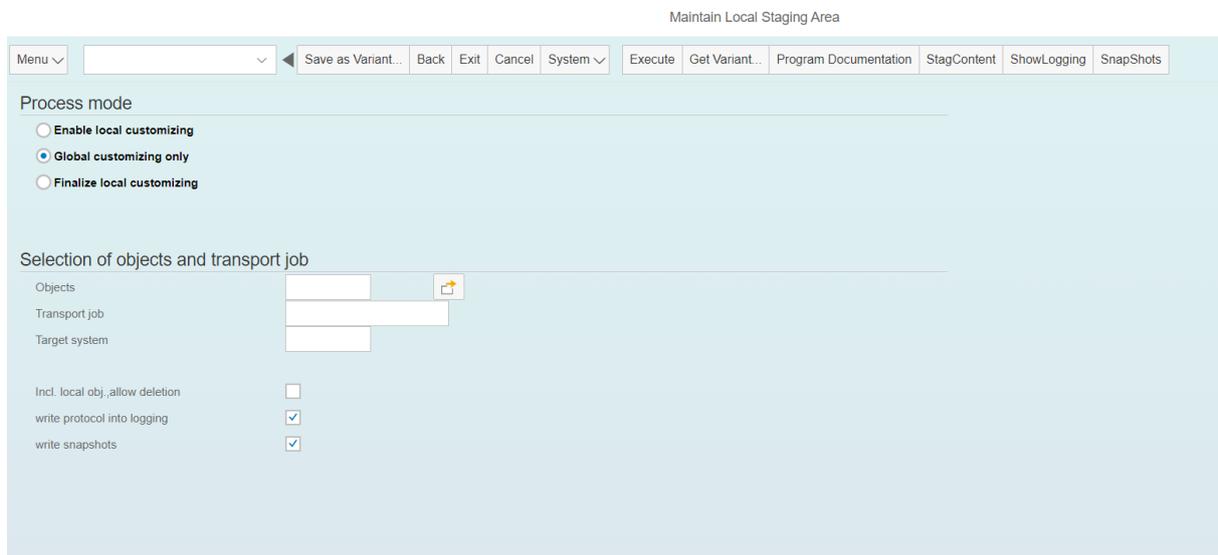
In the section below ("Records Selected") you can choose the object types that you are looking for. You can also choose multiple objects types by clicking this  button.

The columns LocalEntries and LocalAdEntries (for addresses) show the entries in the configuration tables ("Customizing") of the local system, the columns StagingEntries and StagAdEntries show the staging content. Column ("StagEntries") shows the number of entries in LSA per object type. Another column ("StagTable") provides the technical name of the database tables provided by RDM which are the basis for the local staging area.

If you want to do a local change on the object, click on this  button, which you will find in the last column. It is usually only useful to do this when local attributes should be changed, that are not maintained in the RDM system but locally in the receiving system.

2.1.6.2 LSA – Maintain Local Staging Area

Transaction "/ITR/STAGING (Maintain Local Staging Area)" or using the button in the administration cockpit allows access to the LSA as a "subscriber" and offers the following functionalities:



- Process Mode
 - o Enable local customizing: Create or use a transport and allow changes to local attributes. After changing the local attributes, you need to finalize the processing of the object by executing "Finalize local customizing".
 - o Global customizing only: Create or use a transport and release it without the opportunity to add local changes.
 - o Finalize local customizing: Merge local changes into the transport created or used by "Enable local customizing" and release the transport.

- Selection of objects and transport job
 - o Objects: Select the object types that you want to transfer into the configuration of the local system.
 - o Transport: Optional usage of an already existing transport. If not maintained the system will create a transport.
 - o Target System: The transport target specifies where a transport request is to be imported to. In the case of transport targets without specified target clients, the system administrator does not determine in which clients the client-dependent objects are to be imported until the time of import.
 - o Include local objects, allow deletion: Usually this is not selected which will allow a delta handling. Only the objects that have been currently changed or that have been newly added will be updated in the SAP configuration (See section 2.1.6.1 LSA - Delta Handling). If selected the complete content of the configuration tables will be added to the transport allowing local objects to be added and also allowing the local deletion of objects.
 - o Write protocol into logging: Enable Logging. (See section 2.1.6.4 LSA – Logging)
 - o Write snapshot: Create a snapshot of the configuration tables before executing the program (See section 2.1.6.2 LSA – Snapshot Management)

The “Processing Mode” is used to differentiate between two use cases:

- Local Customizing
 - o Reference Data created or changed on RDM can be enriched by the maintenance of local attributes
- Global Customizing
 - o Reference Data created on RDM is transferred without additional changes into an SAP transport

In both use cases, a transport can either be created or reused. The reuse of transport offers more flexibility which can be used to

- Add additional changes (independent of RDM) to the transport
- Reuse transports that have been created in an earlier step of the process (e.g. as a result of a Change Request created in the SAP Solution Manager)

Prerequisite for reusing a transport: User of transaction “/ITR/STAGING” is assigned to the transport.

Note:

For the maintenance of the Factory Calendar the system creates a transport of type “Workbench”. If a transport should be reused, please make sure that this type is used as well.

For the use case "Local Customizing" the subscriber needs to "Enable local customizing" which means that the reference data objects are transferred to the SAP configuration tables and can be enriched using transaction "SPRO" (Customizing). After this has been done, the subscriber needs to "Finalize local customizing" which concludes the maintenance for the objects which are in the scope of the subscription.

The scope of the subscription is defined by the "Objects" defined in the "Selection of objects and transports". The set of objects can either hold one or many reference data object types available in RDM.

Subscriptions can also be automated by scheduling variants of report /ITR/ST_TRANS_CREATE (which is the report linked to transaction /ITR/STAGING").

2.1.6.2.1 LSA – Delta Handling

The delta handling feature of the LSA is activated by a checkbox, which determines whether the staging transport should contain every available object or only the objects that have been changed since the staging report was last executed.

The modes "Enable Local Customizing" and "Finalize Local Customizing" do **not** allow the user to use the delta handling method. When you select the mode "Global customizing only", the delta handling method is enabled by default.

Note: If the Checkbox "Incl. local obj.,allow deletion" is **not** selected, only the objects that have been currently changed or that have been newly added will be sent to SAP configuration! If the option is marked the LSA transfers all entries in the configuration table of the specified object.

Incl. local obj.,allow deletion

Example: If table T001 (Company Codes) consist of 500 entries and through RDM there is one more entry, either 501 entries or only 1 entry is transferred to the transport which is created by executing "Maintain Local Staging Area".

It could still be useful to transport all data. In this case, the SAP configuration that receives this transport will have a complete update.

Example: If entries are deleted in this way, they would subsequently have to be deleted manually in the MDG as well. This is only a special case, but it shows that sending all data also has its advantages. Therefore, the two options are available.

Transport Organizer: Requests

Customizing Requests Involving User BACKF [REDACTED]

- 100 Itego GmbH MDG
 - > ITQ Quality
 - Modifiable
 - ITRK904523 100 BACKF [REDACTED]
 - ITRK903703 100 BACKF [REDACTED]
- 400 Itego GmbH ERP
 - > ITQ Quality
 - Modifiable
 - ITRK904535 400 BACKF MDG Reference Data Management - Transport
 - ITRK904525 400 BACKF MDG Reference Data Management - Transport
 - ITRK902710 400 BACKF MDG Reference Data Management - Transport
 - Released
 - ITRK904561 400 ✓ BACKF MDG Reference Data Management - Transport
 - ITRK904562 ✓ BACKF Customizing Task
 - Table Contents
 - T001
 - 400FB05
 - Customizing: Table Contents
 - Object List of Request
 - Request Attributes

With Delta Handling

Transport Organizer: Requests

The screenshot shows a tree view of SAP requests. The root is '400 Itego GmbH ERP'. Underneath is '-> ITQ Quality'. This folder contains two sub-folders: 'Modifiable' and 'Released'. Under 'Modifiable', there are three requests: ITRK904535, ITRK904525, and ITRK902710, all with status 'BACKF' and description 'MDG Reference Data Management - Transport'. Under 'Released', there are two requests: ITRK904569 and ITRK904570, both with status 'BACKF'. ITRK904569 has the description 'MDG Reference Data Management - Transport', while ITRK904570 has 'Customizing Task'. Under ITRK904570, there is a folder 'Table Contents' which contains a sub-folder 'T001'. This 'T001' folder contains a list of 30 table names, starting with 400 and ending with 400CO01. A red rectangle highlights the entire 'Table Contents' area.

Without Delta Handling

2.1.6.2.2 LSA – Logging

The logging functionality helps to monitor the LSA functionality in more detail and allows to resolve problems that might occur in the maintenance processes. The transaction "/ITR/STAGING" is required to execute this function. Clicking on "Show Logs" opens the following window.

Display Application Logs (RDM-Staging-Report)

Menu ▾
▾
◀ Save as Variant... Back Exit Cancel System ▾
Execute Program Documentation

Time Restriction

Maximum Number of Logs

From (Date/Time)

08.03.2021	00:00:00
------------	----------

To (Date/Time)

08.03.2021	23:59:59
------------	----------

Logs Produced By

User to

Logs in Editing

Display header data only Display all (not recommended, see documentation)

Do not display Wait for end of editing

Display

ALV Grid Control

Text Format

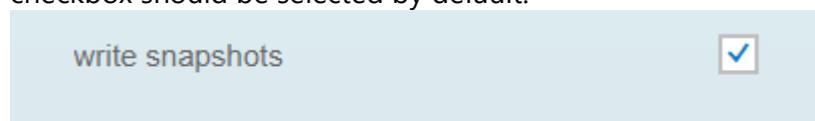
- **“Logs in editing”**: Besides the log produced by earlier runs, you even have the possibility to take a detailed look at the logs that are written for runs that are currently in execution. If problems occur, you can adjust the level. You have the following options when deciding how the report should handle these logs:
 - “Display header data only”: The report shows only the header data and no messages.
 - “Do not display”: The report does not show the header data or messages.
 - “Display complete log”: The report shows the header data and messages. This can, however, lead to the problems discussed above.
 - “Wait for the completion of editing”: The report waits until all relevant logs are written.
- **“Display”**: You can choose to display the logs using an ALV Grid Control or in text format. As well as the format, there are slight differences in the functions available with each option:
 - ALV: You can display the long texts for individual messages and the technical details of logs and messages by choosing the corresponding ALV functions.
 - Text: All logs, including messages and context information, are displayed at once. You can therefore use the text search function to search for a particular text in all messages, for example.

Note: If you display the report in text format, the selected selection criteria are also displayed.

2.1.6.3 LSA – Creation of Snapshots

Snapshots store the entries of the configuration table in different versions. Snapshots can be created manually or automatically. Manually by executing a report which creates a new version or automatically through the Local Staging Area or the inbound process for a generic IDoc. This allows you to restore data to a former state that you consider good.

For example, if you want to transport a new object or an object that has been changed recently, a snapshot will be created automatically if the checkbox “write snapshots” is selected. This checkbox should be selected by default.



2.1.6.4 LSA – Snapshot Management

The snapshot management ensures that changed configuration tables can be recreated based on a consistent version of this table.

Clicking the button **Show SnapShot** will open the following page.

Show SnapShot content

Menu ▾ ◀ Save Back End Cancel System ▾ Refresh (Select Idoc's)

Choice

Version to ↕

Table to ↕

Date 25.02.2021 to 11.03.2021 ↕

Records selected : 0052

Version	Table Name	DB-Entries	AD-Entries	MainIndex	AddrIndex	User Name	Program name	Current Date	Time	SAP System	Mandant
4	T001W	5	1	RDM-T001W-100016	RDM-T001W-A-100016	IT_ERP_04	/ITR/SNAPSH...	10.03.2021	10:00:16	IH1	400
	TWLAD	1	1	RDM-TWLAD-104448	RDM-TWLAD-A-1044...	IT_ERP_04	/ITR/SNAPSH...	10.03.2021	10:44:48	IH1	400
5	T001	78	10	RDM-T001-083837	RDM-T001-A-083837	IT_ERP_04	/ITR/SNAPSH...	09.03.2021	08:38:37	IH1	400
	T001L	8		RDM-T001L-120055		LSA_ADMIN	/ITR/SNAPSH...	10.03.2021	12:00:55	IH1	400
	T001W	7	3	RDM-T001W-100237	RDM-T001W-A-100237	LSA_ADMIN	/ITR/SNAPSH...	10.03.2021	10:02:37	IH1	400
	TWLAD	2	2	RDM-TWLAD-120055	RDM-TWLAD-A-1200...	LSA_ADMIN	/ITR/SNAPSH...	10.03.2021	12:00:55	IH1	400
6	T001	79	11	RDM-T001-092845	RDM-T001-A-092845	IT_ERP_04	/ITR/SNAPSH...	09.03.2021	09:28:45	IH1	400
	T001L	9		RDM-T001L-121721		LSA_SNAP_...	/ITR/SNAPSH...	10.03.2021	12:17:21	IH1	400
	T001W	7	3	RDM-T001W-100418	RDM-T001W-A-100418	IT_ERP_04	/ITR/SNAPSH...	10.03.2021	10:04:18	IH1	400
	TWLAD	3	3	RDM-TWLAD-121721	RDM-TWLAD-A-1217...	LSA_SNAP_...	/ITR/SNAPSH...	10.03.2021	12:17:21	IH1	400
7	T001	81	13	RDM-T001-093645	RDM-T001-A-093645	IT_ERP_04	/ITR/SNAPSH...	09.03.2021	09:36:45	IH1	400

Select the table from which the non-consistent data should be restored (e.g. table T001 (company code). Select the object you want to restore (Right-click → restore).

To ensure that you are restoring the correct data, check the entries in the table. If it is an address object, the AD-Entries column can be helpful to make sure that the address is correct.

CoCode	Company Name	City	Ctr	Crcy	Language	ChAc	Max.ex.dev	FV	C	Company Address	VAT Registration No.	FMA
0001	SAP A.G.	Walldorf	DE	EUR	DE	INT	10	K4	2			
	S-HT: (W)	Palo Alto	US	USD	EN	INT	10	K4	1			
	erbank: Deutschl.	Walldorf	DE	EUR	DE	OMB1		K4	1	22231		
	emplat: AE	Dubai	AE	AED	EN	INT		K4	1			
	emplat: AR	Argentinien	AR	ARS	ES	INT		K4				
	emplat: AR	Argentinien	AR	ARS	ES	INT	10	K4				
	emplat: AT	Austria	AT	EUR	DE	INT	10	K4	2			
	emplat: AU	Australia	AU	AUD	EN	INT	10	V6				
	emplat: BE	Belgium	BE	EUR	EN	CABE	10	K4	2		BE000009797	
	emplat: BR	Brazil	BR	BRL	PT	INT	10	K4				
	emplat: CA	Canada	CA	CAD	EN	CANA	10	K4	2			

Note: Not every role has the authorization to restore a snapshot. (See section 2.2.5 Local Staging Administrator)

2.1.6.5 LSA – Solution Manager Integration

In order to integrate the transport which is created from the Local Staging Area into Solution Manager ChaRM Tickets, choose the appropriate option from the Local Staging Area cockpit.

Admin Staging Content

Start Local Staging Report Show SnapShot Create Snapshot Show Logs Refresh Show GenericIdoc

Choice

Object-Type to

Local Table to

Staging Table to

Records selected: 0088

Object	ObjectName	LocalTable	TableName	StagTable	Hier.	LocalEntries	StagEntries	LocAddEnt	StagAddEnt	Cust
/ITR/B0007	RDM: Purchasing Org	T024E	Purchasing Organizations	/ITR/T024E	1	60	1			
/ITR/B1072	RDM: Material Group	T023	Material Groups	/ITR/T023	1	76	142			
		T023T	Material Group Descriptions	/ITR/T023T	2	163	2			
/ITR/PT001	RDM: Company Code	T001	Company Codes	/ITR/T001	1	144	1	90	50	
	Copy Text	T002	Language Keys (Component BC-118)	/ITR/T002	1	54				
	Details	T002T	Language Key Texts	/ITR/T002T	2	1623				
	Optimize Width	T003	Document Types	/ITR/T003	1	61	64			
	Unfreeze Columns	T003T	Document Type Texts	/ITR/T003T	2	100	9			
	Spreadsheet...	T004	Directory of Charts of Accounts	/ITR/T004	1	56				
	Start LSA-Report	T004T	Chart of Account Names	/ITR/T004T	2	99				
	Start LSA-Report with SolMan	T005	Countries	/ITR/T005	1	267				
		T005T	Country Names	/ITR/T005T	2	719				
/ITR/BT006	RDM: Unit of Measure	T006	Units of Measurement	/ITR/T006	1	275	13			
		T006A	Assign Internal to Language-Dependent Unit	/ITR/T006A	2	552	18			

Select checkbox "SolMan: Create Ticket" and select the appropriate configuration ID for the Solution Manager which is connected to your Local Staging Area.

Maintain Local Staging Area

StagContent Show Logs Show SnapShots

Process mode

Enable local customizing
 Global customizing only
 Finalize local customizing

Selection of objects and transport job

Objects: /ITR/B0007
 Transport job:
 Target system: SolMan-ConfigID SOLMANDEMO to
 Incl. local obj.,allow deletion
 write protocol into logging
 write snapshots
 Standard-Transport-Text
 SolMan: Create Ticket

The process will create a ChaRM ticket and will log this action:

```

data Entry: 400Z001
00060 AFTER: Entries in CustomizingTable T024E found
Transport ITRK906050 successful created
Task ITRK906051 successful created
SolMan-Ticket created: 8000002600
  
```

After this the responsible users can access the ticket in the SAP Solution Manager and process the ticket according to the testing status. RDM creates an attachment with additional information about the data included based on the logging information in the Local Staging Area. Please check the example below.

Search: Standard Changes

Document Type is Standard Change

Document ID contains

Free Text contains

Description contains

Time Frame is Today

Maximum Number of Results: 100

Search Clear Save Search As: Include View Save

Result List: 3 Standard Changes Found

New Refresh

Change ID	Description	Priority	Status	Create...	Category	Relate...	Reque...	Reque...
8000002596	Test	4: Low	In De...	07.10....			07.10....	10.10...
8000002598	RDM: 2. Test	2: High	In De...	07.10....			07.10....	21.10...
8000002600	RDM Reference Data - Purchasing Org	2: High	Created	07.10....			07.10....	14.10...

Search for ChARM ticket which has been created.

Save Display Cancel Edit Create Follow-Up Actions Send E-Mail Print Preview Print Display Object Relationships

More

Status Overview

1 2 3 4 5 6

Created In Development To Be Tested Successfully Tested Imported into Production Withdrawn

Details Edit

General Data

ID: 8000002668

Description: RDM: Material Group - T023, T023T

Developer: Mr. SAP Backoffice

Tester:

IT Operator:

Change Manager: Mr. SAP Consulting

Current Processor:

Implementation Data

Change Cycle / Phase: ITEGO Continuous cycle

Type / ID: Continual Cycle

Landscape / Branch: ITEGO Solution RDM

Development Close:

Go-Live Date:

Project Planning

Project Name: <None>

Attachments Attachment URL With Template Download Advanced

Actions	Name	Type
Properties	RDM - Local Staging Area Logging	Simple Text

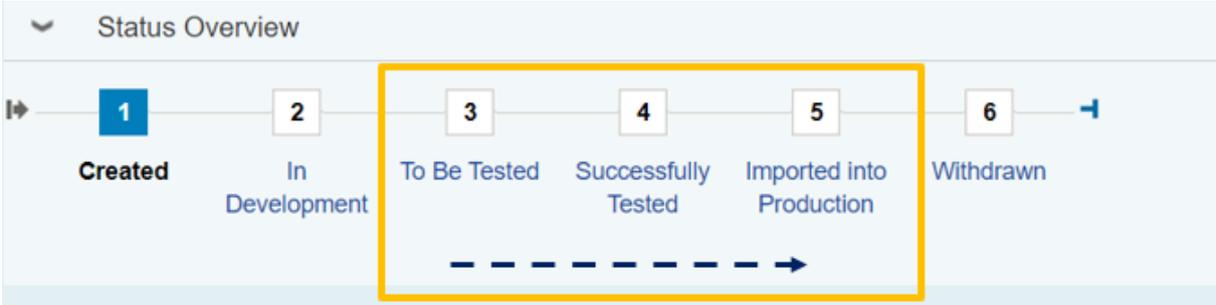
Processing of the ticket

```

-----
Start: 2022-10-27T12:47:25
-----
Logging started
Delta-Mode selected
Processing started for Object: /ITR/B1072 table: T023
Processing started for Object: /ITR/B1072 table: T023T
Snapshot created with index(es): RDM-T023-124725 table: T023
00023 BEFORE: Entries in CustomizingTable T023 found
Staging entries for /ITR/T023 found 00001
Insert entries for T023 found 00001
Update entries for T023 found 00000
Insert entries for /ITR/T023 processed: 00001
data Entry: 20009
00024 AFTER: Entries in CustomizingTable T023 found
Snapshot created with index(es): RDM-T023T-124726 table: T023T
00028 BEFORE: Entries in CustomizingTable T023T found
Staging entries for /ITR/T023T found 00002
Insert entries for T023T found 00002
Update entries for T023T found 00000
Insert entries for /ITR/T023T processed: 00002
data Entry: 200D09
data Entry: 200E09
00030 AFTER: Entries in CustomizingTable T023T found
Transport IR1K900451 successful created
Task IR1K900452 successful created
Transport IR1K900451 could not be released
-----
End: 2022-10-27T12:47:25
-----

```

Additional information attached to the ticket based on the LSA logging



Example: Necessary process steps for finalizing the Import to productive systems.

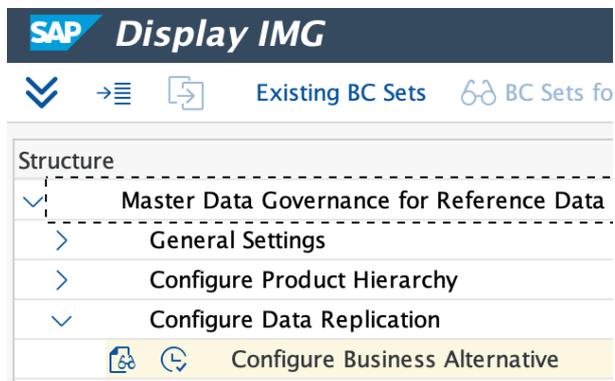
2.1.7 Business Governance Alternative – Direct Update

Besides the possibility to replicate data via the “Full IT Governance Alternative”, data can also be replicated without the need to create transports using the LSA (Local Staging Area). This alternative is called “Business Controlled Governance Alternative” and is using the “Controlled Direct Update”.

Just like replicating Master Data, the data will be replicated directly to the productive receiver systems. This avoids additional IT processes which are used to promote the reference data from the development system to the test system and later to the production. The governance is controlled completely by the business users, using the workflow processes within RDM.

2.1.7.1 Activating Business Governance Alternative

For the activation use the RDMIMG (transaction /ITR/RDMIMG) and click “Configure Business Alternative”.



In the “Activate Direct Table Update” the entity with its Business and Logical system (Receiver systems) for which the Direct Update needs to be activated, must be added. The checkbox indicates the replication via direct update. If the direct update is inactive, the objects will be replicated using the “Full IT Governance Alternative”, involving the Local Staging Area.

SAP Change View "RDM: Activate Direct Table Update": Overview

New Entries

RDM: Activate Direct Table Update

	Business System	Logical syste..	Entity Type	A
<input type="checkbox"/>	IH2400	IH2400	PAYMNTTRM	<input checked="" type="checkbox"/>
<input type="checkbox"/>	IH2400	IH2400	PLANT	<input checked="" type="checkbox"/>
<input type="checkbox"/>	IR1200	IR1200	MATKL	<input checked="" type="checkbox"/>
<input type="checkbox"/>	IT9400	IT9400	BKLAS_VAL	<input checked="" type="checkbox"/>
<input type="checkbox"/>	IT9400	IT9400	BLART	<input checked="" type="checkbox"/>
<input type="checkbox"/>	IT9400	IT9400	COMP CODE	<input checked="" type="checkbox"/>
<input type="checkbox"/>	IT9400	IT9400	CURRENCY	<input checked="" type="checkbox"/>
<input type="checkbox"/>	IT9400	IT9400	CUR_EXRA	<input checked="" type="checkbox"/>
<input type="checkbox"/>	IT9400	IT9400	DAYLIMIT	<input checked="" type="checkbox"/>

If a reference data object includes more than one entity type, the direct update must be activated for both entity types to work correctly. An example for that would be "Terms of Payment". Here the entity types PAYMNTTRM and DAYLIMIT are used to implement the "Terms of Payment" using table T052. Both objects need the activation of the direct update.

	MANDT	USMD_ENTITY	SERV_IMPL	LSA_TAB_POS	LSA_TABLENAME
<input type="checkbox"/>	100	DAYLIMIT	/ITR/PAYMD	1	/ITR/T052
<input type="checkbox"/>	100	PAYMNTTRM	/ITR/PAYMN	1	/ITR/T052

2.1.7.2 Logging Business Governance Alternative

In order to check if the data has been sent to the receiver system, the logs can be displayed and checked. First, the log in the receiver system must be checked using transaction DRFLOG.

In the example below the object type created was "Storage Location" (LGORT). The messages show that the data has been replicated successfully.

