

# Itego Master Data Framework (MDF) for Reference Data and Custom Objects

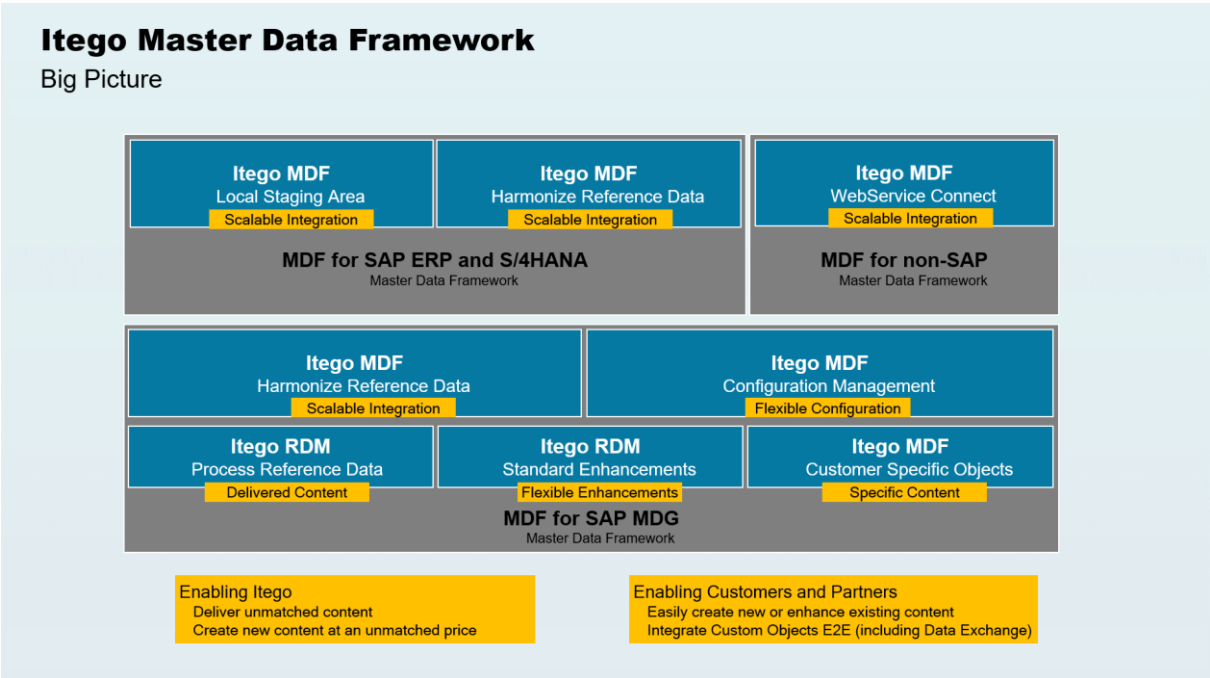
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Itego MDF for Reference Data and Custom Objects builds the foundation of Itego RDM and is the accelerator for the creation of customer specific objects at an unmatched price-performance ratio.

*In our first blog I introduced Itego Reference Data Management (“1 Itego RDM Blog”). If you wonder how Itego and its partners are successful with RDM standard content and customer specific extensions, take a look at the **Itego Master Data Framework (MDF)** described in this blog.*

*MDF has proven to be the main driver for RDM product success and customer adoption. RDM customers can use it for any customer specific enhancement or object. Consider it as an **Add-On sitting on SAP MDG for Custom Objects**. If you use it, you get an End-to-End framework, which supports a “close to zero effort” interface implementation, extensibility and more.*

*But let us take a look at the big picture first:*



*Consider that all reference data objects available in Itego RDM have been built on MDF and you just need to “plug in your new objects”. At the same time existing objects can easily be enhanced which means that adding attributes or complete tables gets as easy as it can be.*

*Utilizing the MDF components, you get implementation support on every level: Data Model, User Interface, Process Model, Data Replication and Data Load.*

Let us start with the basics, the **Data Modeling** support:

## Itego Master Data Framework & SAP MDG Appl. Framework

### Data Model Enhancement

The screenshot shows the SAP Data Model: I1, Reference Data Management interface. It features a top toolbar with actions like Save and Back, Save, Back, Cancel, Edit, New, Check, Activate, Active Area, and Adjust Change Requests. Below the toolbar, there are sections for 'Data Model Details' and 'Entity Types'. The 'Entity Types' section lists various entity types such as COMPCODE, COUNT, CURRENCY, CUR\_EXRA, DAYLIMIT, DECAN, DIMD, DISMM\_ET1, DISPR, DISPRFLD, DOKAR\_CL, DOKNR\_CL, DOKTL\_CL, DOKVR\_CL, and EKGRP. The 'Details: COMPCODE' section is active, showing a table of attributes with columns for Attribute, Key Field, Description, and Data Element. The table lists attributes like BUKRS\_GLO, BUTXT, BUTXT2, BUVAR, DKWEG, DTAMTC, DTAXR, DTPROV, DTTAXC, and DTTDSP, each with a checkbox for Key Field and a corresponding Data Element.

