MDaemon

Versatile Email Server

User Manual

MDaemon® Version 9.0 – User Manual

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SECTION I

MDAEMON® VERSION 9.0.0

MDaemon's Primary Features

MDaemon® v9.0

Versatile Email Server for Windows

Introduction

MDaemon Server v9 is a standards-based SMTP/POP/IMAP mail server that offers a full range of mail server functionality. MDaemon is designed to manage the email needs of any number of individual users and comes complete with a powerful set of integrated tools for managing mail accounts and message formats. MDaemon offers a scalable SMTP, POP3, and IMAP4 mail server complete with LDAP support, an integrated browser-based email client, content filtering, spam filters, extensive security features, and more.

MDaemon Standard and Pro

Alt-N Technologies' MDaemon Server is available in two versions: MDaemon Standard and MDaemon Pro. With the powerful features of **MDaemon Standard,** you can collect your network's email from a single ISP provided POP3 account, or host an entire domain with MDaemon's full-fledged SMTP server. With the increased functionality of IMAP4 and Multiple Domain Support, **MDaemon Pro** is an ideal email backbone for enterprise level organizations. MDaemon Pro also adds group calendar and scheduling, an instant messaging system, multiple language support for WorldClient, automatic domain gateway creation, and more to MDaemon Standard's already extensive set of features. For a complete discussion on the differences between MDaemon Standard and Pro see the white paper, "*MDaemon Versions: Comparing Standard and Pro*". This white paper and other helpful resources can be obtained form our web site at www.altn.com.

MDaemon Features

MDaemon is equipped with many features besides SMTP, POP, and IMAP email processing. The following is a list of just some of those features.

- MDaemon's extensive parsing features make it possible to provide email for an entire LAN with as little as a single dial-up ISP POP3 mailbox. This makes it possible to provide email to an entire network for a fraction of the normally associated cost.

- Complete support for virus scanning and protection through AntiVirus for MDaemon. This utility provides potent anti-virus protection. Messages can be scanned for viruses and cleaned or deleted automatically before ever reaching the intended recipients. Further, you can configure MDaemon to send a message to the administrator, sender, and recipient of the infected message notifying them of the virus. AntiVirus for MDaemon is a separately licensed product that is available from www.altn.com.

- MDaemon features a complete suite of Mailing List or email group management functions allowing for the formation of an unlimited number of distinct distribution lists that can contain local and/or remote members.

Lists can be set to allow or refuse subscription requests, be public or private, post replies to either the list or the originator of the message, be sent in digest format, and be configured using numerous other features.

- An integrated component of MDaemon is WorldClient. This exciting product makes it possible for your users to access their email using their favorite web browser rather than from a workstation dependent email client. This tool is perfect for mobile staff and users who do not have a dedicated machine from which to access their email.

- WorldClient is equipped with a complete suite of email client features. You can: send and receive email, spell check messages, manage your email in multiple personal folders, display the interface in any of 18 languages, schedule meetings and appointments and share calendars and task with other user, manage your MDaemon account settings (when used in conjunction with WebAdmin), manage contacts, and more. WorldClient is also equipped with ComAgent, a small utility that can be downloaded and installed on a user's local computer. This provides easy access to your email and folders and checks for new messages without having to open your web browser. It also includes a complete Instant Messaging system that can be used to quickly "chat" with other MDaemon/WorldClient users.

- MDaemon is equipped with many features designed to help you make your email system secure. The Spam Filter and DNS Black Lists features will help you put an end to most "spam" email messages that "spammers" try to route through or to your domain. IP and Host Screening and Address Suppression provide the capability to screen and prevent certain addresses and domains from connecting to or sending mail through your system. They also make it possible to connect to specific IP addresses while screening all others.

- Equipped with support for Lightweight Directory Access Protocol (LDAP), MDaemon can keep your LDAP server up to date on all of its user accounts. This makes it possible for you to keep an LDAP address book up to date so that users with email clients that support LDAP can access it. You can also choose to use your LDAP server as the MDaemon account database instead of an ODBC compliant database or the local USERLIST.DAT system. Thus, you can configure multiple MDaemon's at different locations to share the same account database.

- MDaemon can be configured to keep your Windows Address Book or Microsoft Outlook Contact Store up to date with your user information. This provides another means of making a global address book available to your users.

- Address Aliases provides the ability to route email messages addressed to "fictitious" mailboxes to a valid account or mailing list. This makes it possible for individual accounts and lists to have "multiple" email addresses at one or more domains.

- The Domain Gateways feature provides the option of setting up separate domains for various departments or groups that may be local to your network or located somewhere else on the Internet. Using this feature, all mail addressed to a domain for which MDaemon is acting as a gateway will be placed in that domain's mailbox by MDaemon. It can then be collected by that domain's MDaemon server or email client and distributed to the domain's users.

- Accounts can be controlled remotely by users by using specially formatted email messages. This allows greater administrative flexibility, and empowers users by turning day-to-day simple account maintenance tasks, such as changing passwords, over to them.

- Integrated web-based remote administration via WebAdmin. WebAdmin is integrated with MDaemon and WorldClient and enables your users to review and edit their account settings via their web-browser. You can designate which settings that your users may edit, and assign access permissions on a per account basis. WebAdmin can also be used by the Administrator (and whomever else you wish to allow) to review or edit any of MDaemon's settings and any other files that you wish to make available to the WebAdmin system for reviewing.

- With File Catalogs, the email administrator can create password protected groups of files which users can have encoded and automatically sent to them through the use of specially formatted email messages.

- Account mailbox formats can be abstracted using Mailbox Format Files (MBF), which allows for a wide range of mail system compatibility.

- An internal message transport system known as RAW mail provides a simple method for placing messages into the mail stream and greatly simplifies custom mail software development. Using RAW, a complete mail system can be devised using a simple text editor and a couple of batch files.

- A highly versatile Content Filtering system makes it possible for you to customize server behavior based on the content of incoming and outgoing email messages. You can insert and delete message headers, add footers to messages, remove attachments, route copies to other users, cause an instant message to be sent to someone, run other programs, and more.

What's New in MDaemon 9.0?

Active Directory Monitoring

Using the options located on the Active Directory and AD Options tabs of the Account Database Options dialog, MDaemon can now be configured to monitor Active Directory and automatically create, edit, delete and disable MDaemon accounts when their associated accounts are altered in Active Directory. Further, all monitoring is one-way from Active Directory to MDaemon—the Active Directory features do not alter the Active Directory schema files in any way.

When set to monitor Active Directory, MDaemon will query for changes at a designated interval and then create a new MDaemon user account whenever it finds that a new Active Directory account has been added. This new MDaemon user account will be created using the full name, logon, mailbox, description, and enabled/disabled state found within Active Directory. When MDaemon detects changes to Active Directory accounts, it will automatically update the associated properties in the matching MDaemon account.

For accounts that are deleted in Active Directory, MDaemon can be configured to take one of the following actions: do nothing, delete the associated MDaemon account, disable the associated MDaemon account, or freeze the associated MDaemon account (i.e. the account can still receive mail but the user can't collect it or access it).

Accounts created by MDaemon's Active Directory feature must be setup for Dynamic Authentication if you want them to work immediately without any need to configure the account manually from within MDaemon. With Dynamic Authentication, MDaemon has no need to store the account's password within its own user database. Instead, the account holder will use his or her Windows login/password credentials and MDaemon will pass those to Windows for authentication of the associated account.

Finally, Active Directory monitoring will continue to work even when MDaemon is shut down—all Active Directory changes will be tracked and then MDaemon will process them once it restarts.

For more information on MDaemon's Active Directory Monitoring, see page 318.

Active Directory Support for Mailing Lists

MDaemon's Mailing Lists can now be configured to pull list addresses from within Active Directory. By using the options on the Mailing List Editor's AD tab (see page 401), you can specify your Active Directory settings, search filters, search scope, and the Active Directory attribute that will contain the member's email address.

Sender ID

MDaemon now supports Sender ID. Related to Sender Policy Framework (SPF), Sender ID seeks to verify that every email message originates from the Internet domain from which it claims to have been sent. This is accomplished by checking the address of the server sending the mail against a registered list of servers that the domain owner has authorized to send mail on its behalf. This verification is automatically performed by MDaemon before the email message is delivered to the user. The result of the Sender ID check can be used as additional input into the filtering tasks already performed by the mail server. Once the sender has been authenticated, the mail server may consider past behaviors, traffic patterns, and sender reputation, as well as apply conventional content filters when determining whether to deliver mail to the recipient.

When the Sender ID option is enabled (located at Security→SPF & Sender ID...), MDaemon will identify the Purported Responsible Address (PRA) of the incoming message through careful inspection of its headers and then verify whether or not the message originated from that location. The PRA is the most recent address purported to be responsible for the message, which may or may not be its original sender.

For more information on MDaemon's support for Sender ID, see page 203.

Integrated Web-based Administration

WebAdmin, MDaemon's web-based remote administration system, is now installed as part of MDaemon—you no longer have to download and install WebAdmin separately. Updates and fixes, however, may still be released periodically and independently from MDaemon if necessary. Therefore, WebAdmin will continue to have its own version number and web site presence.

Because of this change WebAdmin must now be installed to `\MDaemon\WebAdmin`. If WebAdmin is currently installed at another location then you must uninstall it before installing or upgrading MDaemon to version 9. Otherwise, WebAdmin will not be recognized or function properly.

For details on WebAdmin, see page 73 and visit: `http://www.altn.com/WebAdmin/`.

Improved IMAP Performance

MDaemon's IMAP server has been significantly improved to make better use of multiple threads and multiple CPUs, which can provide better performance and responsiveness.

Improved AntiSpam Performance

MDaemon's anti-spam system now runs as a separate daemon—the MDaemon Spam Daemon (MDSpamD), which is fed messages via TCP/IP for scanning. This greatly increases the Spam Filter's performance and makes it possible for you to run MDSpamD locally, on a separate computer, or have MDaemon use another MDSpamD (or any other SpamD enabled product) running at some other location. By default MDSpamD runs locally and receives messages on port 783 at 127.0.0.1, but you can configure a different port and IP address if wish to send the messages to some other spam daemon running at a different location or on a different port.

Improved Content Filter and AntiVirus Performance

MDaemon's Content Filter and AntiVirus processing is now fully multi-threaded and will process many messages simultaneously rather than sequentially as in previous versions.

WorldClient and Groupware Improvements

Free/Busy Server

MDaemon 9 includes a Free/Busy server, which makes it possible for a meeting planner to view the availability of potential meeting attendees. To access this feature, you will click **Scheduling** within WorldClient when creating a new appointment. This opens a Scheduling window containing the list of attendees and a color-coded calendar grid with a row for each one. Each attendee's row is color-coded to indicate the times at which he or she might be available for a meeting. There are colors for Busy, Tentative, Out of Office, and No information. There is also an **Auto-Pick Next** button that makes it possible for you to query the server for the next timeslot at which all attendees may be available. Then, when you have finished creating the appointment it will send an invitation to all of the attendees, who can then accept or decline.

WorldClient's Free/Busy server is also compatible with Microsoft Outlook. To use it, you will simply have to configure Outlook to query WorldClient's Free/Busy Server URL.

For more on how to use WorldClient's Free/Busy features to schedule your appointments, see page 92 and the online Help system within WorldClient.

SyncML Server

WorldClient now includes a SyncML v1.1 compliant server to synchronize your WorldClient calendar, contact, and task folders with SyncML capable devices. See page 93 for more information on WorldClient's SyncML server.

Improved Meeting Invitation Support

WorldClient now includes support for native Outlook (TNEF) meeting invitations, and support for iCalendar meeting invitations has also been greatly improved. When viewing a message containing a meeting invitation or retraction, a toolbar is presented to the user. This toolbar allows the user to accept, decline, or view the invitation. The user has the opportunity to send a response to the meeting organizer with their comments.

Unicode (UTF-8) Support

WorldClient now outputs everything in Unicode (UTF-8), which allows it to display numerous character-sets at once. Consequently, users will not need to switch their browser's encoding setting based on the character set of the message. WorldClient's `Languages.ini` (located in `\WorldClient\Templates`) also uses the UTF-8 encoding, and each user's `WC\Messages.idx` file will be converted to UTF-8 when that user next logs in to WorldClient. XML files used for contacts, calendars, and so on, will also be converted to UTF-8.

Improved Support for Pocket PC Users

WorldClient's Pocket PC theme now permits access to your groupware folders—you can access contacts, tasks and calendar events through your Pocket PC browser. Windows Pocket PC 2003 OS or higher is required for full functionality.

Security Enhancements

DomainKeys Identified Mail Improvements

MDaemon has been updated to support the latest draft of the of the DomainKeys Identified Mail (DKIM) specification. The DKIM allman-01 specification no longer supports the nowsp method of canonicalization messages preparation. In its place a new method called "relaxed" is being considered. In preparation for this change, the default DKIM canonicalization method has been changed to "Simple." See page 209 for more information on this and other DKIM options.

Additional Features and Changes

See the `Relnotes.txt` file located in MDaemon's `\Docs\` subfolder for a complete list of all new features, changes, and fixes to MDaemon from the previous version.

Upgrading to MDaemon 9.0

Below is a list of special considerations and notes that you may need to be aware of when upgrading to MDaemon version 9.0 from a previous version.

Version 9.0.0 Special Notes

- MDaemon now requires Windows 2000/2003/XP. It no longer supports Windows NT/9x/ME. The installer will not allow installs on machines running those OS versions, and MDaemon will not start or run properly on them.

- MDaemon now limits the number of Domain Gateways to the maximum number of users allowed by your license key. For example, if you have a 12 user key MDaemon will allow you to create 12 user accounts plus 12 Domain Gateways; a 50 user key permits up to 50 user accounts and 50 gateways, and so on. The installer will warn you if your current number of gateways exceeds the number permitted by your license. If this happens, none of your gateways or their configurations will been lost—they will still be located in the `Gateways.dat` file. However, you will only be able to access and configure the number of them permitted by your license, starting with the first gateway and proceeding until the maximum number is reached. Additionally, the Automatic Gateway Creation feature will be disabled when the limit is reached. Upgrading your MDaemon to a larger license-size will re-enable the remaining Domain Gateways.

- If you previously installed WebAdmin to a location other than `\MDaemon\WebAdmin`, you must uninstall the previous version of WebAdmin before upgrading to MDaemon 9. WebAdmin is now included in MDaemon's installer, and it will not be installed and configured properly if you have a previous version installed at a different location.

- Your `OverQuota.dat` file in the `\MDaemon\APP` folder may contain this text: "*or $MAXBYTES$ KB of disk space*". Please open the file with Notepad and change it to this: "*or $MAXBYTES$ MB of disk space*".

- MDaemon no longer supports the message encryption option. Consequently, all references to that option have been removed from the user interface. It was inferior to MDaemon's current compliment of security features and isn't needed since MDaemon no longer supports older, less secure OS versions. Please use Notepad to update your `ACCTINFO.DAT` file and remove the line that references "`$ENCRYPTMAIL$`". Currently MDaemon will still read encrypted messages but it will no longer create them.

- If you are using AntiVirus for MDaemon, several alternative update sites may have been added to your AntiVirus configuration. No previously existing update sites were altered, and you can remove the new update sites if you choose.

- You can use the `%SetSubject%` macro in the calendar and task reminder templates (`Calremind.dat` and `Taskremind.dat`) to customize the subject text of calendar and task reminder emails. You can delete your existing `Calremind.dat` and `Taskremind.dat` files and restart MDaemon to create new default files, or you can add these lines to the end of the files:

Calremind.dat

%SetSubject%=Calendar reminder: $CALSUBJECT$ $CALSTARTTIME$

Taskremind.dat

%SetSubject%=Task reminder: $TASKSUBJECT$ $TASKSTARTDATE$

- The subject text within Content Filter notifications for Spam and Antivirus updates has been reset to defaults and changed to be more readable.

- The Mailbox template (at **New Account Defaults→Account Defaults**) was changed from $USERFIRSTINITIAL$$USERLASTNAME$ to $USERFIRSTNAME$.$USERLASTNAME$. For example, previously a new account for Frank Thomas would have resulted in his email address being set to FThomas@example.com. Now it would be Frank.Thomas@example.com.

- Authentication is now required by default before MDaemon will accept an ETRN request to dequeue a Domain Gateway's messages. You can change this via an option on the Options tab of the Gateway Editor.

- MDaemon will strip any existing X-Spam-Flag headers from incoming messages if the following switch is set in MDaemon.ini:

  [Special]
  StripSpamFlagHeaders=Yes (default is No)

- ComAgent now maintains an independent version number from MDaemon. Consequently, your users will no longer be prompted to update ComAgent whenever there is a new version of MDaemon unless that new version also includes some changes to ComAgent. They will, however, need to download ComAgent to get the 9.0.0 version.

- See the Relnotes.txt file located in MDaemon's \Docs\ subfolder for a complete list of all new features, changes, and fixes to MDaemon from the previous version.

Version 8.x Special Notes

- The following entries will be automatically added to your Tarpit, SPF, and DomainKeys verification whitelist files (NoTarpit.dat, SPFXcpt.dat, and DKVerifyXcpt.dat):

  127.0.0.*
  192.168.*.*
  10.*.*.*
  172.16.0.0/12

- The format of the DomainKeys signing file (DKSign.dat) was changed. If you are specifying optional selectors in this file you must now do so in a slightly different way. Open DKSign.dat with Notepad and read the text at the top of the file to see how to use the "s=" to specify your optional selector values and how to use the new "d=" to specify a signing domain.

- An entry in your SpamAssassin `local.cf` file was changed. If you had "`dns_available yes`" in your `local.cf` file this line was removed. Removing it causes SpamAssassin to first check if DNS is available before attempting to use rules which depend upon it. This is a smarter option but does create additional overhead since testing for DNS connectivity may not be necessary for all sites. If you would like to change this setting or disable DNS based rules entirely, you can do so by using the new "*DNS Available?*" option located on the Spam Filtering tab of the Spam Filter dialog (see page 141).

- By default, MDaemon will now perform a Spam Filter scan on incoming messages during the SMTP session. If the score is over 12.0 the message will not be accepted. You can change this threshold to whatever value you deem appropriate via the "*SMTP rejects messages with scores greater than or equal to*" option on the Heuristics tab of the Spam Filter dialog. Setting the value to "0" will completely disable SMTP-based scanning.

- MDaemon includes a product activation system to aid in combating software piracy and protecting the interests of legitimate customers. Immediately after MDaemon starts, it will launch the Activation Wizard, which will walk you through a simple one-time process to activate your registration key. You can activate in quickly through an automated online process or manually through a secure web site.

  The activation process verifies that the registration key you are using is legitimate, and it associates your registration information with the machine on which MDaemon is installed and the MAC address of your Network Interface Card. This makes it impossible for others to illegally use your registration key. Reactivation is required only if you replace your Network card. Click the Help→Activate your registration key… menu selection to launch the Activation Wizard.

  Multiple activations are allowed (such as when you reinstall MDaemon, move it to a different machine, change your network card, and so on), but this is for customer convenience only and should not be considered a license to violate the EULA or attempt to use the same key simultaneously on multiple machines.

  NOTE: None of your personal information is required or transmitted during the activation process, registered users have 30 days in which to activate the software, and activation is required in order for MDaemon 8.0 to function.

  For a more information on activation see:

      http://www.altn.com/Activation/faq.asp

- In order to support MDaemon's collaboration system, Calendar, Contacts, and Task folders are created for each user during installation. A Contacts folder is also created for each domain. If any of these folders already exist, they will be renamed to `Old Calendar`, `Old Contacts`, and `Old Tasks`, and access control is preserved when folders are renamed.

  Additionally, the address book and calendar formats were changed. Consequently, the installation process will automatically convert each user's private address book file (`addrbook.xml`) to the new Contacts folder in his or her root mail directory, and Calendar information will be migrated from the old `Calendar.mrk` file to the new XML format within the Calendar folder. For

domain public address books, each will be converted and placed into the domain's Contacts public folder. None of the original files are deleted by this process. You shouldn't need to repeat the conversion/migration process, but you can run \MDaemon\App\MD3Conv.exe to migrate the calendar and contact data for any user (or all users) if necessary. Run it once with no command line arguments for instructions.

- MDaemon no longer maintains a single global address book accessible by all domains. Address books are now maintained on a per-domain basis. If you wish to create a global address book or any other address books, then you can do so via the Public Folders tab of the Shared Folders dialog.

- MDaemon now includes SpamAssassin 3.1. This new version of SpamAssassin includes many upgrades and improvements. For a complete list of changes see http://www.spamassassin.org.

  On the Heuristics tab of the Spam Filter dialog, the method for designating whether or not the Subject tag will be included in spam messages was changed. SpamAssassin no longer supports a key to turn subject modifications on and off. Instead, the existence of a subject tag determines whether or not one is used. As a result, please check this tab and make sure the subject modification is to your liking. Also, the _HITS_ tag in SpamAssassin 3 does not pad the score with leading zeros. Consequently, you may want to use _SCORE(0)_ in your subject tag instead of _HITS_ to aid in proper message sorting in some email client.

  SpamAssassin 3 does not come configured to use the JP list for SURBL. Consequently, a rule was added to 80_MDaemon_scores.cf to support this. Also, because the default scores for SURBL hits were much lower than what was previously used with MDaemon, the old scores were put into 80_MDaemon_scores.cf. Adjust these score to your liking or delete the lines to use the defaults.

  New default Bayesian scoring was been added to 80_MDaemon_scores.cf. In the future this file will always contain the default scores for Bayesian rules. You may wish to consider deleting the various "score BAYES_xx" lines from your local.cf file in order to use the new defaults.

- Your AntiVirus update schedule file (MDaemon\App\AVSchedule.dat) was renamed to "…\AVSchedule.dat.old" so that a new set of default update times could be put in place. The new defaults randomize the times that updates take place, and schedule only a single update per day. This can improve update speeds by preventing excessively large numbers of MDaemon servers from attempting to update simultaneously around the world. If you prefer to use your previous settings, then you can restore you old AntiVirus update schedule by renaming "…\AVSchedule.dat.old" to "…\AVSchedule.dat".

- Please note the evolution of the old MDaemon GroupWare product into the new Outlook Connector for MDaemon. This name change is reflected in numerous places within MDaemon and its documentation. To read more on this change, see the partner newsletter at:

  http://files.altn.com/static/images/partners/press/newsletters/NL-200501.pdf

- The default automatic spam filtering IMAP rule was changed. This rule is created for each account via the "*Automatically filter spam messages into user's IMAP spam folder*" option located on the Spam Filtering tab of the Spam Filter (click **Security→Spam Filter...**) The rule used to merely check for the existance of the `X-Spam-Flag` header within each message. This was found to be insufficient because some external SpamAssassin-enabled software places "`X-Spam-Flag: No`" into messages. The rule was therefore changed to check for "`X-Spam-Flag: Yes`" rather than merely the existance of the header. To change the rule for all your accounts, clear the "*Automatically filter spam messages into user's IMAP spam folder*" option and follow the instructions. This will remove the old rule from each of your accounts. Then, simply click the checkbox again to build the new rule for each account.

- If you are using the composite log window in the main interface, then check your settings at **Setup→Miscellaneous Options→GUI**. They may need adjustment because a new logging options were added, which may have caused your previous settings to be changed.

- Older versions of ComAgent will no longer synchronize contacts with MDaemon. To regain this capability your users must update to the latest version of ComAgent.

Installation

MDaemon Server v9 requires Microsoft Windows 2000/2003/XP, and a computer system with a Pentium III 500MHz equivalent microprocessor and 512 MB of RAM (a Pentium 4 2.5 GHz or higher with 1 GB or more of RAM is recommended). The typical installation requires 100MB of Hard Disk space plus additional space for mail to be stored. SMTP/POP/IMAP and related services require a Winsock compliant TCP/IP stack, such as that which ships with Microsoft Windows, and Internet access with an ISP service. If you will be using MDaemon as an internal email server only (you will not be using it to send or receive messages externally) then an Internet Service Provider is not necessary.

To install **MDaemon** click **Start→Run…** and enter the path to the setup executable file provided in your **MDaemon** package, then click **OK**. Alternatively, you may install MDaemon by using "Add/Remove Programs" located in the Control Panel.

The installation process will prompt you for some basic information such as a registration name and a root directory where **MDaemon** files should be created. The installation process also provides a step-by-step configuration wizard that can be used to guide you through the most common configuration scenarios.

See:

> **Primary Domain Configuration**—page 35
> **New Account Defaults**—page 328

See also:

> **DomainPOP Mail Collection**—page 239

Chapter

2

MDaemon's Main Display

MDaemon's Main Graphical User Interface (GUI) automatically appears at program startup and gives you important information regarding MDaemon's resources, statistics, active sessions, and queued mail waiting to be processed. It also contains options for easily activating/deactivating MDaemon's various servers. The GUI's tabbed panes keep you up to date on how the server and its incoming and outgoing connections are performing.
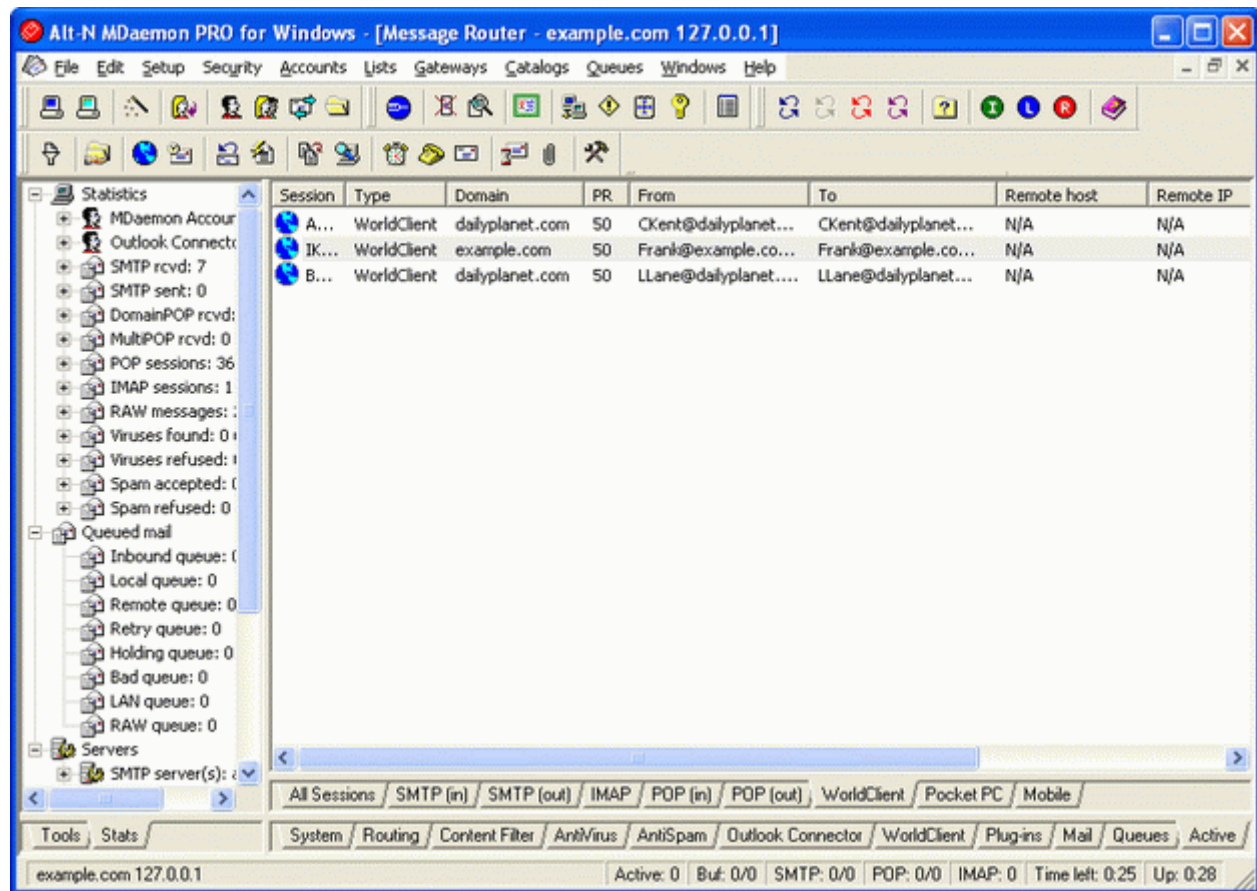
Statistics and Tools

The default left pane of MDaemon's main interface contains two tabs: Tools and Stats. The Tools tab contains an entry for the Primary Domain and each Secondary Domain. Under each entry there is a shortcut to the various dialogs that can be used to configure that domain's settings and users. The Stats tab contains three sections: Statistics, Queued Mail, and Servers. Right-click any of the controls in a section to open a shortcut menu relevant to that control.

The *Statistics* section contains statistics regarding the number of messages sent and received by MDaemon as well as the number of mail sessions that have been initiated since startup. This section also tells you how many user accounts have been used and how many more can be created. *Statistics* contains two right-click shortcut menus: one for the Accounts controls and one for the Statistics controls. The Accounts shortcut menu provides shortcuts for creating, editing, and deleting accounts. The rest of the controls have a shortcut menu that can be used to clear the count listed next to the given control.

The *Queued Mail* section contains an entry for each message queue, and the number of messages (if any) that each queue contains. You can right-click on each of the queue entries to open a shortcut menu containing one or more of the following options, depending on which queue you select:

    View Queue—this option switches the main pane to the *Queues* tab and displays the selected queue. A list of all messages the queue contains will be displayed, and you can right-click any message to open a shortcut menu containing numerous options similar to those available in the Queue & Statistics Manager such as Copy, Move, Edit, White list, and so on.

    Queue and statistics manager—open the Queue and Statistics Manager to the Queue Page with the selected queue displayed.

    Process Now—this option "re-queues" all messages contained in the queue and attempts to process them normally for delivery. If you attempt to process messages contained in the Holding queue, Bad queue, or the like then the messages may encounter the same errors that put them there in the first place and return them to the same queue.

    Freeze/unfreeze queue—temporarily pauses processing for the selected queue, or continues the processing if it is currently paused.

    Release—releases messages from the Holding Queue. MDaemon will attempt to deliver the messages regardless of errors encountered—they will not be returned to the Holding Queue even if they encounter the same errors the caused them to be moved there originally.

    Enable/disable queue—activates or deactivates the Holding Queue. When disabled, messages will not be moved to the Holding Queue regardless of errors encountered.

The *Servers* section contains an entry for each server within MDaemon, and each entry lists the current state of the server: "Active" or "Inactive". Listed below each entry is the port on which that particular server is listening, if that server is currently active. The shortcut menu provides a control for toggling each server between the Active and Inactive state.

Message and Event Tracking

The default right-hand pane of the main interface contains several tabs. They display the status of MDaemon's various servers and resources and are frequently updated to reflect current server conditions. Each SMTP/POP/IMAP session and other server activity is logged onto the appropriate tab once it is complete so that a visible record of network activity is made available. The information displayed on these tabs is mirrored in the log files kept in the *Logs* directory, if you have chosen to log such activity. See page 278 for more information.

The primary pane of MDaemon's GUI contains the following tabs:

    System—at program startup, the System tab displays a log of the *Initialization Process*, which can alert you to possible problems with MDaemon's configuration or status. It also displays activity such as enabling/disabling any of MDaemon's various servers.

    Routing—displays the routing information (To, From, Message ID, and so on) for each message that is parsed by MDaemon.

Content Filter—MDaemon's Content Filter operations are listed on this tab. When a message matches the criteria of one of the Content Filter's message rules, the relevant information related to that message and the actions taken are logged here.

AntiVirus—if you have installed AntiVirus for MDaemon, then all AntiVirus operations are listed on this tab. When a message is scanned for viruses the relevant information related to that message and the action taken is logged here.

AntiSpam—displays all of MDaemon's spam filtering and prevention activities.

Outlook Connector—displays all Outlook Connector activities.

WorldClient—displays WorldClient's session activities.

Plug-ins—displays all activities related to any MDaemon plug-ins.

Mail—click this tab and several other mail-related tabs will appear above it.

    SMTP (in)—all incoming session activity using the SMTP protocol is displayed on this tab.

    SMTP (out)—all outgoing session activity using the SMTP protocol is displayed on this tab.

    POP—when users collect email from MDaemon using the POP3 protocol, that activity is logged here.

    IMAP—mail sessions using the IMAP protocol are logged on this tab.

    MultiPOP—this tab displays MDaemon's MultiPOP mail collection activities.

    DomainPOP—this tab displays MDaemon's DomainPOP activity.

    SPF—displays Sender Policy Framework activity.

    RAW—RAW or system generated message activity is logged on this tab.

    LDAP—displays LDaemon LDAP server activity.

    RAW—RAW or system generated message activity is logged on this tab.

Queues—this tab gives access to another row of tabs above it with one tab corresponding to each message queue, such as: Local, Remote, Holding, Quarantine, Bayesian queues, and so on.

Sessions—click this tab and several other tabs will appear above it. These tabs display an entry for each active connection to MDaemon. Whether the connection is SMTP in or out, POP in or out, IMAP, WorldClient, or some other type, information about each active session is displayed here.

Note

The information displayed on these tabs has no affect on the amount of data that is actually stored in the log files. However, MDaemon does support a great deal of flexibility with regard to the amount and type of information that is logged in those files. See the Log File dialog (page 278) for more information on logging options.

Event Tracking Window's Shortcut Menu

If you right-click in any of the Event Tracking window's tabs it will open a shortcut menu. Various options are provided on this menu that can be used to select, copy, deleted, or save the contents of a given tab. The menu's Print/Copy option will open any currently selected text in Notepad, which can then be used to print the data or save it to a file. The Delete option will delete the text you have selected, and the Mail to support... menu item will open the selected text into a window that you can use to send a message to Technical Support. The Search option will open a window in which you can specify a word or phrase to search for in the log files. MDaemon will search all log files for the text string and then all session transcripts containing that string will be combined into a single file and opened in Notepad for your

review. A practical use of this feature would be to search for a particular Message-ID, which would provide a compilation from all the logs of all session transcripts containing that Message-ID.

Composite Log View

Located on the <u>W</u>indows menu of MDaemon's menu bar is a **C**omposite log view option. Clicking that option will add a window to the main display that will combine the information displayed on one or more of the main pane's tabs. Use the controls on the GUI tab of the Miscellaneous Options dialog (page 288) to designate the information that will be combined in that window.

> **Note**
>
> The layout of the panes in the Event Tracking window is not limited to the default positions described above. You may change the layout be selecting the **<u>Windows</u>** menu selection and then clicking the **Switch panes** control corresponding to the desired layout.

Tray Icon

Whenever the MDaemon server is running, its icon will be visible in the system tray. However, apart from simply letting you know whether the server is running, the icon is also dynamic and will change colors based upon the current server status. The following is a list of the icon indicators:

	All okay. No mail in local or remote queues.
	All okay. Mail in local or remote queues.
	Available disk space below threshold (see page 301).
	Network is down, dialup failed, or disk is full.
Icon Blinking	A newer version of MDaemon is available.

There is additional information about the server available through the icon's tooltip. Pause the mouse pointer over it and the tool tip will appear.

 The first bit of information that the tool tip displays is the Primary Domain's name. Next is its IP address. Finally, following the letter "Q" (signifying the mail queues), are two numbers denoting the number of messages in the queues. The first numbers indicates the number of messages in the remote queue. The second number indicates the number of messages in the local queue.

Shortcut Menu
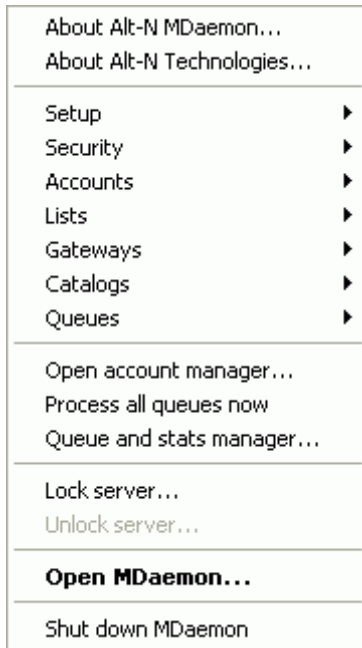
Right click on MDaemon's tray icon to open the shortcut menu. This menu gives you quick access to virtually all of MDaemon's menus and features without having to open the main user interface.

Click the "**About Alt-N…**" options in the top section of the shortcut menu to find out more about MDaemon or Alt-N Technologies.

In the second section you can access the following MDaemon menus: **Setup**, **Security**, **Accounts**, **Lists**, **Gateways**, **Catalogs**, and **Queues**. Each of these cascading menus is identical to the menu of the same name located on the menu bar of the main interface.

The third section has options to open the Account Manager and Queue and Statistics manager, and one that will cause all of MDaemon's mail queues to be processed.

Next, there are commands to lock and unlock MDaemon's interface (See "Locking/Unlocking MDaemon's Main Interface" below) followed by the "**Open MDaemon…**" menu selection, used for opening/restoring MDaemon's interface when it is minimized to the system tray.

The last option is "**Shut down MDaemon**," which is used to quit MDaemon or shut down its system service (the service settings are not changed—the MDaemon service is merely stopped).

Locking/Unlocking MDaemon's Main Interface

To lock the user interface, minimize MDaemon, click the "Lock server…" menu item and then enter a password into the dialog that opens. After confirming the password by entering it a second time, MDaemon's user interface will be locked. It cannot be opened or viewed, but MDaemon will continue to function normally. You will, however, still be able to use the "Process all queues now…" option to process the mail queues manually. To unlock MDaemon, open the "Unlock MDaemon" dialog by double-clicking the tray icon, or by right-clicking the icon and then choosing "Unlock Server…" Then, enter the password that you created when you locked it.

Note
When the server is locked you cannot launch a Ghost session of MDaemon.

Connection Window

If you have configured MDaemon to create sessions in a minimized or default window (see page 288), a Connection Window will appear each time a request is detected by the server from some remote client, or whenever a session is initiated by the server to collect or deliver a message. This window keeps you informed of the status of the transaction and alerts you to any problems encountered during the course of the mail session.

```
SMTP outbound to altn.com (session 2)                    _ □ ×

Session transcript
   Mon 2000-02-21 13:36:46: [264:2] 250-altn.com Hello mike.mail, ESMTP hello!
   Mon 2000-02-21 13:36:49: [264:2] 250-EXPN
   Mon 2000-02-21 13:36:49: [264:2] 250-ETRN
   Mon 2000-02-21 13:36:49: [264:2] 250 SIZE
   Mon 2000-02-21 13:36:49: [264:2] MAIL From:<mike@altn.com> SIZE=1674903
   Mon 2000-02-21 13:36:52: [264:2] 250 <mike@altn.com>, Sender ok
   Mon 2000-02-21 13:36:52: [264:2] RCPT To:<Frank@altn.com>
   Mon 2000-02-21 13:36:54: [264:2] 250 <Frank@altn.com>, Recipient ok
   Mon 2000-02-21 13:36:54: [264:2] DATA
   Mon 2000-02-21 13:36:57: [264:2] 354 Enter mail, end with <CRLF>.<CRLF>
   Mon 2000-02-21 13:36:57: [264:2] Sending <c:\mdaemon\remoteq\pd500000005

Message from/to                        Remote host/IP
      mike@altn.com                          altn.com
      Frank@altn.com                         100.100.100.100
Message transfer stats                 Inactivity Timeout
      319488 of 1674908, 19.1%, 2.34 kb/s    9 Min 55 Sec      Disconnect
```

Session transcript
This window displays all session i/o.

Remote host/IP
This window tells you the name and IP address of the remote computer MDaemon with which MDaemon is interacting.

Message from/to
This window displays the sender's address and the address of the intended recipients.

Message transfer statistics
This keeps a running total of the number of bytes transmitted to or collected from the remote system, the percentage completed, and the current speed of the transfer.

Inactivity timeout
This counter displays how much inactivity time is left before MDaemon will close the session.

Disconnect
This button will immediately disconnect the server from the remote system.

MDaemon's SMTP Work Flow

When an incoming SMTP connection is made, MDaemon goes through a complex series of processing steps to determine whether to accept the message for delivery, and what to do with it once it is accepted. The following chart is a graphical representation of this work flow for inbound SMTP messages. **Note:** the extent to which these steps are executed is dependent upon your particular configuration. One or more steps might be skipped if a given feature is disabled in your configuration.

MTP Server
Starts

Mail Cor
Give

Update Active
Counter

ESMTF
Che

Chapter

3
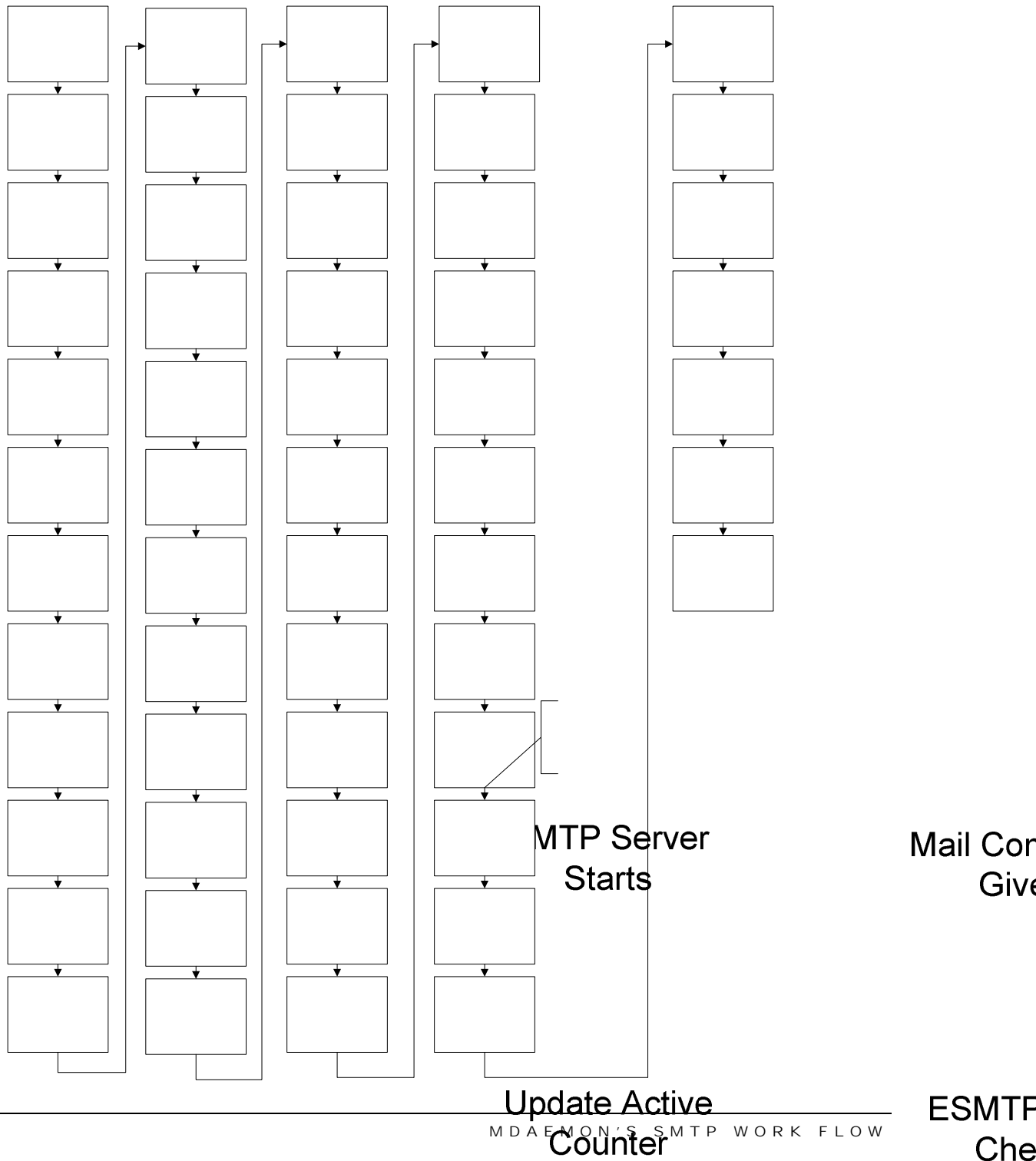
Primary Domain Configuration

Domain Configuration Editor

T he domain configuration editor can be reached via the **Setup→Primary domain…** menu selection and allows you to enter several key pieces of information regarding your domain setup. Your primary domain is the default domain name and set of configuration options that your users will use to send and receive their email. Only one primary domain can be configured, but MDaemon can manage mail for any number of Secondary Domains (MDaemon PRO only), and store mail for any number of *Domain Gateways* as well.

See:

Secondary Domain Editor—page 67
Domain Gateways—page 420

The Domain Configuration editor is a tabbed dialog containing the following sections, which are necessary for configuring MDaemon.

Domain
This dialog contains your Primary Domain's name and IP address, and your HELO domain name and machine name.

Delivery
Here you will specify the degree to which you want MDaemon itself to handle delivery of mail versus relaying mail to an ISP or gateway host for them to deliver for you.

Ports
On this dialog, the ports that MDaemon will monitor and use for SMTP and POP email delivery are designated. You will also designate the port on which MDaemon will listen for IMAP events, and the UDP port used for querying DNS servers. In most cases the default settings will not need to be changed. However, being able to configure these port settings is useful when attempting to integrate MDaemon with various other products that you may be using on your system.

DNS
This dialog is used for designating a primary and backup DNS server's IP address. It also contains various controls governing MDaemon's handling of MX and A records and SMTP errors that are encountered during mail delivery.

Timers

This area contains various time limits that MDaemon will observe while connecting to remote hosts, waiting for protocol dialogs, waiting for DNS server responses, and so on. In addition, this dialog contains the *Maximum Message Hop Count* limit, which is used to help prevent messages from being caught in a delivery loop.

Sessions

Here you will designate the maximum number of concurrent session threads that MDaemon will use for sending and receiving SMTP, POP, and IMAP mail. You will also designate the number of messages that MDaemon will attempt to send/receive *at the same time*. In addition, if you so choose, you can set a limit on the number of outbound SMTP messages that will be spooled per session thread.

Dequeue

Use the Dequeue tab to have MDaemon automatically send ETRN, QSND, or similar commands to an ISP in order to have them dequeue email that you may have them "holding" for you so that you can receive this sort of email via SMTP rather than DomainPOP.

Archival

Use the Archival tab to save a copy of all inbound and outbound mail that MDaemon processes. You can also choose whether this archive will include Mailing List or MultiPOP messages or omit them.

Pruning

This tab is used for denoting the amount of time that an account may remain inactive before it will be deleted. It also contains controls for limiting how long messages may be stored.

Pre-Processing

This dialog is used to designate the path to any program that you may want MDaemon to run immediately before processing and delivering of mail. Here you can also set parameters for MDaemon's actions related to this process.

Unknown Local Mail

This dialog contains various settings that you can use to control what MDaemon will do with messages that arrive at the server addressed to a *Local* domain but to an unknown or undefined user's mailbox. The various control choices include: sending the email message back to the sender, sending it to the Postmaster, putting it in the Bad Message queue, and forwarding the message to another host. These controls may be set to act individually or in any combination.

See:

> **Hosting Multiple Domains**—page 66
> **Domain Gateways**—page 420

See Also:

> **DomainPOP Mail Collection**—page 239

Domain
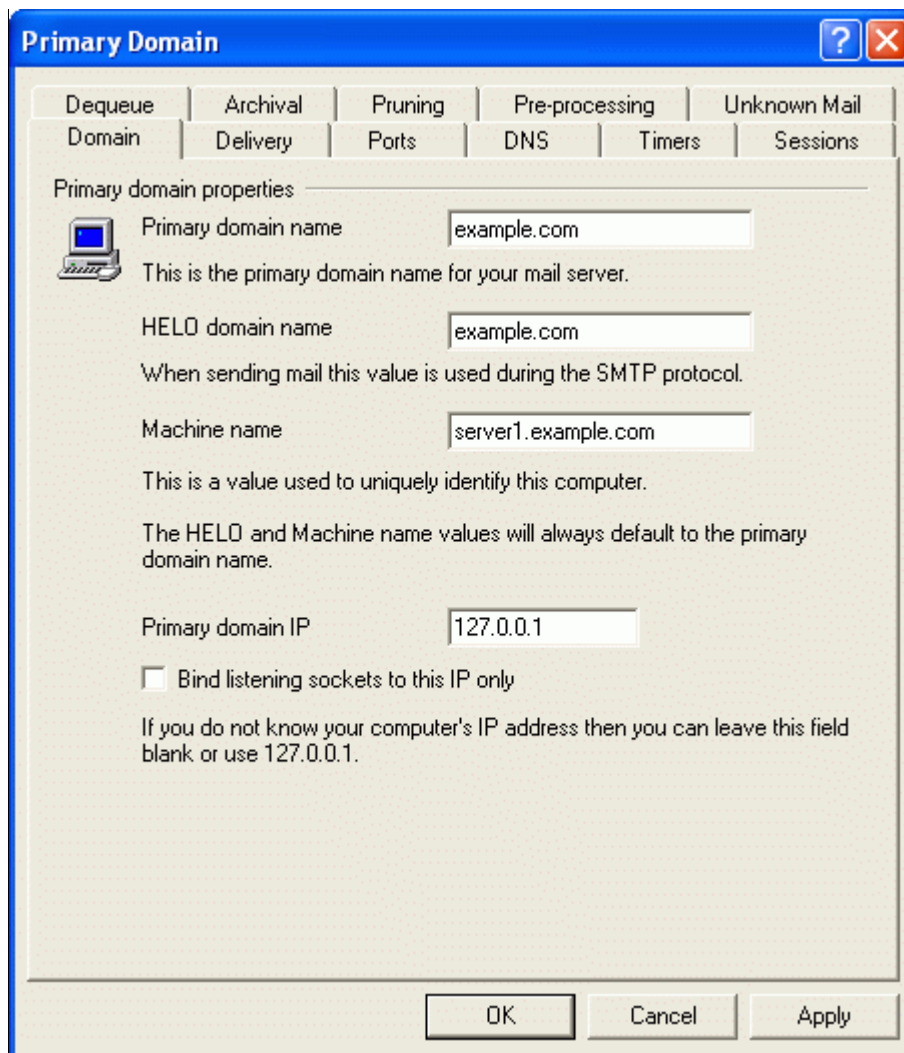
Primary Domain Properties

Primary domain name
Enter your primary domain name here. This is the default domain name used when creating new accounts. Typically, the value entered here will be the registered Internet domain name that a DNS server resolves to the IP address of the local machine running the server, or a qualified alias of that name.

Alternatively, you may choose to use a fictitious domain name for your Primary Domain Name (such as "company.mail") in some situations. When configuring your server in this way it may be necessary to use the **Header Translation** feature (page 217), and/or the **Domain Name Replacement Engine** (page 243), to enable proper mail distribution.

HELO domain name
This Domain name will be used in the SMTP HELO/EHLO instruction when sending mail. In most cases, this will be your Primary Domain Name.

Machine name

This name will be inserted into a message's `Received` headers. When you are using more that one machine for a particular domain (as a backup server, for example) it can sometimes be more difficult to track a message's path through the system with only IP addresses and domain names in the headers—it is more difficult to tell which machines handled the message. Inserting a name into the headers that specifically identifies each machine that processes the message can make this easier. If you do not provide a specific identifier in this control then the Primary domain name will be used.

Primary Domain IP

This is the Primary Domain's IP address.

Bind listening sockets to this IP only

Selecting this switch causes MDaemon to bind its listening network sockets using the specific IP address found in the _Domain IP_ text box. Ordinarily, this control will only need to be used in certain circumstances when hosting multiple domains.

For more information on this type of configuration, see:

Hosting Multiple Domains—page 66

Delivery

Mail Delivery Options

Always send every outbound email to the server specified below
Select this option if you want all outbound email, regardless of its destination domain, to be spooled to a gateway host for routed delivery. If selected, all outbound email will be sent to the host specified in the *ISP or smart host's IP or domain name* field. Typically, this feature is useful during high volume periods when direct message delivery would result in an excessive taxation of server resources.

Try direct delivery but send problem emails to the server specified below
Click this option if you want to spool only undeliverable outbound email to the gateway host specified in the *ISP or smart host's IP or domain name* field. Undeliverable mail is email destined for hosts that could not be resolved to an actual IP address (such as an unregistered gateway to a remote network) or email destined for a host that was resolved properly but could not be connected to directly or is refusing direct connections. Rather than return such mail to its originator, this option causes MDaemon to pass the message off to a more powerful MTA. Sometimes the mail system run by your ISP may have routed methods of mail delivery to which your local server may not have direct access.

Mail Server
Specify your ISP or mail host's domain name or IP address here. This is generally the SMTP server on your ISP.

> **Note**
>
> Do not enter MDaemon's Primary Domain Name or IP address into this text box. This entry should be an ISP or other mail server that can relay mail for you.

Access to the above mail server requires a log in
As an added security measure, some ISPs require their customers to log in before they are allowed to send mail through the ISPs servers. If your ISP or mail host requires this then use this option to specify your login credentials.

User name
Enter you ISP user name or login here.

Password
Use this option to specify your ISP or mail host login password.

Access to the above mail server requires a POP mailbox check
As an added security measure, some ISPs require their customers to log in to a POP mailbox before they are allowed to send mail through the ISPs servers. If your ISP or mail host requires this then click this button to open the POP Check dialog on which you can specify your login credentials. See the *POP Check* dialog below.

Always send all outbound email directly to the recipient's mail server
When this option is chosen, MDaemon will attempt to deliver all mail directly instead of passing it to another host. MDaemon will place undeliverable messages into its Retry System and continue to attempt to deliver them according to the parameters and time intervals that you set in the Retry Configuration dialog. You can access this dialog by clicking the *Click here to configure how undeliverable mail is handled* button.

Click here to configure how undeliverable mail is handled
Click this button to open the **Retry Configuration dialog** from which you can designate how often MDaemon will attempt to deliver messages that encounter problems during the delivery process. You can also specify a time interval after which the attempts will cease, and what to do with these messages after the final attempt is made. See the *Retry Configuration* dialog below.

POP Check
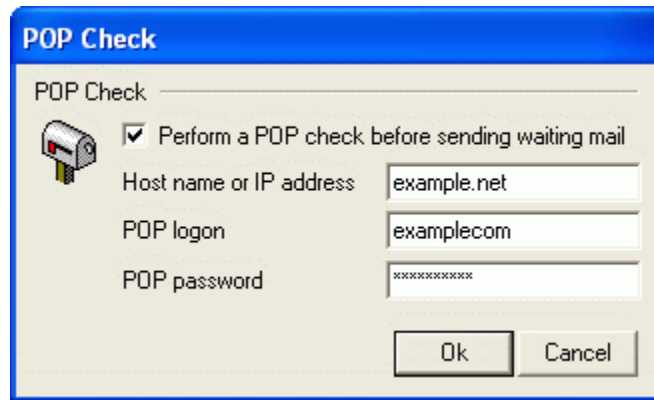
Perform a POP check before sending waiting mail
Click this checkbox if you are required to perform a POP check before sending waiting mail.

Host name or IP address
Enter the host or IP address to which you wish to connect.

POP logon
This is the POP account's logon or account name.

POP password
This is the account's POP password.

Retry Queue Settings
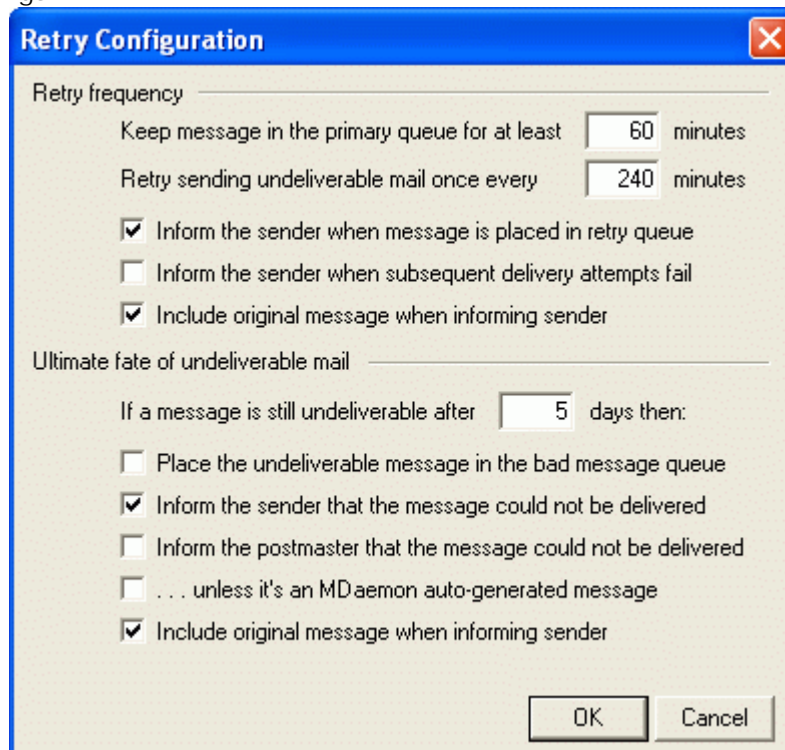
Retry Frequency

Keep message in the primary queue for at least XX minutes
This setting governs the length of time a message will remain in the primary queue before being removed and placed in the retry queue. The primary queue will generally attempt to deliver the message quicker and more frequently than the retry queue.

Retry sending undeliverable mail once every XX minutes
This setting determines how frequently the messages in the retry queue are processed.

Inform the sender when message is placed in retry queue
This switch will inform the sender when his/her message is removed and placed in the retry queue. The text of this message can be found (and edited) in the DELWARN.DAT file.

Inform the sender when subsequent delivery attempts fail
If a delivery attempt of a message in the retry queue fails, a message explaining this fact will be dispatched to the sender of the message. The text of this message can be found (and edited) in the DELWARN.DAT file.

Include original message when informing sender
Click this option to include the original message as an attachment in the above notification messages to the sender.

Ultimate Fate of Undeliverable Mail

If a message is still undeliverable after XX days then:
This setting determines the number of days that a message can remain in the retry queue before being removed.

Place the undeliverable message in the bad message queue
Once a message has reached the time limit set in the *If A Message Is Still Undeliverable After xx Days Then:* control, a copy of that message will be moved to the bad message directory if this switch is enabled.

Inform the sender that the message could not be delivered
Once a message has reached the time limit set in the *If A Message Is Still Undeliverable After xx Days Then:* control, this switch will cause MDaemon to send a message to the sender informing them that the message has been permanently removed from the server. The text of this message can be found (and edited) in the DELERR.DAT file.

Inform the postmaster that the message could not be delivered
If this switch is enabled, the postmaster will be notified when a message has been permanently removed from the retry system.

. . . unless it's an MDaemon auto-generated message
The retry system will never inform MDaemon when an auto-generated message fails to be delivered. However, because such information may be useful to the postmaster, he or she will be informed when these messages cannot be delivered. Click this checkbox if you do not want the postmaster to be informed when auto-generated messages cannot be delivered. Examples of auto-generated messages are return-receipt notifications, auto-responder generated messages, results of account processing, and so on.

Include original message when informing sender

Click this option to include the original message as an attachment in the delivery failure messages to the sender.

Ports

SMTP/ODMR Server Ports

Listen for inbound SMTP/MSA events on these TCP ports
MDaemon will monitor these TCP ports for incoming connections from SMTP/MSA clients. The first port is the main SMTP port, which in most cases should be left at the default setting of port 25. The second is an alternate, Message Submission Agent (MSA) port. Transmission on that port requires AUTH, therefore users sending on that port must configure their mail clients appropriately to make sure that their connections are authenticated. Further, because some ISPs block port 25, your remote users might be able to circumvent that restriction by using the MSA port instead. If you do not wish to designate an MSA port then set the value to "0" to disable it.

> **Note**
>
> Connections to the MSA port are exempt from PTR and reverse lookups, Host and IP screening, the IP Shield, and Tarpitting. MSA port connections continue to utilize dictionary attack connection limiting.

Create outbound SMTP events using this TCP port
This port will be used when mail is sent to other SMTP servers.

Listen for inbound ODMR events using this TCP port
MDaemon will monitor this port for incoming On-Demand Mail Relay (ODMR) connections such as ATRN from Domain Gateways.

Dedicated SSL port for SMTP
This is the port dedicated to SMTP mail sessions using a Secure Sockets Layer (SSL) connection. See SSL & Certificates—page 164 for more information.

POP/IMAP Server Ports (IMAP Available in MDaemon Pro only)

Listen for inbound POP events on this TCP port
MDaemon will monitor this port for incoming connections from remote POP clients.

Create outbound POP events using this TCP port
This port will be used when mail is retrieved from POP3 servers.

Dedicated SSL port for POP
This is the port dedicated to POP3 mail clients using a Secure Sockets Layer (SSL) connection. See SSL & Certificates—page 164 for more information.

Listen for inbound IMAP events on this TCP port
MDaemon will monitor this port for incoming IMAP requests.

Dedicated SSL port for IMAP
This is the port dedicated to IMAP mail clients using a Secure Sockets Layer (SSL) connection. See SSL & Certificates—page 164 for more information.

DNS/LDAP/WebAdmin Server Ports

Query DNS servers using this UDP port
Enter the Port you want MDaemon to use for sending and receiving data grams to the DNS server.

LDAP port for database & address book posting
MDaemon will post database and address book information to your LDAP server on this port.

See: LDAP Address Book Support—page 114

Listen for WebAdmin connections on this TCP port
This is the port that MDaemon will monitor for WebAdmin connections.

Return port settings to defaults
This button returns all the port settings to their standard values.

Bind to new port values now
When you alter the values of any of the port settings you will need to press this button to have your changes take immediate effect. Otherwise, your changes will not be put into place until the next time the server is started.

Note

The preceding port settings are critical for proper server operation and should not be altered unless you are certain that you must do so. Being able to configure the ports that MDaemon uses will allow you to configure the server to operate with proxy systems or other software services that require certain port numbers.

An IP address (a machine) has only one of each available port. If another program attempts to gain access to a port that is already in use by another piece of software an **error** message will inform the user that the requested address (IP:PORT) is **already in use**.

DNS
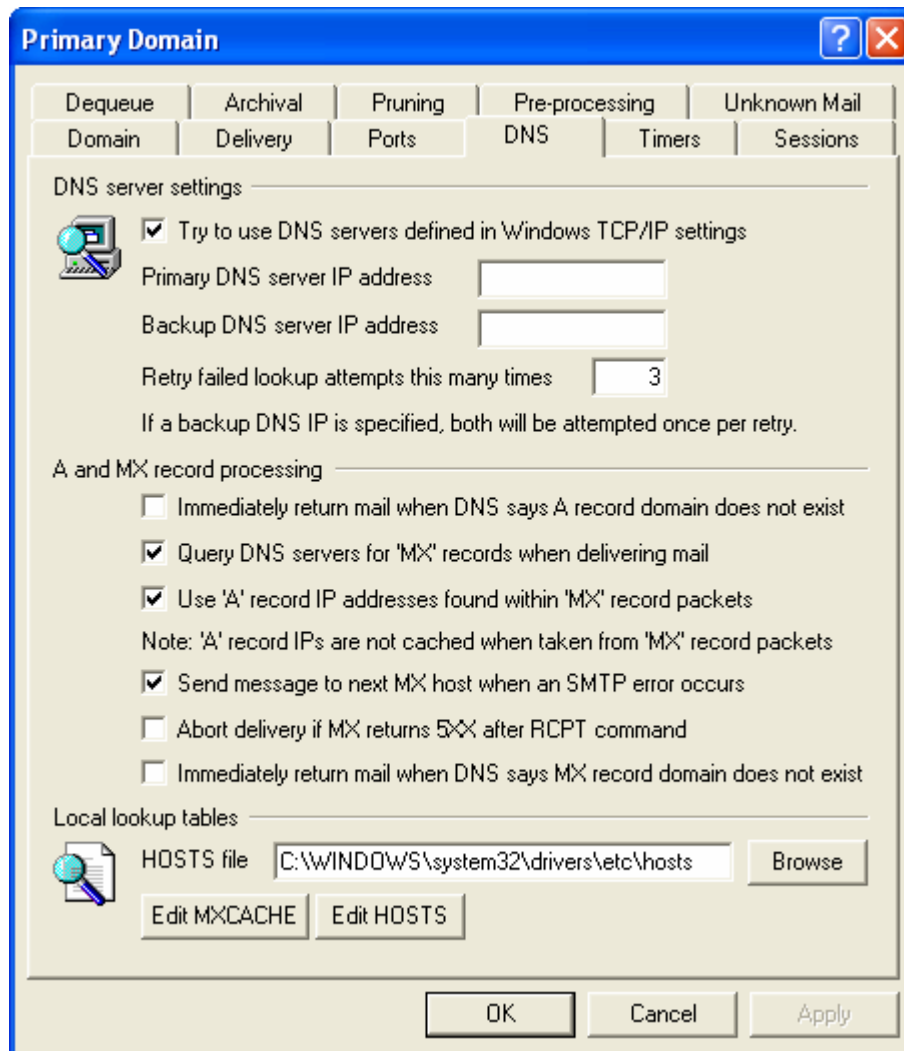
DNS Server Settings

Try to use DNS servers defined in windows TCP/IP settings
Windows sometimes keeps a DNS server IP address in the local TCP/IP configuration. If this is the case on your computer then you can check this option. If MDaemon cannot find a locally maintained DNS server it will continue on and use the ones specified on this screen.

Primary DNS server IP address
Enter the IP address of the DNS server that you want MDaemon to query for 'A' and 'MX' records. In order to ensure proper operation this entry must be specified.

Backup DNS server IP address
Enter the IP address of the backup or secondary DNS server that you want MDaemon to query for 'A' and 'MX' records. This entry is optional but recommended.

Retry failed lookup attempts this many times
If a lookup attempt fails, this is the number of times that MDaemon will repeat the attempt. If you have designated a backup DNS server, both servers will be included in each lookup attempt.

MX Record Processing

Immediately return mail when DNS says A record domain does not exist
Click this option to cause MDaemon to immediately return a message when a DNS lookup shows that
the A record domain doesn't exist.

Query DNS servers for 'MX' records when delivering mail
Enable this control if you want MDaemon to query your designated DNS servers for 'MX' records when
it is attempting to deliver mail.

> **Note**
>
> The following applies globally anywhere within MDaemon where you are allowed to specify
> a host to forward, copy, or send email to. If you enclose the host in brackets (e.g.
> [example.com]), MDaemon will skip MX record lookups when delivering to that host.
> For example, if the *Send the message to this host* option on the Unknown Mail tab contained
> "example.com" then MX lookups would be performed normally. If, however, that option
> contained "[example.com]" then only the A-record lookup would be performed.

Use 'A' record IP addresses found within 'MX' record packets
Click this checkbox if you want MDaemon to attempt delivery to 'A' record IP addresses when such are
discovered during 'MX' record processing.

Send message to next MX host when an SMTP error occurs
With this function active, MDaemon will continue to attempt message delivery to the next 'MX' hosts
even if the current 'MX' returns a fatal SMTP error.

Abort delivery if MX returns 5XX after RCPT command
Normally, MDaemon will continue to attempt to deliver messages to each MX host when receiving a
5XX response to the RCPT command during an SMTP session. Click this checkbox if you want
MDaemon to abort the delivery attempt when receiving such a response.

Immediately return mail when DNS says domain does not exist
Click here to cause MDaemon to immediately return a message if a DNS lookup returns a "Domain Does
Not Exist" message. This will prevent that sort of mail from needlessly going into the delivery retry cycle.

Local Lookup Tables

Hosts file…
Before querying the DNS servers, MDaemon will first attempt to resolve an address by processing the
Windows HOSTS file. If this file contains the IP address of the domain in question, MDaemon will not
need to query the DNS server.

> **Note**
>
> You must enter the complete path and filename rather than just the filename. MDaemon
> will attempt to use the following values as the default location of this file:
>
> Windows NT - [drive]:\windows\system32\drivers\etc\hosts

The HOSTS file is a Windows file that contains the A-record or primary IP address for domain names. MDaemon also allows you to specify MX-record IP addresses within a file called MXCACHE.DAT. This file can be found within the MDaemon\APP\ subdirectory. Load the MXCACHE.DAT file into a text editor and read the comments at the top of the file for more information.

Edit MXCACHE file
Click this button to view or edit the MXCACHE.DAT file with MDaemon's text editor.

Edit hosts File
Click this button to view or edit the HOSTS file with MDaemon's text editor.

