

Quest® Archive Manager for Exchange 8.9

Media Store Guide



© 2024 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 <https://www.quest.com/legal>.

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 <https://www.quest.com/legal/trademark-information.aspx>. 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.

Quest® Archive Manager for Exchange Media Store Guide

Updated March 2024

Version 8.9

Contents

Introduction	4
On-Premise Media Stores	5
Jukebox, Hard Disk or Network Share	5
Simple Path	15
Simple Foldering Store	18
EMC Centera	20
IBM-Tivoli	23
HP Integrated Archive Platform	26
FileNet IS	28
Hitachi HCP and HCAP	30
iTernity	33
KOM Networks KOMpliance	36
XAM	38
nscale	40
Cloud Media Stores	44
Rackspace Cloud Files	44
Caringo CASTor	46
Google Drive	48
EMC Atmos	51
Microsoft Azure	54
AWS S3 or Scalify S3	56
Cloudian HyperStore	59
Modifying Media Store Settings	62
About Us	65
Contacting Quest	65
Technical Support Resources	65

Introduction

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

- [On-Premise Media Stores](#)
- [Cloud Media Stores](#)

You can configure these media stores using the Configuration 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*.

On-Premise Media Stores

This chapter describes the on-premise media stores supported by Hierarchical Storage Management (HSM).

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](#)
- [XAM](#)
- [nscale](#)

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 [Simple Path](#) media store configuration is recommended.



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 > Quest > 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.

The screenshot shows the 'Media Store Administration Wizard' window with the title 'Create a new Media Store'. It features a database icon and the instruction 'Choose a name and type for the Media Store.' Below this, there is a 'Media Store type:' dropdown menu with 'Jukebox, Harddisk, Network Share' selected. A 'Name of the new Media Store:' text box contains 'NETSTORE'. At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons.

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

The screenshot shows the 'Media Store Administration Wizard' window with the title 'Jukebox, Harddisk, Network Share'. It features a database icon and the instruction 'Choose a location where the archived files should be saved. Use a supported storage provider for this Media Store.' Below this, there are several fields: 'Storage provider:' with a dropdown set to 'Hard disk, UNC Path'; 'Path for the Media Store:' with 'C:\HSM' and a 'Browse' link; 'Allow multiple saving:' with a checked checkbox; 'Path for multiple saving:' with 'C:\HSM-Backup' and a 'Browse' link; 'Path for fast file access:' with a dropdown set to 'C:\HSM'; and 'Retention time support:' with a dropdown set to '<None>'. At the bottom, there are '< Back', 'Next >', and 'Cancel' buttons.

Enter the information as described below:

- 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.

i | **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.

i | **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

☐ 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: 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 Volist file: [Browse](#)

AMASS volist creation timeout: seconds

Path to the Volist file: [Browse](#)

☒ Delete old Volist before creation of new one

< Back Next > Cancel

Enter the information as described below:

- a. **Command to create the Volist file** - To get the size of each medium *Amass* provides a command-line-program called **volist**. 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 volist creation timeout** - set a time limit in seconds for the volist command to complete.
 - c. **Path to the Volist file** - enter the path to the batch file or click **Browse** to locate the file.
 - d. **Delete old volist 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

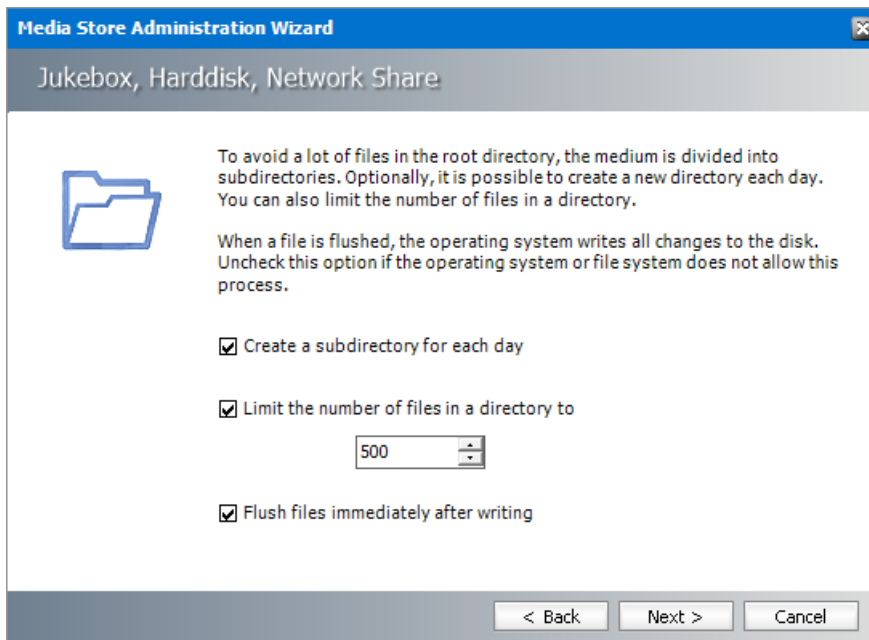
Number of the current medium to write on (CurrentWriteMediaID): 1

< Back Next > Cancel

Enter the information as described below:

- 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, Harddisk, 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

500

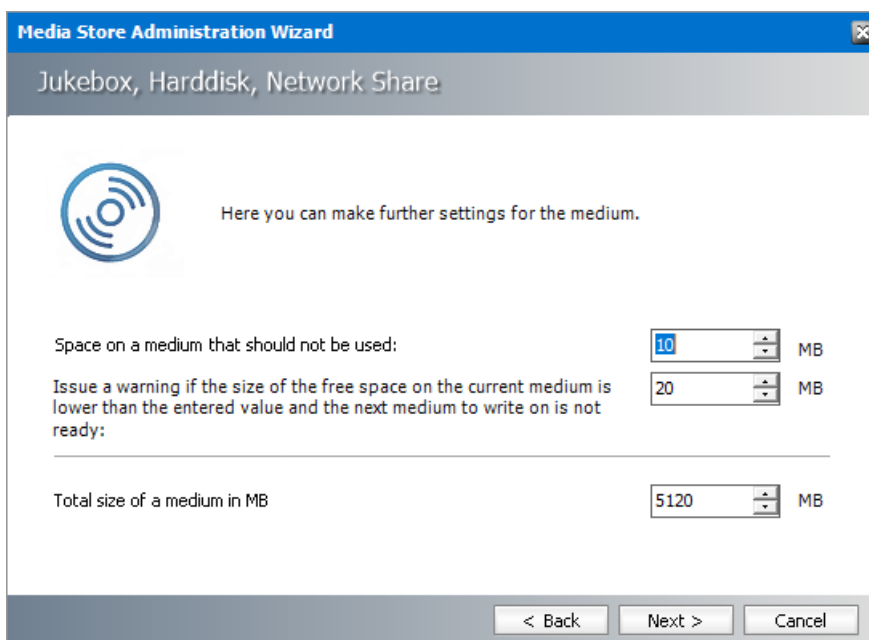
☒ Flush files immediately after writing

< Back Next > Cancel

Enter the information as described below:

- 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.



Media 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: 10 MB

Issue a warning if 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: 20 MB

Total size of a medium in MB 5120 MB

< Back Next > Cancel

Enter the information as described below:

- 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, Harddisk, Network Share

Here you can choose how often the free space on a medium should be calculated.

☒ Recalculate the used space

Interval: 120 seconds

Number of archived files: 500

Total size of the archived files: 5 megabytes

☐ Use a single file for saving the current size

Browse

☐ Use a file for each medium (located in the root folder of each medium)

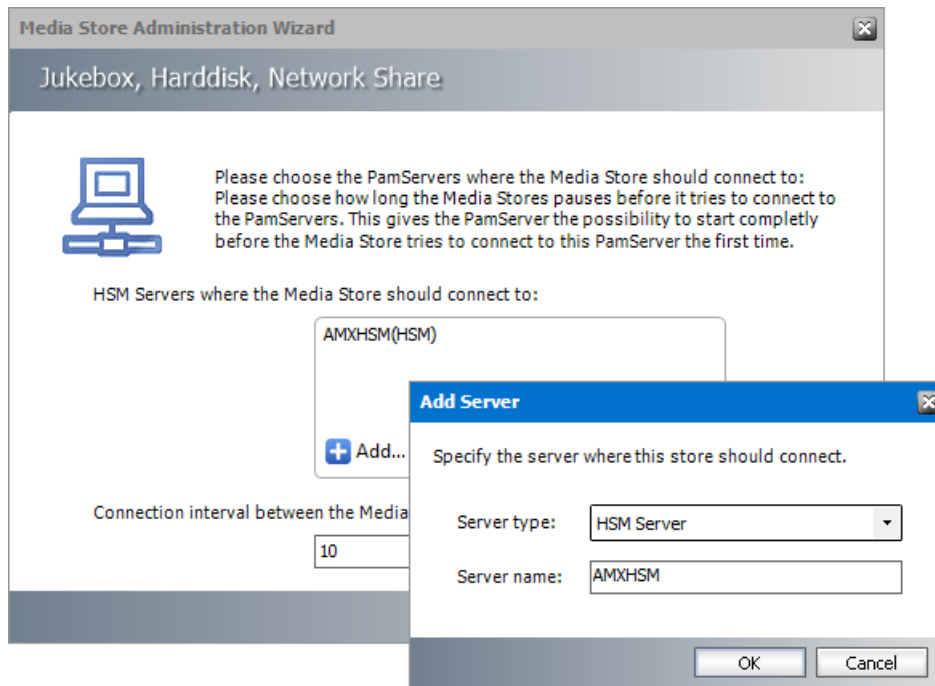
< Back Next > Cancel

13. Enter the information as described below:

- **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*.

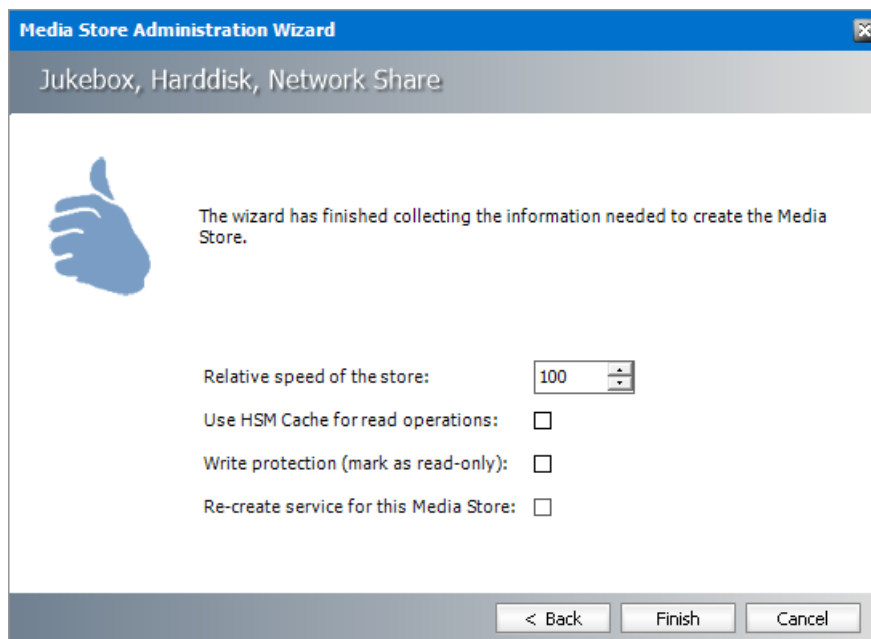


15. Click **Add**. The *Add Server* window opens. Enter the following information:

- Server type** - select **HSM Server**
- 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.

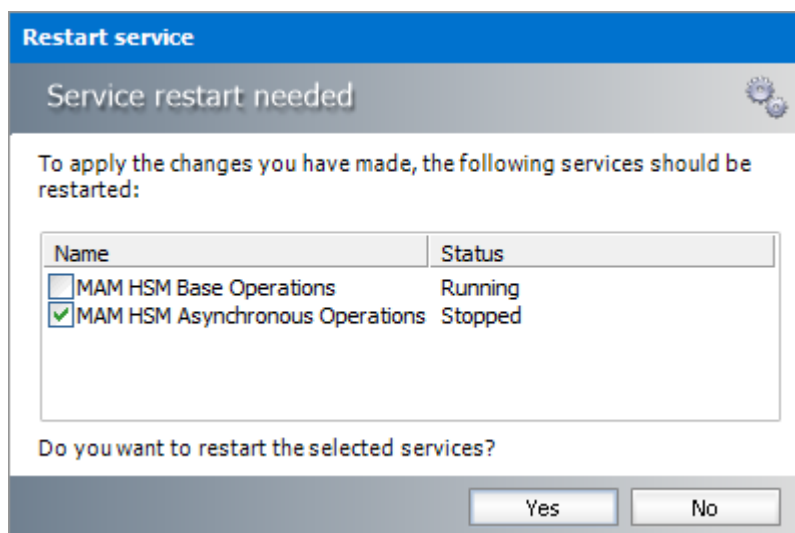
17. Click **Next**. The final configuration window appears.



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.

18. Click **Finish**. The *Service Restart* window opens.



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 > Quest > 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 name and type for the Media Store.

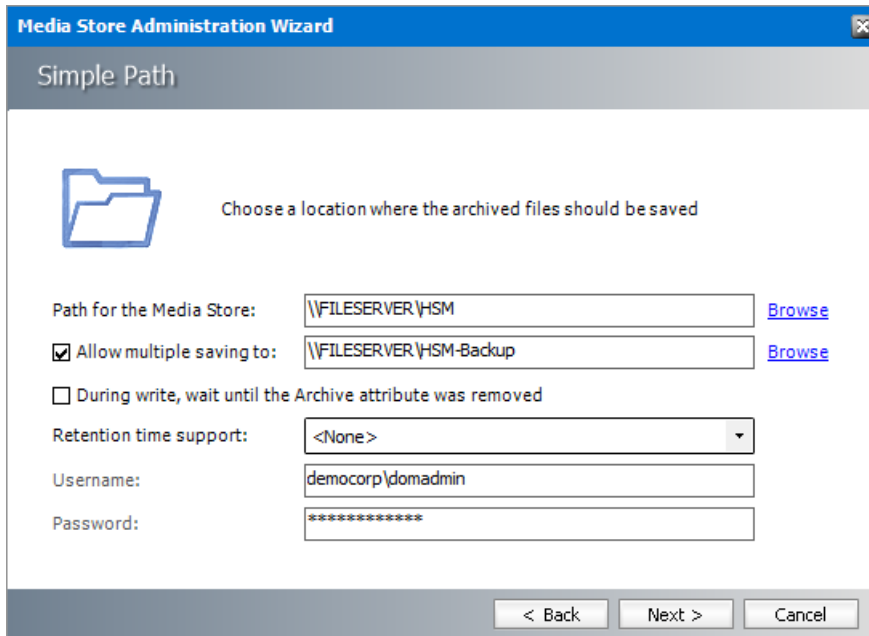
Media Store type: Simple Path

Name of the new Media Store: FILESTORE

< Back Next > Cancel

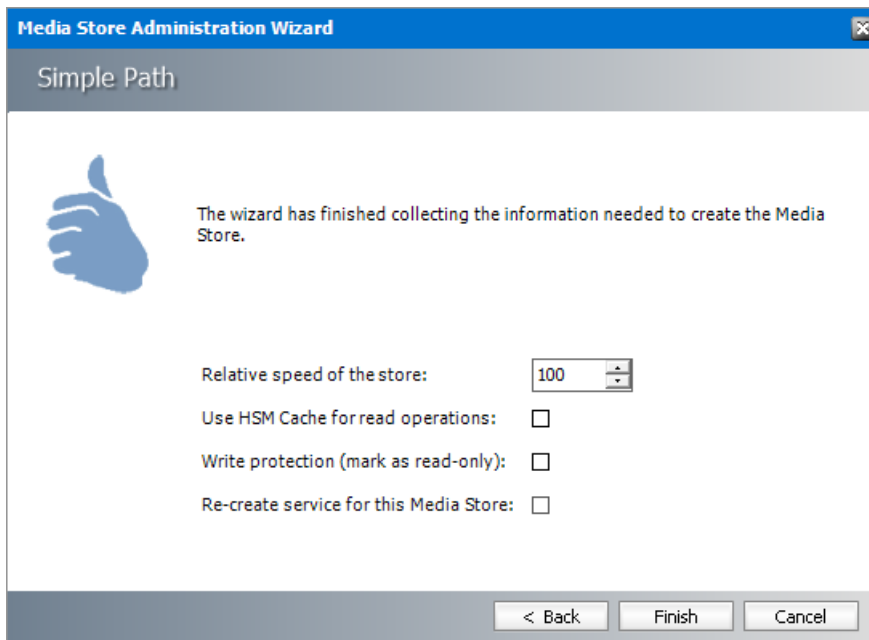
Enter the information as described below:

- 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.



