

## **New Features and Enhancements in M-Files 7.0**

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# 1. The most significant new features and enhancements

M-Files is a document management system that enables companies and organizations of all sizes in a variety of industries to make dramatic gains in efficiency and productivity by improving the way they organize and manage their business documents, information, and processes.

**Development of M-Files 7.0** has particularly emphasized efficient daily operations for users and simple functions for the organization: Extensive integration with Outlook provides benefits for the daily handling of e-mail messages and for their utilization in customer relationships. Diverse improvements to the user interface enable users to manage documents, customers, and projects more quickly. Interactive, intuitive search functions make it easier to find the right information. In addition, M-Files product development has emphasized support for large document vaults and management of fault situations, since the amount of information required by companies is on a constant increase.

With the new release, we wish to provide our customers with many useful ways to develop and improve the organization's operations and spend more time on productive work. M-Files 7.0 offers exactly the right tools and functions for this!

## New features and enhancements in M-Files 7.0

- ✓ Support for Microsoft Office 2010
- ✓ Automatic saving of e-mail messages with their metadata by means of Outlook rules and M-Files features
- ✓ Automatic association of contact persons and customers with e-mail messages
- ✓ An M-Files flag for indication of messages that have been saved to M-Files
- ✓ Listing of related objects below the main object by object type; easy review and editing of documents related to, e.g., an assignment or customer
- ✓ Grouping of search results by object type
- ✓ Interactive shortcuts for making the search results more specific
- ✓ Subordination of search criteria
- ✓ Easier creation of indirect views
- ✓ Specification of indirect searches and filter settings
- ✓ Favorites view
- ✓ Extended filter properties
- ✓ Preview of files in a metadata card
- ✓ Definition of icons for value list items
- ✓ Additions to the icon selection
- ✓ More convenient workflow assignments
- ✓ Shortcuts for changing the workflow state
- ✓ Automatic specification of users on the basis of an object's metadata
- ✓ Pre-filtering of value lists for properties
- ✓ Support for larger document vaults (over a million documents)
- ✓ Improved management of fault situations by means of server settings
- ✓ New language versions: Spanish, Italian, Russian, Chinese (Simplified), and Croatian.

## 2. System requirements and upgrading to version 7.0

### 2.1 System requirements for M-Files 7.0

M-Files is compatible with both 32-bit and 64-bit Microsoft Windows operating systems. The 32-bit and 64-bit systems have separate installation programs.

The M-Files software can be installed in computers running on one of the following operating systems:

- Windows Server 2008 R2
- Windows Server 2008
- Windows Server 2003
- Windows 7
- Windows Vista
- Windows XP
- Windows 2000

The operating system version can be either Workstation or Server. Ensure that the target computer has at least 100 MB of free space for the M-Files Client installation. Ensure that the target computer also has at least 500 MB of free space for the M-Files Server installation. The space required by the document vault depends on the number and size of the documents and other objects to be stored.

Mac and Linux users can access M-Files via a browser-based user interface.

### 2.2 How to upgrade to version 7.0

Our subscription customers have the right to update the M-Files software at no charge. If you need support for the installation or update, or if you want to gain as much benefit from the M-Files 7.0 features as possible for the specific needs of your company, our consultants' services are available. Our customer service staff helps with licensing and subscription matters.

Update instructions:

[http://www.m-files.com/eng/res/How\\_to\\_upgrade\\_M-Files\\_software.pdf](http://www.m-files.com/eng/res/How_to_upgrade_M-Files_software.pdf)

Please contact our customer service or consulting services staff by sending e-mail to the address [sales@m-files.com](mailto:sales@m-files.com).

Our technical support personnel answer questions sent to the address [support@m-files.com](mailto:support@m-files.com) or at <http://support.motivesys.com>.

You can also contact our services by calling us:

USA:

Tel. 1 (972) 516-4210

Fax 1 (972) 516-4211

Other countries:

Tel. +358 3 3138 7500

Fax +358 3 3138 7550

*We hope you will enjoy cooperating with us and working with M-Files in the future! Please do not hesitate to contact us with any questions. We invite you to join us on the M-Files Web site: [www.m-files.com](http://www.m-files.com).*

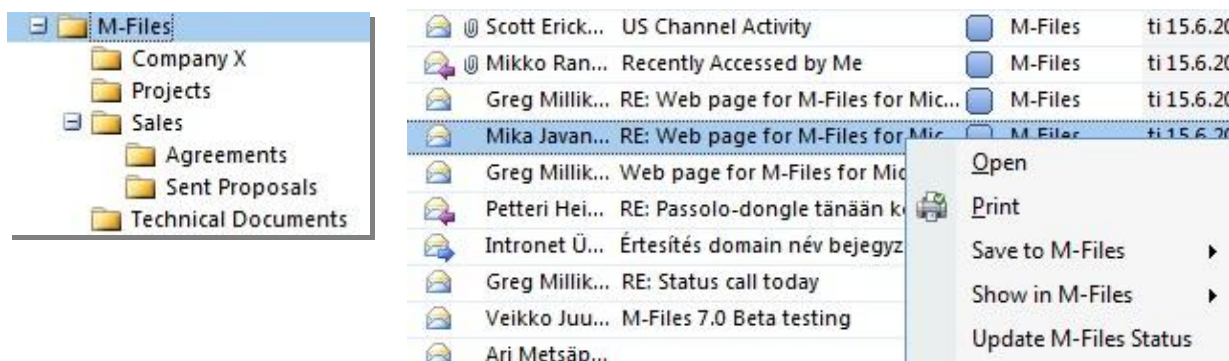
### 3. Saving e-mail messages to M-Files

Since M-Files 5.0, it has been possible to save e-mail messages directly to M-Files. M-Files 7.0 offers several new features and more diverse benefits for the daily handling of e-mail messages and for their utilization in customer relationships. For example, you can automate the storing of messages in M-Files by utilizing Outlook rules and M-Files features.

The following functions are available in Microsoft Outlook 2007 and 2010.

#### 3.1 Saving messages in M-Files folders and other new features

- You can save messages quickly and easily by dragging them to M-Files folders in Outlook.
- M-Files folders are automatically available to you in Outlook if M-Files (7.0 or higher) has been installed on your computer. Automatically created M-Files folders correspond to the M-Files vaults to which you have added a document vault connection.
- The messages are always left also in their original folder in Outlook: the message is not removed from its original Outlook folder when you move it to the M-Files folder.
- Messages related to a particular message are interlinked in M-Files. Thanks to this, the entire message thread is easily accessible and readable in M-Files.
- The *Show in M-Files* function allows you to open a stored message in the M-Files user interface.
- The *M-Files flag* in Outlook's message list indicates that the message has already been saved to M-Files.
- If some other user (e.g., another recipient) has saved the same message to M-Files, M-Files prompts you to confirm whether you wish to save that message again. This prevents saving the same information twice.
- When an e-mail message is saved to M-Files in Outlook, the document date will automatically be the same as the e-mail date, no matter when the message is saved to M-Files.
- You can use the *Save to M-Files* and *Show in M-Files* functions also through the M-Files menu.



*M-Files offers several features for saving messages and viewing them in M-Files.*

#### 3.2 Automatically saving messages and their metadata to M-Files

##### 3.2.1 Using Outlook rules for automatic saving of messages to M-Files

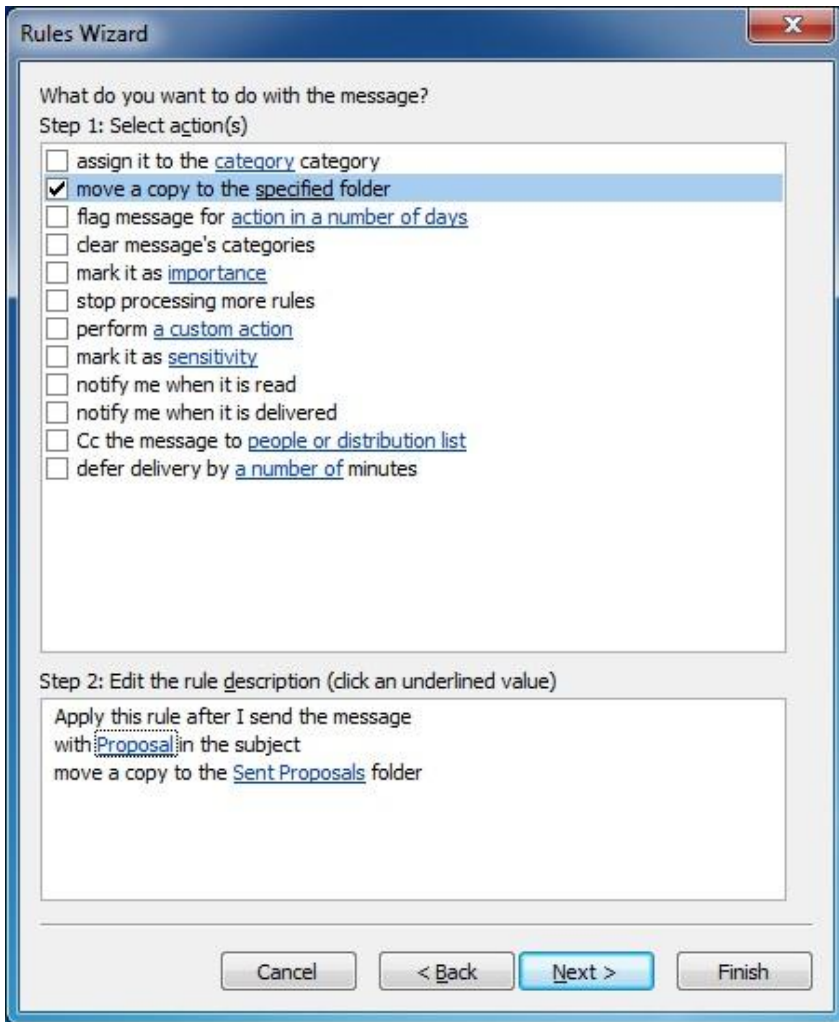
By utilizing Outlook rules, you can easily automate the saving of certain messages to M-Files, on the basis of, for example, the message's sender or subject.

For example, you can specify that all proposals sent are to be saved to M-Files on the basis that the subject contains the word "proposal."

You can find the Outlook rules in the *Tools* menu (select *Rules and Alerts*). The Outlook rules are user-specific.

Note: When one is saving to M-Files, it is best to use the rule "move a copy," in which case the actual message remains in the original folder, such as the *Inbox* or *Outbox*.

If Outlook is not open when the user receives a message that would be saved to M-Files according to the rule, M-Files will suggest "Save pending messages now" when Outlook is opened the next time.



You can utilize Outlook rules to automate saving of the desired messages to M-Files.

### 3.2.2 Specifying automatically populated metadata for each M-Files folder

You can specify automatically populated metadata (properties), added to e-mail messages when you save them to M-Files. The definition is done separately for each M-Files folder, which means that for each folder there are defined certain properties that are added to e-mail messages whenever they are saved in that M-Files folder. In order for this feature to be utilized, the message must be saved by dragging it to the M-Files folder.

You can find the **Specify M-Files Properties** function in Outlook by right-clicking the M-Files folder.

By utilizing folder-specific M-Files properties, you can, for example, automatically associate related messages with a certain project. For instance, if you provide a folder with the property *Project* and give it the fixed value *Zenith Construction Project*, messages saved in that folder are automatically associated with *Zenith Construction Project*. Alternatively, if you wish to save all job applications in the *Job applications* class, select the folder property *Class* and set its value to be *Job applications*.

You may also specify M-Files folder properties to be read from the e-mail message itself.