SAP Display Logs for Replication Model -

Date/Time/Replication Model/Business Object Typ...	Numb..	Replication Mod...	Business Object Description	Outbound Im...
> 09.05.2023 14:56:31 RDM I_DIS 27		Reference Data ...	MRP Controller	/ITR/DISPO
> 09.05.2023 15:37:42 RDM I_DIS 27		Reference Data ...	MRP Controller	/ITR/DISPO
∨ 09.05.2023 08:10:10 RDM I_LG 17		Reference Data ...	RDM: Storage Location	/ITR/LGORT
> Process outbound implementation RDM - O 17				
∨ 09.05.2023 09:15:25 RDM I_LG 22		Reference Data ...	RDM: Storage Location	/ITR/LGORT
>	5			

Ty...	Message Text

	DirectTableUpdate->System: ID1400
	DirectTableUpdate->Table: T001L
	DirectTableUpdate->Key: 1000001LOC1

	Process outbound implementation RDM - Outbound Implementation for LGORT (StorageLo (/ITR/LGORT)
	More Messages During Output Processing
	Replication to business system ID1400
	Filter object /ITR/LGORT - RDM - Filter for LGORT (SLOC): end result of filtering 1
	Process Messages
	CREQUEST: 000000001167 Test DU StoLoc 09.05.2023 11:14:53 SATTLERU
	IDoc 000000000046017 with a data record was transferred
	GenericIdoc sent for: /ITR/T001L with 1 record(s)
	Processing of outbound implementation /ITR/LGORT completed
	More Messages During Output Processing

The logging can also be checked in the receiver systems if it has been activated. To activate it in the receiver systems, execute transaction SM30 and maintain table /ITR/CUST_CODE as shown below.

SAP Data Browser: Initial Screen

Table Name

Add the function module /ITR/RDH_LOGGING_RECEIVER_SIDE and /ITR/RDM_FOR-EIGN_KEY_CHECK and activate it.

Data Browser: Table /ITR/CUST_CODE Select Entries 92



Table: /ITR/CUST_CODE

Displayed Fields: 6 of 6

Fixed Columns: 4

List Width 0250

	MANDT	TABLENAME	EVENTID	EVENT_POSITION	FUNCNAME	ACTIVE
<input type="checkbox"/>	100	*	1	000001	/ITR/RDH_LOGGING_RECEIVER_SIDE	X
<input type="checkbox"/>	100	*	5	000002	/ITR/RDM_FOREIGN_KEY_CHECK	X

The logging can be analyzed with the transaction SLG1. Enter the Subobject /ITR/CUSTSYNC.

Analyze Application Log

Object: /ITR/ RDM-StagingLogs
 Subobject: /ITR/CUSTSYNC
 External ID: []

Time Restriction
 From (Date/Time): 23.01.2023 00:00:00
 To (Date/Time): 23.01.2023 23:59:59

Log Triggered By
 User: * []
 Transaction code: * []
 Program: * []

Log Class
 Only very important logs
 Only important logs
 Also less important logs
 All logs

Log Creation
 Any
 Dialog
 In batch mode
 Batch input

Log Source and Formatting
 Format Completely from Database
 Format Only Header Data from Database
 Format Completely from Archive

Display logs

Technical Information []

Date/Time/User	Num...	External ID	Object text	Subobject Text	Transa...
> 09.05.2023 07:19:51 SCORYF	5	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 07:19:55 SCORYF	7	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 07:19:56 SCORYF	229	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 07:28:09 SCORYF	5	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	/ITG/SHO
> 09.05.2023 08:10:14 SCORYF	2	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 08:10:19 SCORYF	7	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 08:10:19 SCORYF	235	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 09:15:30 SCORYF	2	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 09:15:32 SCORYF	13	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> Problem class Medium	13				
> 09.05.2023 09:15:32 SCORYF	241	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> Problem class Medium	241				
> 09.05.2023 09:46:03 SCORYF	4	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 09:46:08 SCORYF	247	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 09:46:08 SCORYF	7	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 09:51:57 SCORYF	4	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 09:51:59 SCORYF	13	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 09:51:59 SCORYF	253	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 09:54:19 SCORYF	4	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 09:54:21 SCORYF	19	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 09:54:21 SCORYF	259	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 10:01:39 SCORYF	4	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 10:01:42 SCORYF	265	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	
> 09.05.2023 10:01:43 SCORYF	13	/ITR/SNAPSHOT_...	RDM-StagingLogs	/ITR/CUSTSYNC	

Type Message Text

```

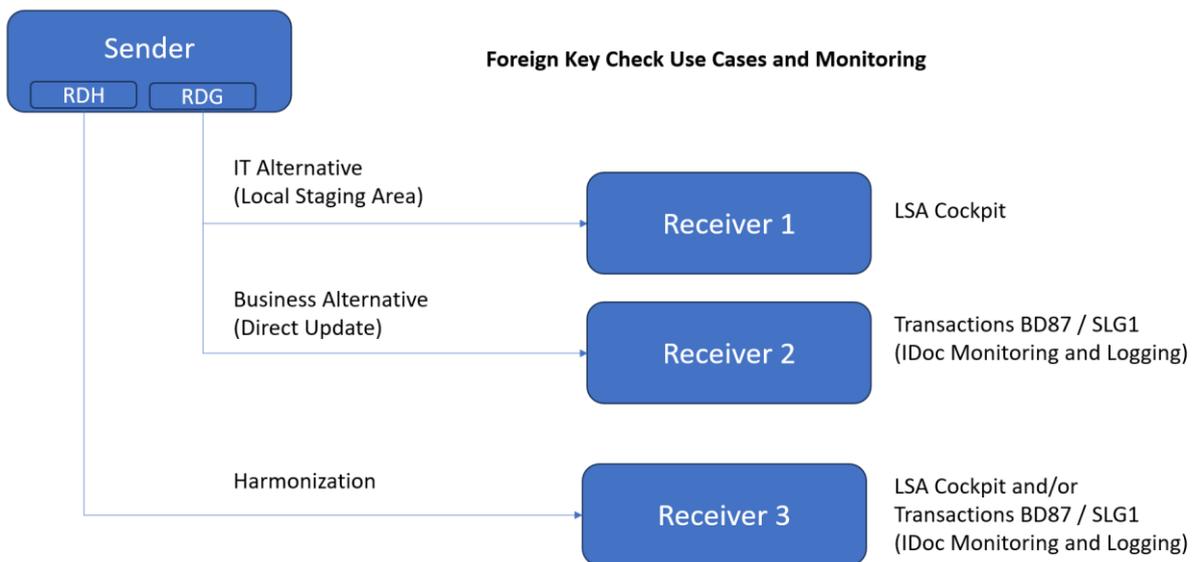
0000000000044012
/ITR/CREQUE_INFO ObjectKey: 100ZZRDM-CR-00000001166 0 -> 20230509 091532
/ITR/CREQUE_INFO ObjectKey: 00000000000000000000000000000000 -> 20230509 091532
/ITR/CREQUE_INFO ObjectKey: 100ZZRDM-CR-00000001167 0 -> 20230509 091532
/ITR/CREQUE_INFO ObjectKey: 00000000000000000000000000000000 -> 20230509 091532
/ITR/CREQUE_INFO ObjectKey: 00000000000000000000000000000000 -> 20230509 091532

```


2.1.8 Foreign Key Check – Use Cases

The “Foreign Key Check” allows to check for inconsistencies in the context of the object types which have been replicated. The functionality depends on the use case which can either be a use case from the Reference Data Governance (IT Alternative or Governance Alternative) or from the Reference Data Harmonization. It allows the user to check if other objects which do have dependencies to the replicated object type are missing.

Missing entries should have been harmonized or need to be created in the receiver system.



2.1.8.1 Foreign Key Check for IT Alternative

When creating for example a MRP Controller using the “Full IT Governance Alternative” all inconsistencies in the receiver will be shown in the Local Staging Area. The red cross in column “Foreign Key” will indicate when entries are missing.

Records selected: 0089

Object	ObjectName	LocalTable	TableName	StagTable	Hier.	LocalEntries	StagEntries	LocAddEnt	StagAddEnt	Cust-Tx	ForeignKey
/ITR/8TDIP	RDM: MRP Controller	T024D	MRP Controllers	/ITR/T024D	1	29	1				✘

After clicking the red cross, details are displayed. In the example below a profit center and a plant are missing.

RDM: Show Staging

/ITR/T024D

```
400K1 T1 Test 1307 +4923456789 TIM
PRCTR Entry PRCTR02 Profit Center CEPC does not exist in PRCTR (check entry) -> CEPC
400K1 T1 Test 1307 +4923456789 TIM
WERKS Entry K1 Plant T001W does not exist in WERKS (check entry) -> T001W
```

2.1.8.2 Foreign Key Check for Business Alternative

If an inconsistency occurs for an object type which has been configured for the “Business Alternative” (Direct Update) the logging of the error can be found in the IDoc Monitoring and the Application Logging as shown in chapter “Logging Business Governance Alternative”.

2.1.8.3 Foreign Key Check for Reference Data Harmonization

To check the foreign keys in the Reference Data Harmonization scenario, use the “Check” Mode in the RDH Cockpit. Select the snapshot and click the foreign key button on the upper right.

RDH: Show/Activate SnapShot(s)

Choice

IndexId		to		
Version		to		
Table		to		
Date	06.07.2023	to	20.07.2023	

Results: 0065

ID	Table Name	DB-Entr.	AD-Entries	Short Description	MainIndex	AddrIndex
->ID110020230717073405	T024D	11		MRP Controllers	T024D073405	
	T880	5		Global Company Data (for KONS Ledger)	T880073405	
->ID110020230717073515	T002	1		Language Keys (Component BC-I18)	T002073515	
	T002T	1672		Language Key Texts	T002T073515	
	T004	33		Directory of Charts of Accounts	T004073515	
	T004T	77		Chart of Account Names	T004T073515	
->ID110020230717074126	T024D	11		MRP Controllers	T024D074126	
	T880	5		Global Company Data (for KONS Ledger)	T880074126	
->ID110020230720090453	J_1BTREGXT	8		Tax region description	J_1BTREGXT090453	
->ID110020230720103307	TVTWT	2		Organizational Unit: Distribution Channels: Texts	TVTWT103307	
->ID110020230720105150	TVTWT	1		Organizational Unit: Distribution Channels	TVTWT105150	
	TVTWT	2		Organizational Unit: Distribution Channels: Texts	TVTWT105150	
->ID110020230720135458	T024D	11		MRP Controllers	T024D135458	
	T880	5		Global Company Data (for KONS Ledger)	T880135458	

Now the Foreign Key Check is displayed and a red cross indicates missing entries.

ID	Table Name	DB-Entr.	AD-Entries	Short Description	MainIndex	AddrIndex	User Name	Program	Current Date	Time	SAP SystemMandt	Act-User	Act-Date	Act-Time	ForeignKey
->ID1100202307170734	T024D	11	MRP	Controllers	T024D073405		SCORVF	RDH	17.07.2023	07:34:05	ID1	100		00:00:00	
	T880	5	Global Company Data (for KONS Ledger)		T880073405		SCORVF	RDH	17.07.2023	07:34:05	ID1	100		00:00:00	
->ID1100202307170735	T002	1	Language Keys (Component BC-118)		T002073515		SCORVF	RDH	17.07.2023	07:35:15	ID1	100		00:00:00	
	T002I	1622	Language Key Texts		T002I073515		SCORVF	RDH	17.07.2023	07:35:15	ID1	100		00:00:00	
	T004	22	Directory of Charts of Accounts		T004073515		SCORVF	RDH	17.07.2023	07:35:15	ID1	100		00:00:00	
	T004I	22	Chart of Account Names		T004I073515		SCORVF	RDH	17.07.2023	07:35:15	ID1	100		00:00:00	
->ID1100202307170741	T024D	11	MRP	Controllers	T024D074126		BOETTCHERM	RDH	17.07.2023	07:41:26	ID1	100		00:00:00	
	T880	5	Global Company Data (for KONS Ledger)		T880074126		BOETTCHERM	RDH	17.07.2023	07:41:26	ID1	100		00:00:00	
->ID1100202307200904	J_1BTRREGXT	8	Tax region description		J_1BTRREGXT090453		SCORVG	RDH	20.07.2023	09:04:53	ID1	100		00:00:00	
->ID1100202307201033	TVTWT	2	Organizational Unit: Distribution Channels: Texts		TVTWT103307		SCORVG	RDH	20.07.2023	10:33:07	ID1	100		00:00:00	
->ID1100202307201051	TVTWT	1	Organizational Unit: Distribution Channels		TVTWT105150		SCORVG	RDH	20.07.2023	10:51:50	ID1	100		00:00:00	
	TVTWT	2	Organizational Unit: Distribution Channels: Texts		TVTWT105150		SCORVG	RDH	20.07.2023	10:51:50	ID1	100		00:00:00	
->ID1100202307201354	T024D	11	MRP	Controllers	T024D135458		SATTLERU	RDH	20.07.2023	13:54:58	ID1	100		00:00:00	
	T880	5	Global Company Data (for KONS Ledger)		T880135458		SATTLERU	RDH	20.07.2023	13:54:58	ID1	100		00:00:00	

After clicking the red cross, details are displayed. In the example below a profit center, a plant and two recipient types are missing.

RDH: Show/Activate SnapShot(s)

RDH: Show/Activate SnapShot(s)

T024D

100ZWNW1MC1MRP Contr one 9669968927 REC1
 USRTYP Entry AG Recipient type T7790 does not exist in USRTYP (check entry) -> T7790

100ZWNW1MC1MRP Contr one 9669968927 REC1
 WERKS Entry ZNWI Plant T001W does not exist in WERKS (check entry) -> T001W

100ZWNW1MC3MRP Controller 3 9669968927 REC1
 PRCTR Entry 0000000456 Profit Center CEPC does not exist in PRCTR (check entry) -> CEPC

100ZWNW1MC3MRP Controller 3 9669968927 REC1
 USRTYP Entry AG Recipient type T7790 does not exist in USRTYP (check entry) -> T7790

< > ..

2.1.9 Data Transfer

RDM delivers content for the extraction of Reference Data from SAP business systems as well as content for the data import of the data to RDM.

To start the extraction of Reference Data, you need to be logged on in the corresponding ERP client. Execute transaction MDMGX and press "Start Extraction". The following screen shows up, allowing you to define the extraction settings:



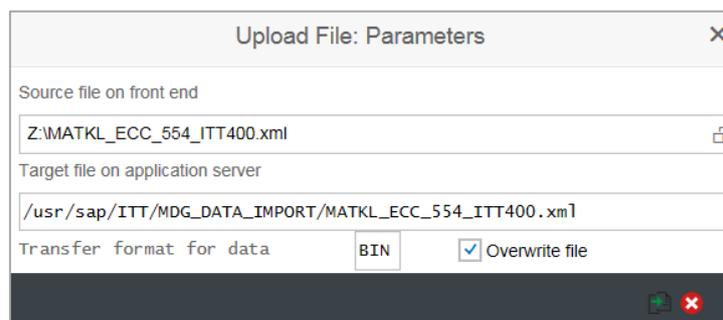
The screenshot shows the 'SAP MDM Generic Customizing Extractor' dialog box. It contains several input fields and checkboxes:

- Reposit. Name (Code): [Empty field]
- Object Type: [Greyed out field]
- Address of FTP Server: [Greyed out field]
- MDM Root: [Greyed out field]
- Port Name (Code): [Empty field] to [Empty field]
- Process Level(0,1,2....): 0
- Local download:
- Download to Appl. Server:
- File directory: [Empty field]
- Download in MDM port structure:
- Upload via FTP:
- User: [Empty field]
- Password: [Masked field with asterisks]

In the "Reposit. Name (Code)" field, use the F4-help and choose the object that you want to extract. Then enter your preferred download settings (e.g. local download on your computer or upload via FTP) and press execute. 

The next screen shows up, displaying the XML files which have been created. Store the name and location of the files. Note: During the extraction, a transformation is executed which can be enhanced using table /ITR/ENT_TRANSF, if the data model has been enhanced (supported for Type 1 entities only).

After the extraction is done, log in to the RDM client and execute transaction CG3Z. The following screen pops up, allowing you to define which files should be transferred to which directory:



The screenshot shows the 'Upload File: Parameters' dialog box with the following fields and options:

- Source file on front end: Z:\MATKL_ECC_554_ITT400.xml
- Target file on application server: /usr/sap/ITT/MDG_DATA_IMPORT/MATKL_ECC_554_ITT400.xml
- Transfer format for data: BIN
- Overwrite file:

Fill out the fields according to your system landscape:

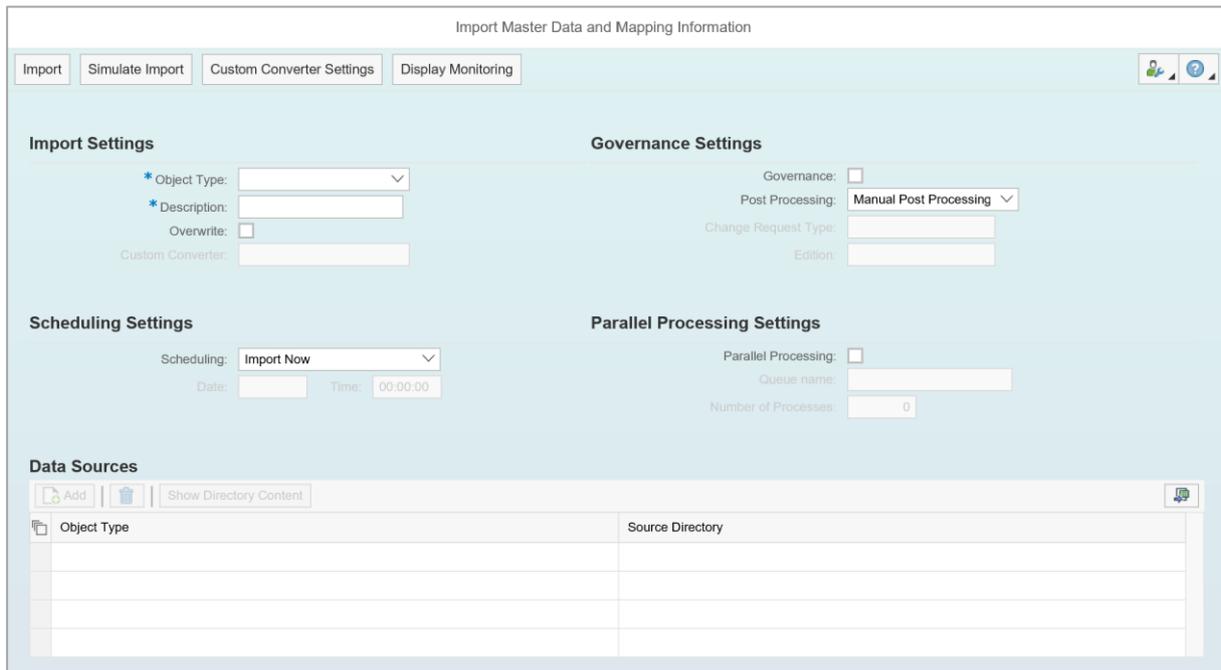
- "Source file on front end": [Path of the file that you want to upload]

- “Target file on application server”: E.g. “/usr/sap/MDG_DATA_IMPORT/[name of the file that you want to upload]” depending on your system landscape and the settings provided in the Data Import settings (see MDGIMG/General Settings/Data Transfer).

Then press upload. Repeat this process for all files which have been generated by the extraction.

After you are done and before importing the data, consider turning off the data replication. This can be done by executing transaction DRFIMG, navigating to “Define Custom Settings for Data Replication” → “Define Replication Models”. In the settings, tag the replication model “RDM” and press “Deactivate”.

After you are done, open the RDM launchpad and press “Import Master Data” in section “Data Transfer”, or execute transaction DTIMPORT. The following screen shows up, allowing you to import the data stored in the previously created files:



Import Master Data and Mapping Information

Import Settings

* Object Type:

* Description:

Overwrite:

Custom Converter:

Governance Settings

Governance:

Post Processing:

Change Request Type:

Edition:

Scheduling Settings

Scheduling:

Date: Time:

Parallel Processing Settings

Parallel Processing:

Queue name:

Number of Processes:

Data Sources

Object Type	Source Directory

In “Import Settings” / “Object Type”, choose the object type. For “Description”, provide a brief description of what you are going to upload.

The “Overwrite” checkbox lets you decide if the data import should overwrite an already existing entry if the import files contain a duplicate entry, or if it should ignore the duplicate entry.

In “Scheduling Settings”, you can decide whether you want to import the data immediately or at any other given point in time.

Using "Governance Settings", you can decide which change request type you want to use.

In "Parallel Processing Settings", you can decide if you want to allow parallel processing or not.

After providing the import settings, press "Add" in the "Data Sources" table and choose the corresponding object type. Then select the source directory (e.g. "MDG_DATA_IMPORT"). You can also check the files in the source directory by pressing on "Show Directory Content".

Press "Import" to import the data and on "Display Monitoring" to track the import process and verify that the process is successfully executed. The data has now been imported. You can view it by navigating to the object search page via the launchpad.

2.1.10 Deleting Objects

Note: a functionality for deleting objects in RDM is **not** delivered out of the box. If a client requests this kind of functionality, Itego can help implementing it on a project basis. For further information about this topic, contact support@itego.de – Subject: "RDM Deletion".

The following screenshots therefore only provide a preview of how the deletion in RDM could work.

In order to delete a certain object, start on the RDM launchpad and press on the corresponding object type. The object search page is displayed:

Search: Material Group

Search Method:

Search Criteria Saved Searches:

Material Group	is	<input type="text"/>	<input type="button" value="+"/>	<input type="button" value="-"/>
Description (short text)	is	<input type="text"/>	<input type="button" value="+"/>	<input type="button" value="-"/>
Description (long text)	is	<input type="text"/>	<input type="button" value="+"/>	<input type="button" value="-"/>
Division	is	<input type="text"/>	<input type="button" value="+"/>	<input type="button" value="-"/>

Maximum Number of Results:

Save Search As:

Result List: More than 100 records found

Pending Chan...	Material Group	Description (short text)	Description (long text)	Division	Valu
	00000032	00000032	MatGrp32	01	7921
	00000033	00000033	MatGrp33	01	0711
	00000034	00000034	MatGrp34	01	0721
	00000035	00000035	MatGrp35	01	1211
	00000036	00000036	MatGrp36	01	3001
	00000037	00000037	MatGrp37	01	3001

Press on the object, you want to delete. The object overview page is displayed:

Process Object with MDG

Audit Information

Audit Information

Created On: 26.12.2018 13:07:34
 Changed On:
 Approved On: 26.12.2018 13:16:43

Material Group

Material Group: 00000032
 Description (short text): 00000032
 Description (long text): MatGrp32

Material Group Descriptions

Actions	Language Key	Description (long text)
<input type="button" value="Delete"/>	EN	MatGrp32

Press on "Delete". A popup shows up, asking you to confirm your action. Press on "Yes". A page shows up, asking you to provide information for the change request header.

Process Object with MDG

Save Submit Cancel Check

Entity 00000032 of entity type MATKL will be deleted with this change request

Change Request Edit

General Notes Attachments

General Data **Process Data**

Change Request ID: 7534

*Description:

Priority:

Due Date:

Reason:

Audit Information

Audit Information

Created On: 26.12.2018 13:07:34

Changed On:

Approved On: 26.12.2018 13:16:43

Material Group

To finalize the process, fill out the required fields of the change request header (in this case: "Description") and press on "Submit".

The delete request is now released.

2.1.11 Exceptions

This section contains information on objects whose processing differs from the standard instructions.

2.1.11.1 Product Hierarchy

The maintenance of a Product Hierarchy differs from the standard process, as this object is maintained in hierarchy levels (for an explanation of this concept view section 4.2.4.1). On the RDM launchpad, you will notice that three search pages are linked:

- **Product Hierarchy Name:** Create the Product Hierarchy itself, but not the nodes in the hierarchy.
- **Product Hierarchy Nodes:** Define the nodes in the Product Hierarchy on various levels (e.g. Raw Materials, Transportation, ...) but not the sub nodes. Each node needs to be assigned and classified to a Product Hierarchy created in "Product Hierarchy Name".
- **Product Hierarchy Sub Nodes:** Define the sub nodes (the actual products) in the Product Hierarchy. Each sub node needs to be assigned to a product hierarchy and a node.

2.1.11.2 *Payment Terms*

The maintenance of Payment Terms differs from the standard process, as this object is maintained in two objects, which are both linked on the launchpad:

- **Payment Terms:** A Payment Term is an object, which defines the payment terms and conditions for certain time periods. It can be created and used independently.
- **Payment Terms Details:** Payment Terms Details, also called "day limit", is an object, which allows to define more detailed terms of payments. It cannot be created independently and therefore needs to be assigned to a Payment Term, which is done in the creation process.

2.1.11.3 *Exchange Rates*

The maintenance of Exchange Rates differs from the standard process as RDM offers additional functionalities. As exchange rates change frequently and simultaneously, they are rarely maintained manually, but rather automatically. For those reasons, RDM offers the possibility of importing and validating exchange rates automatically. It is also possible to include a data steward or specialist into this process to check on the imported exchange rates.

Information on how to set up and use the import process can be found in a separate document for "Exchange Rates".

