

User guide

Version: November 2021

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1. Preamble

Dear reader,

With this document, we are pleased to be able to provide you the current user documentation of Multi Entity Management, our Microsoft certified special solution for Microsoft Business Central.

Due to the process-oriented structure, this user documentation does not show all the details of the application. If you would like to receive information on individual windows, functions or fields, you can also use the online help.

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Our support team will be glad to help you with any questions.

Your XtensionIT ApS.

2. Definitions

Multi Entity Management is an extension for Microsoft Business Central and offers the possibility to manage any master and setup data centrally and to make it available to other companies at runtime.

2.1. Master Data

G/L accounts, customers and vendors as well as items, dimensions and dimension values represent, among others, typical master data. Supplementary master data, such as payment terms, reminder methods and payment methods, customer and vendor bank accounts, business and product posting groups, VAT business and VAT product posting groups can be assigned to these and other master data as required. Setup data, for example, the G/L setup, customers and sales setup as well as vendors and purchases setup and the general posting setup and the VAT posting setup can be treated as master data in Multi Entity Management.

2.2. Template Tables

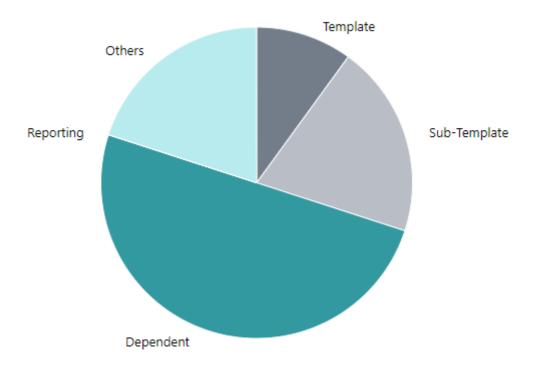
Tables store master data in a fixed structure. Template tables are all tables whose entries are being maintained in a Template or Sub-Template company

2.3. Companies

In Microsoft Business Central, a company is created for each organization of a corporation or enterprise. The company thus represents a completed unit in terms of data and organization that, in addition to the classic company code approach, also structures the master data on a company-by-company basis. In the Role Center, a diagram of the existing company structure within the database can be displayed:

Master Data Indicators V

Company Structure per Company Type



2.3.1. Template Companies

Typically, Template Companies are pure setup companies above the level of the operative companies. Operational companies assigned to a Template Company can also be referred to as dependent companies. A single Template Company or multiple Template Companies can be set up for all dependent companies but also a complex template hierarchy is possible with one Template Company and one or more Sub-Template companies. Generally, after the dependency has been set up all changes to the stored master data are made only from the Template or Sub-Template company and will then be synchronized into the operative or dependent companies.

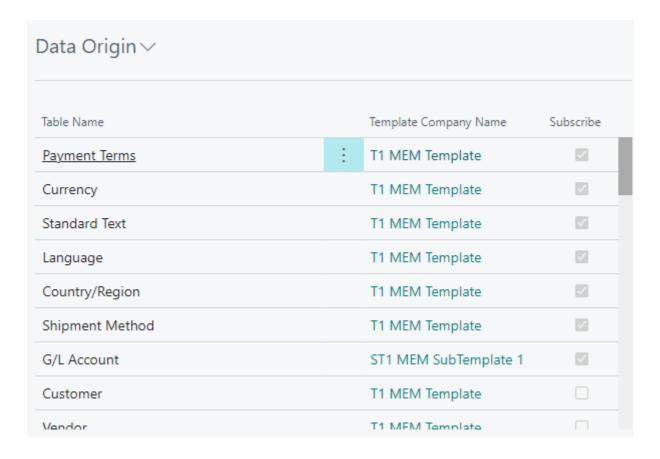
2.3.2. Sub Template Companies

The creation of Template Companies can be mapped over several hierarchy levels. This means that the top level, the Template Company itself contains all the central master data, whereas in the level below the

SubTemplate companies only contain certain parts of the managed master data, which they provide to their assigned dependent companies.

2.3.3. Dependent Companies

Dependent companies are operative companies. They can be assigned to Sub-Template companies and/or Template Companies, and then obtain part of their master data from them.



3. Insert, Modify and Delete Records

This chapter describes how to insert, modify and delete records.

3.1. Insert Records

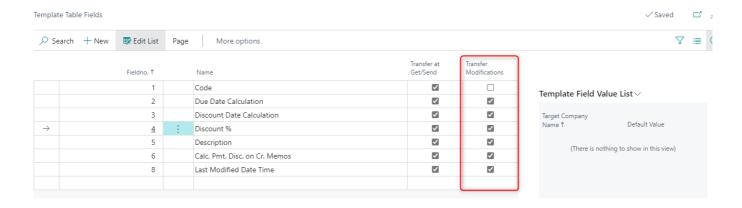
In dependent companies, no records can be inserted in template tables. New data records must be created in the respective parent Template Companies.

In the data origin matrix, it can be seen in which Template Company the insertion for the data in question can be made.

3.2. Modify Records

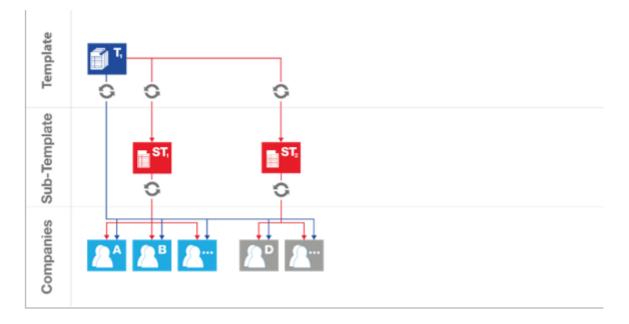
In dependent companies, no records can be changed in template tables. Exceptions are fields in template tables, which are not checked in the transfer at modify field.