In addition, you can specify whether the metadata card is to be displayed when messages are saved in the M-Files folder. The metadata card should be displayed if you wish to check or modify

automatically populated metadata during saving, or if you have not defined any folder-specific properties.

### *M-Files subfolders*

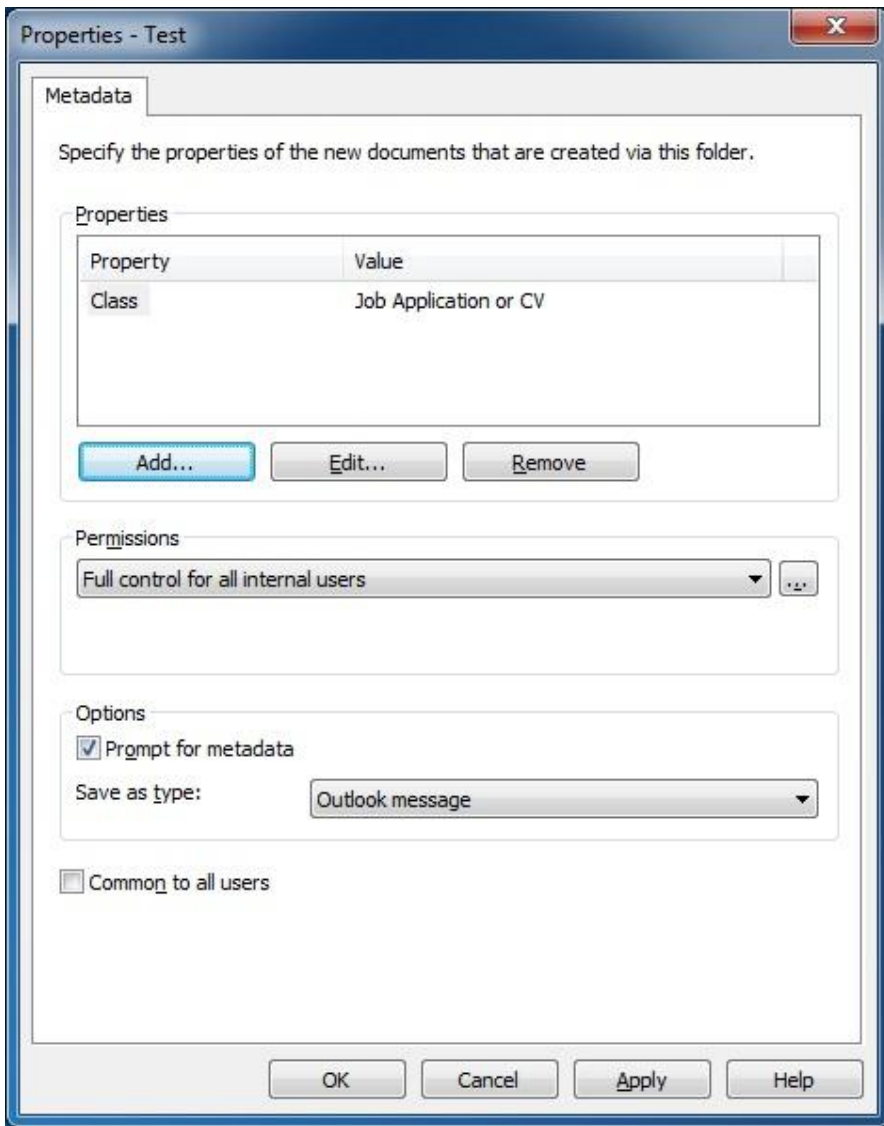
You can create M-Files subfolders under main-level M-Files folders that are in use automatically. Automatically used M-Files folders correspond to the M-Files vaults to which you have added a document vault connection. If you are using only one M-Files vault (e.g., *Company*), you have only one automatically used M-Files folder (*Company*) on the main level, under which you can create subfolders.

You can specify automatically populated metadata for M-Files subfolders in the same way as for main-level folders. Messages saved in a subfolder are saved in the M-Files vault on the basis of the main folder.

Note: If you create a folder directly on the main level, you create a normal Outlook folder, for which you cannot specify M-Files properties.

### *Specifying common M-Files folders*

You can also specify that the M-Files subfolder you created is common to all users, in which case the folder will be displayed in Outlook to all users. A common M-Files subfolder can be created and specified by a user with at least the right to manage common views. When the user drags a message to a common folder, the message automatically receives the metadata (properties) that have been specified for the common folder.



You can specify automatically populated metadata for e-mail messages.

### 3.2.3 Automatically associating contact persons and customers with messages in M-Files Server Administrator

The M-Files administrator can use M-Files Server Administrator to specify that messages are automatically associated with contact persons and/or customers saved in M-Files, on the basis of the sender and recipient information. In this case, a message from, for example, *matt.bay@estt.com* can be automatically associated with the contact person *Matt Bay* and the customer *ESTT*.

When the user is saving an e-mail message to M-Files in Outlook, M-Files looks for similarity between the e-mail addresses in the message and the properties that have been specified in M-Files Server Administrator. On the basis of similarity and the properties specified by the administrator, M-Files automatically associates the message with customers and/or contact persons when the message is saved in the M-Files folder in Outlook.

This automation takes place on a vault-specific basis (with a vault-specific M-Files folder in Outlook), so it applies to all subfolders of the M-Files folder in question.

Note: The message must be saved via the *Save to M-Files* function or by dragging the message to the M-Files folder in Outlook. If you drag the message directly to the M-Files user interface, it will not be associated with the customer or contact person.

## E-mail integration settings

In M-Files Server Administrator, you can make vault-specific specifications concerning the type of contact person or customer information to be associated with e-mail messages. M-Files will look for similarity according to the following principles:

### Contact persons

M-Files looks for a full match with a contact person's e-mail address. M-Files will associate the message with the contact person *Matt Bay* if *Matt Bay's* properties have exactly the same e-mail address as the message does (*matt.bay@estt.com*).

### Customers

If customer information has been specified in the e-mail integration settings:

1. M-Files looks for customer matches via the contact person (the *Customer* object type must be the owner of the *Contact person* object type): M-Files will associate the message with the customer *ESTT* if Matt Bay is the contact person for *ESTT*.
2. M-Files also looks for similarity between the domain name in the e-mail address and the customer's properties: M-Files will associate the message with the customer *ESTT* on the basis of the e-mail address domain, *matt.bay@estt.com* or *patsy.bay@estt.com*, if the domain *estt.com* can be found in the customer's properties. The message will not be associated with any contact person in this case, unless a full match is found with the contact person information.

E-mail Client Integration Settings - Microsoft Outlook

M-Files Client integrates with Microsoft Outlook and can automatically associate e-mail messages with, e.g., contact persons and customers.

**Contact persons**

M-Files will match complete e-mail addresses from the message against the properties present in objects of the specified type.

Contact person object type in M-Files:  
Contact person

E-mail address property for contact persons:  
(any property)

Internet domains to be ignored  
(separate multiple domains with semicolons):

**Customers**

M-Files will use objects of the specified type if they are owners of the contact persons matched above.

Additionally, M-Files will match Internet domains from e-mail addresses in the message against the properties present in objects of the specified type.

Customer object type in M-Files:  
Customer

Internet domain property for customers:  
(any property)

Internet domains to be ignored  
(separate multiple domains with semicolons):

OK Cancel

Use M-Files Server Administrator to specify the contact person and customer information to be associated with the messages saved.

### 3.3 The M-Files flag

The M-Files flag, shown in Outlook's message list, indicates that you have already saved the message to M-Files.

If some other user (e.g., another recipient) has saved the same message to M-Files, M-Files prompts you to confirm whether you wish to save that message again. Even if you do not save the message again, the M-Files flag will now be displayed in Outlook for that message.

With the *Update M-Files Status* function, you can easily display all M-Files flags. Also messages saved in M-Files by other users will then have an M-Files flag in Outlook.

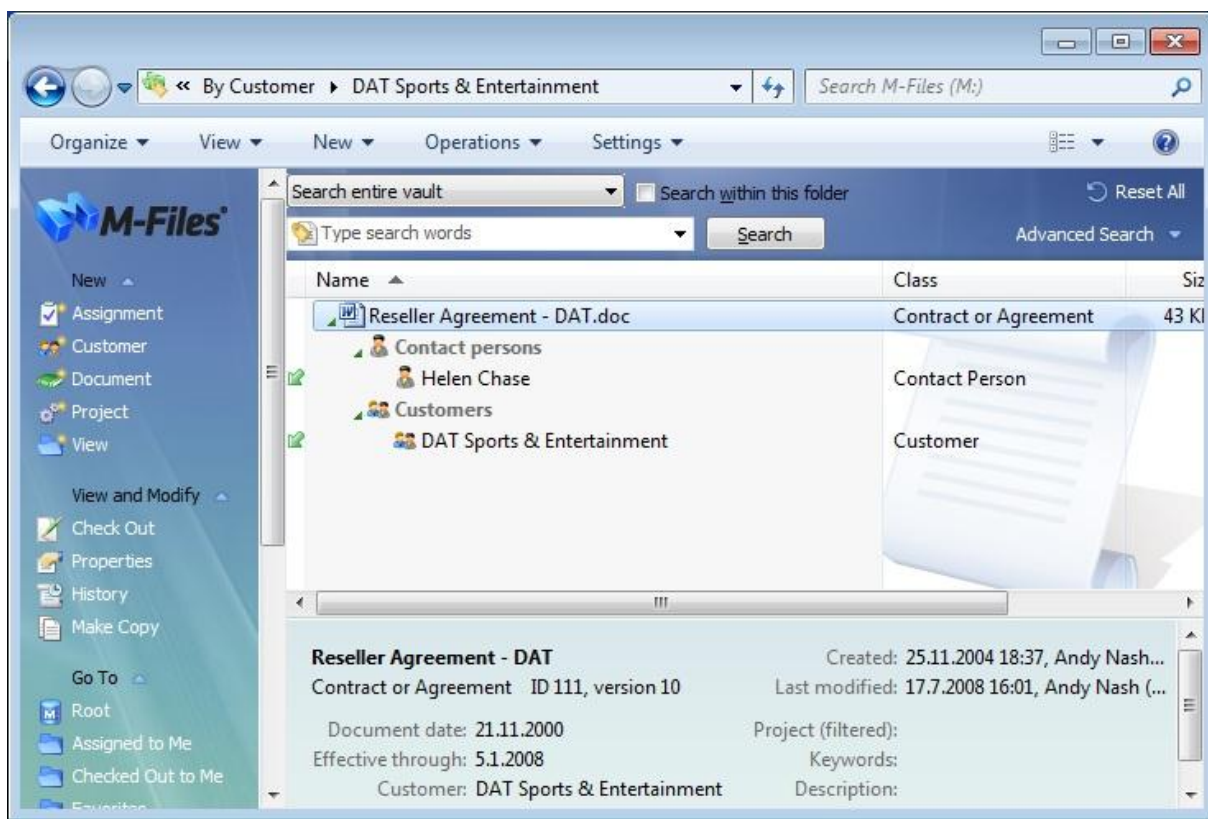
## 4. General improvements to the user interface

### 4.1 Related objects listed directly below the main object

Objects related to a particular object can now be easily browsed directly from the view or from the search result by means of the arrow buttons. M-Files shows all related objects below the main object. This allows you to easily browse, for example, documents and contact persons related to the project, directly from the list view.

#### 4.1.1 Informative grouping titles

Related objects are automatically grouped by object type or by property definition. This allows you to find the desired document or other object quickly and easily. For example, if you are looking for contact persons related to the project, you can find them easily under the grouping title *Contact persons*.