2.1.11.4 *Factory Calendar*

For the maintenance of the Factory Calendar please be aware that in the "Full IT Governance" scenario the system creates a transport of type "Workbench". If the transport is created manually please make sure that this type is used.

2.1.11.5 Unit of Measure

For the Download and Upload of Units of Measure be aware that you need to download and upload three files:

- Unit of Measure (Attributes)
- Unit of Measure (Text)
- Unit of Measure (Ext.) Text (Attributes)

2.2 Roles and Authorizations

The following roles are delivered and can be used as templates for your own role definition and authorization profiles. Authorization profiles define which reference data object can be processed with which change request type and which user role is able to see which data.

All roles use the menu role `"/ITR/ITEGO_MDG_RDM_MENU_<n>"`.

2.2.1 Display

Role: `/ITR/ITEGO_MDG_RDM_DISP_<n>`

Role with limited authorizations. Data can only be displayed.

2.2.2 Requester

Role: `/ITR/ITEGO_MDG_RDM_REQ_<n>`

Requesters can request the creation or a change of a reference data object. The Requester submits a change request and might be involved in the change request processing again if one of the users involved sends the change request back to the requester "For Revision".

2.2.3 Data Specialist

Role: `/ITR/ITEGO_MDG_RDM_SPEC_<n>`

Data Specialists process the change request which has been created by the Requester. They might add additional data and forward the change request to the Data Steward. They also might send the change request to the Requester for revision.

2.2.4 Data Steward

Role: /ITR/ITEGO_MDG_RDM_STEW_<n>

Data Stewards are responsible for checking the data quality and consistency of the requested reference data object and approve, reject or send the change request for revision to the Data Specialist.

2.2.5 Local Staging Administrator

These following roles are used for the maintenance of the local staging area:

Role: /ITR/MDG_STAGING_<n>

This role can only display, it is not authorized to administrate or restore.

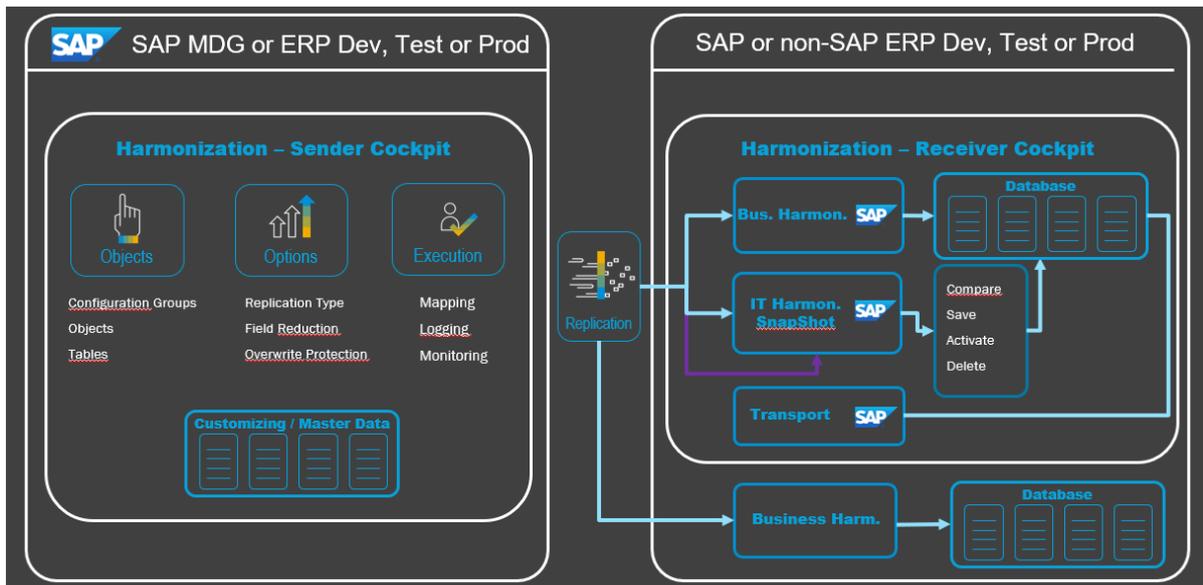
Role: /ITR/MDG_LSA_ADMIN

This role can display and administer. It is not authorized to restore snapshots.

Role: /ITR/MDG_LSA_SNAPSHOT_MNG

This role can display, administer and restore snapshots.

3 Working with Reference Data Management, Harmonization



The primary purpose of Reference Data Harmonization (RDH) is to ensure that data remains harmonized and synchronized across various systems. To achieve this, the solution offers multiple options for replication with optional field reduction, additional code or overwrite protection, all of which can be logged and monitored for transparency and control.

In the first step of data harmonization, data can be consolidated from one or more systems into RDM.

After data consolidation, the next step is synchronization. Data synchronization ensures that data in RDM is accurately propagated to other systems as required. This process can involve multiple systems as sources and destinations.

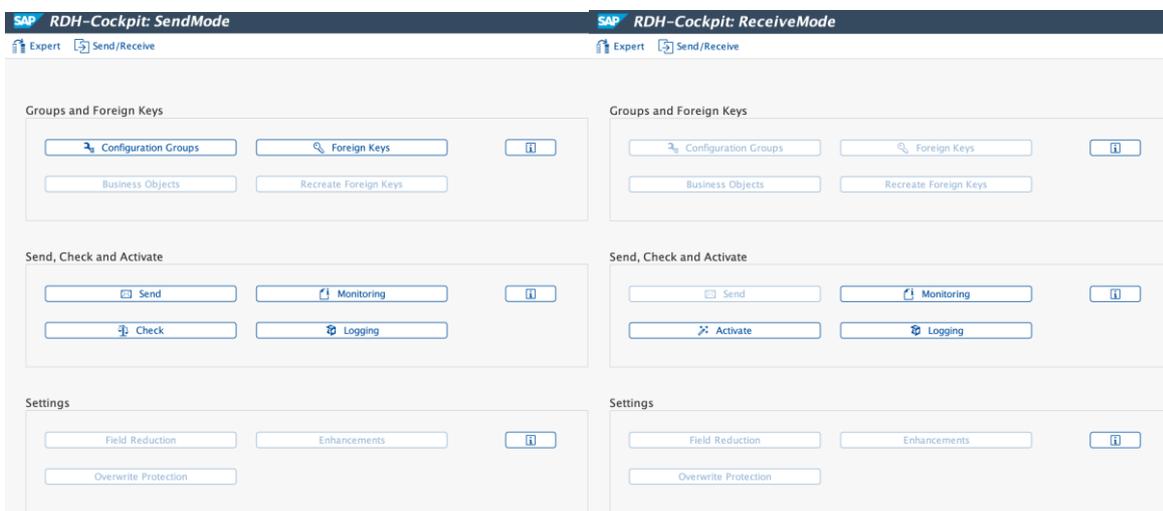
To enable flexible data transport, RDH offers three replication options, each designed for specific use cases. These options provide control, additional features, and flexibility in managing data transfers:

- The "Business Harmonization" (Direct Update – Single/Bundle) option writes entries directly to the tables in the receiver systems. It is a straightforward and quick method for transferring data without extensive processing.
- The "IT Harmonization" (Snapshot) option provides additional functionalities beyond simple data replication. It allows to compare entries, create backups, activate, or delete snapshots in the receiver systems.
- The "Transport" option is another method for data replication. This option is useful when you need to package data and transport it in a controlled manner. It allows for

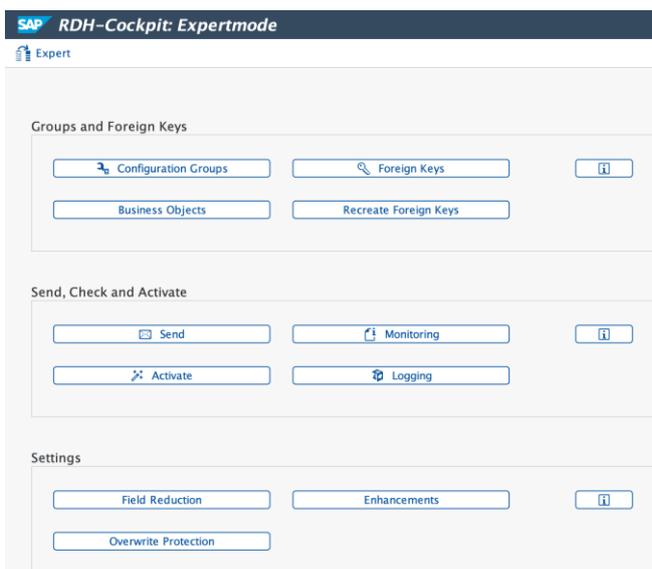
the creation of data packages that can be deployed at specific times or to specific destinations.

3.1 The RDH Cockpit

The RDH Cockpit, accessed through transaction /ITR/RDH_COCKPIT, serves as a comprehensive cockpit for sending and receiving systems.



In addition to the send and receive functions, the RDH cockpit provides an expert mode which offers additional functionality.



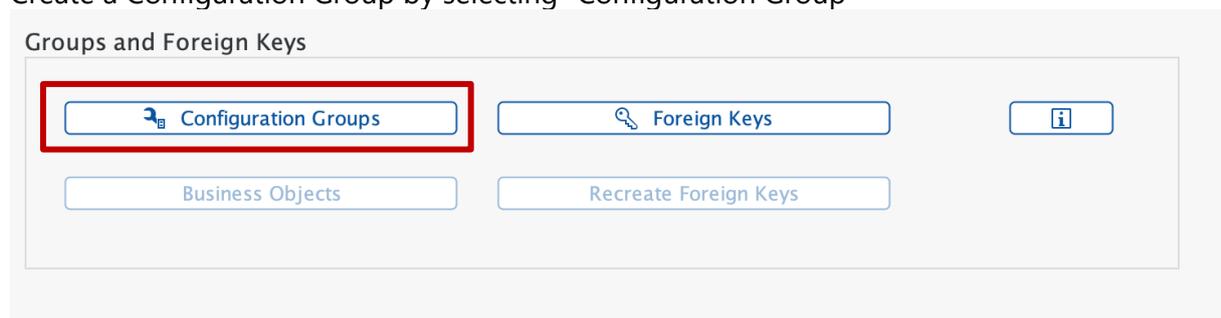
3.2 Send Mode

3.2.1 Send Mode – Configuration Groups

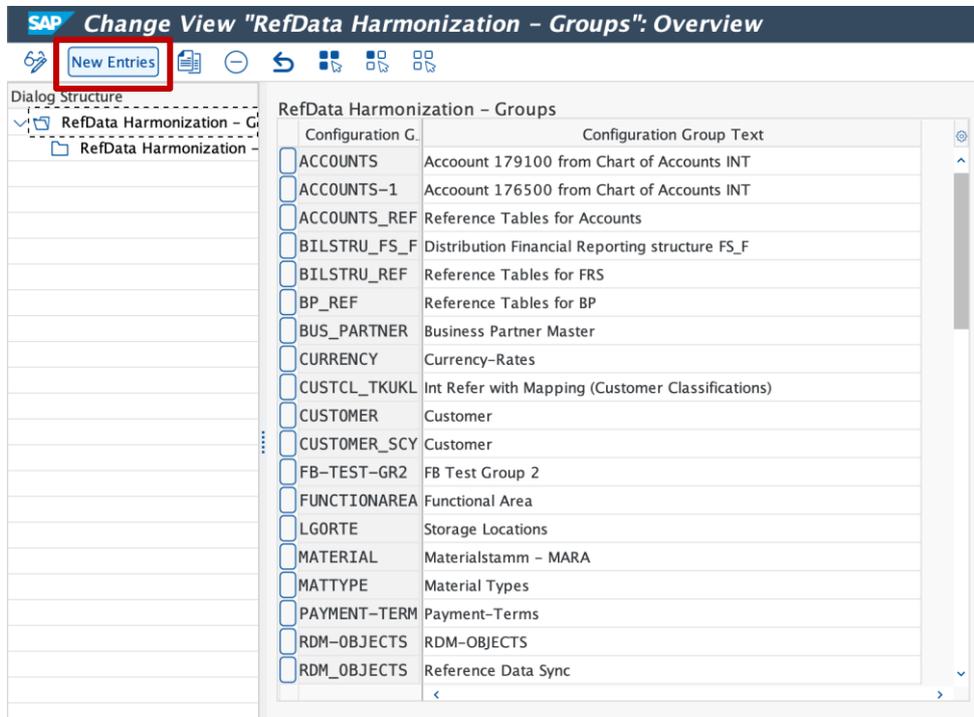
Configuration Groups play a crucial role in organizing and managing the replication of data between systems. These groups provide a structured way to specify the object types and tables that need to be sent from a sending system to a receiving system. Pre-configured configuration groups are delivered through a BC-Set (please refer to the documentation “Reference Data Management - Configuration”).

Configuration Groups allow the definition of key field limitations. This means that you can define filters, ensuring that only relevant data is considered in the replication process. The section below shows how to define such a group.

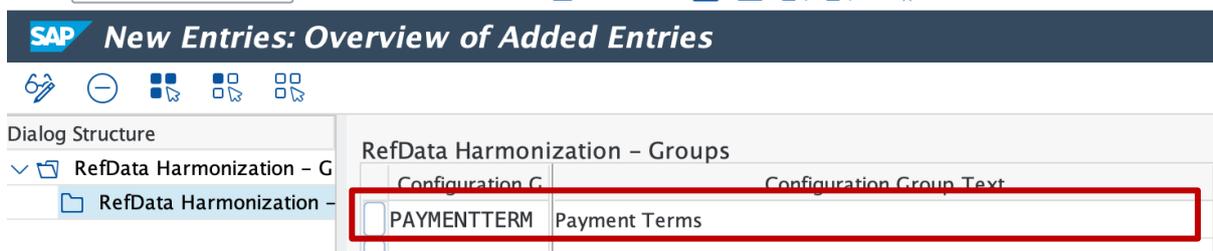
Create a Configuration Group by selecting “Configuration Group”



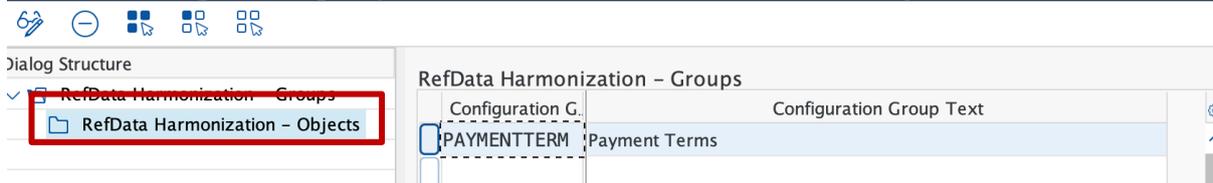
Create a new entry



Define a name for your configuration group and click enter



Mark the configuration group and click "RefData Harmonization - Objects"



Create a new entry



Enter the configuration group and the table names. Then click F4 in the Object key field.

RefData Harmonization – Objects

Configuration G.	Table Name	Line	A	Object key
PAYMENTTERM	T052		<input checked="" type="checkbox"/>	
PAYMENTTERM	T052U		<input checked="" type="checkbox"/>	

Specify the key fields and click enter

Change Key for Table T052U

Medium Label	Field Name	Ty.	Lngh	Key Value
Client	MANDT	C	3	100
Language	SPRAS	C	1	*
Payt terms	ZTERM	C	4	00*
Day Limit	ZTAGG	N	2	*

The keys are shown in the overview. Click enter and save your entries

SAP New Entries: Overview of Added Entries

Dialog Structure

- RefData Harmonization – Groups
 - RefData Harmonization – Objects

Configuration G.	Table Name	Line	A	Object key
PAYMENTTERM	T052		<input checked="" type="checkbox"/>	10000* *
PAYMENTTERM	T052U		<input checked="" type="checkbox"/>	100*00* *

3.2.2 Send Mode – Check Foreign Keys

After creating and adding foreign keys, the next step involves their validation. This verification ensures the accuracy and completeness of foreign key relationships. By performing a check of foreign keys, you can identify any discrepancies or missing entries, preventing potential data inconsistencies during the replication process.

To check the foreign keys in the Reference Data Harmonization scenario, use the “Check” mode in the RDH Cockpit.



Select the Snapshot and click the foreign key button on the upper right

RDH: Show/Activate SnapShot(s)

Choice

IndexId to

Version to

Table to

Date 06.07.2023 to 20.07.2023

Results: 0065

ID	Table Name	DB-Entr.	AD-Entries	Short Description	MainIndex	AddrIndex
->ID110020230717073405	T024D	11		MRP Controllers	T024D073405	
	T880	5		Global Company Data (for KONS Ledger)	T880073405	
->ID110020230717073515	T002	1		Language Keys (Component BC-I18)	T002073515	
	T002T	1672		Language Key Texts	T002T073515	
	T004	33		Directory of Charts of Accounts	T004073515	
	T004T	77		Chart of Account Names	T004T073515	
->ID110020230717074126	T024D	11		MRP Controllers	T024D074126	
	T880	5		Global Company Data (for KONS Ledger)	T880074126	
->ID110020230720090453	J_1BTREGXT	8		Tax region description	J_1BTREGXT090453	
->ID110020230720103307	TVTWT	2		Organizational Unit: Distribution Channels: Texts	TVTWT103307	
->ID110020230720105150	TVTWT	1		Organizational Unit: Distribution Channels	TVTWT105150	
	TVTWT	2		Organizational Unit: Distribution Channels: Texts	TVTWT105150	
->ID110020230720135458	T024D	11		MRP Controllers	T024D135458	
	T880	5		Global Company Data (for KONS Ledger)	T880135458	

The Foreign Key Check is displayed, and a red cross indicates missing entries

ID	Table Name	DB-Entr.	AD-Entries	Short Description	MainIndex	AddrIndex	User Name	Program	Current Date	Time	SAP SystemMandt	Act-User	Act-Data	Act-Time	ForeignKey
->ID110020230717073405	T024D	11		MRP Controllers	T024D073405		SCORYF	RDH	17.07.2023	07:34:05	ID1	100		00:00:00	
	T880	5		Global Company Data (for KONS Ledger)	T880073405		SCORYF	RDH	17.07.2023	07:34:05	ID1	100		00:00:00	
->ID110020230717073515	T002	1		Language Keys (Component BC-I18)	T002073515		SCORYF	RDH	17.07.2023	07:35:15	ID1	100		00:00:00	
	T002T	1672		Language Key Texts	T002T073515		SCORYF	RDH	17.07.2023	07:35:15	ID1	100		00:00:00	
	T004	33		Directory of Charts of Accounts	T004073515		SCORYF	RDH	17.07.2023	07:35:15	ID1	100		00:00:00	
	T004T	77		Chart of Account Names	T004T073515		SCORYF	RDH	17.07.2023	07:35:15	ID1	100		00:00:00	
->ID110020230717074126	T024D	11		MRP Controllers	T024D074126		BOETTCHERM	RDH	17.07.2023	07:41:26	ID1	100		00:00:00	
	T880	5		Global Company Data (for KONS Ledger)	T880074126		BOETTCHERM	RDH	17.07.2023	07:41:26	ID1	100		00:00:00	
->ID110020230720090453	J_1BTREGXT	8		Tax region description	J_1BTREGXT090453		SCORYG	RDH	20.07.2023	09:04:53	ID1	100		00:00:00	
->ID110020230720103307	TVTWT	2		Organizational Unit: Distribution Channels: Texts	TVTWT103307		SCORYG	RDH	20.07.2023	10:33:07	ID1	100		00:00:00	
->ID110020230720105150	TVTWT	1		Organizational Unit: Distribution Channels	TVTWT105150		SCORYG	RDH	20.07.2023	10:51:50	ID1	100		00:00:00	
	TVTWT	2		Organizational Unit: Distribution Channels: Texts	TVTWT105150		SCORYG	RDH	20.07.2023	10:51:50	ID1	100		00:00:00	
->ID110020230720135458	T024D	11		MRP Controllers	T024D135458		SATTLERU	RDH	20.07.2023	13:54:58	ID1	100		00:00:00	
	T880	5		Global Company Data (for KONS Ledger)	T880135458		SATTLERU	RDH	20.07.2023	13:54:58	ID1	100		00:00:00	✗

Click the red cross to display the details. In the example below a plant and two recipient types are missing

RDH: Show/Activate SnapShot(s)

RDH: Show/Activate SnapShot(s)

T024D

100ZWNW1MC1MRP Contr one 9669968927 REC1

USRTYP Entry AG Recipient type T7790 does not exist in USRTYP (check entry) -> T7790

100ZWNW1MC1MRP Contr one 9669968927 REC1

WERKS Entry ZNWI Plant T001W does not exist in WERKS (check entry) -> T001W

100ZWNW1MC3MRP Controller 3 9669968927 REC1

PRCTR Entry 0000000456 Profit Center CEPC does not exist in PRCTR (check entry) -> CEPC

100ZWNW1MC3MRP Controller 3 9669968927 REC1

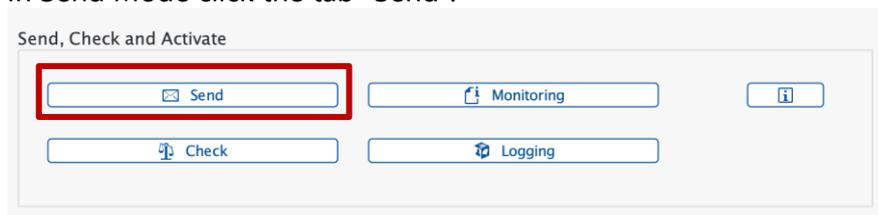
USRTYP Entry AG Recipient type T7790 does not exist in USRTYP (check entry) -> T7790

3.2.3 Send Mode – Sending

The Send mode provides users with various sending modes to replicate data. It ensures flexibility in choosing the appropriate mode based on specific needs, such as direct table update, Snapshot, or creating a transport for entries:

- The "Business Harmonization" (Direct Update – Single/Bundle) option writes entries directly to the tables in the receiver systems. It is a straightforward and quick method for transferring data without extensive processing.
- The "IT Harmonization" (Snapshot) option provides additional functionalities beyond simple data replication. It allows to compare entries, create backups, activate, or delete snapshots in the receiver systems.
- The "Transport" option is another method for data replication. This option is useful when you need to package data and transport it in a controlled manner. It allows for the creation of data packages that can be deployed at specific times or to specific destinations.

In Send Mode click the tab "Send".



3.2.3.1 Single Mode

In Single Mode, individual entries are transmitted, providing a direct and focused approach for sending specific data. Choose the Configuration Group and choose "Single". For options choose e.g. "Logging", "Test" and "Detail List". Then click execute.

SAP RDH: ReferenceDataHarmonization – Send Objects

IdocReduction Show Protocols Online-Selection

ObjectSelection

Table(s) T052 to

View(s) to

Objectgroup(s) PAYMENT-TERM to

ALE / Webservice

MessageType /ITG/GENERIC

Logical System IH2400

Port for Webservice

Mode

Transfer **Single** Bundle SnapShot Transport

Options

Scope with address without address

Heterogen Yes No

Logging Yes No

Changes Yes No

OnlineSele Yes No

Test Yes No

DetailList Yes No

In the test mode you can verify the contents in the provided list

SAP Simulation in Testmode / Show TableKey(s)

Table Name	Short Description	Number
T052 Terms of Payment		
T052	100000100	100 0001 00 D 00 00 000 +00 000 +00 000 00 00 00 00 00 00
T052	100000200	100 0002 00 B 00 00 014 +00 030 +00 000 00 00 00 00 00 00
T052	100000300	100 0003 00 D 00 00 014 +00 020 +00 030 00 00 00 00 00 00
T052	100000400	100 0004 00 D 31 00 000 +00 000 +00 000 00 00 00 00 00 00
T052	100000500	100 0005 00 10 01 000 +00 000 +00 000 00 00 00 00 00 00
T052	100000600	100 0006 00 00 00 +00 31 00 15 01 15 02
T052	100000715	100 0007 15 D 00 00 000 +00 000 +00 000 15 01 31 01 00 00
T052	100000731	100 0007 31 D 00 00 000 +00 000 +00 000 31 01 15 02 00 00
T052	100000815	100 0008 15 D 30 00 014 +00 030 +00 045 00 00 00 00 00 00
T052	100000831	100 0008 31 D 15 01 014 +00 030 +00 045 00 00 00 00 00 00
T052	100000900	100 0009 00 00 00 000 +00 000 +00 000 00 00 00 00 00 00
T052U Own Explanations for Terms of Payment		
T052U	1000000100	100 D 0001 00
T052U	1000000200	100 D 0002 00
T052U	1000000300	100 D 0003 00
T052U	1000000400	100 D 0004 00
T052U	1000000500	100 D 0005 00
T052U	1000000600	100 D 0006 00
T052U	1000000715	100 D 0007 15
T052U	1000000731	100 D 0007 31
T052U	1000000815	100 D 0008 15
T052U	1000000831	100 D 0008 31
T052U	1000000900	100 D 0009 00
T052U	100E000100	100 E 0001 00
T052U	100E000200	100 E 0002 00

3.2.3.2 Bundle Mode

Bundle Mode allows the replication of many records in one message (IDoc or Webservice), optimizing efficiency and organization in the data transmission process. Choose the Configuration Group and choose "Bundle". For options e.g. choose "Logging" and "Detail List". Then click execute.

