

# Metalogix<sup>®</sup> Archive Manager for Files 8.3

# **Administration Guide**



#### © 2020 Quest Software Inc. ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software Inc.

The information in this document is provided in connection with Quest Software products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest Software products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST SOFTWARE ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest Software makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Quest Software Inc. Attn: LEGAL Dept. 4 Polaris Way Aliso Viejo, CA 92656

Refer to our Web site (https://www.quest.com) for regional and international office information.

#### Patents

Quest Software is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at <a href="https://www.quest.com/legal">https://www.quest.com/legal</a>.

#### Trademarks

Quest, the Quest logo, and Metalogix are trademarks and registered trademarks of Quest Software Inc. and its affiliates. For a complete list of Quest marks, visit <u>https://www.quest.com/legal/trademark-information.aspx</u>. All other trademarks and registered trademarks are property of their respective owners.

#### Legend

**CAUTION:** A caution icon indicates potential damage to hardware or loss of data if instructions are not followed.

**IMPORTANT, NOTE, TIP, MOBILE OR VIDEO:** An information icon indicates supporting information.

Metalogix<sup>®</sup> Archive Manager for Files Updated November 2020 Version 8.3

# Contents

bout the documentation	
Archive manager for Files	6
How to manage more Archive Manager servers	7
How to copy server settings	9
How to configure connection settings	10
Interface	13
Manager icons and Undo button	14
What to consider before archiving	15
Restrictions tab	15
Restricted processes tab	16
Backup processes tab	17
Folders tab	19
Extensions tab	
Settings tab	25
General tab	
Creating a new retention category	
Shortcut creation	31
HTML shortcut usage prerequisites	
Opening/Downloading the HTML Shortcuts	
Notification tab	
File compression tab	
User management tab	41
Storage tab	
NetApp Cluster	42
Celerra & VNX FileMovers	49
Generic File Server	55
Scheduler tab	
Jobs tab	
How to define a job	59
How to assign a job to a folder	66
How to start the job immediately	67
Filters tab	67
How to create a filter	68
How to assign a filter to a folder	72
Reports tab	74
Overview tab	

Archive tab	77
Archive-Restore	77
Non-recursive folder selection	79
Recursive folder selection	81
How to archive a folder/file manually	82
How to retrieve a folder/file	84
How to retrieve a desired version of a file	86
How to mark a version for deletion	89
How to remove deletion mark from a version	91
How to display files having been physically removed from the file server	92
How to retrieve a version of a file deleted from the file server	93
Context menu in Archive Manager for Files MARKING FOR DELETION and REMOVING DELETION MARKS from versions of all files	
residing in a folder	
How to mark for deletion versions created during a specific time period	97
How to retrieve a specific version/shortcut	99
How to retrieve a file/shortcut to specific folder	102
Archive view	103
Search & Export	105
Post Processing	109
Statistics tab	
System context menu	114
Other functionality	117
Addendum	119
About Us	122
Contacting Quest	122
Technical Support Resources	122

This manual gives an introduction to Archive Manager for Files Archive Manager for Files – the managerial tool for file archiving and backup, developed by Metalogix, and explains how to work with it. It is a user-friendly application of Archive Manager for Files. With Archive Manager for Files administrators can set many global and useful criteria for automated file archiving from file servers. Along with administrators, even individual users can archive their documents manually, provided they have been given such rights. Archived documents are retrievable anytime and users can work with them as usual. Time for which your documents are stored is set via Retention categories. To store documents for various time periods you can archive them under different retention categories.

Various retention category features enhance the adaptability of Archive Manager for Files and the document lifecycle management for individual documents. Documents can now be archived with two-tier delete and manipulation protection. Tier one defines the retention time in which archived emails can be neither deleted nor moved to a different storage media – these policies vary according to company or state regulations. Tier two allows the administrator to transfer emails to long term storage media or delete them.

Our software allows transparent archiving of files, while preserving the existing structure of disks, folders and files of file servers. It provides full version management with a possibility to any of the versions. Archived files are replaced with a shortcut, thus not taking up so much space on the file-server (disk), yet files are available for working with them as usual. Files may be also retrieved back. Even retrieving of deleted files is possible. Moreover, our full-text search engine provides searching through the archives by applying various criteria.

Further, with Archive Manager for Files you may increase capacity on fast and expensive storages by using cheap, but slower ones without increasing the access time to often used files. The user can define which of the files are considered as often used (fast access to them is crucial) and less used (fast access to them is not crucial) by setting a time interval from the time of their last usage. When that interval elapses, then at archiving the respective file is automatically replaced with a shortcut to save disk space. Within one system there can be defined more such time spans. Data can be included in categories and each category can be assigned a different time span.

HSM as storage mechanism allows storing of data (even all company data) on one or more fileservers. Furthermore, it ensures that files with identical contents are stored only once regardless of location of their respective original file (single instance storage). It is possible to use a shared store as well.

The system is fully automated. The user has to specify attributes of its behavior only. It enables centralized search through company data. This solution is faster and more efficient than searching through different machines/systems.

#### Prerequisite knowledge

Working knowledge of Microsoft Windows is required.

# **Archive manager for Files**

Archive Manager for Files is an administrative application of Archive Manager for Files. With this application you may set many useful criteria for manual and automated file archiving (such as global and specific settings for automated archiving processes, e.g. you may specify when, in what way, and which folders will be archived automatically). On the other hand, archived files can be retrieved anytime.

i NOTE: Since version 3.07 it is possible to archive/backup files not only from the file servers (computers) where Archive Manager for Files is installed but from the remote servers as well (see "Generic File Server"). Archive Manager for Files can be installed elsewhere to control the processes remotely! Furthermore, there can be several Archive Manager for Filess running in parallel.

When running Archive Manager for Files for the first time on a computer where Archive Manager for Files is installed as well, the local computer is automatically displayed in the list box, and its corresponding tab is displayed next to the Home tab on the upper bar.

Enterprise Manager	_ = ×
Home 40ADDC1	
Manage servers	٥
Machine Protocol Port	Add server
00140ADDC1 TCP 7777	Remove server
	Configure
	Copy settings

As you may have noticed, the protocol of this local computer is by default set to TCP, and its port is by default set to 7777.

6

### How to manage more Archive Manager servers

More Archive Manager for Files servers of the local network can be managed from one Archive Manager for Files. They just need to be "added" first.

- i NOTE: In case you want to add file servers to the Manager console as described below, there must be the Archive Manager for Files installed on such servers. However, to archive from file servers, Archive Manager for Files does not need to be installed on them. Just add these servers as "Generic File server" to the Archive Manager (see the Generic File Server section).
- 1. In the Archive Manager for Files window, click on the **Home** tab.
- 2. Click on the Add server... button.

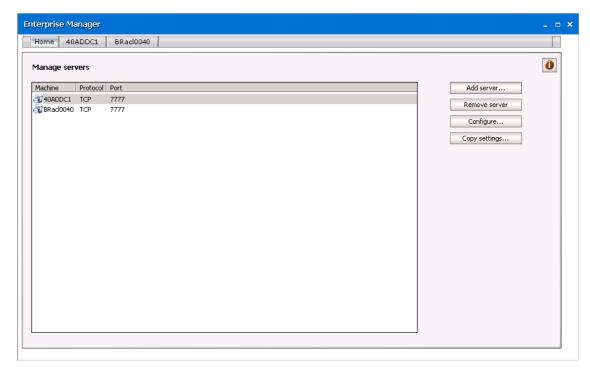
Enterprise Manager	_ = ×
Home 40ADDC1	
Manage servers	0
Machine Protocol Port	Add server
a 40ADDC1 TCP 7777	Remove server
	Configure
	Copy settings
۲ ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	

7

3. Upon clicking the **Add server...** button, the **Select Computers** window appears.

Home 40	ADDC1		
Manage ser	vers		0
Machine	Protocol		Add server
40ADDC1	TCP	7777	Remove server
			Configure
			Copy settings
		Add file server ×	
		Enter the name of the server you want to connect to.	
		Server name:	
		OK Cancel	
•			

- 4. Enter the name of the desired computer (Archive Manager server) in the text box. Then confirm by clicking **OK**.
- 5. The respective **Archive Manager server** appears in the list in the **Archive Manager for Files** window, as shown below. Moreover, a tab with the respective file server name appears on the upper bar.



Now you are ready to configure connectivity settings for the respective file server.

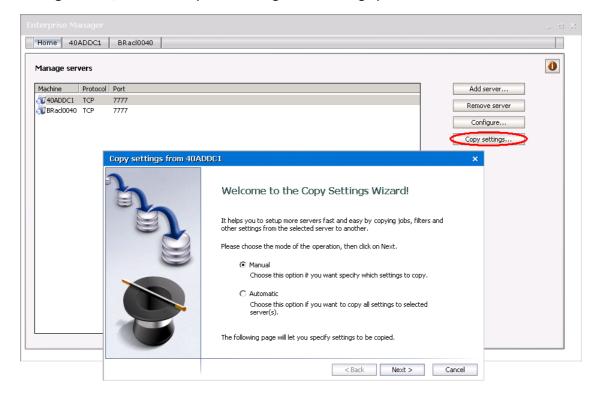
8

i NOTE: The upper bar in the Archive Manager for Files window serves as a switcher between different file servers. To manage a desired file server, simply click on its tab..

### How to copy server settings

You can use the **Copy settings** button on the right-hand side to copy settings of one Archive Manager server to another.

Select the server which settings you want to copy. This will be the source. After clicking the **Copy settings** button, the wizard opens offering the following options:



• Manual – this mode of the operation allows you to copy specific settings of the source

Click **Next** to select settings which you want to copy, e.g. file compression settings as you can see on the screenshot below.

Copy settings from 40A	DDG1	×
	Select settings you want to copy to another server. Please note that on the right side are displayed the properties of the selected object. These properties are read-only.	
	< Back Next > Cance	

• Automatic – this mode of the operation will copy all settings of the source to the servers selected in the next dialog

On the following dialog select the destination servers and click **Next**.

When the process is finished, you can choose to save the log of the operation by clicking the respective button. Finally click **Close**.

### How to configure connection settings

To specify connection settings for a specific Archive Manager server:

1. In the **Archive Manager for Files** window click on the **Home** tab. Select the desired file server in the list. Then click on the **Configure** button.

Enterprise Manager	_ = ×
Home 40ADDC1 BRacl0040	
Manage servers	٥
Machine Protocol Port	Add server
0040ADDC1 TCP 7777	Remove server
BRacl0040 TCP 7777	
	Configure
	Copy settings

2. In the **Connection settings** window, change the network protocol by clicking on the button located at the right (select either HTTP or TCP).

🦃 Connection	settings ×
Server name:	40ADDC1
Network protocol:	TCP O
Communication port:	7777
	OK Cancel

- 3. To change the communication port, simply click on arrows or enter a digit in the **Communication port** text box.
- 4. Click **OK** to confirm.

After adding an Archive Manager server (computer) in the list and upon specifying its connection settings, you may start managing it. To start managing it, click on its corresponding tab located on the upper bar. Sometimes, after clicking on the respective tab you might get a warning message (see the screenshot below). This should not happen normally. This means that the MAM FSA Remote Server Service is not running on the desired file server (the MAM FSA Remote Server Service is responsible for remote connection to the respective file server). Then you need to start this service on the remote server manually.

	_ = >
Home 40ADDC1 BRacl0040	
Manage servers	0
Machine Protocol Port Add server	
Adabbc1 TCP 7777 Remove server	
G BRaclo040 TCP 7777 Renove server	
Configure	
Copy settings	
Error ×	
Failed to connect machine BRacl0040. A connection Attempt failed because the connected party (id not properly respond after a period of time, or established connection failed because connected host has failed to Close	

To make sure that MAM FSA Remote Server Service is started on the remote server, check it: 1. Click Start /Settings /Control Panel /Administration Tools /Services

2. Make sure that the Status column for the MAM FSA Remote Server Service is **Started**. If it is not started, then right-click that service and in the context menu select **Start**.

🖏 Services					_ 🗆 ×
File Action View	Help				
🗢 🔿   🛅   🛅	G 📑   🔽 📰   🕨 🔳 II 🕪				
🔍 Services (Local)	Name 🔺	Description	Status	Startup Type	Log Oi 🔺
	MAM Auditing	Auditing se	Started	Automatic	40DEN
	MAM FSA Archive Service	Scheduling	Started	Manual	40DEN
	MAM FSA Handler Service	Core servic	Started	Manual	40DEN
	MAM FSA Mini-filter Service	FS mini-filt		Automatic	40DEN
	MAM FSA Remote Server Service	Remoting s	Started	Manual	40DEN
	MAM HSM Asynchronous Operations	MAM-STOR	Started	Manual	40DEN
	MAM HSM Base Operations	MAM-STOR	Started	Manual	40DEN
	MAM Search	Indexing a	Started	Automatic	40DEN
	MAMfsaGuardSv	Guard serv		Manual	Local :
	MAML on SV	Looging se	Started	Automatic	Local C
	Extended Standard				

When the connection settings for the desired file server are set and the MAM FSA Remote Server Service is started there, you may click on the desired Archive Manager server's tab located on the upper bar to "open" that computer, i.e. to start managing it.

Enterprise Manager	_ = ×
Home 40ADDC1 BRad0040	
Manage servers	0
Machine Protocol Port Add serve	er
40ADDC1       TCP       7777         BRad10040       TCP       7777         Configur       Copy setting	e

You will get the following interface displayed (including all disks on that computer listed in the left pane).

Enterprise Manager		_ = ×
Home 40ADDC1	BRacl0040	
Archive	Files on 40ADDC1	\$ \$
Scheduler		
Restrictions		
Settings		
Statistics		
	Clear selection Archive	Restore
	Versions Archive	Restore
		u

### Interface

The layout of the interface is split into different sections. In the left you can see six main tabs: Archive, Scheduler, Restrictions, Settings and Statistics. The upper bar serves as a switcher between different file servers. At the bottom there are Archive, Retrieve and Clear selection buttons, and the Versions bar, which can be unfolded by clicking on the arrow on the right.

Enterprise Manager		_ = ×
Home 40ADDC1	BRad0040	
Archive	Files on 40ADDC1 <b>®</b> € <b>■</b> □ <b>℃</b> C:	2
Scheduler		
Restrictions		
Settings		
Statistics		
	Clear selection Archive Restore	
		R
	🦄 Archive-Restore 💷 Archive view 🔍 Search & Export St	now versions

After clicking on the arrow on the Versions bar, it unfolds as shown below. It displays version information of individual documents.

Enterprise Manager	-	□ ×
Home 40ADDC1	BRadl0040	
Archive	Files on 40ADDC1         Image: Close of the second s	
Scheduler		
Restrictions		
Settings		
Statistics	Clear selection Archive Restore	
	Versions	
	Mark for deletion Remove deletion mark Get version	
	Archive-Restore  Archive view  Search & Export	

## Manager icons and Undo button

You may find the Refresh icon (≥) and Show deleted items icon (≥) at various places in Archive Manager for Files. This icon is always located in the upper right corner (see the screenshot below).

The Refresh icon is used to update the screen with recently saved information, i.e. whenever the Apply button is clicked. It is useful to click on it whenever you need to "refresh" the status on your screen.

When you click the Show deleted items icon, items of the selected folder which have been deleted from the file system will be displayed in the list view. Such items will have an icon with small red cross attached to it: **a**.

i NOTE: Different icon with a red sign attached to it ( a) denotes files that are not archivable in general or at the present moment; they are e.g. used by another program.

The Undo button may be found as well at various places throughout Archive Manager for Files. It is always located in the lower part of the window ( Undo ). By clicking on this button you will discard all changes having been made since the Apply button ( Apply ) was last clicked.

Enterprise Manager		_ = ×
Home 40ADDC1	BRacl0040	
Archive	Files on 40ADDC1       ⊕ □ ♥ C:	<b>€</b>

# What to consider before archiving

- 1. Archive Manager does not archive files with SYSTEM, ENCRYPTED, TEMPORARY or REPARSE-POINT attributes.
- 2. Before anything is archived (either manual or automated) please specify first your restrictions related settings. You may do that on the Restrictions tab. IT IS VERY IMPORTANT TO EXCLUDE SOME FOLDERS FROM ARCHIVING (see the section "Restrictions tab").
- 3. Other important things to consider before archiving are the general settings. You should specify them at the beginning, before any arching is done. Simply click on the Settings tab and set your criteria (see the section "Settings tab").
- 4. Next proceed to Scheduler tab. There you can schedule jobs and filters for automated archiving (see the section "Scheduler tab").

## **Restrictions tab**

Under the Restrictions tab you may specify restrictions regarding RETRIEVING of archived files:

- Restricted Processes tab processes which will not be allowed to retrieve archived files
- **Backup Processes** tab backup processes which will be able to backup archived files (shortcuts) but which will not be able to retrieve them

and restrictions regarding ARCHIVING:

- Folders tab folders which are recursively or non-recursively excluded from archiving
- Extensions tab file types which will not be included in archiving

**IMPORTANT:** Before any archiving (either manual or automated) please first specify your restrictionrelated settings. It is important to exclude certain folders from archiving, and – that should be done first! - some files or folders are excluded from archiving by default (e.g. system folders) but you may want to exclude for instance all files residing under Local Settings; otherwise you may archive unintentionally even the "unwanted" ones.

Folders excluded by default can be seen after clicking on the Restrictions tab and then on the Folders tab. All folders excluded from archiving, either recursively or non-recursively, are displayed red. Recursive and non-recursive selection will be explained in detail later in this manual (see the section "Folders tab").

ome 40ADDC1	BRacl0040		
Archive	Folders	Restricted folders	Ŷ
Scheduler Restrictions Settings		C:\V C:\Program Files C:\Program Files (x86) C:\Program Files (x86) C:\test C:\test C:\test C:\test C:\test	gix\Archive Manager Files E
Statistics	⊕ I Users ⊕ I I I I I I I I I I I I I I I I I I I	<[	Apply Undo

### **Restricted processes tab**

By clicking on the Restricted Processes tab, the following window will be displayed. On the right side (in the Restricted processes pane) you can see all processes which have been restricted to recover files. This list includes a standard list already specified within our software. This means that all files in this list are unable (i.e. they have been restricted) to automatically retrieve archived files. This list can, of course, be modified. It is necessary for instance to add to this list antivirus programs, which are capable of restoring files. The administrator may himself include additional files, simply by double clicking the three dots and then entering the respective file name (including its extension!), or by selecting from among running processes.

If desired, any of the restricted processes can be removed from the restricted list.

Enterprise Manager	_ = -
Home 40ADDC1	BRacl0040
*	Running processes 🛷
Archive	Module name Process name Path Name
Scheduler Restrictions Settings Statistics	 avgc32,exe avycc32,exe avycce avyc.exe avxitte,exe avxmontornt.exe avxwontornt.exe avxwontornt.exe avxwontornt.exe avxwontornt.exe avxwontornt.exe avxwontornt.exe avxwontornt.exe beserver.exe beserver.exe casdscsvc.exe casdscsvc.exe ccetumg.exe ccetumg.exe defwatch.exe defwatch.exe difsevc.exe difsevc.exe difsevc.exe
	DWRCSLexe
	Get process list         Add >>         Remove         Apply         Undo
	🞕 Restricted processes 🛛 💊 Backup processes 🦷 Folders 💦 Extensions

The left side (under Running processes) is empty, unless you click the Get process list button. After clicking on that button, a list of all processes currently running on that computer is displayed.

How to disable recovering of files by certain processes

In order to disable recovering of files by certain processes they need to be added among restricted ones. To do so, follow these steps:

- 1. On the Restrictions tab, click the Restricted Processes tab.
- 2. Click on the **Get process list** (Get process list) button. The list of all processes running on the respective machine will be displayed as shown below.
- 3. Select the desired ones and then click on the Add button.

