

M-FILES CORPORATION

# M-FILES 2015.2

## NEW FEATURES AND ENHANCEMENTS

VERSION 1.0

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# 1. Introduction

M-Files 2015.2 offers a variety of new features and enhancements to increase performance, reliability, productivity and efficiency. This document walks you through the main enhancements in detail.

## 1.1 System Requirements

There are no compatibility differences between M-Files 2015.2 and M-Files 2015.1.

Refer to the [System Requirements](#) documentation for full details.

## 1.2 How to Upgrade

M-Files customers with an active *Upgrades and Support Subscription* have the right to update their M-Files software at no charge. If you need support for installing or upgrading the software, or if you want to gain as much benefit as possible from the features in M-Files 2015.2 for the specific needs of your company, our consultancy services are available. Our customer service staff is also available to assist you with any licensing and subscription related matters.

Please see the detailed [upgrade instructions](#) to get started with M-Files 2015.2.

**Note:** Speed and performance improvements in M-Files 2015.2 can cause some empty virtual folders to appear in views in which empty folders are set to be hidden. Because of this, we recommend reading the document [Security Aspects to Consider When Upgrading to M-Files 2015.2](#) before upgrading your system.

## 1.3 Contact Us

Please contact an M-Files Partner or our sales team for a custom online or on-site presentation of M-Files tailored for your business needs. Email us at [sales@m-files.com](mailto:sales@m-files.com). For technical support, please send your requests to [support@m-files.com](mailto:support@m-files.com) or visit <http://support.m-files.com>.

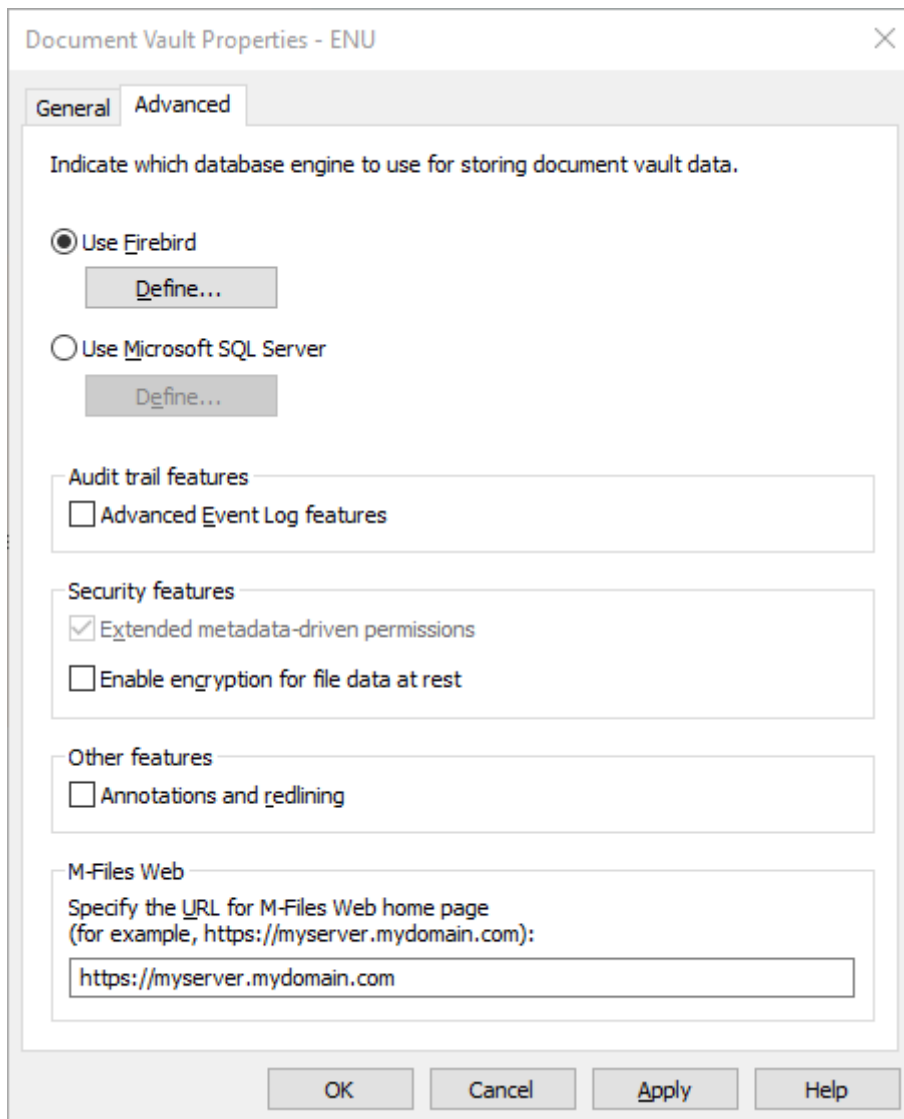
## 2. Sharing Public Links to Files

M-Files 2015.2 supports sharing files with non-M-Files users. Vault users can generate public URLs that can be shared to people without vault credentials to grant them read access to files in M-Files.

### 2.1 Prerequisites

In order for this feature to be available, the following configurations must be applied on M-Files Server:

1. M-Files Web must be configured.
2. The URL for M-Files Web home page must be specified.



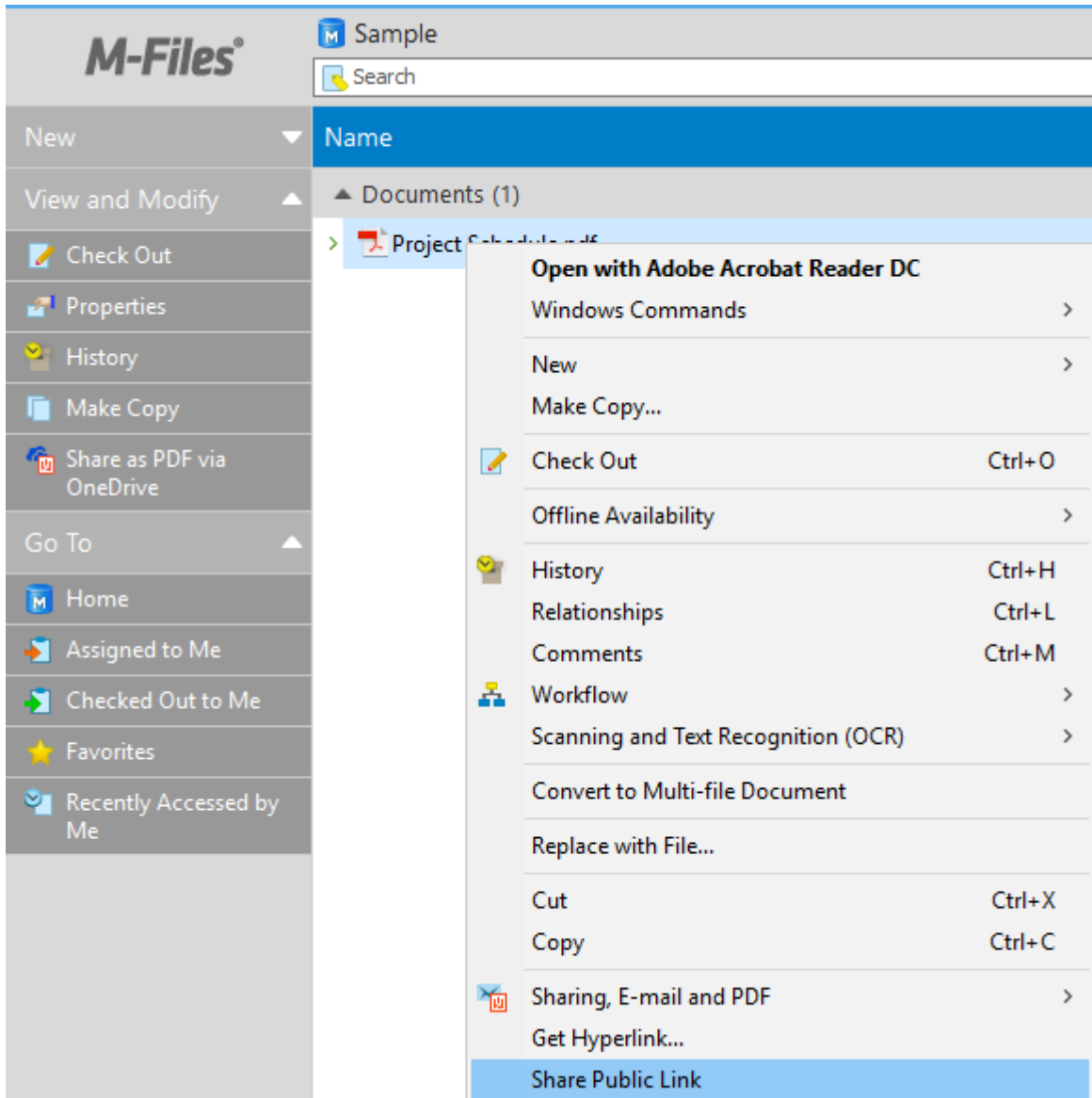
**Image 1:** Specify the URL for M-Files Web home page in the Vault Properties window in M-Files Admin.

