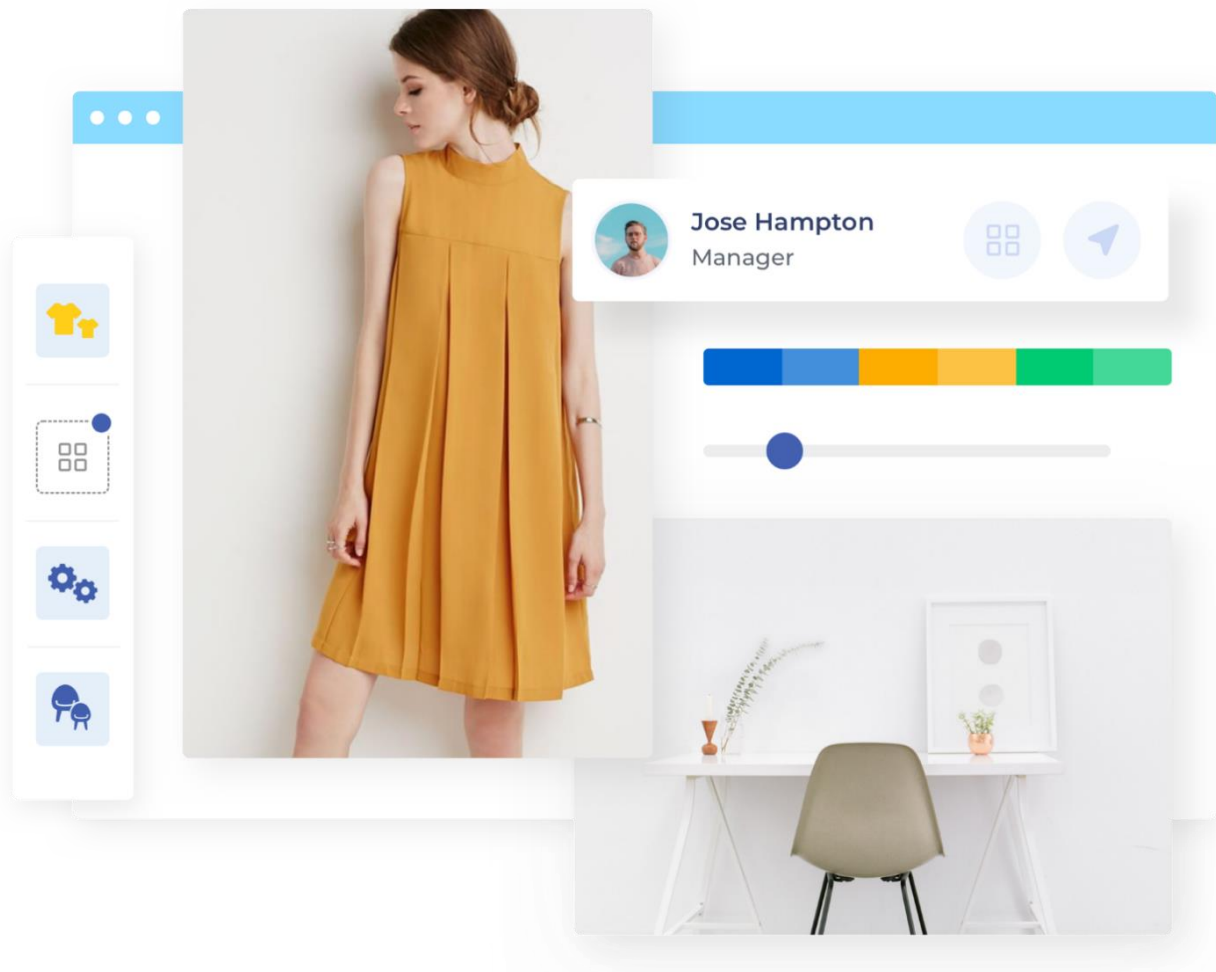


**WHITE PAPER**

TRIMIT Replication of Data 21.2

This document contains information regarding the Replication of Data functionality in TRIMIT 21.2 for Business Central 2021 Release Wave 2 W1 (BC19).

Version: 21.2
Date: 22-11-2021

CONTENTS

Introduction	1
Components	1
Setup Replication Publisher.....	3
Description of the Fields.....	3
Setup Tables/Fields to Replicate	4
Description of the Fields of the Lines	5
Actions – Create Replication Setup from Template	7
Setup Replication Subscriber.....	10
Description of the Fields.....	10
Related.....	12
Process of Replicating data.....	15
Actions.....	15
Connection Code	17
Instance setup for Publishing Database/Company.....	17
Web Service in Publisher Database/Company.....	17
Connection Code in Subscriber Database/Company	18
Replication Log	19
Job Queue.....	20
Customization.....	21
Business Event Publisher Functions	21

INTRODUCTION

When working with different companies (and perhaps different databases), it might be necessary to copy information from one company to another company.

Especially in an Intercompany setup, where one company is leading (this is the company where the design, purchase and production takes place) and the other companies are only sales companies, the information of the Head Office needs to be copied to the Sales Offices.

For this purpose, we have created the **Replication** functionality: to be able to copy Table content between companies in the same database without special validations (as is the case when using RapidStart Services), but also to copy Table content between databases – but this is restricted.

The **Replication** functionality is also able to copy/update only the changed data since last Replication run (which is also not possible when using RapidStart Services).

It will also be possible to schedule the execution of the Replication by using Job Queues.

The company from which data will be copied is called **Publisher Company** (Head Office).

The company to which data will be copied is called the **Subscriber Company** (Sales Office).

In case you want to copy data from database to database, the **Publisher Company** needs to be in an on-prem Database. The **Subscriber Company** can be on-prem or cloud-based database.

Replicate data from cloud to cloud might be possible in future; just ask service@trimit.com for the status of this project.

The functionality described is the functionality in **TRIMIT 21.2 for Business Central W1 BC19.X**.

The pictures in this White Paper are based on the demo database for **TRIMIT 21.2**, which is based on Microsoft Dynamics 365 Business Central 2021 Release Wave 2, in the demo company **CRONUS TRIMIT W1 Ltd.** (based on CRONUS International Ltd. of Microsoft Dynamics 365 Business Central).

COMPONENTS

TRIMIT Replication contains the following objects:

The tables	6036517	<i>trm Connection Setup</i>
	6036534	<i>trm Replication Publish Header</i>
	6036635	<i>trm Replication Publish Lines</i>
	6036536	<i>trm Replication Publish Fields</i>
	6036537	<i>trm Replication Subscriber</i>
	6036538	<i>trm Replication Log</i>
	6036539	<i>trm Replication Error Log</i>
	6036540	<i>trm Repl Item Structure Param.</i>
	6036541	<i>trm Repl AutoIncre Conversion</i>
	6036542	<i>trm Replication Publish Filter</i>
	6036543	<i>trm Replication Plan</i>
	6036544	<i>trm Remote Repl Triggers</i>

The pages

6036544	<i>trm Connection Setup Card</i>
6036545	<i>trm Connection Setup List</i>
6036535	<i>trm Replication Publisher List</i>
6036536	<i>trm Replication Publish Header</i>
6036537	<i>trm Replication Publish SubPag</i>
6036538	<i>trm Replication Publish Fields</i>
6036539	<i>trm Replication Subscriber</i>
6036540	<i>trm Replication Log</i>
6036541	<i>trm Replication Error Log</i>
6036542	<i>trm Replication Publish Lines</i>
6036543	<i>trm Repl Item Structure Param.</i>

The codeunits

6036532	<i>trm Replication Handling</i>
6036533	<i>trm Repl Log Handler SI</i>
6036534	<i>trm Repl Trigger Handler</i>
6036535	<i>trm Repl Item Structure Events</i>
6036536	<i>trm Communication Handler</i>
6036537	<i>trm Remote Repl Handling</i>
6036538	<i>trm Remote Replication Actions</i>

SETUP REPLICATION PUBLISHER

The **Publisher Company** is the company from which data will be copied.

Therefore, the **Replication Publisher** needs to be created in the **Publisher Company** (Head Office) via **Tell me Replication Publisher**.

Replication Publishers Work Date: 6-9-2020					
Search + New Edit List Delete Edit View Activate Deactivate Open in Excel More options					
Code ↑	Description	Replication	Enable Remote Replication	Max. No. of Records to Replicate	
→ MASTER_REPL	Replication of Masters and Items, and all relevant tables	Automatic	☐	0	

DESCRIPTION OF THE FIELDS

CODE

A **Code** for this Replication Publisher.

You can create several codes for different purposes.

DESCRIPTION

A **Description** for this Replication **Code**.

REPLICATION

With the content of the field **Replication**, you can determine how the copy should take place.

