

# Metalogix<sup>®</sup> ArchiveManager for Files 8.7

# Media Store Guide



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#### 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.

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# Introduction

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This guide describes the configuration for a large set of supported media stores that are categorized into two sections:

- On-Premise Media Stores
- <u>Cloud Media Stores</u>

You can configure these media stores using the Confguration tool provided to you with your Archive Manager for Exchange or Archive Manager for Files installation package. For more information about managing media stores see the *HSM Guide*.

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# **On-Premise Media Stores**

This chapter describes the on-premise media stores supported by the Metalogix Hierarchical Storage Management.

In this chapter:

- Jukebox, Hard Disk or Network Media
- Simple Path MediaStore
- Simple Foldering Store
- EMC Centera
- IBM-Tivoli
- HP Integrated Archive Platform
- HP Integrated Archive Platform
- FileNet IS
- Hitachi HCP and HCAP
- iTernity
- KOM Networks KOMpliance
- <u>XAM</u>
- <u>nscale</u>

### Jukebox, Hard Disk or Network Share

Jukebox file management software provides a Windows file system type access to the media store. This lets applications and users directly access the jukebox without having to use some exotic programming. The jukebox software can make the entire jukebox appear as a single drive letter. Each disc in the jukebox appears as a folder. From the Windows interface, you can then assign drive letters to groups of folders. The jukebox software can also create groups of discs within the jukebox management system and assign drive letters to each group. HSM supports the following jukebox media stores: **Amass, Pegasus** and **PoINT Jukebox Manager**.

The Hard Disk or Network Share options are used for media stores that have a fixed size. If you have a hard disk or network share that uses RAID or other virtualized stores that are not size constrained, then is a <u>Simple Path</u> media store configuration is recommended.

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**NOTE: Amass** is a jukebox management software for UNIX and requires an additional set of properties which are described in the instructions below.

#### To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86) \Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the **Stores** tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizard		
Create a new Media Stor	e	
Choose a na	ame and type for the Media Store.	
Media Store type:	Jukebox, Harddisk, Network Share 🔹	
Name of the new Media Store:	NETSTORE	
	< Back Next > Cancel	

5. Click **Next**. The location information window opens.

Media Store Administration Wizard			
Jukebox, Harddisk, N	letwork Share		
	a location where the archived files should be saved. upported storage provider for this Media Store.		
Storage provider :	Hard disk, UNC Path		
Path for the Media Store:	C: \HSM	Browse	
Allow multiple saving:			
Path for multiple saving:	C:\HSM-Backup	Browse	
Path for fast file access:	C:\HSM •		
Retention time support:	<none> •</none>		
	< Back Next >	Cancel	

- a. Storage Provider select a jukebox option like Amass, Pegasus and PoINT Jukebox Manager or select Hard disk, UNC Path.
- b. **Path for the media store** browse and create the folder if it does not exist (eg. **C:\HSM**). You could specify a UNC path to a shared folder as well.
- c. Allow multiple saving select this check box if you want to archive the file in an alternate location. For example C:\HSM-Backup.
- d. **Path for multiple saving** alternate media store location. Browse and create the folder if it does not exist (eg. **C:\HSM**). You could specify a UNC path to a shared folder as well. This field is available if **Allow multiple saving** selected.
- e. Path for fast file access choose between the Path for the media store and Path for multiple saving that are listed in the drop-down. Typically, if the first path is a slow media store like Pegasus Jukebox, and the second path is a large SAN like a local RAID or Harddisk, then you should use SAN because it is much faster. This field is available if Allow multiple saving selected.
  - **NOTE:** If archiving to any one path fails, file store operation will result in an error.
- f. **Retention time support** from the drop-down box, select one of two predefined retention time support options or select **<None>** to ignore retention time support:
  - NetApp SnapLock if you are using NetApp and want to use SnapLock for compliance with law regulations about archiving of electronic documents. (e.g. HIPAA, OFRS, COSO etc.)
  - EMC Celerra if you use EMC Celerra.
- **NOTE: Retention time support** is not available if you select the Jukebox file management options like Amass, Pegasus or PoINT.
- 6. Click **Next**. The *Multiple saving and media switch* window opens if you selected **Allow multiple saving** in the previous step.

Media Store Administration Wizard		
Jukebox, Harddisk, Network Share		
If multiple Saving is activated, you can choose from which numbered medium multiple Saving was activated, or state on how many media multiple saving is initiated. The Media Store also has the option to run a command or batch file when it switches to a new medium. The admin can configure the total number of medias to be written to as well as the opportunity to delete the medias which are no longer required to be stored on more than one location		
Multiple saving		
From the medium with number     0		
○ For the last medium		
Media switch		
□ Check and delete oldest medium which was saved multiple times		
Action when switching media:		
Maximum time for the action: 5000 iii milliseconds		
< Back Next > Cancel		

- 7. Enter the information as described below:
  - Multiple Saving select this check box to setup specific media that will support multiple saving.
    - a. **From the medium with number** choose this option to specify the medium identifier of the first medium that should start multiple saving.
    - b. For the last medium choose this option to specify the medium identifier of the last medium that should allow multiple saving.
  - Media Switch
    - a. Check and delete oldest medium which was saved multiple times select this check box to allow the system to check for files which are no longer required to be stored on more than one location and deletes the duplicate copies.
    - b. Action when switching media enter a command or a batch file that will be run when switching between media.
    - c. **Maximum time for the action** specify a maximum timeout value in milliseconds for the **Action when switching media** command.
- 8. If you selected **Amass** as the storage provider, click **Next** to open the Amass properties window. Otherwise continue with the next step.

Media Store Administration Wizard				
Jukebox, Harddisk, Network Share				
Command to create the Vollist file: C:\vollist-command.bat	Browse			
AMASS vollist creation timeout: 10 💼 seconds				
Path to the Vollist file: C:\vollist-result.txt	Browse			
Delete old Vollist before creation of new one				
< Back Next >	Cancel			

- a. Command to create the Vollist file To get the size of each medium Amass provides a command-line-program called vollist. The user must create a command file (EXE, CMD or BAT) which runs these commands on the UNIX environment and creates a file with the result of this command that the store can read. Normally customers do this via RSH commands. Enter the location of the command file or click **Browse** to locate the file.
- b. AMASS vollist creation timeout set a time limit in seconds for the vollist command to complete.
- c. Path to the Vollist file enter the path to the batch file or click Browse to locate the file.
- d. Delete old vollist before creation of new one select this check box to remove old command files when a new new command file is generated.
- 9. Click Next. The Media naming convention window opens.

