

M-FILES EXTERNAL REPOSITORY CONNECTOR FOR DOCUMENTUM



VERSION 1.8 | LAST UPDATED 24 SEPTEMBER 2024

The M-Files External Repository Connector for Documentum is an application that allows a user to search for and interact with documents stored in OpenText's Documentum Server from the M-Files user interface.

This document tells the prerequisites to install the connector application, installation and configuration instructions, and information about configuration settings.

1. Prerequisites

This section tells you the prerequisites that are required to install and use the Documentum Server connector.

1.1 Documentum REST Services

You must install and configure Documentum REST Services. There must also be network connectivity between the server that hosts the web services and the M-Files server on which the connector application will be installed. For installation instructions, refer to Documentum documentation.

To test the network connectivity, browse to the WSDL page first from the M-Files server with a URL of this format: <http://documentumServerName:8080/dctm-rest/Services>.

Response will be almost the same as the example below. The page must show without errors before the connector is installed.

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<?xml version="1.0" encoding="UTF-8" ?>
<resources xmlns="http://identifiers.emc.com/vocab/documentum" xmlns:dm="http://identifiers.emc.com/vocab/documentum"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <resource rel="http://identifiers.emc.com/linkrel/repositories">
    <link href="http://mfl-docmntm-3.centralus.cloudapp.azure.com:8080/dctm-rest/repositories"/>
    <hints>
      <allow>
        <i>GET</i>
      </allow>
      <representations>
        <i>application/xml</i>
        <i>application/json</i>
        <i>application/atom+xml</i>
        <i>application/vnd.emc.documentum+json</i>
      </representations>
    </hints>
  </resource>
  <resource rel="about">
    <link href="http://mfl-docmntm-3.centralus.cloudapp.azure.com:8080/dctm-rest/product-info"/>
    <hints>
      <allow>
        <i>GET</i>
      </allow>
      <representations>
        <i>application/xml</i>
        <i>application/json</i>
        <i>application/vnd.emc.documentum+xml</i>
        <i>application/vnd.emc.documentum+json</i>
      </representations>
    </hints>
  </resource>
</resources>
```

Figure 1: Documentum REST Services XML response.

1.2 Accounts

1.2.1 Common Account

When the connector is in use, it logs in with a Documentum Server account to be authorized to access folder and documents on behalf of the M-Files user.

During the connector configuration, the administrator can select whether there is a common account that all M-Files users use (Authentication=Common) or whether each user logs in with their own Documentum accounts (Authentication=Personal). In the case of the former, the common account must have access to all content to which users of M-Files need access. M-Files permissions control which documents individual users see.

1.2.2 Indexer Account

If common authentication is not selected, it is necessary to configure a separate Documentum Server account that the index service uses to get content from Documentum Server. This account must have permissions to see the folder structure and contents that are indexed.

1.2.3 Permission Retriever Account

This account is used to retrieve the permissions configured for each document. It is necessary because usually personal or common accounts do not have permissions to read the permissions list.

2. Installation

2.1 Installing the Application

For installation instructions, see [Installing and Managing Vault Applications](#) in the M-Files user guide. [Restart the vault](#) for the settings to take effect.

Vault restart takes the vault temporarily offline. Taking a vault offline should always be done in a controlled manner and the vault users should be notified beforehand.

2.2 Configuring the Connector

To configure the connector:

1. Open M-Files Admin.
2. In the left-side tree view, expand a connection to M-Files Server.
3. In the left-side tree view, expand **Document Vaults**, and then expand a vault.
4. In the left-side tree view, select **Configurations**.
5. In the gray navigation area, expand **External Repositories**, and then select **Documentum**.
6. In the **Dashboard** tab, click **Add Connection** to add a new connection.