You can choose between the following three options:

Automatic	This means that the system will keep track of changes in the Publisher Company in the Replication Log, and only sent changed Records to the Subscriber Company when required. This has a performance impact as there is a log of all changes related to the tables in the Replication Publisher (typically used for data like Items/Masters/Customers, etc.) for which you want to keep the data in sync
Manual	This means that you can Replicate the Tables, but it will be a full Replication each time. This could be used for data as a template. I.e., we have a standard Chart of Account which we want to replicate each time we create a New Company, but after it replicated it will not keep track of changes, and there will be no synchronization of data. (This is i.e., the setting that TRIMIT uses for copying demo data from the demo server to a new created demo site)
Deactivated	This means no data will be sent if a Subscriber tries to replicate

NOTE

When creating a **Replication Publisher**, you need to be aware of all related Tables that might be necessary and need to be added as well.

Also, keep in mind that the Replication functionality will simply write or overwrite existing data.

ENABLE REMOTE REPLICATION

If you want to use this **Replication Subscriber** for replicating data from one database to another database, you need to have a checkmark in this field.

MAX. NO. OF RECORDS TO REPLICATE

If **Enable Remote Replication** is set to *Yes*, you can enter the maximum number of records that can be replicated in one call of the replication. The default will be set to *5000*.

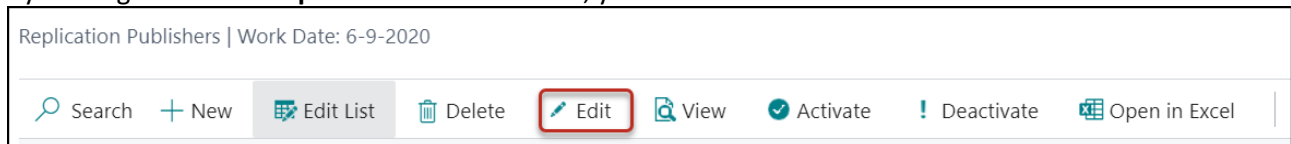
This is a technical setup that will separate the call for Replicating data into several calls, each with a maximum of i.e., 5000 records.

The reason for doing so, is to limit the size of the file that needs to be moved over the Internet.

SETUP TABLES/FIELDS TO REPLICATE

You can setup the Tables and their Fields for a Replication Publisher **Code** in the **Publisher Company** that you want to Replicate to the **Subscriber Company**.

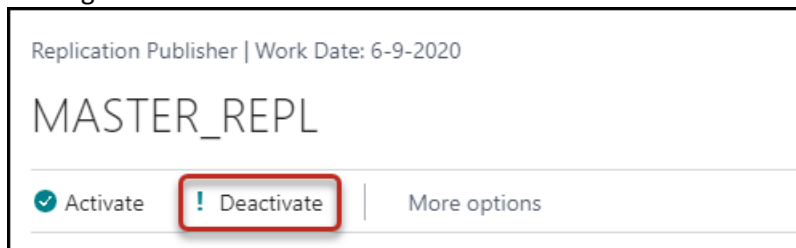
By clicking **Edit** in the **Replication Publishers** List, you can select the Tables and their Fields.



Replication Publishers | Work Date: 6-9-2020

Search + New Edit List Delete Edit View Activate Deactivate Open in Excel

You can only change the content of a **Replication Publisher** if the Field **Replication** is set to *Deactivate*, by clicking **Deactivate**



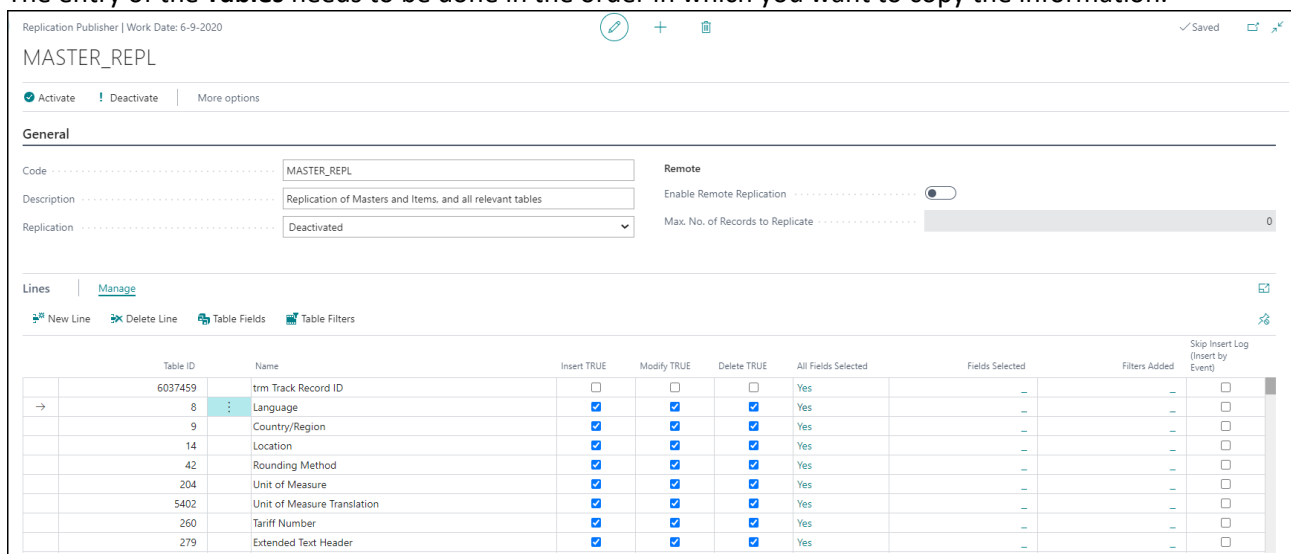
Replication Publisher | Work Date: 6-9-2020

MASTER_REPL

Activate Deactivate More options

You can select any Table, but keep in mind, that you also need to select the Related Tables as well. I.e., for the Item Table (27), you also need the Unit of Measure (204) and the Vendor (23), etc.

The entry of the **Tables** needs to be done in the order in which you want to copy the information.



Replication Publisher | Work Date: 6-9-2020

MASTER_REPL

Activate Deactivate More options

General

Code: MASTER_REPL Remote: Enable Remote Replication (toggle)

Description: Replication of Masters and Items, and all relevant tables

Replication: Deactivated Max. No. of Records to Replicate: 0

Lines | Manage

New Line Delete Line Table Fields Table Filters

Table ID	Name	Insert TRUE	Modify TRUE	Delete TRUE	All Fields Selected	Fields Selected	Filters Added	Skip Insert Log (Insert by Event)
6037459	trm Track Record ID	☐	☐	☐	Yes	-	-	☐
8	Language	☒	☒	☒	Yes	-	-	☐
9	Country/Region	☒	☒	☒	Yes	-	-	☐
14	Location	☒	☒	☒	Yes	-	-	☐
42	Rounding Method	☒	☒	☒	Yes	-	-	☐
204	Unit of Measure	☒	☒	☒	Yes	-	-	☐
5402	Unit of Measure Translation	☒	☒	☒	Yes	-	-	☐
260	Tariff Number	☒	☒	☒	Yes	-	-	☐
279	Extended Text Header	☒	☒	☒	Yes	-	-	☐

DESCRIPTION OF THE FIELDS OF THE LINES

TABLE ID

You can enter the **Table ID** of the Table you want to copy/update from the **Publisher Company** to the **Subscriber Company**.

You need to make sure, that you add the Tables in a logical order.

I.e.: if you want to copy the *6037103 Master* and the *27 Item*, the Master Table needs to come first.

Otherwise – when creating a new Master – the system detects that there is already a (Master) Item in the Item Table and will not be able to create the new Master.

NAME

The Name of the **Table ID** is shown.

INSERT TRUE

A checkmark in this field determines if the AL Code for **OnInsert ()** should be executed.

No checkmark means that the AL Code for **OnInsert ()** will not be executed.

MODIFY TRUE

A checkmark in this field determines if the AL Code for **OnModify()** should be executed.

No checkmark means that the AL Code for **OnModify()** will not be executed.

DELETE TRUE

A checkmark in this field determines if the AL Code for **OnDelete()** should be executed.

No checkmark means that the AL Code for **OnDelete()** will not be executed.

I.e., In Table **6037104 No. System** the AL Code for **OnInsert()**, **OnModify()** and **OnDelete()** will only be executed if the corresponding field **Insert TRUE**, **Modify TRUE** and **Delete TRUE** have been set to Yes.

```

1015
1016 trigger OnDelete()
1017 begin
1018     Master.SetCurrentkey("No. System");
1019     Master.SetRange("No. System", Code);
1020     if not Master.IsEmpty then
1021         Error(TRIM003, Code, Master."No.");
1022
1023     CommentLineTRIMIT.SetRange("Table ID", 6037104);
1024     CommentLineTRIMIT.SetRange("Record ID", Code);
1025     if not CommentLineTRIMIT.IsEmpty then
1026         CommentLineTRIMIT.DeleteAll;
1027 end;
1028
1029 trigger OnInsert()
1030 begin
1031     "Creation Date" := Today;
1032     "Modified Date" := 0D;
1033 end;
1034
1035 trigger OnModify()
1036 begin
1037     NumberSequence;
1038     if Today <> "Creation Date" then
1039         "Modified Date" := Today;
1040 end;

```

ALL FIELDS SELECTED

This Field will automatically be set to Yes, if you did not select the Fields that needs to be copied/updated.