Media Store /	Administration Wizard		×
Jukebox,	Harddisk, Network Share		
	Provide information about medium		
	Create folder names using:	Standard 🔹	
	Create file and folder names using the 8.3 convention (	(MS-DOS compatible)	
	Medium prefix:	m	
	Number of the first medium:	1 .	
	Number of medium that can be administered by HSM:	100 ÷	
	Number ot the current medium to write on (CurrentWriteMediaID):	1	
	< Back	Next > Cancel	

- a. **Create folder names using** select the format of HSM folders names from the drop down from the following options: Standard, Only LowerCase or Only Uppercase.
- b. **Create file and folder-names using 8.3 convention** select this check box to truncate long file names to 8 characters with an extension of 3 characters only if the media storage system does not support long file names.
- c. **Medium prefix** Enter a maximum of 2 alphanumerical characters. Each file will be prefixed with these characters along with the respective media number. For example, if you select **LS**, the name of one of the media would be LS000001.
- d. Number of the first medium specify a number that will be assigned to the first medium.
- e. Number of medium that can be administered by HSM specify the number of media to be administered by Archive Manager. For instance, if there are 20 media in a Jukebox, then enter 20.
- f. **Number of current media to write on** (CurrentWriteMediaID) specify the number of the medium that will be used as the first one for archiving.

10. Click Next. The Directory management window opens.

Media Store Administration Wizard		
Jukebox, Haro	ldisk, Network Share	
	To avoid a lot of files in the root directory, the medium is divided into subdirectories. Optionally, it is possible to create a new directory each day. You can also limit the number of files in a directory. When a file is flushed, the operating system writes all changes to the disk. Uncheck this option if the operating system or file system does not allow this process. ☑ Create a subdirectory for each day ☑ Limit the number of files in a directory to <u>500</u> ☑ Flush files immediately after writing	
	< Back Next > Cancel	

- a. **Create a sub directory for each day** select this check-box to create a directory for each day (recommended). Sub-directories are created with the path 000001, 000002, and so on. This is necessary for performance reasons because the more files a directory contains the longer it takes to search for a file.
- b. Limit the number of files in directory to select this check box to limit the number of files per directory to control directory growth.
- c. **Flush files immediately after writing** select this check box to delete files from the cache. Normally all file systems support flushing of files. Deactivate the option only if the file system does not allow flushing.
- 11. Click Next. The Media space management window opens.

ledia Store Administration Wizard		
Jukebox, Harddisk, Network Share		
Here you can make further settings for the medium.		
Space on a medium that should not be used:       Image: Comparison of the size of the free space on the current medium is lower than the entered value and the next medium to write on is not ready:       MB		
Total size of a medium in MB 5120 📩 MB		
< Back Next > Cancel		

- a. **Space on a media that should not be used** Set a storage space that should not to be used on a medium. This value is defined in MB.
- b. **Issue a warning** Set a low space warning limit. The default is 20 MB. As soon as free storage space is lower than the value specified, a warning message is generated. When this value is reached, the availability of a new medium is verified. This value should comply with the approximate average daily amount of MB to archive, so that a new medium can be checked in a timely manner.
- c. Total size of media in MB Enter the total size of a medium.
- 12. Click Next. The Free space calculator window opens.

Media Store Administration Wizard		
Jukebox, Har	ddisk, Network Share	
Ø	Here you can choose how often the free space on a medium should be calculated.	
	<ul> <li>Recalculate the used space</li> <li>Interval: 120 ÷ seconds</li> <li>Number of archived files: 500 ÷</li> <li>Total size of the archived files: 5 ÷ megabytes</li> </ul>	
<ul> <li>Use a single file for saving the current size</li> <li>Browse</li> <li>Use a file for each medium (located in the root folder of each medium)</li> </ul>		
< Back Next > Cancel		

- **Recalculate the used space** HSM needs to know when to start a new medium, as there is maximum medium size that was set. Choose this option to recalculate the used space periodically, and specify the parameters that will be used to perform the check.
  - a. **Interval** Recalculates the free space on the medium in the time span specified in seconds.
  - b. **Number of archived files** Recalculates the free space on a medium depending on the number of files that have been archived since the most recent calculation.
  - c. **Total size of the archived files** -Recalculates the free space on a medium depending on the archived volume in MB since the most recent calculation.
- Use a single file for saving the current size chose this option if the user does not want to allow HSM to recalculate the used space periodically because it could be a time-consuming operation. Specify a file where the value of the used space on a medium will be saved. Since the size of the file being archived is known, the size of the used space is updated each time a file is stored or removed from the medium.

- Use a file for each medium Choose this option to use a single file for saving the current size of all storage media. The file is located in the root folder.
- 14. Click **Next**. The *HSM server connection information* window opens. Every media store must provide this information so the HSM server can connect to it. For more information about various media stores see the *Archive Manager for Exchange Media Store Administration Guide*.

Media Store Administration Wizard	×
Jukebox, Harddisk, Network Sha	are
Please choose how long the PamServers. This giv before the Media Store t HSM Servers where the Media Store sho	
AMXHSM(H	SM)
	Add Server
🔁 Add	Specify the server where this store should connect.
Connection interval between the Media	Server type: HSM Server 🔹
	Server name: AMXHSM
	OK Cancel

15. Click Add. The Add Server window opens. Enter the following information:

- a. Server type select HSM Server
- b. Server name name of the server where HSM is installed (eg. AMXHSM)
- 16. Click **OK** to close the window and add the HSM Server to the list.
- 17. Click **Next**. The final configuration window appears.

Media Store Administration Wizard		
Jukebox, Ha	rddisk, Network Share	
	The wizard has finished collecting the information needed to create the Media Store.	
	Relative speed of the store:	
	Use HSM Cache for read operations:	
	Write protection (mark as read-only):	
	Re-create service for this Media Store: 🗌	
	< Back Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 18. Click **Finish**. The Service Restart window opens.

Restart service	
Service restart needed	<b>%</b>
To apply the changes you have made, t restarted:	he following services should be
Name	Status
MAM HSM Base Operations MAM HSM Asynchronous Operations	Running Stopped
Do you want to restart the selected ser	rvices?
	Yes No

Select one or more check boxes where the **Status** indicates **Stopped**. Click **Yes** to restart the service so that the HSM service is aware of the media store configuration.

- 19. Verify that the media store appears in the Stores section.
- 20. Create a **Schema** for this media store.

TIP: Whenever a Jukebox type is store created, a service called PMSStoreSv<NameOfTheStore> is created as well. The service startup type is set to Manual. We recommend that you change the startup type to Automatic from Start > Settings > Control panel > Administrative tools > Services.

## **Simple Path**

If you have a hard disk or RAID system that does not need directories with a specific size, then choose the Simple Path media store. This is also the default media store that is configured when you install Hierarchical Storage Manager (HSM). This kind of store is faster and outperforms all other stores under the same circumstances (same hardware, same path).

Advantages:

- It does not do size checking.
- It writes files on any UNC path (e.g. Harddisk or Network-Share)
- Files are stored in subdirectories because there are no *medias* with a specific size in the format <RootPath>\<Year>\<Month>\<Day>\<Hour>\<counter>\Filename.txt e.g. \ \Fileserver\HSM\2021\04\26\18\000\ 4\_000000f4.tif

#### To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86) \Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the Stores tab.
- 4. Click New Store from the Stores section. The Create a new Media Store wizard starts.

Media Store Administration Wizar	d	×
Create a new Media Stor	e	
Choose a na	ame and type for the Media Store.	
Media Store type:	Simple Path 🔹	
Name of the new Media Store:	FILESTORE	
	< Back Next > Cancel	

- a. Media Store Type select Simple Path from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click **Next**. The *Media Store Administration Wizard* step for the Simple Path opens.