3. Link recipients must have access to the *ShareLinks.aspx* on the M-Files Web home page. For instance, if the home page URL is specified as <https://myserver.mydomain.com>, the user that clicks the link must have access to the page <https://myserver.mydomain.com/ShareLinks.aspx>.

**Note:** You can enable this feature also when you have enforced pre-shared key authentication on your M-Files Web site and for mobile access. The pre-shared key does not need to be installed to access the *ShareLinks.aspx* page.

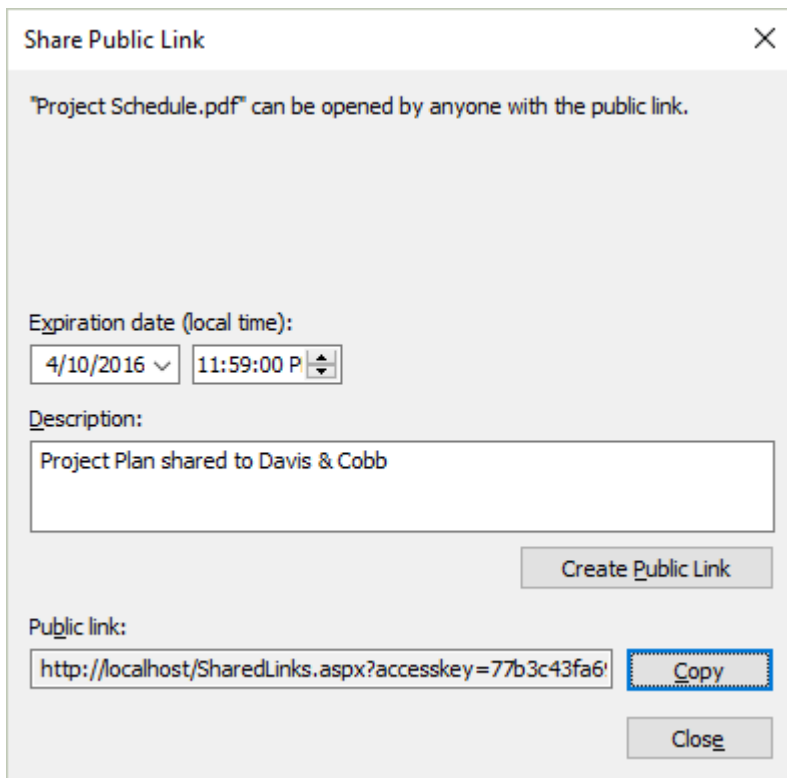
## 2.2 Sharing Features in M-Files Desktop and M-Files Web

In M-Files Desktop, you can generate public links to files by right-clicking the file and then selecting **Share Public Link**:



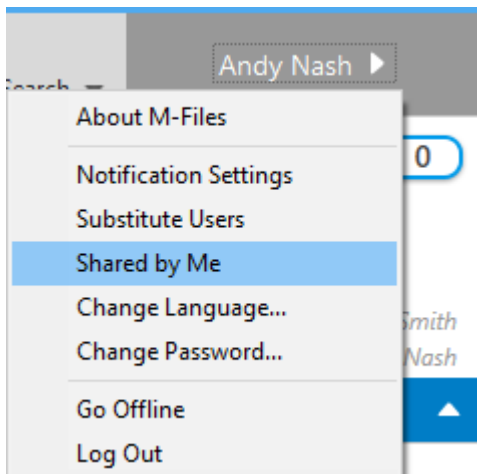
**Image 2:** The *Share Public Link* feature in M-Files Desktop.

In the *Share Public Link* dialog, you can specify the expiration date and time for the link as well as give it a description:



**Image 3:** The *Share Public Link* dialog in M-Files Desktop.

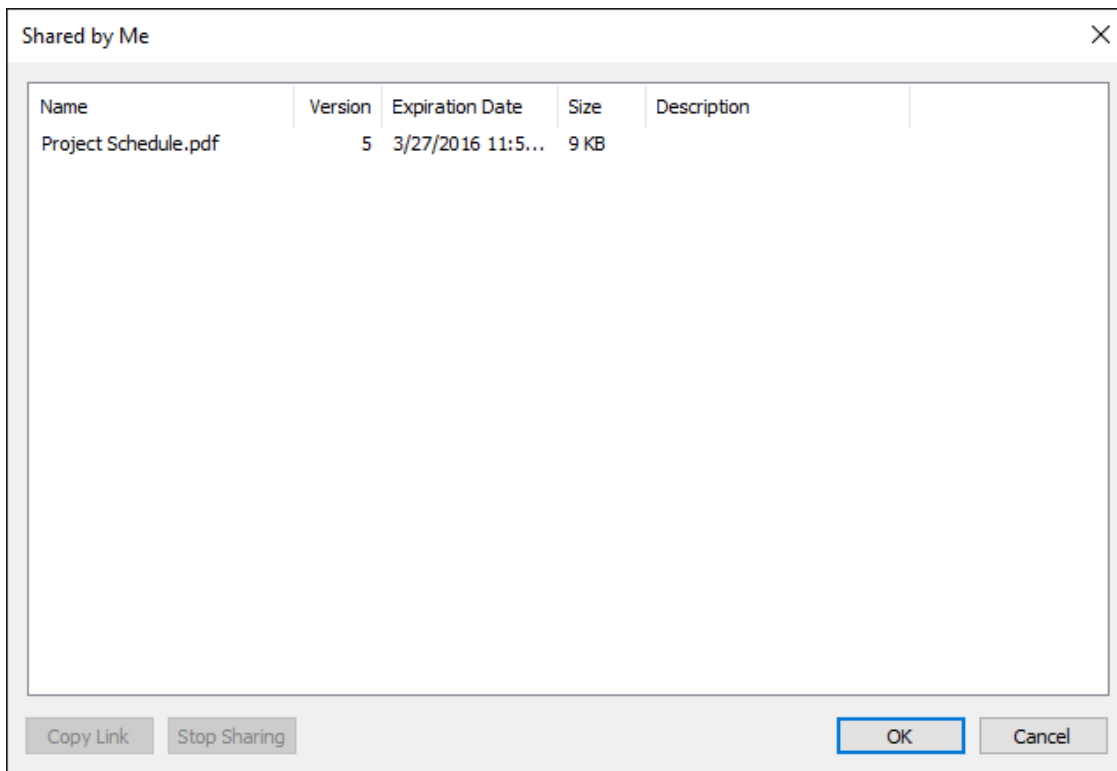
You can also view your shared files by clicking the user name in the top-right corner of the M-Files user interface and by selecting **Shared by Me**:



**Image 4:** View shared files.



In the *Shared by Me* dialog, you can copy the public link to share it again or disable the link by selecting the file from the list and by then clicking the **Stop Sharing** button:




**Image 5:** Managing public links.

**Note:** Vault Administrators see all files shared by all users. They also have the power to remove any public link.

The link recipient is taken to the download page:

# M-Files®

 Project Schedule.pdf

Download

**Image 6:** The file download page.

**Note:** The user interfaces of M-Files Desktop and M-Files Web are slightly different.

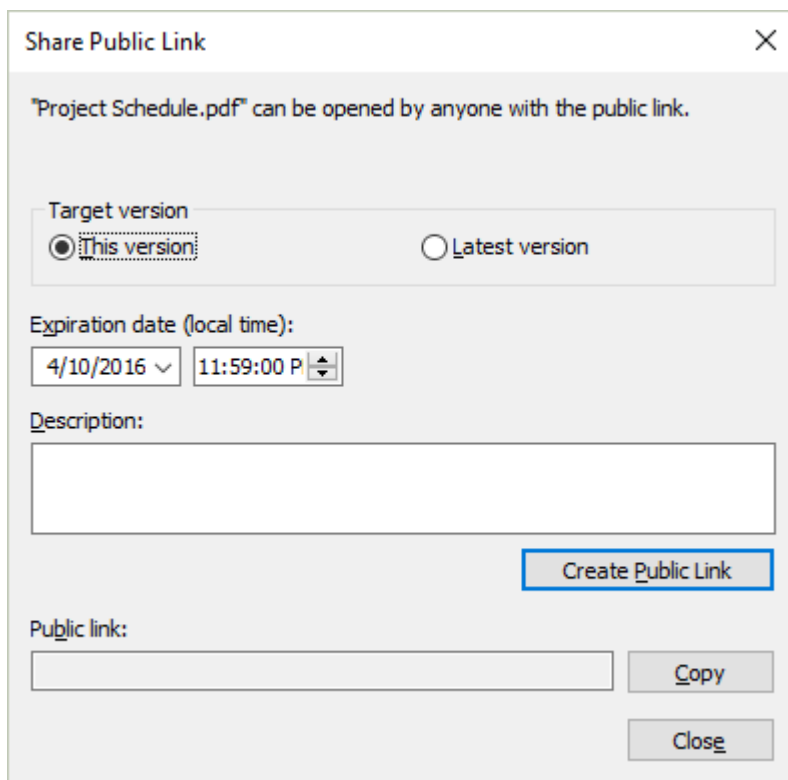
## 2.3 Optional Configuration

Different organizations may want to use the new sharing feature in different ways. That's why we have added a few configuration options to this feature:

- Highly regulated businesses may want to disable this feature altogether to better control the sharing of their content.
- Different organizations may want to specify different default expiry times for public links.
- Sometimes it makes sense to create such public links that always point to the latest version of the shared file.