In the data origin matrix, it can be seen in which Template Company the modification for the data in question can be made.



4. Template Company

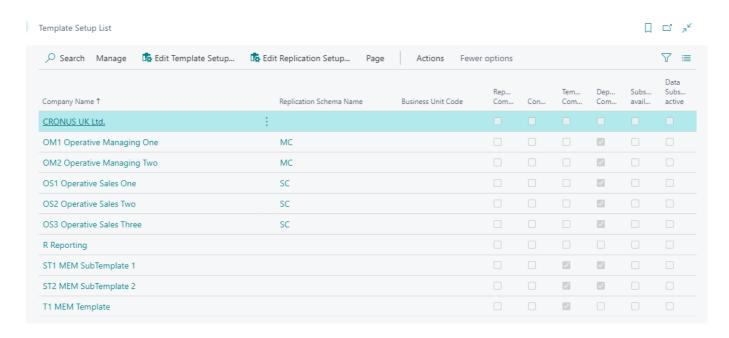
Template companies are companies in which central master data is managed, that is created and modified. Template companies thus make master data available to other dependent or operative companies. The structure of Template Companies can be mapped hierarchically, i.e. over several levels. Here, the top level, i.e. the Template Company itself, contains all central master data, while in an underlying hierarchical level, in Sub-Template companies, exist only certain parts of the data managed in the Template Company, which they provide to the dependent or operative companies.



4.1. Setup Template Company

The setup of companies is ideally carried out hierarchically from top to bottom, i.e. first, the Template Company, subsequently possibly required Sub-Template companies and then the dependent or operative companies are set up.

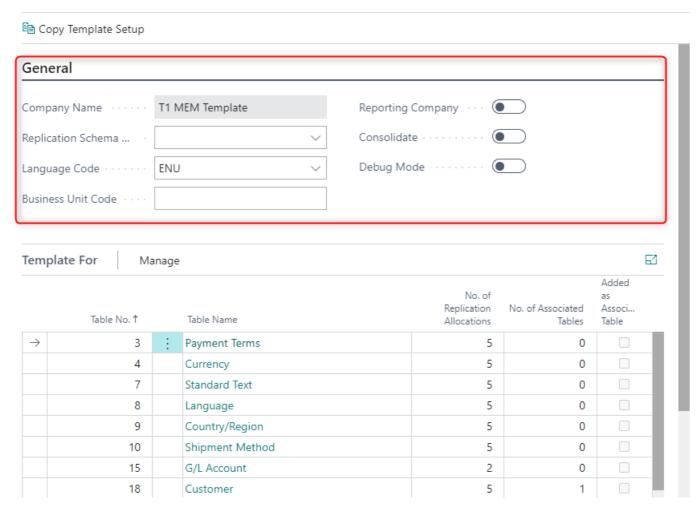
You can set up a Template or Sub-Template client via the navigation area Multi Entity Management, Template Company Setup



The company to be set up as a Template or Sub-Template Company must be clicked. Then click on the Edit icon in the group Manage, in the menu bar.

The window Template Setup Card will open:

Template Setup Card



When setting up a Template or Sub-Template Company, the following settings should be considered:

Field Description. Company Name The current company name is displayed here. Replication Schema The Replication Schema is used to simplify the configuration of companies, see Chapter 7. Business Unit Enter a unique code to merge this company's entries into one or more reporting companies. You can use the business unit to identify the entries.

Subsequently, the template tables are entered, i.e. the tables are assigned to the Template or Sub-Template companies whose master data is to be centrally managed and made available to other companies.

4.2. Setup Template Tables

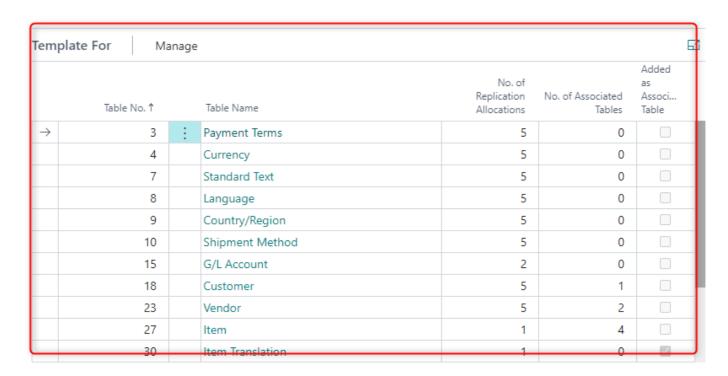
Template tables are assigned to a Template or Sub-Template company. They contain the master data that is to be managed centrally and made available to other clients.

You can set up the template tables for a Template or Sub-Template client using the navigation Multi Entity Management, Template Company Setup, Template Setup Card

Click on the Template or Sub-Template company whose template tables are to be set up. The window Template Setup will open:

Template Setup Card





All the tables that are to be managed centrally in this template Company are entered in the Template for info register.

