



Mail Attender® for Exchange
Version 2.0

White Paper

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Introduction

Mail Attender for Exchange is an administrative support tool designed to manage Microsoft Exchange mailbox and public folder contents. Email systems tend to be a “black box” when it comes to administration. Mail Attender lifts the covers off allowing administrators complete control over the contents of the system. Most organizations with email create policies to both limit liabilities and to reduce the rate of growth. Unfortunately, enforcing these policies is either labor intensive or relies on the diligence of the users. Mail Attender allows the administrators to enforce these policies directly by creating a set of rules. These rules are completely flexible in what, when and where they will be applied. An administrator need only create the rules and Mail Attender does all the rest.

Each rule contains a list of conditions and actions. Each condition can be any property of the mailbox, folders, messages or attachments. The list of actions is performed once all the conditions have been met. Rules can also be limited to specific users, groups, folders and servers.

Mail Attender allows unprecedented control over attachments in an email system. Attachments represent 80% of the storage consumed in a typical email system. Attachments can also produce the greatest liability to a company in the form of pornography, sensitive company documents, inappropriate jokes and so on.

Documents represent the largest number of items in an email system. Documents take many forms such as, emails, calendar entries, journal entries, contacts, and so on. Mail Attender allows management by type, size, age and content. Administrators can use the powerful text searching in Mail Attender to locate documents containing combinations of keywords and phrases in their subjects or bodies.

By putting the information in the hands of the administrator, Mail Attender allows an organization to take control of their own email system.

Benefits

Reduce Your Exposure

With more and more lawsuits occurring, every company should be aware of their potential for legal problems pertaining to email. Infrastructure problems could also be a great cost to a company. Upper management may not realize that there is company exposure occurring from email and to what level. Part of the challenge of protecting your company is to change the way email is used. This could become a cultural and political battle between managers and employees. However, for those companies that have already experienced the pain of a lawsuit due to email, Mail Attender's document and attachment management is a much easier transition than it is for companies that still feel they are too invincible for a lawsuit to happen to them.

By enforcing document and attachment policies, a company can greatly reduce their legal liability due to Mail Attender's ability to locate and delete potentially damaging mail messages.

Recovery and Discovery of Information

Mail Attender makes an excellent search tool. With features like keyword searching, message sender and recipient searching and document age and size conditions, administrators can quickly and easily construct rules to locate and manage messages and documents in Exchange. These may be documents inappropriate to the workplace or sensitive company information. Mail Attender provides the tools needed to deal with these documents.

Return on Investment

Mail Attender will strengthen the ROI of your email system. This is realized when the email policies created by the organization are enforced by Mail Attender. With this enforcement, storage space can be reduced or minimized, thus requiring less hardware and software licenses. Mail Attender can also assist in locating licenses wasted on employees who are no longer with the company. Most importantly, by providing greater control over the email system for the administrators, their time is not wasted on menial or repetitive tasks, but rather, allows them to focus on the most important ones.

- Reduce or minimize hardware and software
- Locate unused licenses
- Reduce work load of administrators

Common Questions

- Q.** How can I use Mail Attender to reclaim space?
- A.** There are several ways. First you can simply delete or export old messages and attachments. Another way is to export attachments from Exchange to a shared network path, and leave a shortcut icon in the email where the attachment originated. This will dramatically reduce the size of mailboxes, but of course the attachments still exist on the file system. Yet another way to reduce space would be to target large attachments or attachments not business related. Sometimes simply emptying each mailbox's deleted items folder will recover significant space.
- Q.** How can I keep an eye on growth?
- A.** It is possible to gather Exchange data such as mailbox sizes and public folder sizes by using Mail Attender reports. By collecting this data periodically, and comparing it to previous information, it is possible to get a picture of which mailboxes and folders are growing the fastest.
- Q.** How can I use Mail Attender to limit legal exposure?
- A.** Legal liability comes in many forms. One of the most common is sexual harassment in the form of pornography or inappropriate jokes emailed within a corporation. In most cases it is nearly impossible to stop this content from entering your email system. In the best case you can only scan for it after the fact. With Mail Attender you have the ability to scan mail by sender address, keywords and phrases, attachment types and names and other ways that make it easier to locate this kind of inappropriate content. Simply by locating this content, and then managing the worst offenders' mailboxes, you can significantly reduce your exposure to liability.
- Q.** Why is it important to delete old email?
- A.** Aside from the space issues, if your company is ever involved in any legal action, your corporate email is subject to discovery in court. Do you want someone else sifting through ALL your company email? The best defense against this is to permanently delete emails beyond a certain date, and to even destroy any existing backups. If you do not have the old emails, then you are not required to produce them in court.
- Q.** Can I block messages and attachments from being sent or received?
- A.** No, Mail Attender is not a "real-time" product. It allows you to manage the content of mailboxes and public folders, as they exist.