Media Store Administration Wiz	ard		×
Simple Path			
Choose a	location where the archived files should be saved		
Path for the Media Store:	\\FILESERVER \HSM	Browse	
✔ Allow multiple saving to:	\\FILESERVER\HSM-Backup	Browse	
During write, wait until the A	Archive attribute was removed		
Retention time support:	<none></none>		
User name:	democorp\domadmin		
Password:	******		
	,		
	< Back Next >	Cancel	

- a. Path for the Media Store local or network share path to the media store.
- b. Allow multiple saving to select this check box if you want to archive the file in an alternate location.
- c. **During write, wait until the Archive attribute was removed** Secret key configured in Simple Path instance.
- d. **Retention time support** from the drop-down box, select one of two predefined retention time support options or select **<None>** to ignore retention time support:
  - NetApp SnapLock if you are using NetApp and want to use SnapLock for compliance with law regulations about archiving of electronic documents. (e.g. HIPAA, OFRS, COSO etc.)
  - EMC Celerra if you use EMC Celerra.
- e. User name Enter the domain\username to access the network share. Activated only if a network share is specified. If you need to access a share you have to allow the computer account (Local System) to access a share or run PamHsmTSv with a special user.
- f. **Password** Enter the password to access the network share. Activated only if a network share is specified.
- 6. Click Next.

Media Store Admir	istration Wizard	×
Simple Path		
2	The wizard has finished collecting the information needed to create the Media Store.	
	Relative speed of the store: 100	
	Use HSM Cache for read operations:	
	Write protection (mark as read-only):	
	Re-create service for this Media Store: 🗌	
	< Back Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

😤 Configuration	
Configure HSM	Database Stores Advanced Diagnostics Encryption Packer Tasks
ArchiveWeb	Stores Id Name Server Mirror of State
auditing	1 FILESSTORE FILESERVER
🕡 н5м 🕨 🕨	
Files Archive	+ New store - 🐼 Set up 🙁 Delete   🚹 Primary   📉 Manage - 🔁 Refresh
可 Users	Id Name Store Server Force Store Encryption Key Compression Task
T Exchange Archive	1 FilesSchema FILESSTORE FILESERVER yes
o Seurch	
Post Processing	
	🛨 Create 🖉 Edit 🔣 Delete 🗹 Test 🔁 Refresh

## **Simple Foldering Store**

This is a basic store similar to Windows Explorer where sub-folders are created under the specified path.

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the Stores tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizard	i -	×
Create a new Media Stor	e	
Choose a na	me and type for the Media Store.	
Media Store type: Name of the new Media Store:	Simple Foldering Store   FOLDERSTORE	
	< Back Next > Cancel	

- a. Media Store Type select Simple Foldering Store from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click **Next**. The *Media Store Administration Wizard* step for the Simple Foldering Store opens.

Media Store Adminis	tration Wizard	×
Simple Folderi	ng Store	
	Choose the location where the archived files should be saved.	
Path of the store Folder scheme	уууу\MM\dd\HH	Browse
	< Back Next >	Cancel

- a. Path to the store Click Browse to locate the local root folder.
- b. Filename prefix a unique prefix that you can create for each item stored in the folders. To construct a date type prefix, click 😰 and select the date formats. You can specify a custom separator between date formats.
- 6. Click Next.

Media Store Admi	nistration Wizard		×
Simple Folde	ering Store		
	The wizard has finished collecting the info Store.	rmation needed to create the Media	
	Relative speed of the store:	100 ÷	
	Use HSM Cache for read operations:		
	Write protection (mark as read-only):		
	Re-create service for this Media Store: [		
	<	Back Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

### **EMC Centera**

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the Stores tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizard	i -	×
Create a new Media Stor	e	
Choose a na	me and type for the Media Store.	
Media Store type:	EMC Centera 🔹	
Name of the new Media Store:	EMCSTORE	
	< Back Next > Cancel	

- a. Media Store Type select EMC Centera from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click Next. The Media Store Administration Wizard step for EMC Centera opens.

Media Store Administration	Wizard	×
EMC Centera		
addresses. Examples: "10.2.3.4"	esses of your Centera Cluster. Use commas to separate the IP-	
"10.2.3.4,	node1, Centera_node2" 10.6.7.8?"c:\centera\rwe.pea" 10.6.7.8?name= <username>, secret=<password>"</password></username>	
Centera IP Adresses:		
Embedded blobs:	100 kilobytes	
-	Open connection to Centera only as needed (Lazy open) Run interface in separate process	
I		
	< Back Next > Cancel	

- a. Centera IP Addresses Insert all IP addresses of your Centera Cluster. Use commas to separate IP addresses.
- b. Embedded blobs When a file is stored two files are created internally one XML file which contains the meta-data and a second file for the data itself. This means that each file that is stored, increments the file-count on Centera by two. If you store lots of small files,

Centera can run out of a *file-count* before it runs out of disk space. With these settings multiple files upto the specified size are collated and embedded in the meta-data file and the data is saved as a base 64 encoded data.

- c. **Open connection to Centera as needed (Lazy open)** Select this check box to open the Centera connection at the very last moment possible. This is done by the Centera SDK itself and is a setting recommended by EMC.
- d. **Run interface in separate process** Select this check box to let the Centera instance run in its own process. That way, two different connections to Centera won't affect each other. If a connection is broken, it can be restarted without the need to restart HSM.
- 6. Click Next.

Media Store Admin	istration Wizard	×
EMC Centera		
	The wizard has finished collecting the information needed to create the Media Store.	
	Relative speed of the store: 100	
	Use HSM Cache for read operations:	
	Write protection (mark as read-only):	
	Re-create service for this Media Store:	
	< Back Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

## **IBM-Tivoli**

#### To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86) \Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the **Stores** tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizar	d	×
Create a new Media Stor	e	
Choose a na	ame and type for the Media Store.	
Media Store type: Name of the new Media Store:	IBM Tivoli   TIVOLIMEDIASTORE	
	< Back Next > Cancel	

- a. Media Store Type select IBM Tivoli from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click Next. The Media Store Administration Wizard step for IBM Tivoli opens.

Media Store Administr	ration Wizard	×
IBM Tivoli		
		7
Config file:		Browse
Log directory:		Browse
API directory:		Browse
User:		
Password:		
	< Back Next >	Cancel

- a. **Config file** Click **Browse** to locate the configuration file (extension OPT) for the IBM Tivoli storage manager (TSM).
- b. Log directory Click Browse to locate the log directory where HSM will log TSM activity.
- c. API directory Click Browse to locate the folder where the TSM API (32-bit) is installed.
- d. **User** Username to access the TSM instance.
- e. **Password** Password to access the TSM instance.
- 6. Click Next.

