



Metalogix Software

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**Administrator's**

# **Archive Manager Exchange Edition Best Practice Manual**

**Version 5**

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## **Introduction**

The purpose of this document is to familiarize you with the best practices for operating a Archive Manager Exchange Edition server in conjunction with your current Exchange Environment. By reading this document, you'll familiarize yourself with Metalogix best recommended practices, as well as some useful tips on using your Archive Manager.

This guide is broken down into several sections:

- Disaster Recovery
- Jobs
- Speed of archiving
- Performance check
- Warnings, Tips & Tricks
- Compliance Recommendation

First four chapters of this manual represent four key areas important from the administrator's point of view. The *Disaster recovery plan* ensures that even in case of unforeseen situations you have all your data backed-up. Find out *How to schedule jobs* to archive emails and free up space on the MS Exchange Server. Archiving can be done quicker if you know *How to increase the speed of archiving*. Finally, read more about *How to check that everything is running*.

Under *Warnings, Tips & Tricks* you can find useful hints for Addin, ArchiveWeb, Fulltext and Retention categories. *Compliance Recommendation* section aids you in your quest of becoming compliant.

### **Prerequisites knowledge**

We assume that the reader has working knowledge of MS Exchange server, MS Outlook and general understanding of **Archive Manager Exchange Edition** and its applications, mainly **Enterprise Manager**. All detailed information explaining terms and describing procedures for this application can be found in the **Admin manual for Archive Manager Exchange Edition Enterprise Manager**.

## Disaster recovery plan

It is generally understood that the **backup** of the data is essentially important. With **Archive Manager Exchange Edition** you have a disaster recovery plan and no loss of data in case of unforeseen circumstances. Regular backups of your Archive Manager should be part of any established operating practices. For the effective disaster recovery plan, it is recommended to backup:

- MS Exchange Server      Run the main backup of your MS Exchange store.
- Your emails                Run your main archiving - the scheduled jobs
- Database                    It is backed up during the backup time specified on the Jobs tab.
- Your archive  
(archived items)            This is backed up easily using so called *Multiple saving in HSM*.

Schedule the backup in the same order as listed above, i.e.:

1. backup of the MS Exchange Server;
2. run scheduled jobs;
3. then the database backup time follows.

**NOTE:** You can also backup the MS Exchange Server and the database at the same time.

**NOTE:** No special time needs to be set for *Multiple saving in HSM*.

Backup detailed steps are described in the following lines.

### Backup your emails

With Archive Manager scheduled jobs, your emails are archived in HSM and cannot be deleted for the time period defined in the relevant retention category. For more information regarding job scheduling see the section "How to configure jobs".

### Backup your database

To properly back up your database, follow these steps:

1. In the **Enterprise Manager \ Manager view \ Jobs** tab specify the backup time (e.g. half an hour) to enable database backup. It is best to schedule the backup time overnight, after the jobs have finished, e.g. from 1 am to 1.30 am. During this period **NO JOBS CAN RUN**. Just enter the time in the **Backup start time** and **Backup stop time** fields and then click **Update** (see the following screenshot).

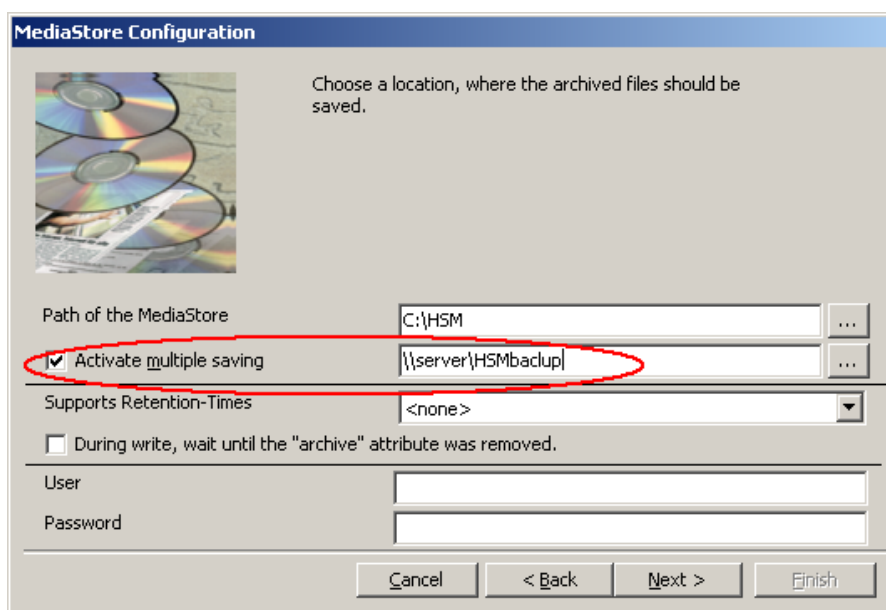


## **Backup your archive**

The documents stored in HSM can be backed up “on the fly” by using the HSM Store “Multiple saving” feature, i.e. saving to two locations at the same time, each on a different machine.

To enable this feature you just need to follow the next steps:

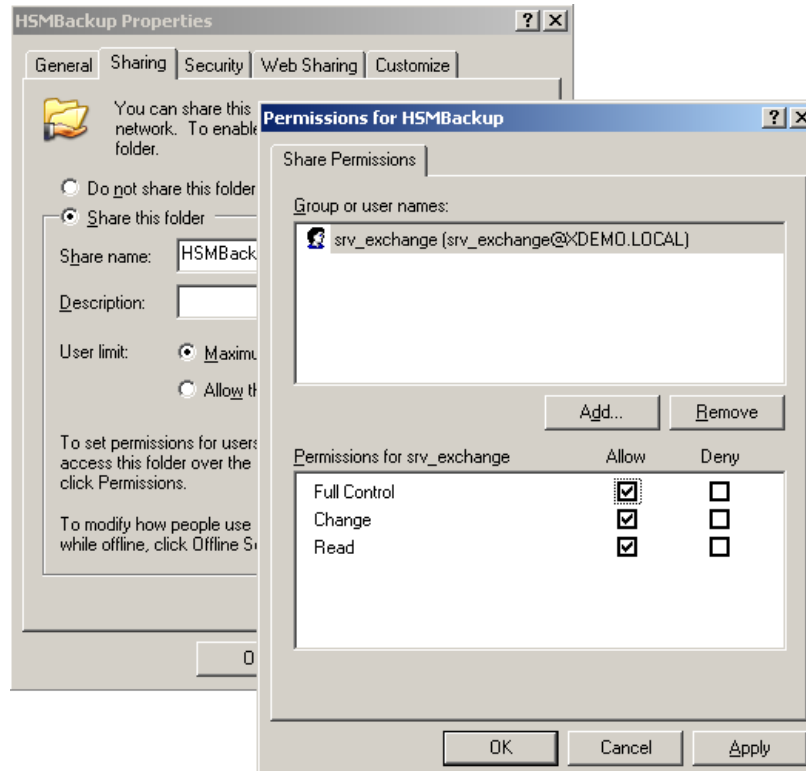
1. Run **C:\Program Files \ Common Files \ PAM \ HSM \ PamMediaStoreAdministration.exe** on the HSM server.
2. Open **Administrate an existing MediaStore**.
3. Click **Next**, then choose your HSM from the dropdown.
4. Click **Next**.
7. Leave the checkbox selected on the next screen, and choose **Next**.
8. Choose the **Activate the multiple saving** check box and also give the UNC path to where you would like to backup a second copy of your HSM (which contains your archive data). If the backup is made on the same server, then you can simply use the browse button to specify the drive and folder where you will backup the items from the HSM Store.



