

Global Master

HOW TO SYNCHRONIZE MASTER DATA BETWEEN COMPANIES

TABLE OF CONTENTS

INTRODUCTION	4
REQUIREMENTS	4
GLOBAL MASTER ROLE CENTER	5
Role Center Cue Tiles	6
Role Center Actions	8
Role Center setup	10
GENERAL SETUP	11
Global Master Setup	11
Partner Setup	16
DATA TEMPLATE	19
Data Template Card fields	20
Data Template Card actions	22
Data Template List actions	24
Set up Data Templates for partner	29
Data Template Filter	30
UPDATE DATA	31
UPDATE STATUS	32
Subscriber Log	32
Subscriber Record Data	33
ERROR HANDLING	33
SUBSCRIBER PERMISSIONS	34
THE DATA TRANSFER PROCESS	35
Create and send Subscriber Log from master company	35
Update and Synchronize Record Data in subscriber company	36

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Synchronize Subscriber status in master company	37
Examining the result of the data transfer process	38
Feature: Force Full Update	40
Feature: Resend Data Template	41
Feature: Resend Subscriber Log	41
Feature: Update older log first	42
JOB QUEUE SETUP	43
Master	43
Subscriber	44
Job Queue Batch	46
COPY SUBSCRIBER COMPANY	48
CONFIGURATION TEMPLATE	49
MAINTENANCE	50
Cleanup Subscriber Log	50
Cleanup Subscriber Log Entries	51
Cleanup reports managed by Job Queue	51
Clean Data (Disabled)	52
PROFILES	53
Global Master Super User	54
PERMISSION SETS	56
RECOMMENDATIONS	57
Templates	57
INSTALLATION	58

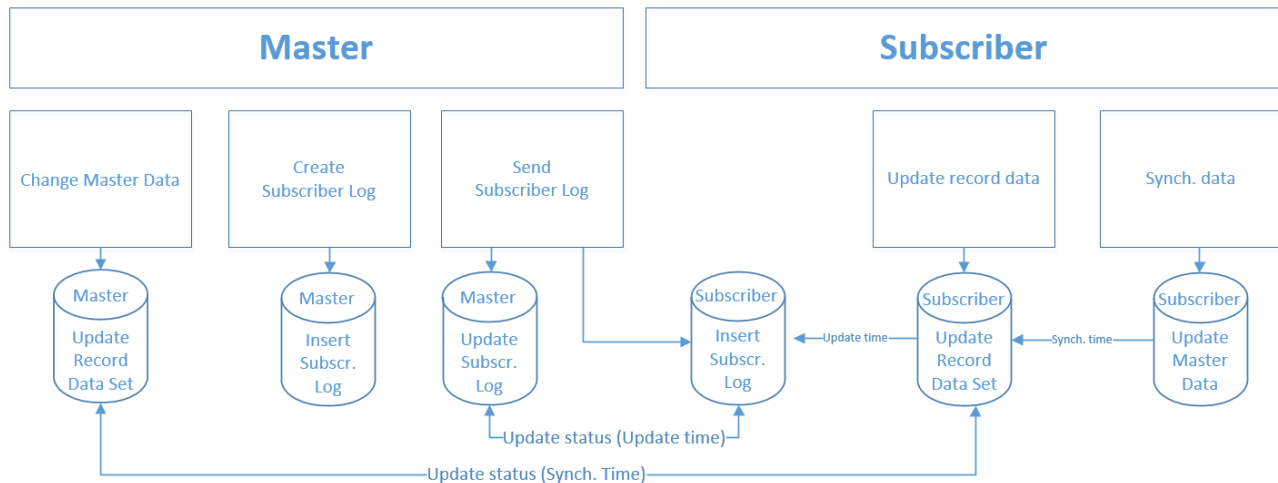
CONTACT INFORMATION

INTRODUCTION

Global Master (GM) is a tool used to synchronize data between companies. It is also possible to synchronize between companies in different databases.

GM provides synchronization based on relationship between partners. In GM, there are two types of partners - Master and Subscriber. It is possible to be both a Master and Subscriber at the same time. Master own templates and data, whereas Subscriber receive data from Master.

Data to synchronize is set up in Templates. Companies that would to subscribe to a template is set up as Subscribers on the Data Template (Reference to Partner setup).



Global Master is located in Departments – Global Master.

Global Master

Lists

- Data Templates
- Subscriber Log

Tasks

- Update & Synchronize Record Data (Subscriber)
- Create & Send Subscriber Log (Master)
- Cleanup Subscriber Log
- Cleanup Subscriber Log Entries

Archive

- Subscriber Log Entries

Administration

- Partners
- Global Master Setup

REQUIREMENTS

This product can be installed as an extension in Microsoft Dynamics NAV 2018 or Microsoft Dynamics 365 Business Central.

It is recommended to use the newest Cumulative Update.

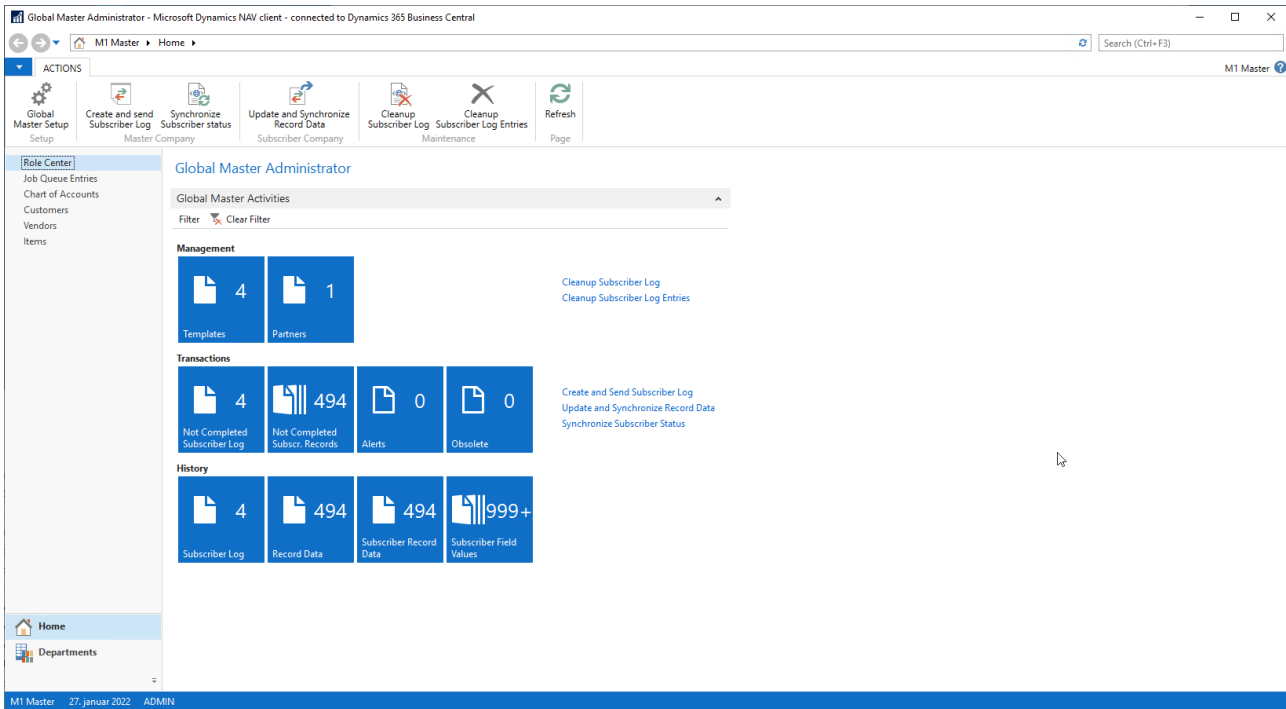
It is possible to see the runtime version in Help – About Microsoft Dynamics.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

GLOBAL MASTER ROLE CENTER

The best overview of the available functions in GM is present in the role center. Here you will find easy access to the Global Master definitions and functions.



There are two groups in the role center: *Master Activities* and *Subscriber Activities*.

The role center is covering both areas since a company can be both of the two types simultaneously or only master or subscriber.

Hint: The *History* group is displayed if selected in Global Master Setup only.

On the next pages the role center cue tiles are explained.

CONTACT INFORMATION

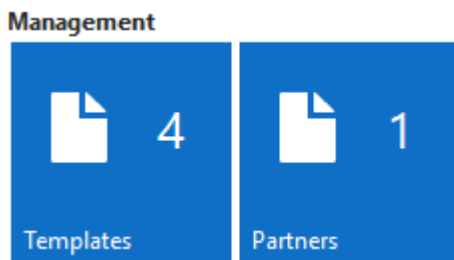
ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Role Center Cue Tiles

In the role center there are three groups. Management, Transactions and History. Every single cue tile represents a shortcut to a table containing data, but the number in the cue tile itself provides information on how many entries there are present in the underlying table.

Management

The management group gives access to definitions of what data to synchronize whereto.



Templates are supplying the synchronization process with settings of what data to synchronize.

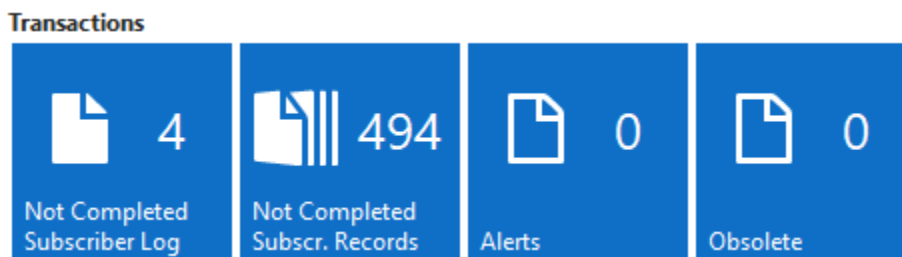
Partners defines the subscribers to receive data.

Template Subscribers are holding information on exactly what subscribers who are to receive data defined in a given template.

These cues are the easiest access to the information as described above.

Transactions

The transactions group is displaying data to be or being processed.



Here Subscriber Logs which are being processed, or which at least are waiting to have the final status marks updated, displayed along with Subscriber Record Data not synchronized yet.

To be accessed in subscriber company only you find the Alerts. Here you find failing synchronization of Record Data that should be investigated. Obsolete Record Data are Record Data which are not controlled by the master company any more are displayed in the subscriber company role center.

Subscriber Logs are holding data to be synchronized for a specific data template. The data itself are stored in an xml document attached to the subscriber Log.

More the log has information on send-to-subscriber and updated-at-subscriber status.

Subscriber Record Data are data per record in a table handled by a data template to be send to a subscriber. Also, here status on the transactions are displayed.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

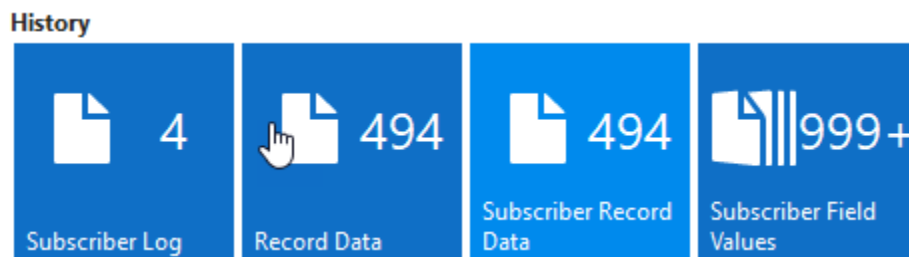
Subscriber company

Alerts are Record Data in the subscriber company which are not synchronized.

Obsolete are Record Data in the subscriber company which no longer controlled by the master company. These records are probably deleted in the master company, and they are now released from the master company control. They can now be managed in the subscriber company.

History

The history group are cue tiles with shortcuts to processed data, but also to data prepared for synchronizing.



Subscriber Logs are holding data being synchronized for a specific data template. The data itself are stored in an xml document attached to the subscriber Log.

More the log has information on send-to-subscriber and updated-at-subscriber status.

Record Data are data to be handled by Global Master on a record level. From here you can even see what fields are handled by Global Master. The current values of the genuine data are to be seen here.

In a subscriber company, Record Data are holding information on what fields the user cannot edit.

It is the presence of a data record that is telling Global Master that a table or field is managed by Global Master.

Subscriber Record Data are data per record in a table handled by a data template to be send to a subscriber. Also, here status on the transactions is displayed.

Subscriber Field Values are data being synchronized to a subscriber on field level.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Role Center Actions

The role center does offer the user a number of quick access actions to a number of features for maintaining the Global Master data flow.

Setup

Global Master Setup

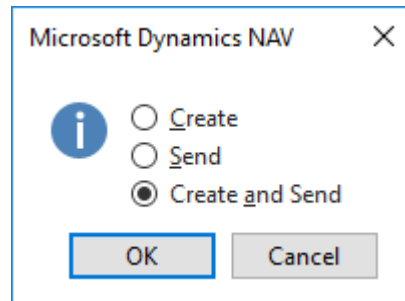
Set up current company.

Here you also have an easy way of selecting the Global Master Role Center as your personal role center.

Master Company

Create and send Subscriber Log

Select one or both the create and send options.



Create and Send

Creating the Subscriber Logs containing data to be transferred to subscriber companies immediately followed by sending the assembled data to the subscriber.

This feature is available in Master Company only.

Create

Creating the Subscriber Logs containing data to be transferred to subscriber companies.

This feature is available in Master Company only.

Send

Sending the Subscriber Logs containing data to subscriber companies.

This feature is available in Master Company only.

Synchronize Subscriber status

Requesting transfer and update status from subscriber companies.

This feature is available in Master Company only.

