User guide

DMS Connector for
Microsoft Dynamics 365 Business Central

Contents

The current version of this user manual can be found on our help page: https://www.tso.de/en/add-ons/m-files-add-ons/dms-connector-for-business-central/help-dms-connector-for-dynamics-365-business-central/

1.   Introduction

1.1   Purpose of this solution

To use the M-Files document management system more efficiently, companies need master and process data from Business Central to "keyword" documents with metadata. With the DMS Connector for Microsoft Dynamics 365 Business Central, you can replicate your master and process data from any Business Central table into M-Files objects.

In addition, the DMS Factbox allows you to drag and drop documents to your master or process data in Business Central, which archives them in M-Files in relation to the Business Central data.

Now you can use your customers, suppliers, contacts, or projects from Business Central to tag your documents, such as quotations, orders, invoices, contacts, and e-mails in M-Files. When a new record is created in Business Central, the DMS Connector creates or updates the record as an M-Files object in M-Files. The DMS Connector is easy to set up and configure without a major implementation project or significant investment of time and IT resources.

1.2   Design and functionality

The following diagram explains the structure and functionality of the DMS Connector.
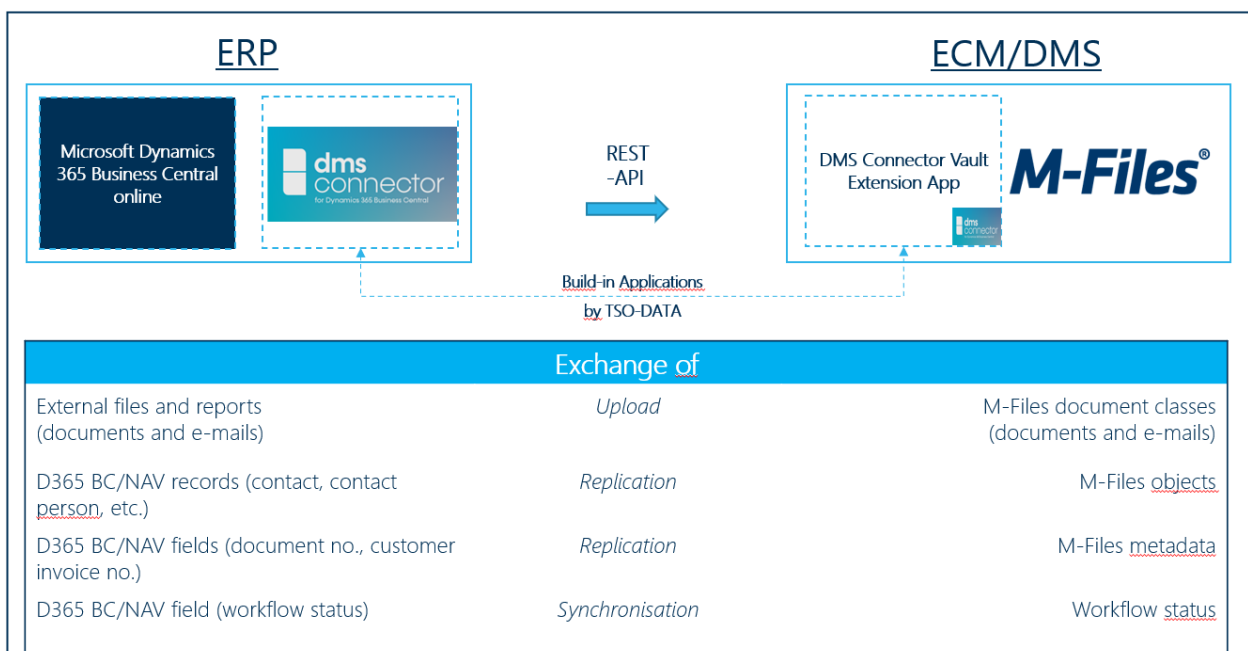
The primary development of the DMS Connector takes place as Build-In Application (App) or Extension in Business Central. Business Central is used to configure the records and fields that are transferred or

replicated to M-Files via a REST API. The interface is designed as a unidirectional interface from Business Central to M-Files. When you purchase the solution, you also access to the DMS Connector Vault Extension App for M-Files, which receives data from Business Central and translates it into M-Files commands (see details Chap. 4).

1.3 Technical implementation

The DMS Connector basically consists of four setup tables. In the following the setup tables are described.

- **DMS Vault Setup**

  The DMS Vault setup establishes the connection between Business Central and M-Files via the REST API.

- **DMS M-Files Table Setup**

  In the „DMS M-Files Table Setup", the master and process data to be replicated in the form of M-Files objects are created and the mapping of metadata is defined.

- **DMS Connector Setup**

  In the section of the DMS Connector setup you will find two register. The register General contains your current license information. In the register Upload Attempts you can see the parameters how the upload of records is done.

- **DMS User Setup**

  The DMS User Setup ensures that a central user has the right to delete objects in M-Files.

1.4 System requirements for use

This chapter describes the system requirements necessary to use the DMS Connector.

1.4.1 System requirements for Business Central

1. The system requirements for Microsoft Dynamics 365 Business Central must be fulfilled. (link to the systems requirements: https://docs.microsoft.com/de-de/dynamics365/business-central/product-get-started)

2. To use the DMS Connector for Microsoft Dynamics 365 Business Central, you need to install the M-Files Server Tools or M-Files Client software. M-Files Server Tools or M-Files Client must be installed on the same Microsoft Dynamics 365 Business Central task queue or that is used to administer the DMS Connector.

1.4.2 System Requirements for M-Files

1. At least the M-Files version "M-Files 2018" is required. The M-Files system must fulfil the minimum requirements as described here.

2. One M-Files Named-User-license (single user license) is required per Microsoft Dynamics 365 Business Central database for one system account. The username and password must be provided for configuration. This system account requires full access to the corresponding M-Files Vault.

3. Installation of the DMS Connector Vault Extension App (see Chapter 4)

1.4.3   Network Requirements

A permanent network connection must exist between the Microsoft Dynamics 365 Business Central and M-Files servers. The DMS Connector accesses the M-Files server just like the M-Files Desktop Client.

1.4.4   Supported Microsoft Dynamics 365 Business Central versions

1. The DMS Connector is an Extension (App), which is certified by Microsoft and is available from Business Central (version 16).
2. Your Microsoft Dynamics 365 Business Central End customer license is to be extended with the Granule of the DMS Connector of TSO-DATA.