Timers
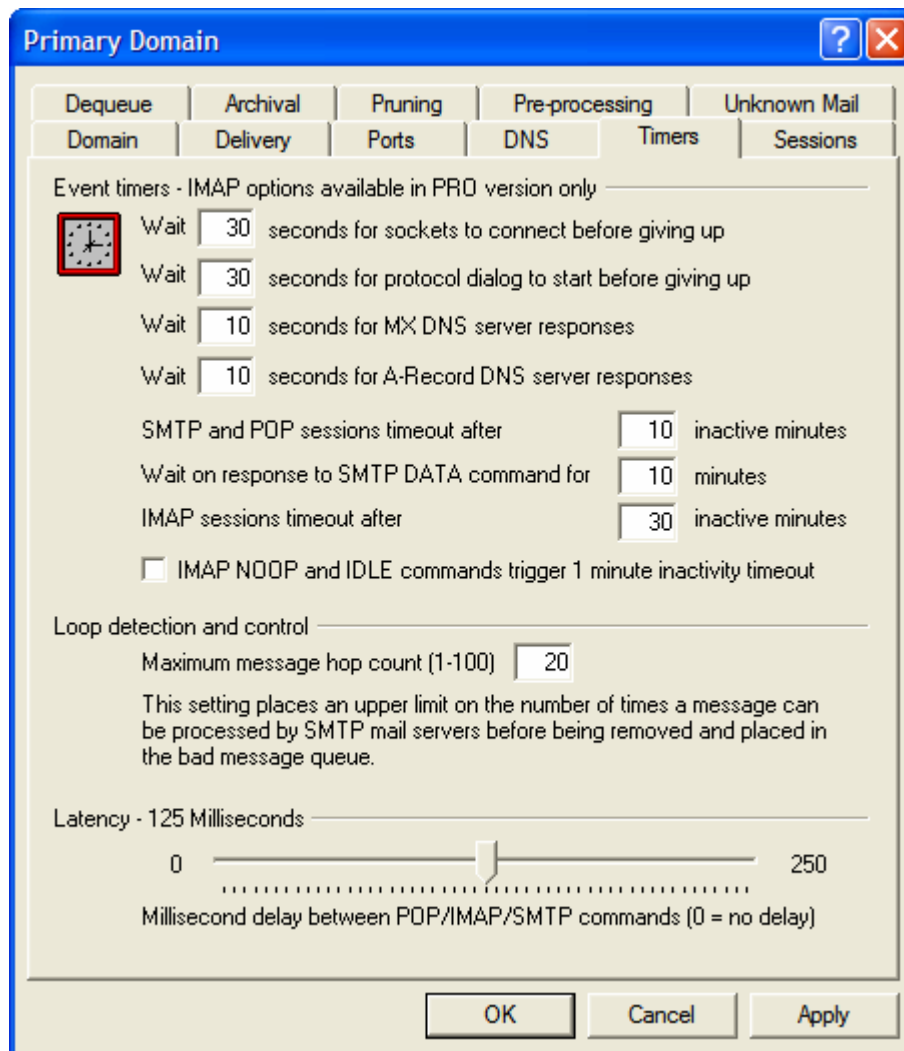
Event Timers (IMAP options available in Pro version only)

Wait XX seconds for sockets to connect before giving up
After initiating a connection request MDaemon will wait this many seconds for the remote system to accept the connection. If the remote system does not respond within this time frame MDaemon will send the message to either the Gateway Host or Retry Queue depending upon which option you have chosen on the **Domain/ISP** tab (page 37) of the Domain Configuration Editor.

Wait XX seconds for protocol dialog to start before giving up
Once a connection has been established with a remote host, this is the number of seconds that MDaemon will wait for the remote host to begin the SMTP or POP3 protocol dialog. If the remote host does not begin the protocol session within this time frame MDaemon will send the message to either the Gateway Host or Retry Queue depending upon which option you have chosen on the **Domain/ISP** tab (page 37) of the Domain Configuration Editor.

Wait XX seconds for MX DNS server responses

While using DNS services to resolve 'MX' hosts for remote domains, MDaemon will wait for responses to its 'MX' queries for this number of seconds. If the DNS server does not respond within this time frame MDaemon will attempt to deliver the message to the IP address specified in the remote host's 'A' DNS record. If that attempt fails MDaemon will send the message to either the Gateway Host or Retry Queue depending upon which option you have chosen on the **Domain/ISP** tab (page 37) of the Domain Configuration Editor.

Wait XX seconds for A-record DNS server responses

This timer governs how long MDaemon will wait while attempting to resolve a remote host's IP address. If the attempt fails, MDaemon will send the message to either the Gateway Host or Retry Queue depending upon which option you have chosen on the **Domain/ISP** tab (page 37) of the Domain Configuration Editor.

SMTP and POP sessions timeout after XX inactive minutes

If a successfully connected and operating session remains inactive (no i/o) for this length of time, MDaemon will abort the transaction. MDaemon will try again at the next scheduled processing interval.

Wait on response to SMTP DATA command for XX minutes

This option governs how long MDaemon will wait for the "250 Ok" response after sending the DATA command during the SMTP process. Since some receiving servers perform lengthy anti-spam, anti-virus, or other necessary operations at that time, this option can be used to give them time to complete those tasks. The default is 10 minutes.

IMAP sessions timeout after XX inactive minutes

If an IMAP session has no activity for this number of minutes, MDaemon will close the session.

IMAP NOOP and IDLE commands trigger 1 minute inactivity timeout

When this checkbox is enabled, the IMAP inactivity timer will be set to one minute when a NOOP or IDLE command is encountered. Some IMAP clients will issue NOOP commands simply to keep sessions open even though there is no actual mail transaction activity going on. This feature will prevent such sessions from remaining active and thus will reduce resources consumed, which can be extremely useful for higher volume IMAP based mail sites.

Loop Detection and Control

Maximum message hop count (1-100)

RFC standards stipulate that a mail server must stamp each message each time that it is processed. These stamps can be counted and used as a stopgap measure against recursive mail loops that can sometimes be caused by errant configurations. If undetected, these looping message delivery cycles will consume your resources. By counting the number times the message has been processed, such messages can be detected and placed in the bad message directory. The assumption is that if a message hasn't reached its recipient after being processed by a given number of mail servers then there is probably a mail loop in progress. Most likely, the default setting of this control should be sufficient to prevent mail loops and will not need to be changed.

Latency

Latency – XX milliseconds

This is the delay in milliseconds between POP/SMTP/IMAP protocol commands. This is useful for preventing high-speed connections from processing data faster than the recipient can extract it. This delay

takes effect only during the POP/SMTP/IMAP protocol command sequence – the actual transfer of a mail message file is already fully buffered.

Sessions
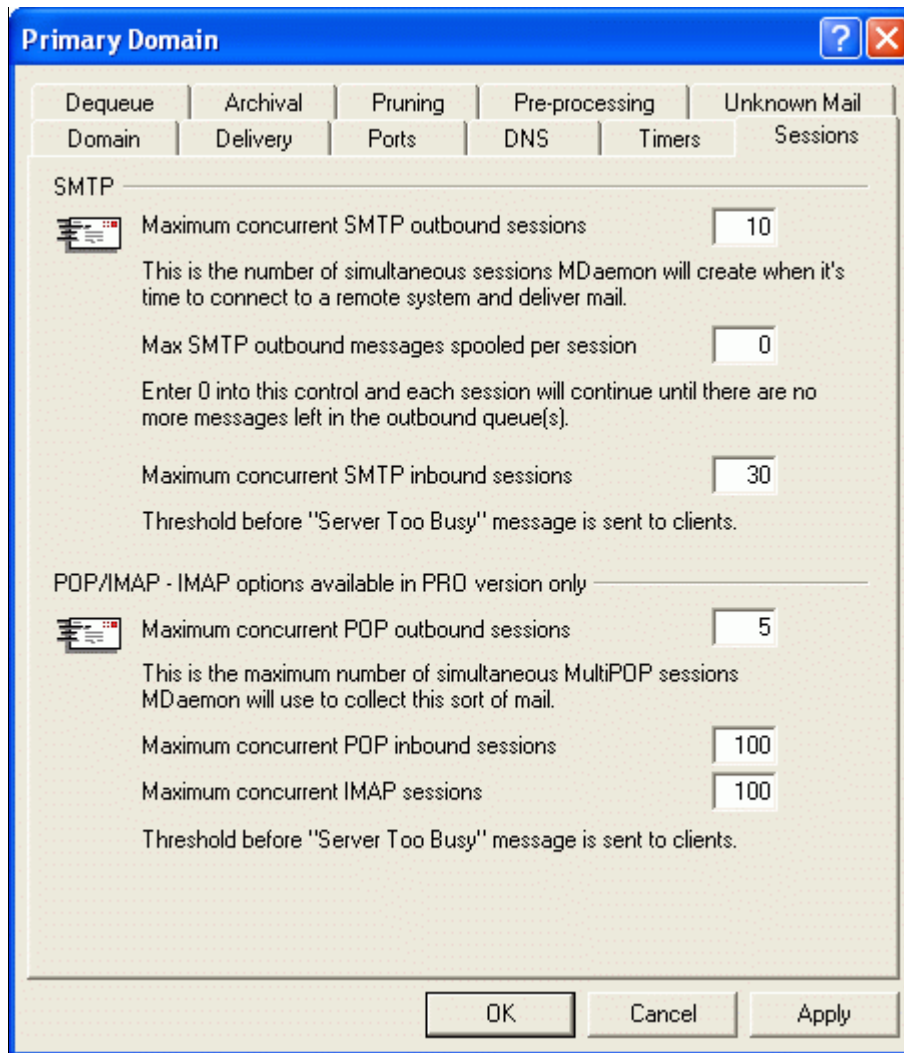
SMTP

Maximum concurrent SMTP outbound sessions

The value entered here represents the maximum possible outbound SMTP sessions that will be created when it is time to send outbound mail. Each session will send outbound messages until either the queue is empty or the *Max SMTP outbound messages spooled per session* setting has been reached. For example, if the outbound mail queue has twenty messages waiting when it is time to send mail and the value of this setting is five, then five sessions will be simultaneously created and each will consecutively deliver four messages.

You should experiment with the number of sessions that yield the best performance for your bandwidth. It is possible to specify so many sessions that your bandwidth will be overloaded or your Windows machine will run out of resources and you will lose delivery efficiency. Remember, each SMTP session created by MDaemon will deliver messages consecutively and therefore four sessions delivering two messages each might perform better and faster than eight threads delivering only one message each. A good place to start would be five to ten threads when using a 56k modem and ten to twenty for broadband.

Maximum SMTP outbound messages spooled per session

This setting places a limit on the number of individual messages that each session will send before it stops delivering mail and frees itself from memory. Ordinarily, you should leave this control set to zero, which will cause each session to continue delivering messages until the queue is empty.

Maximum concurrent SMTP inbound sessions

This value controls the number of concurrent inbound SMTP sessions that the server will accept before it begins responding with a "Server Too Busy" message.

POP/IMAP (IMAP option available in Pro version only)

Maximum concurrent POP outbound sessions

The value entered here represents the maximum possible outbound POP sessions that will be created when it is time to collect DomainPOP and MultiPOP mail. Each session will collect this type of mail until all DomainPOP and MultiPOP servers have been processed, and all mail has been collected. For example, if there are fifteen MultiPOP sessions amongst all of your users and the value of this setting is set to three, then each session will collect mail from five MultiPOP sources.

You should experiment with the number of sessions to determine what number will yield the best performance for your bandwidth. It is possible to specify so many sessions that your bandwidth will be overloaded, or your Windows machine will run out of resources and you will lose processing efficiency. Remember that each POP sessions created by MDaemon will collect mail until all sources have been exhausted. Therefore, four sessions collecting mail from twenty sources might perform better and faster than twenty sessions collecting from a single source. A good place to start would be two to five sessions with a 28.8 modem and five to ten for ISDN.

Maximum concurrent POP/IMAP inbound sessions

This value controls the maximum number of concurrent POP and IMAP inbound mail sessions that the server will accept before it begins responding with a "Server Too Busy" message.

Dequeue
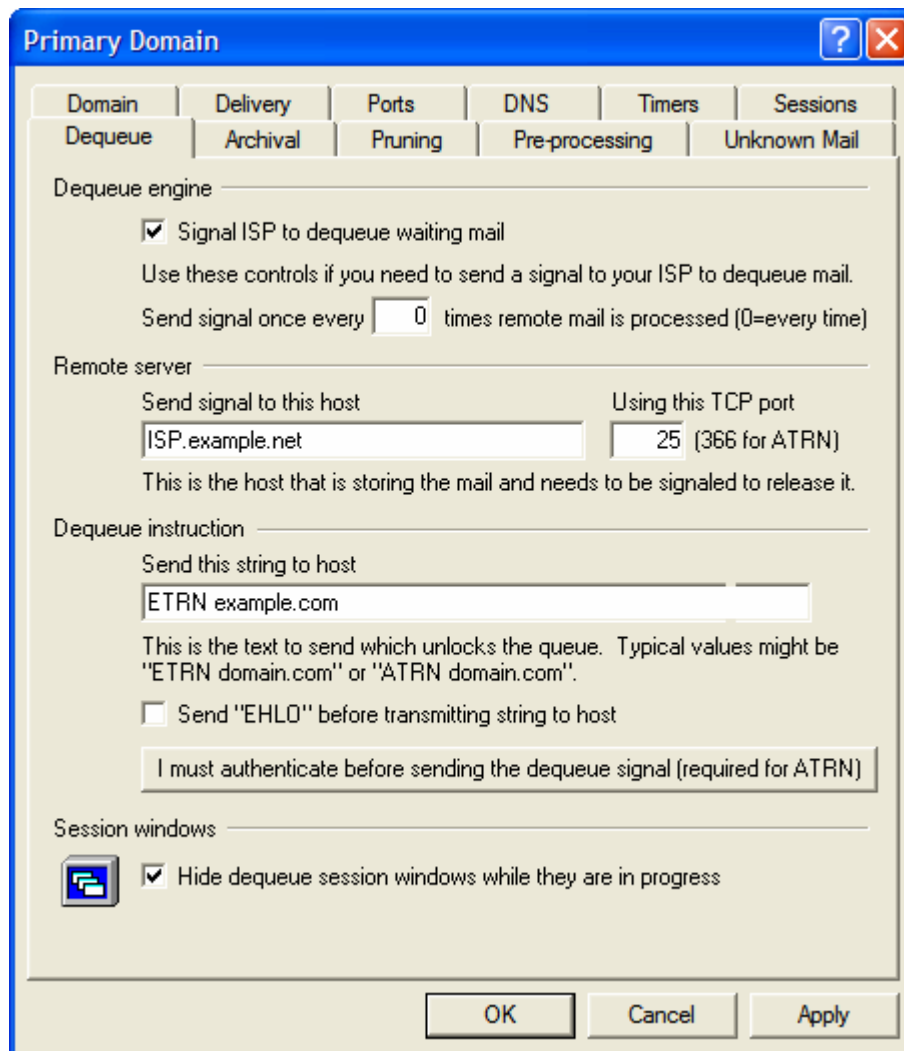
Dequeue Engine

Signal ISP to dequeue waiting mail
When it is time to process remote mail MDaemon can connect to any server on any port and send any string that you wish to send. This is useful when you need to signal a remote server to release your mail by sending some string to them. For example, ATRN, ETRN, or QSND. You can also use this feature when a FINGER or TELNET session is briefly required in order for your ISP to determine that you are online.

Send signal once every [xx] times remote mail is processed
By default the dequeue signal will be sent each time that remote mail is processed. Entering a number into this control will prevent the dequeue signal from being sent every time. It will be sent every x number of times as designated. For example, setting this value to "3" would cause the signal to be sent every third time that remote mail is processed.

Remote Server

Send signal to this remote host
This is the host to which you wish to connect to signal the release of your mail.

<ins>Use this TCP port</ins>
Enter the port on which you wish to make the connection. The default is 25 (the SMTP port), which is appropriate for the ETRN or QSND signaling method. Port 366 is typically used for ATRN, and port 79 is used for FINGER.

Dequeue Instruction

<ins>Send this string to host</ins>
This control is for specifying the text string that needs to be sent in order for your email to be released. For example, the ETRN method requires the text "ETRN" followed by the domain name of the site being queued. Other methods require different text to be sent. Consult your ISP if you need more information on what to send to unlock your mail queue.

> **Note**
>
> When using a dequeue method of mail hosting, we recommend using On-Domain Mail Relay (ODMR) whenever possible. We believe that it is currently the best method available for hosting your email in this manner. ODMR requires the ATRN command to be used in this control.

<ins>Send SMTP "EHLO" before transmitting string to host</ins>
If you enable this checkbox then you should be connecting to an SMTP server to signal release of your mail. This switch causes an SMTP session to be initiated with the specified host and allows the session to progress just beyond the SMTP "EHLO" stage before sending the unlock string.

<ins>I must authenticate before sending the dequeue signal (required for ATRN)</ins>
As a security measure, in order to prevent unauthorized users from attempting to dequeue their customers' email, some ISPs require their customers to authenticate themselves via ESMTP AUTH before sending the dequeue signal. If this is the case for your ISP, you can open the Dequeue AUTH dialog by clicking this button. There you can enter the required authentication information. See Dequeue AUTH below.

> **Note**
>
> Authentication is required when using the ATRN command to dequeue your email.

Session Windows

<ins>Hide dequeue session windows while they are in progress</ins>
Click this checkbox if you want to hide sessions windows while they are in progress.

> **Note**
>
> If the value you enter into the *Send Signal To This Host* control is a domain name and not an IP address, MDaemon will perform an MX record resolution of this site in an attempt to connect to the site's MX IP address. This assumes you have the MX resolution engine

switched on and working (see **DNS** on page 47). If the value entered is an IP address and not a domain name then the connection will be made using that IP address.

On-Demand Mail Relay (ODMR)

We believe that the best relay (queue/dequeue) method currently available for hosting your email is On-Demand Mail Relay (ODMR). This method is superior to ETRN and other methods in that in requires authentication before mail is dequeued. Further, it utilizes a new ESMTP command called `ATRN` that does not require the client (customer) to have a static IP address because it immediately reverses the flow of data between the client and server (provider) and despools the messages without having to make a new connection to do so (unlike ETRN).

MDaemon fully supports ODMR on the client side via using the `ATRN` command and authentication controls on the Dequeue tab, and on the server side using the Domain Gateways features on the Dequeuing tab of the Gateway Editor (page 424).

Many mail servers do not yet support ODMR, therefore you should check with your provider before attempting to use it.

Dequeue AUTH
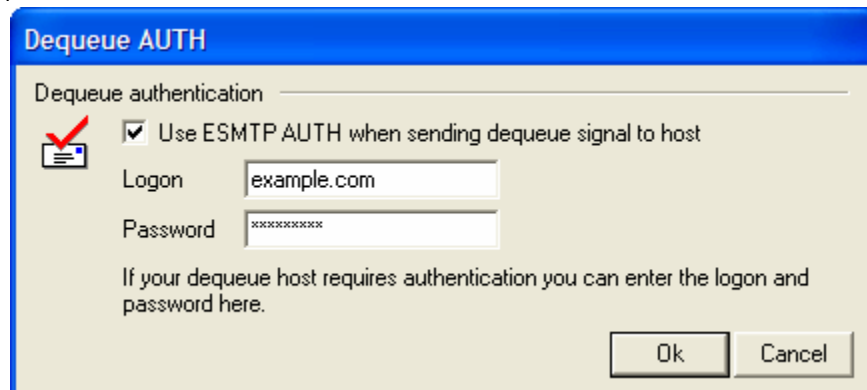
Dequeue Authentication

Use ESMTP AUTH when sending dequeue signal to host
Besides requiring their customers to authenticate themselves before sending mail, some ISPs require their customers to authenticate themselves before sending the signal to dequeue any incoming mail that is being held for them. If you are required to do this, then click this checkbox to cause MDaemon to send your authentication information before attempting to collect any queued email.

Logon
If authentication is required before sending the signal to dequeue your mail, place the required AUTH logon parameter here.

Password
Enter the logon password required by your ISP.

Archival
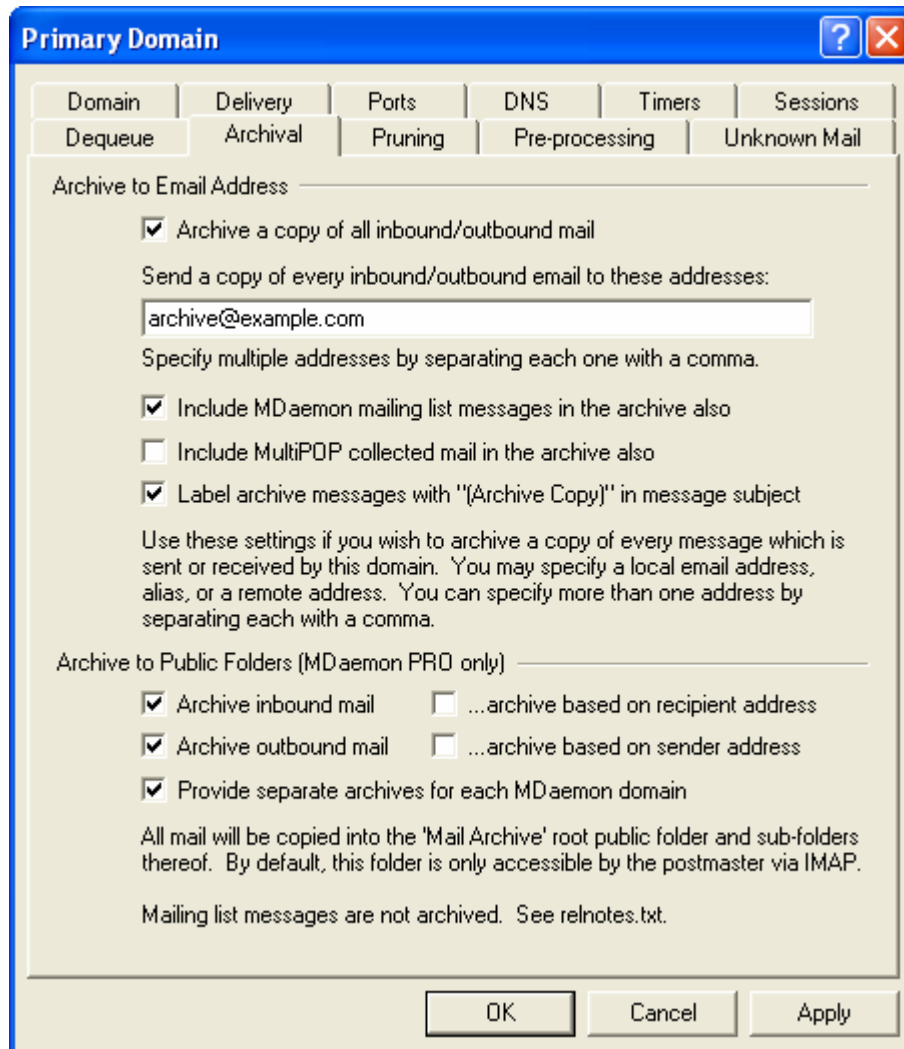
Archive Settings

Archive a copy of all inbound/outbound mail
This switch enables the archival engine. Activating it will cause a copy of every inbound and outbound message that passes through the server to be sent to the address(es) specified in the control following.

Send a copy of every inbound/outbound email to these addresses
Enter one or more addresses to which you wish to send archival messages. Multiple addresses must be separated by a comma. You may specify Local and Remote addresses and Address Aliases.

Include MDaemon mailing list messages in the archive also
Select this switch if you want archived mail to include your mailing list messages.

Include MultiPOP collected mail in the archive also
Select this switch if you want archived mail to include messages collected through MDaemon's MultiPOP feature.

Label archive messages with "(archive copy)" in message subject
Enable this switch if you want to include "(Archive Copy)" in the `Subject:` header of archived mail.

Archive to Public Folders (MDaemon PRO only)

<u>Archive inbound mail</u>
Click this check box to save a copy of all inbound messages in the Mail Archive public folder. By default, this folder is only accessible only by the Postmaster via IMAP. If you want to alter the permissions or grant access to more users you can do so from the Access Control List on the Public Folders dialog.

<u>…archive based on recipient address</u>
Click this option if you want the inbound mail archive to be categorized by the recipient's email address.

<u>Archive outbound mail</u>
Click this check box to save a copy of all outbound messages in the Mail Archive public folder. By default, this folder is only accessible only by the Postmaster via IMAP. If you want to alter the permissions or grant access to more users you can do so from the Access Control List on the Public Folders dialog.

<u>…archive based on sender address</u>
Click this option if you want the outbound mail archive to be categorized by the sender's email address.

<u>Provide separate archives for each MDaemon domain</u>
Click this option if you want to maintain a separate archive for each domain.

Pruning
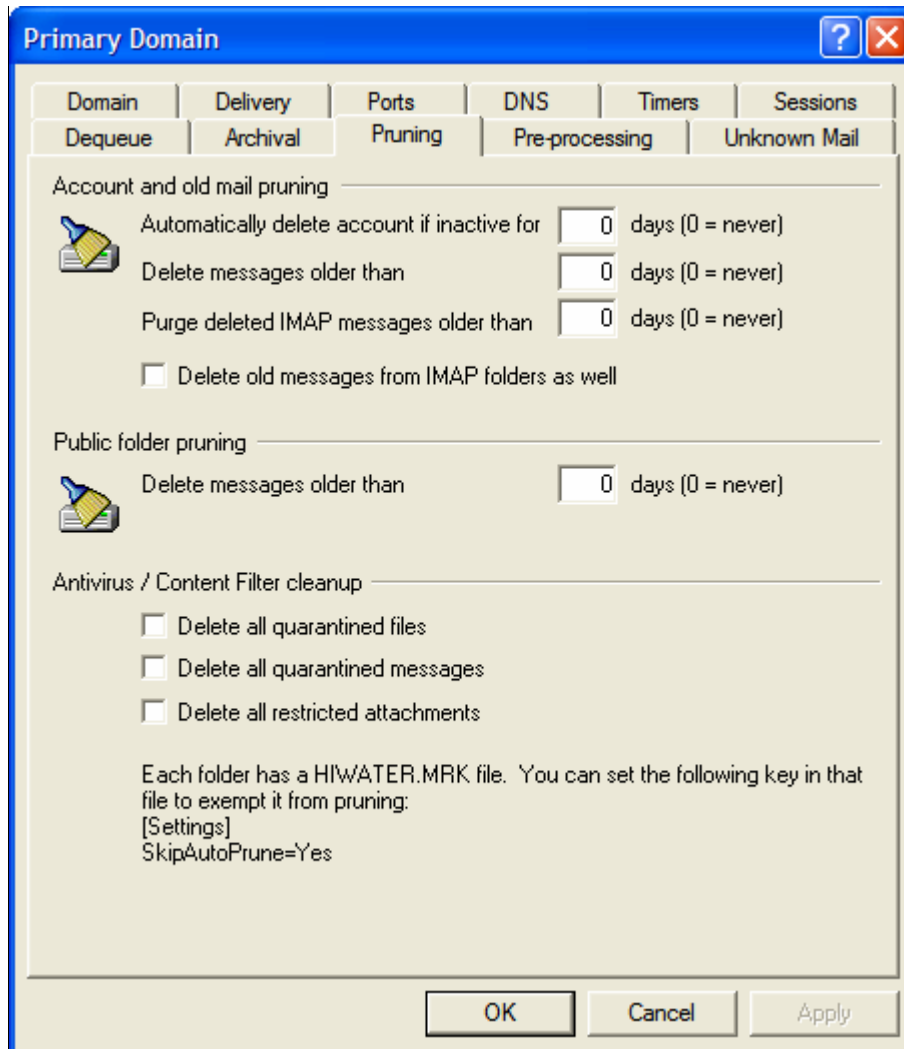
The options in the first section of this dialog are used to designate when or if inactive accounts or old messages belonging to this domain will be deleted by MDaemon. Each day at midnight MDaemon will remove all messages and accounts that have exceeded the time limits stated. There are similar controls used for setting these limits for your other domains on the Secondary Domains dialog (page 67). There are also controls on the Account Editor that can be used to override these settings for individual accounts (see page 344). The remaining options are global, applying to all domains.

Note

When old messages are pruned, rather than actually delete them, MDaemon will move them to the "…\BADMSGS\[Mailbox]\" folder where they can be manually deleted later by the administrator or a nightly process. **Note:** This only applies to pruned old messages. When an account is pruned, it will be deleted along with its messages instead of moved. See AccountPrune.txt in the "…MDaemon\App\" folder for more information and command line options.

Account and Old Mail Pruning

Automatically delete account if inactive for XX days (0 = never)
Specify the number of days that you wish to allow an account belonging to this domain to be inactive before it will be deleted. A value of "0" in this control means that accounts will never be deleted due to inactivity.

Delete messages older than XX days (0 = never)
A value specified in this control is the number of days that any given message may reside in a user's mailbox before it will be deleted by MDaemon automatically. A value of "0" means that messages will never be deleted due to their age.

Purge deleted IMAP messages older than XX days (0 = never)
Use this control to specify the number days that you wish to allow IMAP messages that are flagged for deletion to remain in your users' folders. Messages flagged for deletion longer than this number of days will be purged from their mailboxes. A value of "0" means that messages flagged for deletion will never be purged due to their age.

Delete old messages from IMAP folders as well
Click this checkbox if you want the "*Delete messages older than…*" control to apply to messages in IMAP folders as well. When this control is disabled, messages contained in IMAP folders will not be deleted, regardless of their age.

Public folder pruning

Delete messages older than XX days (0=never)
Specify a number of days in this option if you want old messages to be deleted from Public Folders.

Antivirus / Content Filter Cleanup

Delete all quarantined files
Click this option if you want all quarantined file attachments to be deleted each night.

Delete all quarantined messages
Click this option if you want all quarantined messages to be deleted each night.

Delete all restricted attachments
Click this option if you want all restricted attachments to be deleted each night.

Pre-processing
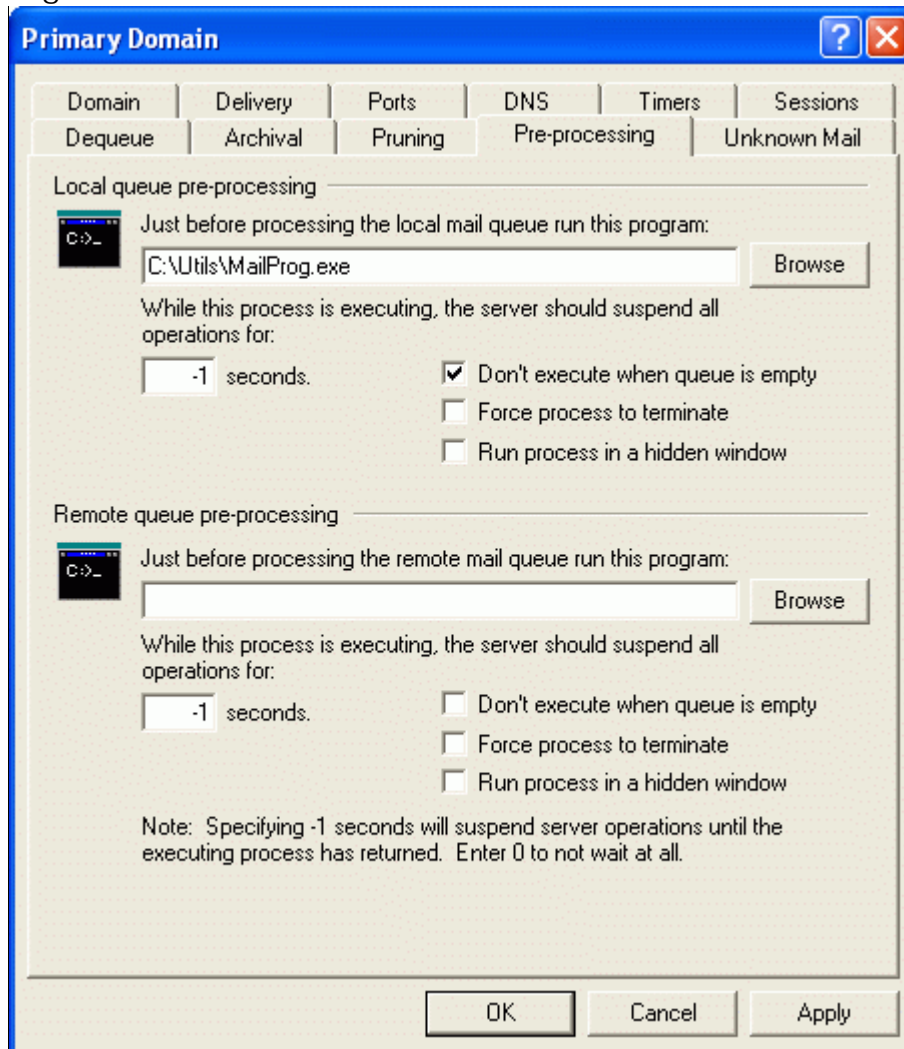
Local/Remote Queue Pre-processing

Just before processing the (local/remote) mail queue run this program
This field specifies a program path and name that will be executed just prior to the processing and delivery of any RFC-822 messages that might be in the local or remote message queues. If complete path information is not provided, MDaemon will first search for the executable in the MDaemon directory, then in the Windows System directory, next in the Windows directory, and finally the directories listed in the PATH environment variable.

…suspend all operations for xx seconds
The value entered here determines how MDaemon will behave while the specified program is in progress. MDaemon can be configured to pause its execution thread for the number of seconds specified while waiting for the process thread to return. If the process returns before the number of seconds has elapsed, MDaemon will resume its execution thread immediately. Enter the numeral zero in this control and MDaemon will not suspend operations at all. Entering "-1" will cause MDaemon to wait until the process returns, no matter how long that might be.

Don't execute when queue is empty
Enable this switch if you do not want the specified program to run when the queue is empty.

Force process to terminate
Sometimes the process you need to run may not terminate on its own. This switch will cause MDaemon to force the session to terminate once the time specified in …*Suspend All Operations For XX Seconds* has elapsed. This switch does not work if the elapsed time interval is set to "-1".

Run process in a hidden window
Click this checkbox if you want the process to run in a hidden window.

Unknown Mail
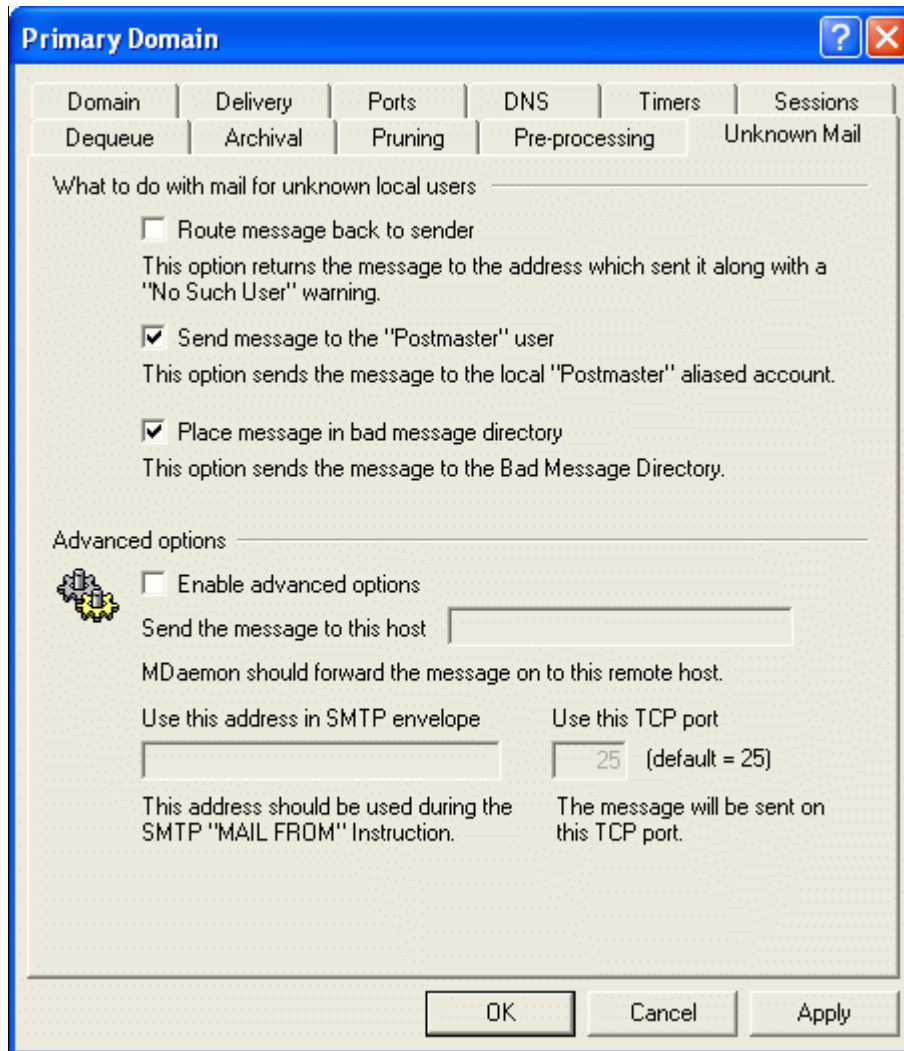
What To Do With Mail For Unknown Local Users

Route message back to sender
Messages that arrive at the server destined for unknown yet supposedly local users will be returned to the message originator if this option is activated.

Send message to the "Postmaster" user
Messages that arrive at the server destined for unknown yet supposedly local users will be forwarded to whatever user has been aliased as the postmaster.

Place message in bad message directory
Messages that arrive at the server destined for unknown yet supposedly local users will be routed to the bad message directory.

Advanced Options

Enable advanced options
Click this checkbox to enable the following advanced mail routing properties.

Send the message to this host
If a mail host is specified here, messages addressed to unknown local users will be sent to it.

Note

The following applies globally anywhere within MDaemon where you are allowed to specify a host to forward, copy, or send email to. If you enclose the host in brackets (e.g. `[example.com]`), MDaemon will skip MX record lookups when delivering to that host. For example, if this option contained "`example.com`" then MX lookups would be performed normally. If, however, that option contained "`[example.com]`" then only the A-record lookup would be performed.

Use this address in SMTP envelope
This address will be used in the SMTP "`Mail From:`" statement used during the session handshaking with the accepting host. Normally the sender of the message is used in this portion of the SMTP envelope. If you require an empty command (`MAIL FROM <>`) then enter "`[trash]`" into this control.

Use this TCP port
MDaemon will send this message on the TCP port specified here rather than the default SMTP outbound port.

Chapter

4

Secondary Domains

Hosting additional Domains with MDaemon.

Hosting Multiple Domains (MDaemon Pro only)

MDaemon contains full support for multiple domains. In addition to the Primary Domain Configuration settings (page 35), it contains the Secondary Domain Editor used for designating any number of additional domains that you want to support as well as the IP address to which each will be associated. MDaemon supports both dedicated and multi-homed IP addresses.

In order to support multi-homing (sharing the same IP across multiple different domains) MDaemon automatically detects the IP address that an incoming connection is attempting to reach and uses the appropriate domain name accordingly. For example, suppose you have the following domains and accounts configured:

```
altn.com, IP = 1.1.1.1
   user-1@altn.com, logon = user-1, POP password = ALTN
arvelh.com - 2.2.2.2
   user-2@arvelh.com, logon = user-2, POP password = ARVELH
```

If a connection is attempted to 1.1.1.1 then MDaemon will answer as "altn.com". If a connection is made to 2.2.2.2 then "arvelh.com" will be used.

If user-1@altn.com connects to 1.1.1.1 to check his mailbox, he will supply "user-1" as his logon and "ALTN" as his password to log in. However, if user-2@arvelh.com connects to 1.1.1.1 to check his mail then he is technically connecting to the wrong server (he should be connecting to 2.2.2.2). In that case, he will need to supply his full email address in the login field to gain access. Of course, if he had connected to 2.2.2.2 he would only need to supply his login value. Therefore, if an account connects to the IP address corresponding to its domain, and that IP address is not used by any other domain, then the account need only specify the login value. Otherwise, it must specify a complete email address. In this way, support for servicing multiple domains can be accomplished using a single IP address. When several domains share the same IP address then the login must contain the full email address. Otherwise MDaemon will not know which user is attempting to log in. When in doubt use the full email address as your login value.

So, how is the login and domain specified? You would expect that providing the account's email address would work like this: arvel@altn.com. MDaemon will always accept logon values that contain the '@' symbol, so if your mail client supports using the '@' symbol in the logon value then there is no

problem. However, it turns out that many email clients on the market today will not allow the '@' symbol to be used in the login field. To accommodate those mail clients that do not permit this, MDaemon allows you to specify an alternative character. MDaemon's default alternative character is '$'. That means that you could use: `arvel$altn.com` as easily as `arvel@altn.com`.

The alternative character is specified on the System tab of the Miscellaneous Options dialog (page 299). This value can be up to 10 characters long, making it possible to provide a string of characters to serve as the delimiter instead of only a single character such as '$'. For example, using '`.at.`' will allow you to make logon values of "`arvel.at.altn.com`".

Several key features, such as Accounts, Mailing Lists, and Security Settings, are on a per domain basis. When you create a mail account you must specify the domain to which the new account belongs. The same goes for Mailing Lists. This means that features such as the IP Screen and IP Shield are tied to domains individually. Some features, however, such as the DomainPOP 'Real Name Matching' feature, are tied exclusively to the primary domain.

As part of the multi-domain process, when you create a secondary domain the following aliases will be set up to automatically:

```
MDaemon@secondarydomain.com = MDaemon@primarydomain.com
listserv@secondarydomain.com = MDaemon@primarydomain.com
listserver@secondarydomain.com = MDaemon@primarydomain.com
list-serv@secondarydomain.com = MDaemon@primarydomain.com
```

These aliases will be automatically removed if the secondary domain is deleted.

Secondary Domain Editor

MDaemon contains full support for multiple domains. In addition to the Primary Domain Configuration settings (page 35), it contains the **Secondary Domains Editor** used for designating any number of additional domains that you wish to support as well as the IP address to which each will be associated. MDaemon supports both dedicated (static) and multi-homed IP addresses.

On the Secondary Domains Editor, for each secondary domain that you wish to host, you will include: the domain name, the IP address to which it will be associated, and whether or not it will be bound to its IP address.

For more information on hosting multiple domains, see:

Hosting Multiple Domains—page 66

See also:

Primary Domain Configuration—page 35
Account Editor—page 334
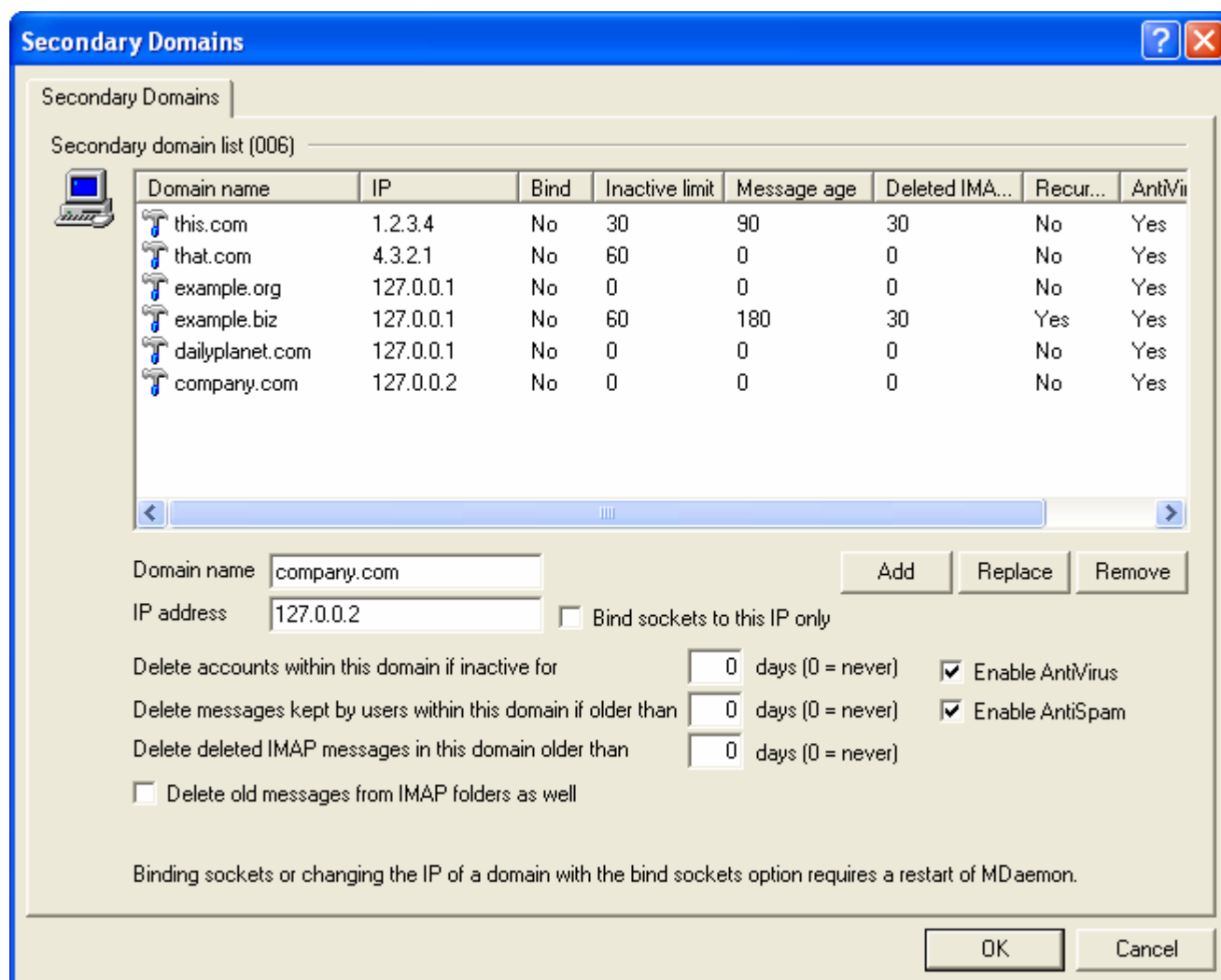
Secondary Domain List

This window contains the list of your secondary domains. It has several columns: Domain Name—lists the name of each domain, IP—each domain's IP address, Bind—shows whether or not the given domain is bound to its IP address, and several other columns that correspond to the controls below the list. This list can be sorted in ascending or descending order by any column. Simply click the column by which you wish to sort the list and it will be sorted by that column in ascending order. Click the same column again to sort it in descending order.

Domain name
Enter the domain name of the secondary domain that you wish to host.

IP address
Enter the IP address to associate with the domain being added or edited.

Bind sockets to this IP only
Click this checkbox if you want to bind the secondary domain to its IP address.

Add
Click this button to add the secondary domain along with its IP address and binding status to the Domain List.

Replace
When you click an entry in the Domain List, its settings will appear in the corresponding controls. Click this button after making any desired changes to the information to replace the entry with the new settings.

Remove
After selecting an entry in the Domain List, click this button to remove it from the list.

Account and Old Mail Pruning

The remaining three controls on this dialog have corresponding controls on the Accounts Editor (page 344) that can be used if you want an individual account's settings to override these defaults.

Delete accounts within this domain if inactive for XX days (0=never)
Specify the number of days that you wish to allow an account belonging to this domain to be inactive before it will be deleted. A value of "0" in this control means that accounts will never be deleted due to inactivity.

Delete messages kept by users within this domain if older than XX days (0=never)
A value specified in this control is the number of days that any given message may reside in a user's mailbox before it will be deleted by MDaemon automatically. A value of "0" means that messages will never be deleted due to their age.

Delete deleted IMAP messages in this domain older than XX days (0 = never)
Use this control to specify the number days that you wish to allow IMAP messages that are flagged for deletion to remain in this domain's users' folders. Messages flagged for deletion longer than this number of days will be purged from their mailboxes. A value of "0" means that messages flagged for deletion will never be purged due to their age.

Delete old messages from IMAP folders as well
Click this checkbox if you want the "*Delete messages kept by users…*" control to apply to messages in IMAP folders as well. When this control is disabled, messages contained in IMAP folders will not be deleted, regardless of their age.

Note

When old messages are pruned, rather than actually delete them, MDaemon will move them to the "...\BADMSGS\[Mailbox]\" folder where they can be manually deleted later by the administrator or a nightly process. This only applies to pruned old messages – when an account is pruned, it will be deleted along with its messages instead of moved. See `AccountPrune.txt` in the "...MDaemon\App\" folder for more information and command line options.

Enable AntiVirus
If *AntiVirus for MDaemon* is installed, click this check box if you want the AntiVirus settings to be applied to the selected secondary domain.

Enable AntiSpam
Click this check box is you want MDaemon's current Spam Filter settings to be applied to the selected secondary domain.

Adding a Secondary Domain

To add a secondary domain to the Domain List:

1. Enter the *Domain Name* and *IP Address*.

2. Click *Bind To This IP* (**only** if you want to bind the domain to its IP address).

3. Click *Add*.

Editing a Secondary Domain

To edit a secondary domain:

1. Click the Domain List entry that you wish to edit.

2. Make any desired changes to the information the will appear in the controls.

3. Click *Replace*.

Removing a Secondary Domain

To remove a secondary domain:

1. Click the entry that you wish to remove from the Domain List.

2. Click *Remove*.

Remote Configuration

Setting up Remote Configuration. Using WebAdmin.

W ebAdmin is an application designed to provide support for web-based remote administration of Alt-N Technologies software. WebAdmin is included with MDaemon and supports remote administration of both MDaemon® and its integrated web-based email component, WorldClient®.

WebAdmin is a server application designed to run in the background on the same computer as the Alt-N Technologies software to be administered. To access WebAdmin you will simply open your browser and point it to the URL and port number on which WebAdmin resides (e.g. www.mywebadmin.com:1000). After providing your login credentials, you will be given access to various controls and settings within MDaemon and other Alt-N products. The type and number of settings to which you will have access is dependent upon the level of access given. There are three levels of access that can be provided to WebAdmin users: Global, Domain, and User.

- Global Administrators—Global administrators are users who have global access permission enabled under their account settings within MDaemon. Global access means that the user can see and configure every setting and control that is accessible via WebAdmin. Global administrators can add, edit, and delete users, domains, and mailing lists. They can edit product INI files, designate other users as Domain administrators, manage passwords, and do many other things; they have complete administrative control.

- Domain Administrators—Similar to Global administrators, Domain administrators have complete control over all users and product settings accessible via WebAdmin. Their administrative control, however, is limited to the domain or domains to which they have been given access. Domain administrators and the domains over which they have control are designated from within WebAdmin by a Global administrator, or by another Domain administrator with access to those domains.

- Users—The lowest possible level of WebAdmin access is User access. MDaemon users, for example, can sign in to WebAdmin and view their individual account settings as well as edit their MultiPOP entries, IMAP filters, auto responders, and so on. The type and number of settings that can be edited depends on the permissions given in each user's individual account settings.

Everyone who has permission to access both WorldClient and WebAdmin can access WebAdmin from within WorldClient. When the "Advanced Settings" option under "Options" is chosen from within WorldClient, it will open WebAdmin in separate browser window.

For more information on WebAdmin, see:

Web Access Defaults—page 330
Account Editor→Web—page 348

WebAdmin (web configuration)

Web Server
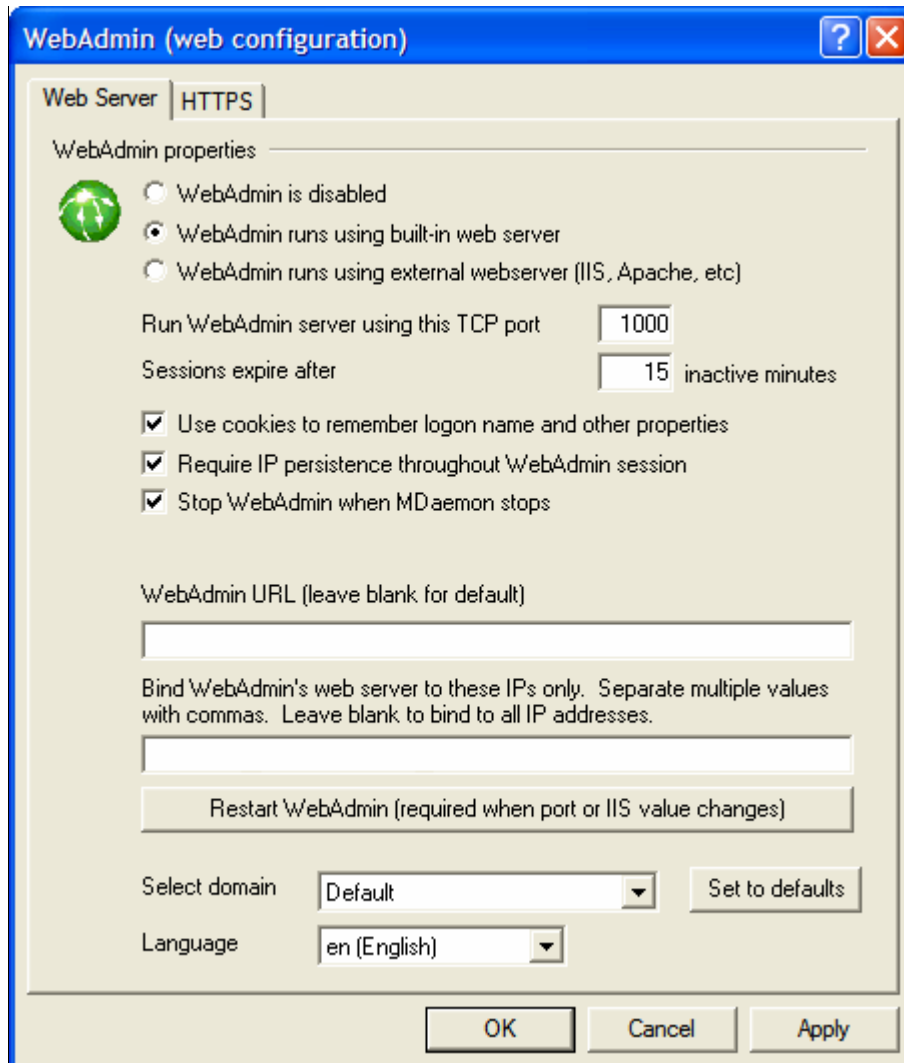
Properties

WebAdmin is disabled
Choose this option to disable WebAdmin. You can also toggle WebAdmin active/inactive from the File menu or Statistics and Shortcuts frame of the main MDaemon GUI.

WebAdmin runs using built-in web server
Choose this option to run WebAdmin using MDaemon's built-in web server. You can also toggle WebAdmin active/inactive from the File menu or Statistics and Shortcuts frame of the main MDaemon GUI.

WebAdmin runs using external web server (IIS, Apache, etc)
Choose this option when you wish to run WebAdmin under Internet Information Server (IIS) or some other web server instead of MDaemon's built-in server. This prevents certain GUI elements from being accessed which might otherwise cause conflicts with your alternate server.

For more information, see *Running WebAdmin under IIS*—page 75.

Run WebAdmin using this TCP port
This is the port on which WebAdmin will listen for connections from your web browser.

Sessions expire after xx inactive minutes
When you are logged in to WebAdmin, this is the amount of time that your session is allowed to be inactive before WebAdmin will close it.

Use cookies to remember logon name and other properties
Click this option if you want WebAdmin to store your logon name and certain other properties in a cookie on your local computer. Using this feature gives you a more customized login experience but requires that they have support for cookies enabled in your browser.

Require IP persistence throughout WebAdmin session
As an added security measure you can click this checkbox to cause WebAdmin to restrict each session to the IP address from which you connected when the session began. Thus, no one can "steal" the session since IP persistence is required. This configuration is more secure but could cause problems if you are using a proxy server or dial-up account that dynamically assigns and changes IP addresses.

Stop WebAdmin when MDaemon stops
Click this option if you want WebAdmin to be shut down whenever MDaemon is shut down. Otherwise, WebAdmin will continue to run in the background.

WebAdmin URL
This is the URL that WorldClient will use internally when users click the Advanced Settings link to edit their account settings via WebAdmin. If you are running WebAdmin with the built-in web server, then leave this field blank. If you are using an alternate web server such as IIS, and you have configured WebAdmin to run at an alternate URL or IP address, then specify that URL here.

Bind WebAdmin's web server to these IPs only
If you wish to restrict the WebAdmin server to only certain IP addresses, specify those addresses here separated by commas. If you leave this field blank then WebAdmin will monitor all IP Addresses that you have designated for your Primary and Secondary Domains.

Restart WebAdmin (required when port or IIS value changes)
Click this button if you wish to restart the WebAdmin server. Note: when changing the port setting you must restart WebAdmin in order for the new setting to be recognized.

Select domain
Use this drop-down list box to select the domain to which you wish to assign a default language setting.

Language
Choose the language from this list that you wish to be the default language setting for the domain you have selected above. This language will be used whenever new users or users who haven't changed their language setting sign in to WorldClient.

Set to defaults
Click this button to restore your domains to the default language setting.

Using WebAdmin with HTTPS

You can configure HTTPS support for WebAdmin on the HTTPS tab of the WebAdmin dialog. The HTTPS tab is a mirror of the WebAdmin tab of the SSL & Certificates dialog (page 170).

For more information, see SSL & Certificates (page 164) and Creating and Using SSL Certificates (page 172).

Running WebAdmin under IIS

WebAdmin is equipped with a built-in web server and therefore doesn't require Internet Information Server (IIS) to operate. However, it does support IIS, and can therefore function as an ISAPI DLL.

Note

When running WebAdmin under IIS you will no longer be able to start and stop it from MDaemon's interface. You must use the tools provided with IIS to do so.

To configure WebAdmin 3.x to operate under IIS 5:

1. If WebAdmin is not yet installed, then during installation select the option, "**I wish to use another web server for WebAdmin**". If WebAdmin is already installed, then stop it from MDaemon's interface or using the "**Stop WebAdmin**" shortcut in the WebAdmin group under the Windows Start menu.

2. Open the IIS management program (**Start→Settings→Control Panel→Administrative Tools→Internet Services Manager**).

3. Right-click **Default Website** and then select **New→Virtual Directory**.

4. Follow the Wizard as it takes you through the steps of creating a Virtual Directory. The following are suggested names and locations for data to be typed into the Wizard, but will vary depending on your installation of MDaemon and the location of WebAdmin.

    a. Alias: "WebAdmin". Click **Next**.
    b. Directory: "c:\mdaemon\webadmin\templates". Click **Next**.
    c. Click **Next**.
    d. Click **Finish**.

5. Set the Execute Permissions to **Scripts Only**.

6. Set the Application Protection to **Low (IIS Process)**.

7. Click the **Configuration** button in the Application Settings section of the Virtual Directory tab.

8. On the **Mappings** tab click the **Add**.

9. In the **Executable** field enter "c:\mdaemon\webadmin\templates\WebAdmin.dll". **Note:** This field cannot contain any spaces. If the path contains a space it must be converted to 8.3 format. The dir /x command will show the 8.3 name for a file or directory.

10. In the **Extension** field enter ".wdm" and select the radio button for **All Verbs**.

11. Click the **Script Engine** box.

12. Click **OK**.

13. All other mappings can be removed if you choose, then click the **OK**.

14. On the **Documents** tab add login.wdm as a Default Document and remove all other entries from the list.

15. In MDaemon, go to **Setup→WebAdmin**… and click **Enable WebAdmin server** and **WebAdmin is running under IIS**.

16. In **WebAdmin URL** type "/WebAdmin/login.wdm".

17. Click **OK**.

To configure WebAdmin 3.x to operate under IIS 6:

Create a new application pool for WebAdmin:

1. If WebAdmin is not yet installed, then during installation select the option, "**I wish to use another web server for WebAdmin**". If WebAdmin is already installed, then stop it from MDaemon's interface or using the "**Stop WebAdmin**" shortcut in the WebAdmin group under the Windows Start menu.

2. Open the IIS management program (**Start→Settings→Control Panel→Administrative Tools→Internet Services Manager**).

3. Right-click **Application Pools**.

4. Click **New→Application Pool**.

5. In the Application pool ID field type "Alt-N" and click **OK**.

6. Right-click **Alt-N**

7. Click **Properties**.

8. Click **Performance** tab.

9. Clear "**Shutdown worker processes after being idle for**" and "**Limit the kernel request queue**".

10. Click **Identity** tab.

11. In the dropdown for Predefined, choose **Local System**.

12. Click **OK**.

Create a virtual directory for WebAdmin:

1. Open the IIS management program (**Start→Settings→Control Panel→Administrative Tools→Internet Services Manager**).

2. Right-click your web site and then select **New→Virtual Directory**.

3. Specify and alias for the virtual directory (for example, "WebAdmin).

4. In the Path field, type the path to the WebAdmin Templates directory—for example, "`C:\Program Files\Alt-N Technologies\WebAdmin\Templates`".

5. Leave the **Read** and **Run Scripts** options checked.

6. Finish the wizard and right-click on the Virtual Directory that was created.

7. Select **Properties**.

8. On the **Home Directory** tab change the application pool to **Alt-N**.

9. Click the **Configuration** button.

10. Click **Add** to add an ISAPI extension mapping.

11. In the **Executable** field enter the path to the `WebAdmin.dll` file. For example, "`C:\Program Files\Alt-N Technologies\WebAdmin\Templates\WebAdmin.dll`".

12. In the **Extension** field enter "`.wdm`"

13. Click the boxes for **Script Engine** and **Verify the file exists**.

14. Click **OK**.

15. All other mappings can be removed if you choose, then click the **OK**.

16. Select the **Documents** tab.

17. Ensure that **Enable default content page** is checked.

18. Ensure that only "`login.wdm`" exists in the list.

19. Click the **Ok** and exit the virtual directory properties dialog.

Add .WDM to list of allowed web extensions:

1. Click on the **Web Service Extensions** folder (in the IIS MMC).

2. Click **Add new web service extension**.

3. In the Extension name field enter "WebAdmin".

4. Click **Add** and then browse to the WebAdmin ISAPI extension. For example: C:\Program Files\Alt-N Technologies\WebAdmin\Templates\WebAdmin.dll.

5. Check **Set extension status to allowed**.

6. Click **OK**.

7. In MDaemon, go to **S̲etup→W̲ebAdmin**… and click **Enable WebAdmin server** and **WebAdmin is running under IIS**.

8. In **WebAdmin URL** type "/WebAdmin/login.wdm".

9. Click **OK**.

HTTPS
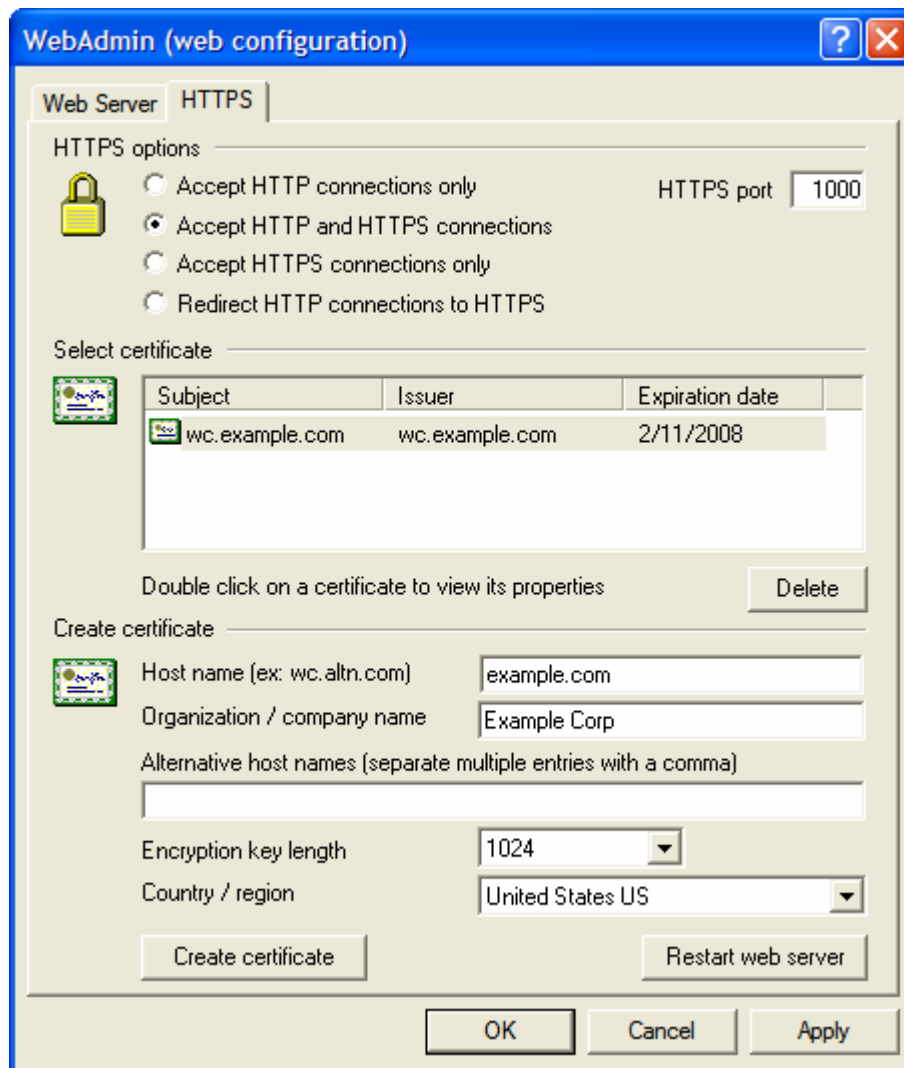
MDaemon's built-in web server supports the Secure Sockets Layer (SSL) protocol. The SSL protocol, developed by Netscape Communications Corporation, is the standard method for securing server/client web communications. It provides server authentication, data encryption, and optional client authentication for TCP/IP connection. Further, because SSL is built into all current major browsers, simply installing a valid digital certificate on your server will activate the connecting client's SSL capabilities. If you choose not to run WebAdmin under IIS or some other web server, this security is built directly into MDaemon's internal web server.

The options for enabling and configuring WebAdmin to use SSL are located on the SSL & Certificates dialog (click Ctrl+L or Security→SSL/TLS/Certificates…→WebAdmin). For your convenience, however, the HTTPS options are also mirrored on this tab of the WebAdmin dialog.

For information on this dialog see page 170.

For information on SSL & Certificates see page 164.

Note

This dialog only applies to WebAdmin when using MDaemon's built-in web server. If you have configured WebAdmin to work with some other web server, these options will not be used—SSL/HTTPS support must be configured within IIS.

Chapter

6

WorldClient Server

Setting up and using the WorldClient Server

Overview

I ncluded in MDaemon is WorldClient. WorldClient is a web-based email solution designed to offer users email client functionality using their favorite web browser. All of their email folders reside on the server so that they have access to everything as if they were at the office. WorldClient can easily hold its own against traditional mail clients while providing the added bonus of its ability to enable users to access their email from anywhere at anytime.

There are many ways in which WorldClient can be used. Use it to keep your mobile staff in touch with their email—remember, WorldClient is not workstation dependent so "mobile" can also mean just traveling across the building. Use WorldClient to offer web-based email services to your customers, and customize the interface to display advertising banners. Use it on a kiosk or in a computer lab to provide email to students or other individuals who may not have a personal computer of their own.

WorldClient also provides many benefits to email administrators. Now you don't have to configure and maintain each individual email client since WorldClient isn't workstation dependent. Customize the graphical images and HTML pages used in WorldClient to suit your corporate needs or the needs of your customer. Further, give your users the ability to maintain their own account settings thus saving you time—you can give as much or as little control to your users as you want.

Finally, there are features that will benefit your customers directly, such as: extensive email functionality wherever you find a browser, client-side interface available in 18 languages, personal and domain address books, manageable mail folders and filters, send/receive file attachments, multiple visual "themes" for interface, and much more.

Calendar & Scheduling System

MDaemon is equipped with a complete collaboration system. From within WorldClient you can easily create appointments, schedule meetings, and work with address books. Recurring appointments are fully supported, and appointments have many fields available to describe them. Further, contacts, calendars, and task data are stored as IMAP folders within each user's root mail directory. Through WorldClient, your users can access these personal folders and control which other users have access to them. All WorldClient themes (especially Lookout) have templates that present contact, calendar, and task folders in a logical and attractive way.

Because the Calendar system is integrated with MDaemon, there is the added benefit of email notifications of appointments, whether scheduled by you or a third-party. Whenever someone other than yourself schedules an appointment for you, you will receive an email message summarizing the

appointment. Each designated appointment attendee will receive an email message detailing the appointment's date, time, location, subject, and list of attendees. Further, any attendees who have calendar entries that conflicted with the appointment's timeslot will receive a message notifying them of the appointment and its conflict with their schedule. The person who scheduled the meeting will receive a summary message listing all of the meeting's details and invited attendees who did or did not have scheduling conflicts.

The Calendar System is also equipped with support for Internet Calendar (iCal) used by Microsoft Outlook and other iCalendar compliant email programs. The Calendar System can detect and process iCalendar information sent to your users and update their calendars accordingly. When a user opens an iCalendar attachment from within WorldClient the information contained in the attachment will be reflected in the user's WorldClient calendar. Also, when users create new meetings or appointments they can list one or more email addresses to which they wish an iCalendar email to be sent. This feature can be set by individual users in their WorldClient Options.

ComAgent

MDaemon is equipped with ComAgent, a secure instant messaging system, address book client, and tray applet that provides quick access to WorldClient's email features. ComAgent can be downloaded by each WorldClient user and then installed on the individual's local computer. It is preconfigured for the specific user when downloaded thus limiting the need to configure it manually.

ComAgent runs in the background and checks your account for new mail by querying the WorldClient server directly. This eliminates the need to open a browser or keep one open to check your email— ComAgent checks for new mail and notifies you with a sound or visual alert when new mail arrives. ComAgent also displays a list of your mail folders and the number and type of messages that each one contains (new, unread, and read). Furthermore, it can be used to launch your browser and move it immediately to a specific mail folder, the first unread message, the compose page, or your calendar page.

Additionally, ComAgent can be used to provide two-way address book synchronization between MDaemon and the Outlook/Outlook Express address book on each user's local computer. Thus, if you use both Outlook or Outlook Express and WorldClient at different times, the address books will match in both products.

Finally, ComAgent is also equipped with a complete instant messaging system. You can view your list of ComAgent "buddies" and each one's online status (online, away, offline), start a conversation with any one or group of them, set your own online status, and view past conversations in a history folder. For specific instructions on how to use ComAgent, see its online help system.

There are several options related to ComAgent and instant messaging (IM) located on the Domain Options tab—page 98.