Vertice     Running processes on 40ADDC1     Restricted processes       Wodule name     Process name     Path       DFSR.exe     dfsrs.exe     C:\Wind       dfsrc.exe     dfsrs.exe     C:\Wind       DiscSoftBusService.exe     C:\Wind     avgcc32.exe       DiscSoftBusService.exe     DiscSoftBusService.exe     C:\Wind       Dwn.exe     dms.exe     C:\Wind       Dwm.exe     dms.exe     C:\Wind       Settrictions     Sistervice.exe     C:\Wind       Sistings     Settings     Sistervice.exe     C:\Wind       Microsoft.exe     Ismerv.exe     C:\Wind       Microsoft.exe     Ismerv.exe     C:\Wind       Microsoft.exe     Ismerv.exe     C:\Wind       Settings     Ismerv.exe     Ismerv.exe       Statistics     Ismerv.exe     Ismerv.exe       Microsoft.ActiveDirectory.WebServices.exe     C:\Wind       Microsoft.ActiveDirectory.WebServices.exe	Home 40ADDC1	BRacl0040				
Normalization     Production     Production       Image: Scheduler     DFSRs.exe     dfsrs.exe     Cl\Wind       Image: Scheduler     DiscSoftBusService.exe     Cl\Wind     avgerv.exe       Image: DiscSoftBusService.exe     DiscSoftBusService.exe     Cl\Wind     avgerv.exe       Dom.exe     dfsrs.exe     dfsrs.exe     Cl\Wind     avgerv.exe       Dom.exe     dfsrs.exe     dfsrs.exe     Cl\Wind     avgerv.exe       Dom.exe     dfsrs.exe     Cl\Wind     avgerv.exe     avgerv.exe       Dom.exe     dfsrs.exe     dfsrs.exe     Cl\Wind     avgerv.exe       FilePamManager.exe     FilePamManager.exe     Cl\Wind     bengine.exe       FilePamManager.exe     fsrsPamHandlerSv.exe     Cl\Wind     bengine.exe       Image: Settings     ismserv.exe     LogonUI.exe     Cl\Wind       Image: Settings     Statistics     Sim.exe     Cl\Wind       Microsoft.ActiveDirectory.WebServices.exe     Microsoft.ActiveDirectory.WebServices.exe     Cl\Wind       Microsoft.ActiveDirectory.WebServices.exe     Microsoft.ActiveDirectory.WebServices.exe     Cl\Wind       Microsoft.ActiveDirectory.web     PAMAuditingSv.exe     Cl\Wind     dfsvc.exe       Microsoft.ActiveDirectory.web     PAMAuditingSv.exe     Cl\Wind       Microsoft.ActiveDirectory.webServices.exe	20	Running processes on 40ADDC1			Restricted processes	Ŵ
issuer, exe     dfssvc, exe     Ci,Winc     avgcc32, exe       iscoftbusService, exe     DiscoftbusService, exe     Ci,Winc     avgcc12, exe       issex     dfssxc, exe     dfssvc, exe     Ci,Winc       issex     dfssxc, exe     dfssvc, exe     Ci,Winc       issex     dfssxc, exe     dfssxc, exe     avgcc12, exe       issex     dfssxc, exe     dfssxc, exe     ci,Winc       issex     dfssxc, exe     dfssxc, exe     ci,Winc       issex     explorer, exe     ci,Winc     avxtle, exe       issex     explorer, exe     ci,Winc     avxtle, exe       issex     explorer, exe     ci,Winc     avxtle, exe       issex     exe     fsaPAMHandlerSv, exe     Ci,Winc       issex     exe     issex     exe       issex     exe     issex     ci,Winc       issex	Archive	Module name	Process name	Path 🔺	Name	
Scheduler     DiscSoftBusService.exe     C:\Prog avgserv.exe     avgserv.exe       Wine.exe     dns.exe     C:\Wine dns.exe     avgserv.exe       Wine.exe     dns.exe     C:\Wine avgserv.exe     avgserv.exe       Explorer.EXE     explorer.exe     C:\Wine fielPamManager.exe     c:\Wine avgserv.exe       SisSoftBusService.exe     dns.exe     C:\Wine avgserv.exe     avgserv.exe       FielPamManager.exe     FielPamManager.exe     C:\Wine fielPamManager.exe     avgserv.exe       FielPamManager.exe     fielPamManager.exe     C:\Wine fielPamManager.exe     avgserv.exe       Settings     Settings     fisserv.exe     C:\Wine bengine.exe       Settings     bass.exe     bass.exe     c:Wine beserver.exe       Microsoft.ActiveDirectory.WebService.exe     C:\Wine manflxsvc.exe     c:Wine ccapp.exe       Microsoft.ActiveDirectory.WebServices.exe     C:\Wine mastic.exe     c:Wine mastic.exe       Microsoft.ActiveDirectory.WebServices.exe     C:\Wine mastic.exe     C:\Wine mastic.exe       Microsoft.ActiveDirectory.WebServices.exe     C:\Wine Microsoft.ActiveDirectory.WebServices.exe     C:\Wine diffiesc.exe       Microsoft.ActiveDirectory.webServices.exe     C:\Wine Microsoft.exe     C:\Wine diffiesc.exe       Microsoft.exe/birectory.web     DiMicrosoft.exe/birectory.exe     C:\Wine Microsoft.exe       Microsoft.exe/birectory.web <td< td=""><td></td><td>DFSRs.exe</td><td>dfsrs.exe</td><td>C:\Wind</td><td></td><td></td></td<>		DFSRs.exe	dfsrs.exe	C:\Wind		
Scheduler     DiscSoftBusService.exe     CliProg dns.exe     avgserv.exe       Wm.exe     dns.exe     CliWint dns.exe     avgserv.exe       Explorer.EXE     explorer.exe     CliWint dns.exe     avgserv.exe       Explorer.EXE     explorer.exe     CliWint dns.exe     avgserv.exe       Sististics     fisPeAMHandger.exe     CliWint dns.exe     bengine.exe       Sististics     fisPeAMHandger.exe     CliWint dns.exe     bengine.exe       Sististics     fisPeamMandger.exe     CliWint dns.exe     bengine.exe       Sististics     fisPeamMandger.exe     CliWint dns.exe     beserver.exe       Sististics     fisPeament dns.exe     castistic     castistic	2		dfssvc.exe		avgcc32.exe	
Dwm.exe     dwm.exe     Ci\Winc     avxilte.exe       Explorer.tZXE     explorer.exe     ci\Winc     avxilte.exe       FisPAMHandlerSv.exe     fisPamHandlerSv.exe     Ci\Winc     avxilte.exe       SisSexe     fisPamHandlerSv.exe     Ci\Winc     benetns.exe       Image: Settings     inetinfo.exe     inetinfo.exe     Ci\Winc     benetns.exe       Settings     Sass.exe     LogonUL.exe     Ci\Winc     beserver.exe       Image: Settings     Image: Settings     Image: Settings     city in the set in the	C24	DiscSoftBusService.exe	DiscSoftBusService.exe	C:\Prog	avgserv.exe	
Norm. exe     dwm. exe     C:\Winc     avxitte.exe       Restrictions     FilePamManager.exe     FilePamManager.exe     C:\Winc     avxitte.exe       FilePamManager.exe     FisePamManager.exe     C:\Winc     avxitte.exe     avxitte.exe       fisePamManager.exe     FisePamManager.exe     C:\Winc     benetine.exe       fisePamManager.exe     fisePamManager.exe     C:\Winc     benetine.exe       fisePamManager.exe     fisePamManager.exe     C:\Winc     benetine.exe       ismserv.exe     ismserv.exe     C:\Winc     beremote.exe       ismserv.exe     lsmserv.exe     C:\Winc     beremote.exe       lsmserv.exe     lsm.exe     C:\Winc     beremote.exe       lsmserv.exe     lsm.exe     C:\Winc     ccapp.exe       lsmserv.exe     manflbsvc.exe     C:\Winc     dsfwack.exe       manflbsvc.exe     msftesql.exe     C:\Winc     dsfwack.exe       matherspl.exe     msftesql.exe     C:\Winc     dsfwack.exe       matherspl.exe     msftesql.exe	Scheduler	dns.exe	dns.exe	C:\Wind	avxc.exe	
Restrictions     FilePamManager.exe     FilePamManager.exe     C:\Prog     avxw.exe       fsaPAMHandlerSv.exe     fsaPamHandlerSv.exe     C:\Prog     benetns.exe       fishfind.exe     institutions     c:\Vinit     benetns.exe       Settings     ismserv.exe     c:\Vinit     beremote.exe       Settings     ismserv.exe     c:\Vinit     beremote.exe       Microsoft.ActiveDirectory.WebServices.exe     C:\Vinit     beserver.exe       Ism.exe     Ism.exe     ccapp.exe     ccapp.exe       Microsoft.ActiveDirectory.WebServices.exe     C:\Vinit     defwatch.exe       maditsvc.exe     msftesql.exe     msftesql.exe     C:\Vinit       msftesql.exe     msftesql.exe     ccetVinit     defwatch.exe       Microsoft.ActiveDirectory.WebServices.exe     C:\Vinit     defwatch.exe       msftesql.exe     msftesql.exe     ccetVinit     defwatch.exe       Microsoft.ActiveDirectory.webServices.exe     C:\Vinit     defwatch.exe     dsm.exe       Microsoft.ActiveDirectory.webServices.exe     C:\Vinit     defwatch.exe     dsm.exe       Microsoft.ActiveDirectory.webServices.exe     C:\Vinit     defwatch.exe     dsm.exe       Microsoft.ActiveDirectory.webServices.exe     C:\Vinit     dsm.exe     dsm.exe       Microsoft.extitutesSv.exe     DAMfeadwrbiverSv.exe		Dwm.exe	dwm.exe	C:\Winc	avxlite.exe	
Restrictions     FspPAMHandlerSv.exe     FsaPamHandlerSv.exe     C:I/Prog     benetns.exe       inetinfo.exe     inetinfo.exe     C:I/Winc     beremote.exe     beremote.exe       isserv.exe     LogonUL.exe     LogonUL.exe     C:I/Winc     beremote.exe       isserv.exe     Ismserv.exe     C:I/Winc     beremote.exe     beremote.exe       isserv.exe     Ismserv.exe     C:I/Winc     beremote.exe       isserv.exe     Ismserv.exe     C:I/Winc     ccapp.exe       isserv.exe     Ism.exe     Ism.exe     C:I/Winc       isserv.exe     Ism.exe     C:I/Winc     ccapp.exe       isserv.exe     Ism.exe     C:I/Winc     ccapp.exe       ism.exe     Ism.exe     C:I/Winc     ccevtmgr.exe       ism.exe     Ism.exe     C:I/Winc     ccevtmgr.exe       ism.exe     Ism.exe     C:I/Winc     ccevtmgr.exe       ism.exe     Ism.exe     Microsoft.ActiveDirectory.WebServices.exe     C:I/Winc       istristics     Istresql.exe     nsftesql.exe     C:I/Winc     disfwick.exe       istresql.exe     nsftesql.exe     C:I/Winc     disfwick.exe     dism.exe       PAMAuditingSv.exe     PAMAuditingSv.exe     C:I/Winc     dism.exe     DWRCST.exe		Explorer.EXE	explorer.exe	C:\Winc	avxmonitornt.exe	
Restrictions     inetinfo.exe     inetinfo.exe     C:\Winc     bengine.exe       ismserv.exe     ismserv.exe     C:\Winc     beremote.exe       ismserv.exe     ismserv.exe     C:\Winc       logonUI.exe     LogonUI.exe     C:\Winc       logonUI.exe     manfltxvc.exe     C:\Winc       microsoft.ActiveDirectory.WebServices.exe     C:\Winc     ccsetmgr.exe       misttesql.exe     msftesql.exe     C:\Winc       msftesql.exe     msftesql.exe     C:\Winc       ntfrs.exe     ntfrs.exe     C:\Winc       PAMAudtingSv.exe     PAMAudtingSv.exe     C:\Winc       dim.exe     dim.exe     dim.exe       uMicrosoft.extubuerSv.exe     C:\Winc     dim.exe       patientersul     patientersultingSv.exe     C:\Winc       patientersultingSv.exe     patientersultingSv.exe     C:\Winc       uMicrolinterSv.exe     patientersultingSv.exe		FilePamManager.exe	FilePamManager.exe	C:\Prog	avxw.exe	
Inteltino.ex/e     inteltino.ex/e     C:\\\\\\\\Winc     Dengine.ex/e       Settings     Issserv.ex/e     C:\\\\\Winc     Dengine.ex/e       Isss.ex/e     Issserv.ex/e     C:\\\\Winc     Deserver.ex/e       Isss.ex/e     Isss.ex/e     C:\\\Winc     Deserver.ex/e       Isss.ex/e     Isss.ex/e     C:\\\Winc     Deserver.ex/e       Isss.ex/e     Isss.ex/e     C:\\Winc     C:\\Winc       Isss.ex/e     Isss.ex/e     C:\\Winc     C:\\Winc       Isss.ex/e     Isss.ex/e     C:\\Winc     C:\\Winc       Isss.ex/e     Isss.ex/e     C:\\Winc     C:\\Winc       Isss.ex/e     Isss.ex/e     C:\\Winc     C:\Winc       Isss.ex/e     Isss.ex/e     C:\\Winc     DifferativeDirectory.WebServices.ex/e       Isss.ex/e     Isss.ex/e     C:\\Winc     differativeDirectory.ex/e       Isss.ex/e     Isss.ex/e     C:\\Winc     differativeDirectory.ex/e       Isss.ex/e     Isss.ex/e     C:\\Winc     differativeDirectory.ex/e       Isss.ex/e     Isss.ex/e     C:\\Winc     differativeDirectory.ex/e       Isss.ex/e     PAMAuditingSv.exe     C:\\Winc     differativeDirectory.ex/e       Isss.ex/e     DMMfcaArchiveEverSv.exe     C:\\Winc     DifferativeDirectory.ex/e       Isss.ex/e     DMMfcaArchiveEverS	$\overline{}$	fsaPAMHandlerSv.exe	fsaPamHandlerSv.exe	C:\Prog	benetns.exe	
Settings         LogenUI.exe         C:\Winc         beserver, exe           Settings         Isass.exe         Isass.exe         C:\Winc         casdscov, exe           Sine.exe         Isass.exe         C:\Winc         casdscov, exe         casdscov, exe           Sine.exe         mamflsvc.exe         mamflsvc.exe         C:\Winc         cevtmgr.exe           mamflsvc.exe         mamflsvc.exe         C:\Winc         defwatch.exe         defwatch.exe           msftesdi.exe         msftcs.exe         C:\Winc         defwatch.exe         dfssvc.exe           msftesdi.exe         msftesdi.exe         C:\Winc         defwatch.exe         dfssvc.exe           MMFca/wrbiversfvc.exe         PAMAudting5v.exe         C:\Winc         dfssvc.exe         dfmc.exe           MMFca/wrbiversfvc.exe         D/Mfca/wrbiversfvc.exe         C:\Winc         dfmc.exe         dfmc.exe           MMFca/wrbiversfvc.exe         D/Mfca/wrbiversfvc.exe         C:\Winc         dfmc.exe         DMMCS_free	Restrictions	inetinfo.exe	inetinfo.exe	C:\Winc	bengine.exe	
Settings     Isass.exe     C:Wint     caddscsvc.exe       Ism.exe     Ism.exe     C:Wint     caddscsvc.exe       Ism.exe     Ism.exe     C:Wint     caddscsvc.exe       Ism.exe     mamflsvc.exe     C:Wint     caddscsvc.exe       Microsoft.ActiveDirectory.WebServices.exe     Microsoft.ActiveDirectory.WebServices.exe     C:Wint       msdtc.exe     msftesql.exe     c:Wint     csetting:exe       ntfrs.exe     ntfrs.exe     C:Wint     csetting:exe       PAMAudtingSv.exe     PAMAudtingSv.exe     C:Wint     dsm.exe       QMMcaArchiverSv.exe     DMMfraArchiverSv.exe     C:Wint     dsm.exe       WRCST.exe     DMMfraArchiverSv.exe     C:Wint     MRCSt.exe		ismserv.exe	ismserv.exe	C:\Winc	beremote.exe	
Settings         Ism.exe         C:\Wind mamfltsvc.exe         ccapp.exe           mamfltsvc.exe         mamfltsvc.exe         C:\Wind mastlc.exe         ccetmgr.exe           statistics         mastlc.exe         msttesql.exe         C:\Wind msttesql.exe         ccetmgr.exe           Mastlc.exe         msttesql.exe         cci\Wind mstc.exe         ccetmgr.exe         dfswack.exe           PAMAuditingSv.exe         pAMAuditingSv.exe         C:\Wind mstc.exe         dfswack.exe         dfswack.exe           VMMcadrobiveSv.exe         pAMAuditingSv.exe         C:\Wind DMMfcadrobiveSv.exe         C:\Wind DMMfcadrobiveSv.exe         DMMfcadrobiveSv.exe         DMMCS.exe           VMMCSt.extbineSt.exe         pAMAuditingSv.exe         clipting         dsm.exe         DMRCSt.exe	<b>1</b>	LogonUI.exe	LogonUI.exe	C:\Winc	beserver.exe	
Statistics     mamfltsvc.exe     C:\Prog Microsoft.ActiveDirectory.WebServices.exe     C:\Winc Microsoft.ActiveDirectory.WebServices.exe     C:\Winc C:\Winc msdtc.exe     ccevtmgr.exe C:\Winc defwatch.exe       Statistics     mamfltsvc.exe     msftesql.exe     C:\Winc Microsoft.ActiveDirectory.WebServices.exe     C:\Winc defwatch.exe       msftesql.exe     msftesql.exe     C:\Prog Microsoft.MctiveSvc.exe     C:\Prog dsm.exe       pAMAudtingSv.exe     PAMAudtingSv.exe     C:\Prog DMMca0rchiveSv eve     DWMCSVc.exe	<u> </u>	lsass.exe	lsass.exe	C:\Wind	casdscsvc.exe	
Microsoft.ActiveDirectory.WebServices.exe     Microsoft.ActiveDirectory.WebServices.exe     C:\Winc     csetmgr.exe       msdtc.exe     msdtc.exe     C:\Winc     C:\Winc       msdtc.exe     msftesql.exe     C:\Winc     defwatch.exe       ntfrs.exe     ntfrs.exe     C:\Winc     dssvc.exe       PAMAuditingSv.exe     PAMAuditingSv.exe     C:\Winc     dsm.exe       Microsoft.ActiveDirectory.WebServices.exe     C:\Winc     dsm.exe	Settings	lsm.exe		C:\Wing	ccapp.exe	
msdtc.exe     msdtc.exe     C:\Winc     defwatch.exe       msftesdi.exe     msftesdi.exe     C:\Prog     dfswc.exe       pAMAuditingSv.exe     PAMAuditingSv.exe     C:\Vinc     dfswc.exe       pAMAuditingSv.exe     PAMAuditingSv.exe     C:\Vinc     dfswc.exe       pAMAuditingSv.exe     PAMAuditingSv.exe     C:\Vinc     dfswc.exe       pAMAuditingSv.exe     PAMAuditingSv.exe     C:\Vinc     dfswc.exe       pMfreadurbiuerSv.exe     DMfreadurbiuerSv.exe     C:\Vinc     dfswc.exe       pMfreadurbiuerSv.exe     DMfreadurbiuerSv.exe     C:\Vinc     dfswc.exe       pMfreadurbiuerSv.exe     DMfreadurbiuerSv.exe     C:\Vinc     dfswc.exe		mamfltsvc.exe	mamfltsvc.exe	C:\Prog	ccevtmgr.exe	
Statistics msftesql.exe msftesql.exe C:\Prog ntfrs.exe ntfrs.exe C:\Wind PAMAudtingSv.exe PAMAudtingSv.exe C:\Prog DMMcadurchiverSv.exe C:\Prog DMMCsdr.chiverSv.exe C:\Prog DMMCsdr.chiverSv.exe C:\Prog DMMCsdr.chiverSv.exe C:\Prog DMMCSt.exe DMMCSt.exe DWRCSt.exe			Microsoft.ActiveDirectory.WebServices.exe	C:\Winc		
Statistics ntfrs.exe ntfrs.exe C:\Winc C:\Prog dsm.exe		msdtc.exe	msdtc.exe	C:\Winc	defwatch.exe	
nttrs.exe nttrs.exe C:\Winc dsm.exe ds		msftesql.exe	msftesql.exe	C:\Prog	dfssvc.exe	
DAMFeaturbiuerSu ava Cilbrand DWRCS.exe	Statistics	ntfrs.exe	ntfrs.exe	C:\Winc	dsm.exe	
		DAMfcsArchiverSv.eve	DAMEcaArchiverSv.eve	CIDrog		
					DWRCST.exe	
Add >> Remove Apply Undo		Get process list	Add >> F	lemove	Apply U	Indo

4. The selected files will be moved to the right side under **Restricted processes**. To confirm, click **Apply**.

**NOTE:** Individual running processes can be moved to the restricted list also by double clicking them. To remove a process from the Restricted processes list, simply select the desired one and then press the Remove button.

### Backup processes tab

You may be using backup tools (e.g. NT Backup, Robocopy.exe or TSM) to do a backup of your files and folders. Together with other files, it can be requested to create a backup also from files which are archived and replaced with a shortcut file. In some cases, the backup processes may be retrieving archived documents while doing a backup of shortcuts. If you experience such behavior, mark these processes on the Backup processes tab.

Processes which are added to "Backup processes" will not be allowed to retrieve shortcuts. They will simply do a backup of files as well as shortcuts and these backed-up shortcuts will be fully functional.

Enterprise Manager			×
Home 40ADDC1	BRad0040		
*	Running processes	Backup processes	N.
Archive	Module name Process name Path	Name	
Scheduler			
Restrictions			
Settings			
Statistics			
	□ All processes opening files with the FILE_OPEN_BACKUP_INTENT fla as backup processes	ag are handled	
	Get process list	Add >> Remove Apply Undo	
	🛞 Restricted processes 🛛 🔌 Backup processes 🦷 Fold	ders 💦 Extensions	

The Backup processes tab is divided to two panes. The left pane (under Running processes) is empty, unless you click the Get process list button. After clicking on that button, a list of all processes currently running on that computer is displayed.

On the right side (under Backup processes) you can see all processes which are handled as backup processes. They have been restricted to recover files but they are able to read the shortcut file. This means that all processes in this list are unable (i.e. they have been restricted) to automatically retrieve archived files. This list can, of course, be modified. The administrator may himself include additional files, simply by double clicking the three dots and then entering the respective process name (including its extension!), or by selecting from among running processes. If desired, any of the restricted processes can be removed from the restricted list.

**IMPORTANT:** It is not necessary to select backup processes one by one. If you click All processes... check box, then all processes opening files with the FILE\_OPEN\_BACKUP\_INTENT flag will be handled as backup processes, i.e. they will not be allowed to retrieve documents. Instead, they will be able to create a backup from the shortcut file.

#### How to disable recovering of files by backup processes

In order to disable recovering of files by backup processes they need to be added among restricted ones. To do so, follow these steps:

- 1. On the **Restrictions** tab, click the **Backup Processes** tab.
- 2. Click on the **Get process list** (Get process list) button. The list of all processes running on the respective machine will be displayed as shown below.
- 3. Select the desired ones and then click on the Add button.

**NOTE:** Processes which are set as restricted processes on the **Restricted processes** tab cannot be added to backup processes and vice versa.

ome 40ADDC1	BRacl0040				
2	Running processes on 40ADDC1			Backup processes	Ŵ
Archive	Module name	Process name	Path 🔺	Name	
2	csrss.exe DFSRs.exe dfssyc.exe	csrss.exe dfsrs.exe dfssvc.exe	C:\Winc C:\Winc C:\Winc		
Scheduler	DiscSoftBusService.exe dns.exe Dwm.exe	DiscSoftBusService.exe dns.exe dwm.exe	C:\Prog C:\Winc C:\Winc		
Restrictions	Explorer.EXE FilePamManager.exe fsaPAMHandlerSv.exe	explorer.exe FilePamManager.exe fsaPamHandler5v.exe	C:\Winc C:\Prog C:\Prog		
22	inetinfo.exe ismserv.exe LogonUI.exe	inetinfo.exe ismserv.exe LogonUI.exe	C:\Wind C:\Wind C:\Wind		
Settings	Isass.exe Ism.exe mamfitsvc.exe	lsass.exe lsm.exe mamfltsvc.exe	C:\Winc C:\Winc C:\Prog		
Statistics		as.exe Microsoft.ActiveDirectory.WebServices.ex msdtc.exe			
	All processes opening files with th as backup processes	e FILE_OPEN_BACKUP_INTENT flag are handled			
	Get process list	Add >>	Remove	Apply	Undo

It is not necessary to select backup processes one by one. If you click **All processes**...check box, then all processes opening files with the FILE\_OPEN\_BACKUP\_INTENT flag will be handled as backup processes, i.e. they will not be allowed to retrieve documents.

4. The selected files will be moved to the right side under **Backup processes**. To confirm, click **Apply**.

**NOTE:** Processes can be moved to the Backup processes list also by double clicking them. To remove a process from the Backup processes list, simply select the desired one and then press the Remove button.

### **Folders tab**

Here you have an option to define folders (or disks) that are to be excluded from archiving. For example, if the computer you are archiving files from has a system disk, then all EXE files used by the system should be deactivated for archiving.

Protection against archiving can be achieved through restrictions. Folders protected against archiving by Archive Manager for Files are displayed red. When a folder (a disk) is not restricted, its icon is displayed green (see the screenshot below).

When you click on the Folders tab, you will get all disks displayed in the left, with a list of restricted folders in the right. If neither folders nor disks had been restricted from archiving then the right side (under Restricted folders) would have been empty.

**NOTE:** A special case includes folders (disks) restricted by default. By default restricted folders (or disks) are displayed with a red icon with a *padlock* attached to the icon. Restriction cannot be removed from folders restricted by default.

There are four folders restricted by default on system disks:

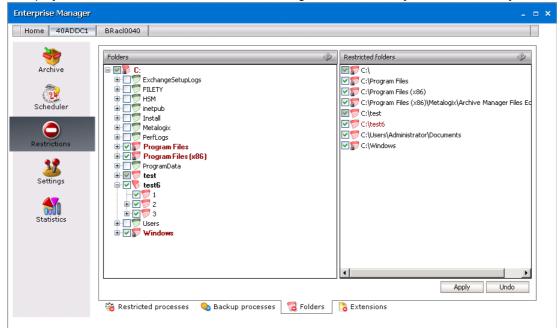
- C:\ disk is restricted non-recursively;
- Program Files folder is restricted recursively;

- Program Files x86 folder is restricted recursively;
- MAM4Files is restricted recursively (i.e. the relative installation path for \MAM4Files; e.g. in our case MAM4Files folder has been installed under C:\Program Files\ Metalogix \ Archive Manager Files Edition);
- Windows installation directory is restricted recursively (i.e. Windows operating system is restricted from archiving by default);

**IMPORTANT NOTE:** In case you place your HSM store on a local hard disk, make sure to protect it (i.e. set it to be restricted recursively from archiving). The administrator should know himself where the HSM store is placed.

**RECOMMENDATION:** The Documents Settings folder should be restricted for every user as well, except for the My Documents folder for each user.

Restriction can be set manually only in the left pane of this window. The right pane serves mainly to display a list of all folders restricted from archiving, either recursively or non-recursively.



Archive Manager for Files recognizes two types of restrictions, which can be set by the administrator:

- recursive; and
- non-recursive

Recursive restriction

For this type of restriction, no files under the parent folder (including all its subfolders) can be archived. To restrict a folder recursively, click on the check box next to the desired folder TWICE. It will get checked and filled with white color.

Non-recursive restriction

For this type of restriction, at least one of the subfolders down the path is allowed for archiving. To select a folder non-recursively, click ONCE on the check box next to the desired folder. It will get checked and filled with grey color.

The two main questions are:

1. How to recognize recursive selection from a non-recursive at a first glance?

Next to each folder you will see check boxes. There are three cases:

• an empty check box (not checked) (e.g. folder Drive);

- a selected check box (checked), filled with grey color (e.g. folder test);
- a selected check box (checked), filled with white color (e.g. folder • Program Files)

An empty check box indicates no selection.

A selected check box filled with grey color indicates non-recursive selection A selected check box filled with white color indicates recursive selection

<b>1</b>	Folders	Restricted folders	N
Archive Scheduler Restrictions Settings Statistics	C: C: C: C: C: C: C: C: C: C:	Image: Critical Criteral Critical Critical Critical Critical C	
		1	

2. And how to select folder either recursively or non-recursively?

The check box next to a desired folder is used as a switcher:

- when empty, then there is no selection;
- when you click on the check box once, it becomes selected and filled • with grey color, and the folder becomes selected non-recursively;
- when you click on the check box for the second time, it becomes selected and filled with white color, and the folder becomes selected recursively

**NOTE:** To remove selection, simply keep clicking on the check box until it is empty. Please notice that restriction cannot be removed from any of by default restricted folders. NEVER REMOVE IT from your HSM store either, if it is placed on a local disk.

#### How to set restrictions recursively

This happens in those cases when the administrator needs to restrict a specific folder from archiving, along with all its subfolders down the path.

To restrict recursively a desired parent folder from archiving:

- 1. On the Restrictions tab, click on the Folders tab.
- 2. In the left pane (under **Folders**), unfold the respective disk's structure down to the desired parent folder.
- 3. Click on the check box next to the desired parent folder **TWO TIMES**.

- 4. After clicking on the check box of the desired parent folder for the second time, all its subfolders down the path become selected and their icons turn red.
- 5. Save those changes by clicking on the **Apply** button.

**NOTE:** By clicking on the Undo button you will cancel all the changes that had been made since you last clicked Apply. In other words, by clicking Undo you will restore what was recently changed.

How to set restrictions non-recursively

To restrict non-recursively a desired folder:

- 1. On the **Restrictions** tab, click on the Folders tab.
- 2. In the left pane, unfold the tree structure of the desired disk down to the desired parent folder.
- 3. Click **ONCE** on the check box next to the desired parent folder.
- 4. Save those changes by clicking on the **Apply** button.

This includes also those cases when the administrator needs to restrict almost all subfolders of a specific parent folder from archiving, yet at least one of the subfolders should be allowed for archiving. Firstly you need to restrict the parent folder recursively, and then unselect the desired subfolder (i.e. the one for which archiving should be allowed).

### **Extensions tab**

In general, on this tab you may specify all file extensions that are to be excluded from archiving. This means that none of the file types specified on this tab will be archived by Archive Manager.

When clicking on the Extensions tab for the first time, both lists – Restricted file types and Registered file types – are empty (see the screenshot below). The left side (under Restricted file types) can be filled in manually, but that would be inefficient and time consuming. A much easier way is to build up a list of all file types located on the computer, and subsequently exclude those that should not be archived.

ome 40ADDC1	BRacl0040			
<b>*</b>	Registered file types		Restricted file types	Ŷ
Archive	Extensions File types			
C Scheduler				
Restrictions				
Settings				
Statistics				
	Build list	Add >> Remove selected	d Apply	Undo

How to exclude certain types from archiving To exclude certain file types from archiving:

- 1. Click on the Restrictions tab.
- 2. Click on the **Extensions** tab.
- 3. Click on the **Build list** button.