This Field will automatically be set to No, if you did select the Fields that needs to be copied/updated.

FIELDS SELECTED

You can select which Field Values needs to be copied/updated from a specific **Table ID** by double-click on this **Fields Selected**. This will open the **Replication Publisher Fields** page.

This page can also be opened by clicking **Manage, Table Fields**

Lines

Manage

New Line

Delete Line

Table Fields

Table Filters

	Table ID	Name	Insert TRUE	Modify TRUE	Delete TRUE	All Fields Selected	Fields Selected	Filters Added	Skip Insert Log (Insert by Event)	Skip Error Han...
	6037115	trm VarDim Combination	☒	☒	☒	Yes	—	—	☐	☐
	6037117	trm VarDim Dimension Option	☒	☒	☒	Yes	—	—	☐	☐
	6036528	trm Translation	☒	☒	☒	Yes	—	—	☐	☐
→	6037103	trm Master	☒	☒	☒	Yes	1	—	☐	☐
	27	Item	☒	☒	☒	Yes	—	—	☐	☐
	6037027	trm Shipment Group	☒	☒	☒	Yes	—	—	☐	☐
	6037035	trm Collection	☒	☒	☒	Yes	—	—	☐	☐

The first time, you open the **Replication Publisher Fields** page for a Table the page will be empty.

You need to click **Insert/Update Fields**, so all the Fields of the Table are added.

After this, you can determine if the update of this Field Value in the **Subscriber Company** is allowed or not by adding/removing the checkmarks in **Update Allowed**.

By default, all the fields have **Update Allowed** set to Yes.

Edit - Replication Publisher Fields

Search

Edit List

Delete

Insert/Update Fields

Open in Excel

Field ID ↑

Name

Update Allowed

(There is nothing to show in this view)

Edit - Replication Publisher Fields

↗ ✕

🔍 Search

Edit List

🗑 Delete

📄 Insert/Update Fields

📊 Open in Excel

☰

	Field ID ↑	Name	Update Allowed
→	1	No.	☒
	101	Creation Date	☒
	102	Modified Date	☒
	104	Search Description	☒
	200	Information Item	☒
	201	Exclude from Transfer on Prod. Collecting Order	☒
	202	Type	☒
	302	Comment	☒
	303	BOM	☒
	304	Template Creating a Master	☒
	305	Created via Template	☒
	306	Template Sales Line	☒

As soon as you have created these **Field ID's**, the information in the **Line** will also change:

Lines

Manage

New Line

Delete Line

Table Fields

Table Filters

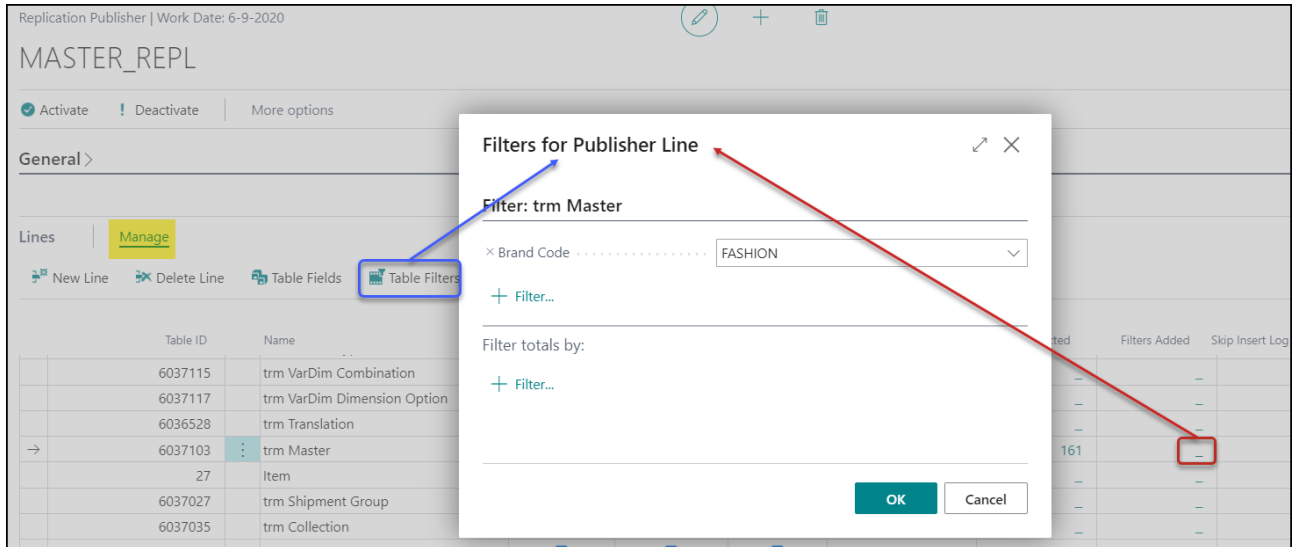
Table ID	Name	Insert TRUE	Modify TRUE	Delete TRUE	All Fields Selected	Fields Selected	Filters Added	Skip Insert Log (Insert by Event)	Skip Error Han...
6037115	trm VarDim Combination	☒	☒	☒	Yes	—	—	☐	☐
6037117	trm VarDim Dimension Option	☒	☒	☒	Yes	—	—	☐	☐
6036528	trm Translation	☒	☒	☒	Yes	—	—	☐	☐
→ 6037103	trm Master	☒	☒	☒	No	161	—	☐	☐
27	Item	☒	☒	☒	Yes	—	—	☐	☐
6037027	trm Shipment Group	☒	☒	☒	Yes	—	—	☐	☐

FILTERS ADDED

You can select which Records needs to be copied/updated from a specific **Table ID** by double-click on this **Filters Added**. This will open the **Filters for Publisher Line** page.

This page can also be opened by clicking **Manage, Table Filters**.

You can set Filters on any field of the **Table ID**.



And the field **Filters Added** will show you the number of Filters you have set.

Table ID	Name	Insert TRUE	Modify TRUE	Delete TRUE	All Fields Selected	Fields Selected	Filters Added	Skip Insert Log (Insert by Event)	Skip Error Handl...
6037115	trm VarDim Combination	☒	☒	☒	Yes	–	–	☐	☐
6037117	trm VarDim Dimension Option	☒	☒	☒	Yes	–	–	☐	☐
6036528	trm Translation	☒	☒	☒	Yes	–	–	☐	☐
→ 6037103	trm Master	☒	☒	☒	No	161	1	☐	☐
27	Item	☒	☒	☒	Yes	–	–	☐	☐
6037027	trm Shipment Group	☒	☒	☒	Yes	–	–	☐	☐
6037035	trm Collection	☒	☒	☒	Yes	–	–	☐	☐

ACTIONS – CREATE REPLICATION SETUP FROM TEMPLATE

Code ↑	Description	Replication	Enable Remote Replication	Max. No. of Records to Replicate
→ MASTER_REPL	Replication of Masters and Items, and all relevant tables	Automatic	☐	0

For copying data from Items/Masters, we have created a special Template that can be used.

If you click **Create Replication Setup for Template** in the list of Replication Publishers, you can choose for which Template you want to create a **Replication Publisher**.

We created one for the replication of Items/Masters:



After clicking **OK**, a message will appear, which you need to confirm by clicking **Yes**.



This function will create the setup for replicating masters/items and all related tables. Do you want to continue?