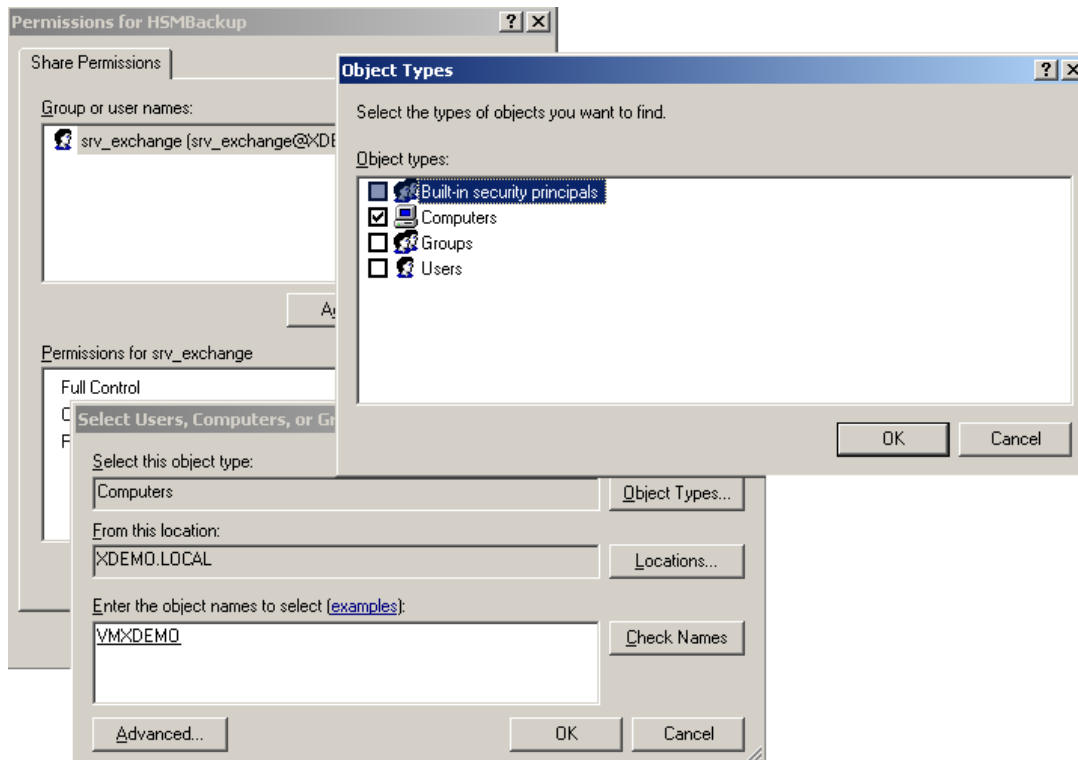
9. Click **Next** on all the other dialogs to conclude the changes. Then you can start the HSM Store again.

### **IMPORTANT COMMENTS:**

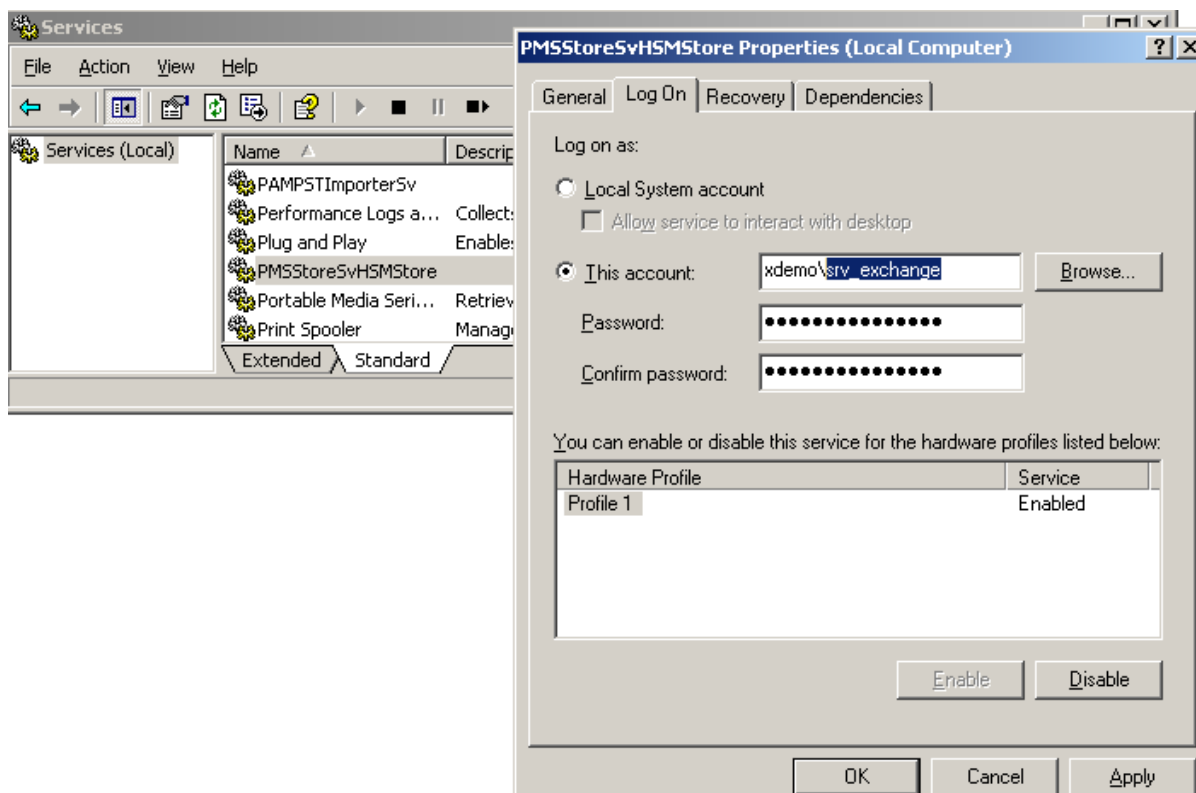
- In our example we have chosen a UNC path as a backup location of the HSM Store (**\\ServerHSMBackup**). It means that another machine called *Server* exists in the environment. On this machine the folder called *HSMBackup* is a windows share.
- When you create this share you need to make sure that you give full share control to the *super-user* account over it and remove the default read right for *Everyone*:



- You could also assign full control over this share for the HSM server itself. When you click the **Add** button just use the *Objects Types* dialog to search in computers:



- Like this the *HSMBackup* share from the backup server will be fully controlled both by the super-user account and by the HSM Server itself.
- The last thing you have to do is to make sure the service of the HSM Store will be running under the *super-user* account from now on, and not under the *Local System*, as in the past. Open the services window and double-click on the HSMStore Service (*PMSStoreSvHSMStore*) to change this. After the change, you can start the store service.



- From this moment on, when HSM stores a file in its default location (*C:\HSM*) the same file will be stored in the backup location too. (*\\Server\HSMBackup*)
- The same folder substructure will be created in the new backup copy from *\\Server\HSMBackup* exactly like in *C:\HSM*

## How to schedule jobs

Jobs are created and scheduled on the **Jobs** tab of **Enterprise Manager**. Except *Normal job*, several other job types can be created. The following guidelines will help you schedule your jobs for the best performance.

**NOTE:** Each job has to have a retention category assigned.

It is suggested to run the jobs out of working hours, although some jobs can run also during the working hours (*Sent Items job*, job archiving the Journal mailbox).

## Threshold job

Companies usually define within their IT department rules regarding storage space mailboxes or groups may occupy on the MS Exchange server, to avoid mail server overloading. The *Threshold job* is used specifically for that purpose.

Usually it is enough for this job to run once a week. The job needs to calculate the space that the mailboxes listed on the **Threshold** tab of **Enterprise Manager** occupy on the MS Exchange server. To make the accurate calculations it has to run at the time when all other archiving is finished, i.e. when no other job is running. For these reasons we recommend to run it at the weekend.