Note: You cannot add more connections than specified in the external repositories' configuration. For instructions on increasing the limit, refer to [Increasing the Number of Allowed External Repository Connections](#) in the M-Files user guide.

7. Specify the settings. For more information, see section 3.
8. Click **Save** to save your configuration.

When the connector is configured, it is necessary to log in with one or more accounts configured above.

To log in, right-click the newly added connection and select **Authenticate Common User** or **Authenticate Indexer User**.

- Use **Authenticate Common User** with the **Common** authentication type.
- Use **Authenticate Indexer User** with the Common authentication type or when a different account is needed for indexing.

Instead of **Authenticate Permissions Retriever** you must always use M-Files **Named Access Control Lists (NACLs)** to control the permissions to Documentum Server documents. This is because the Documentum connector does not support the permission retrieval of all users and user groups with access rights to file simultaneously. When a file is accessed, only the permissions of the accessor (that is, current user) are retrieved. If NACLs are not used, the permissions shown in the M-Files client for a particular document are not shown as expected for all users. For more information on NACLs, refer to [Named Access Control Lists](#) in the M-Files user guide.

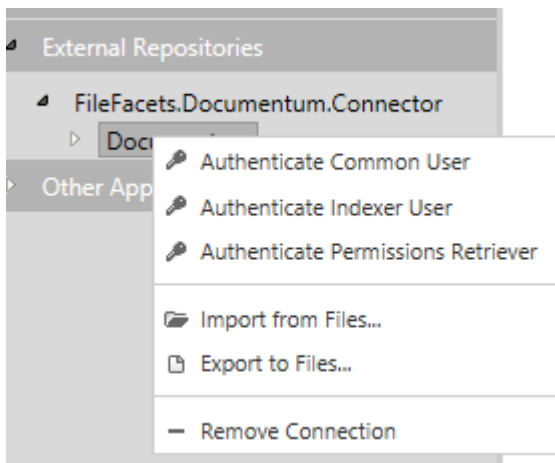


Figure 2: Context menu for M-Files external connector authentication.

3. Specific Values for Connection Configuration

The tables give information on values for the settings in the connection configuration.

3.1.1 General Settings

SETTING CATEGORY	NAME	VALUE	DESCRIPTION
	Enabled	Yes	
	Display Name		Becomes the name of the root node of the connector that is visible to the users. Suggested name: Documentum
	Authentication	Personal	User is prompted to log in when first accessing the external view representing the connector.
		Common	M-Files administrator login is part of the connector configuration and users use these credentials when interacting with the external repository.
		Anonymous	Not supported.
Permissions	Use M-Files NACL	Always	You must always use a default M-Files NACL for the objects in the external repository. This is because the connector does not support retrieving object permissions from an external repository.
Mappings > Object Types > Object Type[1]	M-Files Object Type	Document	The type of M-Files object that will be used to represent a document from Documentum Server. Suggested type: Document
	External Type		Descriptive label that the connector returns to describe the type of Documentum Server object. Currently, only returns '*'. Format is "Property Name". For example: "i_contents_id", "a_is_hidden"
	Properties		Configures the list of Documentum Server properties of a document and the M-Files properties which will display them.
	External Property		Format is "Property Name". For example: "i_contents_id", "a_is_hidden"

For more information on general connector settings, refer to the document [Intelligent Metadata Layer Overview](#).

3.1.2 Connector-Specific Settings

SETTING CATEGORY	NAME	VALUE	DESCRIPTION
	Service URL	For example: http://servername.somedomain.com/dctm-rest	The URL to the Documentum REST Service.
	Path	For example: Repository Name or Repository Name\Cabinet Name	The path to the starting node for the connection. Each level needs to be separated with a '\'. Starting node can be the repository which will show all the cabinets as "sub-folders". Starting node can be the cabinet, in which case it is necessary to specify the repository to which it belongs.

	Show Hidden Files	Yes or No	If this is set to Yes , system and hidden files should be shown.
	Skip Files Without Content	Yes or No	If this is set to Yes , the files without content are skipped.
	Show Personal Cabinets	Yes or No	If this is set to Yes , the personal cabinets are shown.
	Object Types	An accepted object type is a subtype of a dm_document, such as dm_file or dm_memo.	This list of Documentum object types defines which document types are shown in M-Files. If the list is empty, documents of dm_document type and its subtypes are shown. To show only some of the subtypes in M-Files, add them to this list.
	Force Unique Object Names	Yes or No	When this is set to "Yes", M-Files adds a number ID to the display name of the external repository objects in the vault. This does not change the names of the objects in the external repository.