Enterprise Manager		_ = = :
Home 40ADDC1	BRacl0040	
Archive	Registered file types         Restricted file types           Extensions         File types	Ŷ
Scheduler		
Restrictions		
Settings		
Statistics		
	Build list         Add >>         Remove selected         Apply	Undo
	🔆 Restricted processes 💊 Backup processes 🛜 Folders 👌 Extensions	

4. After clicking on the **Build list** button, all file types located on that computer will be displayed under **Registered file types**.

ome 40ADDC1	1 BRacl0040			
<b>*</b>	Registered file types		Restricted file types	Ŵ
Archive	Extensions	File types	<b>A</b>	
~	🖓 AddIn	Visual Studio Add-in definition file		
<b>A</b>	👼 ani	Animated Cursor		
Scheduler	Эаре	APE File		
Scheduler	application	Application Manifest		
	asax 🔬	ASP.NET Server Application		
$\bigcirc$	ascx 🔠	ASP.NET User Control		
Restrictions	🔊 ashx	ASP.NET Generic Handler		
	🚵 asmx	ASP.NET Web Service		
٠.	📴 aspx	ASP.NET Server Page		
<u> </u>	🥑 b5t	B5T File		
Settings	🥑 b6t	B6T File		
	🚳 bat	Windows Batch File		
	🚟 blg	Performance Monitor File		
Statistics	s bmp	Bitmap Image		
Stausuus	🕖 bwt	BWT File		
	📑 cab	Cabinet File		
	•			
	Build list	Add >> Remove s	elected Apply	Undo

5. To add some of the registered files types among restricted ones, simply select them, and then click the **Select from list** button. Selected files types will be moved under **Restricted file types**.

**NOTE:** Add files types to restricted ones also by double clicking the three dots and entering extension name (without the dot!)

Include File Index Fi
ndex File terged Query Index ws Help file able of Contents File irtual Topic Definition File
Nerged Query Index ws Help file able of Contents File
ws Help file able of Contents File
able of Contents File
irtual Topic Definition File
n
on
ettings

6. To confirm, click **Apply**.

**NOTE:** If you have decided to archive certain already restricted file types, simply select them in the Restricted file types list, and then click on the Remove selected button (see the screenshot below).

200				
	Registered file type:	S	Restricted file types	Ŷ
Archive	Extensions	File types	· · · ·	
	H1F	Windows Help Include File	hlp	
<u>a</u>	🔂 н1К	Windows Help Index File	htm html	
Scheduler	🔲 н1Q	Windows Help Merged Query Index	Them.	
Scheduler	🚯 H15	Compiled Windows Help file		
	📕 🐻 н1Т	Windows Help Table of Contents File		
		Windows Help Virtual Topic Definition File		
Restrictions	- Market Ma	Crash Dump File		
	1 1 hlp	Help File		
٠	🗂 hta	HTML Application		
2	🥃 htm	HTML Document		
Settings	🥭 html	HTML Document		
	🔺 icc	ICC Profile		
47	🔺 icm	ICC Profile		
Statistics	🔺 icm 🖬 ico	Icon		
Statistics	inf 🖉	Setup Information		
	ini	Configuration Settings	<b>•</b>	
	<b>€</b>		Þ	

# **Settings tab**

Before any archiving (either manual or automated) it is suitable to specify your settings regarding:

- retention categories (different time spans for which archived items will be kept in the HSM store even if you mark them for deletion), the backup time (the time interval allocated during the day for making the backup of the database), shortcut creation and audit log on the General tab
- email notification on the Notification tab
- compression of files on the File compression tab
- permissions for users on the User management tab
- storage system on the Storage tab

### **General tab**

On this tab you may specify the backup time, audit log, shortcut creation, and different retention categories determining document lifecycle, i.e. archiving method, retention time etc. License information is also available here.

WE STRONGLY RECOMMEND setting the Backup time first. This time is reserved for the database backup. During the backup period no information can be stored or requested; archiving process is stopped and will continue afterwards. Select the Backup time check box and then enter the desired period in the two text boxes. Please pay attention to this period, so that it is not set during working hours.

Enterprise Manager		×				
Home 40ADDC1	BRadl0040					
<b>*</b>	Retention categories					
Archive Scheduler	Image: Sympole         Description         (none)           Target schema         1: schema1           Document lifetime begins with         Archiving time           Retention time         3 months           Keep alive time         Zero					
Restrictions	Automatic document deletion     Disabled       Version limitation     Disabled       Shortcut creation     Yes, immediately       Shortcut lifetime     Keep the shortcut forever       Automatic deletion of unreferenced documents     Yes					
22	Set default Create Change Delete					
Settings	Settings Backup time					
<b>S</b> 1	Backup process starts daily at 9:55:02 AM					
Statistics	Shortcut creation	_				
	Type of shortcuts to be created Standard Shortcut					
	Default action taken when HTML shortcut opened None					
	Audit log	$\overline{-}$				
	Auditing server Port number 7783					
	Other options	_				
	☐ File permissions changes tracking					
	License information Apply Refresh					
	💥 General 🦪 Notification 🛭 📦 File compression 🏽 🎉 User management 🛛 😿 Storage					

If you want to get information about license validity, click the License information button.

#### Audit log

If Auditing feature was installed, you need to enable it on this tab. To enable auditing, check Audit log check box. In the Auditing Server enter the name of the machine where the Auditing feature is installed and specify the Server Port (the default port is 7783).

All actions made in the Archive Manager for Files console create a log entry in the auditing database. The audit logs can be viewed in the ArchiveWeb. The Auditing tab is visible just for permitted users. NOTE: For more information on Auditing see the "Auditing manual".

#### Other options

If File permissions changes tracking is checked, any file system permissions changes for the files that have been archived are also updated in the Archive Manager for Files database. Otherwise the application stores only files permissions applicable at the moment of archiving and does not perform any updating.

#### Retention categories

In the Retention categories section different retention categories for file archiving can be set. Various types of documents require different ways of archiving. The time for which they need to be stored and retrievable can differ as well. You can create retention category for short-term documents, retention category for long-term documents etc. In the following lines we discuss the usage of retention categories, their description and management.

The retention categories which are created here can be assigned to jobs on the Scheduler/Jobs tab. They can be also used at manual archiving (see the "Archive tab" section). Retention categories are defined through the following range of settings:

#### Settings related to documents in the archive:

- Retention time the archived document is not delete-able from the HSM Store for the defined time period. Retention time is thus the MOST CRUCIAL feature of Archive Manager for Files related to law regulations. Documents 'deleted' in file system are still actually residing in the archive until this retention time expires.
- Keep-alive time it is the time period after document deletion, during which the deleted document can be turned back to the file system.
- Document expiration time the document, although not marked for deletion, is automatically deleted (by the Delete job) from the archive after the expiration of the defined time period. It is the MAXIMAL time for which the document resides in the HSM Store. This time period cannot be smaller than the retention time.

Settings related to documents/shortcuts in the file system:

- Keep the original document document is archived but it is not modified in any way (no icon, no shortcut, keeps residing in the file system). This option is used just for backup.
- Delete original document the document is REMOVED from the file system immediately after archiving; no shortcut is created; it is NOT ACCESSIBLE from the file-system; such unreferenced documents are accessible only in Archive Manager for Files / Archive tab when you click the Show deleted items icon (right upper corner) or in ArchiveWeb.
- Create shortcut the document is archived and it is replaced with a shortcut. This type of archiving saves the space on the file system and at the same time enables the user to work with the archived document just as with a non-archived one. Document can be replaced with the shortcut immediately or it is kept without changes for the defined time period and only after its expiration shortcut is created ("Delay shortcut creation by" option).
  - o Delete shortcut after a time the document shortcut is automatically removed from the file system after the expiration of the defined time period (user cannot reach it any longer in file system). However the document still resides in HSM Store.

The shortcut has its pros and cons. Shortcuted documents save space on the file server. However, with often accessed documents the original file is retrieved frequently and the network traffic is high. With often accessed documents we recommend keeping no shortcut on the file-server, but the file itself. It is important to balance high network traffic against fast file accessing. This task is effectively managed via Archive Manager for Files shortcut lifecycle settings:

- Create shortcut immediately shortcut is created at the time of archiving
- Delay shortcut creation document is archived but still remains also in the file system; only after time period defined under the "Document lifetime begins with" setting (when it is not eventually accessed so often any more) it is replaced by a shortcut
- Create shortcut if the document was not used at least for similar as above: document is archived but still remains also in the file system. Shortcut is created only after the document was not accessed for the defined time period.

Further settings define the shortcut lifecycle:

- Keep shortcut forever shortcut is left in the file-system
- Delete shortcut after shortcut is deleted after the defined time period; keep in mind that after the shortcut is deleted, the document in NOT accessible from the file-system

The "Delete shortcut after a time" feature can be used to reduce the number of "redundant" shortcuts left in the file system after a specific number of days, months or years.

Archived document lifecycle:



In addition to default retention category created during the installation the administrator is able to create any number of retention categories satisfying specific criteria of the enterprise. Different retention categories are then assigned to different jobs. The retention category consists of a name, a description, the above mentioned retention settings and of the HSM scheme. It is fully manageable from **Archive Manager for Files**.

### Creating a new retention category

Retention categories created on the Settings / General tab can then be assigned to jobs on the Scheduler / Jobs tab. In this way various retention policies are applied.

- 1. On the Settings / General tab click the Create button.
- 2. In the pop-up window enter the Category name, Description (optional) and select the Target schema in the dropdown box. In the HSM system you may define different HSM Schemas, which are virtual categories for documents. (One HSM Schema has been created at the installation of Archive Manager for Files and you may have created more HSM Schemas, each with a particular number assigned to it.) Click Next.

Enterprise Manager		_ = X
Home 40ADDC1	BRacl0040	
Archive	Retention categories	-
Scheduler	Image: Sympole         Description         (none)           Target schema         1: schema1           Document lifetime begins with         Archiving time           Retention time         3 months           Keep alive time         2 ero           Automatic document deletion         Disabled           Dreate retention category         Disabled	
Restrictions	Basic settings Yes	
Settings	Create Change Delete	
<u> </u>	Category name ordinary documents	
Statistics	Description	
	Target schema 1: schema1	
	hagement 😿 Storage	
	< Back Next > Cancel	

3. In the next dialog define the document lifetime in the archive:

- Retention time during this period none of the documents in the HSM store (archived via this retention category) can be removed from the archive; documents can be only marked for deletion before this time elapses and such documents will be deleted only after this defined time period It is possible to select:
- Fixed period (set the desired period)
- Indefinite period (the retention time is not set specifically but can be defined later)
- Infinite period (retention is everlasting)
- Document lifetime begins with select the document lifetime starting point; this will be the outset of Retention time and other defined time periods (e.g. shortcut creation, delete job uses this starting point to find expired documents and suitable documents marked for deletion); it may be the File creation time, Archiving time or Last modification time
- Keep alive time this is the time period (after the retention period) for which the document will be still kept in the HSM Store although it was marked for deletion and is ready to be deleted. It is a security feature which enables administrator to recall the deletion if necessary. It can be set in days, months, years.
- Enable document expiration after check the check-box if you want to COMPLETELY DELETE archived documents whose retention time has elapsed from the archive. Define the expiration time here which has to be longer than the Retention time. If the expiration time is not set, documents NOT marked for deletion keep residing in the archive
- Limit the number of archived versions select if you want to set how many versions of a document the system should keep in the archive; then set the number of versions (x); if x+1 version is created, the oldest version is marked for deletion and replaced by the new one

Click Next.

NOTE: For more information see the preceding section - "Retention categories".

Create retention category	
Document lifetime	
Retention time is	
fixed 🔽 3 📑 month(s)	
Document lifetime begins with	
Archiving time	
Keep alive time	
0 📑 Days 💌	
Enable document expiration after	
1 Days	
Limit number of archived versions	
1 version(s) of a document	
< Back Next > Cancel	

- 4. Shortcut lifetime dialog incorporate file-system side settings:
- Keep the original document documents will be just copied to the archive; no change in the file system
- Delete the original document documents will be moved to archive and will not be accessible in the file system
- Create shortcut the document will be archived and replaced with a shortcut

In case you have selected the Create shortcut option, further settings become available and you can adjust shortcut behavior to meet your needs. You can choose if the shortcut creation will follow immediately after archiving of the document or will be delayed for the specified period of time. The starting point from which the delay is computed is the time defined under the "Document lifetime begins with" setting.

Moreover, you can decide whether you want to keep the shortcut in the file system until the user deletes it (Keep shortcut forever option) or the shortcut will be deleted automatically after the defined time (Delete shortcut after a time option).

Create retention category
🖏 Shortcut lifetime
C Keep the original document
C Delete the original document
<ul> <li>Create shortcut</li> </ul>
Create shortcut immediately
C Delay shortcut creation by:
C Create shortcut if the document was not used at least for:
Keep the shortcut forever
O Delete the shortcut after:
1 Days
< Back Next > Cancel

- Create shortcut immediately shortcut is created immediately after archiving of the document
- Delay shortcut creation by shortcut is created after specified time calculated from the time defined under the "Document lifetime begins with" setting
- Create shortcut if the document was not used at least for shortcut is created after specified time calculated from the time point when the document was last time retrieved from Archive Manager archive (or from the moment defined under the "Document lifetime begins with" setting, if document was not retrieved yet)
- NOTE: For more information see the preceding section "Retention categories".

#### Click Next.

5. Additional settings dialog is displayed. If the Set the retention category as default is checked, this category will be used at manual archiving in file system or Archive Manager for Files. If the Enable automatic deletion of unreferenced documents check box is selected, documents archived via this category will be marked for deletion whenever the Synchronization job cannot find the reference (shortcut) to the document in the file system. If the check-box is not selected, Synchronization job will not mark eventual unreferenced documents for deletion (see the section "How to define a job"). Click Finish.

NOTE: If none of the created retention categories is marked as default, system context menu for archiving/retrieving does not work.

Create retention category		
Additional settings		
<ul> <li>Enable automatic deletion of unreferenced documents (by Synchronization job)</li> </ul>		
$\square$ Set the retention category as default		
< Back Finish Cancel		

Example:

- I. Documents are archived by a retention category with Enable automatic deletion of unreferenced documents checked and shortcuts are left in the file system
- II. You delete shortcuts from file system  $\rightarrow$  documents become unreferenced

- III. The Synchronization Job runs  $\rightarrow$  unreferenced items are marked for deletion
- IV. Items marked for deletion are deleted from archive when their Retention (and Keep alive) time elapses and the Delete job runs

### **Shortcut creation**

Archive Manager for Files as an archiving tool unloads the file server(s) by archiving files to the HSM store and leaving just shortcuts in the original file location. These shortcuts can be of two types: STANDARD (fsa) and HTML.

Set your preferred settings in the Shortcut creation section of the General tab.

**NOTE:** These settings apply in general. However, Archive and DirectArchive job types can have its own settings regarding shortcut creation defined.

In the Type of shortcut to be created switcher you can choose from the following possibilities:

• Standard Shortcut (fsa) - archived files are replaced with standard shortcuts

	Shortcut creation
Type of shortcuts to be created	Standard Shortcut
Default action taken when HTML shortcut opened	None G

**NOTE:** If the application is unable to create shortcut (compression error), there are two ways to solve the problem:

a) In Regedit, navigate to the location below:

- HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Control\FileSystem

In the right pane, right click on NtfsDisableCompression and click on Modify.

Type 0 (number zero) and click on OK. Close Regedit. Restart the computer to apply changes.

b) In Start menu:

- Administrative Tools – Group Policy Management – Default Domain Policy (right-click to Edit) - Computer Configuration – Policies – Administrative Templates: Policy Definitions (ADMX Files) retrieved from the local machine – System – File System – NTFS – Do not allow compression on all NTFS volumes (right-click to Edit) – choose option: Disabled

• HTML Shortcuts – archived files are replaced with the HTML shortcuts which are pointing to the exact file in the archive. The shortcut has the same name as the original file, just the HTML extension is added to its original extension.

ſ		Shortcut creation
	Type of shortcuts to be created	HTML Shortcut
	Default action taken when HTML shortcut opened	None G

When the HTML Shortcut option is selected, the Default action taken when HTML shortcut opened switcher is activated. Specify the default action for loading of the archived documents:

- $\circ$  None user will have the opportunity to decide whether to open or retrieve the file
- o Open file file will be opened from the archive
- o Retrieve and open file will be retrieved and shortcut deleted

NOTE: For more information about file retrieving see "Opening/Downloading the HTML shortcuts".

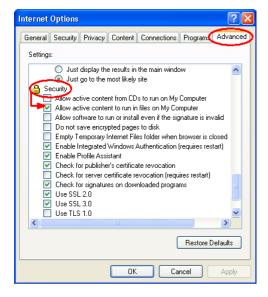
After you have specified your settings click Apply.

### **HTML shortcut usage prerequisites**

When using HTML shortcuts, please, make sure that active content (JavaScript) is enabled in your web browser. At the moment Archive Manager for Files supports Internet Explorer 8.0 or higher.

#### Steps to enable active content in Internet Explorer

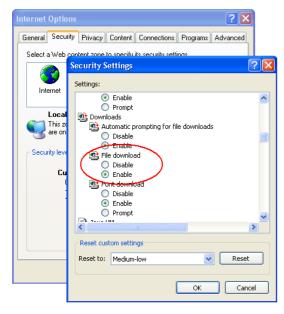
- 1. From the menu bar of Internet Explorer choose **Tools > Internet Options**.
- 2. Click the **Advanced** tab in the Internet Options window and scroll down to the **Security** section.



- 3. Select Allow Active Content To Run In Files On My Computer.
- 4. Click the **Security** tab in the Internet Option window. Select **Local intranet** and then click **Custom Level**.

Internet Options
General Security Privacy Content Connections Programs Advanced
Select a Web content zone to specify its security settings.
Internet Local intranet Trusted sites
Local intranet This zone contains all Web sites that are on your organization's intranet.
Security level for this zone Custom Custom settings. - To change the settings, click Custom Level. - To use the recommended settings, click Default Level.
Custom Level Default Level
OK Cancel Apply

5. The Security Settings dialog opens. Scroll down and locate the **File download** options. Click **Enable**.



6. Scroll down and locate the Access data sources across domains options. Click Enable. Click OK, then click Yes.

Internet Options	? 🗙
General Security Privad Select a Web content zo	cy Content Connections Programs Advanced ne to specify its security settings.
Internet Local i	Security Settings ? 🔀 Settings:
Local intranet This zone contai are on your orga	Custom Disable Java High safety Low safety
Security level for this z Custom Custom se To chang To use th	Medum sarety     Medum sarety     Misciplaceus     Access data sources across domains     Disable     Enable     Prompt
	Allow PETA REFRESH     Disable     Ference     Reset custom settings
	Reset to: Medium-low Reset
	OK Cancel

8. Scroll down and locate Active scripting as well. Select Enable. Click OK, then click Yes. Now you can close the window.

Internet Options	? 🗙
General Security Priva	cy Content Connections Programs Advanced
Local intranet Local intranet This zone contai are on your orga Security level for this z Custom Custom se - To chang - To use th	Security Settings  Settings:  Settings:  Settings:  Settings:  Settings:  Setting:  Setting:
	OK Cancel

## **Opening/Downloading the HTML Shortcuts**

When archiving files, Archive Manager copies them to another location to make a backup or replaces these files with standard or HTML shortcuts to save the storage space on the file server (see "General tab"). While HTML shortcuts require further settings related to the file downloading these will be described in this chapter.

Creating HTML shortcuts for the whole Archive Manager server is done on the Settings/General tab of the Archive Manager for Files. By selecting the HMTL Shortcut option in the Shortcut creation section the Default action taken when HTML shortcut opened switcher gets activated. Three options are available:

a) None

#### b) Open file

c) Retrieve and open

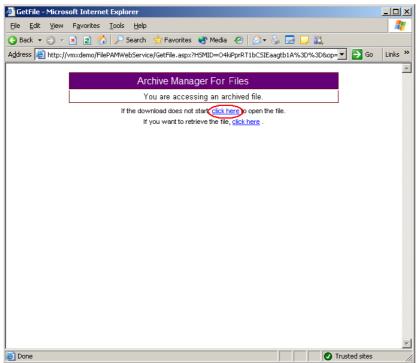
terprise Manager Home 40ADDC1	BRad0040
	Retention categories-
<b>V</b>	
Archive	Image: Observiction     (none)       Target schema     1: schema1
<u>a</u>	Document lifetime begins with Archiving time
Scheduler	Retention time 3 months Keep alive time Zero
	Automatic document deletion Disabled
	Version imitation Disabled Shortcut creation Yes, immediately
Restrictions	Shortcut lifetime Keep the shortcut forever Automatic deletion of unreferenced documents Yes
- 25	Set default Create Change Delete
Settings	Backup time
<b>M</b>	Backup process starts daily at 9:55:02 AM
Statistics	Shortcut creation
	Type of shortcuts to be created HTML Shortcut
	Default action taken when HTML shortcut opened None
	Audit log
	Auditing server Port number 7783
	Other options
	File permissions changes tracking
	License information Apply Undo
	🎎 General 🏾 🎯 Notification 🛭 🍿 File compression 🏾 🍂 User management 🛛 💦 Storage

Let's explain what each option exactly means:

#### a) None

In this case you can decide whether you want to open the file or retrieve it from archive, i.e. shortcut will be deleted. When double-clicking on the HTML shortcut the current Web-browser is being opened. In the Get file window you can see two hyperlinks.

Click the first one if you want to open the file. Then click Open.



Click the second one if you want to retrieve the file. It will be retrieved to its original location. The next dialog informs you that the file was retrieved successfully. Click the link to open the file (in our example click "C:\Archive folder\Test\Test.txt").

🗿 Get file - Micro	soft Internet Explorer	- 🗆 🗵
<u>File E</u> dit <u>V</u> iew	F <u>a</u> vorites <u>T</u> ools <u>H</u> elp	-
🕒 Back 💌 🌖 💌	💌 😰 🏠 🔎 Search 👷 Favorites 🜒 Media 🤣 😥 🛛 😓 💹 🕶 🛄 📖	
Address 🙋 C:\Arc	hive folder\Test.txt.html 📃 🄁 Go	Links »
		<b>A</b>
	Archive Manager For Files	
	You are accessing an archived file.	
	If the download does not start, <u>click here</u> to open the file.	
	If you want to retrieve the file <u>Click here</u>	
🎯 GetFile - Micro	soft Internet Explorer	- 🗆 ×
GetFile - Micro	soft Internet Explorer F <u>a</u> vorites <u>I</u> ools <u>H</u> elp	
<u>File E</u> dit <u>V</u> iew		
Eile Edit View	Favorites Iools Help	
Eile Edit View	Favorites Tools Help        Image: Second Secon	
Eile Edit View	Favorites Tools Help        Image: Second Secon	
Eile Edit View	Favorites Iools <u>H</u> elp ■ ② ⑦ > Search ☆ Favorites ऒ Media ② ② - ③ ☑ □ ǚ vmxdemo/FilePAMWebService/GetFile.aspx?H5MID=O4kiPprRT1bCSIEaagtb1A%3D%3D&op=▼ ● Go Archive Manager For Files The file was retrieved successfully to its original location!	
Eile Edit View	Favorites Iools Help	
Eile Edit View	Favorites Iools <u>H</u> elp ■ ② ⑦ > Search ☆ Favorites ऒ Media ② ② - ③ ☑ □ ǚ vmxdemo/FilePAMWebService/GetFile.aspx?H5MID=O4kiPprRT1bCSIEaagtb1A%3D%3D&op=▼ ● Go Archive Manager For Files The file was retrieved successfully to its original location!	
Eile Edit View	Favorites Iools Help	

NOTE: The original location of the file can be different from the location of the HTML shortcut.

#### b) Open file

When double-clicking on the HTML-shortcut the current Web-browser is being opened. In the File download window click Open. The Web-browser recognizes the MIME-type of the file and opens it in its native application usually embedded in the Web-browser.

🖉 GetFile - Microsoft Internet Explorer	- 🗆 ×
Eile Edit Yiew Favorites Iools Help	
🔇 Back 🔻 🕤 👻 😰 🚷 🔎 Search 👷 Favorites 🛯 Media 🚱 😥 🍡 🚍 🖵 🚉	
Address 🕘 http://vmxdemo/FilePAMWebService/GetFile.aspx?H5MID=O4kiPprRT1bCSIEaagtb1A%3D%3D&op=🗾 🎅 Go	Links »
	<b>A</b>
Archive Manager For Files	
You are accessing an archived file.	
If the download does not start, <u>click here</u> to open the file.	
If you want to retrieve the file, click here File Download	
Some files can harm your computer. If the file information below looks suspicious, or you do not fully trust the source, do not open or save this file. File name: Test.bxt	
File type: Text Document From: vmxdemo	
Would you like to open the file or save it to your computer?	
Done     Trusted sites	<b>-</b>

#### c) Retrieve and open file

After double-clicking the HTML shortcut the GetFile window opens. The dialog informs you that the file was retrieved to its original location and then the desired file will be opened. (Or click the link to open the file. In our example click "C:\Archive folder\Test\Test.txt").