1.5   Additional documentation

Support URL for this App:

https://www.tso.de/en/add-ons/m-files-add-ons/dms-connector-for-business-central/support-dms-connector-for-business-central/

Help URL for this App:

https://www.tso.de/en/add-ons/m-files-add-ons/dms-connector-for-business-central/help-dms-connector-for-dynamics-365-business-central/

Information about Microsoft Dynamics 365 Business Central:

https://docs.microsoft.com/en-us/dynamics365/business-central/product-get-started

Information about M-Files:

https://www.m-files.com/user-guide/latest/eng/

Information about the REST-API by M-Files:

https://developer.m-files.com/APIs/REST-API/

Information about the REST-API by Microsoft Dynamics 365 Business Central:

https://docs.microsoft.com/en-us/graph/dynamics-business-central-concept-overview
https://docs.microsoft.com/en-us/graph/use-the-api

Information about the producer:
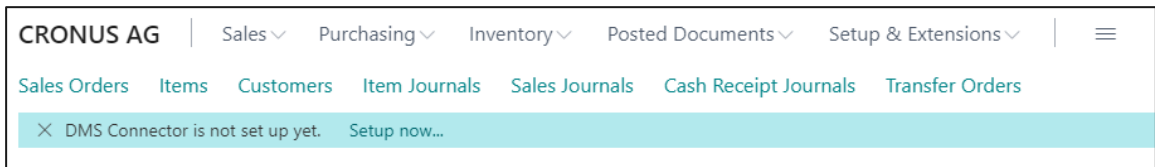
https://www.tso.de/en/

2. First Steps

2.1 Initial Setup via an "Assisted Setup"

**Assumption:** You have successfully downloaded and installed the app in Microsoft AppSource

1. If the app has been downloaded from the Microsoft AppSource, you will receive a notification on your start page, that DMS Connector has not yet been set up.
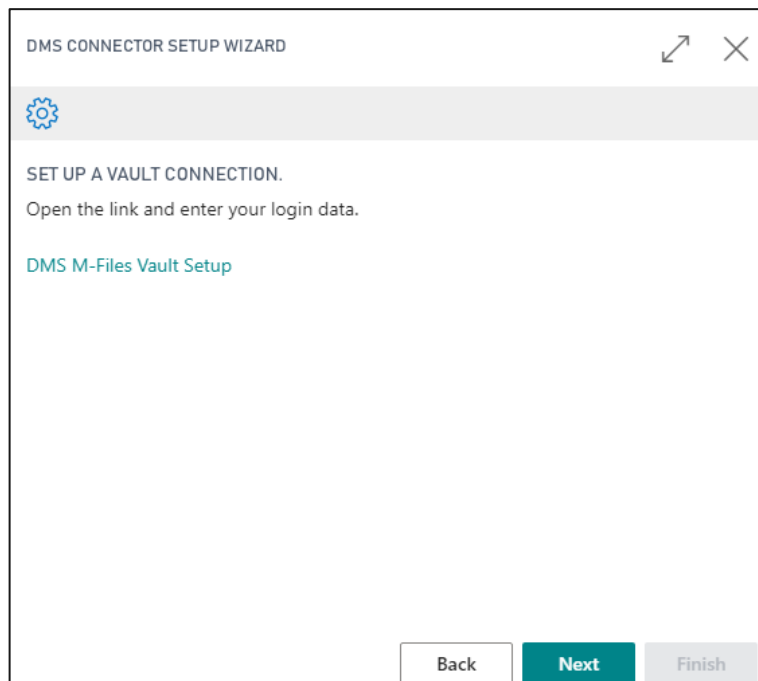

2. Click on "**Set up now"** on the notification to start with the supported setup.

3. Click on **"Next "**
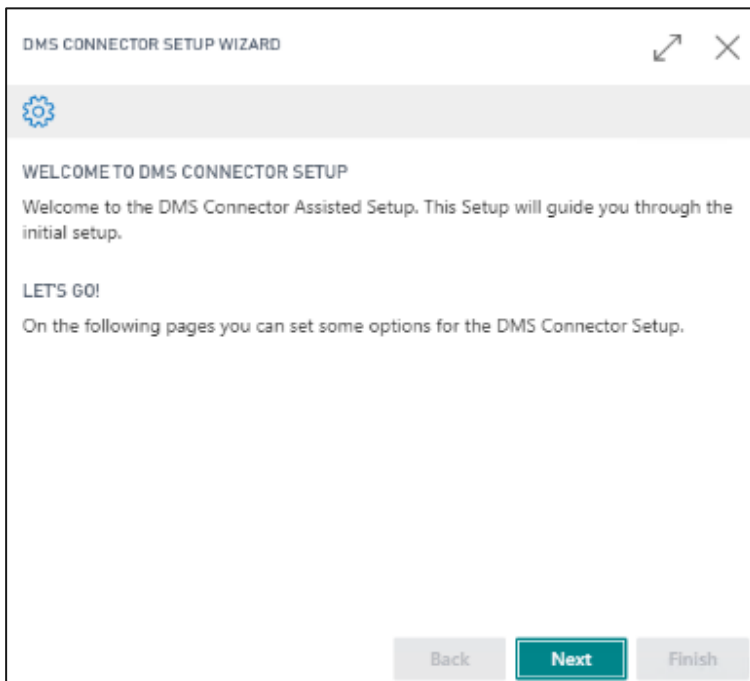
4. Follow the instructions in the User Guide to install the Vault Extension app
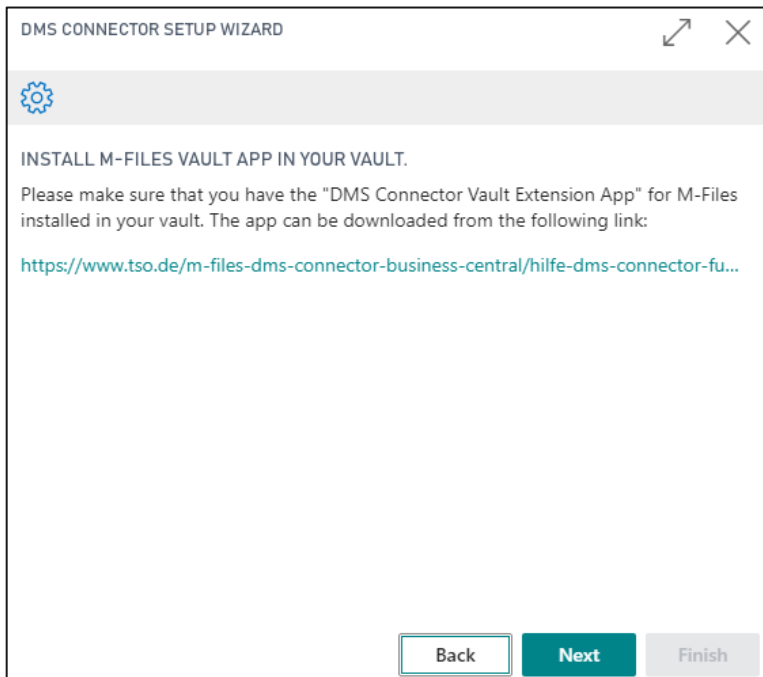
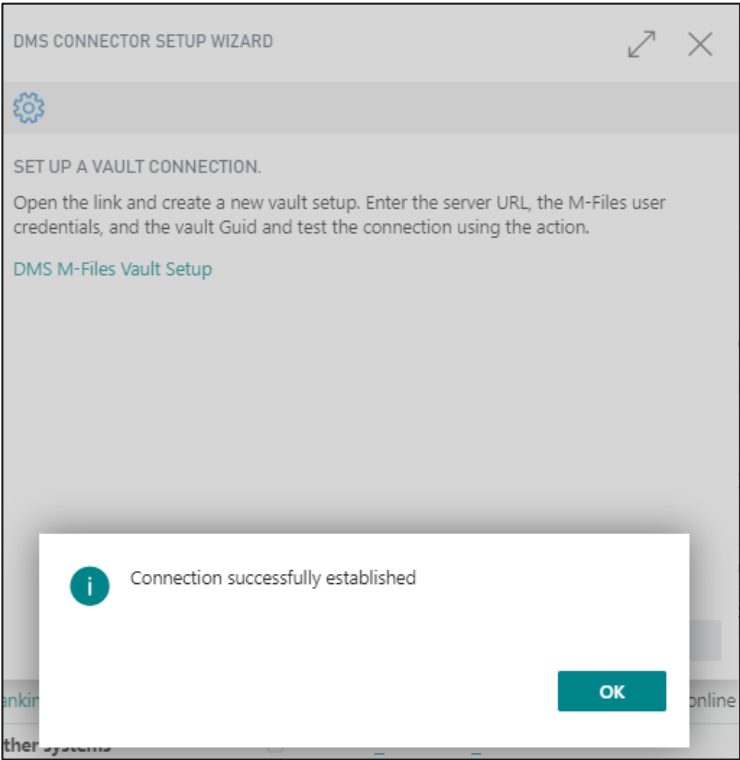5. Follow the further steps on **pos. 3.2.1** for setting up a new Vault.