Product History

Product History

The primary reason Mail Attender was created was to give companies the power to protect themselves. Comparative to Patrick Henry's famous statement "No taxation without representation", companies are now demanding, "No responsibility without authority". Since the Supreme Court ruled that an employee does not own their email, and that it is the property of the company, companies want to have more control over mail messages.

Another reason Mail Attender was created was to overcome the administrative limits of email systems such as Lotus Notes and Microsoft Exchange. The focus of these systems tends to be towards security and reliability rather than on ease of administration. In many respects, the inner workings and email contents of the systems are a "black box" to the administrators, often requiring an abundance of repetitive searching to enforce the simplest of email policies. Mail Attender was designed to perform these enforcement tasks for the administrators.

The first version of Mail Attender was in July of 1998, strictly for Lotus Notes. Since then subsequent releases have added many new and useful features. Mail Attender for Exchange is based primarily on the same set of features. Just like the Lotus Notes version, the feature set is expected to continue to grow as new releases become available.

Release Schedule

A new version of Mail Attender for Exchange will be released at the end of each quarter. Each version is expected to contain 10 to 20 new features and any bug fixes required. In addition, intermediate versions will become available as required to fix any bugs that must be corrected immediately. All releases will be made available at the Sherpa web site www.sherpasoftware.com.

Customer Profiles

Any company using Exchange and Outlook can use Mail Attender for Exchange. Client sizes range between companies with 100 to 50,000 mail users. In addition, many clients also use the Lotus version of Mail Attender. Most of the companies that are using these products require a complete non-disclosure, which does not allow us to publicize our client list. However, some companies allow us to use them as a reference, upon approval.

Supported Versions

Mail Attender was designed for Exchange and Outlook. It has been tested using Exchange 5.5 and 2000 and Outlook 98 and 2000. Although Mail Attender does not require any service packs, always make sure that the newest service packs have been applied to your Exchange server in order to minimize any anomalies.

Other Email Systems

Although Mail Attender versions exist for both Lotus Notes and Microsoft Exchange, and these products currently dominate the email marketplace, we are constantly looking for ways to increase our exposure to new technologies. At the moment we do not have any plans to create Mail Attender versions for other email systems, but as the marketplace changes, we will as well.

Product Overview

Mail Attender is an administration tool designed to manage the contents of Exchange information stores. It can be used for various reasons including corporate policy enforcement, search and destroy missions, limiting legal liabilities, and automating email processing. Mail Attender's ease of use and robust features make for a simplified administration while reducing all associated costs.