Media Store Administratio	on Wizard	×
IBM Tivoli		
Management Class:		
Properties:	-ENABLEARCHIVERETENTIONPROTECTION=yes	
Node:		
Node:		
	Deactivate Data Retention	
	Run interface in separate process	
		_
	< Back Next > Cancel	

- a. **Management class** Specify the management class that determines how the TSM server manages the backup versions of the objects being backed up.
- b. Properties Enter the properties supported by TSM. The only setting which is mandatory for HSM is the -ENABLEARCHIVERETENTION property if data retention is used. If HSM uses more Tivoli Storage Managers, each storage configuration must also contain the -TCPSERVERADDRESS property to specify TSM sever address (e.g. -TCPSERVERADDRESS=TSM1)
- c. Node Specify the container where the data will be stored.
- d. **Deactivate Data Retention** Do not select this check box if your TSM system requires dataretention (e.g. DR550). Select this check box if:
  - you do not have a license or if you just store media on a tape and you do not need the protection.
  - your TSM instance does not support Data Retention.
- e. **Run interface in separate process** Select this check box to let the TSM instance run in its own process. That way, two different connections to TSM won't affect each other. If a connection is broken, it can be restarted without the need to restart HSM.
- 7. Click Next.

Media Store Admin	istration Wizard		×
Cloudian Hyp	perStore		
	The wizard has finished collecting the in Store.	formation needed to create the Media	
	Relative speed of the store:	100 .	
	Use HSM Cache for read operations:		
	Write protection (mark as read-only):		
	Re-create service for this Media Store:		
		< Back Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 8. Click Finish.

- 9. Restart HSM services.
- 10. Verify that the media store appears in the Stores section.
- 11. Create a **Schema** for this media store.

### **HP Integrated Archive Platform**

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the **Stores** tab.
- 4. Click New Store from the Stores section. The Create a new Media Store wizard starts.

Media Store Administration Wizard	i 🛛 🕅
Create a new Media Stor	e
Choose a na	me and type for the Media Store.
Media Store type:	HP Integrated Archive Platform
Name of the new Media Store:	HPARCHIVE
	< Back Next > Cancel

- a. Media Store Type select HP Integrated Archive Platform from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click **Next**. The *Media Store Administration Wizard* step for the HP Integrated Archive Platform opens.

Media Store Administration Wizar	d	×
HP Integrated Archive Pl	atform	
SMTP Server:		
HTTP Server:		
Domain:		
Repository:		
	< Back Next > Cancel	

- a. SMTP Server SMTP server name.
- b. HTTP Server HTTP server name.
- c. **Domain** Domain name of the HP Integrated Archive Platform server.
- d. **Repository** Container configured in HP Integrated Archive Platform instance where the files will be stored.
- 6. Click Next.

Media Store Admir	nistration Wizard					X
HP Integrate	d Archive Platform					
	The wizard has finished collecting the in Store.	formatior	needed	to create	the Media	
	Relative speed of the store:	100	<u>.</u>			
	Use HSM Cache for read operations:					
	Write protection (mark as read-only):					
	Re-create service for this Media Store:					
		< Back	F	inish	Cancel	

Enter the information as described below:

a. Relative speed of the store - the relative speed of this store compared to other stores.

- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

## FileNet IS

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select HSM from the features panel.
- 3. Click the Stores tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizard	i	×
Create a new Media Store	9	
Choose a na	me and type for the Media Store.	
Media Store type:	FileNet IS 🔹	
Name of the new Media Store:	FILENETSERVER	
	< Back Next > Cancel	

- a. Media Store Type select FileNet IS from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click Next. The Media Store Administration Wizard step for the FileNet IS opens.

Media Store Admini	stration Wizard	×
FileNet IS		
URL	http:// /FNWS/LibraryServices.asmx	
User name		
Password		
Library		
Document class		
Filename prefix	yyyy/MM/dd/HH 💱 🗸	
	< Back Next > Cancel	

- a. URL FQDN or IP address of the FileNet IS server.
- b. User name Username to access the FileNet IS instance.
- c. **Password** Password to access the FileNet IS instance.
- d. Library Storage library device name.
- e. Document class Document class for connecting to the FileNet store.
- f. Filename prefix A unique prefix that you can create for each item stored in the media store. To construct a date type prefix, click 😰 🕶 and select the date formats. You can specify a custom separator between date formats.
- 6. Click **Next**.

Media Store Admir	nistration Wizard		×
FileNet IS			
	The wizard has finished collecting the in Store.	formation needed to create the Media	
	Relative speed of the store:	100 ÷	
	Use HSM Cache for read operations:		
	Write protection (mark as read-only):		
	Re-create service for this Media Store:		
		< Back Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

### **Hitachi HCP and HCAP**

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the Stores tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizar	d	×
Create a new Media Stor	e	
Choose a na	ame and type for the Media Store.	
Media Store type:	Hitachi HCAP 🔹	]
Name of the new Media Store:	HCAPSTORE	]
	< Back Next > Cance	

Enter the information as described below:

a. Media Store Type - select Hitachi HCAP or Hitachi HCP from the drop down list.

- b. Name of the new Media Store enter a unique name for this store.
- 5. Click **Next**. The *Media Store Administration Wizard* step for the Hitachi HCAP or Hitachi HCP opens.

Media Store Admini	istration Wizard	×
Hitachi HCAP		
Host	www.hcap.domain	
SSL	Use SSL Strict SSL	
UID	-1	
Timeout	120 .	
Retry limit	0 ÷ seconds	
Shred		
Filename prefix	yyyy/MM/dd/HH	
	< Back Next > Cancel	

For Hitachi HCAP

Enter the information as described below:

- a. Host FQDN or IP address of the Hitachi HCAP server.
- b. SSL Select this check box to use an SSL certificate.
- c. Strict SSL Select this check box to verify the SSL certificate if SSL is checked.
- d. **UID** Enter the user identifier numerical value. For example, File System User ID (-1), Superuser ID (0)
- e. Timeout Set the server connection timeout (in seconds).
- f. Retry limit Specify how many times the store should try to save a file.
- g. **Shred** Select this check box to allow secure file deletion. The file will be deleted and all existing references in storage will be overwritten.
- h. Filename prefix a unique prefix that you can create for each item stored in the media store. To construct a date type prefix, click ♀ r and select the date formats. You can specify a custom separator between date formats.

For Hitachi HCP

Media Store Admin	istration Wizard	×
Hitachi HCP		
Host	namespace-name.tenant-name.hcp-domain-name	
SSL	Use SSL Strict SSL	
User name	Password	
Root Folder	HSM_TESTER	
Timeout	120 ÷ seconds	
Retry limit	0	
Shred		
Filename prefix	yyyy/MM/dd/HH 💱 🗸	
	< Back Next > Cancel	

- a. Host enter a specific host name in the format namespace-name.tenant-name.hcpdomain-name where tenant is the highest node of the storage folder structure. There can be one or more tenants defined. Each tenant can be defined in enterprise or compliance retention-mode. In enterprise mode, privileged operations are allowed. In compliance mode, they are not allowed. For example, when tenant name = company name, there can be another tenant defined in compliance mode. Each tenant can have one or more namespaces defined to indicate departments like sales, development, or other categories.
- b. **SSL** Select this check box to use an SSL certificate.
- c. Strict SSL Select this check box to verify the SSL certificate if SSL is checked.
- d. User name Username to access the Hitachi HCP server.
- e. Password Password to access the Hitachi HCP server.
- f. **Root Folder** the top most folder in the folder hierarchy. You can change the default root folder HSM\_TESTER.
- g. **Timeout** Set the server connection timeout (in seconds).
- h. Retry limit Specify how many times the store should try to save a file.
- i. **Shred** Select this check box to allow secure file deletion. The file will be deleted and all existing references in storage will be overwritten.
- j. Filename prefix a unique prefix that you can create for each item stored in the media store. To construct a date type prefix, click 😭 and select the date formats. You can specify a custom separator between date formats.
- 6. Click Next.