SAP RDH: ReferenceDataHarmonization - Send Objects

IdocReduction Show Protocols Online-Selection

ObjectSelection

Table(s) T052 to

View(s) to

Objectgroup(s) PAYMENT-TERM to

ALE / Webservice

MessageType /ITG/GENERIC

Logical System IH2400

Port for Webservice

Mode

Transfer Single Bundle Snapshot Transport

Options

Scope with address without address

Heterogen Yes No

Logging Yes No

Changes Yes No

OnlineSele Yes No

Test Yes No

DetailList Yes No

Click "back" to show details

ProductivRun / Show Keys for table

Table Name	Short Description	Number														
T052																
Terms of Payment																
T052	100000100	100	0001	00	D	00	00	000	+00	000	+00	000	00	00	00	00
T052	100000200	100	0002	00	B	00	00	014	+00	030	+00	000	00	00	00	00
T052	100000300	100	0003	00	D	00	00	014	+00	020	+00	030	00	00	00	00
T052	100000400	100	0004	00	D	31	00	000	+00	000	+00	000	00	00	00	00
T052	100000500	100	0005	00	10	01	000	+00	000	+00	000	00	00	00	00	00
T052	100000600	100	0006	00	00	00	+00	+00	31	00	15	01	15	02		
T052	100000715	100	0007	15	D	00	00	000	+00	000	+00	000	15	01	31	01
T052	100000731	100	0007	31	D	00	00	000	+00	000	+00	000	31	01	15	02
T052	100000815	100	0008	15	D	30	00	014	+00	030	+00	045	00	00	00	00
T052	100000831	100	0008	31	D	15	01	014	+00	030	+00	045	00	00	00	00
T052	100000900	100	0009	00	00	00	000	+00	000	+00	000	00	00	00	00	00
T052U																
Own Explanations for Terms of Payment																
T052U	100D000100	100	D	0001	00											
T052U	100D000200	100	D	0002	00											
T052U	100D000300	100	D	0003	00											
T052U	100D000400	100	D	0004	00											
T052U	100D000500	100	D	0005	00											
T052U	100D000600	100	D	0006	00											
T052U	100D000715	100	D	0007	15											
T052U	100D000731	100	D	0007	31											
T052U	100D000815	100	D	0008	15											
T052U	100D000831	100	D	0008	31											
T052U	100D000900	100	D	0009	00											
T052U	100E000100	100	E	0001	00											
T052U	100E000200	100	E	0002	00											

After execution, you can identify the IDoc-Number and associated records for each table

Table	Records
T052	11
T052U	16
TVZB	9
TVZBT	18

IDoc-Number	Receiver	Message Type	IDoc Type	Table	Data_30_Characters
000000000108001	IH2400	/ITG/GENERIC	/ITG/GENERIC02	T052	100000100D0000000 0.000 000 0.

3.2.3.3 Snapshot Mode

The Snapshot mode offers the comparison, deletion and activation of data, as well as the creation of backups before activating data.

Choose the Configuration Group and choose "Snapshot". For options choose e.g. "Logging" and "Detail List". Then click execute.

ObjectSelection

Table(s): TFKB

Objectgroup(s): FUNCTIONAREA

ALE / Webservice

Message Type: /ITG/GENERIC

Logical System: IH2400

Mode

Transfer: Single SnapShot Transport

Options

Scope: with address without address

Heterogen: Yes No

Logging: Yes No

Changes: Yes No

OnlineSele: Yes No

Test: Yes No

DetailList: Yes No

Key fields will be shown

SAP ProductivRun / Show Keys for table



Table Name	Short Description	Number
T002	Language Keys (Component BC-I18)	
T002	#	# S 0 VI
T002	0	0 S 0 SR
T002	1	1 D 0 ZH
T002	2	2 M 0 TH
T002	3	3 D 0 KO
T002	4	4 S 0 RO
T002	5	5 S 0 SL
T002	6	6 S 0 HR
T002	7	7 S 4 MS
T002	8	8 S 0 UK
T002	9	9 S 0 ET
T002	A	A L 0 AR
T002	B	B L 0 HE

Click "back" and verify that all data records have been added to one message (IDoc or Web-Service).

RDH: Customizing Harmonization - Send/Activate Objects

Snapshot: T002	47	0	Indexid = T002102138
Snapshot: TFKB	20	0	Indexid = TFKB102138
Snapshot: TFKBT	40	0	Indexid = TFKBT102138

Idoc-Number	Receiver	MessageType	IdocType	Table	Data_30_Chars	
000000000109001	IH2400	/ITG/GENERIC	/ITG/GENERIC02	/ITR/SHOT_C	100ZZT002102138	0

3.2.3.4 Transport Mode

The Transport mode creates a transport with the data records selected. Choose the Configuration Group and choose "Transport". For options e.g. choose "Logging" and "Detail List". Then click execute.

SAP RDH: ReferenceDataHarmonization – Send Objects

IdocReduction Show Protocols Online-Selection

ObjectSelection

Table(s) to

Views(s) to

Objectgroup(s) to

ALE / Webservice

MessageType

Logical System

Port for Webservice

Mode

Transfer Single Bundle SnapShot **Transport**

Options

Scope with address without address

Heterogen Yes No

Logging Yes No

Changes Yes No

OnlineSele Yes No

Test Yes No

DetailList Yes No

Key fields will be shown

SAP ProductivRun / Show Keys for table

Table Name Short Description Number

Table Name	Short Description	Number
TFKB	Functional areas	
TFKB	100KW01	100 KW01 A001
TFKBT	Name of the functional areas	
TFKBT	100DKW01	100 D KW01 Management
TFKBT	100EKW01	100 E KW01 Managemen_Support

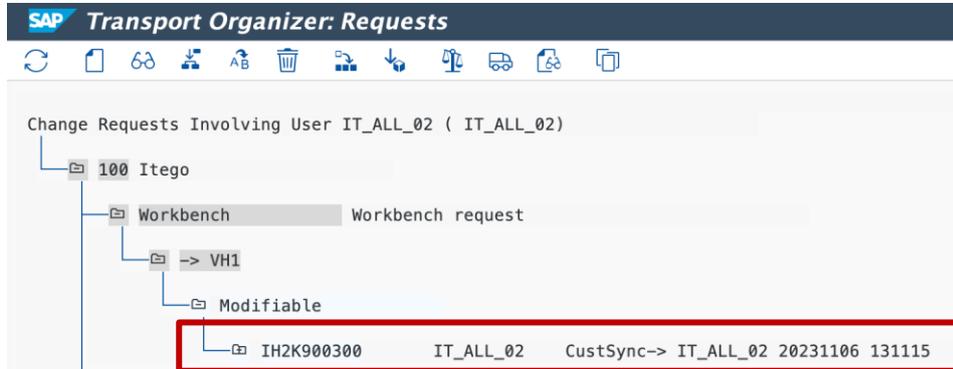
Click "back" to visualize which transport ID has been created.

RDH: Customizing Harmonization – Send/Activate Objects

Snapshot: Indeid = TFKB131115

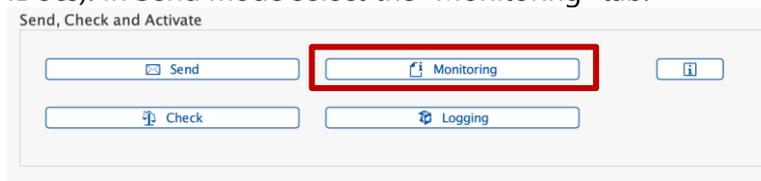
Snapshot: Indeid = TFKBT131115

Use Transaction SE09 to access and review the details

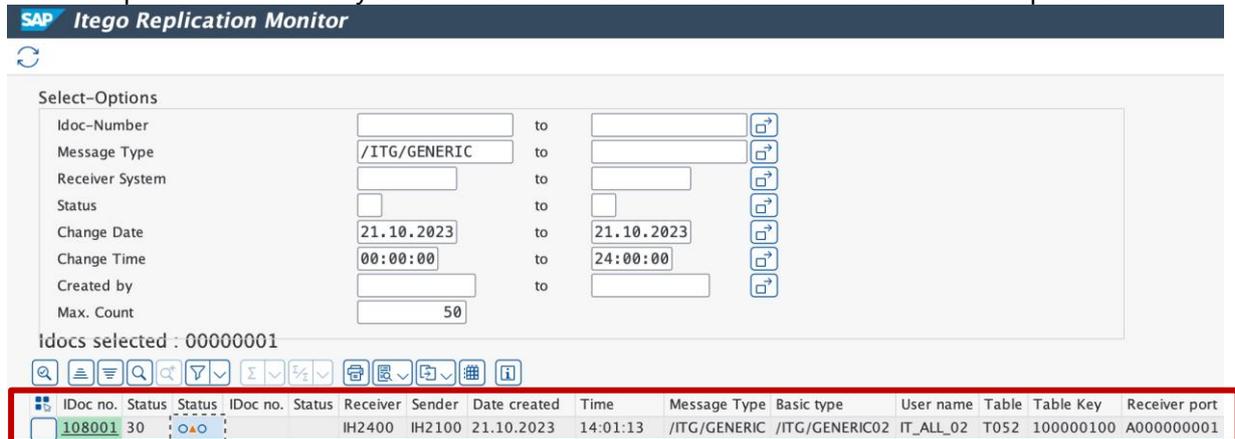


3.2.4 Send Mode – Monitoring

The Monitoring functionality is essential to track and manage the associated messages (e.g. IDocs). In Send mode select the “Monitoring” tab.



In the Replication Monitor you can see the IDoc for the data which has been replicated



To see details click the IDoc number and check the data records.

SAP IDoc Display: 000000000108001

Segments with Errors

IDoc display	Additional information
<ul style="list-style-type: none"> IDoc 0000000000108001 <ul style="list-style-type: none"> Control record Data records <ul style="list-style-type: none"> /ITG/HEADER (Selected) /ITG/HEADER /ITG/HEADER /ITG/HEADER Status records 	Total number: 000097 Segment 000001 Segment 000040 Segment 000062 Segment 000075

Short Technical Information

Direction: 1 Outbox
 Current Status: 30
 Basic type: /ITG/GENERIC02
 Extension:
 Message Type: /ITG/GENERIC
 Partner No.: IH2400
 Partn.Type: LS
 Port: A000000001

Content of Selected Segment	
Fld Name	Fld Co
TABNAME	T052
RELEASED	756

3.3 Receive Mode

3.3.1 Receive Mode – Logging

Logging allows you to review the logs and details for messages (e.g. IDocs) processed in the receiver system. In Receiver mode select the tab “Logging”

Send, Check and Activate

Choose the time and date when the IDoc was processed.

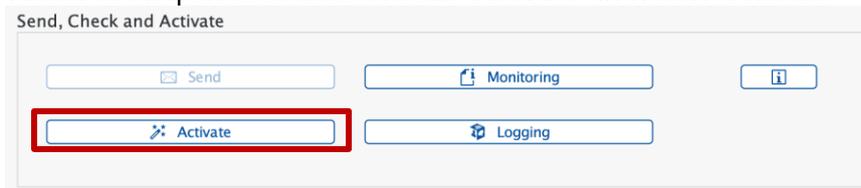
SAP Display logs (2)

Technical Information

Date/Time/User	Numb.	External ID	Object text	Subobject Text	Transactio...	Program	Mode	Log Number
21.10.2023 13:51:04 IT_ALL (5)		/ITR/SNAPSHOT...	RDM-StagingLo...	/ITR/CUSTSYNC	/ITR/RDH...	/ITR/SEND...	Dialog proc...	0000000000000208...
21.10.2023 14:01:11 IT_ALL (6)		/ITR/SNAPSHOT...	RDM-StagingLo...	/ITR/CUSTSYNC	/ITR/RDH...	/ITR/SEND...	Dialog proc...	0000000000000208...

3.3.2 Receive Mode – Activation

The activation option allows to activate Snapshots. This step involves a detailed overview, comparison, deletion of snapshots, backup creation, activation flag setting, and the final activation of Snapshots. Select the tab "Activate" in Receiver mode.



An overview of all Snapshots is displayed

SAP RDH: Show/Activate SnapShot(s)

Choice

IndexId: [] to []

Version: [] to []

Table: [] to []

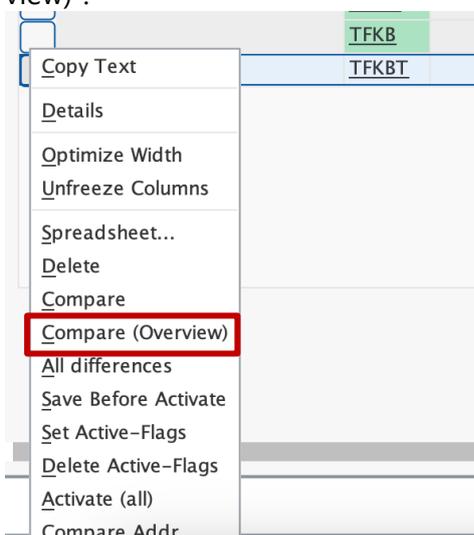
Date: 08.10.2023 to 22.10.2023

Results: 0006

ID	Table	DB-Entr.	AD-Entries	Short Description	MainIndex	AddrIndex	User	Program	Current Date	Time	SAP
->IH210020231022102138	T002	47		Language Keys (Component BC-I18)	T002102138		IT_ALL_02	RDH	22.10.2023	10:21:38	IH2
	TFKB	20		Functional areas	TFKB102138		IT_ALL_02	RDH	22.10.2023	10:21:38	IH2
	TFKBT	40		Name of the functional areas	TFKBT102138		IT_ALL_02	RDH	22.10.2023	10:21:38	IH2
->IH210020231022102707	T002	47		Language Keys (Component BC-I18)	T002102707		IT_ALL_02	RDH	22.10.2023	10:27:07	IH2
	TFKB	20		Functional areas	TFKB102707		IT_ALL_02	RDH	22.10.2023	10:27:07	IH2
	TFKBT	40		Name of the functional areas	TFKBT102707		IT_ALL_02	RDH	22.10.2023	10:27:07	IH2

3.3.2.1 Compare

To compare differences between Sender- and Receiver left click and select "Compare (Overview)".



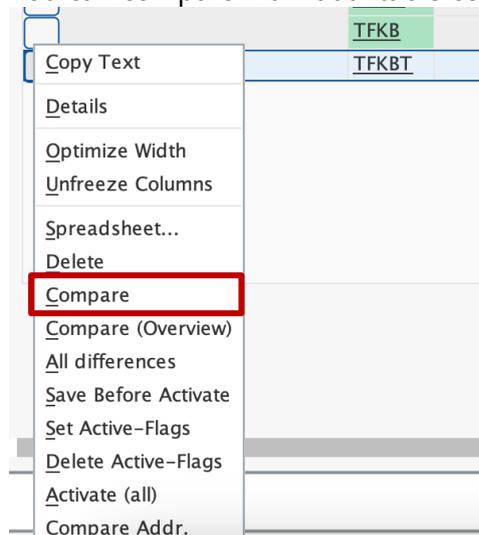
DB_Only: indicates records existing only in the receiver system.

Ind_Only: indicates records existing only in the sender system.

Diff: indicates records with different content between the systems.

Program	Current Date	Time	SAP System	Mandt	DB-Only	Ind_Only	Diff	Ident	All-DB	Act-User	Act-Date	Act-Time
RDH	22.10.2023	10:21:38	IH2	100								00:00:00
RDH	22.10.2023	10:21:38	IH2	100								00:00:00
RDH	22.10.2023	10:21:38	IH2	100								00:00:00
RDH	22.10.2023	10:27:07	IH2	100				47	47			00:00:00
RDH	22.10.2023	10:27:07	IH2	100				20	20			00:00:00
RDH	22.10.2023	10:27:07	IH2	100				40	40			00:00:00

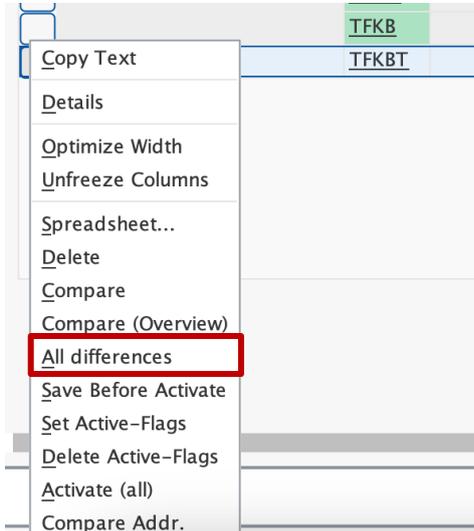
You can compare individual table content with "Compare".



The numbers indicate where the differences are or if the content is only in one system or is identical.

```
RDH: Show/Activate Snapshot(s) 1
Differences (1=DB only,2=IND-only,3=DIFF,4=IDEN)
Select Row ( 3=DIFF ) shows Details!
0001 0005 0002 0031
1 xxxEKW04
2 xxxDKW01
2 xxxDKW02
2 xxxDKW03
2 xxxEKW02
2 xxxEKW03
3 xxxE0100
3 xxxEKW01
4 xxxD0001
4 xxxD0002
4 xxxD0003
4 xxxD0004
4 xxxD0100
4 xxxD0300
4 xxxD0400
4 xxxD0500
4 xxxD0980
```

You can show all differences by selecting "All differences".

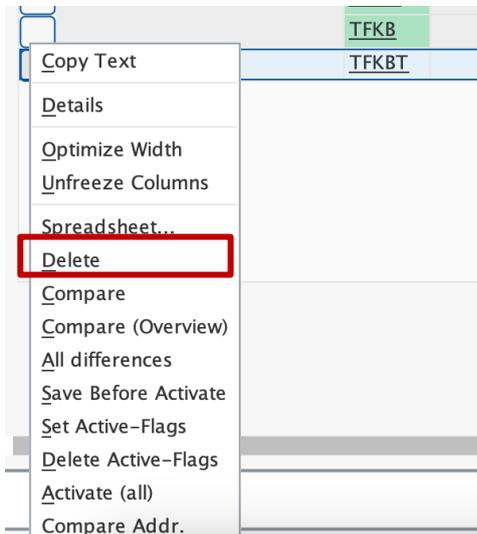


Records selected: 0000017

Ta...	Key	Field	Short Description	Long Field Label	SnapShot/Value	DBValue
TFKB	xxxKW02	FKBER	Functional Area	Functional Area	KW02	KW01
	xxxKW03	FKBER	Functional Area	Functional Area	KW03	KW04
	xxxKW04	FKBER	Functional Area	Functional Area	KW02	KW04
TFKBT	xxxDKW01	FKBER	Functional Area	Functional Area	KW01	0980
		FKBTX	Name of the functional area	FunctArea text	Management	Kalk. Kosten
	xxxDKW02	FKBER	Functional Area	Functional Area	KW02	PT01
		FKBTX	Name of the functional area	FunctArea text	Produktion	Verkaufs- und Servicekost
	xxxDKW03	FKBER	Functional Area	Functional Area	KW03	PT02
		FKBTX	Name of the functional area	FunctArea text	Steuer Sonderergebnis	Vertriebskosten
	xxxE0100	FKBTX	Name of the functional area	FunctArea text	Production-Support	Production
	xxxEKW01	FKBTX	Name of the functional area	FunctArea text	Management	Sales department
	xxxEKW02	FKBER	Functional Area	Functional Area	KW02	PT02
		FKBTX	Name of the functional area	FunctArea text	Production	Sales costs
	xxxEKW03	FKBER	Functional Area	Functional Area	KW03	PT03
		FKBTX	Name of the functional area	FunctArea text	Administration	Administration Costs
	xxxEKW04	FKBER	Functional Area	Functional Area	0500	KW04
		FKBTX	Name of the functional area	FunctArea text	Research & Development	Trade

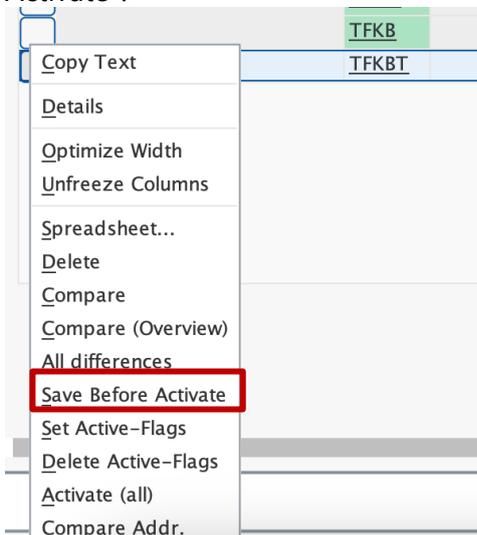
3.3.2.2 Delete

The delete option allows to remove unwanted Snapshots. You can delete Snapshots with left click and "Delete".



3.3.2.3 Save before Activate

It is possible to create a backup Snapshot before the activation, for this select "Save Before Activate".

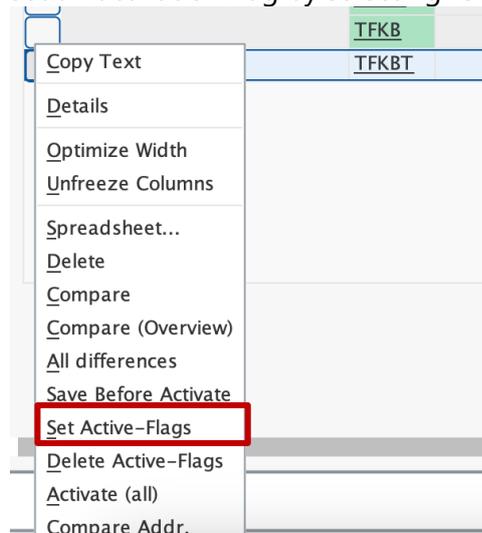


The backup Snapshot is saved.

->IH210020231022102707	T002	47	Language Keys (Component BC-I18)	T002102707	IT_ALL
	TFKB	20	Functional areas	TFKB102707	IT_ALL
	TFKBT	40	Name of the functional areas	TFKBT102707	IT_ALL
->SAVECO20231022105844	T002	47	Language Keys (Component BC-I18)	T002105844	IT_AL
	TFKB	20	Functional areas	TFKB105844	IT_AL
	TFKBT	40	Name of the functional areas	TFKBT105844	IT_AL

3.3.2.4 Set Activation Flag

The activation flag designed to provide users a visual indicator for status of Snapshots, in order to categorize and differentiate between activated and non-activated Snapshots. You can set an activation flag by selecting "Set Active-Flags".

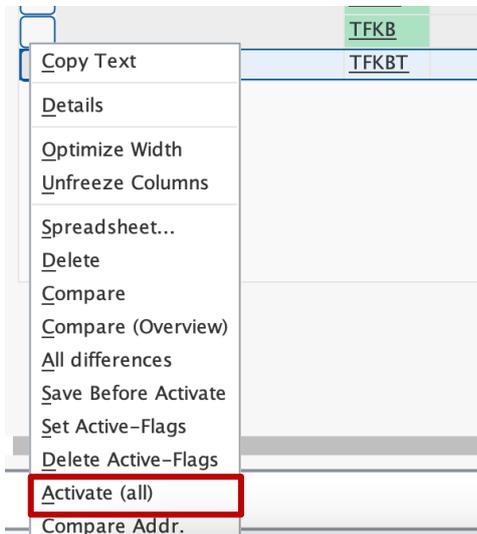


Now you can see the activation flags.

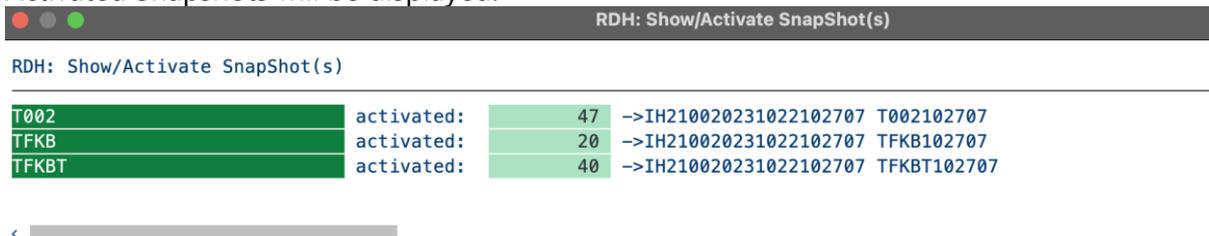
sr	Act-Date	Act-Time	Act-Flag
		00:00:00	<input type="checkbox"/>
		00:00:00	<input type="checkbox"/>
		00:00:00	<input type="checkbox"/>
		00:00:00	<input checked="" type="checkbox"/>
		00:00:00	<input checked="" type="checkbox"/>
		00:00:00	<input checked="" type="checkbox"/>
		00:00:00	<input type="checkbox"/>
		00:00:00	<input type="checkbox"/>
		00:00:00	<input type="checkbox"/>

3.3.2.5 Activate

For activation select "Activate (all)".



Activated Snapshots will be displayed:



After confirming you can see the activation date and time.

ndt	Act-User	Act-Date	Act-Time	Fore..
0			00:00:00	
0			00:00:00	
0			00:00:00	
0	IT_ALL_02	22.10.2023	11:06:22	✓
0	IT_ALL_02	22.10.2023	11:06:22	✓
0	IT_ALL_02	22.10.2023	11:06:22	✓
0			00:00:00	
0			00:00:00	
0			00:00:00	

3.4 Expert Mode

3.4.1 Expert Mode – Business Objects

The "Business Objects" option allows to create custom business objects.