ComAgent's Instant Messaging System

ComAgent is equipped with a simple but effective instant messaging (IM) system. With this system you can communicate instantly with any other account on your MDaemon server. You can choose a list of "buddies" from a list of all MDaemon users and then see which ones are online and ready to receive an IM. You will also be able to start a group conversation involving several buddies at once. All of the IM features are available via the shortcut (right-click) menu within ComAgent.

ComAgent's IM system is also scriptable, which allows custom programs to interface with it. By creating semaphore (SEM) files in the \MDaemon\WorldClient\ directory, an external application can send IM messages to ComAgent users immediately. The following is the format of the SEM file:

```
To: frank@example.com          Email address of ComAgent user.
From: rip@example.com          Email address of instant message's sender.
<blank line>
Text of instant message.       This is the text sent as an instant message.
```

The SEM file name must start with the characters "IM-" and be followed by a unique numerical value. For example, "IM-0001.SEM". Applications should also create a corresponding file called "IM-0001.LCK" to lock the SEM file. Once the SEM file is completed remove the LCK file and the SEM file will be processed. MDaemon uses this scripting method to send Instant Message reminders to you about upcoming appointments and meetings.

An action was added to the Content Filter system that uses this scripting method to send instant messages. Further, rules utilizing this action can use the Content Filter macros in the IM. For example, you can create an instant message rule that looks like this:

```
You have received an email from $SENDER$.
Subject: $SUBJECT$
```

This rule would be an effective way to get new mail alerts through ComAgent.

Because many businesses and administrators have reservations about using an Instant Messaging system in their company due to the inherent lack of centralized accountability and the inability to monitor IM traffic that is in traditional and well known IM clients, we have designed ComAgent's instant messaging system to minimize those deficiencies. First of all, our system is not peer-to-peer—individual ComAgent clients do not connect directly to each other. Further, because every IM passes through the server, each message is logged in a central location accessible to the MDaemon/WorldClient administrator. Thus a record of all conversations can be maintained for the security of both your company and your employees or users. IM activity is logged in a file called InstantMessaging.log located in the MDaemon\LOGS\ directory. The assurance of accountability is also the primary reason we do not support other IM clients such as ICQ, AOL, and MSN. We may, however, add that capability as an optional feature in some future version of MDaemon. Finally, our IM system is secure in that each transaction is strongly encrypted from start to finish so that plain text is never transmitted.

Instant Messaging is provided on a per-domain basis. Controls for activating instant messaging and designating whether or not IM traffic should be logged are located on the Options tab of the WorldClient dialog (**Setup→WorldClient**…**→Options**).

Automatic Address Book Synchronization

By using ComAgent in conjunction with MDaemon's integrated address book system, you can provide two-way synchronization between MDaemon and the Outlook/Outlook Express address book on each user's local computer. Thus, if you use both Outlook or Outlook Express and WorldClient at different times, the address books will match in both products.

MDaemon maintains an accurate and continuously up to date database of users each time an MDaemon account is added, removed, or modified. ComAgent has the ability to poll MDaemon at regular intervals and acquire all the contact information being stored there. It then publishes this information to the local computer's Windows Address Book or contact store. This has the effect of instantaneously updating any local software package which uses the local address book system (for example, Outlook/Outlook Express).

Anyone using ComAgent with the proper access credentials can also add Public contacts by using the Windows Address Book directly, or through Outlook/Outlook Express. The new contact will be picked up by ComAgent and uploaded to MDaemon's address book. From there all other users on your network will have access to the new contact the next time their ComAgent poles MDaemon.

On the Synchronization tab of ComAgent's properties dialog you can specify the folders within your Windows Address Book that you wish to be synchronized. You can designate separate folders for both Public and Private contacts.

Note

Windows Address Book (WAB) synchronization requires IE 5 or greater with identity support enabled.

For information on other Address Book options within MDaemon and WorldClient see:

LDAP Options—Page 114

Miscellaneous Options→*WAB*—Page 305

Using WorldClient

Starting WorldClient

There are three ways to start/stop the WorldClient server:

1. On the Stats tab on the left-hand side of the MDaemon GUI, right-click on the WorldClient entry and choose the *Toggle Active/Inactive* selection on the shortcut menu.

2. Click File→Enable WorldClient server on the main interface.

3. Click Setup→WorldClient (web mail)... on the main interface, and then click *WorldClient runs using built-in web server* on the Web Server tab.

Logging in to WorldClient

1. Point your web-browser to `http://main-or-second-domain.com:WCPortNumber`. This port is designated on the Web Server tab of the WorldClient dialog (page 86). If you configure WorldClient to listen to the default web port (port 80) then you do not need to denote the port number in the login URL (e.g. www.mydomain.com instead of www.mydomain.com:3000).

2. Type your MDaemon account's user name and password.

3. Click Sign in.

Changing WorldClient's Port Setting

1. Click <u>S</u>etup→<u>W</u>orldClient (web mail)... on the menu bar.

2. Type the desired port number in the control labeled <u>R</u>un WorldClient Server using this TCP Port.

3. Click OK.

WorldClient Documentation

Client-side Help

WorldClient is equipped with extensive client-side help for your users. See the online help system within WorldClient for information on the client features and functions.

WorldClient Web Mail

Use the **Setup→WorldClient...** menu selection to enable your WorldClient server and configure various WorldClient related settings. You can designate the port on which it will operate as well as the time that you wish to allow WorldClient sessions to remain inactive before they expire. You can also control many global or domain specific settings such as: the default language and theme to use, whether users can create accounts, the default pagination of the message listing, whether or not ComAgent support is enabled, whether or not Instant Messaging is allowed and logged, many Calendar and Scheduling features, Public and Private address book settings, RelayFax integration, and much more.

Web Server
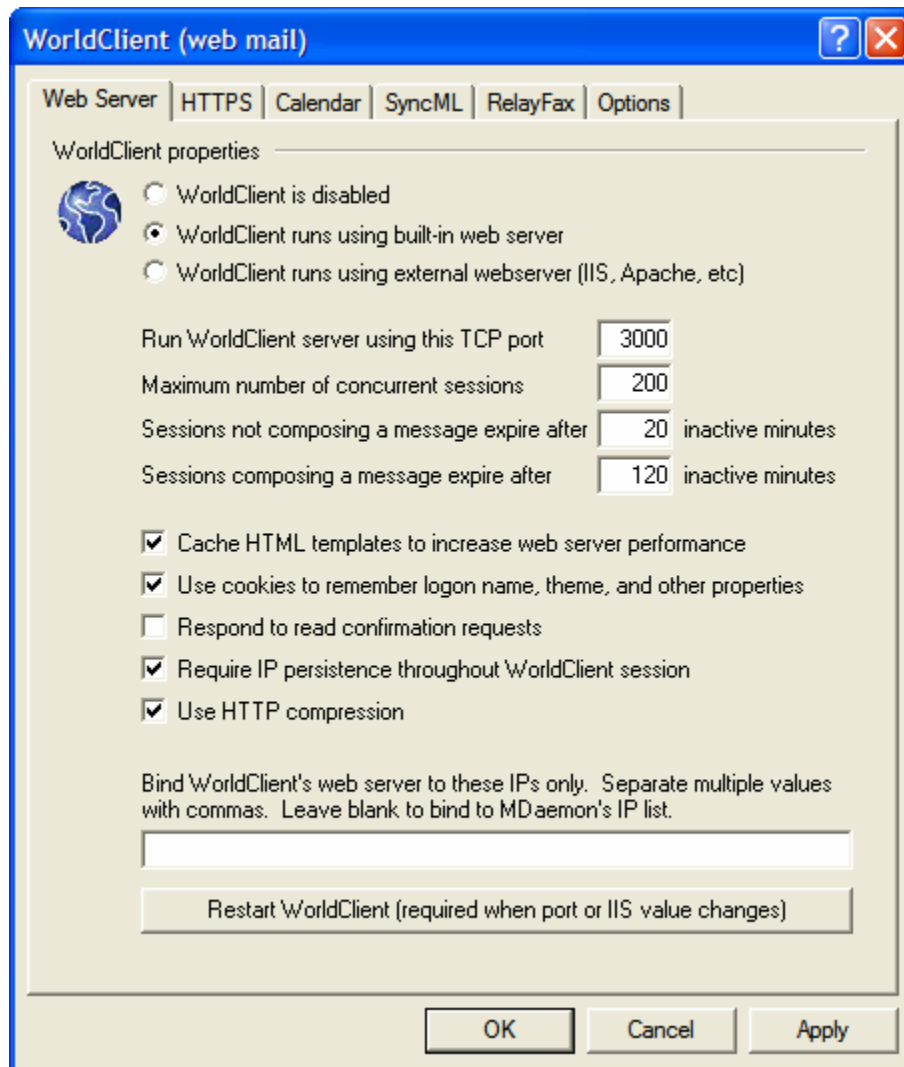
This tab contains various global, server level settings that govern WorldClient's configuration and behavior regardless of the users or domains to which they belong.

WorldClient Properties

WorldClient is disabled
Choose this option to disable WorldClient. You can also toggle WorldClient active/inactive from the File menu or Statistics and Shortcuts frame of the main MDaemon GUI.

WorldClient runs using built-in web server
Choose this option to run WorldClient using MDaemon's built-in web server. You can also toggle WorldClient active/inactive from the File menu or Statistics and Shortcuts frame of the main MDaemon GUI.

WorldClient runs using external web server (IIS, Apache, etc)
Choose this option when you wish to run WorldClient under Internet Information Server (IIS) or some other web server instead of MDaemon's built-in server. This prevents certain GUI elements from being accessed which might otherwise cause conflicts with your alternate server.

For more information, see *Running WorldClient under IIS*—page 88.

Run WorldClient server using this TCP port
This is the port on which WorldClient will listen for connections from your users' web browsers.

Maximum number of concurrent sessions
This is the maximum number of sessions that may be connected to WorldClient at the same time.

Sessions not composing a message expire after xx inactive minutes
When a user is logged in to WorldClient but is not composing a message, this is the amount of time that their session will remain inactive before WorldClient will close it.

Sessions composing a message expire after xx inactive minutes
This timer governs how long a user's session will be kept open while they are composing a message and the session remains inactive. It is a good idea to set this timer higher than the *Sessions not composing a message…* timer since inactivity time is typically greater while a user is composing a message. This is because composing a message requires no communication with the server until the message is sent.

Cache HTML templates to increase web server performance
Click this box to cause WorldClient to cache templates in memory rather than read them each time they need to be accessed. This can dramatically increase server performance but WorldClient will have to be restarted if you ever make a change to one of the template files.

Use cookies to remember logon name, theme, and other properties
Click this option if you want WorldClient to store each user's logon name, theme, and certain other properties in a cookie on his or her local computer. Using this feature gives your users a more "customized" login experience but requires that they have support for cookies enabled in their browsers.

Respond to read confirmation requests
Click this option if you want WorldClient to respond to incoming messages that contain a request for read confirmation. When the WorldClient user opens the message MDaemon will send a notification to the sender indicating that it was displayed by the recipient. The WorldClient user who received the message will not have seen any indication that the read confirmation was requested or responded to.

Clear the check box if you want WorldClient to ignore read confirmation requests regardless of whether the message is read or not.

Require IP persistence throughout WorldClient session
As an added security measure you can click this checkbox to cause WorldClient to restrict each user session to the IP address from which the user connected when the session began. Thus, no one can "steal" the user's session since IP persistence is required. This configuration is more secure but could cause problems for users who may be using a proxy server or dial-up account that dynamically assigns and changes IP addresses.

Use HTTP Compression
Click this check box if you want to use HTTP compression in your WorldClient sessions.

Bind WorldClient's web server to these IPs only
If you wish to restrict the WorldClient server to only certain IP addresses then specify those addresses here separated by commas. If you leave this field blank then WorldClient will monitor all IP Addresses that you have designated for your Primary and Secondary Domains.

Restart WorldClient (required when port or IIS value changes)
Click this button if you wish to restart the WorldClient server. Note: when changing WorldClient's port setting you must restart WorldClient in order for the new setting to be recognized.

Running WorldClient under IIS
WorldClient is equipped with a built-in web server and therefore doesn't require Internet Information Server (IIS) to operate. However, WorldClient does support IIS, and can therefore function as a ISAPI DLL. To configure WorldClient to operate under IIS:

1. Stop WorldClient. WorldClient cannot run using the included web server and in IIS at the same time.

2. Create a web site or virtual directory in IIS for the `\WorldClient\HTML` directory

3. Enable "Scripts and executables" permission and set `WorldClient.dll` as the default document.

4. Using Windows Explorer, give Full Control access to your MDaemon directory to the `IWAM_ComputerName` account.

5. If you have any email accounts that use NT domain authentication, edit your Local Security Policy to give `IWAM_ComputerName` the "Act as part of the operating system" user right.

6. If you are also running WebAdmin under IIS, edit WorldClient's `Domains.ini` (located in `\MDaemon\WorldClient\`) and set the `WebAdminURL` key in the `[Default:Settings]` section to the URL of WebAdmin.

7. In MDaemon, go to **Setup→WorldClient…→Web Server**, and then click **WorldClient is running under IIS**.

> **Note**
>
> When running WorldClient under IIS you will no longer be able to start and stop it from MDaemon's interface. You must use the tools provided with IIS to do so.

HTTPS
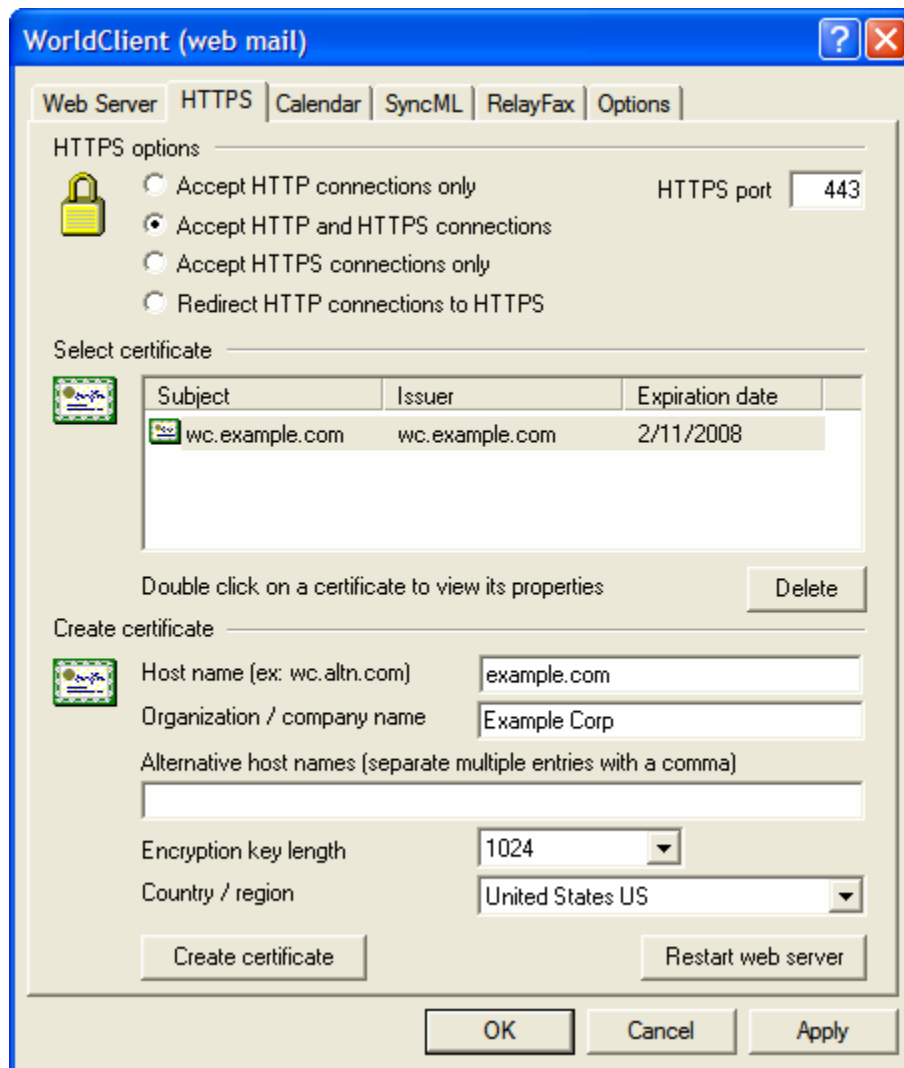
MDaemon's built-in web server supports the Secure Sockets Layer (SSL) protocol. The SSL protocol, developed by Netscape Communications Corporation, is the standard method for securing server/client web communications. It provides server authentication, data encryption, and optional client authentication for TCP/IP connection. Further, because SSL is built into all current major browsers, simply installing a valid digital certificate on your server will activate the connecting client's SSL capabilities. If you are unable or choose not to run WorldClient under IIS you now have this security built directly into WorldClient.

The options for enabling and configuring WorldClient to use SSL/HTTPS are located on the SSL & Certificates dialog (click **Ctrl+L** or Security→SS<u>L</u>/TLS/Certificates...→WorldClient). For your convenience, however, these SSL/HTTPS options are also mirrored on this tab of the WorldClient dialog (click **Ctrl+W** and_WorldClient or <u>S</u>etup→<u>W</u>orldClient...→HTTPS).

For information on this dialog see page 167.

For information on SSL & Certificates see page 164.

Note

This dialog only applies to WorldClient when using MDaemon's built-in web server. If you have configured WorldClient to work with some other web server, these options will not be used—SSL/HTTPS support must be configured within IIS.

Calendar
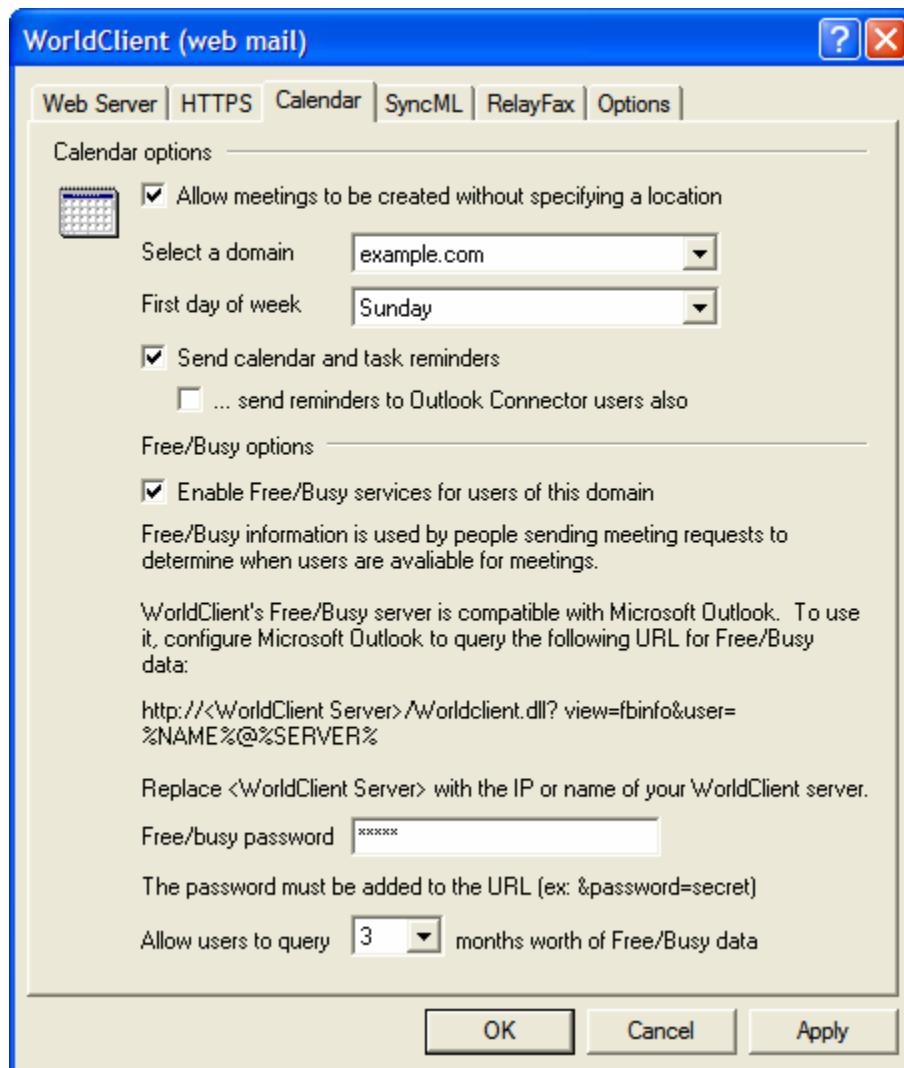
Calendar Options

Allow meetings to be created without specifying a location
Click this option if you do not want to require that users specify a meeting location whenever a meeting event is created. Clear the check box if you want to force all meetings to have a location specified when they are scheduled. This is a global setting; it cannot be set per domain.

Select a domain
Use this drop-down list to choose the domain whose Calendar settings you wish to edit. If you make changes to any of the settings on this tab then you must *Apply* them before switching to a different *Select domain* setting. If you make changes and then attempt to select a different domain without first applying them, a box will appear asking you to choose whether or not you wish to save the changes before switching to the new domain. Click *Yes* to save the changes or *No* to discard them.

First day of week
Choose a day from the drop-down list. The selected day will appear in the domain's calendars as the first day of the week.

**Send calendar and task reminders**
Click this checkbox if you wish to allow WorldClient's calendar and task reminders to be sent to your users via email and ComAgent.

**…send reminders to Outlook Connector users also**
If you have enabled the "_Send calendar and task reminders_" option above, click this option if you also wish to enable reminders for Outlook Connector users.

Free/Busy Options
MDaemon includes a Free/Busy server, which makes it possible for a meeting planner to view the availability of potential meeting attendees. To access this feature, click Scheduling within WorldClient when creating a new appointment. This opens a Scheduling window containing the list of attendees and a color-coded calendar grid with a row for each one. Each attendee's row is color-coded to indicate the times at which he or she might be available for a meeting. There are colors for Busy, Tentative, Out of Office, and No information. There is also an Auto-Pick Next button that makes it possible for you to query the server for the next timeslot at which all attendees may be available. When you have finished creating the appointment it will send an invitation to all of the attendees, who can then accept or decline.

WorldClient's Free/Busy server is also compatible with Microsoft Outlook. To use it, configure Outlook to query the URL listed below for Free/Busy data. In Outlook 2002, for example, the Free/Busy options are located under Tools→Options→Calendar Options…→Free/Busy Options…

Free/Busy server URL for Outlook:

```
http://<WorldClient Server>/Worldclient.dll?view=fbinfo&user=%NAME%@%SERVER%
```

Replace "`<WorldClient Server>`" with the IP address or domain name of your WorldClient server (including the port number if you aren't using the default web port). For example:

```
http://example.com:3000/Worldclient.dll?view=fbinfo&user=%NAME%@%SERVER%
```

For more on how to use WorldClient's Free/Busy features to schedule your appointments, see the online Help system within WorldClient.

**Enable Free/Busy services for users of this domain**
Click this option if you wish to provide access to the Free/Busy server features to users of the domain selected above.

**Free/Busy password**
If you wish to require a password when this domain's users attempt to access the Free/Busy server features via Outlook, then include the password here. This password must be appended to the URL listed above (in the form: "`&password=FBServerPass`") when the users configure their Free/Busy settings within Outlook. For example:

```
http://example.com:3000/Worldclient.dll?view=fbinfo&user=%NAME%@%SERVER%&passw
ord=MyFBServerPassword
```

**Allow users to query X months worth of Free/Busy data**
Use this option to designate how many months worth of Free/Busy data your users may query.

SyncML
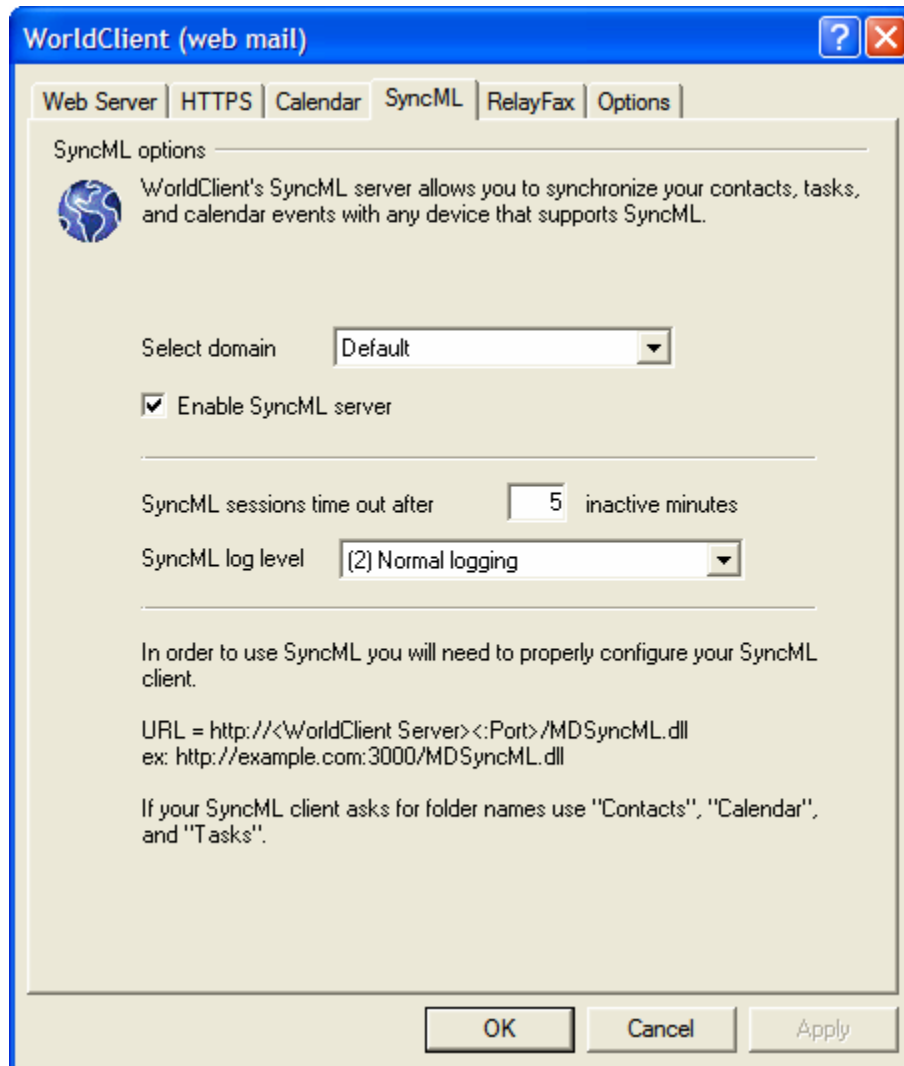
WorldClient includes a SyncML v1.1 compliant server to synchronize your WorldClient calendar, contact, and task folders with SyncML capable devices.

For more information on SyncML and the SyncML specification, visit the Open Mobile Alliance (OMA) at:

`http://www.openmobilealliance.org/tech/affiliates/syncml/syncmlindex.html`

For information about your particular device's capabilities and its support for SyncML, consult your device's manufacturer or its included documentation.

> **Note**
>
> WorldClient's SyncML server does not support open source Sync4j clients. Those clients are engineered to work only with the Sync4j server—they do not use the industry standard vCal/vCard data encapsulation forms.

SyncML Options

Select domain
Use this drop-down list box to choose the domain to which you wish the *Enable SyncML server* setting to be applied. After selecting the domain, enable or disable that option and then click **Apply** or **OK** to save that setting. Choose "Default" from the drop-down list to designate the default setting. The default setting will be applied to all new domains and all existing domain for which you have not specifically defined a SyncML setting.

Enable SyncML server
Enable or disable this option to designate whether or not the SyncML server will be accessible by the domain selected in the Select domain option above. After designating a setting for a domain, click **Apply** or **OK** to save that setting.

SyncML sessions time out after XX inactive minutes
This is the length of time a SyncML session will be permitted to remain inactive before it will time out and be closed. This is a global setting—it is applied to all SyncML sessions regardless of the domain.

SyncML log level
Use this drop-down list to designate the degree to which SyncML activities will be logged. There are six possible levels of logging: 1-Debug logging, 2-Normal logging, 3-Warnings and errors only, 4-Errors only, 5-Critical errors only, and 6-No logging. This is a global setting—it cannot be applied to specific domains.

Configuring Your SyncML Clients
In order to access WorldClient's SyncML server, your SyncML clients must be configured to connect to:

```
http://<WorldClient Server><:port>/MDSyncML.dll
```

Examples:

```
http://mail.example.com:3000/MDSyncML.dll
```

```
http://www.example.com/MDSyncML.dll
```

If your SyncML client asks for folder names then use `Contacts`, `Calendar`, and `Tasks`. Those names always expand to the user's default WorldClient folders of the corresponding type.

The SyncML server supports any of the following formats for the folder paths:

```
contacts
```
```
/contacts
```
```
./contacts
```
```
contacts/phone
```
 (assuming a phone sub-folder exists)
```
contacts.imap\phone.imap
```

Note
Before attempting to synchronize using SyncML, a user must log in to WorldClient one time.

RelayFax

Alt-N Technologies' RelayFax Server is an email to fax and fax to email gateway that can be integrated seamlessly with WorldClient in order to provide fax services to your users. When this functionality is enabled, WorldClient users will be given access to various features that will enable them to compose and send faxes via the WorldClient client pages. For more information about RelayFax, visit the RelayFax web site at www.relayfax.com.
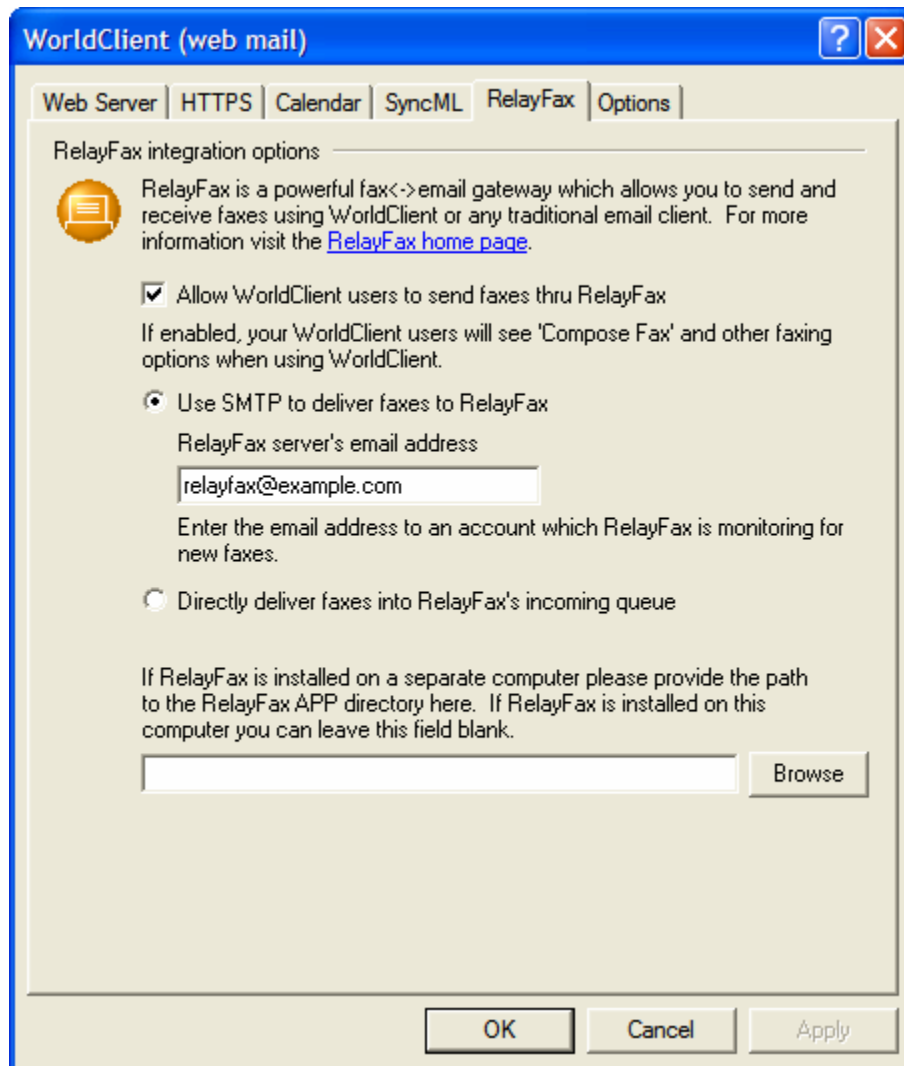
RelayFax Integration Options

Allow WorldClient users to send faxes thru RelayFax
Click this option to integrate RelayFax with WorldClient. When active it will cause a "Compose Fax" control and other fax related features to appear on the WorldClient pages.

Use SMTP to deliver faxes to RelayFax
RelayFax monitors a specific mailbox for incoming messages that are to be faxed. Click this option and MDaemon will use the normal SMTP email delivery process to send these messages to that mailbox's address. This option is useful when RelayFax is monitoring a mailbox located somewhere other than your LAN. If RelayFax resides on your LAN you may choose to have MDaemon deliver the messages directly

to RelayFax's message queue and thus bypass the SMTP delivery process altogether. For more information on this method, see *Directly deliver faxes into RelayFax's incoming queue* below.

RelayFax server's email address

Specify the email address to which you want messages intended for faxing to be delivered. This value must match the address that you have configured RelayFax to monitor for these messages.

Directly deliver faxes into RelayFax's incoming queue

If RelayFax resides on your LAN you may choose this method rather than SMTP for distributing messages to it for faxing. When MDaemon receives a message intended for RelayFax it will place it directly into RelayFax's incoming queue rather than deliver it using SMTP. If RelayFax resides on the same machine on which MDaemon is running you may leave the file path field blank. Otherwise, you must specify the network path to RelayFax's `\app\` directory.

Options
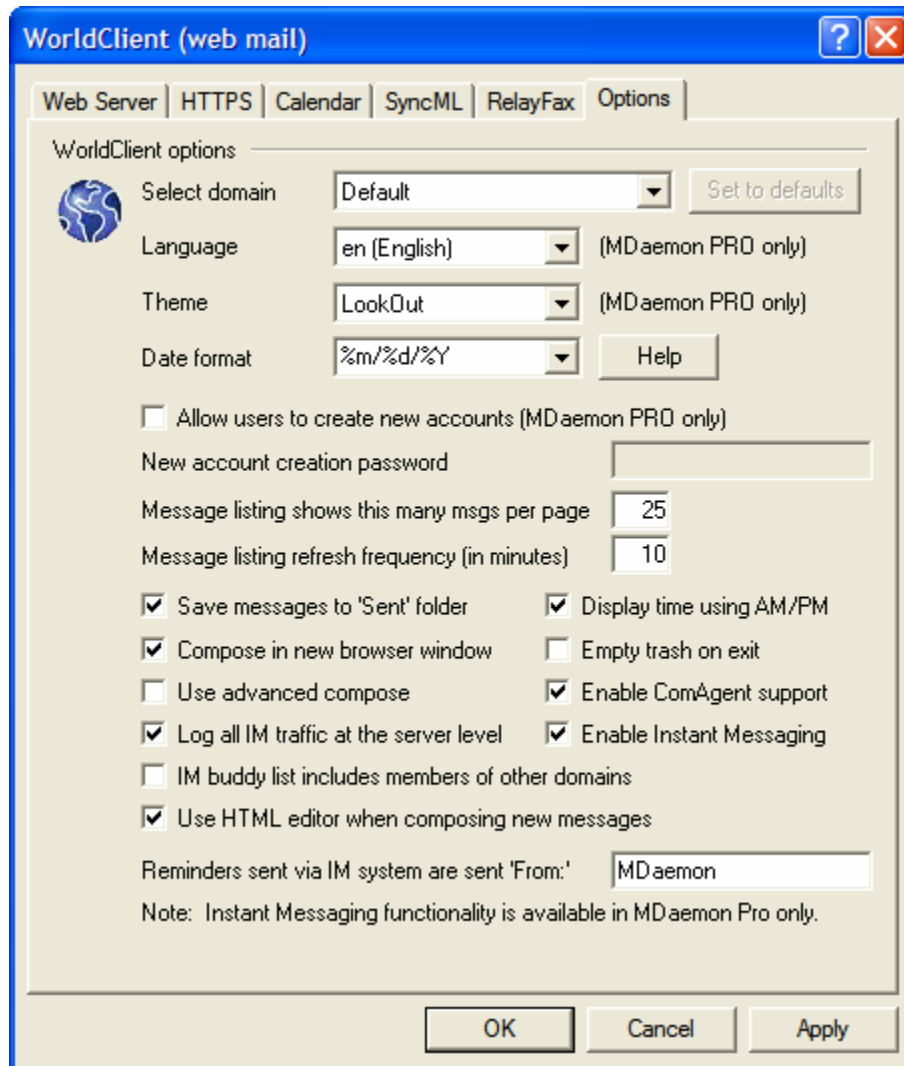
The settings on this tab are domain specific. Most of the features and controls deal with client level behavior rather than the overall behavior and configuration of the WorldClient server.

WorldClient Options

Select domain

Use this drop-down list to choose the domain whose settings you wish to edit. Leave it set to *Default* if you wish to edit the default settings. The default settings will be used for all domains whose settings you haven't specifically changed. If you make changes to any of the settings on this tab then you must *Apply* them before switching to a different *Select domain* setting. If you make changes and then attempt to select a different domain without first applying them, a box will appear asking you to choose whether or not you wish to save the changes before switching to the new domain. Click *Yes* to save the changes or *No* to discard them.

Set to defaults

This option resets a domain to the *Default* settings. Use the *Select domain* control to select a domain and then click *Set to defaults* to restore it.

Language (MDaemon PRO only)
Use the drop-down list box to choose the default language in which the WorldClient interface will appear when your users first sign in to the selected domain. Users can change their personal language setting through an option in Options→Personalize within WorldClient.

Theme (MDaemon PRO only)
Use this drop-down list box to designate the default WorldClient theme to use for the client interface when the selected domain's users first sign in. The users can personalize the theme setting from the Options→Personalize page within the client.

Date format
Use this text box to designate how dates will be formatted for the selected domain. Click the Help button to display a list of macro codes that can be used in this text box. You can use the following macros in this control:

> **%A** — Full weekday name
>
> **%B** — Full month name
>
> **%d** — Day of month (displays as "01-31")
>
> **%m** — Month (displays as "01-12")
>
> **%y** — 2-digit year
>
> **%Y** — 4-digit year

For example, "%m/%d/%Y" might be displayed in WorldClient as "12/25/2002".

Note

This setting is per domain. Individual users cannot modify the date format used for their accounts.

Help
Click this button to display the list of macro codes that can be used in the *Date format* above.

Allow users to create new accounts (MDaemon PRO only)
Click this checkbox if you want a "Create Account" button to appear on WorldClient's sign-in screen when a user connects to the selected domain. This will enable users to create their own MDaemon accounts accessible via WorldClient.

TIP!

If you choose to allow users to create their own email accounts then you should carefully review the New Account Defaults settings (page 328). Use New Account Defaults to designate the degree of control that you will allow users to have over their own accounts.

New Account creation password
Type a password here if you want to restrict new account creation from the sign-in screen to only those users who know the password. Users will have to type the new account creation password into the

Password box on the sign-in screen before the "Create Account" button will allow them to proceed. If *Create Account* is clicked without specifying the proper password, a message will be displayed stating that the password is required.

When the user is taken to the Account Creation screen they must specify their account name (mailbox name), password, full name, and the language in which they want the interface to appear.

Message listing shows this many msgs per page
This is the number of messages that will be listed on each page of the Message Listing for each of your mail folders. If a folder contains more than this number of messages then there will be controls above and below the listing that will allow you to move to the other pages. Individual users can modify this setting from the Options→Personalize page within WorldClient.

Message listing refresh frequency (in minutes)
This is the number of minutes that WorldClient will wait before automatically refreshing the Message Listing. Individual users can modify this setting from the Options→Personalize page within WorldClient.

Save messages to 'Sent' folder
Click this option if you want a copy of each message that you send to be saved in your mailbox's *Sent* folder. Individual users can modify this setting from the Options→Compose page within WorldClient.

Display time using AM/PM
Click this option if you want a 12-hour clock with AM/PM to be used when times are displayed for this domain within WorldClient. Clear the check box if you want to use a 24-hour clock for the domain. Individual users can modify this setting from the Options→Calendar page within WorldClient.

Compose in new browser window
Click this option if you want a separate browser window to open for composing messages instead of simply switching the main window to the compose screen. Clear the box if you do not want separate windows to open. Individual users can modify this setting from the Options→Compose page within WorldClient.

Empty trash on exit
This option causes the user's trash to be emptied when he or she signs out from WorldClient. Individual users can modify this setting from the Options→Personalize page within WorldClient.

Use advanced compose
Click this option to cause the Advanced Compose rather than the normal Compose screen to be opened by default for the domain's users. Individual users can modify this setting from the Options→Compose page within WorldClient.

Enable ComAgent support
This option makes the ComAgent messaging utility available to the selected domain's users. They can download it from the Options→ComAgent page within WorldClient. The downloaded installation file will be automatically customized for each user's account to make installation and setup easier.

Enable Instant Messaging (MDaemon PRO only)
Click this option if you want to activate ComAgent's instant messaging (IM) system for the selected domain's users. Clear the check box if you want the instant messaging controls to be unavailable.

Log all IM traffic at the server level (MDaemon PRO only)

Click this check box if you want all of the selected domain's instant messaging traffic to be included in the `InstantMessaging.log` file (located in the `MDaemon/LOGS/` folder).

IM buddy list includes members of other domains

Click this option if you want all of your MDaemon domains' users to be available for adding to the selected domain's buddy lists. Clear this checkbox if you want only users of the same domain to be available for adding to buddy lists. For example, if your MDaemon is hosting mail for example.com and mycompany.com then activating this control for your example.com users will enable them to add buddies to their lists from both domains. Clearing it would mean that they could only add other example.com users.

Use HTML editor when composing new messages

Click this check box if you want to allow your users to compose messages in a rich text (HTML) format.

Reminders sent via IM system are sent 'From:'

When an Appointment or Meeting is scheduled on a user's WorldClient calendar, the event can be set to send a reminder to the user at a specified time. If the IM system is active for the user's domain then the reminder will be sent in an instant message if he or she is using ComAgent. Use this text box to specify the name that you wish the message to appear to be 'From:'

Outlook Connector for MDaemon

MDaemon PRO supports **Outlook Connector for MDaemon**, a separately licensed product available from Alt-N Technologies. Outlook Connector makes it possible for you to share your Microsoft Outlook calendars, contacts, tasks, and more with other users—something which was ordinarily only possible when Outlook was coupled with Microsoft Exchange Server. Outlook Connector for MDaemon can effectively eliminate your dependency on Exchange.

When you have installed Outlook Connector for MDaemon, the Outlook Connector dialog will be available from Setup→Outlook Connector... (or Ctrl+C). This dialog is used for activating and configuring Outlook Connector and for authorizing specific accounts to use it.

For more information on Outlook Connector for MDaemon, visit www.altn.com.

Outlook Connector Users
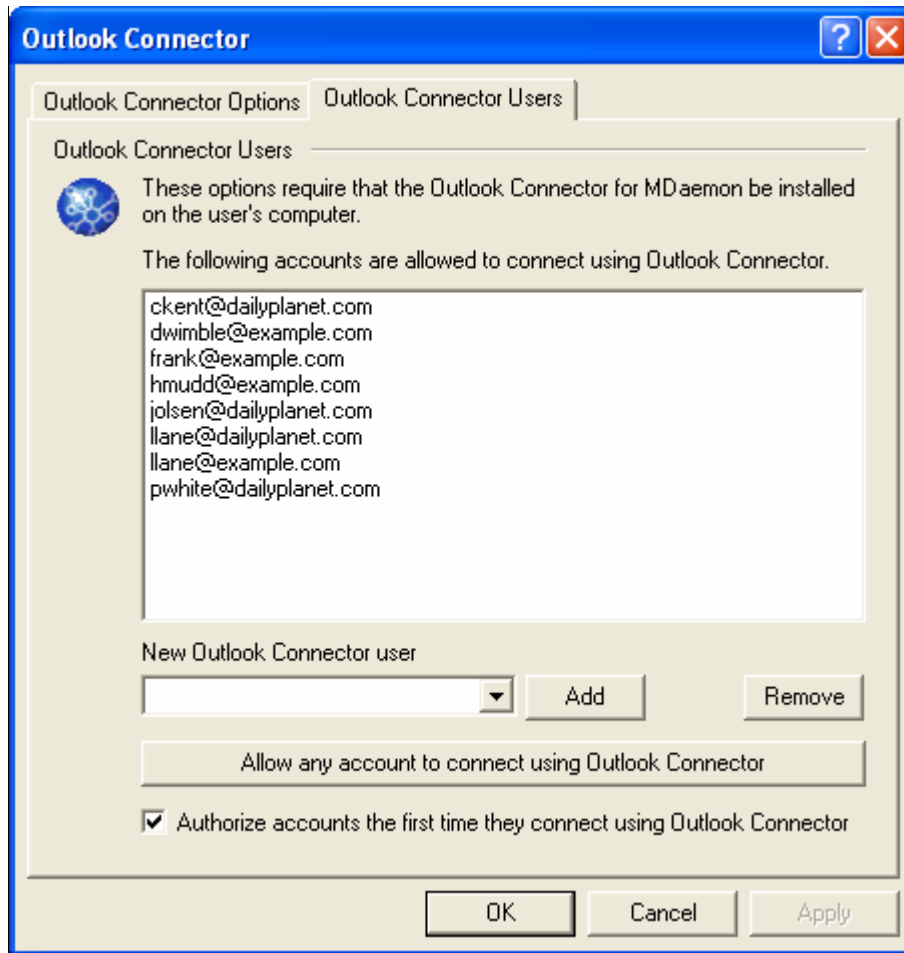
Outlook Connector Users

…accounts allowed to connect using Outlook Connector
This is the list of MDaemon users who are authorized to share their Outlook folders, Calendars, Contacts, and so on via Outlook Connector. You can add users to the list by using the options outlined below.

New Outlook Connector user
To add an MDaemon user to the list of authorized Outlook Connector users, select the desired user from this drop-down list and then click *Add*.

Add
After selecting a user from the *New Outlook Connector user* drop-down list, click this button to add that account to the list of authorized Outlook Connector users.

Remove
To remove an account from the list of authorized Outlook Connector users, select the desired user in the list and then click *Remove*.

Authorize any account to connect using Outlook Connector
To instantly authorize all MDaemon accounts to connect via Outlook Connector, click this button and all MDaemon accounts will be added to the *…accounts allowed to connect using Outlook Connector* list.

Authorize accounts the first time they connect using Outlook Connector

Click this checkbox if you want each MDaemon user to be added to the …*accounts allowed to connect using Outlook Connector* list the first time he or she attempts to connect using Outlook Connector. **Note:** if you enable this option then you have in effect authorized all MDaemon accounts to use Outlook Connector for MDaemon. The accounts simply will not be added to the list until the first time each one uses it.

Outlook Connector Options

Enable users to connect using Outlook Connector for MDaemon
Click this checkbox to activate Outlook Connector for MDaemon. Your users will not be able to utilize Outlook Connector's features unless this option is enabled.

Share account data with Outlook Connector users
Click this option if you want all MDaemon accounts that have been authorized to connect via Outlook Connector to be visible on the *Permissions* list that appears in the Outlook Connector for MDaemon Plugin. When sharing Outlook items, Outlook Connector users will choose from the list those accounts to which they wish to grant permission to share them. When this feature in disabled, the Outlook Connector Plugin's *Permissions* list will be blank and the users will have to enter email addresses manually—only addresses belonging to accounts authorized to connect via Outlook Connector will be able to share the Outlook items. If a user enters an address that is not authorized then the items will simply not be shared with that address unless it is authorized to connect via Outlook Connector at some later time.

Restrict shared data to members of users own domain
This option is only available when the *Share account data with Outlook Connector users* feature is enabled. Click this checkbox if you want only users who are authorized to connect via Outlook Connector and who belong to same domain to appear on the *Permissions* list in the Outlook Connector Plugin—accounts

belonging to different domains will not be listed even if they are authorized to connect via Outlook Connector.

Generate Outlook Connector shared folders
Click this button to generate a set of Outlook Connector folders for each domain. It will generate the following folders: contact, appointment, journal, task, and note.

Attachment Linking

Attachment Linking (<u>S</u>etup→Attachment linking…, or Ctrl+K) is a new feature that makes it possible for MDaemon to remove all attachments from incoming email messages automatically, store them in a designated location, and then place URL links in the message from which they were extracted pointing to their location.

This can greatly speed up mail processing when your users retrieve their messages or synchronize their mail folders since the messages will be devoid of large attachments. It can also provide increased security and an increased level of protection for your users since attachments can be stored in a central location for monitoring by the administrator and will not be downloaded automatically to mail clients where they might be executed automatically.

Further, both the location where files will be stored and the URL links inserted into messages in place of attachments are flexible. In MDaemon you merely designate the location where you wish to store the files and the format of the URL that will be inserted into the messages. You can use macros to make these paths dynamic, or you can simply make them static. The level of security and user requirements for getting to these files is up to you and depends entirely upon your particular system and the security measures that you have implemented. You could, for example, place files in a storage location accessible via FTP, or in a secure directory requiring specific access credentials, or in a public location accessible to anyone—whatever you prefer.

In order for Attachment Linking to work, an Account must have the "Enable automatic extraction of MIME encoded attachments" option enabled (located on the Mailbox tab of the Account Editor) and use a mail client such as WorldClient, which understands how to render HTML formatted email messages. Normally, automatically extracted attachments are placed within the account's FILES directory. However, because it might be useful to group all the attachments for all accounts into a single directory (such as an accessible directory on your web server), the Attachment Linking feature allows you to do this by providing a space for you to designate a path to the directory, and it supports template and message macros to make the path dynamic. When you specify the location where extracted attachments will be stored you can use the macros to create multiple shared directories. For example, "$ROOTDIR$\Attachments\$DOMAIN$\" will group all attachments into a subdirectory named for the domain to which the user belongs. That directory is contained in another subdirectory called "Attachments" that is under MDaemon's root directory (usually C:\MDaemon\). So, if your account's email address is frank@example.com, then the above example will cause your extracted attachments to be placed in the subdirectory, "C:\MDaemon\Attachments\example.com\." You can further subdivide attachment storage by appending the "$MAILBOX$" template macro to the above example. This will cause your files to be stored in a subdirectory beneath "\example.com\" called "Frank." Therefore the full file path of the directory where your extracted files will be stored is: "C:\MDaemon\Attachments\example.com\Frank\."

The format of the URL that you include in the space provided can also be made dynamic by using template and message macros. Because your account holders will be using this URL to gain access to their file attachments you must make certain that the designated storage directory is accessible via URLs in HTML formatted email. The format and nature of the URL depends on how you wish to use it and the method of access that you wish to provide to your MDaemon users. If all of your users access their email exclusively from your local area network then you might choose to store attachments in a shared directory that is accessible locally but not via the Internet, and thus format the URL accordingly with a network or

intranet file path. Or, you might wish to make the attachments freely available to everyone and therefore place them in a public html folder, or a folder that is accessible via anonymous FTP. If you are using MDaemon's integrated web server then one easy method of making the attachments available to your users is to place them in a subdirectory of WorldClient's "HTML" directory (usually "C:\MDaemon\WorldClient\HTML\"). For example, the attachment path could be, "$ROOTDIR$\WorldClient\HTML\attachments\$DOMAIN$\" and the message URL, "http://$DOMAIN$:3000/attachments/$DOMAIN$/." However, depending on your network's security measures, this might make the attachments available to anyone, since it is a public html directory. Where you store the files and how your users will get to them is completely up to you.

> ✋ **Caution!**
>
> If you are using IIS or some other web server then you should make sure that you have configured it to not allow scripts or programs to be executed automatically by the server in the directory in which you are storing the extracted attachments. For example, IIS should not automatically execute files with the extension "*.asp" If your server automatically launched scripts then someone could simply email a file with a script or program attached—knowing that it would be extracted—and then launch it remotely. This would represent a serious vulnerability and could potentially give a malicious person access to your server. Exercise extreme caution when composing your attachment path and message URL. Always keep security in mind.

Finally, when users delete or expunge messages with POP, IMAP, or WorldClient, MDaemon will automatically delete all attachments linked to that message in order to recover disk space.

> ✋ **Caution!**
>
> MDaemon deletes linked attachments whenever their associated message is deleted on the server. Because it is normal for a POP client to send a command to the mail server to delete each message after it is retrieved, any user that collects his email via a POP client **must** have that client configured to leave messages on the server. If mail is retrieved via a POP client that is not set to leave messages on the server then the attachments will be deleted immediately after each message is retrieved. Thus the attachments intended for the user will be irretrievably lost and the URL in the message will point to a file that no longer exists. Virtually all POP mail clients support the option to leave messages on the server.
>
> If you wish to prevent extracted attachments from being deleted then you can disable the option, "*Delete attachments from disk when messages are deleted.*" With this option disabled, no attachments will be deleted regardless of the state of the message to which it was originally attached or the protocol that was used to collect the message.
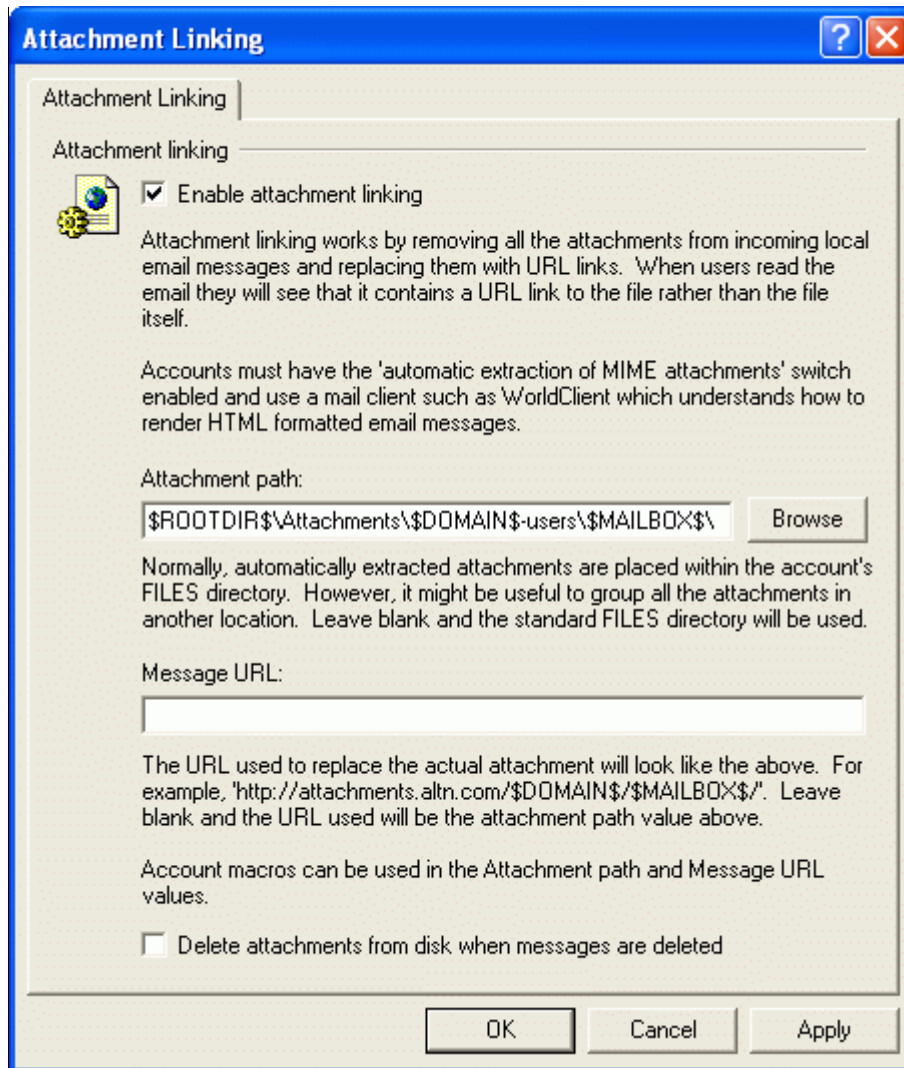
Attachment Linking

Enable attachment linking
Click this checkbox to enable Attachment Linking for all accounts that are configured to have
attachments automatically extracted from their messages. The "*Enable automatic extraction of MIME encoded
attachments*" option is located on the Mailbox tab of the Account Editor. When you click the *Enable
attachment linking* option, you will be asked if you wish to enable automatic extraction of attachments for all
MDaemon accounts. If you choose "No" then Attachment Linking will be enabled but you must
manually activate attachment extraction for each account that you desire to use it.

Attachment path
Use this text box to designate the directory where you wish to store extracted file attachments. You can
use template and message macros to make this path dynamic.

Message URL
This is the base URL that will be inserted into messages from which files have been extracted. For
example, if a file named "myfile.gif" is extracted from a message and the *Message URL* is set to

"`http://example.com/attachments/`," then the URL inserted into the message will be: "`http://example.com/attachments/myfile.gif`."

Delete attachments from disk when messages are deleted
Click this option if you want extracted attachments to be deleted from the server whenever the message to which they are linked is deleted. Give this option careful consideration before enabling it. If it is enabled and a user collects his email via a POP client that is not configured to leave messages on the server, then all of his extracted attachments will be irretrievably lost. If this option is **not** enabled then no attachments will be lost, but a great deal of your hard drive space could eventually be taken up by outdated and useless files that their original recipient no longer wants or needs.

Chapter

7

LDaemon/Address Book Options

Using LDAP and Supporting Global Address Books.

MDaemon supports Lightweight Directory Access Protocol (LDAP) functionality. Click **Setup→LDaemon/LDAP …** to open the LDAP Options dialog used for configuring MDaemon to keep your LDAP server up to date on all of its user accounts—MDaemon can maintain an accurate and continuously up to date LDAP database of users by communicating with LDaemon each time an MDaemon account is added or removed. This makes it possible for users with mail clients that support LDAP to "share" a global address book that will contain entries for all of your MDaemon users as well as any other contacts that you include.

You can also use your LDAP server as the MDaemon user database rather than its local `USERLIST.DAT` system or an ODBC compliant database. You might want to use this method of maintaining your user information if you have multiple MDaemon servers at different locations but want them to share a single user database. Each MDaemon server would be configured to connect to the same LDAP server in order to share user information rather than storing it locally.

Finally, you can also use this dialog for managing Alt-N's LDaemon LDAP server. You can obtain this standards-based LDAPv3 server free of charge from www.altn.com.

For information on using your LDAP server as the account database, see **LDAP Options—page 114** and **Account Database Options—page 311**.

LDaemon
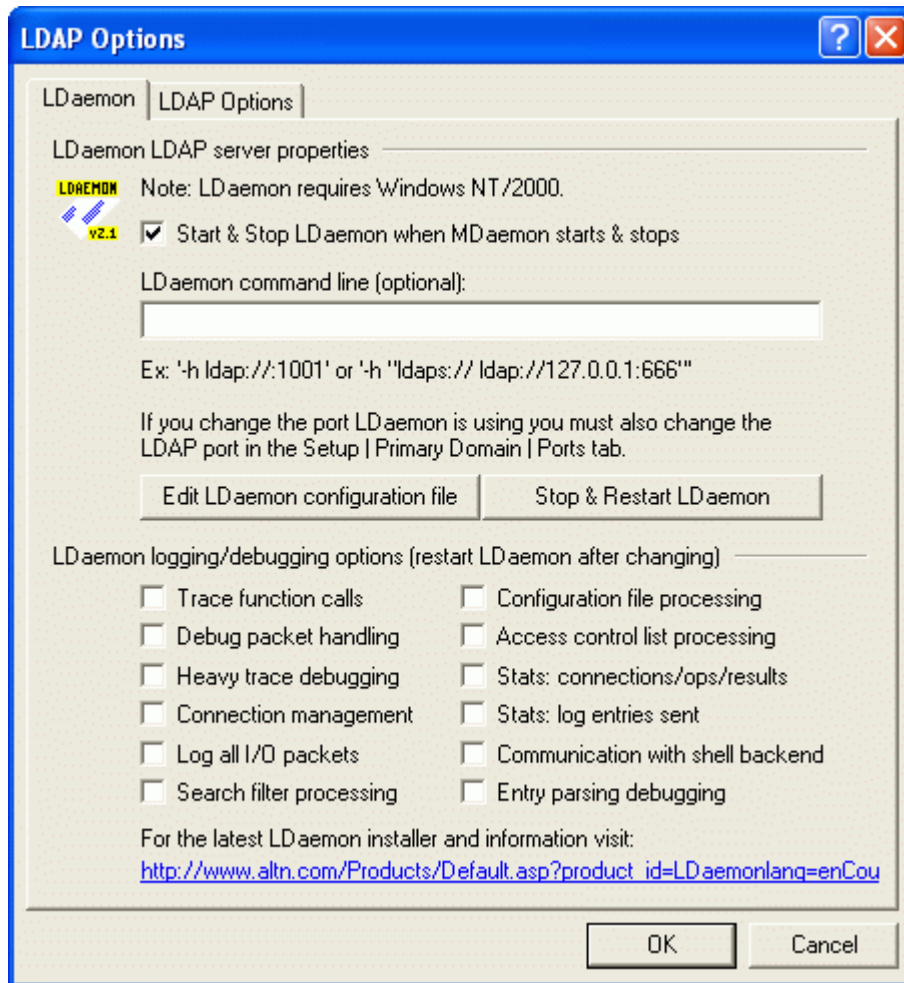
This tab is used to control Alt-N Technologies' LDaemon LDAP server. Note: these controls will not be available until LDaemon has been installed. LDaemon can be downloaded free of charge from `ftp://ftp.altn.com/LDaemon/`.

LDaemon LDAP Server Properties

Start & Stop LDaemon when MDaemon starts & stops
Click this checkbox if you want to launch the LDaemon LDAP server when MDaemon starts, and stop it when MDaemon stops.

LDaemon command line (optional)
If you wish to utilize some command line switches for LDaemon you can do so by typing the command line into this control.

Edit LDaemon configuration file
Click this button to open the LDaemon configuration file for editing in the default text editor.

Stop & Restart LDaemon
After make any changes to LDaemon, click this button to stop and restart the LDAP server so that your changes will be implemented.

LDaemon Logging/Debugging Options

This section contains various logging/debugging options for LDaemon. You must restart LDaemon after making any changes to these options before the new settings will take effect.

LDAP Options
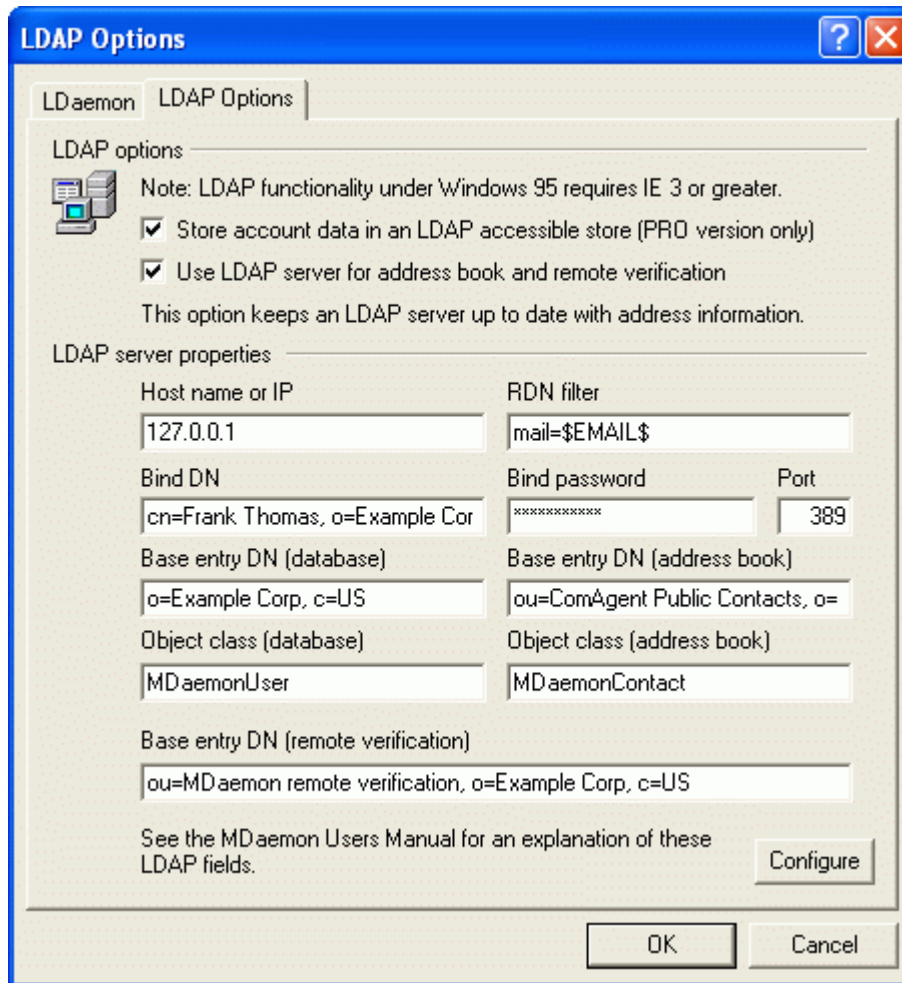
LDAP Options

Store account data in an LDAP accessible store (PRO version only)
Click this check box if you want MDaemon to use your LDAP server as the MDaemon user database rather than ODBC or its local `USERLIST.DAT` system. You might want to use this method of maintaining your user information if you have multiple MDaemon servers at different locations but want them to share a single user database. Each MDaemon server would be configured to connect to the same LDAP server in order to share user information rather than storing it locally.

Use LDAP server for address book and remote verification
If you are using ODBC or the default `USERLIST.DAT` method of maintaining your account database rather than the LDAP server method, you can still keep an LDAP server up to date with all of your users' names, email addresses, and aliases by enabling this checkbox. Thus, you can still keep an LDAP server up to date for use as a global address book system for users of email clients that contain support for LDAP address books.

This will maintain a database of your mailboxes, aliases, and mailing lists that your remote backup servers can query for remote verification of address information. See *Base entry DN (remote verification)* below for more information.

LDAP Server Properties

Host name or IP
Enter the host name or IP address of your LDAP server here.

RDN filter
This control is used to generate the RDN for each user's LDAP entry. The relative distinguished name (RDN) is the leftmost component in each entry's distinguished name (DN). For all peer entries (those sharing a common immediate parent) the RDN must be unique, therefore we suggest using each user's email address as their RDN to avoid possible conflicts. Using the $EMAIL$ macro as the value of the attribute in this control (i.e. mail=$EMAIL$) will cause it to be replaced by the user's email address when their LDAP entry is created. The user's DN will be comprised of the RDN plus the *Base entry DN* below.

Bind DN
Enter the DN of the entry to which you have granted administrative access to your LDAP server so that MDaemon can add and modify your MDaemon user entries. This is the DN used for authentication in the bind operation.

Bind Password
This password will be passed to your LDAP server along with the *Bind DN* value for authentication.

Port
Specify the port that your LDAP server is monitoring. MDaemon will use this port when posting account information to it.

Base entry DN (database)
Enter the base entry (root DN) that will be used in all of your MDaemon user entries when you are using the LDAP server as your user database rather than the USERLIST.DAT file. The Base entry DN is combined with the RDN (see *RDN filter* above) to make up each user's distinguished name (DN).

Base entry DN (address book)
When mirroring account information to an LDAP database address book, enter the base entry (root DN) that will be used in all of your MDaemon user address book entries. The Base entry DN is combined with the RDN (see *RDN filter* above) to make up each user's distinguished name (DN).

Object class (database)
Specify the object class to which each MDaemon user's user database entry must belong. Each entry will contain the objectclass= attribute with this as its value.

Object class (address book)
Specify the object class to which each MDaemon user's LDAP address book entry must belong. Each entry will contain the objectclass= attribute with this as its value.

Base entry DN (remote verification)
One common problem with domain gateways and backup servers is that they don't usually have a method for determining whether or not the recipient of an incoming message is valid. For instance, if a message comes to example.com's backup server for frank@example.com then the backup server has no way of knowing whether or not there is actually a mailbox, alias, or mailing list at example.com for "frank". Thus the backup server has no choice but to accept all of the messages. MDaemon contains a method for verifying these addresses and solving this problem. By specifying a Base entry DN that will be used for all

mailboxes, aliases, and mailing lists, your LDAP server can be kept up to date with all of this information. Then, your backup server can simply query your LDAP server each time a message arrives for your domain and verify whether or not the recipient's address is valid. If it isn't then the message will be rejected.

Note

Although any LDAP server may be used, we recommend using the latest version of Alt-N Technologies' LDAP server, LDaemon 2.1, because of its integrated features and ease of setup. You can obtain LDaemon free of charge from www.altn.com.

<u>Configure</u>
Click this button to open the `LDAP.dat` configuration file in a text editor. It is used for designating the LDAP attribute names that will correspond to each MDaemon account field.

Chapter

8

Shared Folders/Mail Queues

Creating additional mail queues, and configuring and utilizing Shared IMAP folders.

MDaemon supports Shared IMAP Folders—Public and User folders may both be shared. Public folders are extra folders that do not belong to any particular account but can be made available to multiple IMAP users. User folders are IMAP folders that belong to individual MDaemon accounts. Not to be confused with public FTP or html folders, MDaemon's Shared IMAP folders, whether Public or User, may not be accessed by everyone. Each shared folder must have a list of MDaemon users associated with it, and only members of that access list may access it via WorldClient or an IMAP email client.