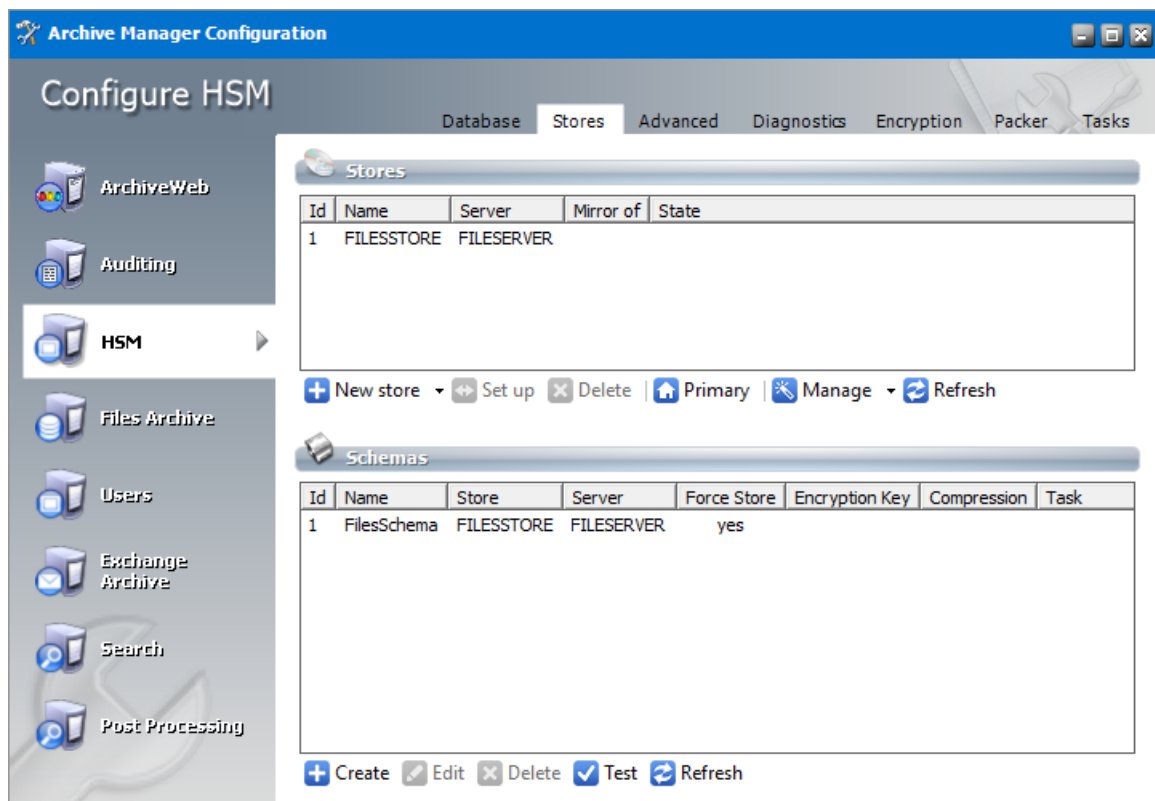
Enter the information as described below:

- 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. **Username** - 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**.



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.

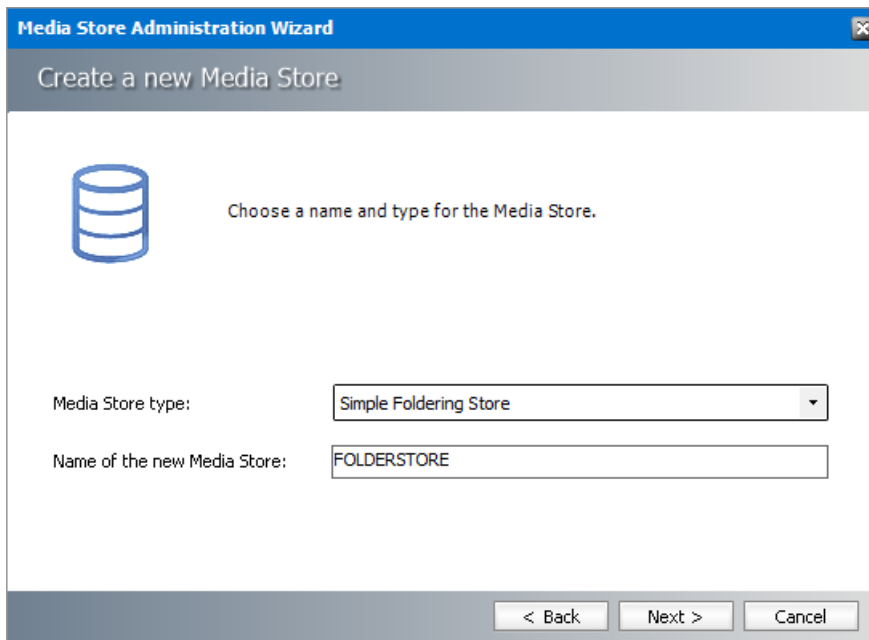


Simple Foldering Store

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 > Quest > 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 name and type for the Media Store.

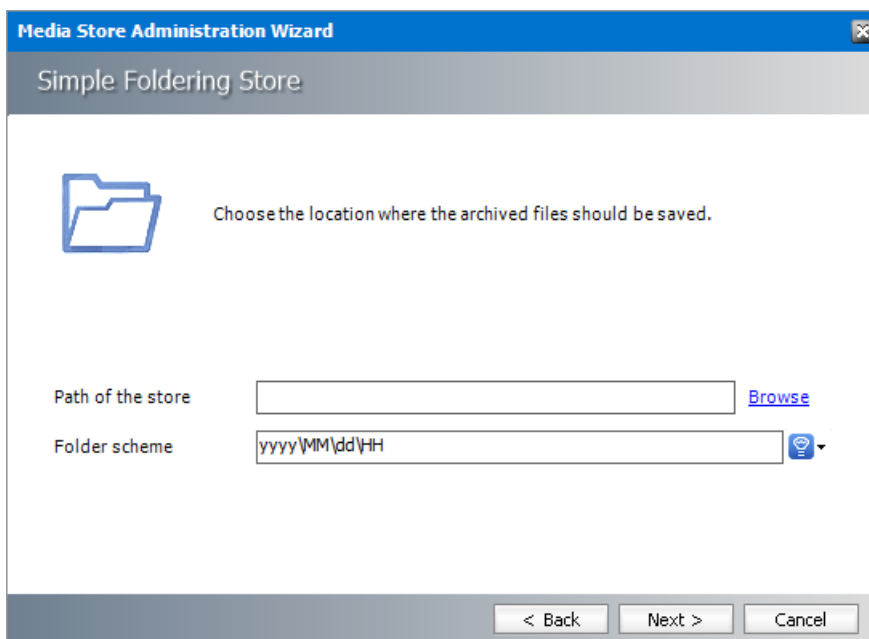
Media Store type:

Name of the new Media Store:

< Back Next > Cancel


Enter the information as described below:

- 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 Administration Wizard

Simple Foldering Store


 Choose the location where the archived files should be saved.

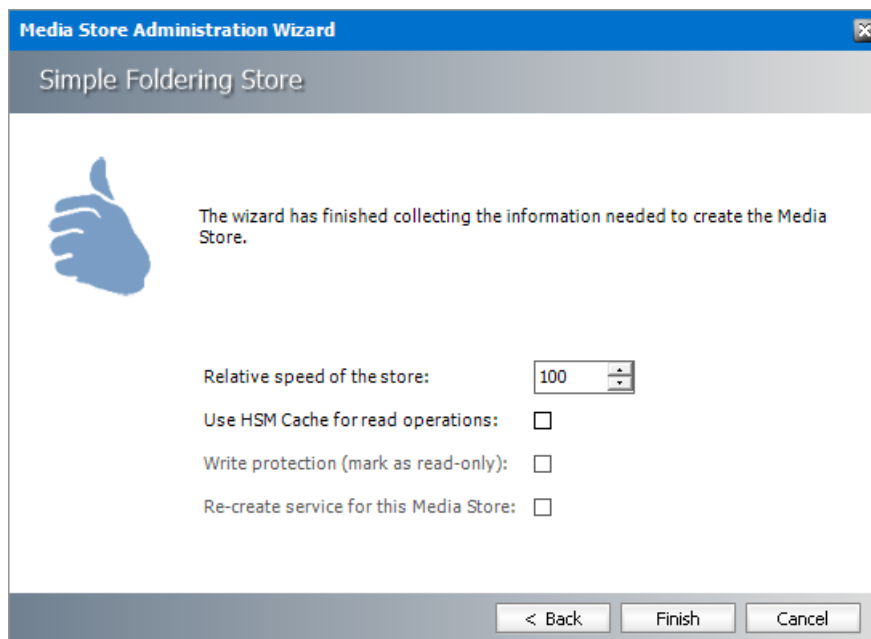
Path of the store [Browse](#)

Folder scheme 

< Back Next > Cancel

Enter the information as described below:

- 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**.



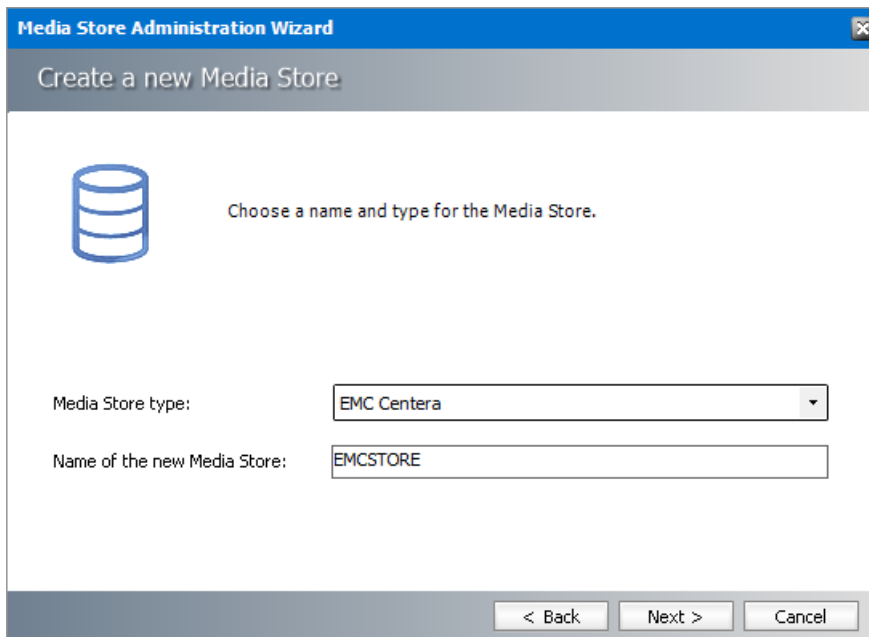
Enter the information as described below:

- 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.

EMC Centera

To create a store:

1. Open the *Configuration* tool from **Start > Quest > 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 name and type for the Media Store.

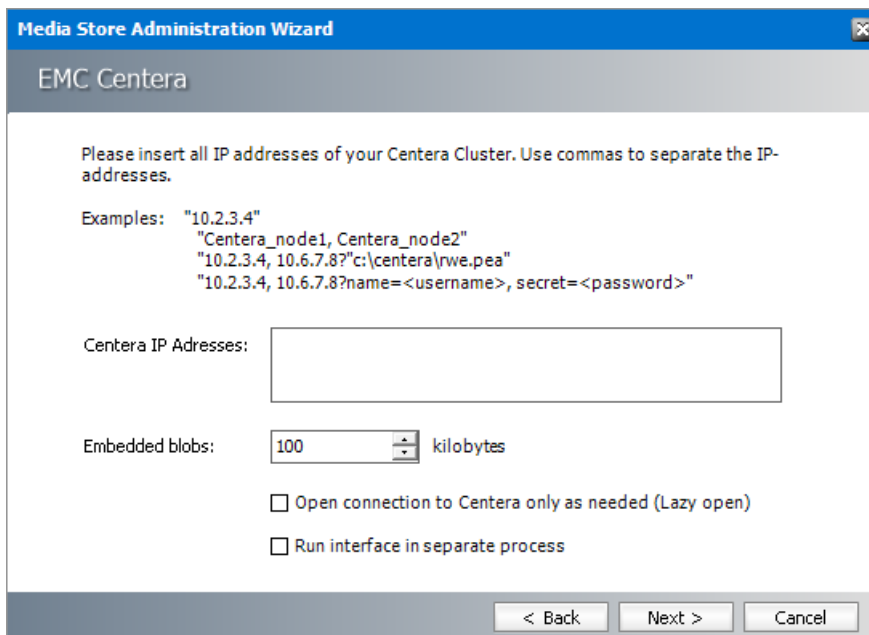
Media Store type:

Name of the new Media Store:

< Back Next > Cancel

Enter the information as described below:

- 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

Please insert all IP addresses of your Centera Cluster. Use commas to separate the IP-addresses.

Examples: "10.2.3.4"
 "Centera_node1, Centera_node2"
 "10.2.3.4, 10.6.7.8?"c:\centera\rwe.pea"
 "10.2.3.4, 10.6.7.8?name=<username>, secret=<password>"

Centera IP Adresses:

Embedded blobs: kilobytes

☐ Open connection to Centera only as needed (Lazy open)

☐ Run interface in separate process

< Back Next > Cancel

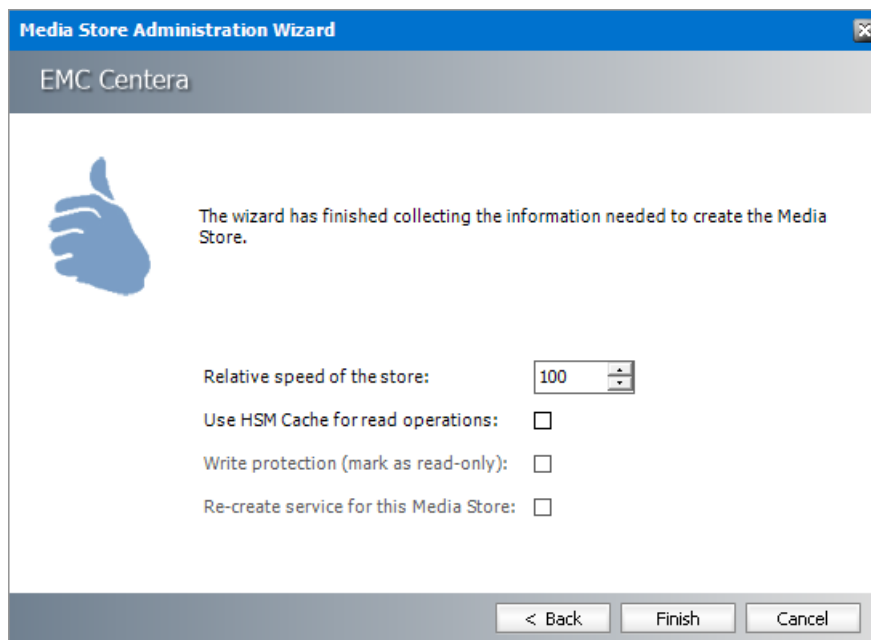
Enter the information as described below:

- 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**.



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.

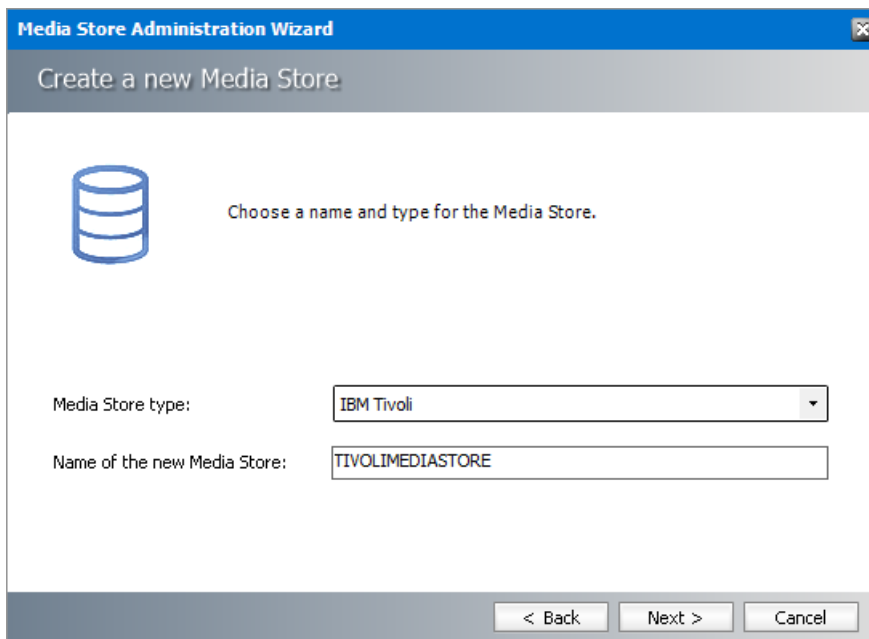
9. Verify that the media store appears in the *Stores* section.

10. Create a **Schema** for this media store.

IBM-Tivoli

To create a store:

1. Open the *Configuration* tool from **Start > Quest > 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 name and type for the Media Store.