6. Click on **"DMS M-Files Vault Setup "**

Follow the further steps on **pos. 3.2.1** for setting up a new Vault.
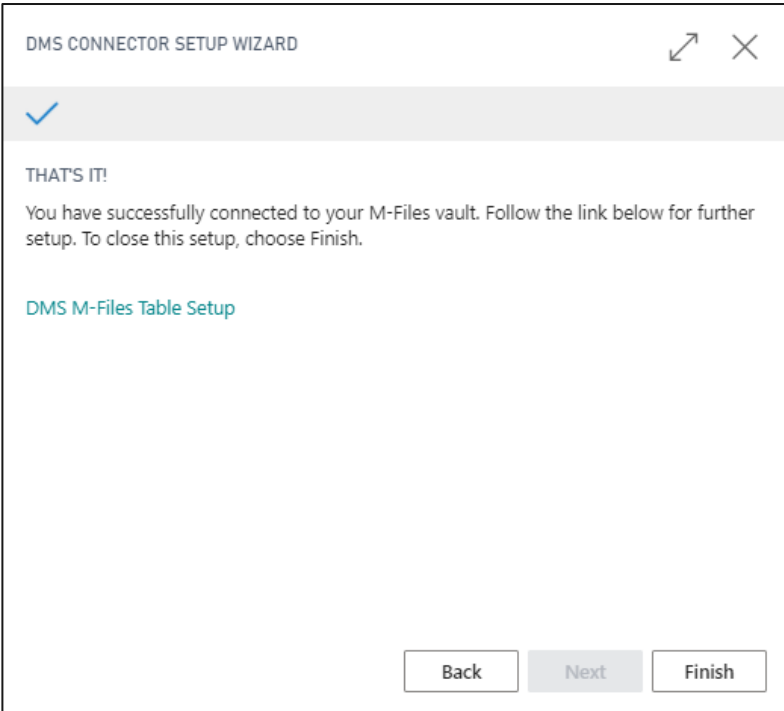

If the connection has been established successfully, you will receive a corresponding information from the system.

7. Click on **"OK "**and then on **"Next "**

8. Click on "Finish ", to complete the first setup for an M-Files Vault.

3.   Setup in Business Central

3.1   DMS Vault Setup

The DMS Vault setup establishes the connection via the REST API between Business Central and M-Files.
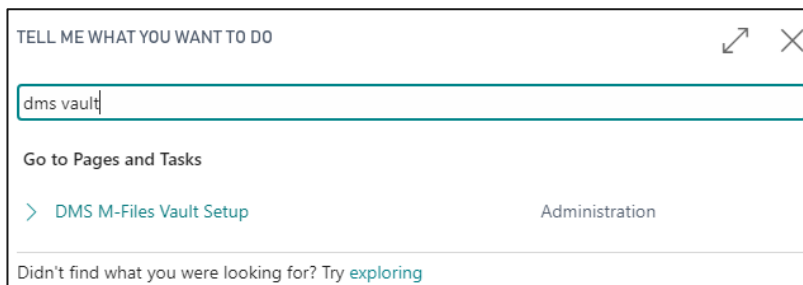
3.1.1   General information for DMS Vault setup

The DMS Vault setup establishes the connection between Business Central and M-Files via the REST API.
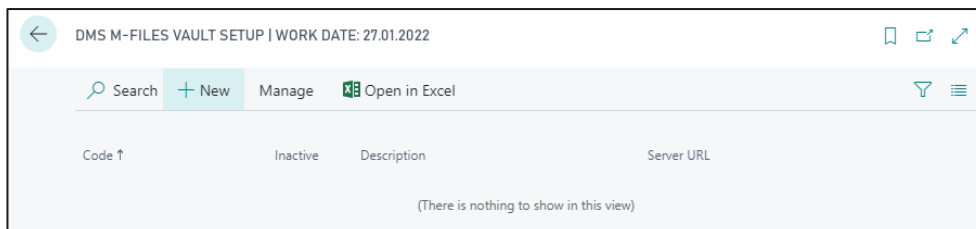
3.1.2   Set new Vault setup

Follow the steps below to configure a new Vault setup.

1.   Enter **"DMS Vault Setup"** in the search.

2.   Click **"New"** to configure a new Vault setup.

(List of the currently available Vault facilities)

3. Do the following steps

   a. **Code:** Enter a code for the connection, e.g. CLOUDTESTVAULT

   b. **Description:** Enter a description for the connection, e.g. Cloud Test Vault

   c. **Server URL:** Specify the URL of M-Files Server. The server requires "http://" or "https://" as prefix.

   d. **Vault Login Name**: Enter the login name for the M-Files user of the DMS Connector. The license is required for uploading data. For more details, see pos. 2

   e. **Vault Password**: Enter the password for the M-Files user of the DMS Connector.

   f. **Vault GUID**: Enter the specific M-Files Vault GUID.

4. Click **"Check Connection to the Server"**

Now your Vault setup is checked in the background. If the connection was successfully established, you will receive a corresponding information. If a successful connection is not established, then run the previous steps again and check your setup.
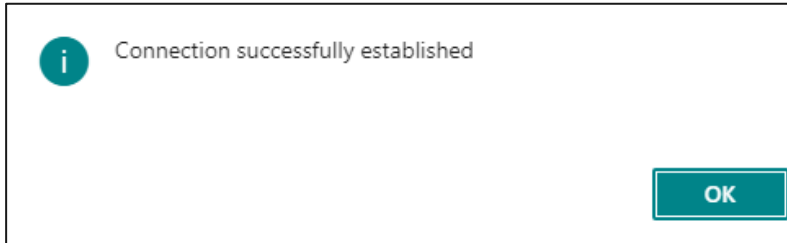
5. Vault-Extension

This will check if the Vault-Extension app is installed. If the installation was successful, the version number will be added. For details on installing the Vault extension, see Chapter 3.