🎒 GetFile - M	licrosoft Internet Explorer	
<u>Eile E</u> dit <u>y</u>	<u>vi</u> ew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp	
😋 Back 👻 🗧	🕽 👻 😰 🐔 🔎 Search 👷 Favorites 😵 Media 🤣 😥 🚽 🚉	
Address 🥘 h	ttp://vmxdemo/FilePAMWebService/GetFile.aspx?H5MID=O4kiPprRT1bC5IEaagtb1A%3D%3D&op=🗾 🔁 🤇	50 Links »
		*
	Archive Manager For Files	
	The file was retrieved successfully to its original location!	
	The location of the file is: C:\Archive folder\Test\Test.txt	
	C. Alchive folder (rest.f.k)	

**NOTE:** The original location of the file can be different from the location of the HTML shortcut. **NOTE:** After retrieving the HTML shortcut is deleted.

### **Notification tab**

The e-mail notification feature helps you to be always informed about your scheduled jobs and receive emails with up-to-date data regarding job running. For this purpose you need to:

- 1. configure the notification settings on the Notification tab
- 2. enable notification for jobs about which you wish to be notified. This is done on the Scheduler / Jobs tab in the Job properties section. (See "How to define a job".)

The notification email contains the basic Job(s) properties and a note if any errors occurred during the job running. The report is sent as an attachment.

NOTE: The e-mail notification cannot be activated for the DirectArchive job.

Archive Manager for Files		_ = X
Home WIN2012R2		
*		E-mail notification
Archive	Enable e-mail notification	
<b>A</b>	Send e-mails about job status	Immediately
Scheduler	Send notification e-mail to address	
	Send weekly logs on	Friday
Restrictions	Send daily/weekly logs at	6 - : 30 -
Com	press daily/weekly logs larger than 100 kB	
Settings	SMTP server	
	SMTP port	25 🔆
Statistics	Use SSL	
stausues	Sender e-mail address	
	SMTP account - username	
	SMTP account - password	
		Send test mail
		Apply Refresh
🐰 Gen	eral 🤤 Notification 🏾 🏟 File comp	oression 🏽 🎉 User management 🛛 😿 Storage

Check Enable e-mail notification check box to allow notification.

Use the **Send e-mails about job status** switcher to choose between Daily, Weekly or Immediate notifications. Should you choose the Immediately option, the notifications will be send just after the job stops running.

In the **Send weekly logs on** drop down specify the day of the week for weekly notifications and in the **Send daily/weekly logs at** fields set the time for daily/ weekly notifications. The notification email will be send at the specified time.

Check **Compress daily/weekly logs larger than 100kB**, too. Archive Manager for Files will try to pack the huge summaries with ZIP in order to reduce the size of the sent email. To do so, you will need Microsoft Visual J# Version 2.0 Redistributable Package installed on the server. If you experience any problems using this feature, e.g. the mail is not sent, please try installing the above mentioned package or simply uncheck the check box.

In the SMTP server and SMTP port that is used by you organization for outgoing emails.

Select the check box Use SSL if your email server is uses SSL.

Enter the **Sender e-mail address**, **SMTP account - username** and **SMTP account - password** in the respective text boxes.

To confirm, click **Apply**.

Finally click **Send test mail** to test the connection and the data you have entered. The addressee defined should receive a test mail in a few seconds depending on the SMTP server.

### File compression tab

On this tab the administrator may specify files, with regard to their size, which will be compressed during archiving process. It is also possible to exclude certain file types from compression.

How to set compression criteria with regard to file size

- 1. Click on the Settings tab.
- 2. Click on the File compression tab.
- 3. Select the **Compress files by default** check box. (This is crucial otherwise no compressing will take place.)
- 4. Select the Compress files by size check box.
- 5. Enter values in the **Compress files if their size is between** *n* **bytes and** *n* **kilobytes** boxes.

Enterprise Manager		 ×
Home 40ADDC1	BRacl0040	
Archive Archive Scheduler Restrictions Settings Statistics	File compression settings         Compress files by size         Compress files if their size is between         and         Build list >>         list         page         page </td <td></td>	
	🗴 General 🦪 Notification 🛛 🕸 File compression 🛛 🎉 User management 🛛 😿 Storage	

**IMPORTANT:** Providing that the Compress files by default check box is unselected, no compressing will take place.

How to exclude certain file types from compressing

- 1. Click on the Settings tab.
- 2. Click on the File compression tab.
- 3. Click on the **Build list** button.

Enterprise Manager		×
Home 40ADDC1	BRadl0040	
Archive	File compression settings         Compress files by size	_
Scheduler	Compress files if their size is between 0 📑 bytes and 0 📑 kilobytes	
0	Do not compress file types	
Restrictions Settings Statistics	Image: market system     Remove       ari     Build list >>       gri     Build list >>       gri     Build list >>       ipeg     ipeg       ipeg     ipeg       ipag     Ina       mov     mp3       mpeg     mpeg       mpg     frame       wma     wmv	
	Compress files by default Apply Refresh	
	🐰 General 🦪 Notification 🛛 ٷ File compression 🏿 🎉 User management 🛛 👩 Storage	

4. After clicking on the **Build list** button, a list of all file extensions gets displayed in the right list box. Select the desired ones and then click on the **Add** button. After clicking on **Add**, the respective file extensions are moved in the **Do not compress file types** list box.

**NOTE:** The administrator may also double-click the three dots and then enter the desired file extensions (without a dot!).

Enterprise Manager					- =
Home 40ADDC1	BRacl0040				
Archive Scheduler		es if their size is betwee and		bytes kilobytes	
Restrictions Settings Statistics	Do not compress f ace arj avi gr jpe jpe jpg lha mov mp3 mpe png png prar wmw wmv General	Remove << Add Compress vy default	Extensions AddIn ani ani ape application assx assx assx assx bassx b5t b5t b6t b6t b6t b1 b1 b2 b5t b5t b5t b5t b5t b5t b5t b5t	File types         Visual Studio Add-in definition file         Animated Cursor         APE File         Application Manifest         ASP.NET Server Application         ASP.NET Control         ASP.NET Control         ASP.NET Server Page         BST File         BGT File         Windows Batch File         Performance Monitor File         Bitmao Image	Refresh

#### 5. Click Apply to confirm.

**NOTE:** Should you wish to include for compressing some already excluded file types, simply select the respective file extensions in the **Do not compress file types** list box and then click on the **Remove** button.

### User management tab

On this tab the administrator may specify users' permissions for Archive Manager for Files features. This means that individual users can be given permissions to archive/retrieve files, to retrieve versions, to mark versions for deletion, to change jobs etc.

All such rights should be specified individually for each user. New user accounts can be added onto this tab (in order to manage users' permissions) simply by using the Add button.

### Steps to enable rights

- 1. Click the Settings tab.
- 2. Click the User management tab.
- 3. Select the desired user account in the left pane.

Home 40ADDC1	BRacl0040				
Archive	Manage Archive Manager for Files us	er's permissions			
6	Name:	Permissions:	Allow	Deny	
<u> </u>	\$)DEMO!/user1	All			
Scheduler	addemo:/user1	Archive and Restore			
	40DEMO1/Administrator	Archive / Restore			
		Archive View	$\checkmark$		
		Search & Export	¥		
Restrictions		Restore a version			
٠.		Mark / unmark for deletion			
4		Manage jobs			
Settings		Archive, Archive Forecast			
1		Delete			
<u> </u>		Direct Archive			
Statistics		Shortcut Creator	$\checkmark$		
010100		Shortcut Converter	¥		
		Synchronization			
		Change filters			
		Change restrictions			
		Restricted processes			
		Backup processes	¥		
		Folders			Ţ
		Evtensions			
	Add Remove	Apply	Undo	Refrest	n i
	🧏 General 🏾 🤤 Notification 🛭 🍿 File	compression 🛛 🍂 User management 🛛 💦 Stora	ae .		

4. In the left pane select the user account whose permissions you want to manage. Then in the right pane set the permissions for the Archive Manager features for the selected user by selecting either the *Allow* or *Deny* check boxes for the corresponding feature. For example, to enable a user to mark archived files in the HSM store for deletion, select the check box under the *Allow* column against the **Mark for deletion/Remove deletion mark from a version** feature.

- **NOTE:** To allow or deny all settings at once use the Allow All and Deny All check boxes.
- 5. To confirm, click **Apply**. If you click **Undo** you will cancel all changes that have been made since you last clicked **Apply**.

## Storage tab

Archive Manager for Files provides a powerful backup solution aimed at saving disk space by saving files on mass storage devices. This device can be a Network Appliance or a VNX file server. To backup your files on them you need to include these devices on the Storage tab. Further, on this tab you can also define Generic File Server (remote computer) from which you can archive files without a need to install Archive Manager for Files on it.

# **NetApp Cluster**

NetApp devices can be used when they are added to the **Storage** tab. After a standard installation, this tab is visible to the administrator. To grant one or more users the ability to use the NetApp device(s) you must grant the user the rights to the Storage tab.

Metalogix Archive Manager supports the NetApp Cluster Mode environment. A NetApp cluster consists of one or more nodes grouped together to form a scalable cluster. Creating a cluster enables the nodes to pool their resources and distribute work across the cluster, while presenting administrators with a single entity to manage. Clustering also enables continuous service to end users if individual nodes go offline. Depending on the controller model, node storage consists of flash disks, capacity drives, or both. Nodes communicate with each other over a private, dedicated cluster interconnect.

To use Metalogix Archive Manager with a NetApp cluster mode environment it is necessary to create, configure and enable **FPolicy**. NetApp<sup>®</sup> FPolicy<sup>®</sup> is a file access notification framework that allows an administrator to monitor file access over CIFS protocol. When configured for Metalogix Archive Manager, **FPolicy** monitors events in the NetApp environment and sends notifications to the Metalogix Archive Manager (**MAM FSA FPolicy Server**) every time a user opens a stub file. Metalogix Archive Manager listens to these events and restores a file every time an 'open' request is received.

There are several steps you must perform to create an **FPolicy** configuration:

- 1. Plan your configuration.
- 2. Create an FPolicy external engine
- 3. Create an FPolicy event
- 4. Create an **FPolicy** policy.
- 5. Create an **FPolicy** scope and attach it to the **FPolicy** policy.
- 6. Enable the **FPolicy** policy.

### **Prerequisites**

- 1. Configured and running NetApp (Cluster mode) environment with CIFS servers.
- 2. Installed Metalogix Archive Manager.

### **NetApp Fpolicy configuration steps**

- 1. Log into NetApp Admin node console.
- 2. Create an **FPolicy** external engine.

The cluster uses the external engine to hold configuration information that it needs in order to send notification information to the **FPolicy** servers. It specifies the primary servers and secondary servers to which the cluster will send notifications. It also specifies **FPolicy** server related configuration information.

Metalogix Archive Manager requires FPolicy external engine sending notifications to **MAM FSA FPolicy Server**. This service is part of Metalogix Archive Manager for Files installation. Default port used by **MAM FSA FPolicy Server** is 7790.

Example:

```
vserver fpolicy policy external-engine create -vserver svm1 -engine-
name policy_engine -primary-servers 10.16.1.1 -port 7790 -extern-engine-
type synchronous -ssl-option no-auth
```

### NOTE:

**vserver svm1: svm1** - is the name of the Storage Virtual Machine with the CIFS share archived by Metalogix Archive Manager.

**primary-servers: 10.16.1.1 -** 10.16.1.1 is the IP address of the server with Metalogix Archive Manager FSA FPolicy Server installed.

**port 7790 -** 7790 is the port under which Metalogix Archive Manager FSA FPolicy Server listens.

To verify the **FPolicy** external engine has been created you can use <code>vserver fpolicy</code> policy external-engine show command.

Vserver	Engine	Primary Servers	Secondary Servers	Port	External Engine Type
 svm1	policy_ engine	10.16.1.1		7790	synchronous

3. Create an **FPolicy** event.

An event describes what to monitor. An event can contain protocol, file operations, filters, and volume operation event types. In the **FPolicy** configuration, an event is attached to an **FPolicy** policy. You can attach the same event to one or more policies.

Metalogix Archive Manager requires monitoring of **open file** operations over offline files.

43

Example:

```
vserver fpolicy policy event create -vserver svm1 -event-name cifs_event
-protocol cifs -file-operations open -filters offline-bit -volume-
operation true
```

# **NOTE: vserver svm1: svm1** is the name of the **Storage Virtual Machine (Data VServer)** with the CIFS share archived by Metalogix Archive Manager

To verify the FPolicy event has been created you can use <code>vserver fpolicy policy event show command.</code>

	Event		File		Is Volume
Vserver	Name	Protocols	Operations	Filters	Operation
svm1	cifs_event	cifs	open	offline-bit	true

4. Create an **FPolicy** policy.

**Fpolicy** policy associates an external engine from step 2 and one or more events from step 3 to the policy.

You must create an FPolicy event name before creating an FPolicy policy. If you are using an external FPolicy server, you must also create an FPolicy engine before creating a policy.

Example:

```
vserver fpolicy policy create -vserver svm1 -policy-name mam_policy -
events cifs_event -engine policy_engine -is-mandatory false -allow-
privileged-access yes -privileged-user-name demodomain\mam -is-
passthrough-read-enabled false
```

### NOTE:

**vserver svm1: svm1** is the name of the Storage Virtual Machine (Data VServer) with the CIFS share archived by Metalogix Archive Manager.

events cifs\_event: cifs\_event is the name of the **Fpolicy** event that was created in the Step 3.

engine policy\_engine: policy\_engine is the name of the **Fpolicy** engine that was created in the Step 2.

**privileged-user-name: demoadmin\mam** is the name of the superuser under which Metalogix Archive Manager's services run.

To verify the **FPolicy** policy has been created you can use vserver fpolicy policy show -instance command.

Vserver:	svml
	<pre>mam_policy</pre>
Events to Monitor:	
FPolicy Engine:	· · ·
Is Mandatory Screening Required:	
Allow Privileged Access:	
User Name for Privileged Access:	demo1\mam
Is Passthrough Read Enabled:	false

5. Create an **FPolicy** scope for an **FPolicy** policy.

A scope defines the boundaries on which the FPolicy policy will apply. The Vserver is the basic scope boundary. When you create a scope for an FPolicy policy, you must define the FPolicy policy to which it will apply and you must designate to which Vserver you want to apply the scope. There are a number of parameters that further restrict the scope within the specified Vserver. You can restrict the scope by specifying what to include in the scope. Or you can restrict the scope by specifying what to exclude from the scope.

#### Example:

```
vserver fpolicy policy scope create -vserver svm1 -policy-name
mam policy -volumes-to-include * -export-policies-to-include * -file-
extensions-to-include *
```

#### i. NOTE:

vserver svm1: svm1 is the name of the Storage Virtual Machine (Data VServer) with the CIFS share archived by Metalogix Archive Manager.

**policy-name mam\_policy: mam\_policy** is the name of the FPolicy policy that was created in the Step 4.

To verify the **FPolicy** scope has been created you can use the vserver fpolicy scope show -instance command.

		Vserver:	svm1
		Policy:	mam_policy
Shares	to	Include:	
Shares	to	Exclude:	-
Volumes	to	Include:	*
Volumes	to	Exclude:	
Export Policies	to	Include:	
Export Policies	to	Exclude:	
File Extensions	to	Include:	*
File Extensions	to	Exclude:	_

6. Enable **FPolicy** policy for the specified **Vserver** and set its sequence (priority).

The sequence is used when multiple policies have subscribed to the same file access event. To modify the sequence number of a policy, the administrator must disable the policy (if it is enabled) and then use this command to enable it with the new sequence number. Policies that use the native engine configuration have a higher priority than policies for any other engine, regardless of the sequence number assigned to them.

Example:

```
vserver fpolicy enable -vserver svm1 -policy-name mam policy -sequence-
number 1
```

#### i NOTE:

vserver svm1: svm1 is the name of the Storage Virtual Machine (Data VServer) with the CIFS share archived by Metalogix Archive Manager.

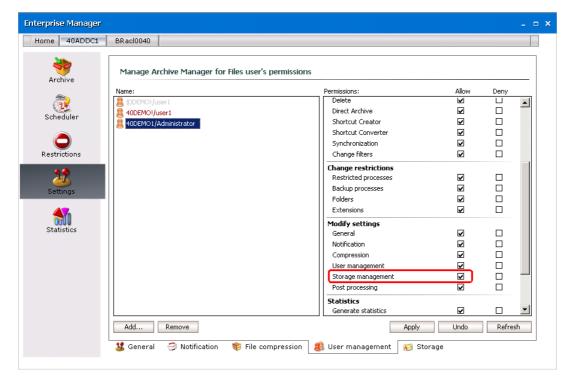
policy-name mam policy: mam policy is the name of the FPolicy policy that was created in the Step 4.

To verify the FPolicy has been enabled you can use the <code>vserver fpolicy show-enabled</code> command.

Vserver	Policy Name	Priority
svm1	mam_policy	1

### Steps to include a NetApp cluster

- 1. Click on the **Settings** tab.
- 2. Click on the User Management tab at the bottom of the screen.
- 3. From the left pane select the user name for which you want to enable the **Storage** tab.
- 4. Select the **Storage management** check box.



5. Click the **Storage** tab from the bottom of the screen.

Enterprise Manager			×
Home 40ADDC1	BRad0040		
Archive	Set up your storage systems for using with Archive Manager for Files	_	
Scheduler	Machines: Settings:		
Restrictions			
Settings			
Statistics			
	Add  Remove Apply Refresh NetApp Filer NVX FileMover NX FileMover NX FileMover NX FileMover		
	🤴 Generic File Server		

6. Click Add and then click NetApp Filer.

ager for Files			_ = >
10MAM1			
Set up your storag	e systems for using with Archive Manager for	Files	
Machines:	Settings:		
(metApp>	⊿ General		
	Machine name		
	Show hidden shares	False	
	Туре	NetApp Filer	
	⊿ NetApp		
	Admin Vserver		
	Admin Vserver login name		
	Admin Vserver password		
	Data Vserver		
	Mode	Cluster Mode	
	Node Vserver		
	Policy		
	Protocol	CIFS	
	Machine name The name of the machine.		
Add 🗢 Remo			Apply Undo

Enter the parameters for the properties as described below:

Field	Description
Machine name	CIFS server name to be archived

Admin Vsever	IP adress of admin vserver	
Admin Vserver login name	User name to log into admin server	
Admin Vserver password	Password to log into admin server	
Data Vserver	Name of <b>Data Vserver</b> (Storage Virtual Machine) with CIFS server.	
Node Vserver	Name of <b>Node Vserver</b> in the NetApp cluster.	
Policy	Name of the <b>Fpolicy</b> policy that you configured previously. See step 4 in the <u>NetApp Fpolicy configuration steps</u> 43 for more details.	

- **NOTES:** NetApp cluster consists of three types of **Vservers**, which help in managing the cluster and its resources, and the data access to the clients and applications. A cluster contains the following types of **Vservers**:
  - Admin Vserver is created automatically by the cluster setup process.
  - Node Vserver is created when the node joins the cluster. The Admin Vserver represents the cluster, and Node Vservers represents the individual nodes of the cluster.
  - Data Vserver represents the data serving Vservers. Data Vservers are also referred to as Cluster Vservers because they are used to read and write data to and from the cluster. Unless otherwise specified the term Vserver refers to cluster (data-serving) Vserver, which applies to both Vserver with FlexVol volumes and Vserver with Infinite Volume. After the cluster setup, a cluster administrator must create Data (Cluster) Vservers and add volumes to these Vservers to facilitate data access from the cluster. A cluster must have at least one Data (Cluster) Vserver to serve data to its clients.

The user account that runs the Metalogix Archive Manager services must be part of the **BUILT-IN\Administrators** group on the Storage Virtual Machine with the CIFS share that is to be archived.

A sample NetApp configuration settings is shown below:

Set	tings:					
¥	/ General					
	Machine name	ONTAP-CIFS				
	Show hidden shares	False				
	Туре	NetApp Filer				
~	NetApp					
	Admin Vserver	10.16.91.191				
	Admin Vserver login name	admin				
	Admin Vserver password	•••••				
	Data Vserver	SVM1				
	Mode	Cluster Mode				
	Node Vserver	ontapsim02-c1-01				
	Policy	mam_policy				
	Protocol	CIFS				

### 7. Click Apply.

After including a NetApp device, you may proceed with file archiving (see Archive tab 77) or Scheduler tab 58 to learn how to archive either manually or by applying scheduled jobs).

### **Celerra & VNX FileMovers**

Configuring Celerra & VNX FileMovers for use with Archive Manager for Files

The archiving of files on the Celerra & VNX FileMovers is achieved by putting them offline using HTTP commands sent to the FileMover API. Be default, only the Control Station can access the Celerra & VNX FileMovers API. Therefore the server\_http command must be used to allow other IP addresses to access it. It is necessary to enable HTTP commands sending from the Archive Manager server to the Celerra & VNX FileMovers using the following server\_http command:

```
server_http <data mover> -append dhsm -hosts <Archive Manager_server_IP>
Respond should look as follows...
<data mover>:
DHSM FACILITY CONFIGURATION
...
ACCESS CONTROL
Allowed IPs :<Archive Manager_server_IP>
...
```

[This configures CELERRA & VNX FILEMOVERS API security and then restarts the API service so that the changes take effect.]

Further you need to specify the authentication and a user. There are three types of authentication (none, basic, digest), but supported types for Archive Manager are these:

- none
- digest

In case you choose a "digest" type of authentication, you have to assign a user for DHSM commands. The user must exist or it should be created and assigned to the DHSM feature.

Specifying authentication: server\_http <data mover> -modify dhsm -authentication <authentication type> Creating a user: /nas/sbin/server\_user <data mover> -add -md5 -passwd <User name>

Assigning the user to the DHSM feature: server\_http <data mover> -modify dhsm -users <User name>

Respond should look as follows... Authentication : digest ,Realm : DHSM\_Authorization Allowed user : user1 (or valid)

[<User\_name> is the name of the account (A Celerra or VNX account) that Archive Manager for Files needs to use for authentication. This user is a Data Mover user, not a domain user. A prompt for a "User ID" and "Group ID" may also occur. A suitable number is 1000 for both, unless this is in use elsewhere. The number must be unique and does not need to have "root" privileges. If prompted for a "Home Directory" just press Enter to continue and leave the entry blank.]

DHSM command must be allowed on the selected file system. This is done in the following way:

#### fs\_dhsm -modify <file\_system> -state enabled

Respond should look as follows... <file\_system>: state = enabled

[This command enables DHSM for the file system. If the DHSM in not enabled, the next command will not establish he connection between Archive Manager and the Celerra & VNX FileMovers and the Celerra & VNX FileMovers will not be accepted in the Archive Manager for Files.]

As mentioned above the archiving of files on Celerra & VNX FileMovers is based on putting them offline. Then an URL pointing to the file in the archive is specified for each file. When VNX or Celerra is used with Archive Manager for Files this URL is the address of a .NET ASPX web page. The page ensures retrieving of the original file from the archive. That's why a non-CGI HTTP connection must be configured to the web page. It could be done in Celerra & VNX FileMovers administration console as follows:

fs\_dhsm -connection <file\_system> -create -type http -secondary http://<Archive Manager\_server>/HsmDownload -read\_policy\_override full -cgi n

```
Respond should look as follows...
<file_system>:
...
cid = 0
type = HTTP
secondary = http://<Archive Manager_server>/HsmDownload
read policy override = full
options = cgi=n
```

[This command creates a Celerra & VNX FileMovers connection on the file system. This uses a Web server "<Archive Manager\_server>" and specifies that files offlined via this connection could be retrieved from the virtual directory /HsmDownload in the hierarchical name space published by the web server. This command only has to be done once; it remains persistent across Data Mover boots.]

If the web page is configured to require authentication, the above command line must be enhanced by -user and -password parameters, e.g.:

fs dhsm -connection <file system> -create -type http -secondary http://<Archive Manager server>/HsmDownload -read policy override full -cgi n -user <user name>

-password <password>

```
As a last step of the configuration, it is necessary to activate DHSM feature:
```

server\_http <data mover> -service DHSM -start Respond should look as follows... DHSM FACILITY CONFIGURATION Service Name : EMC File Mover service Active : True

After completing the above steps, the Celerra & VNX FileMovers can be added to Archive Manager for Files using the Archive Manager for Files (see the next section "How to include a VNX or Celerra file server"). The meaning of the properties of the FileMover (see the figure below) is the following:

Machine name	The network name of the Celerra or VNX FileMover machine.
Show hidden shares	It makes hidden shares accessible and archivable for Archive Manager. By default is this option off ( <i>False</i> ).
Offline URL format	The format of offline URLs of archived files. The URL format must contain string %ID%, which will be replaced by ID of the archived file. The URL must point to connection set up in above steps.
Protocol	The type of the Celerra or VNX FileMover file system.

#### Authentication

If the Celerra or VNX FileMover requires authenticated requests (depends on your Celerra or VNX configuration), specify the name and password of the user.

Enterprise Manager							>
Home 40ADDC1	BRacl0040						
Archive	Set up your st	orage syster	ns for using with Archiv Settings:	e Manager for File	s		
2			🗆 General				
25	- 51002		Machine name				
Scheduler			Show hidden shares		False		
			Туре		VNX FileMover		
			E VNX				
Restrictions			Authentication		(none)		
			Offline URL format			HsmDownload/GetFil	e.aspx?i
Settings			Protocol		CIFS		
Statistics							
			Machine name The name of the machine.				
	Add 🗢	Remove				Apply	Undo
	🐰 General 🥳	Notification	🏟 File compression	🎉 User manage	ment 🛛 👸 Stora	age	

### How to include a VNX or Celerra file server

To include a VNX or Celerra file server, you need to include it on the Storage tab. Before including it you have to give rights to the desired user for the Storage tab. However, after a standard installation, this tab is visible for the administrator without a need to specify the rights.