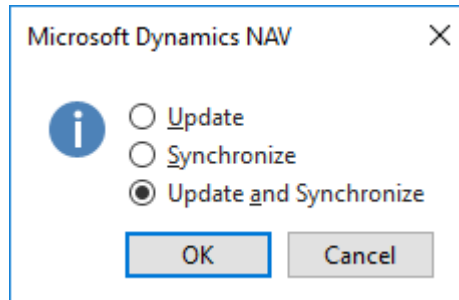
CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Subscriber Company

Update Record Data

Select one or both of the update and synchronize options.



Update and Synchronize

Importing data received from the master company and immediately hereafter making imported data available in the subscriber company.

This feature is available in Subscriber Company only.

Update

Importing data received from the master company ready for synchronizing to make the data available in the subscriber company.

This feature is available in Subscriber Company only.

Synchronize

Making imported data available in the subscriber company.

This feature is available in Subscriber Company only.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Maintenance

Cleanup Subscriber Log

Remove data (XML) from the Subscriber Log after the synchronization of data already has been performed.

Subscriber Log records does have an attached XML document, containing data to be transferred to the subscriber company. Removing this XML document leaves the rest of the Subscriber Log with all other information than the data transferred.

Cleanup Subscriber Log Entries

Deleting Subscriber Log Entries after the synchronization of data already has been performed.

Role Center setup

You choose the Global Master Role Center as your personal role center easily from the Global Master Setup. Then you have easiest access to all Global Master functionality.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

GENERAL SETUP

There are two basic things you need to set up before you set up the Data Templates. These are Global Master Setup and Partner Setup.

Global Master Setup needs to be set up in both Master Company and Subscriber Company, whereas Partner Setup is only set up in Master Company.

Master and Subscriber must have a unique Partner ID. It is not allowed to have companies with the same Partner ID.

The same rule applies to Data Templates (this is only a problem if we have multiple Master Companies). It is not allowed to have the same Data Template code in different Master Companies. If you have multiple Master Companies, we suggest you to use prefix or suffix that is unique for the individual Master Company.

Global Master Setup

This is the basic setup for Global Master functionality. The company can be setup as *Master*, *Subscriber* or *Master and Subscriber*.

Partner ID is the unique value for the partner. When setting up a Partner to connect to a subscriber ID in the Partner setup must be the same as Partner ID in the Global Master Setup.

The screenshot shows a software window titled "Edit - Global Master Setup" with a ribbon interface. The ribbon includes tabs for "HOME" and "ACTIONS". The "ACTIONS" tab contains icons for "View", "Edit", "Choose Global Master Role Center", "User Personalization", "Notes", "Links", "Refresh", "Clear Filter", and "Go to". Below the ribbon, the "Global Master Setup" section is expanded to show three main areas: "General", "Master Company", and "Subscriber Company".

- General:** "Company Type" is set to "Master" (dropdown). "Partner ID" is "M1" (text input). "Show History in Role Center" is an unchecked checkbox. A "Show fewer fields" button is visible.
- Master Company:** "Max. No. of Records per Xml File" is an empty text input. "Remove file contents older than (Master)" is an empty text input. "Remove file contents immediately (Master)" is an unchecked checkbox.
- Subscriber Company:** "Delete entries older than:" is an empty text input. "Remove file contents immediately:" is an unchecked checkbox. "Remove file contents older than:" is an empty text input. "Override delete restriction:" is an unchecked checkbox. A "Show more fields" button is visible.

An "OK" button is located at the bottom right of the window.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

To activate Global Master functionality the first requirement is to enter a value in Company Type and Partner ID in Global Master Setup.

General

Company Type

Determining if the current company is *Master*, *Subscriber* or *Master and Subscriber*.

Partner ID

ID for the company used when synchronizing.

Show History in Role Center

Select if the History group is to be displayed in the role center. If not selected there is no access to the cues belonging to this group.

Master

Max. No. of Records per Xml File

Enter a number of nodes for splitting the transactions into smaller parts whenever the number of nodes exceeds the "Max No. of Records per Xml File".

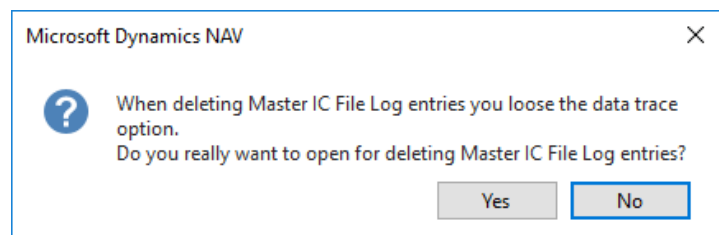
This should make the transaction process smoother. A number larger than 10000 must be entered. Else leave 0 as the default value for not splitting the transactions.

Remove file contents older than (Master)

Enter a date formula with a time span of how old a Log entry has to be before removing file contents (XML document) will take place.

The removing of the file contents will be performed by the function designated for this procedure:
Cleanup Subscriber Log.

Warning when entering date formula will appear:



Remove file contents immediately (Master)

With this option selected the XML file stored in BLOB field "File contents" on the Subscriber Log will be removed after use. This meaning that when the Subscriber Log has been sent to the subscriber company, the presence of the XML file is obsolete, and therefore it is removed.

Please note that the Subscriber Log is copied to the subscriber company with the XML file contents included.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Subscriber

Handle Data Files

This field is required to extract the data received from Master Company. The process "Update record data" extracts data into the Global Master record set.

It is only possible to run this process in the Subscriber Company.

Synch. dataset

This field is required to update master data in the Subscriber Company.

It is only possible to run this process in the Subscriber Company.

Only Synch. Net Changes

Global Master is only sending net changes to Subscriber. If we mark this field only these changes are synchronized at Subscriber.

Update older log first

Subscriber logs are processed sequentially sorted by the number. Selecting "Update older log first" ensures that the contents of a subscriber log, that is handling a certain table must be synchronized before the next subscriber log managing the same table is completed.

This ensures the changes are synchronized in the correct order, if more changes are following each other.

Delete entries older than

Enter a date formula with a time span of how old a Log entry has to be before deleting the entry

The removing of the file contents will be performed by the function designated for this procedure:

Cleanup Subscriber Log Entries.

Note: Date formula used for both Master and Subscriber.

Removing file contents older than (Subscriber)

Enter a date formula with a time span of how old a Log entry has to be before removing file contents (XML document) will take place.

The removing of the file contents will be performed by the function designated for this procedure:

Cleanup Subscriber Log.

Remove file contents immediately

With this option selected the XML file stored in BLOB field "File contents" on the Subscriber Log will be removed after use.

This meaning that when the Subscriber Log has processed by the update to Record Data in the subscriber company, the presence of the XML file is obsolete, and therefore it is removed.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Setting up role center

A shortcut for setting up role centers for yourself or other users has been introduced. Instead of going through the Departments menu you can use the two action buttons.

Choose Global Master Role Center

Setting up User Personalization for the current user.
The Global Master role center will be attached to the current user.

User Personalization

Opening the User Personalization List for setting up users.

Copying the entire subscriber company

Copy Subscriber Company

Copying a subscriber company into a sister subscriber company.
See chapter Copy Subscriber Company for more information.

Setting up field blacklist

Some fields are not wanted in the field synchronization. For making fields unwanted and excepted from the data template setup a blacklist containing unwanted fields has been introduced to the system.

A field entered in this blacklist will not be inserted in the data templates when using "*Insert all fields from table*" from the Data template Card.

Access to the blacklist is found in Global Master Setup on the *Navigate* tab.

Blacklist Setup

Accessing the Blacklist Setup Tables where individual tables can be blacklisted by the following options:

All fields

The entire table is blacklisted and excepted from the "*Insert all fields from table*" function, used in Data Template.

Some fields

The fields marked "Blacklisted" in the "Blacklist Setup Tables" page are blacklisted and excepted from the "*Insert all fields from table*" function, used in Data Template.

Access to the Blacklist Setup Fields page is granted when clicking the assist button on Blacklist Setup Table lines marked "Some fields".

Her the field list for the selected table can be managed.

Note: The web client does not support the assist button control.

For the web client version of Global Master there is an action button "Blacklist Field Setup" in the ribbon.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Set default Blacklist

Setting up a default blacklist provided by the Global Master system. This setup can be modified after the initial setup.

Please note that some fields will be mandatory blacklisted. The "Blacklist" mark cannot be removed from fields which are considered as mandatory blacklisted.

Delete Blacklist

Removes all blacklist setup making it possible to build a new blacklist from scratch.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Partner Setup

In the Partner list you can add and manage subscribers. A partner is a company which is receiving master data from the master company.

When added to the partner list, a partner can be attached to one or more templates as a “Template Subscriber”.

ID Partner ID is a unique value. It is not allowed to have companies with the same Partner ID.

Database Exchange Type Database: Exchange data with a Partner which is located in the same database
 Web Service: Exchange data with a Partner which is located in another SQL database. A Web Service is used.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
 +45 31 31 07 00 | info@profacto.dk | www.profacto.dk

On Hold

It is possible to set the Partner on hold. We will not exchange data if the Partner is on hold. Default value is Yes and can only be changed if mandatory fields are entered.

Description

If Description is empty when entering a value in Company Name then Description is set to Company Name.

Mandatory fields

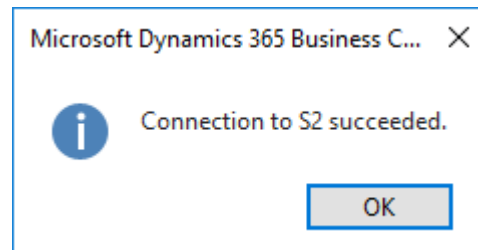
“Company Name” is mandatory if Database Exchange Type is Database.

The four fields “Web Service Name”, “Service Name”, “User ID” and “Password” are all mandatory when Exchange Type “Web Service” has been selected.

Actions

Test Connection

Test if we can contact the server. If connection is success test is also performed regarding Partner ID on Global Master setup is the same as the ID on the Partner card.



Create Subscriber Log

This step creates a Subscriber Log containing an xml-file with all the data that needs to be sent to the Partner. It is not sent to Partner in this step.

Only data from released Data Templates not “On hold” are used and only changed records from these Templates are collected.

Send Subscriber Log

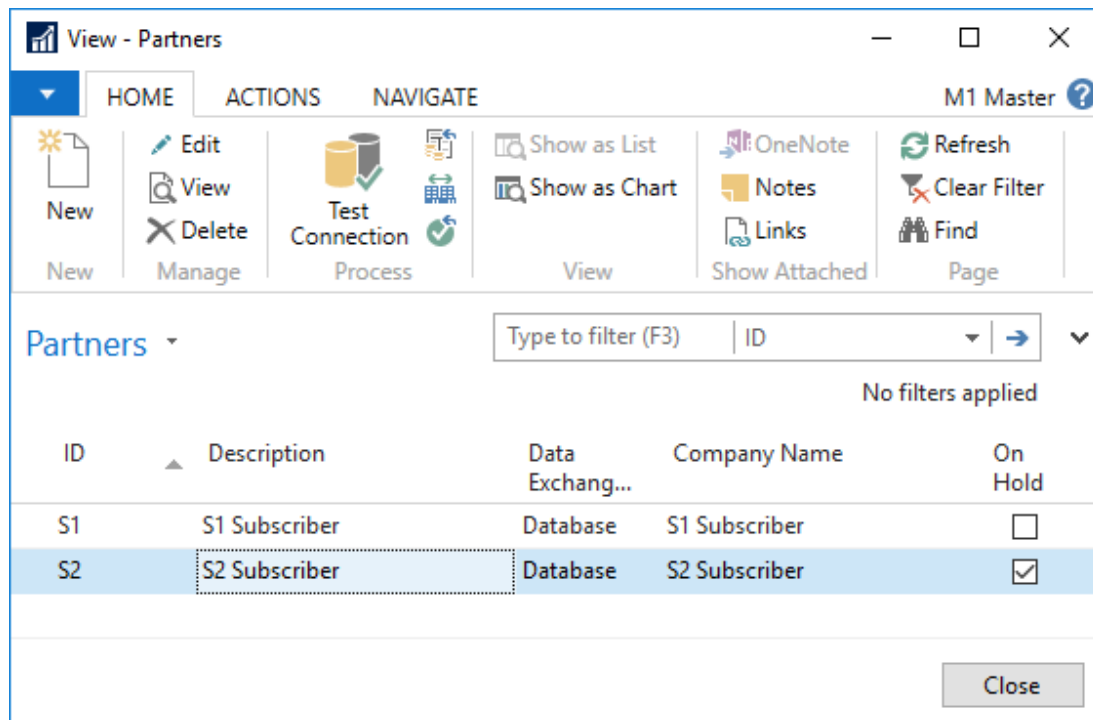
Send all open Subscriber Logs to this partner

CONTACT INFORMATION

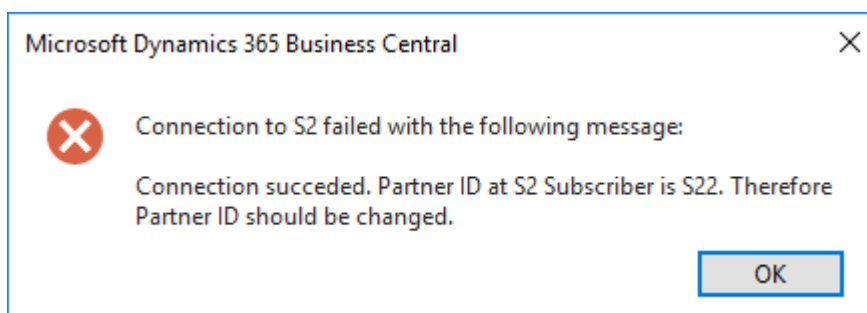
ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Test Connection

Setting up partners are essential for making the data synchronization work. Please make sure that the Partner ID in the subscriber companies are set up correctly.



You can always use the “Test Connection” action in the Master Company to ensure that the ID’s are matching each other. If not, you probably will experience an error message as shown below.