### 2.3.1 File Versions and Public Links

By default, the public links always point to the specific file version that the user has shared. This is to avoid situations where user A has shared file B and then user C edits file B without realizing that the file has been shared. In some environments, you might want to allow users to create public links that always point to the latest version of the shared file. When you enable this configuration (see the next chapter), the "Target version" options are added to the dialog:



Share Public Link

"Project Schedule.pdf" can be opened by anyone with the public link.

Target version

☒ This version ☐ Latest version

Expiration date (local time):

4/10/2016 11:59:00 P

Description:

Create Public Link

Public link:

Copy Close

**Image 7:** The "Share Public Link" dialog with the "Target version" options.

### 2.3.2 Registry Values for M-Files Web

The following Windows registry values affect only M-Files Web. These values are added to the registry of the M-Files Server computer:

<b>Key</b>	HKEY_LOCAL_MACHINE\Software\Motive\M-Files\<version>\Server\MFWA\Sites\ <Site ID>\Vaults\<Vault GUID>\Configurations	
<b>Value name</b>	EnableShare	
<b>Value type</b>	REG_SZ	
<b>Description</b>	Enables or disables the "Share Public Link" feature.	
<b>Default value</b>	True	
<b>Valid values</b>	True	The "Share Public Link" feature is enabled.
	False	The "Share Public Link" feature is disabled.
<b>Value name</b>	AllowSharingLatest	
<b>Value type</b>	REG_SZ	
<b>Description</b>	Specifies whether the public link can point to the latest version of the shared file or only to the specific version that user has shared.	
<b>Default value</b>	False	
<b>Valid values</b>	True	The public link can point to the latest or the specific version of the shared file.
	False	The public links always point to the specific file version that was shared.
<b>Value name</b>	DefaultShareExpireIn	
<b>Value type</b>	REG_SZ	
<b>Description</b>	Specifies the default expiry time for public links in days.	
<b>Default value</b>	5	
<b>Valid values</b>	Any integer	The default expiry time for links in days.

### 2.3.3 Registry Values for M-Files Desktop

The following Windows registry values affect only M-Files Desktop. These values are added to the registry of the M-Files Server computer:

Key	HKEY_LOCAL_MACHINE\Software\Motive\M-Files\<version>\Server\MFServer\VaultOptions\<GUID>	
Value name	AllowSharing	
Value type	REG_DWORD	
Description	Enables or disables the "Share Public Link" feature.	
Default value	1	
Valid values	1	The "Share Public Link" feature is enabled.
	0	The "Share Public Link" feature is disabled.

Value name	AllowSharingLatest	
Value type	REG_DWORD	
Description	Specifies whether the public link can point to the latest version of the shared file or only to the specific version that user has shared.	
Default value	0	
Valid values	1	The public link can point to the latest or the specific version of the shared file.
	0	The public links always point to the specific file version that was shared.

## 3. Metadata Card Configurability

In M-Files 2015.1 we added extensive configurability options to the metadata card. See the [Configuring the Metadata Card](#) document in M-Files Knowledge Base for more information.

M-Files 2015.2 extends the metadata configuration features in various ways.

### 3.1 Using Other Properties Values as Part of Default Values

You can use add dynamic text to set property values in metadata card configuration rules. You can, for example suggest automatic naming pattern for new proposals to be *Proposal - <Customer name> - <Document Date>*. M-Files also supports [automatic values for properties](#). The main differences between this new feature and the automatic values are the following:

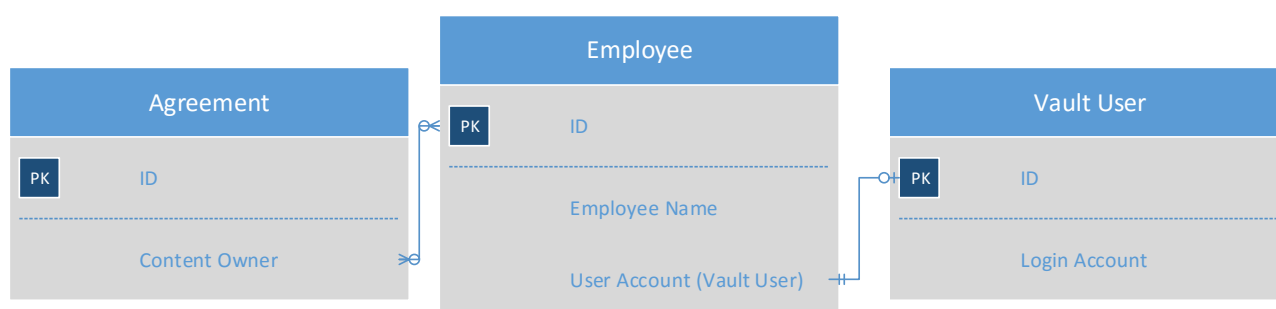
	SET VALUES FOR METADATA CARD CONFIGURATION	AUTOMATIC VALUES
When is the value updated in the metadata card?	When filling out the metadata card	After checking in changes to the server
Can the user modify the set value directly by editing the property?	Yes	No
Is the calculation performed by client or server?	Client	Server
The main use case	Suggesting property values while allowing users to edit the value.	Enforcing naming conventions of properties in the vault.

## 3.2 Using Current User Placeholder in Property Values

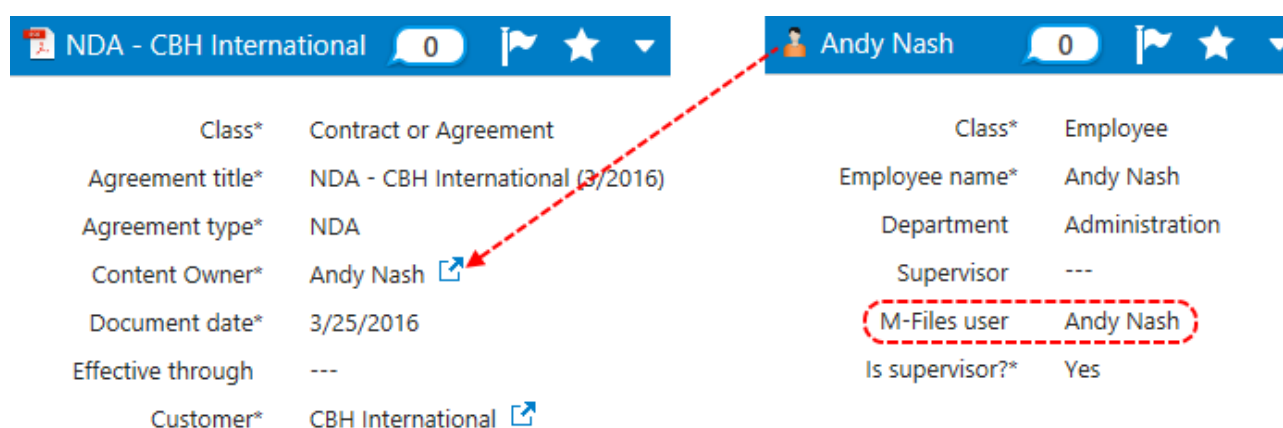
You can use the %CURRENT\_USER% placeholder when setting property values in the metadata card. This is useful if you want, for example to suggest that the Document Owner for a new agreement is the user who saves the agreement to the vault.