Yes
No

Now you can determine the **Code** for this **Replication Publisher**:

Edit - Dialog - AED

Set a name for the Publisher MASTER_REPL_2

OK Cancel

After clicking **OK**, you can determine the **Tables** you want to replicate – by default, they are all chosen:

Edit - Lines - MASTER_REPL_2 · 10000

Choose	Table ID	Name	Filters Added	Skip Insert Log (Insert by Event)	Skip Error Handling
☒	6037459	trm Track Record ID	☐	☐	☐
☒	8	Language	☐	☐	☐
☒	9	Country/Region	☐	☐	☐
☒	14	Location	☐	☐	☐
☒	42	Rounding Method	☐	☐	☐
☒	204	Unit of Measure	☐	☐	☐

The following Tables are in this Template:

Choose	Table ID	Name	Filters Added	Log Added (Insert by)	Skip Insert	Skip Error Handling
Yes	6037459	trm Track Record ID	No	No	No	No
Yes	8	Language	No	No	No	No
Yes	9	Country/Region	No	No	No	No
Yes	14	Location	No	No	No	No
Yes	42	Rounding Method	No	No	No	No
Yes	204	Unit of Measure	No	No	No	No
Yes	5402	Unit of Measure Translation	No	No	No	No
Yes	260	Tariff Number	No	No	No	No
Yes	279	Extended Text Header	No	No	No	No
Yes	280	Extended Text Line	No	No	No	No
Yes	348	Dimension	No	No	No	No
Yes	349	Dimension Value	No	No	No	No
Yes	350	Dimension Combination	No	No	No	No
Yes	351	Dimension Value Combination	No	No	No	No
Yes	5722	Item Category	No	No	No	No
Yes	6036682	trm Group Code	No	No	No	No
Yes	6037000	trm Group Integer	No	No	No	No
Yes	6037104	trm No. System	No	No	No	No
Yes	6037194	trm Status Code	No	No	No	No
Yes	6037003	trm Contribution Margin	No	No	No	No
Yes	7500	Item Attribute	Yes	No	No	No
Yes	7501	Item Attribute Value	Yes	No	No	No
Yes	7502	Item Attribute Translation	No	No	No	No
Yes	7503	Item Attr. Value Translation	No	No	No	No
Yes	6037100	trm VarDim Type	No	No	No	No
Yes	6037102	trm VarDim Variant Option	No	No	No	No
Yes	6037039	trm VarDim Type Subset	No	No	No	No
Yes	6037115	trm VarDim Combination	No	No	No	No
Yes	6037117	trm VarDim Dimension Option	No	No	No	No
Yes	6036528	trm Translation	No	No	No	No
Yes	6037103	trm Master	No	No	No	No
Yes	27	Item	No	No	No	No
Yes	6037027	trm Shipment Group	No	No	No	No
Yes	6037035	trm Collection	No	No	No	No
Yes	6037101	trm VarDim Master	No	No	No	No
Yes	6037036	trm Delivery Period	No	No	No	No
Yes	6037033	trm Matrix Limitation Setup	No	No	No	No
Yes	6037037	trm Collection Master Relation	No	No	No	No
Yes	6037034	trm Matrix Limit Master Relat	No	No	No	No
Yes	6037116	trm VarDim Positive/Negative	No	No	No	No
Yes	6037119	trm VarDim Pos./Neg. Inactive	No	No	No	No
Yes	6037341	trm BOM Component Line	No	No	No	No
Yes	6037109	trm Matrix Master	No	No	No	No
Yes	6037113	trm Matrix Item Line	No	No	No	No
Yes	6037120	trm Matrix Item Line Inactive	No	No	No	No
Yes	6037114	trm Matrix Cell	No	No	No	No
Yes	6037118	trm Assortment	No	No	No	No
Yes	97	Comment Line	No	No	No	No
Yes	6036533	trm Comment Line	No	No	No	No
Yes	6037250	trm Additional Info Header	No	No	No	No
Yes	6037251	trm Additional Info Line	No	No	No	No
Yes	6037189	trm Measurement Chart Version	No	No	No	No
Yes	6037190	trm Measurement Chart Line	No	No	No	No
Yes	6037191	trm Measurement	No	No	No	No
Yes	30	Item Translation	No	No	No	No
Yes	6037107	trm VarDim Item Header	No	No	No	No
Yes	6037106	trm VarDim Item	No	No	No	No
Yes	7505	Item Attribute Value Mapping	No	No	No	No
Yes	5404	Item Unit of Measure	No	No	No	No
Yes	5717	Item Cross Reference	No	No	No	No
Yes	23	Vendor	No	No	No	No
Yes	99	Item Vendor	No	No	No	No
Yes	5800	Item Charge	No	No	No	No
Yes	6037025	trm Item Charge Calc Line	No	No	No	No
Yes	6037006	trm Ext Location Management	No	No	No	No
Yes	6037181	trm Picture Relation	No	No	No	No
Yes	6037180	trm Picture	No	No	No	No
Yes	7012	Purchase Price	No	No	No	No
Yes	6036652	trm Dimension Purchase Price	No	No	No	No
Yes	341	Item Discount Group	No	No	No	No
Yes	7014	Purchase Line Discount	No	No	No	No
Yes	6	Customer Price Group	No	No	No	No
Yes	6036656	trm Price Group Parameters	No	No	No	No
Yes	7002	Sales Price	No	No	No	No
Yes	6036654	trm Dimension Sales Price	No	No	No	No
Yes	6036655	trm VarDim Sales Price	No	No	No	No
Yes	7004	Sales Line Discount	No	No	No	No
Yes	6036657	trm Sales Line Discount Type	No	No	No	No
Yes	6036663	trm Sales Line Disc Comb Rate	No	No	No	No
Yes	6037203	trm Search Table Header	No	No	No	No
Yes	6037204	trm Search Table Line	No	No	No	No
Yes	6037205	trm Formula Header	No	No	No	No
Yes	6037206	trm Formula Line	No	No	No	No
Yes	6037200	trm Formula Constant	No	No	No	No
Yes	6037201	trm Formula Global Variable	No	No	No	No
Yes	6037202	trm Formula VarDim Field Ref	No	No	No	No
Yes	6037212	trm Formula Dialog	No	No	No	No
Yes	352	Default Dimension	No	No	No	No
Yes	354	Default Dimension Priority	No	No	No	No

NOTE

This Template will not include the Tables that might be necessary for using TRIMIT's Webshops and Portals.

After clicking **Close** the Replication Subscriber **Code** is created and by clicking **Edit**, you can still change the Tables, Records and Fields you want to copy.

Replication Publishers | Work Date: 6-9-2020

✓ Saved

🔍 Search

+ New

📄 Edit List

🗑 Delete

✎ Edit

🔍 View

🔄 Activate

⚠ Deactivate

📄 Open in Excel

Actions

Fewer options

🔼 🔽

Code ↑	Description	Replication	Enable Remote Replication	Max. No. of Records to Replicate
MASTER_REPL	Replication of Masters and Items, and all relevant tables	Automatic	☐	0
→ MASTER_REPL_2	Replication of Masters and Items, and all relevant tables	Deactivated	☐	0

Be aware that you need to **Activate** the **Code** before you can actually use it!!

SETUP REPLICATION SUBSCRIBER

After you have setup the **Replication Publisher Codes** in the **Publisher Company** (Head Office) from which you want to copy the data, you can now go to the **Subscriber Company** (Sales Office): The Company to which you want to copy the data or to update the data.

In the **Replication Subscriber**, which can be found via **Tell me Replication Subscriber**, you can now determine from which **Publisher Company** (Head Office) you want to copy/update the data based on the [Replication Publisher Code](#) into the current **Subscriber Company** (Sales Office).

Replication Subscriber Work Date: 6-9-2020							
Connection Type	Related Company ↑	Connection Code ↑	Replication Publisher Code ↑	Replication	Last Replicated Log Entry	Last Replicated	Duration
→ Internal	CRONUS HQ	MASTER_REPL	MANUAL	Manual	178	20-7-2020 11:58	15 milliseconds
External	CRONUS TRIMITBC13 MASTER	CONNECT	CRONUS	Automatic	415162	2-3-2020 20:47	23 minutes 22 seconds 438 milliseconds
External	CRONUS TRIMITBC13 MASTER	CONNECT	TEST	Manual	415162	2-3-2020 20:05	2 seconds 68 milliseconds

DESCRIPTION OF THE FIELDS

CONNECTION TYPE

You can choose between the following three options:

Internal	If you want to copy data from 1 company to another company in the same Database																											
External	If you want to copy data from 1 company in 1 database to another company in another database																											
Portal Synchronization	If you want to use Item Attributes as search method in the TRIMIT Portals, you need to create a Replication Subscriber with Connection Type Portal Synchronization. This can be done via the Portal Item Attribute Mgt. by clicking Actions, Replication Log Setup. Portal Item Attribute Mgt. Work Date: 6-9-2020 Search + New Edit List Delete Item Attribute Values Translations Open in Excel Actions Fewer options Replication Log Setup <table><thead><tr><th>ID ↑</th><th>Name</th><th>Use As Filter</th><th>Alternative Sorting</th><th>Used On Expanded Variant</th></tr></thead><tbody><tr><td>20</td><td>TRIMIT_COLOR</td><td>☒</td><td>0</td><td>☐</td></tr><tr><td>22</td><td>TRIMIT_GARMENTSTYLE</td><td>☒</td><td>0</td><td>☐</td></tr></tbody></table> Replication log setup Ok. Restart client to active logging. OK CRONUS TRIMIT W1 Ltd. Finance Sales Purchase Product Design Logistics Production Portals Replication Subscriber: All Search New Delete Edit List Process Open in Excel Actions Related <table><thead><tr><th>Connection Type</th><th>Related Company</th><th>Connection Code</th><th>Replication Publisher Code</th><th>Replication</th><th>Last Replicated Log Entry</th></tr></thead><tbody><tr><td>Portal Synchronization</td><td>CRONUS TRIMIT W1 Ltd.</td><td></td><td>PORTAL-ITM-ATTRIBUTE</td><td>Manual</td><td>0</td></tr></tbody></table>	ID ↑	Name	Use As Filter	Alternative Sorting	Used On Expanded Variant	20	TRIMIT_COLOR	☒	0	☐	22	TRIMIT_GARMENTSTYLE	☒	0	☐	Connection Type	Related Company	Connection Code	Replication Publisher Code	Replication	Last Replicated Log Entry	Portal Synchronization	CRONUS TRIMIT W1 Ltd.		PORTAL-ITM-ATTRIBUTE	Manual	0
ID ↑	Name	Use As Filter	Alternative Sorting	Used On Expanded Variant																								
20	TRIMIT_COLOR	☒	0	☐																								
22	TRIMIT_GARMENTSTYLE	☒	0	☐																								
Connection Type	Related Company	Connection Code	Replication Publisher Code	Replication	Last Replicated Log Entry																							
Portal Synchronization	CRONUS TRIMIT W1 Ltd.		PORTAL-ITM-ATTRIBUTE	Manual	0																							

NOTE

For **Connection Type External**, it is only possible if the Database/Company from which the data should be replicated (Replication Publisher) is based on an **on-prem** installation.

The receiving Database/Company can be **on-prem** or **cloud**.

We will be looking into the possibility that the publisher is also a **cloud** installation, but that is not yet developed.

RELATED COMPANY

In this Field, you can select the Company from which you want to copy/update data.

The lookup (**Alt+Arrow down**) will only work for companies within the same database.

Therefore, if you want to use **Connection Type External**, you need to make sure to enter the exact Company name!!

CONNECTION CODE

The **Connection Code** is only applicable for **Connection Type External**.

See [Connection Code](#) how to setup this Connection Code.

REPLICATION PUBLISHER CODE

In this Field, you can select the **Replication Publisher Code** from the **Related Company** that you want to copy/update into the current **Subscriber Company**.

REPLICATION

This is the content of the Field **Replication** of the **Replication Publisher Code** from the **Related Company**.

With the content of the field **Replication**, you can determine how the copy should take place.

You can choose between the following three options:

Automatic	This means that you can set up a Job Queue in the Subscriber Company , that the Replication will run the Replication Publisher Codes that are also set in the Publisher Company to automatic. If this is required, it would make sense to have both Publisher and Subscriber set to automatic, as it otherwise would do a full replication each time if Publisher was set to <i>Manual</i> .
Manual	This means that the replication has to be run manually when required. If the Publisher is set to <i>Automatic</i> , it will only replicate the differences since the last replication.
Deactivated	This means that it cannot be run.

You can only change the *Automatic* into *Deactivated*.

You can only change the *Manual* into *Deactivated*.

LAST REPLICATED NO.

Last entry in the **Replication Log** in the **Publisher Company** that has been executed.

LAST REPLICATED

The Date and Time of the last execution of this **Replication Subscriber**.

DURATION

This field shows you the time it took for the last executed Replication.

RELATED

Replication Subscriber | Work Date: 6-9-2020

Search
New
Edit List
Delete
Process
Open in Excel
Actions
Related
Fewer options

Error Log
Subscriber Tables
Table Fields
Parameters
Connection Card
Connection List

ERROR LOG

This can show errors that have been occurred during the Replication.

Replication Error Log | Work Date: 6-9-2020

Search
Edit List
Delete
Replicate
Open in Excel
More options

No. ↑
Record ID
Activity
Replication Publisher Code
Replication Log Entry
Table ID
Error Text
Creation Date/Time

(There is nothing to show in this view)

SUBSCRIBER TABLES

This will show the list of Tables of the **Replication Publisher Code** from the **Related Company** (the Publisher Company).

You can however not change this in the **Subscriber Company**; therefore, you need to go to the **Publisher Company**.

Replication Publish Lines | Work Date: 6-9-2020

Search
Initial Replication Table
Open in Excel
More options

Table ID	Name	Insert TRUE	Modify TRUE	Delete TRUE
6037459	trm Track Record ID	☐	☐	☐
8	Language	☒	☒	☒
9	Country/Region	☒	☒	☒
14	Location	☒	☒	☒
42	Rounding Method	☒	☒	☒
204	Unit of Measure	☒	☒	☒
5402	Unit of Measure Translation	☒	☒	☒
260	Tariff Number	☒	☒	☒

TABLE FIELDS

This will show the list of Fields of the Tables of the **Replication Publisher Code** from the **Related Company** (Publisher Company) based on the Fields that have been chosen.

You can however not change this in the **Subscriber Company**; therefore, you need to go to the **Publisher Company**.

Fields TRIMIT Work Date: 6-9-2020								
Search + New Edit List Delete Open in Excel								
TableNo	No.	TableName	FieldName	Field Caption	Type	Class	OptionString	RelationTableNo
→	3	1	Payment Terms	Code	Code	Normal		0
	3	2	Payment Terms	Due Date Calculation	Due Date Calculation	DateFormula	Normal	0
	3	3	Payment Terms	Discount Date Calculation	Discount Date Calculation	DateFormula	Normal	0
	3	4	Payment Terms	Discount %	Discount %	Decimal	Normal	0
	3	5	Payment Terms	Description	Description	Text	Normal	0
	3	6	Payment Terms	Calc. Pmt. Disc. on Cr. Memos	Calc. Pmt. Disc. on Cr. Memos	Boolean	Normal	0
	3	8	Payment Terms	Last Modified Date Time	Last Modified Date Time	DateTime	Normal	0
	3	8000	Payment Terms	Id	Id	GUID	Normal	0
	3	6036800	Payment Terms	trm Credit Card Pmt. on Portal	Credit Card Pmt. on Portal	Boolean	Normal	0
	3	2000000000	Payment Terms	\$systemid	System ID	GUID	Normal	0
	3	2000000001	Payment Terms	SystemCreatedAt	Created At	DateTime	Normal	0
	3	2000000002	Payment Terms	SystemCreatedBy	Created By	GUID	Normal	2000000120
	3	2000000003	Payment Terms	SystemModifiedAt	Modified At	DateTime	Normal	0
	3	2000000004	Payment Terms	SystemModifiedBy	Modified By	GUID	Normal	2000000120
	4	1	Currency	Code	Code	Code	Normal	0
	4	2	Currency	Last Date Modified	Last Date Modified	Date	Normal	0

PARAMETERS

Especially for the replication of Items, we have added some extra **Parameters**: Fields that can be changed during the replication process. The Parameters are related to the specific **Replication Subscriber**.

For other replications, you might want to create your own customization in which you can change the content of the Fields that will be replicated, but this way you will have an example of how to set this up.

Edit - Replication Item Structure Param. - CRONUS HQ · MASTER_REPL

Manage

General

Replace Vendor No.
HQ

Replace Create Related Order Instantly
Set to No

Replace Replenishment Policy
Inventory

Location Clear Whse. Param.
☒

Replace Replenishment System
Purchase

DESCRIPTION OF THE FIELDS

REPLACE VENDOR NO.

If the Item in the **Publisher Company** (Head Office) is bought from external Vendors, the same Item in the **Subscriber Company** (Sales Office) might simply be bought from the Head Office.

Therefore, you want to replace the **Vendor No.** after replication by the Vendor No. of the Head Office.

REPLACE REPLENISHMENT POLICY

If the Item of the **Publisher Company** (Head Office) is bought or produced per Order, the same Item in the **Subscriber Company** (Sales Office) might simply be bought on Inventory.

Therefore, you want to replace the **Replenishment Policy** after replication by *Inventory*.

REPLACE REPLENISHMENT SYSTEM

If the Item in the **Publisher Company** (Head Office) is produced, the same Item in the **Subscriber Company** (Sales Office) will simply be bought from the Head Office.

Therefore, you might want to change the **Replenishment System** from *Production* to *Purchase*.

Be aware that if the **Automatic Replenishment** in the Master is set to *Yes*, the **Replenishment System** might be *Purchase*, although it is actually *Production* because there is a Bill of Materials.

REPLACE CREATE RELATED ORDER INSTANTLY

If the Item in the **Publisher Company** (Head Office) is bought/produced per Order, and a related order is created instantly, you might not want to do this in the **Subscriber Company** (Sales Office), so you can change this setting:

No
Set to No
Set to Yes

LOCATION CLEAR WHSE. PARAMETERS

If you are copying the **Locations** from the **Publisher Company** (Head Office) to the **Subscriber Company** (Sales Office), you might not want to have all the fields regarding WMS filled with checkmarks – because the Logistics of the Sales Office might simply take place in the Head Office.