Click the Business Objects button in Expert mode

SAP RDH-Cockpit: Expertmode

Expert

Groups and Foreign Keys

Configuration Groups

Foreign Keys

Business Objects

Recreate Foreign Keys

Switch to edit mode and click new Entries

SAP Change View "RDH: BusinessObjects": Overview

New Entries

RDH: BusinessObjects

Object	Table Name	Short Description
<input type="checkbox"/> ACCOUNTS	SKA1	G/L account A-Seg
<input type="checkbox"/> ACCOUNTS	SKAT	G/L account TXT
<input type="checkbox"/> ACCOUNTS	SKB1	G/L account B-Seg
<input type="checkbox"/> BUSINESSPARTNER	ADRC	Addresses (Business Address Services)

Enter the name for the new Business Object and the corresponding table, as well as a description. Then confirm and save

RDH: BusinessObjects

Object	Table Name	Short Description
<input type="checkbox"/> Functional Area	TFKB	Functional Area
<input type="checkbox"/> Functional Area	TFKBT	Functional Area TxT

After saving the Business Object is created



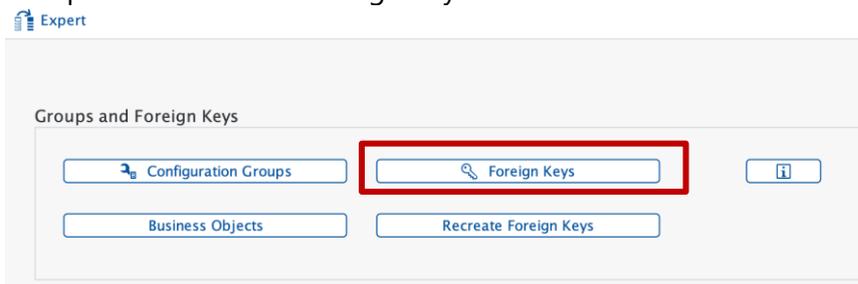
RDH: BusinessObjects

Object	Table Name	Short Description
FRS	FAGL_011SC	Balance sheet structure
FRS	FAGL_011TC	Balance sheet structure
FRS	FAGL_011VC	Balance sheet structure
FRS	FAGL_011ZC	Balance sheet structure
FRS	T011	Balance sheet structure
FRS	T011T	Balance sheet structure
FUNCTIONAL AREA	TFKB	Functional Area
FUNCTIONAL AREA	TFKBT	Functional Area TxT
KONTRAKT	EKBE	Purchasing document history
KONTRAKT	EKET	Scheduling agreement schedule lines

3.4.2 Expert Mode – Foreign Keys

The Foreign Keys can be assigned to the Configuration Groups, which ensures that related data is handled consistently during data replication processes. While it can simplify management, it may add complexity to the configuration, especially if there are many interdependencies between tables, but it is generally advisable to include key tables that are closely related and need to be replicated together in order to maintain data integrity.

In Expert mode select "Foreign Keys"



Search for your Business Object

SAP RDH: ForeignKeys

BusinessObject: FUNCTIONAL AREA to

Table: to

Records selected : 00000006

Include in RDH Groups

Object	Table	Field name	Short Description	Check table	Short Description	Field Name
FUNCTIONA...	TFKB	FNSUB1	Substring 1 of Functional Area	FMMDFNSUB1	Value of Substring 1 of Functional Area	FNSUB1
FUNCTIONA...	TFKB	FNSUB2	Substring 2 of Functional Area	FMMDFNSUB2	Value of Substring 2 of Functional Area	FNSUB2
FUNCTIONA...	TFKB	FNSUB3	Substring 3 of Functional Area	FMMDFNSUB3	Value of Substring 3 of Functional Area	FNSUB3
FUNCTIONA...	TFKB	STR_ID	Master Data Subdivision ID	FMMDSTRID	Define Subdivision ID of FM Master Data	STR_ID
FUNCTIONA...	TFKBT	FKBER	Functional Area	TFKB	Functional areas	FKBER
FUNCTIONA...	TFKBT	SPRAS	Language Key	T002	Language Keys (Component BC-118)	SPRAS

Select the entries and click "Include in RDH Groups"

Records selected : 00000006

Include in RDH Groups

Object	Table	Field name	Short Description	Check table	Short Description	Field Name
FUNCTIONA...	TFKB	FNSUB1	Substring 1 of Functional Area	FMMDFNSUB1	Value of Substring 1 of Functional Area	FNSUB1
FUNCTIONA...	TFKB	FNSUB2	Substring 2 of Functional Area	FMMDFNSUB2	Value of Substring 2 of Functional Area	FNSUB2
FUNCTIONA...	TFKB	FNSUB3	Substring 3 of Functional Area	FMMDFNSUB3	Value of Substring 3 of Functional Area	FNSUB3
FUNCTIONA...	TFKB	STR_ID	Master Data Subdivision ID	FMMDSTRID	Define Subdivision ID of FM Master Data	STR_ID
FUNCTIONA...	TFKBT	FKBER	Functional Area	TFKB	Functional areas	FKBER
FUNCTIONA...	TFKBT	SPRAS	Language Key	T002	Language Keys (Component BC-118)	SPRAS

Choose the Configuration Group

Records selected : 00000006

Include in RDH Groups

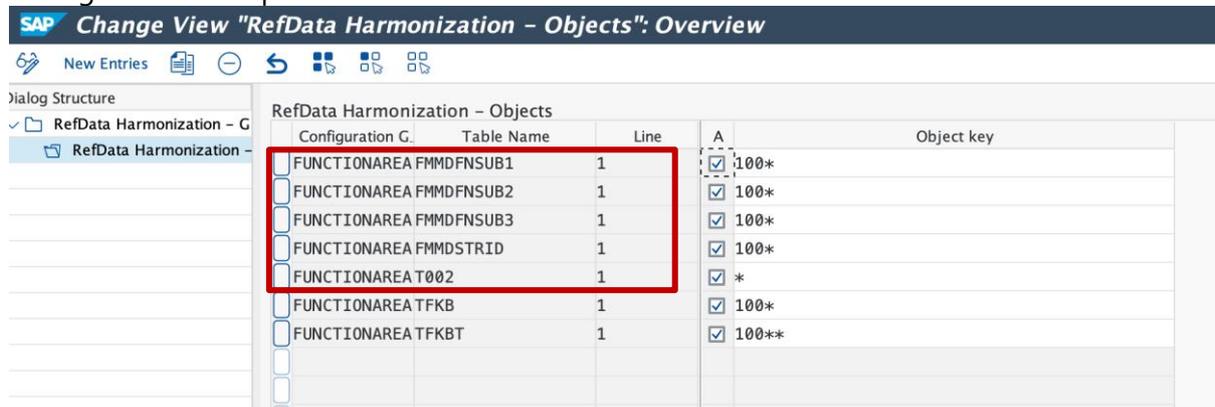
Object	Table	Field name	Short Description
FUNCTIONA...	TFKB	FNSUB1	Substring 1 of Functional Area
FUNCTIONA...	TFKB	FNSUB2	Substring 2 of Functional Area
FUNCTIONA...	TFKB	FNSUB3	Substring 3 of Functional Area
FUNCTIONA...	TFKB	STR_ID	Master Data Subdivision ID
FUNCTIONA...	TFKBT	FKBER	Functional Area
FUNCTIONA...	TFKBT	SPRAS	Language Key

Group Selection

- CUSTOMER_SCY
- FB-TEST-GR2
- CURRENCY
- LGORTE
- MATTYPE
- WERKSTOFF
- FUNCTIONAREA
- RDM-OBJECTS
- RDM_OBJECTS
- S02_BNKA

Check the Configuration Group and verify that the foreign key tables have been added to the

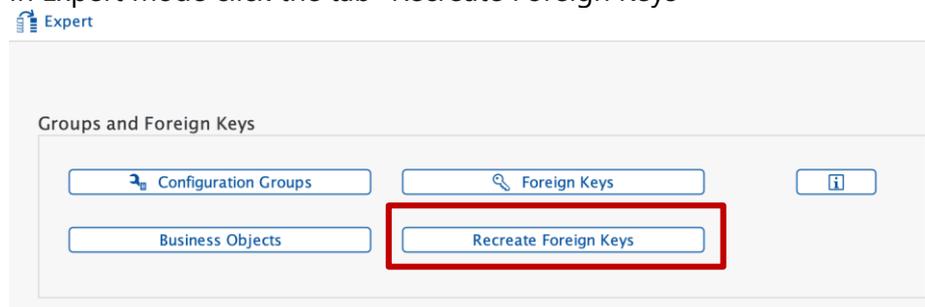
Configuration Group



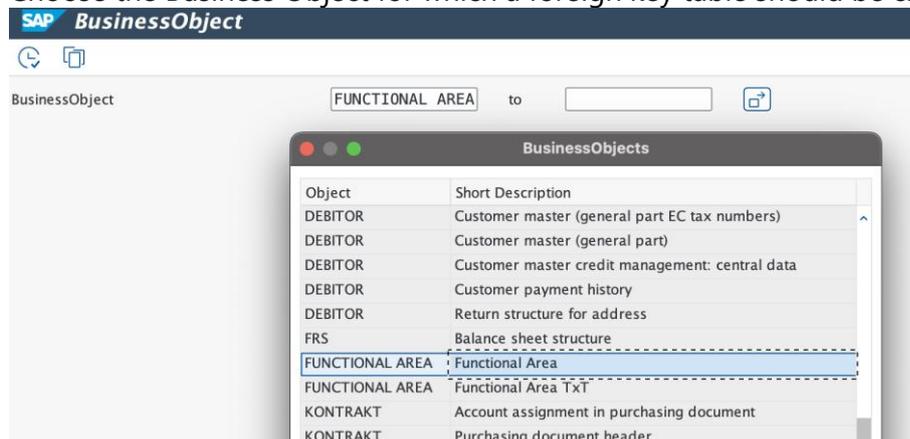
3.4.3 Expert Mode – Recreate Foreign Keys

Recreating foreign keys is important after creating a Business Object. It ensures that dependent tables, linked with foreign keys and associated with specified tables in Configuration Groups, are accurately linked to the Business Object.

In Expert mode click the tab “Recreate Foreign Keys”



Choose the Business Object for which a foreign key table should be created and click execute

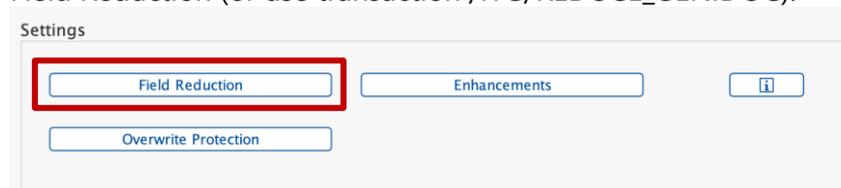


The created list shows related tables which supports the creation of a new Business Object by ensuring that dependent tables with foreign keys are searched, harmonized, and connected, maintaining the integrity and consistency of the entire object, especially when data is replicated across various systems.

SAP BusinessObject			
BusinessObject			
TFKB	FNSUB1	Substring 1 of Functional Area	FMMDFNSUB1
TFKB	FNSUB1	Substring 1 of Functional Area	FMMDFNSUB1
TFKB	FNSUB2	Substring 2 of Functional Area	FMMDFNSUB2
TFKB	FNSUB2	Substring 2 of Functional Area	FMMDFNSUB2
TFKB	FNSUB3	Substring 3 of Functional Area	FMMDFNSUB3
TFKB	FNSUB3	Substring 3 of Functional Area	FMMDFNSUB3
TFKB	STR_ID	Master Data Subdivision ID	FMMDSTRID
TFKB	STR_ID	Master Data Subdivision ID	FMMDSTRID
TFKBT	FKBER	Functional Area	TFKB
TFKBT	SPRAS	Language Key	T002

3.4.4 Expert Mode – Field Reduction

Field Reduction is designed to customize and control the reduction of specific fields in the data replication process. It ensures that content is not overwritten in the receiving system, preserving maintained values during the data replication. Select Expert Mode and then click Field Reduction (or use transaction /ITG/REDUCE_GENIDOC).



Select the table of the business object (in this case document type) and the target (receiving) system for the reduction. If no target system is chosen, the reduction applies to all systems.

GenericIdoc Reduction	
Table	T003
Target System	IH2400

Choose the fields that should be reduced and click Deselect. Save your selection.

Act	Status	Field	Text
	<input checked="" type="checkbox"/>	MANDT	Client
	<input checked="" type="checkbox"/>	BLART	Document Type
	<input checked="" type="checkbox"/>	NUMKR	Number Range
	<input checked="" type="checkbox"/>	KOARS	Account Types
	<input checked="" type="checkbox"/>	STBLA	Reverse DocumentType
	<input checked="" type="checkbox"/>	XNETB	
	<input checked="" type="checkbox"/>	XRVJP	SAP Billing Document
	<input checked="" type="checkbox"/>	XSYBL	Batch Input Only
	<input checked="" type="checkbox"/>	XVORK	Init.Acct Assignment
	<input checked="" type="checkbox"/>	XKKPR	Only One Customer/Vendor Allowed?
	<input checked="" type="checkbox"/>	XGSUB	Inter-Company
	<input checked="" type="checkbox"/>	XMGES	Enter Trading Part.
	<input checked="" type="checkbox"/>	BRGRU	Authorization Group
	<input checked="" type="checkbox"/>	RECID	Debit Rec.Indicator
	<input checked="" type="checkbox"/>	RECI	Rec.Indicator Credit
	<input checked="" type="checkbox"/>	XMTXT	Document Header Text
	<input checked="" type="checkbox"/>	XMREF	Reference Number
	<input checked="" type="checkbox"/>	XNGBK	Doc.Type for Subseq.Adjustment
	<input checked="" type="checkbox"/>	KURST	Exchange Rate Type for FC Documents
	<input checked="" type="checkbox"/>	XNEGP	Negative Postings Permitted
	<input checked="" type="checkbox"/>	XKQAA	
	<input checked="" type="checkbox"/>	XKOAD	
	<input checked="" type="checkbox"/>	XKQAK	
	<input checked="" type="checkbox"/>	XKQAM	
	<input checked="" type="checkbox"/>	XKQAS	
	<input checked="" type="checkbox"/>	XNMRL	Official document numbering
	<input checked="" type="checkbox"/>	XAUSG	Self-issued document
	<input checked="" type="checkbox"/>	XDTCH	Check Date
	<input checked="" type="checkbox"/>	BLKLS	Document Class
	<input checked="" type="checkbox"/>	XROLLUP	Rollup
	<input checked="" type="checkbox"/>	XPLAN	Planning
	<input checked="" type="checkbox"/>	XALLOCACT	Act.Allocation

Act	Status	Field	Text
	<input checked="" type="checkbox"/>	MANDT	Client
	<input checked="" type="checkbox"/>	BLART	Document Type
	<input checked="" type="checkbox"/>	NUMKR	Number Range
	<input checked="" type="checkbox"/>	KOARS	Account Types
	<input checked="" type="checkbox"/>	STBLA	Reverse DocumentType

To validate the field reduction, replicate an object (in this example document type) and check the monitoring. For the number range (NUMKR) the reduction was successful and is marked with a slash which informs the receiving system to preserve the local value of the field.

IDoc Display: 0000000000096005

Segments with Errors

IDoc display	Additional information	Short Technical Information								
<ul style="list-style-type: none"> IDoc 0000000000096005 <ul style="list-style-type: none"> Control record Data records <ul style="list-style-type: none"> /ITG/HEADER /ITG/POSITIONS 	Total number: 000041 Segment 000001 Segment 000002 Segment 000003 Segment 000004 Segment 000005 Segment 000006 Segment 000007 Segment 000008 Segment 000009 Segment 000010 Segment 000011 Segment 000012 Segment 000013 Segment 000014 Segment 000015 Segment 000016	Direction: 2 Inbox Current Status: 53 OO Basic type: /ITG/GENERIC02 Extension: Message Type: /ITG/GENERIC Partner No.: IH2100 Partn.Type: LS Port: SAPIH2								
Content of Selected Segment										
<table border="1"> <thead> <tr> <th>Fid Name</th> <th>Fid Cont.</th> </tr> </thead> <tbody> <tr><td>MANDT</td><td>100</td></tr> <tr><td>BLART</td><td>T2</td></tr> <tr><td>NUMKR</td><td>/</td></tr> </tbody> </table>			Fid Name	Fid Cont.	MANDT	100	BLART	T2	NUMKR	/
Fid Name	Fid Cont.									
MANDT	100									
BLART	T2									
NUMKR	/									

3.4.5 Expert Mode – Overwrite Protection

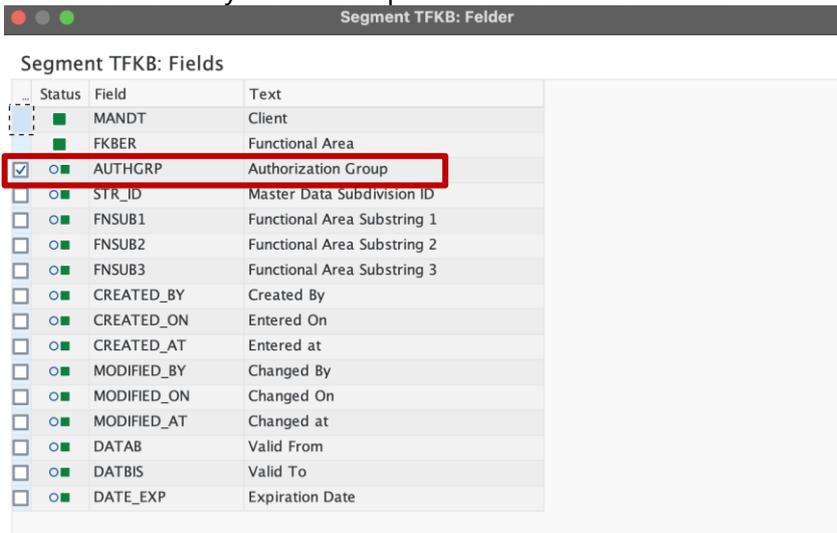
In the receiving system, fields can additionally be protected against overwriting during a data replication in Snapshot mode. Fields which are deactivated are not overwritten in the receiver system. For this select the Overwrite Protection in Expert Mode on your receiver system.



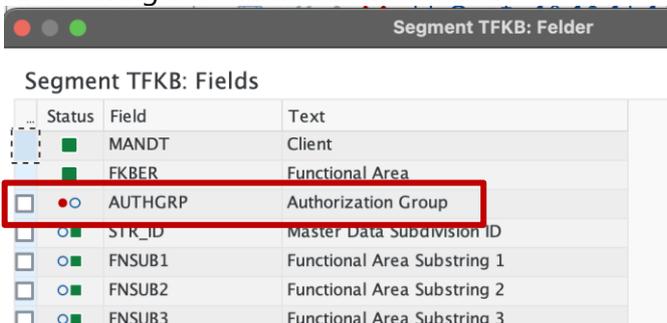
Choose the table for which the table content wants to be protected in the receiver system.



Choose the field you want to protect and click Deselect.



After saving it is marked as deselected



To verify choose Send in Send Mode.

Send, Check and Activate

Create a Snapshot

IdocReduction Show Protocols Online-Selection

ObjectSelection

Table(s) to

View(s) to

Objectgroup(s) to

ALE / Webservice

Message Type

Logical System

Port for Webservice

Mode

Transfer
 Single
 Bundle
 Snapshot
 Transport

Options

Scope with address without address

Heterogen Yes No

Logging Yes No

Changes Yes No

OnlineSele Yes No

Test Yes No

DetailList Yes No

The Authorization Group is filled with A001 and sent to the receiver system.

SAP ProductivRun / Show Keys for table

Table Name	Short Description	Number		
TFKB	Functional areas			
TFKB	100KW01	100	KW01	A001
TFKBT	Name of the functional areas			
TFKBT	100DKW01	100	D KW01	Management
TFKBT	100EKW01	100	E KW01	Managemen_Support

RDH: Customizing Harmonization – Send/Activate Objects 1

Snapshot: TFKB Indexid = TFKB122426
 1 0

Snapshot: TFKBT Indexid = TFKBT122426
 2 0

Idoc-Number	Receiver	MessageType	IdocType
0000000000115001	IH2400	/ITG/GENERIC	/ITG/GENERIC02

Switch to Receiver mode on your receiver system and select Activate to display the Snapshot.



Left click and select "All differences".

SAP RDH: Show/Activate SnapShot(s)

Choice

IndexId to
 Version to
 Table to
 Date 23.10.2023 to 06.11.2023

Results: 0006

ID	Table	DB-Entr.	AD-Entries	Short Description	MainIndex
->IH210020231031155908	TFKB	1		Functional areas	TFKB155908
	TFKBT	2		Name of the functional areas	TFKBT155908
->IH210020231105144248	TFKB	1		Functional areas	TFKB144248
	TFKBT	2		Name of the functional areas	TFKBT144248
->IH210020231106122426	TFKB	1		Functional areas	TFKB122426
	TFKBT	2		Name of the functional areas	TFKBT122426

Copy Text

Details

Optimize Width

Unfreeze Columns

Spreadsheet...

Delete

Compare

Compare (Overview)

All differences

Save Before Activate

Set Active-Flags

Here the differences in the Snapshot between sender and receiver system are shown.

Show differences

Records selected: 00000001

Table	Key	Field	Short Description	Long Field Label	SnapShotValue	DBValue
TFKB	xxxKW01	AUTHGRP	FM: Authorization Group of Functional Area	Authorization Group	A001	X000

To activate set the Active Flag and select "Activate (all)".

Table	Key	Field	Short Description
TFKB	1		Functional areas
TFKBT	2		Name of the functional areas

- Copy Text
- Details
- Optimize Width
- Unfreeze Columns
- Spreadsheet...
- Delete
- Compare
- Compare (Overview)
- All differences
- Save Before Activate
- Set Active-Flags
- Delete Active-Flags
- Activate (all)**
- Compare Addr.

RDH: Show/Activate SnapShot(s)

TFKB	activated:	1	->IH210020231106122426 TFKB122426
TFKBT	activated:	2	->IH210020231106122426 TFKBT122426

You can compare the tables in the sender (left) and receiver system (right) and can see that the value was not overwritten.

SAP Data Browser: Table TFKB Select Entries					SAP Data Browser: Table TFKB Select Entries				
MANDT	FKBER	AUTHGRP	STR_ID	FNSUB1	MANDT	FKBER	AUTHGRP	STR_ID	FNSUB1
<input type="checkbox"/>	100	0001			<input type="checkbox"/>	400	0001		
<input type="checkbox"/>	100	0002			<input type="checkbox"/>	400	0002		
<input type="checkbox"/>	100	0003			<input type="checkbox"/>	400	0003		
<input type="checkbox"/>	100	0004			<input type="checkbox"/>	400	0004		
<input type="checkbox"/>	100	0100			<input type="checkbox"/>	400	0100		
<input type="checkbox"/>	100	0300			<input type="checkbox"/>	400	0300		
<input type="checkbox"/>	100	0400			<input type="checkbox"/>	400	0400		
<input type="checkbox"/>	100	0500			<input type="checkbox"/>	400	0500		
<input type="checkbox"/>	100	0980			<input type="checkbox"/>	400	0980		
<input type="checkbox"/>	100	KW01	A001		<input type="checkbox"/>	400	KW01	X000	
<input type="checkbox"/>	100	KW02			<input type="checkbox"/>	400	KW02		
<input type="checkbox"/>	100	KW03			<input type="checkbox"/>	400	KW03		
<input type="checkbox"/>	100	KW04			<input type="checkbox"/>	400	KW04		

3.4.6 Expert Mode – Enhancements

Enhancements can be used to implement additional logic like customized data adjustments, defaulting, or value mappings. Select Enhancements in Expert Mode or use transaction /ITR/CUSTCODE.

The screenshot shows the SAP Settings interface with the 'Enhancements' button highlighted in red. Below it is the SAP Display View 'RDM: special customer handling' showing a table of configurations.

Table Name		Function Module	A
* Idoc-Inbound	1	/ITR/RDH_LOGGING_RECEIVER_SIDE	<input checked="" type="checkbox"/>
* Idoc-Inbound (...)	2	/ITR/RDM_FOREIGN_KEY_CHECK	<input checked="" type="checkbox"/>
/ITR/ADDR	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/MDIP	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/MDLG	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/MDLL	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/MDLV	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/MDLW	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T001	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T001L	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T001W	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T002	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T002T	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T003	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T003T	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T004	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T004T	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T005	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T005S	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>
/ITR/T005T	Idoc/WS-Outbo...	/ITR/RDM_LSA_TO_CUST	<input checked="" type="checkbox"/>

Various events can be chosen (e.g. Event 6: RDH-Snapshot/Enhancement)

The screenshot shows a dropdown menu for event selection. The 'RDH-SnapShot/Enhancement' option is highlighted with a red box.