When IMAP users access their list of personal folders, shared public folders and shared user folders to which they have been given access will also be displayed. In this way certain mail folders can be shared by multiple users but still require each user's individual logon credentials. Further, having access to a folder doesn't necessarily mean having full read/write or administrative access to it. Specific access rights can be granted to individual users, thus allowing you to set different levels of access for each one. For example, you might allow some users to delete messages while restricting that from others.

Once a public or user IMAP folder has been created you can use the Content Filter to set criteria by which certain messages are moved into that folder. For example, it might be useful to make a rule that would cause messages containing `support@mydomain.com` in the `TO:` header to be moved into the `Support` public folder. The Content Filter actions "`Move Message to Public Folders...`" and "`Copy Message to Folder...`" make this possible. For shared user folders, you can use your personal IMAP Mail Rules to route specific messages to them. In addition to using Content Filters and IMAP Mail Rules, you can associate a specific account with a shared folder so that messages destined for that "Submission Address" will be automatically routed to the shared folder. However, only users who have been granted "post" permission to the folder will be able to send to that address.

For added convenience, the mailing list editor also contains a Public Folders tab that makes it possible for you to configure a public folder for use with a particular list. If you enable this feature then a copy of each list message will be placed into the specified public folder. All public folders are stored in the `\Public Folders\` directory within the MDaemon directory hierarchy.

Shared Folders

To reach the Shared Folders dialog click <u>S</u>etup➔Shared <u>f</u>olders… on MDaemon's menu bar.

Shared Folders
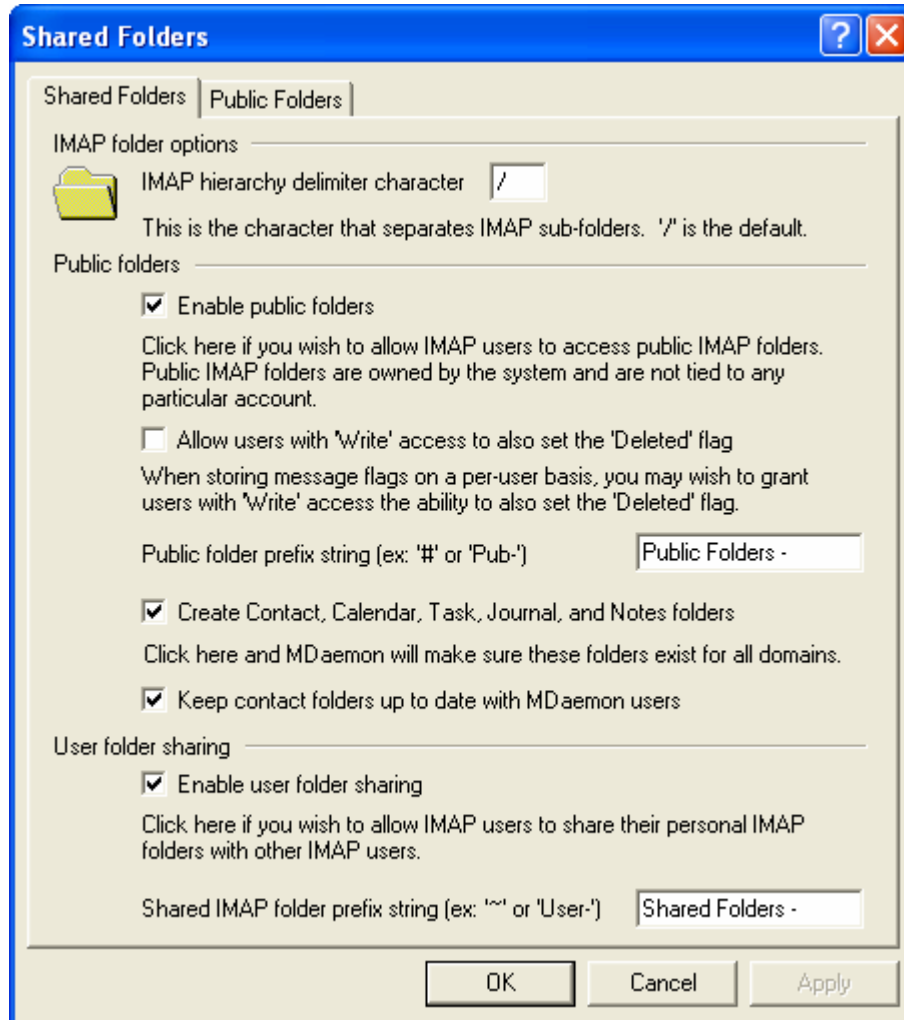
IMAP Folder Options

IMAP hierarchy delimiter character

Type the character that you want to denote a subfolder when used in a folder name. For example, if this character is set to "/" and you have a folder on the Public Folders tab called "My Folder", then to create a subfolder under it you would name your new folder "My Folder/My Subfolder". Whenever IMAP users connect to MDaemon, "My Subfolder" will be listed in their folders as a subfolder of "My Folder".

Note: Although a subfolder will be displayed as a subfolder in your list of IMAP folders in your email client, it is not actually a subfolder on the server. It is a parent folder containing the folder and subfolder names separated by the delimiter character.

Public Folders

Enable public folders
Click this switch if you wish to allow IMAP users to gain access to public folders. The users that can access them and the level of access granted is designated under each folder on the Public Folders tab. Clear this check box if you want to hide public folders from all users.

Allow users with 'Write' access to also set the 'Deleted' flag
'Write' access means users can 'flag' messages as read, unread, and so on. Click this check box if you want users to whom you have granted 'write' access permission to be able be to flag messages as 'deleted' as well.

Public folder prefix string (ex: '#' or 'pub-')
Public folders are prefixed with a sequence of up to 20 characters, such as '#' or 'Public-'. This is to help users easily distinguish public from private folders from within their email client software. Use this text box to specify the series of characters that you wish to use to denote public folders.

Create Contact, Calendar, Task, Journal, and Notes folders for all domains
Click this check box if you wish to ensure that these folders exist for all domains. Whenever a secondary domain is added to MDaemon, these folders will be created.

Keep contact folders up to date with MDaemon users
If this option is enabled, MDaemon will keep the contact folders synchronized with its account list.

User Folders Sharing

Enable user folder sharing
Click this switch if you wish to allow IMAP users to share access to their IMAP folders. The users that can access them and the level of access granted is designated under each folder on the Shared Folders tab of the Account Editor (Accounts→Account Manager...→User Account on MDaemon's menu bar). Clear this check box if you want to prevent users from being able to share access to their folders, and prevent the aforementioned Shared Folders tab from appearing on the Account Editor.

> **Note**
>
> When using Outlook Connector for MDaemon, this option will be unavailable. You will not be able to deactivate it because user folder sharing is required for Outlook Connector to function properly.

Shared IMAP folder prefix string (ex: '-' or 'User-')
Shared user folders are prefixed with a sequence of up to 20 characters, such as '-' or 'User-'. This is to help users easily distinguish shared from private folders from within their email client software. Use this text box to specify the series of characters that you wish to use to denote shared user folders.

Public Folders
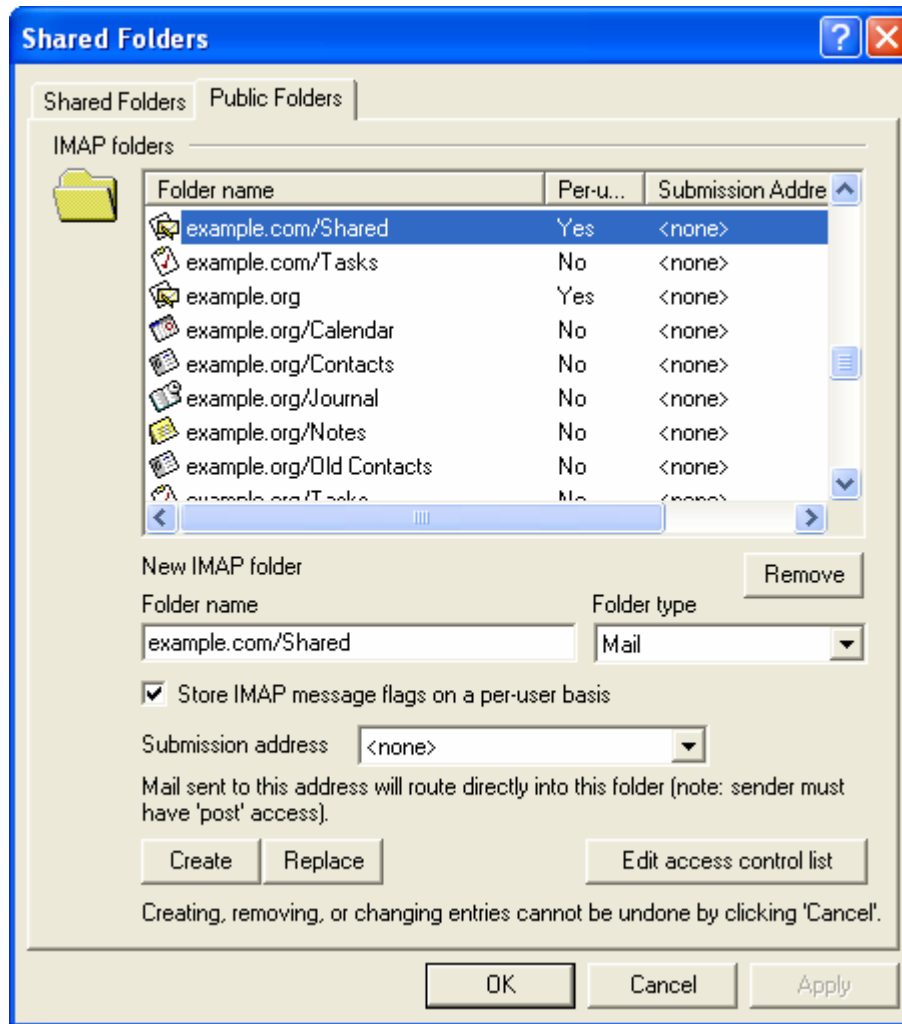
IMAP Folders

Displayed in this area is each public IMAP folder that you have created, the *Per-user flags* setting, and the Submission Address with which each one has been associated (if any). When MDaemon is first installed, this area will be empty until you use the *Folder name* and *Create* controls to add a folder to it. Subfolders in this list will have the folder and subfolder names separated by the delimiter character designated on the Shared Folders tab.

<u>Remove</u>
To remove a public IMAP folder from the list, select the desired folder and then click the Remove button.

New IMAP Folder

<u>Folder name</u>
To add a new folder to the list, specify a name for it in this control, set the per-user flags and Submission address controls, and then click <u>Create</u>. If you want the new folder to be a subfolder of one of the folders in the list, then prefix the new folder's name with the parent folder's name and the delimiter character designated on the Shared Folders tab. For example, if the delimiter character is '/' and parent folder is

"My Folder" then the new subfolder name would be "My Folder/My New Folder". If you don't want it to be a subfolder, then name the new folder "My New Folder" without the prefix.

Store IMAP message flags on per-user basis
Click this check box if you want the folder's message flags (read, unread, replied to, forwarded, and so on) to be set on a per-user basis instead of globally. Each user will see the status of the messages in the shared folder displayed according to their personal interaction with them. A user who hasn't read a message will see it flagged as 'unread' while a user who has read it will see the status as 'read'.

If this control is disabled then all users will see the same status. So, once any user has read a message then all users will see it marked as 'read'.

Submission address
Use this drop-down list to associate a specific account with a shared folder so that messages destined for that "Submission Address" will be automatically routed to the shared folder. However, only users who have been granted "post" permission to the folder will be able to send to that address.

Create
After specifying a folder's name and other settings, click this button to add the folder to the list.

Replace
If you wish to edit one of the Public Folders entries, click the entry, make the desired changes to the *Folder name* or other setting, and then click the *Replace*.

Edit access control list
Choose a folder and then click this button to open the Access Control List dialog for that folder. Use the Access Control List dialog to designate the users that will be able to access the folder and the permissions for each user.

Access Control List
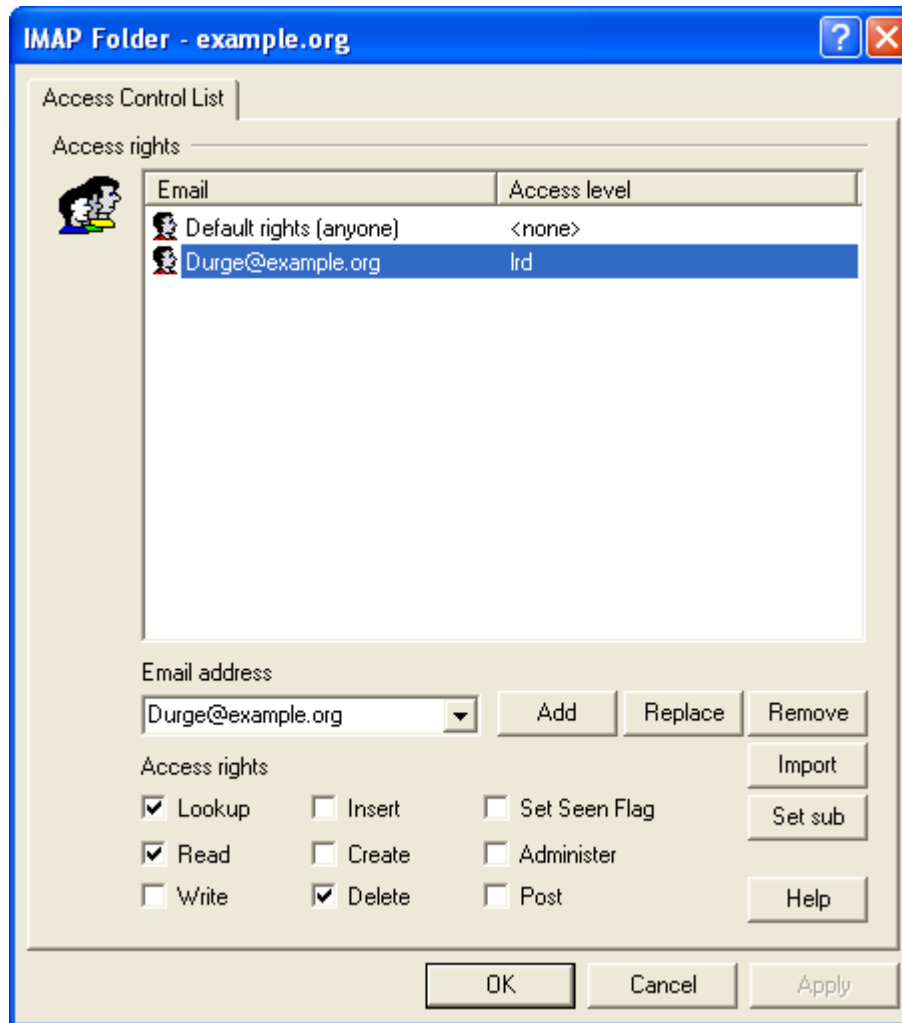
Access Rights

This area is for designating the MDaemon user accounts that you wish to grant access to the shared folder, and for setting the access permissions for each one. You can reach this dialog from the Public Folders tab of the Shared Folders dialog (click Setup→Shared folders…→Public Folders). Double-click the desired folder, or click the folder and then click *Edit access control list*, to open the Access Control dialog for that folder. Each entry lists the email address of the account and a one letter Access Level abbreviation for each Access Right that you grant to the user.

Email address
From the drop-down list, choose the MDaemon account that you wish to grant access to the shared folder.

Add
After choosing an Email Address from the list, and the access rights that you wish to grant to the user, click *Add* to add the account to the list.

Replace
To modify an existing Access Rights entry, select the entry, make any desired changes to the Access Rights, and then click *Replace*.

Remove
To remove an entry from the Access Rights list, select the desired entry and then click *Remove*.

Import
With the *Import* feature you can add the members of an existing Mailing List to the list of users with Access Rights. Choose the access rights that you wish to grant to the users, click Import, and then double-click the desired list. All of the list's members will be added to the list with the rights that you set.

Access Rights

Choose the rights that you wish to grant to individual users by clicking the desired options in this area and then clicking *Add* for new entries or *Replace* for existing entries.

You can grant the following Access Control Rights:

Lookup (l) – user can see this folder in their personal list of IMAP folders.

Read (r) – user can open this folder and view its contents.

Write (w) – user can change flags on messages in this folder.

Insert (i) – user can append and copy messages into this folder.

Create (c) – user can create subfolders within this folder.

Delete (d) – user can delete messages from this folder.

Set Seen Flag (s) – user can change the read/unread status of messages in this folder.

Administer (a) – user can administer the ACL for this folder.

Post (p) – user can send mail directly to this folder (if folder allows).

Help
Click *Help* to display a list of the access rights and their definitions.

Note

Access rights are controlled through MDaemon's support for Access Control Lists (ACL). ACL is an extension to the Internet Message Access Protocol (IMAP4) that makes it possible for you to create an access list for each of your IMAP message folders, thus granting access rights to your folders to other users who also have accounts on your mail server. If your email client doesn't support ACL you can still set the permissions via the controls on this dialog.

ACL is fully discussed in RFC 2086, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc2086.txt
```
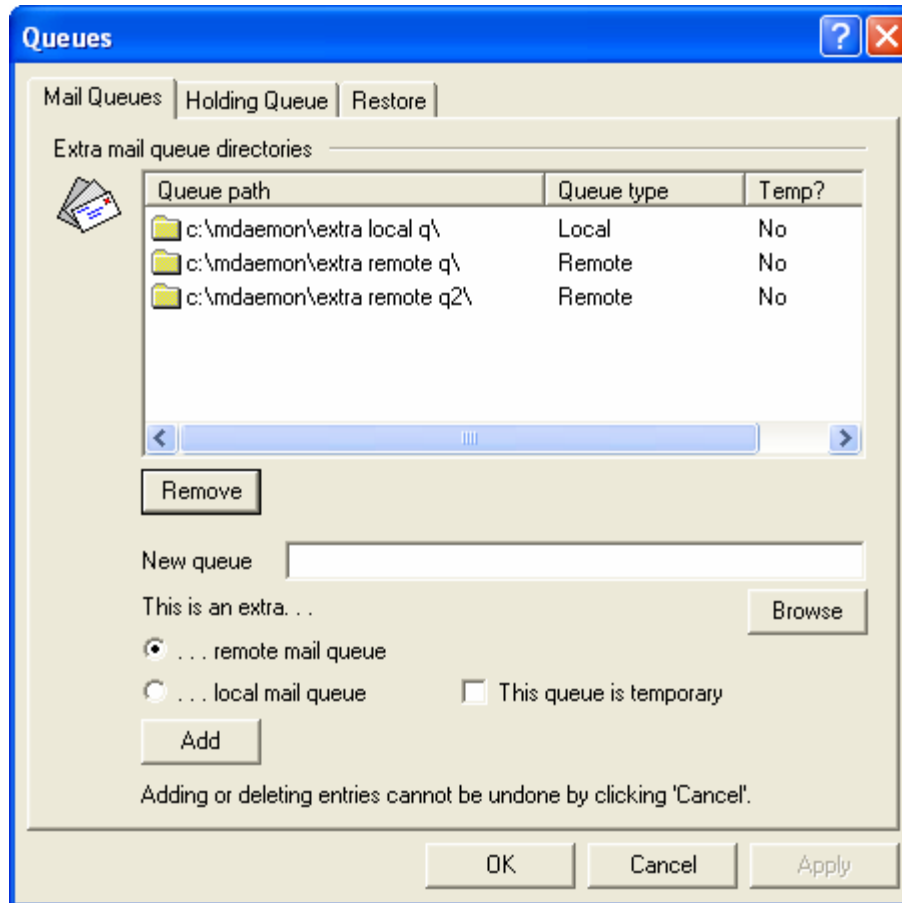
Mail Queues

Use the Queues dialog (click Queues→Queues on the menu bar) to create custom local and remote mail queues. Custom queue support makes it possible for you to have MDaemon monitor several locations from which to send mail. On the Mail Queues tab you can create new queues, designating them as local or remote, and specify whether or not the new queue should be temporary. Temporary queues will be used at the next scheduled mail processing interval and then removed from the mail queue list. You can use Content Filters (page 252) to cause messages to be automatically placed into one of your custom mail queues.

Extra Mail Queue directories

This area displays an entry for each custom queue, lists whether it is local or remote, and whether it is temporary or permanent.

Remove
If you wish to remove a queue from the list, select its entry and then click the *Remove* button.

New queue
Use this text field to list the path to the folder that you wish to designate as a mail queue.

This is an Extra...

…remote mail queue

Choose this option if you want the custom mail queue to be used for remote mail.

…local mail queue

Choose this option if you want the custom mail queue to be used for local mail.

This queue is temporary

Click this checkbox if you want the queue to be temporary. It will be used during the next mail processing interval and then removed from the list.

Add

After you have listed the path to the new queue and designated its other parameters, click the *Add* button to add it to the list of custom queues.

Holding Queue
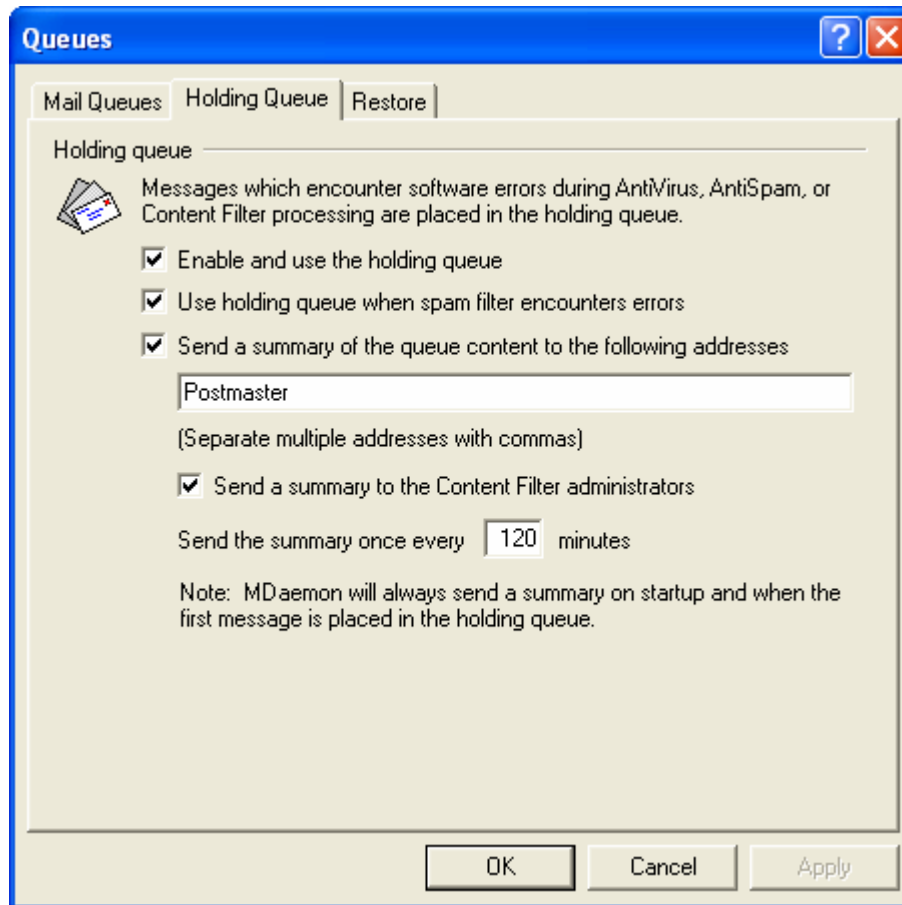
The Holding Queue (configured by clicking <u>Queues</u>→<u>Queues</u>...→<u>Holding Queue</u> on the menu bar) can be used to receive messages that cause software exceptions during AntiVirus, AntiSpam, or Content Filter processing. If a software error occurs when processing a message it will be moved into the holding queue and not delivered.

Messages placed into the holding queue will stay there until the administrator takes some action to remove them. There is a *Process holding queue* button on the main user interface and an identical option on the Queues menu (click <u>Queues</u>→<u>Process</u> <u>holding queue</u> or press Ctrl+F11). You can also process the messages by right-clicking the holding queue on the main interface and then selecting "Re-Queue" from the right-click menu. Processing the holding queue will move all of its messages into either the remote or local queues for normal mail processing. If the error that caused a message to be placed into the holding queue still exists then that message will be placed back into the holding queue when the error reoccurs. If you want to attempt to deliver the holding queue's messages regardless of any error which might occur, then you can do so by right-clicking the holding queue on the main interface and then selecting "Release" from the right-click menu. When releasing messages from the holding queue a confirmation box will open to remind you that the messages could contain viruses or otherwise not be able to filter properly through the Content Filter, AntiSpam and/or AntiVirus engines.

Holding Queue

Enable and use the holding queue
Click this check box to activate the holding queue. Messages that cause software exceptions during AntiVirus and Content Filter processing will be moved to this queue whenever an error occurs.

Use holding queue when spam filter encounters errors
Click this option if you also wish to move messages that cause errors during Spam Filter processing to the holding queue.

Send a summary of the queue content to the following addresses
If you wish to send a summary of messages contained in the holding queue to one or more email addresses at regular intervals then click this option and list the addresses in the text space provided. When listing multiple addresses, separate them by commas.

Notification messages are sent at MDaemon startup, the first time a message is placed into the holding queue, and at the interval specified in the *Send the summary once every XX minutes* option below.

Note
If a notification messages causes a software error then it may not be delivered to remote recipients. It will, however, still be delivered to local recipients.

Send a summary to the Content Filter administrators
Click this option if you want an additional copy of each notification message to be sent to the Content Filter Administrators designated on the Admins/Attachments tab of the Content Filter (see page 262).

Send the summary once every XX minutes
Use this option to designate the number of minutes that will pass before MDaemon will send a holding queue notification message to each specified address or Content Filter Administrator.

Restore
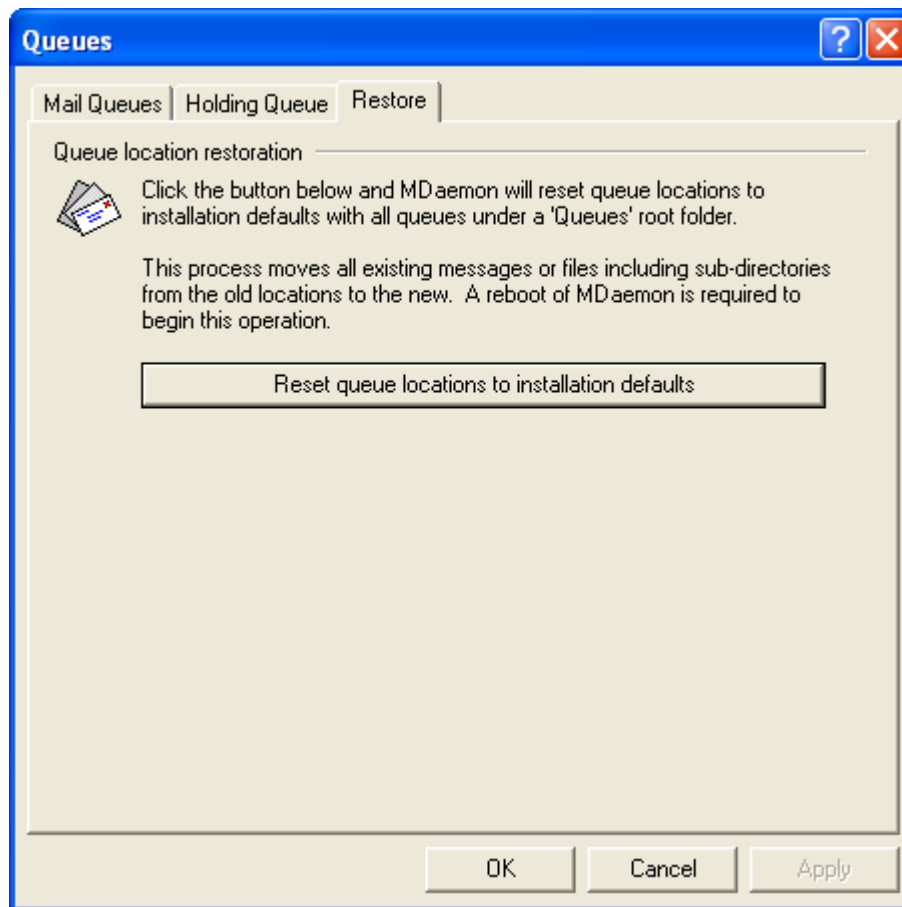
Queue Location Restoration

Reset queue locations to installation defaults
By default, a new installation of MDaemon stores message queues such as Remote, Local, Raw, and the like under the \MDaemon\Queues\ subfolder. Previous versions of MDaemon stored queues elsewhere. If your installation of MDaemon is using the old folder locations and you would like to move your queues to this more organized structure then click this button and all queues and the files and messages they contain will be moved for you. After clicking this button you will need to restart MDaemon for the changes to be implemented.

Chapter

9

Security Features

MDaemon's Security and Screening Features

M Daemon is equipped with an extensive suite of security features and controls. Click **Security** on MDaemon's menu bar to reach the following security features:

Security Features

- **AntiVirus Settings**— AntiVirus for MDaemon can help you stop email-borne computer viruses by providing the highest level of integrated protection available for MDaemon customers. It will catch, quarantine, repair, and/or remove any email message found to contain any virus. For more on AntiVirus for MDaemon see page 267.

- **Content Filter**—a highly versatile and fully multi-threaded Content Filtering system makes it possible for you to customize server behavior based on the content of incoming and outgoing email messages. You can insert and delete message headers, add footers to messages, remove attachments, route copies to other users, cause an instant message to be sent to someone, run other programs, and much more. For more on Content Filtering see page 252.

- **DNS Black Lists**—allows you to specify several ORDB and MAPS RBL type hosts that will be checked each time someone tries to send a message to your server. If the connecting IP has been blacklisted by any one of these hosts, the message(s) will be refused or flagged.

- **Spam Filter**—new spam filtering technology to heuristically examine email messages in order to compute a "score". This score is used to determine the likelihood of a message being spam. Based on that determination the server can then take certain actions such as refusing or flagging the message.

- **SSL & Certificates**—MDaemon supports the Secure Sockets Layer (SSL) protocol for SMTP, POP, and IMAP, and for WorldClient's web server. SSL is the standard method for securing server/client Internet communications.

- **Address Suppression**—lists addresses that are not allowed to send mail traffic through your server.

- **IP Screening**—used to designate IP addresses from which you will allow or refuse connections to your server.

- **Host Screening**—used to designate hosts (domain names) from which you will allow or refuse connections to your server.

- **IP Shielding**—if a domain name specified in this list attempts to connect to your server, its IP address must match the one that you have assigned to it.

- **SMTP Authentication**—used for setting several options that denote how MDaemon will behave when a user sending a message to MDaemon has or has not been authenticated first.

- **POP Before SMTP**—the controls on tab are used to require each user to first access his or her mailbox before being allowed to send a message through MDaemon, thus authenticating that the user is a valid account holder and allowed to use the mail system.

- **Site Usage Policy**—used for creating a Site Security Policy to be transmitted to sending servers at the beginning of every SMTP mail session. An example of a common site policy is, "This server does not relay."

- **Relay Settings**—used to control what MDaemon will do when a message arrives at your mail server that is neither from nor to a local address.

- **Trusted Hosts—**domain names and IP addresses that will be considered as exceptions to the relay rules listed on the Relay Settings tab.

- **Tarpitting—**makes it possible for you to deliberately slow down a connection once a specified number of RCPT commands have been received from a message's sender. This is to discourage spammers from trying to use your server to send unrequested bulk email ("spam"). The assumption behind this technique is that if takes spammers an inordinately long period of time to send each message then that will discourage them from trying to use your server to do so again in the future.

- **Reverse Lookup**—MDaemon can query DNS servers to check the validity of the domain names and addresses reported during incoming messages. Controls on this tab can be used to cause suspicious messages to be refused or a special header inserted into them. Reverse Lookup data will also be reported in the MDaemon logs.

- **Sender Policy Framework**—All domains publish MX records to identify the machines that may receive mail for them, but this doesn't identify the locations allowed to *send* mail for them. Sender Policy Framework (SPF) is a means whereby domains can also publish "reverse MX" records to identify those locations authorized to send messages for them.

- **DomainKeys and DomainKeys Identified Mail**—DomainKeys (DK) and DomainKeys Identified Mail (DKIM) are email verification systems that can be utilized to prevent spoofing. They can also be used to ensure the integrity of incoming messages, or ensure that the message hasn't been tampered with between the time it left the sender's mail server and arrived at yours. They accomplish this by using an encrypted public/private key pairs system. Outgoing messages are signed using a private key and incoming messages have their signatures verified by testing them with the public key published on the sender's DNS server.

DNS Black Lists (DNS-BL)

DNS Black Lists (DNS-BL) can be used to prevent most "spam" email from reaching your users. This new security feature allows you to specify several ORDB and MAPS RBL type hosts (which maintain lists of servers known to relay "spam") that will be checked each time someone tries to send a message to your server. If the connecting IP has been blacklisted by any one of these hosts, the message(s) will be refused or flagged.

Note

Use of this feature can prevent most spam from being sent to your users. However, some sites are blacklisted by mistake and therefore using this feature could cause some difficulties, but it is worthwhile if you are worried about controlling spam.

DNS-BL lookups are performed using the DNS server specified in **Setup→Primary Domain…→DNS**. This feature was tested and performed well with no significant delay per mail session.

DNS Black Lists includes an "exception" database for designating IP addresses that will not be subject to DNS-BL lookups. Before activating this feature, you should add your local IP address range to the exception list to prevent lookups on it. 127.0.0.1 is exempt and therefore doesn't need to be added to the exceptions.

For information on spam and how to control and eliminate it using ORDB and MAPS RBL, visit:

```
http://www.ordb.org
http://www.mail-abuse.com/rbl/
```

ORDB and MAPS RBL are trademarks of their respective organizations. Alt-N Technologies is proud to be associated with them and make use of their services on behalf of our customers.

DNS-BL Options
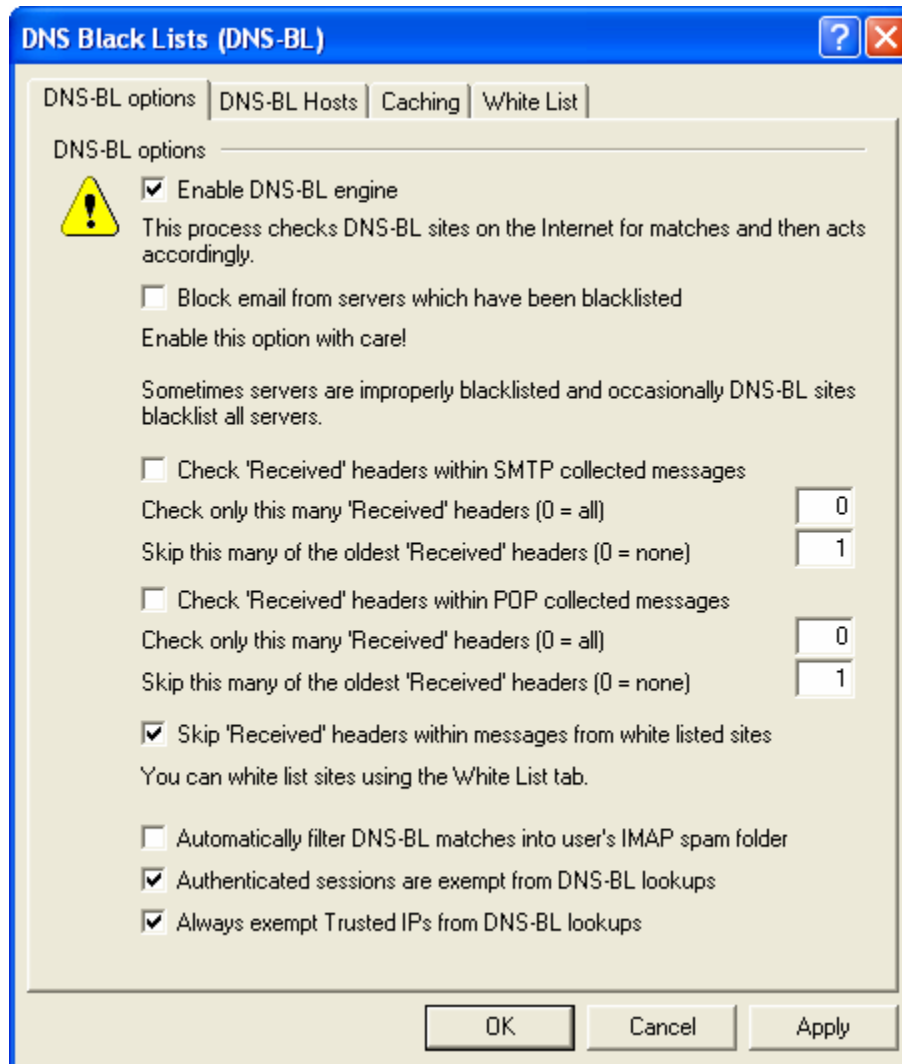
DNS-BL

Enable DNS-BL engine
Click this checkbox to turn on DNS Black Lists.

Block email from servers which have been blacklisted
When this option is enabled, during the SMTP session MDaemon will refuse messages that receive a blacklisted result from the DNS-BL lookup. If you disable/clear this option, messages from blacklisted servers will not be refused, but will have an `X-RBL-Warning:` header inserted. You can then use the Content Filter feature to search for messages with this header and do with them as you please. For more information, see the option "*Automatically filter DNS-BL matches into user's IMAP spam folder*" below.

Check 'Received' headers within SMTP collected messages
Click this switch if you want DNS Black Lists to check the IP address stamped in the "`Received`" headers of messages received via SMTP.

<u>*Check only this many 'Received' headers (0 = all)*</u>
Specify the number of '`Received`' headers that you want DNS-BL to check starting with the most recent. A value of "0" means that all 'Received' headers will be checked.

<u>*Skip this many of the oldest 'Received' headers (0 =none)*</u>
Use this option if you want DNS-BL to skip over one or more `Received` headers when checking SMTP messages. Since it is often necessary to skip the oldest `Received` header, this option has a default setting of "1".

<u>*Check 'Received' headers within POP collected messages*</u>
When this switch is enabled DNS-BL will check the IP address stamped in the "`Received`" headers of messages collected via DomainPOP and MultiPOP.

<u>*Check only this many 'Received' headers (0 = all)*</u>
Specify the number of 'Received' headers that you want DNS-BL to check starting with the most recent. A value of "0" means that all 'Received' headers will be checked.

<u>*Skip this many of the oldest 'Received' headers (0 =none)*</u>
Use this option if you want DNS-BL to skip over one or more `Received` headers when checking DomainPOP and MultiPOP messages. Since it is often necessary to skip the oldest `Received` header, this option has a default setting of "1".

<u>*Skip 'Received' headers within messages from exempted IPs*</u>
When this option is enabled, DNS-BL will not check the "Received" headers within messages coming from IP addresses that you have designated as exceptions. Click the "Exceptions" button below to designate those IP addresses.

<u>*Automatically filter DNS-BL matches into user's IMAP spam folder*</u>
Click this option and an "`Inbox\Spam\`" IMAP folder will be created for all future user accounts that you add to MDaemon. MDaemon will also create an IMAP mail rule for each of those users that will search for the `X-RBL-Warning` header and then place messages containing that header into the user's spam folder. When you click this option you will also be asked whether or not you would like MDaemon to create this folder and rule for each of your already existing user accounts. See *Auto-generating a Spam Folder and Rule for Each Account* below.

Auto-generating a Spam Folder and Rule for Each Account
MDaemon can automatically create an "`Inbox\Spam\`" IMAP mail folder for each account and generate an IMAP Mail Rule that will move messages into that folder whenever if finds the `X-RBL-Warning` header. Whenever you click the above option, you will be presented with the option to create the folder and accompanying rule for all accounts. Simply choose "yes" on the dialog to create the folders and rules. Although not foolproof, this is an easy and generally reliable way to help your users quickly identify spam email messages—it can effectively prevent spam email from being mixed in with all of their legitimate email. They will only need to occasionally review the contents of their spam folder just to make sure that an important message doesn't accidentally get put there (which may sometimes occur). When creating the folders and rules for your accounts, if MDaemon finds that an account already has a rule that checks for the existence of the `X-RBL-Warning` header then no action will be taken and no rule will be created for that account. If you want the name of the IMAP folder to be something other than "Spam," you can change the default setting by editing the following key in the `MDaemon.ini` file:

```
[Special]
DefaultSpamFolder=Spam  (Replace "Spam" with another name - 20 chars maximum)
```

Authenticated sessions are exempt from DNS-BL lookups

Click this checkbox if you want those sessions that were authenticated using the AUTH command to be exempt from DNS-BL lookups. It will perform no lookups for those sessions.

For more information see:

Always exempt Trusted IPs from DNS-BL lookups

Click this checkbox if you want addresses that are listed on the Trusted Hosts tab of Relay Settings (see page 191) to be exempt from DNS-BL lookups.

DNS-BL Hosts
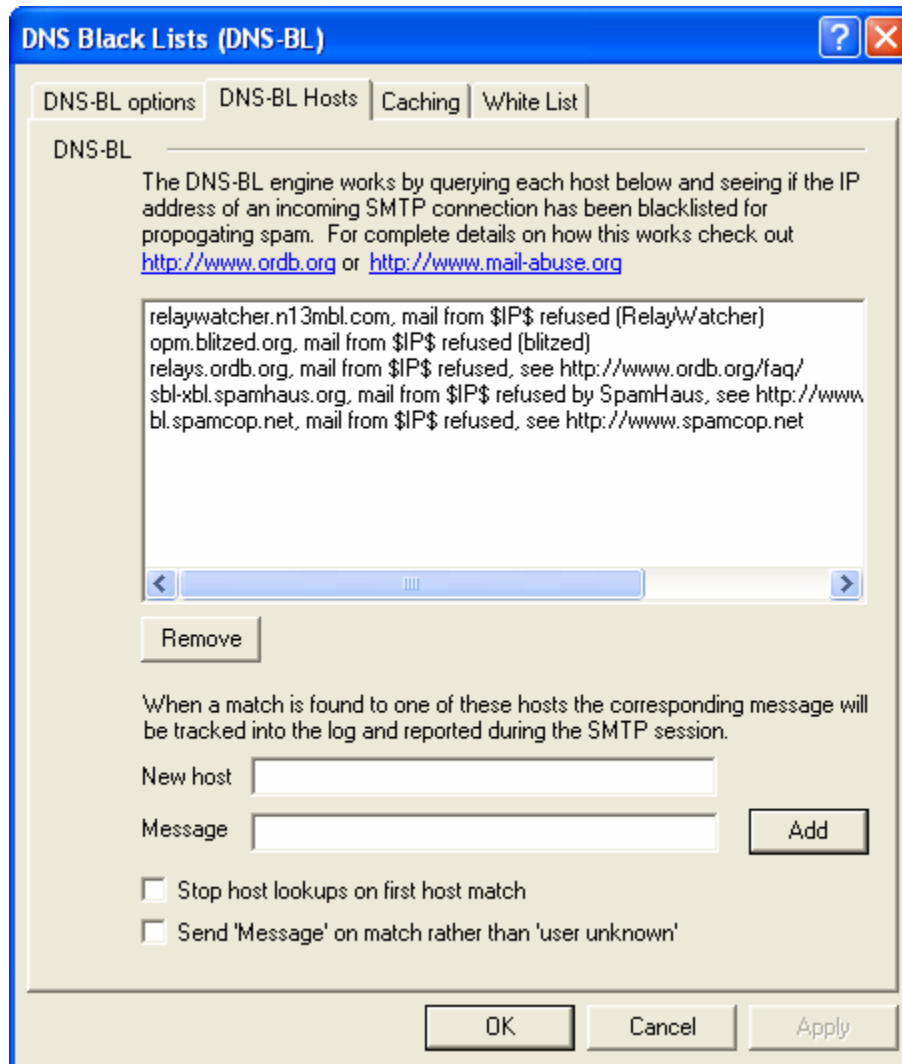
DNS-BL

MDaemon will query each of these hosts when performing a DNS-BL lookup on an IP address. If a host replies to the query with a positive result, MDaemon will refuse to accept the message from that IP address, and will send the short message associated with the host that blacklisted the address (if you have enabled the "*Send 'Message' on match…*" option below).

> **Note**
>
> If you have elected to flag messages as spam (see the options on the DNS-BL Options tab) then MDaemon will not refuse a message addressed to a valid user during the SMTP session, nor will it send an RBL host or "user unknown" message if a blacklist match is found.

Remove
Select an entry from the RBL Hosts list and click this button to remove it from the list.

New host
If you wish to add a new host to be queried for blacklisted IP addresses, enter it here.

Message
This is the message that will be sent when an IP address has been blacklisted by the *New Host*.

Add
After entering a *New Host* and *Message*, click this button to add it to the RBL Hosts list.

Stop host lookups on first host match
Oftentimes there are multiple hosts contained in the headers of each message that DNS-BL processes, and multiple RBL hosts that are queried. Ordinarily, DNS-BL will continue to query the RBL hosts for all hosts in the message regardless of the number of matches found. Click this option if you want DNS-BL to discontinue RBL host queries for any given message as soon as a match is found.

Send "Message" on match rather than "User unknown"
Click this option if you want the specific message assigned to the RBL host to be passed during the SMTP session whenever an IP address is found to be blacklisted. Otherwise, a "user unknown" message will be passed instead. This option is not available if you have elected to use the option on the DNS-BL Options tab to flag messages as spam rather than refuse them.

Caching
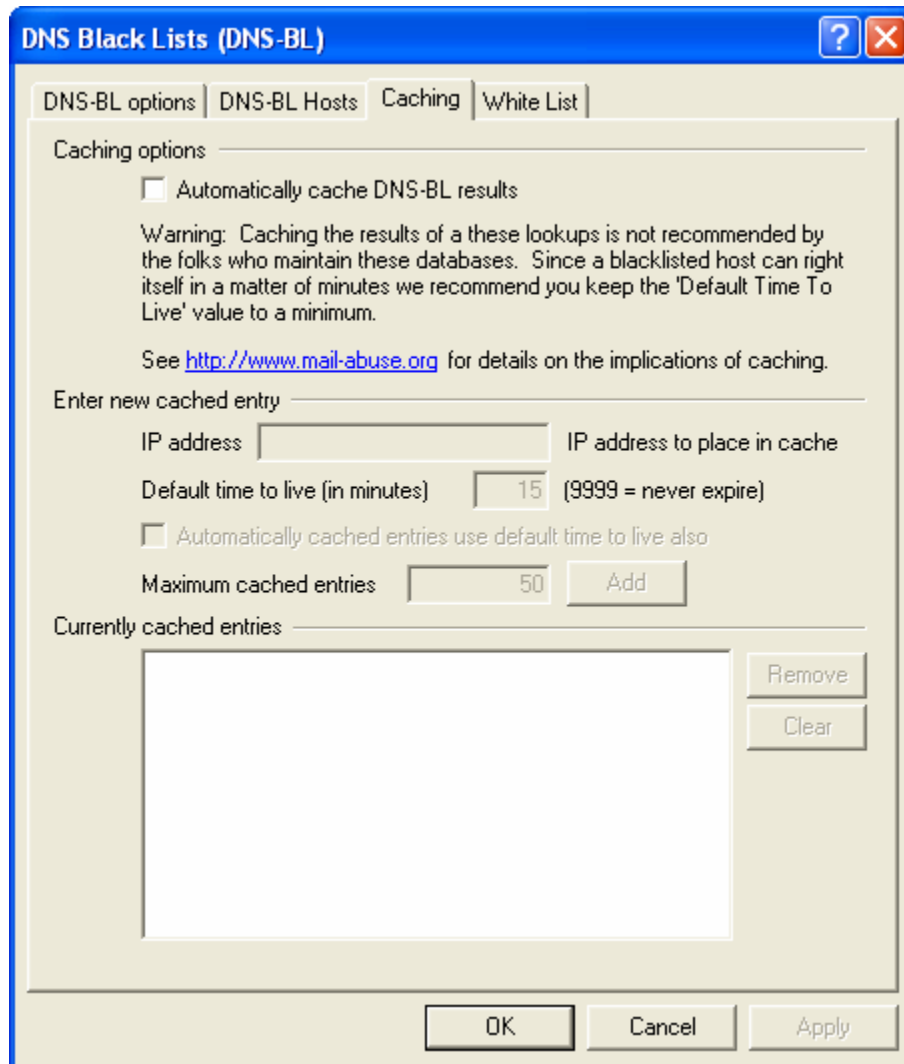
Caching Options

Automatically cache DNS-BL results
Enable this control if you want to cache those IP addresses that receive a positive (i.e. blacklisted) result from a DNS-BL lookup.

✋ **Warning!**

Although caching addresses may conserve some resources—since DNS-BL lookups will not need to be performed on those IP addresses that have already been cached—it is not recommended by the RBL Hosts. Since a blacklisted IP address could have its status corrected in a matter of minutes, caching entries could result in mail being refused unnecessarily. Caution should therefore be used when caching entries. If you choose to use this feature then we recommend keeping small the amount of time that any given entry is

cached. For more information on the implications of caching DNS-BL lookups, see: www.mail-abuse.org.

Enter New Cached Entry

IP address
Enter the IP address that you wish to manually add to the DNS Black List cache.

Default time to live (in minutes)
This is the amount of time that the entry will remain in the DNS Black List cache. Entering 9999 into this field will prevent the entry from expiring—however this is not recommended.

Automatically cached entries use default time to live also
Click this check box if you want automatically cached entries to use the *Default time to live* setting specified above. Normally the time to live (TTL) parameter is based on information returned during the DNS lookup rather than by the *Default time to live* setting.

Maximum cached entries
This is the maximum number of entries that you want to allow to be cached.

Add
After entering the *IP Address* and *Default Time To Live* click this button to add the entry to the list of cached IP addresses.

Currently cached entries
This box list the IP addresses that are currently cached. MDaemon will not perform a lookup on them. They will be treated as blacklisted addresses.

Remove
Select an entry and then click this button to remove it from the list of cached addresses.

Clear
Click this button the clear the list of all cached IP addresses.

White List
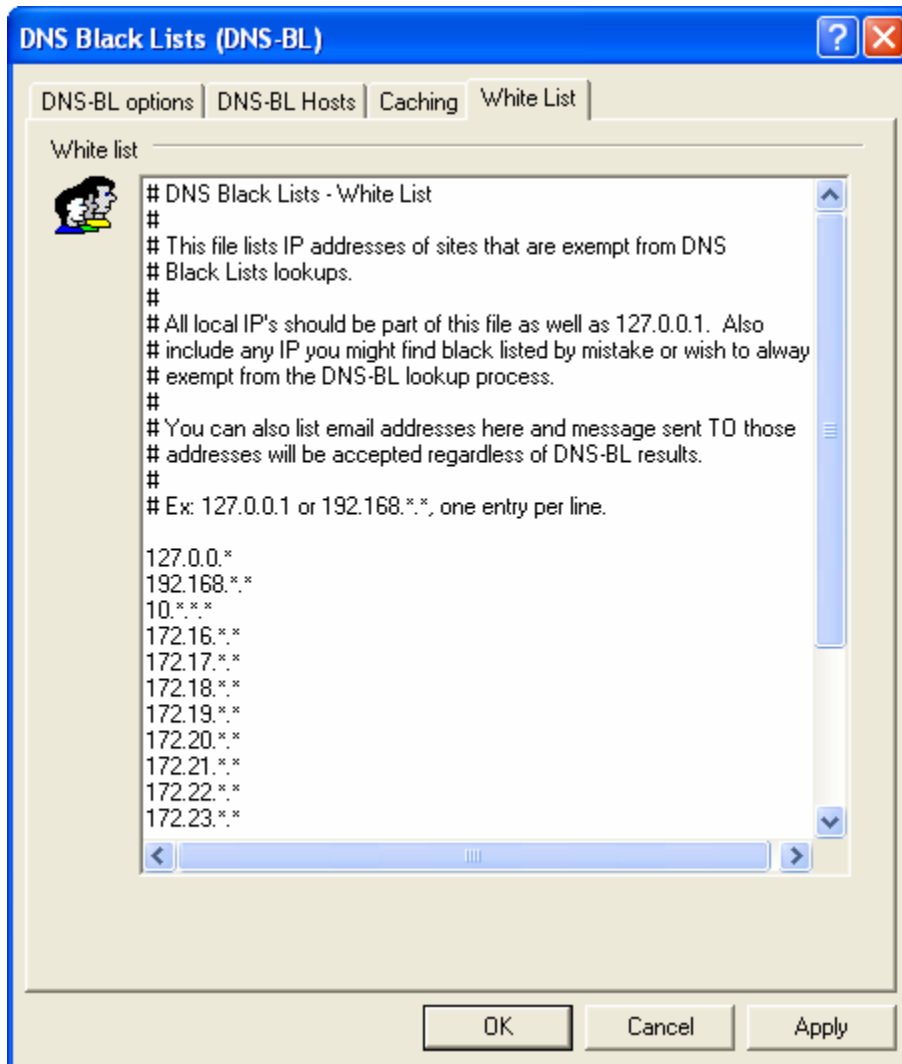
White List

Use this tab to designate IP addresses that will be exempt from DNS-BL lookups. You should always include your local IP address range to prevent DNS Black Lists from looking up messages originating from local users and domains (i.e. 127.0.0.1, 192.168.*.*, and so on). Place one address on each line. Wildcards are permitted.

Spam Filter

The Spam Filter increases MDaemon's already extensive suite of spam prevention tools. The Spam Filter incorporates new technology to heuristically examine incoming email messages in order to compute a "score" based on a complex system of rules. The score is then used to determine the likelihood of a message being spam, and certain actions can be taken based on that score—you can refuse the message, flag it as possible spam, and so on.

Addresses can be white or black listed, or designated as completely exempt from Spam Filter examination. You can have a spam report inserted into messages, showing their spam scores and how those scores were achieved, or you can generate the report as a separate email and have the original spam message included with it as an attachment. Further, you can even use Bayesian learning to help the Spam Filter learn over time to identify spam more accurately and thus increase its reliability.

Finally, by examining many thousands of known spam messages, the rules have been optimized over time and are very reliable in detecting the fingerprint of a spam message. You can, however, customize or add new rules by editing the Spam Filter's configuration files to meet your specific needs.

MDaemon's Spam Filter uses an integrated, popular open-source heuristic technology. The homepage for the open-source project is:

```
http://www.spamassassin.org
```

Spam Filtering
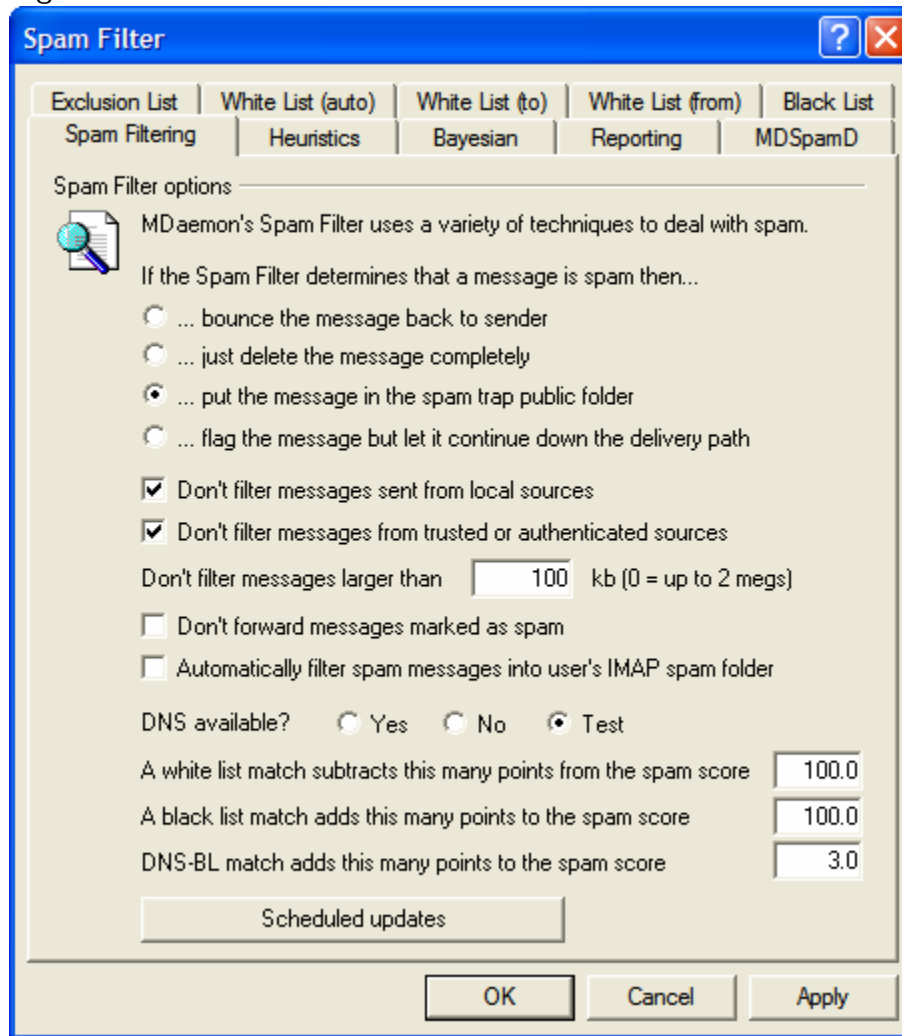
Spam Filter Options

If a message is determined to be spam then…

The Spam Filter will take the action chosen below if a message's spam score is greater than or equal to the spam score specified on the Heuristics tab.

> **…bounce the message back to sender**
> Choose this option if you want to attempt to bounce each spam message back to its sender. Spam is notorious for having invalid return paths, so these messages may frequently be undeliverable.

> **…just delete the message completely**
> Choose this option if you want to simply delete any incoming message whose spam score exceeds the designated limit.

> **…put the message in the spam trap public folder**
> Choose this option if you want to flag messages as spam and then move them to the spam public folder rather than allow them to be delivered.

…flag the message but let it continue down the delivery path

Choose this option if you want to go ahead and deliver each spam message to its intended recipient, and flag it as spam by inserting various spam headers and/or tags designated on the Heuristics tab.

Don't filter messages sent from local sources

Click this check box if you want messages from local users and domains to be exempt from filtering.

Don't filter messages from trusted or authenticated sources

Enable this option if you want messages sent from trusted domains or authenticated senders to be exempt from spam filtering.

Don't filter messages larger than XX kb (0=filter all messages)

It is typical for spam messages to be fairly small since the usual goal of the spammers is to deliver as many messages as possible in the shortest amount of time. If you want messages over a certain size to be exempt from spam filtering then specify that amount (in KB) here. Use "0" as the amount if you don't want size to be a factor in determining exemption from spam filtering—messages will be processed through the spam filter regardless of size.

Don't forward messages marked as spam

Click this check box if you do not wish to allow spam messages to be forwarded.

Automatically filter spam messages into user's IMAP spam folder

Click this option and MDaemon will automatically place each message that the Spam Filter determines to be spam into each user's "Spam" IMAP folder (if such a folder exists). It will also automatically create the folder for each new user account that is added.

When you click this option you will also be asked whether or not you would like MDaemon to create this folder for each of your already existing user accounts. If you choose "Yes" then a folder will be created for all users. If you choose "No" then a folder will only be created when each new user is added. Any folders that already exist for some or all of your users will not be altered or affected in any way.

> **Note**
>
> The remaining options on this tab are unavailable when you have configured MDaemon to use another server's MDaemon Spam Daemon (MDSpamD) for Spam Filter processing. See the MDSpamD tab for more information.

DNS available?

These options allow you to choose whether or not DNS is available to the Spam Filter when processing messages. You may choose one of the following options:

Yes—DNS is available. SURBL/RBL and other rules that require DNS connectivity will therefore be utilized.

No—DNS is not available. Spam filtering rules that require DNS will not be utilized.

Test—DNS availability will be tested and if present it will be used. This is the default setting.

A white list match subtracts this many points from the spam score

Including an address on one of the Spam Filter white lists does not automatically guarantee that a message to or from that address will not be considered spam. Instead, white listed addresses will simply have the amount specified in this control subtracted from their spam scores. For example, if you have the spam

score threshold set to 5.0 and this value set to 100, and then a particularly excessive spam message arrives that gets a spam score of 105.0 or higher before the white list value is subtracted, then the final spam score of the message will be at least 5.0—thus denoting it as spam. This would rarely happen, however, because spam rarely has a value that high unless it contains some other exceptionally high-scoring element, such as a blacklisted address. Of course, if you set the white list subtraction value to a much lower amount then it would occur much more frequently.

A black list match adds this many points to the spam score

As with the white list option above, including an address on the Spam Filter's black list doesn't guarantee that a message from that address will be considered spam. Instead, the value specified in this option will be added to the message's spam score, which will then be used to determine whether or not the message is spam.

DNS-BL match adds this many points to the spam score

If you are using DNS Black Lists (page 131) then you can use this option to specify a value that will be added to a message's spam score when a DNS-BL match results. Sometimes the Spam Filter's heuristic examination of a message may not score it high enough to be considered spam, but a DNS-BL lookup may show that it probably is spam. Adding this value to the spam score of these messages can help to reduce the number of spam messages that manage to slip through undetected by the Spam Filter.

Scheduled updates

Click this button to open the AntiSpam Updates event scheduling dialog (Setup→Event Scheduling...) on which you can schedule the times that the Spam Filter will check for heuristic engine file updates.

Heuristics
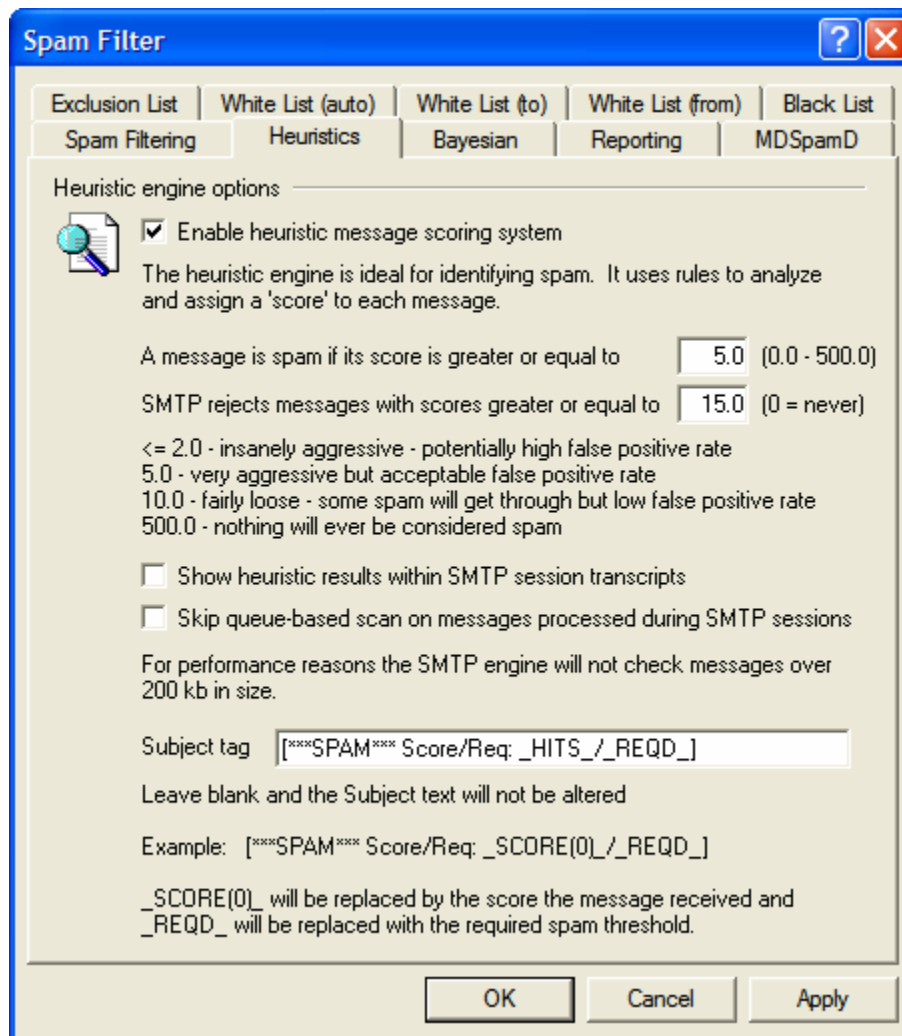
Heuristic Engine Options

Enable heuristic message scoring system
Click this check box to activate the heuristic message-scoring, spam filtering system. No Spam Filter options on any of the tabs will be available until this option is enabled.

A message is spam if its score is greater or equal to XX (0.0-500.0)
The value that you specify here is the required spam threshold that MDaemon will compare to each message's spam score. Any message with a spam score greater than or equal to this amount will be considered spam, and then the appropriate actions will be taken based on your Spam Filter settings.

SMTP rejects messages with scores greater or equal to XX (0=never)
Use this option to designate a spam score rejection threshold. When a message's spam score is greater than or equal to this score it will be rejected completely rather than proceed through the rest of the options and possibly be delivered. The value of this option should always be greater than the value of the "_A message is spam if its score…_" option above. Otherwise, a message would never be considered spam and have the rest of the Spam Filter's options applied to it—it would simply be rejected during delivery. Use "0" in this option if wish to disable scanning during the SMTP process, and if you do not want

MDaemon to reject any messages regardless of their scores. If SMTP scanning is disabled then a queue-based scan will still be performed on the messages after they are accepted. The default setting for this option is "12".

Example,

If you have the spam score threshold set to 5.0 and the rejection threshold set to 10.0 then any message with a spam score that is greater than or equal to 5.0 but less than 10.0 will be considered spam and handled according to the rest of the settings on the Spam Filter dialog. Any message with a spam score greater than or equal to 10.0 will be rejected by MDaemon during the delivery process.

> **Note**
>
> You should monitor the spam filter's performance over time and refine both the spam and rejection thresholds to suit your need. For most people, however, a spam score threshold of 5.0 will catch most spam, with relatively few false negatives (spam that slips through unrecognized) and rarely any false positives (messages flagged as spam that are not). A rejection threshold of 10-15 will cause only messages that are almost certainly spam to be rejected. It is extremely rare that a legitimate message will have a score that high. The default rejection threshold is 12.

Show heuristic results within SMTP session transcripts
Click this option to display heuristic processing results inline with SMTP session transcripts. This option is not available when you have your Spam Score rejection threshold set to "0"— meaning that spam will never be rejected because of its score. For more information see, "*SMTP rejects messages with scores greater or equal to XX (0=never)*" above. **Note:** when using this option, the results of spam processing during the SMTP session will be logged in the SMTP log, not the Spam log.

Skip queue-based scan on messages processed during SMTP sessions
By default, MDaemon scans messages during the SMTP session to determine whether or not they should be rejected for having a spam score above the rejection threshold. For messages that are accepted MDaemon will then perform another, queue-based, scan and treat the messages accordingly, based on their scores and your spam filter configuration. Click this option if you want MDaemon to omit the queue-based scan and treat the results of the initial Spam Filter scan as definitive. This can potentially, significantly decrease CPU usage and increase the efficiency of the AntiSpam system. However, only the default SpamAssassin headers will be added to messages when the queue-based scan is omitted. If you have made any changes to the default SpamAssassin headers or specified custom headers in your `local.cf` file, those changes and additions will be ignored.

Subject tag
This tag will be inserted at the beginning of the Subject header of all messages that meet or exceed the required spam score threshold. It can contain information about the spam score, and you can use your IMAP message filters to search for it and filter the message accordingly (assuming that you have the Spam Filter configured to continue delivering spam messages). This is a simple method for automatically routing spam messages to a designated "spam" folder. If you want to dynamically insert the message's spam score and the value of the required spam threshold then use the tag "_HITS_" for the message's score and "_REQD_" for the required threshold. Alternatively, you can use "_SCORE(0)_" instead of "_HITS_"— this will insert a leading zero into lower scores, which can help ensure the proper sort-order when sorting messages by subject in some email clients.

Example,

> A subject tag set to: `***SPAM*** Score/Req: _HITS_/_REQD_ -`
> will cause a spam message with a score of 6.2 and the subject: "Hey, here's some spam!"
> to be changed to "***SPAM*** Score/Req: 6.2/5.0 – Hey, here's some spam!"
>
> If "`_SCORE(0)_`" is substituted for "`_HITS_`" then it would be changed to "***SPAM***
> Score/Req: 06.2/5.0 – Hey, here's some spam!"

If you do not wish to alter the subject header then leave this option blank. No subject tag will be inserted.

Note

This option is unavailable when you have configured MDaemon to use another server's
MDaemon Spam Daemon (MDSpamD) for Spam Filter processing. The Subject tag
configuration will be determined by the other server's settings. See the MDSpamD tab for
more information.

Bayesian
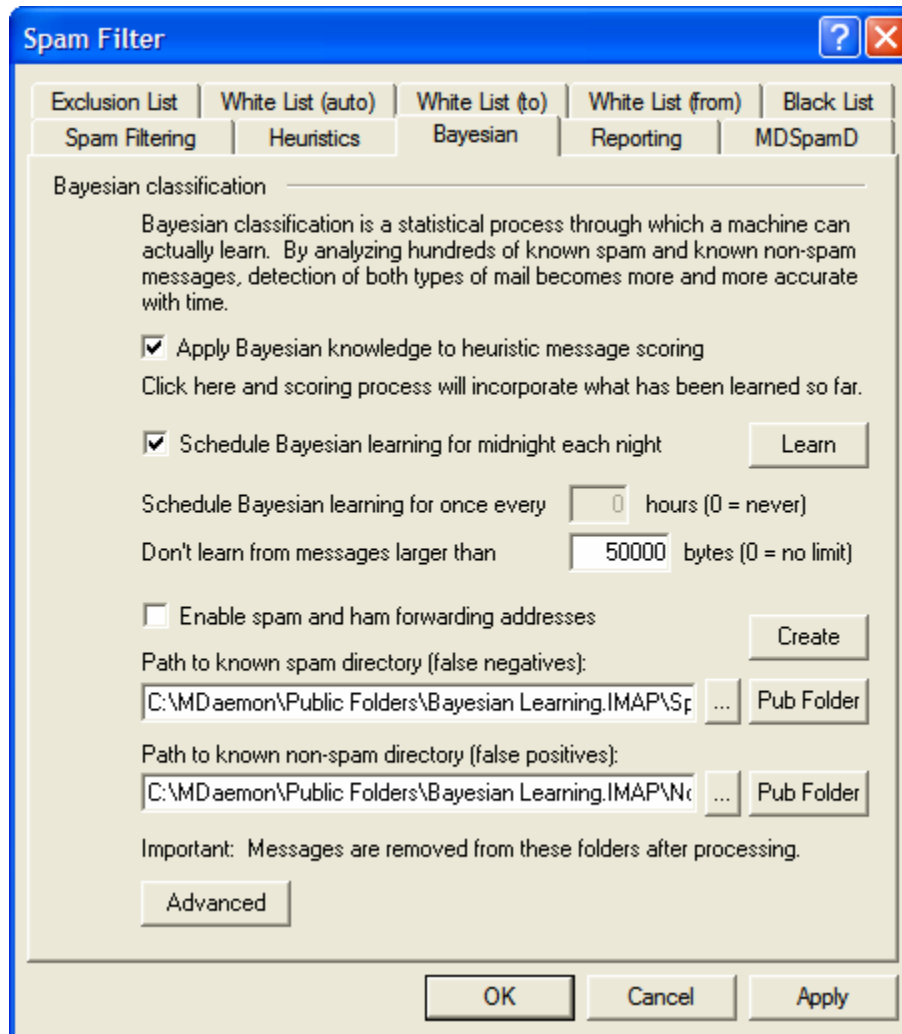
Note

The Bayesian tab is unavailable when you have configured MDaemon to use another server's MDaemon Spam Daemon (MDSpamD) for Spam Filter processing. All Bayesian learning will be performed on the other server. See the MDSpamD tab for more information.

The Spam Filter supports Bayesian learning, which is a statistical process that can optionally be used to analyze spam and non-spam messages in order to increase the reliability of spam recognition over time. You can designate a folder for spam messages and non-spam message that will be scanned each night about midnight. All of the messages in those folders will be analyzed and indexed so that new messages can be compared to them statistically in order to determine the likelihood that they are spam. The Spam Filter can then increase or decrease a message's spam score based upon the results of its Bayesian comparison.

> **Note**
>
> The Spam Filter will not apply a Bayesian classification to messages until a Bayesian analysis has been performed on the number of spam and non-spam messages designated on the Bayesian Advanced dialog (click *Advanced* on this tab to access that dialog). This is necessary in order for the Spam Filter to have a sufficient pool of statistics to draw from when making the Bayesian comparison. Once you have given the system these messages to analyze, it will be sufficiently equipped to begin applying the results of a Bayesian comparison to each incoming message's spam score. By continuing to analyze even more messages the Bayesian classifications will become more accurate over time.

Bayesian Classification

Apply Bayesian knowledge to heuristic message scoring
Click this check box if you want each message's spam score to be adjusted based on a comparison to the currently known Bayesian statistics.

Schedule Bayesian learning for midnight each night
When this option is active, once each day at midnight the Spam Filter will analyze and then delete all messages contained in the spam and non-spam folders specified below. If you wish to schedule Bayesian learning for some other time interval then clear this option and use the *Schedule Bayesian learning for once every XX hours* option below. If you do not wish Bayesian learning to ever occur automatically, then clear this option and specify "0" hours in the option below.

Schedule Bayesian learning for once every XX hours (0=never)
If you wish Bayesian learning to occur at some time interval other than once each night at midnight, then clear the above option and specify a number of hours in this option instead. Each time that number of hours has elapsed, the Spam Filter will analyze and then delete all messages contained in the spam and non-spam folders specified below. If you do not wish Bayesian learning to ever occur automatically, then clear the above option and specify "0" hours in this option.

> **Note**
>
> If you do not want the messages to be deleted after they are analyzed then you can prevent that by copying LEARN.BAT to MYLEARN.BAT in the \MDaemon\App\ subfolder and then deleting the two lines that begin with "del" in that file. When the MYLEARN.BAT file is present in that folder MDaemon will use it instead of LEARN.BAT. See SA-Learn.txt in your \MDaemon\SpamAssassin\ subfolder for more information. For more detailed information on heuristic spam filtering technology and Bayesian learning, visit:
>
> ```
> http://www.spamassassin.org/doc/sa-learn.html
> ```

Don't learn from messages larger than XX bytes (0=no limit)
Use this option to designate a maximum message size for Bayesian analysis. Messages larger this value will not be analyzed. Specify "0" in this option if you do not wish to implement any size restriction.

Learn

Click this button to initiate a manual Bayesian analysis of the designated folders rather than waiting for the automatic analysis.

Enable Spam and Ham forwarding addresses

Click this check box if you wish to allow users to forward spam and non-spam (ham) messages to designated addresses so that the Bayesian system can learn from them. The default addresses that MDaemon will use are "`SpamLearn@<domain.com>`" and "`HamLearn@<domain.com>`". Messages sent to these addresses must be received via SMTP from a session that is authenticated using SMTP AUTH. Further, MDaemon expects the messages to be forwarded to the above addresses as attachments of type "`message/rfc822`". Any message of another type that is sent to these email addresses will not be processed.

You can change the addresses MDaemon uses by adding the following key to the `CFILTER.INI` file:

```
[SpamFilter]
SpamLearnAddress=SpamLearnAddress@
HamLearnAddress=NonSpamLearnAddress@
```

Note: the last character of these values must be "@".

Create

Click this button to create Spam and Ham public IMAP folders automatically, and to configure MDaemon to use them. The following folders will be created:

`<Bayesian Learning>`	—root IMAP folder
`<Bayesian Learning\\Spam>`	—this folder is for false negatives (spam that doesn't score high enough to get flagged as such).
`<Bayesian Learning\\Ham>`	—this folder is for false positives (non-spam messages that erroneously score high enough to get flagged as spam).

By default, access permission to these folders is only granted to local users of local domains and is limited to Lookup and Insert. The postmaster's default permissions are Lookup, Read, Insert, and Delete.

Path to known spam directory (false negatives):

This is the path to the folder that will be used for Bayesian analysis of known spam messages. Only copy messages to this folder that you consider to be spam. You should not automate the process of copying messages to this folder because of the potential for errors. Automating this process could sometimes cause non-spam messages to be analyzed as spam, which would decrease the reliability of the Bayesian statistics.

Path to known non-spam directory (false positives):

This is the path to the folder that will be used for Bayesian analysis of messages that are definitely **not** spam. Only messages that you do **not** consider to be spam should be copied to this folder. You should not automate the process of copying messages to this folder because of the potential for errors. Automating this process could sometimes cause spam messages to be analyzed as non-spam, which would decrease the reliability of the Bayesian statistics.

Pub Folder

Click one of these buttons to designate one of your Public Folders as the Bayesian directory. This is an easy way for your users to place their messages incorrectly categorized as spam or non-spam into your Bayesian directories for analysis. Note, however, that giving access to more people increases the likelihood that some messages will be put into the wrong folders thus skewing the statistics and decreasing reliability.

Note

If you rename a Public folder via a mail client, Windows Explorer, or some other means, then you must manually reset this path to the appropriate new folder name. If you rename a folder but do not change its path here, the Spam Filter will continue to use this path for the Bayesian folder instead of the new one.

Advanced

Click this button to open the Bayesian advanced options dialog, which contains options for automatic Bayesian learning and designating Bayesian database token limits. See Bayesian Advanced Options below.

Bayesian Advanced Options
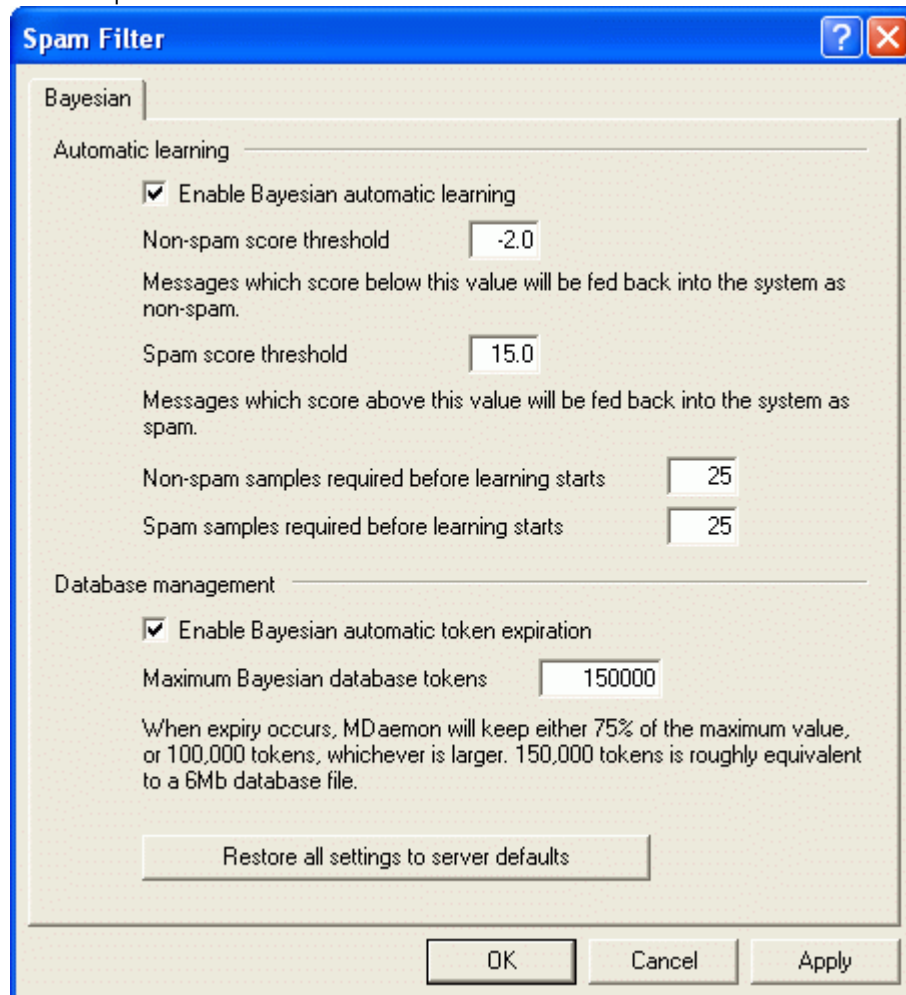
> **Note**
>
> The Bayesian Advanced Options are unavailable when you have configured MDaemon to use another server's MDaemon Spam Daemon (MDSpamD) for Spam Filter processing. All Bayesian learning will be performed on the other server. See the MDSpamD tab for more information.

Automatic Learning

Enable Bayesian automatic learning

With automatic Bayesian learning you can designate spam and non-spam scoring thresholds. Any message scoring below the non-spam threshold will be treated by automatic learning as non-spam, and any message scoring above the spam threshold will be treated as spam. Although automatic learning is not generally recommended, it can be beneficial if you are careful in setting your thresholds values because it will allow old expired tokens that are removed from the database files (see *Token expiration message count* below) to be replaced automatically. This prevents the need for manual retraining to recover expired tokens.

Non-spam score threshold

Messages with a spam score below this value will be treated as non-spam messages by the Bayesian Classification system.

Spam score threshold

Messages with a spam score above this value will be treated as spam messages by the Bayesian Classification system.

Non-spam samples required before learning starts

The Spam Filter will not apply a Bayesian classification to messages until this number of non-spam messages (and spam messages specified in the next option) has been analyzed by the Bayesian system. This is necessary in order for the Spam Filter to have a sufficient pool of statistics to draw from when making the Bayesian comparison. Once you have given the system these messages to analyze, it will be sufficiently equipped to begin applying the results of a Bayesian comparison to each incoming message's spam score. By continuing to analyze even more messages the Bayesian classifications will become more accurate over time.

Spam samples required before learning starts

Just as the previous option applies to non-spam messages, this option is for designating the number of *spam* messages that must be analyzed before the Spam Filter will begin applying a Bayesian classification to them.

Database Management

Enable Bayesian automatic token expiration

Click this option if you want the Bayesian system to automatically expire database tokens whenever the number of tokens specified below is reached. Setting a token limit can prevent your Bayesian database from getting excessively large.

Maximum Bayesian database tokens
This is the maximum number of Bayesian database tokens allowed. When this number of tokens is reached, the Bayesian system removes the oldest, reducing the number to 75% of this value, or 100,000 tokens, whichever is higher. The number of tokens will never fall below the larger of those two values regardless of how many tokens are expired. Note: 150,000 database tokens is approximately 8Mb.

Restore all settings to server defaults
Click this button to restore all of the Bayesian advanced options to their default values.

Reporting
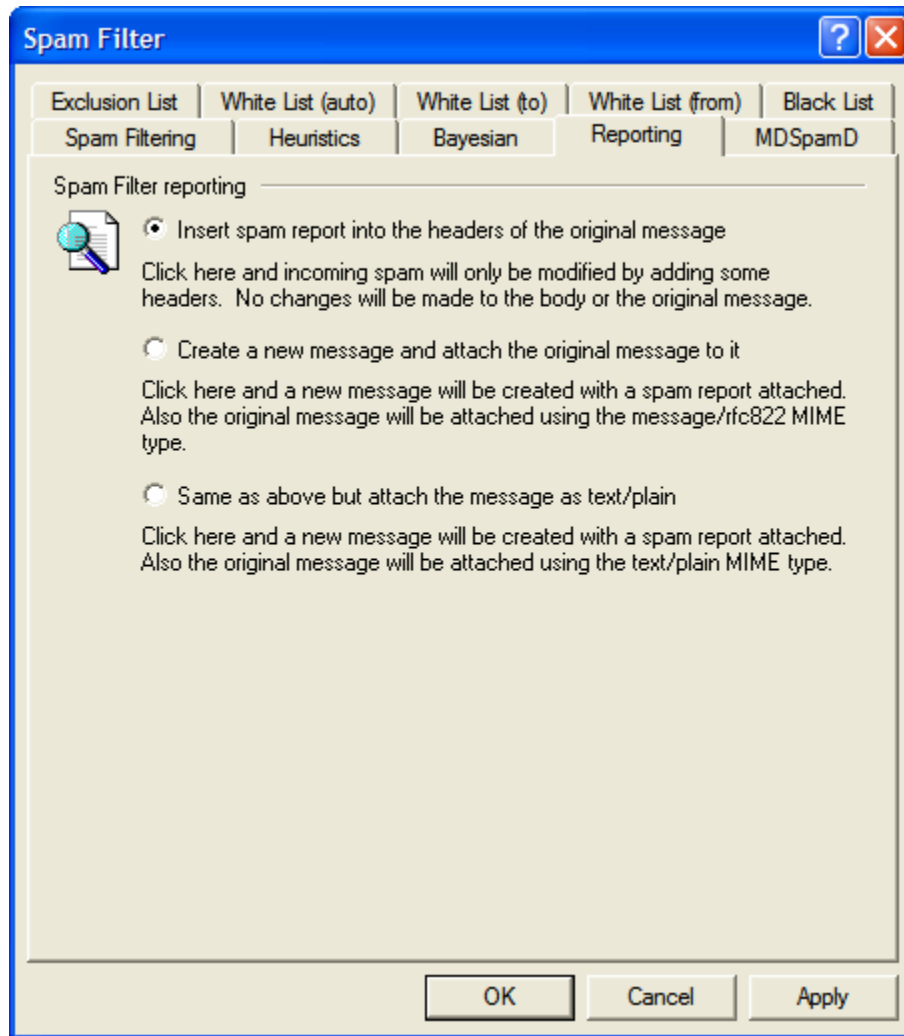
Note

The Spam Filter Reporting options are unavailable when you have configured MDaemon to use another server's MDaemon Spam Daemon (MDSpamD) for Spam Filter processing. Spam Filter Reporting will be controlled by the other server's settings. See the MDSpamD tab for more information.

Spam Filter Reporting

Insert spam report into the headers of the original message
Choose this reporting option if you want the Spam Filter to insert a spam report into each spam message's headers. The following is an example of a simple spam report:

```
X-Spam-Report: ---- Start Spam Filter results
   5.30 points, 5 required;
   * -5.7 -- Message-Id indicates the message was sent from MS Exchange
   *  2.0 -- Subject contains lots of white space
```

```
* -3.3 -- Has a In-Reply-To header
*  3.0 -- Message has been marked by MDaemon's DNS Black List
*  2.9 -- BODY: Impotence cure
*  2.2 -- BODY: Talks about exercise with an exclamation!
*  0.5 -- BODY: Message is 80% to 90% HTML
*  0.1 -- BODY: HTML included in message
*  1.6 -- BODY: HTML message is a saved web page
*  2.0 -- Date: is 96 hours or more before Received: date
---- End of Spam Filter results
```

Create a new message and attach the original message to it

Choose this reporting option if you want spam to cause a new email message to be created containing the spam report. The original spam message will be included with it as a file attachment.

Same as above but attach the message as text/plain

Like the previous reporting option, this option will generate the spam report as a new message that includes the original spam message as a file attachment. The difference is that the original message will be attached using the text/plain MIME type. Because spam sometimes contains HTML code that is unique for each message and can potentially reveal to the spammer which email and IP address opened it, this method can prevent that from happening by converting the HTML code to plain text.

MDSpamD
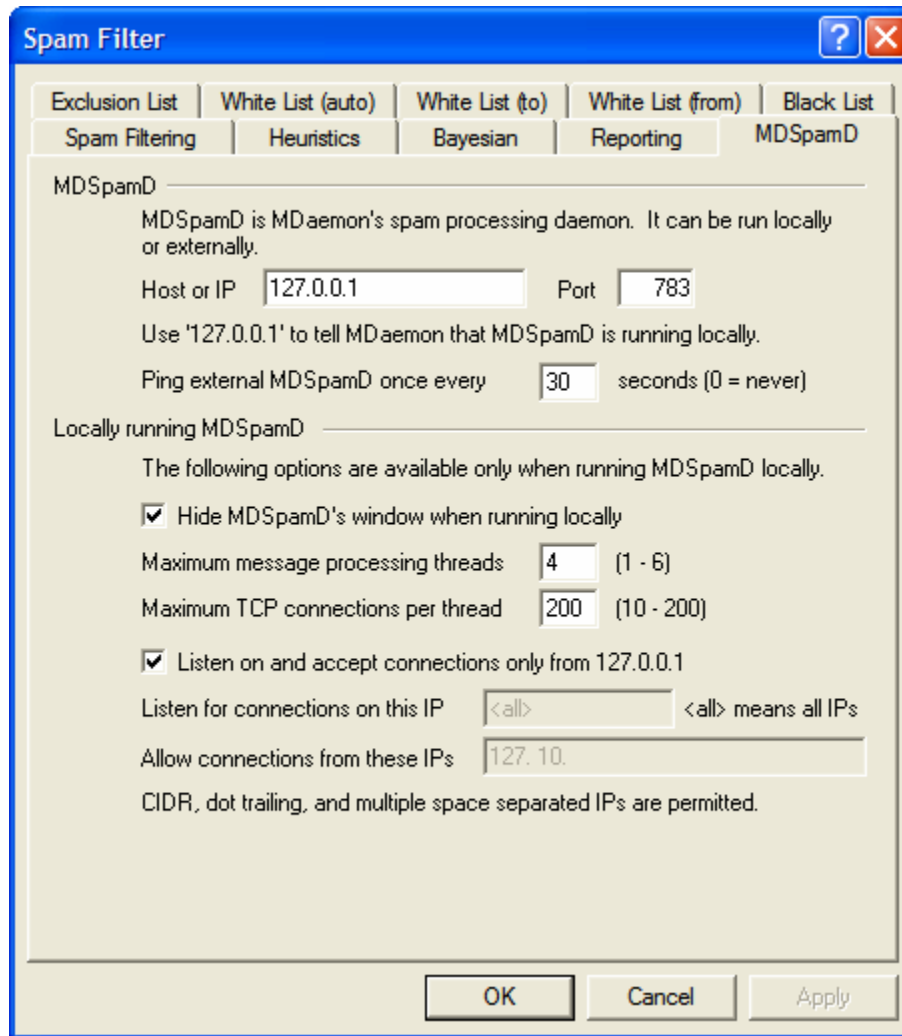
MDaemon's anti-spam system runs as a separate daemon—the MDaemon Spam Daemon (MDSpamD), which is fed messages via TCP/IP for scanning. This greatly increases the Spam Filter's performance and makes it possible for you to run MDSpamD locally, on a separate computer, or have MDaemon use another MDSpamD (or any other SpamD enabled product) running at some other location. By default MDSpamD runs locally and receives messages on port 783 at 127.0.0.1, but you can configure a different port and IP address if wish to send the messages to some other spam daemon running at a different location or on a different port.

MDSpamD

Host or IP
This is the host or IP address to which MDaemon will send messages to be scanned by MDSpamD. Use 127.0.0.1 if MDSpamD is running locally.

Port
This is the port on which the messages will be sent. The default MDSpamD port is 783.

Ping external MDSpamD once every XX seconds
If you are using an MDSpamD or some alternative SpamD enabled product that is running externally, you can use this option to ping its location periodically if necessary. Use "0" if you do not wish to ping that location.

Locally running MDSpamD

Hide MDSpamD's window when running locally
When MDSpamD is running locally, enable this option if you would like it to run hidden in the background. Otherwise it will run in a visible Command Prompt window.

Maximum message processing threads
This is the maximum number of threads that MDaemon will use for internal processing.

Maximum TCP connections per thread
This is the maximum number of TCP connections accepted by an MDSpamD thread before it branches into another thread.

Listen on and accept connections only from 127.0.0.1
Click this option if do not you wish to allow your local MDSpamD to accept connections from any external source. Only connections from the same machine on which it is running will be allowed.

Listen for connections on this IP
If the previous option is disabled, you can use this option to bind or restrict connections to a specific IP address. Only connections to the designated IP address will be allowed. Use "<all>" if you do not wish to restrict MDSpamD to any particular IP address.

Allow connections from these IPs
These are the IP addresses from which MDSpamD will accept incoming connections. Connections from other IP addresses will be rejected. This is useful if you wish to allow connections from another server in order to share Spam Filter processing.

Command Line Options
MDSpamD can accept many command line options, documented at:

`http://spamassassin.apache.org/full/3.0.x/dist/doc/spamd.html`

If you wish to use any of these options, construct a string containing the desired options and then save it within the `CFilter.ini` file in the following format:

```
[SpamD]
Extra=<command line options string>
```

Note

Some of the options can be configured using the options on this dialog and therefore do not need to be set up manually via command line options.

Exclusion List
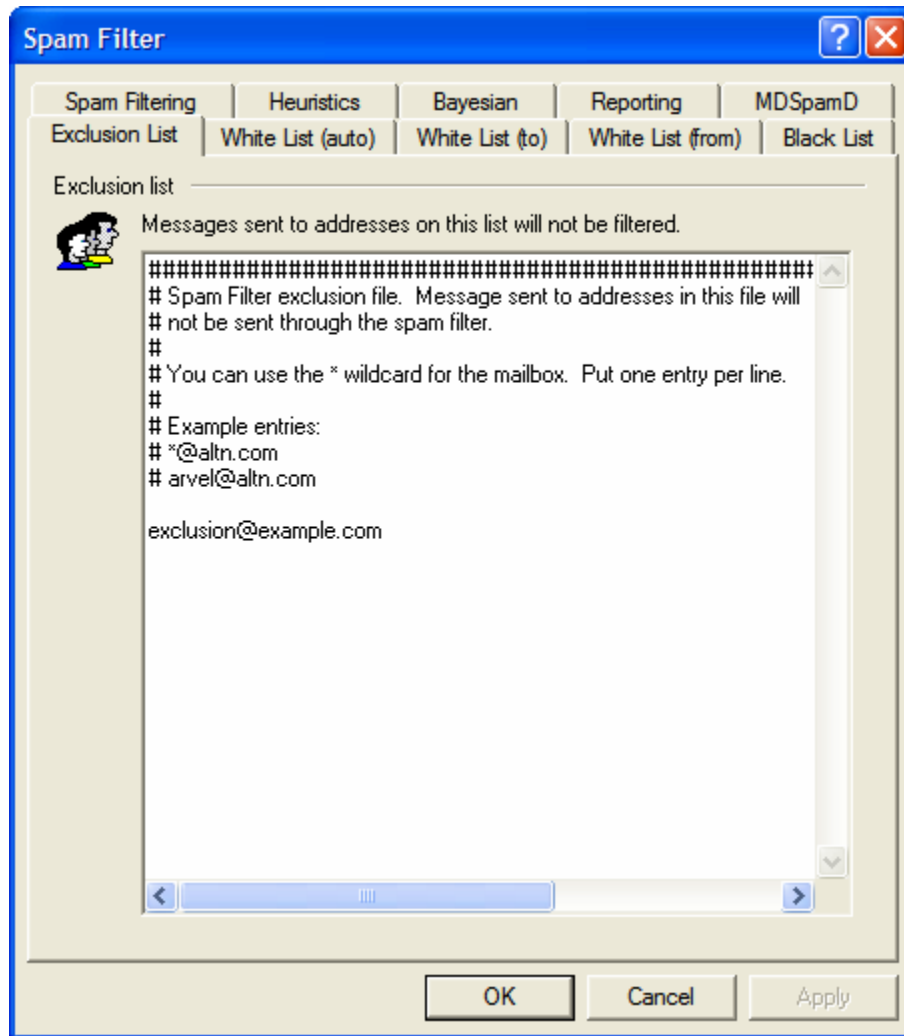
Messages sent to addresses on this list will not be filtered

Use this tab to designate recipient addresses that you wish to be exempt from spam filtering. Messages destined for these addresses will not be processed through the spam filter.

> **Note**
>
> This tab is unavailable when you have configured MDaemon to use another server's MDaemon Spam Daemon (MDSpamD) for Spam Filter processing. This Spam Filter list will be maintained on the other server. See the MDSpamD tab for more information.

White List (auto)
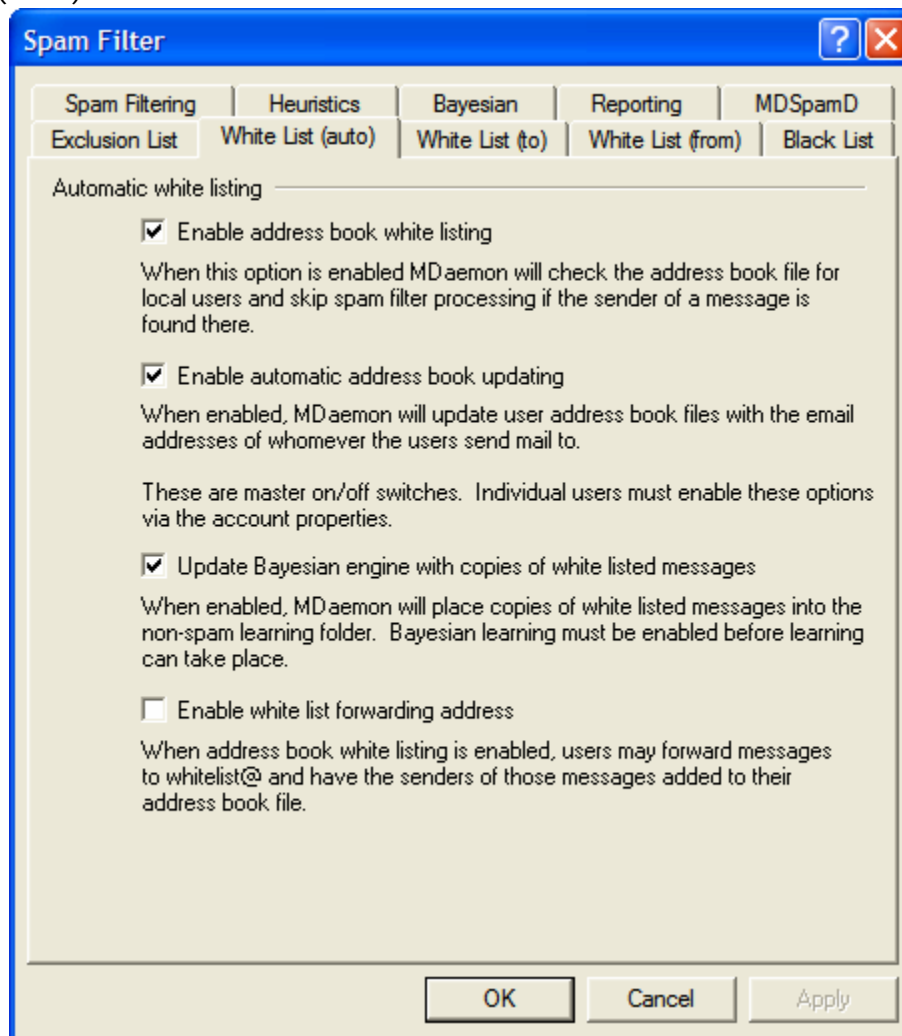
Automatic White Listing

Enable address book white listing
Click this option to add private address book entries to the white list automatically. Using this option, MDaemon can query each user's private address book file with each incoming message. If the sender of the message is in the recipient's address book file then the message will be automatically white listed. If you do not wish to apply automatic white listing to every MDaemon user then you can disable it for individual users by clearing the *Use private address book as Spam Filter white list* option on the Options tab of the Account Editor.

Keeping your address book updated and synchronized with WorldClient, Outlook, Outlook Express, the Windows Address Book, and other MAPI mail clients that use the Windows Address Book, can be done easily using ComAgent.

Enable automatic address book updating
This option automatically adds to your address book any non-local email addresses to which you send mail—non-local recipients are added to your XML address book file. When used in conjunction with the

option to use your private address book file as your white list, the number of Spam Filter false positives can be drastically reduced.

If you do not wish to apply automatic address book updating to every MDaemon user then you can disable it for individual users by clearing the *Update private address book when the account sends mail* check box on the Options tab of the Account Editor.

Note: This option is disabled for accounts using auto-responders.

Update Bayesian engine with copies of white listed messages
Click this option to cause qualified messages to be copied automatically into the Bayesian non-spam learning folder (designated on the Bayesian tab). This helps to automate the process of providing the Bayesian engine with samples of non-spam email, or "ham". Regularly providing the Bayesian engine with new examples of non-spam to learn from will increase its reliability over time and help to reduce the number of false positives (i.e. messages that are erroneously classified as spam).

To qualify for this feature, an incoming message must be addressed to a local user and the sender must be someone in his WorldClient address book. If the message is outgoing, then it must be the recipient who is in the address book. If you do not want any outgoing messages to qualify, then use Notepad to edit the following setting in the MDaemon.ini file:

```
[SpamFilter]
UpdateHamFolderOutbound=No (default = Yes)
```

When a message qualifies, it is copied into the Bayesian non-spam learning folder even if Bayesian scheduled learning is disabled on the Bayesian tab. Thus, when scheduled learning is later enabled, or when learning is manually activated, a set of non-spam messages will be ready for analysis. Not every message that qualifies, however, is copied into the learning folder. When the feature is activated, MDaemon will copy qualified messages until a designated number is reached. Subsequently it will copy single messages at designated intervals. By default, the first twenty-five qualifying messages will be copied and then every tenth qualifying message after that. The initial number copied is equal to the number designated in the option, "*Non-spam samples required before learning starts*" located on the Bayesian Advanced dialog. Changing that setting will also change this value. If you wish to change the interval by which subsequent messages are copied, you can do so by editing the following setting in the MDaemon.ini file:

```
[SpamFilter]
HamSkipCount=10 (default = 10)
```

Finally, once a designated total number of messages has been copied, the entire process will be begin again—twenty-five will be copied and then every tenth (or an alternate value if you have changed these settings). By default, the process will be restarted after 500 qualifying messages have been copied. You can change this value by editing the following setting in the MDaemon.ini file:

```
[SpamFilter]
HamMaxCount=500 (default = 500)
```

> **Note**
>
> This option is unavailable when you have configured MDaemon to use another server's MDaemon Spam Daemon (MDSpamD) for Spam Filter processing. All Bayesian learning functions are determined by the other server's settings and are performed on the other server. See the MDSpamD tab for more information.

Enable white list forwarding address

When your account is set to "*Use private address book as Spam Filter white list*" on the Account Editor's Options tab, enabling this option will allow you to forward messages to `whitelist@<domain.com>` and have MDaemon add the sender of the original message to your personal address book. The white listed address is taken from the forwarded messages `From` header.

Messages forwarded to `whitelist@<domain.com>` must be forwarded as attachments of the type `message/rfc822`, and they must be received by MDaemon via SMTP from a session that is authenticated using SMTP AUTH. Forwarded messages not meeting these requirements will not be processed.

You can change the address MDaemon uses by editing the following key in the `CFILTER.INI` file:

```
[SpamFilter]
WhiteListAddress=WhiteList@
```

Note: the last character must be "@".

White List (to)
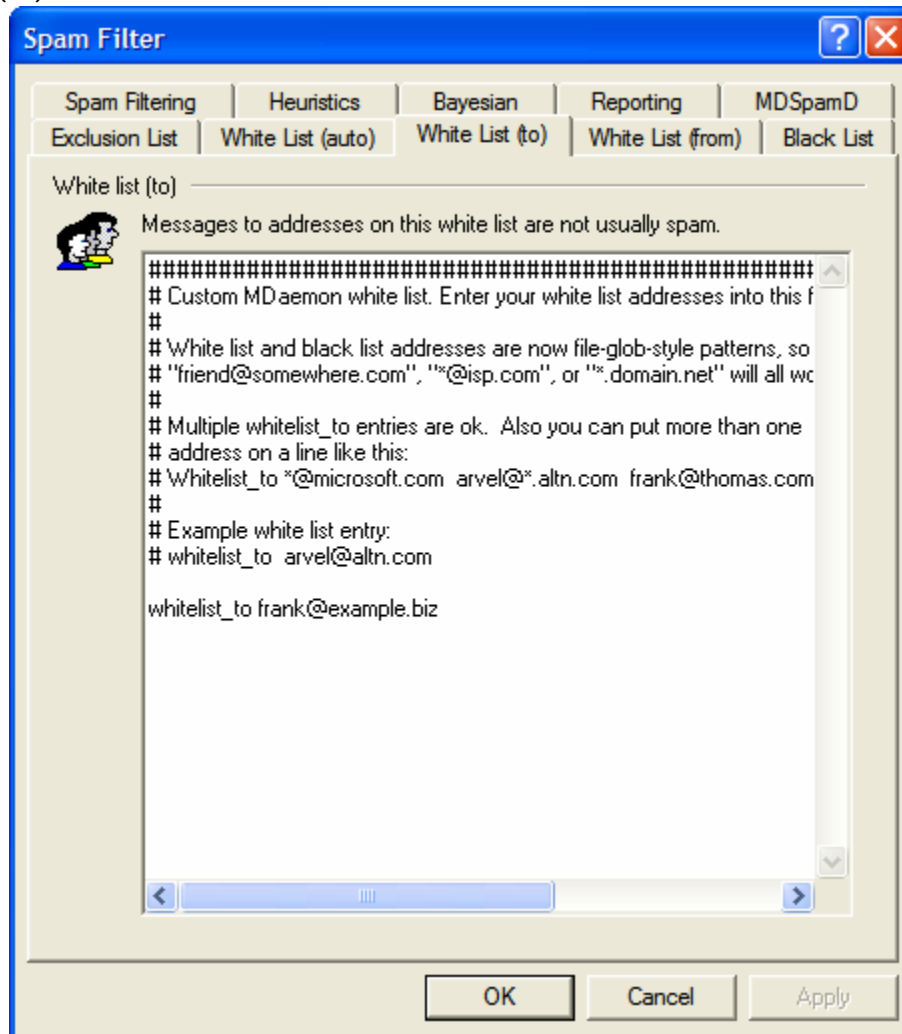
Messages to addresses on this white list are not usually spam

Including an address on this white list does not automatically guarantee that a message to that address will not be considered spam. Instead, messages to the white listed addresses will have the amount specified on the Spam Filtering tab subtracted from their spam score. For example, if you have the spam score threshold set to 5.0 and the white list value on the spam filtering tab set to 50, and then a particularly excessive spam message arrives that gets a spam score of 55.0 or higher before the white list value is subtracted, then the final spam score of the message will be at least 5.0—thus denoting it as spam. This would rarely happen, however, because spam rarely has a value that high unless it contains some other exceptionally high-scoring element, such as a blacklisted address.

Note

This tab is unavailable when you have configured MDaemon to use another server's MDaemon Spam Daemon (MDSpamD) for Spam Filter processing. This Spam Filter list will be maintained on the other server. See the MDSpamD tab for more information.

White List (from)

Messages from addresses on this white list are not usually spam

Including an address on this white list does not automatically guarantee that a message from that address will not be considered spam. Instead, messages from these white listed addresses will have the amount specified on the Spam Filtering tab subtracted from their spam score. For example, if you have the spam score threshold set to 5.0 and the white list value on the spam filtering tab set to 50, and then a particularly excessive spam message arrives that gets a spam score of 55.0 or higher before the white list value is subtracted, then the final spam score of the message will be at least 5.0—thus denoting it as spam. This would rarely happen, however, because spam rarely has a value that high unless it contains some other exceptionally high-scoring element, such as a blacklisted address.
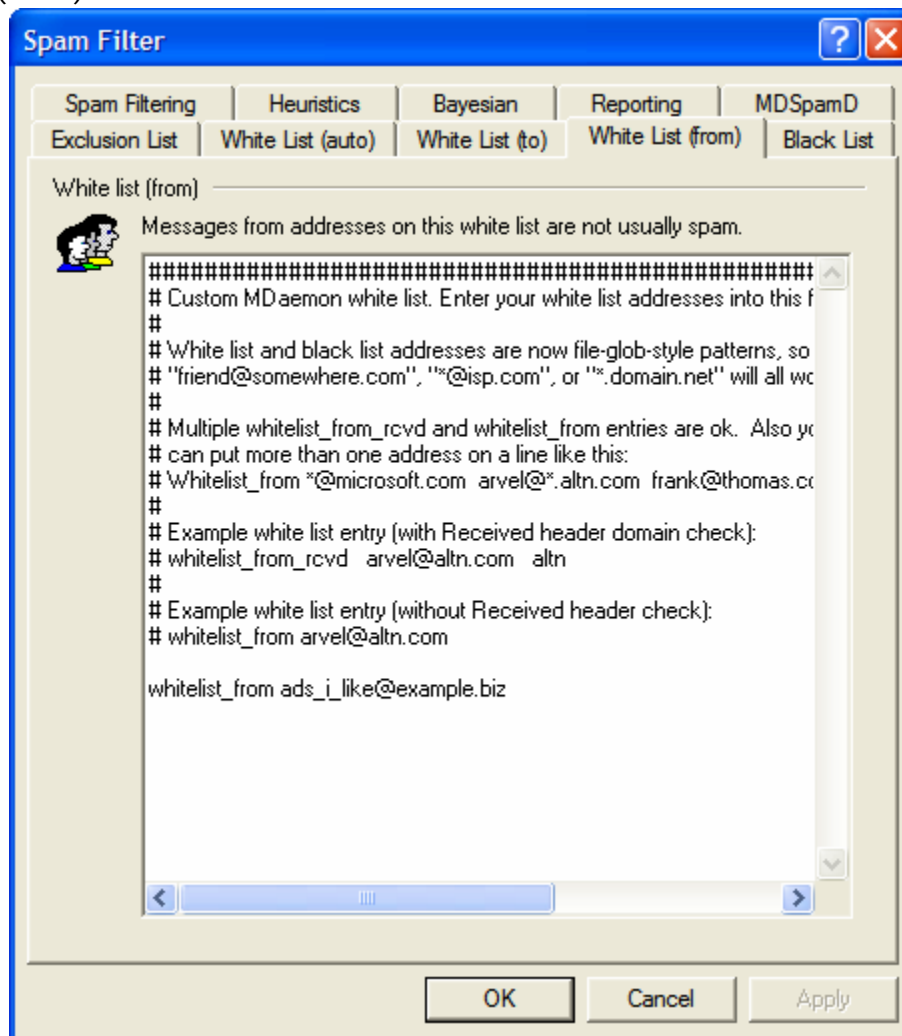
Note

This tab is unavailable when you have configured MDaemon to use another server's MDaemon Spam Daemon (MDSpamD) for Spam Filter processing. This Spam Filter list will be maintained on the other server. See the MDSpamD tab for more information.

Black List
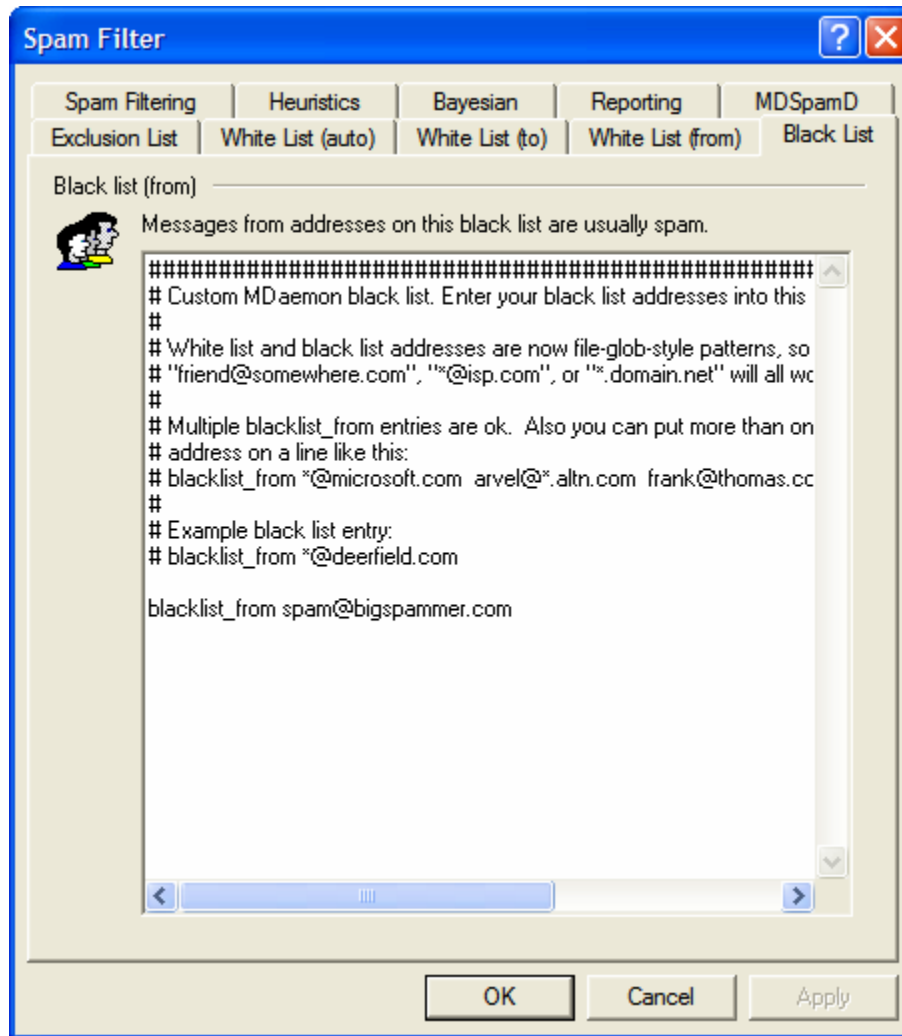
Messages from addresses on this black list are usually spam

Including an address on this black list does not automatically guarantee that a message from that address will be considered spam. Instead, messages from the black listed addresses will have the amount specified on the Spam Filtering tab added to their spam score. For example, if you have the spam score threshold set to 5.0 and the black list value on the spam filtering tab set to 50, and a particularly low-scoring message arrives that gets a spam score of -50.0 or lower before the black list value is added, then the final spam score of the message will be less than 5.0—thus denoting it as a legitimate non-spam message. This would rarely happen, however, because messages rarely have that much subtracted from their spam scores unless they contain some other special element, such as a white listed address.

> **Note**
>
> This tab is unavailable when you have configured MDaemon to use another server's MDaemon Spam Daemon (MDSpamD) for Spam Filter processing. This Spam Filter list will be maintained on the other server. See the MDSpamD tab for more information.

SSL & Certificates

MDaemon now supports the Secure Sockets Layer (SSL)/Transport Layer Security (TLS) protocol for SMTP, POP, and IMAP, and for WorldClient's web server. The SSL protocol, developed by Netscape Communications Corporation, is the standard method for securing server/client Internet communications. It provides server authentication, data encryption, and optional client authentication for TCP/IP connection. Further, because SSL is built into all current major browsers, simply installing a valid digital certificate on your server will activate the connecting browser's SSL capabilities when connecting to WorldClient.

If you are connecting to the standard mail ports via a mail client instead of using WorldClient, MDaemon supports the STARTTLS extension over TLS for SMTP and IMAP, and the STLS extension for POP3. However, you must first have your client configured to use SSL, and it must support those extensions—not all mail clients support them.

Finally, you can also dedicate specific ports for SSL connections. This isn't required but can provide a further level of accessibility for clients that do not support certain SSL extensions. For example, Microsoft Outlook Express doesn't support STARTTLS for IMAP over the default mail port, but it does support connections to dedicated SSL ports.

The options for enabling and configuring SSL are located on the SSL & Certificates dialog (click **Ctrl+L** or Secu̲rity→SS̲L/TLS/Certificates... on MDaemon's menu bar). The SSL port settings are located on the Ports tab of the Primary Domain Configuration dialog (click **F2** or S̲etup→P̲rimary domain...→Ports).

For information on creating and using SSL Certificates, see:

> *Creating & Using SSL Certificates*—page 172

For more general information on the SSL protocol and Certificates, see:

> http://wp.netscape.com/security/techbriefs/ssl.html

> http://www.microsoft.com/technet/prodtechnol/iis/maintain/featusability/default.asp
> (At this URL see: "Chapter 6 - Managing Microsoft Certificate Services and SSL")

—

The TLS/SSL protocol is addressed in RFC-2246, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc2246.txt
```

The STARTTLS extension for SMTP is addressed in RFC-3207, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc3207.txt
```

Using TLS with the IMAP and POP3 protocols is addressed in RFC-2595, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc2595.txt
```

MDaemon
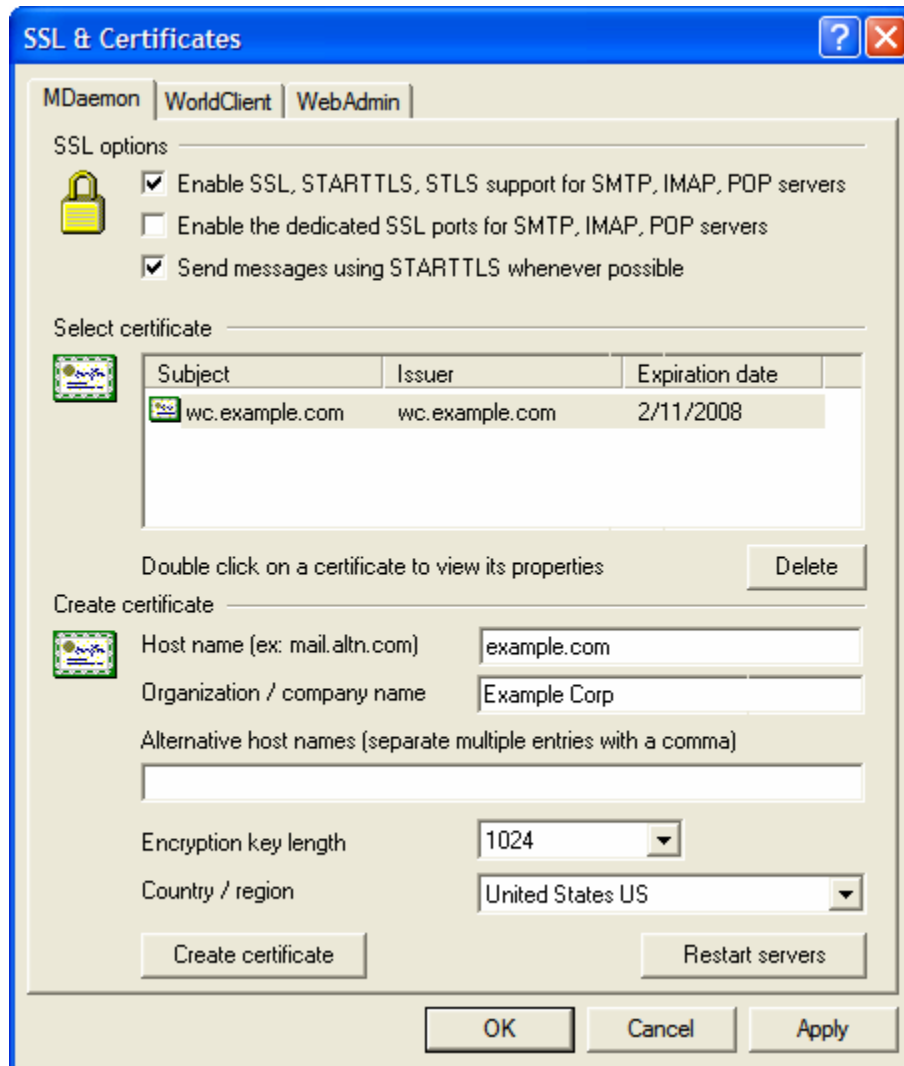
SSL Options

Enable SSL, STARTTLS, and STLS support for SMTP, IMAP, POP servers
Click this check box to activate support for the SSL/TLS protocol and the STARTTLS and STLS extensions. Then, choose the certificate that you want to use from the Select Certificate section below.

Enable the dedicated SSL ports for SMTP, IMAP, POP servers
Click this option if you want to make available the dedicated SSL ports specified on the Ports tab of the Primary Domain Configuration dialog. This will not affect clients using STARTTLS and STLS on the default mail ports—it merely provides an additional level of support for SSL.

Send messages using STARTTLS whenever possible
Click this option if you want MDaemon to attempt to use the STARTTLS extension for every SMTP message it sends. If a server to which MDaemon is connecting doesn't support STARTTLS then the message will be delivered normally without using SSL.

Select Certificate

This box displays your SSL certificates. Single-click a certificate in this list to designate it as the certificate that you wish the mail servers to use. Double-click a certificate to open it in the Certificate dialog on which you can review its details.

> **Note**
>
> Currently, MDaemon does not support different certificates for multiple domains. All mail domains must share a single certificate. If you have more than one domain then enter those domain names into the control called "*Alternative host names (separate multiple entries with a comma)*" outlined below.

Delete
Select a certificate in the list and then click this button to delete it. A confirmation box will open and ask you if you are sure that you want to delete the certificate.

Create Certificate

The following controls are used to create certificates. To edit any certificate, double-click its entry in the list above.

Host name
Enter the host name to which your users will connect (for example, "mail.example.com").

Organization/company name
Enter the organization or company that "owns" the certificate here.

Alternative host names (separate multiple entries with a comma)
Currently, MDaemon does not support separate certificates for multiple domains—all domains must share a single certificate. If there are alternative host names to which users may be connecting and you want this certificate to apply to those names as well, then enter those domain names here separated by commas. Wildcards are permitted, so "`*.example.com`" would apply to all sub domains of `example.com` (for example, "`wc.example.com`", "`mail.example.com`", and so on).

Encryption key length
Choose the desired bit-length of the encryption key for this certificate. The longer the encryption key the more secure the transferred data will be. Note, however, that not all applications support key lengths longer than 512.

Country/region
Choose the country or region in which your server resides.

Create Certificate
After entering the information into the above controls, click this button to create your certificate.

Restart Servers
Click to restart the SMTP/IMAP/POP servers. The servers must be restarted when a certificate changes.

WorldClient
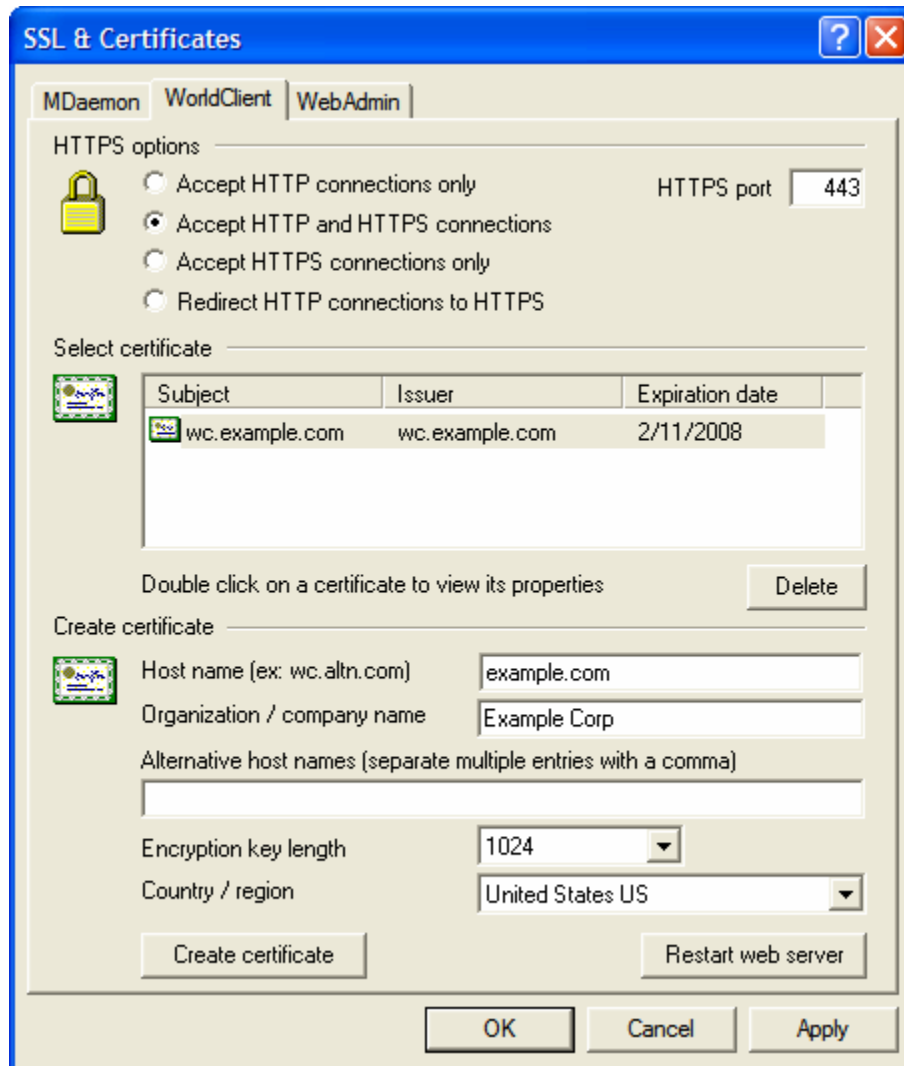
The options for enabling and configuring WorldClient to use SSL are located on the SSL & Certificates dialog (click **Ctrl+L** or **Sec**u**rity→SS**L**/TLS/Certificates...→WorldClient**). For your convenience these options are also located on the WorldClient/RelayFax Properties dialog (click **Ctrl+W** or **Setup→**W**orldClient...→HTTPS**).

Note

This dialog only applies to WorldClient when using its built-in web server. If you have configured WorldClient to work with IIS instead of its own web server then these options will not be used—SSL support must be configured within IIS.

HTTPS Options

Accept HTTP connections only
Choose this option if you do not wish to allow any HTTPS connections to WorldClient. Only HTTP connections will be accepted.

Accept HTTP and HTTPS connections
Choose this option if you want to enable SSL support within WorldClient, but do not wish to force your WorldClient users to use HTTPS. WorldClient will listen for connections on the HTTPS port designated below, but it will still respond to normal http connections on the WorldClient port designated on the Web Server tab of the WorldClient (web mail) dialog.

Accept HTTPS connections only
Choose this option if you want to **require** HTTPS when connecting to WorldClient. WorldClient will respond only to HTTPS connections when this option is enabled—it will not respond to HTTP requests.

Redirect HTTP connections to HTTPS
Choose this option if you wish to redirect all HTTP connections to HTTPS on the HTTPS port.

HTTPS port
This is the TCP port that WorldClient will listen to for SSL connections. The default SSL port is 443. If the default SSL port is used then you will not have to include the port number in WorldClient's URL when connecting via HTTPS (i.e. "https://example.com" is equivalent to "https://example.com:443").

> **Note**
>
> This is not the same as the WorldClient port that is designated on the Web Server tab of the WorldClient (web mail) dialog. If you are still allowing HTTP connections to WorldClient then those connections must use that other port to connect successfully. HTTPS connections must use the HTTPS port.

Select Certificate

This box displays your SSL certificates. Single-click a certificate in this list to designate it as the certificate that you wish WorldClient to use. Double-click a certificate to open it in the Certificate dialog on which you can review its details.

> **Note**
>
> Currently, MDaemon does not support multiple certificates for WorldClient. All WorldClient domains must share a single certificate. If you have more than one WorldClient domain then enter those domain names (and any others that you wish to use to access WorldClient) into the control called "*Alternative host names (separate multiple entries with a comma)*" outlined below.

Delete
Select a certificate in the list and then click this button to delete it. A confirmation box will open and ask you if you are sure that you want to delete the certificate.

Create Certificate

The following controls are used to create certificates. To edit any certificate, double-click its entry in the list above.

<u>Host name</u>
Enter the host name to which your users will connect (for example, "wc.example.com").

<u>Organization/company name</u>
Enter the organization or company that "owns" the certificate here.

<u>Alternative host names (separate multiple entries with a comma)</u>
Currently, MDaemon does not support multiple certificates—all WorldClient domains must share a single certificate. If there are alternative host names to which users may be connecting and you want this certificate to apply to those names as well, then enter those domain names here separated by commas. Wildcards are permitted, so "`*.example.com`" would apply to all sub domains of example.com (for example, "`wc.example.com`", "`mail.example.com`", and so on).

<u>Encryption key length</u>
Choose the desired bit-length of the encryption key for this certificate. The longer the encryption key the more secure the transferred data will be. Note, however, that not all applications support key lengths longer than 512.

<u>Country/region</u>
Choose the country or region in which your server resides.

<u>Create Certificate</u>
After entering the information into the above controls, click this button to create your certificate.

<u>Restart web server</u>
Click this button to restart the web server. The web server must be started before new certificates will be used.

WebAdmin
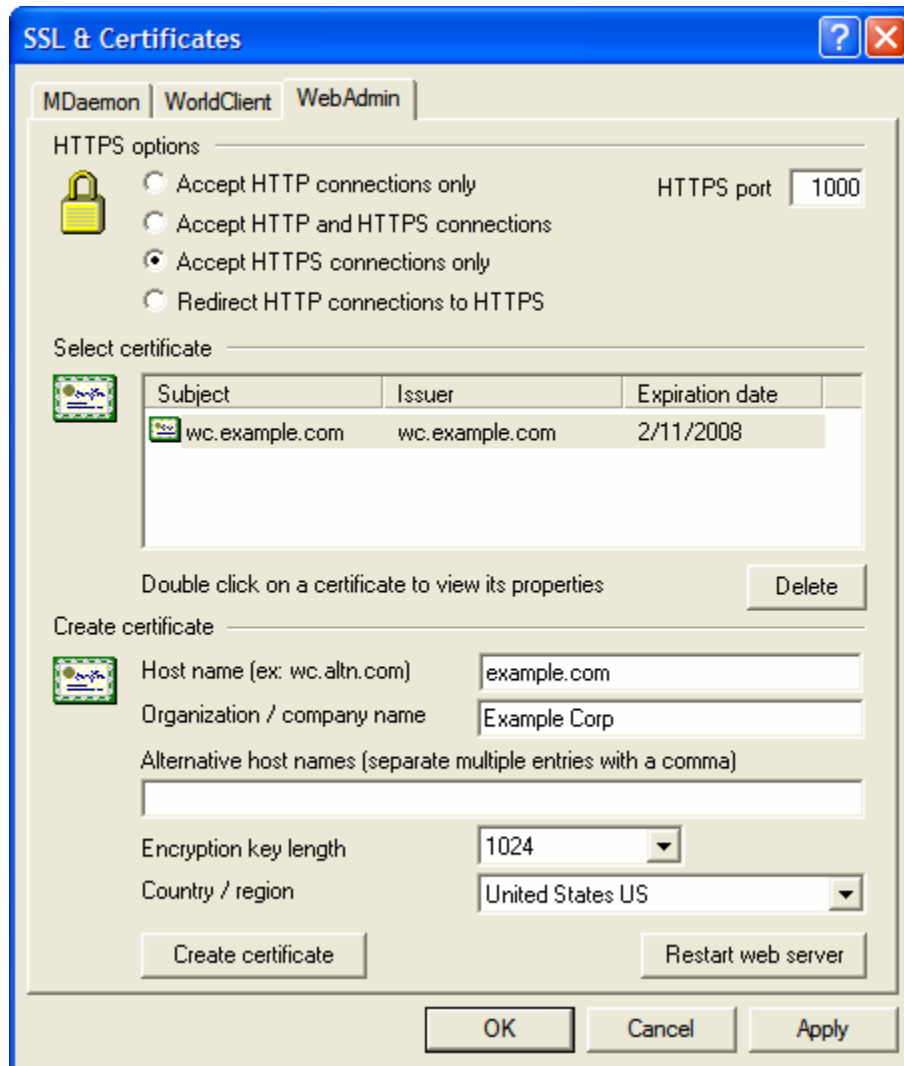
The options for enabling and configuring WebAdmin to use SSL are located on the SSL & Certificates dialog (click Ctrl+L or Security→SSL/TLS/Certificates…→WebAdmin). For your convenience, however, you can also access these options on the HTTPS tab of the WebAdmin dialog (click Alt+I or Setup→WebAdmin…→HTTPS).

Note

This dialog only applies to WebAdmin when using MDaemon's built-in web server. If you have configured WebAdmin to work with some other web server, these options will not be used—SSL/HTTPS support must be configured within IIS.

HTTPS Options

Accept HTTP connections only
Choose this option if you do not wish to allow any HTTPS connections to WebAdmin. Only HTTP connections will be accepted.

Accept HTTP and HTTPS connections
Choose this option if you want to enable SSL support within WebAdmin, but do not wish to force your WebAdmin users to use HTTPS. WebAdmin will listen for connections on the HTTPS port designated below, but it will still respond to normal http connections on the WebAdmin port designated on the Ports tab of the Primary Domain dialog.

Accept HTTPS connections only
Choose this option if you want to **require** HTTPS when connecting to WebAdmin. WebAdmin will respond only to HTTPS connections when this option is enabled—it will not respond to HTTP requests.

Redirect HTTP connections to HTTPS
Choose this option if you wish to redirect all HTTP connections to HTTPS on the HTTPS port.

HTTPS port
This is the TCP port that the web server will monitor for SSL connections. The default SSL port is 443. If the default SSL port is used then you will not have to include the port number in WebAdmin's URL when connecting via HTTPS (i.e. "https://example.com" is equivalent to "https://example.com:443").

> **Note**
>
> This is not the same as the port designated on the Ports tab of the Primary Domain dialog. If you are still allowing HTTP connections, then those connections must use that port. HTTPS connections must use the HTTPS port.

Select Certificate

This box displays your SSL certificates. Single-click a certificate in this list to designate it as the certificate that you wish WebAdmin to use. Double-click a certificate to open it in the Certificate dialog on which you can review its details.

> **Note**
>
> Currently, MDaemon does not support multiple certificates for WebAdmin—all WebAdmin domains must share a single certificate. If you have more than one domain then enter those domain names (and any others that you wish to use to access WebAdmin) into the control called "*Alternative host names (separate multiple entries with a comma)*" outlined below.

Delete
Select a certificate in the list and then click this button to delete it. A confirmation box will open and ask you if you are sure that you want to delete the certificate.

Create Certificate

The following controls are used to create certificates. To edit any certificate, double-click its entry in the list above.

Host name
Enter the host name to which your users will connect (for example, "wa.example.com").

Organization/company name
Enter the organization or company that "owns" the certificate here.

Alternative host names (separate multiple entries with a comma)
Currently, MDaemon does not support multiple certificates—all domains must share a single certificate. If there are alternative host names to which users may be connecting and you want this certificate to apply to those names as well, then enter those domain names here separated by commas. Wildcards are permitted, so "*.example.com" would apply to all sub domains of example.com (for example, "wa.example.com", " webadmin.example.com", and so on).

Encryption key length
Choose the desired bit-length of the encryption key for this certificate. The longer the encryption key the more secure the transferred data will be. Note, however, that not all applications support key lengths longer than 512.

Country/region
Choose the country or region in which your server resides.

Create Certificate
After entering the information into the above controls, click this button to create your certificate.

Restart web server
Click this button to restart the web server. The web server must be started before new certificates will be used.

Creating and Using SSL Certificates

In Windows 2000/XP, when using the SSL & Certificates dialog to create certificates, MDaemon generates certificates that are self-signed. In other words, the Issuer of the certificate, or Certificate Authority (CA), is the same as the owner of the certificate. This is perfectly valid and allowed, but because the CA won't already be listed in yours users' lists of trusted CAs, whenever they connect to WorldClient or WebAdmin's HTTPS URL they will be asked whether or not they wish to proceed to the site and/or install the certificate. Once they agree to install the certificate and trust your WorldClient's domain as a valid CA they will no longer have to see the security alert message when connecting to WorldClient or WebAdmin.

When connecting to MDaemon via a mail client such as Microsoft Outlook, however, they will not be given the option to install the certificate. They will be allowed to choose whether or not they wish to continue using the certificate temporarily, even though it isn't validated. Each time they start their mail client and connect to the server, they will have to choose to continue using the non-validated certificate. To avoid this you should export your certificate and distribute it to your users via email or some other means. Then, they can manually install and trust your certificate to avoid future warning messages.

Creating a Certificate
To create a certificate from within MDaemon:

1. Move to the SSL & Certificates dialog within MDaemon (click **Ctrl+L** or **Security→SSL/TLS/Certificates...** on MDaemon's menu bar).

2. In the text box labeled, "*Host name*", enter the domain to which the certificate belongs (for example, "`mail.example.com`").

3. Type the name of the organization or company that owns the certificate into the text box labeled, "*Organization/company name*".

4. In "*Alternative host names...*", type all other domain names that your users will be using to access your server (for example, "`*.mydomain.com`", "`example.com`", "`wc.altn.com`", and so on).

5. Choose a length for the encryption key from the drop-down list box.

6. Choose the Country/region where your server resides.

7. Click **Create certificate**.

Using Certificates Issued by a Third-party CA

If you have purchased or otherwise generated a certificate from some source other than MDaemon, you can still use that certificate by using the Microsoft Management Console to import it into the certificate store that MDaemon uses. To do so:

1. On your Windows toolbar, click **Start→Run...**, and then type "`mmc /a`" into the "Open:" text box.

2. Click **OK**.

3. In the Microsoft Management Console, click **Console→Add/Remove Snap-in...** (or press **Ctrl+M** on your keyboard).

4. On the Standalone tab, click **Add...**.

5. Click **Certificates**, and then click **Add**.

6. Choose **Computer account**, and then click **Next**.

7. Choose **Local computer**, and then click **Finish**.

8. Click **Close**, and click **OK**.

9. Under "Certificates (Local Computer)", click the "Certificates" subfolder under the "Trusted Root Certification Authorities" folder if the certificate that you are importing is self-signed. If it is not self-signed then click the "Personal" folder.

10. Click **Action→All Tasks→Import...** , and click **Next**.

11. Enter the file path to the certificate that you wish to import (using the Browse button if necessary), and click **Next**.

12. Click **Next**, and click **Finish**.

Note

MDaemon will only display certificates that have private keys using the Personal Information Exchange format (PKCS #12). If your imported certificate does not appear in the list then you may need to import a `*.PEM` file, which contains both a certificate key and private key. Importing this file using the same process outlined above will convert it to the PKCS #12 format.