Logging	Use Logging	Yes or No	If this is set to Yes , connector logging is enabled. You can check the location of the log file in the Windows Application log. Normally, the log files are saved to C:\Program Files\M-Files\Server Vaults\ <vault name="">\Logs.</vault>
Logging	Log Level	<ul style="list-style-type: none"> • Fatal: Only the most critical errors are logged. • Error: Connector problems or exceptions are logged. • Warn: Certain error situations are logged allowing the connector to continue functioning. • Info: Status messages about connector activity are logged. • Debug: Information for debugging connector operations is logged, including request latencies. • Trace: Same as Debug but more detailed. 	<p>The level of detail of log file messages.</p> <p>Use the level Warn when the connector has been properly configured and is operational.</p> <p>To investigate an issue with the connection, use either the Debug or Trace level. Note that the log file can grow quickly in size when either the Debug or Trace level is used.</p>
	Path		The location on the server where log files will be added. Must point to a folder that will be dedicated for this connection.
Rules for Data Requests	Object Version Data Requests		Settings for data requests specific to object versions. Applies to folder objects as well.
Rules for Data Requests > Object Version Data Requests	Always Get Permissions when Optional	Yes or No	<p>If this is set to Yes, the connector always gets object version permissions when they are an optional part of the data request.</p> <p>The recommended value is No because it can be that the users do not have the required rights to get the permissions when they only have read access to the object.</p>
Rules for Data Requests > Object Version Data Requests	Get Permissions for Background Operations when Optional	Yes or No	<p>If this is set to Yes, the connector always gets object version permissions for background operations when they are an optional part of the data request. The indexer user must have the same rights as the user used for permission retrieval.</p> <p>The recommended value is Yes if the same user account is used for the indexer user and the permissions retriever. This avoids unnecessary calls to the external repository and improves performance.</p>

Rules for Data Requests > Object Version Data Requests	Always Get Properties when Optional	Yes or No	<p>If this is set to Yes, the connector always gets object version properties when they are an optional part of the data request.</p> <p>The recommended value is Yes. This avoids unnecessary calls to the external repository and improves performance.</p>
Rules for Data Requests	Folder Data Requests		Settings for data requests specific to folders.
Rules for Data Requests > Folder Data Requests	Always Get Permissions when Optional	Yes or No	<p>If this is set to Yes, the connector always gets folder permissions when they are an optional part of the data request.</p> <p>The recommended value is No because it can be that users do not have the required rights to get the permissions when they only have read access to the object.</p>

4. Important Remarks and Known Issues

- The connector does not support changing the location of a promoted object in the external repository. The connector will delete the promoted object from M-Files and create a new unmanaged object to the new location. Also, the metadata of the original object gets deleted, and the new object has no metadata.
- Type information and format definitions are in the connector cache. The cache is cleaned when the connection configuration is updated or the M-Files vault is restarted.

5. Change History

The table below describes the essential changes by document version.

VERSION	DATE	ESSENTIAL CHANGES
1.0	2018/03/14	Initial version.
1.2	2020/05/05	Added a note regarding the limited number of connections to section 2.2.
1.3	2020/06/02	Added a link to the IML overview document to section 3.1.1.
1.4	2020/12/07	Added the section Important Remarks and Known Issues.
1.5	2021/05/12	Modified section 2.2 to recommend using NACLs. Added <i>Permissions > Use M-Files NACL</i> to the table in section 3.1.1. Other minor changes throughout the document.
1.6	2021/08/03	Made small modifications to the table in section 3.1.1. Added multiple new settings to section 3.1.2. Changed the instruction for using NACLs from recommended to mandatory in section 2.2.
1.7	2021/10/14	Added a description for the "Force Unique Object Names" setting.
1.8	2024/09/24	Footer updated.