Table Name		
/ITR/ADDR	Idoc/WS-Outbound	1
Idoc-Inbound		1
Adapter PROCESSING		1
Adapter FINALIZE		1
Idoc/WS-Outbound		1
Idoc-Inbound (Check/Change after Unpack)		1
RDH-SnapShot/Enhancement		1

And various implementations can be assigned. Please check function modules which can be found by searching SE37 for "/ITR/*TEMPLATE*EVENT*". For example:

Function group	Function group short text
Function Module Name	Short text for function module
/ITR/RDM_FOREIGN	
/ITR/RDH_TEMPLATE_EVENT_ID_5	
/ITR/RDH_TEMPLATE_EVENT_ID_6	

3.4.7 Expert Mode – Key-/Value-Mapping

In this section you are able to customize and maintain Key- and Value Mapping. For more information please refer to the RDM Configuration Guide.

4 Reference Data Object Types (Content)

4.1 Content for Reference Data Harmonization (RDH)

Based on the generic Master Data Framework (MDF), RDH can harmonize and synchronize all SAP tables.

Using "Configuration Groups" tables which should be harmonized can be grouped into one or many groups. Based on groups filters can be used to restrict the reference data values which should be in scope.

"Business Objects" help to define dependencies between configuration tables and with this create complete objects which can be harmonized as a complete object rather than a set of tables.

Predefined Configuration Groups for common scenarios like a MDG implementation (for Materials, Business Partners or Financials) or a Financial Reporting Structure replication can be provided by Itego. Please contact support@itego.de (subject: "Predefined Configuration Groups").

4.2 Content for Reference Data Governance (RDG)

RDM delivers the central governance for reference data aligned to the functionalities offered in the SAP Reference Implementation Guide (IMG) available through transaction SPRO. For each object change request types, message types and other components are delivered which are described below.

For all objects Meta Data can be maintained. This can be done by adding files or links that can be used to describe the reference data object in more detail. Examples: Usage scenario of a specific Material Group. Formulas used for a Unit of Measure.

Reference data objects which are part of RDM and do have dependencies are usually linked to each other as part of the data model. Example: Country and Region. This allows to use "active" data in MDG which is not necessarily already in productive usage. If needed this can be changed on a project basis. Example: Country within Region could reference customizing table T005 which would restrict the selection to countries which are in productive usage.

Dependencies to reference data objects which are not in the scope of RDM are implemented as a reference to the specific customizing table which needs to be synchronized within the system landscape.

4.2.1 Financials

4.2.1.1 Account Group for General Ledger Accounts

Account Groups for General Ledger Accounts are based on a Chart of Accounts and are used to define number ranges as well as optional and mandatory fields for accounts in this account group. The following attributes (based on view V_T077S with tables T077S and T077Z) can be maintained:

Attribute	Properties, Comments, Configuration Table
CoA	Chart of Accounts
Account Group	G/L Account Group
Name	Language dependent text
From G/L account	Number of G/L account (lower area limit)
To G/L account	Number of G/L Account (Upper Area Limit)

Change Request Types available:

CR Type	Description	Properties, Comments
IAF1S01	Create G/L Acc.Gr. and activate	Create, 1-step
IAF1S02	Process G/L Acc.Gr. and activate	Change, 1-step
IAF1SL1	Load G/L Acc.Gr. and activate	Load, 1-step
IAF2S01	Create G/L Acc.Gr. with approval	Create, 2-step
IAF2S02	Process G/L Acc.Gr. with approval	Change, 2-step
IAF2SL1	Load G/L Acc.Gr. with approval	Load, 2-step
IAF3S01	Create G/L Acc.Gr. with proc. and appr.	Create, 3-step
IAF3S02	Process G/L Acc.Gr. with proc. and appr	Change, 2-step

4.2.1.2 Account Group for Vendors

Account Groups for Vendors and are used to define number ranges as well as optional and mandatory fields for vendors in this account group. The following attributes (based on view V_T077K with tables T077K and T077Y) can be maintained:

Attribute	Description
Account group	Vendor account group
Name	Language dependent text
One-time account	Indicator: Account group for one-time accounts?

Change Request Types available:

CR Type	Description	Properties, Comments
IAV1S01	Create Vend.Acc.Gr. and activate	Create, 1-step
IAV1S02	Process Vend.Acc.Gr. and activate	Change, 1-step
IAV1SL1	Load Vend.Acc.Gr. and activate	Load, 1-step
IAV2S01	Create Vend.Acc.Gr. with approval	Create, 2-step
IAV2S02	Process Vend.Acc.Gr. with approval	Change, 2-step
IAV2SL1	Load Vend.Acc.Gr. with approval	Load, 2-step
IAV3S01	Create Vend.Acc.Gr. with proc. and appr	Create, 3-step
IAV3S02	Process Vend.Acc.Gr. with proc and appr	Change, 2-step

4.2.1.3 Account Group for Customers

Account Groups for Customers and are used to define number ranges as well as optional and mandatory fields for customers in this account group. The following attributes (based on view V_T077D with tables T077D, T077X and TKUPA) can be maintained:

Attribute	Description
Account group	Customer Account Group
Name	Language dependent text
One-time account	Indicator: Account group for one-time accounts?
Procedure	Output determination procedure

Change Request Types available:

CR Type	Description	Properties, Comments
IAC1S01	Create Cust.Acc.Gr. and activate	Create, 1-step
IAC1S02	Process Cust.Acc.Gr. and activate	Change, 1-step
IAC1SL1	Load Cust.Acc.Gr. and activate	Load, 1-step
IAC2S01	Create Cust.Acc.Gr. with approval	Create, 2-step
IAC2S02	Process Cust.Acc.Gr. with approval	Change, 2-step
IAC2SL1	Load Cust.Acc.Gr. with approval	Load, 2-step
IAC3S01	Create CustAccGr with proc. and appr.	Create, 3-step
IAC3S02	Process CustAccGr with proc. and appr.	Change, 2-step

4.2.1.4 Currency Code

Currency Codes are defined for all currencies which occur in business transactions and usually are aligned with the ISO Codes. The following attributes can be maintained:

Attribute	Description
Currency Code	Currency
Description long	Description (Long Text)
Description short	Description (Short Text)
ISO Code	ISO currency code
Primary SAP Code	Primary SAP Currency Code for ISO Code
Alternative Key	Alternative key for currencies
Valid until	Date until which the currency is valid

Change Request Types available:

CR Type	Description	Properties, Comments
ICU1S01	Create Currency and activate	Create, 1-step
ICU1S02	Process Currency and activate	Change, 1-step
ICU1SL1	Load Currency and activate	Load, 1-step
ICU2S01	Create Currency with approval	Create, 2-step
ICU2S02	Process Currency with approval	Change, 2-step
ICU2SL1	Load Currency with approval	Load, 2-step
ICU3S01	Create Currency with proc. and appr	Create, 3-step
ICU3S02	Process Currency with proc and appr	Change, 2-step

4.2.1.5 Business Area

A Business Area is used for reporting both internal and external. It is defined as an organizational area. The following attributes can be maintained:

Attribute	Description
Business Area	Business Area
Description (medium text)	Language dependent text

Change Request Types available:

CR Type	Description	Properties, Comments
IGS1S01	Create Business Area and activate	Create, 1-step

IGS1S02	Process Business Area and activate	Change, 1-step
IGS1SL1	Load Business Area and activate	Load, 1-step
IGS2S01	Create Business Area with approval	Create, 2-step
IGS2S02	Process Business Area with approval	Change, 2-step
IGS2SL1	Load Business Area with approval	Load, 2-step
IGS3S01	Create Business Area with proc. and appr	Create, 3-step
IGS3S02	Process Business Area with proc and appr	Change, 3-step

4.2.1.6 Chart of Accounts

The Chart of Accounts is used to maintain the G/L Accounts which themselves are used by Company Codes. The following attributes can be maintained:

Attribute	Description
Chart of Accounts	Chart of Accounts
Alternative language	Alternative languages
Maint.language	Maintaining language
Controlling integration	Type of integration between G/L accounts and cost elements
Group Chart of Accts	Group Chart of Accts
Central layout	Central layout
Chart of accts layout	Chart of accts layout
Company code layout	Company code layout
Trading partner cannot be entered	Trading partner cannot be entered
Length of G/L account number	Significant length of the G/L account number
Description (long text)	Language dependent text
Blocked	Indicator: is the chart of accounts blocked ?

Change Request Types available:

CR Type	Description	Properties, Comments
IKP1S01	Create Chart of Accounts and activate	Create, 1-step
IKP1S02	Process Chart of Accounts and activate	Change, 1-step
IKP1SL1	Load Chart of Accounts and activate	Load, 1-step
IKP2S01	Create Chart of Accounts with approval	Create, 2-step
IKP2S02	Process Chart of Accounts with approval	Change, 2-step
IKP2SL1	Load Chart of Accounts with approval	Load, 2-step
IKP3S01	Create Chart of Accounts with proc. and appr	Create, 3-step

IKP3S02	Process Chart of Accounts with proc and appr	Change, 3-step
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4.2.1.7 Company Code

Company Codes are used to structure the business organization from a financial accounting perspective. The following attributes can be maintained:

Attribute	Description
Company Code	Company Code ID
Company Name	Name of Company Code or Company
Long Name	(Long) Name of Company Code
City	City
Country	Country
Currency	Currency Code
Language Key	Language
Address	Address details

Additional Attributes available in the Data Model:

Attribute Description
Additional settings variant for bus.area financial statements
Name of global company code
Company Code Variant (Screen)
Foreign Trade: Screen ctrl of imp.data f. MM-goods receipt
Document Type for Journal Voucher (Amount Correction)
Deferred Tax Rule
Document Type for Provisions for Taxes on Services Received
Document Type for Journal Voucher (Tax Code Correction)
Document Type for Remittance Challans
Original Key of the Company Code
Cash Management and Forecast Company Code
Financial Management Area
Funds center can be assigned to an account in HR from
Activate Account Assignment Derivation in Funds Management
Field Status Variant
Funds reservation field status var.
Foreign Trade: Import Data Control in MM Purchase Orders
Inflation Method

Credit control area Credit control area
Allocation Indicator
Foreign trade: Import data copying control for GR
Chart of Accounts According to Country Legislation
Rules for Copying from the Sample Account for G/L Accounts
Output Tax Code for Non-Taxable Transactions
Input Tax Code for Non-Taxable Transactions
Method for offsetting account determination
Posting Period Variant
Fiscal Year Variant
Procedure for Setting the Posting Date
Manage Variant of Posting Period for Company Code/Ledger
Company
VAT Registration Number
Surcharge Calculation Method
Jurisdiction for tax calculation - tax jurisdiction code
Foreign Currency Translation for Tax Items
Sales/Purchases Tax Group
Maximum exchange rate deviation in percent
Workflow variant
Indicator: Extended withholding tax active
G/L account authorization check in purchase requisitions
G/L account authorization check in PO/scheduling agreement
G/L account authorization check in inventory management
G/L account authorization check in contracts
G/L account authorization check in shopping cart
Enable Amount Split
Accounts Receivable Pledging Active
Cost of sales accounting status
Indicator: hedge request active
Indicator: Purchase Account Processing is Active
Indicator: Company code is in another system
Indicator: Cash Management activated?
Indicator: Updating MM in Cash Mgmt/Forecast activated?
Indicator: Updating SD in Cash Mgmt/Forecast activated?
Activate Update in Funds Management
Indicator: Cash budget management active
Indicator: Project Cash Management active?
Indicator: Propose fiscal year ?
Indicator: Business area financial statements required?
Indicator: JVA Active

Indicator: Post translations for exchange rate differences?
Indicator: Can credit control area be overwritten?
Indicator: Base amount for tax is net of discount?
Indicator: Negative Postings Permitted
Indicator: Productive company code?
Indicator: Discount base amount is the net value
Indicator: No ex.rate difference when clearing in local crcy
Indicator: Document date as the basis for tax determination
Indicator: Propose current date as value date?
Tax Reporting Date Active in Documents
Indicator: Financial Assets Management active

Change Request Types available:

CR Type	Description	Properties, Comments
ICC1S01	Create Company Code and activate	Create, 1-step
ICC1S02	Process Company Code and activate	Change, 1-step
ICC1SL1	Load Company Code and activate	Load, 1-step
ICC2S01	Create Company Code with approval	Create, 2-step
ICC2S02	Process Company Code with approval	Change, 2-step
ICC2SL1	Load Company Code with approval	Load, 2-step
ICC3S01	Create Company Code with proc. and appr	Create, 3-step
ICC3S02	Process Company Code with proc and appr	Change, 3-step

4.2.1.8 Document Type

Document Types are used to classify Documents. The main fields of application are accounting, and business transactions. The following attributes can be maintained:

Attribute	Description
Document type	Document type
Document Class	Document Class
Authorization Group	Authorization Group
Account types	Account types
Ex.rate type for forgn crncy docs	Ex.rate type for forgn crncy docs
Number range	Number range
Rec.Indicator Credit	Rec.Indicator Credit

Debit Rec.Indicator	Rules for Issuing an Invoice
Reverse DocumentType	Reverse Document Type
Description (short text)	Language dependent text
Act.allocation	Act.allocation
Plan.allocation	Plan.allocation
Check Date	Check Date
Inter-company postgs	Inter-company posting
Only one customer/vendor allowed?	Indicator: Only one customer/vendor allowed
Assets	Indicator: Are postings to assets permitted?
Customer	Indicator: Are postings to customer permitted?
Vendor	Indicator: Are postings to vendor permitted?
Material	Indicator: Are postings to material account permitted?
G/L account	Indicator: Are postings to G/L account permitted?
Market Data Exchange Rate	Market data Exchange Rate
Enter trading part.	Indicator: Trading partner can be entered manually
Reference number	Indicator: Reference number
Long Invoice reference required	Long Invoice Reference Required
Document header text	Indicator: Document header text
Negative Postings Permitted	Negative postings permitted
Net document type	Indicator: Document posted net?
Doc.type for subseq.adjustmnt	Indicator: Document type for posting subsequent adjustment
Planning	Planning
Post to Position Accounts	Futures Account Text Field
Rollup	Rollup
SAP billing document	Indicator: Posting from SAP billing document?
Batch input only	Indicator: Document type can only be used in batch input
Assignment to Acctg Principles Is Unique	Accounting Principle Assignment Is Unique in Document
Init.acct assignment	Indicator: Document type for initial account assignment?
Ex.rate dif.part pyt	Ex.rate dif.part pyt

Change Request Types available:

CR Type	Description	Properties, Comments
IBT1S01	Create Document Type and activate	Create, 1-step

IBT1S02	Process Document Type and activate	Change, 1-step
IBT1SL1	Load Document Type and activate	Load, 1-step
IBT2S01	Create Document Type with approval	Create, 2-step
IBT2S02	Process Document Type with approval	Change, 2-step
IBT2SL1	Load Document Type with approval	Load, 2-step
IBT3S01	Create Document Type with proc. and appr	Create, 3-step
IBT3S02	Process Document Type with proc and appr	Change, 3-step

4.2.1.9 Exchange Rates

Exchange Rates allow the operator to calculate the difference between two currencies. Exchange Rates in RDM represent a special case as the data is updated from external sources (e.g. the ECB) on a daily basis. Incoming Exchange Rates that do not alternate the current value beyond a certain limit are approved automatically. Exchange Rates that deviate beyond this mentioned border have to be approved by a specialist first. The following attributes can be maintained:

Attribute	Description
Exchange Rate (Type)	Exchange Rate (Type)
Currency (from)	Currency value from
Currency (to)	Currency value to
Valid from	Valid from
Alt. exch.rate type	Alternative Exchange Rate type
Alt.e/r type valid fr.	Alternative e/r type valid from
Exchange Rate	Exchange Rate
Quotation type	Quotation type
Ratio (from)	Ration (from)
Ratio (to)	Ration (to)

Change Request Types available:

CR Type	Description	Properties, Comments
ICR1S01	Create Exchange Rate and activate	Create, 1-step
ICR1S02	Process Exchange Rate and activate	Change, 1-step
ICR1SL1	Load Exchange Rate and activate	Load, 1-step
ICR2S01	Create Exchange Rate with approval	Create, 2-step

ICR2S02	Process Exchange Rate with approval	Change, 2-step
ICR2SL1	Load Exchange Rate with approval	Load, 2-step
ICR3S01	Create Exchange Rate with proc. and appr	Create, 3-step
ICR3S02	Process Exchange Rate with proc and appr	Change, 3-step
ICR3SL1	Load Curr ExRT, process and activate	Automatic import from external source

Please also have a look at the object specific documentation for “Exchange Rates”.

4.2.1.10 Functional Area

A Functional Area is an organizational area. It classifies the expenses of a company in the following fields: Functions Administration, Sales and Distribution, Marketing, Production, Research and Development. The following attributes can be maintained:

Attribute	Description
Functional Area	Functional Area
Authorization Group	Authorization Group
Valid from	Valid-From Date
Valid to	Valid to date
Expiration Date	Expiration Date
Functional Area Substring 1	Functional Area Substring 1
Functional Area Substring 2	Functional Area Substring 2
Functional Area Substring 3	Functional Area Substring 3
Master Data Subdivision ID	Master Data Subdivision ID
Description (medium text)	Language dependent text

Change Request Types available:

CR Type	Description	Properties, Comments
IFK1S01	Create Functional Area and activate	Create, 1-step
IFK1S02	Process Functional Area and activate	Change, 1-step
IFK1SL1	Load Functional Area and activate	Load, 1-step
IFK2S01	Create Functional Area with approval	Create, 2-step
IFK2S02	Process Functional Area with approval	Change, 2-step
IFK2SL1	Load Functional Area with approval	Load, 2-step
IFK3S01	Create Functional Area with proc. and appr	Create, 3-step
IFK3S02	Process Functional Area with proc and appr	Change, 3-step

4.2.1.11 Operating Concern

An Operating Concern is an organizational unit. It defines the extent of the marketing and sales information that can be reported in combination. Every Operating Concern is being assigned by at least one Controlling Area. The following attributes can be maintained:

Attribute	Description
Operating Concern	Operating Concern
Distribution	Distribution
Period block	Period block
Industry version	Industry version
Created On	Created On
Created in Release	Created in Release
Operating Concern Status	Operating Concern Status
Operating Concern Status	Operating Concern Status
Environment	Environment
Operating Concern Status	Operating Concern Status
Currency	Currency
FLG CUR1	FLG CUR1
FLG CUR2	FLG CUR2
FLG CUR3	FLG CUR3
Obj. name	Object name
Message Type	Message Type
Client	Client
Type of Profit. Analysis	Type of Profit. Analysis
Fiscal Year Variant	Fiscal Year Variant
Program Version	Version number
SAP Release	SAP Release
Original op.concern	Original Operating Concern
System type	Communication application
Description (medium text)	Language dependent text
Act. 2nd per. type	Indicator: Update actual data in the second period type
Plan 2nd per. type	Indicator: Update plan data in the 2nd period type
Field Name	Field Name
Flag: Type of use	Flag: Type of use

Change Request Types available:

CR Type	Description	Properties, Comments
IER1S01	Create Operating Concern and activate	Create, 1-step
IER1S02	Process Operating Concern and activate	Change, 1-step
IER1SL1	Load Operating Concern and activate	Load, 1-step
IER2S01	Create Operating Concern with approval	Create, 2-step
IER2S02	Process Operating Concern with approval	Change, 2-step
IER2SL1	Load Operating Concern with approval	Load, 2-step
IER3S01	Create Operating Concern with proc. and appr	Create, 3-step
IER3S02	Process Operating Concern with proc and appr	Change, 3-step

4.2.1.12 Controlling Area

A Controlling Area includes several Company Codes. It is used for cost accounting purposes. The following attributes can be maintained:

Attribute	Description
Controlling Area	Controlling Area
Distribution Method	Distribution Method
Name	Name of the controlling area
Document type	Document type
Hierarchy Area	Hierarchy Area
Hierarchy 1	Use First Alternative Hierarchy for Authorizations
Hierarchy 2	Use Second Alternative Hierarchy for Authorizations
Do Not Use Std Hier.	Do Not Use Standard Hierarchy for Authorizatio
Currency Type	Currency Type for Controlling Area
C&V Profile Active	Ind.: Currency and Valuation Profile Active
Currency and Valuation Profile	Currency and Valuation Profile
Operating concern	Operating concern
FM Area	Financial Management Area
Hierarchy 1	Use First Alternative Hierarchy for Authorizations
Hierarchy 2	Use Second Alternative Hierarchy for Authorizations
Do Not Use Std Hier.	Do Not Use Standard Hierarchy for Authorizations
Std. Hierarchy	Do Not Use Standard Hierarchy for Authorizations
Description	Language dependent text
CoCd -> CO Area	Allocation Indicator
Productive indicator	Productive indicator for controlling area
Convert revenue	Indicator: Revenue must be converted
Reserve	Indicator: reserve (not used at present)

Chart of Accounts	Chart of Accounts
Currency	Currency Key
Fiscal Year Variant	Fiscal Year Variant
Logical System	Logical System
LSystem master data	Logical system for master data maintenance
Profit Center Local Currency	Local Currency for Profit Center Accounting
Currency type for Profit Ctr Acctg	Currency type of the profit center report currency
Transaction currency	Store transaction currency in EC-PCA
Account control transfer valuation diff.	Account control when transferring valuation differences
ALE distribution method	Method for Distributing Profit Centers Using ALE
Valuation View	Valuation View
Elim.Intern.Bus.Vol	Elimination of internal bus. volume for Profit Center Acctg
Profit ctr ledger	Profit center ledger
Hierarchy Area	Profit center area
Recon.Ledger	Reconciliation Ledger Active
Acct determination for primary CEImS	Reconciliation Ledger: Acct Determination for Primary CEImS
ValView for CalcBase	Valuation View for Calculation Base
Description (medium text)	Description (medium text)
Person Responsible	Person Responsible for the Controlling Area
Bus.Proc. ALE active	Indicator: ALE for active business process (process costs)
Diff. CCode Currency	Indicator: Different Company Code Currency is Allowed
Fiscal Year	Fiscal Year
AA: Activity Type	Account Assignment: Activity Type Active
Group Name	Group Name
Group Name	Group Name
All Currencies	Update all Currencies
Asset Accounting	Asset Accounting Active
Order Management	Order Management Active
Acty-Based Costing	Activity-Based Costing Active
ProfitAnalysis	Profitability analysis active
Fiscal Year	Fiscal year
Gener./ledger active	General ledger system active
Funds Management	Funds management active
Inc. sales orders	Inc. sales orders
Group Name	Group Name
Group Name	Group Name
Costing	CO product costing active

Cost Centers	Cost Center Accounting Active
Cost Objects	Cost Objects Active
Commit. Management	Order commitment management active
W. Commit. Mgt	W. Commit. Mgt
Profit Center Acctg	Profit Center Accounting is active
Profit center valuation	Profit center valuation
Projects	Projects active
Variiances	Compute with variiances
Real Estate Mgmt	Field is used
Down payments	Update of down payments to projects and orders
C Man. & Forecast	FI financial budgeting is active
Customer master	FI cust.master active
Payments	Update payments assigned to projects
CoCd Validation	CO Company Code Validation
Purchasing	Purchasing is active
Product costing	Product costing is active
Human Resources	Human Resources is active
Sales Orders	SD Order Processing is Active
Billing document	SD Billing is active
Company Name	Name of Company Code or Company

Change Request Types available:

CR Type	Description	Properties, Comments
IKO1S01	Create Controlling Area and activate	Create, 1-step
IKO1S02	Process Controlling Area and activate	Change, 1-step
IKO1SL1	Load Controlling Area and activate	Load, 1-step
IKO2S01	Create Controlling Area with approval	Create, 2-step
IKO2S02	Process Controlling Area with approval	Change, 2-step
IKO2SL1	Load Controlling Area with approval	Load, 2-step
IKO3S01	Create Controlling Area with proc. and appr	Create, 3-step
IKO3S02	Process Controlling Area with proc and appr	Change, 3-step

4.2.1.13 Tax Code

Tax codes are sequenced collections of one or more tax components that define the tax rates applied on line items and define how to calculate the tax amount.

Attribute	Description
AUFTL	Target Tax Code (for Deferred Tax)

EGRKZ	'Tax Relevant' Indicator (Only for External Tax System)
J1BISS	Tax Calculation: Service Without ICMS/IPI
J1BTAXL1	Tax law: ICMS
J1BTAXL2	Tax law: IPI
J1BTAXL4	COFINS Tax Law
J1BTAXL5	PIS Tax Law
J1BTXICE	ICMS Stored as "Exempt" Instead of "Other Basis"
J1BTXIPE	IPI Stored as "Exempt" Instead of "Other Basis"
J1BUSAGE	Tax Calculation: Material Usage
LAND1_TAX	Country Key
LSTML	Tax law: IPI
MOSSC1	MOSS Tax Reporting Country for Electronic Service
MWART	Indicator: Tax code for sales taxes
NEWDEFTA	New Deferred Tax Code: Yes/No
OSS_CLASS	OSS Classification
PROCD	Tax Calculation: Material Usage
PRUEF	EU Code / Code
TOLERANC	Tolerance Percentage Rate for Tax Calculation
TXIND	Tax Calculation: Service Without ICMS/IPI
TXREL	Tax law: ICMS
XINACT1	Set Tax Code to "Inactive" - No Further Use
XMSTU	SAP internal product code (external interface)
XSLTA1	Country for Tax Return
ZMWSK	Tax Category for US Taxes
ZMWSKESA	Target Tax Code for Deferred EU Acquisition Tax, Output Tax
ZMWSKESE	Target Tax Code for Deferred EU Acquisition Tax, Input Tax

Change Request Types available:

CR Type	Description	Properties, Comments
ITX1S01	Create Tax Code and activate	Create, 1-step
ITX1S02	Process Tax Code and activate	Change, 1-step
ITX1SL1	Load Tax Code and activate	Load, 1-step
ITX2S01	Create Tax Code with appr.	Create, 2-step
ITX2S02	Process Tax Code with appr.	Change, 2-step
ITX2SL1	Load Tax Code with appr.	Load, 2-step
ITX3S01	Create Tax Code with proc. and appr	Create, 3-step
ITX3S02	Process Tax Code with proc. and app	Change, 3-step

4.2.1.14 Valuation Class

A valuation class is used for the automatic determination of G/L accounts in material document posting.