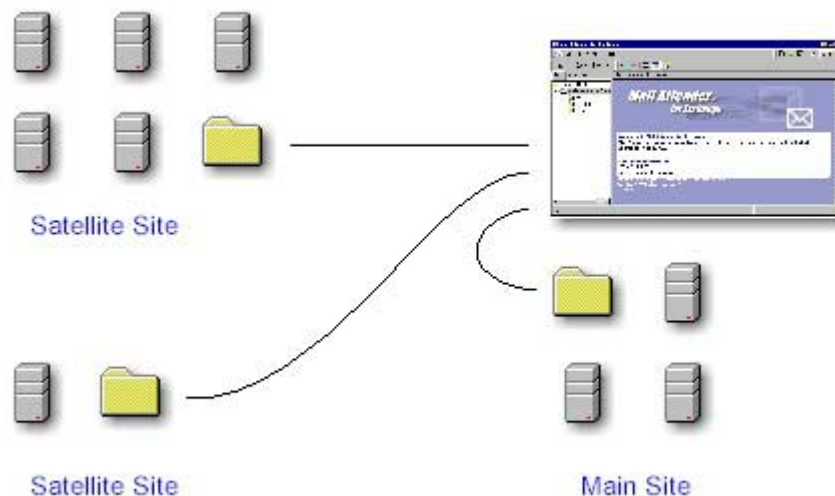
Distributing the Workload

Mail Attender consists of two main components. These are the MMC configuration application used to create, edit and distribute rules, and the processing engines. The processing engines can be on any computer with access to Exchange. This can be the Exchange server itself or a completely different computer. The processing engines can run as a NT service or as a stand-alone desktop application.

Rules generated by the Mail Attender MMC snapin client are stored as files in a shared rules directory. This directory can be local or a shared network folder. The processing engines are also pointed at a particular shared rules directory where they periodically review the rules to determine which ones need to be processed.

Multiple engines can share the same shared folder, but this is not required. Each engine could have its own directory or they could all share one directory, or any combination in between. It all depends on the desired architecture.

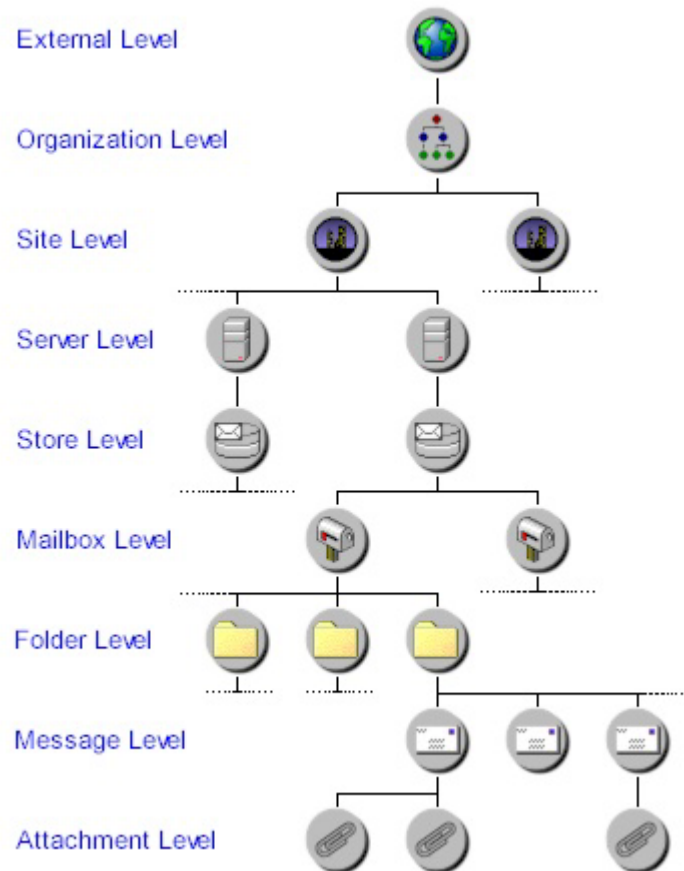
The following illustration shows one main office and two satellite locations. Each location has its own rules folder and processing engine. From the main site, administrators can create and distribute rules to these share folders through WAN links, VPN, or remote dialup.



Mail Attender Rules

Mail Attender has three main types of rules. These are mailbox, public folder and result rules. A mailbox rule will apply conditions and actions to one or more Exchange mailboxes and their folders, messages and attachments. A public folder rule will apply conditions and actions to public folder items (folders, messages and attachments). A result rule will use existing items already found by Mail Attender as a starting point for applying conditions and actions.