Location Card | Work Date: 6-9-2020

BLACK · Black Warehouse (WMS) **In the Publisher Company**

Zones Bins Inventory Posting Setup Online Map More options

Warehouse

Require Receive	☐	Default Bin Selection	
Require Shipment	☐	Outbound Whse. Handling Time	
Require Put-away	☐	Inbound Whse. Handling Time	
Use Put-away Worksheet	☒	Base Calendar Code	
Require Pick	☐	Customized Calendar	No
Bin Mandatory	☐	Use Cross-Docking	☒
Directed Put-away and Pick	☒	Cross-Dock Due Date Calc.	
Use ADCS	☐		

Location Card | Work Date: 6-9-2020

BLACK · Black Warehouse (WMS) **In the Subscriber Company**

Zones Bins Inventory Posting Setup Online Map More options

Warehouse

Require Receive	☐	Default Bin Selection	
Require Shipment	☐	Outbound Whse. Handling Time	
Require Put-away	☐	Inbound Whse. Handling Time	
Use Put-away Worksheet	☐	Base Calendar Code	
Require Pick	☐	Customized Calendar	No
Bin Mandatory	☐	Use Cross-Docking	☐
Directed Put-away and Pick	☐	Cross-Dock Due Date Calc.	
Use ADCS	☐		

CONNECTION CARD

This will open the **Connection Card** of the **Connection Code**.

This action is only enabled if the **Connection Code** is filled.

CONNECTION LIST

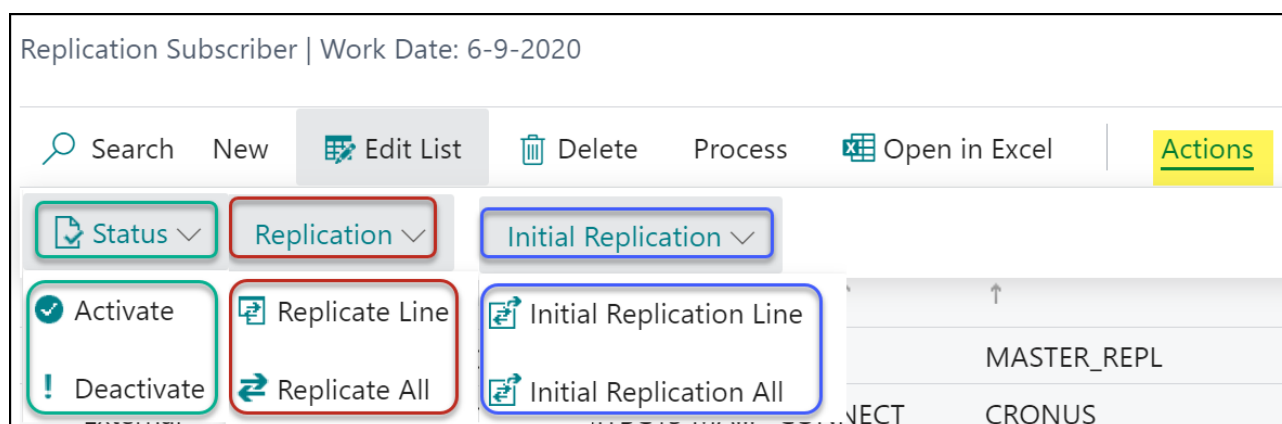
This will open the **Connection List** of the **Connection Codes**.

This action is only enabled if the **Connection Code** is filled.

PROCESS OF REPLICATING DATA

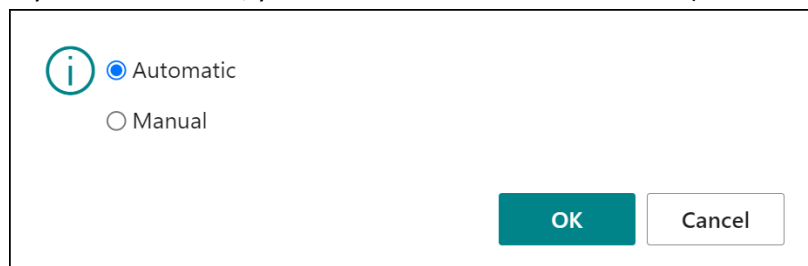
After you have setup the **Replication Publisher** and the **Tables/Fields to Replicate** in the **Publisher Company** and the **Replication Subscriber** and the **Parameters** in the **Subscriber Company**, you can execute the actual Replication via the **Actions** in the **Replication Subscriber** (or via the Job Queue).

ACTIONS



STATUS

If you click **Activate**, you can choose between *Automatic (via a Job Queue)* or *Manual*.



REPLICATION AND INITIAL REPLICATION

To execute the Replication, you need to click on one of the four Actions:

Replicate Line	Replicate only all the changed/added/deleted Table Data of the Replication Publisher of the current Line (also in ribbon <i>Home</i>).
Replicate All	Replicate only all the changed/added/deleted Replication Publisher of all Lines.
Initial Replication Line	Replicate all records in the Tables of the Replication Publisher on the current Line. If records exist in the Subscriber Company , they are overwritten (they are not deleted first).
Initial Replication All	Replicate all records in the Tables of the Replication Publisher on all the Lines. If records exist in the Subscriber Company , they are overwritten (they are not deleted first).

When using **Initial Replication Line** or **Initial Replication All** you will get an extra message that needs to be confirmed:

Replication Subscriber | Work Date: 6-9-2020

Search

New

Edit List

Delete

Process

Open in Excel

Actions

Related

Status

Replication

Initial Replication

→ Internal	Initial Replication Line	MASTER_REPL
External	Initial Replication All	CRONUS
External	CRONUS TRIMITBC13 MASTER	TEST

WARNING: This Function Replicates All Subscriber records from **CRONUS HQ**! NOTE: Existing records are not deleted but is overwritten. Do you wish to continue?

Yes No

WARNING: This Function Replicates All Subscriber record for all **Subscriber Lines**! NOTE: Existing records are not deleted but is overwritten. Do you wish to continue?

Yes No

After you have confirmed these messages with Yes, you will see how many tables needs to be copied, and the percentage within a specific table that already has been copied.

Working on it...

Table 6037459 Track Record ID (1-89) 43%

Cancel

Depending on the number of Tables and Data in it, this can take several minutes.

NOTE

If you use **Replicate All**, the system will check if the **Initial Replication All** already was executed.
If not, the action **Replicate All** will be executes as **Initial Replication All**.

NOTE

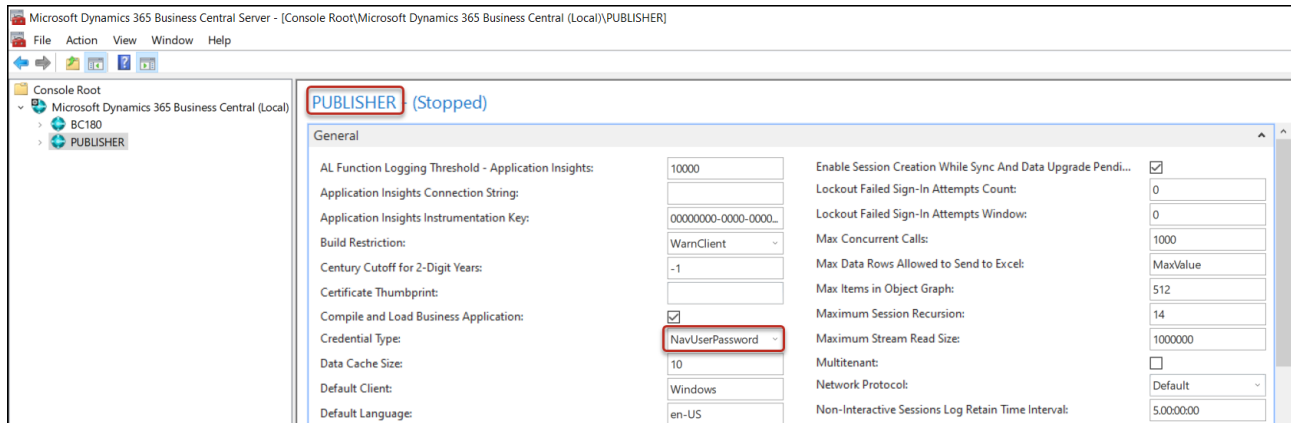
The framework for replication does **not** support fields of the type *MediaSet*.
In the ItemReplicationFramework, this is handled using a Publisher, and Subscriber (code), but in all other scenario's/tables it had to be a customized AL code to handle this.