## Shortcut sync job

This job searches in archive for items which have no reference (shortcut) on MS Exchange. Such items are referred to as LOST ITEMS. The lost items will be marked for deletion when this job runs. However, they had to be archived via retention category which allows the *Shortcut sync job* to operate (see the “Administrator’s manual for Archive Manager Exchange Edition Enterprise Manager” – Retention categories).

Items marked for deletion can only be found using the Archive Manager fulltext search feature or directly in the ArchiveWEB interface, while the retention time has not yet elapsed.

**IMPORTANT NOTE:** Keep in mind that any lost item can be restored by the administrator during its retention period **until** you run this *Shortcut Sync job*. Upon running this job, all lost items enabled for clean-up by *Shortcut Sync job* are marked for deletion. They cannot be restored e.g. on the **Archive** tab in **Enterprise Manager**. Therefore, be careful when using this *Shortcut Sync job*; use it only in cases when you are sure that no more lost items need to be restored so that the space they occupy could eventually be freed up for further usage following expiration of the retention period.

**EXAMPLE:** If you are archiving your **Journal mailbox**, it makes sense to archive it with a job using the retention category that deletes the original email from the MS Exchange completely, leaving no shortcut behind as the same emails remain in the users’ mailboxes. When you create such retention category for the job archiving Journal mailbox and check the **Allow automatic deletion of unreferenced emails (by Shortcut Sync job)** check box for that retention category, *Shortcut sync job* will operate over the items archived from the Journal mailbox. As a result, all of them will be marked for deletion and purged from the archive when their retention and keep-alive time expires.

## **Delete files job**

The purpose of the *Delete Files job* is to purge following items from archive:

- Items marked for deletion upon expiration of their Retention + Keep alive time
- Items whose Delete time, if such was defined, has elapsed (Delete time = maximal time for which the items can reside in archive)

### **IT REMOVES THEM DEFINITELY FROM THE ARCHIVE.**

Provided that your retention time is e.g. 5 years, there is no reason to run the *Delete Files job* during 5 years from the beginning of archiving. You can schedule it to start after these 5 years and run it once a month/week then.

## **Sent Items job**

Sent Items job archives sent items of all mailboxes listed on the **Sent Items job settings** tab (**Enterprise Manager \ Manager** view \ **Settings** tab). In case you wish to make sure that all sent items for the mailboxes are archived, create and schedule this job to run every few minutes (not often than every 3 minutes).

## **Normal jobs**

Administrator may create as many *Normal jobs* as needed. It is recommended to schedule them out of working hours, usually once a day.

## How to increase the speed of archiving

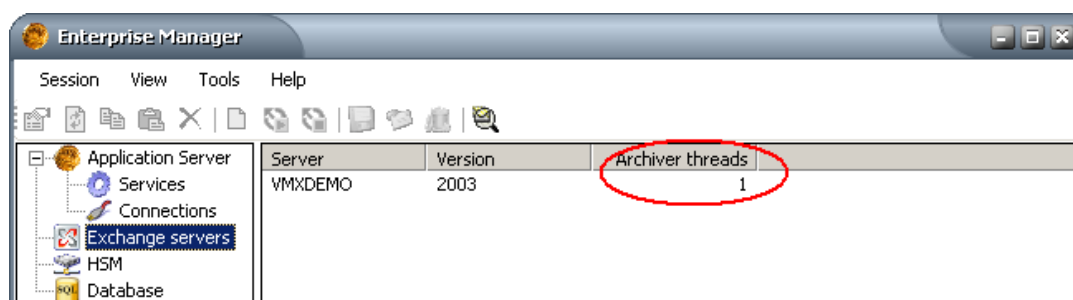
The speed of automated archiving via jobs can be managed by the number of threads and in the DirectArchive config file.

At the initial stage when implementing Archive Manager it is usually desirable to archive all or a great part of emails gathered up in the MS Exchange Server. Inevitably, this may require higher activity of Archive Manager. At this point you may want to increase the speed of archiving until the old data are archived. After some time, depending on the amount of data to be archived, only new items need to be processed and the Archive Manager activity decreases.

### Threads

Number of archiving threads can be set in the **Status** view of **Enterprise Manager**. This view is displayed by clicking **Status** on the **View** menu.

By clicking on the **Exchange servers** node a list of synchronized MS Exchange servers will be displayed, including the number of threads.



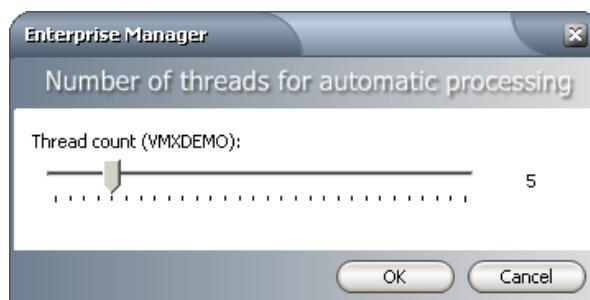
The more threads you use, the faster the jobs terminate. However, if the number of threads is set e.g. to 30 (maximum), it is as if 30 new users were working with MS Exchange server when jobs are running. This means also a higher network load. So, the number of threads needs to be considered. The network loading is also a reason why we always recommend scheduling jobs out of working hours.

The only time Archive Manager truly needs to speak with Exchange is during the process of archiving (jobs running). Otherwise, Archive Manager communicates directly to Outlook clients. As a result, you should only increase the thread count if your network is extremely large and your archiving is unable to complete before the next job is queued. As you do so, you should monitor the burden your Exchange server is taking because of it. If it is too dramatic, you should reduce your thread count. If you're unable to find a balance, you should contact our support.

By default the number of threads is set to 1. Should you wish to increase the number of threads, first try 8 – 12 threads to see the effect the settings will have on the MS Exchange server and network performance.

To change the number of threads, double-click a desired Exchange server. In the **Threads** window simply set the number of threads to be processed in one cycle. The higher the number, the less number of cycles you have – it however slows down the system. An optimal number is from 15 to 20.

After changing the number of threads, the DirectArchive service has to be restarted. In the pop-up dialog click **Yes**, to restart it.



### Direct Archive config

Items fitting the archiving filtering of the scheduled jobs will fill records into the EXCHANGEPAWMPDAPOOL table in Archive Manager database, when the jobs run. Subsequently these records are read and, while the items are archived from the Exchange Store, they are deleted from this table by the DirectArchive service.

In the DirectArchive config file the administrator can specify the DirectArchive service settings and influence the speed of processing in this way.

Open the config file from:

<installdir> \ Metalogix \ MAM4Exchange \ Services \ exchangePAMDirectArchiveSv \ exchangePamDirectArchiveSv.exe.config

The key values of the DirectArchive config presented in the following table influence the processing speed. The values in the table are the default ones:

Key name	Default value	Description
sleeptime	60000	The interval in milliseconds after which several lines/items (exact number is set in msgbuffer key value) are taken from EXCHANGEPAWMPDAPOOL to be processed.
archiverthreadcount	5	Number of threads (see the section "Threads"). It can be set also in the Status view of Enterprise Manager.
msgbuffer	100	The respective number of lines is taken from EXCHANGEPAWMPDAPOOL to be processed at once.
retrycount	5	The item that was not processed successfully will be processed the defined number of times.
retryinterval	60	The interval (in minutes) after which the unsuccessful items are processed again.