Mail Attender treats the Exchange environment as a hierarchy or tree that it traverses. The levels of this tree include: External, Organization, Sites, Servers, Stores, Mailboxes, Folders, Messages and Attachments.



For example: Assume a rule has two conditions: (1) a mailbox be greater than 100 MB and (2) messages be older than 180 days. Mail Attender will traverse the tree to include all Organizations, Sites, Servers, and ignore those branches where the mailboxes are less than 100 MB. It traverses those mailbox branches, including all Folders and ignores all messages less than 180 days. Once it finds a branch that has passed all the conditions, any item along that path is subject to the actions in the rules action list. This includes any items up the branch and farther down the branch. In this example, this would include any in the Organization, Site, Server, Mailbox, Folder, Message and any attachments of the Message.

Just like conditions, actions perform work at different levels of the tree. In the above example, let's assume that the rule has two actions: (1) a folder contents report be generated and (2) any attachments be deleted. In this case, only the folders that contain the messages over 180 days old are subject to the folder contents report action. Similarly, only the attachments of the messages over 180 days are deleted.

By treating the whole Exchange environment as a hierarchy, Mail Attender greatly simplifies the creation of rules and insures that only those items meeting the conditions are managed by the rule.

Result Lists and Result List Rules

A result list rule works just like a mailbox or public folder rule with a few special exceptions. Mail Attender will use each result in the result list rule as a starting point for applying conditions and actions. This means that Mail Attender does not need to traverse the entire tree again to locate items you wish to manage.

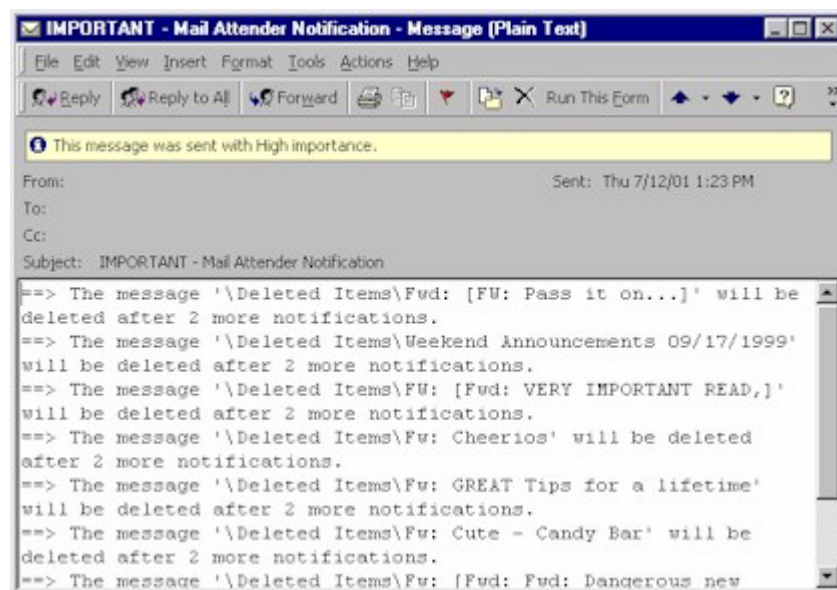
An example of this is a result list rule with a mailbox folder result, a message size condition and an export and delete action. Mail Attender will first try to locate the mailbox folder. If it is found, then the message size condition will be applied to each message in that folder. Any messages that match the condition will be the target of the export and delete attachment action.

The same would work in reverse, meaning if a rule had an attachment result and a empty folder action, Mail Attender would first try to find the attachment. If it is found, it will empty the folder that contains the message that contains the attachment

Warning Users Before Taking Action

In many situations, an administrator may want to provide the mailbox owner with an opportunity to do something with an Exchange item before an action is performed. For example, an administrator wants to warn each user before moving or deleting an old email. This allows the user to copy the email to their PC's hard drive before the original is deleted. Mail Attender allows for three different warning settings for each action. They are: No Warning, Default, and Custom Warnings. In addition, you can specify the number of warnings delivered to each user before the action takes place.