*Related objects can easily be browsed directly from the view or from the search result.*

### 4.2 Favorites

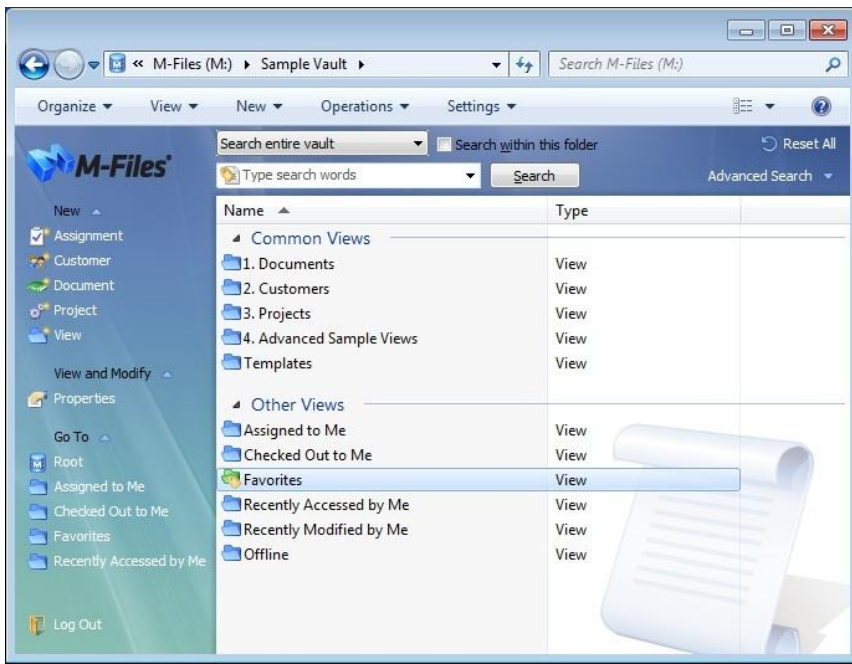
In addition to *My Views* and task area shortcuts, you can add documents and other objects to favorites. Favorites are user-specific.

You can add objects to favorites and remove them with the following functions (*Operations* menu / shortcut menu):

- *Add to Favorites*
- *Remove from Favorites*

Note: You cannot delete favorites with the *Delete* function.

You can conveniently access your favorites via the quick link in the task area.



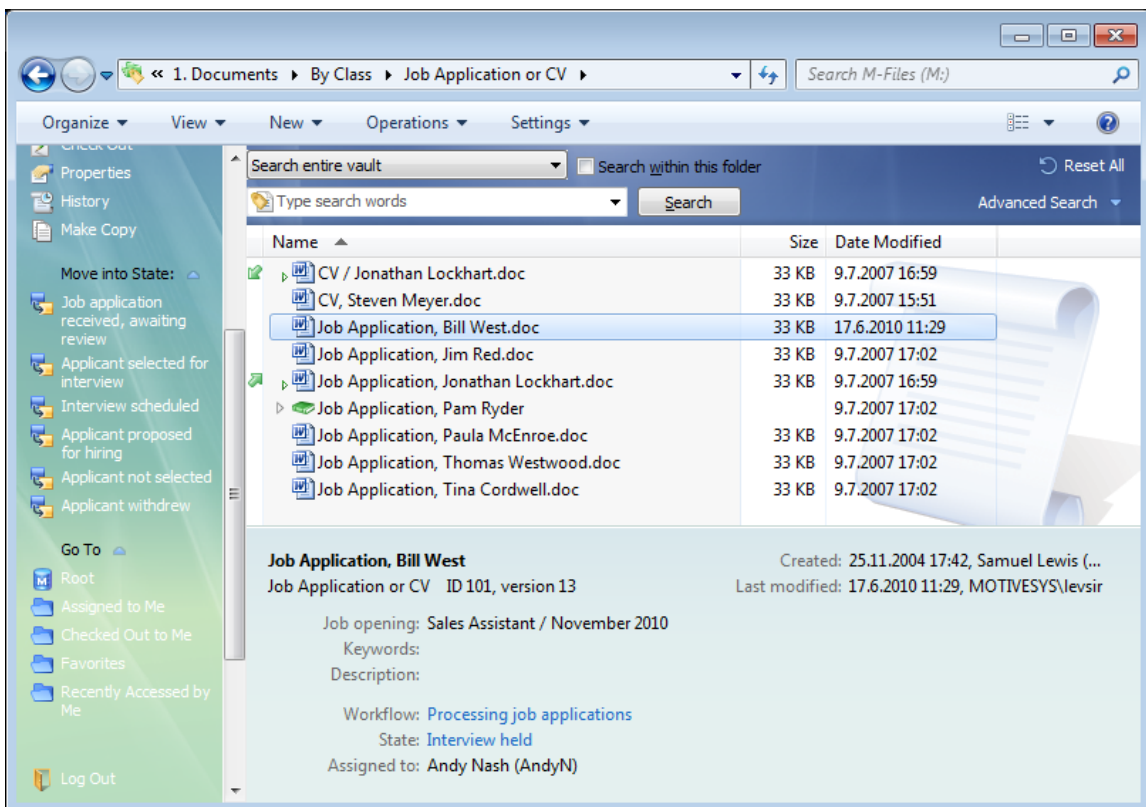
You can add frequently used documents to favorites and remove them.

### 4.3 Shortcuts for changing the workflow state

You can change the workflow state directly via the quick links in the task area. The various workflow states are available for selection under the *Move into State* title. You can move the object to the desired state simply by clicking the state. If you wish, you can add a comment about the state change at this point.

Note: The *Move into State* title and the various workflow states are displayed in the task area only if the object has an associated workflow for whose state changes the user has the required permissions.

You can also change the state by clicking the workflow or state link in the properties pane.



Various links are available in the task area and properties pane for changing the workflow state.

#### 4.4 The latest comment displayed

In the comment field, the latest comment is always displayed, whether it was added to the latest version or not. In other words, if there is no comment in the latest version, M-Files still shows the comment added last.

#### 4.5 Other changes to the task area

- ***Recently Accessed by Me:*** Displays a view of the documents and other objects last opened or edited by the user.
- **Arrow functions:** You can open and close the quick links below each title by clicking the arrows.

## 5. Other usability improvements

### 5.1 Support for MS Office 2010 and AutoCAD 2011

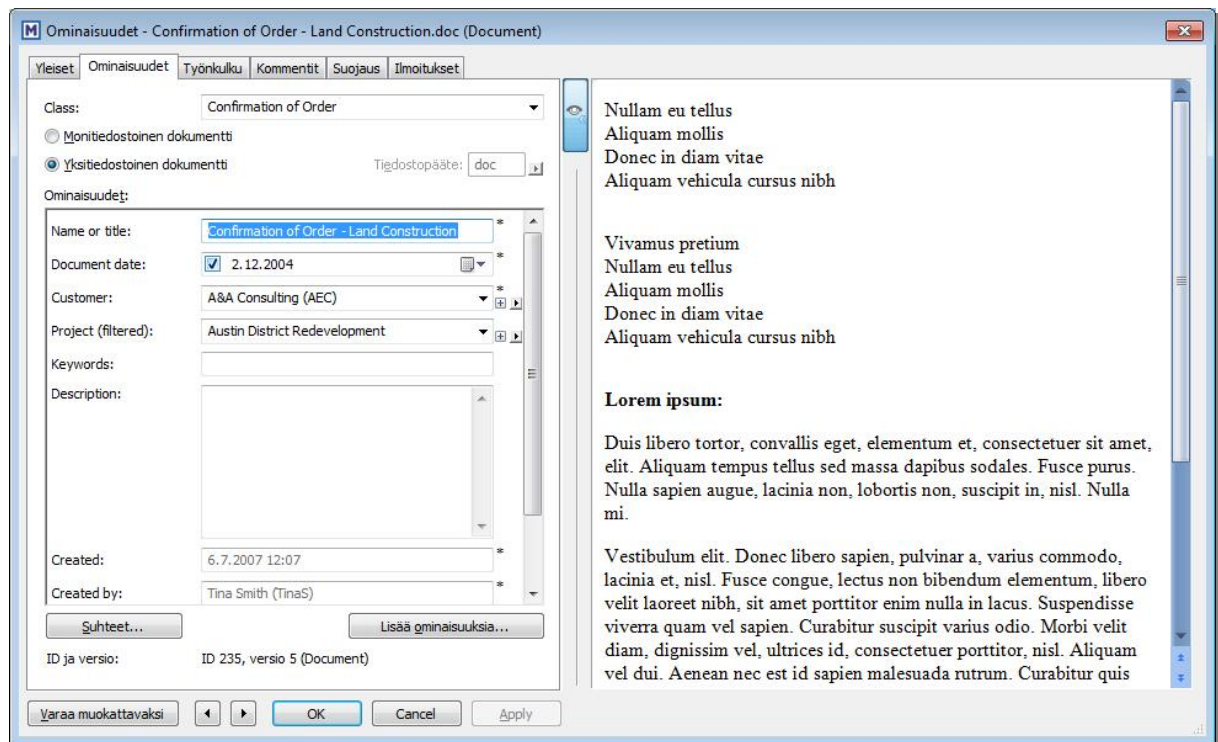
M-Files 7.0 supports Microsoft Office 2002, 2003, 2007, and 2010.

In addition, M-Files 7.0 supports the latest AutoCAD version, 2011 (AutoCAD and AutoCAD LT), as well as previous AutoCAD versions beginning with AutoCAD 2004.

### 5.2 Previewing files in a metadata card

In addition to being able to preview documents from the M-Files user interface, you can now preview them in the metadata card. You can activate the preview in the metadata card by clicking this function's icon in the upper right-hand corner. In preview mode, you can easily browse and copy the contents of documents. Preview is possible if the software supporting the relevant file format is installed on the machine.

When you are transferring files to M-Files, for example, the preview function makes it easier to fill in the metadata.

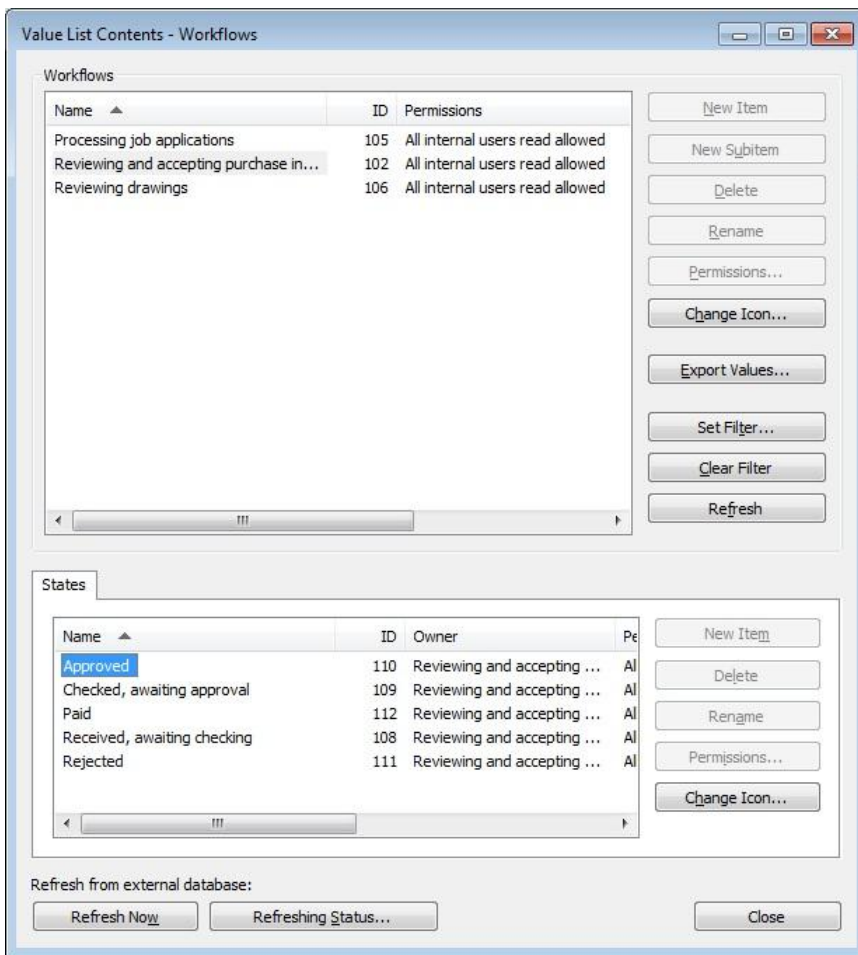


*You can activate the preview in the metadata card by clicking the function's icon in the upper right-hand corner. The preview is disabled by default.*

### 5.3 Icons for value list items

In previous versions of M-Files, it was already possible to add, change, and remove icons for object types. In M-Files 7.0, you can add icons for value list items as well. This allows you to further increase the clarity of the M-Files user interface.