For Data Modeling you can use, enhance or copy delivered Itego RDM Standard Content as needed. Templates are available for features like a comprehensive address management, enhanced audits, meta data management and language dependent texts.

Admitted - these are not the main effort drivers (as we found out at SAP many years ago), it is more in the other levels to come. So please stay curious about the next levels that I will explain.

Next level: **User Interface (UI)** and **Process Modeling** support

## Itego Master Data Framework

### Flexible Enhancements for Reference Data Processing

The diagram illustrates the Itego RDM for SAP MDG architecture and a workflow for reference data processing. On the left, a vertical stack of components is shown: 'Itego RDM for SAP MDG' at the top, followed by 'UI and Rule Configuration (Field Properties, Validations, Derivations)', 'Process Reference Data', 'Data Model and Workflow Configuration (Data Model Enhancements / Rule Based Workflow)', 'Change Requests Monitoring', 'Change Documents', 'File Up-/Download', 'Data Replication', and 'Data Import'. At the bottom of this stack is 'Itego Master Data Framework'. On the right, a tree view shows the 'Master Data Framework' structure, including 'General Settings', 'UI Field Properties', 'Configure Field Properties', 'Rule Service Configuration', 'Rule Definition', 'Rule Type Definition', 'Define Source Fields for Rules', 'Define Values for Sources and Target', 'Rules Service Extensibility Adapter', 'Search UI Configuration', and 'Configure Search Criteria and Result List'. Below the tree view is a flowchart diagram showing the process flow: 'Save' leads to 'Withdraw', which leads to 'Submit'. 'Submit' leads to 'Requesting' (Status: To be submitted / Draft), which leads to 'Finalize Processing' (Status: Finalized Request / Add Req.). 'Finalize Processing' leads to 'Send for Approval' (Status: Expert Processing), which leads to 'Approve' (Status: Global Approval). 'Approve' leads to 'Activated'. There are also intermediate steps like 'Send for Review' and 'Inquire Request'.

The Itego MDF Configuration Management supports Rule Based UI Configurations as well as Rule based Validations and Derivations. All can be defined on Change Request Type and Change Request Step level and use multiple Source and Target fields for the Rule Definition.

Example 1: UI Configuration

### Itego Master Data Framework

#### Example 1: Company Code - User Interface Configuration

**Optional Field**

**Change Request Type dependent (Optional, Read-Only, Required, Hidden)**

**Required Field**

**Maintain value for Mandatory Field "City"**

Model	Target Entity	Description	Target Field	CR Type	CR Step	Field Property	Active
I1	COMPCODE	Company Code	ORT01	*	*	Required Field	✓

The figure above shows a User Interface configuration for a Maintenance UI based on CR Type and CR Step. Additional to this, the layout of the Search UI can be configured (Search Attributes and Result List) – not shown here but available nevertheless.

Example 2: Validations and Derivations

### Itego Master Data Framework

#### Example 2: Rule Configuration - Derivation

**Source Field(s) dependent (Derivation for Target Field)**

Model	Target Entity	Description	Target Field	Rule ID	Counter	Source1 from	Source1 to	Source2 ...	Source2 to	Source3 ...	Source3 to	Target Value from	Target Value to	Active	Message ...	Msg... Type
I1	MATKL	Material Group	BKLAS	0001	1	01						0710		✓		
I1	MATKL	Material Group	BKLAS	0001	2	A1						3030		✓		

Division: 01 Product Division 01

Valuation Class: 0710 Equipment 1

Default unit of weight: [ ]