In the above example, the administrator wants the delete message action to warn each user three times before deleting each piece of their email that meets the rules conditions. He can choose to use the default warning or to type in a custom warning. When Mail Attender runs and identifies an email that meets the conditions, the user will receive a warning message. Mail Attender keeps a warning count for each email and decrements it each time it runs again. If more than one email is found in a particular mailbox, the warnings are collectively posted as one message so that users are not inundated with warning messages.



If an action list contains several actions, Mail Attender stops processing the list after the first action is not processed because of a warning. In the above example, assume the administrator adds a second action to the list that adds the mailbox to a list report. Each time Mail Attender warns the user, rather than deleting the email, it ignores the rest of the action list. When the warning count for that email reaches zero, the email is deleted and the rest of the list is processed. If any other items on the list require warnings, they are treated in the same fashion, ignoring items further down the list until the warning count reaches zero.

Using Dynamic Keywords

Mail Attender allows for customization of subjects, messages, warnings, paths and many other settings with "Keywords". These keywords are identified by square brackets []. When Mail Attender recognizes a keyword it replaces it with the equivalent text within the context of the rule and where it is in the Exchange hierarchy tree. For example, a delete message custom warning could be:

==> The message '[FOLDER_PATHNAME][MESSAGE_SUBJECT]' will be deleted after [ACTION_WARNINGSLEFT] more notifications.

When Mail Attender needs to resolve the warning for this action, it looks for keywords. In this example, the three keywords [FOLDER_PATHNAME], [MESSAGE_SUBJECT] and [ACTION_WARNINGSLEFT] are found. Mail Attender will replace these keywords with the text specific to that message so folder path (ie \Inbox\My Project) would take the place of [FOLDER_PATHNAME], the message subject (ie Fwd: Project Schedule) would take the place of [MESSAGE_SUBJECT] and so forth. The resulting warning text might look something like this:

==> The message '\Inbox\My Project\Fwd: Project Schedule' will be deleted after 2 more notifications.

Each keyword has an appropriate level in the hierarchy tree that allows Mail Attender to resolve its meaning. This means that in the above example, you could not use the attachment keyword [ATTACH_LABEL] since Mail Attender has only traveled to the message level in the tree and [ATTACH_LABEL] could refer to any of the messages attachments. If you tried to use this keyword in the delete message warning, Mail Attender would replace it with three question marks ????. This is to indicate that either the information was not available or could not be determined.

Scheduling Rules for Processing

Mail Attender rules can be scheduled to run three different ways, Once, Daily and Periodic. In addition, a list of schedules can be created with any combination of these three. This allows you to schedule rules to run whenever and however often you wish.

Reports Generated by Mail Attender

There are several types of reports that can be generated by Mail Attender. These include Detailed Mailbox Reports, Mailbox Contents Reports, Detailed Folder Reports, Folder Contents Reports, Detailed Message Reports, Detailed Attachment Reports and List Reports. Reports are simply another action added to the rule.

'Detailed Mailbox Reports' contain information about a particular mailbox such as its status, size, quota information and the size of each root folder.

'Mailbox Content Reports' list details about each message in each sub folder of the mailbox.

'Detailed Folder Reports' contain information about a particular folder such as its status and size.

'Folder Contents Reports' list details about each message in a particular folder in the same fashion as the mailbox contents report.

'Detailed Message Reports' and 'Detailed Attachment Reports' contain information about the particular message or attachment such as the their status and size.

'List Reports' collect information about the items at all levels of the Exchange hierarchy tree. Specifically, it lists details about the deepest condition or action level. For example, if a rule contained a folder count condition and a message export action, the items listed in the list report would be every message exported by the rule.

All reports can be emailed to one or more addresses, posted to a public folder, stored in a local or network folder, or stored in the shared rules directory where they appear in the report list of the Mail Attender MMC client. There are currently two formats to choose from, HTML and plain text.