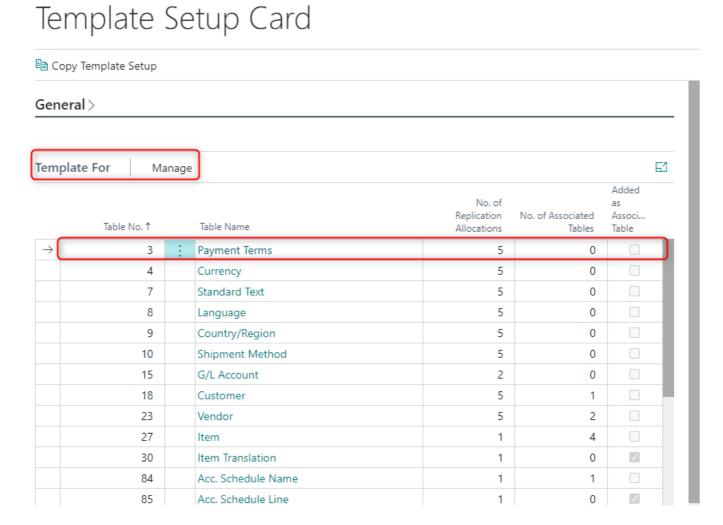
The following settings must be taken into account when assigning the tables:

Field Description Table ID This is the object number of the table. The selection of the tables is available via the looku Alt+down arrow Table Name The field fills automatically and contains the name of the table.

Subsequently, the fields of the respectively assigned tables (template table fields) can be parameterized.

4.3. Setup Template Table Fields

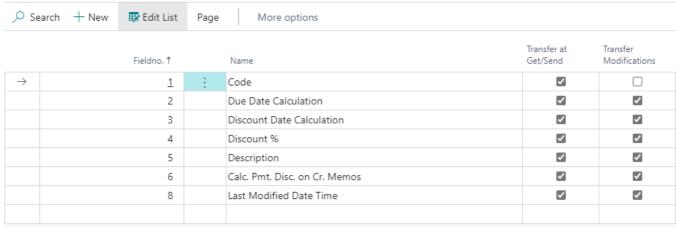
The individual fields of the template tables assigned to a Template or Sub-Template Company can be parameterized differently. The template table fields of a Template or Sub-Template company are set up via the Template Setup window:



In the Template for info register, first select the table whose table fields you want to edit. Then Manage in the same info register and then click Fields

The window Template Table Fields will open:

Template Table Fields



When parameterizing the fields of a table, the following settings must be taken into account:

Field Description Table no. This is the object number of the template table whose fields are displayed. Field No Specifies the number of the field of the template table. Name The field fills automatically and contains the name of the field. Transfer at Get/Send The field content of the data record is transferred to the dependent company during the transfer. Transfer Modifications The field content of the data record is transferred to all dependent companies during a subsequent change. If this checkmark is set, the field content in a dependent company cannot be changed. If the field content is to be changeable in dependent companies, no checkmark must be set here.

The checkmarks in the fields Transfer at Insert and Transfer at Modify are automatically preassigned.

New fields that are added to a table by later customizations do not automatically appear in that table and must be added as needed.

4.4. Setup Associated Tables

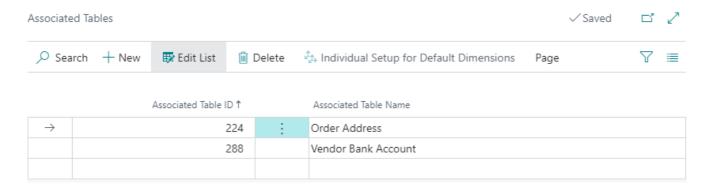
Associated tables are tables whose own primary key points to another table, i.e. data can only be acquired in related tables when they are associated to the other table.

Typical examples of related tables are

- Delivery addresses of a customer
- Order addresses of a vendor
- Variants of an item
- Bank accounts of a customer
- Bank accounts of a vendor

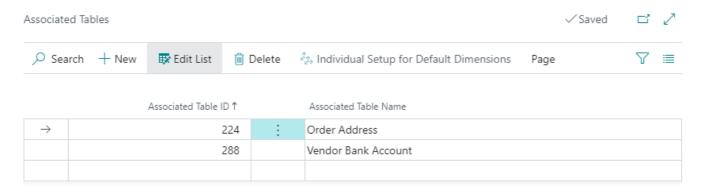
Related tables must be set up so that they are recognized as an extension of a data record (for example, bank accounts of a customer or vendor) and are automatically taken into account during data transfer.

The setup of related tables is done via the window Template Setup



In the info register Template for, first select the table whose table fields you want to edit. Then select Manage in the same info register and then click on Associated Tables.

The window Associated Tables will open:



When setting up related tables, the following settings must be taken into account:

Field Description Associated Table ID This is the object number of the related table. The selection of the tables is available via the lookup arrow + down. If an associated table is set up, it is automatically entered as a table in the "Template for" info register. This is done so that the fields of the related table can also be parameterized.

Associated Table Name The field fills automatically and contains the name of the associated table. Related tables are automatically added as a template table in the Template for tab.

4.5. Data Usage Matrix

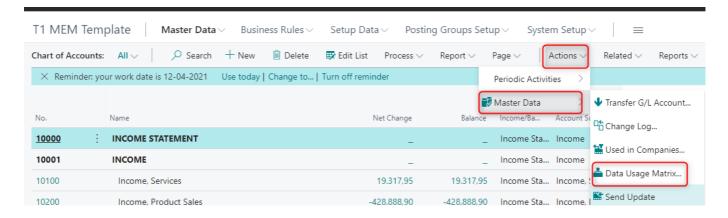
In the Data Usage Matrix, the data fields of a data record are displayed for the currently open Template or Sub-Template Company as well as for the next subordinate level with the field values there.