To include VNX or Celerra file server, follow these steps:

- 1. Click on the Settings tab.
- 2. Click on the User management tab.
- 3. In the left pane select the user for which you want to enable **Storage** tab. Make sure to select the **Storage management** check box.

Home 40ADDC1	BRacl0040				
Archive	Manage Archive Manager for F	iles user's permissions			
	Name:	Permissions:	Allow	Deny	
(24)	40DEMO!/user1	All			
Scheduler	40DEMO1/Administrator	Archive and Restore			
		Archive / Restore	$\checkmark$		
		Archive View	$\checkmark$		
Restrictions		Search & Export	$\checkmark$		
Restrictions		Restore a version	$\checkmark$		
۰ ک		Mark / unmark for deletion	$\checkmark$		
<u> </u>		Manage jobs			
Settings		Archive, Archive Forecast	$\checkmark$		
47		Delete	$\checkmark$		
		Direct Archive	V		
Statistics		Shortcut Creator	V		
		Shortcut Converter			
		Synchronization			
		Change filters	¥		
		Change restrictions	_	_	
		Restricted processes			
		Backup processes Folders	V		
		Folders			•
	Add Remove	Apply	Undo	Refree	sh

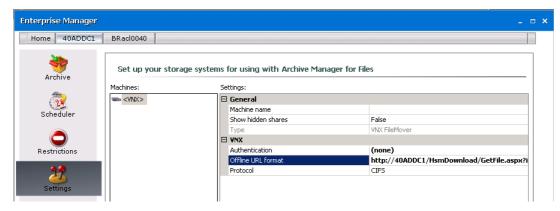
- 4. After *allowing* Storage management on the User management tab you may include a Celerra file-server on the Storage tab. So, click on the Storage tab.
- 5. Click on the **Add** button and then click **VNX FileMover**.

Enterprise Manager		 • ×
Home 40ADDC1	BRacl0040	
Archive	Set up your storage systems for using with Archive Manager for Files	
Scheduler	Machines: Settings:	
Restrictions		
Settings		
Statistics		
	Add Remove Apply Undo	

6. If the Celerra or VNX FileMover requires authenticated requests (depends on your VNX or Celerra configuration), specify the name and password of the user. Click on the Authentication box. Then click on the down arrow. In the respective text boxes enter the name of the appropriate use (User name) and password (Password and Confirm password text boxes).

erprise Manager				-
Home 40ADDC1	BRacl0040			
<b>e</b> Archive	Set up your stora	ge systems for using with Archive M	anager for Files	
	Machines:	Settings:		
<u>.</u>	<vnx></vnx>	🗆 General		
Scheduler		Machine name		
Schedulor		Show hidden shares	False	
		Туре	VNX FileMover	
$\bigcirc$				
Restrictions		Authentication	(none)	•
		Offline URL format	User name:	
37		Protocol		
			Password:	
Settings				

7. Click on the Offline URL format to specify the format of offline URLs of archived files. The URL format must contain string %ID% which will be replaced by the ID of the archived file. The URL must point to the connection set up at VNX or Celerra configuration (see "Configuring Celerra & VNX FileMovers for use with Archive Manager for Files").



8. Click on the **Protocol** box. Then click on the down arrow to choose the desired protocol, i.e. the type of the Celerra or VNX FileMover file system.

Home 40ADDC1	BRacl0040		
Archive	Set up your stora	ge systems for using with Archive Mana Settings:	ager for Files
2	- <vnx></vnx>	General	
C. me		Machine name	
Scheduler		Show hidden shares	False
		Туре	VNX FileMover
		I VNX	
Restrictions		Authentication	(none)
		Offline URL format	http://40ADDC1/HsmDownload/GetFile.aspx?i
<b>3</b>		Protocol	CIFS 💽
<u> </u>			CIFS
Settings			NFS VS

9. Click on the **Machine name** box and enter the network name of the Celerra or VNX FileMover machine.

Finally click Apply.

54

ome 40ADDC1	BRacl0040		
Archive		age systems for using with Archive Mana	ager for Files
~	Machines:	Settings:	
<u>a</u>	<vnx></vnx>	🗆 General	
Scheduler		Machine name	
Scheduler		Show hidden shares	False
		Туре	VNX FileMover
		I VNX	
Restrictions		Authentication	(none)
		Offline URL format	http://40ADDC1/HsmDownload/GetFile.aspx?
		Protocol	CIFS

## **Generic File Server**

Archive Manager for Files is able to archive or backup files also from the computer where it is not installed. All you need to do is to include that computer as a Generic File Server on the Storage tab. Firstly you need to give rights to the desired user for the Storage tab. However, after a standard installation, this tab is visible for the administrator without a need to specify the rights.

To include Generic File Server, follow these steps:

- 1. Click on the Settings tab.
- 2. Click on the User management tab.
- 3. In the left pane select the user for which you want to enable **Storage** tab. Make sure to select the **Storage management** check box

Home 40ADDC1	BRacl0040				
Archive	Manage Archive Manager 1	for Files user's permissions			
~	Name:	Permissions:	Allow	Deny	
(m)	addemo!/user1	All			
Scheduler	40DEMO1/Administrator	Archive and Restore			
		Archive / Restore	¥		
		Archive View	¥		
		Search & Export	$\checkmark$		
Restrictions		Restore a version	$\checkmark$		
		Mark / unmark for deletion	$\checkmark$		
<u> </u>		Manage jobs			
Settings		Archive, Archive Forecast	$\checkmark$		
4.5		Delete	¥		
		Direct Archive	$\checkmark$		
Statistics		Shortcut Creator	¥		
		Shortcut Converter	$\checkmark$		
		Synchronization	¥		
		Change filters	¥		
		Change restrictions			
		Restricted processes	$\checkmark$		
		Backup processes	$\checkmark$		
		Folders	¥		•
	Add Remove	Apply	Undo	Refres	;h
	🕺 General 🏾 🤤 Notification	n 🏟 File compression 🗥 🕵 User manageme	ent 🛛 👸 Sto		

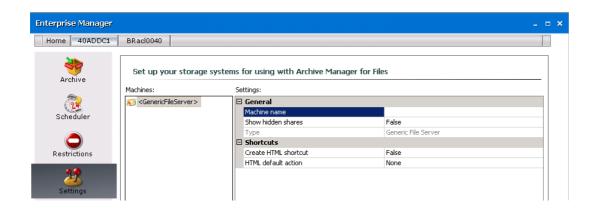
4. After *allowing* Storage management on the User management tab you may include a Generic File Server on the Storage tab. So, click on the Storage tab.

Enterprise Manager		_ <b>_</b> ×
Home 40ADDC1	BRadl0040	
Archive	Set up your storage systems for using with Archive Manager for File Machines: Settings:	15
Scheduler		
Restrictions		
Settings		
Statistics		
	Add 🗢 Remove	Apply Undo
	🐰 General 🦪 Notification 🛭 🍿 File compression 🏽 🌲 User manage	ment 🛛 👸 Storage

5. Click on the **Add** button and select the **Generic File Server** from the down-drop menu.

Enterprise Manager		= ×
Home 40ADDC1	BRacl0040	
Archive	Set up your storage systems for using with Archive Manager for Files	
Scheduler	Machines: Settings:	
Restrictions		
Settings		
Statistics		
	Add Remove Apply Undo	
	n 🕸 File compression 🎉 User management 🐹 Storage	_

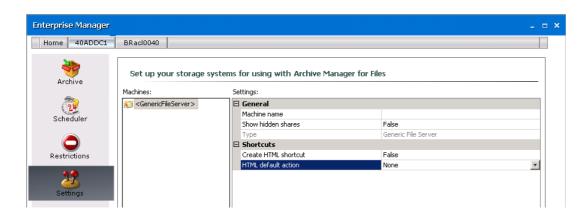
6. Click on the Machine name box and type the computer name in the text box. Click Apply.



- 7. The **Show hidden shares** option can be set to *True* or *False*. It makes hidden shares accessible and archivable for Archive Manager. By default is this option off (*False*).
- Click on the Create HTML shortcut box. Then click on the down arrow. Here you can activate the HTML shortcut creation (select True). It that case HTML shortcut will be created on that remote computer whenever its file is archived. If False is selected, the archived file will be just copied to the HSM Store. Click Apply.

erprise Manage				
ome 40ADDC	1 BRacl0040			
<b>Archive</b>	Set up your storage s	ystems for using with Archive Manag Settings:	ger for Files	
<b>A</b>	GenericFileServer>			
24		Machine name		
Scheduler		Show hidden shares	False	
		Туре	Generic File Server	
		Shortcuts		
Restrictions		Create HTML shortcut	False	
3.2		HTML default action	True	
			False	i .
Settings				

9. To set the default action when opening the HTML shortcut, click the **HTML default action** box. Click the down arrow to choose from **None**, **Open file** or **Retrieve and open** (see "Opening/Downloading the HTML shortcuts"). Click **Apply**.



### Scheduler tab

This tab is used for configuring purposes, in other words the administrator may schedule jobs that would automatically archive different folders/disks with predefined settings and retention. Jobs, of course, need to be created up-front, and only then they can be assigned to folders/disks. Should you wish to archive files for instance with regard to their extension, create filters and apply them to folders/disks. All those specifications can be defined on the Jobs and Filters tabs as described further.

### Jobs tab

As mentioned above, jobs need to be created up-front.

After clicking on the Jobs tab you will see it split in five parts (sections): Scheduler jobs, Job properties, Folders, Filters and Filter properties.

When running Archive Manager for Files for the first time, there are no jobs specified, that's why this tab is empty (as shown below). Later, when jobs have been defined, they would be displayed under Scheduler jobs.

58

Enterprise Manager			_ = ×
Home 40ADDC1	BRacl0040		
Archive	Scheduler jobs 🥠	Folders ở ⊛-⊛ C:	Filters 🛷
Scheduler Restrictions			
Settings	Delete Create Delete		Filter properties
Statistics			
		Folder overview	Apply Undo
	\delta Jobs <table-cell> 🐬 Filters , Reports</table-cell>	🎪 Overview	

Following sections deals with job creation. The process is as follows:

- 1. Job is defined and its properties are set.
- 2. Job is assigned to folders which should be processed.
- 3. Then a filter can be created and assigned to a folder.

# How to define a job

- 1. Click on the Scheduler tab.
- 2. Click on the **Jobs** tab.
- 3. Click on the Create button.

ome 40ADDC1	BRad0040		
Archive	Scheduler jobs 🥠 Name Type Status	Folders 🧳	7 Filters 🥠
Scheduler			
Restrictions			
Settings	Create Delete Job properties		Filter properties
Statistics			
		Folder overview	Apply Undo

4. In the **Create new job** window enter a name for your job in the **Job name** text box. Then select the type of the job in the **Job type** drop-down box. Afterwards click **OK**.

**NOTE:** There can be defined five types of jobs: *Archive, Delete, DirectArchive, ArchiveForecast, ShortcutCreator* and *Synchronization*.

، 🧭	ireate new job	×
	Specify the name and the type of the new	v job.
Job name:		
Job type:		
Archive		•
Archive	N	
Delete	15	
DirectArc	nive	
ArchiveFo	precast	
Synchroni	zation	

As mentioned above, several types of jobs can be created:

- Archive does archiving with specified settings
- Delete main features:
  - ✓ deletes documents marked for deletion in the HSM store (archive), if their retention period and keep alive time has expired (time is calculated from the document lifetime starting point)
  - ✓ deletes documents from the archive if their expiration time elapsed (time is calculated from the document lifetime starting point)
  - ✓ for both above mentioned cases, the job deletes also shortcuts from the file system when the corresponding document is deleted from the archive (optional feature; default it's ON)
  - ✓ deletes shortcuts after a defined time where Delete shortcut after feature was enabled (see the section "Retention categories") (time is calculated from the document lifetime starting point)

Delete job can run on folder basis, i.e. process just specified folders. It can run in different modes, too:

- Reporting no action is taken, just a report is generated. The report contains the list of files which are going to be deleted. The report can be checked and modified if necessary. It can be found under <installdir>\fsaPamLogs \delete \ delete.report
- Process report mode files from the previously generated (and modified) report are processed
- Process immediately mode processing files without any report (not recommended)
- DirectArchive immediate archiving whenever a document is modified
- ArchiveForecast does not perform any archiving; it is designed to estimate space that will be saved by Archive Manager for Files. Although no archiving is performed, you have to select a retention category when creating this job. Different retention categories result in different space saving.

Simply schedule this job and apply it to the desired folders. After the job has finished running, data regarding the potential space saving can be found in the report summary of this job (Scheduler / Reports tab).

- ShortcutCreator creates delayed shortcuts; some documents may have been archived with retention category where the Delay shortcut creation by or Create shortcut if the document was not used... option was selected; such items were copied to archive but the shortcuts are created after a defined time period
- Synchronization This job works for NTFS and FSA shortcuts and it has basically 3 main tasks:
- ✓ Update the database with correct file paths if a file shortcut was moved
- $\checkmark$  Mark for deletion the documents which have no reference in the file system optional, this function must be enabled in the document retention category (see the section "Creating a new retention category")
- ✓ Delete unreferenced shortcuts

This job can run in different modes:

- o Reporting mode no action is being taken just a report is generated. This is useful as administrators first have a report on what is going to be done. The report can be checked and modified if necessary. It can be found under <installdir> \fsaPamLogs \sync \ sync.report
- Process report mode files from the previously generated (and modified) report are processed
- Process immediately mode processing files without any report (not recommended)

NOTE: KEEP IN MIND THAT THE JOB PROCESSES ALL FILES TWICE, ONCE IT CRAWLS THE DATABASE, SECOND IT GOES THROUGH THE FILE SYSTEM. THE PERFORMANCE RATE IS AROUND 50-200 DOCS/SEC, DEPENDING ON SERVER CAPABILITY AND LOAD. IT CAN TAKE DAYS TO RUN IT ON MILLIONS OF ARCHIVED/NON-ARCHIVED FILES, SO, PLAN THE SCHEDULE CAREFULLY. YOU MAY EXPERIENCE HIGH DISK AND DATABASE LOAD.

Further we describe how to specify job properties and explain individual features. Please note that not all settings apply to every type of job.

5. In the **Job properties** section you need to specify details about particular job (e.g. retention category; you may "turn a job on" / "turn a job off", etc.). To "turn a job on", click on the **Enabled** field. Click on the down arrow to unfold the down-drop box and select **True**. Job will be turned on.

Number of threads field specify the number of threads in which the given job run. This feature can fasten up archiving and is recommended to be used. It is accessible for Archive, CreateVersion, and ArchiveForecast job. The default value for a new job is 4, the maximum value for one job is 16.

In the Shortcut type field select the type of shortcuts which will be created when the job archives files. Three shortcut types are available – FSA, HTML or DEFAULT shortcuts. If Default is

selected, settings of Settings tab / Shortcut creation section are applied. This setting is accessible only for Archive and DirectArchive job types. For more information please see the "Shortcut creation" section.

**NOTE:** Jobs created in older product versions in which this setting was not available will have this property set to 1 after upgrade.

Home 40ADDC1	BRacl0040		
Archive Scheduler Restrictions	Scheduler jobs 🤣 Name Type Status	Folders for job1 🤣	Filters 🛷
Settings Statistics	Create Delete Job properties General Number of thri 4 Shortcut type Default Enabled True Job type False Notification E-mail notifica; False Notification the Suprement		Filter properties
	Notification ty; Summary F Detention Fnabled Value specifying whether the job is enabled. Solution of the second sec	Folder overview	Apply Undo

6. In the **Retention category** field assign a retention category to the job. Retention categories define the document lifecycle. This setting is available for Archive, DirectArchive and ArchiveForecast jobs.

NOTE: Retention categories are created on Settings / General tab.

- 7. In the Notification section you can activate email notification for the given job. Click on the E-mail notification field and in the down-drop box select True. Archive Manager will be sending notifications about this job as configured on the Settings/ Notification tab. In the Notification type field choose Detailed type of notification or Summary for summarized notification.
- 8. The **Operation** section is available just for the *Synchronization* and *Delete* job to specify its settings.

Click on the **Operation** mode field. Then click on the down arrow and select the operation mode:

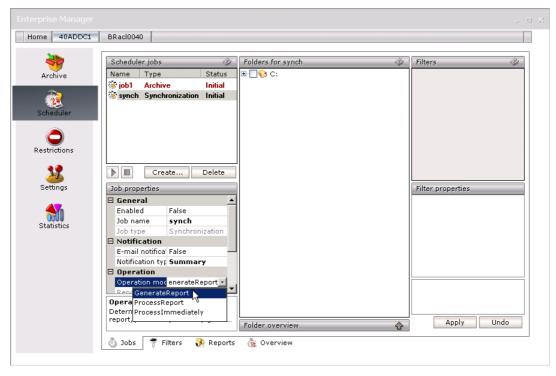
- Reporting mode no action is being taken just a report is generated. This is useful as administrators first have a report on what is going to be done. The report can be checked and modified if necessary.
- Process report mode files from the previously generated report are processed. Administrator is able first to check and modify the list of files going to be processed (i.e. deleted or synchronized)

• Process immediately mode – processing files without any report (not recommended)

The **Report file** field displays the path to the generated report (e.g.<installdir> \fsaPamLogs \sync \ sync.report).

Settings for Delete job:

If the **Delete shortcuts** field is set to "true", files which are going to be deleted from the archive will also have its shortcuts deleted from the file system.



9. To schedule archiving, click on the **Start at** field. Then click on the down arrow and select a day on the calendar; select the desired month by clicking on the side arrows; and specify the desired time in the text box. Then press **Enter**.

Enterprise Manager			
Home 40ADDC1	BRacl0040		
	Scheduler jobs 🤣	Folders for job1 🛷	Filters 🛷
Archive	Name Type Status		
	😵 job1 Archive Initial		
Scheduler	े synch Synchronization Initial		
Restrictions			
22	Create Delete		
Settings	Job properties		Filter properties
	Notification		
	E-mail notifical False		
Statistics	Notification typ Summary Retention		
	Retention cate 3 mo.		
	Scheduling		
	Start at :017 9:52 AM -		
	February, 2017		
	Sun Mon Tue Wed Thu Fri Sat 29 30 31 1 2 3 4		
	5 6 7 8 9 10 11		
	12 13 🚯 15 16 17 18		Apply Undo
	19 20 21 22 23 24 25	Folder overview 🟠	Apply Olido
	26 27 28 1 2 3 4 5 6 7 8 9 10 11 ts	👧 Overview	
	<b>O</b> Today: 2/14/2017	100	
	2:52:14 AM		

10. To specify the maximum time span during which the job will be running, click on the **Maximum run time** field and specify your requirements. (E.g. enter 3 and the job will be allowed to run for a maximum of 3 hours.). If you leave **Unspecified**, then there is no limitation as to time span.

Home 40ADDC1	BRacl0040		
_			
Archive Archive	Scheduler jobs 🛷 Name Type Status	Folders for job1 🛷 🕀 🗌 🍤 C:	Filters 🤣
Scheduler	☆ job1 Archive Initial ☆ synch Synchronization Initial		
Settings	Create Delete Job properties E-mail notifical False		Filter properties
Statistics	Notification ty; Summary Retention cate 3 mo. Scheduling Start at 2/14/2017 9:5 End at 2/14/2017 Run interval 1 day Maximum run (unspecified)		
	Maximum run time Defines the maximum time of running for the job (in hours).	Folder overview	Apply Undo

11. To specify how often the job should run, click on the **Run interval** field. Click on the down arrow to open the drop-down box and then specify the period in minutes, hours or days.

Home 40ADDC1	BRacl0040		
Archive Scheduler Restrictions	Scheduler jobs // Scheduler jo	Folders for job1 🥔	Filters
Settings Statistics	Create Delete Job properties E-mail notificai False Notification tyr Summary Retention Retention cate 3 mo. Scheduling Start at 2/14/2017 9:5 End at 2/14/2017 Run interval 1 day Run interval 1 day Run interval 1 day Run interval 1 day	Folder overview	Filter properties

12. To enter the last day when the job should run, click on the **End at** field. Afterwards click on the down arrow to open the calendar and select the desired month and day.

**NOTE:** Should you select the **Infinite** check box, job would be running infinitely. Then press **Enter**.

Enterprise Manager			_ = X
Home 40ADDC1	BRacl0040		
*	Scheduler jobs 🛛 🖗	Folders for job1 🛷	Filters 🖗
Archive	Name Type Status	€:	
Scheduler	iob1 Archive Initial synch Synchronization Initial		
Restrictions			
	Create Delete		
Settings	Job properties		Filter properties
Statistics	E-mail notifical False Notification typ Summary Retention Retention cate 3 mo.		
	Scheduling           Start at         2/14/2017 9:5           End at         2/14/2017 •           February, 2017 ▶		
	Sun Mon Tue Wed Thu         Fri         Sat           29         30         31         1         2         3         4           5         6         7         8         9         10         11           12         13         4         5         16         17         18           19         20         21         22         23         24         25           26         27         28         1         2         3         4	Folder overview	Apply Undo
	5 6 7 8 9 10 11 t	s 💩 Overview	
	C Today: 2/15/2017		
	🔲 Infinite		

Created jobs can now be assigned to folders to automate folder archiving. **NOTE:** To change the properties of the job, it has to be stopped first.

# How to assign a job to a folder

To automate folder archiving, assign jobs to them.

- 1. Click on the Scheduler tab.
- 2. Click on the **Jobs** tab.
- 3. Select a desired job in the list in the Scheduler jobs section.

Enterprise Manager		_ = ×
Home 40ADDC1	BRad0040	
Archive Scheduler	Scheduler jobs     Folders for job1       Name     Type     Stati       Image: Static strain str	Filters 🤣
Restrictions Settings	Create Delete	Filter properties

4. Select a desired folder (disk), either recursively or non-recursively, in the **Folders** section. Click **Apply**.

**NOTE:** By unfolding the **Folder overview** tab you may see what folders the currently selected job is assigned to.

Enterprise Manager
Home 40ADDC1 BRacl0040
Scheduler jobs   Sched

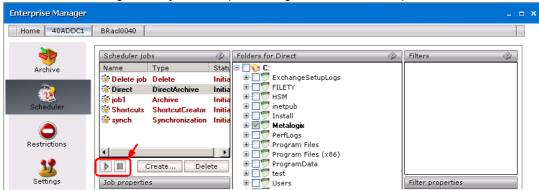
## How to start the job immediately

Job starts running automatically as it is set in Job properties (see the previous section). However, you can start the job manually any time:

- 1. On the Scheduler / Jobs tab select the relevant job in the Scheduler jobs section.
- 2. Click the Start button below the list view. The job starts running immediately.

**NOTE:** You can also stop the job by using the **Stop** button.

**IMPORTANT NOTE:** If the job was stopped, it remembers which file was the last processed file. When it is started again, the job starts processing files from this last processed file.



### **Filters tab**

By using filters you may specify which of the files will be archived and in what way. Before using any filters they need to be created on the Filters tab.

When you switch to this tab, you will see the window split in two parts. On the left, there is a list of all filters displayed (when Archive Manager for Files is running for the first time, the list is empty!). On the right you will see their properties.

ome 40ADDC1	BRacl0040			
2	Filters	Ŵ	Filter properties	
Archive	🕈 Filter		🗆 File properties	
			Exclude attributes	(no filter)
			Include file types	(all file types)
Scheduler			Maximum size	(unspecified)
			Minimum size	(unspecified)
			Older than	(unspecified)
			🗆 General	
Restrictions			Filter name	Filter
Restrictions			Wildcard filters	
			Exclude wildcard filter	(no files)
24			Excluding applied to	All
Settings			Include wildcard filter	(all files)
			Including applied to	All
Statistics				
			Filter name The name of the filter.	
	Create	Delete		Apply Undo

# How to create a filter

- 1. Click on the Scheduler tab.
- 2. Click on the **Filters** tab.
- 3. Click on the **Create** button to open the **Create new filter** window.

Enterprise Manager			
Home 40ADDC1	BRadl0040		
Archive	Filters	Ŷ	Filter properties
Scheduler			
Restrictions			
Settings			
Statistics			
	Create	Delete	Apply Undo
	🖞 Jobs  🚏 Filters 🚺 F	Reports	👵 Overview

4. In the **Create new filter** window enter the name in the **Filter name** text box. Then click **OK**.

Create new fil	ter
Filter name:	
0	K Cancel

5. After clicking **OK** the following window is displayed.

Enterprise Manager			- 🗆
Home 40ADDC1	BRacl0040		
*	Filters 🛷	Filter properties	
Archive	T DOC	🗆 File properties	
20	🖗 Filter	Exclude attributes	(no filter)
24	😴 Text	Include file types	(all file types)
Scheduler		Maximum size	(unspecified)
		Minimum size Older than	(unspecified)
		General	(unspecified)
		Filter name	Text
Restrictions		Wildcard filters	Text
		Exclude wildcard filter	txt
<u> </u>		Excluding applied to	All
Settings		Include wildcard filter	(all files)
		Including applied to	All
Statistics			
		Filter name The name of the filter.	
	Create Delete		Apply Undo
	💩 Jobs    Filters 🔂 Reports	🎄 Overview	

6. Click on the Exclude attributes field. Then click on the down arrow to unfold the dropdown box. Files with selected attributes will be excluded from archiving (Archive files, Read only files, Hidden files). If none of those options are selected, then all files will be archived.