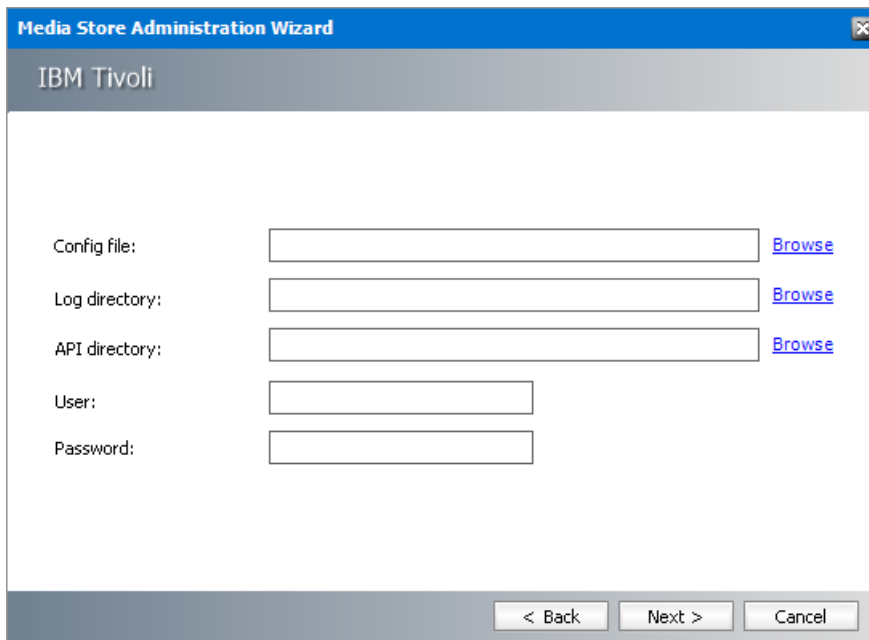
Media Store type: IBM Tivoli

Name of the new Media Store: TIVOLIMEDIASTORE

< Back Next > Cancel

Enter the information as described below:

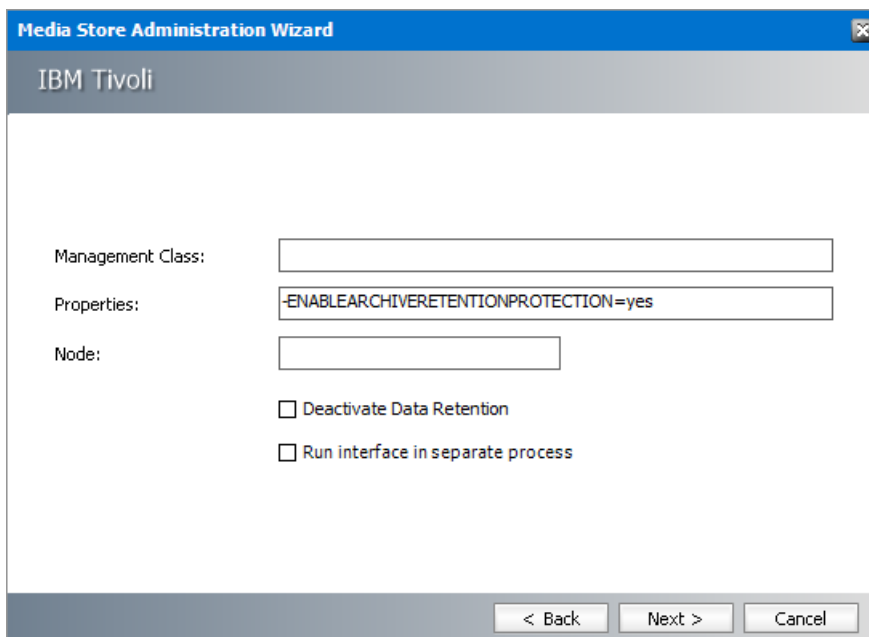
- a. **Media Store Type** - select **IBM Tivoli** from the drop down list.
 - b. **Name of the new Media Store** - enter a unique name for this store.
5. Click **Next**. The *Media Store Administration Wizard* step for IBM Tivoli opens.



The screenshot shows the 'Media Store Administration Wizard' window for 'IBM Tivoli'. It contains five input fields: 'Config file:', 'Log directory:', 'API directory:', 'User:', and 'Password:'. Each of the first three fields has a 'Browse' link to its right. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Enter the information as described below:

- 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**.



The screenshot shows the next step in the 'Media Store Administration Wizard' for 'IBM Tivoli'. It contains three input fields: 'Management Class:', 'Properties:', and 'Node:'. The 'Properties:' field contains the text '-ENABLEARCHIVERETENTIONPROTECTION=yes'. Below these fields are two checkboxes: 'Deactivate Data Retention' and 'Run interface in separate process'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Enter the information as described below:

- 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 `-TCPSEVERADDRESS` property to specify TSM sever address (e.g. `-TCPSEVERADDRESS=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 data-retention (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**.

Enter the information as described below:

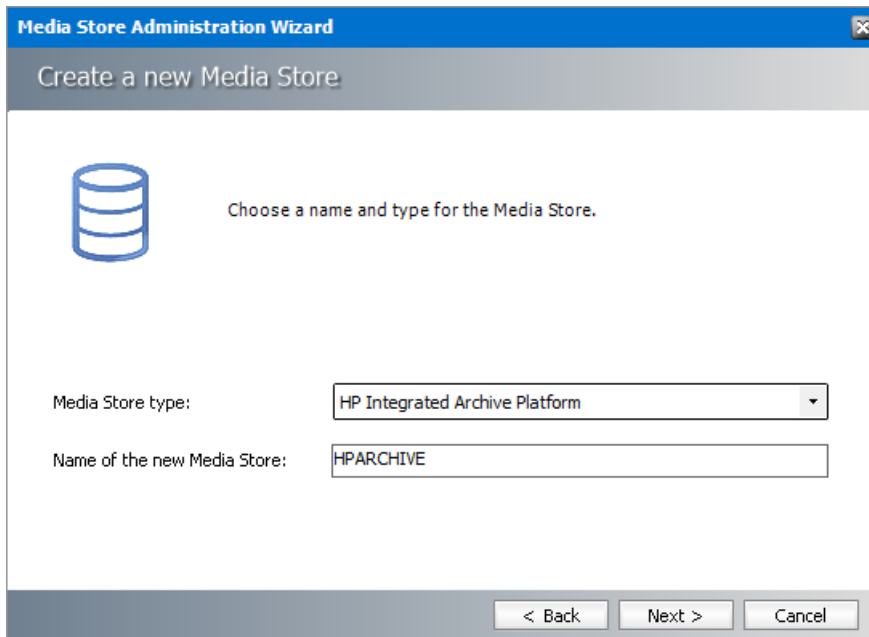
- a. **Relative speed of the store** - the relative speed of this store compared to other stores.
 - b. **Use HSM Cache for read operations** - select this check box to allow HSM to use its internal cache to copy files during read operations.
 - c. **Write protection (mark as read only)** - not supported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



Enter the information as described below:

- 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 Wizard

HP Integrated Archive Platform

SMTP Server:

HTTP Server:

Domain:

Repository:

< Back Next > Cancel


Enter the information as described below:

- 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 Administration Wizard

HP Integrated Archive Platform

 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

Enter the information as described below:

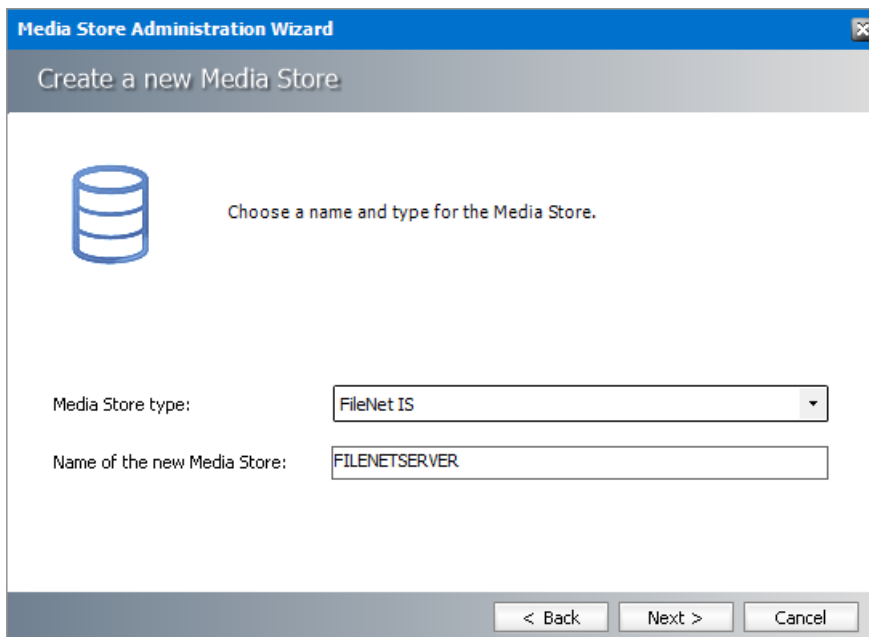
- a. **Relative speed of the store** - the relative speed of this store compared to other stores.

- 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:

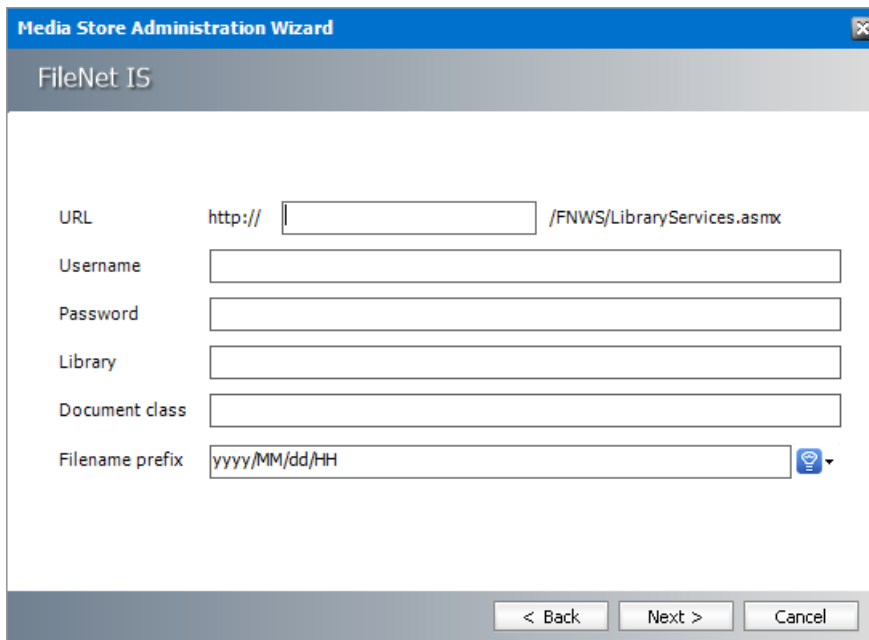
1. Open the *Configuration* tool from **Start > Quest > Archive Manager Configuration** or `C:\Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe`
2. Select **HSM** from the features panel.
3. Click the **Stores** tab.
4. Click **New Store** from the *Stores* section. The *Create a new Media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



The screenshot shows the 'Media Store Administration Wizard' window with the title 'Create a new Media Store'. On the left is a database icon. The text 'Choose a name and type for the Media Store.' is centered. Below this, there are two input fields: 'Media Store type:' with a dropdown menu showing 'FileNet IS', and 'Name of the new Media Store:' with a text box containing 'FILENETSERVER'. At the bottom right are three buttons: '< Back', 'Next >', and 'Cancel'.


Enter the information as described below:

- 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.

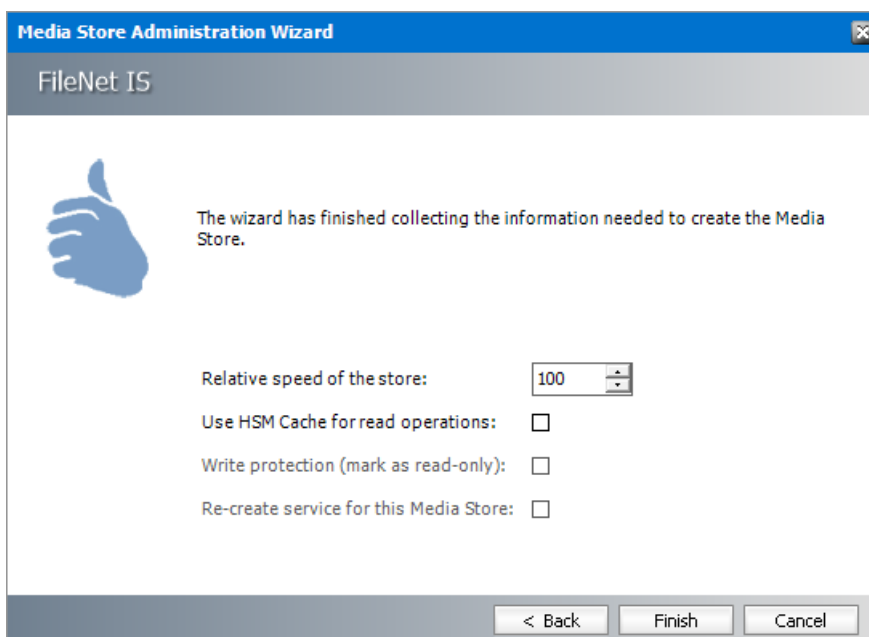


The screenshot shows the 'Media Store Administration Wizard' window for 'FileNet IS'. It contains several input fields: 'URL' with a pre-filled 'http://' and a dropdown for '/FNWS/LibraryServices.asmx'; 'Username', 'Password', 'Library', and 'Document class' as empty text boxes; and 'Filename prefix' with the value 'yyyy/MM/dd/HH' and a date format icon. At the bottom are '< Back', 'Next >', and 'Cancel' buttons.

Enter the information as described below:

- a. **URL** - FQDN or IP address of the FileNet IS server.
- b. **Username** - 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**.



The screenshot shows the completion screen of the 'Media Store Administration Wizard'. It features a thumbs-up icon and the message: 'The wizard has finished collecting the information needed to create the Media Store.' Below this, there are four options: 'Relative speed of the store:' with a value of 100 and a spinner; 'Use HSM Cache for read operations:' with an unchecked checkbox; 'Write protection (mark as read-only):' with an unchecked checkbox; and 'Re-create service for this Media Store:' with an unchecked checkbox. At the bottom are '< Back', 'Finish', and 'Cancel' buttons.

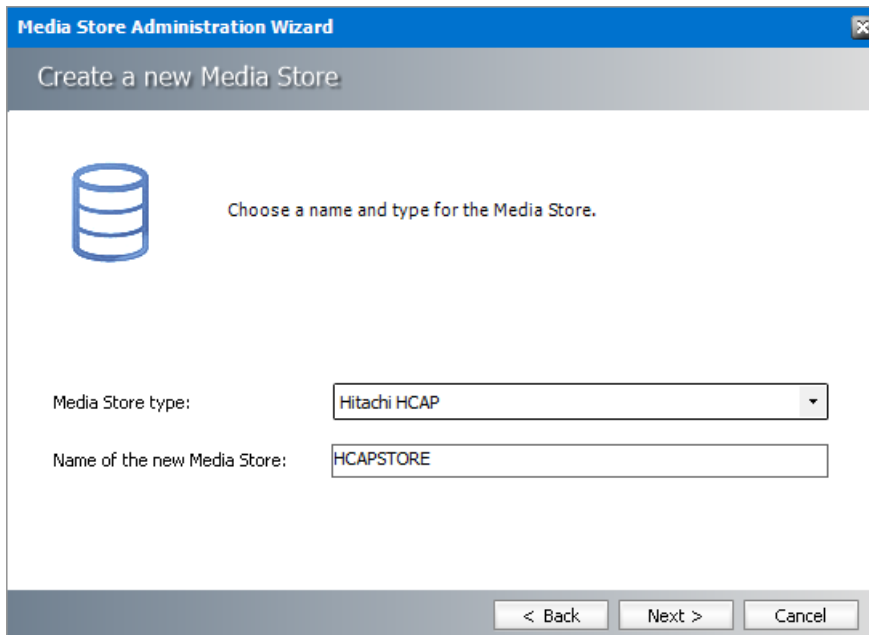
Enter the information as described below:

- 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.

Hitachi HCP and HCAP

To create a store:

1. Open the *Configuration* tool from **Start > Quest > 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.

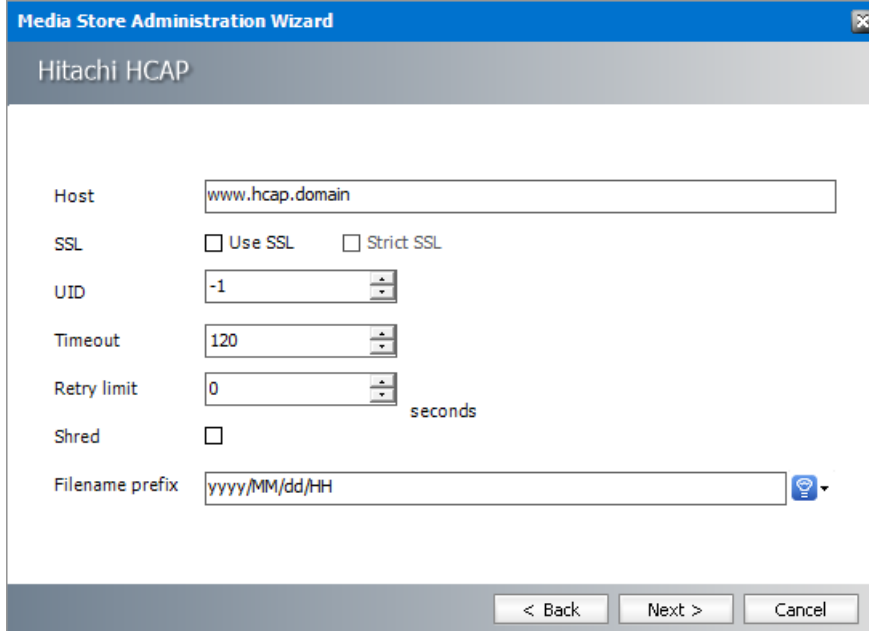


Enter the information as described below:


- 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.