## 3.3 Custom Placeholders

M-Files vaults are often configured so that for each vault user, there is a matching employee object in the vault. The metadata structure is then often designed so that the documents refer to users via the employee property:



**Image 8:** Common metadata structure in M-Files where documents refer to users via the employee object type.

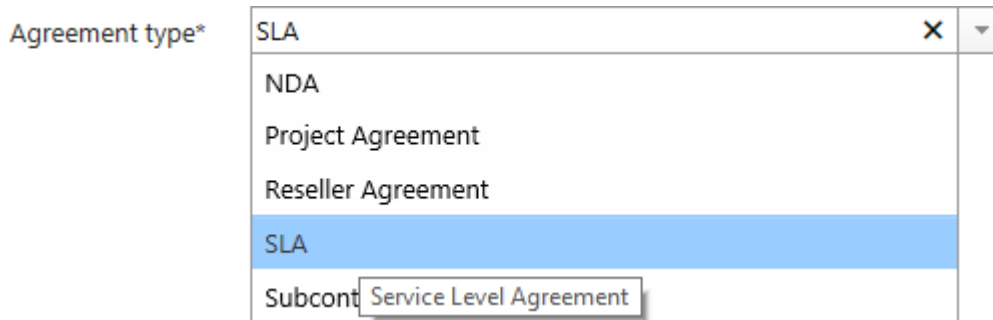


**Image 9:** The agreement document refers to user Andy Nash via the employee object type.

If you want to prefill the current user as the content owner in this kind of metadata structure, you must first find the employee object that represents the current user. This can be accomplished by using custom placeholders in a metadata card configuration rule. Details are explained in the [Configuring the Metadata Card](#) document.

### 3.4 Adding Tooltips for Value List Items

You can add tooltips for value list items in the metadata card. This is useful if the value list contains abbreviations or codes that the end-user is not familiar with.



**Image 10:** Tooltips for value list items.

### 3.5 Using Single-Line Text Form Control for Multi-Line Text Properties

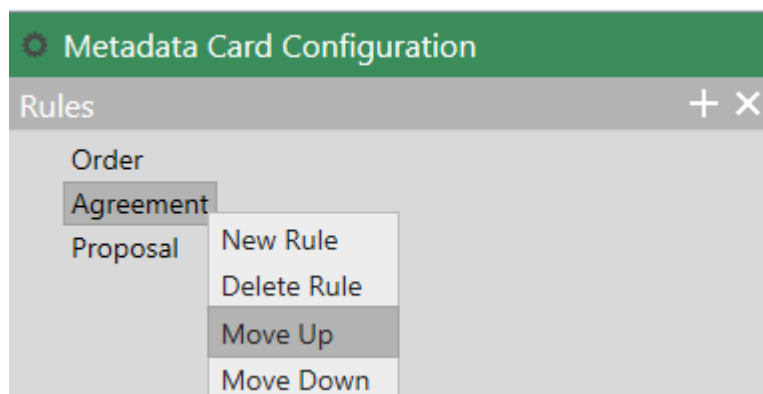
Multi-Line text properties can now be displayed without line breaks as single line text boxes on the metadata card. This is a useful configuration for properties that can contain more than 100 characters but that should not consume too much real estate on the metadata card.



**Image 11:** Using the single-line text form control for multi-line text properties.

### 3.6 Changing the Evaluation Order of the Rules

The hierarchical rule list is evaluated from top to bottom. The higher a rule is in the list, the earlier it is evaluated. You can move rules up and down in the hierarchy.



**Image 12:** Changing the evaluation order of the rules

## 4. Server Activity Monitor

M-Files 2015.2 provides administrators a more detailed view of the activities in the system. With this real-time monitoring dashboard, administrators can view the most active sessions to identify potential bottlenecks in the system. You can also view the users with the most object modifications, opening times of views by user and durations of background processes.

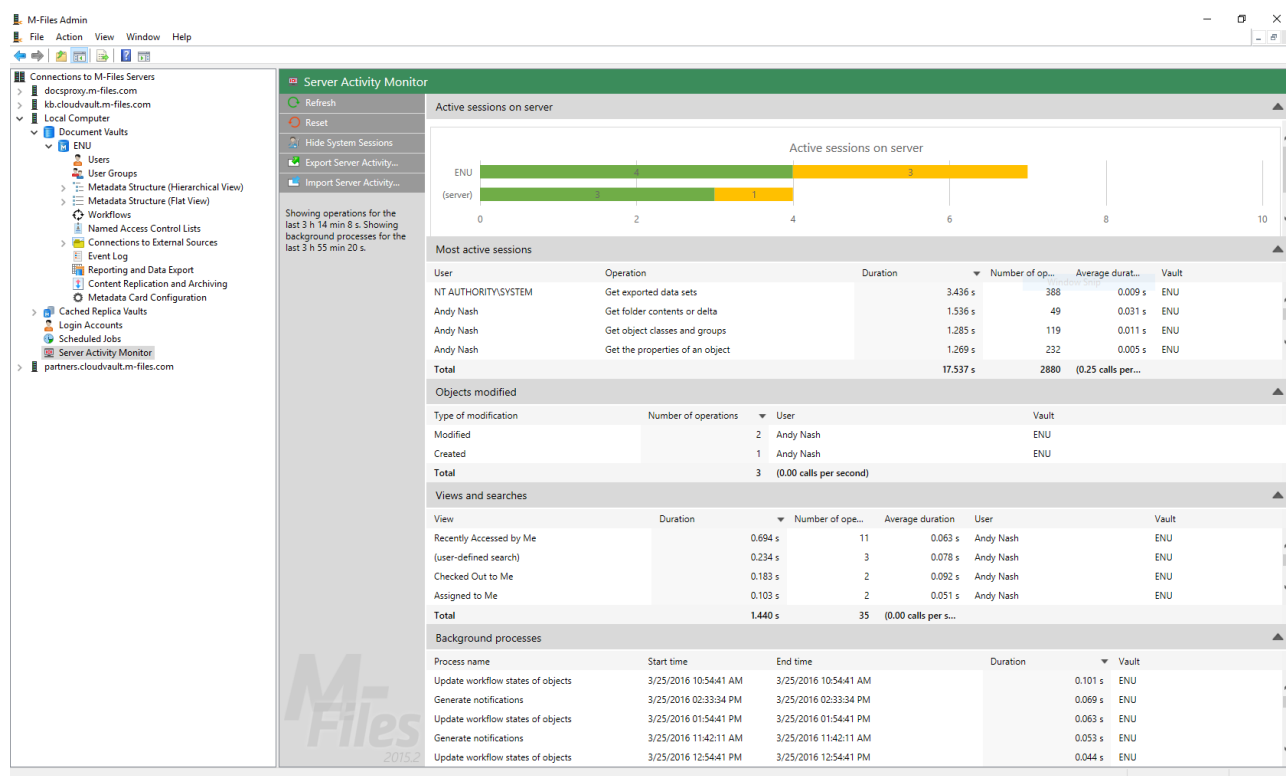


Image 13: Server Activity Monitor

The Monitor collects and shows data in real-time and does not store it permanently. However, you can export diagnostics data as a JSON file and import it later. M-Files Support teams can also diagnose your system performance by using these JSON exports.

## 5. Speed Improvements

M-Files 2015.2 is faster than the previous version for many key operations. This chapter lists some areas in the software where the performance has been significantly improved.

### 5.1 Faster File Uploads and Downloads

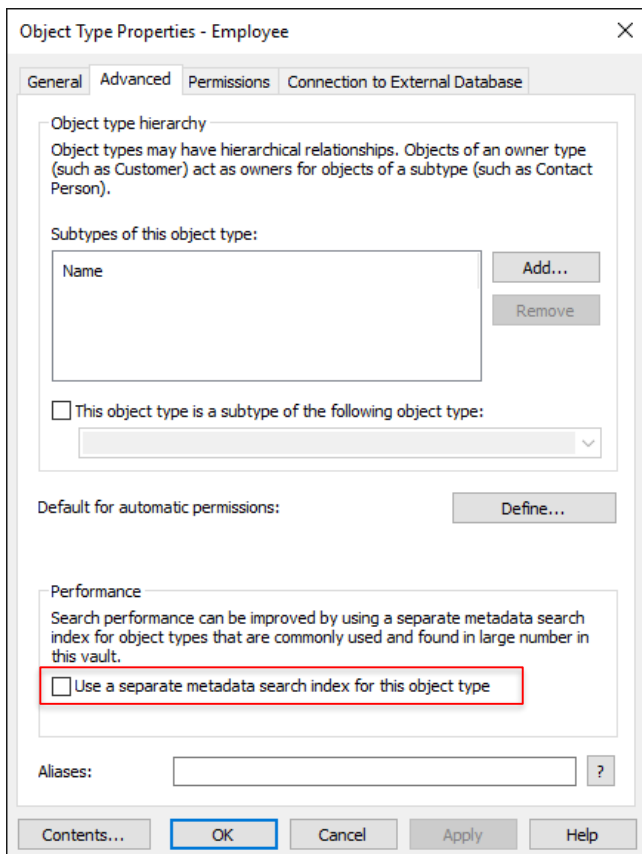
We have optimized file uploads from M-Files Desktop to M-Files Server and downloads from M-Files Server to M-Files Desktop. All M-Files Cloud Vault deployments and all vault connections that use the HTTPS protocol benefit from this improvement.