Media Store Admir	nistration Wizard			×
Hitachi HCAF	)			
	The wizard has finished collecting the in Store.	formation need	ed to create the Media	
	Relative speed of the store:	100 ÷		
	Use HSM Cache for read operations:			
	Write protection (mark as read-only):			
	Re-create service for this Media Store:			
		< Back	Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

### iTernity

**NOTE:** Requires Web Services Enhancements (WSE) 3.0 for Microsoft .NET (Runtime files only) to be installed on the Archive server.

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the **Stores** tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizard		
Create a new Media Stor	e	
Choose a n	ame and type for the Media Store.	
Media Store type:	iTernity •	]
Name of the new Media Store:	ITERNITY-A9870EE	
	< Back Next > Cance	:

- a. Media Store Type select iTernity from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click Next.

If Microsoft WSE 3.0 runtime files are not present an error message appears.

Media Stor	e Administration Wizard
	Microsoft WSE 3.0 is not installed. You can not use iTernity store. Please install the Microsoft WSE 3.0.
	ОК

Otherwise, the *Media Store Administration Wizard* step for iTernity opens.

Media Store Administratio	n Wizard	×
iTernity		
URL:	http://10.16.100.51/iternity/Ternity.asmx	
Timeout:	100 ÷ seconds	
Storage Provider:	Store   AES 256  Low  Standard	
User:	administrator	
Password:	*******	
Confirm password:	*******	
	Contract Nuclear Contract	_
	< Back Next > Cancel	

- a. **URL** URL of the iTernity server.
- b. Timeout Set the server connection timeout (in seconds).
- c. Storage Provider specify the type and encryption (Standard or AES256).
- d. User enter the username for access to the iTernity instance
- e. Password and Confirm Password enter and confirm the password for the iTernity instance
- 6. Click **Next**.

Media Store Admin	istration Wizard		×
iTernity			
	The wizard has finished collecting the in Store.	formation needed to create the Media	
	Relative speed of the store:	100	
	Use HSM Cache for read operations:		
	Write protection (mark as read-only):		
	Re-create service for this Media Store:		
		< Back Finish Cancel	

Enter the information as described below:

a. Relative speed of the store - the relative speed of this store compared to other stores.

- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

### **KOM Networks KOMpliance**

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the **Stores** tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizard			×
Create a new Media Stor	e		
Choose a na	me and type for the Media S	itore.	
Media Store type:	KOMpliance		•
Name of the new Media Store:	KOMSERVER-01		
	< Ba	ack Next >	Cancel

- a. Media Store Type select KOMpliance from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click Next. The Media Store Administration Wizard step for the KOMpliance opens.

Media Store Administr	ation Wizard		6	×
KOMpliance				
KOMpliance server Path of the store Folder scheme	yyyy\MM\dd\HH		Browse	
		< Back	Next > Cancel	

- a. **KOMpliance server** enter the KOMpliance server name.
- b. Path of the store Click Browse to locate the store in the KOMpliance server.
- c. Folder scheme a unique prefix that you can create for each item stored in the media store. To construct a date type prefix, click ♀ r and select the date formats. You can specify a custom separator between date formats.
- 6. Click Next.

Media Store Admin	istration Wizard					×
KOMpliance						
	The wizard has finished collecting the in Store.	formatio	n neede	ed to create	e the Media	
	Relative speed of the store:	100	•			
	Use HSM Cache for read operations:					
	Write protection (mark as read-only):					
	Re-create service for this Media Store:					
		< Back		Finish	Cancel	

Enter the information as described below:

a. Relative speed of the store - the relative speed of this store compared to other stores.

- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

#### XAM

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the **Stores** tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizard				
Create a new Media Stor	e			
Choose a na	me and type for the Media Store.			
Media Store type:	ХАМ		•	
Name of the new Media Store:	XAMSERVER-01			
	< Back	Next >	Cancel	

- a. Media Store Type select XAM from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click **Next**. The *Media Store Administration Wizard* step for the XAM opens.

Media Store Adminis	tration Wizard						×
ХАМ							
XRI	snia-xam://						
User name							
Password							
Retry limit	0 +	Shred					
Systemproperties	Name	Туре	Value				
	Add						
Filename prefix	yyyy/MM/dd/HH					<u>ବ</u> -	
			<	Back	Next >	Cancel	

- a. **XRI** enter the specific path to the XRI store.
- b. User name Access key configured in the XAM instance.
- c. **Password** Password configured in the XAM instance.
- d. Retry limit set how many times the store should try to save a file.
- e. System Properties click Add and enter the system properties for the XAM instance.
- f. Filename prefix a unique prefix that you can create for each item stored in the media store. To construct a date type prefix, click 😰 🕶 and select the date formats. You can specify a custom separator between date formats.
- 6. Click **Next**.

Media Store Admi	nistration Wizard		
XAM			
	The wizard has finished collecting the information Store.	n needed to create the Media	
	Relative speed of the store: 100	•	
	Use HSM Cache for read operations:		
	Write protection (mark as read-only):		
	Re-create service for this Media Store:		
	< Back	Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

#### nscale

**nscale** from Ceyoniq Technology is an information platform that offers simple and robust document archiving. You can choose from two different options to integrate with nscale Web services or the nscale windows server.

To create a store:

- 1. Open the Configuration tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the Stores tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.
- 5. From the Media store drop down select either Nscale Web Service or Nscale File Server

Media Store Administration Wizard				
Create a new Media Store				
Choose a n	ame and type for the Media Store.			
Media Store type:	Nscale Web Service 🔹			
Name of the new Media Store:	NSCALEPORTAL			
	< Back Next > Cancel			

6. Click **Next**. Depending on your selection of media store type, the property window opens.

Media Store Administration W	/izard	×
Nscale Web Service		
Service base URL:	http://localhost/nscaleWeb	
File transfer URL:	http://localhost:7782/nscaleWeb	
File transfer physical path:	C:\Program Files (x86)\Common Files\PAM\HSM\Web\nsc	aleWeb
	Delete file after transfer	
Credentials:	Oefault	
	O User:	
	Password:	
	Confirm:	
	< Back Next >	Cancel

or

Media Store Administration V	Vizard					×
Nscale File Server						
Service base URL:	http://localhost:8	8080/nscaleV	/eb			
File transfer URL:	http://localhost:7	7782/nscaleW	/eb			
File transfer physical path:	C:\Program Files	(x86)\Comm	on Files\PAM	I\HSM\Web\ns	caleWeb	
	🖌 Delete file aft	er transfer				
Credentials:	O Default					
	O User:					
	Password:					
	Confirm:					
		<	Back	Next >	Cancel	

- 7. Enter the information as described below:
  - a. Service base URL Enter the URL of your NSCALE Server in the format http://<nscalewebserver>:8080/nscaleweb
  - b. File transfer URL Enter the URL of the HSM server to transfer the document between HSM and nscale server in the format http://<hsm-server>:7782/nscaleweb
  - c. **File transfer physical path** Specify the path of the temporary Folder on the HSM Server where the file will keep during the transfer process.
  - d. **Delete File after transfer** If checked, the file will be deleted from the above path once the file is transferred to the nscale server.
  - e. **Credentials**: **Default** If selected, the web request will be authenticated using the credentials of the currently logged-on user.
  - f. **Credentials**: **User** If selected, the web request will be authenticated using the username entered in the adjacent field.
    - i. **Password** password of the user.
    - ii. **Confirm** re-enter the password to confirm.
- 8. Click Next. The Settings window opens (for Nscale File server).