For Hitachi HCAP




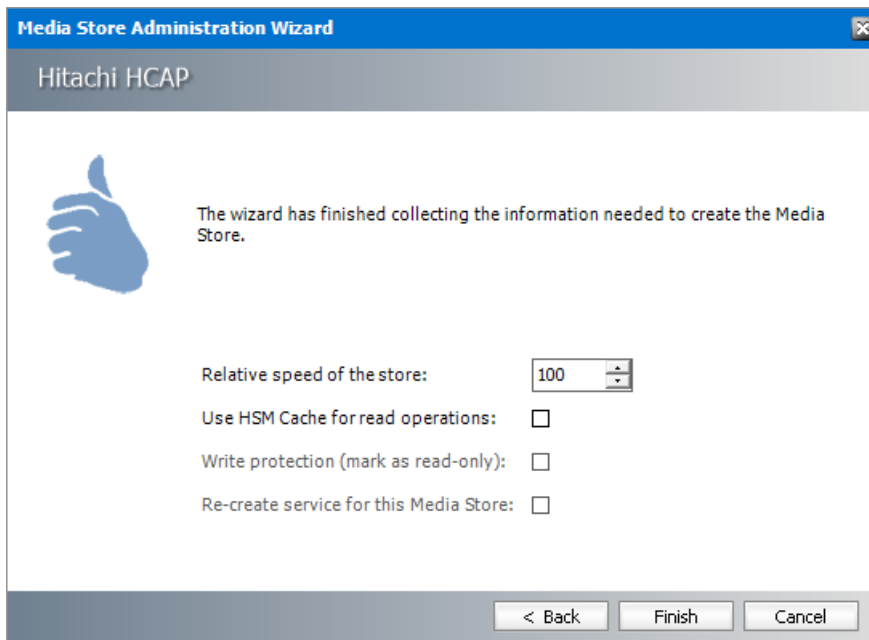
Enter the information as described below:

- 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  and select the date formats. You can specify a custom separator between date formats.

For Hitachi HCP

Enter the information as described below:

- a. **Host** - enter a specific host name in the format `namespace-name.tenant-name.hcp-domain-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. **Username** - 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**.



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.

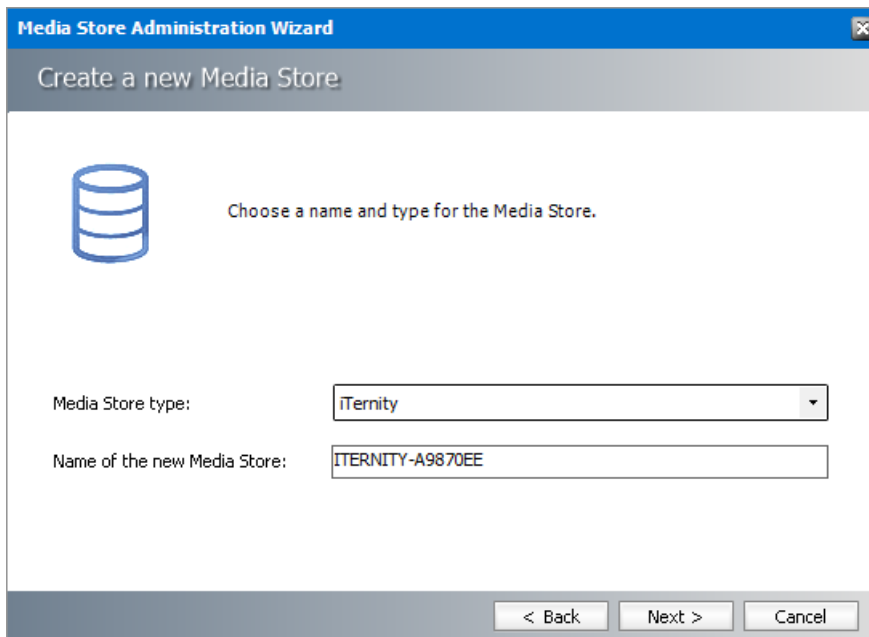
iTernity



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 > Quest > 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 name and type for the Media Store.

Media Store type: iTernity

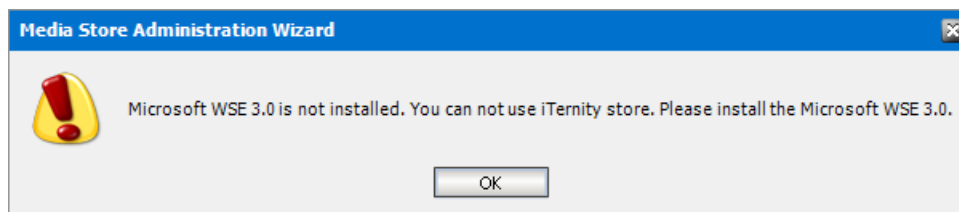
Name of the new Media Store: ITERNITY-A9870EE

< Back Next > Cancel

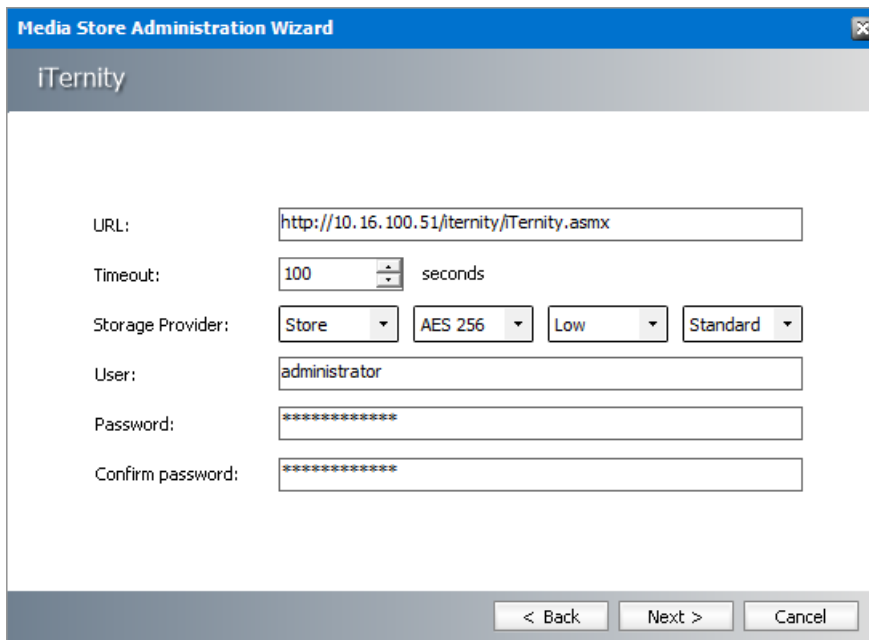
Enter the information as described below:

- 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.



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

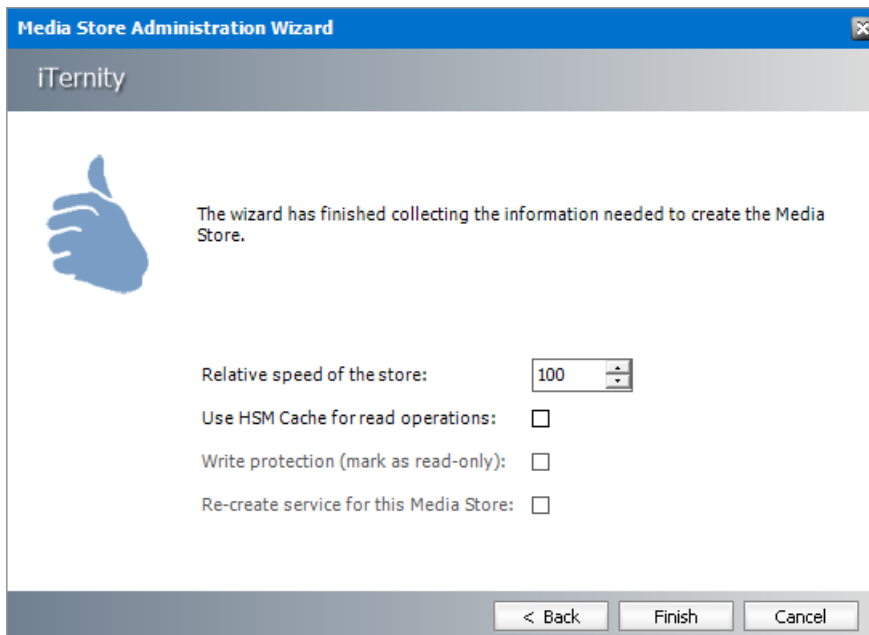


The screenshot shows the 'Media Store Administration Wizard' window for 'iTernity'. It contains the following fields and controls:

- URL:** A text box containing 'http://10.16.100.51/iternity/iTernity.asmx'.
- Timeout:** A spinner box set to '100' followed by the text 'seconds'.
- Storage Provider:** Four dropdown menus with values 'Store', 'AES 256', 'Low', and 'Standard'.
- User:** A text box containing 'administrator'.
- Password:** A text box filled with asterisks '*****'.
- Confirm password:** A text box filled with asterisks '*****'.
- Navigation:** At the bottom are three buttons: '< Back', 'Next >', and 'Cancel'.

Enter the information as described below:

- 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**.



The screenshot shows the final step of the 'Media Store Administration Wizard' for 'iTernity'. It includes:

- Visual Feedback:** A blue thumbs-up icon and the text 'The wizard has finished collecting the information needed to create the Media Store.'
- Configuration Options:**
 - Relative speed of the store:** A spinner box set to '100'.
 - Use HSM Cache for read operations:** An unchecked checkbox.
 - Write protection (mark as read-only):** An unchecked checkbox.
 - Re-create service for this Media Store:** An unchecked checkbox.
- Navigation:** At the bottom are three buttons: '< Back', 'Finish', and '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

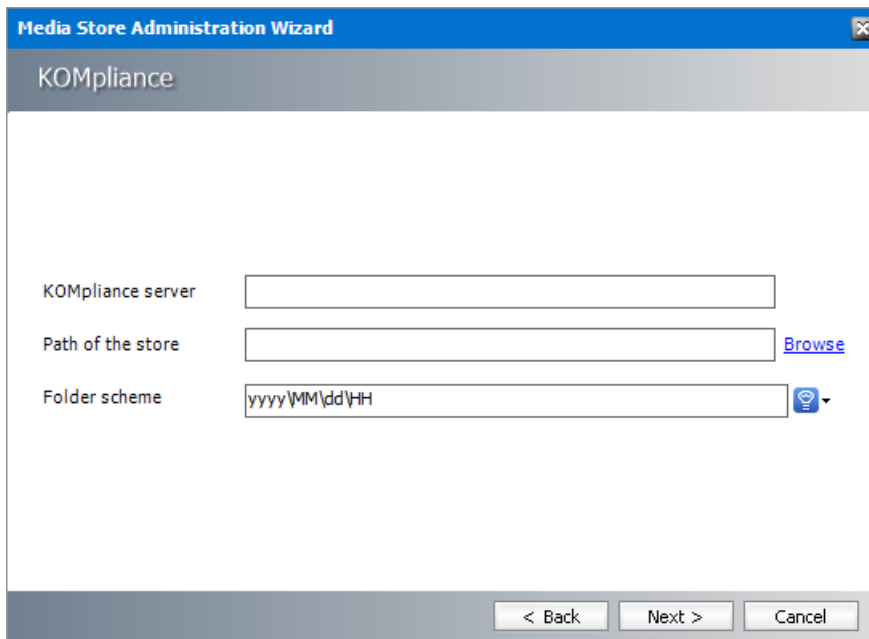
To create a store:

1. Open the *Configuration* tool from **Start > Quest > 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.

The screenshot shows the 'Media Store Administration Wizard' window. The title bar is blue with the text 'Media Store Administration Wizard'. Below the title bar is a grey header with the text 'Create a new Media Store'. The main area is white and contains a blue database icon on the left. To the right of the icon is the text 'Choose a name and type for the Media Store.' Below this are two input fields. The first is labeled 'Media Store type:' and has a dropdown menu with 'KOMpliance' selected. The second is labeled 'Name of the new Media Store:' and has a text box containing 'KOMSERVER-01'. At the bottom of the window are three buttons: '< Back', 'Next >', and 'Cancel'.


Enter the information as described below:

- 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.

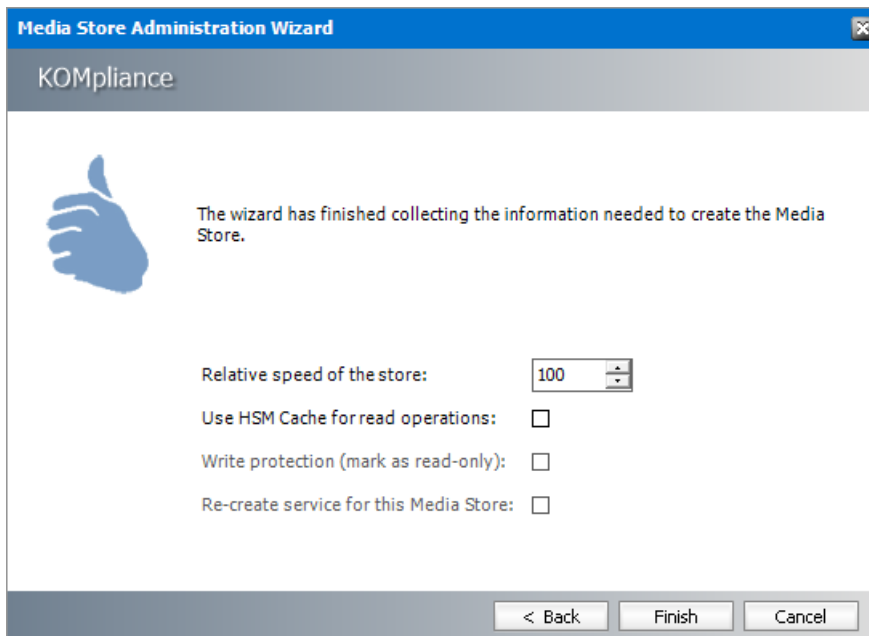


The screenshot shows the 'KOMpliance' step of the Media Store Administration Wizard. It features three input fields: 'KOMpliance server', 'Path of the store', and 'Folder scheme'. The 'Folder scheme' field contains the text 'yyyy\MM\dd\HH' and has a dropdown arrow icon to its right. A 'Browse' button is located to the right of the 'Path of the store' field. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Enter the information as described below:

- 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  and select the date formats. You can specify a custom separator between date formats.

6. Click **Next**.



The screenshot shows the completion screen of the Media Store Administration Wizard. It features a blue thumbs-up icon on the left. The text reads: 'The wizard has finished collecting the information needed to create the Media Store.' Below this, there are four settings: 'Relative speed of the store:' with a spinner box set to '100', 'Use HSM Cache for read operations:' with an unchecked checkbox, 'Write protection (mark as read-only):' with an unchecked checkbox, and 'Re-create service for this Media Store:' with an unchecked checkbox. At the bottom, there are three buttons: '< Back', 'Finish', and '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 > Quest > 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 name and type for the Media Store.

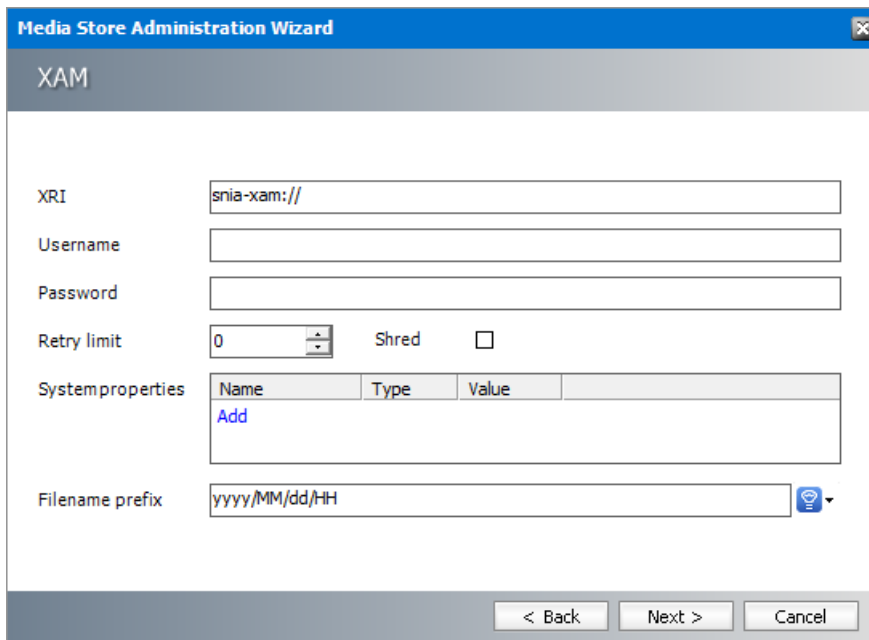
Media Store type: XAM

Name of the new Media Store: XAMSERVER-01

< Back Next > Cancel

Enter the information as described below:

- 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.