6. Updating metadata structure

Updating the metadata structure updates the existing M-Files structure in the DMS-Connector or Business Central. Thus, when changes are made to the metadata structure in M-Files, the metadata structure should also be updated at this point to correctly display all metadata, properties and classes associated with the M-Files object.
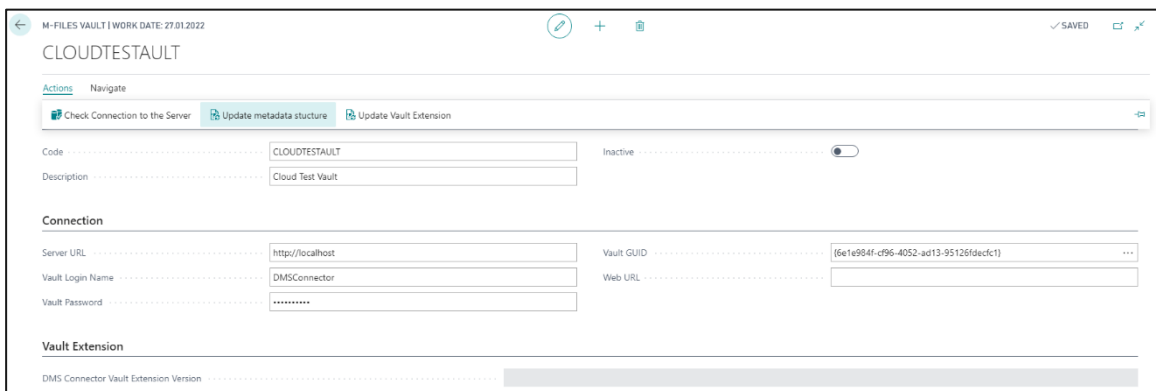
3.2 DMS Setup

3.2.1 General Information on DMS setup

You can find the DMS setup by searching for "DMS Setup". In the area of the DMS Setup you will find three register. In the register General you will find your current license information. In the register "Upload Attempts" you can see the parameters how the upload of records is done.

Note: To start uploading records from Business Central, the task queue must be inserted. If you have not already done the DMS Job in Task Queue during the supported setup, follow the instructions in chapter 3.2.3.

The following describes the fields on this map:

1. **Register: General**

   a. **Version:** Indicates the version of the app

2. **Register: Upload attempts**

   a. **Number of files per User**: Indicates how many objects/files per table setup are uploaded per run. *Recommendation from developer: 50*

   b. **Max. Number of repetitions**: Indicates the maximum number of times a failed transfer should be repeated. *Recommendation from developer: 4*

   c. **1st attempt after minutes**: Specifies after how many minutes the next upload attempt will be started after the previous attempt failed. *Recommendation from developer: 2*

d. **2nd attempt after minutes**: Specifies after how many minutes the next upload attempt will be started after the previous attempt failed. *Recommendation from developer: 4*

e. **3rd attempt after minutes**: Specifies after how many minutes the next upload attempt will be started after the previous attempt failed. *Recommendation from developer: 15*

f. **Further attempts after minutes**: Specifies after how many minutes the next upload attempt will be started after the previous attempt failed. *Recommendation from developer: 180*

3. **License information**

a. Explanation see **Chap. 3.3.2**
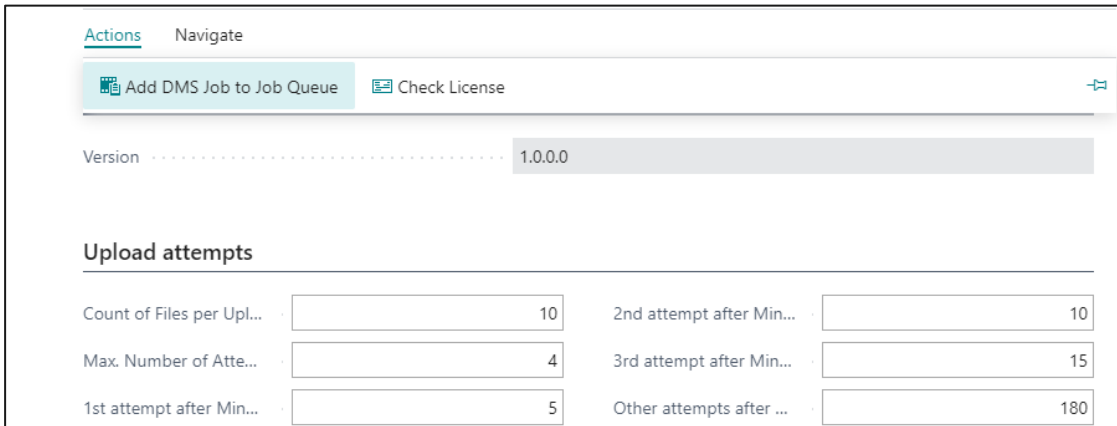
3.2.2 Check license

In the DMS setup area you can view all information regarding the status of your current license in the lower tab **"License Information"**

1. **App Activated:** Indicates the current activation status.

2. **License Type:** Indicates the current license type.

3. **Expiration date:** Indicates when the license expires.

4. **Installation date:** Indicates when the DMS Connector was installed.

3.2.3 DMS Job to Queue

The action **"Add DMS Job to Job queue"** transfers the job to the task queue. You will receive a pop-up confirmation if this was successful.
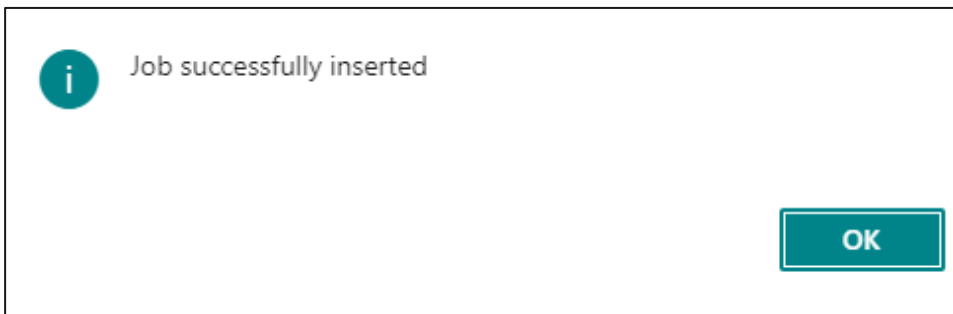
In the search, enter **"Job Queue entries"** and click on the hyperlink of the same name and select your previously added job.
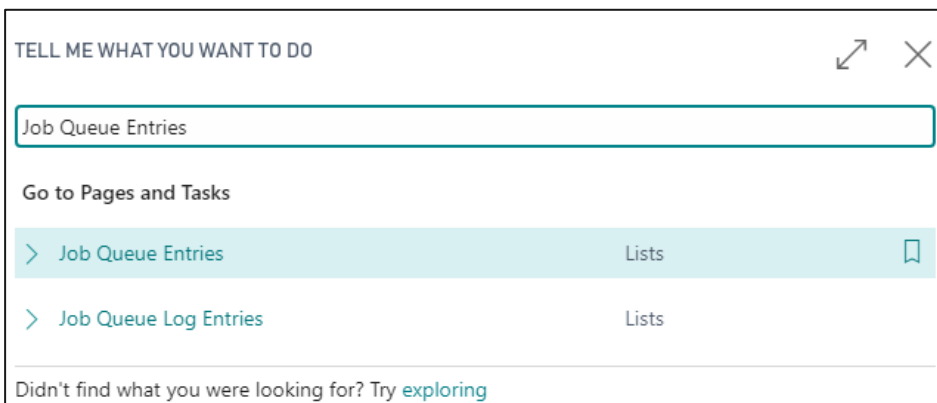
In the task queue item, the individual jobs can be processed. To edit a job, it must be set to Wait in the Edit View.

Status		User ID	Object Type to Run	Object ID to Run	Object Caption to Run	Description
→ Ready	⋮	MF2018-DEMO\SMEYER	Report	1511	Delegate Approval Requests	Automatis
Ready		MF2018-DEMO\SMEYER	Codeunit	459	Remove Orphaned Record Links	Verwaiste I
Ready		MF2018-DEMO\SMEYER	Codeunit	6700	O365 Sync. Management	Automatis
Ready		MF2018-DEMO\SMEYER	Codeunit	5918	ServOrder-Check Response Time	
Ready		MF2018-DEMO\SMEYER	Codeunit	5371117	DMS Create ObjectsTDMS	DMS Creal
Ready		MF2018-DEMO\SMEYER	Codeunit	5371112	DMS Job Queue ProcessTDMS	DMS Job C

After adding the jobs to the task queue, the following two jobs are set to "Waiting" by default.