Division: A1

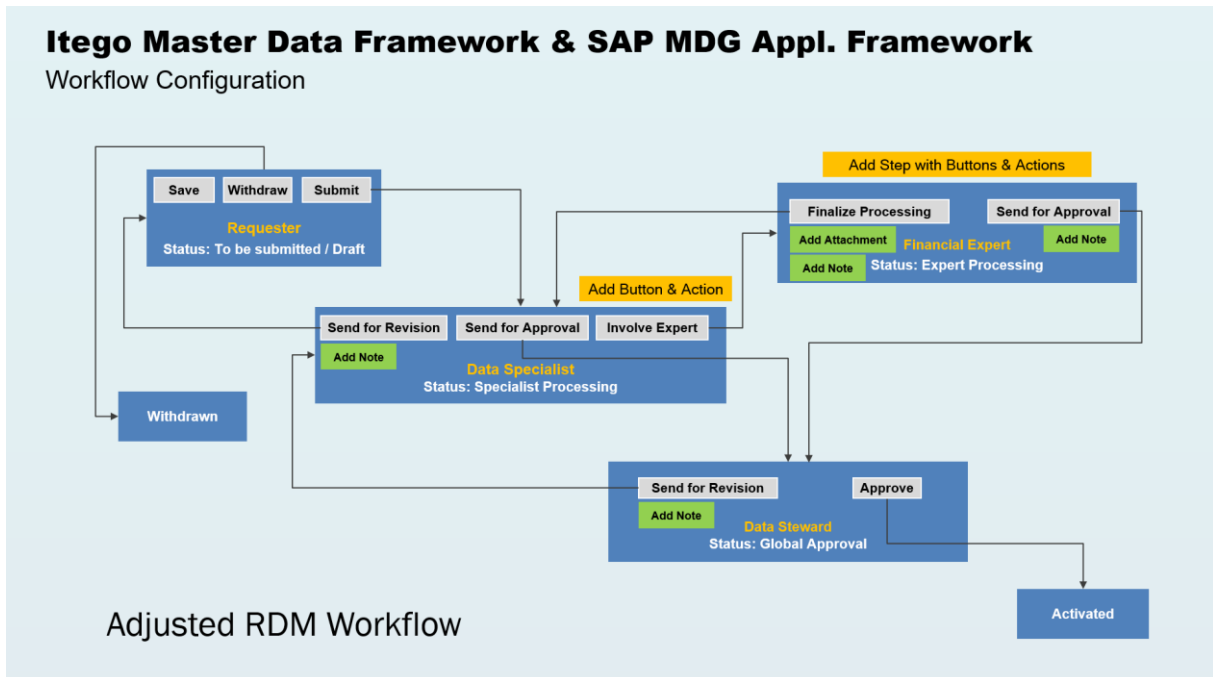
Valuation Class: 3030 Operating supplies

Default unit of weight: [ ]

In this example you see a configuration for a source field dependent Derivation. Up to three source fields can be used (here only one is used: Division) and the target field (here: Valuation class) will be derived

from the defined source values (or source value ranges). Validations and Limitations can be defined in the same manner and Defaulting is supported as well.

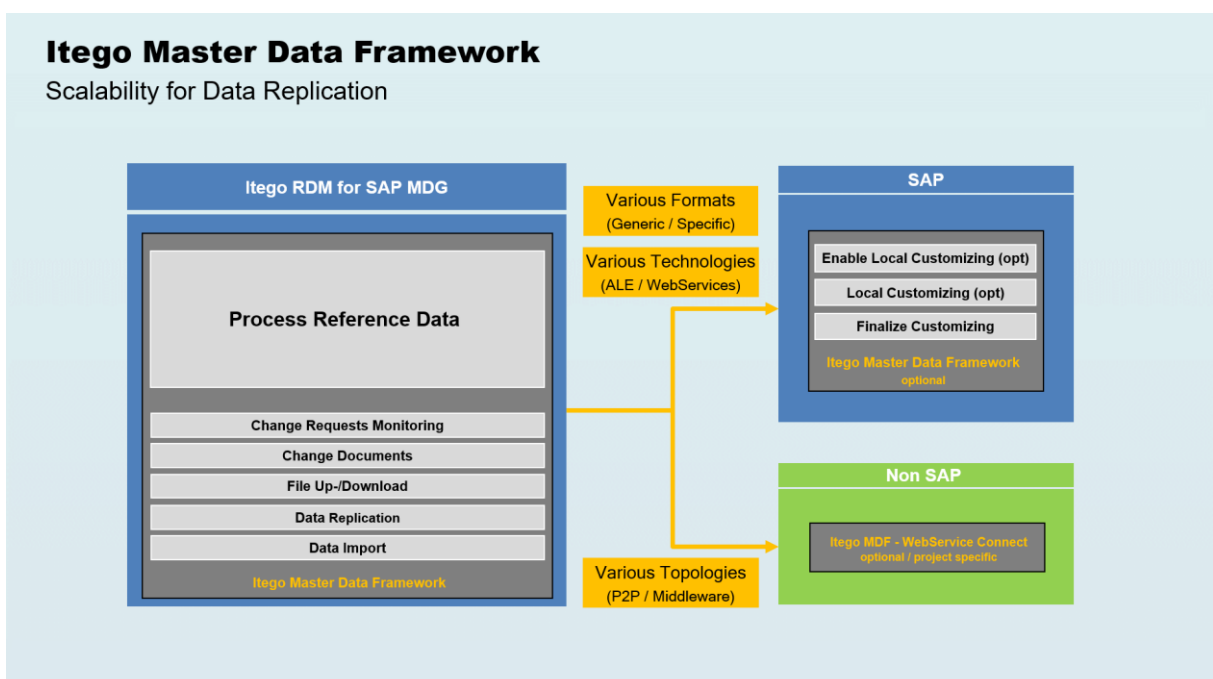
More **Process Modeling** (Workflow) support:



Based on delivered Rule Based RDM Workflows (3-step, 2-step or 1-step for Create and Process and 2-step or 1-step for Load) you can easily derive (copy and adjust) your own customer specific workflow and enhance it easily with additional buttons, actions or steps.