Enterprise Manager					_ = )
Home 40ADDC1	BRacl0040				
*	Filters	Ŷ	Filter properties		
Archive	💎 Filter		File properties		
2			Exclude attributes	(no filter)	•
<u></u>			Include file types	Archive	
Scheduler			Maximum size	🗌 Read Only	
			Minimum size	Hidden	
			Older than		
Restrictions					
Settings					

7. Click on the **Include file types** field. Then click on the down arrow to unfold the dropdown box. Here you may specify the type of files to archive. Simply double-click the three dots and enter the desired extension (without a dot!). Then press **Enter**.

**NOTE:** If you leave this field empty, all file types will be archived.

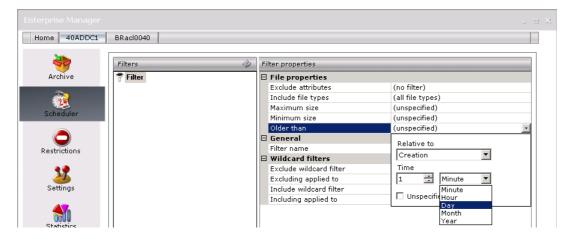
ome 40ADDC1					
39	Filters	Ŵ	Filter properties		
Archive	📍 Filter		🗆 File properties		
-			Exclude attributes	(no filter)	
2			Include file types	(all file types)	
			Maximum size		
Scheduler			Minimum size	txt	
			Older than		
			🖯 General		
Restrictions			Filter name		
			Wildcard filters		

8. Click on the **Maximum size** field. In the adjacent field enter the maximum size of files (in kilobytes) to be processed.

**NOTE:** Should you enter Unspecified, then there are no limitations regarding the size of files to be processed.

- 9. Similarly, click on the **Minimum size** field, and in the adjacent field enter the minimum size of files (in kilobytes) to be processed.
- 10. Click on the **Older than** field. Then click on the down arrow to unfold the dropdown box. You may filter files according to time of their creation, modification, and last access.

Should you enter Unspecified, then there are no limitations regarding time.



- 11. In the **Filter name** field you may change the name of the filter anytime.
- 12. In the **Wildcard filters** section you can define files or folders filtering based on the regular expression, i.e. you can define files/folders archiving based on their names.

Basically, you define expressions using wildcards and specify whether they will be applied to folder name or file name or both. It is possible to include or exclude folders/files matching the defined criteria. All steps are explained in detail further.

**NOTE:** It can happen that a file/folder matches criteria both for include wildcard filtering as well as exclude wildcard filtering. In that case it will NOT be archived. "Exclude" is stronger than "include".

Home 40ADDC1	BRacl0040				
<b>*</b>	Filters	Ŵ	Filter properties		
Archive	💎 Filter		🗆 File properties		
2			Exclude attributes	(no filter)	
192			Include file types	(all file types)	
Scheduler			Maximum size	(unspecified)	
			Minimum size	(unspecified)	
			Older than	Creation; 1 Day	
			🗆 General		
Restrictions			Filter name	Filter	
			Section 24		
<b>1</b>			Exclude wildcard filter	(no files)	Ψ.
<u> </u>			Excluding applied to	All	
Settings			Include wildcard filter	(all files)	
			Including applied to	All	
Statistics					
			Exclude wildcard filter		
			Enables filtering based on regu excluded from archiving.	lar expressions, matching files will be	
	Create	Delete		Apply Un	do

It is possible to define Exclude as well as Include wildcard filters. In the following lines we describe how to specify the Exclude wildcard filter. This filter defines which files/folders should be excluded from archiving (based on their names). The Include wildcard filters are defined similarly.

To define the criteria for Exclude wildcard filtering:

Click on the Exclude wildcard filter field. Then click on the downward arrow. In the pop-up dialog you will define and test the wildcards.

Write the desired expression in the Wildcard text box. Then click Add to add it to the Wildcards list. In case there are more expressions defined in the Wildcards list, the filter will be applied to the file/folder if its name matches at least one expression.

	Wildcards:	colou?r gr[ae]y PleniM priv* prog*
Wildcard		
testing	Wildcard:	P[a-i]M
	Sample path:	C:\Program Files (x86)\Metalogix\MAMSearch\Scripts\MSSQL\06_PAMFTS_Table
	Applied to:	All
	Result:	The wildcard matches the given sample path!
		d filters are based on regular expressions. If you would like to learn more about them, please sqular-expressions.info

NOTE: The rest of the dialog is only for the testing purposes. You can test how the defined expression will be applied and if it will match the files/folders which you wish. Simply:

- select the expression in the list
- In the Sample path text box enter the path for which you want to apply the filter
- In the Applied to combo box choose if you want to apply the expression to file name, folder name or both
- The Result shows you if the selected expression matches the specified path, i.e. if the filter with the given wildcard applies to that path

After you have defined the expression(s) in the Exclude wildcard filter, click the Excluding applied to text box. Click the down arrow and in the drop-down box select whether you want to apply the filter to filename, folder or both.

13. To save, click Apply.

**NOTE:** In the case you want to delete a filter, simply select the desired filter in the list in the left pane and then click on the Delete button. But be careful when removing any filter, because if such a filter was already assigned to a job, no filter will be considered!

After having created filters on this tab, you may assign them to folders.

### How to assign a filter to a folder

- 1. Create a filter on the Filters tab, if it is not created yet. (See the section "How to create a filter")
- 2. Click on the **Jobs** tab.

**NOTE:** To display recently created filters, click on the **Refresh** button located in the upper right corner in the Filters section. Use this button especially if several **Archive Manager for Files** applications are running simultaneously.

3. In the **Scheduler jobs** section select the job which is already archiving the desired folder(s) or which you want to use for archiving the desired folder(s).

**NOTE:** You can only assign a filter to a folder if the folder is processed by a job. (See the section "How to assign a job to a folder".)

Enterprise Manager			_ = ×
Home 40ADDC1	BRacl0040		
Archive Scheduler Restrictions	Scheduler jobs       Name     Type       Stat       Type       Stat       Direct       DirectArchive       Stortcuts       ShortcutS       Synchronization       Stort       Create       Delete	FILETY HSM FILETY	Filters
Settings Statistics	Job properties  General  Shortcut type Default Enabled Palse Job name Direct Job type DirectArchive  Retention Retention Retention Retention Walue specifying whether the job is enabled.  Jobs Filters Reports	Folder overview         C:\Metalogix         C:\test6\1         C:\test6\2	Filter properties         Maximum si (unspecified)         Minimum siz (unspecified)         Older than Creation; 1 D         General         Filter name         Filter name of the filter.         Apply         Undo

4. Click on the upward arrow on the **Folder overview** tab to unfold it. By unfolding the **Folder overview** tab you will see all folders/disks the respective job is assigned to.

	[		
2	Scheduler jobs 🧼 Folde	rs for Direct 🛷	Filters 🖓
Archive	Name Type Stat 🖃 🗌 🎙	) C:	P DOC
		🕎 ExchangeSetupLogs	🕈 Filter
2	🔅 Direct DirectArchive Stor 😐	T FILETY	Text
22	👘 job1 Archive Stop	💆 нѕм	ll °
Scheduler	Shortcuts ShortcutCreator Stop	💆 inetpub	
-	😵 synch Synchronization Stop	🔽 Install	
		Metalogix	
		PerfLogs	
Restrictions		Program Files	
		Program Files (x86)	
- <b>X</b>	Create Delete	🔽 ProgramData	
Settings	Job properties	test test6	Filter properties
ootango			
			Maximum si (unspecified)
<b>7</b> 10	Shortcut type Derault		Minimum si: (unspecified)
Statistics	Enabled False	r overview	Older than Creation; 1 D
	Job name Direct	•	🗆 General
		C:\Metalogix	Filter name Filter
		C:\test6\1	Filter name
		C:\test6\2	The name of the filter.
	Enabled		
	Value specifying whether the job is		
	enabled.		Apply Undo

5. In the **Folder overview** section select the folder for which you wish to apply filter(s).

Enterprise Manager
Home 40ADDC1 BRacl0040
Archive       Scheduler         Scheduler       Image: Direct during State Store

6. For the folder selected in the **Folder overview** section select the desired filter/filters in the **Filters** section.

lome 40ADDC1	BRacl0040	
*	Scheduler jobs 🖉 Folders for Direct 🖉 Filters for C:\\2	1
Archive	Name Type Stat □ 0 C:	
<b>R</b>	Time     DirectArchive     Stop       Image: Stop     Image: Stop     Image: Stop       Image: Stop     Image: Stop     Image: Stop	
Scheduler	Shortcuts ShortcutCreator Stor P 2 inetpub	
	Synch Synchronization Stor Install	
	Hetalogik	
Restrictions	Program Files	
	Program Files (x86)	
3.2	Create Delete	
Settings		-
Securitys	Job properties	
	□ General     □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
	Enabled False	
Statistics	Job name Direct Folder overview	_
	Job type DirectArchive V C:\Metalogix Filter name Filter	-
	Retention     Filter name	7
	Retention cate 3 mo.	
	Enabled	
	Value specifying whether the job is enabled. Apply Undo	
	🖏 Jobs 🍸 Filters 🕀 Reports 🔞 Overview	_

**NOTE:** If multiple filters are attached to a folder, the files in it have to fulfill all the criteria in all filters. If the file does not match one of the defined criteria, it will not be processed.

#### EXAMPLE:

- I. One filter is defined to process .doc and .txt files. In this case if the file has the extension .doc or .txt, it will be archived.
- II. Two filters are set for a folder, one to process only .doc files, the second one to process only .txt files. In this case processed file should have both .doc and .txt extension, which is impossible. Two such filters will cause that no file will be processed by the job in that folder. This is a wrong configuration.
- 7. Click Apply.

### **Reports tab**

In the Jobs section of this tab you will see a list of all jobs. Select the desired job and its reports will be displayed in the Reports section. Reports on documents processed by jobs are created automatically whenever archiving by the relevant job is finished.

	Enterprise Manager			×
List of	Home 40ADDC1	BRacl0040		]
jobs		Jobs	Report Content	
	Archive	Name Type		
	Scheduler	Delete job     Delete       Direct     DirectArchive       job1     Archive       Shortcuts     ShortcutCreator       synch     Synchronization	contont	
Reports ~ for	Restrictions	Reports		
selected				
job	Settings		-	
	Statistics	<ul> <li>              2/21/2017 9:50:25 AM      </li> <li>             2/21/2017 9:50:11 AM         </li> <li>             2/21/2017 9:50:08 AM         </li> <li>             2/21/2017 9:48:08 AM         </li> <li>             2/21/2017 9:43:54 AM         </li> </ul>	Page size V eports @ Overview	

To display the desired report:

- 1. Click on the Scheduler tab then switch to the Reports tab.
- 2. Select the desired job on the **Jobs** section to list its reports.
- 3. In the **Reports** section double-click the report with the relevant date and time.
- 4. Now select which report data you wish to display in the **Report content** section. Every report includes:
  - Job overview general information on job and its settings

• Summary – count of successfully processed, failed, skipped and archived files; number of created shortcuts etc.

**NOTE:** Successfully processed files include files which were just archived or archived and replaced with a shortcut, or, if there was no new version, just replaced with a shortcut – depending on the settings.

- Failed documents which failed to be processed and their details
- Skipped documents which were skipped and their details
- Succeeded successfully processed documents

• Skipped folders – folders not processed, e.g. because of the permission issues; the reason for skipping is listed under the Reason column

lome 40ADDC1	BRad0040		
3	Jobs 💞	Report Content	
Archive	Name Type	Name	Value
Scheduler Restrictions	Control Contro	Job started at: Job finished at: Number of successfully processed files: Number of skipped files: Number of archived files: Total size of archived files: Total size of files moved to archive: Number of created shortcuts: Estimated space saved: Estimated space saved in percentage:	2/21/2017 9:50:29 AM 2/21/2017 9:50:30 AM 0 31 0 0 bytes (0 bytes) N/A 0 0 bytes (0 bytes) 0 bytes (0 bytes) 0 bytes (0 bytes) 0 %
Statistics	G         Failed           G         Skipped           O         Succeeded           G         Skipped folders           ⊕         2/21/2017 9:50:28 AM ▼	Page size 🐨	

5. There can be a lot of documents listed e.g. in the *Succeeded* section. To make the list more transparent, you can set the number of rows to be displayed per page in the **Report** content. To do so, unfold the **Page size** down-drop menu and select 20, 50 or 100. Use the arrows to switch between pages.

lome 40ADDC1	BRacl0040		
*	Jobs 🖗	Report Content	
Archive	Name Type	Name	Value
Scheduler Restrictions Settings Statistics	Synch Synchronization  Reports  2/21/2017 9:50:29 AM  Job Overview  Summary  Failed  Skipped	Job started at: Job finished at: Number of successfully processed files: Number of failures: Number of failures: Total size of fails moved to archive: Total size of files moved to archive: Number of created shortcuts: Estimated size of created shortcuts: Estimated space saved: Estimated space saved in percentage:	2/21/2017 9:50:29 AM 2/21/2017 9:50:30 AM 0 31 0 0 bytes (0 bytes) N/A 0 0 bytes (0 bytes) 0 bytes (0 bytes) 0 bytes (0 bytes) 0 %
	Succeeded Skipped folders	Page size v	(k) >>

## **Overview tab**

On this tab you may see daily overview of jobs' activity. You may select any day using the calendar in the Scheduling overview section (i.e. the upper part of the window). The chart next to calendar shows the past or scheduled behavior of jobs during the selected day. The red color indicates the period for which the jobs are scheduled. The vertical brown lines mark the exact time when the job starts running.

The period for database backups is marked in light blue. Jobs are stopped during this backup time and are resumed afterwards.

All activities taken by jobs are listed in the lower pane, in the Events section. You may see there the date and time of each job's action, along with action's description.

Enterprise Manager _ 🗖
Home 40ADDC1 BRad0040
Home       40ADDC1       BRacl0040         Weight       Scheduling overview       Image: Construction of the second of

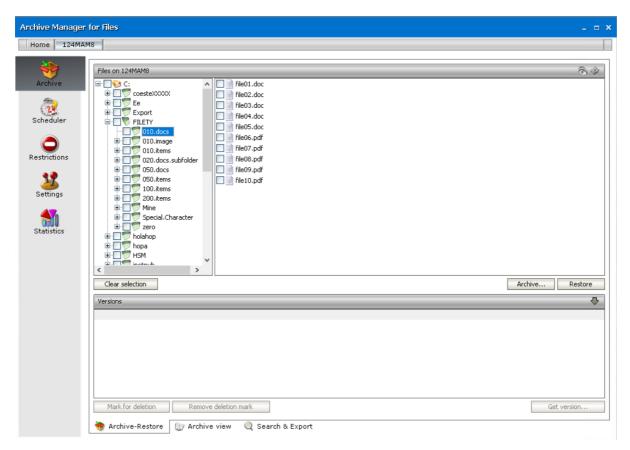
# Archive tab

Archive tab is basically designed for manual archiving/restoring of files (Archive-Restore tab), browsing the archive (Archive view) as well as searching and exporting of files (Search & Export tab).

# **Archive-Restore**

This view of the Archive tab is reserved for manual archiving/restoring of files/folders and Archive Manager context menu for folders is also accessible here. In the left pane you will see a list of all disks displayed. Simply click on the plus (+) sign to unfold the folder structure of the desired disk.

NOTE: Different icon with a red sign attached to it ( b) denotes files that are not archivable in general or at the present moment; they are e.g. used by another program.



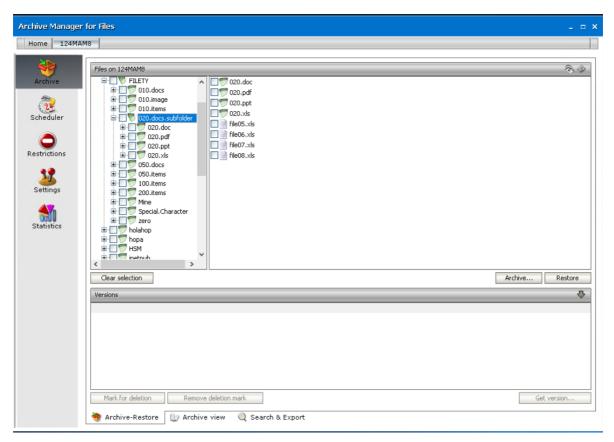
To archive with Archive Manager for Files you just need to select the desired file or select the desired folder either recursively or non-recursively. Then click the Archive button. The file is archived and replaced with a shortcut.

# Non-recursive folder selection

- 1. Click on the Archive tab.
- 2. In the left pane, click on the plus (+) sign next to the desired disk to unfold its structure.

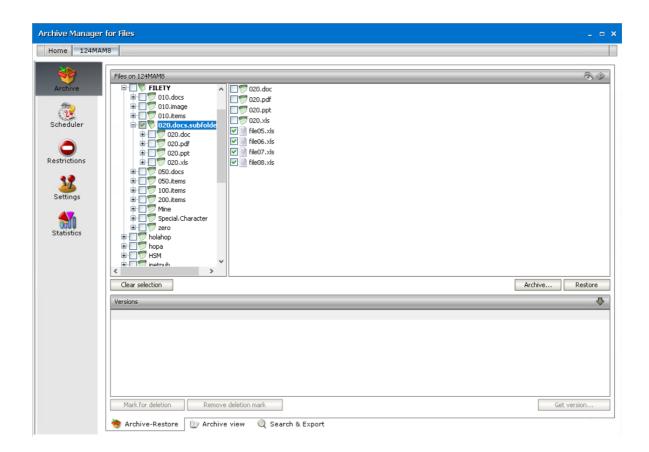
Archive Manager	for Files	×
Home 124MAN	18	
	Files on 124MAM8	\$ ¢
Archive	₩- <b>□</b> ♥ C:	
Scheduler		
Restrictions		
Settings		
Statistics		
	Clear selection Archive	Restore
	Versions	<b>₽</b>
	Mark for deletion Remove deletion mark Get ver	/sion
	🥎 Archive-Restore 💷 Archive view 🔍 Search & Export	i

3. Locate the desired folder in the left pane and then click on it to display its content in the right pane. On the screenshot below you may see that none of the files are selected.



4. To select that folder *non-recursively*: in the left pane click **ONCE** on the check box next to it. After clicking on the check box of the desired folder, all files residing there become selected.

**NOTE:** You may notice that the check box of the parent folder is filled with grey color. A selected check box filled with grey color is typical for non-recursive selection.



## **Recursive folder selection**

- 1. Click on the Archive tab.
- 2. In the left pane, click on the plus (+) sign next to the desired disk to unfold its structure.
- 3. Locate the desired folder in the left pane and then click on it to display its content in the right pane.
- 4. To select that folder *recursively*: in the left pane click **TWO TIMES** on the check box next to it to.

After clicking on the check box of the desired folder for the second time, everything down the path becomes selected (i.e. all its subfolders as well as files).

**NOTE:** You may notice that the check box of the parent folder is filled with white color. A selected check box filled with white color is typical for recursive selection.

Archive Manager	for Files	
Home 124MA	M8	
Archive Scheduler Restrictions Settings Statistics	Files on 124MAM8         FILETY         010.docs         010.lingge         010.lingge         010.lingge         010.lingge         010.lingge         020.doc         020.doc         020.obc         050.litems         050.litems	\$\$
	Clear selection	Archive Restore
	Mark.for deletion Remove deletion mark	Get version

**NOTE:** To select a specific file you just need to unfold the folder structure and locate the relevant folder in the left pane of the Archive tab. Its content gets displayed in the right pane. Then select the desired file/files in the right pane, simply by clicking on their respective check boxes.

# How to archive a folder/file manually

- 1. Click on the Archive tab.
- 2. Locate the desired folder/file in the left pane.
- 3. Select the check box of the desired folder, either non-recursively or recursively (see the sections "Non-recursive folder selection" or "Recursive folder selection"); or select the check boxes of a desired files in the right pane.
- 4. Then simply click on the **Archive** button located in the lower right corner.

Archive Manager for Files	_ = ×
Home 124MAM8	
Image: Scheduler       Image: Scheduler         Image: Scheduler	Restore @ Get version

**IMPORTANT NOTE:** DEFAULT RETENTION CATEGORY IS USED AT MANUAL ARCHIVING. IF NO RETENTION CATEGORY IS SET AS DEFAULT ON THE **SETTINGS / GENERAL** TAB AN ARCHIVE OPTIONS WINDOW IS DISPLAYED. IN THIS WINDOW YOU CAN CHOOSE FROM THE ALREADY EXISTING RETENTION CATEGORIES.

THE ARCHIVE OPTION WINDOW CAN BE ALSO CALLED WHEN YOU KEEP THE **CTRL KEY** PRESSED AND CLICK THE **ARCHIVE** BUTTON. IT ALLOWS YOU TO CHOOSE A RETENTION CATEGORY AT MANUAL ARCHIVING.

Archi	ive options	
8	Select a retention	category te be used.
	3 mo.	
	Schema:	1: schema1
	Retention time:	3 months
	Delete time:	Infinite
		Archive Cancel

5. During archiving a popup window may be displayed informing you that archiving is in progress. When archiving is over simply click **Close** to close the window.

Mrchive	e Manager for Files : Archive (successfully completed)
	Successfully finished.
Result:	84 files were processed
Elapsed time:	0:00:24
Estimated time left:	00:00:00

6. You may notice that archived files are displayed with an icon, indicating that they were replaced with a shortcut.

**NOTE:** In some cases archived files are not displayed with an icon. This is no error. It only means that the original file was too small; it was archived but there was no use to replace it with a shortcut. You may check it by selecting the desired file and unfolding the **Versions** tab. (See below)

Archive Manager for Files	_ = ×
Home 124MAM8	
Files on 124MAM8         Image: Scheduler         Image: Scheduler	Archive Restore
Version       Creation date (archive)       Created by       Machine       Size       Retention category       File created       Last modifical         1       2/11/2020 6:43:13 AM       administrator       124MAM8       5 bytes       Default, version 3       2/11/2020 6:41:34 AM       2/11/2020 6:         Mark for deletion       Remove deletion mark	

NOTE: To clear selection when archiving is over, simply click the Clear selection button.

# How to retrieve a folder/file

**NOTE:** Folders could be retrieved also via Archive Manager context menu which offers advanced settings (see "How to retrieve a specific version/shortcut").

1. Click on the Archive tab.

2. Select the desired folder either recursively or non-recursively; or select the desired archived file.

**NOTE:** Should recursive selection be chosen, then all files along with all subfolders of the respective parent folder will be retrieved. Should non-recursive selection be chosen, then all files of the respective parent folder would be retrieved; its sub-folders would not.

- Archive Manager for Files Home 124MAM8 Files on 124MAM8 6 🗹 河 020.doc 010.docs 🔽 觉 020.pdf 020.ppt Scheduler 
   Use...

   USe....

   USe...

   USe...

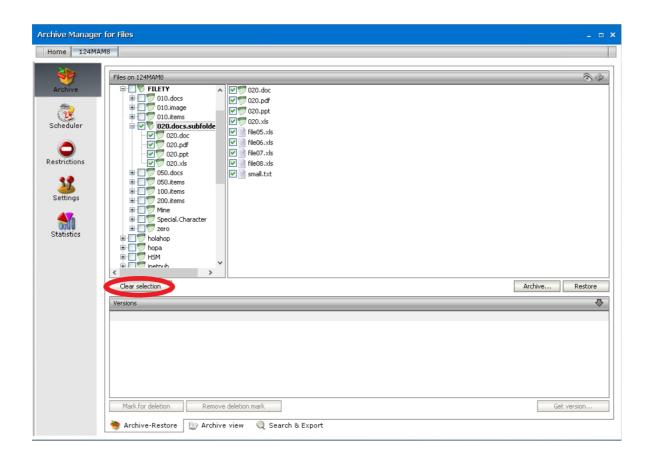
   USe...
   🗹 🐬 020.xls 020.docs.subfolde File05.xls File06.xls 0 File07.xls File08.xls small.txt Y Settings Statistics Archive. Clear selection Restore Versions of C(),...\small.txt Version Creation date (archive) Created by Machine Size Retention category File created Last modification 2/11/2020 6:43:13 AM administrator 124MAM8 5 bytes Default, version 3 2/11/2020 6:41:34 AM 2/11/2020 6:41:34 AM Mark for deletion Remove deletion mark Get version Archive-Restore 🛛 🔝 Archive view Q Search & Export
- 3. Click on the **Restore** button.

4. During retrieving a pop-up window may be displayed informing that retrieving is in progress. When retrieving is over simply click **Close** to close the window.

🛛 🥳 😽 Archiv	e Manager for Files : Restore (successfully completed) _
	Successfully finished.
Result:	84 files were processed
Elapsed time:	0:00:32
Estimated time left:	00:00:00
	Close

5. Retrieved files will be displayed without an icon, yet selected.

To clear selection, simply click on the **Clear selection** button.



## How to retrieve a desired version of a file

Our software offers versioning capability. This means that the HSM store keeps versions of modified files. Due to this capability, it is easy to retrieve any of the versions that are in the HSM store and work with them.