> a) Codeunit 5371112 - DMS Job Queue ProcessTDMS

This job is used to upload the documents that have the status "Uploading" to M-Files at the specified interval and number per table setup as defined in DMS Setup.

> b) Codeunit 5371117 - DMS Create ObjectsTDMS

This job is used to identify objects that need to be uploaded to M-Files due to an update of the facility or the metadata, need to be created or updated in M-Files.

> c) Codeunit 5371121 - Document PDF CreationTDMS

This job is responsible for PDF generation for posted documents if this is set up in Report Archiving.

Process	Report		Actions	Navigate	Fewer options

📄 Job Queue ⌄

🔧 Set Status to Ready		odeunit	User ID
⏸ Set On Hold		5371117	Maximum
❌ Show Error		MS Create ObjectsTDMS	Last Ready
▶ Restart		MS Create Objects	Earliest Sta

1. **Register General:**

   a. **Object Type to Run:** Specifies the type of the object, report, or code unit, that is to be run for the job queue entry. After you specify a type, you then select an object ID of that type in the Object ID to Run field.

   b. **Object ID to Run:** Specifies the type of the object, report, or code unit, that is to be run for the job queue entry. After you specify a type, you then select an object ID of that type in the Object ID to Run field.

   c. **Description:** Specifies the type of the object, report, or code unit, that is to be run for the job queue entry. After you specify a type, you then select an object ID of that type in the Object ID to Run field.

   d. **Parameter String:** Specifies the type of the object, report, or code unit, that is to be run for the job queue entry. After you specify a type, you then select an object ID of that type in the Object ID to Run field.

   e. **Job Queue Category Code:** Specifies the type of the object, report, or code unit, that is to be run for the job queue entry. After you specify a type, you then select an object ID of that type in the Object ID to Run field.

   f. **User ID:** Specifies the type of the object, report, or code unit, that is to be run for the job queue entry. After you specify a type, you then select an object ID of that type in the Object ID to Run field.

g. **Maximum No. of Attempts to Run:** Specifies how many times a job queue task should be rerun after a job queue fails to run. This is useful for situations in which a task might be unresponsive. For example, a task might be unresponsive because it depends on an external resource that is not always available. *Recommendation from producer: 10*

h. **Last Ready State:** Specifies the date and time when the job queue entry was last set to Ready and sent to the job queue.

i. **Earliest Start Date/Time:** Specifies the earliest date and time when the job queue entry should be run.

j. **Expiration Date/Time:** Specifies the date and time when the job queue entry is to expire, after which the job queue entry will not be run.

k. **Status:** Specifies the status of the job queue entry. When you create a job queue entry, its status is set to On Hold. You can set the status to Ready and back to On Hold. Otherwise, status information in this field is updated automatically.

2. **Register Recurrence:**

a. **Recurring Job:** Specifies if the job queue entry is recurring. If the Recurring Job check box is selected, then the job queue entry is recurring. If the check box is cleared, the job queue entry is not recurring. After you specify that a job queue entry is a recurring one, you must specify on which days of the week the job queue entry is to run. Optionally, you can also specify a time of day for the job to run and how many minutes should elapse between runs.

b. **Running days:** Specifies that the task queue item is run on the days. *Recommendation from producer: Monday to Friday*

c. **Next Run Date Formula:** Specifies the date formula that is used to calculate the next time the recurring job queue entry will run.

d. **Starting Time:** Specifies the date formula that is used to calculate the next time the recurring job queue entry will run. *Recommendation from producer: 06:00:00*

e. **Ending Time:** Specifies the latest time of the day that the recurring job queue entry is to be run. *Recommendation from producer: 22:00:00*

f. **No. of minutes between Runs:** Specifies the minimum number of minutes that are to elapse between runs of a job queue entry. This field only has meaning if the job queue entry is set to be a recurring job (Cannot be shorter than 1 minute). *Recommendation from producer: 1*

g. **Inactivity Timeout Period:** Specifies how many minutes can pass before a recurring job that has the status On Hold is automatically restarted. *Recommendation from producer: 0*

3.3   DMS M-Files Table Setup

In the "DMS M-Files Table Setup", the master and process data that is to be replicated in the form of M-Files objects is created and the mapping of metadata is performed. In addition, document classes can be defined per table setup and thus per Business Central table, which can be uploaded to the DMS drop form of the respective table or via report archiving.

3.3.1   New M-Files Table Setup

Follow the steps below to configure a new Vault setup.

1. Enter in the search **"DMS M-Files Table Setup"** and click on the hyperlink of the same name.
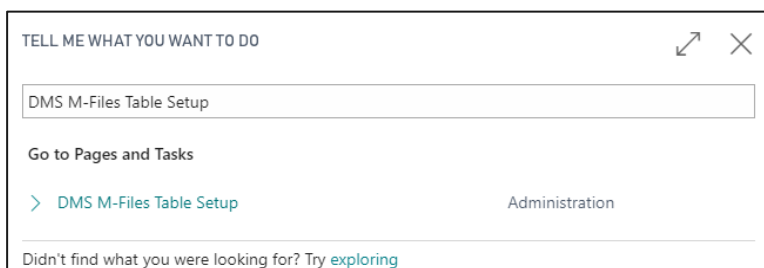
2. Click **"New"** in the navigation bar.
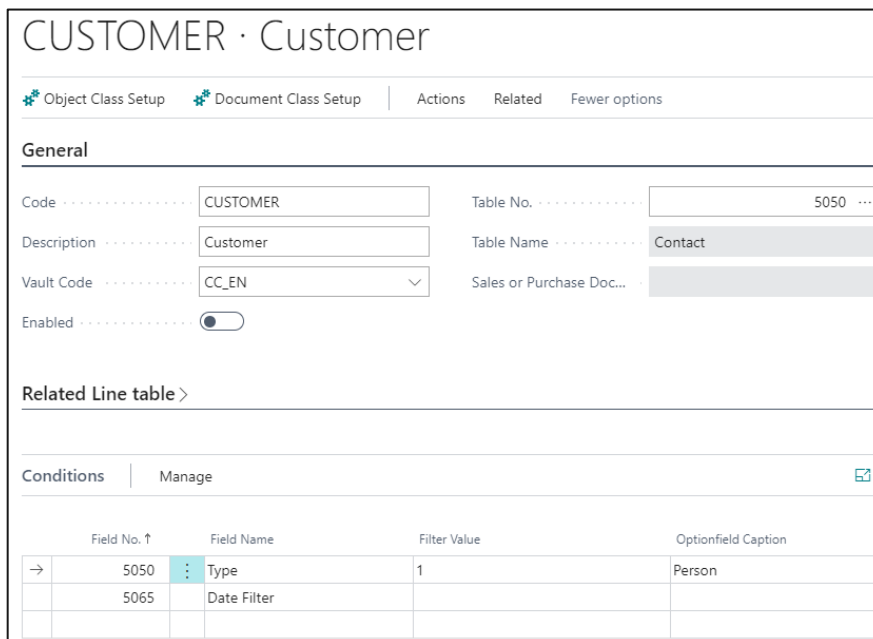
3. General tab - perform all the steps from **a to e**.

    a. **Code:** Enter a unique code for the table you want to republish to M-Files.

    b. **Description:** Enter a description.

    c. **Vault-Code:** Select a vault code. The M-Files objects will be created in this Vault.

    d. **Enabled:** once the code of a table facility has been stored in the "parameter string" of job 5371117 and the table facility has been set to active via this field, the job will consider this facility for triggering the object upload. Whenever the table setup is changed, the field is set to inactive. When the setup is closed, the user is asked if he/she wants to reactivate it.

      e. **Table No.**: Select from the list the Business Central table you want to use for replicating records and archiving documents in M-Files.

      f. **Sales or Purchase document type:** if the table you want to set up is the Sales (Table 36) or Purchase (Table 38) header, you must specify the document type (quotation, order, invoice, etc.) of the desired table.