Attribute	Description
KKREF	Account category reference

Change Request Types available:

CR Type	Description	Properties, Comments
IVC1S01	Create Valuation Class and activate	Create, 1-step
IVC1S02	Process Valuation Class and activate	Change, 1-step
IVC1SL1	Load Valuation Class and activate	Load, 1-step
IVC2S01	Create Valuation Class with appr.	Create, 2-step
IVC2S02	ProcessTax Code with appr.	Change, 2-step
IVC2SL1	Load Valuation Class with appr.	Load, 2-step
IVC3S01	Create Valuation CL with proc. and appr	Create, 3-step
IVC3S02	Process Valuation CL with proc. and app	Change, 3-step

4.2.2 Human Resources

4.2.2.1 Personnel Area

A Personnel Area is a subunit of a Company Code and is divided into several sub-areas. It is used for managing workforce, time and payroll. The following attributes can be maintained:

Attribute	Description
Personnel area	Personnel Area
City code	City Code
County code	County Code
Country Grouping	Country Grouping
Name 2	Name 2
City	City
Company Code	Company Code
Country Key	Country Key
Region	Region
PO Box	PO Box
Postal Code	Postal Code
Description	Language dependent text
Street and House No.	Street and House Number
Description (medium text)	Language dependent text

Address group	Address Group (Key) (Business Address Services)
City	City
c/o	Coname
House Number	House Number
Country Key	Country Key
Name	Language dependent text
Name 2	Language dependent text
Name 3	Language dependent text
Name 4	Language dependent text
Postal Code	City postal code
Region	Region
Description	Language dependent text
Search Term 1	Search Term 1
Search Term 2	Search Term 2
Street	Street
Title	Form-of-Address Key
Tax Jurisdiction	Tax Jurisdiction
Time zone	Address time zone

Change Request Types available:

CR Type	Description	Properties, Comments
IPA1S01	Create Personnel Area and activate	Create, 1-step
IPA1S02	Process Personnel Area and activate	Change, 1-step
IPA1SL1	Load Personnel Area and activate	Load, 1-step
IPA2S01	Create Personnel Area with approval	Create, 2-step
IPA2S02	Process Personnel Area with approval	Change, 2-step
IPA2SL1	Load Personnel Area with approval	Load, 2-step
IPA3S01	Create Personnel Area with proc. and appr	Create, 3-step
IPA3S02	Process Personnel Area with proc and appr	Change, 3-step

4.2.3 Logistics

4.2.3.1 Material Group

Material Groups are used to group materials with the same attributes or purpose. The following attributes (based on view V023 with tables T023 and T023T) can be maintained:

Attribute	Description
Material Group ID	Material Group
Description	Language dependent text
Valuation Classes	T025 - Valuation Classes
Division	TSPA - Organizational Unit: Sales Division
Default unit of weight	Unit of Measurement
Department	Department number
Class	Asset Class
AuthorizGroup	Authorization Group
Purch.value key	Purchasing Value Key
MG ref. matl	Material group reference material

Change Request Types available:

CR Type	Description	Properties, Comments
IMK1S01	Create Material Gr. and activate	Create, 1-step
IMK1S02	Process Material Gr. and activate	Change, 1-step
IMK1SL1	Load Material Gr. and activate	Load, 1-step
IMK2S01	Create Material Gr. with approval	Create, 2-step
IMK2S02	Process Material Gr. with approval	Change, 2-step
IMK2SL1	Load Material Gr. with approval	Load, 2-step
IMK3S01	Create Material Gr. with proc. and appr	Create, 3-step
IMK3S02	Process Material Gr. with proc and appr	Change, 3-step

4.2.3.2 Unit of Measurement

Units of Measurement are used to define quantities and physical units based on dimensions. The following attributes (based on table T006 and others) can be maintained:

Attribute	Description
Dimension	T006D - Dimensions
Unit of Measure	Internal Unit of Measurement Format
Measurement Unit Text	Language Dependent Text
Commercial / Techn. Text	Language dependent text
Decimal Places	Number of decimal places for number display
Float. Point Exp.	Base ten exponent for floating-point display
Numerator	Numerator for conversion to SI unit
Denominator	Denominator for conversion into SI unit
Exponent	base ten exponent for conversion to SI unit

Additive constant	Additive constant for conversion to SI unit
Decimal Rounding	No. of decimal places for rounding
Unit of meas.family:	Unit of measurement family
ISO code	ISO code for unit of measurement
Primary code	Selection field for conversion from ISO code to int. code
Commercial meas.unit:	Commercial measurement unit ID
Value-based commt:	Value-based commitment indicator

Change Request Types available:

CR Type	Description	Properties, Comments
IUM1S01	Create Unit of Meas. and activate	Create, 1-step
IUM1S02	Process Unit of Meas. and activate	Change, 1-step
IUM1SL1	Load Unit of Meas. and activate	Load, 1-step
IUM2S01	Create Unit of Meas. with approval	Create, 2-step
IUM2S02	Process Unit of Meas. with approval	Change, 2-step
IUM2SL1	Load Unit of Meas. with approval	Load, 2-step
IUM3S01	Create Unit of Meas. with proc and appr	Create, 3-step
IUM3S02	Process Unit of Meas with proc and appr	Change, 3-step

4.2.3.3 Plant

Plants are used to divide a corporation according to production, procurement, maintenance, and materials planning and define a place where goods are produced, or services are provided. The following attributes can be maintained:

Attribute	Description
Plant ID	Plant
Name 1	Description 1
Name 2	Description 2
Language Key	Language
Street and House No.	Street and House Number
PO Box	PO Box
Postal Code	Postal Code
City	City
Country Key	Country Key
Region	Region Code
County code	County Code

City code	City Code
Jurisdiction code	Tax Jurisdiction
Factory calendar	Factory calendar key

Additional Attributes available in the Data Model:

Attribute Description
Variance Key
Activating requirements planning
Number of days for PO tolerance - Compress info records - SU
Valuation area
Sales district
Take regular vendor into account
Indicator: batch status management active
Superior Department Store
Batch Record: Type of DMS Used
Distribution profile at plant level
Order Allocation Run
Indicator: Season Active in Inventory Management
Division for intercompany billing
Maintenance Planning Plant
Business Place
Indicator: Conditions at plant level
Indicator: Source list requirement
Customer number of plant
Number of Days for First Reminder/Expediter
Number of Days for Second Reminder/Expediter
Number of Days for Third Reminder/Expediter
Vendor number of plant
Control of Credit of Cost Centers
Update of Activity Consumption in the Quantity Structure
Updating is active in actual costing
Updating is active for mixed costing
Node type: supply chain network
Structure for name formation
IPI credit allowed
Vendor type (refinery/mill/other) (Brazil)
Exchange valuation indicator
Cost Object Controlling linking active
Invoke Added-Function Source Determination via ATP

Store Category to Differentiate Store, Dep. Store, Shop
Tax Indicator: Plant (Purchasing)
Text name of 1st dunning of vendor declarations
Text name of the 2nd dunning of vendor declarations
Text name of 3rd dunning of vendor declarations
Sales organization for intercompany billing
Plant category
Shipping Point/Receiving Point
Rule for determining the sales area for stock transfers
Distribution channel for intercompany billing
SOP plant
Supply region (region supplied)

Change Request Types available:

CR Type	Description	Properties, Comments
IPT1S01	Create Plant and activate	Create, 1-step
IPT1S02	Process Plant and activate	Change, 1-step
IPT1SL1	Load Plant and activate	Load, 1-step
IPT2S01	Create Plant with approval	Create, 2-step
IPT2S02	Process Plant with approval	Change, 2-step
IPT2SL1	Load Plant with approval	Load, 2-step
IPT3S01	Create Plant with proc. and appr	Create, 3-step
IPT3S02	Process Plant with proc and appr	Change, 3-step

4.2.3.4 Division

Divisions can be assigned to a Sales Division and Materials can be created referencing a Division. A Division consists out of multiple products or a product line with strong similarities. The following attributes can be maintained:

Attribute	Description
Division	Division
Description (short text)	Language dependent text

Change Request Types available:

CR Type	Description	Properties, Comments
IPT1S01	Create Division and activate	Create, 1-step
IPT1S02	Process Division and activate	Change, 1-step
IPT1SL1	Load Division and activate	Load, 1-step
IPT2S01	Create Division with approval	Create, 2-step
IPT2S02	Process Division with approval	Change, 2-step
IPT2SL1	Load Division with approval	Load, 2-step
IPT3S01	Create Division with proc. and appr	Create, 3-step
IPT3S02	Process Division with proc and appr	Change, 3-step

4.2.3.5 Factory Calendar

Factory Calendars are assigned to Plants. They are used to monitor & manage the working days and holidays in a year. The following attributes can be maintained:

Attribute	Description
Factory Calendar ID	Transport/Conversion: Identification (LIMU, TABU...)
Termination flag	Termination Flag
Curr. until year	Year, until which calendar is in buffer
Curr.from year	Year, from which calendar is in buffer
No.of first workday	Characteristic Basic Data
To Year	Year until which data is saved
Date	Creation date
Changed At	Calendar: Created or Changed At
User	Changed By
Bit for workday	Indicator: day is workday
Bit for workday	Indicator: day is workday
Bit for workday	Indicator: day is workday
Bit for workday	Indicator: day is workday
Holiday Calendar ID	Holiday Calendar ID
Termination flag	Interval Length for Leave Entitlement
Bit for workday	Indicator: day is workday
Bit for workday	Indicator: day is workday
Bit for workday	Indicator: day is workday
Bit for workday	Indicator: day is workday
Holidays long text	Language independent text
Description (long text)	Language dependent text
From year	Year from which data is stored
Year stored	Year for which levy is to be carried out

From date	Year from which levy is to be carried out
To date	To date
Bit for workday	Bit for workday
Text	Language Dependant Text
Language Key	Language Key

Change Request Types available:

CR Type	Description	Properties, Comments
IID1S01	Create Factory Calendar and activate	Create, 1-step
IID1S02	Process Factory Calendar and activate	Change, 1-step
IID1SL1	Load Factory Calendar and activate	Load, 1-step
IID2S01	Create Factory Calendar with approval	Create, 2-step
IID2S02	Process Factory Calendar with approval	Change, 2-step
IID2SL1	Load Factory Calendar with approval	Load, 2-step
IID3S01	Create Factory Calendar with proc. and appr	Create, 3-step
IID3S02	Process Factory Calendar with proc and appr	Change, 3-step

4.2.3.6 Laboratory/Office

The Lab/Office object is used to define a Laboratory or Office at a certain location. They can be assigned to a Material (usually for chemicals). The following attributes can be maintained:

Attribute	Description
Lab/Office	Lab/Office
Description (medium text)	Language dependent Text

Change Request Types available:

CR Type	Description	Properties, Comments
ILB1S01	Create Lab/Office and activate	Create, 1-step
ILB1S02	Process Lab/Office and activate	Change, 1-step
ILB1SL1	Load Lab/Office and activate	Load, 1-step
ILB2S01	Create Lab/Office with approval	Create, 2-step
ILB2S02	Process Lab/Office with approval	Change, 2-step
ILB2SL1	Load Lab/Office with approval	Load, 2-step
ILB3S01	Create Lab/Office with proc. and appr	Create, 3-step
ILB3S02	Process Lab/Office with proc and appr	Change, 3-step

4.2.3.7 Location

Locations form the foundation of transportation processes. They are used to define a place (physical or logical) in which resources are managed. The following attributes can be maintained:

Attribute	Description
Location	Location
Plant	Plant
Description (medium text)	Language dependant text
Address group	Address Group (Key) (Business Address Services)
City	City
c/o	Coname
House Number	House Number
Name	Language independent text
Name 2	Language independent text
Name 3	Language independent text
Name 4	Language independent text
Postal Code	City postal code
Description	Language dependent text
Search Term 1	Search Term 1
Search Term 2	Search Term 1
Street	Street
Title	Form-of-Address Key
Tax Jurisdiction	Tax Jurisdiction
Time zone	Address time zone
Country Key	Country Key
Region	Region

Change Request Types available:

CR Type	Description	Properties, Comments
ILC1S01	Create Location and activate	Create, 1-step
ILC1S02	Process Location and activate	Change, 1-step
ILC1SL1	Load Location and activate	Load, 1-step
ILC2S01	Create Location with approval	Create, 2-step
ILC2S02	Process Location with approval	Change, 2-step
ILC2SL1	Load Location with approval	Load, 2-step

ILC3S01	Create Location with proc. and appr	Create, 3-step
ILC3S02	Process Location with proc and appr	Change, 3-step

4.2.3.8 Material Status

A Material Status is used to indicate, if a Material is subject to any kind of restrictions (e.g. development, blocked, released). The following attributes can be maintained:

Name	Description
Material Status	Plant-Specific Material Status
Profile Name	Profile Name for ALE Change Authorization
Routing/master recipe message	Message if material is used in routing/master recipe
Inventory mgmt msg.	Message if material is used in Inventory Management
MRP message	Message if material is used in MRP
Purchasing msg.	Message if material is used in Purchasing
Mat. Cost Estimate Procedure	Material cost estimate procedure
POrder header msg.	Message if material is used in production order header
PO/network item msg.	Message if Material Used in Production Order or Network Item
PRT message	Message if PRT are assigned to routing or order
Plant maint. message	Message if material is used in Plant Maintenance
LT planning message	Message if material used in long-term planning
Distr. lock	Indicator: distribution lock
Ind. reqmt msg.	Message if independent requirement is created for material
Forecasting message	Message if material is used in Forecasting
QM inspection msg.	Message if material is used in QM inspection procedures
BOM header msg.	Message if Material Is Used in BOM Header
BOM item message	Message if material is used as BOM item
Transfer order message	Message if material is used in WM transfer order
Transfer requirement msg.	Message if material used in WM transfer reqmt/posting change
Blocked POrd. Gen.	Blocked for PO Generation in Purchase Quantity Planning
Lock Order Planning	Locked for Purchase Quantity Planning
Lock Rtn to Publ.	Locked for Return to Publisher
Blocked POrd. Gen.	Locked for Purchase Order Gen. for Return to Publisher
Description (medium text)	Language dependent text

Change Request Types available:

CR Type	Description	Properties, Comments
IMS1S01	Create Material Status and activate	Create, 1-step
IMS1S02	Process Material Status and activate	Change, 1-step
IMS1SL1	Load Material Status and activate	Load, 1-step
IMS2S01	Create Material Status with approval	Create, 2-step
IMS2S02	Process Material Status with approval	Change, 2-step
IMS2SL1	Load Material Status with approval	Load, 2-step
IMS3S01	Create Material Status with proc. and appr	Create, 3-step
IMS3S02	Process Material Status with proc and appr	Change, 3-step

4.2.3.9 Material Type

Material Types are used to categorize materials with similar attributes (e.g. finished products, raw materials, ...). The following attributes can be maintained:

Attribute	Description
Material Type	Material type
Valuation	Update Movements in Quantity in All Valuation Areas
Display material	Display material
Time till deleted	Time in days until a material is deleted
Valuation	Update Value Flows in All Valuation Areas
Authorization Group	Authorization Group
Ext. Purchase Orders	External Purchase Orders Allowed
Int. purchase orders	Internal purchase orders allowed
Class	Class
Class type	Class type
With Qty Structure	With qty structure
External no. assignment w/o check	External Number Assignment Without Validation
Field reference	Field selection reference
Initial Status	Initial status of a new batch
Acct cat. reference	Account category reference
Grouping indicator	Grouping indicator
Material is configurable	Configurable Material
Manufacturer part no.	Indicator: Use manufacturer part numbers

Pipeline mandatory	Pipeline Handling Mandatory
Material f. process	Material Master Record for a Process
Price ctrl mandatory	Price Control Mandatory
SRef: material type	Screen reference depending on the material type
X-plant matl status	Cross-Plant Material Status
Ref. material type	Reference material type
Print price	Print price
Maintenance status	Maintenance status
Description (medium text)	Language dependent text
Item category group	Default value for material item category group
Price control	Price control indicator
Material type ID	Material type ID
Valuation area	Valuation area
Pipeline mandatory	Pipeline Handling Mandatory
Quantity updating	Quantity Updating in Material Master Record
Value updating	Value Updating in Material Master Record
Pipeline allowed	Pipeline handling allowed
Maintenance status	Maintenance status of material master record

Change Request Types available:

CR Type	Description	Properties, Comments
IMT1S01	Create Material Type and activate	Create, 1-step
IMT1S02	Process Material Type and activate	Change, 1-step
IMT1SL1	Load Material Type and activate	Load, 1-step
IMT2S01	Create Material Type with approval	Create, 2-step
IMT2S02	Process Material Type with approval	Change, 2-step
IMT2SL1	Load Material Type with approval	Load, 2-step
IMT3S01	Create Material Type with proc. and appr	Create, 3-step
IMT3S02	Process Material Type with proc and appr	Change, 3-step

4.2.3.10 BOM Usage

The Bill of Materials Usage is used to define the parts, components and raw materials needed, to produce a finished "end-item". The following attributes can be maintained:

Name	Description
BOM Usage	BOM Usage
Spare part indicator	Indicator: spare part

Spare part	Indicator: spare part
Production	Indicator: item relevant to production
Plant maintenance	Indicator: item relevant to plant maintenance
Costing	Indicator: item relevant to costing
Engineering/design	Indicator: item relevant to engineering
Sales	Indicator: item relevant to sales & distribution (SD)
HL configuration	Indicator: item relevant to high-level configuration
Relevant to sales	Indicator: item relevant to sales
Production relevant	Indicator: item relevant to production
Plant maintenance	Indicator: item relevant to plant maintenance
Relevancy to Costing Indicator	Indicator: item relevant to costing
Engineering/design	Indicator: item relevant to engineering
HL configuration	Indicator: high-level configuration
Description (medium text)	Language dependent text

Change Request Types available:

CR Type	Description	Properties, Comments
IST1S01	Create BOM Usage and activate	Create, 1-step
IST1S02	Process BOM Usage and activate	Change, 1-step
IST1SL1	Load BOM Usage and activate	Load, 1-step
IST2S01	Create BOM Usage with approval	Create, 2-step
IST2S02	Process BOM Usage with approval	Change, 2-step
IST2SL1	Load BOM Usage with approval	Load, 2-step
IST3S01	Create BOM Usage with proc. and appr	Create, 3-step
IST3S02	Process BOM Usage with proc and appr	Change, 3-step

4.2.3.11 Storage Location

A Storage Location defines a location where physical goods are stored. While a Storage Location can have an own address, this address needs to be within a Plant, as all Storage Locations are a sub-Storage Location of a Plant. The following attributes can be maintained:

Attribute	Description
Storage location	Storage Location
Plant	Plant
SLoc MRP indicator	Storage location MRP indicator

Descr. of Storage Loc.	Description of Storage Location
Division	Division
Sales Organization	Sales Organization
Distribution Channel	Distribution Channel
Business System	Business System
Inv Mngmnt Type	Invoice management type
In-transit assignment	TD in-transit flag
License number	License number for untaxed stock
Description (short text)	Language dependent text
Shipping Point/Receiving Pt	Shipping Point/Receiving Point
Authorization check	Storage location authorization for goods movements active
Freeze book inv.SLoc	Freezing book inventory bal. allowed in stor. loc.
HU reqmnt	Handling unit requirement
Neg.stocks in SLoc.	Negative stocks allowed in storage location
Stor. resource	Storage location is allocated to resource (storage resource)
Sequence Number	Sequence Number
City	City
c/o	Coname
House Number	House Number
Name	Language independent text
Name 2	Language independent text
Name 3	Language independent text
Name 4	Language independent text
Postal Code	Postal Code
Description	Language dependent text
Search Term 1	Search Term 1
Search Term 2	Search Term 2
Street	Street
Title	Form-of-Address Key
Tax Jurisdiction	Tax Jurisdiction
Time zone	Address time zone
Country Key	Country Key
Region	Region

Change Request Types available:

CR Type	Description	Properties, Comments
ILG1S01	Create Storage Location and activate	Create, 1-step
ILG1S02	Process Storage Location and activate	Change, 1-step

ILG1SL1	Load Storage Location and activate	Load, 1-step
ILG2S01	Create Storage Location with approval	Create, 2-step
ILG2S02	Process Storage Location with approval	Change, 2-step
ILG2SL1	Load Storage Location with approval	Load, 2-step
ILG3S01	Create Storage Location with proc. and appr	Create, 3-step
ILG3S02	Process Storage Location with proc and appr	Change, 3-step

4.2.3.12 MRP Profile

A MRP Profile is used to define which fields are filled with which values when MRP data is entered in the material master record. It also defines which values can be overwritten.

Change Request Types available:

CR Type	Description	Properties, Comments
IMRP1S01	Create MRP Profile and activate	Create, 1-step
IMRP1S02	Process MRP Profile and activate	Change, 1-step
IMRP1SL1	Load MRP Profile and activate	Load, 1-step
IMRP2S01	Create MRP Profile with approval	Create, 2-step
IMRP2S02	Process MRP Profile with approval	Change, 2-step
IMRP2SL1	Load MRP Profile with approval	Load, 2-step
IMRP3S01	Create MRP Profile with proc. & app	Create, 3-step
IMRP3S02	Process MRP Profile with proc. & app	Change, 3-step

4.2.3.13 MRP Type

MRP Types are used to control which procedure is used to plan a material and which MRP parameters can be entered when maintaining a material master record.

Attribute	Description
ALTSL	Method for Selecting Alternative Bills of Material
AUFTL	Splitting Indicator
AUSSS	Assembly scrap in percent
BESKZ	Procurement Type
BSTFE	Fixed lot size
BSTMA	Maximum Lot Size
BSTMI	Minimum Lot Size
BSTRF	Rounding value for purchase order quantity

DISGR	MRP Group
DISLS	Lot size (materials planning)
DISMM	MRP Type
DISPO	MRP controller
DZEIT	In-house production time
EISBE	Safety stock
EISLO	Minimum Safety Stock
EKGRP1	Purchasing group
FHORI	Scheduling Margin Key for Floats
FXHOR	Planning time fence
KAUSF	Component scrap in percent
KZBED	Indicator for Requirements Grouping
KZDIE	Indicator: MRP controller is buyer (deactivated)
KZECH	Determination of batch entry in the production/process order
LAGPR	Storage costs indicator
LFRHY	Planning cycle
LGFSB	Default storage location for external procurement
LGPRO	Issue Storage Location
LGRAD	Service level
LOSFX	Ordering costs
MAABC	ABC Indicator
MABST	Maximum stock level
MDACH	Action control: planned order processing
MEINS	Base Unit of Measure
MINBE	Reorder Point
MISKZ	Mixed MRP indicator
MRPPP	PPC planning calendar
MTVFP	Checking Group for Availability Check
PERIV1	Fiscal Year Variant
PERKZ	Period Indicator
PLIFZ	Planned delivery time in days
PLIFZX	Consider Planned Delivery Time of the MRP Area
RDPRF	Rounding Profile
RGEKZ	Indicator: Backflush
RWPRO	Range of coverage profile
SAUFT	Ind.: Repetitive mfg allowed
SBDKZ	Dependent requirements ind. for individual and coll. reqmts
SCHGT	Indicator: bulk material
SFEPR	Repetitive manufacturing profile
SHFLG	Safety time indicator (with or without safety time)

SHZET	Safety time (in workdays)
SOBSL	Special procurement type
STRGR	Planning strategy group
TAKZT	Takt time
USEQU	Quota arrangement usage
VINT1	Consumption period: backward
VINT2	Consumption period: forward
VPMAT	Planning material
VPREF	Conv. factor f. plng material
VPWRK	Planning plant
VRMOD	Consumption mode
WAERS1	Currency Key
WEBAZ	Goods receipt processing time in days
WZEIT	Total replenishment lead time (in workdays)

Change Request Types available:

CR Type	Description	Properties, Comments
IMRT1S01	Create MRP Type	Create, 1-step
IMRT1S02	Process MRP Type	Change, 1-step
IMRT1SL1	Load MRP Type and activate	Load, 1-step
IMRT2S01	Create MRP Type with approval	Create, 2-step
IMRT2S02	Process MRP Type with approval	Change, 2-step
IMRT2SL1	Load MRP Type with approval	Load, 2-step
IMRT3S01	Create MRP Type with proc. & app	Create, 3-step
IMRT3S02	Process MRP Type with proc. & app	Change, 3-step

Attribute	Description
A1BED	Dependent reservation - standard orders
A2BED	Dependent reservation - plant maintenance orders and network
BBBED	Material staging reqmts (subcontr. reqmts) MRP element BB
CBPPT	Method by which a material is planned
DISVF	MRP procedure
DYFOL	Screen sequence for the header details
FXART	Firming Type of the Planning Result
ICBED	Reorder point planning with external requirements
KZMEB	Indicator: calculate reorder level

KZREG	Indicator: plan material regularly
KZSIB	Indicator: calculate safety stock
PROKZ	Forecast indicator
PROOS	MRP indicator of forecast
PROVB	Consumption indicator of forecast
PRRED	Reduce forecast requirements
RESPL	Indicator: delete firm planned orders
RYBED	Time-phased planning with requirements (MRP)
U1BED	Release for stock transfer order
U2BED	Delivery schedule for a stock transfer requisition
U4BED	Delivery schedule for stock transport scheduling agreement

4.2.3.14 MRP Area

The MRP Area is a logical organizational unit that represents a specific production or planning area in a company. It is used to define and control MRP parameters and planning processes for a specific area within a company.