CONNECTION CODE

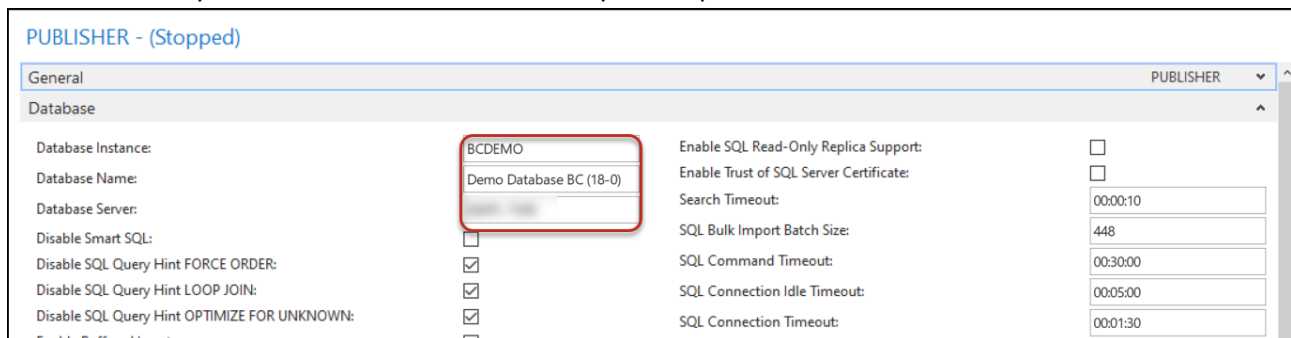
Before you can create a **Connection Code**, you need to make sure that your settings of the Publisher Database are set right.

INSTANCE SETUP FOR PUBLISHING DATABASE/COMPANY

Create a special **Instance** via **Business Central Administration** (i.e., PUBLISHER_BC18) and in the properties of your Instance the parameter **Credential Type** needs to be set to *NavUserPassword*.



Make sure that you have the same connection to your on-prem database. I.e.:



In this **Publisher Database**, you also need to create a special user/password that you will be used specifically for the replication.

I.e.: User NAS Password BC18repl21\$

Be careful in assigning **User Rights SUPER** to this special user.

WEB SERVICE IN PUBLISHER DATABASE/COMPANY

You also need to create a **Web Service**, which can be found in TRIMIT 21.1 by clicking **Tell me** Web Service.

Object Type	Object ID	Object Name	Service Name	All Tena...	Published	OData V4 URL	SOAP URL
Codeunit	6038103	Trm ConnectPortal WS Turbo	PUBLISHER	☒	☒	https://go.microsoft.com/fwlink/?linkid=2138827	http://docbc18gb/7047/BC/WS/CRONUS%20UK%20Ltd/Codeunit/PUBLISHER
Page	6410	workflowVendors	workflowVendors	☐	☒	http://docbc18gb/7048/BC/odata/v4/Company(CRONUS%20UK%20Ltd)/Page/workflowVendors	http://docbc18gb/7047/BC/WS/CRONUS%20UK%20Ltd/Page/workflowVendors
Page	6409	workflowItems	workflowItems	☐	☒	http://docbc18gb/7048/BC/odata/v4/Company(CRONUS%20UK%20Ltd)/Page/workflowItems	http://docbc18gb/7047/BC/WS/CRONUS%20UK%20Ltd/Page/workflowItems
Page	6408	workflowCustomers	workflowCustomers	☐	☒	http://docbc18gb/7048/BC/odata/v4/Company(CRONUS%20UK%20Ltd)/Page/workflowCustomers	http://docbc18gb/7047/BC/WS/CRONUS%20UK%20Ltd/Page/workflowCustomers
Page	6407	workflowJournalLines	workflowJournalLines	☐	☒	http://docbc18gb/7048/BC/odata/v4/Company(CRONUS%20UK%20Ltd)/Page/workflowJournalLines	http://docbc18gb/7047/BC/WS/CRONUS%20UK%20Ltd/Page/workflowJournalLines
Page	6406	workflowJournalBatches	workflowJournalBatches	☐	☒	http://docbc18gb/7048/BC/odata/v4/Company(CRONUS%20UK%20Ltd)/Page/workflowJournalBatches	http://docbc18gb/7047/BC/WS/CRONUS%20UK%20Ltd/Page/workflowJournalBatches

Object Type Codeunit

Object ID 6038103

Object Name will be filled automatically

Service Name you need to fill a name for this Web Service, i.e., **PUBLISHER**

Published	Yes
OData via URL	will be filled automatically
SOAP URL	if the Service Name of this Web Service is the same as your Instance name, this field will be filled automatically based on your server name, Object Type and Service Name

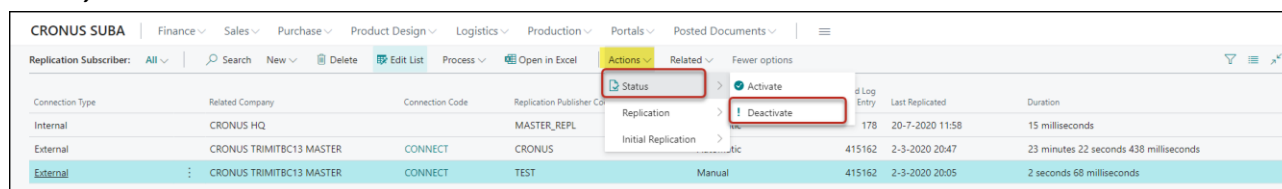
NOTE

We do advise you to have the same **Service Name** for this Web Service, as you have setup for the special Instance you created at [Instance setup for Publishing Database/Company](#).

CONNECTION CODE IN SUBSCRIBER DATABASE/COMPANY

Now we can complete the **Replication Subscriber** by creating a new **Connection Code**.

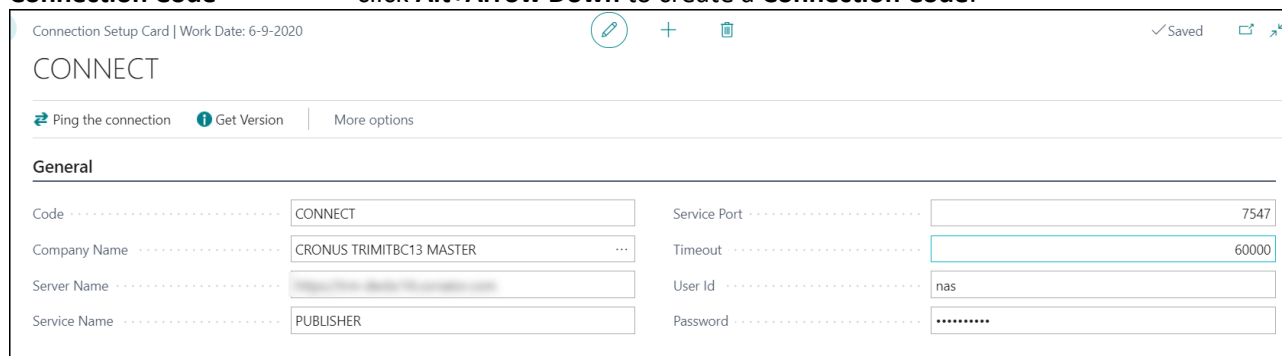
Therefore, click **Tell me Replication Subscriber**, and make sure the Line is *Deactivated* by clicking **Actions, Status, Deactivate**.



Connection Type	Related Company	Connection Code	Replication Publisher Code	Status	Log Entry	Last Replicated	Duration
Internal	CRONUS HQ		MASTER_REPL	Deactivated	178	20-7-2020 11:58	15 milliseconds
External	CRONUS TRIMITBC13 MASTER	CONNECT	CRONUS	Deactivated	415162	2-3-2020 20:47	23 minutes 22 seconds 438 milliseconds
External	CRONUS TRIMITBC13 MASTER	CONNECT	TEST	Manual	415162	2-3-2020 20:05	2 seconds 68 milliseconds

See [Replication Subscriber](#) for a Description of the fields.

Connection Code click **Alt+Arrow Down** to create a **Connection Code**:



Connection Setup Card | Work Date: 6-9-2020

CONNECT

Ping the connection Get Version More options

General

Code: CONNECT Service Port: 7547

Company Name: CRONUS TRIMITBC13 MASTER Timeout: 60000

Server Name: PUBLISHER User Id: nas

Service Name: PUBLISHER Password:

Code	Name for this Connection Code
Company	The same name as Related Company
Server Name	Name of the Server of the Replication Publisher Database
Service Name	Name of the Instance for the Replication Publisher Database
Service Port	SOAP Services Port that you used in the Instance for the Replication Publisher
Timeout	No. of seconds for Timeout
User id	User ID you created specifically for Replication as mentioned in Instance setup for Publishing Database/Company
Password	Password you created specifically for Replication as mentioned in Instance setup for Publishing Database/Company

With the action **Ping the Connection**, you can test if the fields are set right.

With the action **Get Version**, you can get the version (build) of this Server Name/Service Name. This will make it easier to determine that the version (build) of this **Connection Setup** (Publisher) and the database in which you want to copy data to (Subscriber) have the same version (build). This will only work if there is a working connection, so the **Ping the Connection** does work.