Specific icons can be defined for, e.g., workflow states and meeting types. Since workflow states can be changed directly with the shortcuts in the task area or properties pane, icons can be used to make a visual distinction between the states.



*You can easily add, change, and remove icons for value list items.*



*Thanks to the extensive selection of icons offered by M-Files, the visual clarity of the user interface can be increased in accordance with the organization's operations.*

## 5.4 Similarity search for all value list items

When you want to provide an object with a property that uses a value list, M-Files will suggest previously saved values with the same beginning. In previous versions, M-Files searched for similarity over the first 5,000 values, which meant that use of a filter was necessary for searching some of the values saved earlier. M-Files 7.0 searches for similarity with all values saved and then suggests suitable values.

For example, when the user wants to add the customer *ESTT* to the document *House Plan Star* and starts typing the letters *ES* in a field using a value list in the metadata card, M-Files will suggest all customers beginning with *ES*, and the user can then select *ESTT*.

## 5.5 Saving and converting to PDF

You can save a file directly as a PDF file by using the M-Files functions. This enables you to save the file in the M-Files user interface with the *Save As PDF* function without needing to open the file in an application.

In addition to the earlier PDF save options, M-Files 7.0 offers the opportunity to automatically save a single-file document as a multi-file document. In this case, M-Files first automatically changes the single-file document (e.g., Word file) to a multi-file document and then creates a PDF file in that multi-file document. Thus, both the original file and the PDF file are automatically available in the same multi-file document.

You can also convert a file to PDF. In this case, the original file (e.g., a Word file) is replaced with the corresponding PDF file.

## 5.6 Improvements in M-Files Web Access

M-Files Web Access for version 7.0 includes also many improvements and new features. Thus, users who cannot use the client software can be guaranteed the same properties and functionality as regular users.

M-Files Web Access also enables easy publication of different kinds of material on the Internet, so the number of users can be unlimited. Press releases, publications, photographs, product catalogues, etc. can be easily published via M-Files Web Access.

## 6. Improvements to searches

### 6.1 General search criteria

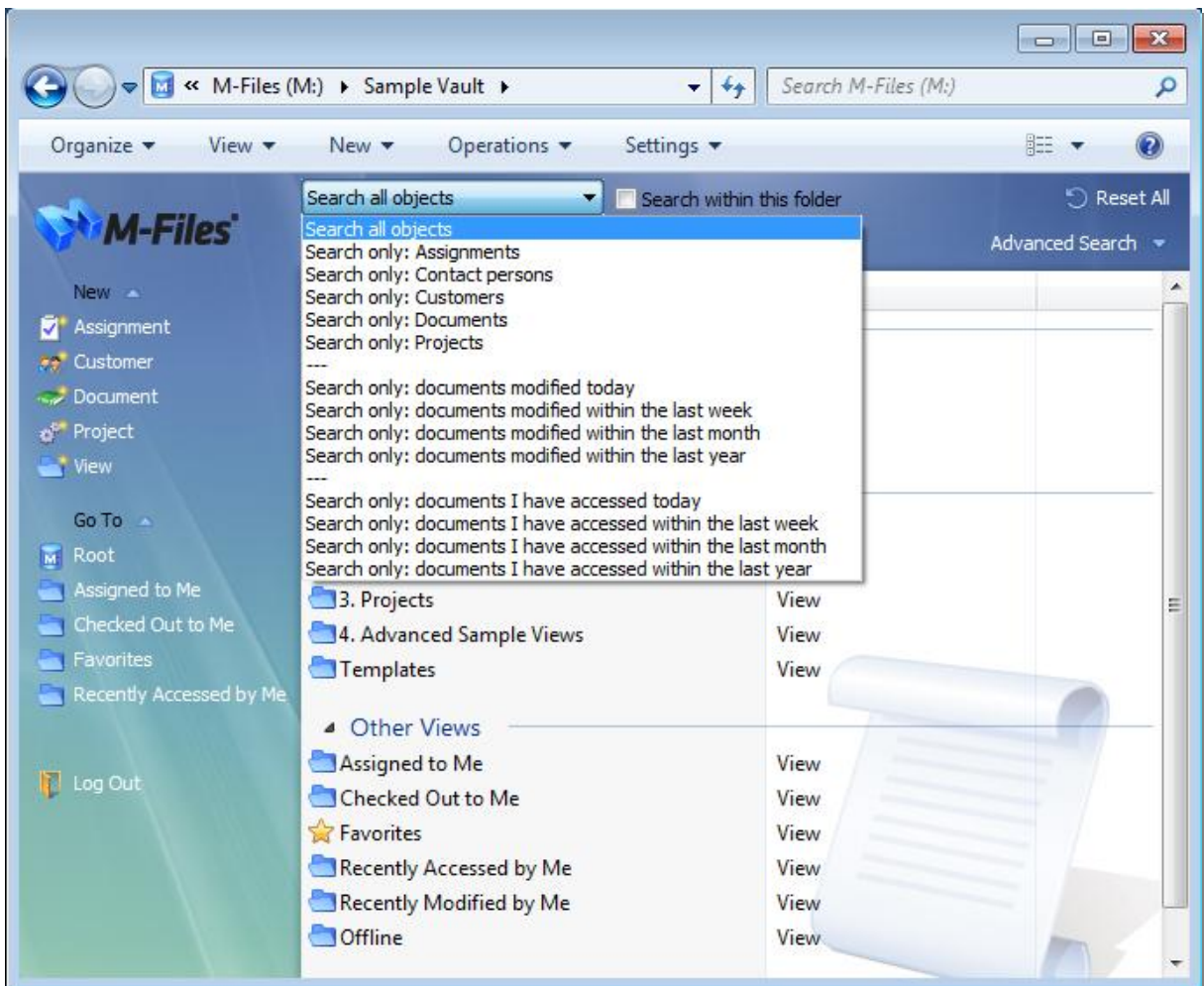
#### 6.1.1 Search all objects

With this default setting, M-Files searches for all objects on the basis of the search strings (unless more specific search criteria have been defined in the advanced search).

#### 6.1.2 Predefined search criteria

Predefined search criteria can be used to speed up the search. You can search for objects according to a certain object type (e.g., documents only) or the modification date:

- *Search only: by object type*
- *Search only: modified (today, within the last week/month/year)*
- *Search only: documents I have accessed (today, within the last week/month/year).*



*You can find the desired object more quickly by using predefined search criteria.*

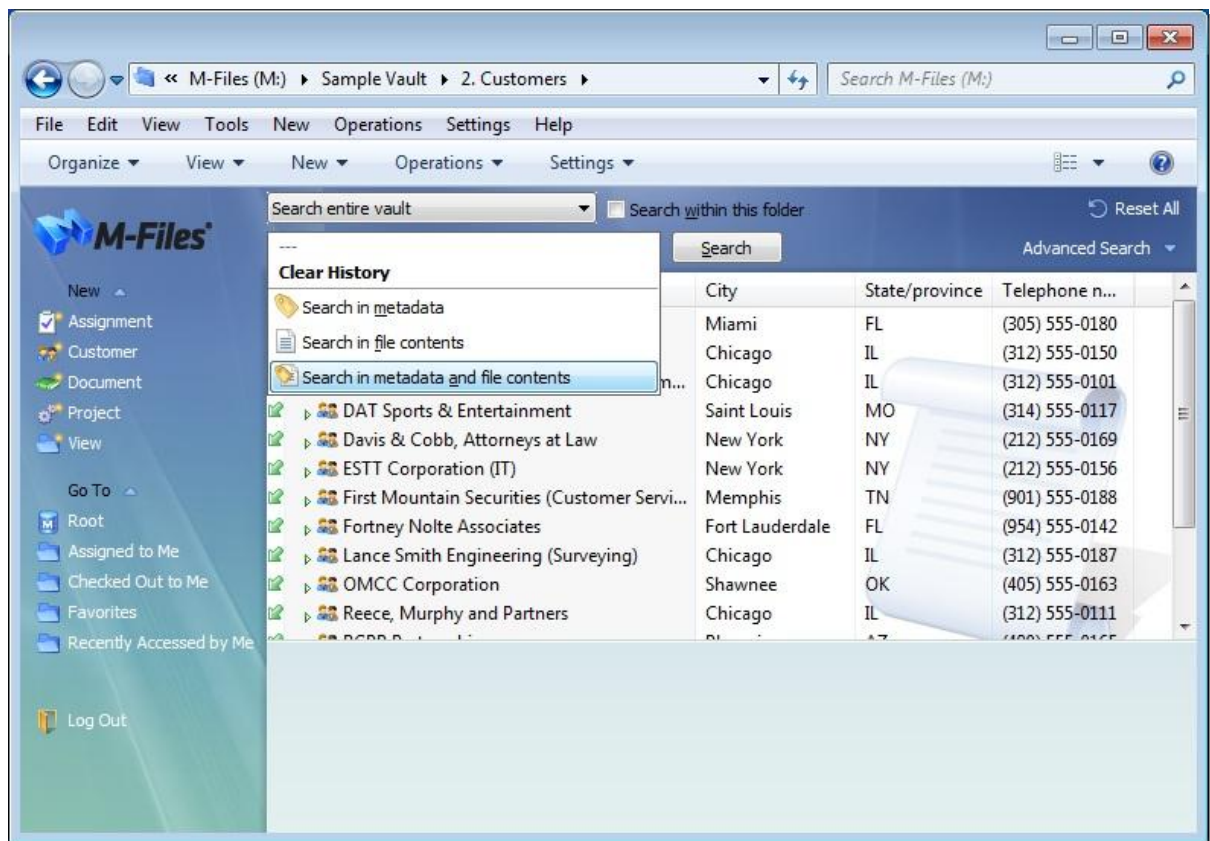
### 6.2 Quick Search

#### 6.2.1 Type search words in the quick search field.

#### 6.2.2 Search contents

Just as before, the user can determine whether to search metadata, file contents, or both. The search contents are now specified in this field (previously included in the general search criteria). There is a

specific icon for each type of content to be searched. By default, both metadata and file contents are searched. If the user changes the content setting, M-Files will use that setting for all subsequent searches.



You can easily change the setting for the search contents in the quick search menu.