Last (and most exciting) level: **Data Replication and Data Load**

Overview Data Replication:

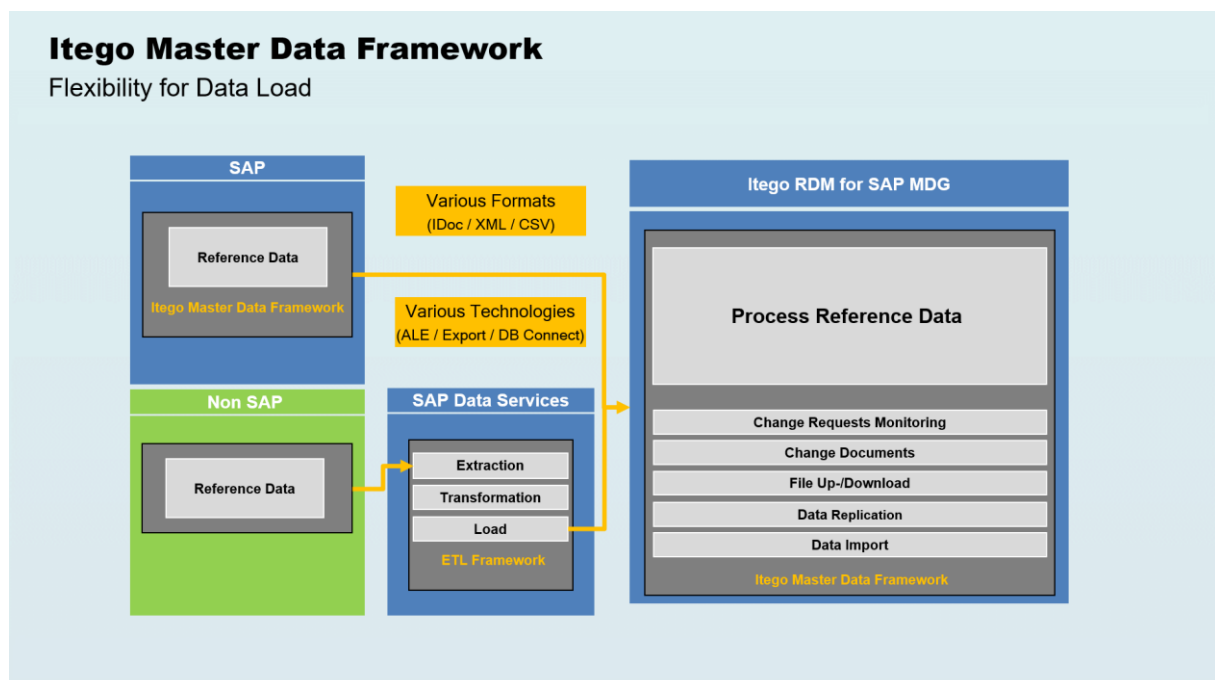


The generic Itego MDF Integration delivers the most compelling functionalities, from a technical perspective as well from a cost saving potential. It automatically translates data model entities and attributes into interface messages and attributes.

Every SAP based object, table or attribute can be used in one of the replication modes (described in my earlier blog) basically without any implementation effort. Based on the generic nature of the interfaces also the Local Area and Harmonization Cockpits are supported. Object specific data exchange is possible as well if needed.

Standard technologies like ALE/IDoc, Data Import, File Upload or Webservices are covered. Based on the Data Replication Framework these technologies are wrapped and equipped for a direct Peer-to-Peer or a Middleware based replication (e.g. SAP PI).

Overview Data Load:



As well as for Data Replication, standard technologies based on generic interfaces are supported for Data Load. For non-SAP objects MDF offers ETL templates based on SAP DS, which (for example) can connect directly to a non-SAP database.

Facts in a nutshell, summary and links to additional resources:

MDF enables Itego to deliver Standard Content for **Reference Data** at an unmatched technical depth. Based on this, it also enables Customers and Partners to easily create new **Custom Objects** or enhance existing objects End-to-End (including Data Replication and Data Load).

It guarantees a "close to zero effort" for Data Replication and Data Load, tackling the most complex and effort intensive part of any MDG implementation when it comes to customer specific objects.

If you did not see Itego Reference Data Management in action, consider to watch some demos here: [Itego RDM - Demos](#)