REPLICATION LOG

Any change in the **Publisher Company** after an **Initial Replication** has been executed in the **Subscriber Company** can be saved in the **Replication Log** of the **Publisher Companies**.

This can be found via **Tell me Replication Log** in the **Publisher Company** (Head Office).

I.e., if you have created a **Replication Publisher Code** for copying Master data and have executed the Initial Replication in the Subscriber Company, and have changed data of a Master, the **Replication Log** will show you what has happened after the Initial Replication.

Replication Log Work Date: 6-9-2020						
Search Delete Replicated Log Records Open in Excel More options						
No. ↑	Record ID	Activity	Table ID	User ID	Creation Date/Time	
172		Initial	6037206	KBI@TRIMIT.COM	20-7-2020 10:01	
173		Initial	6037200	KBI@TRIMIT.COM	20-7-2020 10:01	
174		Initial	6037201	KBI@TRIMIT.COM	20-7-2020 10:01	
175		Initial	6037202	KBI@TRIMIT.COM	20-7-2020 10:01	
176		Initial	6037212	KBI@TRIMIT.COM	20-7-2020 10:01	
177		Initial	352	KBI@TRIMIT.COM	20-7-2020 10:01	
178		Initial	354	KBI@TRIMIT.COM	20-7-2020 10:01	
179	trm VarDim Positive/Negative: Positive,COLOR_1,Master,2010,None,"",01	Modify	6037116	KBI@TRIMIT.COM	9-11-2020 16:04	
180	trm Track Record ID: "trm VarDim Positive/Negative: Positive,COLOR_1,Master,2010,None,""",23",433	Insert	6037459	KBI@TRIMIT.COM	9-11-2020 16:04	
181	trm VarDim Positive/Negative: Positive,COLOR_1,Master,2010,None,"",23	Insert	6037116	KBI@TRIMIT.COM	9-11-2020 16:04	
182	trm VarDim Positive/Negative: Positive,COLOR_1,Master,2010,None,"",99	Modify	6037116	KBI@TRIMIT.COM	9-11-2020 16:04	
183	trm VarDim Positive/Negative: Positive,SIZE_EU,Master,2010,None,"",36	Modify	6037116	KBI@TRIMIT.COM	9-11-2020 16:04	
184	trm VarDim Positive/Negative: Positive,SIZE_EU,Master,2010,None,"",38	Modify	6037116	KBI@TRIMIT.COM	9-11-2020 16:04	
185	trm VarDim Positive/Negative: Positive,SIZE_EU,Master,2010,None,"",40	Modify	6037116	KBI@TRIMIT.COM	9-11-2020 16:04	
186	trm VarDim Positive/Negative: Positive,SIZE_EU,Master,2010,None,"",42	Modify	6037116	KBI@TRIMIT.COM	9-11-2020 16:04	
187	trm VarDim Positive/Negative: Positive,SIZE_EU,Master,2010,None,"",44	Modify	6037116	KBI@TRIMIT.COM	9-11-2020 16:04	
188	trm VarDim Positive/Negative: Positive,SIZE_EU,Master,2010,None,"",46	Modify	6037116	KBI@TRIMIT.COM	9-11-2020 16:04	
189	trm VarDim Positive/Negative: Positive,SIZE_EU,Master,2010,None,"",48	Modify	6037116	KBI@TRIMIT.COM	9-11-2020 16:04	
190	trm Matrix Item Line: Assortment Matrix,"",None,"",0	Insert	6037113	KBI@TRIMIT.COM	9-11-2020 16:05	
191	trm Matrix Item Line: Matrix,2010,None,"",10000	Insert	6037113	KBI@TRIMIT.COM	9-11-2020 16:05	
192	trm Matrix Item Line: Matrix,2010,None,"",20000	Insert	6037113	KBI@TRIMIT.COM	9-11-2020 16:05	

You can delete records by clicking **Delete Replicated Log Records** in the ribbon **Home**.

Records will however only be deleted after they have been replicated in the **Subscriber Company**.

JOB QUEUE

If the Field **Replication** in the **Replication Subscriber** (Sales Office) is set to *Automatic*, you can create your own batch job for this in the **Job Queue**.

You can find it via ***Tell me Job Queue Entries***.

Your **Job Queue Entry** could look as follows:

Job Queue Entry Card | Work Date: 6-9-2020

+

✓ Saved

Codeunit · 6036532 · trm Replication Handling

Process
Reports
More options

General

Show less

Object Type to Run

Codeunit

Maximum No. of Attempts to Run

0

Object ID to Run

6036532

Rerun Delay (sec.)

0

Object Caption to Run

trm Replication Handling

Last Ready State

20-7-2021 13:07

Description

trm Replication Handling

Earliest Start Date/Time

Parameter String

Expiration Date/Time

Job Queue Category Code

Job Timeout

12 hours

User ID

KBI@TRIMIT.COM

Status

On Hold

Recurrence

Recurring Job

Next Run Date Formula

Run on Mondays

Starting Time

18:00:00

Run on Tuesdays

Ending Time

Run on Wednesdays

No. of Minutes between Runs

1440

Run on Thursdays

Inactivity Timeout Period

5

Run on Fridays

Run on Saturdays

Run on Sundays

CUSTOMIZATION

If you want to use extra AL Code during the replication process, you can use the Business Event Publisher Functions available in the Codeunit **6036532 Replication Handling**.

I.e., if you use the Replication functionality in an Intercompany setup, you want to change the **Vendor No.** of the Masters/Items after the Master has been copied from the **Publisher Company** (Head Office) (with an external Vendor No.) to the Sales Office (with Vendor "Head Office").

BUSINESS EVENT PUBLISHER FUNCTIONS

In the Codeunit **6036532 Replication Handling**, there are Events available that can be used if you want to add your own AL Code during the Replication Process:

[BusinessEvent(false)]

local procedure Pf_OnAfterGetSubscriberRecord

```
(var publisherRecRef_par: RecordRef;  
var subscriberRecRef_par: RecordRef;  
var replicationSubscriber_par: Record "trm Replication Subscriber";  
var stop_par: Boolean)  
begin  
end;
```

[BusinessEvent(false)]

local procedure Pf_OnAfterCopySubscriberRecord1

```
(var publisherRecRef_par: RecordRef;  
var subscriberRecRef_par: RecordRef;  
var subscriberRecRefBefore_par: RecordRef;  
var replicationSubscriber_par: Record "trm Replication Subscriber";  
var found_par: Boolean;  
var stop_par: Boolean)  
begin  
end;
```

[BusinessEvent(false)]

local procedure Pf_OnAfterCopySubscriberRecord2

```
(var publisherRecRef_par : RecordRef;  
var subscriberRecRef_par : RecordRef;  
var subscriberRecRefBefore_par : RecordRef;  
var replicationSubscriber_par : Record "trm Replication Subscriber";  
var found_par : Boolean;  
var stop_par : Boolean)  
begin  
end;
```

[BusinessEvent(false)]

local procedure Pf_OnAfterInsertModifySubscriberRecord

```
(var publisherRecRef_par : RecordRef;  
var subscriberRecRef_par : RecordRef;  
var subscriberRecRefBefore_par : RecordRef;  
var replicationSubscriber_par : Record "trm Replication Subscriber";  
var found_par : Boolean)  
begin  
end;
```

[BusinessEvent(false)]

local procedure Pf_OnbeforeDeleteSubscriberRecord

```
(var subscriberRecRef_par : RecordRef;  
var replicationSubscriber_par : Record "trm Replication Subscriber";  
var stop_par : Boolean)  
begin  
end;
```

[BusinessEvent(false)]

local procedure Pf_OnAfterDeleteSubscriberRecord

```
(var subscriberRecRefBefore_par : RecordRef;  
var replicationSubscriber_par : Record "trm Replication Subscriber")  
begin  
end;
```

[BusinessEvent(false)]

local procedure Pf_PreTableReplicate

```
(var replicationSubscriber_par: Record "trm Replication Subscriber";  
var replicationPublisherLine_par: Record "trm Replication Publish Lines"; var  
stop_par: Boolean)  
begin  
end;
```

[BusinessEvent(false)]

local procedure Pf_PostTableReplicate

```
(var replicationSubscriber_par: Record "trm Replication Subscriber";  
var replicationPublisherLine_par: Record "trm Replication Publish Lines")  
begin  
end;
```

[BusinessEvent(false)]

local procedure Pf_PreReplicate

```
(var replicationSubscriber_par: Record "trm Replication Subscriber")  
begin  
end;
```

[BusinessEvent(false)]

local procedure Pf_PostReplicate

```
(var replicationSubscriber_par: Record "trm Replication Subscriber")  
begin  
end;
```