## How to check that everything is running

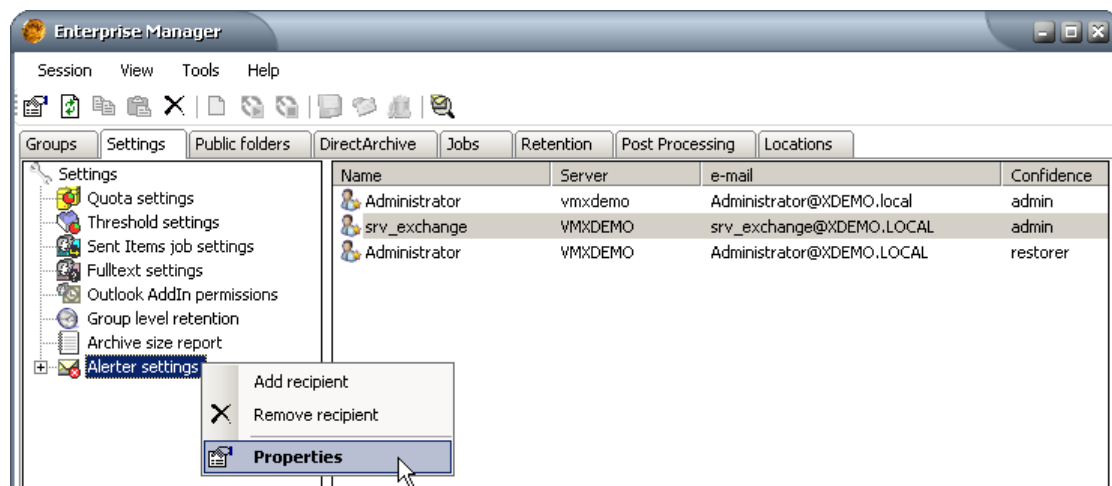
It is necessary for administrator to have an overview and check regularly that all applications are running correctly. To facilitate this task for Archive Manager and prevent critical situations administrator has:

- Alerter messages** - messages sent to the defined mailbox if any critical situation occurs, e.g. when the quota set for a group has been exceeded etc.
- Job reporting** - information on job status
- Log files / Job protocols** - summary information on all processes run by Archive Manager, jobs including

### Alerter tab

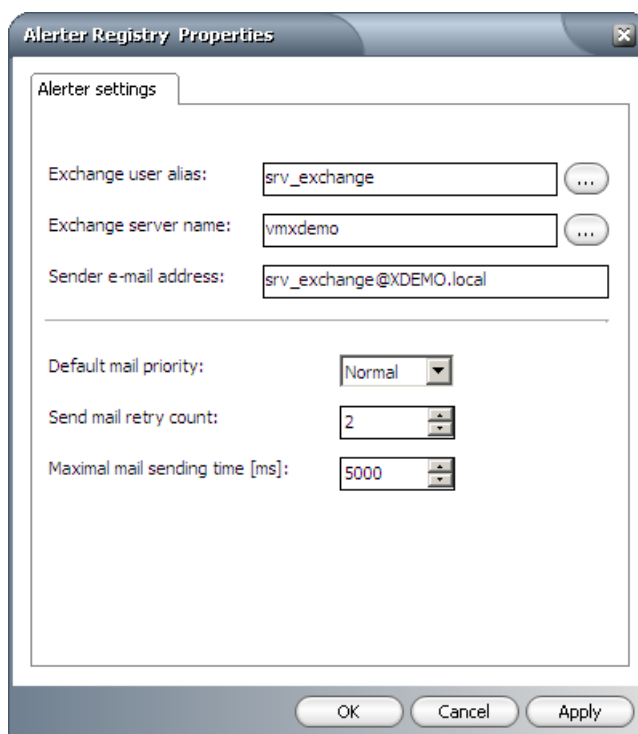
This tab (**Enterprise Manager \ Manager view \ Settings \ Alerter Settings**) has been designed to notify the users, preferably administrators, about circumstances leading in some cases to critical situations. Depending on the type of confidence level, alert messages (notification) will be sent to recipients added onto the **Alerter Settings** tab.

You may specify which user will be sending notifications. Simply right-click the **Alerter** node in the left pane and in the context menu click **Alerter settings**.



In the **Alerter Registry Properties** window specify the sender. When you are done, click **Apply** and then **OK**. The sender you have specified in the **Alerter Registry Properties** window will be sending alert notifications.

The sender is by default set to the super-user (*srv\_exchange*).



There are 5 types of alert notifications:

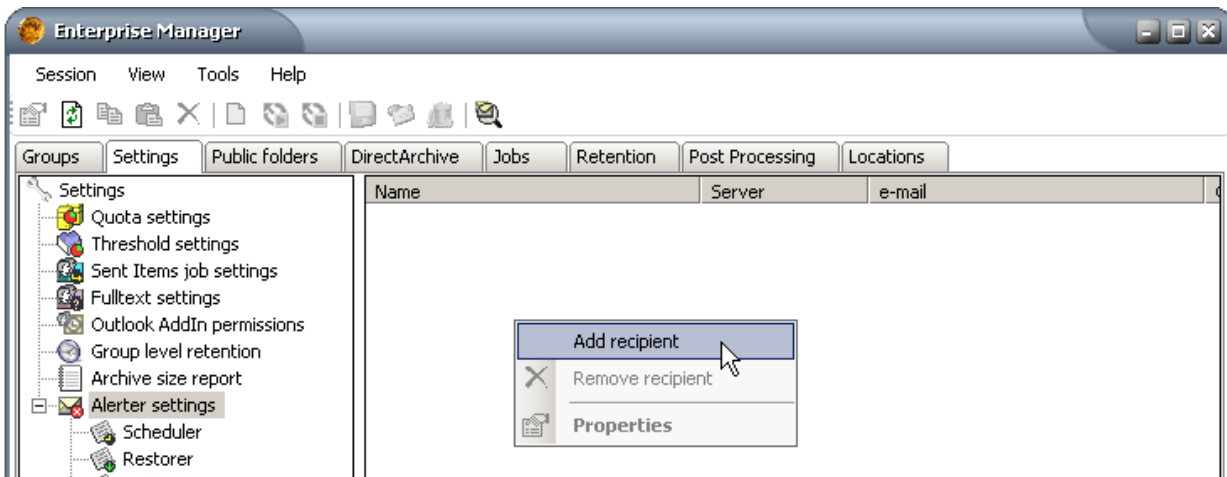
- *Scheduler notifications* are sent when scheduling errors are encountered;
- *Restorer notifications* are sent when errors while restoring are encountered;
- *Archiver notifications* are sent when errors while archiving are encountered;
- *QuotaExceed notifications* are sent when quota-exceeded related errors are encountered.
- *QuotaWarning notifications* are sent when a certain percentage of the limit in the HSM store has been used up. This setting (percentage) can be configured on the server side.

Alert notifications have been defined by default. All of them have the same confidence level (*admin*) which ensures that the recipient added onto the **Alerter** tab with that confidence level will receive all alert messages.