## 6.3 Advanced search

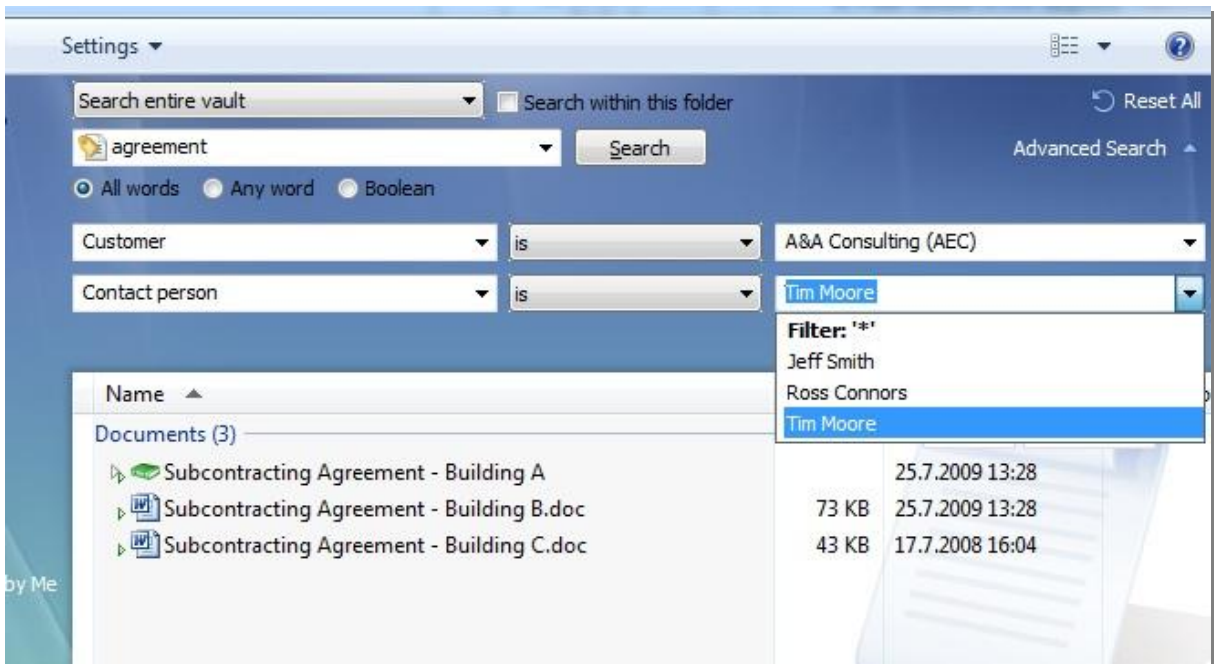
New features and changes:

- All definition fields are displayed (three in parallel).
- All property definitions are listed separately.
- The *Property (any property)* option has been removed.
- You can display the less frequently used property definitions with the *More* function.

### 6.3.1 Subordination of search criteria

You can easily specify search criteria by utilizing their subordination, so the options shown in the lists are filtered on the basis of other list choices. For example, if you have selected a certain workflow as the search criterion, the state options are filtered such that only the states related to your selected workflow are visible and selectable. Corresponding filtering will be performed automatically for other interdependent value lists as well. For example, contact persons are filtered by customer if these value lists have a hierarchical relationship.

Subordinate search criteria can be used with the "is" or "one of" operator (the latter in additional conditions only).



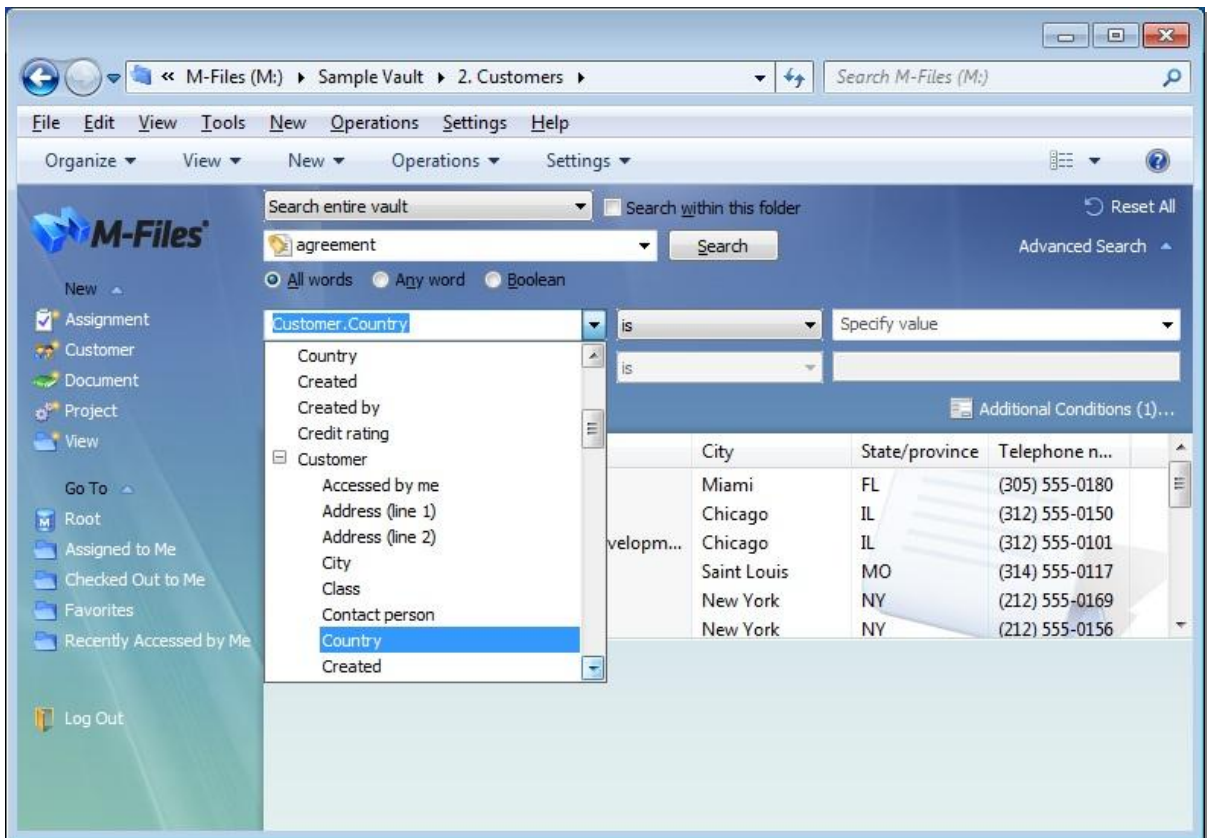
You can utilize subordinate search criteria when searching for, e.g., documents related to a certain contact person.

### 6.3.2 Indirect searches

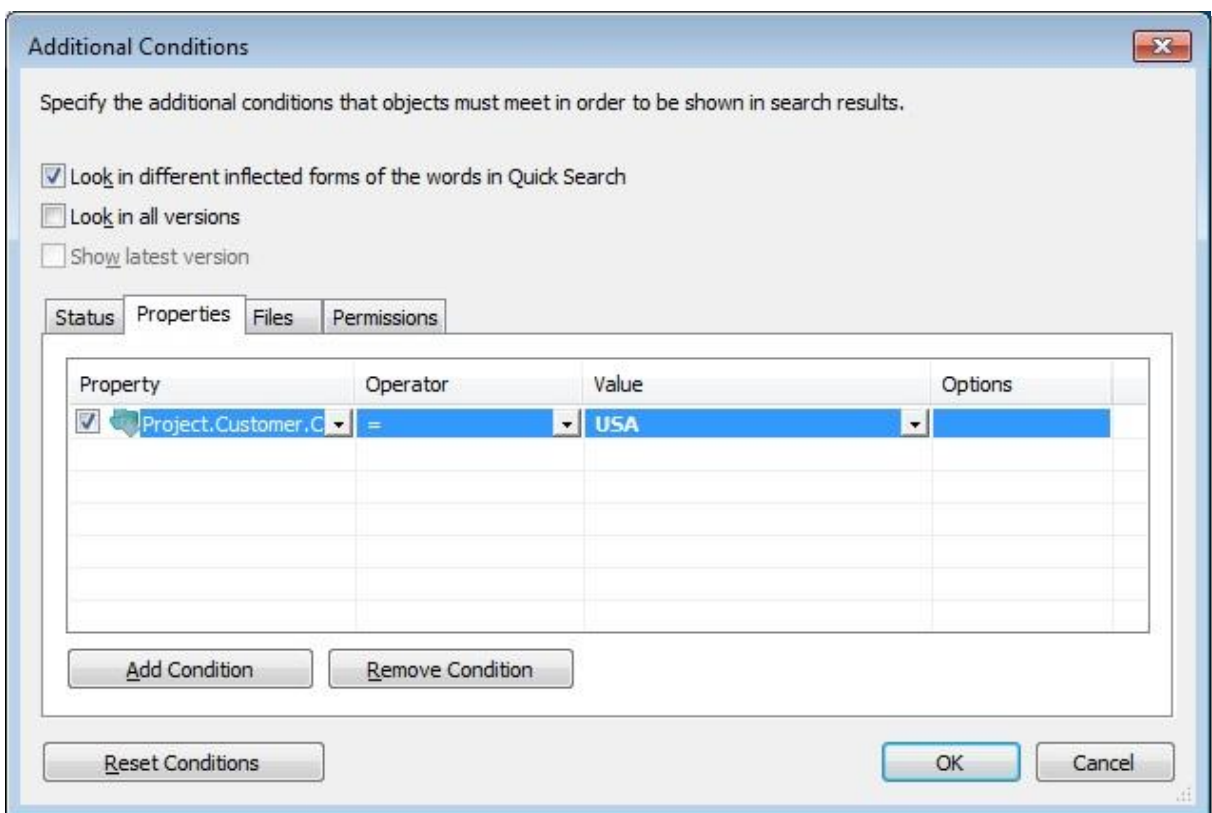
You can specify search criteria also by means of *property relationships*, which means that the object itself need not have the property in question. **The property selected as the search criterion is in this case the property of a related object.**

By using indirect search, you can, for example, find agreements related to a specific country; even if the *Country* property has not been defined for the actual agreement, it is enough if it can be found via a customer associated with the agreement. In this case, the search criterion is specified as "*Customer.Country*." You can specify these indirect search properties by clicking the plus-sign button in the list and then selecting the property of a related object to be used as the search criterion. In the above example, *Customer* was selected from the list first, and then the customer's *Country* property, which resulted in the search criterion with a period, "*Customer.Country*," being displayed in the search field.

You can specify indirect views in the same manner, by using the properties of related objects. You can utilize indirectness when specifying filter settings as well.



*You can specify indirect search criteria, in which case the object itself need not have the property that is being searched for; the object is included in the search results if a related object has the same property.*



*By using additional conditions, you can create three-level indirect search criteria.*

## 6.4 Grouping of search results by object type

M-Files automatically groups search results by object type. Thanks to this, you can quickly and easily find the desired object, regardless of whether you are looking for, e.g., a document or project.