4. tab Related line table - perform the steps from a to g if you want to use information from the table line for tagging in M-Files.

Related Line table			
Related Line Table No.	37 ···	Related Header Table Field No.	3 ···
Related Line Table Name	Sales Line	Related Header Table Fieldname	No.
Related Line Table Field No.	3 ···	Additional Condition	No
Related Line Table Fieldname	Document No.		

      a. **Related line table no.:** Enter the number of the line table you want to use for keywording.

      b. **Related line table:** Show the name of the table stored in the "Related row table no." field.

      c. **Related line table field no.:** The related field no. of the line table must be specified here.

      d. **Related line table:** Shows the name of the table stored in the "Related line table field no." field.

      e. **Related header table field no.:** The related field no. of the header table must be entered here.

      f. **Related header table field name:** Shows the name of the table stored in the field "Related row table header no.".

      g. **Additional condition:** Here you can specify additional conditions for the rows table based on filter criteria.

5. Conditions - define filters for table setup

Conditions	Manage			
	Field No. ↑	Field Name	Filter Value	Optionfield Caption
→	1 ⋮	Document Type	0 ···	Quote

In the conditions, you can specify filter criteria based on which the objects intended for table setup are created in M-Files. For example, you can filter that no objects are to be created for locked contacts.

6. Action "Object classes setup" - perform steps a to f one after another.

a. **Class ID:** Select your class from the list of classes available in the M-Files vault.

b. **Class Name:** The class name is automatically populated based on the class ID.

c. **Additional condition:** Here you can add an additional condition for the object class.

d. **BC Field for M-Files ID:** Here you specify the field number of the Business Central table to be used for the object ID in M-Files. Since the object ID in M-Files must be unique, the primary key of the respective table should be used for this purpose (e.g., No. or Code).

e. **M-Files ID field name:** is automatically populated based on the BC field.

f. **"Last Modified" Filter**: If required, a "Last Modified" filter can be set if a field of this type is available in the table. Under this condition, the current date is set as a filter after each job run, so that the job does not always run over all records, but only considers those that fall within the date filter. This increases the performance of the jobs.

7. Perform the following steps a to i to perform mapping of M-Files property and Business Central fields.

Carry out the mapping line by line or property by property. Note: First, each row or M-Files property is set to "ignore".

a. **Property ID:** Unique ID for the property (property definition) in M-Files.

b. **Property name:** automatically set based on the property ID.

c. **Required:** indicates whether the property is a required field in the class.

d. **Skip on error**: is not enabled by default. If an error occurs during upload for this record, then this error will be ignored and the whole dataset or M-Files object will be created.

e. **Data source:** Select here the data source (for more details, see info box) for the property to be linked.

f. **Table No.:** is automatically drawn based on the table from the Business Central header.

g. **Field No.:** Now select the Business Central field you want to "map" with the M-Files property.

h. **Field name:** Automatically drawn based on the field no.

i. **Check these fields line by line.**

8. To map M-Files metadata and Business Central field, follow these steps

   Now create the mapping line by line or property by property. **Note**: First, each row and M-Files property respectively is set to ignore.

Properties	Manage	More options						
Property ID ↑		Property Name	Requ...	Skip On Error	Data Source	Table No.	Field No.	Fieldname
→ 1040 ⋮		No.	☐	☐	BC Table	5050	1	No.
1041		Name	☐	☐	Ignore	5050	0	
1042		Name 2	☐	☐	Ignore	5050	0	
1043		Adress	☐	☐	Ignore	5050	0	
1044		Adress 2	☐	☐	Ignore	5050	0	
1045		Post Code	☐	☐	Ignore	5050	0	
1046		City	☐	☐	Ignore	5050	0	
1059		Phone No.	☐	☐	Ignore	5050	0	

a. **Property ID:** Unique ID for the property (property definition) in M-Files

b. **Property name:** Is automatically set based on the property ID.

c. **Required**: Currently ignored by the system

d. **Skip on Error:** Is not activated by default. If an error during upload for this data set, the error is ignored, and the entire data set or M-Files object is created.

e. **Data Source:** Now select the metadata type (for more details, see the info box)

f. **Table-No.** is automatically dragged from the Business Central header based on the table

g. **Field No.:** Now select the Business Central header based on the table.

h. **Field name:** is automatically dragged based on the field number.

i. **Check their fields line by line.**

Info box: Data source

Data source	Explanation
BC Table	BC Table means that the selected M-Files Metadata is filled by a specific Business Central field.
Ignore	Ignore means that the M-Files metadata is not filled by a specific Business Central value during upload.
Document table	Uses the information of the file to be uploaded. For example, the "Created on" or "File name" properties.
BC Table line	Accesses information from the table line. Accordingly, the table no. changes here to the line table.
Filename	The filename of the file is used to populate the property.

Within an M-Files table setup, you have the option to define one or more document classes that will be used for uploading files via the dropform or for report archiving.
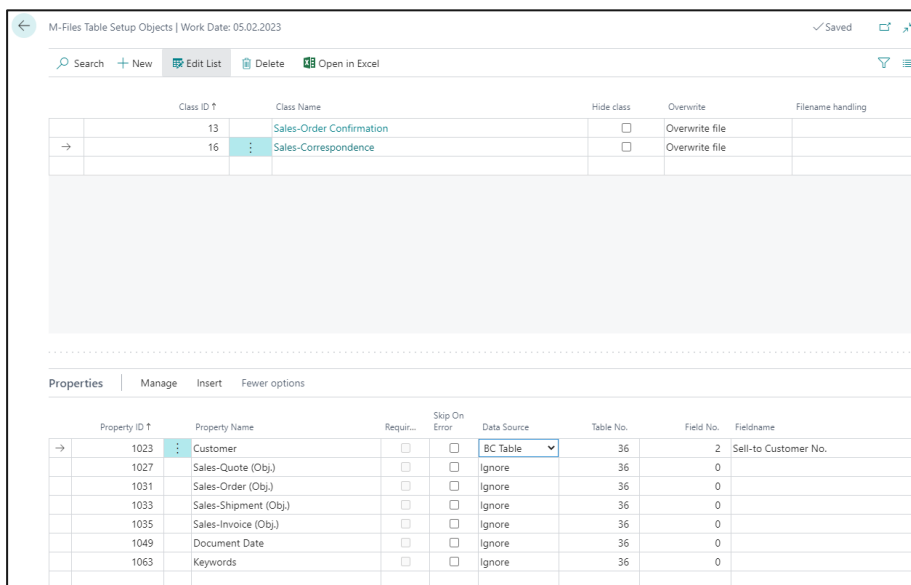
Store a document class as follows:

        a. **Class ID**: Enter the ID of the M-Files document class you want to link. Alternatively, select the appropriate class from the drill-down menu.

b. **Class Name:** The class name of the selected document class is automatically specified here.
c. **Hide class**: This function controls that a document class can be linked to a Business Central table, for example via report archiving, but is hidden for storage on the DMS dropform.
d. **Overwrite:** This controls the behaviour when a file with the same name is stored a second time on the dropform of a Business Central table. Either the file is overwritten, uploaded as a new file or the user is asked.
e. **File name handling:** This controls how the file name of the document is assigned. You can specify that the file name is generated by M-Files. If a document is then dropped, the name displayed in the Factbox is updated based on the document title in M-Files as soon as the file is uploaded.