Med	lia Store A	dministration		×
Μ	ledia Sto	ore Administration Wizard		
	Settings fo	or archiving into Nscale File Server		
	🔀 Archi	ve Descriptor		
	ID	Name		
	✓ 1	NSCALE_STANDARD		
			< Back Next >	Cancel

- 9. Select the default **ID** check box.
- 10. Click Next. The HSM settings window for this media store opens.

Media Store Admir	nistration Wizard	×
Nscale Web	Service	
2	The wizard has finished collecting the information nee Store.	ded to create the Media
	Relative speed of the store:	
	Use HSM Cache for read operations:	
	Write protection (mark as read-only):	
	Re-create service for this Media Store:	
	< Back	Finish Cancel

- a. Relative speed of the store relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations If checked HSM will copy files into the cache when reading from this store.
- a. Write protection (mark as read only) not supported for this store type.
- b. Re-create service for this Media Store not supported for this store type.
- 11. Click **Finish** to complete the nscale integration.

# **Cloud Media Stores**

Media storage systems have been steadily moving away from local storage to remote, serverbased storage and processing. This chapter provides integration information with a host of cloud storage solutions. Most of the cloud stores use a flat file system with no directory structure that you see in Windows folders. However, some of them allow a hierarchical file names to imitate a folder structure. For example 2021/11/23/somefilename.txt

Wherever possible, hierarchical file names are configurable and the naming convention is based on the current date and time that allows granularity to milliseconds. For example you can use the prefix yyyy MM ddHHmmssfff to name the files, or any arbitrary sub-string can be added to the format string.

In this chapter:

- <u>Rackspace Cloud Files</u>
- <u>Caringo CAStor</u>
- <u>Google Drive</u>
- EMC Atmos
- <u>Microsoft Azure</u>
- <u>Microsoft Azure</u>
- AWS S3 or Scality S3
- <u>Cloudian HyperStore</u>

#### **Rackspace Cloud Files**

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select HSM from the features panel.
- 3. Click the Stores tab.
- 4. Click New Store from the Stores section. The Create a new Media Store wizard starts.

Media Store Administration Wizard			
Create a new Media Store			
Choose a na	me and type for the Media Store.		
Media Store type: Name of the new Media Store:	Rackspace Cloud Files    RACK098AADE7		
	< Back Next > Cancel		

- a. Media Store Type select Rackspace Cloud Files from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click Next. The Media Store Administration Wizard step for the Rackspace Cloud Files opens.

Media Store Administ	ration Wizard			×
Rackspace Clou	ud Files			
User ID				
API Key				
Container				
Filename prefix	yyyy/MM/dd/HH			<b>₽</b> .
		< Back	Next >	Cancel

- a. User ID username for access to the Rackspace Cloud Files server.
- b. API key Access key to the API library configured in the Rackspace Cloud Files instance.
- c. **Container** Logical entity similar to file folders which store objects that consist of data and its descriptive metadata that is configured in Rackspace Cloud Files instance.

- d. Filename prefix a unique prefix that you can create for each item stored in the media store. To construct a date type prefix, click ? and select the date formats. You can specify a custom separator between date formats.
- 6. Click Next.

Media Store Admin	istration Wizard	×
Rackspace C	loud Files	
	The wizard has finished collecting the in Store.	formation needed to create the Media
	Relative speed of the store:	100 :
	Use HSM Cache for read operations:	
	Write protection (mark as read-only):	
	Re-create service for this Media Store:	
		< Back Finish Cancel

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

# **Caringo CAStor**

#### To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the Stores tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wiza	rd	×
Create a new Media Sto	re	
Choose a n	ame and type for the Media Store.	
Media Store type: Name of the new Media Store:	Caringo CAStor	
	< Back Next > Cancel	

- a. Media Store Type select Caringo CAStor from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click Next. The Media Store Administration Wizard step for Caringo CAStor opens.

Media Store Admi	nistration Wizard	×
Caringo CAS	tor	
Hosts	cas.caringo.com	Add
		Remove
Port	80 🗧	
Retry limit	5 🕂	
Timeout	300 seconds	
	< Back Next >	Cancel

- a. Hosts -enter your specific host name and click Add to add the host name to the hosts list. A host can be also removed from the list by selecting it and clicking Remove.
- b. Port set the port for communication with the cloud.
- c. **Retry limit** specify how many times the store should try to save a file.

- d. Timeout set the server connection timeout (in seconds).
- 6. Click Next.

Media Store Admin	istration Wizard		×
Caringo CASt	tor		
	The wizard has finished collecting the in Store.	formation needed to create the Media	
	Relative speed of the store:	100 .	
	Use HSM Cache for read operations:		
	Write protection (mark as read-only):		
	Re-create service for this Media Store:		
		< Back Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

### **Google Drive**

**NOTE:** To use a Google Drive store, the .NET Framework 4.5 must be installed on the HSM Server. If you install the .NET Framework after installing HSM, you must run the HSM setup once more in the **Repair** mode to be able to access the Google Drive.

#### To create a store:

1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe

- 2. Select **HSM** from the features panel.
- 3. Click the **Stores** tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizar	d 🛛
Create a new Media Stor	e
Choose a na	me and type for the Media Store.
Media Store type:	Google Drive 🔹
Name of the new Media Store:	GOOGLEDRIVE
	< Back Next > Cancel

- a. Media Store Type select Google Drive from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click **Next**. The *Media Store Administration Wizard* step for the Google Drive opens.

Media Store Administration Wizard	×
Google Drive	
Root Folder METALOGIX_HSM	
CLIENT ID	
CLIENT SECRET	
Authorize access to your Google account Access to your Google Drive is not authorized	
< Back Next > Cancel	]

- a. **Root Folder** the default root folder is already entered for you. You can change it if necessary.
- b. Client Id Access key configured in Hitachi HCAP instance.
- c. Client Secret Secret key configured in Hitachi HCAP instance.
  - **NOTE:** To create the Client ID and Client Secret:
    - 1. Login to the Google Developers console at https://console.developers.google.com/project
    - 2. Create a new project.
    - 3. Expand APIs & auth in the left pane and select APIs.
    - 4. Activate the following APIs: Drive API.
    - 5. Select **Credentials** from the left pane.
    - 6. Under the OAuth section, click Create new Client ID.
    - 7. Select Installed application, then click Create Client ID.
- 6. Click Authorize access to your Google account.