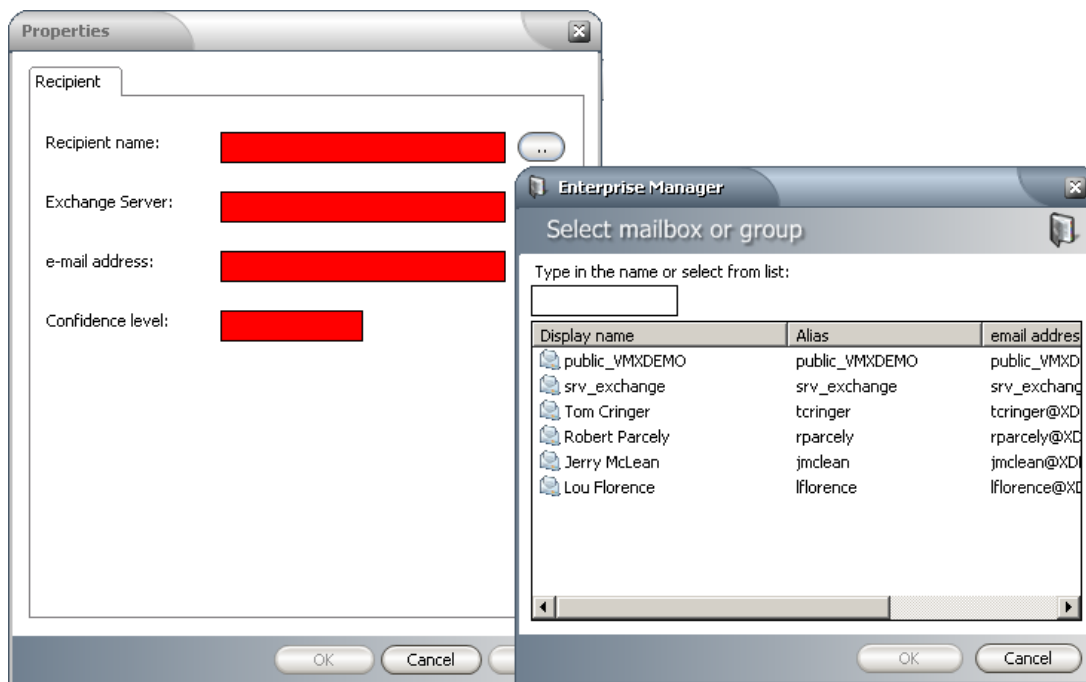
**NOTE:** It is possible to change the layout of the alert notifications together with their confidence levels (see the “Administrator’s manual for Archive Manager Exchange Edition Enterprise Manager”). However, they need to be prepared before adding recipients onto the **Alerter** tab. The same user may be added onto this tab several times (even 5 times; for each alerter), each time with a different confidence level. On the other hand, one alerter type can be sent to more users with the given confidence level. Nevertheless, the best practice is to add the administrator as a recipient of all alert messages.

#### Specifying administrator as a recipient of alert messages

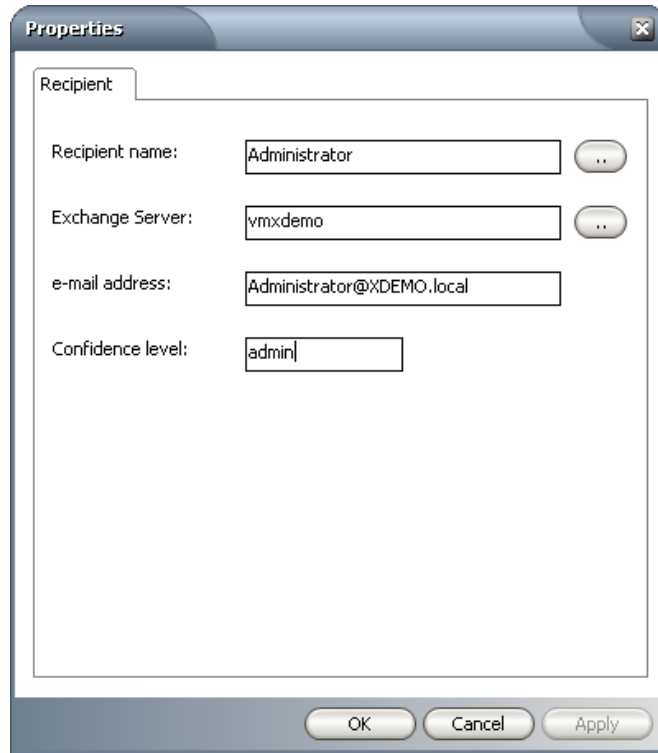
1. In **Manager** view, click on the **Settings** tab.
2. In the left pane click on the **Alerter settings** node.
3. Right-click inside the right pane and then, in the context menu, click **Add recipient**.



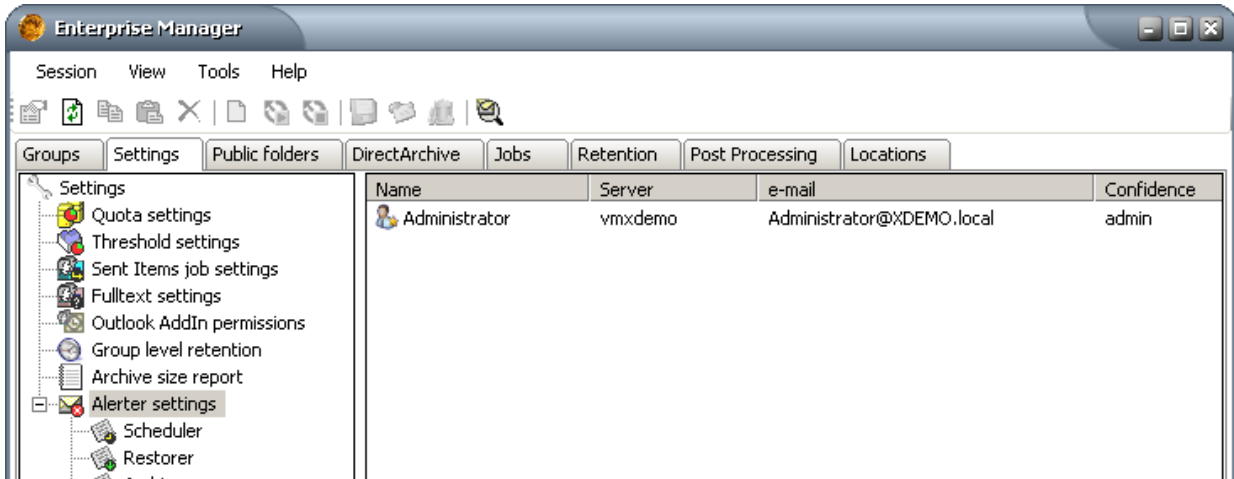
4. The **Properties** window opens. Click on the **browse** button in the **Properties** window next to the **Recipient name** text box to open the **Select mailbox or group** window where you can select the desired recipient.



5. Enter the name of the desired mailbox in the text box or select the mailbox from the list view. Confirm by clicking **OK**.
7. The **Recipient name**, **Exchange Server** and **e-mail address** text boxes will be filled in automatically in the **Properties** window. You just need to enter the confidence level.
8. Enter the desired confidence level in the **Confidence level** text box. By default all alerters have one confidence level – admin. If you have not modified it, enter this confidence level in the text box. In this way the admin will receive all alerters.  
**NOTE:** Please, be careful, because any spelling mistake may result in failing to receive alert notifications.



9. Finish by clicking **Apply** and then **OK**. The desired recipient is then displayed on the **Alerter settings** tab, with his confidence level displayed as well.



You may of course add other mailboxes onto the **Alerter** tab; each of them will receive alert messages as specified through the confidence level.