In the following, the mapping between NAV fields and M-Files properties can take place, as already done in the object class setup. The M-Files properties are automatically displayed based on the defined classes. If a property in M-Files changes or a new property is added, the metadata structure must be updated via the Vault facility, after which the class property can be stored in the document class facility:

Properties	Manage	Insert	Fewer options						
	Property ID ↑	Property Name	Requir...	Skip On Error	Data Source	Table No.	Field No.	Fieldname
	1023	Customer	☐	☐	BC Table	36	2	Sell-to Customer No.
→	1031 ⋮	Sales-Order (Obj.)	☐	☐	BC Table	36	3	No.
	1040	No.	☐	☐	BC Table	36	3	No.
	1049	Document Date	☐	☐	Ignore	36	0	

The same data sources are available for the mapping as already listed in the info box of the object classes facility.

3.4   Table and status overview

In the DMS M-Files table setup overview, you have the possibility to check per table setup how many elements have already been uploaded, are still to be uploaded, are updated, overwritten or deleted, or have run into an error.

Code ↑		Enabled	Description	Table No.	Table Name	Count of uploaded elements	Count of elements to upload	Count of elements to update	Count of elements to overwrite	Count of elements to delete	Count of elements with error
0 CUSTOMER	⋮ ☐		Customer	5050	Contact	0	0	0	0	0	0
0_SALES INVOICE		☐	Sales Invoice	36	Sales Header	0	1	0	0	0	1
ARTIKEL		☑	Artikel	27	Item	150	0	0	0	0	0
ARTIKEL2		☑	Artikel2	27	Item	149	0	0	0	0	0
DEBITOREN		☑	Debitoren	18	Customer	69	0	0	0	0	0
DEBITOREN2		☑	Debitoren2	18	Customer	75	1	0	0	0	1
EKBESTELLUNG		☐	Einkaufsbestellungen	38	Purchase Header	21	0	0	0	0	0
EKGUTSCHRIFT		☐	Einkaufsgutschrift	38	Purchase Header	3	0	0	0	0	0
EKRECHNUNG		☑	Einkaufsrechnung	38	Purchase Header	4	0	0	0	0	0
GEB VK-RECHNUNGEN		☑		112	Sales Invoice Header	101	1	1	0	0	2
GEBEKRECHNUNG		☑	Gebuchte Einkaufsrechnung	122	Purch. Inv. Header	40	0	0	0	0	0
GEBVKGUTSCHRIFT		☑	Gebuchte Verkaufsgutschrift	114	Sales Cr.Memo Header	2	0	0	0	0	0
GEBVKLIEFERUNG		☑	Gebuchte Verkaufslieferung	110	Sales Shipment Header	60	1	0	0	0	1
KREDITOR		☑	Kreditoren	23	Vendor	68	0	0	0	0	0
VK-ANGEBOT		☑	VK-Angebote	36	Sales Header	7	0	0	0	0	0
VK-AUFTRAG		☑		36	Sales Header	57	0	0	0	0	0
VK-MAHNUNG		☑	Registrierte Mahnungen	297	Issued Reminder Header	2	0	0	0	0	0
VK-RECHNUNG		☑		36	Sales Header	1	0	0	0	0	0

The following information can be found in the individual columns:

a) **Uploaded items:** Shows the number of all items and files that have already been successfully uploaded to M-Files for the given table setup.
b) **Items to upload:** Shows the number of all items and files that have not yet been uploaded for the respective table facility but are in the queue.
c) **Items to update:** Shows the number of items and files that need to be updated in M-Files for each table device whose metadata has been updated.
d) **Items to overwrite:** Shows the number of all objects and files that need to be overwritten for the respective table setup whose metadata exists in M-Files.
e) **Elements to delete:** Shows the number of all objects and files, for the respective table setup, that have been marked for deletion by a user and are waiting to be deleted.
f) **Elements with error flags:** Shows the number of all objects and files, for the respective table setup, that have run into an error. Clicking on the elements with errors takes you to the overview where you can see the last error message:

3.4.1 Update or delete M-Files objects from Business Central

Before you start: Make sure that the user is deposited in the DMS user setup and has rights to delete. Otherwise follow the instructions in chapter.

If objects or documents run into an error or should be updated or deleted, you have the possibility to control this also via the DMS M-Files table setup. To do this, click on the desired record in the overview and you can control the following actions from here:

1. **Update metadata:** Updates the items selected in the list.

2. **Delete M-Files item in M-Files:** Deletes the record in M-Files.

3. **Reset error counter:** Resets the error counter. This will restart the upload when the job is restarted.

4. **Detailed error message:** Click on "Actions" to access the detailed error message. This shows the error of the selected data set, which contents and properties have been

transferred. If the error is corrected, a pop-up shows that there are no more error messages.
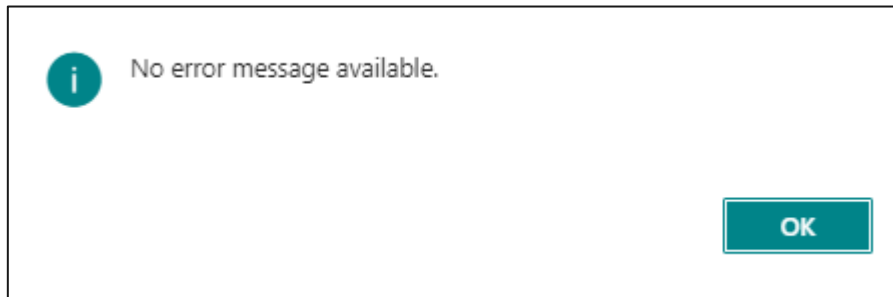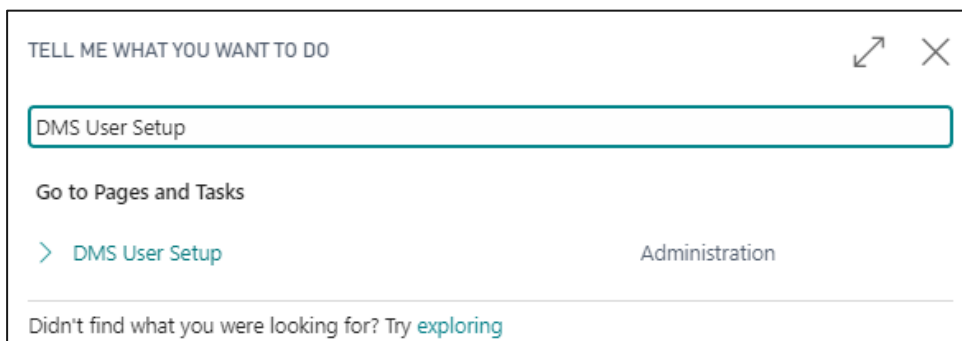