The screenshot shows the 'Media Store Administration Wizard' window with the 'XAM' tab selected. The window contains several input fields and a table for system properties.

XAM

XRI: snia-xam://

Username: [Empty field]

Password: [Empty field]

Retry limit: 0 [Spinner] Shred ☐

System properties:

Name	Type	Value
Add		

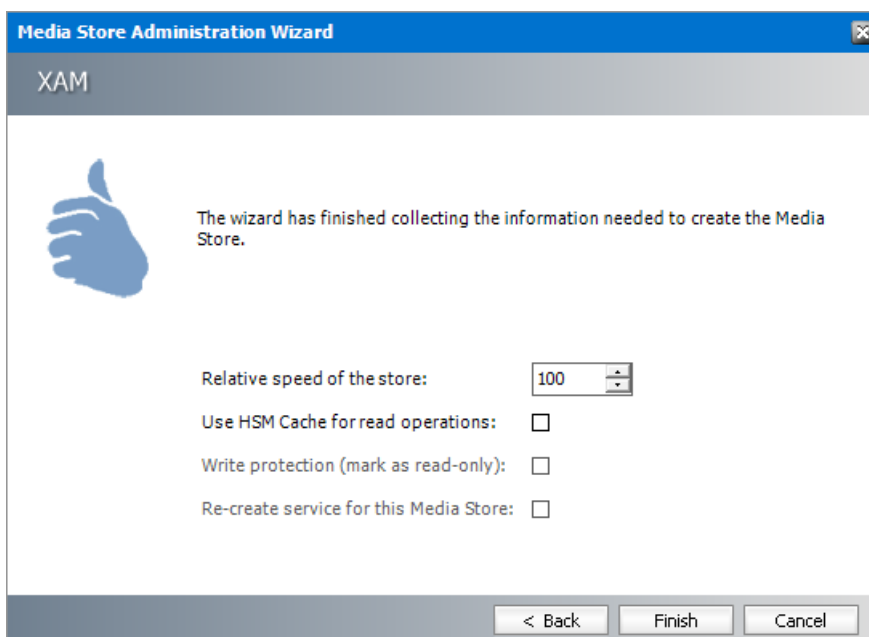
Filename prefix: yyyy/MM/dd/HH [Dropdown icon]

Navigation buttons: < Back, Next >, Cancel

Enter the information as described below:

- XRI** - enter the specific path to the XRI store.
- Username** - Access key configured in the XAM instance.
- Password** - Password configured in the XAM instance.
- Retry limit** - set how many times the store should try to save a file.
- System Properties** - click **Add** and enter the system properties for the XAM instance.
- Filename prefix** - a unique prefix that you can create for each item stored in the media store. To construct a date type prefix, click [Dropdown icon] and select the date formats. You can specify a custom separator between date formats.

6. Click **Next**.



The screenshot shows the 'Media Store Administration Wizard' window with the 'XAM' tab selected. The window displays a thumbs up icon and a message indicating the wizard has finished collecting information. Below the message are several configuration options.

XAM

The wizard has finished collecting the information needed to create the Media Store.

Relative speed of the store: 100 [Spinner]

Use HSM Cache for read operations: ☐

Write protection (mark as read-only): ☐

Re-create service for this Media Store: ☐

Navigation buttons: < Back, Finish, Cancel

Enter the information as described below:

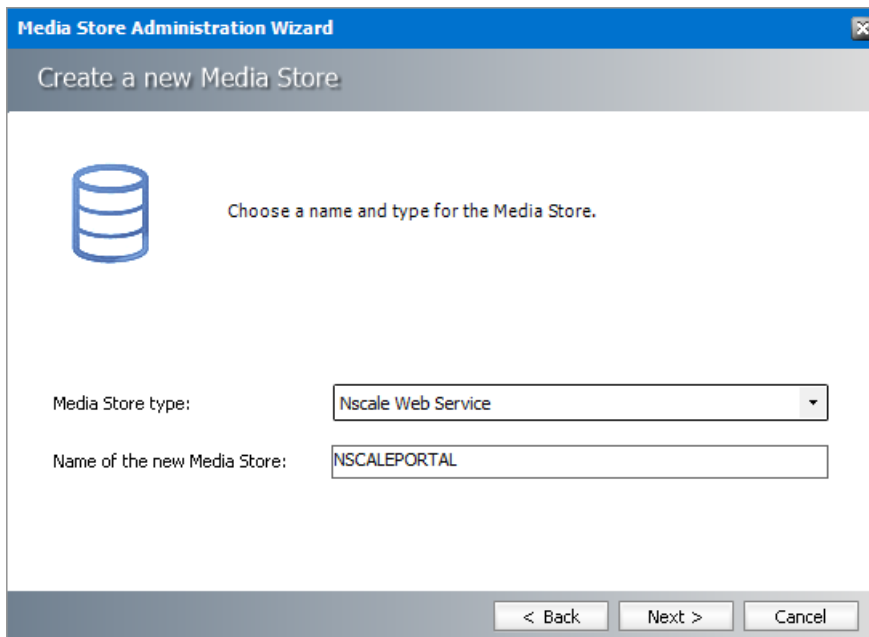
- a. **Relative speed of the store** - the relative speed of this store compared to other stores.
 - b. **Use HSM Cache for read operations** - select this check box to allow HSM to use its internal cache to copy files during read operations.
 - c. **Write protection (mark as read only)** - not supported 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.

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 > Quest > 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

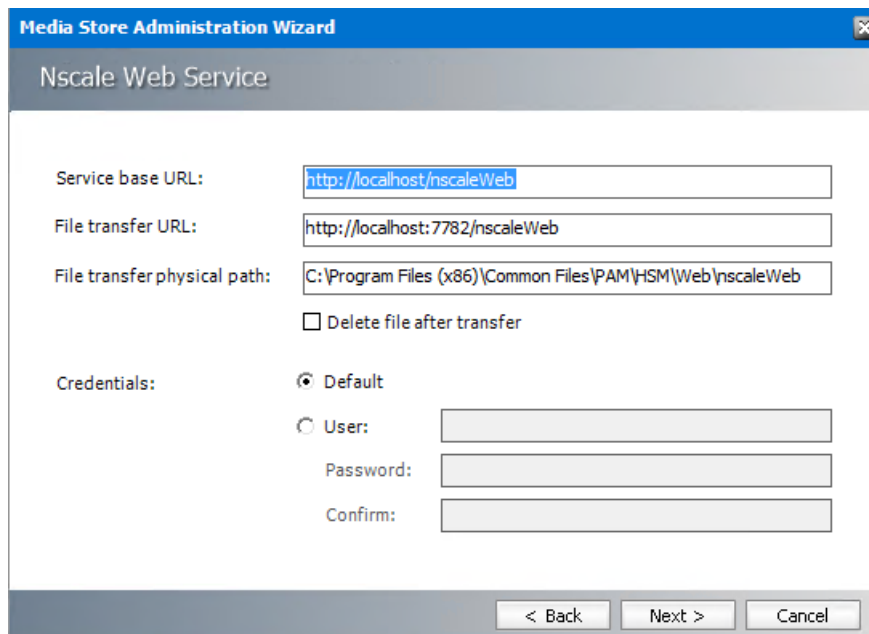
 Choose a name and type for the Media Store.

Media Store type:

Name of the new Media Store:

< Back Next > Cancel

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



Media Store Administration Wizard

Nscale Web Service

Service base URL:

File transfer URL:

File transfer physical path:

☐ Delete file after transfer

Credentials:

☒ Default

☐ User:

 Password:

 Confirm:

< Back Next > Cancel

or

Media Store Administration Wizard

Nscale File Server

Service base URL:

File transfer URL:

File transfer physical path:

☒ Delete file after transfer

Credentials:

☒ Default

☐ User:

 Password:

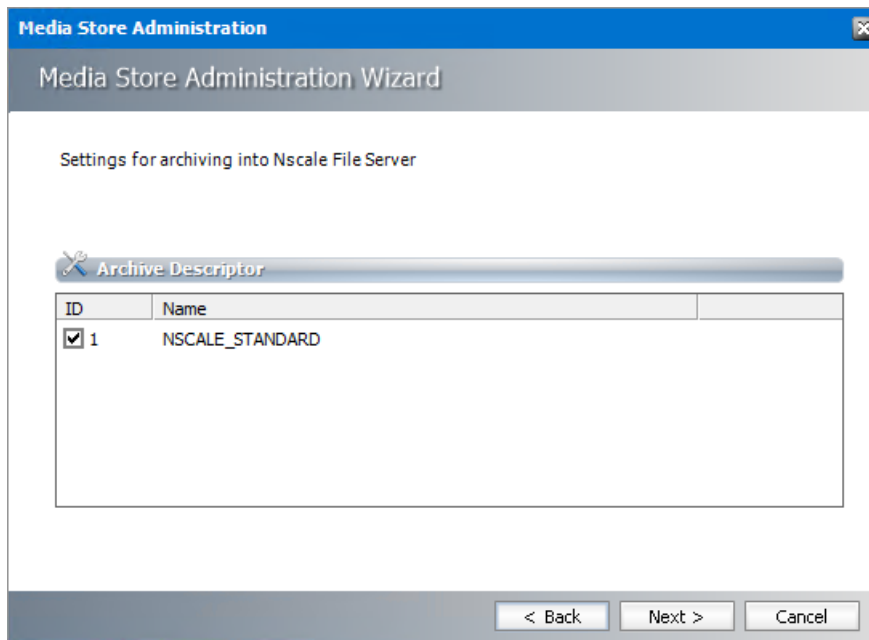
 Confirm:

< Back Next > Cancel

7. Enter the information as described below:

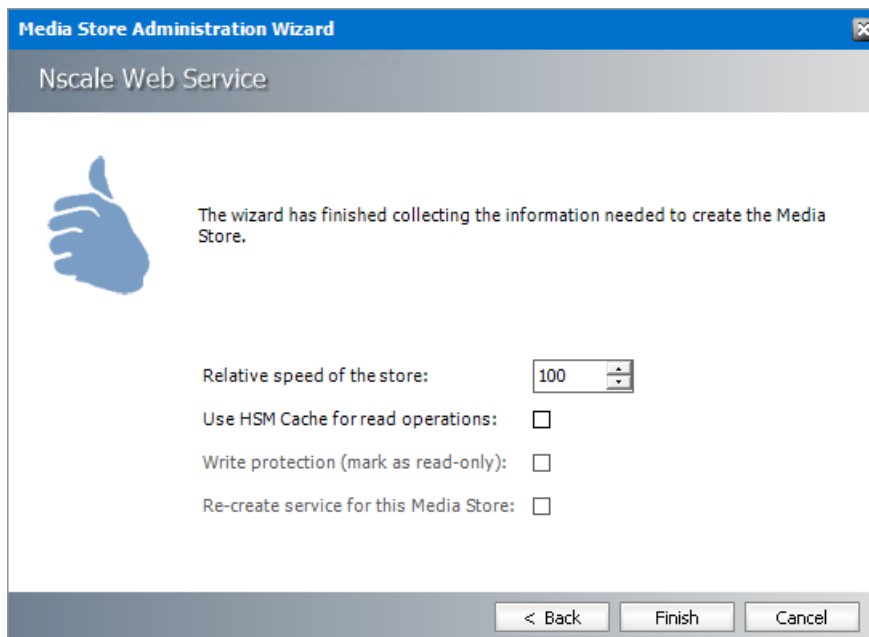
- a. **Service base URL** - Enter the URL of your NSCALE Server in the format `http://<nscale-webserver>:8080/nscaleweb`
- b. **File transfer URL** - Enter the URL of the HSM server to transfer the document between HSM and nscale server in the format `http://<hsm-server>:7782/nscaleweb`
- c. **File transfer 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).



9. Select the default **ID** check box.

10. Click **Next**. The *HSM settings* window for this media store opens.



- 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, server-based 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\dd\HH\mm\ss\fff` to name the files, or any arbitrary sub-string can be added to the format string.

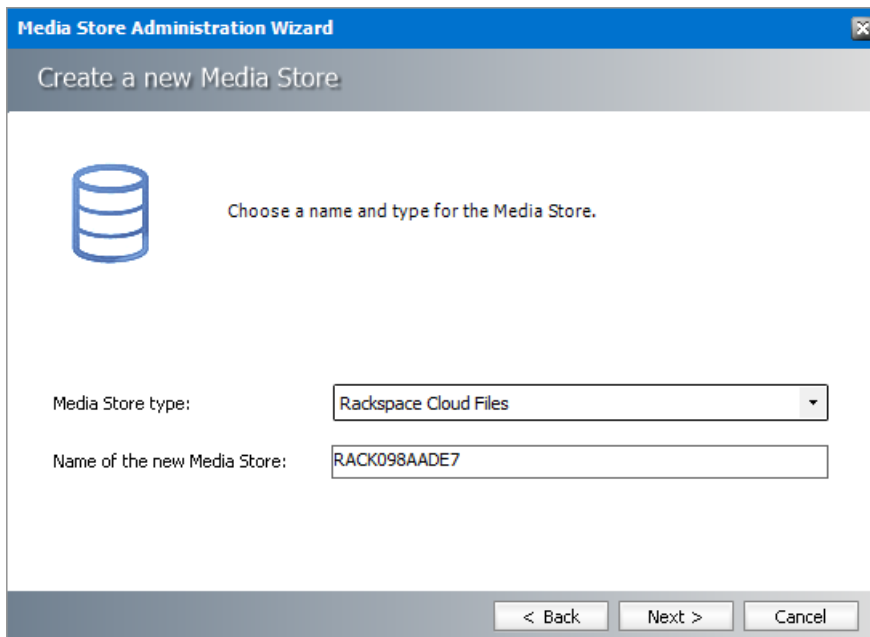
In this chapter:

- [Rackspace Cloud Files](#)
- [Caringo CAStor](#)
- [Google Drive](#)
- [EMC Atmos](#)
- [Microsoft Azure](#)
- [Microsoft Azure](#)
- [AWS S3 or Scality S3](#)
- [Cloudian HyperStore](#)

Rackspace Cloud Files


To create a store:

1. Open the *Configuration* tool from **Start > Quest > 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 name and type for the Media Store.

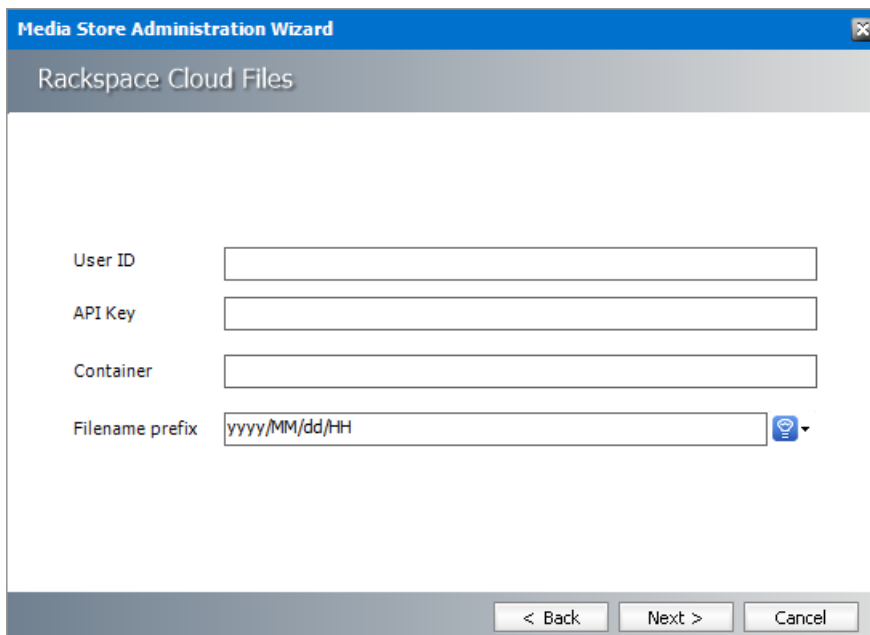
Media Store type:

Name of the new Media Store:

< Back Next > Cancel

Enter the information as described below:

- 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 Administration Wizard

Rackspace Cloud Files

User ID

API Key


Container

Filename prefix 

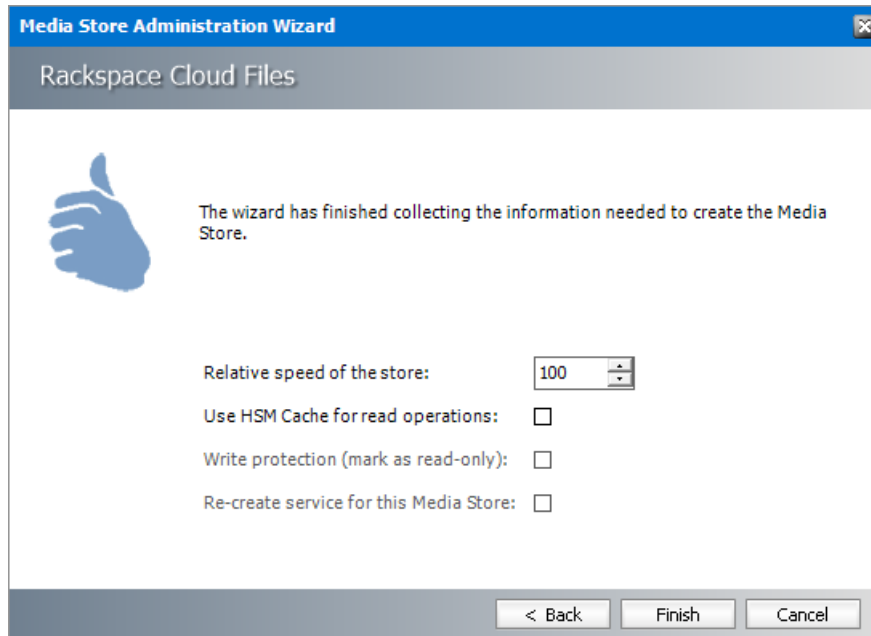
< Back Next > Cancel

Enter the information as described below:

- 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**.