4.5.1. Open Data Usage Matrix

The Data Usage Matrix is available for the following tables and their data records:

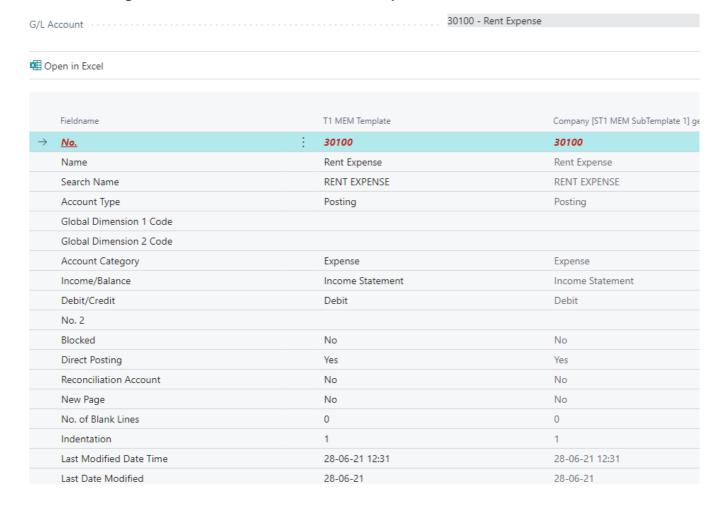
- G/L Account
- Customer and Vendor
- Item
- Account scheme and column layout
- Dimension and Dimension Values

The Data Usage Matrix can be opened via the respective window. To do this, first click on the dataset whose usage is to be displayed. Then click on the Data Origin matrix symbol in menu Actions - Data Origin Matriks



The window Data Usage Matrix will open:

Edit - Data Usage Matrix - G/L Account - 30100 - Rent Expense



When displaying the Data Usage Matrix, different colors are used that have the following meaning

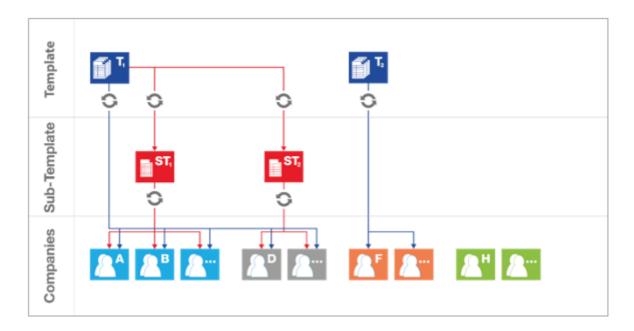
Column Fieldname:

Field name Description Red, bold and italic Fields of the so-called primary key. Changes are not allowed, as this would correspond to renaming the record. Black, bold For these fields, the field Transfer at Modify is not set in the current company, i.e. these fields may be changed in the dependent companies of the next hierarchy level.

Columns for Companies: Columns Companies Description Red, bold and italic Fields of the so-called primary key. Changes are not allowed, as this would correspond to renaming the record. Grey Field contents may not be changed in the respective company. The field contents come from the assigned Template or SubTemplate company Black Field contents may be changed in the respective company. Blue For these fields, the field Transfer at Modify is not set in the corresponding Template Company, i.e. these fields may be changed in the dependent company of the next hierarchy level Green, bold The fields Transfer at Insert and Transfer at Modify are not set for these fields in the corresponding Template Company, i.e. these fields may be changed in the dependent companies of the next hierarchy level.

5. Dependent Company

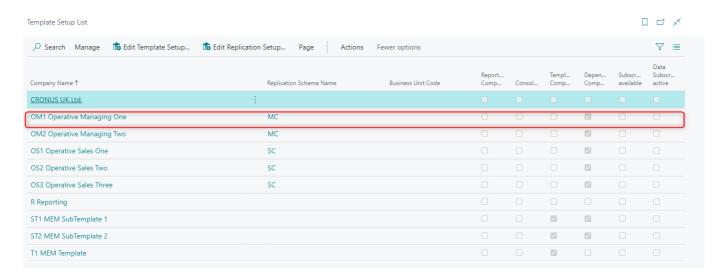
Dependent clients are operating organizations. They can be assigned to both Sub-Template and Template Companies and then derive at least part of their master data from them.



5.1. Setup Dependent Companies

The establishment of companies is ideally hierarchical from top to bottom, i.e. first the Template Company, then possibly required Sub-Template companies and then set up the dependent or operational companies.

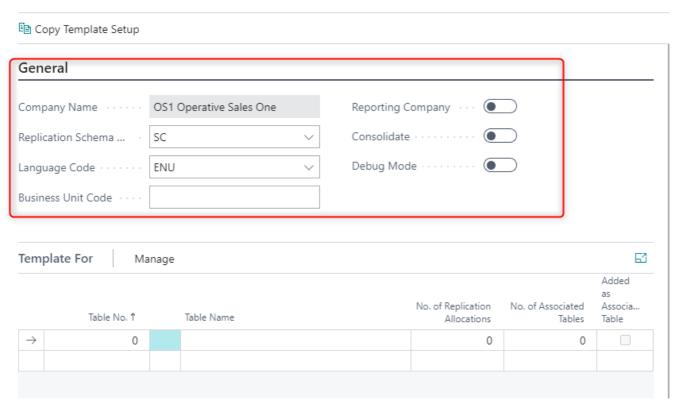
You can set up a dependent or operative company using the navigation area Multi Entity Management, Template Company Setup



The company that is to be set up as a dependent or operational company must be clicked. Then click on the Edit icon in the menu bar of the Manage group.