We estimate that most M-Files Cloud Vault users will experience at least a 75% increase in download and upload speed after upgrading M-Files Desktop and M-Files Server to the new 2015.2 version. The difference is most remarkable for connections

that have a network latency of tens of milliseconds or more: in our test environments we measured up to five times faster download and upload speeds when the network latency between M-Files Desktop and M-Files Server was 170 ms.

## 5.2 Partitioning Object Type Data in the Vault Database for Quicker Searches

M-Files 2015.2 allows administrators to separate the metadata search index for object types in order to speed up searches. For example, if your vault contains hundreds of thousands of customer objects, it might make sense to separate the metadata search index of customer objects to improve search performance for both customer objects and other objects in the vault.



**Image 14:** Using a separate metadata search index for object types.

## 5.3 Faster Value List Imports in Replication

In M-Files 2015.1, content packages with large value lists caused delays in import jobs. This caused issues especially in replication setups where export and import jobs were executed in short intervals and in environments where all the metadata structure components were replicated. M-Files Server 2015.2 can better detect the value list items that have been changed, which reduces the number of required queries to the database. In our performance tests, this feature was up to 50-100 times faster in M-Files 2015.2 than in M-Files 2015.1.



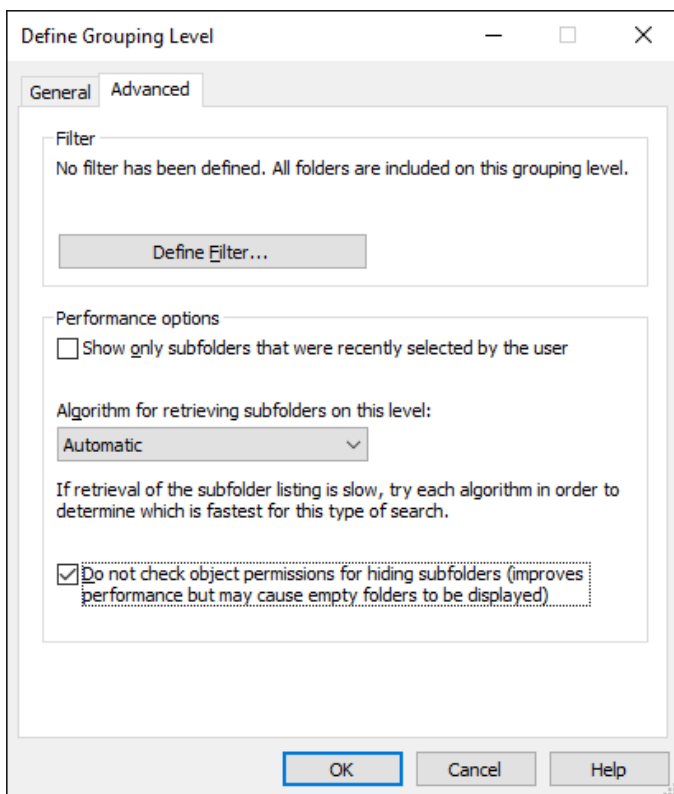
## 5.4 Skip the Permission Checks When Hiding Empty Folders in Views

There are two common reasons that may cause slowness when retrieving virtual folder listings for views:

1. Hiding empty folders on a grouping level is slower than showing empty folders
2. Checking object permissions when hiding virtual folders may slow down opening the view especially if the number of virtual folders is big

Hiding empty folders causes more complex database queries to the server and may slow down opening the view. Consider Proposals by Project view example in the Sample Vault structure. M-Files Server must know the objects that belong to the class *Proposal*. These proposal documents must be also grouped by Project (object type). If you choose to show empty project folders in the view, the virtual folder listing for projects can be quickly retrieved because M-Files Server can return all project objects that are visible to the user.

The downside of this view configuration is that the user may end up having many empty project folders on the grouping level. To avoid this, user can hide empty folders in the grouping level settings. In M-Files 2015.1 and earlier, this option slowed down the operation of showing the project virtual folder remarkably in some environments because each virtual folder was scanned to make sure that also those virtual folders are hidden that contain objects but where none of the objects are visible to the user. In M-Files 2015.2 we provide an option in the view settings to skip this permission check:



**Image 15:** Do not check object permissions for hiding subfolders

The negative impact of this setting in this example is that if there are objects related to a project but user does not have read permissions to any of those objects, the empty project folder would still appear on the grouping level (assuming that user has read permissions to that project object in the vault).

## 5.5 Specify the Properties that Cannot Be Used as Grouping Levels in Views

Using the new feature documented in chapter 05.4 may have negative security consequences in some environments.

Consider this example from a vault where Social Security Number (SSN) is added as a metadata field to confidential employee related documents. HR department has saved a Document A related to Employee B and specified the following SSN as the metadata value for that document: 000-00-0000. The document itself is visible to HR and Employee B only.

If User C did not have read permissions to Document A, he could still create a view that groups all documents in the vault by the SSN property, choose to hide the empty folders and then choose to not check object permissions for hiding empty folders (see chapter 05.4). Even though User C could not see Document A, empty virtual folder 000-00-0000 would be shown as an empty virtual folder in the view, so User C would see the SSN and would know that there is at least one document related to that SSN in the vault.

To mitigate this issue, vault administrators can specify whether certain property definitions, value lists and object types can be used as grouping levels in views or not.

Property Definitions: using properties as grouping levels is disabled by default for new properties.

Using value lists as grouping levels is enabled by default for new value lists.

Using object types as grouping levels is enabled by default for new object types.

**Image 16:** Allowing usage of properties, value lists and object types as a grouping level in views

In the vault migration during M-Files Server upgrade to the 2015.2 version, the *Allow using this property / value list / object type as a grouping level in views* is set for existing metadata structures as follows:

- Property definitions:
  - Date properties: enabled
  - All other properties: disabled
- Value lists: enabled
- Object types: enabled

The same logic applies to the new property definitions that are created after upgrading M-Files Server to the 2015.2 version.

**Note:** We recommend reading the document [Security Aspects to Consider When Upgrading to M-Files 2015.2](#) before upgrading your system.

## 5.6 Better Database Compression

The vault databases are better compressed in M-Files 2015.2 than in earlier M-Files versions. This applies to M-Files Cloud Vault and to environments that use Microsoft SQL Server Enterprise Edition as the database engine. For optimal database compression, we recommend to use Microsoft SQL Server 2016 Enterprise Edition. Due to more effective database compression, more data can be read into memory with less I/O on SQL Server. This has the following potential benefits:

- The RAM memory requirements for running M-Files vault databases in SQL Server can be smaller
- Data can be read into RAM memory quicker than before, which has positive impact on overall performance of the vault.

## 5.7 Sending Notifications Faster

The evaluation of notification rules is up to 5-10 times quicker in M-Files 2015.2 than in M-Files 2015.1. This optimization affects the lead time between the events in the vault that trigger notifications and sending the notification messages to recipients.

## 5.8 Faster Cached Listings

In M-Files 2015.1 Desktop and earlier, users may experience random slowness when accessing views and listings. This occurs for example when user is browsing a view in the vault while many new and changed objects are replicated to the vault. When user then navigates to home view, for example, the transition was often slow and sometimes made M-Files Desktop non responsive. This issue has now been fixed in M-Files 2015.2.

## 5.9 Performance Improvements in Operations Related to Objects with Many Versions

Object operations of objects that contained tens of object versions were sometimes slow in M-Files 2015.1. This behavior has been optimized in M-Files 2015.2 so that updating objects with tens of version is remarkably faster than before.

## 5.10 Performance Improvements in Vaults with Many Views

Listings in views than contain multiple other views in vaults where the total number of views is hundreds or thousands has been optimized remarkably.

## 5.11 Faster Replication of Old File Versions

M-Files Server stores the latest object file version of each object entirely and then tries to compress the repository size by saving the old file versions as delta files that only contain binary level changes between the latest file version and the old file version. While this mechanism greatly helps to compress the size of the file repository, it also caused unnecessary delta comparison and re-assembly of files in environments where the full version history of objects is exported as an export job. In

M-Files 2015.2, M-Files Server tries to search entire files of old file versions from the disk to avoid unnecessary re-assembly of the delta file versions.

## 6. Improvements in M-Files Web

### 6.1 Integration with Microsoft Office Online

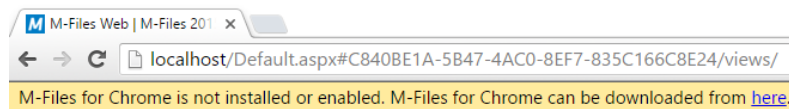
M-Files Web can be configured to work with Microsoft Office Online Apps for Word, Excel and PowerPoint. Microsoft Office Online Apps can be installed locally to your on-premises network, or in case you are using M-Files Cloud Vault, you can configure the compatibility with your Office 365 Online Apps.

With this integration, you can open Office files directly to the browser versions of Word, Excel and PowerPoint and edit the files without having to install these Office applications locally.