Form Google DriveAccountConfirmation
testmtlgx2@gmail.com +
e Metalogix
<ul> <li>Metalogix HSM would like to:</li> </ul>
8 View and manage the files and documents in your Google Drive
By clicking Accept, you allow this app and Google to use your information in accordance with their respective terms of service and privacy policies. You can change this and other Account Permissions at any time.
Cancel
Cancel

- 7. Click Accept. If your credentials were correct, a confirmation message appears.
- 8. Click Next.

Media Store Admir	nistration Wizard	×
Google Drive	2	
	The wizard has finished collecting the information needed to create the Media Store.	
	Relative speed of the store: 100 🔹	
	Use HSM Cache for read operations:	
	Write protection (mark as read-only):	
	Re-create service for this Media Store:	
	< Back Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 9. Click Finish.
- 10. Restart HSM services.
- 11. Verify that the media store appears in the Stores section.
- 12. Create a **Schema** for this media store.

#### **EMC Atmos**

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select HSM from the features panel.
- 3. Click the **Stores** tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizard		
Create a new Media Stor	e	
Choose a na	ame and type for the Media Store.	
Media Store type:	EMC Atmos 👻	
Name of the new Media Store:	EMCATMOS-500	
	< Back Next > Cancel	

- a. Media Store Type select EMC Atmos from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click Next. The Media Store Administration Wizard step for the EMC Atmos opens.

Media Store Admi	nistration Wizard	×
EMC Atmos		
URL	accesspoint.emccis.com	
Use SSL		
UID		
Shared secret		
Retry limit	0 📩 Use HTTP Status 100 Continue	
Folder scheme	yyyy/MM/dd/HH	
	< Back Next > Cance	el 🛛

- a. URL FQDN or IP address of the EMC Atmos server.
- b. Use SSL select this check box to use SSL as the communication protocol.
- c. UID username to access the EMC Atmos instance
- d. Shared Secret Secret key configured in the EMC Atmos instance.

- e. **Retry limit** set how many times the store should attempt to save a file.
- f. Use HTTP Status 100 Continue select this check box for request header when creating or updating namespace objects.
- g. Folder scheme a unique prefix that you can create for each item stored in the media store. To construct a date type prefix, click ♀ and select the date formats. You can specify a custom separator between date formats.
- 6. Click Next.

Media Store Admin	istration Wizard		×
EMC Atmos			
	The wizard has finished collecting the in Store.	formation needed to create the Media	
	Relative speed of the store:	100 🗧	
	Use HSM Cache for read operations:		
	Write protection (mark as read-only):		
	Re-create service for this Media Store:		
		< Back Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

# **Microsoft Azure**

Azure Blob Storage is the Microsoft object storage solution for the cloud.

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86) \Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the Stores tab.
- 4. Click New Store from the Stores section. The Create a new Media Store wizard starts.

Media Store Administration Wizar	d	×
Create a new Media Stor	re	
Choose a n	ame and type for the Media Store.	
Media Store type:	Microsoft Azure	•
Name of the new Media Store:	AZURESTORE	
	< Back Next >	Cancel

- a. Media Store Type select Microsoft Azure from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click **Next**. The *Media Store Administration Wizard* step for the Microsoft Azure opens.

Media Store Administrati	on Wizard	×
Microsoft Azure		
URL	https:// 📩 .blob.core.windows.t	net
Account key or SAS token		
Container name		
Timeout	90 ÷ seconds	
Retry policy	No retries   Retry count	×
Filename prefix	yyyy/MM/dd/HH	ଙ୍ଗୁ-
	< Back Next > Can	cel

- a. URL the base address for the objects in your storage account that is the combination of the account name and the Azure Storage blob endpoint forms. You can enter the account name in the field and change the protocol between http or https.
- b. Account key or SAS token the account key for your storage account. You can use either of the two keys to access Azure Storage, but in general it's a good practice to use the first key, and reserve the use of the second key for when you are rotating keys. You can also use a shared access signature (SAS) which is a URI that grants restricted access rights to Azure Storage resources. You can provide a shared access URI to clients who should not be trusted with your storage account key but whom you wish to delegate access to certain storage account resources. By distributing a SAS URI to these clients, you grant them access to a resource for a specified period of time.
- c. Container name name of the container that you have created to organizes the set of blobs, similar to a directory in a file system.
- d. **Timeout** Set the server connection timeout (in seconds).
- e. Retry policy choose the behavior from the available options.
- f. Retry count set how many times the store should try to save a file.
- g. Filename prefix a unique prefix that you can create for each item stored in the media store. To construct a date type prefix, click 😰 🕶 and select the date formats. You can specify a custom separator between date formats.
- 6. Click Next.

Media Store Admi	nistration Wizard	×
Microsoft Az	ure	
	The wizard has finished collecting the information needed to create the Media Store.	
	Relative speed of the store: 100 📩	
	Use HSM Cache for read operations:	
	Write protection (mark as read-only):	
	Re-create service for this Media Store: 🔲	
	< Back Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

To test you Azure connection data, go to <u>https://www.myazurestorage.com</u> and enter the account name and account key. Under the BLOBs menu you will see your stored files under a container.

### AWS S3 or Scality S3

To create a store:

- 1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the **Stores** tab.

4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wiza	rd 🛛 🕅
Create a new Media Sto	re
Choose a n	name and type for the Media Store.
Media Store type:	AWS S3
Name of the new Media Store:	AWS-S3-09564
	< Back Next > Cancel

- a. Media Store Type select AWS S3 or Scality S3 from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click Next. The Media Store Administration Wizard step for the AWS S3 or Scality S3 opens.

Media Store Admi	nistration Wizard	×
AWS S3		
Host	s3.amazonaws.com	
Use SSL		
Proxy		
Access key		
Secret key		
Bucket		
Filename prefix	yyyy/MM/dd/HH	
	< Back Next > Cance	1

For Scality S3

Media Store Admi	nistration Wizard	×
Scality S3		
Host		
Use SSL	Use Signed URL	
Proxy		
Access key		
Secret key		
Bucket		
Filename prefix	yyyy/MM/dd/HH	
	111111mml	
	< Back Next > Cancel	

To set up the connection enter your AWS S3 store credentials:

- a. Host FQDN of the S3 host server.
- b. Use SSL select this check box to use SSL.
- c. Use Signed SSL only for Scality S3. Select this box to use a self signed certificate for your local Certificate Authority.
- d. **Proxy** FQDN of the proxy server if there is a proxy server that is used in your organization to access external web servers.
- e. Access Key and Secret Key unique to a customer. This information can be found on Account Management portal under the Security Credentials as shown below.