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.

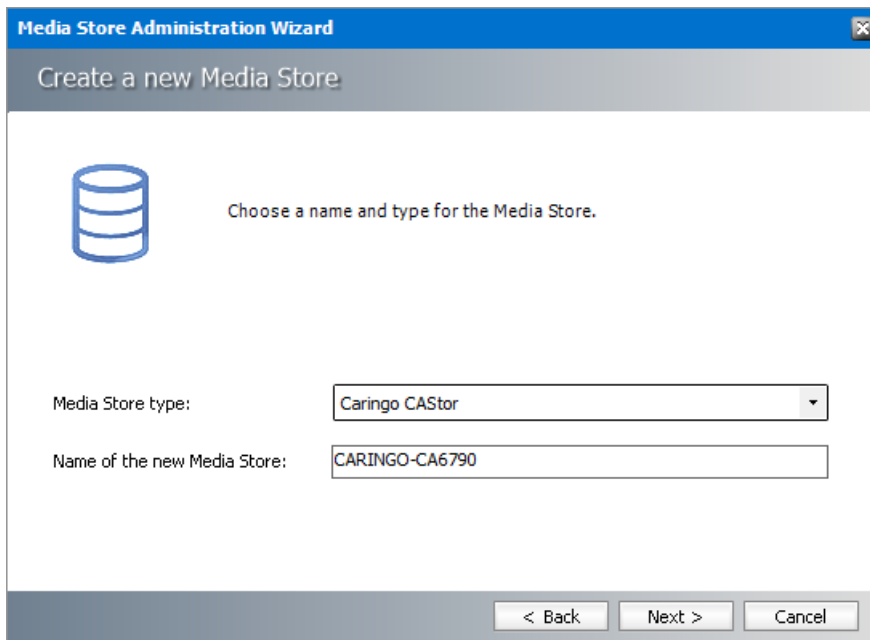
9. Verify that the media store appears in the *Stores* section.

10. Create a **Schema** for this media store.

Caringo CASTor


To create a store:

1. Open the *Configuration* tool from **Start > Quest > 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 name and type for the Media Store.

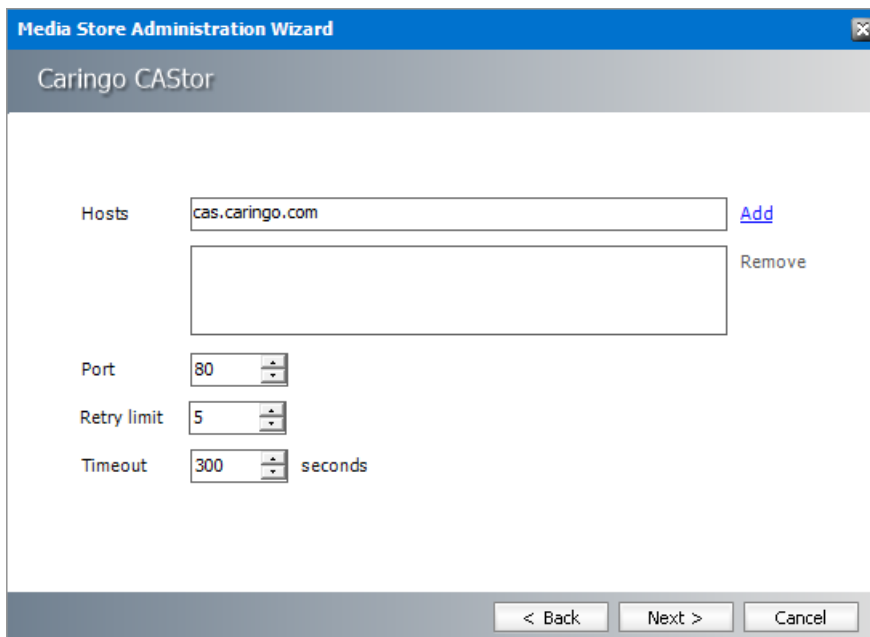
Media Store type:

Name of the new Media Store:

< Back Next > Cancel

Enter the information as described below:

- 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 Administration Wizard

Caringo CASTor

Hosts [Add](#)

[Remove](#)

Port

Retry limit

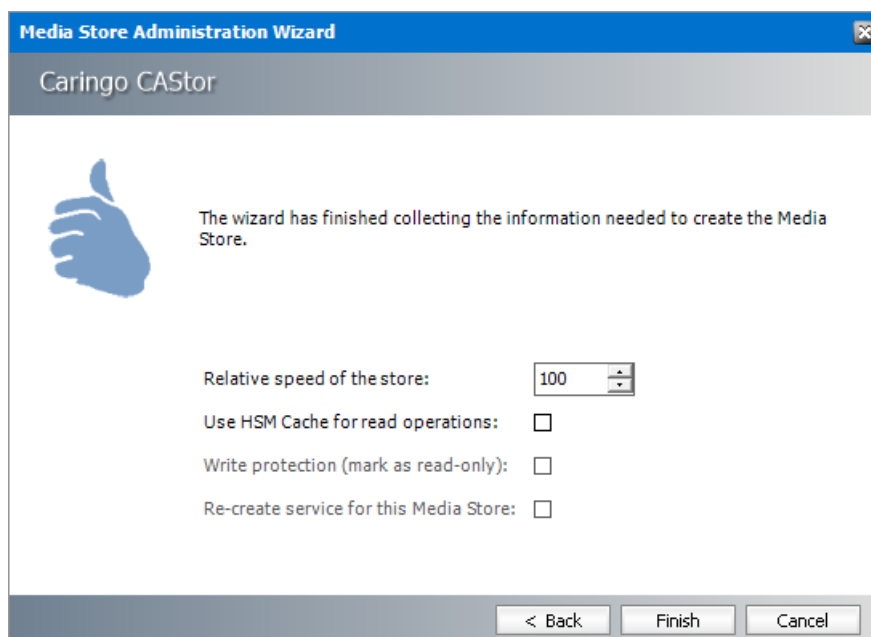
Timeout seconds

< Back Next > Cancel

Enter the information as described below:

- 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**.



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.

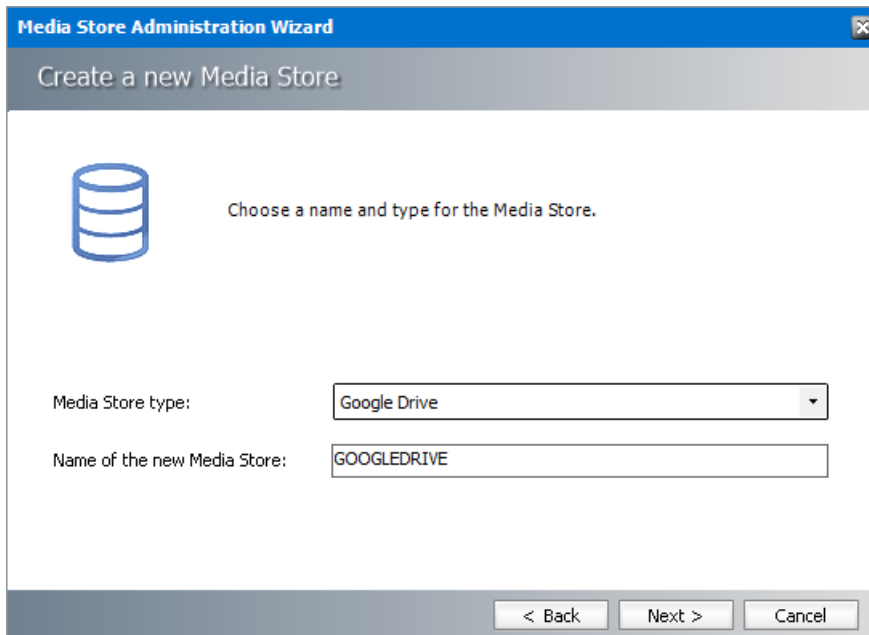
Google Drive

i **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 > Quest > Archive Manager Configuration** or `C:\Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe`

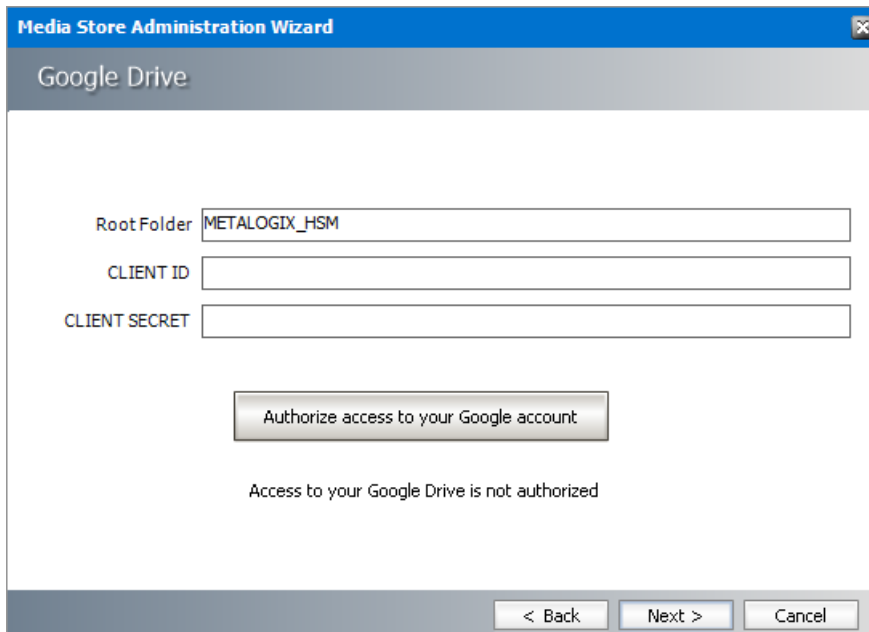
2. Select **HSM** from the features panel.
3. Click the **Stores** tab.
4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.



The screenshot shows a window titled "Media Store Administration Wizard" with a subtitle "Create a new Media Store". On the left is a database icon. The text "Choose a name and type for the Media Store." is centered. Below this, there are two input fields: "Media Store type:" with a dropdown menu showing "Google Drive", and "Name of the new Media Store:" with a text box containing "GOOGLEDRIVE". At the bottom are three buttons: "< Back", "Next >", and "Cancel".

Enter the information as described below:

- 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.



The screenshot shows a window titled "Media Store Administration Wizard" with a subtitle "Google Drive". It contains three input fields: "Root Folder" with "METALOGIX_HSM", "CLIENT ID", and "CLIENT SECRET". Below these is a button labeled "Authorize access to your Google account". Under the button, it says "Access to your Google Drive is not authorized". At the bottom are three buttons: "< Back", "Next >", and "Cancel".

Enter the information as described below:

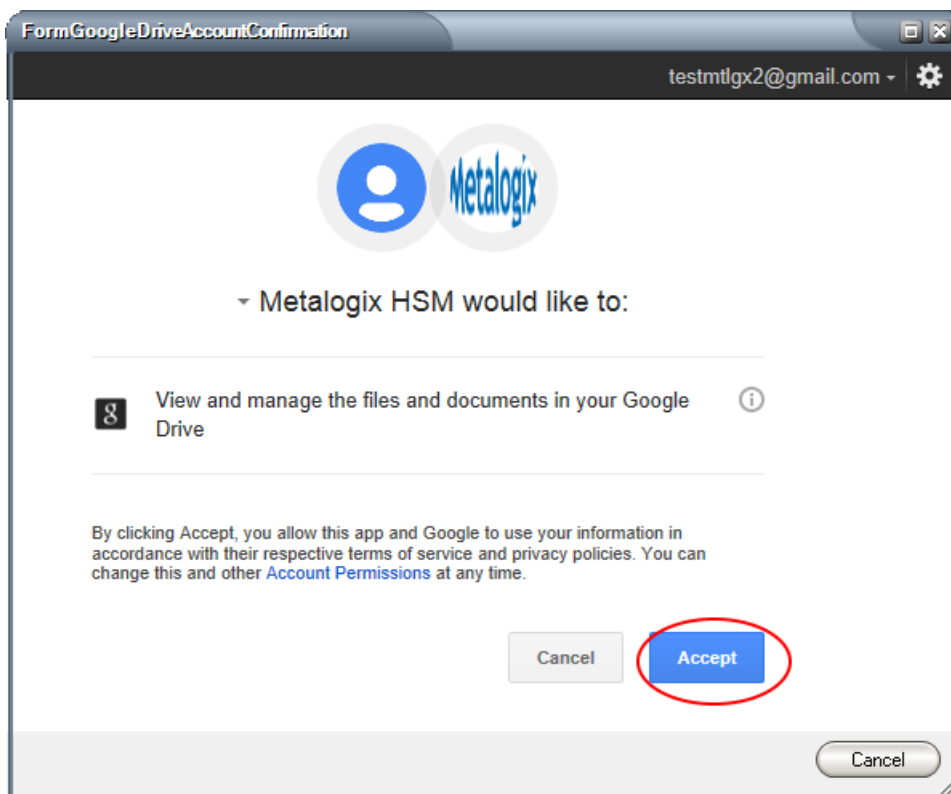
- a. **Root Folder** - the default root folder is already entered for you. You can change it if necessary.
- b. **Client Id** - Access key configured in Hitachi HCAP instance.
- c. **Client Secret** - Secret key configured in Hitachi HCAP instance.



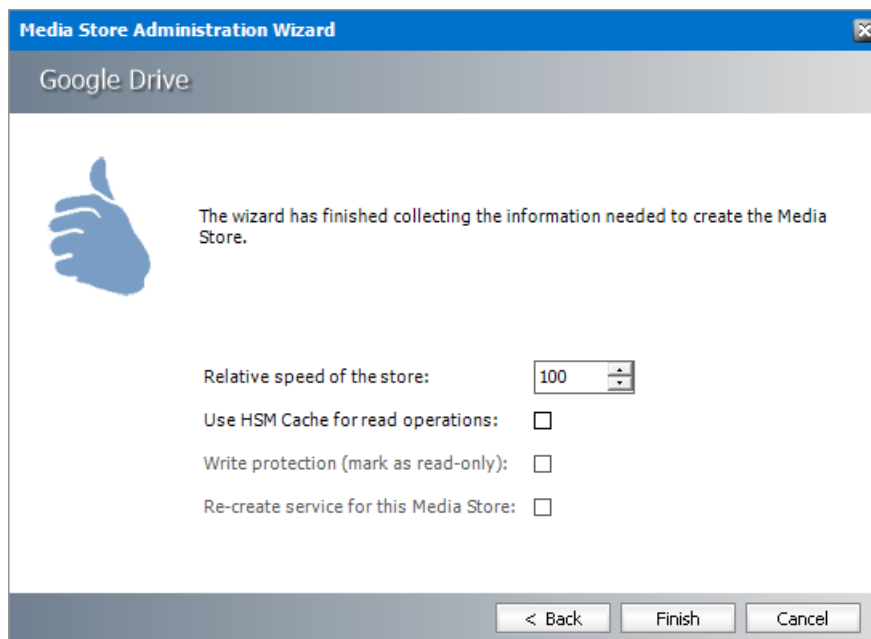
NOTE: To create the Client ID and Client Secret:

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**.



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



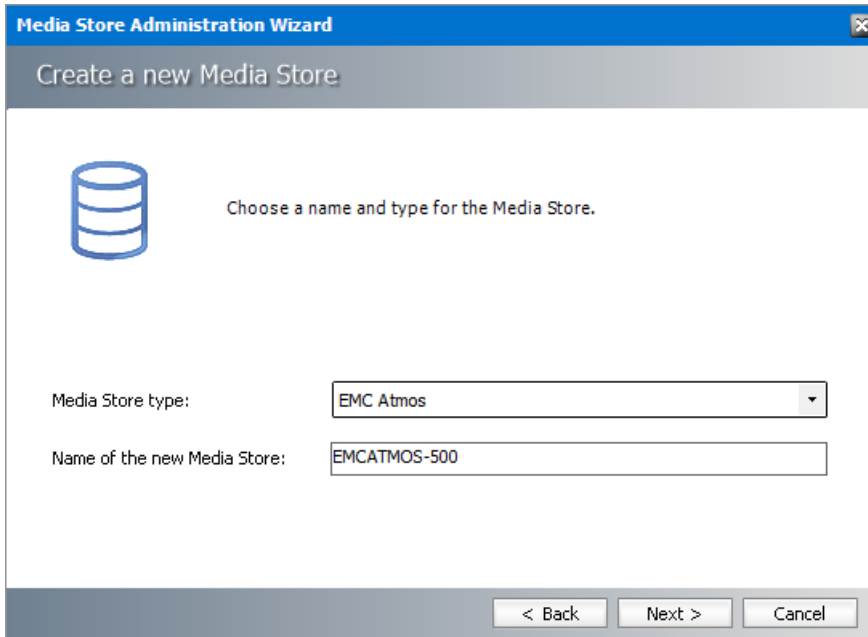
Enter the information as described below:

- 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.
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 > Quest > 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 name and type for the Media Store.