See the [Enabling Office Online Services for M-Files Web](#) document in M-Files Knowledge Base for more details.

### 6.2 M-Files for Chrome Extension

When you log in to M-Files Web 2015.2, the browser prompts you to install the new M-Files for Chrome extension:



**Image 17:** M-Files for Chrome installation reminder

You can also install this extension later from [Chrome Web Store](#). After installing the extension, please follow the instructions in the [Installing and Enabling the M-Files for Chrome Extension](#) document to finish the installation.

With the M-Files for Chrome extension the end-user experience of editing files is remarkably better:

STEP	M-FILES FOR CHROME ENABLED	M-FILES FOR CHROME DISABLED
1	Double-click the file	Double-click the file
2	Check-out	Check-out
3	Editor (e.g. MS Word) opens	Editor (e.g. MS Word) opens
4	User makes changes	User makes changes
5	User saves the file	User saves the file as a copy to Desktop
6	User closes the editor	User closes the editor
7	User checks in the file in M-Files Web	User drags the edited file over the checked out file in M-Files Desktop
8		User checks in the file in M-Files Web

If you cannot use Chrome for M-Files Web and you need to regularly edit files via the M-Files Web client, you can enable the Java applet in M-Files Web configuration to get similar user experience with other, Java compatible browsers.

Note: M-Files for Chrome extension is currently available only to Microsoft Windows Operating Systems.

## 6.3 Less Java Dependency

With the enhancements mentioned in chapters 6.1 and 6.2, M-Files Web is now less-dependent on Java. In fact, we recommend that you disable the Java Applet in M-Files Web altogether if:

- The users can use Chrome and install the browser plugin OR
- You edit mostly just Office documents and have configured the integration with Microsoft Office Online Apps (see chapter 6.1) OR
- You use M-Files Web mostly for read-only purposes

Refer to the [M-Files Web and Java](#) document in M-Files Knowledge Base for details.

## 6.4 Support for Auto-Filled Metadata Properties in MS Office Documents

You can insert metadata properties to Microsoft Word, Excel, and PowerPoint files using the M-Files for Microsoft Office plugin that is installed along with the M-Files Desktop app.

You can set up fields in Word, Excel, and PowerPoint in which the selected M-Files properties are filled in automatically. For example, you can select a customer name and address from the document properties and insert them as the recipient's contact information in a proposal. This feature is often used in template document to speed up filling the documents created from templates.

These dynamic property fields can now be filled and updated also when new documents are created or existing documents are modified via M-Files Web and M-Files Mobile.

This feature is disabled by default as it may cause negative performance impact in some environments. To enable the feature, please apply the following registry values on M-Files Server:

<b>Key</b>	HKEY_LOCAL_MACHINE\Software\Motive\M-Files\<version>\Server\MFServer\VaultOptions\[VaultGUID]	
<b>Value name</b>	UpdateMetadataInFileOnCheckInSupportedExtensions	
<b>Value type</b>	REG_SZ	
<b>Description</b>	File extensions to which the setting is applied. If you specify multiple file types, separate values with comma.	
<b>Default value</b>	Empty	
<b>Valid values</b>	doc docx xls xlsx	

## 6.5 Sharing Files with Non-Users

You can share files with non-users from M-Files Web too. See chapter 2 for more details.

## 6.6 GANTT Chart View

M-Files GANTT Chart View add-on is now compatible with M-Files Desktop and M-Files Web. Contact M-Files for more details of this add-on.

# 7. Improvements in M-Files APIs

## 7.1 GetObjectVersionAndPropertiesOfMultipleObjects method in the Client API

M-Files Client API now supports a method of fetching the object version and properties of multiple objects in one call. With this method, developers can significantly improve performance of applications that leverage M-Files Client API. Notice that this method was implemented to M-Files Server API earlier. M-Files Web Service API also has a similar method.

## 7.2 New API Documentation

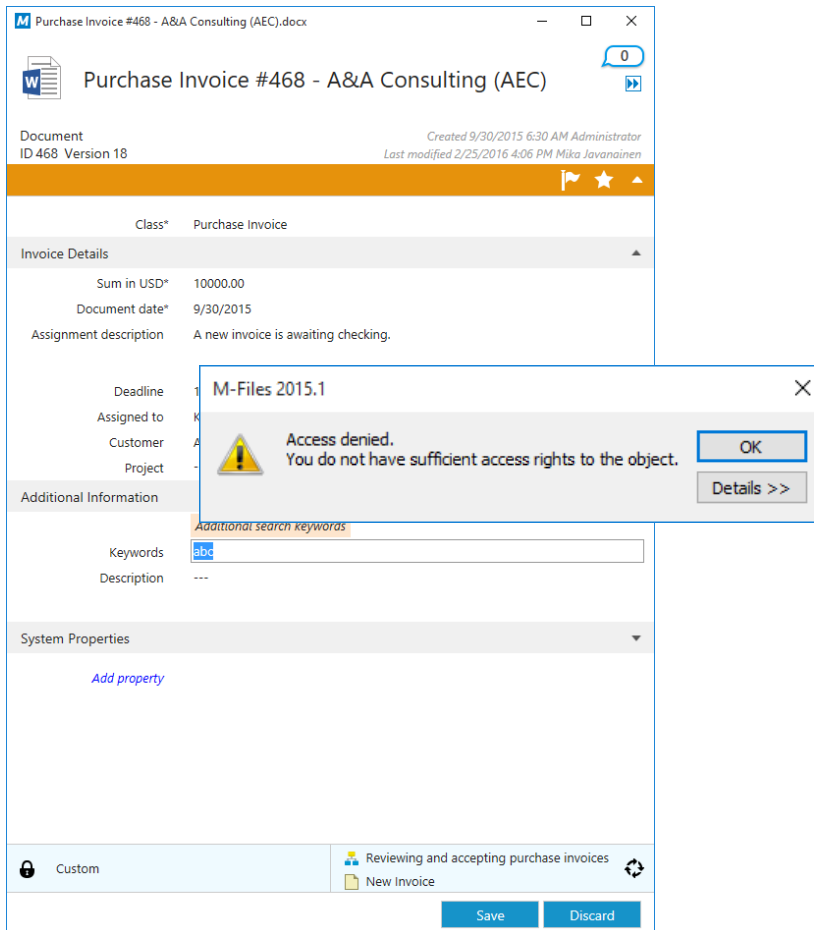
The M-Files API documentation is now available as an [online version](#). This is also the default location for the API documentation in M-Files 2015.2 and later.

The documentation is available as an offline version as well, and can be downloaded at: <http://www.m-files.com/api>.

## 8. Other improvements

### 8.1 Prevent Making Changes to the Metadata if you Don't Have Edit Rights

In M-Files 2015.1 users with read-only rights to the objects were able to start making changes to the metadata of the object. After making the changes, they were not able to save those changes:



**Image 18:** Error message when trying to save changes to the object metadata without edit rights to the object

In M-Files 2015.2 users without edit rights to objects cannot even start editing the metadata card. In the example above, user with read-only rights to the Purchase Invoice #468, cannot select the keywords field and attempt to make changes to it.

### 8.2 Save E-mail Messages as RFC822 EML Files

By default, the Connections to External Mail Sources feature in M-Files Admin imports e-mails to the vault either as html, txt, or msg files. With the following registry value, you can configure M-Files Server to import new emails as RFC822 compliant eml files.

Key	HKEY_LOCAL_MACHINE\SOFTWARE\Motive\M-Files\<Version>\Server\MFServer\Vaults\<VaultGuid>\MailSources\<ExternalMailSourceName>
Value name	StoreEmailInRawEmlFormat

<b>Value type</b>	REG_DWORD	
<b>Description</b>	When enabled, stores new e-mail messages as eml files.	
<b>Default value</b>	0	Disabled
<b>Valid values</b>	0	Disabled
	1	Enabled