Account	Welcome   Sign Ou Account Number
Account Activity	
<ul> <li>AWS Identity and Access Management</li> </ul>	This page allows you to manage the root account credentials for your AWS Account. To manage IAM Users, their permissions, and security credentials, use the AWS Management Console.
AWS Management Console	
Consolidated Billing	Access to applications and services within AWS cloud is secure and protected in multiple ways. Accessing those applications and services requires the use of special credentials that are associated with your account. There are three
DevPay	types of credentials currently offered by AWS. If you know which security credentials you need, simply select one of the links below:
Manage Your Account	Access Credentials: Your Access Keys, X.509 Certificates, and Key Pairs
Payment Method	<ul> <li>Sign-In Credentials: Your E-mail Address, Password, and AWS Multi-Factor Authentication Device</li> </ul>
Personal Information	Account Identifiers: Your AWS Account ID and Canonical User ID
Security Credentials	If you are not sure which security credentials you should use, the link below will help you identify the credentials you
Usage Reports	need for the task you want to accomplish:
Billing Alerts	Find out which AWS Security Credentials you need
<ul> <li>Billing Preferences</li> </ul>	
	Access Credentials
	There are three types of access credentials used to authenticate your requests to AWS services: (a) access keys, (b) X.509 certificates, and (c) key pairs. Each access credential type is explained below.

Access Keys	🗟 X.509 Certificates	🎘 Key Pairs			
	t is created — see your a			ervice API. We create one for y	ou
Created	Access Key ID	Se	ret Access Key	Status	
January 31, 2013	AKIAIQ7KBPH2540880	ng Sho	n	Active (Make Inactive)	
Create a new Access	Кеу		Secre	et Access Key >	×
	n, you should never share nds frequent key rotation		BNFmP5olJ0vtW1	p5/CabD/=58HTLlogroudflor88	

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- f. **Bucket** needs to be created first and the name should be provided when configuring the media store.
- g. Filename prefix a unique prefix that you can create for each item stored in the media store. To construct a date type prefix, click ? and select the date formats. You can specify a custom separator between date formats.
- 6. Click Next.

Media Store Admin	istration Wizard					×
AWS S3						
	The wizard has finished collecting the inf Store.	formation	ı needed	to create	the Media	
	Relative speed of the store:	100	• •			
	Use HSM Cache for read operations:					
	Write protection (mark as read-only):					
	Re-create service for this Media Store:					
		< Back	F	inish	Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

### **Cloudian HyperStore**

To create a store:

1. Open the *Configuration* tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe

- 2. Select **HSM** from the features panel.
- 3. Click the Stores tab.
- 4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.

Media Store Administration Wizar	d 🛛	)
Create a new Media Stor	e	
Choose a na	me and type for the Media Store.	
Media Store type:	Cloudian HyperStore 🔹	
Name of the new Media Store:	Cloudian	
	< Back Next > Cancel	

- a. Media Store Type select Cloudian HyperStore from the drop down list.
- b. Name of the new Media Store enter a unique name for this store.
- 5. Click **Next**. The *Media Store Administration Wizard* step for the Cloudian HyperStore opens.

Media Store Admini	istration Wizard				×
Cloudian Hyp	erStore				
Host					
Access key					
Secret key					
Bucket					
Filename prefix	yyyy/MM/dd/HH			<b>₽</b>	
		< Back	Next >	Cancel	

Enter the information as described below:

a. Host - FQDN or IP address of the Cloudian HyperStore server.

- b. Access key Access key configured in Cloudian HyperStore instance.
- c. Secret Key Secret key configured in Cloudian HyperStore instance.
- d. **Bucket** Logical entity similar to file folders which store objects that consist of data and its descriptive metadata that is configured in Cloudian HyperStore instance.
- e. Filename prefix a unique prefix that you can create for each item stored in the media store. To construct a date type prefix, click ♀ and select the date formats. You can specify a custom separator between date formats.
- 6. Click Next.

Media Store Admin	istration Wizard		×
Cloudian Hyp	erStore		
	The wizard has finished collecting the in Store.	formation needed to create the Media	
	Relative speed of the store:	100 🔅	
	Use HSM Cache for read operations:		
	Write protection (mark as read-only):		
	Re-create service for this Media Store:		
		< Back Finish Cancel	

- a. Relative speed of the store the relative speed of this store compared to other stores.
- b. Use HSM Cache for read operations select this check box to allow HSM to use its internal cache to copy files during read operations.
- c. Write protection (mark as read only) not supported for this store type.
- d. Re-create service for this Media Store not supported for this store type.
- 7. Click Finish.
- 8. Restart HSM services.
- 9. Verify that the media store appears in the *Stores* section.
- 10. Create a **Schema** for this media store.

# **Modifying Media Store Settings**

To modify the store settings:

- 1. Open the Configuration tool from Start > Metalogix > Archive Manager Configuration or C: \Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
- 2. Select **HSM** from the features panel.
- 3. Click the Stores tab.

🛠 Configuration	
Configure HSM	Database Stores Advanced Diagnostics Encryption Packer Tasks
archiveWeb	Stores Id Name Server Mirror of State
Auditing	1 FILESSTORE HSMSERVER 2 JUKEBOX HSMSERVER Running
🕡 нѕм 🗼	
<b>Files Archive</b>	Hew store 👻 Set up 🗵 Delete   🔂 Primary 🛛 Manage 🔹 🔁 Refresh
of Users	Id         Name         Store         Server         Force Store         Encryption Key         Compression         Task           1         FilesSchema         FILESSTORE         HSMSERVER         yes
Texchange Archive	2 HSMSchema JUKEBOX HSMSERVER
🔊 Search	
🔊 Post Processing	
	🕂 Create 🖉 Edit 🗵 Delete 🗹 Test 🧭 Refresh

4. Click Manage.

Media Store Administration Wizard		
Media Store Administration Wizard		
<u> </u>	This wizard will guide you step by step trough the creation and administration of a Media Store.	
	C Create a new Media Store	
	<ul> <li>Administer an existing Media Store</li> </ul>	
	O Start, Stop or Delete an existing Media Store	
	Next > Cancel	

5. Click Next. The Choose a Media Store to manage window opens. Select the media store from the drop down that you want to manage.

Media Store Administration Wizard				
Administer an existing Media Store				
Choose a Media Store to manage.				
Please choose a Media Store:				
< Back Next > Cancel				

6. Click Next. Sometimes a warning message can appear. For example, the service for a media store like Jukebox, Harddisk, Network Share must be stopped first. Only then it can be modified. All other kinds of stores run directly in HSM and HSM services must be restarted after the changes have been applied.

Media Store Administration	
Given store is already running and cannot be edited. Please stop service first.	
ОК	

- 7. Click OK. Click the Back button and select Start, Stop or Delete an existing Media Store.
- 8. Click **Next**. The *Start, Stop or Delete an existing Media Store* window opens.

Media Store Administration Wizard					
Start, Stop or delete an existing Media Store					
Choose Media Stores to start, stop or delete					
Store		Service Status			
JUKEB	OX	Running			
FilesSt	ore	No service			
Sta	nt 🔲 Stop   🔀 Delete				
		< Back Finish Cancel	]		

- 9. Select the store and click **Stop**. Wait for the service to stop and then click **Finish**.
- 10. The Service restart needed window opens.

Restart service				
Service restart needed	<b>4</b>			
To apply the changes you have made, the following services should be restarted:				
Name	Status			
MAM HSM Base Operations MAM HSM Asynchronous Operations	Running Running			
Do you want to restart the selected services?				
	Yes No			

11. Click **Yes** to restart the services. Then start over again and modify the settings.

12. If you modify settings for stores that need running services, you must start the service again.

# 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 allows 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

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