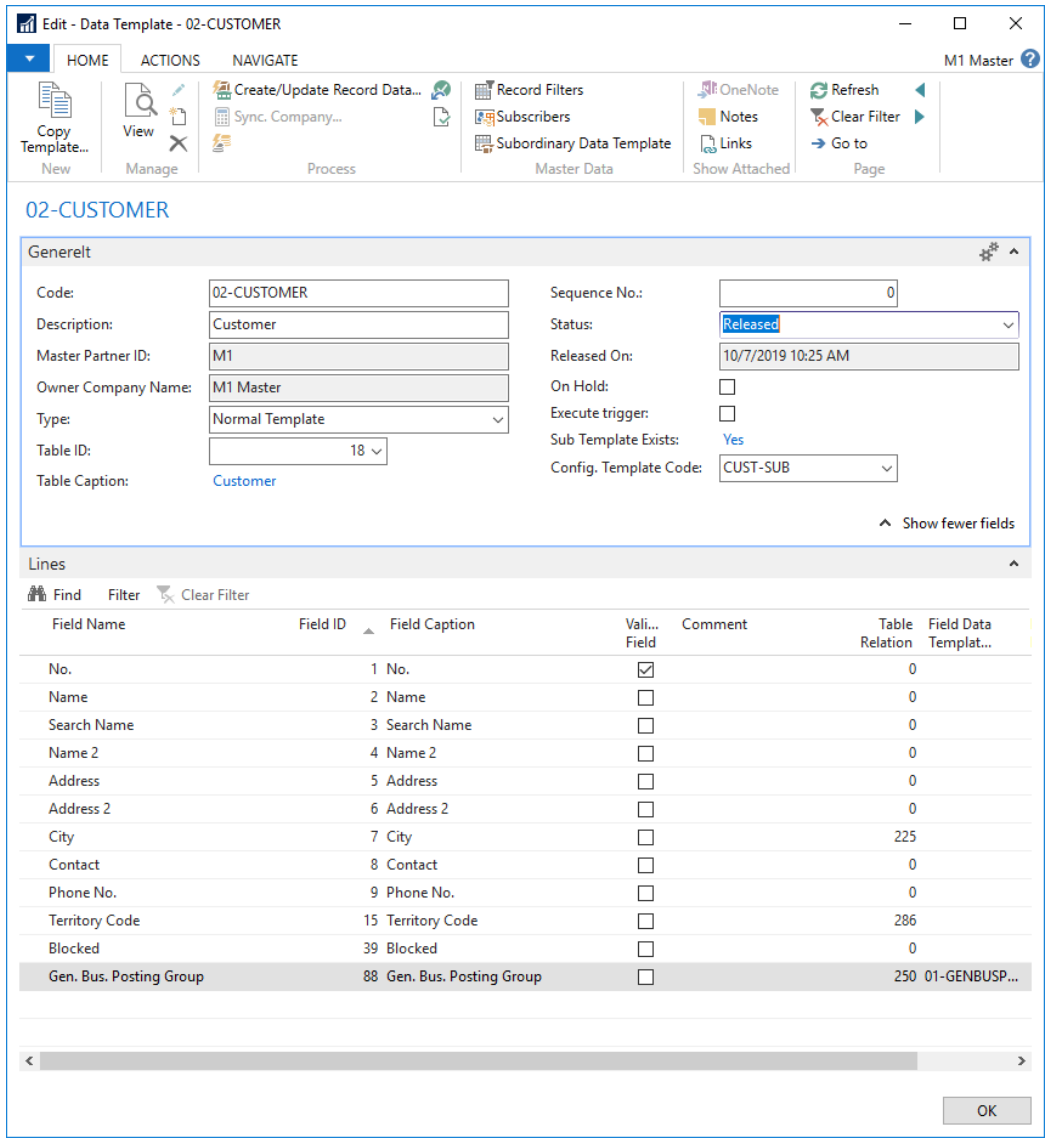
Also, the Partner cannot be marked “On Hold” if the synchronization should be activated. Make sure no partners you are expecting synchronized are “On Hold”.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

DATA TEMPLATE

Data Templates are used to set up data we want to exchange between Master and Subscribers. A Data Template contains table ID and a number of table fields to be transferred.



To every Data Template there is a Master (Master Partner ID) and one or more subscribers. Master is the owner of the Data Template. It is only possible to change the Data Template in Master Company, and status must be "Under Development" in order to change the template settings.

It is possible to set filters to select a subset of the data. This could be finished goods, balance accounts etc. If the Data Template table have related data, you want to update together with this this Template you can do this.

If you have data directly related to a field, you can add a Field Template for this field. This could be Inventory Posting Group.

If you on the other hand have data related to the table, you can add a Sub Template. This could be Item Cross Reference etc.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Data Template Card fields

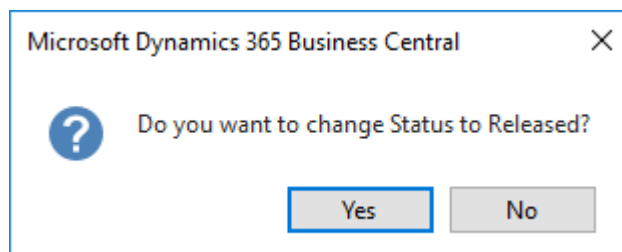
Setting the template up requires that information is filled in in a number of fields in the template header.

Code	<p>The code is a unique ID for the template.</p> <p>It is not allowed to use the same Data Template code in different Master Companies.</p>
Description	<p>Template description of your own choice.</p> <p>If Description is empty when entering a value in Table ID then Description is set to Company Name.</p>
Type	<p>Type of the template will be used to determine the usage of the template and its fields.</p> <p><i>Normal Template</i> Data from templates fields are synchronized to the subscriber.</p> <p><i>Field Template</i> Data from the field templates fields are synchronized when a Normal Template is referring to the Field Template in a line with a field containing a table relation. Field templates are used for data related to a field in the normal template field. Only the used value will be transferred to the subscriber.</p> <p><i>Sub Template</i> Data from the sub templates fields are synchronized to the subscriber when a normal template with the sub template attached is processed. Sub templates are used for data from tables with indirect relations. All values are transferred.</p>
Table ID	<p>Table number for the data to be defined in the current template.</p> <p>When a table number is selected the Description field of the template header will be filled in automatically.</p> <p>The Table ID field is a lookup field referring to all tables in the database which are not excepted from use in the Global Master.</p>
Table Caption	<p>Name of the table handled by the template.</p> <p>Is mostly interesting when the Description field is used for a description different from the table name.</p>

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Sequence No.	Number used for sorting within the templates belonging to each template type.
Status	<p>Status is indicating the state of the template.</p> <p><i>Under Development</i> The template and its settings can be modified. When under development, the template is “On Hold” meaning that it is excepted from synchronization.</p> <p>Pending Approval The template is “On Hold” and cannot be synchronized.</p> <p><i>Released</i> The template is activated for synchronization.</p>



When changing status to “Released” the so called Record Data are updated. These are the data to be synchronized.

Released On	Date and time stamp for when status set to “Released”.
Sub Templates Exists	Showing if Sub Templates are attached to the template.
Config. Template Code	<p>Attached standard Configuration Template to be used by the subscriber when adding new records in the subscriber company.</p> <p>Please see the “Configuration Template” chapter.</p>

CONTACT INFORMATION

Data Template Card actions

A few actions on the *action* tab are useful when working with the templates.

Create/Update Record Data	<p>Creating Record Date for the current template.</p> <p>Note: This action should be performed automatically when setting the template status "Released".</p> <p>It is only possible to run this process in the Master Company.</p>
Sync. Company	<p>Synchronize the current template. All waiting synchronizations for the current table are processed</p> <p>It is only possible to run this process in the Subscriber Company.</p>
Choose fields from table	<p>Select fields to be synchronized with the template. Already chosen fields are marked blue in the list page which are displaying all fields to be selected.</p>
Copy Template	<p>Copy existing template and its settings into a new template Code.</p> <p>Lines are included. If chosen, references to attached Field Data Templates are transferred as well.</p> <p>If selected by option, Record Filters are copied to the new code.</p> <p>Please note that subscribers not are copied. These are to be maintained manually.</p> <p>A useful feature for when working with different template filters etc.</p>
Set Status Under Development	<p>With one click all data templates with status "Released" will be set to status "Under Development".</p> <p>Data templated with status "Pending Approval" are not changed.</p>
Set Status Released	<p>With one click all data templates with status "Under Development" will be set to status "Released".</p> <p>Data templated with status "Pending Approval" are not changed.</p>
Create and send Subscriber (Current Template)	<p>Performing the action known from the Global Master role center, but for the current template only.</p>

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

From the *Navigate* tab you can get an overview of attached data.

Record Filters	It is possible to setup filters if you do not want to exchange all records in this table.
Subscribers	Here you add Subscribers to which you will exchange data defined in the current Data Template.
Sub Template link	Data related to the template tables primary key fields can be added using a "Sub Data Template Link". When a Sub Template is linked to template, the data described in the Sub Template will be synchronized to the subscriber company. All records from the table will be synchronized.
Record Data	Get an overview of the Record Data attached to the current Data Template prepared for the synchronization.
Subscribers Record Data	Record Data for individual subscribers are displayed here.
Log Entries	Displaying Log Entries attached to the current template. Log Entries are present in the Subscriber Companies only.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Data Template List actions

The list page of the Data Templates does have some useful action features in the *Actions* tab.

Set all to Under Development	With one click all data templates with status “Released” will be set to status “Under Development”. Data templated with status “Pending Approval” are not changed.
Set all to Released	With one click all data templates with status “Under Development” will be set to status “Released”. Data templated with status “Pending Approval” are not changed.
Set On Hold	Setting a “On Hold” checkmark directly from the list page.
Activate	Resetting (removing) “On Hold” checkmark directly from the list page.
Synchronize Record Data (Current Template)	An alternative to the “Update and Synchronize Record Data” in the Global Master Role Center is to use this function. Only the current template will be synchronized. Please note that Record Date have to be updated before this function is started. This action is for use in subscriber companies only.
Set up Data Templates	Select an area for which a number of data templates will be created according to GM standard settings. These can be modified for customized use if necessary.
Set up Subscribers	Using a wizard you can easy select a number of subscribers to be attached to the current Data Template.

Super User features

Handling unusual circumstances might require special tools, which are not to be used on daily basis.
That is why the *Global Master Super* profile gives access to a few extra features.

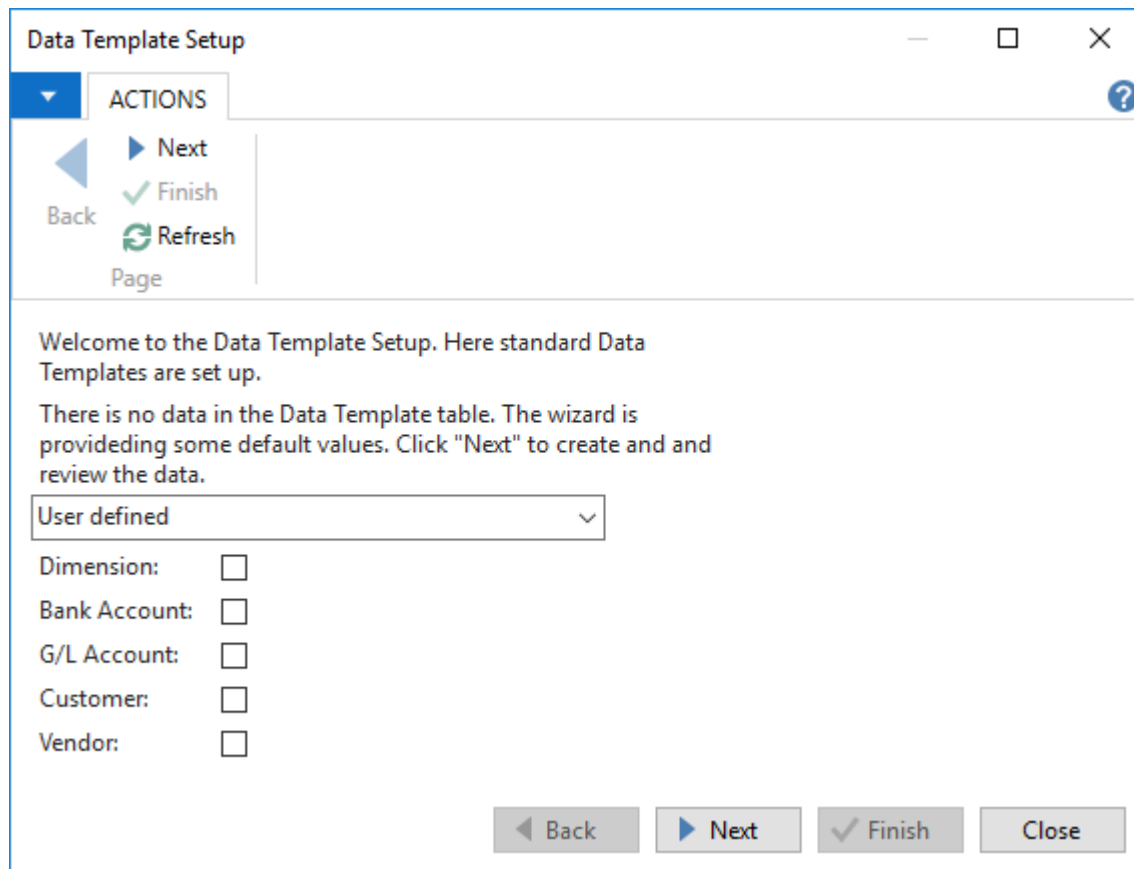
Mark template changed	To force an update of the template definition, the Super User can use this action to raise the “Field added” flag.
Create/Update Record Data (all Data Templates)	A function corresponding to the one on the Template Card, but handling all templates in stead of the current only, will be started using this action. This feature is very powerful, when a complete update is desired. Select the “Force Full Update” option in the request form which appears with this action, or change the filter to suit your demands.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Set up Data Templates

When activating "Set up Data Templates" from Data Template List the user can select among pre-defined areas for which Data Templates will be created.