Address Suppression
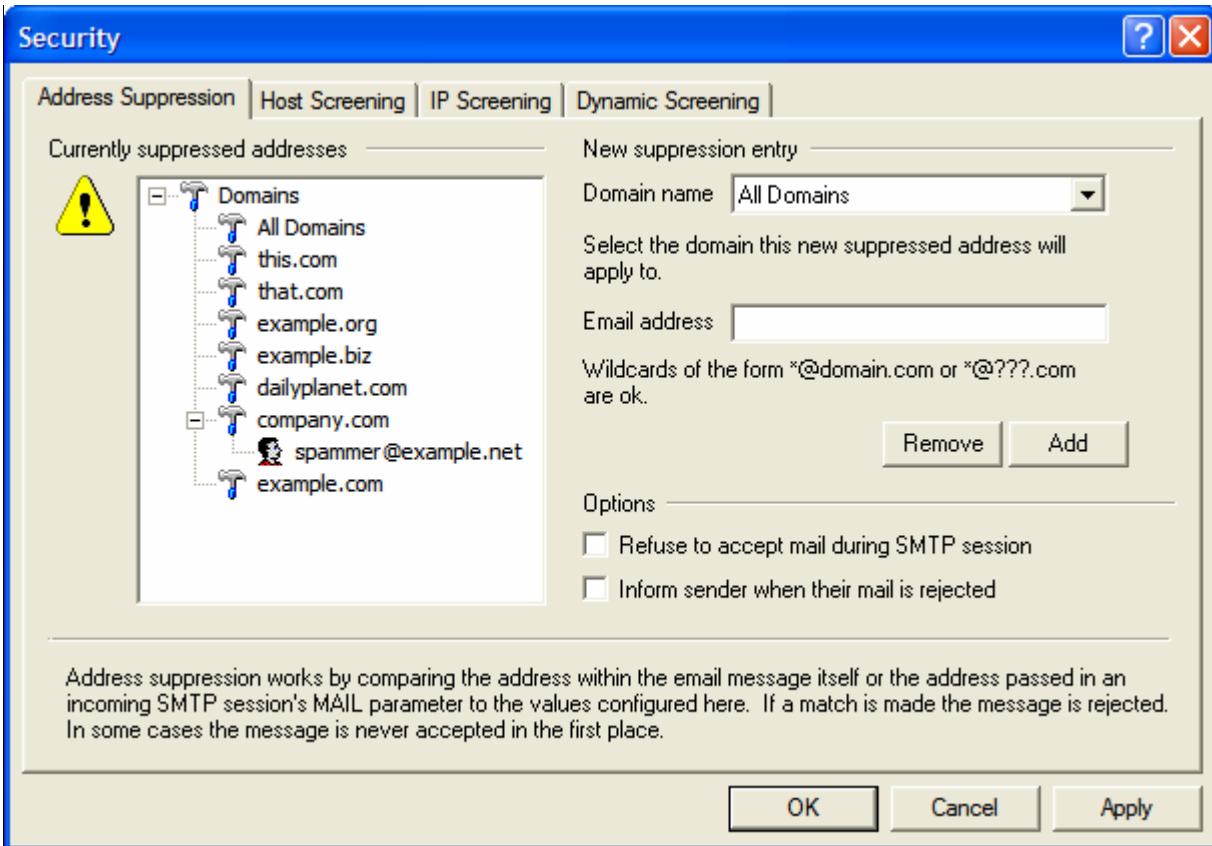
Use Security→Address Suppression… (or F4) to edit the addresses on the suppression list. This list contains addresses that are not allowed to send mail traffic through your server. If a message arrives from an address on this list, it will either be accepted and moved to the bad message queue or refused during the SMTP session and thus never accepted at all, depending upon your settings. This is useful for controlling problem users. Addresses may be suppressed on a per domain basis or globally (applied to all MDaemon domains).

Currently Suppressed Addresses

This window displays all currently suppressed addresses listed by the domain that is suppressing them.

New Suppression Entry

Domain name
Choose the domain to which this suppressed address will apply. In other words, what domain do you want to prevent from receiving mail from the suppressed address? Choose "All Domains" from this list to suppress the address globally.

> **Note**
>
> Messages arriving from addresses listed in the "All Domains" category will be accepted and then moved to the bad message queue. Messages from addresses listed under specific

domains will be handled according to that domain's suppression settings. See "*Refuse to accept mail during SMTP session*" and "*Inform sender when their mail is rejected*" below for more suppression options.

Email address
Enter the address that you wish to suppress. Wildcards are accepted, therefore "*@badmail.com" will suppress any message from any user at "badmail.com" and "frank@*" will suppress any message from anyone named "frank", regardless of the domain the message is from.

Remove
Click this button to remove an entry that you have selected in the *Currently Suppressed Addresses* display.

Add
Click this button to add the designated user to the suppression list.

Options

Refuse to accept mail during SMTP session
When this control is enabled, mail to the selected domain from a suppressed address will be refused during the SMTP transaction stage. No mail to that domain from a suppressed address will ever be stored on your server, even in temporary work files. When this control is disabled, messages will be accepted but then moved to the bad message queue. This feature is set on a per domain basis; it is not available for "All Domains" suppressed addresses.

Inform sender when their mail is rejected
If selected, a polite message will be routed back to the suppressed sender telling him or her that their message was deleted. This feature is set on a per domain basis.

Note

In order for this function to work, a copy of the message must be downloaded during the SMTP session so that it can be parsed. Consequently, this option is incompatible with the "*Refuse to accept mail during SMTP session*" switch.

Host Screening
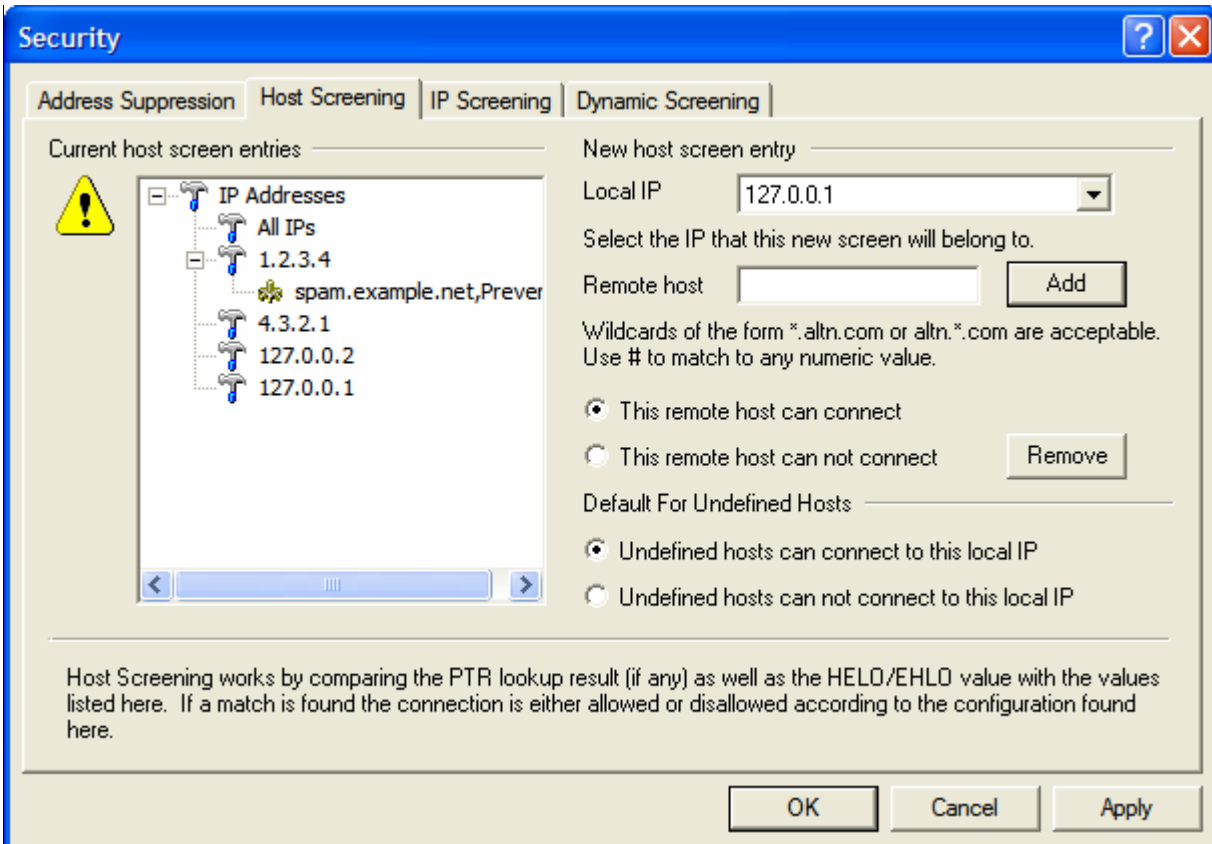
Current Host Screen Entries

This window displays all hosts that are being screened by MDaemon. They are listed either globally or according to the Local IP Address to which they apply.

New Host Screen Entry

Local IP
Choose from the drop-down list either "All IP's" or the local IP to which you wish to apply the screen. This is the IP address that the remote host is attempting to connect to.

Remote host
Enter a host that you wish to add to the screened list. Wildcards are permitted, so you could enter "*.example.com" to prevent or allow connections from all sub domains of example.com, or "example.*" to apply the screen to all top-level domains beginning with "example". The wildcard "#" can be used to match any numeric value. Click the *Add* button to add the specified host to the list.

This remote host can connect
Selecting this option will allow only those hosts designated under the given local IP to connect and deliver messages to that IP address. Attempts to connect to that IP address by hosts not specified in the listing will be refused and immediately aborted. This option is useful for setting up private mail network systems.

<u>This remote host can not connect</u>
Selecting this option will allow all hosts other than those designated under the given local IP to connect and deliver messages to that IP address. When a screened host attempts to connect to that IP address, the connection will be refused and immediately aborted. This option is useful for excluding hosts that cause problems for your mail transport system.

<u>Add</u>
Click this button to add the host to the list.

<u>Remove</u>
Click this button to remove a selected entry from the list.

Default for Undefined Hosts

<u>Undefined hosts can connect to this local IP</u>
When this option is chosen, all hosts not listed in the host screen **will** be allowed to connect to the specified IP address.

*<u>Undefined hosts cannot connect to this local IP</u>*
When this option is chosen, **only** those hosts specifically granted permission in the host screen will be allowed to connect to the specified IP address.

IP Screening

Use the **Security→Address Suppression/Host, IP, and Dynamic Screening…** (F4) menu selection to configure IP Screening. The IP Screen is a list of IP addresses that you have designated as either acceptable or non-acceptable. How the server treats attempted connections from the IP addresses listed on the IP Screen depends on the security setting selected in the Screen editor. You may specify a list of IP addresses and then configure the server to only allow connections from those on the list, or you can configure it to abort any connection attempt from an IP address on the list. CIDR notation and the wildcards *, #, and ? are allowed.

For example:

..*.*	Matches to any IP address
#.#.#.#	Matches to any IP address
192.*.*.*	Matches to any IP that begins with 192
192.168.*.239	Matches to IP addresses from 192.168.0.239 to 192.168.255.239
192.168.0.1??	Matches to IP addresses from 192.168.0.100 to 192.168.0.199
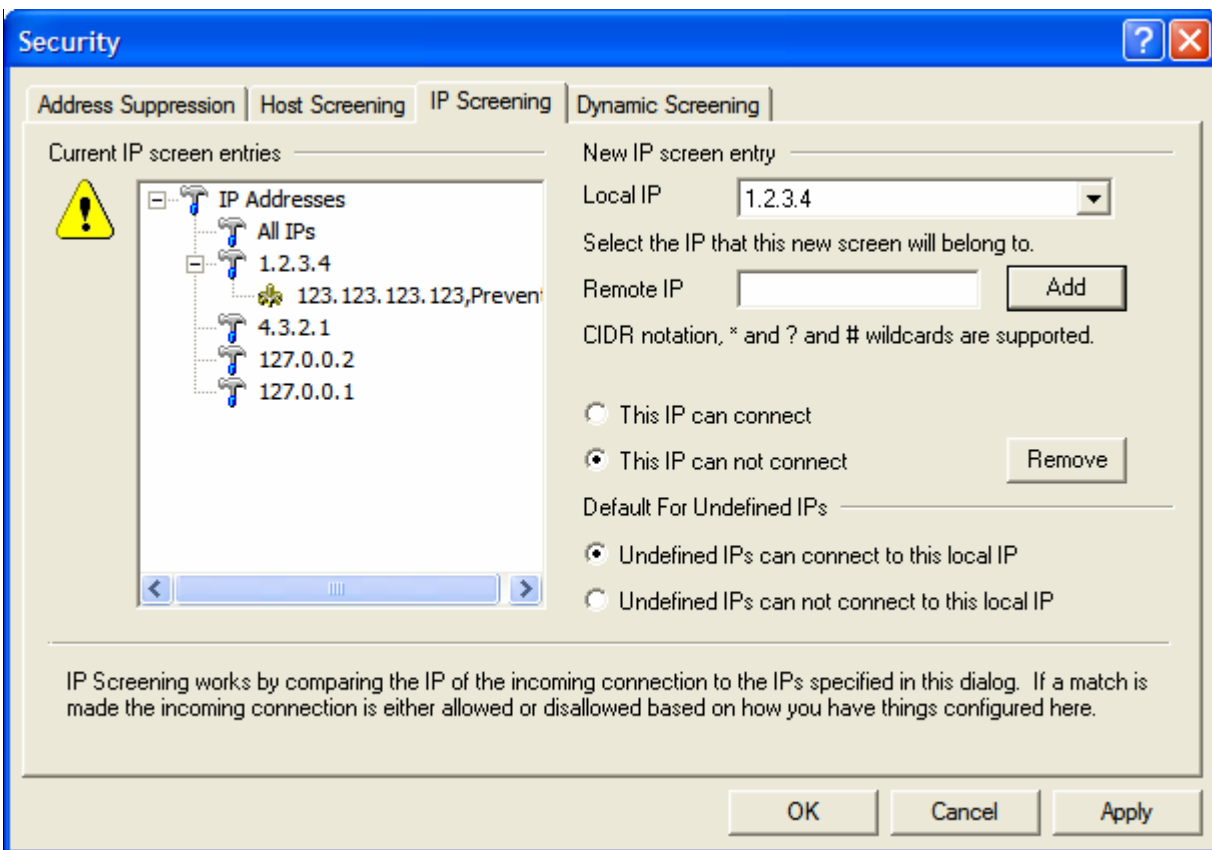
Current IP Screen Entries

This window displays all IP addresses that are being screened by MDaemon. They are listed either globally or according to the Local IP Address to which they apply.

New IP Screen Entry

Local IP
Choose from the drop-down list either "All IP's" or the local IP to which you wish to apply the screen.

Remote IP
Enter an IP address that you wish to add to the screened list. You must enter this address in dotted decimal form. The IP Screen works with IP addresses only. Click the *Add* button to add the specified IP address to the address listing.

This IP can connect
Selecting this option will allow only those IP addresses specified under the given domain to connect and deliver messages. Attempts to connect via IP addresses not specified in the listing will be refused and immediately aborted. This option is useful for setting up private mail network systems.

This IP can not connect
Selecting this option will allow all IP addresses other than those specified in the address listing to connect and deliver messages. Attempts to connect from IP addresses specified in the address listing will be refused and immediately aborted. This option is useful for excluding IPs that cause problems for your mail transport system.

Add
Click this button to add the address specified in the *IP Address* control to the *Current IP Screen Settings* window.

Remove
Click this button to remove a selected entry from the listing.
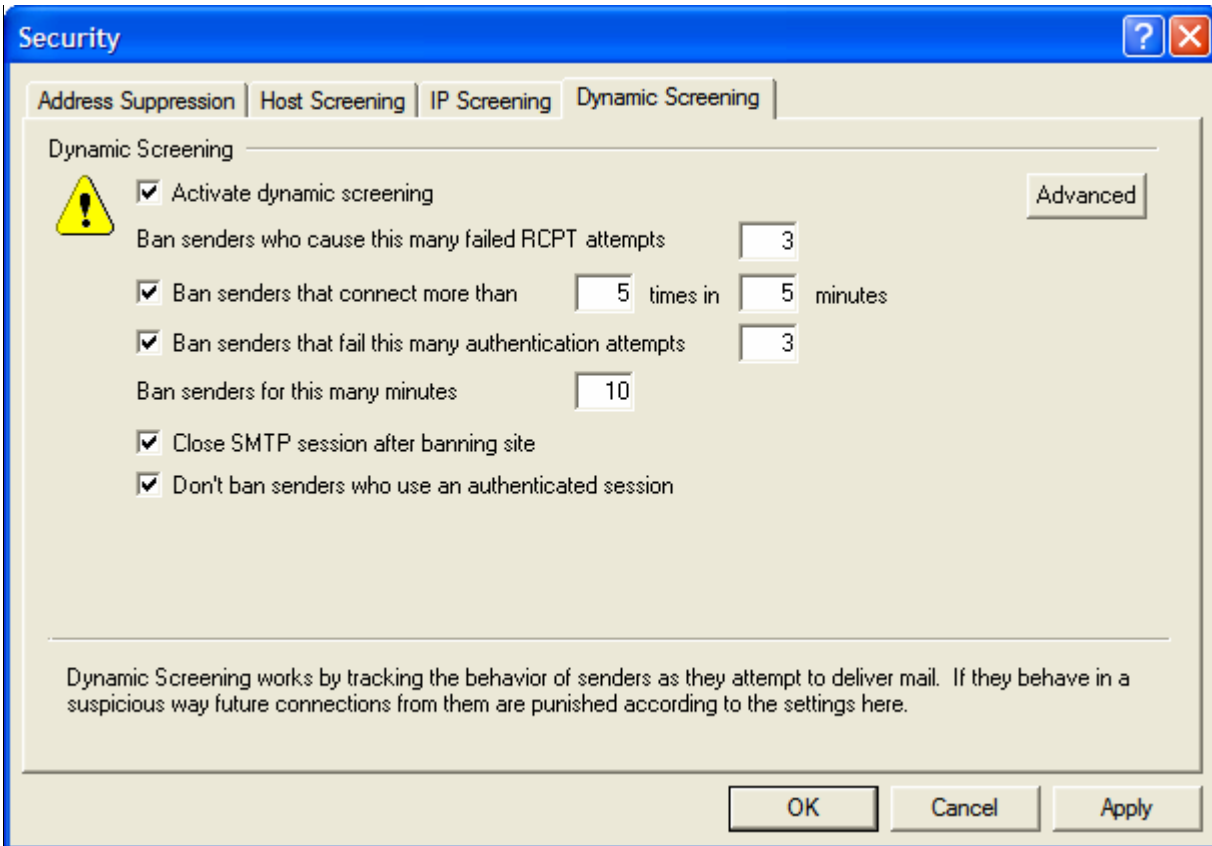
Default for Undefined IP's

Undefined IPs can connect to this local IP
When this option is chosen, all IP addresses not listed in the IP Screen **will** be allowed to connect.

Undefined IPs cannot connect to this local IP
When this option is chosen, **only** those IP addresses specifically granted permission in the IP Screen will be allowed to connect.

Dynamic Screening

Using the Dynamic Screening features, MDaemon can track the behavior of sending servers to identify suspicious activity and then respond accordingly. For example, with Dynamic Screening you can temporarily ban an IP address from future connections to your server once a specified number of "unknown recipient" errors occur during a mail session with that IP address. You can also ban senders that connect to your server more than a specified number of times in a specified number of minutes, and senders that fail authentication attempts more than a designated number of times.

When a sender is banned, it is not permanent. The sender's IP address will be banned for the number of minutes that you have specified on this dialog. Further, from the *Advanced* button on this dialog you can open the TARPIT.DAT file, which contains a list of the banned IP addresses and the length of time each will be banned. This file is memory resident and can be changed from the *Advanced* button or manually with a text editor. Note: when editing this file manually you can create a blank file called TARPIT.SEM and place it in MDaemon's \APP\ directory. This will cause MDaemon to reload the memory resident TARPIT.DAT file thus implementing your changes.

Dynamic Screening

Activate dynamic screening
Click this check box to activate dynamic screening.

Advanced
Click this button to open the tarpit.dat file in a text editor. This file lists all IP addresses that have been banned by Dynamic Screening. You can manually add IP addresses and the number of minutes to

ban them by listing them one entry per line in the form: `IP_address<space>Minutes`. For example, `1.2.3.4 60.`

Ban senders who cause this many failed RCPT attempts
When a sender causes this number of "Recipient unknown" errors during a mail session it will be automatically banned for the number of minutes specified in the *Ban senders for this many minutes* option below. Frequent "Recipient unknown" errors are often a clue that the sender is a spammer, since spammers commonly attempt to send messages to outdated or incorrect addresses.

Ban senders that connect more than [X] times in [X] minutes
Click this check box if you wish to temporarily ban senders who connect to your server an excessive number of times in a limited time period. Specify the number of minutes and the number of connections allowed in that period.

Ban senders that fail this many authentication attempts
Use this option if you wish to temporarily ban senders that fail an authentication attempt a specified number of times. This can help prevent attempts to "hack" a user account and falsely authenticate a session.

Ban senders for this many minutes
When an IP address is automatically banned, this is the number of minutes the ban will last. When the ban expires the host will be able to send to you again normally. This feature prevents you from accidentally banning a valid sender permanently.
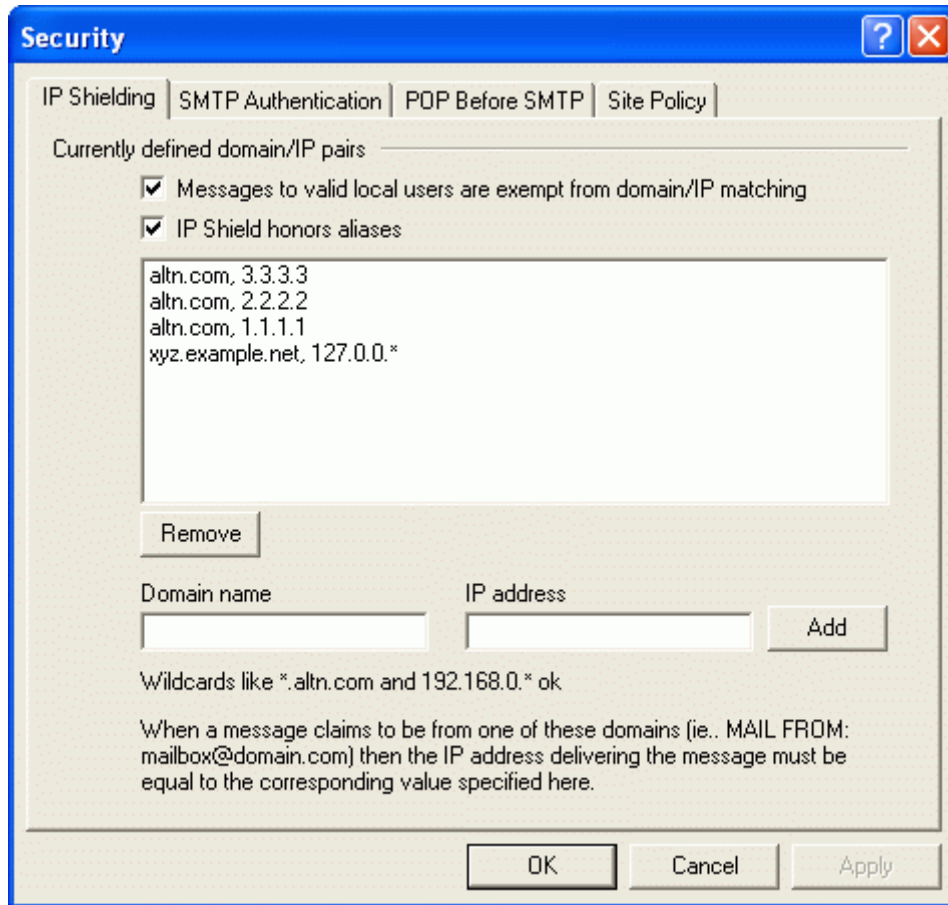
Close SMTP session after banning site
Enabling this option causes MDaemon to close the SMTP session after the sender's IP address is banned.

Don't ban senders who use an authenticated session
Click this checkbox if you want senders who authenticate their mail sessions before sending to be exempt from Dynamic Screening.

IP Shielding

Use the Secu̲rity→IP Sh̲ielding… menu selection to configure IP Shielding. The IP Shield is a list of domain names and matching IP addresses that will be checked during the `SMTP MAIL FROM:` command. An SMTP session claiming to be from someone at one of the listed domains will be honored only if it is coming from a machine with one of the associated IP addresses. For example, suppose your domain name is mdaemon.com and your local LAN computers use IP addresses in the range from 192.168.0.0 to 192.168.0.255. With this information you can set up IP Shielding to associate the domain name mdaemon.com with the IP address range 192.168.0.* (wildcards are allowed). Thus anytime a computer connects to your SMTP server and states, "`MAIL FROM <someone@mdaemon.com>`", the SMTP session will continue only if the connecting computer has an IP address within the required range from 192.168.0.0 to 192.168.0.255.

Currently Defined Domain/IP Pairs

This is the list of domain names and their corresponding IP addresses that will be compared when someone attempts to connect to MDaemon claiming to be from one of them.

Messages to valid local users are exempt from domain/IP matching
Click this option if you want only those messages that are destined for a non-local user or invalid local user to be checked for a domain/IP match. This will prevent others from posing as one of your local users in order to relay their mail **through** your server but save resources by not checking those sending

messages **to** users on your server. If you click both this option and the *IP Shield honors aliases* option below, messages to valid aliases will be accepted as well.

IP Shield honors aliases
Click this option if you want the IP Shield to honor address aliases when checking domain/IP address shields. If *IP Shield honors aliases* is clicked, the IP Shield will translate an alias to the true account to which it points and thus honor it if it passes the shield. Without this option enabled, the IP Shield will treat each alias as if it is an address independent of the account that it represents. Thus, if an alias' IP address violates an IP Shield then the message will be refused. This option is mirrored on the Alias Editor (Accounts→Address aliases...)—changing the setting here will be reflected there.

If you want incoming messages to valid address aliases to be exempt from IP Shielding then click both this option and the *Messages to valid local users are exempt from domain/IP matching* option above.

Domain name
Enter the domain name that you wish to associate with a specific IP address range.

IP address
Enter the IP address that you wish to associate with a domain name. You must enter this address in dotted decimal form.
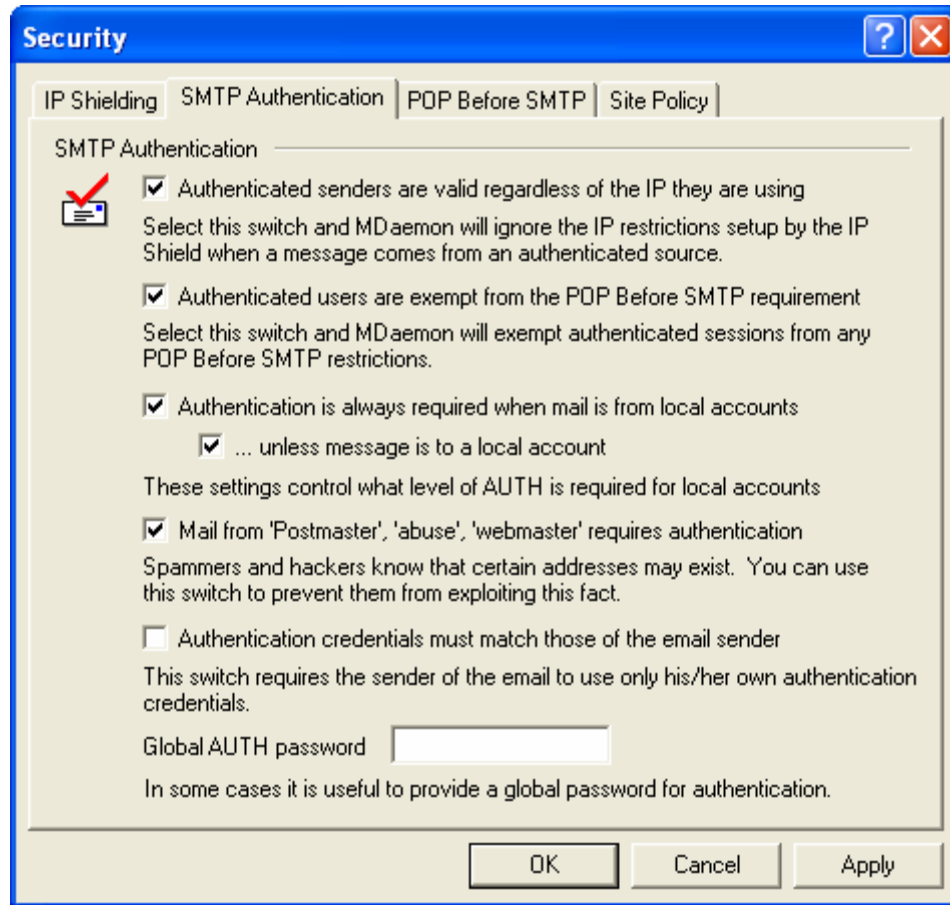
Add
Click the *Add* button to add the domain and IP address range to the listing.

Remove
Click this button to remove the selected entries from the listing.

SMTP Authentication

SMTP Authentication

Authenticated senders are valid regardless of the IP they are using
When this control is active, currently shielded IP addresses will not apply to users that have been authenticated. Mail will be accepted from them regardless of the IP address from which they are connecting.

Authenticated users are exempt from the POP before SMTP requirement
If you are utilizing the POP before SMTP security feature below, you may click this control to make authenticated users exempt from this restriction. An authenticated user will not need to check his or her email before sending messages.

Authentication is always required when mail is from local accounts
When this option is enabled and an incoming message claims to be from one of MDaemon's domains, the account must first be authenticated or MDaemon will refuse to accept the message for delivery.

…unless message is to a local account
If you are requiring authentication of messages from local accounts but wish to skip the authentication when the recipient also is a local account, and then click this option. Note: this may be necessary in some situations where you require some of your users to use different mail servers for outgoing and incoming mail.

Mail from 'Postmaster', 'abuse', 'webmaster' requires an authenticated session

Click this checkbox to require messages claiming to be from one of your "postmaster@...", "abuse@..." or "webmaster@..." aliases or accounts to be authenticated before MDaemon will accept them. Spammers and hackers know that these addresses might exist, and may therefore attempt to use one of them to send mail through your system. This option will prevent them and other unauthorized users from being able to do so. This option is also available on the Alias Editor (Accounts→Address aliases...→Options). Changing the setting here will be reflected there as well.

Authentication credentials must match those of the email sender

Click this checkbox if you wish to require users who authenticate during SMTP delivery to use only their own authentication credentials. The logon and password used must be those of the sender given in the SMTP MAIL command. This will prevent valid local users from being able to send email through your system from addresses other than their own.

Global AUTH password

If the *Authenticated senders are valid regardless of the IP they are using* control is enabled, MDaemon accounts configured for dynamic NT authentication must use this global AUTH password for authentication instead of their normal NT password.

POP Before SMTP
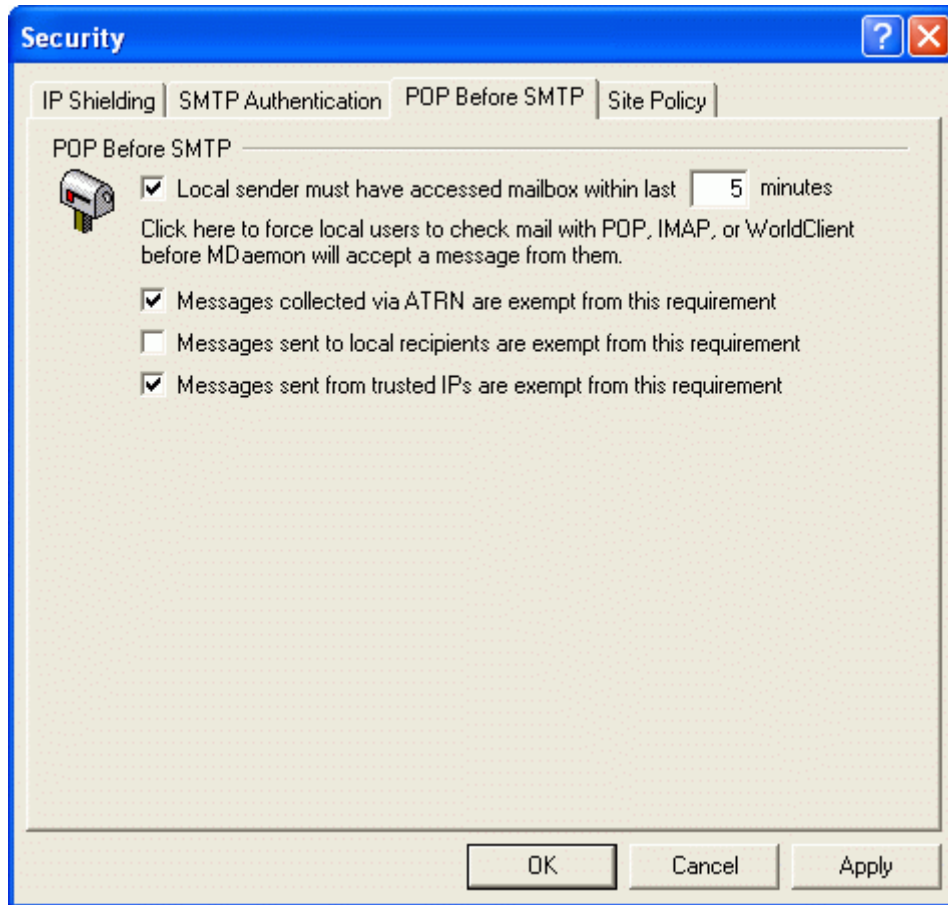
POP Before SMTP

Local sender must have accessed mailbox within last [XX] minutes
With this feature enabled, whenever someone claims to be a local user they must have logged in and checked their local mailbox within the specified number of minutes before they will be allowed to send mail.

Messages collected via ATRN are exempt from this requirement
Click this control if you want messages collected via ATRN to be exempt from the POP Before SMTP requirement.

Messages sent to local recipients are exempt from this requirement
Click this checkbox if you want messages that are sent from one local user to another to be exempt from the "Local sender must have accessed mailbox…" requirement. Ordinarily, MDaemon will enforce the "POP before SMTP" requirement as soon as the sender is known, but when this control is enabled MDaemon will wait until the recipient of the message is revealed before determining whether or not it is required.

Messages sent from trusted IPs are exempt from this requirement
If this checkbox is enabled, messages arriving from a domain listed in the *Currently defined domain/IP pairs* area of this dialog will be exempt from the *Local sender must have accessed mailbox…* requirement.

Site Policy
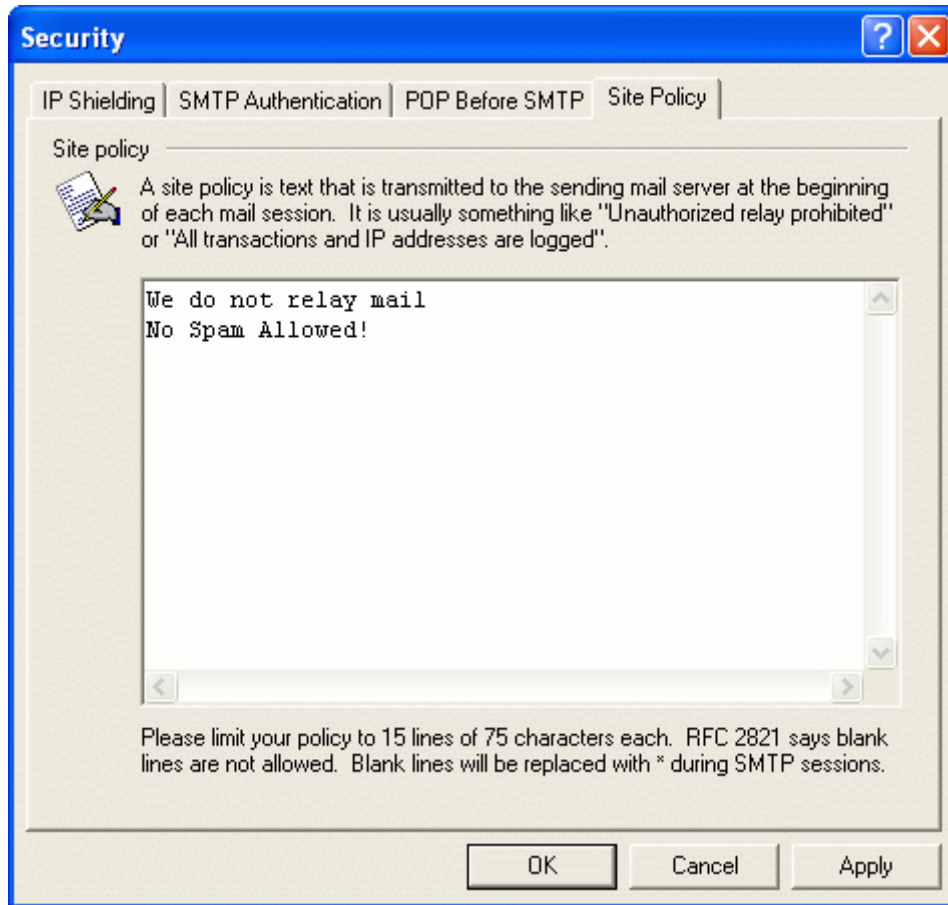
Creating an SMTP Session Policy Statement

Use this dialog to specify a Site Security Policy. The text is stored in the `policy.dat` file located in MDaemon's `\app\` subdirectory and is transmitted to sending servers at the beginning of every SMTP mail session. An example of a common site policy is, "`This server does not relay`" or "`Unauthorized use prohibited.`" You do not need to prepend each line with "220" or "220-". MDaemon handles each line accordingly, either with or without these prepended codes.

A site usage policy with a statement regarding relaying of mail would look like this during the SMTP transaction:

```
220-Alt-N Technologies ESMTP MDaemon v9.0
220-This site does relay unauthorized email.
220-If you are not an authorized user of our server
220-then you must not relay mail through this site.
220
HELO domain.com…
```

The `POLICY.DAT` file must be comprised of printable ASCII text only and have no more than 512 characters per line; however no more than 75 characters per line is highly recommended. The maximum size of this file is 5000 bytes. MDaemon will not display files larger than 5000 bytes.

Relay Settings
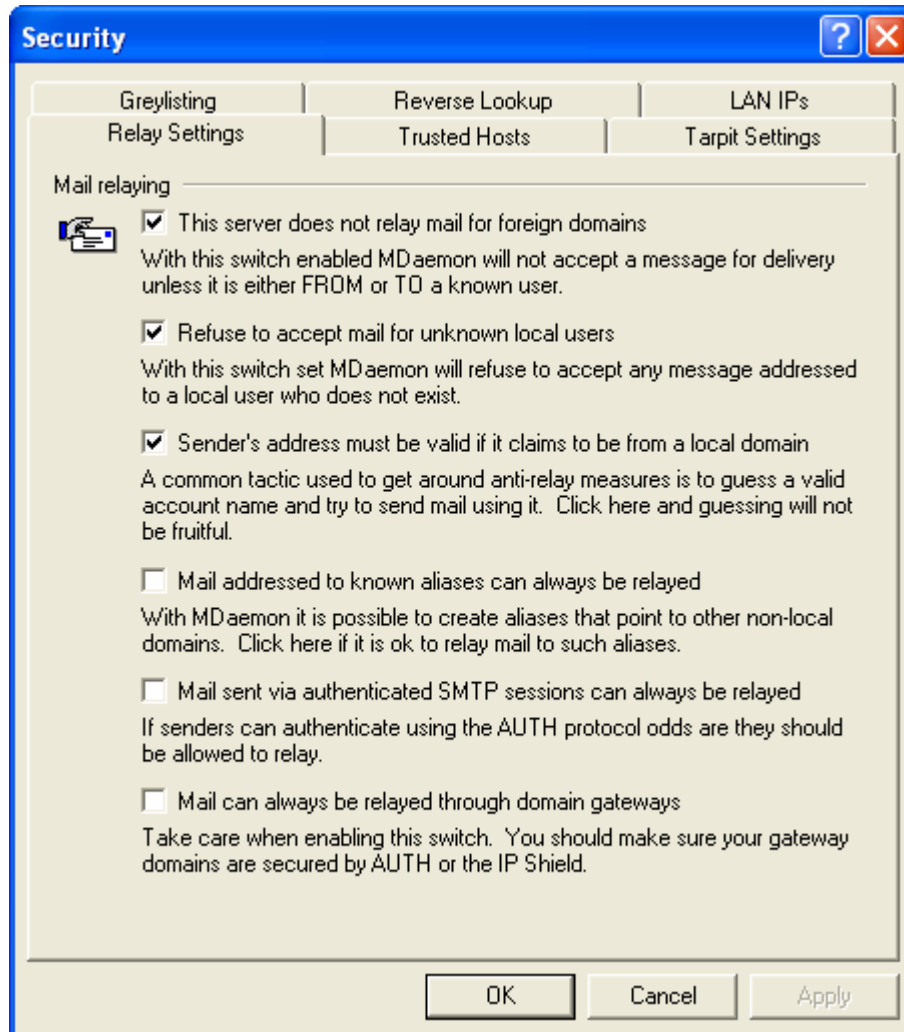
Use the **Security→Relay/...** (**Alt+F1**) menu selection to define how your server reacts to mail relaying. When a message arrives at your mail server that is neither from nor to a local address, your server is being asked to relay (or deliver) the message on behalf of an unknown third party. If you do not want your server to relay mail for unknown users you can use the options provided here.

> **Warning!**
>
> Relaying email indiscriminately for other servers could result in your domain being blacklisted by one or more RBL hosts (see page 135). Open relaying is greatly discouraged because "spammers" exploit open servers to hide their tracks.

Mail Relaying

**This server does not relay mail for foreign domains**
When this switch is selected, MDaemon will refuse to accept messages for delivery that are both FROM and TO a non-local user.

**Refuse to accept mail for unknown local users**
When this checkbox is enabled, MDaemon will refuse to accept mail that is for a local domain but addressed to a nonexistent user. "Local" includes both LAN and Domain Gateways.

**Sender's address must be valid if it claims to be from a local domain**
If the person sending a message claims to be from one of MDaemon's domains, the account used will be verified against the account database. The local account must exist or MDaemon will refuse to accept the message for delivery.

**Mail addressed to known aliases can always be relayed**
Click this control if you want MDaemon to relay mail for Address Aliases (page 369) regardless of your Relay Control settings.

**Mail sent via authenticated SMTP sessions can always be relayed**
When this checkbox is enabled, MDaemon will always relay mail when it is sent via an authenticated SMTP session.

**Mail can always be relayed through domain gateways**
Enable this checkbox if you want MDaemon to permit mail relaying through domain gateways regardless of your Relay Control settings. This feature is disabled by default and isn't recommended.

Trusted Hosts
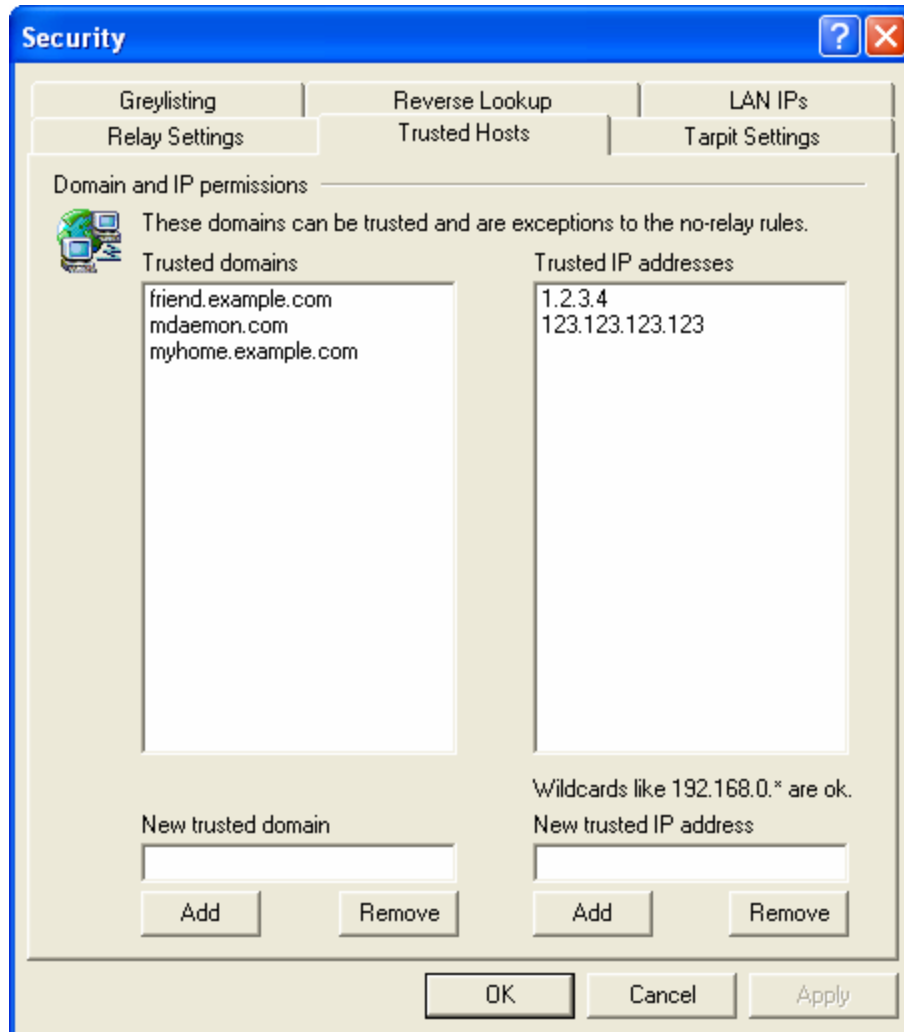
Domain and IP Permissions

Trusted domains
Domains that you list here are exceptions to the no-relay rule. These domains are "trusted" by your server and MDaemon will not refuse to relay mail for their users.

New trusted domain
Enter a new domain name to be added to the *Trusted Domains* list.

Add
Click this button to add the new domain to the *Trusted Domains* list.

Remove
Click this button to remove the selected entries from the *Trusted Domains* list.

Trusted IP addresses
IP addresses that you list here are exceptions to the no-relay rule. These IP addresses are "trusted" by your server and MDaemon will not refuse to relay mail for their users.

New trusted IP address

Enter a new IP address to be added to the *Trusted IP Addresses* list.

Add

Click this button to add the new IP address to the *Trusted IP Addresses* list.

Remove

Click this button to remove the selected entries from the *Trusted IP Addresses* list.

Tarpit Settings
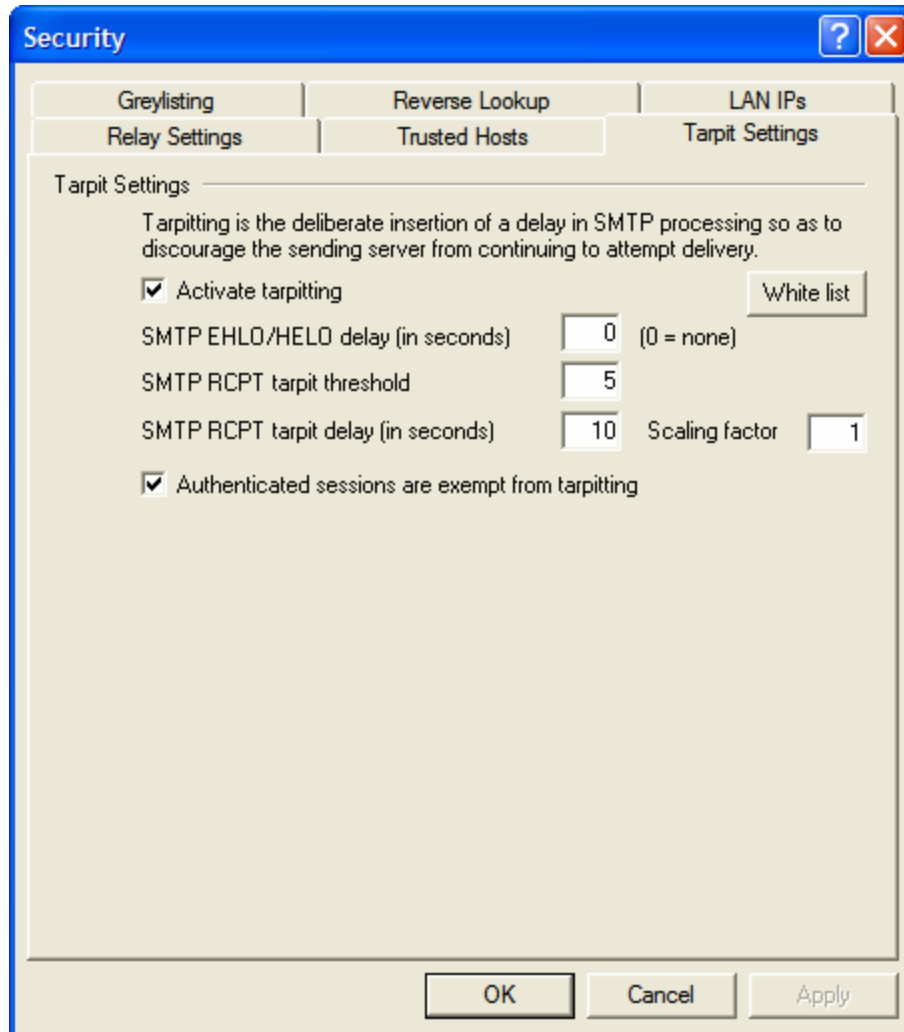
Click **Security→Relay/Trusts/Tarpit/...** (**Alt+F1**) to open this dialog. It is used for configuring two security features: Tarpitting and Automatic IP Screening.

Tarpitting makes it possible for you to deliberately slow down a connection once a specified number of RCPT commands have been received from a message's sender. This is to discourage spammers from trying to use your server to send unrequested bulk email ("spam"). You can specify the number of RCPT commands allowed before tarpitting begins and the number of seconds to delay the connection each time a subsequent command is received from that host during the connection. The assumption behind this technique is that if takes spammers an inordinately long period of time to send each message then that will discourage them from trying to use your server to do so again in the future.

Tarpit Settings

Activate tarpitting
Click this check box to activate MDaemon's tarpitting features.

SMTP EHLO/HELO delay (in seconds)

Use this option to delay the server response to EHLO/HELO SMTP commands. Delaying the responses by even as little as ten seconds can potentially save a significant amount of processing time by reducing the amount of spam received. Frequently spammers depend on rapid delivery of their messages and therefore do not wait long for a response to EHLO/HELO commands. With even a small delay, spam tools will sometimes give up and move on rather than wait for a response. Connections on the MSA port (designated on the Ports tab of the Primary Domain editor) are always exempt from this delay. The default setting for this option is "0", meaning EHLO/HELO will not be delayed.

SMTP RCPT tarpit threshold

Specify the number of SMTP RCPT commands that you wish to allow for a given host during a mail session before MDaemon will begin tarpitting that host. For example, if this number was set to 10 and a sending host attempted to send a message to 20 addresses (i.e. 20 RCPT commands), then MDaemon would allow the first 10 normally and then pause after each subsequent command for the number of seconds specified in the *SMTP RCPT tarpit delay* control below.

SMTP RCPT tarpit delay (in seconds)

Once the *SMTP RCPT tarpit threshold* is reached for a host, this is the number of seconds that MDaemon will pause after each subsequent RCPT command is received from that host during the mail session.

Scaling factor

This value is a multiplier by which the base tarpit delay will be increased over time. When the tarpit threshold is reached and the tarpit delay is applied to a session, each delay will be multiplied by this value to determine to length of the next delay in the session. For example, if the tarpit delay is set to 10 and the scaling factor is set to 1.5 then the first delay will be 10 seconds, the second will be 15 seconds, the third 22.5, then 33.75, and so on (i.e. 10 x 1.5 = 15, 15 x 1.5 = 22.5, etc.). The default Scaling factor is 1, meaning that the delay will not be increased.
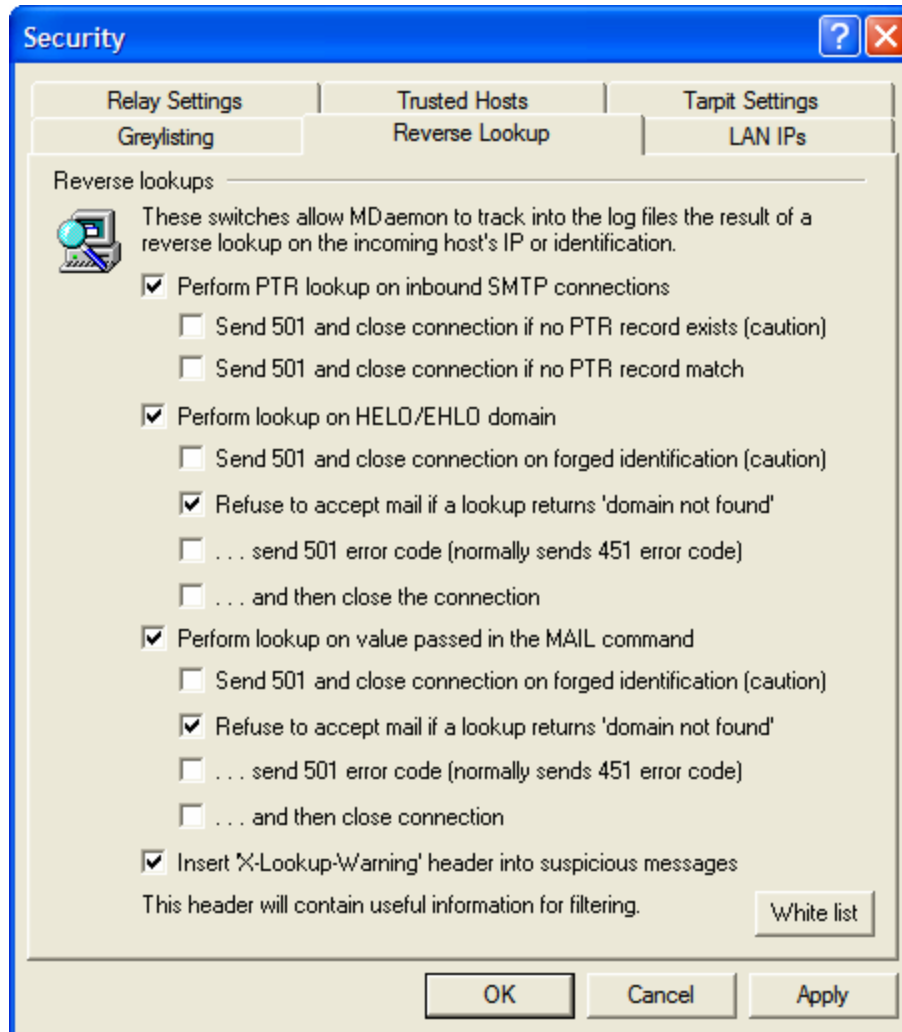
White list

Click this button to open the Tarpitting White List dialog. On it you can designate IP addresses that you wish to be exempt from tarpitting.

Authenticated sessions are exempt from tarpitting

Click this checkbox if you want senders who authenticate their mail session to be exempt from Tarpitting.

Reverse Lookup

Using the controls on this tab, MDaemon can be configured to do a reverse lookup on the domain passed in the HELO/EHLO and/or MAIL commands. When performing the lookups MDaemon will attempt to acquire all of the MX and A record IP addresses for the given domain. Then the IP of the machine making the connection is compared to this list in an attempt to determine whether the sender might be forging their identity.

Oftentimes the sending mail server's IP address will not match any known MX or A records for a given domain and yet still be delivering the mail legitimately. The purpose of the Reverse Lookup process is therefore not to exclude mail but to include as much information as possible in the log files, and to provide the means whereby the postmasters can act according to their own local policies regarding these suspicious messages. To that end, an option exists that makes it possible for a special header to be inserted into all messages that do not pass a reverse lookup. The content filter system can then be used to determine the fate of messages containing the header.

You can also perform reverse lookups on pointer (PTR) records of incoming IP addresses. When using this option the connection can be aborted or a warning header inserted into the message if the incoming IP address does not match any PTR record.

Finally, it is generally agreed that accepting mail from sources that identify themselves by using a domain that does not exist should be optional. Therefore, a switch exists that makes it possible for you to refuse messages for which the reverse lookup process returns a "domain not found" message from the DNS server. In such cases, MDaemon will return a `451` error code, refuse to accept the message, and then allow the SMTP session to progress. However, should you wish to return a `501` error code, close the socket connection, or do both, other switches are provided for those purposes.

Trusted IP addresses and localhost (127.0.0.1) are always exempt from reverse lookups.

Reverse Lookups

Perform PTR lookup on inbound SMTP connections
Enable this option if you want MDaemon to perform pointer record lookups on all inbound SMTP connections.

…send 501 and close connection if no PTR record exists (caution)
If this box is checked then MDaemon will send a `501` error code (syntax error in parameters or arguments) and close the connection if no PTR record exists for the domain.

…send 501 and close connection if no PTR record match
If this box is checked then MDaemon will send a `501` error code (syntax error in parameters or arguments) and close the connection if the result of a pointer record lookup fails to match.

Perform lookup on HELO/EHLO domain
Click this box if you want a lookup to be performed on the domain name that is reported during the `HELO/EHLO` portion of the session. The `HELO/EHLO` command is used by the client (sending machine) to identify itself to the server. The domain name passed by the client in this command is used by the server to populate the `from` portion of the `Received` header.

Perform lookup on value passed in the MAIL command
Enabling this switch will cause a lookup to be performed on the domain name that is passed during the `MAIL` command portion of the mail transaction. The address passed in the `MAIL` command is supposed to be the reverse-path for the message, and is usually the mailbox from which the message is originating. Sometimes, however, it is the address to which error messages should be directed instead.

…send 501 and close connection on forged identification (caution)
Click this check box if you want a 501 error code to be sent and then the connection closed when the result of a lookup appears to be a forged identification.

> ### ✋ Caution!
>
> When the result of a reverse lookup states that the server is using a forged identification, this result may frequently be incorrect. It is very common for mail servers to identify themselves with values that do not match their IP addresses. This can be due to ISP limitations and

restrictions and other legitimate reasons. For this reason, you should exercise caution before enabling this option. It is likely that using this option could result in your server refusing some legitimate messages.

Refuse to accept mail if a lookup returns 'domain not found'
When a lookup results in "`domain not found`", enabling this option will cause the message to be refused with a `451` error code (Requested action aborted: local error in processing) and then the session will be allowed to progress normally to its conclusion.

…send 501 error code (normally sends 451 error code)
Enable this checkbox if you want the error code that is sent in response to a "domain not found" result to be `501` (syntax error in parameters or arguments) instead of `451`.

…and then close the connection
Click this checkbox if you want the connection to be closed immediately instead of allowed to progress when "`domain not found`" is the result of the reverse lookup.

Insert 'X-Lookup-Warning' header into suspicious messages
Click this checkbox if you want a header to be inserted into messages that are considered suspicious due to the results of the reverse lookup. You can edit the name and content of the header by editing the following MDaemon.ini key:

```
[Special]
LookupWarningHeader=X-LookupWarning: text
```
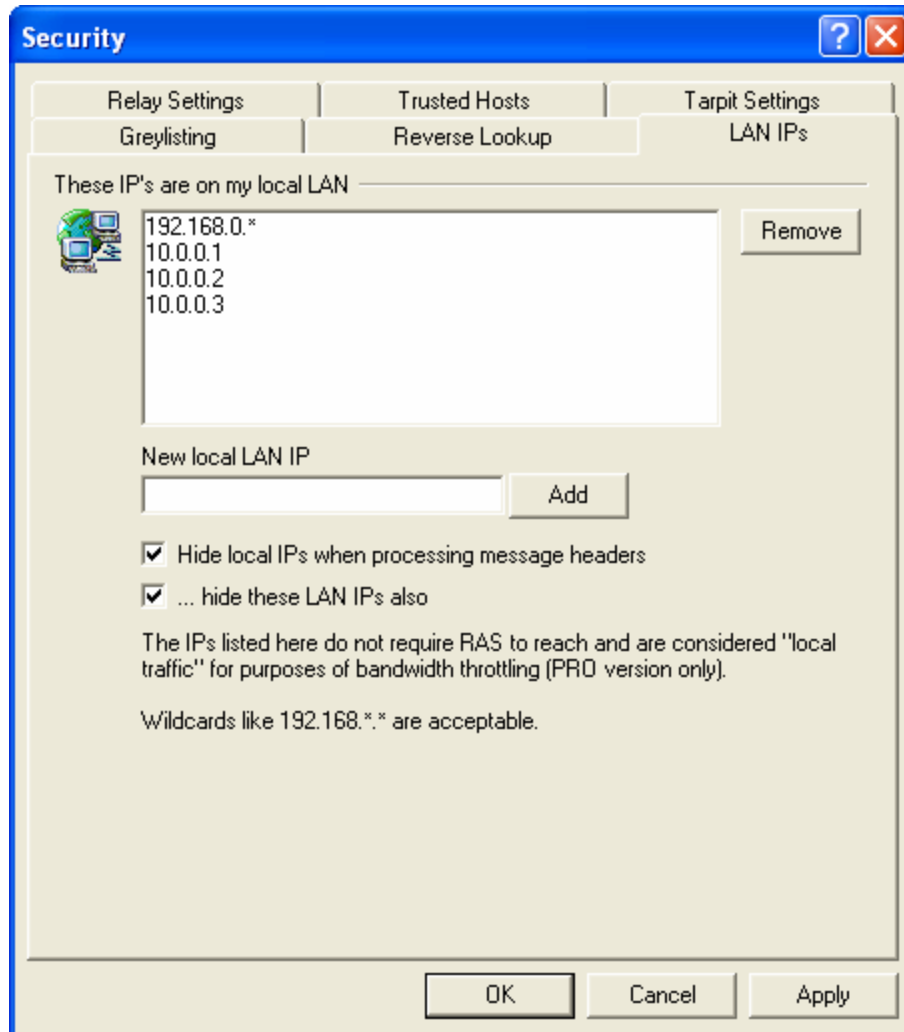
If you edit this value, MDaemon will allow you to make the "X-LookupWarning: text" portion anything that you want, but be certain that your alterations conform to RFC regulations regarding mail headers.

White list
Click this button to open the Reverse Lookup White List dialog. On it you can designate IP addresses that you wish to be exempt from reverse lookups.

LAN IPs

Note: This dialog is identical to the dialogs of the same name located in RAS Dialup Settings (page 236) and Bandwidth Throttling (page 453). Changes made to the settings on any one of these dialogs will appear on all of them.

These IPs are on my local LAN

This tab is used to list IP addresses that reside on your LAN (local area network). These IP addresses therefore do not require RAS to reach them, and they are treated as local traffic for the purposes of bandwidth throttling. Further, there are various other security and spam prevention restrictions that they may be exempt from since they are local addresses.

Remove
Select an IP address from the list and then click this button to remove it. You may also double click an entry to remove it.

New local LAN IP
Enter an IP address to add to the local IP list and click *Add*. Wildcards like 127.0.*.* are permitted.

Add
After entering an IP Address into the *New local LAN IP* control, click this button to it to the list.
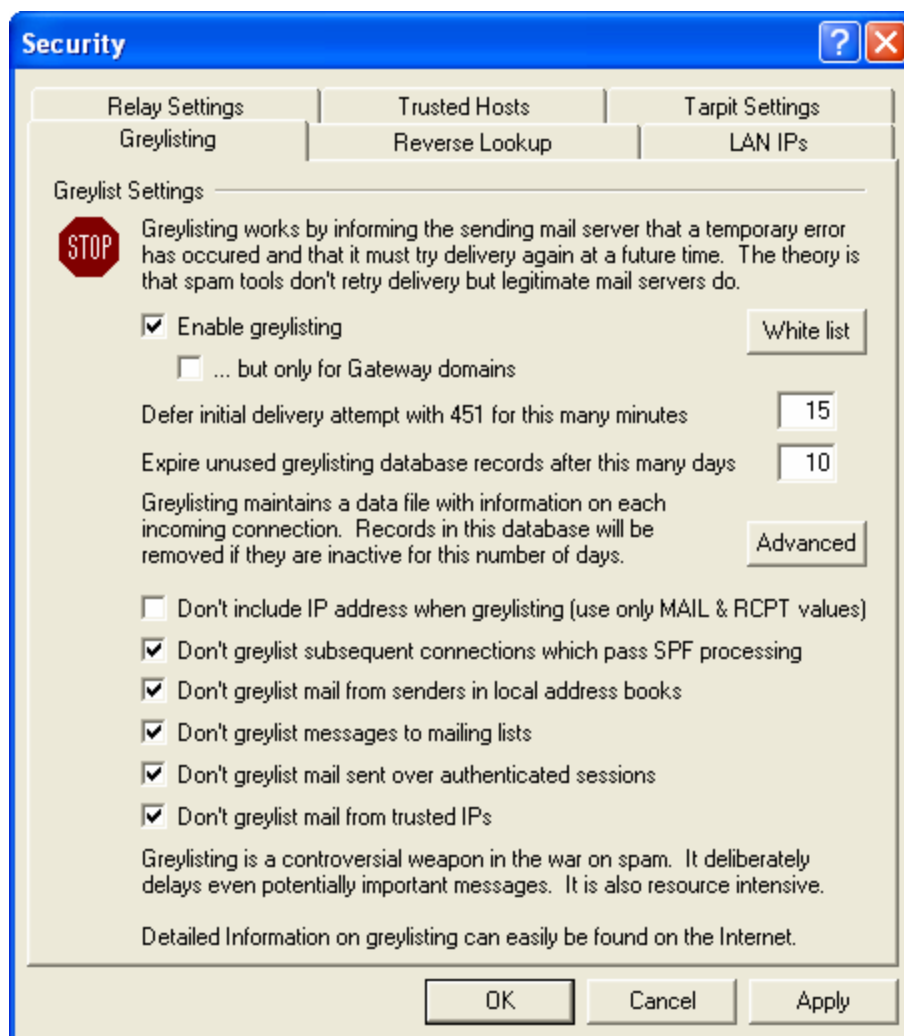
Hide local IPs when processing message headers
Click this check box if you want MDaemon to hide all local IP addresses when it creates received headers.

…hide these LAN IPs also
If MDaemon is configured to hide local IP addresses, click this check box if you want to hide these LAN IP addresses as well.

Greylisting

Configured from the Security dialog (located at Security→Relay/…/Greylist…→Greylisting), Greylisting is a spam-fighting technique that exploits the fact that SMTP servers retry delivery of any message that receives a temporary (i.e. "try again later") error code. Using this technique, when a message arrives from a non-white listed or otherwise previously unknown sender, its sender, recipient, and sending server's IP address will be logged and then the message will be refused by Greylisting during the SMTP session with a temporary error code. Furthermore, for a designated period of time (say, 30 minutes) any future delivery attempts will also be temporarily refused. Because "spammers" do not typically make further delivery attempts when a message is refused, Greylisting can significantly help to reduce the amount of spam your users receive. But, even if the spammers should attempt to retry delivery at a later time, it is possible that by that time the spammers will have been identified and other spam-fighting options (such as DNS Black Listing) will successfully block them. It's important to note, however, that this technique can deliberately delay "good" email along with the "bad". But, the legitimate messages should still be delivered sometime later after the greylisting period has expired. It is also important to note that you have no way of knowing how long the sending servers will wait before making further delivery attempts. It is possible that purposely refusing a message with a temporary error code could cause it to be delayed by as little as just a few minutes or by as much as an entire day.

There are several traditional problems and negative side-effects associated with greylisting, and the Greylisting dialog contains a number of options designed to deal with them.

First, some sending domains use a pool of mail servers to send outbound mail. Since a different mail server could be used for each delivery attempt, each attempt would be treated as a new connection to the greylisting engine. This could multiply the length of time it would take to get past greylisting because each of those attempts would be greylisted as if they were separate messages instead of retries of a previous message. By utilizing an SPF lookup option, this problem can be solved for sending domains who publish their SPF data. Furthermore, there is an option to ignore the IP of the sending mail server completely. Using this option lowers the efficiency of greylisting, but it does completely solve the server pool problem.

Second, greylisting traditionally entails a large database since each incoming connection must be tracked. MDaemon minimizes the need to track connections by placing the greylisting feature nearly last in the SMTP processing sequence. This allows all of MDaemon's other options to refuse a message prior to reaching the greylisting stage. As a result, the size of the greylisting data file is greatly reduced, and since it is memory resident there is little practical performance impact.

Finally, several options are available to minimize the impact of greylisting on "good" messages. First, messages sent to mailing lists can be excluded. Next, Greylisting has its own whitelist file on which you can designate IP addresses, senders, and recipients that you wish to be exempt from greylisting. Finally, Greylisting contains an option for using each account's private address book files as a whitelist database. So, mail to a user from someone in that user's address book can be excluded from greylisting.

For more information about greylisting in general, visit Even Harris' site at:

http://projects.puremagic.com/greylisting/.

Greylist Settings

Enable greylisting
Click this option to enable the Greylisting feature within MDaemon.

…but only for Gateway domains
Click this check box if you wish only to greylist messages destined for gateway domains.

White list
This button opens the Greylisting white list on which you can designate senders, recipients, and IP addresses that will be exempt from greylisting.

Defer initial delivery attempt with 451 for this many minutes
Designate the number of minutes for which a delivery attempt will be greylisted after the initial attempt. During that period of time, any subsequent delivery attempts by the same server/sender/recipient combination (i.e. "greylisting triplet") will be refused with another temporary error code. After the greylist period has elapsed, no further greylisting delays will be implemented on that triplet unless its Greylisting database record expires.

Expire unused greylisting database records after this many days
After the initial greylisting period has elapsed for a given greylisting triplet, no further messages matching that triplet will be delayed by Greylisting. However, if no message matching that triplet is received for the number of days designated in this option, its Greylisting database record will expire. A subsequent attempt by that triplet will cause a new Greylisting record to be created it will have to go through the initial greylisting period again.

<u>Advanced</u>
Click this button to open the Greylisting database, which you can use to review or edit your greylisting triplets.

<u>Don't include IP address when greylisting (use only MAIL & RCPT values)</u>
Click this check box if do not wish to use the sending server's IP address as one of the greylisting parameters. This will solve the potential problem that can be caused by server pools, but it will reduce Greylisting's efficiency.

<u>Don't greylist subsequent connections which pass SPF processing</u>
When using this option, if an incoming message matches a triplet's sender and recipient but not the sending server, but SPF processing determines that the sending server is a valid alternate to the one listed in the triplet, then the message will be treated as a subsequent delivery matching that triplet rather than a new connection requiring a new Greylisting record.