The window Template setup will open:

Template Setup Card



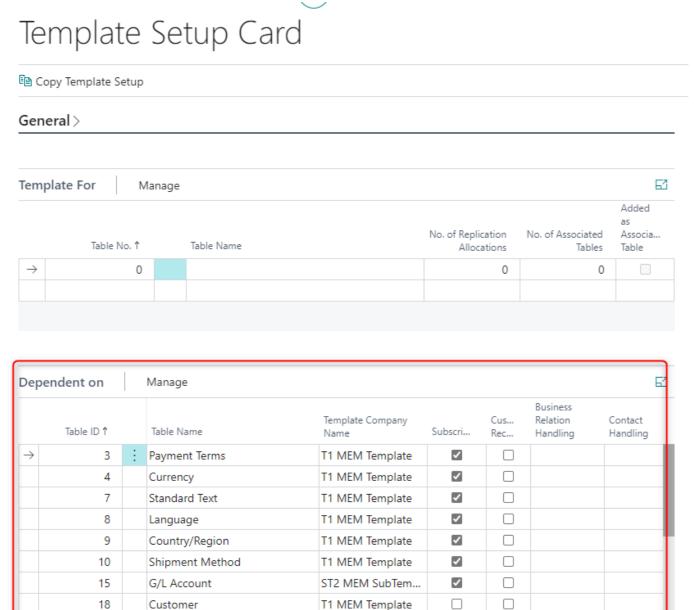
When setting up a dependent or operative company, the following settings must be taken into account:

Field Description Company name The current company name is displayed here Replication Schema The Replication Schema is used to simplify the configuration of companies, see Chapter 7 Business Unit code Enter a unique code to merge this company's entries into one or more reporting companies. You can use the business unit to identify the entries.

5.2. Assign Template Tables

Template tables are assigned to a dependent company, whose data the dependent or operative client is to obtain from a Template or Sub-Template client. You assign the template tables to a dependent or operative company using the navigation area the navigation area Multi Entity Management, Template Company Setup The dependent or operative company to which template tables are to be assigned must be clicked. Then, in the menu bar of the group Transaction, click on the Edit Template icon.

The window Template Setup will open:



In the Dependent on information tab, all tables are assigned whose master data the dependent or operative company is to receive from a Template or Sub-Template company

The following settings must be taken into account:

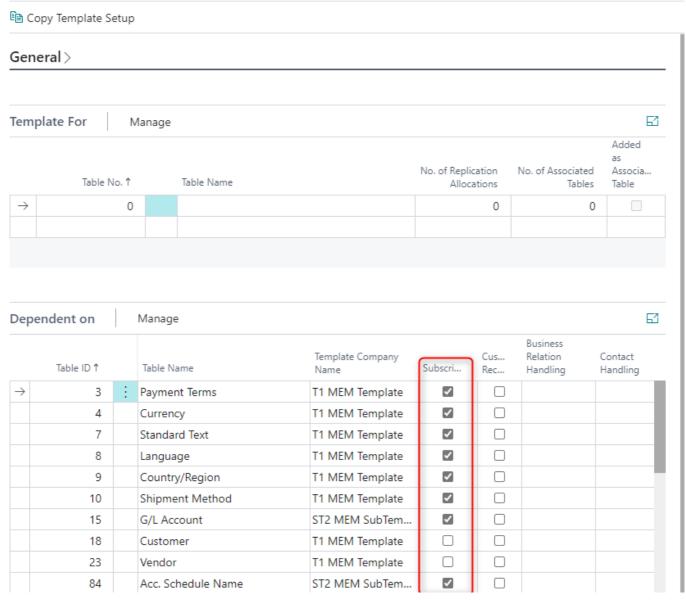
Field Description Table ID This is the object number of the table. The selection of the tables is available via the lookup arrow + down Table Name The field fills automatically and contains the name of the table. Template Company Name At this point, the Template Company or, if applicable, Sub-Template company is selected to provide the data. The Lookup button displays all possible template and Sub-Template companies. After the company has been assigned, the application checks whether data records already exist in the dependent company for the selected table. If this is the case, a note appears and the assignment is not possible. Conflicts

have to be resolved manually before an assignment can be made. Subscribe If you check this box, the data are permanently sourced from the Template or Sub-Template company, i.e. new records from this table are automatically written to the dependent company. By subsequently removing and re-setting the check mark, the transmission can be forced repeatedly. Individual Data Check this box if you want to allow individual master data in the operative company of this table despite the dependency on a Template Company. When entering individual data in the operative company, the system checks whether this master data is already being used in the Template Company.

5.3. Subscribing Data

Is there a check mark in the Subscribe field for one dependent or operative company in the Dependent on info tab for one or more template tables, this means that new data records of these tables are automatically written to the dependent or operative company. Subsequent removal and re-ticking of the check mark will cause the transfer to take place again.