Wizard step 1: Select among standard data templates and continue by clicking "Next".

The option box does have three options which are helping for fast filling in the checkboxes.



Options

User defined – Select by clicking checkboxes

All – All checkboxes will be marked.

None – Marks in checkboxes are removed

Click "Next" when the desired checkboxes are filled out.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Data Template Setup NAV2017DKCU24-GM-RE... ?

ACTIONS

Back Next
 Finish
 Refresh
 Page

Code	Description	Table ID	Table Caption
01-DEFAULT...	Default Dimension	352	Default Dimension
01-DIM	Dimension	348	Dimension
01-DIMCOMB	Dimension Combination	350	Dimension Combination
01-DIMVAL	Dimension Value	349	Dimension Value
01-DIMVALC...	Dimension Value Combination	351	Dimension Value Combination

Back Next Finish Close

Wizard step 2: Created data templates are displayed. Click "Finish" to end the wizard.

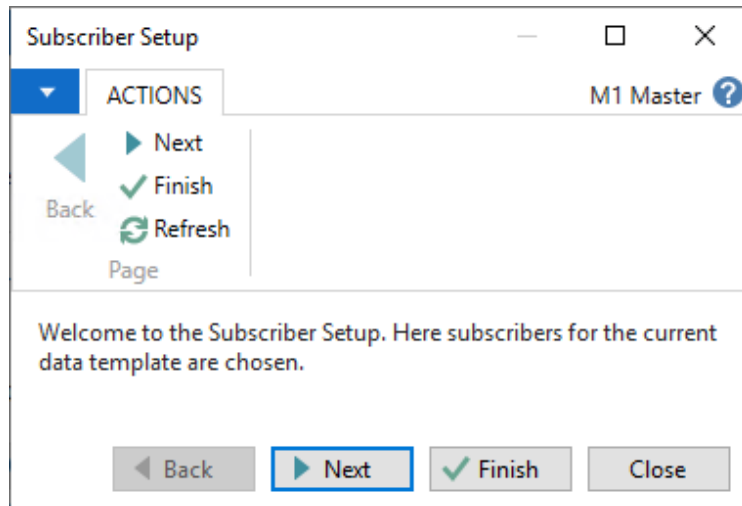
CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
 +45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Subscriber setup

When activating the action “Set up Subscribers” from the Templates list a wizard will guide you through selection of a number of subscribers, which are attached as subscribers to the current data template.

The current template is the template on the line with focus in the Templates list.



Subscriber Setup

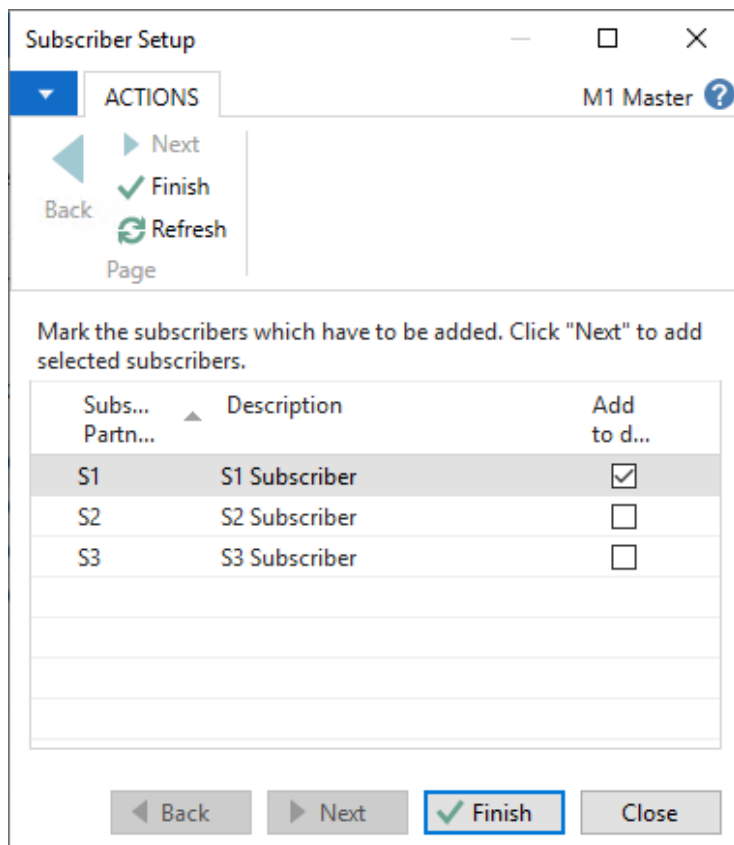
ACTIONS M1 Master ?

Next
Back Finish
Refresh
Page

Welcome to the Subscriber Setup. Here subscribers for the current data template are chosen.

Back Next Finish Close

Wizard step 1: Displaying welcome instructions only. Click “Next” to continue.



Subscriber Setup

ACTIONS M1 Master ?

Next
Back Finish
Refresh
Page

Mark the subscribers which have to be added. Click "Next" to add selected subscribers.

Subs... Partn...	Description	Add to d...
S1	S1 Subscriber	<input checked="" type="checkbox"/>
S2	S2 Subscriber	<input type="checkbox"/>
S3	S3 Subscriber	<input type="checkbox"/>

Back Next Finish Close

Wizard step 2: Mark partners to be added as subscribers.

Choose the partners you want to subscribe to the current template by inserting checkmarks in the checkboxes. Click “Finish” to complete the selection.

CONTACT INFORMATION

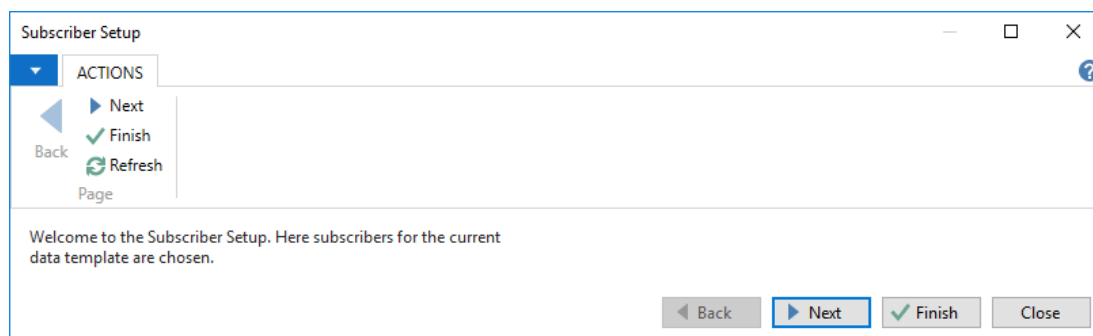
ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Afterwards the selected partners will occur as subscribers. Check this out from the Template Card clicking on the “Subscribers” button in the Navigate tab.

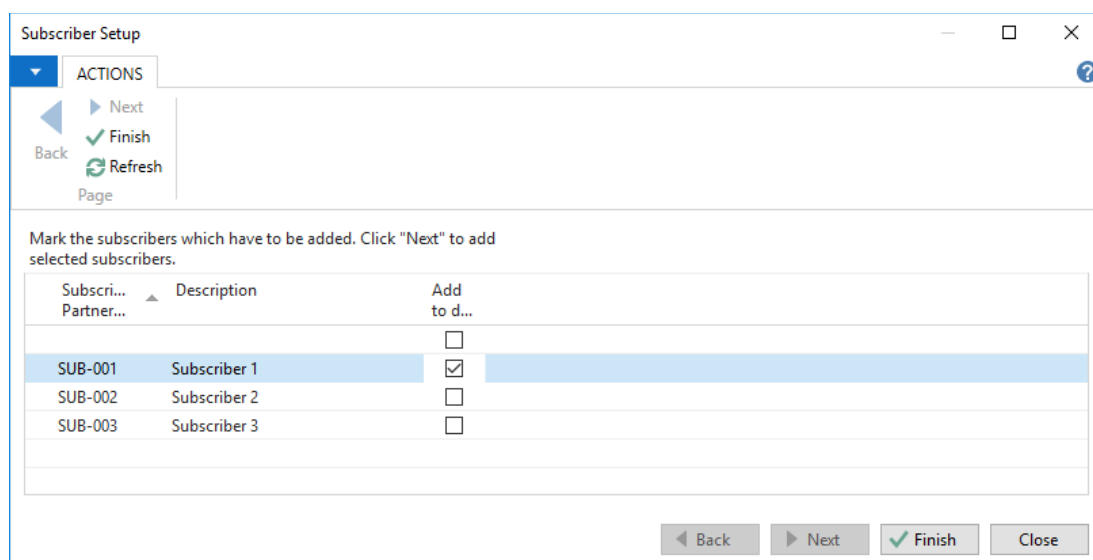
Add more subscribers to a selected Data Template

Using the Subscriber Wizard, it is easy to add more subscribers to a given Data Template.

From the Templates list there is an action called “Set up Subscribers”. Clicking on this icon the subscriber wizard will be activated.



Wizard step 1: Read the instruction and continue by clicking “Next”.

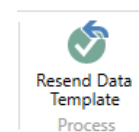


Wizard step 2: Set a checkmark in every single line you want to select. Click “Finish” to end the wizard.

Mark the partners (subscribers) you want to have added to the current Data Template. Then click “Finish” to create the subscriber references.

Resending data to subscriber

If you need to make it possible for transferring a Data Template to a given subscriber, even if the “Data Template Logged” field on the subscriber is marked, a function can remove this “Data Template Logged” mark for resending the data with the next synchronization.



On the Data Template Subscribers page, you will find the action button to clear the “Data Template Logged” field.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Set up Data Templates for partner

Adding a new partner when a number of useful templates already are available, will set the user in another perspective regarding how to add more templates to a specific partner (subscriber).

For this Global Master has a wizard named "Set up Templates", which can be started from the Action tab in the Partners page.

Select a partner in the Partners page and start the "Set up Templates" wizard. After pressing "Next" a list of templates to select are displayed.

Data Tem...	Description	Add to s...	Type
01-COUNT...	Country/Region	<input checked="" type="checkbox"/>	Field Template
01-GENBU...	Gen. Business Posting Group	<input checked="" type="checkbox"/>	Field Template
01-POSTC...	Post Code	<input checked="" type="checkbox"/>	Field Template
02-CUSTO...	Customer	<input checked="" type="checkbox"/>	Normal Tem...

Mark the checkboxes for the desired templates to add as template subscribers to the current template and press "Finish" to create.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Data Template Filter

You might have a situation where you don't want to synchronize all records in a table. Maybe a certain subscriber needs a partial range of the customers available in the master company only.

Adding a Data Template Filter to a Data Template ensures that only records within the filter will be processed by the Global Master synchronization.

Even data template filters in a sub template can be very useful.

Take an example with the Item Cross Reference, where the table contains references between between items and a customer, a vendor or a bar code.

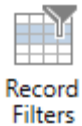
From the normal template for the Itemtable a Sub Data Template Link connecting to the template handling table "Item Cross Reference" should be defined.

In a case where you are synchronizing customers but neither vendors nor bar codes, it is not desired to synchronize all contents of the Item Cross Reference table.

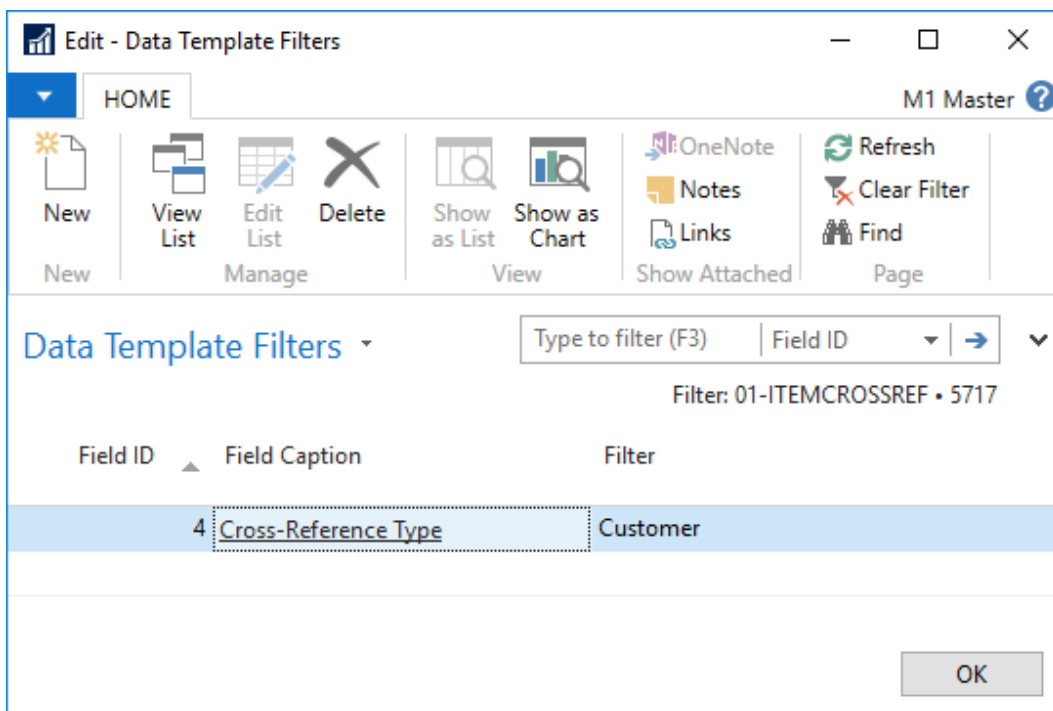
Here a filter attached to the Item Cross Reference template would make sense.

The template has to be "Under Development" when you want to add a data template filter.

In the Data Templates list or in the Data Template card, please navigate to the "Record Filters" action button.



Adding a Data Template Filter on the Item Cross Reference template, including only data with "Cross Reference Type=Customer" ensures transfer of data from the table with references to customers alone.