3.5 DMS User Setup

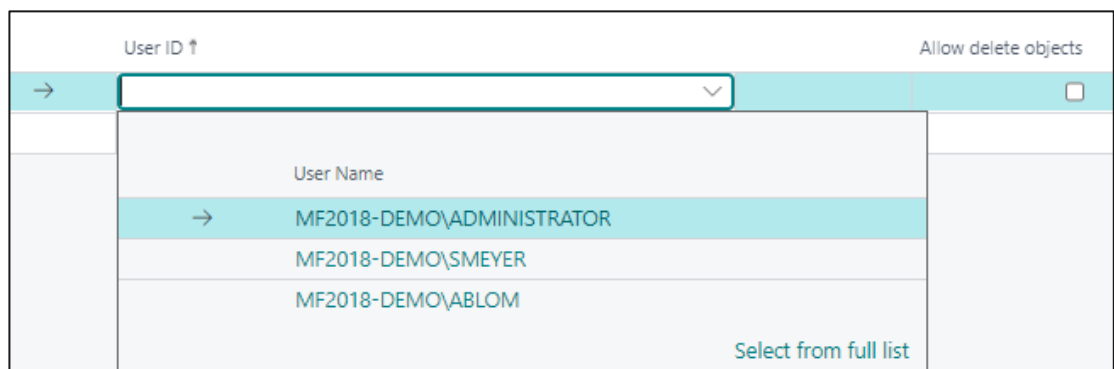### 3.5.1 General information on DMS user setup

The DMS user setup ensures that a user in Business Central has the right to delete objects in M-Files.

3.5.2 Creating a New DMS User

You can find the DMS user setup by searching under **"DMS User Setup".**

1. Click on **"New".**
2. Select the correct Business Central user from the list

3. Define further options:

a) **Allow deletion of objects:** Users who have been granted this right have the option of deleting an element via the DMS M-Files table setup or via the element's map, so that it is also deleted in M-Files.

b) **M-Files Link Type:** This controls the way in which documents are opened by a user in the standard system (in the M-Files Desktop Client, in the M-Files Web Client, with the respective application based on the file type).

3.6   DMS Report Archive Setup

The DMS Report Archiving is used to create document records of posted receipts. These documents can be automatically stored in M-Files.

3.6.1   Setup

You can find the DMS Report archiving facility with the search under "DMS Report archiving facility".

An overview with the archives that have been set up is displayed.

DMS Report Archive Setup | Work Date: 05.02.2023							✓ Saved		🔖 ⟶ ⤢
🔍 Search + New 📝 Edit List 🗑 Delete 📊 Open in Excel								▽	≡
	Inac... ⌄		BC Document Type ↑	Table Setup Code	Class ID	Archive from Posting Date	Archive to Posting Date	Count of Files per Run	Arc... after doc... has
→	☐	⋮	Posted Sales Invoice	GEB VK-RECHN...	12	08.04.2021		1	☐
	☐		Posted Sales Shipment	GEBVKLIEFERU...	11	08.04.2021		1	☑
	☐		Iss Reminder	VK-MAHNUNG	25	01.04.2021		1	☐
	☐		Order Confirmation	VK-AUFTRAG	10	08.04.2021		1	☐
	☐		Quote	VK-ANGEBOT	9	08.04.2021		1	☐

a) **Inactive:** This can be used to control whether the selected archiving is active or inactive.
b) **Document type:** Select the document type to be archived here.
c) **Table setup:** Select the table setup that contains the M-Files class you want to use for archiving. The setups are automatically filtered correctly by table number.
d) **Class ID:** Select the class to be used for archiving.
e) **Archiving from posting date:** You can specify from which posting date archiving should start.
f) **Archiving up to posting date:** You can specify up to which posting date archiving should run.
g) **Number of files per run:** Here you can define how many documents of a category should be created per run. The run is executed by the task queue items.
h) **Archive after document has been printed:** It can be controlled whether posted vouchers should only be archived if they have been printed. Otherwise, all documents will be archived.
i) **Archiving after release:** Document types "Offer" and "Order confirmations" can also be archived when the unposted documents are released. If this option is checked, the documents will be created when the document is released.

3.6.2 Execution of archiving

A job is required to execute archiving. (See 3.2.3 DMS Job to Queue).

4.   Setup Vault Extension

The Vault Extension app processes the data and commands from Business Central and executes the commands in M-Files.

The following describes how to install the Vault Extension App in your M-Files environment.

1. Download the DMS Connector Vault Extension app from the Support URL

    https://www.tso.de/en/add-ons/m-files-add-ons/dms-connector-for-business-central/support-dms-connector-for-business-central/

2. Installing the Vault Extension app when deploying to a local M-Files Vault

    Please follow the steps or installation instructions of M-Files for installing Vault App (Ex-tension). https://www.m-files.com/user-guide/latest/eng/Applications.html

    Please note that server administrator rights are required when installing a Vault app. When deploying to an M-Files Cloud Vault, you do not need server administrator privileges. This means that the installation of a Vault app must be performed by M-Files support. If you have any questions, please contact your local M-Files partner or M-Files support directly (support@m-files.com).

    Note: It is sufficient if the app is simply installed!

5.   Integration of the DMS Factbox in customer specific Pages

To extend the DMS Factbox in other pages, a page extension is needed. An exemplary implementation of the code can be taken from the appendix.

To display the Factbox on the corresponding page, the DMS table setup must be available for the corresponding table.

6. Appendix

6.1 List of Abbreviations

DMS Connector | DMS Connector for Microsoft Dynamics 365 Business Central SaaS
Business Central | Microsoft Dynamics 365 Business Central SaaS

6.2 Glossar

Name	Explanation
Vault	A Vault or document manager organizes the storage of files and objects in M-Files. (For more details: https://www.m-files.com/user-guide/latest/eng/managing_document_vaults.html)
Metadata, properties, and property definitions	The property definitions are used to determine the properties associated with the classes. A property definition denotes a property name (should be as descriptive as possible) and the data type, which determines the data type (in relation to the property) that is entered.
	Several properties can be combined to create classes (see Classes). For example, the document class Employment Contract contains the properties Title, Document Date, Employee, Keywords and Description.
	The property definitions are used to determine the metadata in the metadata form. The properties associated with a document class are displayed in the metadata form after selecting the class.
	https://www.m-files.com/user-guide/latest/eng/Property_definitions.html?hl=eigenschaftendefinition

6.3 Integration of the DMS Factbox in a Page Extension

Exemplary integration of the DMS Factbox for the creditor overview.

```
pageextension 50000 "Vendor List Extension" extends "Vendor List"
{
    layout
    {
        addfirst(factboxes)
        {
            part(DropformTDMS; "Dropform TDMS")
            {
                ApplicationArea = All;
                Visible = DropformVisibility;
            }

            part(DocumentListPartTDMS; "Document ListPartTDMS")
            {
                ApplicationArea = All;
                Visible = DropformVisibility;
            }
        }
    }

    trigger OnOpenPage()
    begin
        DropformVisibility := CurrPage.DropformTDMS.Page.GetVisibility(Rec.RecordId());
    end;

    trigger OnAfterGetCurrRecord()
    begin
        CurrPage.DropformTDMS.Page.SetCurrentRecordId(Rec.RecordId());
        CurrPage.DocumentListPartTDMS.Page.SetCurrentRecordId(Rec.RecordId());
        CurrPage.DocumentListPartTDMS.Page.Update(false);
    end;

    var
        DropformVisibility: Boolean;
}
```

7.   Contact details

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