Technical Questions

- Q.** What actually manages my Exchange contents?
- A.** Mail Attender consists of two components. These are the MMC (Microsoft Management Console) client application, which is used to create, edit and distribute rules, and the processing engines, which then apply the rules to the Exchange mailboxes. The processing engines can run as an NT service on any Windows NT 4.0 or 2000 server or as a stand-alone application on your desktop. For the processing engines to be able to access all mailboxes, they must have full Exchange administrative rights..
- Q.** Will I need to reboot my Exchange server?
- A.** That depends on how you deploy Mail Attender, and what DLLs are installed and in use on your Exchange server. As stated above, you can manage Exchange content from a completely different computer and never have to touch your Exchange server. If you do wish to install Mail Attender on you Exchange server, you can generally expect to reboot a Windows NT 4.0 installation, and not have to reboot a Windows 2000 installation.
- Q.** On which versions of Exchange and Outlook does Mail Attender work?
- A.** Mail Attender works with both Exchange 5.5 and 2000. Outlook 98 or 2000 with CDO (Collaboration Data Objects) installed is required when installing Mail Attender on a computer that is not running Exchange.
- Q.** How does Mail Attender access the Exchange information stores?
- A.** The Mail Attender processing engine runs under an NT account with full administrative access to all Exchange mailboxes. It then uses a combination of CDO and MAPI to connect to each mailbox as the user and process the content.
- Q.** Is there a version of Mail Attender for the Alpha processor?
- A.** No, not at this time.
- Q.** How are rules shared between servers?
- A.** As explained in the product overview section, rules are stored in shared rules folders, which can be network shares accessible by all or some or one processing engine. The MMC client creates these rules, stores them in a shared rules folder and the processing engines retrieve them from there.
- Q.** What are the system requirements for Mail Attender?
- A.** The requirements are different depending on whether you are installing the MMC client or the processing engine or both. The following are requirements for each component:

Mail Attender MMC Client Application

Windows NT 4.0, 2000
Microsoft Management Console Version 1.2 or higher
Internet Explorer 5.0 or higher
Approx. 15 MB HD Space

Mail Attender Processing Engine (NT Service Version)

Windows NT 4.0, 2000
Approx. 5 MB HD Space
Outlook 98 or 2000 (If installed on a server not running Exchange)
CDO 1.21 (Optional component of the Outlook installation)

Mail Attender Processing Engine (Stand-Alone Application Version)

Windows NT 4.0, 2000
Approx. 5 MB HD Space
Outlook 98 or 2000
CDO 1.21 (Optional component of the Outlook installation)

- Q.** What kind of load will Mail Attender put on an Exchange server?
- A.** That depends greatly on the servers hardware, the conditions and actions of a rule, the number of mailboxes being processed and so on. Most customers choose to schedule rules to be run late at night when Exchange traffic is at its lowest point. Mail Attender also allows you to dynamically throttle rule processing to reduce the impact on the Exchange servers.
- Q.** What kind of access does Mail Attender need?
- A.** The processing engines must have full administrative access to Exchange. NT service processing engines must run under an NT account with this access and stand-alone processing engines running on the desktop must be logged on to an NT account with this access.
- Q.** Will I need additional licenses when installing another processing engine?
- A.** No, currently Mail Attender is licensed by mailbox, not by server.
- Q.** Mail Attender logs into each mailbox, is there any effect on Exchange?
- A.** Aside from the "Last Logon Time" for that mailbox being updated, there is no other effect. Also, Exchange happily supports multiple users connected to a single mailbox. Even if a user has a message open in Outlook that is being delete by Mail Attender, Exchange will gracefully recover.
- Q.** In what format are the exported messages?
- A.** They are in MSG format, which is opened by Outlook. In addition, the file will also contain any attachments that existed in the original message. When Mail Attender chooses a file name for the exported message, it uses the original message subject, and replaces any characters not allowed in file names with an underscore '_ '.
- Q.** When exporting attachments, what happens if a file exists with the same name?
- A.** Mail Attender will not overwrite any existing files. It will simply tack on a number at the end of the file name. If a file exists with that name and number, it increments the number until it finds a non-existent file name. For example: MyProject.doc, MyProject(1).doc, My Project(2).doc and so on.
- Q.** Can I copy, move or backup rules outside of the MMC client?
- A.** Yes, the rules are simply files stored in shared folders. You can copy, move, delete and back them up just as you would any other kind of file. If you intend to create duplicate rules, it is best use the copy rule feature of the MMC client to make a copy of the rule, and then move the duplicated file wherever you wish.
- Q.** What if I can't remember the password of the Exchange admin account? Can I use a different account when setting up the NT service?
- A.** Yes, however you must make sure the NT account you choose has full access to all Exchange mailboxes that you wish to manage.
- Q.** What is a 'Hard' delete?
- A.** Exchange supports a feature that allows you to retain deleted items until they are backed up. This is a safety feature that prevents users from accidentally deleting important messages. A side effect of this is that any message deleted by an automated tool can be