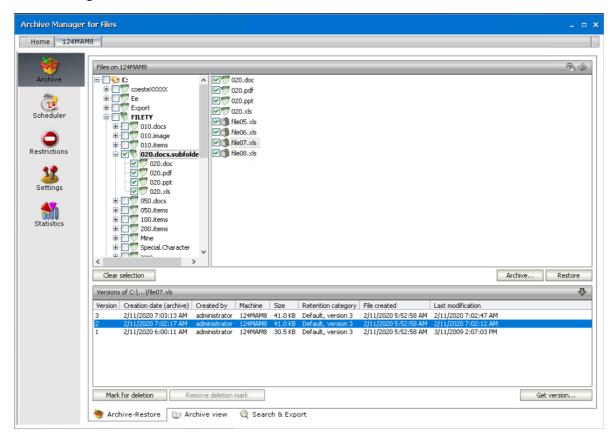
**NOTE:** Version retrieving with advanced settings can be done on a folder level via Archive Manager context menu (see "How to retrieve a specific version/shortcut").

To retrieve a desired version of a file:

- 1. Click on the Archive tab.
- 2. Locate the desired file.
- 3. Click on the upward arrow on the Versions tab.

Archive Arc	ome 124MA	AM8	
Scheduler   Scheduler   Scheduler   Scheduler   Scheduler   Statistics   Statistics   Statistics	*	Files on 124MAM8	6
	Scheduler estrictions Settings Settings	B       CoestexXXXX         B       Export         C       FILETY         C       010.docs         C       010.docs         C       010.docs         C       010.docs         C       020.doc         C       050.docs         C       050.docs         C       050.docs         C       050.docs         D       020.doc         D       100.docs         D       100.doc         D       100.doc <t< th=""><th></th></t<>	
		Clear selection	Archive Restore

4. After clicking on the upward arrow on the **Versions** tab, it expands as shown on the following screenshot. Select the desired version and then click on the **Get version** button.



5. In the **Get version** window confirm by clicking **OK**.

**NOTE:** Should you wish to get only the shortcut to the desired version, select the **Get shortcut only** check box.

Get version			
	Destination path on 124MAM8:		
	C:\FILETY\020.docs.subfolder\file07.xls		Browse
🗌 Get sh	ortcut only	ОК	Cancel

### 6. Click Yes to confirm.

	Get version ×
?	The file "C:\FILETY\020.docs.subfolder\file07.xls" already exists on 124MAM8. Would you like to overwrite it?
	Yes No

### 7. Click **OK**.

Archive Manager	for Files	_ = X
Home 124MA	M8	
Archive	Files on 124MAM8	\$ \$
Scheduler	Image: Constant Consta	
Restrictions	Image       Image         Im	
Settings		
Statistics	OSO.items     OSO.items     Oto.items	
	Special.Character	
	Clear selection	Archive Restore
	Versions	<b>₽</b>
	Mark for deletion Remove deletion mark	Get version
	😽 Archive-Restore 🛛 🕼 Archive view 🛛 🍳 Search & Export	

As you may have noticed, it is possible to get shortcuts to desired versions as well.

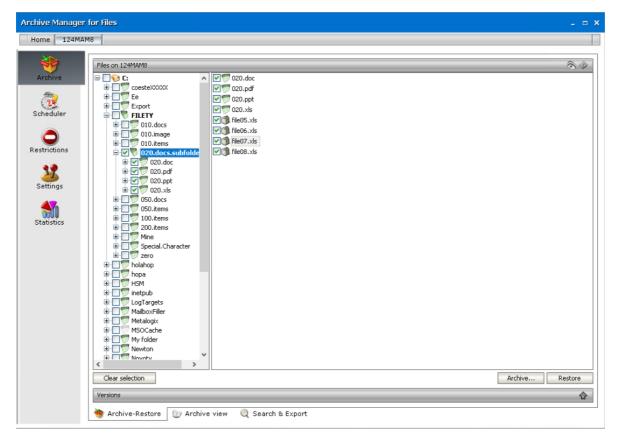
## How to mark a version for deletion

Marking files for deletion is applicable only in the HSM store. It does not mean that files marked for deletion would be irretrievable. Files marked for deletion are kept in the HSM store and they are retrievable during their retention period (see the section "Retention categories"). However, upon the expiration of retention time and eventually keep alive time files marked for deletion are considered useless and are therefore deleted by Delete job from the HSM store to free up space.

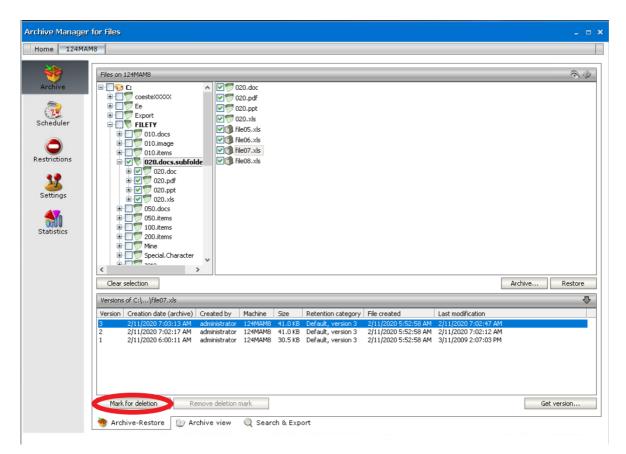
**NOTE:** Marking for deletion could be done on the folder level also via Archive Manager context menu (see the section "Context menu in Archive Manager for Files").

To mark a specific version of a file for deletion:

- 1. Click on the Archive tab. Locate the desired folder in the left pane.
- 2. Locate the desired file in the right pane and then click on the upward arrow on the **Versions** tab to unfold it.

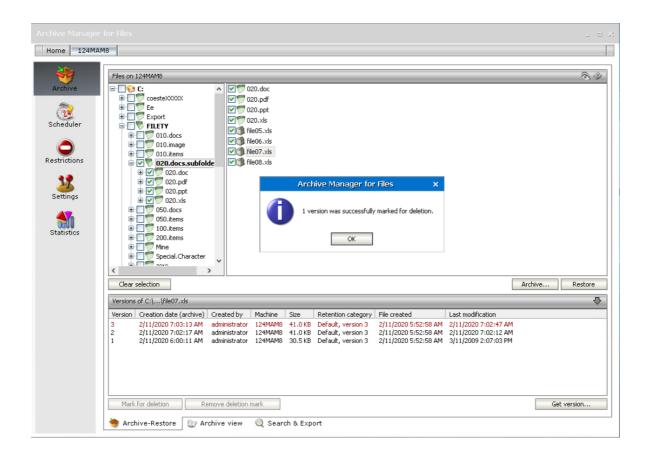


3. Upon clicking on the upward arrow on the **Versions** tab, the tab unfolds. Select the desired version in the lower pane and then click on the **Mark for deletion** button.



4. Click **OK**. The file will be displayed red, indicating that it is marked for deletion in the HSM store.

**NOTE:** The file is not deleted yet, and will be kept physically in the HSM store until the retention time and eventually keep alive time expires.

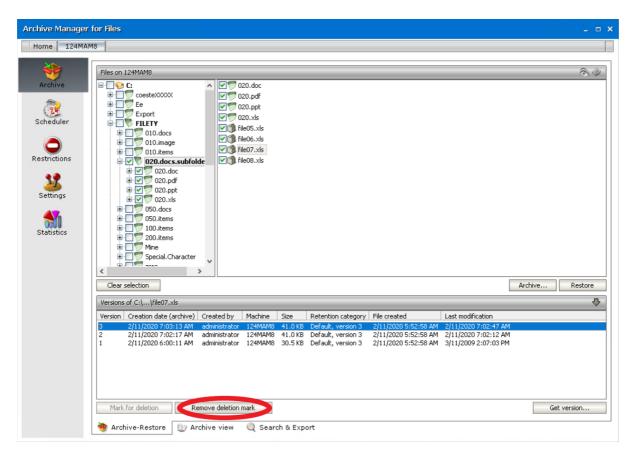


## How to remove deletion mark from a version

**NOTE:** Removing deletion mark could be done on the folder level also via Archive Manager context menu (see "Context menu in Archive Manager for Files").

- 1. Click on the Archive tab. Locate the desired folder in the left pane.
- 2. Locate the desired file in the right pane.
- 3. Click on the upward arrow on the Versions tab.
- 4. After clicking on the upward arrow on the **Versions** tab, the tab unfolds. Select the desired version which is marked for deletion (highlighted in red) and then click on the **Remove deletion mark** button.

91



5. Click OK.

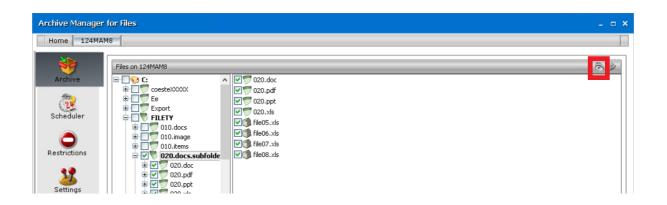
	Archive Manager for Files	×
1	Deletion mark was successfully removed from 1 version	
	OK	

# How to display files having been physically removed from the file server

With Archive Manager for Files it is possible to display files physically deleted from the file server. Files deleted from the file server are displayed with a red cross.

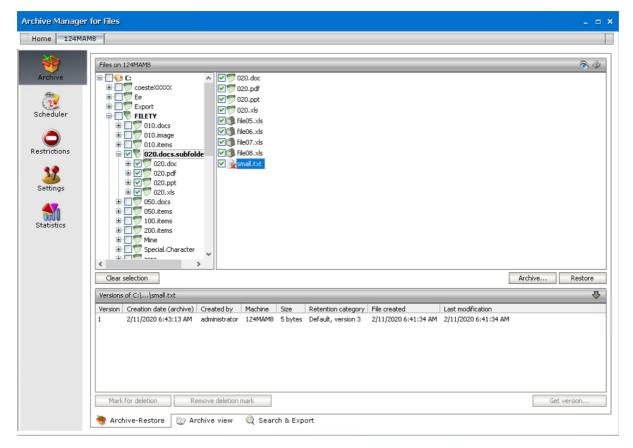
To display files deleted from the file server:

- 1. Click on the Archive tab.
- 2. Locate the desired folder in the left pane.
- 3. Click on the Show deleted items icon located in the upper right corner (see below).



4. Files deleted from the respective folder are displayed with a red cross. By selecting any of them you may display its versions.

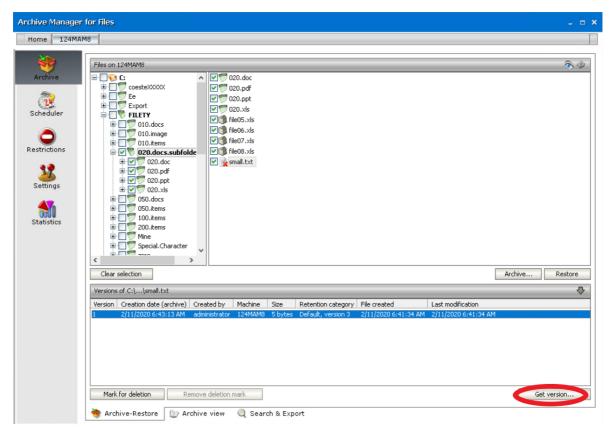
NOTE: Retrieving of deleted items is described in the next section.



# How to retrieve a version of a file deleted from the file server

- 1. Click on the Archive tab.
- 2. Click on the Show deleted items icon located in the upper right corner.
- 3. Locate the desired folder in the left pane.

- 4. Select the desired file in the right pane.
- 5. Click on the upward arrow on the **Versions** tab to unfold the tab.
- 6. Select the desired version in the lower pane and then click on the **Get version** button.



7. In the Get version window you may choose to restore only a shortcut by selecting the Get shortcut only check box. Click OK.

Get vers	ion		
	Destination path on 124MAM8:		
	C:\FILETY\020.docs.subfolder\small.txt		Browse
🗌 Get she	ortcut only	OK	Cancel
8. Click OK.			
	Archive Manager for Files $$ ×		
1	1 version was successfully restored.		
	ОК		

NOTE: The same can be done also via Archive Manager context menu (see further).

# **Context menu in Archive Manager for Files**

Since a new version is created automatically whenever a modified document is archived, a large number of versions from a single document may be created. At some points you may want to mark for deletion some of the versions so that they could be physically deleted from the HSM store upon expiration of the retention period.

The context menu is used preferably for:

- marking versions for deletion,
- removing deletion marks,
- retrieving a specific version or shortcut of a file even to a folder different from the original one (useful e.g. for notebook users).

Context menu is used on the folder level and all tasks can be performed even recursively.

**NOTE:** Archived files (i.e. their versions) having been marked for deletion are retrievable with Archive Manager for Files.

# MARKING FOR DELETION and REMOVING DELETION MARKS from versions of all files residing in a folder

The context menu on the Archive tab offers you six basic possibilities:

- Mark for deletion mark for deletion all, oldest, latest versions of all files residing in a folder or versions created during a specific period
- Mark for deletion recursively mark all, oldest, latest, or specific versions of files for deletion recursively, i.e. the deletion mark is applied to the versions of files residing also in the subfolders of a given folder
- Remove deletion mark remove deletion mark from all, oldest, latest or specific versions of the files
- Remove deletion mark recursively remove deletion mark from all, oldest, latest or specific versions of files recursively, i.e. the deletion mark is removed from the versions of files residing also in the subfolders of a given folder
- Get version retrieve specific versions of files (see "How to retrieve a specific version/shortcut")
- Get version to **folder** retrieve specific versions of files to folder different from the original location

Only the first option Mark for deletion will be described in detail. The procedures for the next three options are similar. The Get version option is described in "How to retrieve a specific version/shortcut" and the Get version to folder option is described in "How to retrieve a file/shortcut to a specific folder".

To mark versions of all files residing in a folder for deletion:

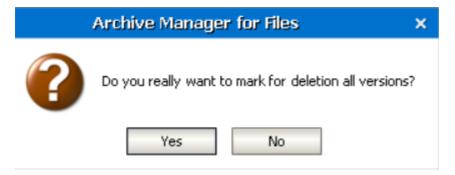
- 1. Click on the Archive tab.
- 2. Locate the desired folder in the left pane and right-click it.
- 3. In the context menu, select Mark for deletion and then
  - > All versions to mark for deletion all versions of the folder's files
  - Oldest version to mark for deletion the oldest version of all files
  - Latest version to mark for deletion the most recent version of all files.

NOTE: Advanced option is described further in "How to mark for deletion versions created during a specific time period".

NOTE: You can also mark for deletion a specific version of a single file (see the section "How to mark a version for deletion").

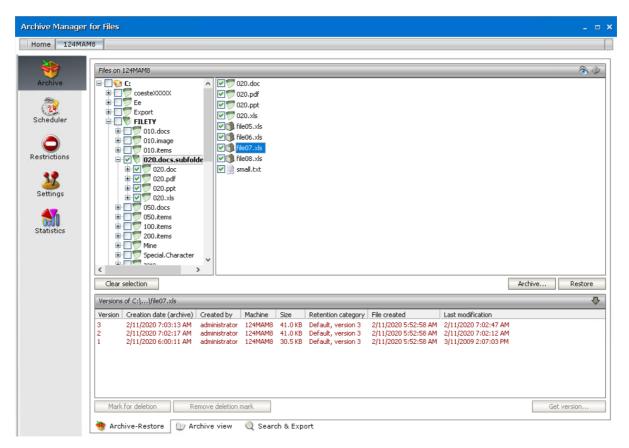
Archive Manager	for Files		
Home 124MA	M8		
Archive Control Control Contr	Files on 124MAM8	Latest versions	
Stausucs	200.items     Get version to folder     Special.Character		
	Clear selection		Archive Restore

4. In the respective dialog-box click Yes to confirm.



NOTE: Now you may check what you have done: Simply select any of the files in the right pane (under the respective folder), and then click on the arrow on the Versions tab to unfold it. Versions which you

have marked for deletion will be displayed red, indicating that they are marked for deletion in the HSM store. (In our example three versions are marked. See the next screenshot.)



# How to mark for deletion versions created during a specific time period

- 1. Click on the Archive tab.
- 2. Locate the desired folder in the left pane and right-click it.
- 3. In the context menu, select Mark for deletion and then Advanced.

Archive Manager for Files	- <b>-</b> x
Home 124MAM8	
Archive         Archive         Scheduler         Bestrictions         Statistics             Statistics             Fles on 124MAM8             Image: Display the second sec	All versions Oldest versions Latest versions Advanced

4. In the Mark for deletion window, select the Mark for deletion versions created between switcher and then specify the desired time period. Click **OK**.

🥂 Mark for deletion	×
Specify versions	
C Mark for deletion 1 - oldest version(s)	
C Mark for deletion 1 - latest version(s)	
• Mark for deletion versions created between	
1/ 1/2000 💌	
and 2/29/2020 💌	
OK Cancel	

**NOTE:** In this window you may also choose to mark for deletion several oldest versions or several most recent versions.

# How to retrieve a specific version/shortcut

In some cases you may want to replace shortcut(s)/file(s) residing in a folder with a specific shortcut/version. Since Archive Manager for Files keeps the existing structure of disks and folders, this can be done even recursively. To replace shortcut(s)/file(s) residing in a folder with a specific version/shortcut:

- 1. Click on the Archive tab.
- 2. Locate the desired folder and right-click it.

**NOTE:** Specific version retrieving can be done also for a single file (see the section "How to retrieve a desired version of a file").

3. In the context menu, select Get version.

Archive Manager f	r files _ 🗆 ×
Home 124MAM	
Archive Scheduler Restrictions Settings Statistics	Files on 124MAM8         Image: Second Character         Image: Special Cha
	Clear selection Archive Restore
	Versions           Wersions         Image: Constraint of the second sec

4. In the Get version window you may specify your requirements as follows:

You can retrieve the Latest version, Previous version or select the Version number switcher and enter the desired version in the adjacent text box (the digit 1 stands for the 1<sup>st</sup>, i.e. the oldest version).

There is also a possibility to apply Date Filter to decrease the number of versions being retrieved. Select the check box **Apply Date Filter**, choose **Date Type** which can be **Archive**, **Created** or **Modified** and finally set the desired time period.

Home 124MAN	18	
	Fles on 124MAM8       Coststation	
	Clear selection	Run in 1 📑 thread(s)
	Versions of C:\\file08.xls	Filters
	Version         Created by         Machine         Size         Retention category         File created         Last modification           3         2/11/2020 7:01:27 AM         administrator         124HAM8         204 KB         Default, version 3         2/11/2020 5:52:58 AM         2/11/2020 7:01:21 AM           2         2/11/2020 7:00:21 AM         administrator         124HAM8         188 KB         Default, version 3         2/11/2020 5:52:58 AM         52:58 AM <t< td=""><td>Apply Date Filter Date Trace From: Created Modified OK Cancel</td></t<>	Apply Date Filter Date Trace From: Created Modified OK Cancel
	Mark for deletion Remove deletion mark	Get version

The meaning of each **Date Type** is as follows:

Archive - the date when specific file version had been archived.

**Created** - the date when specific file version was created.

Modified - the date when specific file version was last time modified.

Same as in **Get version** it is possible to apply date filter to decrease the number of versions being retrieved.

**IMPORTANT NOTE:** In the case that the desired version does not exist, no replacement will be made.

💓 Get version 🛛 🗙 🗙	💓 Get version 🛛 🗙 🗙
Specify version  Latest version  Previous version  Version number:  1	Specify version  C Latest version  C Previous version  C Version number:  1
Advanced options	Advanced options
Replace shortcuts	Replace shortcuts
Replace files	Replace files
Restore deleted files	Restore deleted files
	Recursively
Get file(s)	Get shortcut(s) only
Run in 1 🕂 thread(s)	Run in 1 thread(s)
Filters	Filters
Date Type Archive	Date Type Archive
From: 2020.02.11 / 07:34	From: 2020.02.11 / 07:36
To: 2020.02.11 / 07:34 💌	To: 2020.02.11 / 07:36 💌
OK Cancel	OK Cancel

- Select the Replace shortcuts check box, should you wish to replace Archive Manager shortcut(s) of the folder with the version having been specified.
- Select the Replace files check box, should you wish to replace file(s) of the folder with the version having been specified in the text box.
- Select the Restore deleted files check box, should you wish to retrieve specified version even for files deleted from the folder.

For all the above mentioned options: If you wish to get shortcut(s) only, select **Get shortcut(s) only** by clicking on the switcher button; in the case that you wish to get file(s), switch to **Get file(s)** by clicking the button.

Select the **Recursively** check box to apply the defined operation to subfolders, too.

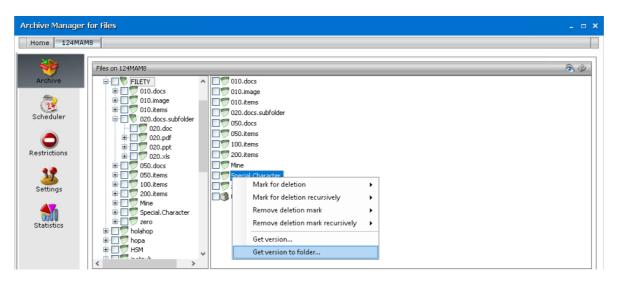
In the **Run in** *x* **threads** box you may specify the number of threads you wish to run – the more threads, the faster retrieving.

5. Click **OK** to confirm. Then click Close.

# How to retrieve a file/shortcut to specific folder

With Archive Manager for Files you can retrieve files or their shortcuts from one folder to another. Especially notebook users will appreciate this feature since it allows them to get all archived documents and files of any folder copied to their machine without retrieving the original files.

- 1. On the Archive tab locate the folder and right-click it.
- 2. From the context menu click Get version to folder.



3. In the pop-up window define your settings:

You can retrieve the **Latest version** or select the **Version number** switcher and enter the desired version number in the adjacent text box (the digit 1 stands for the 1st, i.e. the oldest version). **NOTE:** In the case that the desired version does not exist, no retrieving will take place.

Get version to folder >>	×
Specify version C Version number:	
Advanced options	
Replace files and shortcuts	
Get file(s)	
Restore to folder:	
C:\FILETY\Special.Character	
Run in 1 📩 thread(s)	
Filters	
Apply Date Filter	
Date Type Archive	
From: 2020.02.11 / 07:39	
To: 2020.02.11 / 07:39 💌	
OK Cancel	

If you check Replace files and shortcuts check box, the versions of files or shortcuts already existing in the destination folder will be rewritten by the new ones being synchronized now. If you leave this check box empty, files/shortcuts already existing in the destination folder (which were e.g. copied here earlier) will be left untouched. Only new files/shortcuts will be added to the destination folder. Check Recursively check box to apply the defined operation to subfolders, too.

Should you wish to get shortcuts only, select Get shortcut(s) only by clicking on the switcher button, should you wish to get files, switch to Get file(s).

In the Retrieve to folder text box enter the path to the folder where you want to retrieve the files and/or shortcuts or use the browse button to locate the desired folder.

In the Run in x threads box you may specify the number of threads you wish to run – the more threads, the faster the retrieval.

## **Archive view**

This tab gives the administrator the ability to view the archive created by Archive Manager for Files. Any file with all its versions archived by Archive Manager can be located in the archive, even if it is marked for deletion. The archive preserves the structure of disks, folders and files as it was at the moment of archiving.

Archive Manager	for Files	
Home 124MAN	18	
Archive	Archived files	Ŵ
Archive	C: FILETY FILETY FILETY FILETY FILETY FILEON FI	
	Versions of C:\\file01.jpg	\$
	Version         Creation date (archive)         Created by         Machine         Size         Retention category         File created         Last modification           3         1/14/2020 4:47:31 PM         administrator         124MAM8         45.0 KB         Default, version 1         1/14/2020 4:45:51 PM         1/14/2020 4:46:56 PM           2         1/14/2020 4:44:20 PM         administrator         124MAM8         45.5 KB         Default, version 1         1/14/2020 4:35:15 PM         1/14/2020 4:44:12 PM           1         1/14/2020 4:41:39 PM         administrator         124MAM8         32.8 KB         Default, version 1         1/14/2020 4:35:15 PM         3/21/2013 10:29:37 AM	
	Mark for deletion Remove deletion mark	Get version

The **Archive view** tab is divided into three panes in the same way as Archive-Retrieve tab. The left pane displays folders in the tree view and the right pane displays the archived content of the folder selected on the left.

The bottom pane is unfolded after clicking on the upward arrow on the Versions bar. This pane contains version information of the selected file. Here the administrator can manage versions in the same way as in the Archive-Restore tab: Mark for deletion, Remove deletion mark and Get version buttons are accessible (see the "Archive-Restore" section).

The context menu is also implemented for the folders in the tree view. The context menu offers the same functionality as on the Archive-Restore tab:

- Mark for deletion
- Mark for deletion recursively
- Remove deletion mark
- Remove deletion mark recursively
- Get version
- Get version to folder

(For more information see the "Context menu in the Archive Manager for Files" section as described for Archive-Restore tab.)

me 124M	IAM8	
	Archived files	
Archive	Ee FILETY FILETY 010.duces 010.duces 010.duces 020.duces 050.duces	
	Versions of C:\file01.jpg	,
	Version         Creation date (archive)         Created by         Machine         Size         Retention category         File created         Last modification           3         1/14/2020 4:47:31 PM         administrator         124MAM8         45.0 KB         Default, version 1         1/14/2020 4:35:15 PM         1/14/2020 4:46:56 PM           2         1/14/2020 4:44:20 PM         administrator         124MAM8         44.5 KB         Default, version 1         1/14/2020 4:35:15 PM         1/14/2020 4:44:12 PM           1         1/14/2020 4:41:39 PM         administrator         124MAM8         32.8 KB         Default, version 1         1/14/2020 4:35:15 PM         3/21/2013 10:29:37 AM	

# Search & Export

You can also search images or documents with scanned content, unless the characters are too small to be detected. To enable this feature, select **Enable OCR Engine** in the **Configuration tool** > **Post Processing** > **OCR Engine** tab. The search criteria can be can be defined to search for files with a specific file size, archived at particular time interval or by a specific user among others.