### 8.3 4K Sector support

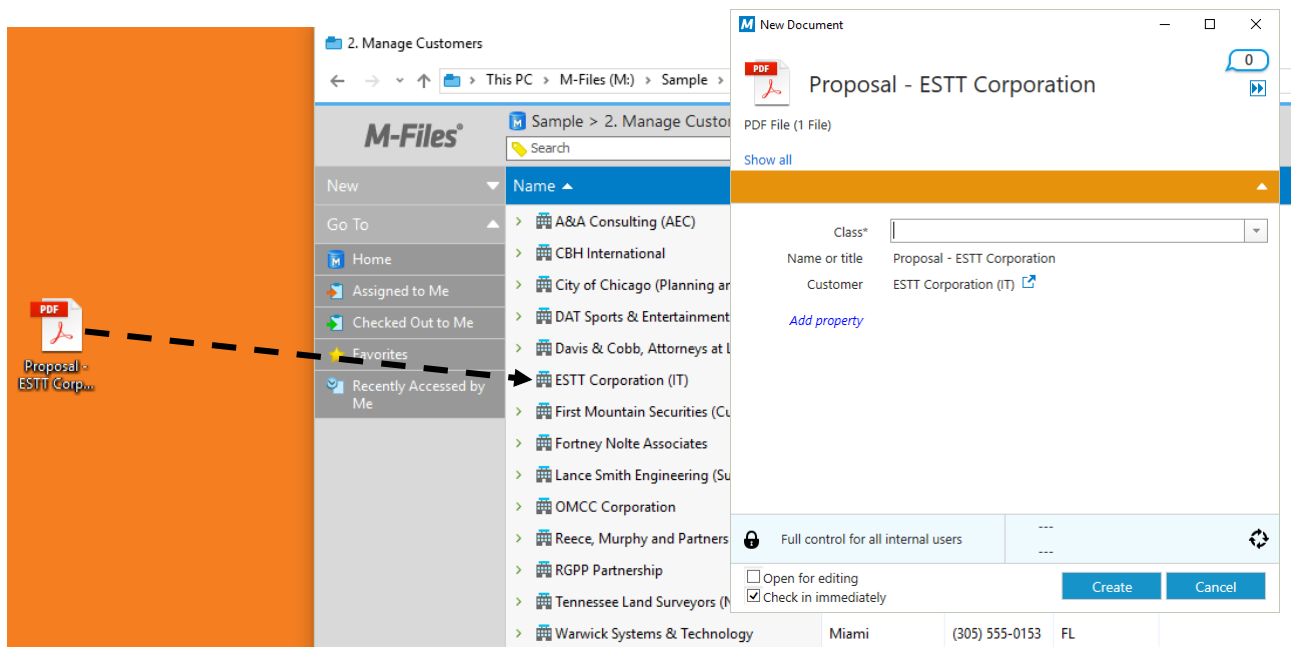
M-Files Desktop can now be installed on computers that use the large (4K) sector hard drives on Windows 8 or later.

### 8.4 Vault-specific Logins

Vault-specific logins help hosting partners to better manage M-Files implementations in multi-tenant server environments. Contact M-Files customer support for more details.

### 8.5 Attach New Documents to Metadata Objects by Drag and Drop

When adding new documents to the vault, you can now drop the file above a metadata object in M-Files Desktop and M-Files will automatically create a relationship between the new document and the metadata object. You can, for example drop a *Proposal – ESTT Corporation.pdf* from your desktop over the *ESTT Corporation* customer object and M-Files Desktop will pre-fill the customer field in the metadata card field automatically.



**Image 19:** Dropping files over the metadata object pre-fills the metadata card

This feature is enabled with a client-side Windows registry value:



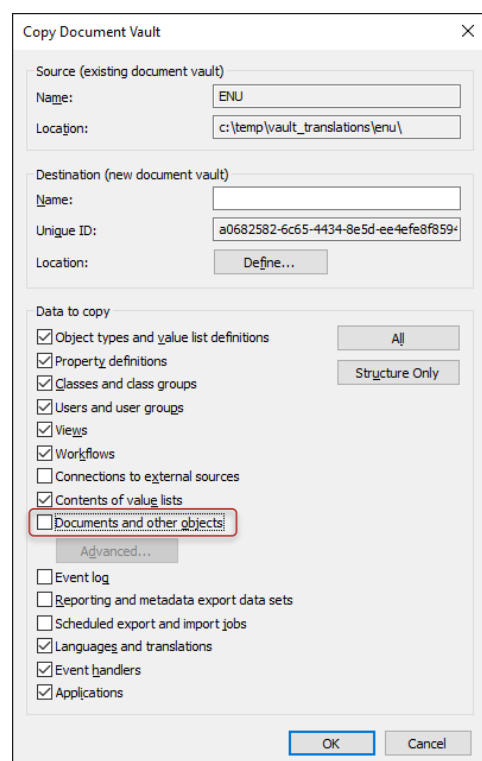
<b>Key</b>	HKEY_CURRENT_USER\Software\Motive\M-Files\<version>\Client\MFShell\<Vault Connection Name>
------------	--------------------------------------------------------------------------------------------

<b>Value name</b>	EnableVirtualObjectsAsDropTargets	
<b>Value type</b>	REG_DWORD	
<b>Description</b>	Enables or disables the feature	
<b>Default value</b>	0	
<b>Valid values</b>	1	The feature is enabled
	0	The feature is disabled

## 8.6 Copy Vault Structure Without Copying the Files

Administrators can easily make structure copies of M-Files vaults using the M-Files Admin tool. It has been possible to exclude files from the structure copy in the earlier version of M-Files but in the configurations where the vault was hosted by Microsoft SQL Server and if the files were stored in the database, the copy operation would first make a full copy of the vault and then delete the files from the new database. This made it difficult to make structure copies of the vaults if there was not enough disk space on the SQL Server computer.

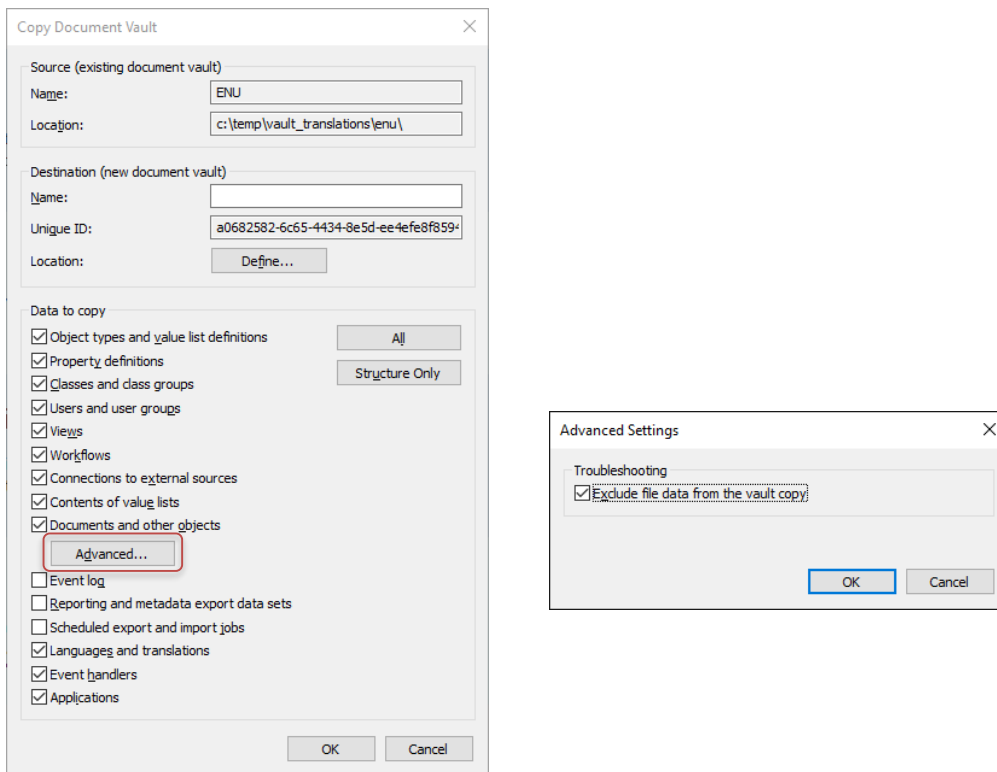
In M-Files 2015.2 you can make vault copies that exclude the file data even if the file data is stored in to the database on Microsoft SQL Server: this operation is now faster and requires less temporary disk space.



**Image 20:** Exclude documents and other objects from the vault copy

## 8.7 Copying Vaults with All Objects but Without File Data

In M-Files 2015.2 you can create vault copies that contain metadata and full version history of all objects but does not include any files. This is particularly useful in many test scenarios where you need to restore the vault with the objects where you don't necessarily have enough disk space for the object files. Creating structure copies of the vault databases without files is also faster than copying vaults with object files.



**Image 21:** Exclude file data from the vault copy

## 8.8 Anti-Malware Support for Windows Server 2016

M-Files Server supports Anti-Malware checks on Windows Server 2016. If you have configured an anti-virus software that is compatible with Windows Antimalware Scan Interface (AMSI) such as Windows Defender and if the real-time scanning is enabled, uploaded files to M-Files Server are scanned for viruses and malware.

# 9. Improvements in M-Files Cloud Vault

## 9.1 No Dedicated Server Requirement for Azure Active Directory

M-Files Cloud Vault now supports Azure Active Directory as the identity provider for all single-tenant and multi-tenant deployments. Please contact your M-Files representative for more details.

## 9.2 Encryption of Metadata

The metadata databases can be encrypted using the Transparent Data Encryption technology in Microsoft Azure. Please contact your M-Files representative for more details.