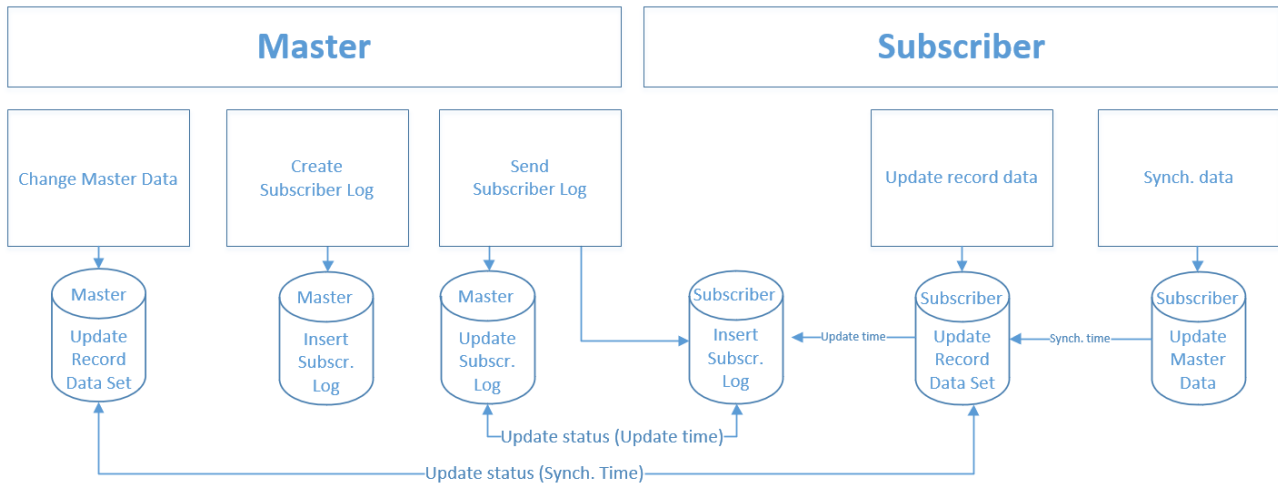
Now the value of the Item Cross Reference will be taken to consideration before including the cross reference in the dataset to be synchronized.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

UPDATE DATA

GM update data in different steps. First steps is in the Master Company where we generate the data for Subscribers. Last steps is in the Subscriber Company where we receive and process the data from Master Company.



Besides Master Data updating, GM also keeps track of the status of this. In the Master Company, we can see if the Subscriber has updated the Record Data and more important if, Subscriber has synchronized data.

GM provides possibility to schedule jobs to handle all steps automatically. In the Master Company, it is also possible to update GM Record Data automatically when you change Master Data.

If you have scheduled steps to be processed it is still possible to process these manually¹. This could be the case if we need to push data to a Subscriber outside the scheduling periods. In this case, Subscriber also have to handle the incoming data manually.

See Chapter *The Data Transfer process*.

¹ Please note that long lasting synchronizations can lock each other since writing in the database can cause tables to be locked during the process.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

UPDATE STATUS

GM provides status on two levels in Master Company. First level is the Subscriber Log that contains data for each Subscriber Company. Next level is on Subscriber Record Data which holds all details with single field values.

Transactions

32

Subscriber Log

History

892

Record Data

999+

Subscriber Record Data

999+

Subscriber Field Values

Subscriber Log

Here you can see if the Subscriber Log has been send to Subscriber. GM logs this in the fields “Data Send” and “Data Send On”. Furthermore, it is possible to see if Subscriber has updated the data. This requires that you run the status update job (Synchronize Subscriber Status). GM logs this in the fields “Data updated (Subscriber)” and “Data updated On (Subscriber)”.

Subs... Partn...	Master Partn...	Entry No.	Subscriber Company Name	Owner Company Name	Data Template Code	Creation Date	Data Tem...	Data Sent On	Data Upd...	Data Updated On (Subscriber)	Error Text
S1	M1	1	S1 Subscriber	M1 Master	01-DIM	10/4/2019	<input checked="" type="checkbox"/>	10/4/2019 2:38 PM	<input checked="" type="checkbox"/>	10/4/2019 2:38 PM	
S1	M1	2	S1 Subscriber	M1 Master	01-DIMVAL	10/4/2019	<input checked="" type="checkbox"/>	10/4/2019 2:38 PM	<input checked="" type="checkbox"/>	10/4/2019 2:38 PM	
S1	M1	3	S1 Subscriber	M1 Master	02-BANKACCOUNT	10/4/2019	<input checked="" type="checkbox"/>	10/4/2019 2:38 PM	<input checked="" type="checkbox"/>	10/4/2019 2:38 PM	
S1	M1	4	S1 Subscriber	M1 Master	02-CUSTOMER	10/4/2019	<input checked="" type="checkbox"/>	10/4/2019 2:38 PM	<input checked="" type="checkbox"/>	10/4/2019 2:38 PM	
S1	M1	5	S1 Subscriber	M1 Master	02-GL-ACCOUNT	10/4/2019	<input checked="" type="checkbox"/>	10/4/2019 2:38 PM	<input checked="" type="checkbox"/>	10/4/2019 2:39 PM	
S1	M1	6	S1 Subscriber	M1 Master	02-ITEM	10/4/2019	<input checked="" type="checkbox"/>	10/4/2019 2:38 PM	<input checked="" type="checkbox"/>	10/4/2019 2:39 PM	
S1	M1	7	S1 Subscriber	M1 Master	02-VENDOR	10/4/2019	<input checked="" type="checkbox"/>	10/4/2019 2:38 PM	<input checked="" type="checkbox"/>	10/4/2019 2:39 PM	
S1	M1	8	S1 Subscriber	M1 Master	02-CUSTOMER	10/7/2019	<input checked="" type="checkbox"/>	10/7/2019 9:15 AM	<input checked="" type="checkbox"/>	10/7/2019 9:16 AM	
S1	M1	9	S1 Subscriber	M1 Master	02-CUSTOMER	10/7/2019	<input checked="" type="checkbox"/>	10/7/2019 9:35 AM	<input checked="" type="checkbox"/>	10/7/2019 9:36 AM	
S1	M1	10	S1 Subscriber	M1 Master	02-CUSTOMER	10/7/2019	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	
S1	M1	11	S1 Subscriber	M1 Master	02-VENDOR	10/7/2019	<input checked="" type="checkbox"/>	10/7/2019 1:58 PM	<input type="checkbox"/>		
S1	M1	12	S1 Subscriber	M1 Master	02-VENDOR	10/7/2019	<input checked="" type="checkbox"/>	10/7/2019 1:58 PM	<input type="checkbox"/>		
S1	M1	13	S1 Subscriber	M1 Master	02-VENDOR	10/7/2019	<input checked="" type="checkbox"/>	10/7/2019 1:58 PM	<input type="checkbox"/>		
S1	M1	14	S1 Subscriber	M1 Master	02-VENDOR	10/7/2019	<input checked="" type="checkbox"/>	10/7/2019 1:58 PM	<input type="checkbox"/>		

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
 +45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Subscriber Record Data

Here you can see if the Subscriber Record Data has been included in Subscriber Log. GM logs this in the fields “Data Logged”, “Data Logged On” and “Subscriber Log Entry No.”

Furthermore, it is possible to see if Subscriber has synchronized the data. This requires that you run the status update job (Synchronize Subscriber Status). GM logs this in the fields “Data Sync. (Subscriber)” and “Data Sync. On (Subscriber)”.

The screenshot displays the 'Edit - Subscriber Record Data' interface. At the top, there are navigation buttons: 'Show Record Data', 'Unselect Sent Mark', 'Refresh', and 'Find'. Below these is a search bar with 'Subscriber Partner ID' and a filter dropdown. The main table lists subscriber records with the following data:

Subs... Partn...	Table ID	Table Caption	Primary Key	Data Sent	Data Sent On	Data Sync. (Subscriber)	Data Sync. On (Subscriber)	Subscriber Log Entry No.
S2	18	Customer	No.=61000	<input checked="" type="checkbox"/>	10/7/2019 2:05 PM	<input type="checkbox"/>		4
S1	18	Customer	No.=62000	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	10
S2	18	Customer	No.=62000	<input checked="" type="checkbox"/>	10/7/2019 2:05 PM	<input type="checkbox"/>		4
S1	18	Customer	No.=KI1020	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	10

Below the table, the 'Subordinate Subscriber Field Values' section is visible, showing details for the selected record (No.=KI1020):

Field ID	Field Name	Field Value	Data Sent	Data Sent On	Data Sync.	Data Sync. On (Subscriber)	Obs...
1	No.	KI1020	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	<input type="checkbox"/>
2	Name	Cronus Cardoxy Sales	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	<input type="checkbox"/>
3	Search Name	CRONUS CARDOXY SALES	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	<input checked="" type="checkbox"/>	10/7/2019 9:43 AM	<input type="checkbox"/>

If records are marked as Obsolete this means that, the record has been sent to Subscriber previous but is now not part of Data Template.

ERROR HANDLING

If you synchronize record data in Subscriber Company then sometimes you will experience errors on some of the records.

If you look at your Record Data errors are highlighted in red.

If you have not synchronized Record Data, you will see these highlighted in yellow.

To see the error, go to the record and choose Log Entries

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk


SUBSCRIBER PERMISSIONS

If you subscribe for data from a Master Company then Master Company owns these data. That is, you cannot change data you received from Master Company.

An example could be that Master Company owns your Customer table. If you try to change some of the fields provided by Master Company, you will get an error.

In the example below, it is intended to change the address of the customer, which results in an error. You will also get an error if I try to delete or rename the customer.


Example with modification

 Address is controlled by Global Master and cannot be changed locally, because the record is attached to Data Template Code 02-CUSTOMER.

Example with deletion

 It is not allowed to delete Customer , because the record is attached to Data Template Code 02-CUSTOMER.

Example with rename

 It is not allowed to rename Customer , because the record is attached to Data Template Code 02-CUSTOMER. (Select Refresh to ...

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

THE DATA TRANSFER PROCESS

This chapter describes how to synchronize data step by step.

Please note that actions have to be performed in both master and subscriber companies. If more subscriber companies are to be handled, the actions described for the subscriber company have to be performed in every single subscriber company.

Data to be transferred are stored in the Subscriber Logs. Here you will find an XML Document containing the detailed transactions to be sent.

The Subscriber Log also holds information on creation date, sent time and updated on subscriber time.

There is one Subscriber Log for every template subscriber.

Create and send Subscriber Log from master company

To activate the synchronization, press the “Create and send Subscriber Log” action button in the role centers ribbon.



You can choose to create and send separately or performing both steps combined.

Create

Subscriber Logs are created for the templates which are released.

Send

The contents of the Subscriber Logs are sent to the subscriber companies.

In the Subscriber Record Data and Subscriber Field Values the records will be marked Sent. Still yellow since they are not synchronized in the subscriber company.

Create and Send

Performing both of the above described functions.

Next action takes place in the subscriber company.

CONTACT INFORMATION

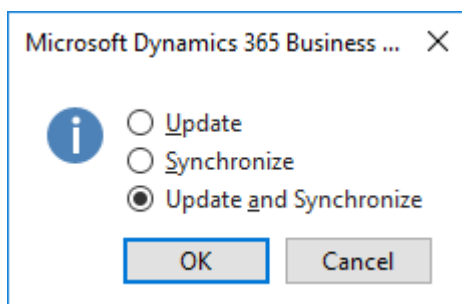
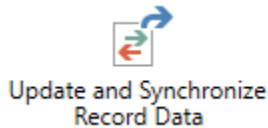
ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Update and Synchronize Record Data in subscriber company

In the subscriber company, there are still a few tasks to be performed, before the data are received and ready to be used here.

The Subscriber Log has been updated, when the Send activity was performed in the master company. In our example we can see that one template was sent.

Press “Update and Synchronize Record data” to proceed.



Update

Data are received from the XML document of the Subscriber Logs. Data are stored in Redord Data

Synchronize

Data are synchronized from the Data records into the corresponding data tables.

Subscriber Log Entries are now present in the subscriber company.

After the synchronization the data are ready to be used in the subscriber company.

Update and Synchronize

Performing both of the above described functions.

Next action takes place in the master company.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Synchronize Subscriber status in master company

Now the subscriber company have been synchronized, we do have to fetch the subscriber status to complete the entire synchronization process.

Activate the “Synchronize Subscriber status” in the role centers action ribbon.



Now the lines in both Subscriber Record Data and in Subscriber Field Values are marked with “Data Synchronized” and they are not yellow anymore.

Note: Partners “On Hold” will not have the status updated.

The synchronization process is completed.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Examining the result of the data transfer process

After the synchronization process is completed, it is always a good idea to take a look on the result. Check if the expected data was transferred into the target tables in the subscriber company.

Even if the Subscriber Log is regarded as completed, that is if both fields “Data Template Sent” and “Data Updated” are marked, the final step synchronizing the data into the genuine target tables might have been unsuccessful.

Example: Post Code with validation in all fields

The Post code table has a primary key containing Code and City. This making the post code table not suitable to be handled by either a field template or a sub template.

Therefore, the post codes in this example were set up to be handled by a normal template 01-POSTCODE.

Field ID	Field Caption	Vali... Field	Comment	Table Relation	Field Data Templat...	Info... Field	Exec... trig...
1	Code	<input checked="" type="checkbox"/>		0		<input type="checkbox"/>	<input type="checkbox"/>
2	City	<input checked="" type="checkbox"/>		0		<input type="checkbox"/>	<input type="checkbox"/>
3	Search City	<input checked="" type="checkbox"/>		0		<input type="checkbox"/>	<input type="checkbox"/>
4	Country/Region Code	<input checked="" type="checkbox"/>		9		<input type="checkbox"/>	<input type="checkbox"/>
5	County	<input checked="" type="checkbox"/>		0		<input type="checkbox"/>	<input type="checkbox"/>

Please note that validation of all fields has been set up. Field “Country/Region Code” has a table relation, but no field template was defined in this case.