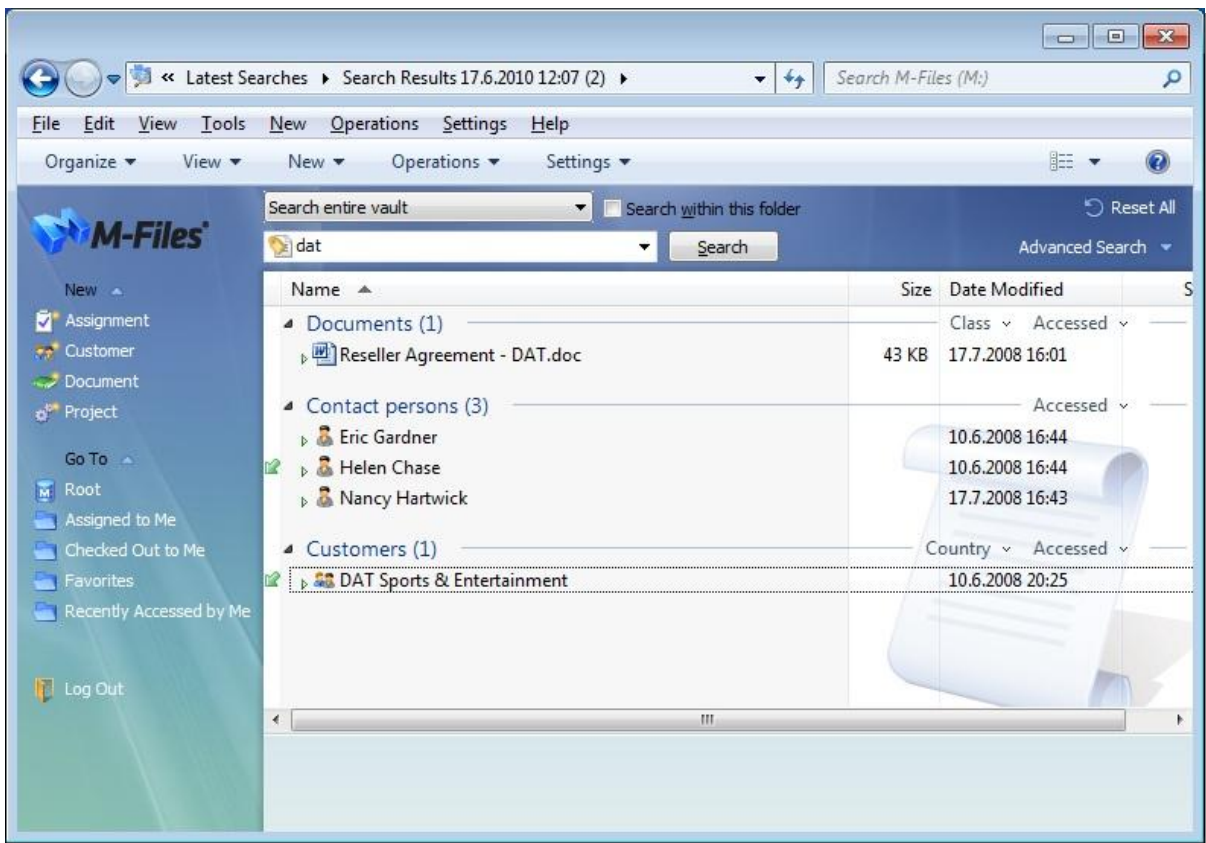
If there is a "+" sign in addition to the number beside the object type title, there are more search results than are shown (e.g., *Documents (50+)*). You can display more search results with the *Show more results* function.

### 6.4.1 Making the search results more specific (interactive search panel)

In addition to being able to specify various search criteria before performing the search, you can make the search more specific after the search results have been displayed. For this purpose, M-Files offers an interactive search panel, with which you can make the search more specific – by, say, document class.

For example, if you are searching for a certain proposal and the search returns a large number of documents, you can make the search results more specific by performing another search, for documents in the *Proposal* class only.

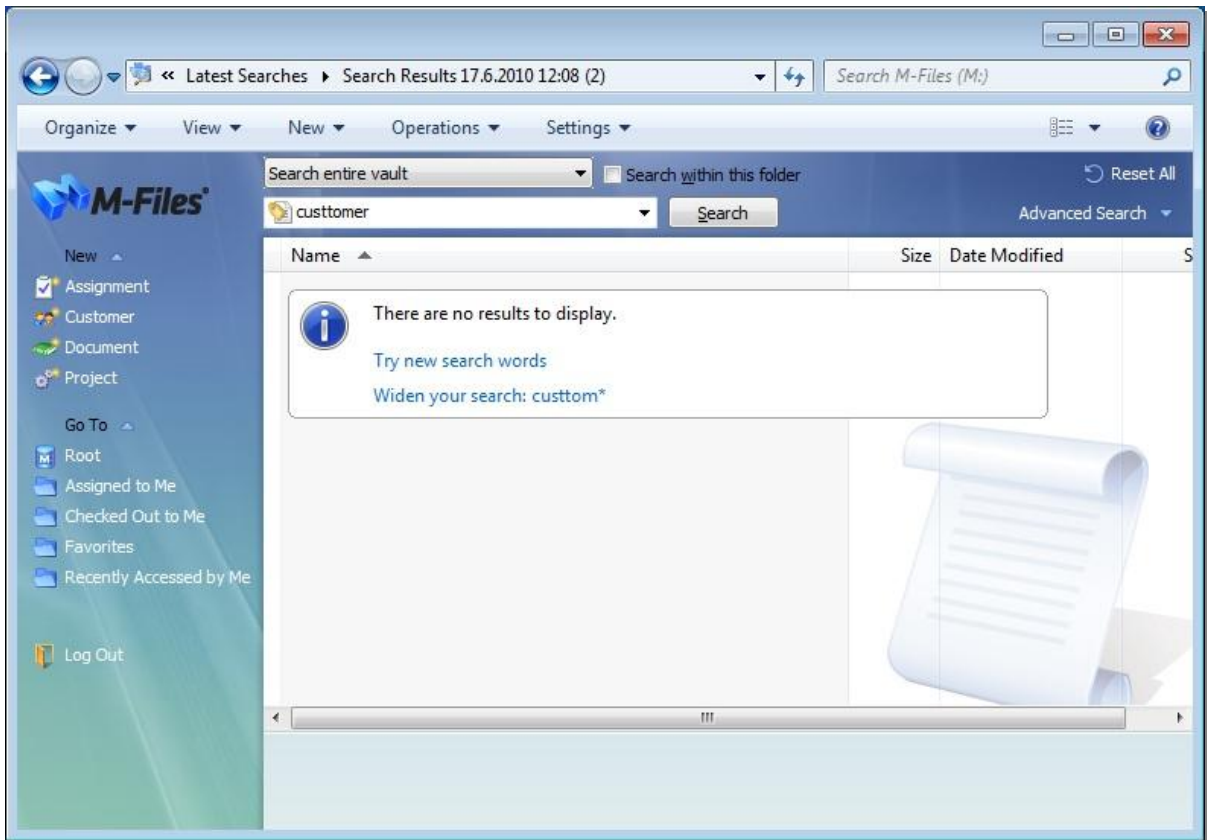
The interactive search panel is shown on the right-hand side in the list area, on the same level as the object type title. Please note that the search panel is specific to each object type: when you make more specific searches in the list area, M-Files will search for objects belonging to that object type only.



*M-Files groups the search results by object type. In addition, you can use the interactive search panel in the list area to make the search results more specific.*

## 6.5 Try new searches

In addition to the interactive search panel, M-Files guides the user toward the desired search result by means of various quick tips.

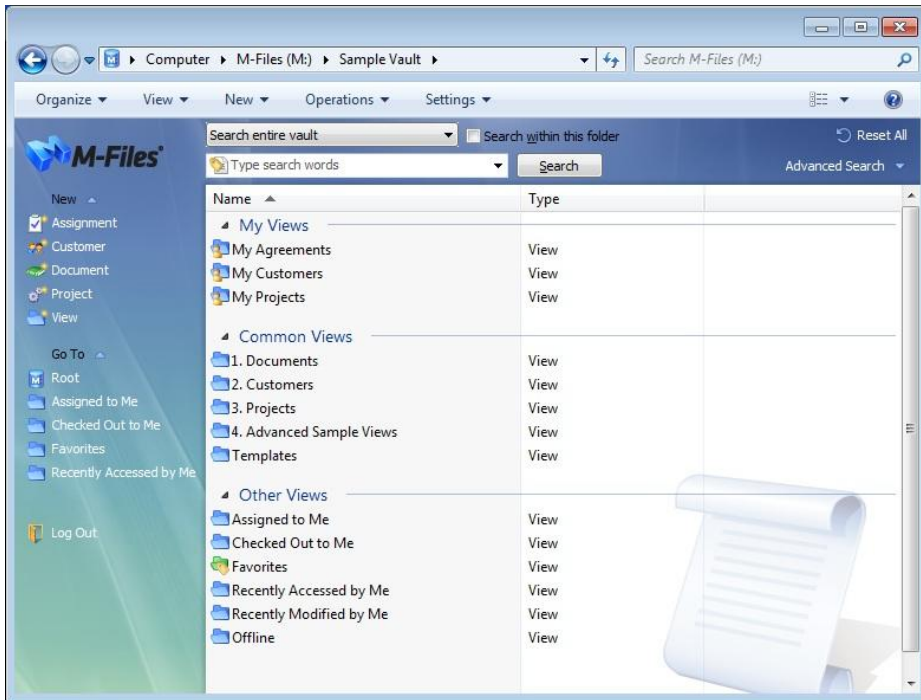


*For example, M-Files may suggest the use of another search string or making the search broader.*

## 7. Improvements to views

### 7.1 Grouping of views

The main-level views have been grouped into *My Views*, *Common Views*, and *Other Views*. In addition, traditional folders are in a separate group. This makes it easier for the user to distinguish among these different views and navigate to My Views. Also, the regular user often does not have the permission for editing common views, so grouping common views separately clarifies the distinction between common views and the user's own views.



The main-level views have been grouped into *My Views*, *Common Views*, and *Other Views*.

### 7.2 Indirect views

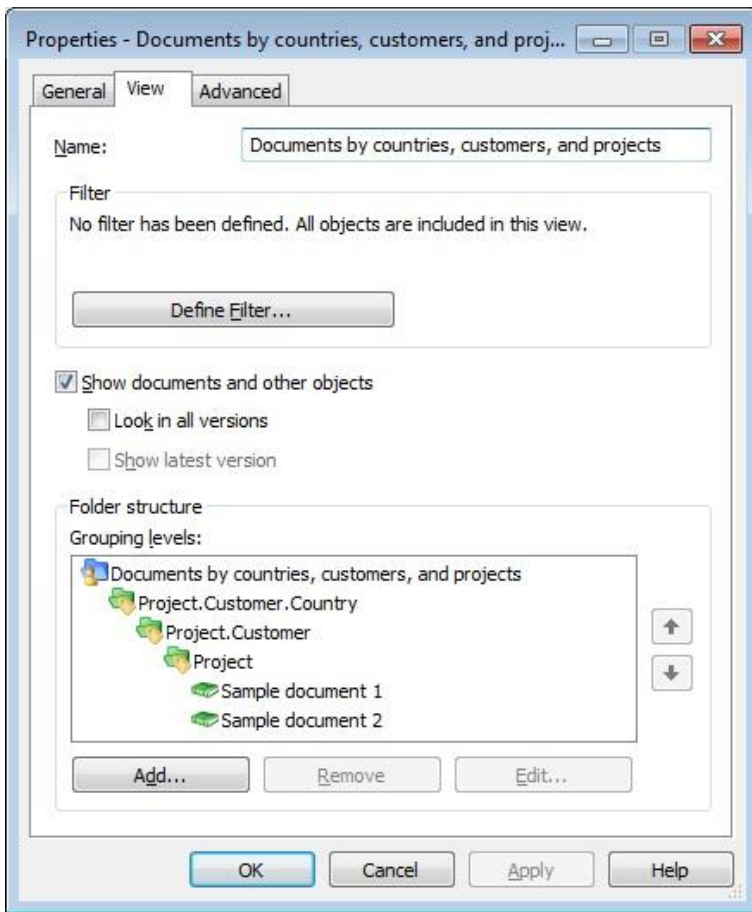
Views can be created by means of *property relationships*: the object itself does not have to include all of the properties defined for the grouping level in order to be included in the filtered view. Instead, the properties may be properties of other objects that have a relationship with the object in question (such as project or customer properties).