recovered by the user. See Microsoft Knowledgebase Article Q178630 for more details. When deleting messages using the Hard delete feature, Mail Attender will erase the message regardless of the retain deleted items setting in Exchange. The message is gone, and can no longer be recovered by the user or even the Exchange administrator.

Q. How long will Mail Attender take to process my mailboxes or public folders?

A. That will vary dramatically with what the rule targets, how it identifies its targets, where is the processing engine installed that is applying the rule, how fast is the hardware running both the processing engine and Exchange, the size of the mailboxes or public folders being processed and many other factors.

In a best case, where you were managing mailboxes, and did not require traversing the mailbox subfolders, you may be able to process as fast as 2 or 3 mailboxes per second. Once you start managing folders, messages and attachments, this number will increase in proportion to the number items in each mailbox. Again in a best case you may be able to process several messages per second. If a mailbox contains thousands of messages, it may take considerable time to process that mailbox.

Q. How can I reduce the time it takes to process a rule?

A. There are several ways. First, reduce the scope of a rule using the server, users and folder lists effectively. Next, you can often reduce processing time by adding conditions that will narrow down the items being searched. For example, when searching for keywords or phrases, you can also add a condition that limits the search to messages less than 10 days old. In other words, only scan newer messages. To make this most effective, make sure the date limiting condition appears in the rule list before the content searching condition.

Another way to reduce processing time is by installing a processing engine on each Exchange server and setting the rule to run only on each Exchange server. This will force each server to manage its own mailboxes, eliminating network traffic.

As an alternative to the option above, you could add additional processing engines to the same shared rules directory and set the rule to be processed by all participating servers. This will cause the processing engines to share to rule. This will not reduce the per mailbox processing time, but while one engine is processing one mailbox, the other engine is processing a different mailbox. This will cut the overall processing time down significantly.

Q. How can I reduce mailbox sizes, and yet keep old messages available to the users?

A. The best way is to export old messages to a network share to which they have access. This could be their NT home directory, other any path they can access. You can even reproduce the folder structure that exists in their mailbox. For example:

\\MyServer\Users\Jdoe\Inbox\Projects\Fw_Project Schedule.msg

Q. Can Mail Attender manage public folder contents?

A. Yes, you can create a public folder rule and process contents exactly the same way. The main difference between public folder rules and mailbox rules is simply the size of the folder hierarchy. In a public folder rule, Mail Attender connects to one mailbox specified in the rule and traverses the public folder tree rather than the mailbox folder tree. All the rule conditions and actions are the same.

Summary

Mail Attender is an extensive product and can be used to perform many unique and necessary functions. Legal implications regarding email are enormous, but don't forget the infrastructure issues as well, as you watch your email system grow.

New functionality is constantly added to Mail Attender. This is typically the result of feedback from our customers. We feel that if we are implementing features that you request, the evolution of Mail Attender will be extremely dynamic and more powerful with each new release.

Contact Information

If you need additional information regarding Mail Attender for Exchange, visit our web site <http://www.sherpasoftware.com> or call us at (800) 255 –5155.

Sales and technical contacts are available to answer any questions you may have.