The template is released to generate subscriber record data. A subscriber Log is created and sent. Then the data was updated and synchronized in the subscriber company.

However, we did not transfer the Country/Region codes in advance. That’s why we are experiencing some errors in the subscriber company now.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

After the update and the synchronization both have been performed in the subscriber company the subscriber log was marked with “Data Template Sent” and “Data Updated” information. So far it looks perfect.

Data Template Code	Creation Date	Data Tem...	Data Sent On	Data Upd...	Data Updated On (Subscriber)	Error Text
01-POSTCODE	14-02-2020	<input checked="" type="checkbox"/>	14-02-2020 09:58	<input checked="" type="checkbox"/>	14-02-2020 09:59	

Time stamps were successfully added and no error text appears.

However, the synchronization process comes after a successfully performed data update. The data update is generating Record Data to be synchronized into the actual target table.

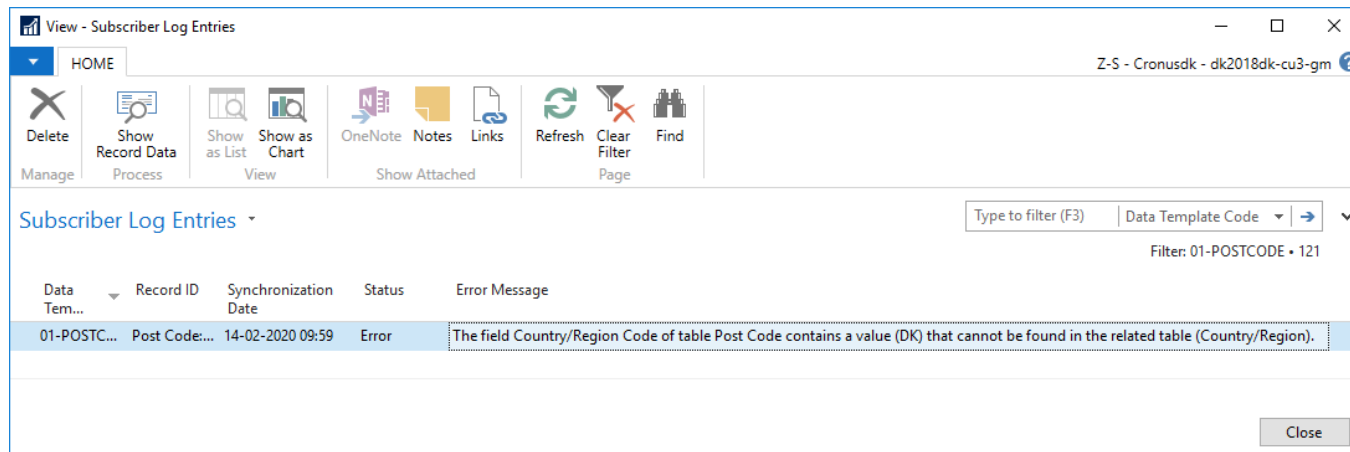
Taking a look in the poste code table, we are discovering that no poste codes are available. This means that the synchronization of the poste codes failed.

Regarding the Record Data the post code lines are appearing red and with error messages.



Primary Key	Table ID	Table Caption	Data Syn...	Data Sync. On (Subscriber)
Post Code: 1000,København K	225	Post Code	<input type="checkbox"/>	
Post Code: 1001,København K	225	Post Code	<input type="checkbox"/>	
Post Code: 1002,København K	225	Post Code	<input type="checkbox"/>	
Post Code: 1003,København K	225	Post Code	<input type="checkbox"/>	
Post Code: 1004,København K	225	Post Code	<input type="checkbox"/>	

Use the “Log Entries” button to see what error message is describing the detected problem.



The screenshot shows a window titled "View - Subscriber Log Entries". The main content area displays a table with the following columns: Data Tem..., Record ID, Synchronization Date, Status, and Error Message. A single row is visible with the following data: Data Tem...: 01-POSTC..., Record ID: Post Code:..., Synchronization Date: 14-02-2020 09:59, Status: Error, and Error Message: The field Country/Region Code of table Post Code contains a value (DK) that cannot be found in the related table (Country/Region). The error message is highlighted with a red border. The window also features a filter bar at the top right with the text "Filter: 01-POSTCODE • 121" and a "Close" button at the bottom right.

The field Country/Region Code of table Post Code contains a value (DK) that cannot be found in the related table (Country/Region).

You can also get an overview of record data entering the Record Data cue from the role center directly.

To fix the problem with the missing Country/Region Codes, you have to transfer these data into the subscriber company. After updating the data, you can synchronize both Country/Region Codes and Post Codes with success.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Feature: Force Full Update

If the data for some reason was not correct updated Global master provides a function which should help making the update complete.

In the Data Template Card, you will find the action “Create/Update Record Data”.



When starting the report, you are presented the option “Force Full Update”. If you select this mark, the template is forced to be updated at once, when the OK button is pressed.

The screenshot shows a dialog box titled "Edit - Create/Update Record Data". At the top right, there are window control buttons (minimize, maximize, close) and the text "M1 Master" with a help icon. On the left side, there is a "Clear Filter Page" button with a funnel icon and a red 'X'. The main area contains an "Options" section with a "Force Full Update" checkbox that is checked. Below this is a "Template Header" section. Underneath, there is a "Show results:" section with a filter: "Where Code is 02-VENDOR". There is also an "Add Filter" button with a plus sign. At the bottom right, there are "OK" and "Cancel" buttons.

A brand-new set of Subscriber Logs are created. Data to be transferred are stored in the Subscriber Logs. Here you will find an XML Document containing the detailed transactions to be sent.

Important notice:

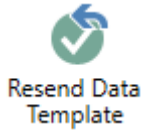
Now the data still have to be synchronized to the subscribers. This is not performed with this feature.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Feature: Resend Data Template

If you need to make it possible for transferring a Data Template to a given subscriber, even if the “Data Template Logged” field on the subscriber is marked, a function can remove this “Data Template Logged” mark for resending the data with the next synchronization.



On the Data Template Subscribers page you will find the action button to clear the “Data Template Logged” field.

Feature: Resend Subscriber Log

Once a Subscriber Log has been marked in the “Data Template Sent” field, this specific transaction is considered sent to subscriber company.

As a troubleshooting action, the system provides an option to resend the already sent Subscriber Log.

In the Subscriber Log page, you will find an action named “Resend Subscriber Log” located in the action tab.



Activating this button the field “Data Template Sent” will be cleared together with “Data Sent On” time stamp. Hereby the Subscriber Log can be send once more.

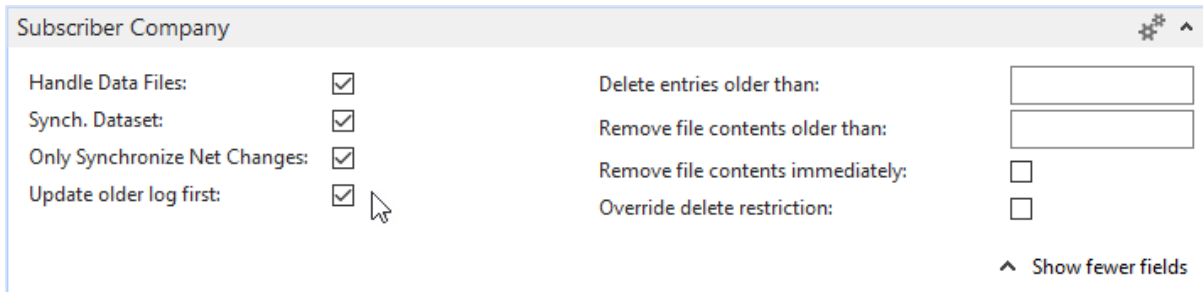
With the next “Send Subscriber Log” action the reopened Subscriber Log will be send to the subscriber.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Feature: Update older log first

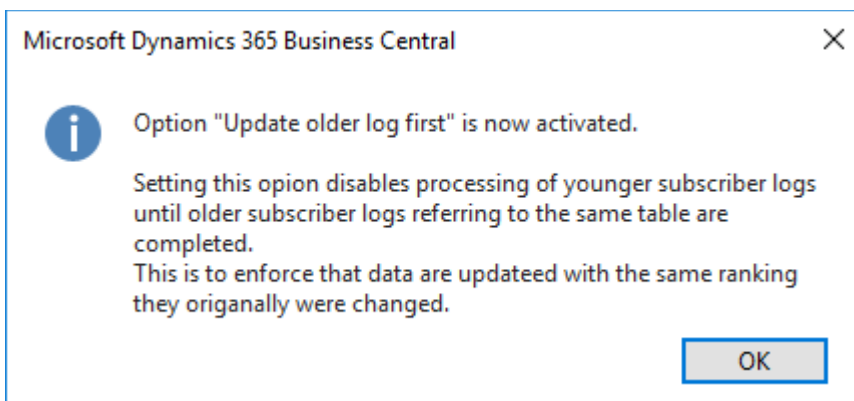
To ensure that data are updated in the subscriber company in the order the data originally was changed and logged in in the master company, a setting in Global Master Setup can be set.



Handle Data Files:	<input checked="" type="checkbox"/>	Delete entries older than:	<input type="text"/>
Synch. Dataset:	<input checked="" type="checkbox"/>	Remove file contents older than:	<input type="text"/>
Only Synchronize Net Changes:	<input checked="" type="checkbox"/>	Remove file contents immediately:	<input type="checkbox"/>
Update older log first:	<input checked="" type="checkbox"/>	Override delete restriction:	<input type="checkbox"/>

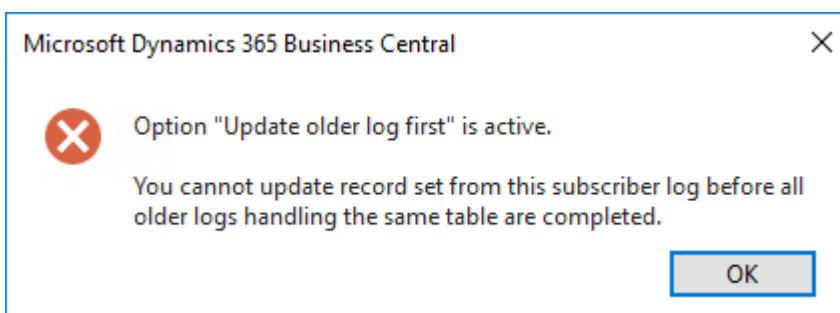
^ Show fewer fields

Setting a checkmark in field “Synch. Older log first” will activate a verification ensuring that a newer log referring to data in the same table as for an older not completed log cannot be processed first.



Now the subscriber company function “Update Record Data” will skip processing younger subscriber logs, if there are one or more older subscriber logs handling data for the same table as the one to be processed.

Even if you use the “Update Record Data (Current Log)” in the “Not Completed Subscriber Log” page, the option will not allow to process the younger log before an older one. You will get an error message as displayed below.

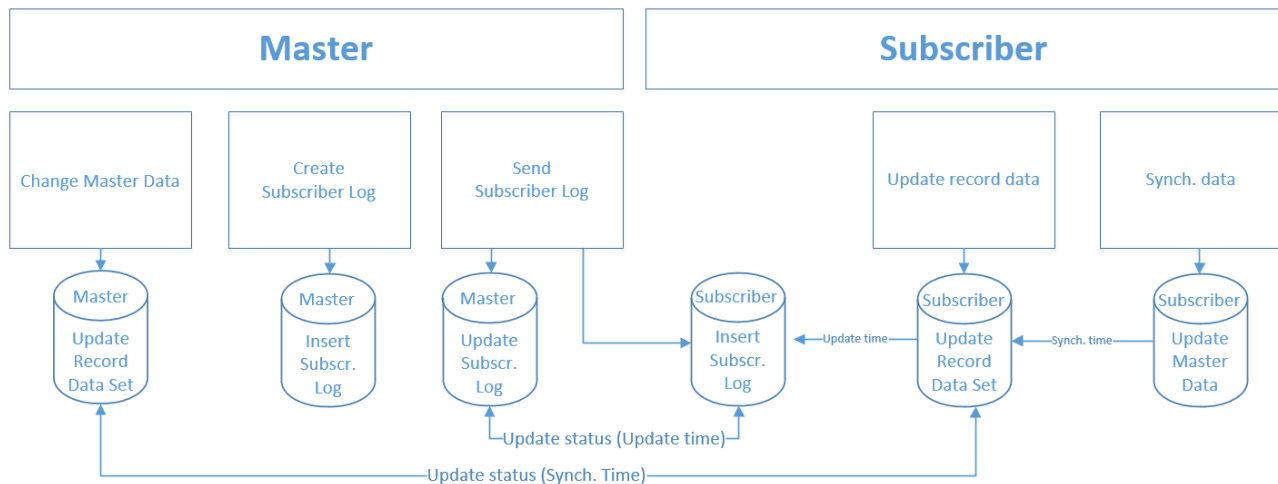


CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

JOB QUEUE SETUP

We have jobs to handle all steps in Global Master. In this section, it is described which objects to call to schedule these steps using the Job Queue.



Master

Record Data Set

Update Record Data Set:

Codeunit 6208197 GM Create Record Data PROF

If you have set "Auto Update Record Set"² in Global Master Setup, you do not need to schedule this job. When setting the Auto Update Record Set you need to run the batch job once to update record data for master data that have been changed but not updated.

Subscriber Log

Create Subscriber Log:

Codeunit 6208207 "GM Create Subscriber Log PROF"

Send Subscriber Log:

Codeunit 6208202 "GM Send Subscriber Log PROF"

Create and Send Log:

Codeunit 6208205 "GM Create and Send Log PROF"

Including both of the two mentioned above to ensure data are ready to be send.