Template Setup Card



The check mark Subscribe applies to all tables that do not have a separate "get and send function". Excepted the tables

- G/L Account
- Customer and Vendor
- Item
- Account schedule and column layout
- Dimension and Dimension Values

5.4. Data Origin Matrix

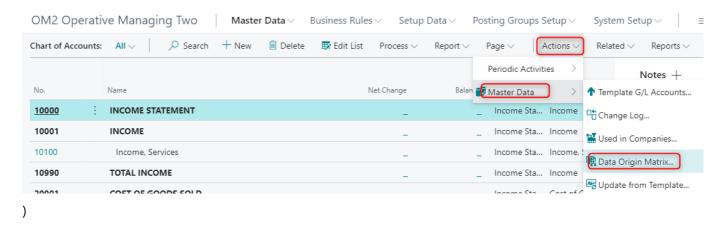
In the Data Origin Matrix, the data fields of a data record for the currently opened company and all higherlevel Template or Sub-Template companies are displayed with their field values.

5.4.1. Open Data Origin Matrix

The data origin matrix is available for the following tables and their data records:

- G/L Account
- Customer and Vendor
- Ttem
- Account schedule and column layout
- Dimension and Dimension Values

The Data Origin Matrix is retrieved via the respective window. To do this, first click on the record whose origin you want to display. Then click on the symbol Data Origin Matrix in menu bar Actions, Master Data:



The window Data Origian Matrix will open:

Edit - Data Origin Matrix - G/L Account - 10000 INCOME STATEMENT



G/L Account						
The state of the s						
	Fieldname		Company [OM2 Operative Managing Two] subscribed		npany [ST2 MEM SubTemplate et/send	Company [T1 MEM Templa
\rightarrow	No.	÷	10000	100	000	10000
	Name		INCOME STATEMENT	INC	OME STATEMENT	INCOME STATEMENT
	Search Name		INCOME STATEMENT	INC	OME STATEMENT	INCOME STATEMENT
	Account Type		Heading	Hea	ading	Heading
	Global Dimension 1 Code					
	Global Dimension 2 Code					
	Account Category		Income	Inco	ome	Income
	Income/Balance		Income Statement	Inco	ome Statement	Income Statement
	Debit/Credit		Both	Bot	h	Both
	No. 2					
	Blocked		No	No		No
	Direct Posting		No	No		No
	Reconciliation Account		No	No		No
	New Page		No	No		No
	No. of Blank Lines		1	1		1
	Indentation		0	0		0
	Last Modified Data Time		28 06 21 12:21	28	NE 21 12:21	28 06 21 12:31

In the Data Origin Matrix are different colors used which have the following meanings:

Field name Description Red, bold and italic Fields of the so-called primary key. Changes are not allowed, as this would correspond to renaming the record Black, bold For these fields, the field Transfer at Modify is not set in the current company, i.e. these fields may be changed in the dependent companies of the next hierarchy level

Columns for Companies Columns Companies Description Red, bold and italic Fields of the so-called primary key. Changes are not allowed, as this would correspond to renaming the record Grey Field contents may not be changed in the respective company. The field contents come from the assigned Template or SubTemplate company Black Field contents may be changed in the respective company Blue For these fields, the field Transfer at Modify is not set in the corresponding Template Company, i.e. these fields may be changed in the dependent company of the next hierarchy level Green, bold For these fields, the fields Transfer at Insert and Transfer at Modify are not set in the corresponding Template Company, i.e. these fields may be changed in the dependent companies of the next hierarchy level

6 Send Data, Get Data

Unnecessary master data in dependent or operative companies often prevents clear and smooth work. An essential approach of Multi Entity Management is that these companies work only with the data they really need.

Since the amount of data required is changeable, dependent companies can fetch missing data from their Template or Sub-Template companies in an active process. Template companies can proactively send new data to all or selected downstream companies

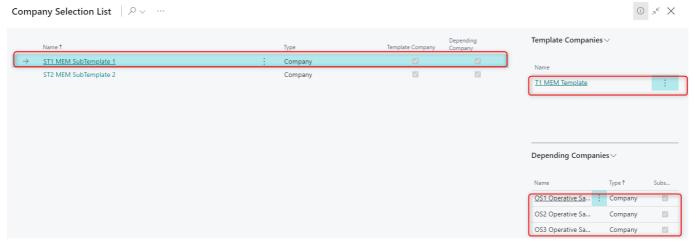
New data records that are created in Template or Sub-Template companies can be transferred to dependent or operative companies. This functionality is available for the following tables and their data records:

- G/L Account
- Customer and Vendor
- Ttem
- Account schedule and column layout
- Dimension and Dimension Values

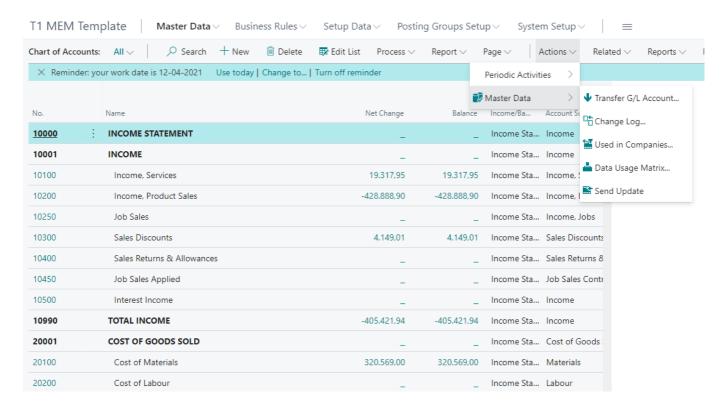
To do this, call up the respective window of the table from which data records are to be sent to dependent or operative companies in the Template or Sub-Template company

In the example below, two records to be sent are selected in the Chart of Accounts window. Then, in the menu bar in the Multi Entity Management group, click on the Transfer G/L Account icon:

The Company Selection List window



The Company Selection List window opens, in which the companies are marked, in which the data records to be transferred can be sent:



The Company Selection List window contains two info boxes that provide the following information:

Info box Description Template Companies This info box lists the respective Template Company from which the selected company receives its master data, in this case for the G/L accounts table. Dependent Companies This info box lists all dependent companies that receive master data, in this case for the G/L accounts table, from the selected company, if this is a Template or Sub-Template company. The Subscribe field shows whether the dependent companies automatically receive new master data from the selected Template or Sub-Template company.