## Job reporting

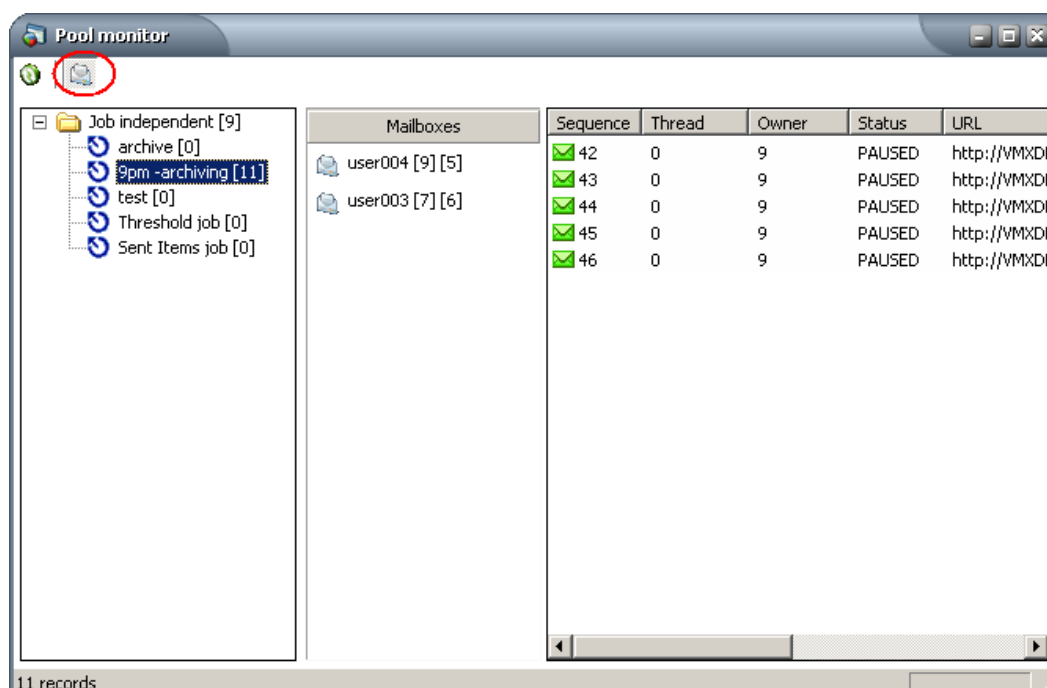
“Job reporting” is a feature which allows the administrator to see how many messages are waiting (are scheduled) for archiving, i.e. how many messages were given to the asynchronous archiving service - DirectArchive service (see “DirectArchive config” section).

The messages are collected from different sources: scheduled jobs. When a “source” decides to archive messages, it simply puts them into a database table. The asynchronous service periodically reads this table and processes messages, depending on job settings.

The *job reporting* feature simply displays the content of that database table: it displays ONLY those messages that are queued for processing. The content is automatically categorized by the start time of the job.

To check the status of messages archived by individual jobs, go to **Enterprise Manager \ Manager** view \ **Jobs** tab and click on the **Job reporting** under the Existing jobs list view.

Unfold the **Job independent** folder. You will get displayed all your jobs. Number next to the job indicates how many emails assigned to the job are waiting to be processed. Under the **Job independent** folder you can find emails from DirectArchive which are waiting to be processed. To get more details about the chosen job simply click on it. Click the **View switcher** icon (📄) next to the Refresh icon to display the **Mailboxes** pane. In this pane you can see mailboxes from which the selected job is archiving. The second number in square brackets next to the mailbox is the number of emails waiting to be archived in that mailbox. (The first number is the mailbox ID.)



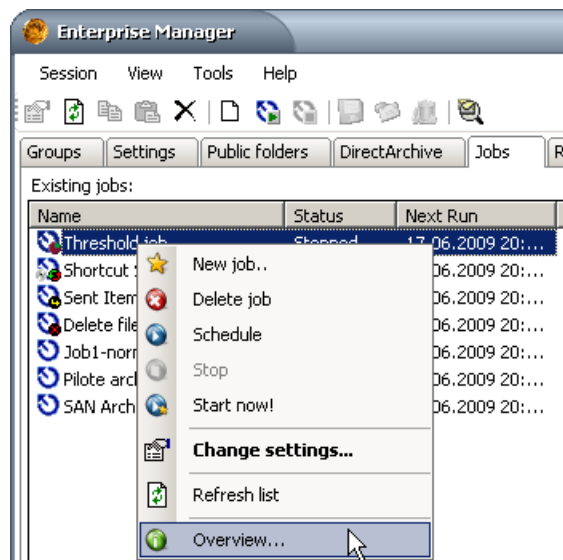
In the right pane of the window you can see individual items of the relevant mailbox or job. Items displayed green are pending items. The red ones will not be processed any more as there were several unsuccessful attempts to archive them (*Error count*).

If the job does not manage to process all items in one cycle, the remaining items are displayed green and in the *PAUSED* status until the next start of the job.

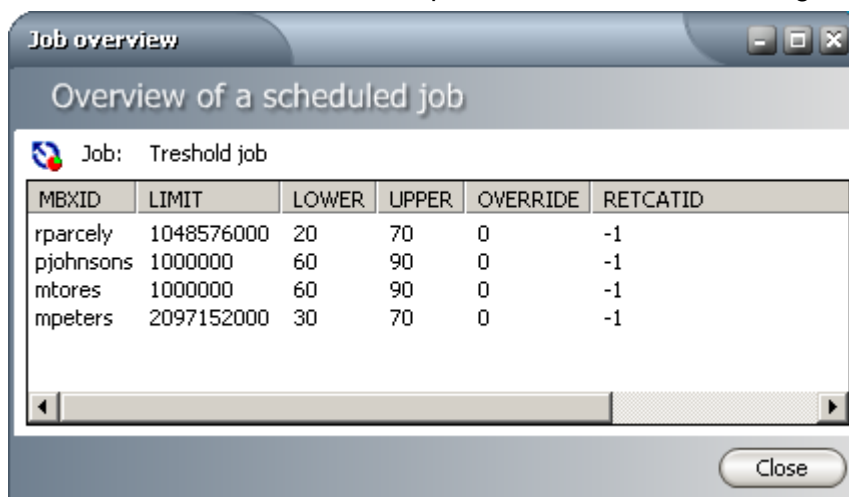
**NOTE:** In case the pool monitor always displays a lot of paused items, you may need to optimize the speed of archiving (see the section “How to increase the speed of archiving”).

A lot of useful information can be found in the list view, e.g. the sequence number of the item (*Sequence*), ID of the owner (*Owner*), *Status* (WAIT - waiting to be processed or PAUSED – the respective job is stopped), location of the mailbox item (*URL*), the date of creation (*Creation date*), number of unsuccessful attempts to process the item (*Error count*), ID of the job in charge of the item (*Job*) etc.

Back on the **Jobs** tab of the **Enterprise Manager** you can display mailboxes and public folders the job-in-question has been assigned to. To do so right-click the selected job and choose **Overview** from the context menu.



The respective **Job overview** window will open, as seen on the following screenshot.



## **Logs and job protocols**

Under the **<installdir> \ Metalogix \ MAM4Exchange \ Log** folder, administrator can find log files and a **Protocols** folder with protocols of all jobs that have run already. Everything the job has done so far is written in the protocol named according to that job, e.g. *SchedulerProtocol\_ArchiveOldMails.log*.

In the same **<installdir> \ Metalogix \ MAM4Exchange \ Log** folder you will also find useful logs like:

- *PamExScheduler\_0000i.txt* providing overall information about the performance of all the scheduled jobs
- *exchangebam\_0000i.log* providing information about the Archive Manager activity
- *Synchronization\_<date>.log* providing information about the status of the Active Directory synchronization with the Archive Manager database
- *PamLog000i.txt* providing information about the HSM activity

## **Warnings, Tips & Tricks**

### **Warning**

Avoid changing permissions on your SQL Server, the Archive Manager Admin Active Directory Account, or the Archive Manager File Structure.

One of the most common problems we see with Archive Manager is that administrators tend to try to apply their own custom settings and security groups with Archive Manager. Because of this, we feel the need to write this strongly worded warning:

**Under no circumstances whatsoever should you ever change the following aspects of Archive Manager Exchange Edition:**

- The super-user account name in Active Directory
- The super-user account password
- The super-user account privileges
- The super-user account group membership

Additionally, you should NEVER:

- Hide the super-user account from the Global Address List
- Run Manual queries on the Archive Manager SQL DB

Also, the super-user account should *Never Expire*.

### **Addin**

The Outlook Addin plugin is an extremely powerful tool that authorized personnel can use to manage their own archived messages from Outlook, without the need to navigate to the Archive Manager management console or ArchiveWeb. As a best practice, we strongly recommend giving this tool to administrators. However, we even more strongly encourage that you do not give the Addin with all possible permissions to all of your users. Allowing all users to utilize this add-in enables them to effectively control their own archive, which could potentially lead to compromises in your archive compliance. For example, a user could restore and then permanently delete a message from the archive.