Synchronize Subscriber Status

Report 6208193 "GM Update Status PROF"

² "Auto Update Record Set" is not optional in the NAV 2018 and 365 BC versions. This feature will be performed by default.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Subscriber

Record Data

Update Record Data: Codeunit 6208208 "GM Handle Subscriber Log PROF"

Synchronize Record Data: Codeunit 6208195 "GM Synch. Company PROF"

See chapter Maintenance for available cleanup jobs.

Update and Synchronize Record Data

Update and Synchronize Record Data: Codeunit 6208206 "GM Upd. and Synch. Record PROF"
Including both of the two mentioned above to ensure data are ready for synchronization.

Job Queue is located in Administration - Application Setup - Job Queue

Application Setup

Choose by department

General

Users

Financial Management

Finance
Posting Groups
VAT Posting Group
VAT Rate Change
Trail Codes
Dimensions

Intercompany Postings
Intrastat
Fixed Assets
Cash Flow
General

Service

Service Operations
General
Status

Pricing
Fault Reporting
Contract

Human Resources

Job Queue

Workflow

Flow

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Example of Job Queue Entry scheduling Codeunit 6208205 "GM Create and Send Log PROF".
 You can also schedule this to run several times per day.

Codeunit · 6208205 · GM Create and Send Log PROF

General

Object Type to Run: Codeunit
 Object ID to Run: 6208205
 Object Caption to R...: GM Create and Send Log PR...
 Description: GM Create and Sen...
 Earliest Start Date/Time:
 Status: On Hold

▼ Show more fields

Recurrence

Recurring Job:
 Run on Mondays:
 Run on Tuesdays:
 Run on Wednesdays:
 Run on Thursdays:
 Run on Fridays:
 Run on Saturdays:
 Run on Sundays:

Next Run Date Formula:
 Starting Time: 10:00:00 PM
 Ending Time: 11:59:00 PM
 No. of Minutes between Ru...: 120
 Inactivity Timeout Period: 0

OK

CONTACT INFORMATION

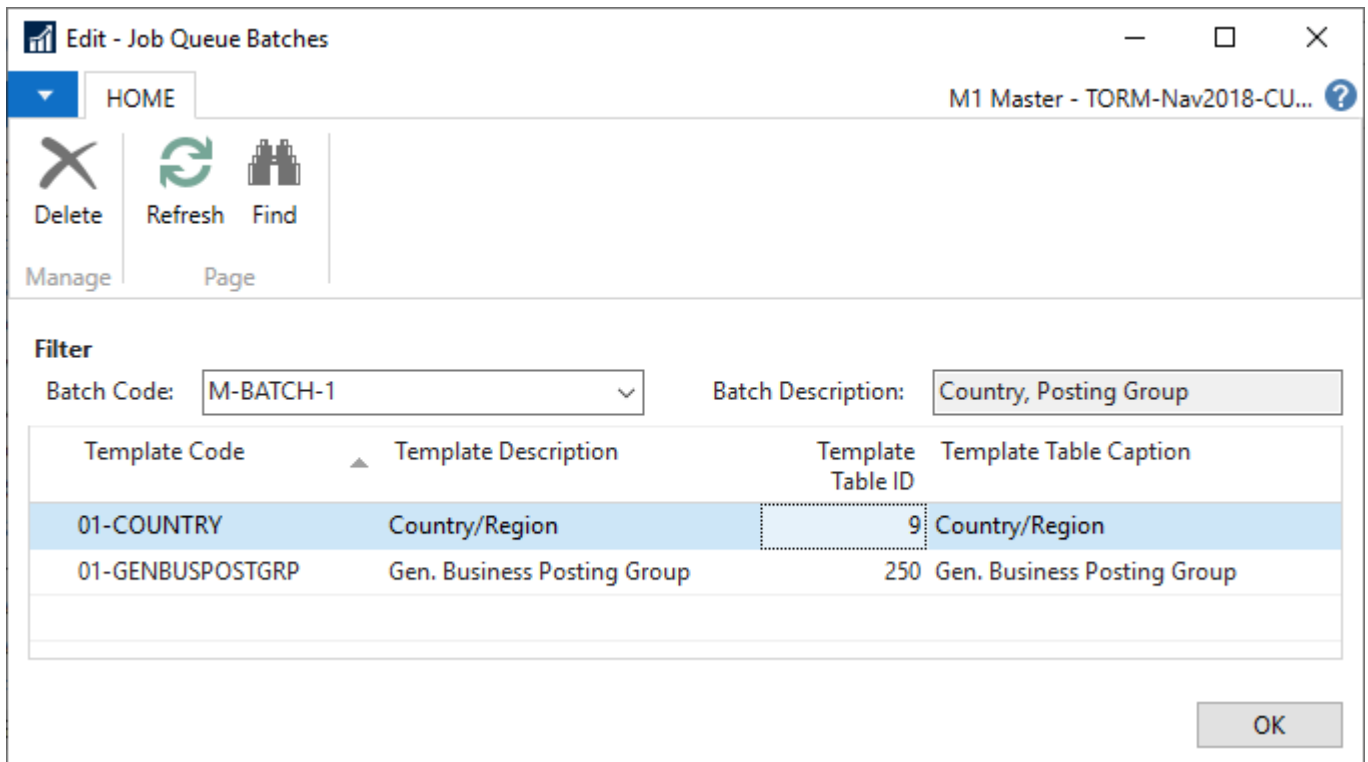
ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
 +45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Job Queue Batch

Running all templates with one job might require a larger number of resources. To make jobs running more smoothly, Job Queue Batches are introduced.

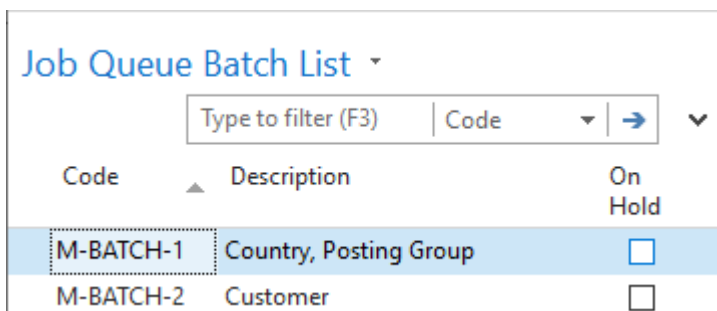
A Job Queue Batch makes it possible to group a number of templates in a batch. This batch will then be processed by a dedicated Job Queue Entry.

Job Queue Batches are accessed in Departments or by using the search field (Ctrl-F3).



Add the number of templates you want to group, and set the “Parameter string” in a Job Queue Entry. The parameter string is used as a filter for which templates to be processed. See an example on next page.

A Job Queue Batch can be set on hold for a period by marking the “On Hold” field in the Job Queue Batch List.



CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Codeunits for Job Queue Batches

There is one codeunit for each step of the synchronization process. These codeunits are requiring a template filter set in the Job Queue Entry which is meant to start the process.

Codeunit 6208221 "GM Batch Create Subs. Log PROF"	Create Subscriber Log (Master)
Codeunit 6208222 "GM Batch Send Subs. Log PROF"	Send Subscriber Log (Master)
Codeunit 6208223 "GM Batch Update Rec. Data PROF"	Update Record Data (Subscriber)
Codeunit 6208224 "GM Batch Synch. Company PROF"	Synchronize Data (Subscriber)
Codeunit 6208225 "GM Batch Update Status PROF"	Update Status on Subscriber Log (Master)

Job Queue Entry with Parameter String

On the Job Queue Entry one of the GM Batch codeunits are to be selected, when you want to use Job Queue Batches in Global Master. Enter a filter in field "Parameter String" to choose what batch or batches to process.

Example of filter string: M-BATCH*

Batches starting with M-BATCH will be processed. M-BATCH-1, M-BATCH-2 M-BATCH-3 etc.

General			
Object Type to Run:	Codeunit	Maximum No. of Attempts to R...	0
Object ID to Run:	6208222	Last Ready State:	04-11-2021 12:23
Object Caption to Run:	GM Batch Send Sub...	Earliest Start Date/Time:	04-11-2021 12:59
Description:	GM Batch Send Sub...	Expiration Date/Time:	
Parameter String:	M-BATCH*	Status:	Ready
Job Queue Category Co...		On Hold Due to Inactivity:	<input type="checkbox"/>
User ID:			
		Show fewer fields	

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

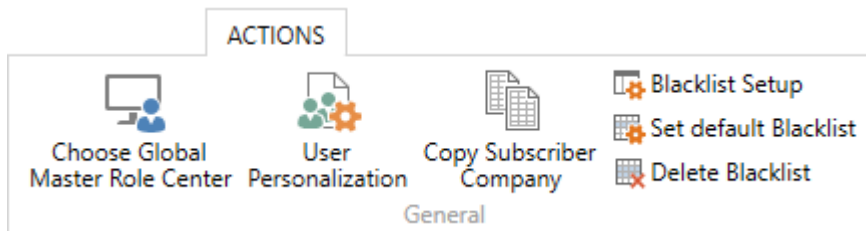
COPY SUBSCRIBER COMPANY

Adding a new company as a subscriber into a configuration with an already subscribed master would normally result in a large number of synchronization activities into the new subscriber.

This is why the Copy Subscriber Company function have been created. Copying an existing company into a new company name in the database, is an already known feature in Dynamics NAV and Dynamics 365 Business Central.

The advantage using the “Copy Subscriber Company” function is that the new company will be set up as a subscriber, and in the same step configured as if the data synchronization from the master company already have been performed into the new subscriber company.

This is to avoid unnecessary synchronizations when the new subscriber is activated.



Among the Global Master Setup actions, you will find the “Copy Subscriber Company” feature.

Copying a company including Global Master settings to be adjusted, is possible from a subscriber company only.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

CONFIGURATION TEMPLATE

A standard feature in Dynamics NAV/365 Business Central is to have configuration templates for setting default values in new records created.

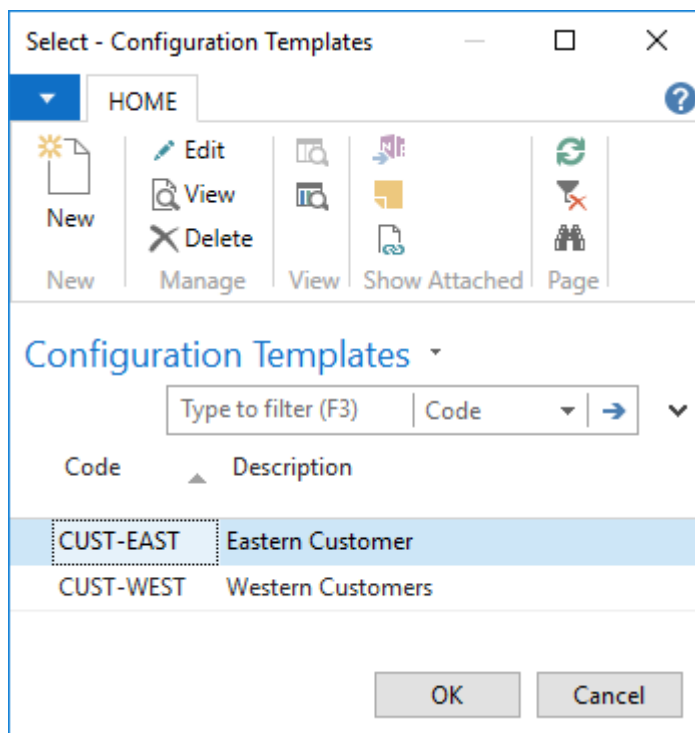
As an example, you could add a Location Code to newly added customers by entering a certain value in the Location Code field.

When entering a “Config. Template Code” in the template header, the code will be synchronized to the subscriber companies, meaning that the usage of this specific Configuration template code is open.

Now you can enter fields and initial values for these fields in a configuration template named with exactly this code.

New entered records (Customers etc.) will then have the initial value inserted when created.

However, is a field present in the configuration template, and also present in the Global Master data template, the data governed by Global Master will be transferred to the subscriber.



From the Data Template card, you can look up in field “Config. Template Code” to access configuration templates attached to the current table. Select amongst the displayed configuration templates.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

MAINTENANCE

Under the Task area in Departments, you will find the two cleanup functions in the Maintenance menu.

Alternatively access to the functions are found directly from the Global Master Role Center.

These processing only reports are used for removing data and deleting log entries.

Since the file contents in the Subscriber Log entries are using quite an amount of space, this cleanup procedure is useful for freeing space in the database.

Cleanup Subscriber Log

This report is used for removing file contents from the Subscriber Logs or deleting the entry completely.

File contents is the embedded XML document used when transferring GM data between databases.

Edit - Cleanup Subscriber Log

ACTIONS

Clear Filter Page

Delete subscriber log:

Remove data to synchronize from subscriber log:

Subscriber Log

Sorting: Subscriber Partner ID, Master Partner ID, Entry No.

Show results:

Where Subscriber Partner ID is Enter a value.

And Master Partner ID is Enter a value.

And Creation Date is Enter a value.

+ Add Filter

Schedule... OK Cancel

The report can be started using a filter as in most reports. In addition to this there are two options. The minimum age of the entry entered in the Global Master Setup must be reached before an entry is deleted.

Delete Subscriber Log Deleting the entry completely. (Option is disabled)

Remove data to synchronize from Subscriber Log The embedded XML document will be removed from the entry.