The defined search criteria can be saved as a template to be used later in the future. Search results can be exported to a local folder. Exporting of the search results list and saving it in different formats is also possible.

### Steps to search for archived files

- 1. Open the Archive tab and select the **Search & Export** tab at the bottom of the window.
- 2. Click the Files tab.
- 3. Click Add new clause and enter the search criteria using the fields as described below
  - a. **Field** click the drop down to select the property of the file to be searched. For example, select **Subject** as the field to search.
  - b. **Operator** click the drop down and select a search operator.

c. Value - Specify the search text. If the selected **Field** requires a date value, a date picker icon appears to help you choose a date. This field supports wildcard characters as described in the table below:

Wildcard	Description	Example
*	A substitute for zero or more characters	*.pdf
?	A substitute for a single character to match	Sales201?.pdf

- 4. To add more criteria, click **Add new clause** again. The default operator is **And** but you can select another logical operator.
- 5. Right-click in the results list pane. Select the **Show** option and then select the columns that you wan in the search result list.

Archive Manager for	Files						_ = ×
Home 124MAM8	1						
Archive	Files Settings Find items that match these criteria:						
<u></u>	And/Or Field Operator		Value				
Scheduler	+ X File name Contains	-					
	+ X A • Archived date • <	•	1/15/2020				-
Restrictions	+ Add new clause						
Settings	Clear Search Export						
<u> </u>	File path Show	~	File path	ed date	File size (KB)	Archived date	Archived by
Statistics	Get Version(s) to	~	File name				
		~	File size (KB)				
		~	File size (MB)				
			File size (GB)				
		~	Archived date				
		~	Archived by				
		~	File owner				
		~	Versions count				
		~	Deleted date				
			Created at				
			Last Modified				
			Retention time				
			Locked				
	(						•
	🕈 Archive-Restore 🛛 🖄 Archive view 🔍 Search &	Expo	rt 🗌				
			···				

#### 6. Click the **Settings** tab.

Archive Manager for Files							_ = ×
Home AMXSERVER-F							
Search only		shown for each versi	on separately.				
Statistics	File name	File size (MB)	Archived date	Archived by	File owner	Versions count	Deleted date

- 7. Configure the settings as described below:
  - a. Limit search results to the number of files that are returned in the search result list.
  - b. Search in deleted documents select this check box to search through files that are marked for deletion.
  - c. **Search only in deleted documents** select this check box to exclusively search through files that are marked for deletion. All other archived files will be ignored.
  - d. **Search in versions** select this check box to search through all versions of the archived files and each match will be returned in the result list.

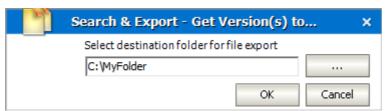
8. Click Search. You can click Clear to reset the search criteria and start again.

File	es Settings						
F	ind items that match these criteria	:					
	And/Or Field	Operator	Value				
er .	+ X 🗆 File name	Contains	File				
	+ X 🗆 A 💌 Archived d	iate 🔻 < 💌	1/15/2020				
	+ Add new clause						
ns							
	Clear Search	Export					
;							
	File path	File size (MB)	File name	Deleted date	File size (KB)	Archived date	Archived by
	r lie paci	1 110 5120 (110)					
⊳	C:\FILETY\010.image\	0.04	file01.jpg		45.00	1/14/2020 4:47	administrato
Þ			file01.jpg file07.bmp			1/14/2020 4:47 1/14/2020 4:49	
Þ	C:\FILETY\010.image\	0.04					administrato
	C:\FILETY\010.image\ C:\FILETY\010.image\	0.04	file07.bmp		3967.44	1/14/2020 4:49	administrato administrato
	C:\FILETY\010.image\ C:\FILETY\010.image\ C:\FILETY\010.image\	0.04 3.87 0.15	file07.bmp file08.gif		3967.44 148.62	1/14/2020 4:49 1/14/2020 4:51	administrato administrato administrato
	C:\FILETY\010.image\ C:\FILETY\010.image\ C:\FILETY\010.image\ C:\FILETY\010.image\ C:\FILETY\010.image\	0.04 3.87 0.15 0.74	file07.bmp file08.gif file09.tif		3967.44 148.62 752.66	1/14/2020 4:49 1/14/2020 4:51 1/14/2020 4:58	administrator administrator administrator

### Steps to export files to a destination folder

Each file found in the search can be restored to a local folder with its actual version.

- 1. Right-click the desired file in the list.
- 2. From the context menu select **Get Version(s) to.** The *Search & Export Export to* window opens.
- 3. Specify the folder where you want to restore the file(s).



4. Click **OK** to restore the file and its actual version to the destination folder.

### Steps to export the search result

- 1. Select the Files tab.
- 2. Click **Export** under the search criteria section.
- 3. From the Export pop-up window select the fields that you want to export.

- 4. Click Next. The Save As window opens.
- 5. Specify the file name and the format. You can save the report in several formats (XLS, PDF, XML, RPT, HTML). The default file name is *Export.xls*
- 6. Click Save.

## **Post Processing**

Post Processing allows running customer specific tasks over archived files. Clients using other software programs who wish to process archived files within those software programs may do so via the Post Processing.

i NOTE: If you have installed Archive Manager Search as a fulltext engine, you must enable the appropriate post-processing plugin. With this plugin configured, you will be able to fulltext search in the file archive. The plugin is called PFPostProcessLuceneIndexPlugin and the files are in the C:\Program Files (x86)\Common Files\PAM\PostProcessingPlugins folder.

Do not start post processing service on multiple servers for the same database. Starting the post processing service on multiple servers is not recommended, since that can cause conflicts in bookmarking. The same database should not be indexed by more than one post processing service.

### Steps to install the post processing plugin

- 1. Open Archive Manager Configuration Tool from <installdir>\ Program Files (x86)
  \Common Files \ PAM \ PAMConfig \ PamConfig.exe.
- 2. Switch to the **Post Processing** tab.
- 3. Switch to the **Post Processing Scopes** tab.
- 4. Right-click on the desired scope and from the context menu select Configure.
- 5. Click Add.
- 6. Installed plugins will be loaded in the *Add Plugin* pop-up window. Select the **PFPostProcessLuceneIndex** plugin in the drop-down box and click **Add**.

🔏 Add plugin		×
Select a plugin from the list of installed plugins:		
PFPostProcessLuceneIndex.PFPPLuceneIndexPlugin		•
	Add	Cancel

7. The plugin is listed in the *Plugins* list in *Configuration* tab. By default it is active.

Configuration			
🔀 Post Processii	ig for Files		
Enabled		Machine:	AMXSERVER-F
Index directory:	C:\Program Files (x86)\Metalogix\	MAMSearch\Index\File	Browse
Files Databas			
Provider:	Microsoft SQL Server		
Server name:	AMXSERVER-F		
Initial catalog:	MAMFILE		
			Configure
🦃 Plugins			
Plugin Name		Active	Bookmark
PFPostProcessLucen	eindex.PFPPLuceneIndexPlugin	Yes	01.01.2020 00:00:00
<			>
Add Rem	Properties		
			OK Cancel

### Steps to Configure a Plugin

The plugin is loaded by default with the date and time (initial bookmark date). This means that the plugin processes files having been archived after this initial bookmark date. If post processing should begin from some other bookmark date, then make sure to reset the initial bookmark date

1. From the *Plugins* list, select the **PFPostProcessLuceneIndex** plugin. Right-click the plugin and click **Properties** from the context menu .

Configuration				×
X Post Processing for Files				
Enabled		Machine:	AMXSERVER	₹-F
Index directory: C:\Program Files (x86)\Metalo	ogix∖M	AMSearch \Index \File		Browse
Files Database				
Provider: Microsoft SQL Server				
Server name: AMXSERVER-F				
Initial catalog: MAMFILE				
				Configure
💖 Plugins				
Plugin Name		Active	Bookmark	
PFPostProcessLuceneindex.PFPPLuceneIndexPlugin		Yes	01.01.190	00 00:00:00
	SS	Add new plugin		
	ീ	Remove plugin		
	2	Refresh Properties		
	65	Set Bookmark		
		Disable		
<				>
Add Remove Properties				
			or	Grand
			ОК	Cancel

- 2. In the *Post processing plugin properties* window displays information about the plugin. You can enable or disable the plugin, or set the bookmark as described below.
- i NOTE: Advanced Post Processing settings can be configured after clicking the General Settings tab on the Post processing tab.

### Steps to specify a bookmark date

- 1. Right-click the desired plugin and click **Set Bookmark** from the context menu. You can also click **Set Bookmark** from the *Post processing plugin properties* window.
- 2. In the *Enter bookmark* window specify the desired time either manually or by choosing a date from the calendar when you click the drop-down in the date field. Click **OK**.

E	nter	boo	kma	rk				×
	Se	lect	da	28				
	01.01	1 202	0.00	):00:0	0			-
		1				_		
	-	]	Janu	iary	2020	ו	▶	Cancel
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Cancel
	29	30	31	Ð	2	3	4	
	5	6	7	8	9	10	11	
	12	13	14	15	16	17	18	
	19	20	21	22	23	24	25	
	26	27	28	29	30	31	1	
	2	3	4	5	6	7	8	
	2	Too	lay:	11/1	8/2	019		

3. The *Restart service* window appears.

Restart	service 🔀
Ø	The MAM Post-processing service must be restarted in order to apply the configuration changes.
	Would you like to restart it now?
	🗌 Do not showthis message again
	Yes No

4. Click **Yes** to restart the service.

#### NOTE:

The bookmark date is displayed in the *Plugins* list in *Configuration* tab.

If you reset the bookmark date, the change takes effect immediately, and there is no need to disable and enable the plugin again.

If you remove a plugin by using the **Remove** button, it will stop completely without remembering where it stopped. If you then load that plugin again, you must configure it again.

## **Statistics tab**

This tab was designed to give the administrator fast, reliable and comprehensive information about archived and retrieved files. The number of files, their size as well as space saved on the disc at archiving – all these essential data can be sorted by folder, user and time period. Exporting the statistics to chosen folder is also possible.

Enterprise Manager		_ = ×
Home 40ADDC1	BRadl0040	
Archive Scheduler	Statistics           Type:         Archived           Statistics:         Archived hourly statistics           Description         Shows the number and size of archived files on hourly basis.	Generate     Export
Restrictions	Comment: Statistics: 'All archived'; server: 40ADDC1	
Statistics		
	M Statistics	

As a first step, in the Type down-drop box choose whether you want to generate statistics for Archived or Retrieved files.

Then select the statistics specification in the Statistics down-drop box:

All	-	returns data on saved space and number and size of all archived files
Yearly statistics	-	returns data on saved space and number and size of archived files for the chosen sequence of years
Monthly statistics	-	returns data on saved space and number and size of archived files for the chosen sequence of months
Daily statistics	-	returns data on saved space and number and size of archived files for the chosen sequence of days
Hourly statistics	-	returns data on saved space and number and size of archived files for the chosen sequence of hours

Additional statistics are available for Archived files ("Archived" is selected in the Type down-drop box):

User based statistics	-	returns data on saved space and number and size of files archive by the selected user or all users (including jobs)
Folder based statistics	-	returns data on saved space and number and size of files archived in the selected folder

**NOTE:** All the above mentioned statistics types DO NOT take into consideration versions of archived files. Only data for the current versions of the archived files are collected. In case of archived files it is possible to get statistics also for their versions. To generate the statistics for versions (not including the actual version) select Archived yearly statistics – versions, Archived Monthly statistics – versions etc.

After specifying your desired statistics click the Generate button (Generate). Depending on the chosen type of statistics you will be asked to specify the time span for the statistics, user or folder.

Example: To set the period for which you want to generate the statistics use the down arrows to open the calendar. Then select the date. You can also simply rewrite the values. Then click OK.

24	Statistics period
	Set the period you want to generate statistics for:
From:	Tuesday , <mark>January</mark> 01, 1980 💌
To:	Tuesday , February 28, 2017 💌
	OK Cancel

Statistics get displayed in the Results pane.

300								
				Stat	tistics			
Archive	Type:	Archived	Archived Cenerate					
<b>M</b>	Statistic	s: Archived	Archived hourly statistics Export					
25	Descript	ion Shows t	he number and size o	f archived files on ho	ourly basis.			
Scheduler								
				Res	sults			
Pestrictions	Commo							
Restrictions	Comme		ourly statistics': serve	er: 40ADDC1: from: I	01/01/1980: to: 02/2	8/2017		
Restrictions			ourly statistics'; serve	er: 40ADDC1; from: I	01/01/1980; to: 02/2	8/2017		
22		ics: 'Archived h						
Restrictions Settings			ourly statistics'; serve Month	Pr: 40ADDC1; from: 1	01/01/1980; to: 02/2	8/2017 File count	File size [MB]	
22		ics: 'Archived h					File size [MB]	
Settings		ics: 'Archived h	Month	Day	Hour	File count		
22		Year	Month 2	Day 21	Hour 9	File count	1084.70	
Settings		Year 2017 2017	Month 2 2	Day 21 24	Hour 9 14	File count 31 5	1084.70 1.09	
Settings		Year 2017 2017	Month 2 2	Day 21 24	Hour 9 14	File count 31 5	1084.70 1.09	
Settings		Year 2017 2017	Month 2 2	Day 21 24	Hour 9 14	File count 31 5	1084.70 1.09	
Settings		Year 2017 2017	Month 2 2	Day 21 24	Hour 9 14	File count 31 5	1084.70 1.09	

Click Export (<u>Export</u>) should you wish to export the statistics as an .rpt, .html, PDF or .xls file to your desired location.

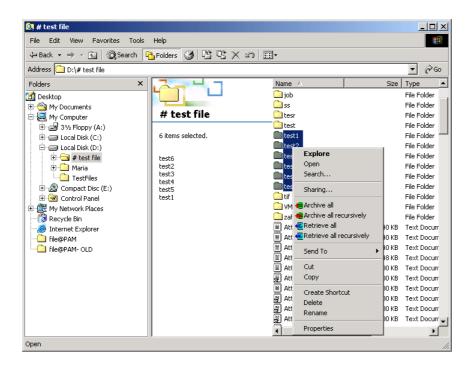
## System context menu

With Archive Manager for Files you may archive/retrieve through system context menus. There are several system context menus, depending on where you click with your right mouse button.

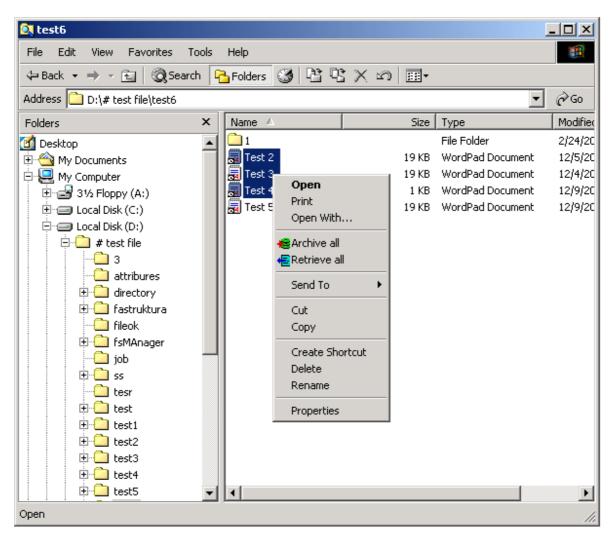
If you select several folders and then click with your right-mouse button, the context menu allows you may choose to archive all, archive all recursively (i.e. subfolders included), retrieve all, or retrieve all recursively.

At archiving, the default retention category is used.

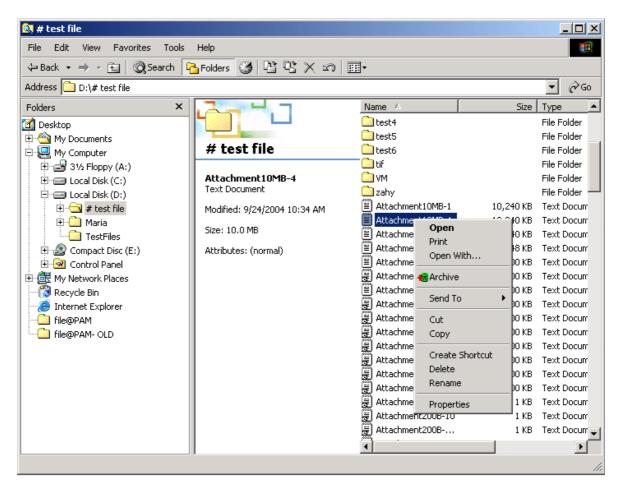
**NOTE:** If none of the retention categories (under **Settings** / **General** tab) is marked as default, system context menu for archiving/retrieving is not accessible.



If you select several files and then click with your right-mouse button, the following menu opens. You may choose to archive all, or retrieve all.



Select one file and then click with your right-mouse button. You may choose to archive the file if it has not been archived yet (see the screenshot below). If you select an archived file, you can retrieve it via the context menu.



# **Other functionality**

#### Free Space Checking

In order to prevent free space to get too low on a file server, it is possible to allow retrieving of archived files only under certain conditions. The administrator can define the minimal amount of the free space for which retrieving will be allowed. If the amount of the free space left is smaller than the minimal amount, retrieving will fail.

The minimal free space can be defined in figures or percentage for individual disks and UNC paths or it can be set globally as well.

To activate the free space checking functionality, the new key CheckFreeSpace has to be added to registry:

HKEY\_LOCAL\_MACHINE \ Software \ Metalogix \ fsaPAM \ CheckFreeSpace

Then add a new string value for every disk or UNC path for which you want to check the free space. To check all disks and UNC paths globally, set an asterisk "\*" as a Value name.

c	1	ni	ta	v	
J	УI		۱a	л	

Value name	Data
Disk name with ":" or UNC path starting with "\\" or every path will be checked if asterisk "*" is set	Value in - percentage "%" - bytes "B" - kilobytes "KB" - megabytes "MB" - gigabytes "GB" - terabytes "TB"

#### Examples:

Value name	Data
*	20%
C:	30%
D:	300 GB
<u>\\fileserver1</u>	5%
\\fileserver2\data	100 MB

😭 Registry Editor				
File Edit View Favorites Help				
🚊 🖓 Metalogix	▲ Name	Туре	Data	
Archive Web	ab (Default)	REG_SZ	(value not set)	
🗐 🌙 fsaPAM	ab D:	REG_SZ	30%	
License	ab \\fileserver2\data	REG_SZ	100 MG	
Setup				
MAMEI	- 4		1	<b>F</b>
Computer HKEY_LOCAL_MACHINE\SOFTWARE Metalogix \fsaPAM \Chec	ckFreeSpace			

To apply the changes, all MAMfsa services have to be restarted in Start / Programs / Administrative tools / Services.

#### Size Faking Feature

At archiving, Archive Manager for Files transfers an archived file to HSM system, i.e. to the archive. Only a shortcut of few kilobytes remains at the original location of the file and thus Archive Manager saves storage space. However, when using quota management software sometimes it is required that the archived file (i.e. shortcut) be displayed with the size of the original file. This feature has to be set in registry under:

HKEY\_LOCAL\_MACHINE\SOFTWARE\Metalogix\fsaPAM\SparseGlobal

When the SparceGlobal key value is set to:

1 – the shortcut will be displayed with the size of the original file

0 – the shortcut will be displayed with its actual size

**NOTE:** The shortcut will be also displayed with its actual size, if the key is not present in the registry.

To set this feature also for HTML shortcuts, the SparceGlobal key has to be set to value "1" and SparseHTML key has to be set to value "1" as well. As a result also HTML shortcuts will be displayed with the size of the original file.

To apply the changes, all MAMfsa services have to be restarted in Start / Programs / Administrative tools / Services.

NOTE: As compression is not supported on PSFS, the size faking feature is not supported on PSFS.

#### **Filtering for Log Files**

It is possible to considerably shorten log files accessible in the Archive Manager for Files on the Scheduler / Reports tab by not including less important information into them, i.e. log entries for "Already archived" messages will be filtered out.

To activate filtering, a new key LogIsArchived has to be added to the registry under

HKEY\_LOCAL\_MACHINE\SOFTWARE\Metalogix\fsaPAM

Right-click inside the right pane, choose New > DWORD value and set this new created LogIsArchived key to "0".

To apply the changes, all MAMfsa services have to be restarted in Start / Programs / Administrative tools / Services.

# **Addendum**

#### Applying product license

If you are prompted to apply the license there are two options:

- Archive Manager server has an internet connection (a)
- Archive Manager server has NO internet connection (b)
- a) If the server has an internet connection, follow the next steps:
  - Enter your license key and click Next.
  - NOTE: If the internet access is filtered out by a proxy on the server, click the Set proxy link to enter the proxy settings.
  - The license will be validated and you can continue the installation.

Activate	License Key	×
Q	Enter license key and select the activation method	
	License key:	
	Activation mode:	
	Online activation (requires online internet connection)	
	O Offline activation	
	Set proxy	
	< Back Next > Close	

- b) If the server has NO internet connection, follow the next steps:
  - Enter your license key.
  - Select the Offline activation radio button and click Next.
  - Copy the Activation request text from the Activation request text box or save it as a file (click the Save to file link)
  - On a machine with internet access open the Activation URL (listed under the Activation Request).
  - Paste the Activation Request text you have copied or Browse for the file you have saved and click Activate
  - Activation text is generated. Again copy the text or save it as a file
  - Back on the Archive Manager server click Next to proceed to the Enter your Activation Response dialog. Paste the Activation text you have copied from the our web page or load the file.
  - Click Next, then Finish.

**NOTE:** In case your Archive Manager server has no Internet connection permanently, you will be asked to revalidate your license periodically. It is the same process as described in the part b) above.

Description of the Archive Manager for Files registry values

These values are defining the basic behavior of our product and can be found in the Windows registry under the path:

HKEY LOCAL	_MACHINE\SOFTWARE	Metalogix\fsaPAM

AllowRemoteDrives	whether the "Storage" tab is enabled in the manager
DBCommandTimeout	overrides the default timeout for DB command used in handler service (in seconds); values less than 30 will configure the system to use 30s
dbconnectionstring	database connection string
dbconnectionstringADO	database connection string used by the Handler service
dbpassword	encoded database password, machine dependent
dbschema	Archive Manager database schema
dbtype	database type
dbuser	database user, account used when creating database connections
dbversion	Archive Manager database version
DebugOutputFlags	set by the FilePamDbg.exe application, used for gathering debug information
fsaLogDir	base path of the job log files
fsaPamGuardTimer	defines, when the Guard service should restart the other services. Value entered is in minutes after midnight. If set to 0xffffffff, the services won't be restarted in the night. Recommended to set the value to 0xffffffff
HSMServer	indicates the HSM server
LogFilePathName	the path of the log file used by the Archive Manager core service to store information about current archive and retrieve processes
LogIsArchived	flag, by default set to 1. This registry entry is not created automatically. If set to 0, the job logs will not contain information about files, which were not being archived because they were already shortcuts
MinSizeToShortcutB	defines the minimum size of a file, which can be replaced with a shortcut after archiving
NetAppBackupUsers	defines one domain user for which the screen requests from NetApp will not retrieve the file back to the original location on filer; supported format: <domain>\<user></user></domain>
RunServices	tells the Guard service, which other Archive Manager services to start. The value is a bitmask: 1 - Handler service, 2 - Remote server service, 4 - Archiver service. If set to 7, all other services will be started
RemoveExtendedAttribs	If set to 0, files with extended attributes are archived but the shortcut is not created. If set to1, extended attributes are removed and the original file is archived and replaced by shortcut.

ScriptPath	the path to the database scripts
ShortcutXMLTag	used in the case of kernel type shortcuts (not HTML, NetApp or Celerra), if set to 1, the information stored in the reparse point is written into the content of the shortcut. Recommended to set the value to 1
SparseGlobal	indicates whether the file size faking feature is turned on (1) or off (0) globally for all shortcut types. Some customers using quota management software might have problems with size faking (see "Size faking feature")
SparseHTML	The same functionality focused just on HTML shortcuts. If set to 1, the HTML shortcuts will have the same logical size of the shortcut as the original file had (see "Size faking feature")
StartServicesAfter	tells the Guard service, how long to wait before starting the other Archive Manager services. Value defined in milliseconds
StartServicesByGuard	indicates whether the other Archive Manager services should be started by the Guard service
TempDir	directory, where the Handler service stores temporary files which are created during the retrieve process. This registry entry is not created automatically, by default the service user's temporary directory is used
WebServicePrefix	used when generating HTML shortcuts. Defines the basic URL of the FilePamWebService, which is responsible for auto- retrieving HTML shortcuts

Additional notes / Known issues:

Resilient File System (ReFS) is not supported on Windows Server 2012 R2.

# About Us

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Around the globe, more than 130,000 companies and 95% of the Fortune 500 count on Quest to deliver proactive management and monitoring for the next enterprise initiative, find the next solution for complex Microsoft challenges and stay ahead of the next threat. Quest Software. Where next meets now. For more information, visit <u>www.quest.com</u>.

## **Contacting Quest**

For sales or other inquiries, visit <u>www.quest.com/contact</u>.

## **Technical Support Resources**

Technical support is available to Quest customers with a valid maintenance contract and custome rs who have trial versions. You can access the Quest Support Portal at <a href="https://support.quest.com">https://support.quest.com</a>

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product