Attribute	Description
BERTY	Type of MRP area
ORTZG	Receiving storage location
SPE_BNTYP	Business Types of MRP Area
WERZG	Plant

Change Request Types available:

CR Type	Description	Properties, Comments
IMRA1S01	Create MRP Area and activate	Create, 1-step
IMRA1S02	Process MRP Area and activate	Change, 1-step
IMRA1SL1	Load MRP Area and activate	Load, 1-step
IMRA2S01	Create MRP Area with Appr.	Create, 2-step
IMRA2S02	Process MRP Area with Appr.	Change, 2-step
IMRA2SL1	Load MRP Area with Appr.	Load, 2-step
IMRA3S01	Create MRP Area with proc. and appr.	Create, 3-step
IMRA3S02	Process MRP Area with proc. and appr.	Change, 3-step

4.2.3.15 Scope of Planning

The Scope of Planning in SAP is a configuration that defines the organizational units (such as plants or MRP areas) and their sequence to be planned during an MRP (Material Requirements

Planning) run. This feature allows you to consolidate planning runs across multiple plants or MRP areas, making it easier to manage large enterprises.

Attribute	Description
PUWNR	ID: Scope of planning for MRP unit
PUWTX	Description: Scope of Planning
COUNTER	Counter (Sequential List of Plants and MRP Areas)
PLANTID	ID: Plant
BERID	ID: MRP Area

Change Request Types available:

CR Type	Description	Properties, Comments
IPS1S01	Create Planning Scope and activate	Create, 1-step
IPS1S02	Process Planning Scope and activate	Change, 1-step
IPS1SL1	Load Planning Scope and activate	Load, 1-step
IPS2S01	Create Planning Scope with approval	Create, 2-step
IPS2S02	Process Planning Scope with approval	Change, 2-step
IPS2SL1	Load Planning Scope with approval	Load, 2-step
IPS3S01	Create Planning Scope w. proc. and app	Create, 3-step
IPS3S02	Process Planning Scope w. proc. and appr	Change, 3-step

4.2.3.16 MRP Controller

The MRP Controller is a person responsible for monitoring and managing the MRP process for a specific set of materials or production areas within a company.

Attribute	Description
WERKS	Plant
DISPO	MRP Controller
DSNAM	Name of MRP controller
DSTEL	MRP controller's telephone number
EKGRP	Purchasing Group
MEMPF	Recipient Name
GSBER	Business Area
PRCTR	Profit Center
USRTYP	Recipient type
USRKEY	Object ID for recipient

Change Request Types available:

CR Type	Description	Properties, Comments
IMRC1S01	Create MRP Controller and activate	Create, 1-step
IMRC1S02	Process MRP Controller and activate	Change, 1-step
IMRC1SL1	Load MRP Controller and activate	Load, 1-step
IMRC2S01	Create MRP Controller with appr.	Create, 2-step
IMRC2S02	Process MRP Controller with appr.	Change, 2-step
IMRC2SL1	Load MRP Controller with appr.	Load, 2-step
IMRC3S01	Create MRP Controlle with proc. and appr	Create, 3-step
IMRC3S02	ProcessMRP Controller with proc. and app	Change, 3-step

4.2.3.17 Classification

The classification is a general concept which for example allows business users to define additional attributes (characteristics) which can be used as additional attributes in the maintenance of material data. It consists of characteristics which are bundled in classes.

Class attributes available:

Attribute	Description
ADATU	Date on which the record was created
AENNR1	Change Number
ANAME	Name of Person who Created the Object
ANZUO	Number of Assignments
AUSGD	Issue date
BGRKL	Classification authorization group
BGRKP	Class maintenance authorization group
BGRSE	Authorization group for finding objects
BISDT	Valid-to date
BNAME	Block name
CLALT	Alternative Display Format
CLASS1	Class
CLMOD	Default Class Data - Can Be Overwritten in Component
CLMUL	Multiple Selection Allowed
CLOBK	Required Component
CVIEW	Organizational Area
DINKZ	DIN class indicator

DISST	Low-Level Code
DOKAR	Document Type
DOKTL	Document part
DOKVR	Document version
GENRKZ	Table for Finding Objects: To Be Generated=X, Generated=R
KATALOG	Name of External Catalog
KDOKAZ	Always Display Document for Class
KLAGR	Class Group
KLART	Class Type
KNOBJ	Number of Object with Assigned Dependencies
LBREI	Total width of list
LEIST	Characteristics table
LOCLA	Local class

Change Request Types for Classes available:

CR Type	Description	Properties, Comments
ICL1S01	Create Class and activate	Create, 1-step
ICL1S02	Process Class and activate	Change, 1-step
ICL1SL1	Load Class and activate	Load, 1-step
ICL2S01	Create Class with approval	Create, 2-step
ICL2S02	Process Class with approval	Change, 2-step
ICL2SL1	Load Class with approval	Load, 2-step
ICL3S01	Create Class with proc. and appr.	Create, 3-step
ICL3S02	Process Class with proc. and appr.	Change, 3-step

Attributes for characteristics available:

Attribute	Description
ABTEI	Organizational Area
AENNR	Change Number
AMERK	Relevancy indicator (print, search, display)
ANZRE	Display Relevant
BLLIN	Line Number in Block
CKBOX	Checkbox
COLOR	Color
CUSTR	Text, 40 Characters Long
DATUV	Valid-From Date
DINKB	Code letter
DPLEN	Field output length
DPTXT	Display Text Instead of Content

DRURE	Print Relevant
HERKU	Characteristic origin
IMERK	Internal characteristic
INDRE	Index Characteristic
INPUT	Entry
INTSF	Highlighted
INVER	Inverse
JUSTR	Display right-justified
LKENZ	Deletion Indicator
MKENN	Standard Code Letter
OFFST	Offset in work area
OMERK	Object-Dependent Characteristic
RELEV	Relevancy Indicator
SELRE	Search Relevant
TECHV	Indicator: changed with new effectivity
VMERK	New characteristic without values

Change Request Types for Characteristics available:

CR Type	Description	Properties, Comments
ICH1S01	Create Characteristic and activate	Create, 1-step
ICH1S02	Process Characteristic and activate	Change, 1-step
ICH1SL1	Load Characteristic and activate	Load, 1-step
ICH2S01	Create Characteristic with approval	Create, 2-step
ICH2S02	Process Characteristic with approval	Change, 2-step
ICH2SL1	Load Characteristic with approval	Load, 2-step
ICH3S01	Create Characterist with proc. and appr.	Create, 3-step
ICH3S02	Process Characteris with proc. and appr.	Change, 3-step

4.2.4 Sales

4.2.4.1 Product Hierarchy

A Product Hierarchy defines a structure of products or materials which can be used for statistical analysis or pricing. Different levels can be defined (e.g. Branches and Divisions) and used for the creation of the structure. Products assigned to the last level are called Sub Nodes and products on higher levels are called Nodes.

New Nodes and Sub Nodes can be created and maintained in different languages and are assigned into the Product Hierarchy structure before they are replicated to a target system. SAP receivers store that data in table T179.

During the initial load of a product hierarchy external numbers defined in source system are loaded and mapped to RDM numbers. New Nodes or Sub Nodes will get new RDM numbers (through number ranges defined for each product hierarchy level) and external numbers.

Assignments of Nodes or Sub Nodes to the Product Hierarchy can be changed and might include the new assignment of a complete subtree consisting of Nodes and Sub Nodes. This will change external numbers accordingly for the usage in receiver systems.

The following attributes can be maintained:

Attribute	Description
Product Hierarchy Name	Product Hierarchy Name
Product Hierarchy Sub Node	Product Hierarchy Sub Node
External Number	External number
Description (Long Text)	Language dependent text
Product Hierarchy Node	Product Hierarchy Node
External Number	Language dependent text
Prod.Hier. Level	Product Hierarchy Level

Change Request Types:

CR Type	Description	Properties, Comments
IPH1SE1	Create Prod.Hier. and activate	Create, 1-step
IPH1SE2	Process Prod.Hier. and activate	Change, 1-step
IPH1SE4	Hierarchy Proc. Prod. Hier. w Activate	Load, 1-step
IPH1SEL	Load Prod.Hier. and activate	Load, 1-step
IPH2SE1	Create Prod.Hier. with approval	Create, 2-step
IPH2SE2	Process Prod.Hier. with approval	Change, 2-step
IPH2SE4	Hierarchy Proc. Prod. Hier. with Approv.	Load, 2-step
IPH2SEL	Load Prod.Hier. with approval	Load, 2-step
IPH3SE1	Create Prod.Hier. with proc. and appr.	Create, 3-step
IPH3SE2	Process Prod.Hier. with proc. and appr.	Change, 3-step

4.2.4.2 Sales Organization

Sales Organizations are used to define responsibilities for selling materials and services. The following attributes can be maintained:

Attribute	Description
Sales Organization ID	Sales Organization
Description	Language dependent text
Currency	Currency Code
Address text name	Text name for form text module short address
Letter header text	Text name for form text module letter header
Footer lines text	Text name for formula text module footer lines
Greeting text name	Text name for form text module: Greeting
Text SDS sender	Text names for layout-set module SDS sender
Ref. Sales Organization	Reference sales org.for sales doc.types (by sales area)
Cust.inter-co.bill.	Customer number for intercompany billing
Sales org.calendar	Sales organization calendar
Rebate proc.active	Rebate processing active in the sales organization
Purch. Organization	Purchasing Organization
Purchasing Group	Purchasing Group
Vendor	Account Number of Vendor or Creditor
Order Type	Order Type (Purchasing)
Plant	Plant
Storage location	Storage location
Movement Type	Movement Type (Inventory Management)

Additional Attributes available in the Data Model:

Attribute Description
Purchasing document category
Time of numbering for deliveries
Maximum Number of Items in Billing Document
Tax code for SD documents
Price protection period
Unit for price protection
Determining the VAT registration number

Change Request Types available:

CR Type	Description	Properties, Comments
ISO1S01	Create Sales Org. and activate	Create, 1-step
ISO1S02	Process Sales Org. and activate	Change, 1-step
ISO1SL1	Load Sales Org. and activate	Load, 1-step
ISO2S01	Create Sales Org. with approval	Create, 2-step
ISO2S02	Process Sales Org. with approval	Change, 2-step
ISO2SL1	Load Sales Org. with approval	Load, 2-step
ISO3S01	Create Sales Org. with proc. and appr	Create, 3-step
ISO3S02	Process Sales Org. with proc and appr	Change, 3-step

4.2.4.3 Payment Terms

Payment Terms are used to define the terms of payment used for customers and vendors based on the date of payment (e.g. 3% discount within 14 days). The following attributes can be maintained:

Attribute	Description
Payment Term ID	Payment Term
Sales Text	Payment Term Description (Text)
Day Limit	Day Limit
Own Explanation	Own Explanation (Text)
Customer	Indicator: Customer account type
Vendor	Indicator: Vendor account type
Fixed Day	Fixed Day
Additional Months	Additional Months
Block Key	Transfer payment block when changing terms of payment?
Payment Method	Transfer payment method when changing terms of payment?
Default for Baseline date	Indicator: No default for the base date / Propose document date / Propose entry date / Propose posting date
Installment Payment	Indicator: Term for installment payment
Rec. Entries Suppl. In Master	Recurring Entries: Add Terms of Payment from Master Record
Percentage – Term 1	Cash Discount Percentage Rate
No of days – Term 1	Days from Baseline Date for Payment
Fixed Date – Term 1	Due Date for Special Condition
Add. Months – Term 1	Additional Months for Special Condition (Term 1)
Percentage – Term 2	Cash Discount Percentage Rate
No of days – Term 2	Days from Baseline Date for Payment
Fixed Date – Term 2	Due Date for Special Condition

Add. Months – Term 2	Additional Months for Special Condition (Term 2)
No of days – Term 3	Days from Baseline Date for Payment
Fixed Date – Term 3	Due Date for Special Condition
Add. Months – Term 3	Additional Months for Special Condition (Term 3)
Explanation 1	Explanation Term 1 (Text)
Explanation 2	Explanation Term 2 (Text)
Explanation 3	Explanation Term 3 (Text)
Explanation 4	Explanation 4

Change Request Types available:

CR Type	Description	Properties, Comments
IPY1S01	Create Payment Term and activate	Create, 1-step
IPY1S02	Process Payment Term and activate	Change, 1-step
IPY1SL1	Load Payment Term and activate	Load, 1-step
IPY2S01	Create Payment Term with approval	Create, 2-step
IPY2S02	Process Payment Term with approval	Change, 2-step
IPY2SL1	Load Payment Term with approval	Load, 2-step
IPY3S01	Create Payment Term with proc. and appr	Create, 3-step
IPY3S02	Process Payment Term with proc and appr	Change, 3-step

4.2.4.4 Distribution Channel

Distribution Channels are assigned to at least one Sales Organization. They define the channel through which goods (or e.g. services) reach a customer. The following attributes can be maintained:

Attribute	Description
Distribution Channel	Distribution Channel
Description (Short Text)	Language dependent Text

Change Requests Types available:

CR Type	Description	Properties, Comments
IVT1S01	Create Distribution Channel and activate	Create, 1-step

IVT1S02	Process Distribution Channel and activate	Change, 1-step
IVT1SL1	Load Distribution Channel and activate	Load, 1-step
IVT2S01	Create Distribution Channel with approval	Create, 2-step
IVT2S02	Process Distribution Channel with approval	Change, 2-step
IVT2SL1	Load Distribution Channel with approval	Load, 2-step
IVT3S01	Create Distribution Channel with proc. and appr	Create, 3-step
IVT3S02	Process Distribution Channel with proc and appr	Change, 3-step

4.2.4.5 Incoterms

Incoterms are used to define internationally recognized trading terms. These terms are approved by the International Chamber of Commerce (ICC). The following attributes can be maintained:

Attribute	Description
Incoterms	Incoterms (Part 1)
GI at loading/proof of delivery	Goods issue at loading, proof of delivery (POD)
Title transf. loc.	Title transfer loc.
Location mandatory	Location is mandatory
Description (medium text)	Language dependent Text

Change Requests Types available:

CR Type	Description	Properties, Comments
IIC1S01	Create Incoterm and activate	Create, 1-step
IIC1S02	Process Incoterm and activate	Change, 1-step
IIC1SL1	Load Incoterm and activate	Load, 1-step
IIC2S01	Create Incoterm with approval	Create, 2-step
IIC2S02	Process Incoterm with approval	Change, 2-step
IIC2SL1	Load Incoterm with approval	Load, 2-step
IIC3S01	Create Incoterm with proc. and appr	Create, 3-step
IIC3S02	Process Incoterm with proc and appr	Change, 3-step

4.2.4.6 Sales Group

Sales Groups are used to define groups of sales persons working for a certain company or department. This primarily helps to monitor and manage work force. The following attributes can be maintained:

Attribute	Description
Sales Group	Sales group
Description (short text)	Language dependent Text

Change Requests Types available:

CR Type	Description	Properties, Comments
IVK1S01	Create Sales Group and activate	Create, 1-step
IVK1S02	Process Sales Group and activate	Change, 1-step
IVK1SL1	Load Sales Group and activate	Load, 1-step
IVK2S01	Create Sales Group with approval	Create, 2-step
IVK2S02	Process Sales Group with approval	Change, 2-step
IVK2SL1	Load Sales Group with approval	Load, 2-step
IVK3S01	Create Sales Group with proc. and appr	Create, 3-step
IVK3S02	Process Sales Group with proc and appr	Change, 3-step

4.2.4.7 Shipping Conditions

Shipping Conditions are assigned to a customer and define the conditions, under which a shipment to said customer takes place. They are crucial for determining the Shipping Point of a delivery. The following attributes can be maintained:

Attribute	Description
Shipping Conditions	Shipping Conditions
Description (short text)	Language dependent Text

Change Requests Types available:

CR Type	Description	Properties, Comments
IVB1S01	Create Shipping Condition and activate	Create, 1-step
IVB1S02	Process Shipping Condition and activate	Change, 1-step
IVB1SL1	Load Shipping Condition and activate	Load, 1-step
IVB2S01	Create Shipping Condition with approval	Create, 2-step
IVB2S02	Process Shipping Condition with approval	Change, 2-step

IVB2SL1	Load Shipping Condition with approval	Load, 2-step
IVB3S01	Create Shipping Condition with proc. and appr	Create, 3-step
IVB3S02	Process Shipping Condition with proc and appr	Change, 3-step

4.2.4.8 Shipping Type

Shipping Types are used to define the transportation method, that goods are delivered with (e.g. Rail, Road, ...). The following attributes can be maintained:

Attribute	Description
Shipping Type	Shipping type
Description (short text)	Language dependent Text
Mode of Transport	Mode of transport
Ship. Type proc. grp	Shipping type procedure group

Change Requests Types available:

CR Type	Description	Properties, Comments
IVS1S01	Create Shipping Type and activate	Create, 1-step
IVS1S02	Process Shipping Type and activate	Change, 1-step
IVS1SL1	Load Shipping Type and activate	Load, 1-step
IVS2S01	Create Shipping Type with approval	Create, 2-step
IVS2S02	Process Shipping Type with approval	Change, 2-step
IVS2SL1	Load Shipping Type with approval	Load, 2-step
IVS3S01	Create Shipping Type with proc. and appr	Create, 3-step
IVS3S02	Process Shipping Type with proc and appr	Change, 3-step

4.2.4.9 Sales Office

A "Sales Office" is a unit within an organization that is responsible for the sale and distribution of goods and services. It is part of the organizational structure in SAP Sales and Distribution (SD) module and represents a specific geographical area or region where sales activities are conducted. A sales office can be assigned to one or more sales groups and is used to facilitate, track, and report sales transactions, enabling businesses to manage their sales operations efficiently. It is also used for reporting purposes and can be linked to specific sales groups and employees, providing a way to structure the sales department within an organization. The following attributes can be maintained:

Attribute	Description
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Sales Office	Sales Office
Description	Language dependent Text
Sales Office Address	Address
Sales Group Assignment	Assignment to one or more Sales Groups

Change Requests Types available:

CR Type	Description	Properties, Comments
ISA1S01	Create Sales Office and activate	Create, 1-step
ISA1S02	Process Sales Office and activate	Change, 1-step
ISA1SL1	Load Sales Office and activate	Load, 1-step
ISA2S01	Create Sales Office with approval	Create, 2-step
ISA2S02	Process Sales Office with approval	Change, 2-step
ISA2SL1	Load Sales Office with approval	Load, 2-step
ISA3S01	Create Sales Office with proc. and appr	Create, 3-step
ISA3S02	Process Sales Office with proc and appr	Change, 3-step

4.2.5 Purchasing

4.2.5.1 Purchasing Group

Purchasing Groups define individuals or groups of individuals which are responsible for specific operational areas. The following attributes (based on view V_024 with table T024) can be maintained:

Attribute	Description
Purchasing Grp	Purchasing Group
Description	Language independent text
Tel. Purchasing Group	Telephone number of purchasing group (buyer group)
Tel. Dialing Code + Number	Telephone no.: dialling code+number
Tel. Extension	Telephone no.: Extension
E-Mail Address	E-Mail Address
Fax Purchasing Group	Fax number of purchasing (buyer) group

Change Request Types:

CR Type	Description	Properties, Comments
IEG1S01	Create Purch.Gr. and activate	Create, 1-step
IEG1S02	Process Purch.Gr. and activate	Change, 1-step
IEG1SL1	Load Purch.Gr. and activate	Load, 1-step
IEG2S01	Create Purch.Gr. with approval	Create, 2-step
IEG2S02	Process Purch.Gr. with approval	Change, 2-step
IEG2SL1	Load Purch.Gr. with approval	Load, 2-step
IEG3S01	Create Purch.Gr. with proc. and appr.	Create, 3-step
IEG3S02	Process Purch.Gr. with proc. and appr.	Change, 2-step

4.2.5.2 Purchasing Organization

A Purchasing Organization is responsible for all purchasing activities and can be divided in several purchasing groups. The following attributes (based on view V_T024E with table T024E) can be maintained:

Attribute	Description
Purch. Organization	Purchasing Organization
Description	Language independent text

Company Code	Assignment of Purchasing Organization to Company Code
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Change Request Types available:

CR Type	Description	Properties, Comments
IEO1S01	Create Purch.Org. and activate	Create, 1-step
IEO1S02	Process Purch.Org. and activate	Change, 1-step
IEO1SL1	Load Purch.Org. and activate	Load, 1-step
IEO2S01	Create Purch.Org. with approval	Create, 2-step
IEO2S02	Process Purch.Org. with approval	Change, 2-step
IEO2SL1	Load Purch.Org. with approval	Load, 2-step
IEO3S01	Create Purch.Org. with proc. and appr.	Create, 3-step
IEO3S02	Process Purch.Org. with proc. and appr.	Change, 2-step

4.2.6 General Settings

4.2.6.1 Country

Countries are used to define country specific attributes like currencies, decimal formats or postal codes. The following attributes (based on view V_T005 with tables T005, T005T, T002, T002T and T005X) can be maintained:

Attribute	Description
Ctry Key	Country Key
Name	Language dependent text
Long name	Language dependent text
Nationality	Language dependent text
Nationality (Long)	Language dependent text
Veh. country key	Vehicle country key
Index-based curr.	Currency Key of the Index-Based Currency
Language Key	Language Key
Hard currency	Currency Key of the Hard Currency
ISO code	Country ISO code
ISO code 3 char	ISO country code 3 char
ISO Code Numeric 3-Chars	ISO Country Code Numeric 3-Characters
Procedure	Procedure (Pricing, Output Control, Acct. Det., Costing,...)
Trde stat.short name	Short Name for Foreign Trade Statistics
Intrastat code	Intrastat Code
EU Member	Indicator: European Union Member?
Net Discount Base	Indicator: Discount base amount is the net value
Capital Goods Ind	Indicator: Display Capital Goods Indicator?
Net Tax base	Indicator: Base amount for tax is net of discount ?
Decimal Format	Decimal Format
Date format	Date format
Postal code required	Flag: Street address postal code required entry?
PO Box postal code	Flag: PO Box postal code required?
Postal code length	Postal code length (max)
City file active	Flag: City file address check
Street postcode	Flag: Street-specific postal code? (City file)
Check rule for postal code	Rule for the postal code field check
Address layout key	Formatting routine key for printing addresses
Print Country Name	Flag: Print country name in foreign addresses?

Change Request Types available:

CR Type	Description	Properties, Comments
ILA1S01	Create Country and activate	Create, 1-step
ILA1S02	Process Country and activate	Change, 1-step
ILA1SL1	Load Country and activate	Load, 1-step
ILA2S01	Create Country with approval	Create, 2-step
ILA2S02	Process Country with approval	Change, 2-step
ILA2SL1	Load Country with approval	Load, 2-step
ILA3S01	Create Country with proc. and appr.	Create, 3-step
ILA3S02	Process Country with proc. and appr.	Change, 2-step

4.2.6.2 Region

Regions are assigned to countries and have different meanings in the countries. Examples: province, federal state, department or state. The following attributes (based on view V_T005S with tables T005S and T005U) can be maintained:

Attribute	Description
Ctry Key	Country Key
Region	Region (State, Province, County)
Description	Language dependent text

Change Request Types available:

CR Type	Description	Properties, Comments
IRE1S01	Create Region and activate	Create, 1-step
IRE1S02	Process Region and activate	Change, 1-step
IRE1SL1	Load Region and activate	Load, 1-step
IRE2S01	Create Region with approval	Create, 2-step
IRE2S02	Process Region with approval	Change, 2-step
IRE2SL1	Load Region with approval	Load, 2-step
IRE3S01	Create Region with proc. and appr.	Create, 3-step
IRE3S02	Process Region with proc. and appr.	Change, 2-step

4.2.6.3 Language Key

Language Keys are used for defining the language in which you enter texts, display texts and print documents. The following attributes can be maintained:

Attribute	Description
Language Key	Language Key
Degree of Translation of Lang.	Degree of Translation of Language
Lang. (ISO 639)	2-Character SAP Language Code
Language specifications	Language specifications
Description (short text)	Language dependent text

Change Request Types available:

CR Type	Description	Properties, Comments
ILU1S01	Create Language Key and activate	Create, 1-step
ILU1S02	Process Language Key and activate	Change, 1-step
ILU1SL1	Load Language Key and activate	Load, 1-step
ILU2S01	Create Language Key with approval	Create, 2-step
ILU2S02	Process Language Key with approval	Change, 2-step
ILU2SL1	Load Language Key with approval	Load, 2-step
ILU3S01	Create Language Key with proc. and appr	Create, 3-step
ILU3S02	Process Language Key with proc and appr	Change, 3-step