Additionally, you should make sure that all your users utilizing the Outlook Addin are not running:

- the firewall
- extra Outlook Add-ins that conflict with the Archive Manager plugin
- antivirus is not scanning already read items

### **Fulltext searching**

Archive Manager Exchange Edition is capable of completely searching emails throughout an entire enterprise. With fulltext searching, administrators can search through any email field, including the “to” and “from” field.

To setup fulltext searching, you can follow the instructions in the Archive Manager Search manual, or just follow these summarized steps:

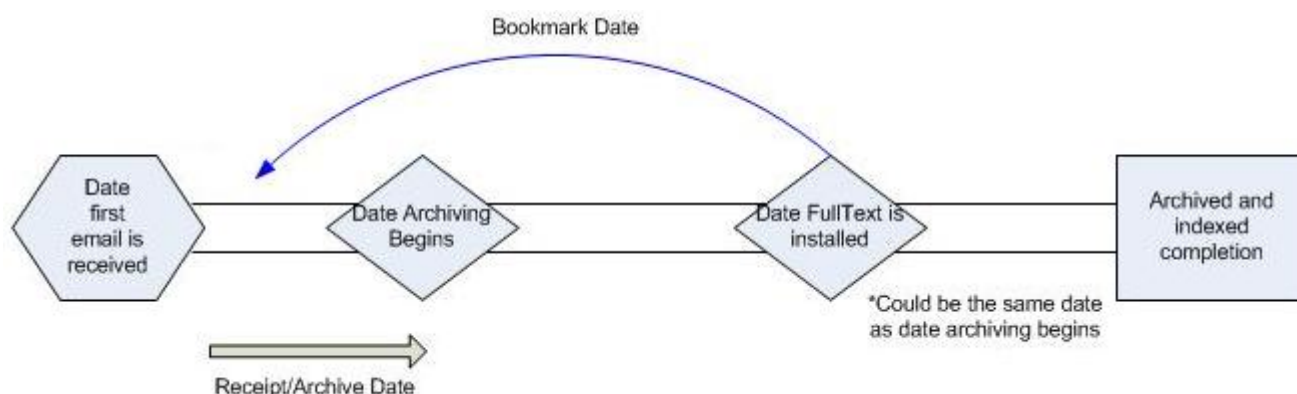
- 1) Open Enterprise Manager and select **View**, then **Manager**.
- 2) Select the **Post Processing** tab
- 3) Click the **Add...** button on the bottom of the page
- 4) From the dropdown box, select **PostProcessPAMSearchIndex.SearchIndexPlugin**.
- 5) Click **Add**.
- 6) Right-click the plugin name and choose **Edit Plugin...**
- 7) Select the **Apply for all mailboxes** option.
- 8) Check **Plugin is active** option.
- 9) Click **OK**.
- 10) In the same way (steps 3 to 9) add the **PostProcessRecipients.PostProcessPlugin** to allow searching based on the "to" field.
- 11) Start the MAMPostProcessingSv service.

Now you can examine the plugin properties area on the right. Notably, you will see a field called **Bookmark Date**. Bookmark date allows you to see the date of the latest email your server has indexed. This data is listed in European standard format (Day/Month/Year/Time). You can monitor it by occasionally clicking refresh.

By default the initial bookmark date is the date when the plugin was installed, i.e. plugin will start indexing only emails archived after this date. If you have archived emails before plugins installation, you have to shift the bookmark date back to the past. To do so:

- 1) From the same Post Processing tab, right click **PostProcessPAMSearchIndex.SearchIndexPlugin** and select **Set Bookmark ...**
- 2) From the bookmark dropdown, select a date before any archiving took place and press **OK**.
- 3) Repeat the same for **PostProcessRecipients.PostProcessPlugin**.

The fulltext post-processing plugins will begin to index your archives and slowly move the bookmark date up to the date of the most recently indexed archived email. Keep in mind, this process may take several hours or several days when first implemented, depending on the quantity of emails. Once it is complete, you can utilize the fulltext search option from ArchiveWeb.



## ArchiveWeb

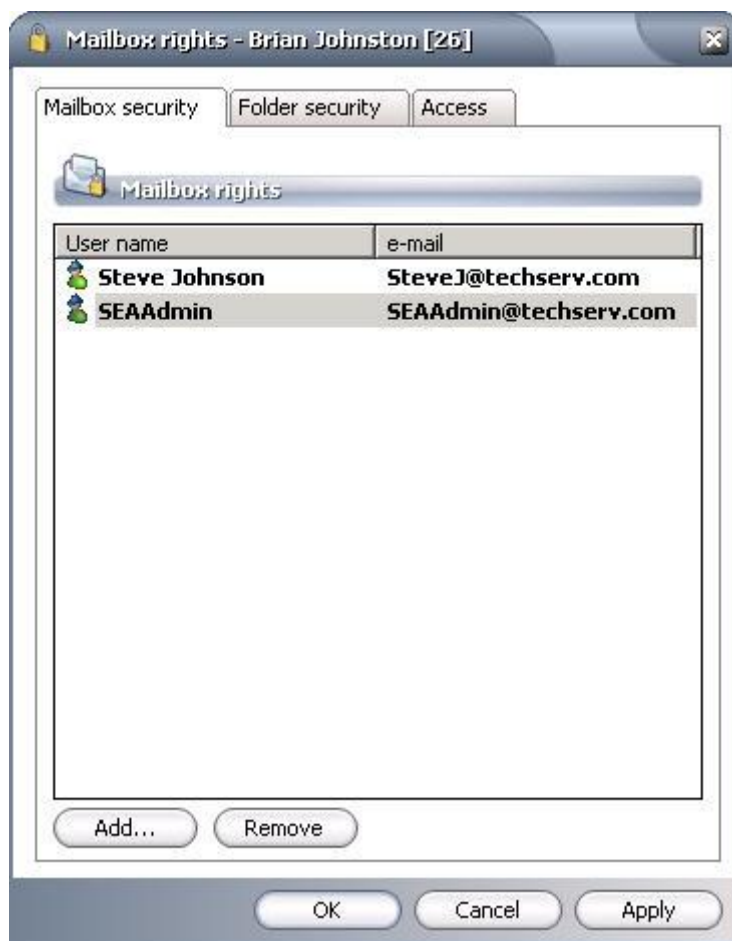
Archive Web is a web based interface that directly connects into the Archive Manager backend and allows you to search and administer your archive from an easy to use web interface. Through ArchiveWeb, you can completely access your entire Exchange archive, including individual mailboxes, messages, and flagged items for legal purposes, such as holds. In this section of the best practices guide, we're going to go over some simple but important practices with archive web. This way, you'll be prepared to administer some of the most common tasks with Archive Manager, without having the need to load the console and occupy valuable time on your server.

### Permission to Search Other Users' Mailboxes

In order to search another user's mailbox, you will need to navigate to the Enterprise Manager and login with FullAccess rights (super-user). Once inside the Enterprise Manager console, perform the following steps:

- 1) From the menu, select **Tools -> Mailbox rights manager**.
- 2) From the mailbox rights manager, select the mailbox(es) that you would like **to be able to search** and double-click it.
- 3) This will bring up the Mailbox Rights for that particular mailbox(es).
- 4) To allow a user to search this mailbox(es), select **Add...**
- 5) Either type the name of the user or scroll and select the user account, then press **OK**.
- 6) Press **Apply**.

As you can see from the screenshot below, in this case, Steve Johnson has the rights to search Brian Johnston's mailbox.