## 9.3 Faster Searches and Listings Due to Faster ACL Evaluation

M-Files Cloud Vault Servers can now evaluate the Access Control Lists (ACL) up to four times faster than before in Microsoft Azure. This has a very positive impact on speed of returning view listings and search results especially in vaults that have many different ACLs and in searches where there are many matches in the vault database but only small fraction of the results can be shown to the user per permission settings.

## 10. Improvements in M-Files Mobile

M-Files Mobile apps for Android, iOS, and Windows Phone are updated quarterly. These updates are independent of M-Files Server, Web, and Desktop updates but in order to use some new functionalities, you may need to upgrade M-Files Server to the latest version.

The latest enhancements in M-Files Mobile focus on improvements in federated authentication and offline use. Please review the [M-Files Mobile Apps Feature Comparison](#) document in M-Files Knowledge Base for up-to-date feature support information.

### 10.1 New Universal App for Windows 10

M-Files now offers a modern [Universal App for Windows 10](#). The app is compatible with Windows 10 Phone, tablets and PCs. This app is optimized for touch screens and for use cases where data is mainly read and reviewed.

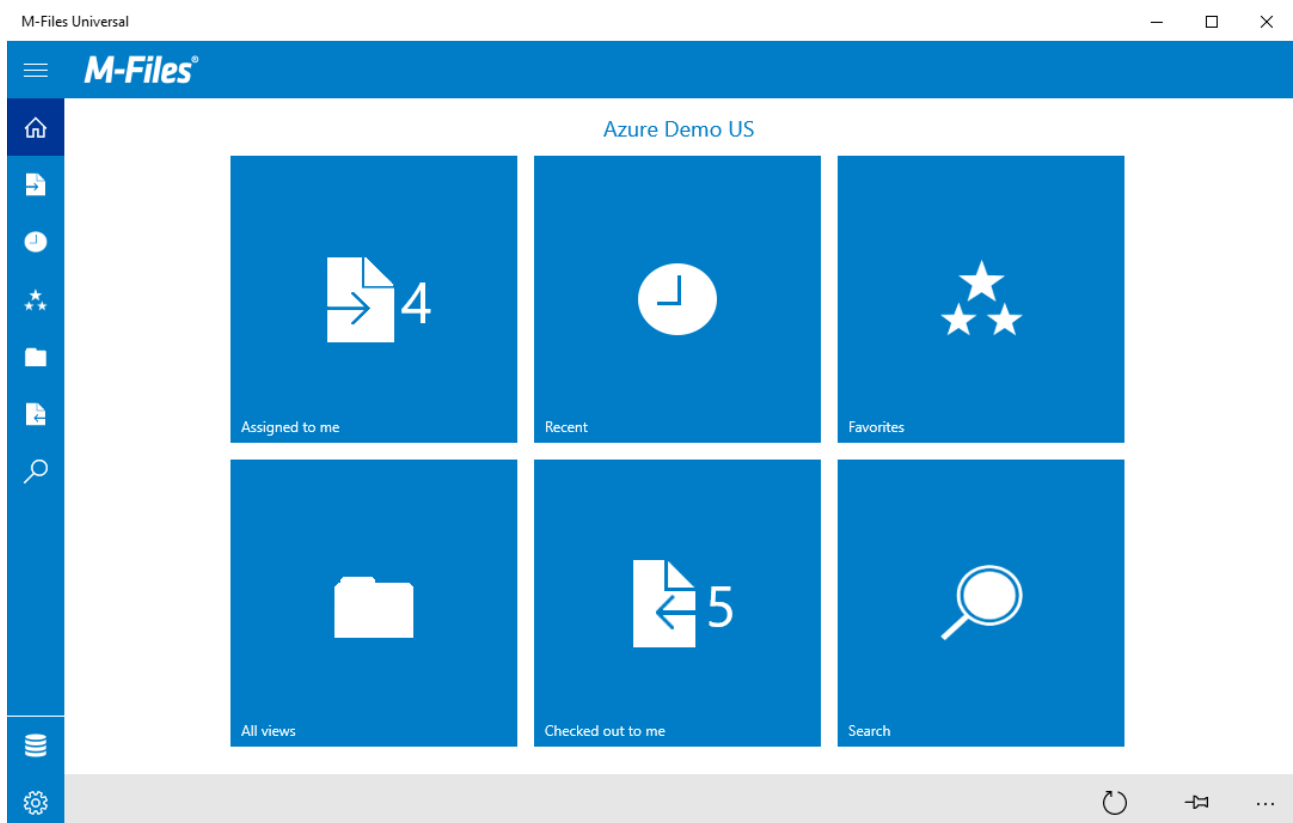


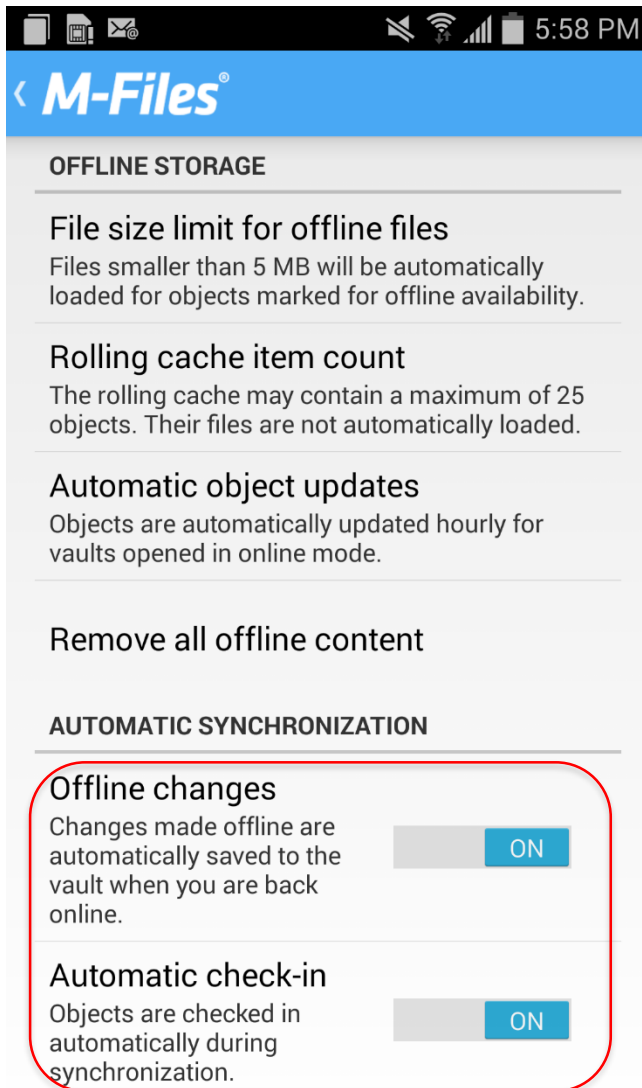
Image 22: M-Files Universal App for Windows 10

**Note:** For best experience on PC, we recommend using the M-Files Desktop application.

## 10.2 Improvements in the Android and iOS apps

### 10.2.1 Editing Objects in Offline Mode

You can now edit files in offline mode. Regarding to this feature, there are now two new options that you can set in the app settings: you can specify where offline changes are saved automatically back to the vault and if whether the objects that were edited in offline mode are checked in automatically during the synchronization.



**Image 23:** Offline synchronization settings in the Android app

### 10.2.2 Better Support for Metadata Card Configuration

Android and iOS apps support most metadata card configurations (see also chapter 3). The following behaviors for properties and property groups are supported in both apps now: labels, descriptions, tooltips, hiding properties, required properties, default values, property groups, ordering properties, and localized configurations.

## 11. Language Versions of M-Files Software

✓ Albanian	✓ Hungarian
✓ Arabic	✓ Italian
✓ Bulgarian	✓ Japanese
✓ Chinese (Traditional/Taiwan)	✓ Korean <b>NEW</b>
✓ Chinese (Simplified/RPC)	✓ Norwegian
✓ Croatian	✓ Polish
✓ Czech	✓ Portuguese (Brazil)
✓ Danish	✓ Romanian
✓ Dutch	✓ Russian
✓ English	✓ Serbian <b>NEW</b>
✓ Estonian	✓ Slovakian <b>NEW</b>
✓ Finnish	✓ Slovenian
✓ French	✓ Spanish
✓ German	✓ Swedish
✓ Greek	✓ Turkish
✓ Hebrew	✓ Vietnamese

In addition to providing these software localizations, M-Files lets you to translate the metadata structure to any language. Users can individually select the software and metadata structure language of their preference.

The M-Files Web language is determined by each user's browser settings, but it is equally possible for the system administrator to override the language selection via the M-Files Web configuration site.

The language of an M-Files mobile app can be changed via the language settings of each device.

## 12. Change History

The table below describes the essential changes by document version.

VERSION	DATE	ESSENTIAL CHANGES
1.0	2016-04-07	Initial published version

## 13. Reference Documents

[Configuring the Metadata Card](#)