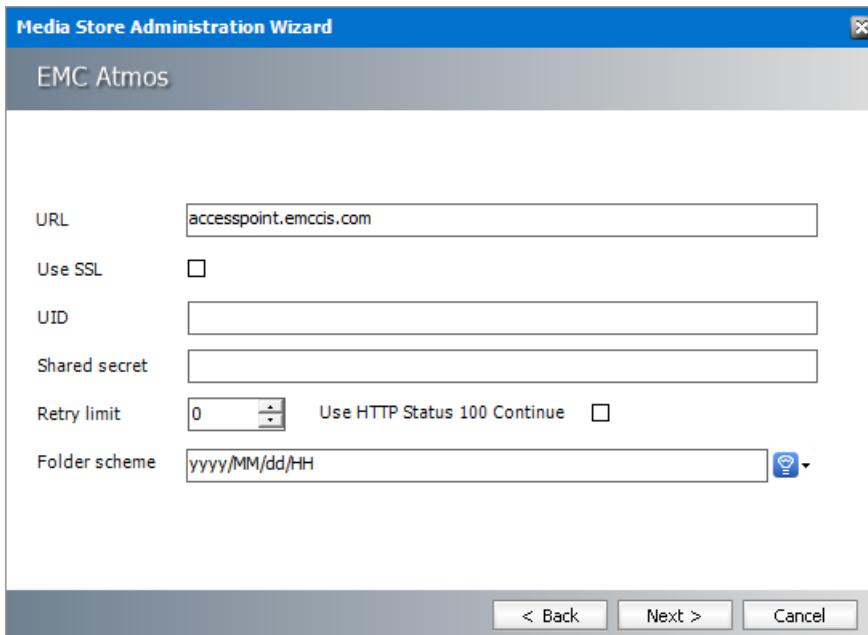
Media Store type:

Name of the new Media Store:

< Back Next > Cancel

Enter the information as described below:

- 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 Administration Wizard

EMC Atmos


URL:

Use SSL: ☐

UID:

Shared secret:


Retry limit: Use HTTP Status 100 Continue: ☐

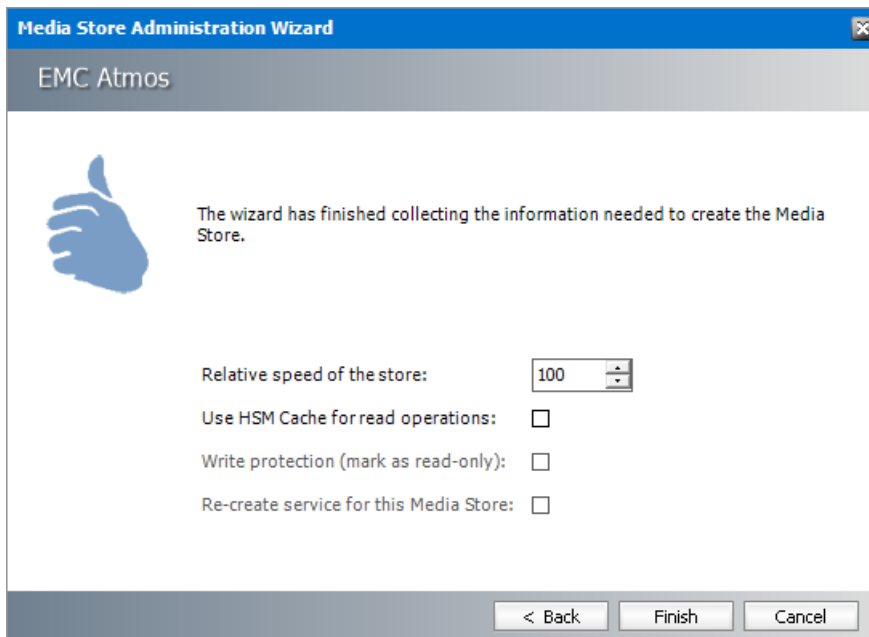
Folder scheme: 

< Back Next > Cancel

Enter the information as described below:

- 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**.



Enter the information as described below:

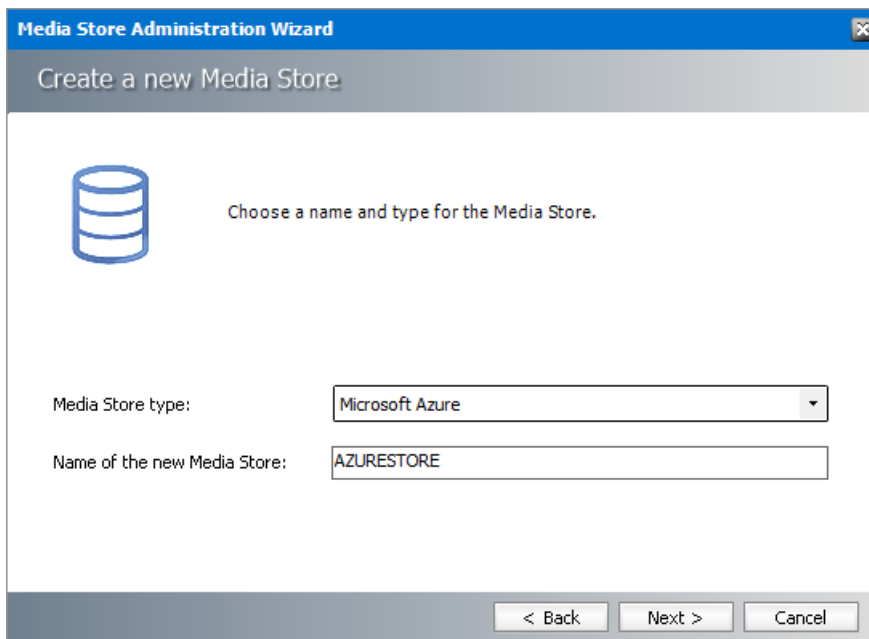
- a. **Relative speed of the store** - the relative speed of this store compared to other stores.
 - b. **Use HSM Cache for read operations** - select this check box to allow HSM to use its internal cache to copy files during read operations.
 - c. **Write protection (mark as read only)** - not supported 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.

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 > Quest > 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 name and type for the Media Store.

Media Store type: Microsoft Azure


Name of the new Media Store: AZURESTORE

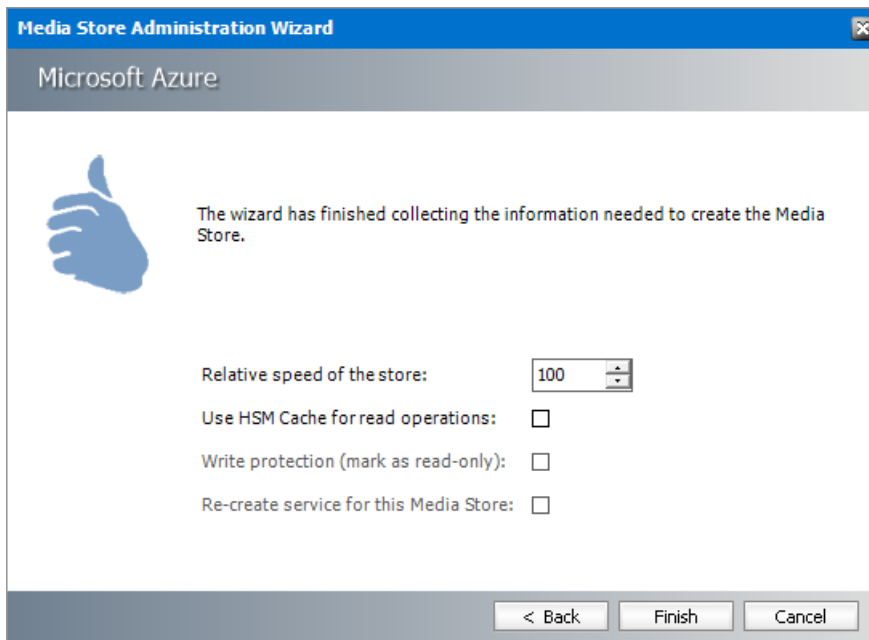
< Back Next > Cancel

Enter the information as described below:

- 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.

Enter the information as described below:

- 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**.



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.

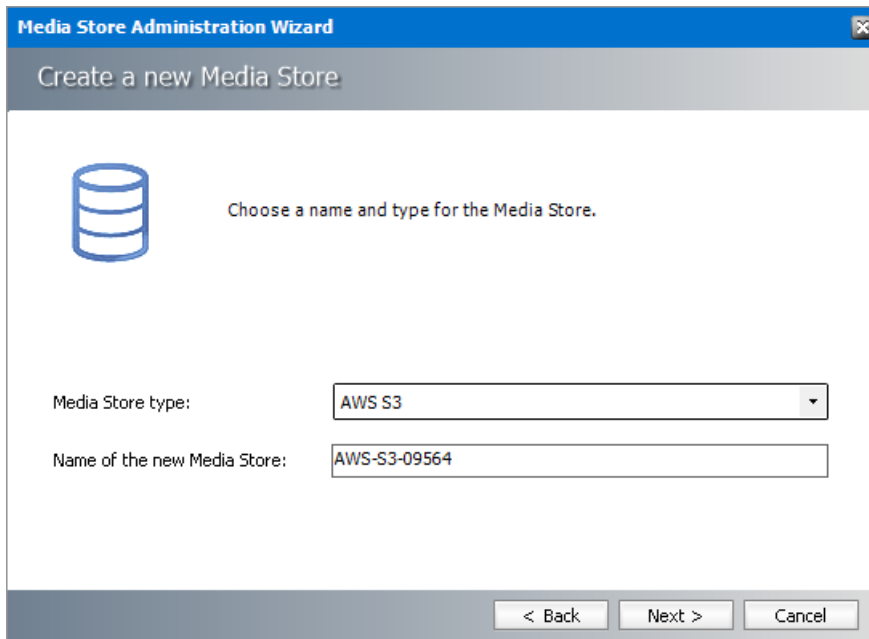
To test you Azure connection data, go to <https://www.myazurestorage.com> and enter the account name and account key. Under the BLOBs menu you will see your stored files under a container.

AWS S3 or Scality S3

To create a store:

1. Open the *Configuration* tool from **Start > Quest > 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.

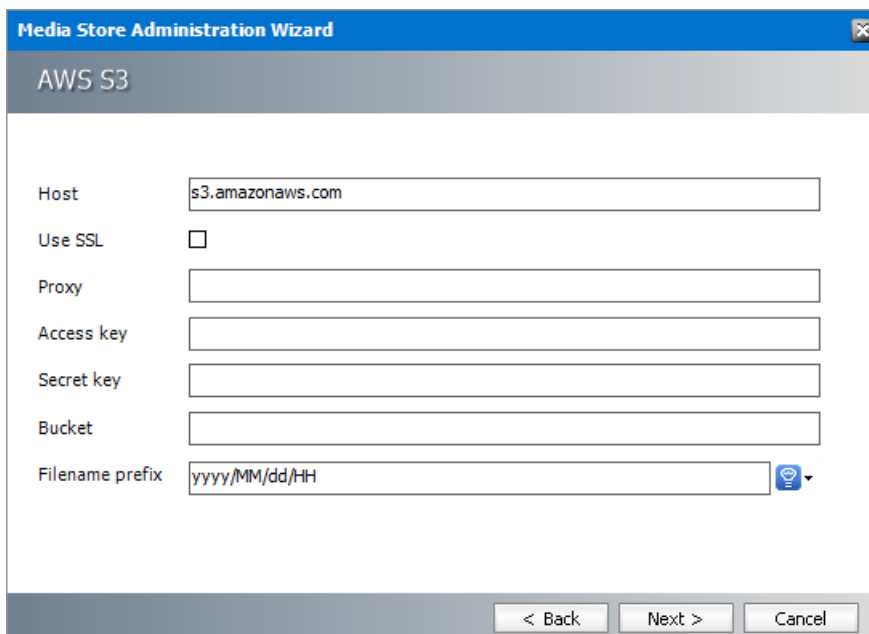


The screenshot shows the 'Media Store Administration Wizard' window with the title 'Create a new Media Store'. It features a database icon and the instruction 'Choose a name and type for the Media Store.' Below this, there are two input fields: 'Media Store type:' with a dropdown menu showing 'AWS S3', and 'Name of the new Media Store:' with a text box containing 'AWS-S3-09564'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Enter the information as described below:

- 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.

For AWS S3



The screenshot shows the 'Media Store Administration Wizard' window with the title 'AWS S3'. It contains several input fields: 'Host' with 's3.amazonaws.com', 'Use SSL' with an unchecked checkbox, 'Proxy' with an empty text box, 'Access key' with an empty text box, 'Secret key' with an empty text box, 'Bucket' with an empty text box, and 'Filename prefix' with 'yyyy/MM/dd/HH' and a help icon. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

For Scality S3

Media Store Administration Wizard

Scality S3

Host:

Use SSL: ☐ Use Signed URL: ☐

Proxy:

Access key:

Secret key:

Bucket:

Filename prefix:

< Back Next > Cancel

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

- Host** - FQDN of the S3 host server.
- Use SSL** - select this check box to use SSL.
- Use Signed SSL** - only for Scality S3. Select this box to use a self signed certificate for your local Certificate Authority.
- Proxy** - FQDN of the proxy server if there is a proxy server that is used in your organization to access external web servers.
- 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

- Account Activity
- AWS Identity and Access Management
- AWS Management Console
- Consolidated Billing
- DevPay
- Manage Your Account
- Payment Method
- Personal Information
- Security Credentials**
- Usage Reports
- Billing Alerts
- Billing Preferences

Welcome [Name] | Sign Out
Account Number: 1234-5678-9101

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](#).

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 types of credentials currently offered by AWS. If you know which security credentials you need, simply select one of the links below:

- ↓ **Access Credentials:** Your Access Keys, X.509 Certificates, and Key Pairs
- ↓ **Sign-In Credentials:** Your E-mail Address, Password, and AWS Multi-Factor Authentication Device
- ↓ **Account Identifiers:** Your AWS Account ID and Canonical User ID

If you are not sure which security credentials you should use, the link below will help you identify the credentials you need for the task you want to accomplish:

[Find out which AWS Security Credentials you need](#)

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

Use access keys to make secure REST or Query protocol requests to any AWS service API. We create one for you when your account is created — see your access key below.

Your Access Keys


Created	Access Key ID	Secret Access Key	Status
January 31, 2013	AKIAQ7HARPCZK5LW5G	BNFmP5o00vtWlp5/CabCj+3887%lgmruaBf88	Active (Make Inactive)

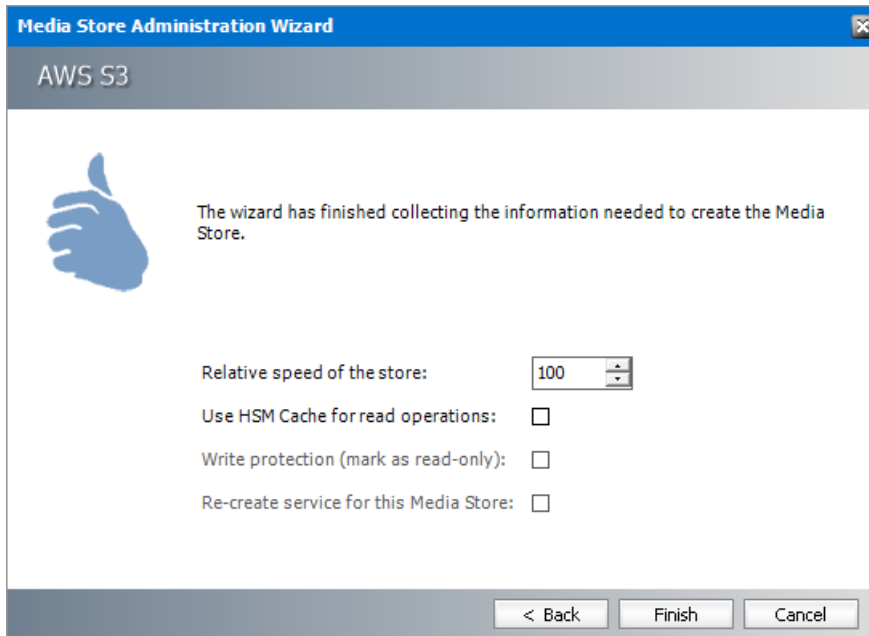
[Create a new Access Key](#)

For your protection, you should never share your secret access key. AWS best practice recommends frequent key rotation.

Secret Access Key

BNFmP5o00vtWlp5/CabCj+3887%lgmruaBf88

- 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**.