The following handy functions are available in ArchiveWeb (see the “ArchiveWeb manual”):

- Searching
- Search Templates
- Legal hold
- Export to PST

### **Retention periods**

The exact length of time an email should be archived greatly varies upon legal requirements outlined by the regulations to which your company is required to comply. A partial list of these requirements is available through Microsoft at <http://technet.microsoft.com/en-us/library/aa998649.aspx>, but your exact compliance regulations are defined by your industry and the laws of the nation in which you reside. Note that Metalogix does not provide any legal advice regarding retention periods whatsoever – this is the responsibility of your legal department.

With Archive Manager, retention periods take place after an email has been archived according to the group settings associated with a job. You can think of the process of applying a retention category like this:

- 1) In Archive Manager, a job is created to schedule when the archiving will occur.
- 2) A Archive Manager group is created based on the users in your organization and their compliance requirements. Within each group, the group settings will determine the minimum size and age of the message to be archived.

- 3) The Archive Manager group is assigned a retention category that will determine how long email is kept in your archive.

*Case Example: If you have two departments, sales and marketing, who each have security groups that contain all sales persons and marketers, you could add both of these groups into an Archive Manager group called "Sales and Marketing" that could receive a retention period (next bullet point) that would be based upon legal compliance regulations requested by your legal department.*

- 4) The job is associated with your Archive Manager group.
- 5) The job is run based on a schedule you set earlier (Point 1). It reads through the received by and size fields based in the job criteria and sends the message to the archive.
- 6) The message is held in the archive for the period set in your retention category.

Example archive retention process

**Archive Manager Group** – All users from Sales and Marketing security groups

**Job** – All messages older than 10 days, larger than 0 bytes.

**Retention** – 120 calendar months

**Today's date** – 1/11/10

**Email Received By Date** – 1/1/10

**Email Received By** – A marketing user

In this case, the following would happen:

- 1) The Archive Manager job runs.
- 2) The job checks the emails of the mailboxes associated with the group assigned to that job.
- 3) Archive Manager determines that the message is older than 10 days by viewing the received by date.
- 4) Archive Manager determines that the message is larger than 0 bytes.
- 5) Archive Manager archives the message and assigns the retention category of 120 calendar months.
- 6) Ten years pass.
- 7) The message is deleted on 1/11/20 – ten years from the day the message was archived, not received.

Retention Periods – Important Notes

- Retention periods are retained based upon the date when the message is **ARCHIVED**, not the date in which the message is received. For a full explanation, see the last bullet points in the section above.
- Before reviewing retention categories, you should know that once a message has been archived a retention category **CANNOT BE CHANGED**. This is done to achieve legal compliance.

## Compliance Recommendations

Depending on the industry in which you work, different requirements are set forth regarding email archiving and archive requirements. Some extreme cases, such as data involving trading information for the Securities and Exchange Commission, have such stringent requirements that they mandate that all emails be archived permanently. On the other hand, some loose requirements mandate that only a “best effort” must be maintained for email compliance.

In order to aid you in your quest of becoming compliant, Metalogix Software has prepared a list of compliance resources that will outline some of the most common standardizations used throughout the industry. Keep in mind, Metalogix Software is merely a software company and not a legal firm.

**Any information contained in this document should not be considered legal advice in any way. If you wish to ensure archiving compliance in your organization, consult an attorney.**

### SEC

The SEC maintains very strict standards that require adherence to email standards that are more rigid than any other compliance laws. Some of the regulations with the SEC include:

- Having messages time/date stamped [17A-4(f)(2)]
- Ensuring supervisors have the ability to review outgoing email for noncompliant language [17A-4 Section 3010]
- Maintaining a searchable Archive [17A-4(f)(3)]
- Keeping offsite storage in tamper-proof media [SEC 17A-4(f)(3)]

Additionally, for brokers, members, and dealers:

- Retention periods of at *least* 6 years

To achieve this, Metalogix Software makes the following recommendations:

- 1) Implement Archive Manager Exchange Edition.
- 2) Create user accounts for your supervisors and give them the ability to search their subordinates in ArchiveWeb.
- 3) Create a retention policy of 1200 months.
- 4) Apply this retention policy to all users.
- 5) Implement a second HSM by completing the following steps:
  1. Navigate to the PamMediaStoreAdministration tool.
  2. Stop your HSM by choosing Start, Stop, or Delete an existing MediaStore, then choosing Stop.
  3. Close, then open Administrate an existing MediaStore.
  4. Click Next, then choose your HSM from the dropdown.
  5. Click Next.
  6. Leave the checkbox selected on the next screen, and choose Next.
  7. At the next screen, choose the Activate multiple saving checkbox, then select a location where you would like to backup a second copy of your HSM (which contains your archive data).
  8. Click Next seven times, then click Finish.

- 6) Setup a backup plan using software to backup from your secondary HSM to another media system.
- 7) Back the other media system to tape completely.

#### Gramm-Leach Bliley Act –

The Gramm-Leach Bliley act was enacted to secure access to sensitive financial records. Concerning email compliance, the following regulations pertain:

- Email must be secured [Section 6801]
- Customer records must be controlled to prevent harm
- Strong access control and passwords

Accordingly, Metalogix Software recommends you implement the following solution to ensure your archive's safety:

- 1) Implement Archive Manager Exchange Edition.
- 2) Only allow one necessary administrator to access mailboxes in ArchiveWeb.
- 3) Ensure that the SEA\_Admin account has a password with at least:
  - a. 2 numbers
  - b. 3 special characters (\*\$%^)
  - c. 16 total digits
- 4) Set a retention period to 84 months.

#### HIPAA

Health Insurance Portability and Accountability Act is designed to maintain the safety and confidentiality of health records from any other source than the individual and their health care provider. Concerning emails from health related institutions, there are many regulations that come into play:

- Email Confidentiality required [Section 164.312]
- Archives must utilize Encryption [Section 164.312]
- Archive must always be accessible [Section 164.312]
- Organization must have an email archive disaster recovery plan [Section 164.308]
- An auditing record must be maintained for when email is sent, received, modified, accessed, and deleted from Exchange Store [Section 164.312(b)]

Because of the nature of sensitive medical information, Metalogix recommends that HIPAA clients maintain a security level equal to that of the Securities and Exchange Commission. Additionally, we require that HIPAA clients be running SEA version 4.1 or later.

To achieve this, do the following:

- 1) Implement Archive Manager Exchange Edition.
- 2) Create user accounts for your supervisors and give them the ability to search their subordinates in ArchiveWeb.
- 3) Create a retention policy of 1200 months.
- 4) Apply this retention policy to all users.
- 5) Implement a second HSM by completing the following steps:
  1. Navigate to the **PamMediaStoreAdministration** tool

2. Stop your HSM by choosing **Start, Stop, or Delete an existing MediaStore**, then choosing **Stop**
  3. Close, then open **Administratate an existing MediaStore**
  4. Click **Next**, then choose your HSM from the dropdown
  5. Click **Next**
  6. Leave the checkbox selected on the next screen, and choose **Next**.
  7. At the next screen, choose the **Activate multiple saving** checkbox, then select a location where you would like to backup a second copy of your HSM (which contains your archive data).
  8. Click **Next** seven times, then click **Finish**.
- 6) Setup a backup plan using backup software to backup from your secondary HSM to another media system.
  - 7) Back the other media system to tape completely.

#### FDA 21 CFT Part 11

FDA 21 CFT Part 11 specifically maintains auditing requirements regarding exactly when email was sent, why it was sent, who it was sent to, where it was sent, and why it was sent. Additionally, the requirements of it say that this report must be generated by a computer. Accordingly, Metalogix Software makes the following recommendation:

- 1) Implement Archive Manager Exchange Edition 4.1 or later to enable auditing.

[www.metalogix.com](http://www.metalogix.com)

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