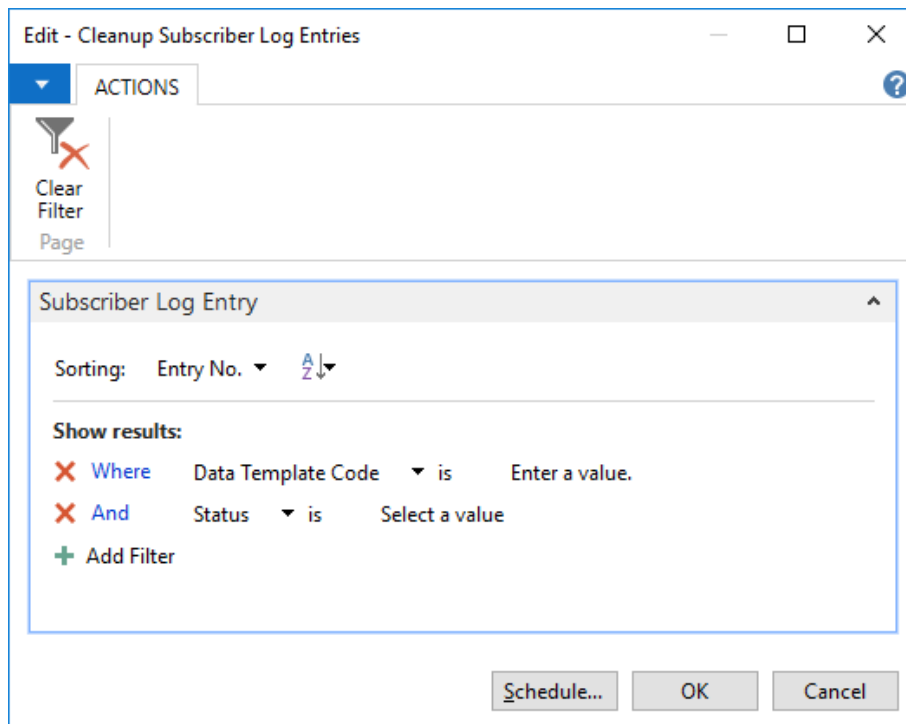
Important: Only Subscriber Logs with "Data updated (Subscriber)" will be affected.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Cleanup Subscriber Log Entries

This report is used for deleting the Subscriber Log entries.



The report can be started using a filter as in most reports. In addition to this there are two options. The minimum age of the entry entered in the Global Master Setup must be reached before an entry is deleted.

Important: Only Subscriber Log Entries where Status is Success will be affected.

Cleanup reports managed by Job Queue

The two reports mentioned above, can be managed by the job queue. There are two codeunits designed for this purpose.

Codeunit 6208213 “GM Cleanup Subscriber Log PROF” – Remove data to synchronize option is set.
Codeunit 6208214 “GM Cleanup Sub. Log Entr. PROF”

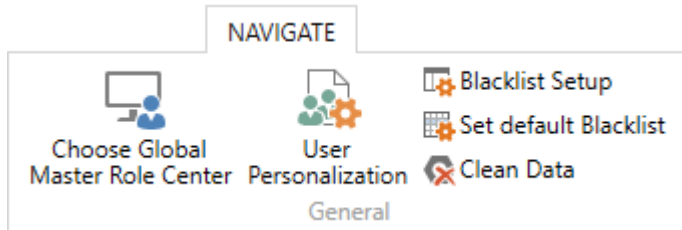
Running these codeunits the corresponding report will be started with no request form.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Clean Data (Disabled)

From the Global Master Setup page, you can sweep the data clean by using the action “Clean Data”. The “Clean Data” function has to be started for every single company you want to clean up.



The following tables are processed:

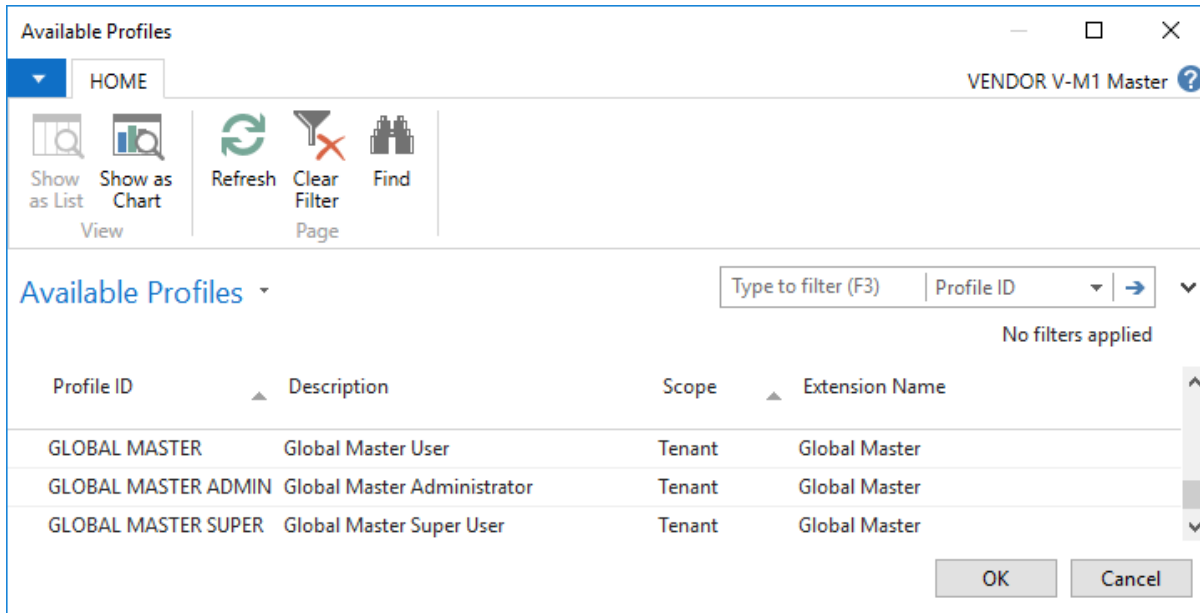
Data Template Header	Deleted in subscriber company
Data Template Line	Deleted in subscriber company
Data Template Subscriber	Field “Data logged” is set to true
Record ID	Deleted
Field Value	Deleted
Data Template Filter	Deleted
Temp Field Value	Deleted (Temporary used during synchronization)
Data Template Subscriber	Deleted
Record ID Key Field	Deleted
Subscriber Log Entry	Deleted
Subscriber Log	Deleted
Record ID Subscriber	Deleted
Sub. Template Link	Deleted
Field Value Subscriber	Deleted
Subscriber Selection	Deleted (Temporary used by wizard)
Company Setup	Deleted (Temporary used by wizard)

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

PROFILES

The Global Master extension comes with three profiles. These are pre-defined profiles, each with a designated purpose.



Profiles are to be added to users in the User Personalization page. Here you see an overview of the three profiles which are included in the Global Master extension.

GLOBAL MASTER USER

This profile has access to tasks for performing the synchronization of data between master and subscriber companies.

GLOBAL MASTER ADMIN

The Administrator profile has access to all necessary functions and set up options for running and managing Global Master.

GLOBAL MASTER SUPER

The super user has access to a few extra features than the admin user. However, these options are mostly for analysis and test purposes only.

It is not recommended using the super user for running the system on a daily basis.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Global Master Super User

Business Central offers an additional setup using a build in profile.

This profile does use the Global Master Role Center as already described. However, there is a difference.

For more information see the *Global Master SUPER USER* paper which is describing a number of hidden features.

By choosing the profile "GLOBAL MASTER SUPER", which is a profile with scope Tenant, the Global Master Setup page is modified in a way that gives the user a few undisclosed features.

Showing the group "Testing/Analysis", the super user does have access to some additional options, which normally are activated in by default.

"Special Features" are to be used occasionally and with great caution only.

Edit - Global Master Setup M1 Master ?

HOME ACTIONS

View Edit Manage Choose Global Master Role Center Process User Personalization Notes Links Show Attached Refresh Clear Filter Page Go to

Global Master Setup

General

Company Type: Partner ID:
Show History in Role Center:
[Show fewer fields](#)

Master Company

Max. No. of Records per Xml File: Remove file contents older than (Master):
Remove file contents immediately (Master):

Subscriber Company

Handle Data Files: Delete entries older than:
Synch. Dataset: Remove file contents older than:
Only Synchronize Net Changes: Remove file contents immediately:
Update older log first: Override delete restriction:
[Show fewer fields](#)

Testing/Analysis

Auto Update dataset: Exchange dataset:
Create Data Files:

Special Features

Pass Validation for RapidStart: Process XML version 2.00:

OK

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

Testing/Analysis

Auto Update dataset

If this field is marked, Record Data are automatically updated when a record is changed in the master company, and if the field is included in a Data Template owned by Master Company.

Create Data Files

In general, this field should always be marked, as this is to allow generating data to Subscribers.

If we for some reason want to stop this for a period, the option can be disabled.

Exchange dataset

This setting is required for sending the Subscriber Logs to a subscriber.

If we for some reason want to stop this process temporarily, we can uncheck this field.

Important: For making the synchronization work smoothly, these options have to be enabled.

Special Features

Pass Validation for RapidStart

Using RapidStart together with an active Global Master installation is not possible, because primary key fields always are validated on insert.

Using this option makes it possible to pass the validation, and makes it possible to insert data using RapidStart.

Important: Please deactivate this option right after use.

Process XML version 2.00

With Global Master version 69 a new XML Document version 2.10 was introduced.

This option re-activates interpretation of the old XML data when updating and synchronizing in the subscriber company.

Please refer to important guidance in the paper *“Global Master – Installation instructions for version 69”*.

This option is only available in subscriber companies and should be used with great caution only.

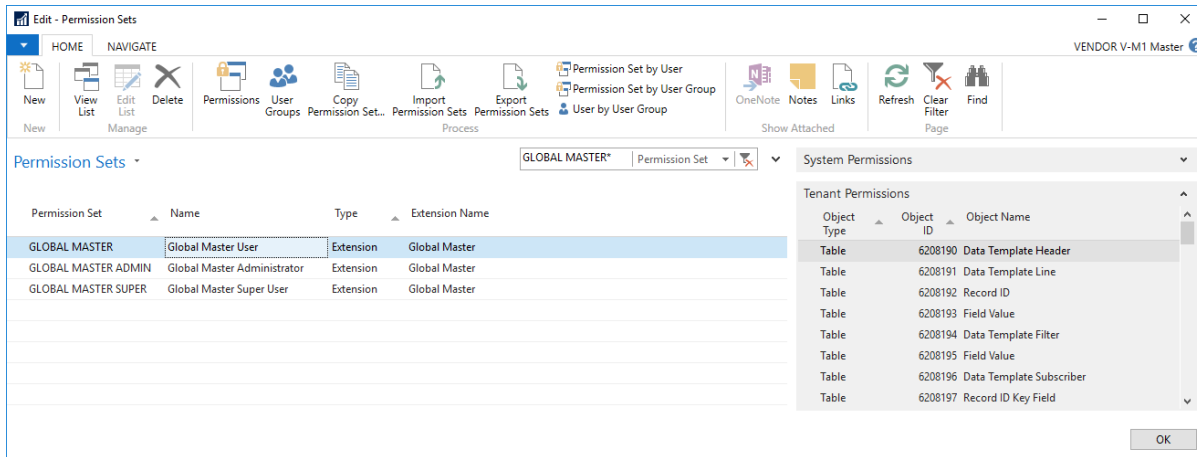
Important: Please deactivate this option right after use.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

PERMISSION SETS

The Global Master extension provides three permission sets. These are to be attached to users who have to perform tasks in the Global Master system.



The three permission sets are corresponding to the three user profiles with the three same names.

GLOBAL MASTER

This permission set gives access to tasks for performing the synchronization of data between master and subscriber companies.

GLOBAL MASTER ADMIN

The Administrator permissions gives access to all necessary functions and set up options for running and managing Global Master.

GLOBAL MASTER SUPER

The super user has identical rights as the admin user.

Using the super user profile makes a few extra features visible. These are for test and analysis or for data manipulation purposes only.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

RECOMMENDATIONS

Templates

Knowing the data to be synchronized using Global Master is very important. References between tables is critical when using field templates and sub templates.

In this chapter a few suggestions how to define templates for certain tables are listed.

Post Code

The “Post Code” table was designed to make entering of post codes and city easier. Therefore, the table has a unusual structure that does not match the use of neither field template nor sub template.

Use a template type normal for the “Post Code” table.

Consider if it is a good idea setting a filter on the Code field.

Comment Line

The “Comment Line” table has a build in option reference to a number of tables. This is not matching the requirements of the template types field and sub.

Use Normal Template for the “Comment Line” table, but a good advice is to have a filter on the “Table Name” field.

You might want to have more than one “Comment Line” template with different filters attached to each one.

Extended Text Header

Both the “Extended Text Header” and the “Extended Text Line” cannot be handled by other types than the normal template.

Use a filter when setting the template up for synchronization. A matching template for “Extended Text Line” is a must.

Extended Text Line

Both the “Extended Text Header” and the “Extended Text Line” cannot be handled by other types than the normal template.

Use a filter when setting the template up for synchronization. A matching template for “Extended Text Header” is a must.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk

INSTALLATION

Global Master is available as an extension for Dynamics NAV 2018 and Dynamics 365 Business Central. Since the basis for the two versions are not alike, make sure that the correct extension is used.

Version 11 is for Dynamics NAV 2018 (NAV 11.0)

Version 13 is for Dynamics 365 BC (NAV 13.0)

Version 14 is for Dynamics 365 BC (NAV 14.0)

AdditionalInfo	Name	Version
Installed	Business Central Intelligent Cloud	v. 14.14.43294.0
Installed	Essential Business Headlines	v. 14.14.43294.0
Installed	Global Master	v. 14.0.43286.69
Installed	Intelligent Cloud Base	v. 14.14.43294.0
Installed	PayPal Payments Standard	v. 14.14.43294.0
Installed	Sales and Inventory Forecast	v. 14.14.43294.0
Installed	Send remittance advice by email	v. 14.14.43294.0

For installing the extension, please refer to the proper guidance provided by Microsoft.

To access Global Master, you need permissions granted by the license file.

CONTACT INFORMATION

ProFacto A/S | Lyfaparken | Måløv Byvej 229 G, 1 | DK-2760 Måløv
+45 31 31 07 00 | info@profacto.dk | www.profacto.dk