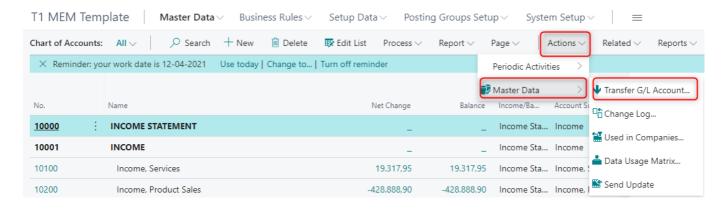
6.2. Get data

Data records that are required in Sub-Template companies or dependent or operative companies but are not available can be retrieved from Template or Sub-Template companies.

This functionality is available for the following tables and their datasets:

- G/L Account
- Customer and Vendor
- Item
- Account schedule and column layout
- Dimension and Dimension Values

For this purpose, in the Sub-Template companies or dependent or operative companies in the window of the respective table, you can directly access the data records of the hierarchically superior company in order to search for and transfer missing data records, i.e. to get the data. In the following example, the Chart of Accounts of the hierarchically superior Template Company is accessed in the Chart of Accounts window. To do this, click on the symbol Template G/L Accounts in the menu bar in the group Multi Entity Management:



The "Chart of Accounts" window then opens in the Template or Sub-Template Company, in which the missing G/L accounts can be searched for, selected and transferred.

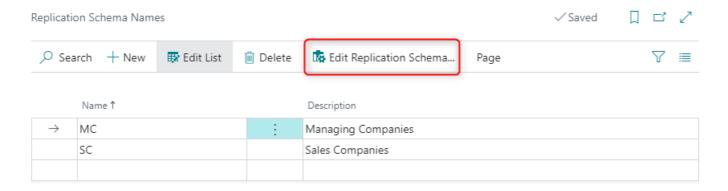
7. Replication schema

Replication Schemas simplify the setup of dependent or operative companies, since the assignment of the template tables is not done individually per company, but only once via the Replication Schema, which is only assigned to the dependent or operative company.

7.1. Open Replication Schema

You can open Replication Schemas using the button in the navigation area Multi Entity Management, Replication Schema

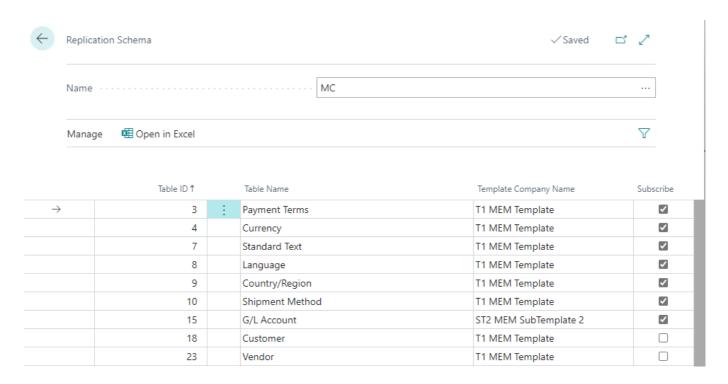
The windo Replication Schema Names will open:



7.2. Setup Replication Schema

The Replication Schema to be set up is to be clicked. Then click on the Edit Replication Schema icon in the group Process of the menu bar.

The window Replication Schema will open:



All template tables whose data are to be obtained from a Template Company and / or, if applicable, SubTemplate company are assigned to a replication scheme.

The following settings must be taken into account:

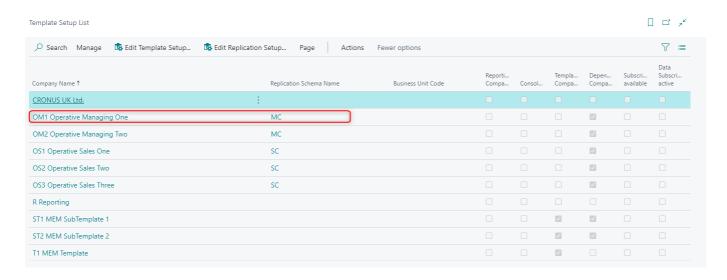
Field Description Table ID This is the object number of the table. The selection of the tables is available via the lookup arrow + down Table Name The field fills automatically and contains the name of the table. Template Company Name At this point, the Template Company or, if applicable, Sub- Template company is selected to provide the data. The Lookup button displays all possible template and Sub-Template companies. After the company has been assigned, the application checks whether data records already exist in the dependent company for the selected table. If this is the case, a note appears and the assignment is not possible. Conflicts must be resolved manually before an assignment. Subscribe If you check this box, the data from the Template or Sub-Tem- plate company will be permanently sourced, i.e. new data records of this table are automatically written to the dependent company. By subsequently removing and re-setting the check mark, the transmission can be forced repeatedly.