For example, *viewing documents by Country, Customer, and Project* is possible by means of indirect views, even if not all of these properties have been defined for the actual document. **It is sufficient that the document be associated with the project, the project be associated with the customer, and a country be specified for the customer.**

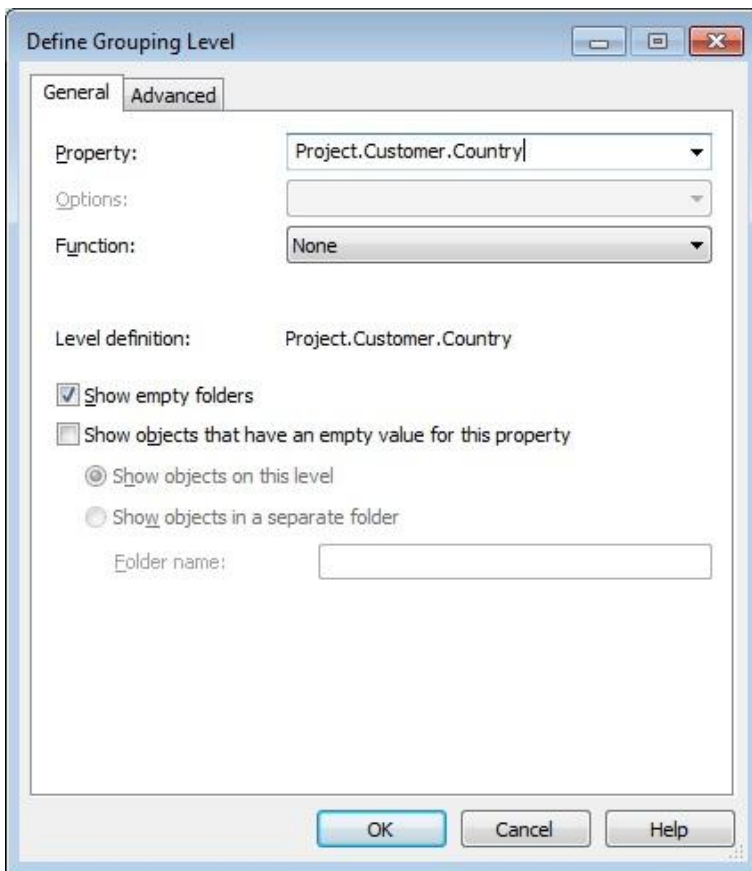
The creation of indirect views has been made even more flexible in the 7.0 version. This latest version enables the intuitive, user-friendly creation of indirect views.

You can now easily specify these indirect views by clicking the plus-sign buttons in the property list and then selecting the property of a related object according to which you wish to create and group the internal structure of the view. In the example, first *Project* has been selected from the property list as the highest grouping level, then the project's property *Customer* was chosen, and finally the project customer's property *Country* was chosen, resulting in the property "*Project.Customer.Country*" with the periods. This way, the document has been linked all the way to the country information, which enables the creation of an indirect view by country. After this, the internal structure of the view has been defined to be distributed by customer, and by project on the last level (see the figure).

You can perform indirect searches in the same manner, by using the properties of related objects. You can utilize indirectness in specification of filter settings as well.



*Creation of an indirect view is an easy and user-friendly procedure.*



*You can easily define indirect views by clicking the plus-sign buttons in the property list, which results in the combined property with the periods.*

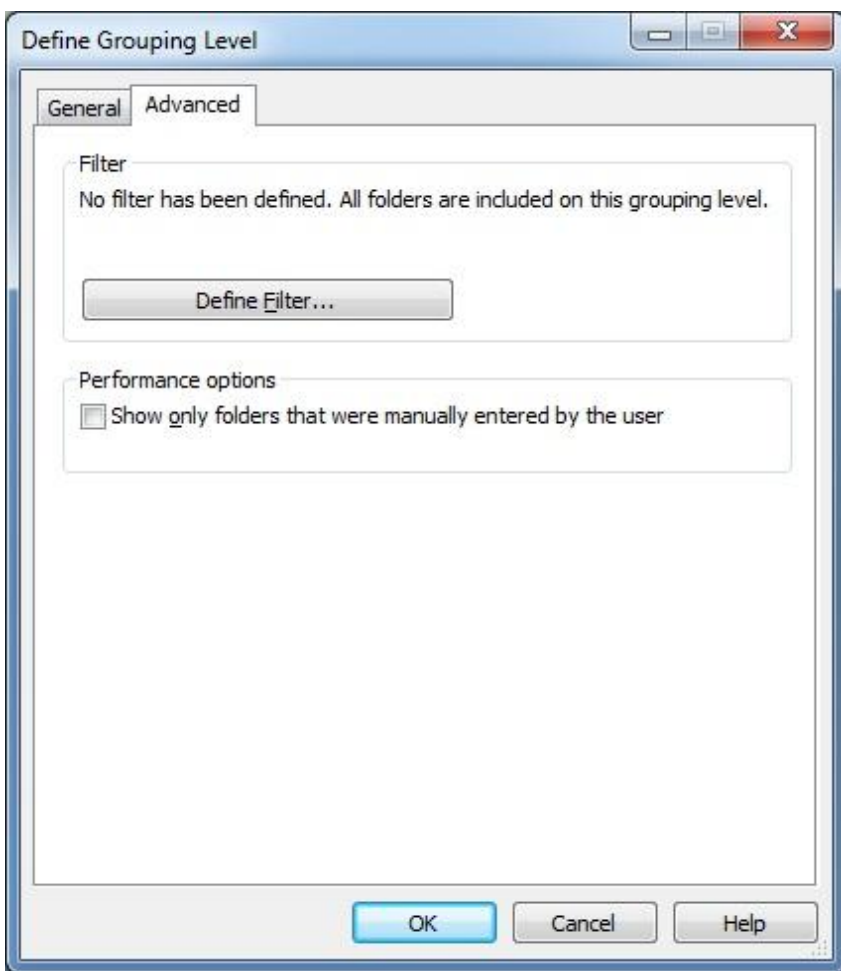
### 7.3 User-specific folder selection in a view

In the advanced settings for the view grouping level, you can specify whether the user is to be shown all virtual folders belonging to the level or whether the user may select the folders to be used. Folder selection is useful when the view or virtual folder includes a large number of subfolders (more than 500). By means of folder selection, the user can easily select the folders to be modified. The use of folder selection is significantly quicker than, for example, grouping by first letter when the number of objects is large (more than 10,000).

For example, if the view has been defined *By Customer* or *By Project* and the company has thousands of customers or projects, user-specific folder selection makes it easier for users to perform their daily tasks in the required customer or project folders. In this case, the user employs the *Select Folder* function to select only the folders that should be used.

Folder limitation can be used if the grouping level is specified according to a property that utilizes a value list. Note: The setting is specific to each grouping level.

For common views, folder limitation can be specified by a user with at least the right to manage common views.



*You can activate folder selection limitation in the advanced settings for the grouping level.*

## 8. Workflows and assignments

### 8.1 Two types of assignments included in workflows

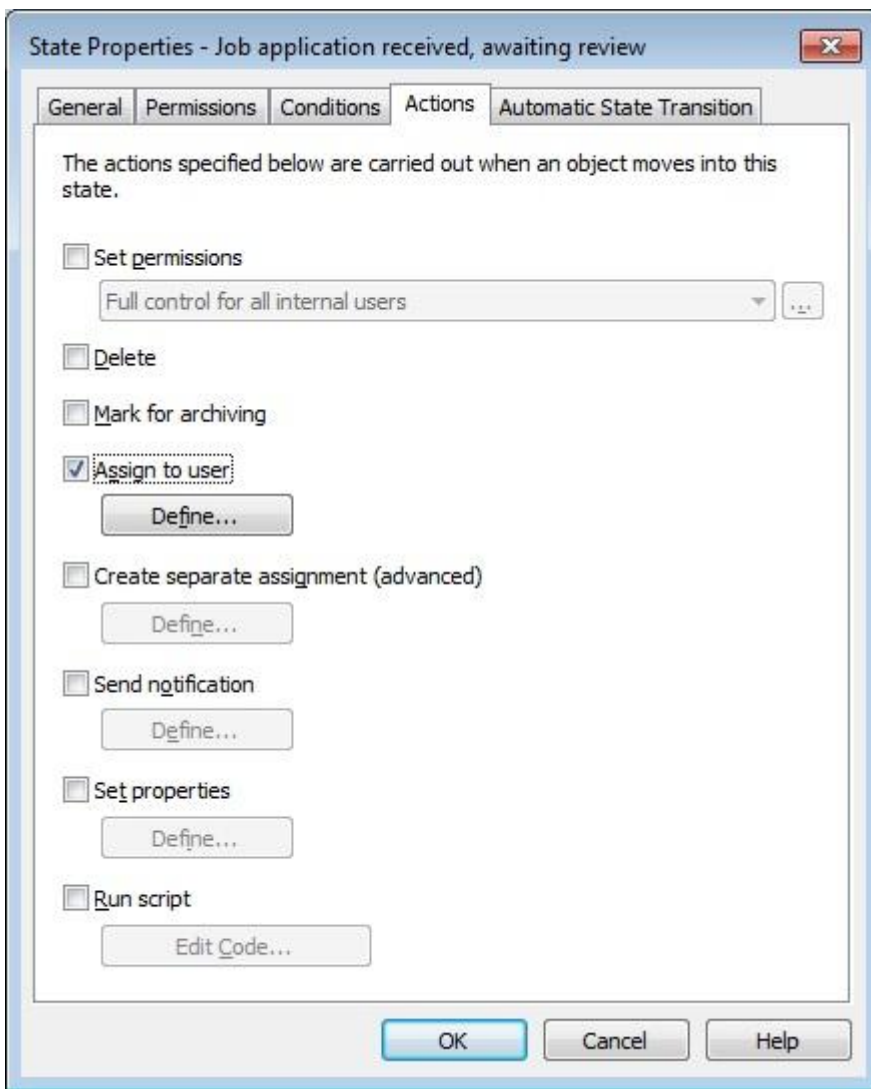
Assignments can be included in a workflow, or they can be independent of workflows. M-Files 7.0 offers two types of assignments for use in connection with workflows. They transfer information and responsibility for task execution to the correct person automatically during a state transition.

#### 8.1.1 Workflow assignment that does not result in a separate object

By selecting *Assign to User*, you can create an assignment that does not result in a separate object. An assignment created with this option is switched to the "complete" state when **one of the persons to whom the task was assigned changes the document state in the workflow** (usually by moving the object to the next state).

In the object's properties, you can see whom it has been *assigned to*, provided that the object is in a state to which an assignment is related.

The person to whom the task was assigned can change the state, using the functions in the task area, properties pane, or shortcut menu (refer to the description of improvements to the user interface).