<u>Don't greylist mail from senders in local address books</u>
Click this option if you wish to exempt a message from greylisting when its sender is listed in the recipient's address book.

<u>Don't greylist messages to mailing lists</u>
Click this check box if you wish to exempt mailing list messages from greylisting.

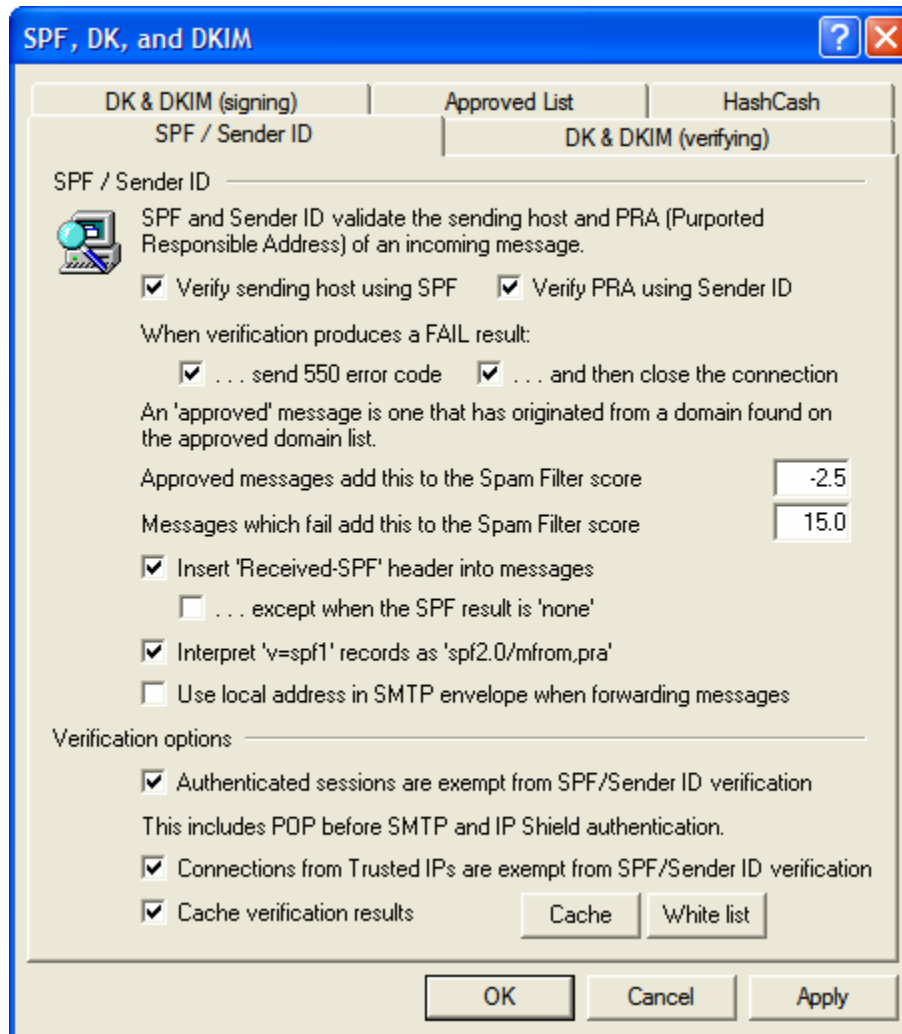*<u>Don't greylist mail sent over authenticated sessions</u>*
Use this option if you wish all messages coming in over an authenticated session to be exempt from greylisting.

<u>Don't greylist mail from trusted IPs</u>
Use this option if you wish all messages coming from trusted IP addresses to be exempt from greylisting.

Sender Policy Framework

SPF / Sender ID

MDaemon supports both Sender Policy Framework (SPF) and Sender ID Framework to help verify sending servers and protect against spoofing and phishing, which are two common types of email forgery in which the sender of the message attempts to make the message appear to be coming from someone else.

Many domains publish MX records in the Domain Name System (DNS) to identify the locations permitted to receive mail for them, but this doesn't identify the locations allowed to *send* mail for them. SPF is a means whereby domains can also publish sender records to identify those locations authorized to send messages. By performing an SPF lookup on incoming messages, MDaemon can attempt to determine whether or not the sending server is permitted to deliver mail for the purported sending domain, and consequently determine whether or not the sender's address may have been forged or "spoofed". Sender ID is related to SPF, but it is more complex in order to more reliably determine the actual domain purported to have sent the message, and to reduce the likelihood of incorrect results.

Use the options on this tab to configure your server's SPF and Sender ID settings.

For more information on SPF, visit:

`http://spf.pobox.com`.

For more information on Sender ID, visit:

`http://www.microsoft.com/mscorp/safety/technologies/senderid/default.mspx`.

SPF / Sender ID

Verify sending host using SPF
When this option is enabled, MDaemon will perform queries for SPF data on the sending host of any incoming messages that do not come from white listed IP addresses or exempt sessions, such as authenticated connections or Trusted IP addresses (when those exemptions have been enabled). The host MDaemon will verify is taken from the `MAIL` value passed during SMTP processing This SPF verification option is enabled by default.

Verify PRA using Sender ID
Enable this option if you wish to use the Sender ID framework to verify incoming messages. MDaemon will identify the Purported Responsible Address (PRA) of the incoming message through careful inspection of its headers and then verify whether or not the message originated from that location. The PRA is the most recent address purported to be responsible for the message, which may or may not be its original sender.

When verification produces a FAIL result:

…send 550 error code
Click this check box if you want a 550 error code to be sent when the result of the SPF/Sender ID query is "Fail".

…and then close the connection
Enable this option if you want the connection to be closed immediately after sending the 550 error code.

Approved messages add this to the Spam Filter score
Specify the amount that you wish to be added to a message's Spam Score when SPF/Sender ID confirms that it originated from a domain found on the Approved List.

> **Note**
>
> Ordinarily the value specified here should be a negative number so that the spam score will be reduced for the approved messages.

Messages which fail SPF add this to the Spam Filter score
Specify the amount that you wish to be added to the message's Spam Score when it fails to pass SPF/Sender ID verification.

Insert 'Received-SPF' header into messages
Click this option if you want a "Received-SPF" header to be inserted into each message.

…except when the SPF result is 'none'
Enable this option if you do not wish the "Received-SPF" header to be inserted into a message when the result of the SPF query is "none".

Interpret 'v-spf1' records as 'spf2.0/mfrom,pra'
Sender ID prefers SPF 2.0 records. However, when no SPF 2.0 records are found, Sender ID will attempt to use SPF 1 data and retask it for Sender ID purposes. Ordinarily you should leave this option enabled, but if you do not wish to allow Sender ID to interpret SPF 1 records in this way then you can disable it by clearing the option.

Use local address in SMTP envelope when forwarding messages
Click this option if you want all mail forwarded by MDaemon to use a local address in the SMTP envelope. This helps reduce problems associated with forwarding. Normally, forwarded messages are sent using the email address of the original sender and not the email address that is actually doing the forwarding. In some situations, using a local address may be necessary in order to prevent the receiving server from falsely identifying the forwarded message as having a "spoofed" address.

Verification Options

Authenticated sessions are exempt from SPF/Sender ID verification
Click this check box if you wish authenticated connections to be exempt from SPF/Sender ID queries. Authenticated sessions include those verified via AUTH, POP before SMTP, or the IP Shield.

Connections from Trusted IPs are exempt from SPF/Sender ID verification
Enable this option if you want connections from Trusted IP addresses to be exempt from SPF/Sender ID verification.

Cache verification results
Click this option if you wish to temporarily cache the results of SPF queries.

Cache
This button opens the SPF cache.

White List
Click this button to open the SPF white list on which you can designate IP addresses that you wish to be exempt from SPF lookups.

DomainKeys and DomainKeys Identified Mail

DomainKeys (DK) and DomainKeys Identified Mail (DKIM) are cryptographic email verification systems that can be utilized to prevent spoofing (forging another person's email address in order to pose as a different message sender). Additionally, because most junk email (spam) messages contain spoofed addresses, DK/DKIM can help greatly in the reduction of spam even though the specifications weren't specifically designed to be an anti-spam tool. DK/DKIM can also be used to ensure the integrity of incoming messages, or ensure that the message hasn't been tampered with between the time it left the signing mail server and arrived at yours. In other words, with DK/DKIM cryptographic verification the receiving server can be certain that the arriving message is from the server that signed it, and that no one changed that message in any way.

In order to ensure the validity and integrity of messages, DK/DKIM uses a public and private key-pairs system. An encrypted public key is published to the sending server's DNS records and then each outgoing message is signed by the server using the corresponding encrypted private key. For incoming messages, when the receiving server sees that a message has been signed, it will retrieve the public key from the sending server's DNS records and then compare that key with the message's cryptographic signature to determine its validity. If the incoming message cannot be verified then the receiving server knows it contains a spoofed address or has been tampered with or changed. A failed message can then be rejected, or it can be accepted but have its spam score adjusted.

To configure MDaemon to verify incoming cryptographically signed messages, use the options provided on the DK & DKIM (verifying) tab located at Security→SPF & Sender ID/DomainKeys & DKIM.... To configure MDaemon to sign outgoing messages, use the options provided on the DK & DKIM (signing) tab of that same dialog. MDaemon's main interface includes a DomainKeys tab (located under the Mail tab) that can be used for monitoring DK/DKIM activity in real time, and you can log DK/DKIM activity using the option at Setup→Logging...→Options.
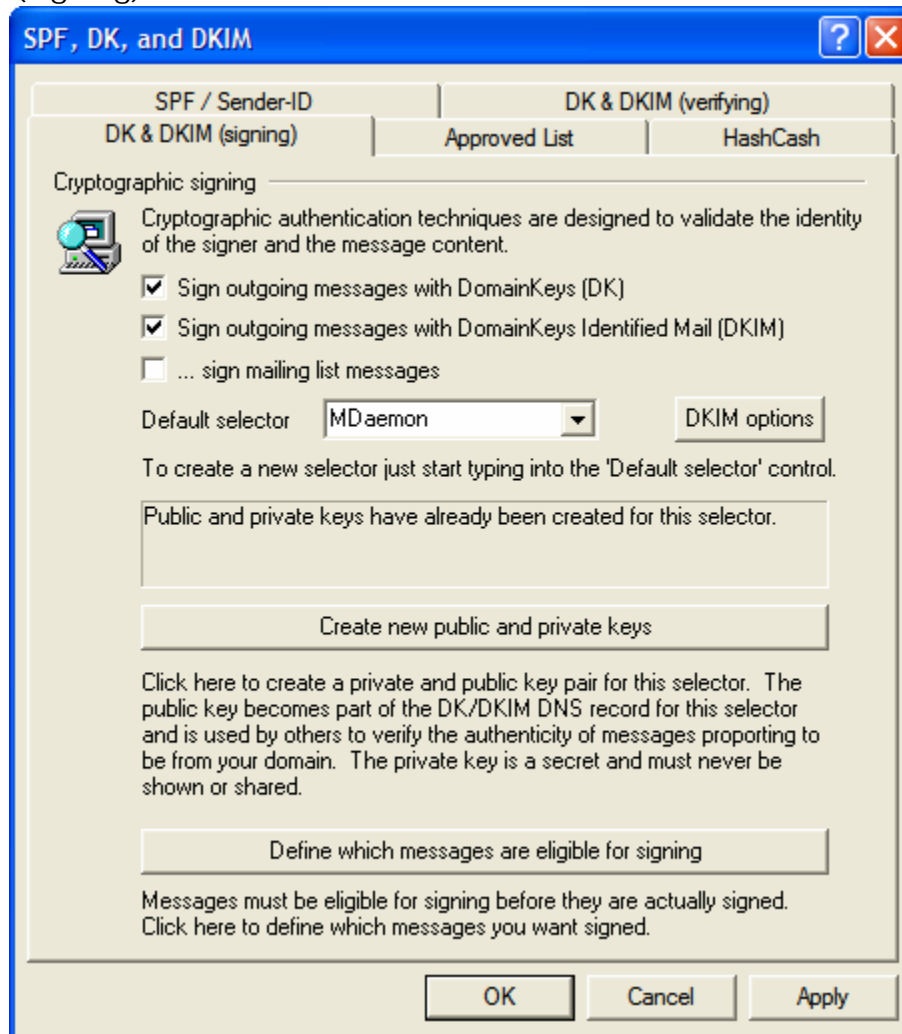
For more on DomainKeys, visit:

http://antispam.yahoo.com/domainkeys.

For more on DomainKeys Identified Mail, visit:

http://www.altn.com/press/press_release.asp?ReleaseID=137.

DK & DKIM (signing)

Use the options contained on the DK & DKIM (signing) tab to control whether or not some outgoing messages will be cryptographically signed, the method that will be used to sign them (DK and/or DKIM), and to designate which messages should be signed. You can also use this tab to designate selectors and generate corresponding public and private keys suitable for use with the DK and DKIM specifications. A default selector ("MDaemon") and a default public and private key are created for you automatically on startup. All keys are unique—they are never the same from one site to another, regardless of the selector specified. By default, keys are generated with a secure bit depth of 1024 bits.

Cryptographic Signing

Sign outgoing messages with DomainKeys (DK)
Click this option if you wish MDaemon to use DomainKeys to cryptographically sign some outgoing messages. In order for a message to be signed, it must meet the criteria designated under the *Define which messages are eligible for signing* button and be received by MDaemon for delivery on an authenticated session via SMTP AUTH. There is also a Content Filter action, "*Sign with DomainKeys selector…*" that you can use to cause messages to be signed.

Sign outgoing messages with DomainKeys Identified Mail (DKIM)

Click this option if you wish MDaemon to use DomainKeys Identified Mail to cryptographically sign some outgoing messages. In order for a message to be signed, it must meet the criteria designated under the *Define which messages are eligible for signing* button and be received by MDaemon for delivery on an authenticated session via SMTP AUTH. There is also a Content Filter action, "*Sign with DomainKeys selector…*" that you can use to cause messages to be signed.

...sign mailing list messages

Click this check box if you wish to cryptographically sign all outgoing Mailing List messages. Because MDaemon will sign all mail to all of your lists, you do not need to use the "*Define which messages are eligible for signing*" option to authorize them for cryptographic signing.

> **Note**
>
> Signing list mail requires content filter processing for each list message after "cracking" the list. This could affect server performance when dealing with large and highly active mailing lists.

Default selector

From the drop-down list, choose the selector whose corresponding public/private key pair you wish MDaemon to use when signing messages. If you wish to create a new key pair with a different selector, then type the desired selector name here and click "*Create new public and private keys*" below. If you wish some messages to be signed using an alternate selector, create a Content Filter rule using the "*Sign with DomainKeys selector…*" action.

DKIM Options

Click this button to open the DKIM Options dialog. See *DKIM Options* below for more information.

Create new public and private keys

Click this button to generate a public/private key pair for the selector specified above. A public/private key pair will be generated for the selector, and the file `dns_readme.txt` will be generated and automatically opened. This file contains example DK/DKIM data that you will need to publish to your domain's DNS records listing your DK/DKIM Policy and the public key for the designated selector. The file lists samples for both testing and not testing status, and for whether you are signing all messages or just some messages originating from your domain. If you are currently testing DK/DKIM or this selector, then you will need to use the information contained in the Testing entries for either the Policy or the selector, depending on what you are testing. Otherwise you will need to use the Not Testing entries.

All keys are stored in `PEM` format, and all selectors and keys are stored under the `\MDaemon\Pem` folder in the following way:

    \MDaemon\Pem\<Selector>\rsa.public - public key for this selector
   \MDaemon\Pem\<Selector>\rsa.private - private key for this selector

Define which messages are eligible for signing

When you have enabled one or both of the *sign outgoing messages* option above, click this button to edit the `DKSign.dat` file, which contains the list of domains and addresses that MDaemon will use to determine whether or not a message should be signed. For each address listed you must designate whether or not the message should be `To` or `From` that address in order for it to qualify to be signed, or you can designate

some other header such as "Reply-To" or "Sender". Optionally, you can also designate a selector for each entry, which will be used when signing a message that matches that entry. Finally, you can specify an optional signing domain to be used in the "d=" tag within the signature header. This can be useful, for example, when you have multiple sub-domains signing messages. In such cases you could use the "d=" tag to tell the receiving servers to look for the DK/DKIM keys in a single domain's DNS record thus making it possible for you to manage all of the keys in one record rather than having to manage separate records for each sub-domain. Wildcards are permitted in domains and addresses.

DKIM Options
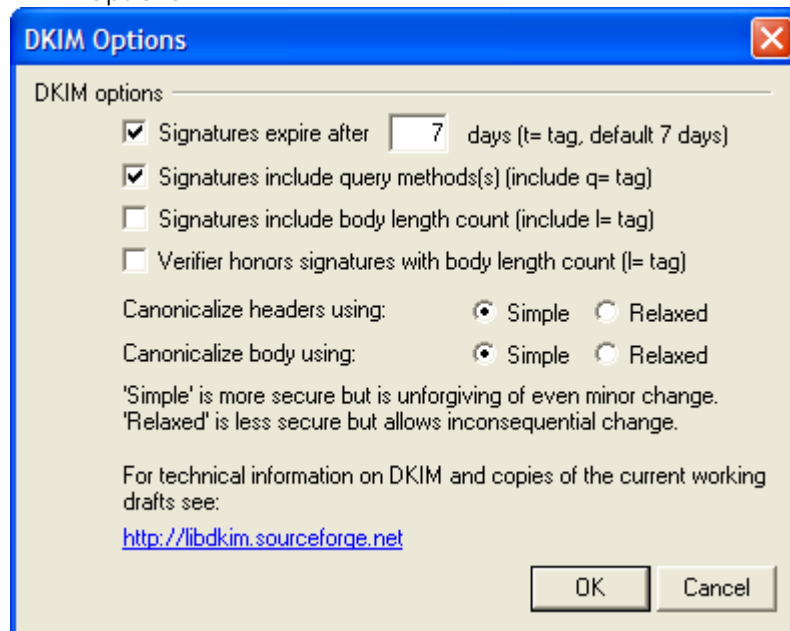
DKIM Options

Signatures expire after X days
If you wish to limit the number of days that a DKIM signature can be considered valid, activate this option and specify the desired number of days. Messages with expired signatures will always fail verification.

Signatures include query method(s)
Click this option to include the query method tag in the DKIM signature (i.e. q=dns)

Signatures include body length count
Enable this option if you wish to include the body length count tag in DKIM signatures.

Verifier honors signatures with body length count
When this option is enabled, MDaemon will honor the body length count tag when it is found in an incoming message's DKIM signature. When the actual body length count is greater than the value contained in this tag, MDaemon will only verify the amount specified in the tag—the remainder of the message will remain unverified. This indicates that something was appended to the message, and consequently that unverified portion could be considered suspect. When the actual body length count is less than the value contained in this tag, the signature will not pass verification (i.e. it will receive a "FAIL" result). This indicates that some portion of the message was deleted, causing the body length count to be less than the amount specified in the tag.

Canonicalization

Canonicalization is a process whereby the message's headers and body are converted into a canonical standard and "normalized" before the DKIM signature is created. This is necessary because some email servers and relay systems will make various inconsequential changes to the message during normal processing, which could otherwise break the signature if a canonical standard was not used to prepare each message for signing. Currently there are two canonicalization methods used for DKIM signing and verification: Simple and Relaxed. Simple is the strictest method, allowing little to no changes to the message. Relaxed is more forgiving than Simple, allowing several inconsequential changes.

Canonicalize headers using: Simple, Relaxed

This is the canonicalization method used for the message headers when signing the message. Simple allows no changes to the header field in any way. Relaxed allows for converting header names (not header values) to lower case, converting one or more sequential spaces to a single space, and other innocuous changes. The default setting is "Simple."

Canonicalize body using: Simple, Relaxed

This is the canonicalization method used for the message body when signing the message. Simple ignores empty lines at the end of the message body—no other changes to the body are allowed. Relaxed allows for blank lines at the end of the message, ignores spaces at the end of lines, reduces all sequences of spaces in a single line to a single space character, and other minor changes. The default setting is "Simple."

DK & DKIM (verifying)
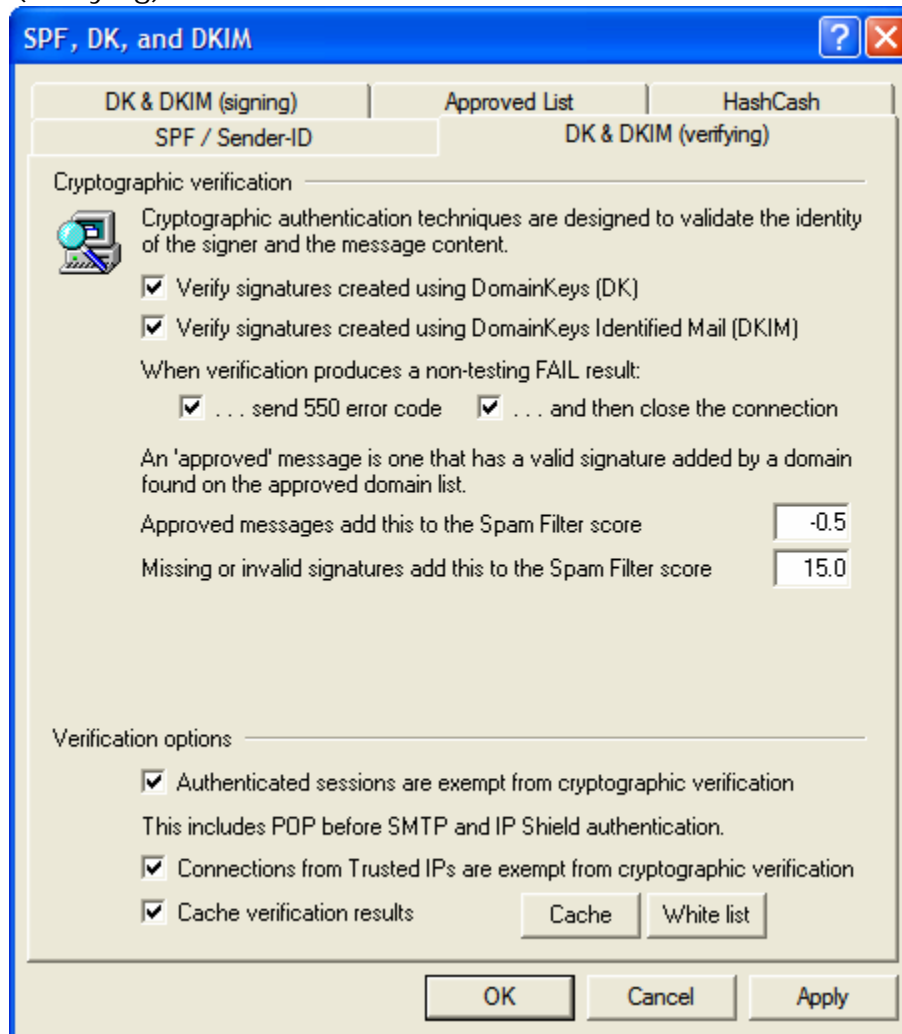
Use this tab to configure MDaemon to look for DomainKeys (DK) and/or DomainKeys Identified Mail (DKIM) signatures in incoming remote messages and to attempt to verify them when found. When an incoming message has been cryptographically signed, MDaemon will retrieve the public key from the signing server's DNS record and then use that key to test the message's DK/DKIM signature to determine its validity. If the signature verification process returns a "Fail" result then MDaemon will retrieve the signing domain's Policy. If the policy does not indicate that DK/DKIM is merely being tested, then the message can be rejected outright or accepted but have its spam score adjusted upward. If a message is not signed, then MDaemon will retrieve the Policy of the domain in the "From" header to determine whether or not all of that domain's messages should be signed and whether it is test mode. If the domain is not merely testing DK or DKIM and it indicates that all messages should be signed, then the message will receive a "Fail" result and be treated accordingly. When a message is not signed and the domain's DNS record does not contain a DK/DKIM Policy, then the message will be processed normally as if cryptographic verification wasn't being used. Messages that receive a "Pass" result will continue through normal processing and may have their spam scores adjusted accordingly if the signing server's domain appears on the Approved List.

Cryptographic Verification

Verify signatures created using DomainKeys (DK)
Click this option to enable DomainKeys verification of incoming remote messages.

Verify signatures created using DomainKeys Identified Mail (DKIM)
Click this option to enable DomainKeys Identified Mail verification of incoming remote messages.

When verification produces a non-testing FAIL result:

…send 550 error code
When this check box is enabled and the verification process returns a "Fail" result, MDaemon will return the 550 code and reject the message during the SMTP process unless the signing domain's DomainKeys Policy indicates that it is merely testing DK/DKIM. If the domain's policy indicates it is testing then the message will be processed normally.

…and then close the connection
Click this option if you wish to close the connection to a sending server when DK/DKIM verification of a message receives a "Fail" result and the message is rejected according to the previous option. If this option is disabled then the message will still be rejected according to the previous option but the connection will be allowed to continue.

Approved messages add this to the Spam Filter score
The value specified here will be added to the Spam Score of any DK or DKIM signed messages that receive a "Pass" result when the signing server's domain appears on the Approved List. When a message's signature is verified but the signing server's domain is not on the Approved List, the Spam Score will not be adjusted—the verified signature will have no effect on the score. However, normal Spam Filter processing and scoring will still be applied to that message.

> **Note**
>
> Ordinarily the value specified here should be a negative number so that the spam score will be reduced for messages containing a valid cryptographic signature when the signing server is on the Approved List. MDaemon's default value for this option is -0.5.

Missing or invalid signatures add this to the Spam Filter score
The value specified here will be added to the Spam Score of any DK or DKIM signed messages receiving a "Fail" result when the "*…send 550 error code*" option above is disabled and the sending domain's Policy does not indicate that DK/DKIM is being tested. When the site's Policy indicates Testing, a failed cryptographic verification will not cause the Spam Score to be modified in any way.

Verification Options

Authenticated sessions are exempt form cryptographic verification
Click this option if you want to exempt messages from cryptographic verification when the message session is authenticated via AUTH, POP before SMTP, or the IP Shield.

Connections from Trusted IPs are exempt form cryptographic verification
Use this option if you want connections from Trusted IP addresses to be exempt from cryptographic verification.

Cache verification results
Click this option if you wish to cache the DK/DKIM information found during the DNS lookup. By temporarily caching the information contained in a domain's DNS record, you can increase the efficiency of processing DK/DKIM signed messages that arrive in the near future from the same domain.

White list
Click this button to open the exception list. Messages originating from any IP addresses specified on the list will not be subject to cryptographic verification.

Cache
This button opens the DomainKeys cache. When using the *Cache DomainKeys results* option above, this file will list any currently cached information.

Authentication-Results header
Whenever a message is authenticated using SMTP AUTH, SPF, DomainKeys, or DomainKeys Identified Mail, MDaemon will insert the Authentication-Results header into the message listing the results of the authentication process. If MDaemon is configured to accept messages even when they fail authentication, then the Authentication-Results header will contain a code to identify the reason for the failure.

DK/DKIM Headers in Mailing List Messages
By default, MDaemon strips DK/DKIM signatures from incoming list messages because those signatures can be broken by changes made to the message headers or content during list processing. If you would like MDaemon to leave signatures in list messages, you can configure it to do so by manually setting the following option in the MDaemon.ini file:

```
[DomainKeys]
StripSigsFromListMail=No (default is "Yes")
```

Approved List
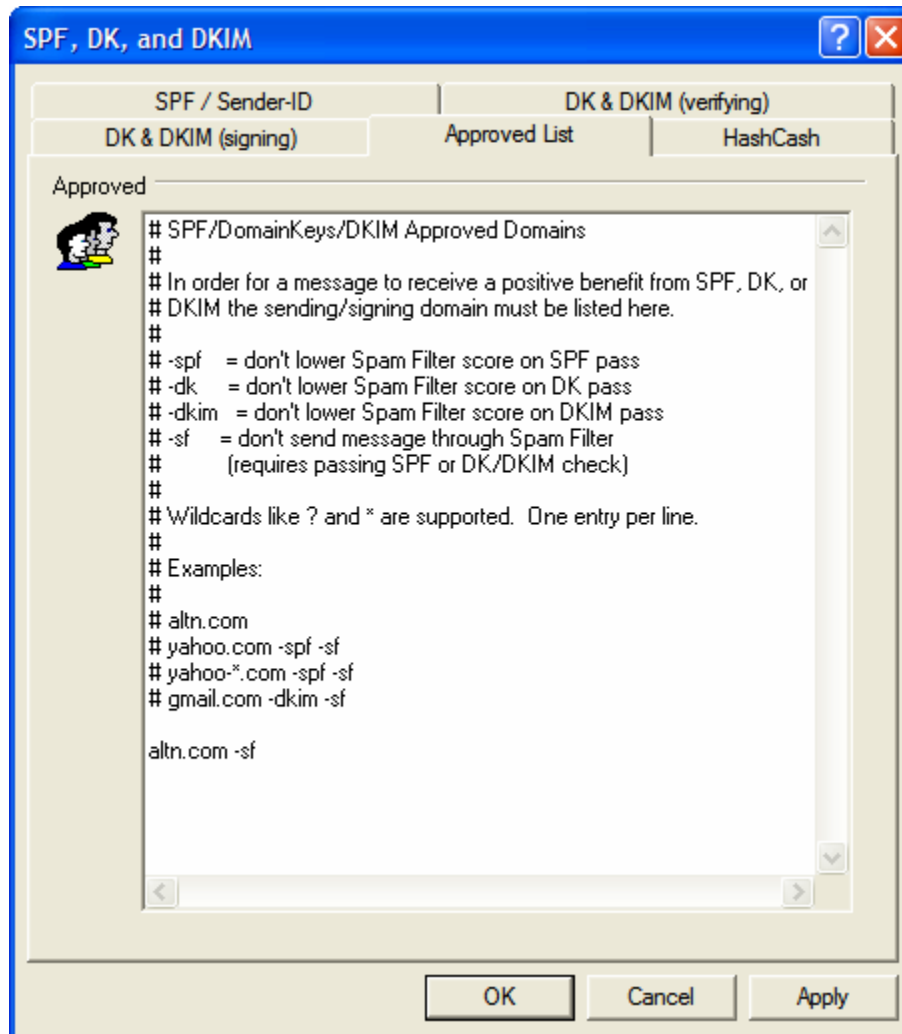
Because some spammers have begun using SPF or signing messages with valid DK or DKIM signatures, the fact that a message is signed and verified is no guarantee that you won't consider it to be spam, even though it does ensure that the message originated from a valid source. For this reason, a message's spam score will not be lowered as a result of SPF, Sender ID, DK, or DKIM verification unless the signing server's domain is on the Approved List. This is essentially a white list that you can use to designate domains permitted to have their messages' spam scores reduced when those incoming messages are verified.

When a message signed by one of these domains is verified by SPF, Sender ID, DK or DKIM, its spam score will be reduced according to the settings found on the *SPF/Sender ID* and *DK & DKIM (verifying)* tabs. You can, however, append any combination of the flags listed below if you wish to prevent one or more of those verification methods from reducing the score. There is also a flag that you can use to prevent verified messages from being passed through the Spam Filter.

-spf	Don't lower the spam score for SPF or Sender ID verified messages sent by this domain.
-dk	Don't lower the spam score for DK verified messages from this domain.
-dkim	Don't lower the spam score for DKIM verified messages from this domain.
-sf	Don't process verified messages from this domain through the Spam Filter.

HashCash
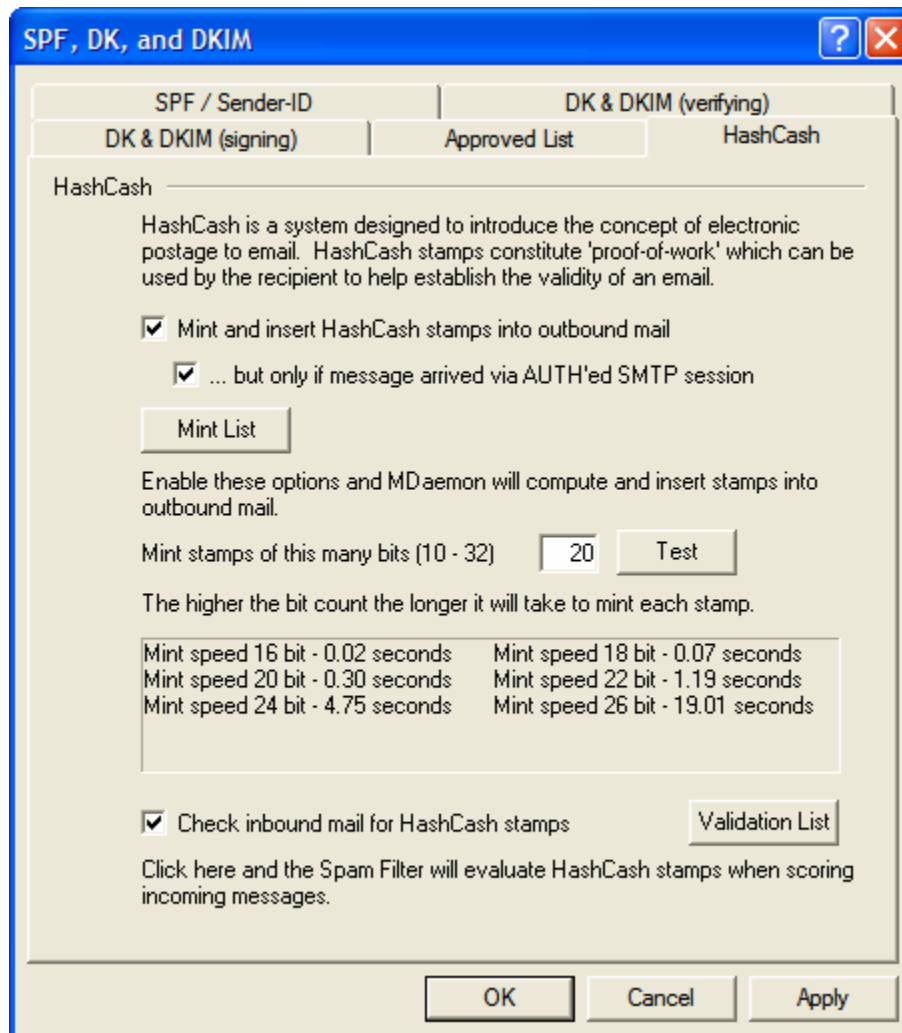
HashCash is a "proof of work" system that is both an anti-spam tool and a Denial of Service countermeasure similar to an electronic form of postage. Using the HashCash system MDaemon can mint HashCash stamps, which are in effect "paid for" with CPU processing time rather than actual currency. A HashCash stamp is inserted into an outgoing message's headers and then verified by the recipient's email server and weighed according to the value of the stamp. Stamped messages are more likely to be legitimate and can therefore be passed through the receiving server's anti-spam systems. Use of HashCash stamps can help to reduce false positives and prevent messages from being erroneously rejected due to their failing to pass a word-filter or blacklist system.

Spammers rely on the ability to send many hundreds or even hundreds of thousands of messages in extremely short periods of time, and they frequently send a single copy to many recipients by using BCC and similar techniques that do not require a significant amount of processing time for any given recipient. A spammer attempting to use a HashCash system, however, would have to mint a unique HashCash stamp for each recipient each time that recipient was sent a message. This would be highly prohibitive and inefficient for the typical spammer. Conversely, for the typical legitimate mail server and sender, the extra cost in CPU time required to stamp outgoing messages is essentially insignificant and will not affect mail

delivery speeds or mail processing time in any noticeable way, especially since outgoing mailing list messages are never stamped.

Stamps are only generated for outbound remote messages that are either from or to the addresses designated on the Mint List, and they are never generated for mailing list messages. Further, by default MDaemon will only generate those HashCash stamps when the message arrives via an authenticated SMTP session. Requiring authenticated sessions is recommended but optional. You can deactivate this requirement if you wish to stamp messages arriving on unauthenticated sessions.

For incoming messages, only stamps contained in messages for recipients designated on the Validation List will be checked for validity. If an incoming message contains a HashCash stamp but the recipient isn't on the list, then the stamp will be ignored and the message will be processed normally as if it didn't contain a HashCash stamp at all. By default, only your primary domain is contained on this list. Click the *Validation List* button if you wish to add secondary domains or domain gateways to it.

For more information on HashCash, visit http://www.hashcash.org/.

HashCash

Mint and insert HashCash stamps into outbound mail
Click this check box to activate the HashCash system. MDaemon will generate stamps for outbound remote messages that are either from or to the addresses designated on the Mint List

…but only if message arrived via AUTH'ed SMTP session
Click this check box if you wish to generate stamps only for those messages arriving on authenticated SMTP sessions. Clear it if you do not wish to require authentication, but this is not recommended.

Mint List
Click this button to open the Mint List. MDaemon will only generate HashCash stamps for addresses on this list. By default only your primary domain is listed. If you wish to generate stamps for your secondary domains, domain gateways, or for messages addressed either to or from specific individuals then you will need to add those addresses to the list.

Mint stamps of this many bits (10-32)
This is the bit count MDaemon will use when generating HashCash stamps. The larger the count the greater the amount of processing time required to generate a stamp.

Test
Click this button to test the amount of time required to generate a stamp with the designated bit count.

Check inbound mail for HashCash stamps
Enable this option if you wish to check inbound messages for HashCash stamps and adjust their spam scores based on the results. Only messages with recipients specified on the Validation List will be checked. If an incoming message contains a HashCash stamp but the recipient isn't on the list, then the stamp will be ignored and the message will be processed normally as if it didn't contain a HashCash stamp at all.

Validation List
MDaemon will only attempt to validate HashCash stamps in messages for recipients designated on the Validation List. Incoming messages for recipients who are not on the list will be processed normally. No HashCash stamp check will be performed. Only your primary domain is listed by default.
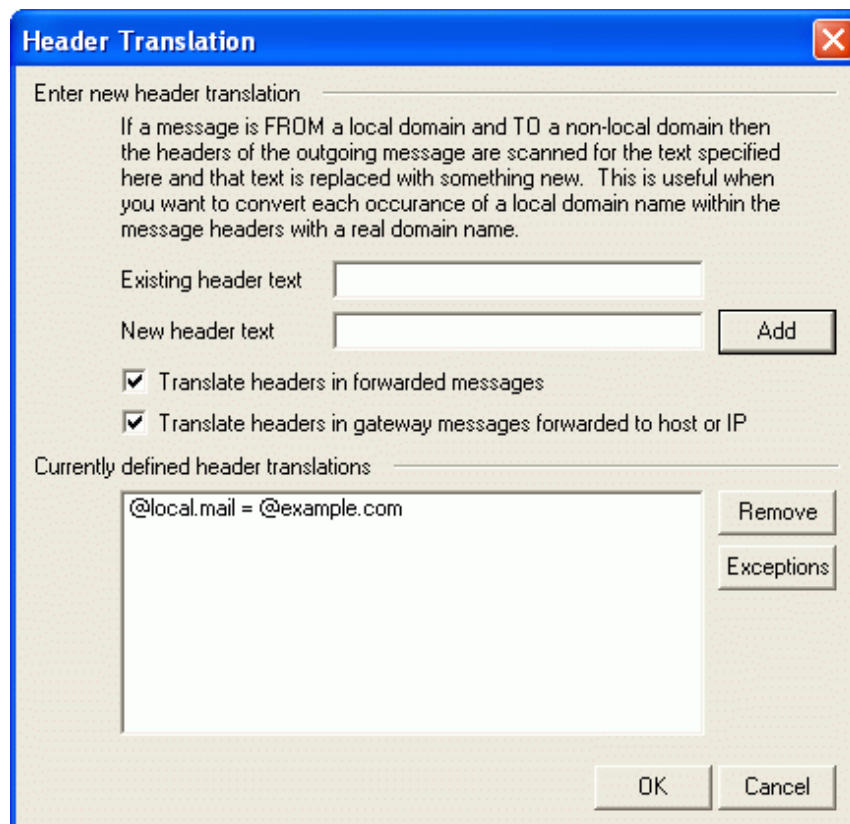
Header Translation

Changing header text on the fly.

T he "Header Translation" feature can change any portion of text found within a header to a new value whenever a message is detected which must leave your domain and travel across the Internet. You specify the text you want to search for and its corresponding replacement value. MDaemon will then search through all the headers in the message and make the replacements. You may also specify headers that MDaemon should **not** modify (such as "Subject:" or "Received:" headers) by clicking the "Exceptions" button on this dialog.

This feature is necessary for some MDaemon configurations in which the local domain name is fictitious or different from the domain name that must appear on outbound mail. In such a situation, Header Translation could be used to change every occurrence of "@localdomain.com" to "@RemoteDomain.com".

Header Translation

Enter New Header Translation

Existing header text
Type the text that you want to be replaced when it is found within the headers of any outbound message.

New header text
This text will be substituted for that which you specified in the *Existing Header Text* field.

Add
Click this button to add the above text parameters to the Current Header Translations list.

Translate headers in forwarded messages
Click this checkbox to cause the header translations to apply also to messages automatically forwarded from a local domain to a non-local domain.

Translate headers in gateway messages forwarded to host or IP
Click this check box if you want the headers to be translated in forwarded domain gateway mail. See the Forwarding tab of the Gateway Editor (page 426) for more information.

Currently Defined Header Translations

This list contains the portions of text that MDaemon will scan for in the outbound message headers, and the text that will be substituted when a match is found.
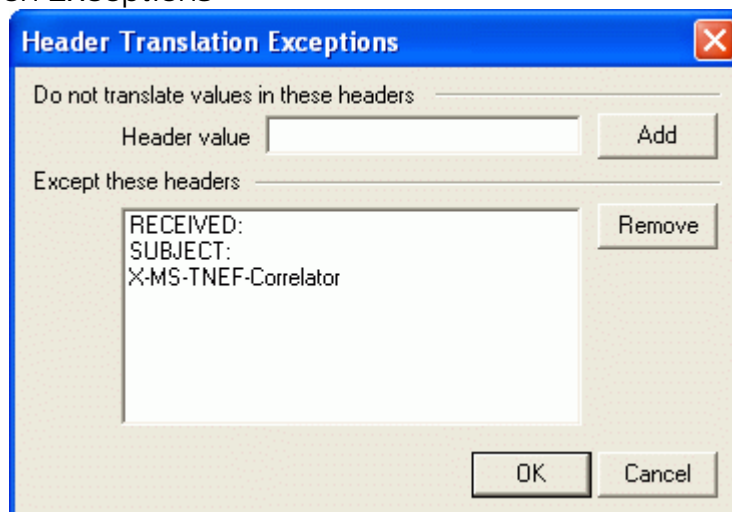
Remove
Select an entry in the Current Header Translations list and then click this button to remove it from the list.

Exceptions
Click this button to open the Header Translation Exceptions dialog. This dialog is used for specifying any Headers that you wish to be omitted from the Header Translation process.

Header Translation Exceptions

Do Not Translate Values in These Headers

Header value
Enter any header that you want to be omitted from the Header Translation process.

Add

Click this button to add a new header to the list.

Except These Headers

MDaemon will not scan these headers when it is substituting header text.

Remove

Select a header in the list and then click this button to remove it.

IP Cache and DNS Lookup

Using the IP Cache and performing DNS Lookups.

I n order to speed message delivery and shorten mail processing time MDaemon caches the IP addresses of all hosts with which it comes in contact. These IP's are stored and the cache is checked each time MDaemon requires a DNS resolution on a domain name. If the domain name needing resolution is found in the IP cache then the DNS lookup is skipped, which can save a surprising amount of processing time. The settings in this window allow you to manipulate the parameters under which the cache will operate. You may also manually add and remove entries and set the maximum size of the cache. The IP Cache can be reached from the **Setup→IP Cache...** menu selection.

IP Cache
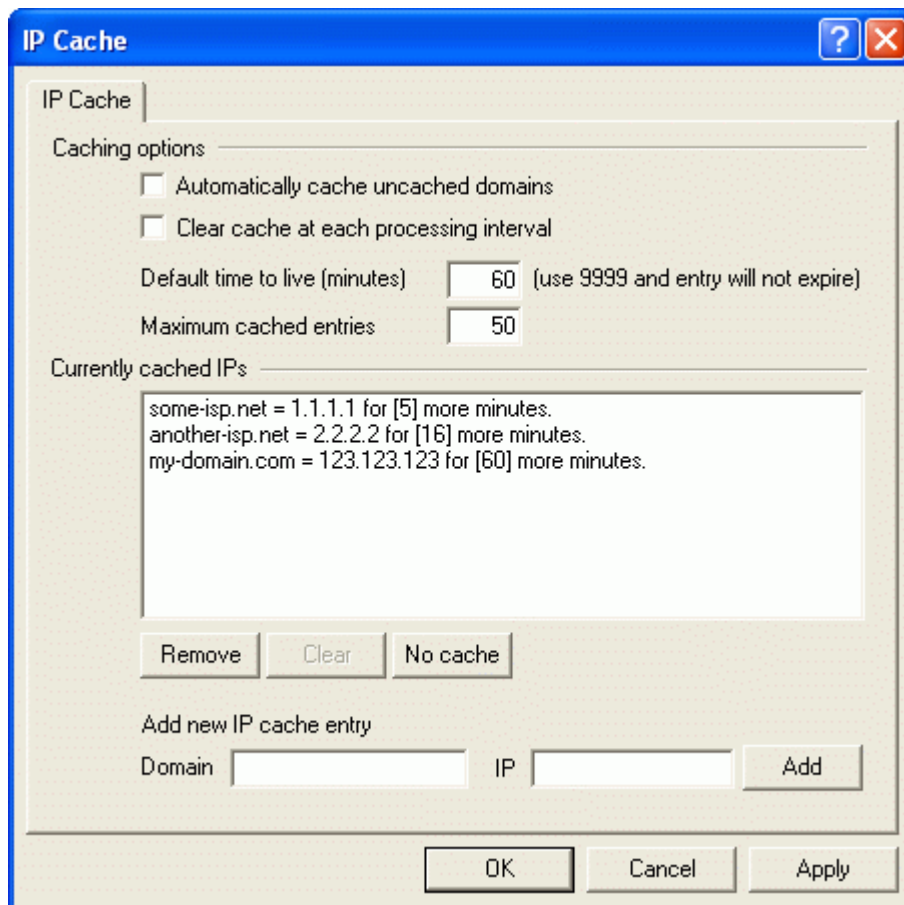
Caching Options

Clear cache at each processing interval
If selected, the entire contents of the cache will be flushed at the start of each mail session. This allows the cache to be refreshed at each processing interval.

Automatically cache uncached domains
This switch governs **MDaemon's** internal auto-caching engine. If you want MDaemon to cache domains automatically then enable this option. If you want to build the IP Cache yourself, then clear this checkbox.

Default time to live
This is the default value in minutes that an entry in the IP Cache can survive. Once the entry has been in the IP Cache for this number of minutes, MDaemon will remove it. If you want to set a permanent entry in the IP Cache then designate the *Default Time To Live* as 9999 in which case the entry will never expire.

Max cached entries
This value determines how large the cache may be. Once this setting has been reached, the next cache entry will bump the first one out of the cache.

Currently Cached IPs

Remove
Select an entry in the *Currently Cached IPs* window and then click this button to remove it.

No cache
Click this button to bring up a list of domain names and/or IP addresses that you never want MDaemon to add to the IP Cache.

Clear
This button will flush the cache.

Add New IP Cache Entry

Domain
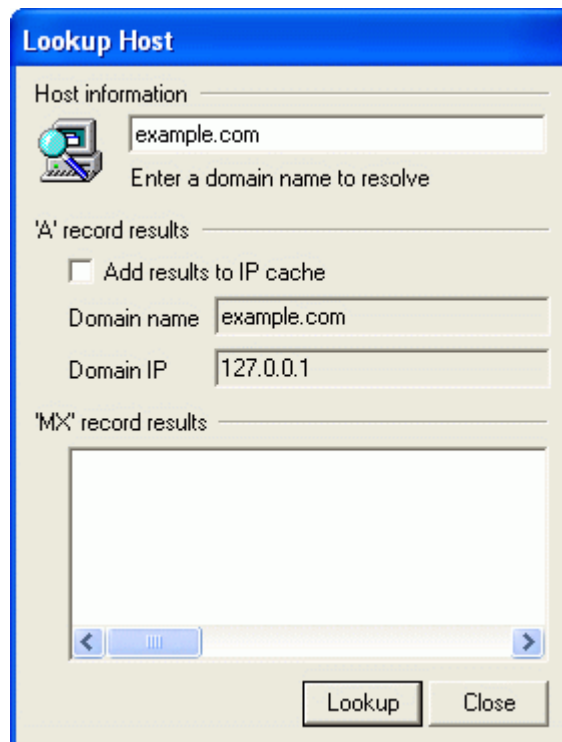Enter the domain name that you wish to add to the IP cache.

IP
Enter the IP address that you wish to add to the IP cache.

Add
Once you have entered a domain name and IP address, click this button to manually add them to the cache.

DNS Lookup

The DNS Lookup utility (**Setup→Perform a DNS Lookup…**) can be very useful when used in conjunction with the IP Cache. DNS Lookup makes it possible for you to quickly and easily perform a DNS lookup for any valid Internet domain name. A successfully resolved domain name lookup will display the domain's A-Record and any MX-Records that might be listed. There is also a control that can be used to automatically add the results of a successful lookup to the IP Cache.

Host Information
Enter the domain name whose DNS information you wish to retrieve.

"A" Record Results

Add results to IP cache
Click this checkbox if you want the results of DNS lookups to be added to the IP Cache.

Domain name
This is the name of the resolved domain name.

Domain IP
This is the resolved domain's IP address.

"MX" Record Results
This window will display any MX records listed for the resolved domain.

Lookup!
Click this button to perform a DNS lookup for the domain name that you have listed in the Host Information section.

Chapter

12

Scheduling and Dialup

Using the Event Scheduler and RAS Dialup/Dialdown Engine.

C lick the **Setup→Event scheduling...** menu selection (or press **F6**) to open MDaemon's Event Scheduler. This dialog makes it possible for you to schedule MDaemon's Remote mail processing events as extensively or as simply as you prefer. You can schedule exact times for mail delivery and collection or use a counter to process mail at regular intervals. You can also set conditions that will trigger mail processing at unscheduled times such as when a certain number of messages are waiting to be delivered, or when a message has been waiting a specified amount of time. If you have installed Alt-N's AntiVirus for MDaemon, there will be an additional tab on this dialog called AntiVirus Updates. This tab is used for scheduling how often to check for AntiVirus virus signature updates.

Event Scheduling

Send & Receive Mail
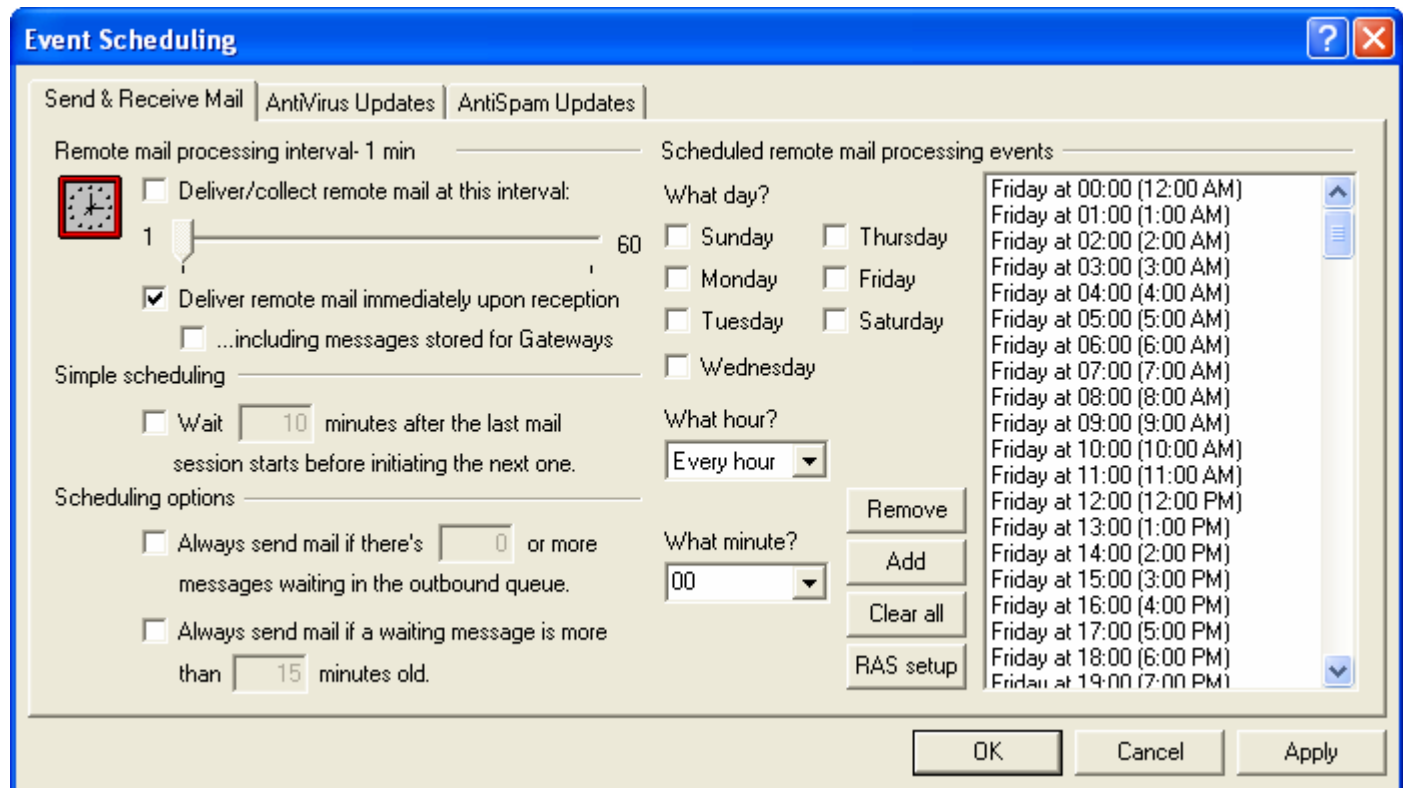
Remote Mail Processing Interval

Deliver/collect remote mail at this interval
Click the check box and slide this bar left or right to specify the time interval between mail processing sessions. It can be configured to count down from a range of 1 to 60 minutes. After that amount of time, MDaemon will process remote mail before beginning the countdown again. When this check box is cleared, *Remote Mail* processing intervals will be determined by the other scheduling options on the dialog.

Deliver remote mail immediately upon reception
When this option is selected, MDaemon will process and deliver remote mail immediately when it is received rather than waiting for the next processing interval.

…including messages stored for Gateways
Click this check box if you also want messages for Domain Gateways to be delivered immediately. However, this only applies to gateways with the, "*Deliver messages at each scheduled remote mail processing interval*" option enabled on the Gateway tab of the Gateway Editor.

Simple Scheduling

There are numerous ways a remote mail session can be triggered in MDaemon. The *Simple Scheduling* feature is handy when you want a remote mail processing session to occur at a regular time interval after the last session occurred, regardless of the trigger that initiated the session. Unlike the rigidly fixed intervals used when setting up specific times or using the slide bar, this option's time interval will reset whenever mail is processed, regardless of what caused the mail session to be initiated.

Note
In order for *Simple Scheduling* to take effect for a given day, at least one timed entry must exist for that day in the *Scheduled Times* list. For example, suppose you wanted to schedule 45 minutes between dialup sessions but only on Monday through Friday. You would need to enable the *Simple Scheduling* option and enter 45 minutes into the control and then enter at least one scheduled time for each day (Monday, Tuesday, Wednesday, Thursday, and Friday). Since there would be no scheduled time for Saturday or Sunday, those days would be exempt and would not trigger a *Remote Mail* session. The hour and minute setting you designate when you setup your trigger days doesn't matter; *Simple Scheduling* only checks whether there is an entry present for that day.

Scheduling Options

Always send mail if there's xx or more messages waiting in the outbound queue
MDaemon will trigger a mail session whenever the number of messages waiting in the outbound queue meets or exceeds the number that you specify here. These sessions are in addition to any other normally scheduled sessions.

Always send mail if a waiting message is more than xx minutes old
When this control is enabled, MDaemon will trigger a mail session whenever a message has been waiting in the outbound queue for the number of minutes specified. These sessions are in addition to any other normally scheduled sessions.

Scheduled Remote Mail Processing Events

What day?
Select the days that you wish to schedule.

What hour?
Select the hour that you wish to schedule.

What minute?
Select the minute that you wish to schedule.

Add
Once you've selected the day, hour, and minute click this button to add this time to the list of scheduled events.

Remove
Clicking this button will remove an entry that you have selected from the schedule listing.

Clear all
This button removes all entries from the schedule listing.

RAS setup
This button is provided so that you can quickly review or edit your RAS settings.

Tip
Most configurations will do well to simply use the slide bar or Simple Scheduling to control mail processing intervals. For example, it is pointless to schedule every minute of every day using the scheduler when you can simply set the slide bar to one minute intervals, place it in control, and accomplish the same thing. On the other hand, if you want the processing intervals to be more than an hour apart, or only on certain days, then you can use some combination of *Simple Scheduling* and specific times.

See:

Configuring Your RAS Settings—page 230

AntiVirus Updates
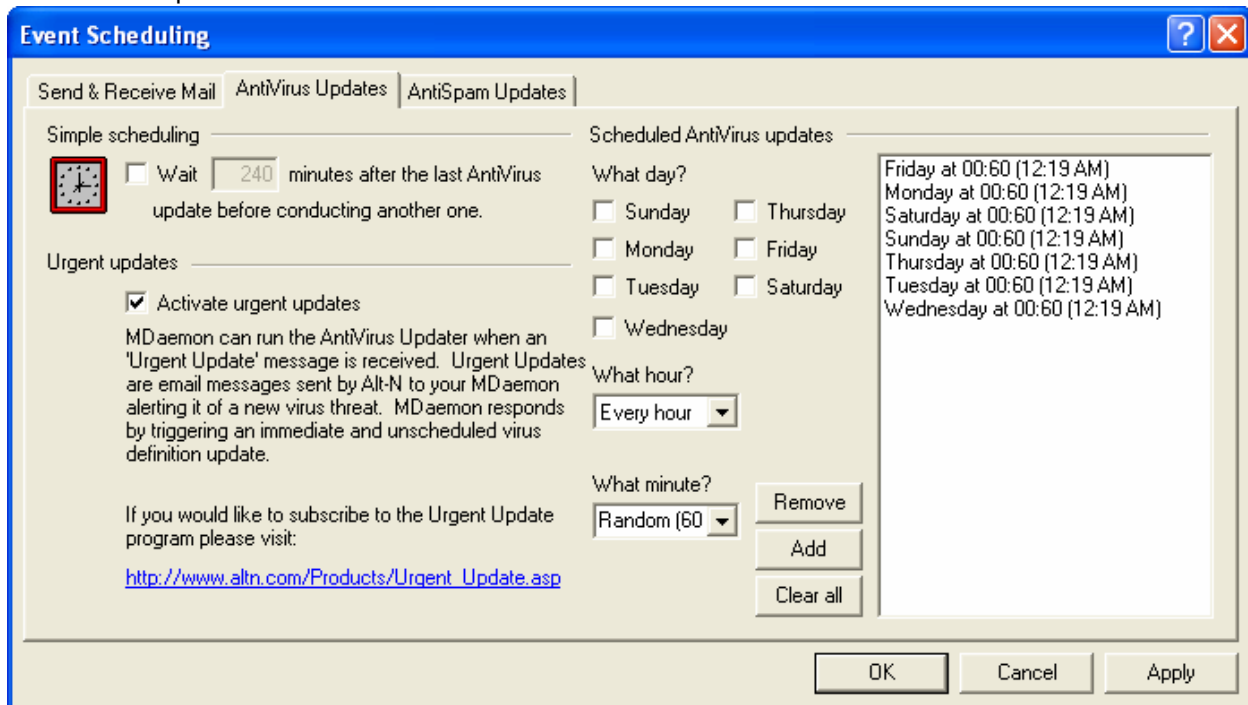
Simple Scheduling

Wait XX minutes after the last AntiVirus update before conducting another one.
Click this checkbox and specify the number of minutes that you want AntiVirus for MDaemon to wait before checking for new virus signature updates. Note, this is actually the number of minutes that AntiVirus for MDaemon will *attempt* to wait after the last time you checked for an update, whether the update was triggered by the scheduler or manually. The scheduler and manually triggered updates are given precedence over Simple Scheduling and it will therefore reset this counter if an AntiVirus Update event is triggered by one of those other methods. Thus, for example, if you have this option set to check for updates every 240 minutes and you manually check for an update after 100 minutes have passed then this counter will start over again at 240.

Urgent Updates

Activate urgent updates
Click this checkbox to activate the urgent updates feature. With this feature enabled, AntiVirus for MDaemon will immediately connect to the update location and download the high-priority update whenever MDaemon receives an "Urgent Update" message. To receive these messages you must first subscribe to the "Urgent Updates" mailing list at:

    http://www.altn.com/Products/Urgent_Update.asp

See AntiVirus Updater (page 270) for more information.

Scheduled AntiVirus Updates

What day?
Select the days that you wish to schedule.

What hour?

Select the hour that you wish to schedule.

What minute?

Select the minute that you wish to schedule. Select "Random (60)" if you wish the minute to be random. Selecting a random minute can help to increase the speed of updates because it reduces the number of servers attempting to update at the same time.

Add

Once you've selected the day, hour, and minute click this button to add this time to the list of scheduled events.
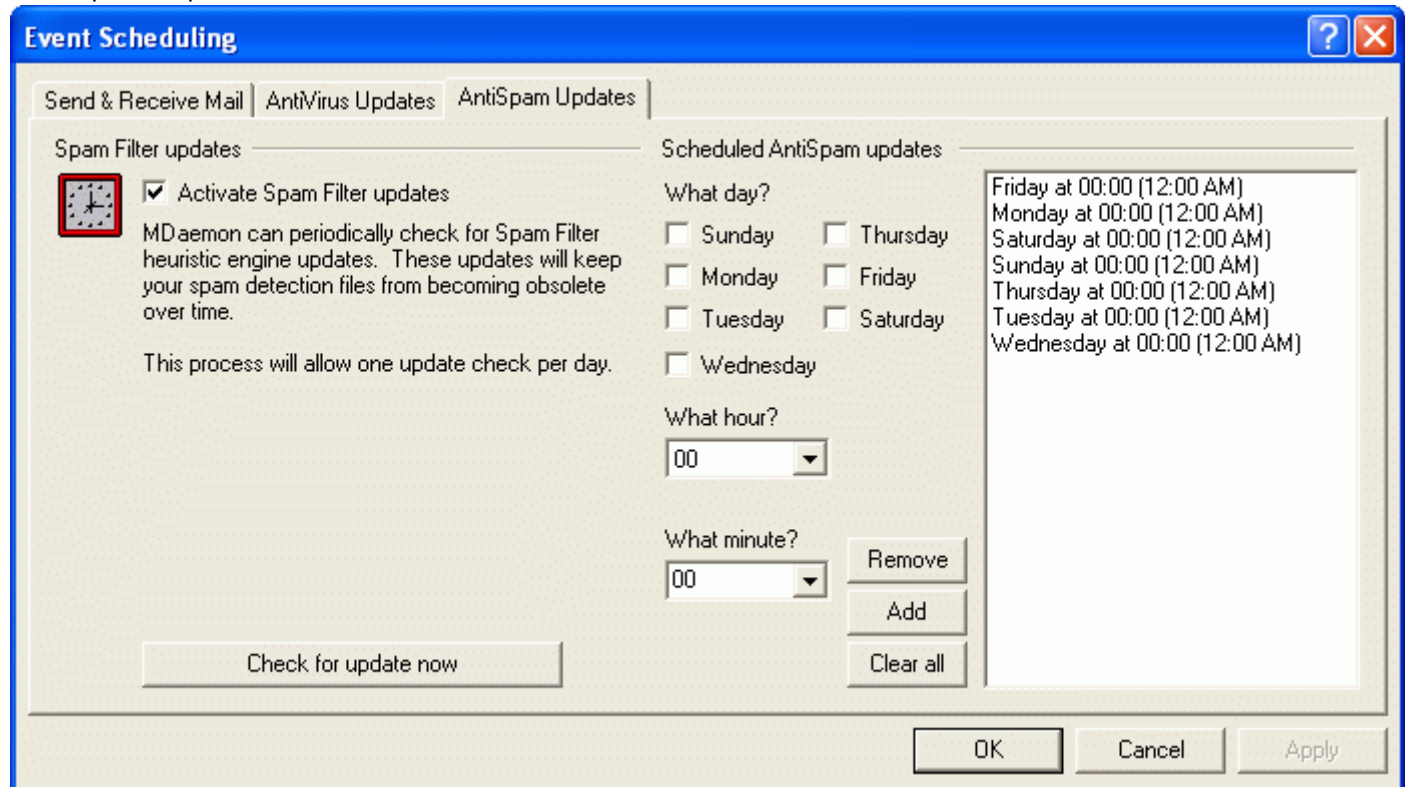
Remove

Clicking this button will remove an entry that you have selected from the schedule listing.

Clear all

This button removes all entries from the schedule listing.

AntiSpam Updates

Similar to the AntiVirus Updates tab, use this tab for scheduling how often you want to check for new Spam Filter rules. Because spam rules are updated much less frequently than virus definitions, and are much less critical, we recommend only scheduling one update check per week. If you wish to check for updates more frequently, once per day is the maximum that can be scheduled. You can, however, use the "Check for update now" button as often as you wish. Most weeks there will not be an update, but whenever there is one, a message will sent to your designated Content Filter administrators (Security→Content Filter...→Admins/Attachments) detailing exactly what took place.

Spam Filter Updates

Activate Spam Filter updates
Click this check box if you want the Spam Filter rules to be updated automatically. Similar to AntiVirus for MDaemon's updating feature, the Spam Filter can connect to Alt-N Technologies at scheduled intervals to check for new rules and then download and install them automatically when found.

Check for update now
Click this button to check immediately for a Spam Filter rules update.

Scheduled AntiSpam Updates

What day?
Select the days on which you wish to schedule an update.

What hour?
Select the hour for which you wish to schedule the update on the given days.

What minute?
Choose or type the minutes value that you wish to be coupled with the "*What hour?*" setting above.

Add
Once you've selected the day, hour, and minute click this button to add the time to the list of scheduled events.

Remove
Select one or more entries from the schedule and click this button to delete them from the list.

Clear all
This button removes all entries from the schedule listing.

RAS Dialup Settings

Click the **Setup→RAS Dialup/Dialdown...** menu selection (or press **F7**) to configure your RAS Dialup Settings. This dialog will only be available if you have Remote Access Services installed on your system. It is used by MDaemon when you need to dial up your ISP just prior to a Remote Mail processing event.

Dialup Settings
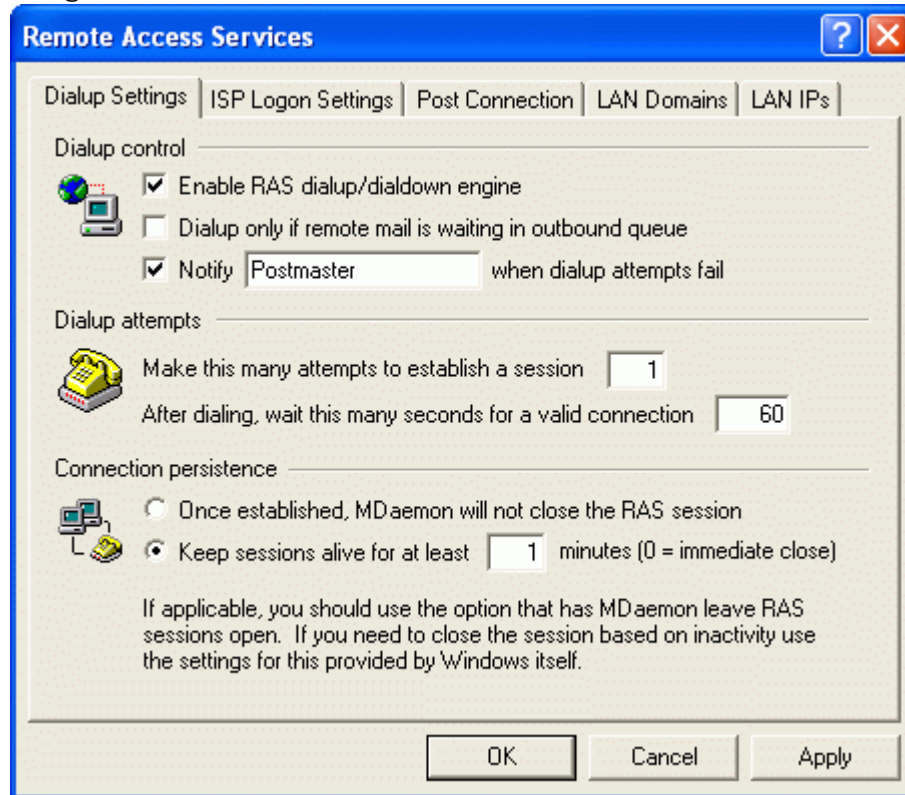
Dialup Control

Enable RAS dialup/dialdown engine
Selecting this option will cause MDaemon to use the settings specified here to make a connection to a remote host before sending and/or receiving remote mail.

Dialup only if remote mail is waiting in outbound queue
When this switch is checked, MDaemon will not dial up the ISP unless there is remote mail waiting in the Remote queue. This may be beneficial in some circumstances but be aware that if MDaemon does not dial up then it cannot do any mail **collecting** either (unless it is delivered across the local LAN).