Changes to the Replication Schema always have a direct impact on all companies that are assigned to this schema.

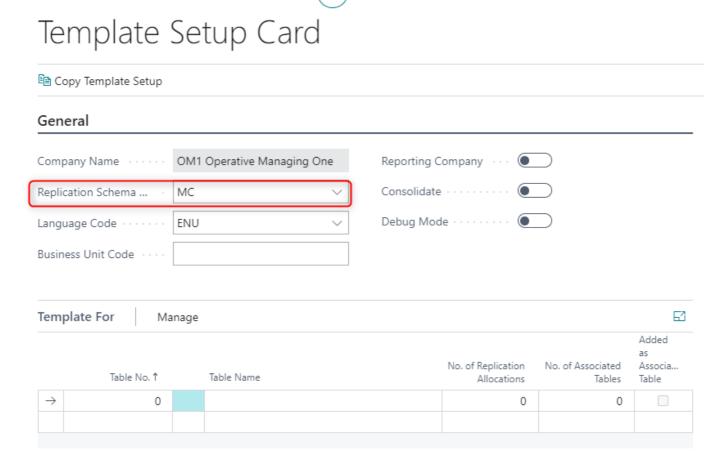
7.3. Assign Replication Schema

All dependent or operative companies that are to be set up based on a Replication Schema must be assigned to the respective Replication Schema.

The assignment of a Replication Schema to a dependent company is carried out via the button in the navigation area Multi Entity Management, Template Company Setup:



The dependent or operative company to be assigned to a replication scheme is to be clicked. Then click on the Edit Template Setup icon in the Manage group of the menu bar.



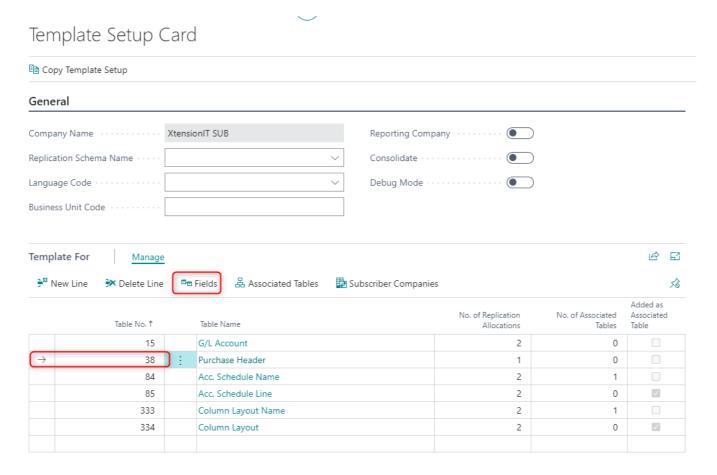
The following settings must be taken into account:

Field Description Replication Schema Name Select the Replication Schema on which the dependent company should be to depend on template tables. The selection of the tables is available via the Dropdown button.

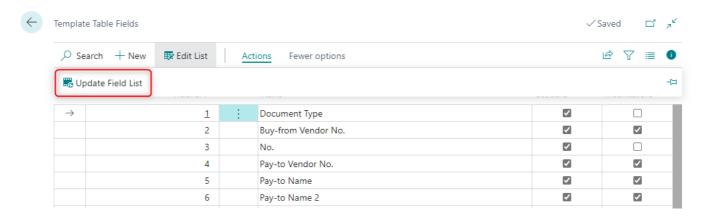
Using a Replication Schema makes it impossible to change template tables individually in the dependent company. Changes to the Replication Schema always have a direct impact on all clients that are assigned to this schema.

8. Extended field

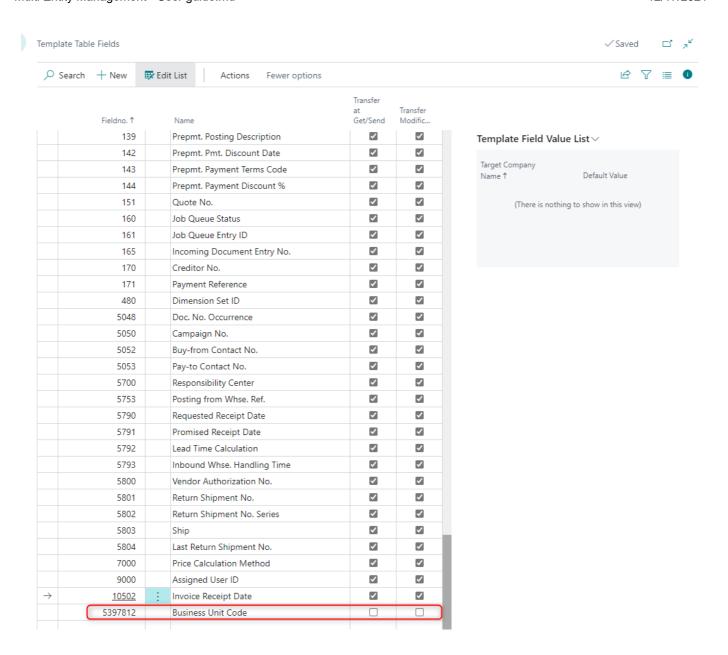
Extended fields to existing table, new fields must first be updated in Tempory Template



Tempory template - Table field must be updated



When extended field is updated to choosen table, columns: Transfer at Get/Send and Transfer Modifications is set to false.



This columns must be set manually by user.