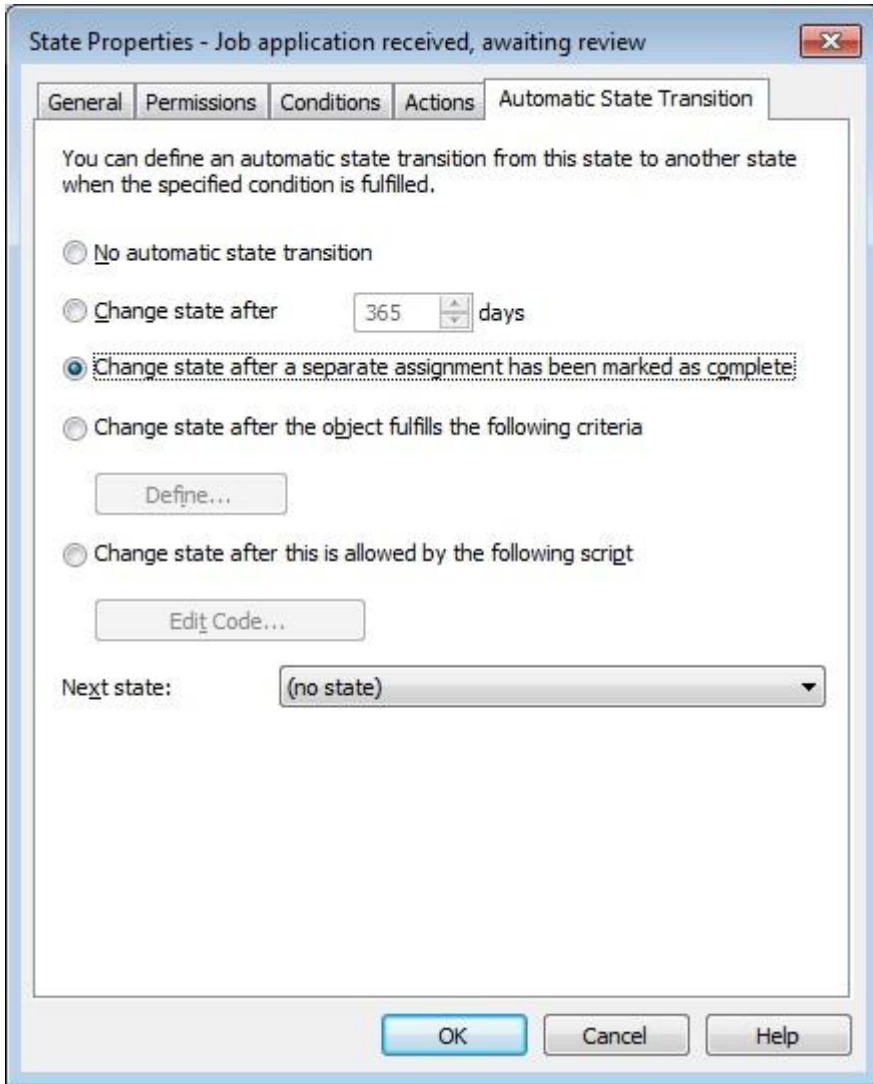


*By selecting Assign to User, you can create an integrated assignment.*

### 8.1.2 Workflow assignment that results in a separate object

You can create separate assignments as well, in which case the assignment results in a separate object. To create such an assignment, select **Create separate assignment** (in the *Actions* tab). A separate assignment differs from an integrated assignment also in that **all persons to whom the task was assigned must mark the assignment as complete** to move it to the "complete" state.

In addition, if you want the workflow state to be changed after completion of a separate assignment, you must activate the automatic state transition condition "*Change state after a separate assignment has been marked as complete.*"



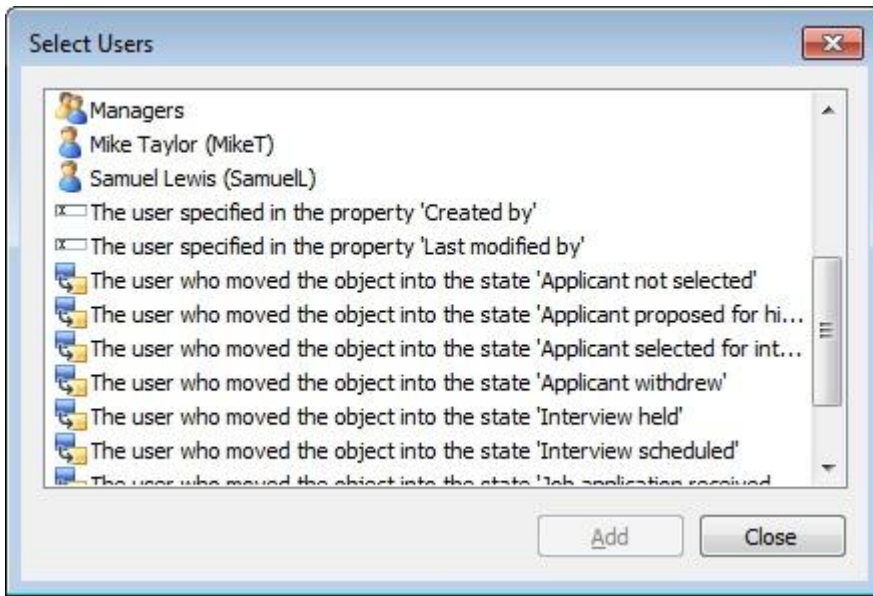
*In the automatic state transition conditions, you can specify a state change to take place after completion of a separate assignment.*

## 8.2 Specifying users automatically on the basis of the object's metadata

Users can be specified also on the basis of the metadata of the object with which the workflow has been associated. For example, a person who has been specified in the property *Approved by* in the object's metadata can automatically be specified as the person to whom the task is assigned. This way, the assignment is not dependent on a designated person but is instead automated and associated with a property of the actual object (e.g., *Approved by*, *Created by*, or *Last modified by*).

You can make such automatic user specifications by selecting **The user specified in the property "X."** Here, "X" stands for the property whose value is used as the user's value when the state transition takes effect.

You can use this automatic user selection for workflows **when you determine the people to whom tasks are assigned, when you wish to send a notification to users, or when you specify permissions for states.**



*When the state transition takes effect, the person defined in the object's metadata at that moment is the "automatic" user.*

### 8.3 Separate assignment object and associated icons

As described above, separate assignment objects can be created for workflows, but the objects can be independent of workflows as well. Whenever an assignment is a separate object, **all** users to whom the task was assigned must mark the assignment as complete before it is switched to the "complete" state.

There are separate icons for uncompleted and completed assignment objects, making it easy to distinguish between uncompleted and completed assignments.

## 9. Improvements to the metadata structure

### 9.1 Pre-filtering of properties

You can specify pre-filtering for property definitions to show a subset of the objects. This way, the list of objects to be displayed can be limited by certain criteria, and the user can more quickly find the desired object when, for example, adding a customer to the metadata card.

For example, pre-filtering can be used to divide

- customers into prospective and actual customers
- customers into buyers and suppliers
- customers into persons and companies
- projects into internal and external projects
- projects into current and past projects

The customer class may also be used as a pre-filter for customer listing. Likewise, the project class, for example, may be used as a pre-filter for a project listing.

Property definitions can be created and modified by a user with at least the right to modify the metadata structure.

Property Definition Properties - New Property Definition

General Automatic Values Validation Permissions

Name: Internal Projects

Data type: Choose from list (multi-select)

Content:

Show values from the following list:

Projects Filter...

Filter the list by using the value of the following property:

(automatic filtering)

Sort values in the list in the following order:

Ascending by value name

Allow using this property with the following object type:

All object types

OK Cancel Apply Help

*You can specify pre-filtering of values (specify the filter to the right side of the list).*

Note: The lower filter selection, "Filter the list by using the value of the following property," is dynamic and depends on what the user selects in the metadata card.

Property	Operator	Value
<input checked="" type="checkbox"/> Class	=	Internal Project

For example, you can create a new property definition "Internal Project" using the filter setting "Class is Internal Project".

Class:

Use template:

Create an empty multi-file document

Create an empty single-file document      File extension:

Properties:

Name or title:	<input type="text"/>	*
Internal project:	<input type="text" value="Internal project 1"/>	+ * *
Created:	Sales Strategy Development	*
Created by:	Staff Training / ERP	*
Last modified:	27.7.2010 15:07	*

Using the pre-filtering for an property definition a user can easily select the right project in the metadata card.

## **10. Improved management of fault situations by means of server settings**

### **10.1 Increased reliability of indexing**

Memory use has been enhanced in M-Files 7.0 by improving the reliability of indexing. Improvements to the reliability of indexing also enable creation of a new index while the old index is being used for searches.

(Indexing of metadata and files has been separated into different processes, and both have been separated from the server processes.)

# 11. Support for large document vaults and improvements to performance

## 11.1 Support for vaults containing over a million documents

Since the amount of information that organizations require is on a constant increase, M-Files product development has placed an emphasis on support for large document vaults. Thanks to these development efforts, vaults containing over a million documents can be used in the same manner as smaller vaults. For example, searches and folder lists work quickly in large document vaults as well.

### **Recommendations for over 1,000,000 documents:**

- 4 Intel Xeon processors
- 32 GB of RAM
- RAID-1 or RAID-5 disk
- 64-bit operating system

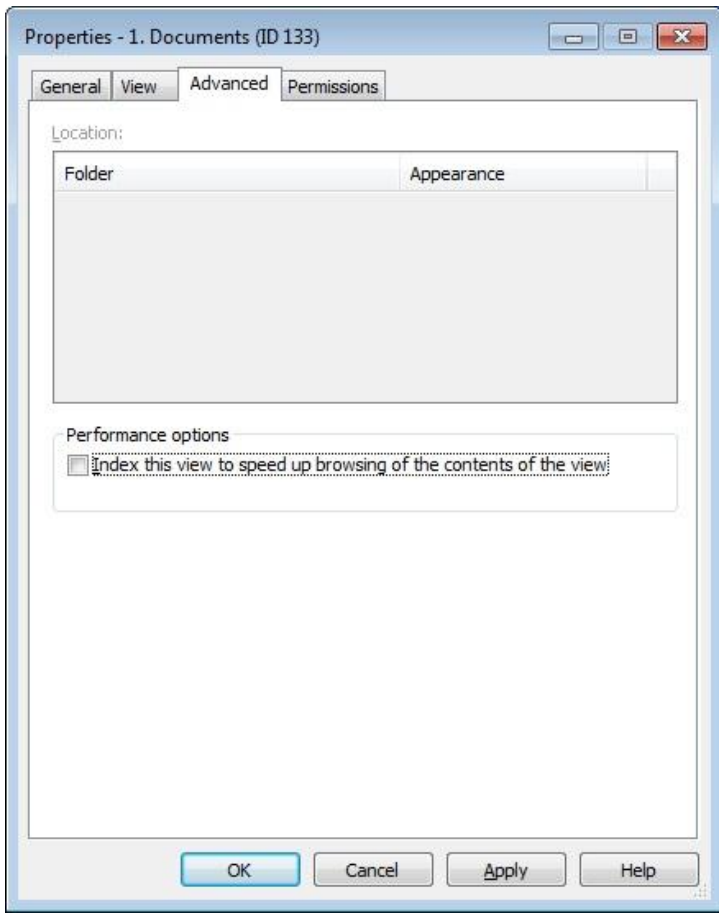
For environments with over a million documents, we recommend contacting the Motive Systems consulting services staff.

## 11.2 Indexing the view

Indexing of the view can be used to speed up the use of certain important views in a large document vault, if the filter criteria for the view sufficiently filter the group of objects. Indexing of the view is recommended only if the view includes a limited number of objects (e.g., 10,000 objects in a vault with a total of 1,000,000 objects) and if the view is used daily and is working slowly.

Indexing of views should be used sparingly and only for views that benefit significantly from it, since each indexed view in the vault slightly slows down the creation and editing of documents and other objects.

View-specific indexing can be activated by a user with at least the right to manage common views.



*You can index a view to enable faster browsing of its contents.*

## 12. Language versions of the M-Files software

The current M-Files language versions:

- English
- Finnish
- French
- German
- Spanish
- Chinese (Traditional/Taiwan)
- Chinese (Simplified/PRC)
- Japanese
- Hungarian
- Italian
- Portuguese (Brazil)
- Polish
- Dutch
- Russian
- Swedish
- Turkish
- Greek
- Croatian
- Slovenian
- Vietnamese
- Arabic (Beta version)

You may change the language of the software and the document vault (metadata structure) while the software is running. Even if, for example, a Finnish version of M-Files has been installed on the computer, you can easily switch to the English version without reinstalling the software. This is a significant benefit when shared computers are used.