Enter the information as described below:

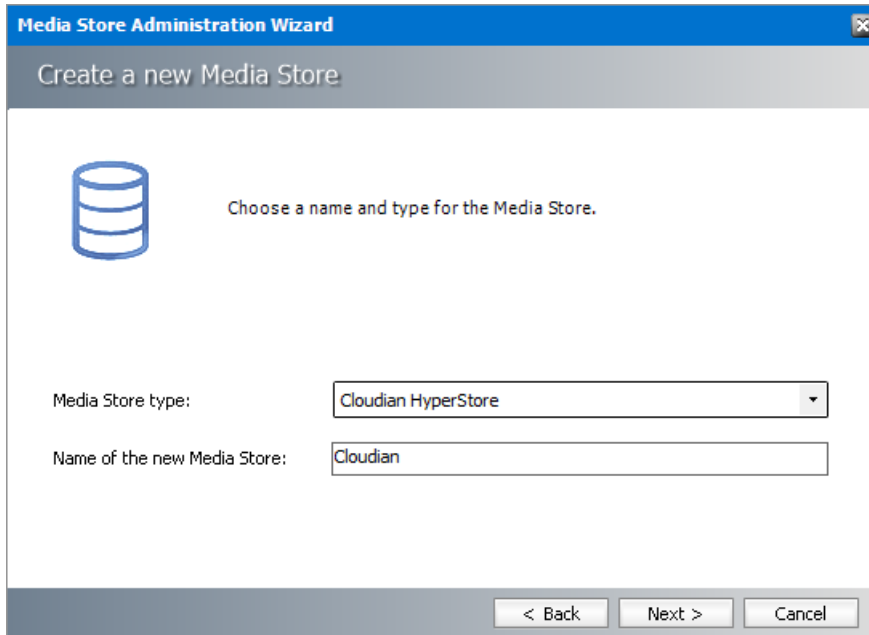
- a. **Relative speed of the store** - the relative speed of this store compared to other stores.
 - b. **Use HSM Cache for read operations** - select this check box to allow HSM to use its internal cache to copy files during read operations.
 - c. **Write protection (mark as read only)** - not supported 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.

Cloudian HyperStore

To create a store:

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

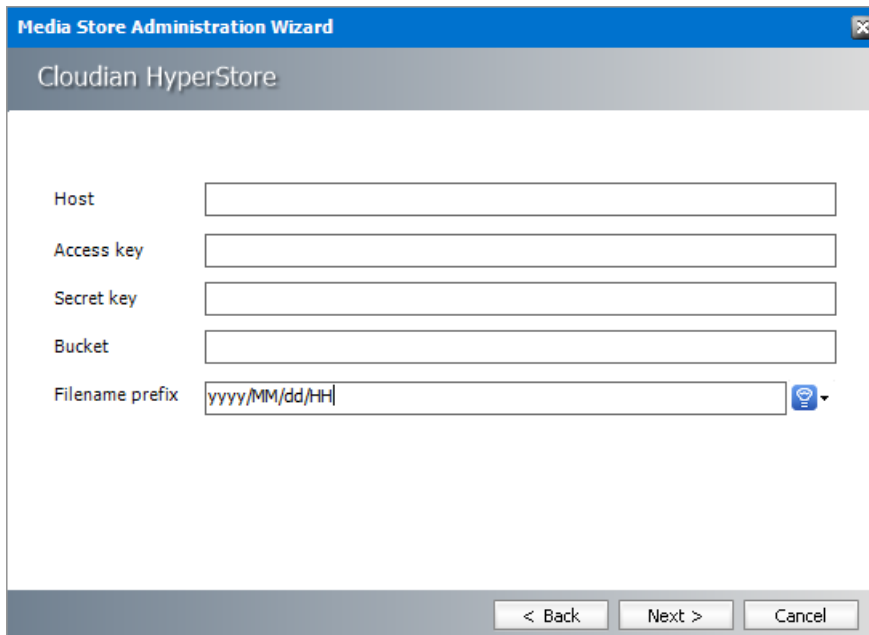
2. Select **HSM** from the features panel.
3. Click the **Stores** tab.
4. Click **New Store** from the *Stores* section. The *Create a new Media Store* wizard starts.



The screenshot shows the 'Media Store Administration Wizard' window with the title 'Create a new Media Store'. It features a database icon and the instruction 'Choose a name and type for the Media Store.' Below this, there are two input fields: 'Media Store type:' with a dropdown menu set to 'Cloudian HyperStore', and 'Name of the new Media Store:' with a text box containing 'Cloudian'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Enter the information as described below:


- 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.



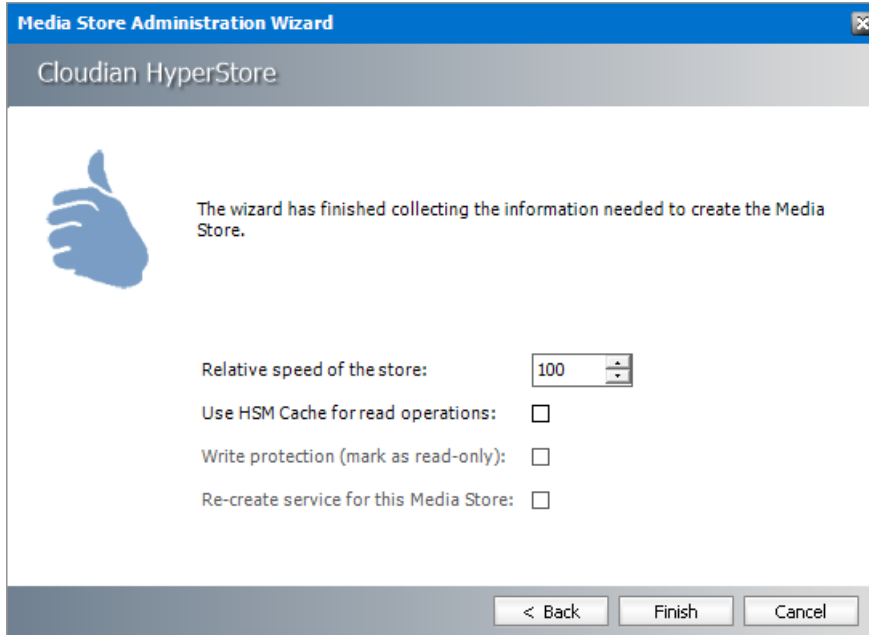
The screenshot shows the 'Media Store Administration Wizard' window for 'Cloudian HyperStore'. It contains five input fields: 'Host', 'Access key', 'Secret key', 'Bucket', and 'Filename prefix'. The 'Filename prefix' field has the text 'yyyy/MM/dd/HH|' and a small blue icon with a dropdown arrow. At the bottom, there are three buttons: '< Back', 'Next >', and '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**.



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.

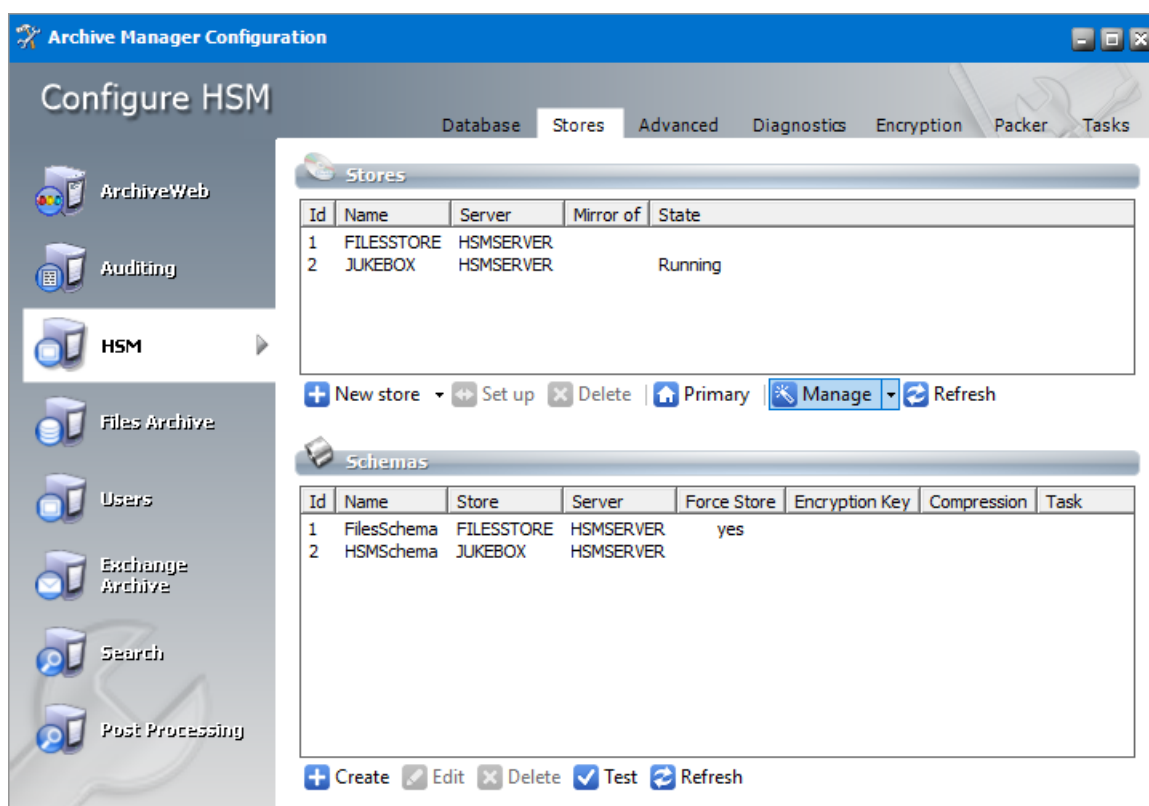
9. Verify that the media store appears in the *Stores* section.

10. Create a **Schema** for this media store.

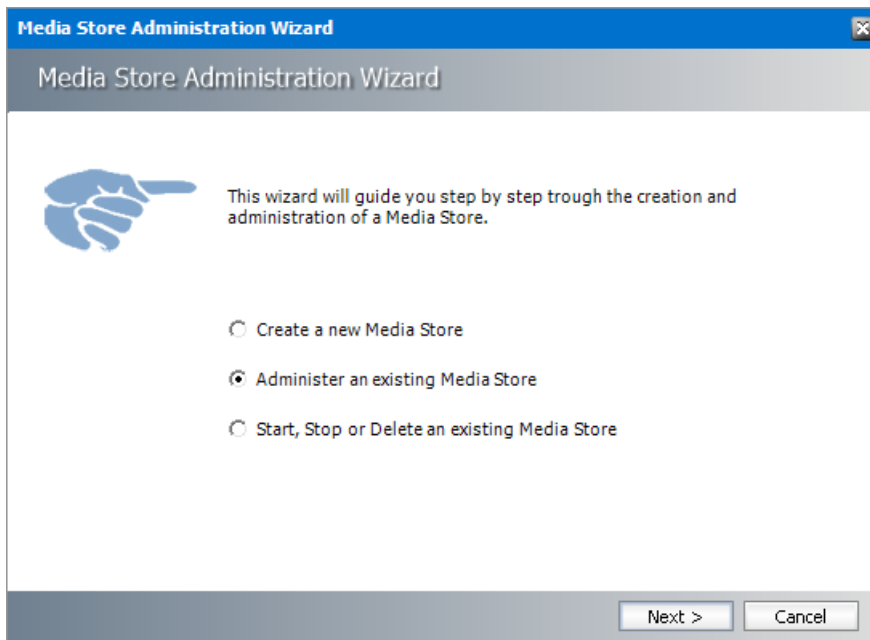
Modifying Media Store Settings

To modify the store settings:

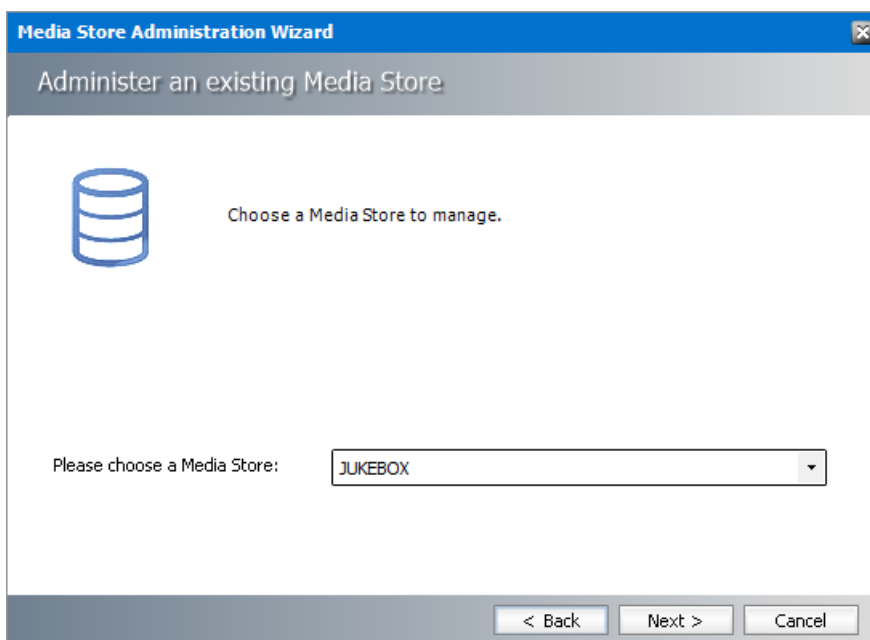
1. Open the Configuration tool from **Start > Quest > Archive Manager Configuration** or C:\Program Files (x86)\Common Files\PAM\PAMConfig\PAMConfig.exe
2. Select **HSM** from the features panel.
3. Click the **Stores** tab.



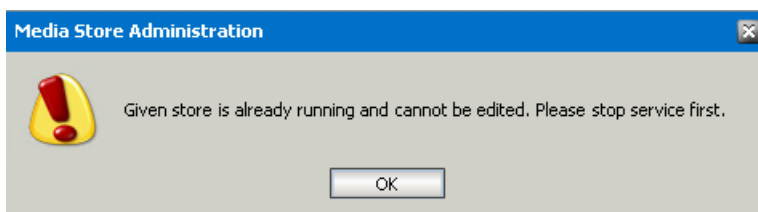
4. Click **Manage**.



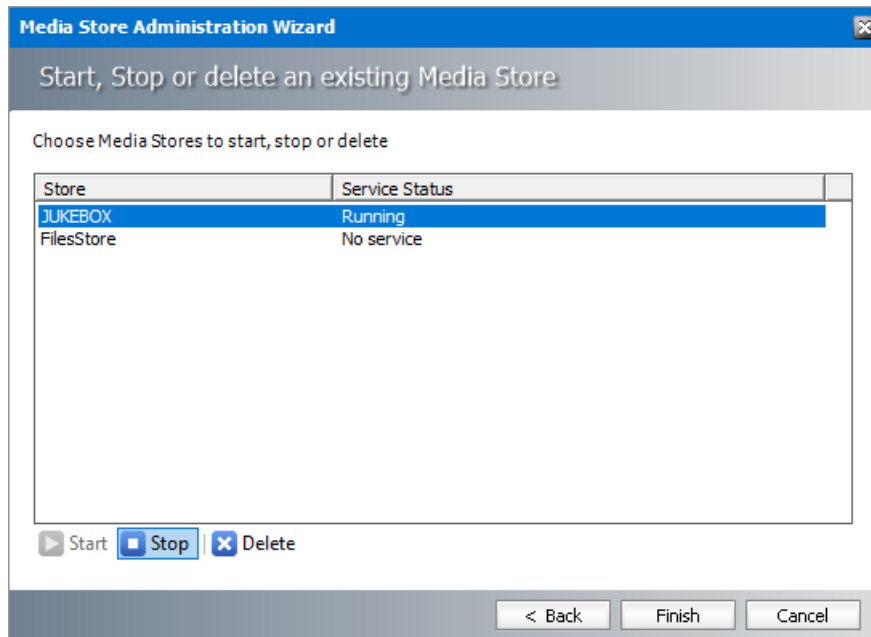
5. Click **Next**. The *Choose a Media Store to manage* window opens. Select the media store from the drop down that you want to manage.



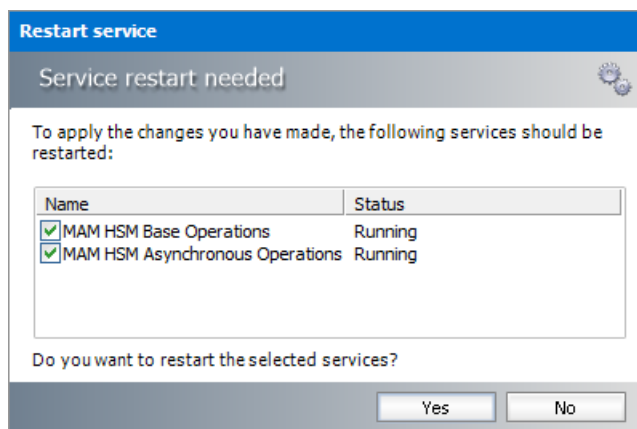
6. Click **Next**. Sometimes a warning message can appear. For example, the service for a media store like *Jukebox*, *Harddisk*, *Network Share* must be stopped first. Only then it can be modified. All other kinds of stores run directly in HSM and HSM services must be restarted after the changes have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



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.



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



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 www.quest.com.

Contacting Quest

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

Technical Support Resources

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

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