Notify [address] when dialup attempts fail
When selected, MDaemon will send a message to the specified address when a dialup event fails because of some error.

Dialup Attempts

Make this many attempts to establish a session
MDaemon will attempt to connect to the remote host this many times before giving up.

After dialing, wait this many seconds for a valid connection
This value determines how long MDaemon will wait for the remote computer to answer and complete the RAS connection.

Connection Persistence

Once established, MDaemon will not close the RAS session
By default, MDaemon will shut down a created connection immediately after all mail transactions have been completed, and the session is no longer in use. Selecting this option will cause the connection to remain open even after all transactions have been completed.
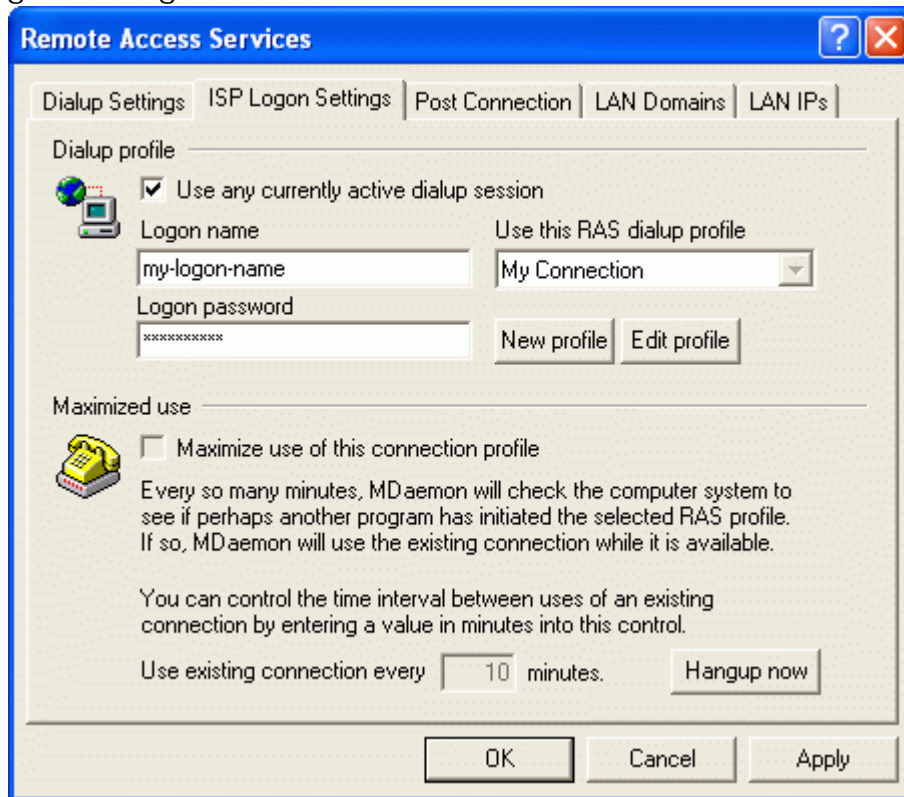
> **Note**
>
> MDaemon will never close a connection that it did not create.

Keep sessions alive for at least xx minutes
If enabled, this option will cause an MDaemon created RAS session to remain open for at least the number of minutes specified or until all mail transactions have been completed, whichever is greater.

ISP Logon Settings

Dialup Profile

Use any currently active dialup session
Click this checkbox if you want MDaemon to be able to utilize other connection profiles when it detects that one is active. Whenever it is time to dialup, MDaemon will first check to see if there is an active connection that it can use rather than dialing.

Logon name
The value specified here will be passed to the remote host during the authentication process.

Logon Password
The value specified here will be passed to the remote host during the authentication process.

Use this RAS dialup profile
This drop-down list box allows you to select a session profile that has been previously defined through windows Dialup Networking or Remote Access Services Setup.

New profile
Click this button to create a new Dialup Networking or Remote Access Services profile.

Edit profile
Click this button to edit the currently selected Dialup Networking or Remote Access Services profile.

**Maximized Use**

Maximize use of this connection profile
This switch causes MDaemon to monitor your connections so that if it detects that another program has established a connection it will process remote mail immediately regardless of scheduled times. If the connection remains open it will continue to process remote mail at regular time intervals based on the *Use existing connection every XX minutes* setting.

Hang-up now
This button will close the connection to the ISP. This button is active only if MDaemon has initiated the RAS session.

![Post Connection icon] **Post Connection**
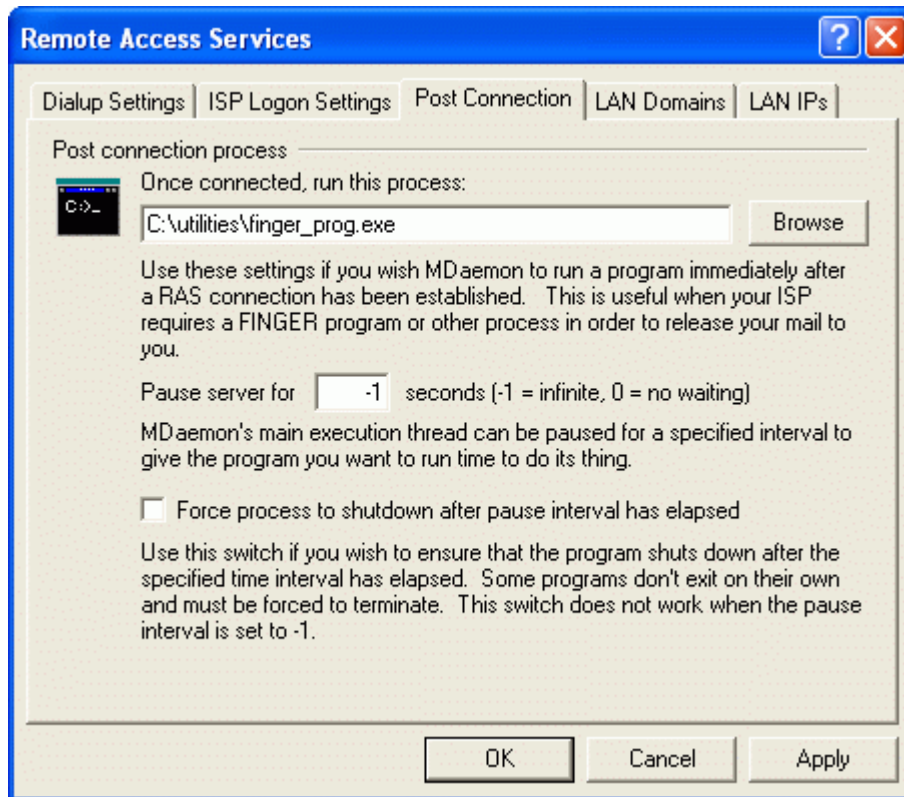
Post Connection Process

Once connected, run this process
If a program is specified here, MDaemon will spawn a thread and execute the process. This is extremely useful for those who require `Finger` or some other program to unlock the ISP's mailbox.

Pause server for xx seconds (-1 = infinite, 0=no waiting)
If the _Once Connected, Run This Process_ control contains a valid entry then the server will pause its operations for the number of minutes specified here while it waits for the executing process to return. Entering "-1" will cause the server to wait indefinitely for the process to return.

Force process to shutdown after pause interval has elapsed
Sometimes the program you need to run may not exit once it has run its course; some programs require user intervention in order to close them down. This is not acceptable when the software must run unattended. If this switch is selected MDaemon will force the process thread to terminate once the number of seconds specified in _Pause Server For XX Seconds_ has elapsed. This function does not work when the server is configured to wait indefinitely for the process to return.

🖊 LAN Domains
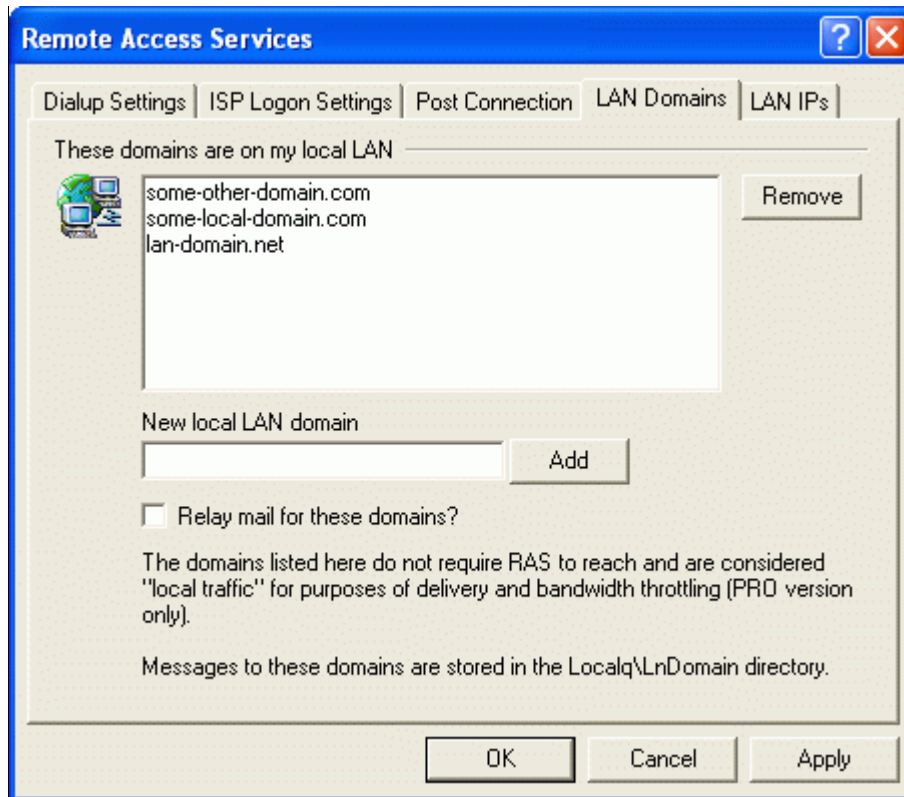
These domains are on my local LAN

The domains listed here are considered by MDaemon to be part of your local LAN. Therefore, no dialup is required in order to deliver a message to one of them.

New local LAN domain
Enter a domain name to add to the Local LAN list and click the *Add* button to add it.
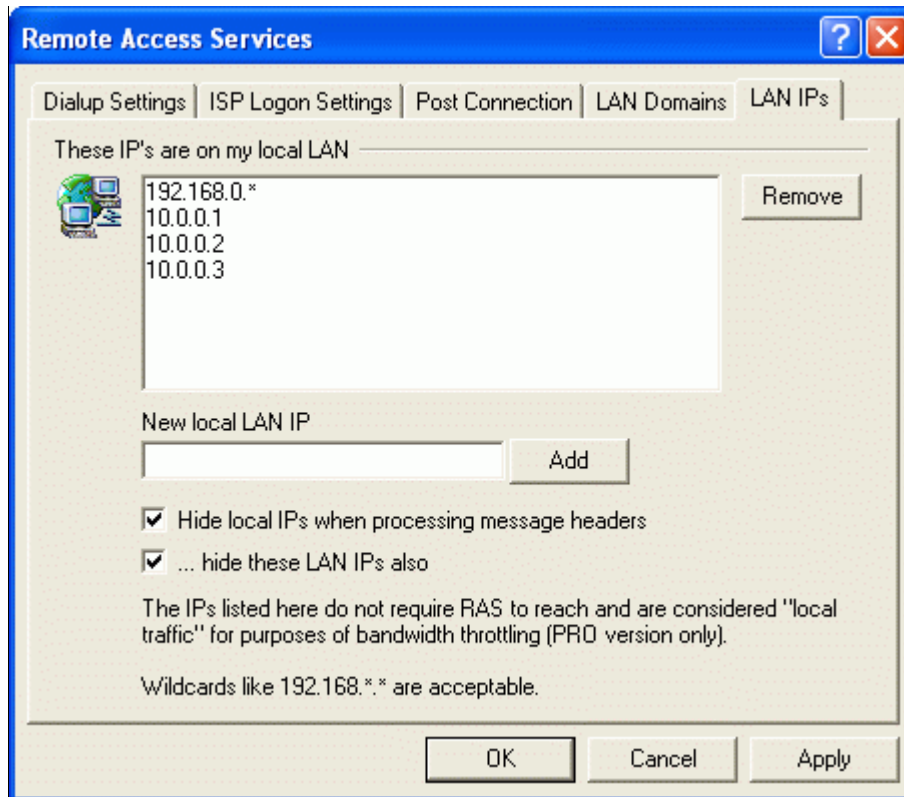
Relay mail for these domains
If this switch is selected MDaemon will relay mail for these domains. This provides some measure of control over the traffic sent to and from these domains.

Add
Click this button to add an entry to the list of LAN domains.

Remove
Click this button to remove a selected entry from the list of LAN Domains.

LAN IPs

Note: This dialog is identical to the dialogs of the same name located in RAS Dialup Settings (page 236) and Security Settings (page 198). Changes made to the settings on any one of these dialogs will appear on all of them.

These IPs are on my local LAN

This tab is used to list IP addresses that reside on your LAN (local area network). These IP addresses therefore do not require RAS to reach them, and they are treated as local traffic for the purposes of bandwidth throttling. Further, there are various other security and spam prevention restrictions that they may be exempt from since they are local addresses.

Remove
Select an IP address from the list and then click this button to remove it. You may also double click an entry to remove it.

New local LAN IP
Enter an IP address to add to the local IP list and click _Add_. Wildcards like 127.0.*.* are permitted.

Add
After entering an IP Address into the _New local LAN IP_ control, click this button to it to the list.

Chapter

13

DomainPOP Mail Collection

Using MDaemon's DomainPOP Mail Collection features.

U se DomainPOP Mail Collection (<u>Setup</u>→Do<u>m</u>ainPOP…, or F8) to configure MDaemon to download mail from a remote POP mailbox for redistribution to your users. This feature works by using the POP protocol to download all the mail found in the ISP's POP mailbox associated with the specified logon. Once collected, the messages are parsed according to the settings provided on this dialog and then placed in user mailboxes or the remote mail queue for MDaemon to deliver, just as if the messages had arrived at the server using conventional SMTP transactions.

It is important to note that messages stored in POP mailboxes and retrieved using the POP protocol will be devoid of the important routing information (sometimes called the message's "envelope") that would ordinarily be supplied had the messages been delivered using the more powerful SMTP protocol. Without this routing information, MDaemon is forced to "read" the message and examine the headers in an attempt to determine to whom the message was originally intended. This is not an exact science to say the least. Message headers are sometimes notorious for their lack of sufficient information that is needed to determine the intended recipient. This lack of what would seem to be a fundamental characteristic of an email message - the recipient - may seem surprising but one must keep in mind that the message was never intended to be delivered to its recipient using the POP protocol. With SMTP, the contents of the message are irrelevant since the protocol itself dictates specifically to the server, during the mail transaction, the intended recipient of the message.

In order to allow for POP retrieval and delivery of mail messages in a reliable and consistent way, MDaemon employs a powerful suite of header processing options. When MDaemon downloads a message from a remote POP source it immediately parses all the relevant headers within that message and builds a collection of potential recipients. Every email address found in the headers that MDaemon inspects is included in the collection.

Once this process is complete, MDaemon's collection of recipients is divided into local and remote sets. Further, all addresses that are parsed and placed into the collection of potential recipients are processed through the Address Alias translator before being divided into local and remote sets. Every member of the local set (addresses with a domain that matches either MDaemon's Primary domain or one of the Secondary domains) will receive a copy of the message. What happens to the remote set is governed by the settings in this dialog. You can elect to simply ignore these addresses, forward a summary listing of them to the postmaster, or honor them—in which case MDaemon will actually deliver a copy of the message to the remote recipient. Only under rare circumstances would the need to deliver these messages to remote recipients be warranted.

Care must be taken to prevent duplicate messages or endlessly looping mail delivery cycles. A common problem that results from the loss of the SMTP envelope manifests itself with mailing list mail. Typically,

messages distributed by a mailing list do not contain within the message body any reference to the addresses of the recipients. Rather, the list engine simply inserts the name of the mailing list into the TO: field. This presents an immediate problem: if the TO: field contains the name of the mailing list then the potential exists for MDaemon to download this message, parse the TO: field (which will yield the name of the mailing list), and then dispatch the message right back to the same list. This would in turn deliver another copy of the same message back to the POP mailbox from which MDaemon downloaded the original message—thus starting the whole cycle over again. To cope with such problems mail administrators must take care to use the tools and settings that MDaemon provides to either delete mailing list mail or perhaps alias it in such a way that it will be delivered to the proper local recipient(s). You could also utilize the Routing Rules or Content Filters to deliver the message to the correct recipient(s).

Additional concerns when employing this sort of mail collection scheme revolve around the issue of unwanted message duplication. It is very easy for mail that is delivered to the ISP's POP mailbox using SMTP to generate unwanted duplicates, once it has been collected using DomainPOP. For example, suppose a message is sent to someone at your domain and a carbon copy is sent to another person at the same domain. In this situation, SMTP will deliver **two** copies of the same message to your ISP's mailbox—one for each recipient. Each of the two message files will contain references to **both** recipients—one in the TO: field and the other in the CC: field. MDaemon will collect each of these two identical message files and parse both addresses from each of them. This would result in both recipients receiving one unwanted duplicate message. To guard against this sort of duplication MDaemon uses a control which allows you to specify a header that MDaemon will use to check for duplication. The Message-ID field is ideal for this. In the above example, both messages are identical and will therefore contain the same Message-ID field value. MDaemon can use this value to identify and remove the second message during the download stage before it can be parsed for address information.

As a final measure guarding against duplicate messages and endless looping delivery cycles, MDaemon employs a means for detecting how many trips or "hops" a message has made through the transport system. Each time an SMTP mail server processes a message it "stamps" the message with a "Received" header. MDaemon counts all such headers when it encounters a message for the first time. If the total number of mail servers exceeds a specified value, it is likely the message is caught in a delivery loop and should be taken out of the mail stream and moved to the bad message directory. This value can be configured through the Domain Configuration Editor (page 50).
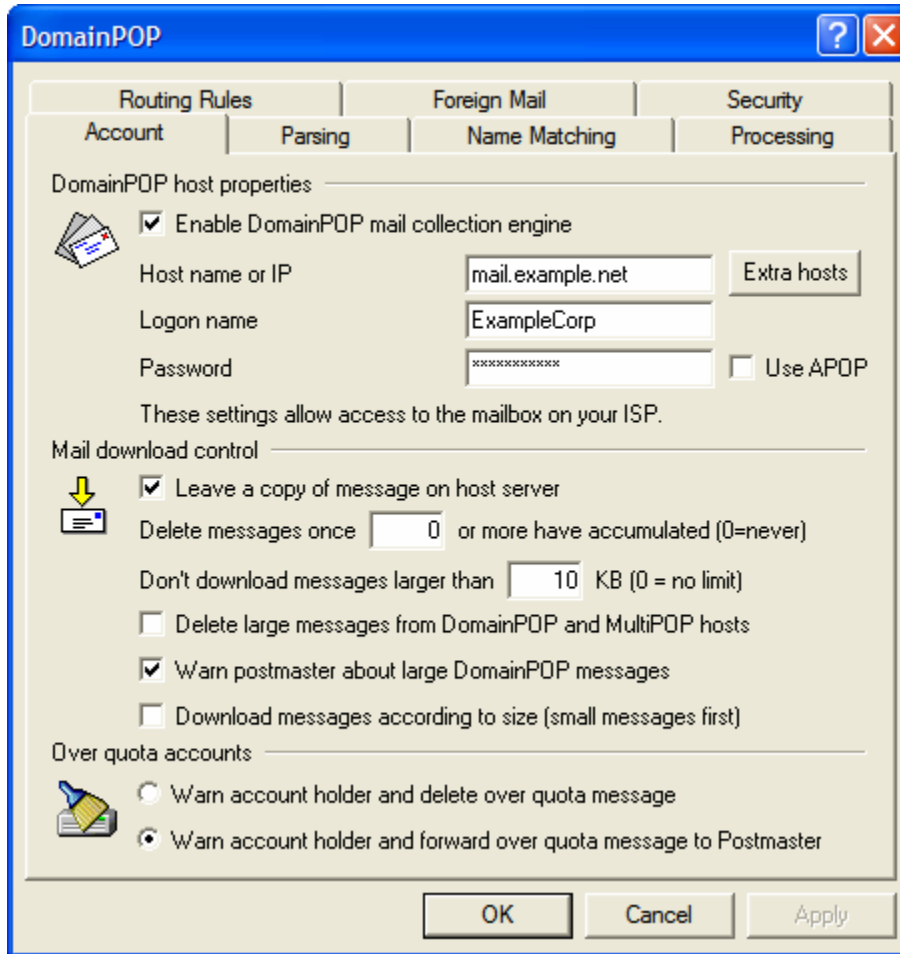
See:

DomainPOP Mail Collection

Account

DomainPOP Host Properties

Enable DomainPOP mail collection engine
If selected, MDaemon will use the setting provided on this screen to collect mail from a DomainPOP mail host for local redistribution.

Host name or IP
Enter your DomainPOP host's domain name here. Additionally, if you wish to specify a port to collect the mail from other than MDaemon's current default POP port, you can do so by appending a new port value to the host name separated by a colon. For example, using "mail.altn.com" as a DomainPOP host will connect to that host using the default outbound POP port while using "mail.altn.com:523" will connect to that host on port 523.

Logon name
Enter your logon of the POP account used by DomainPOP.

Password
Enter the POP or APOP account's password here.

Use APOP
Click this box if you wish to use the APOP command and CRAM-MD5 authentication when retrieving your mail. This makes it possible to authenticate yourself without having to send clear text passwords.

Mail Download Control

Leave a copy of message on host server
If selected, MDaemon will not remove collected messages from your DomainPOP mail host.

Delete messages once [xx] or more have accumulated (0 = no limit)
If you are leaving messages on your ISP server then they will be deleted once this number is reached. Enter "0" if you want messages to remain on the server regardless of the number.

> **Note**
>
> Some ISP's may limit the amount that you are allowed to store in your mailbox.

Don't download messages larger than [xx] KB (0 = no limit)
Messages greater than or equal to this size will not be downloaded from your DomainPOP mail host. Enter "0" if you want MDaemon to download messages no matter the size.

Delete large messages from DomainPOP and MultiPOP hosts
Click this switch and MDaemon will delete messages that exceed your maximum set size. The messages will simply be removed from the DomainPOP and MultiPOP mail hosts and will not be downloaded.

Warn postmaster about large DomainPOP messages
Click this switch and MDaemon will send a warning to the postmaster whenever a large message is discovered in the DomainPOP mailbox.

Download messages according to size (small messages first)
Enable this checkbox if you want the message downloading order to be based on size—beginning with the smallest and proceeding to the largest.

> **Note**
>
> This option retrieves smaller messages quicker but requires a larger amount of internal sorting and processing.

Over Quota Accounts

Warn account holder and delete over quota message
When this option is chosen and a message is collected for an account that is over its quota (designated on the Quotas tab of the account editor), MDaemon will delete the message and send a warning to the user letting them know that their account is over its limit.

Warn account holder and forward over quota message to Postmaster
When this option is chosen and a message is collected for an account that is over its quota (designated on the Quotas tab of the account editor), MDaemon will forward the message to the Postmaster and send a warning to the user letting them know that their account is over its limit.

🖼 Parsing
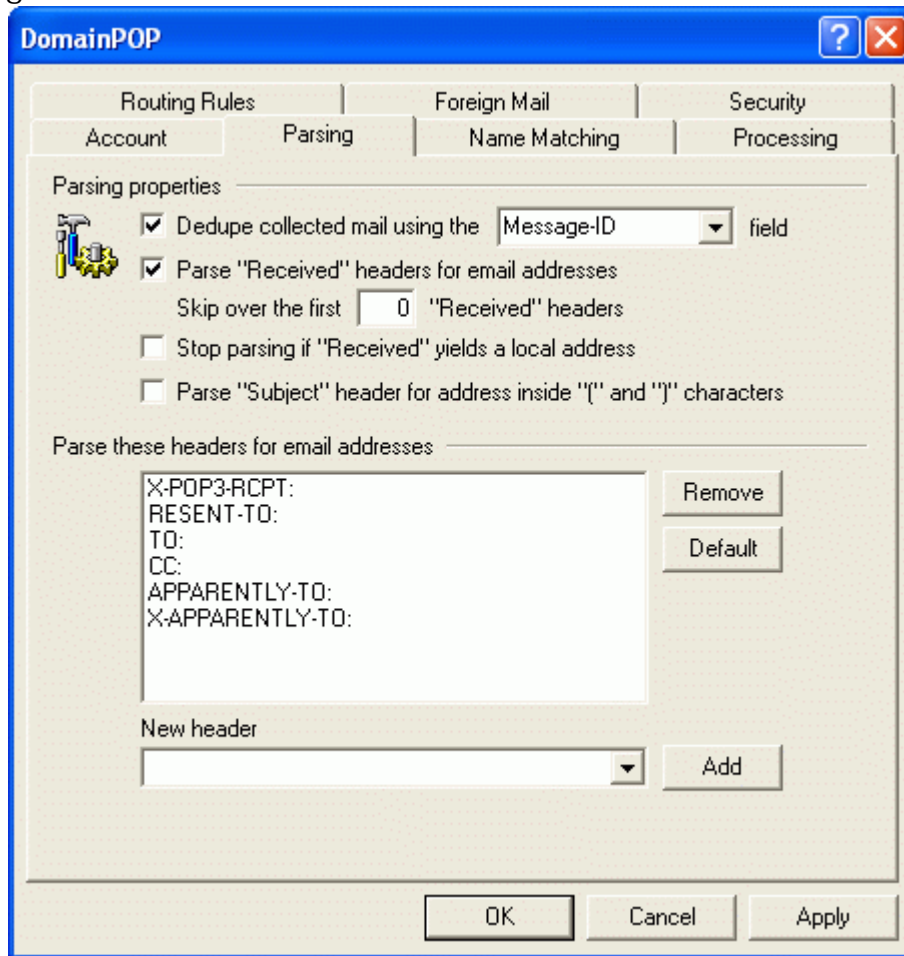
Parsing Properties

De-dupe collected mail using the Message-ID field
If this option is selected MDaemon will remember the value of the specified header and will not process additional messages collected in the same processing cycle which contain an identical value. The `Message-ID` field is the natural header to use but the actual header can be anything you want.

Parse "Received" headers for email addresses
This switch makes use of a powerful yet seldom used optional RFC-822 regulation. It is possible to store the recipient information ordinarily found only within the message's envelope in a message header so that parsers of the mail message will be able to glean the actual recipient address by merely inspecting the headers later. MDaemon will attempt to capitalize on this optional rule if you have this switch set by parsing ALL the "received" headers found within the mail message for valid addresses.

Skip over the first xx "Received" headers
Sometimes it is useful to process Received headers but starting at the nth occurrence of them. This setting allows you to enter the number of "Received" headers that MD will skip over before beginning its processing.

Stop parsing if "Received" yields a valid local address
If while parsing a "received" header MDaemon detects a valid local address, this switch will cause all further parsing to stop and MDaemon will not search the message for more potential delivery addresses.

Parse "Subject:" header for address inside "(" and ")" characters
When this is selected and MDaemon finds an address contained in "( )" in the "Subject:" header of a message, this address will be added to the message's list of recipients along with any other parsed addresses.

Parse these headers for email addresses

This control lists the headers that MDaemon will parse in an attempt to extract addresses. Every header listed here is checked for addresses.

Remove
This button will remove the selected entries from the header list.
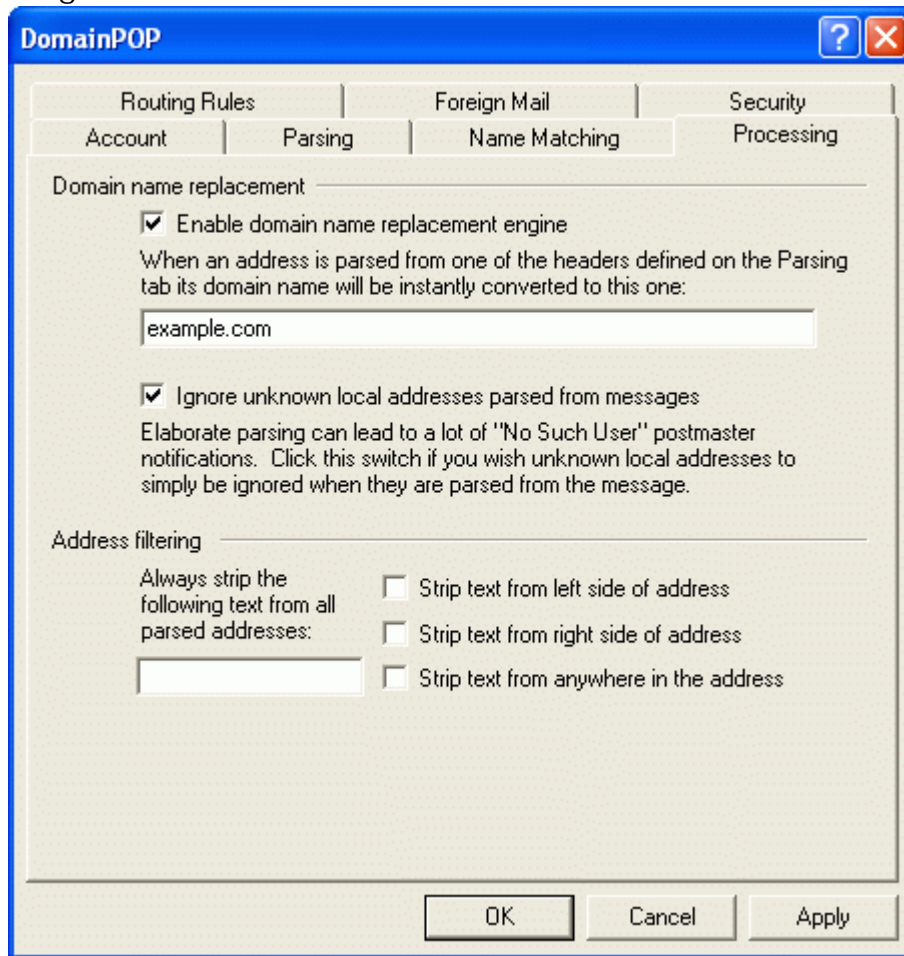
Default
This button will clear the current contents of the header list and add MDaemon's default list of headers. The default headers are typically sufficient to extract all addresses from the message.

New header
Enter the header you wish to add to the header list.

Add
Add the header listed in the _New Header_ control to the list.

🖼 Processing

Domain Name Replacement

Enable domain name replacement engine
This option is an attempt to cut down on the number of domain aliases your site will require. When a message is downloaded *all* domain names in *all* addresses which are parsed from that message are instantly transformed into the one specified here.

*Ignore unknown local addresses parsed from messages*
As mentioned above, the Domain Name Replacement feature will alter the domain name in all email addresses parsed from the message, converting it into the one you specify on this screen. This could create some addresses which do not have a corresponding mailbox account at your site. Since the domain name will match your primary domain name, MDaemon will consider such addresses local but undefined. Such mail typically generates a "No Such User" message directed at the postmaster. This switch will prevent the Domain Name Replacement Engine from generating "No Such User" messages.

Address Filtering

Always strip the following text from all parsed addresses
Some ISP's will stamp each message with a line that indicates who the recipient of the message should be along with a bit of routing information appended to the address on either the left or right hand side. This stamp would be perfect to use for parsing the recipient address except that the additional routing

information makes this impossible without a lot of account aliasing. Rather than do all that you can simply specify the value of this appended text in the edit control associated with this feature and MDaemon will strip any occurrence of this text from all addresses that it parses.

🖼 Routing Rules
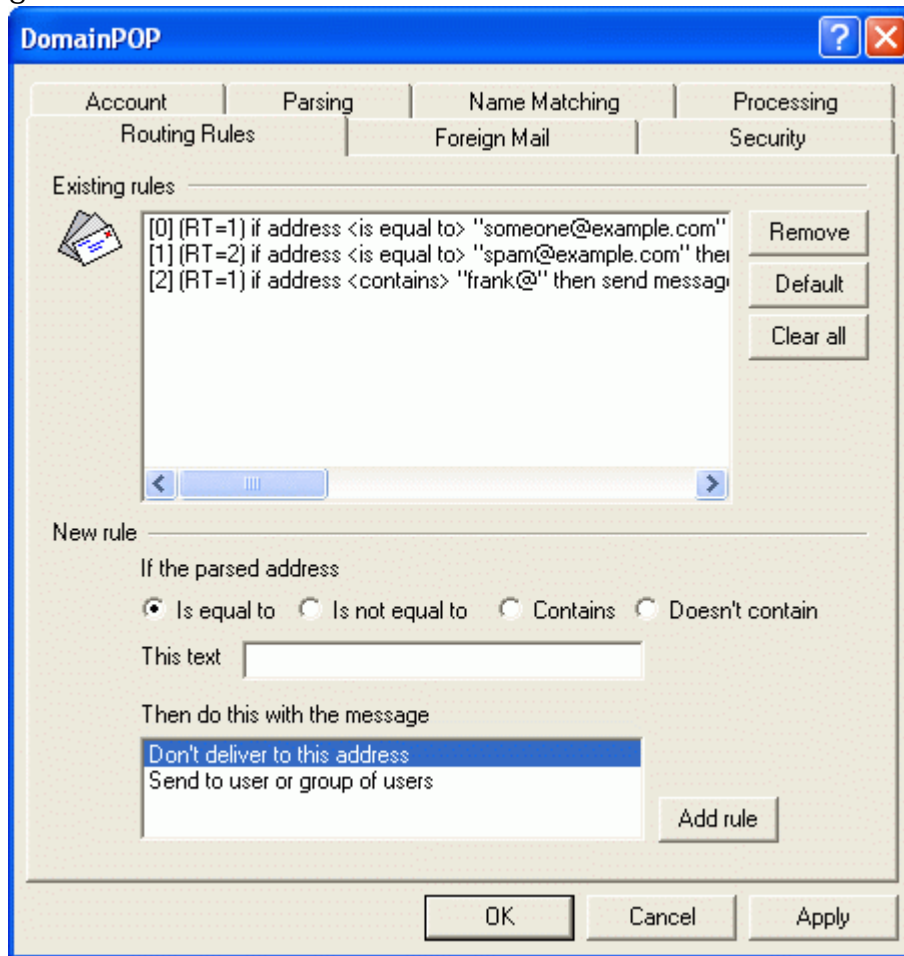
Existing Rules

This list shows you the rules that you have created and will be applied to your messages.

Remove
Press this button and the selected rules in the _Existing Rules_ list will be removed.

Default
Press this button to remove all existing rules and replace them with a predefined set of defaults.

Clear all
This button removes all existing rules.

New Rule

If the parsed address…

Is equal to, is not equal to, contains, does not contain
This is the type of comparison that will be made when an address is compared to this routing rule. MDaemon will search each address for the text contained in the "_This text_" field and then proceed based upon this control's setting—does the address's complete text match exactly, not match exactly, contain the text, or not contain it at all?

<u>***This text***</u>
Enter the text that you want MDaemon to search for when scanning the addresses.

<u>***Then do this with the message***</u>
This control lists the available actions that can be performed if the result of the rule is true. Here is a list of actions and what they do:

Don't deliver to this address - Selecting this rule will prevent the message from being delivered to the specified address.

Send to user or group of users - Selecting this action will bring up a dialog that will allow you to create a list of email addresses that should receive a copy of the message being processed.

🖃 Foreign Mail
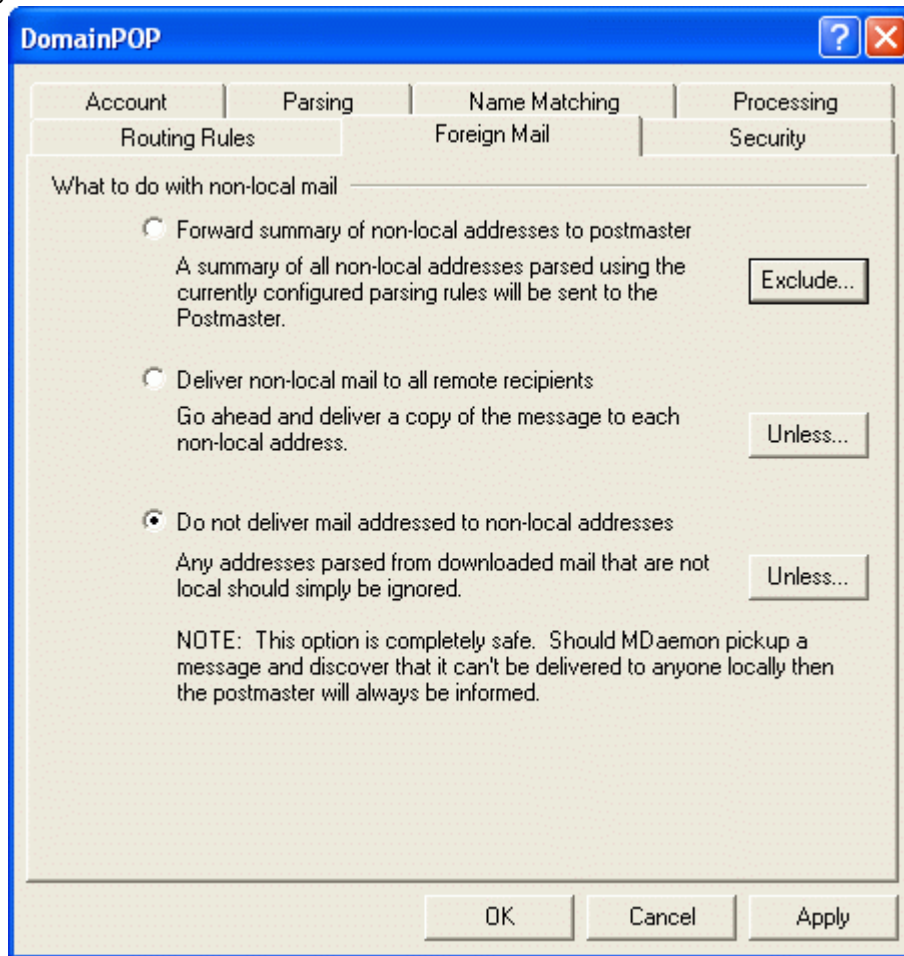
What to do with non-local mail

Forward summary of non-local addresses to postmaster
If this option is selected MDaemon will send a single copy of the message to the postmaster along with a summary of the non-local addresses that the parsing engine extracted using the current set of headers and parsing rules.

Deliver non-local mail to all remote recipients
If this option is selected MDaemon will deliver a copy of the message to any non-local recipient that it finds within the inspected headers.

Do not deliver mail addressed to non-local addresses
If this option is selected MDaemon will remove from the recipient list any address that is non-local. It will be as if MDaemon never parsed remote addresses from the original downloaded message.

> **Note**
>
> The various *Unless..* buttons allow you to define addresses which are exceptions to the rules.
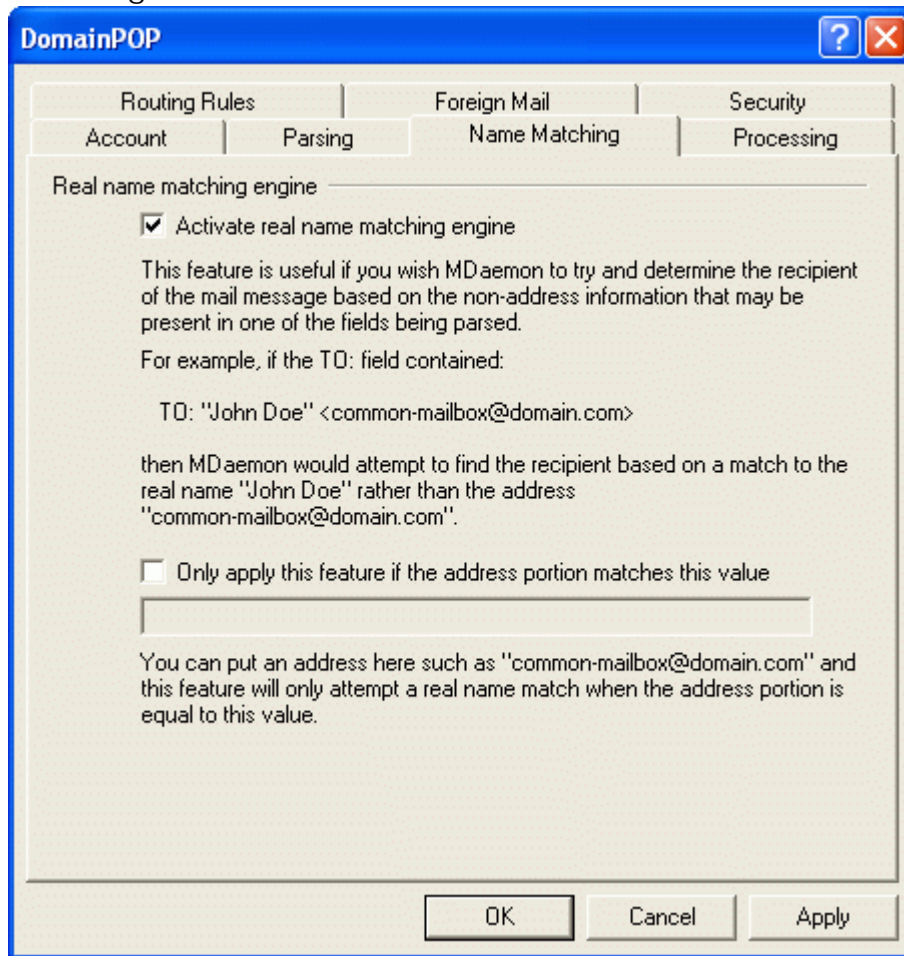
🖼 Security
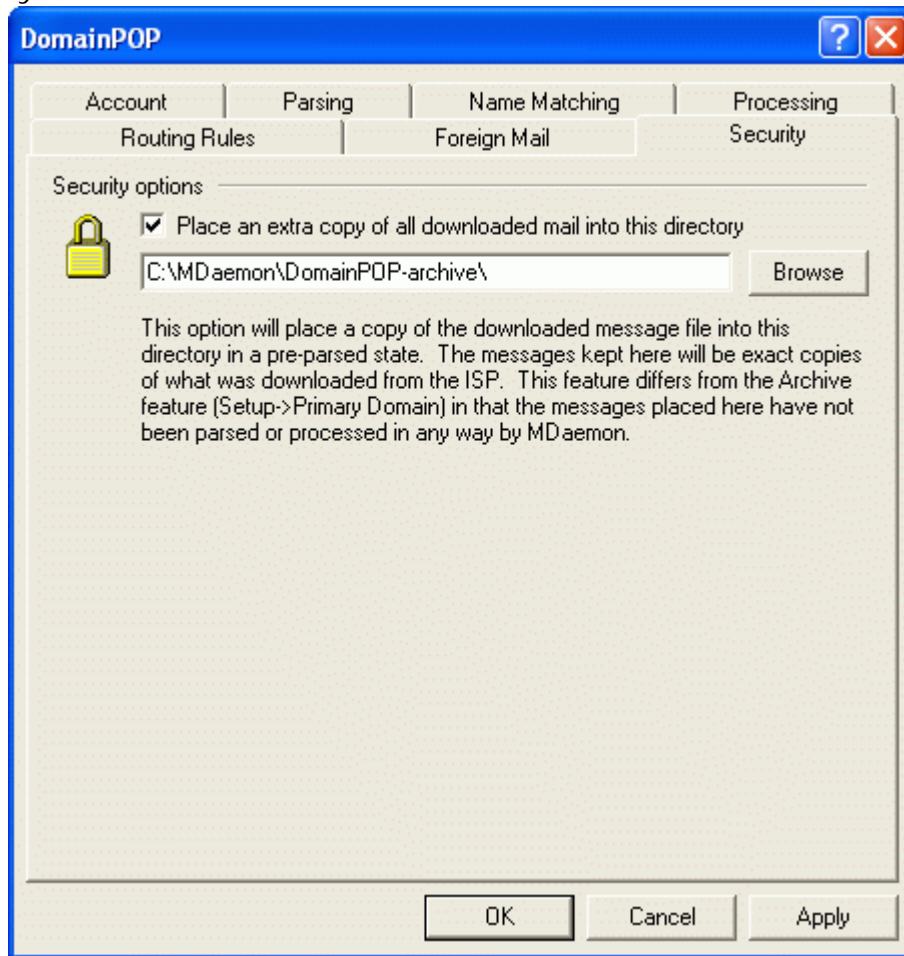
Safety Options

Place an extra copy of all downloaded mail into this directory
This is a safety feature to ensure that you don't lose any mail due to unforeseen parsing or other errors that might occur when downloading mail in bulk quantities.

🖼 Name Matching

Real Name Matching Engine

Activate real name matching engine

This feature allows MDaemon to determine who should receive a DomainPOP collected message based not upon what the email address is but upon what the text portion (typically a person's real name) is. For example, a message's TO header might read:

```
TO: "Joe User" <common-mailbox@isp.com>
```

or

```
TO: Joe User <common-mailbox@isp.com>
```

Name Matching does not care about the "common-mailbox@isp.com" portion of the address. It instead extracts the "Joe User" portion and attempts to lookup this name in the MDaemon user database. If a match is found to an account's real name field then that account's local email address is used for delivery purposes. If no match is made then MDaemon reverts to delivering the message to the email address parsed from the data (common-mailbox@isp.com in this example).

> **Note**
>
> The real name portion of the address should not contain a comma, semi-colon, or colon character so take care when you setup this information in your mail clients.

Only apply this feature if the address portion matches this value
This control allows you to specify an email address that must be present in the extracted data in order for the real name matching process to proceed. This allows you a measure of control over when the Name Matching feature will be employed. For example, you can specify an address such as "common-mailbox@isp.com" and then only addresses matching this value will be candidates for Name Matching.

Suppose you have "common-mailbox@isp.com" in this control.

This means that:

`TO: "Joe User" <common-mailbox@isp.com>` will be a candidate for Name Matching while `TO: "Joe User" <Joe@mdaemon.com>` will not.

Chapter

14

Content Filter and Anti-virus

Filtering messages and scanning for viruses.

T he Content Filter dialog (**Security**➔**Content Filter...**) can be used for a large number of purposes such as: preventing spam email, intercepting messages containing viruses before they reach their final destination, copying certain emails to one or more additional users, appending a note or disclaimer to the bottom of messages, adding and deleting headers, stripping email attachments, deleting messages, and more. Because individual Content Filter rules are created by the administrator, and because of their diversity, they can be used in many situations and are limited for the most part only be the creativity of the person creating them. With a little bit of thought and experimentation, this feature can be very useful.

 MDaemon has integrated support for AntiVirus for MDaemon. Alt-N Technologies, in a joint effort with Kaspersky Labs a world-renowned anti-virus software developer, has developed AntiVirus, an anti-virus engine that can be installed and integrated with MDaemon. When AntiVirus is installed you will see two additional tabs on the Content Filter dialog. These tabs are used to directly control the product's features and designate what actions MDaemon will take when a virus is detected. To obtain AntiVirus for MDaemon, visit `www.altn.com`. See page 267 for more on using AntiVirus for MDaemon.

Content Filter Editor
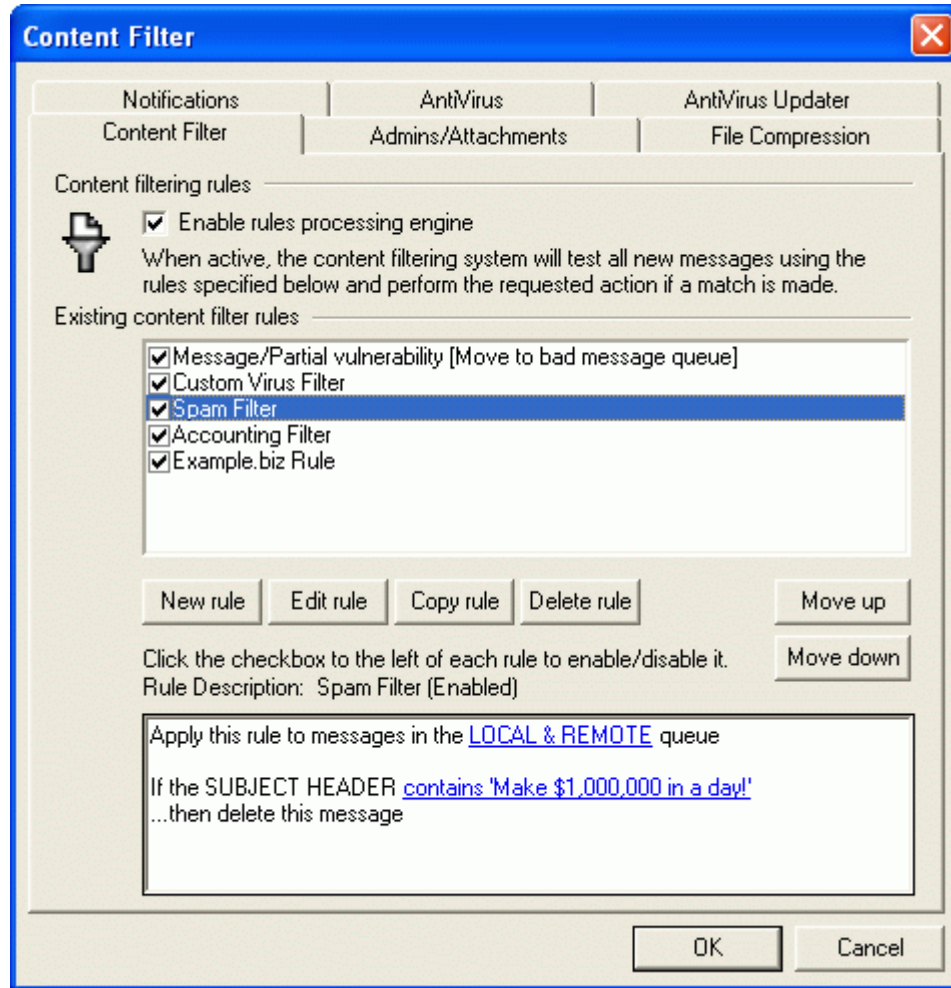
All messages processed by MDaemon will at some point reside temporarily in one of the message queues. When Content Filtering is enabled, before any message is allowed to leave the queue it will first be processed through the Content Filter rules. The result of this procedure will determine what is done with the message.

> **Note**
>
> Messages that have a filename beginning with the letter "P" will be ignored by the content filtering process. Every other message will be processed through the content filter system. Once processed, MDaemon will change the first character of the filename to a "P". In this way a message will only be processed through the content filtering system once.

Content Filtering Rules

Enable rules processing engine
Click this checkbox to enable content filtering. All messages processed by MDaemon will be filtered through the content filter rules before being delivered.

Existing Content Filter Rules

This box lists all rules in the order that they will be applied to a message. This makes it possible for you to arrange your rules to achieve a greater level of versatility.

For example: If you have a rule that deletes all messages containing the words, "This is Spam!" and a similar rule that sends those messages to the Postmaster, then putting them in the right order will enable both rules to be applied to the message. This assumes that there isn't a "Stop Processing Rules" rule that applies to the message higher up in the list. If so, then you would use the *Move Up/Move Down* buttons to move the "Stop" rule below the other two. Now any message containing "This is Spam!" would be copied to the Postmaster and then deleted.

> **Note**
>
> MDaemon has the capability to create rules that will perform multiple tasks and use `and/or` logic. Considering the example above, instead of using multiple rules you could create a single rule that would accomplish all of those tasks and more.

New rule
Click this button to create a new content filter rule. This will open the Setup New Rule dialog.

Edit rule
Click this button to open the selected rule in the Modify Rule editor.

Copy rule
Click this button to clone the selected content filter rule. An identical rule will be created and added to the list. The new rule will be given a default name called "Copy of [Original Rule Name]". This is useful if you wish to create multiple similar rules. You can create a single rule, clone it several times, and then modify the copies as needed.

Delete rule
Click this button to delete the selected content filter rule. You will be asked to confirm your decision to delete the Rule before MDaemon will do so.

Move up
Click this button to move the selected rule up.

Move down
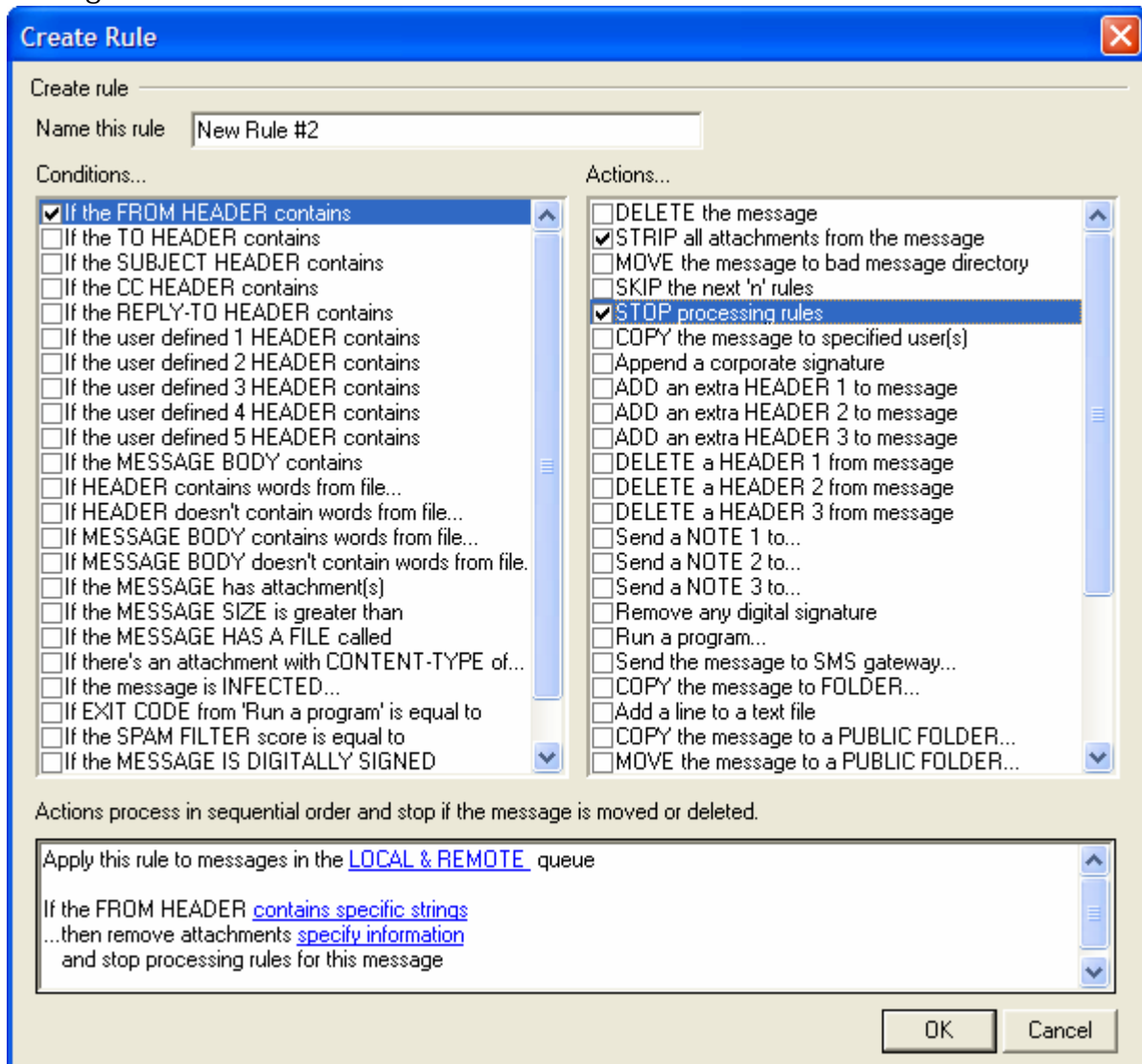Click this button to move the selected rule down.

Rule Description [*Rule Name*] (Enabled/Disabled)

This box displays the currently selected rule in its internal script format. Click any of the rule's conditions (listed as a hyperlink) and the appropriate editor will be opened for changing that particular condition.

Creating a New Content Filter Rule

This dialog is used for creating Content Filter Rules. It is reached by clicking the *New Rule* button on the Content Filter dialog.

Create Rule

Name this rule
Type a descriptive name for your new rule here. By default it will be called "New Rule #n".

Conditions...

This box lists the conditions that may be applied to your new rule. Click the checkbox corresponding to any condition that you want to be applied to the new rule. Each enabled condition will appear in the Rule Description box below. Most Conditions will require additional information that you will specify by clicking on the Condition's hyperlink in the Rule Description box.

If the [HEADER] contains—Click any of these options to base your rule on the content of those particular message headers. You must specify the text for which to scan. This condition now supports regular expressions. See "Using Regular Expressions in Your Filter Rules"—page 257.

If the user defined [# HEADER] contains—Click one or more of these options to base the rule on message headers that you will define. You must specify the new header, and the text for which to scan. This condition now supports regular expressions. See "Using Regular Expressions in Your Filter Rules"—page 257.

If the MESSAGE BODY contains—This option makes the contents of the message body one of the conditions. This condition requires you to specify a text string for which to search. This condition now supports regular expressions. See "Using Regular Expressions in Your Filter Rules"—page 257.

If the MESSAGE has Attachment(s)—When this option is selected, the rule will be contingent upon the presence of one or more message attachments. No additional information is required.

If the MESSAGE SIZE is greater than—Click this option if you want the rule to be based upon the size of the message. The size must be specified in *KB*. Default is 10KB.

If the MESSAGE HAS A FILE called—This option will scan for a file attachment with a particular name. The filename must be specified. Wildcards such as `*.exe` and `file*.*` are permitted.

If message is INFECTED...—This condition is TRUE when AntiVirus for MDaemon determines that a message is infected with a virus.

If the EXIT CODE from a previous run process is equal to—If a previous rule in your list utilizes the *Run Process* action, you can use this condition to look for a specific exit code from that process.

If the MESSAGE IS DIGITALLY SIGNED—The condition applies to messages that have been digitally signed. No further information is required by this condition.

If ALL MESSAGES—Click this option if you want the rule to be applied to all messages. No further information is required; this rule will affect every message except those to which a "Stop Processing Rules" or "Delete Message" action has been applied in a previous rule.

Actions...

MDaemon can perform these actions if a message matches the rule's conditions. A few Actions will require additional information that you will specify by clicking on the Action's hyperlink in the Rule Description box.

Delete Message—Selecting this action will cause the message to be deleted.

Strip All Attachments From Message—This action causes all attachments to be stripped from the message.

Move Message To Bad Message Directory—Click this action to cause a message to be moved to the bad message directory.

Skip n Rules—Selecting this action will cause a specified number of rules to be skipped. This is useful in situations where you may want a rule to be applied in certain circumstances but not in others.

For example: you may wish to delete messages that contain the word "Spam", but not those that contain "Good Spam". To accomplish this you could create a rule that deletes messages containing "Spam" and then place above it another rule that states "if the message contains "Good Spam" then Skip 1 Rule".

Stop Processing Rules—This action will skip all remaining rules.

Copy Message To Specified User(s)—Causes a copy of the message to be sent to one or more recipients. You must specify which recipients are to receive the message.

Append Standard Disclaimer—This action makes it possible for you to create a small amount of text that will be appended as a footer to the message. Alternatively, it can add the contents of a text file.

For example: you could use this rule to include a statement that says "This email originated from my company, please direct any complaints or questions to me@mycompany.com".

Add Extra Header Item To Message—This action will add an additional header to the message. You must specify the name of the new header and its value.

Delete A Header Item From Message—This action will remove a header from a message. You must specify the header that you wish to delete.

Send Note To... —This action will send an email to a particular address. You will be able to specify the recipient, sender, subject, and a small amount of text. You can also configure this action to attach the original message to the note.

For example: you might wish to create a rule that will move all messages containing "This is Spam!" to the bad message directory and create another rule that will send a note to someone letting them know that this has been done.

Remove Digital Signature—Click this action to cause a digital signature to be removed from the message.

Run Process…—This action can be used to run a particular program when a message meets the rule's conditions. You must specify the path to the program that you wish to run. You can use the $MESSAGEFILENAME$ macro to pass the name of the message to the process, and you can specify whether or not MDaemon should suspend its operations temporarily or indefinitely while it waits for the process to terminate. Further, you can force the process to terminate and/or run it in a hidden window.

Send Message through SMS Gateway Server…—Click this option to send the message through an SMS Gateway Server. You must supply the Host or IP Address and the SMS phone number.

Copy Message to Folder…—Use this option to place a copy of the message into a specific folder.

Add Line To Text File—This option will cause a line of text to be added to a specific text file. When choosing this action you will have to specify the path to the file and the text that you want to be appended to it. You may use certain MDaemon macros in your text to cause the content filter to dynamically include information about the message such as the sender, recipient, message ID, and so on. Click the Macros button on the "Add line to text file" dialog to display a list of permitted macros.

Move Message to Public Folders…—Use this action to cause the message to be moved to one or more Public Folders (page 120).

Search and Replace Words in a Header—Use this option to scan a specified header for certain words and then delete or replace them. When creating this rule, click the "specify information" link in the Rule Description to open the "Header – Search and Replace" dialog on which you will designate the header and words to replace or delete. This action now supports regular expressions. See "Using Regular Expressions in Your Filter Rules" below.

Search and Replace Words in the Message Body—Use this option to scan the message body and replace any desired text. This action now supports regular expressions. See "Using Regular Expressions in Your Filter Rules" below.

Jump to Rule…—Use this action to jump immediately to a rule further down in the list, skipping over all rules between the two.

Sign with DomainKeys selector…—Use this action if you want the rule to cause a message to contain a DomainKeys signature. You can also use it if you wish to sign some messages using a selector other than the one designated on the DK & DKIM dialog.

Sign with DKIM selector…—Use this action if you want the rule to cause a message to contain a DKIM signature. You can also use it if you wish to sign some messages using a selector other than the one designated on the DK & DKIM dialog.

Rule description
This box displays the new rule's internal script format. Click any of the rule's conditions or actions (listed as hyperlinks) and the appropriate editor will be opened for specifying any needed information.

Modifying an Existing Content Filter Rule
To modify an existing content filter rule, select the rule and then click the *Edit Rule* button on the Content Filter dialog. The rule will be opened for editing in the Modify Rule editor. The controls on this editor are identical to the Create Rule Dialog.

Using Regular Expressions in Your Filter Rules
Previously, the Content Filtering system only supported searches for specific text strings. Now, it supports "regular expression" searches, which is a more powerful system that also makes it possible for you to search for text *patterns*. Regular expressions contain a mix of plain text and special characters that indicate what kind of matching to do, and can thus make your Content Filter rules more powerful and better targeted.

What are Regular Expressions?

A regular expression (regexp) is a text pattern consisting of a combination of special characters known as *metacharacters* and alphanumeric text characters, or "*literals*" (abc, 123, and so on). The pattern is used to match against text strings—with the result of the match being either successful or not. Regexps are used primarily for regular text matches and for search and replace.

Metacharacters are special characters that have specific functions and uses within regular expressions. The regexp implementation within the MDaemon Content Filtering system allows the following metacharacters:

```
\ | ( ) [ ] ^ $ * + ? . <>
```

Metacharacter	Description
****	When used before a metacharacter, the backslash ("\") causes the metacharacter to be treated as a literal character. This is necessary if you want the regular expression to search for one of the special characters that are used as metacharacters. For example, to search for "+" your expressions must include "\+".
|	The *alternation* character (also called "*or*" or "*bar*") is used when you want either expression on the side of the character to match the target string. The regexp "abc|xyz" will match any occurrence of either "abc" or "xyz" when searching a text string.
[…]	A set of characters contained in brackets ("[" and "]") means that any character in the set may match the searched text string. A dash ("-") between characters in the brackets denotes a range of characters. For example, searching the string "abc" with the regexp "[a-z]" will yield three matches: "*a*," "*b*, " and "*c*. " Using the expression "[az]" will yield only one match: "*a*."
^	Denotes the beginning of the line. In the target string, "abc ab a" the expression "^a" will yield one match—the first character in the target string. The regexp "^ab" will also yield one match—the first *two* characters in the target string.
[^…]	The caret ("^") immediately following the left-bracket ("[") has a different meaning. It is used to exclude the remaining characters within brackets from matching the target string. The expression "[^0-9]" indicates that the target character should not be a digit.
(…)	The parenthesis affects the order of pattern evaluation, and also serves as a *tagged* expression that can be used in *search and replace* expressions.
	The results of a search with a regular expression are kept temporarily and can be used in the *replace* expression to build a new expression. In the *replace* expression, you can include a "&" or "\0" character, which will be replaced by the sub-string found by the regular expression during the search. So, if the *search* expression "a(bcd)e" finds a sub-string match, then a *replace* expression of "123-&-123" or "123-\0-123" will replace the matched text with "123-abcde-123".
	Similarly, you can also use the special characters "\1," "\2," "\3," and so on in the *replace* expression. These characters will be replaced only by the results of the *tagged* expression instead of the entire sub-string match. The number following the backslash denotes which tagged expression you wish to reference (in the case of a regexp containing more than one tagged expression). For example, if your *search* expression is "(123)(456)" and your *replace* expression is "a-\2-b-\1" then a matching sub-string will be replaced with "a-456-b-123" whereas a *replace* expression of "a-\0-b" will be replaced with "a-123456-b".
$	The dollar sign ("$") denotes the end of the line. In the text string, "13 321 123" the expression "3$" will yield one match—the last character in the string. The regexp "123$" will also yield one match—the last *three* characters in the target string.

*	The asterisk ("*") quantifier indicates that the character to its left must match *zero or more* occurrences of the character in a row. Thus, "1*abc" will match the text "111abc" and "abc."
+	Similar to the asterisk quantifier, the "+" quantifier indicates that the character to its left must match *one or more* occurrences of the character in a row. Thus, "1+abc" will match the text "111abc" but not "abc."
?	The question mark ("?") quantifier indicates that the character to its left must match *zero or one* times. Thus, "1*abc" will match the text "abc," and it will match the "1abc" portion of "111abc."
.	The period or dot (".") metacharacter will match any other character. Thus ".+abc" will match "123456abc," and "a.c" will match "aac," abc," acc," and so on.

Eligible Conditions and Actions

Regular expressions may be used in any *Header* filter rule *Condition*. For example, any rule using the "if the FROM HEADER contains" condition. Regular expressions may also be used in the "if the MESSAGE BODY contains" condition.

> **Note**
>
> Regular expressions used in Content Filter rule *conditions* are case insensitive. Case will not be considered.

Regular expressions may be used in two Content Filter rule *Actions*: "Search and Replace Words in a Header" and "Search and Replace Words in the Message Body."

> **Note**
>
> Case sensitivity in Regular expressions used in Content Filter rule *actions* is optional. When creating the regexp within the rule's action you will have the option to enable/disable case sensitivity.

Configuring a Regexp in a Rule's Condition

To configure a header or message body condition to use a regular expression:

1. On the Create Rule dialog, click the checkbox that corresponds to the header or message body condition that you wish to insert into your rule.

2. In the summary area at the bottom of the Create Rule dialog, click the "**contains specific strings**" link that corresponds to the condition that you selected in step 1. This will open the Specify Search Text dialog.

3. Click the "**contains**" link in the "Currently specified strings…" area.

4. Choose "**Matches Regular Expression**" from the drop-down list box, and click **OK**.

5. If you need help creating your regexp or want to test it then click "**Test regular expression**." If you do not need to use the Test Regular Expression dialog then type your regexp into the text box provided, click **Add**, and then go to step 8.

6. Type your regular expression into the "Search expression" text box. To simplify the process we have provided a shortcut menu that can be used to easily insert the desired metacharacters into your regexp. Click the ">" button to access this menu. When you choose an option from this menu its corresponding metacharacter will be inserted into the expression and the text insertion point will be moved to the appropriate place required by the character.

7. Type any text that you wish to use to test your expression in the text area provided, and click **Test**. When you are finished testing your expression, click **OK**.

8. Click **OK**.

9. Continue creating your rule normally.

Configuring a Regexp in a Rule's Action
To configure a "Search and Replace Words in…" action to use a regular expression:

1. On the Create Rule dialog, click the checkbox that corresponds to the "Search and Replace Words in…" action that you wish to insert into your rule.

2. In the summary area at the bottom of the Create Rule dialog, click the "**specify information**" link that corresponds to the action that you selected in step 1. This will open the Search and Replace dialog.

3. If you chose the "Search…header" action in step 1, then use the drop-down list box provided to choose the header that you wish to search, or type a header into the box if the desired header isn't listed. If you did not choose the "Search…header" action in step 1 then skip this step.

4. Type the *search* expression that you wish to use in this action. To simplify the process we have provided a shortcut menu that can be used to easily insert the desired metacharacters into your regexp. Click the ">" button to access this menu. When you choose an option from this menu its corresponding metacharacter will be inserted into the expression and the text insertion point will be moved to the appropriate place required by the character.

5. Type the *replace* expression that you wish to use in this action. As with the *search* expression we have provided a metacharacter shortcut menu for this option as well. Leave this text box blank if you wish to delete a matched sub-string instead of replace it with more text.

6. Click "**Match case**" if you want the expression to be case sensitive.

7. Click "**Regular expression**" if you want the search and replace strings to be treated as regular expressions. Otherwise each will be treated as a simple sub-string search and replace—it will look for an exact literal match of the text rather than process it as a regular expression.

8. If you do not need to test your expression then skip this step. If you do need to test your expression then click "**Run Test**." On the Search and Replace Tester dialog, type your search and

replace expressions and the text that you wish to test with, then click **Test**. When you are finished testing your regexps click **OK**.
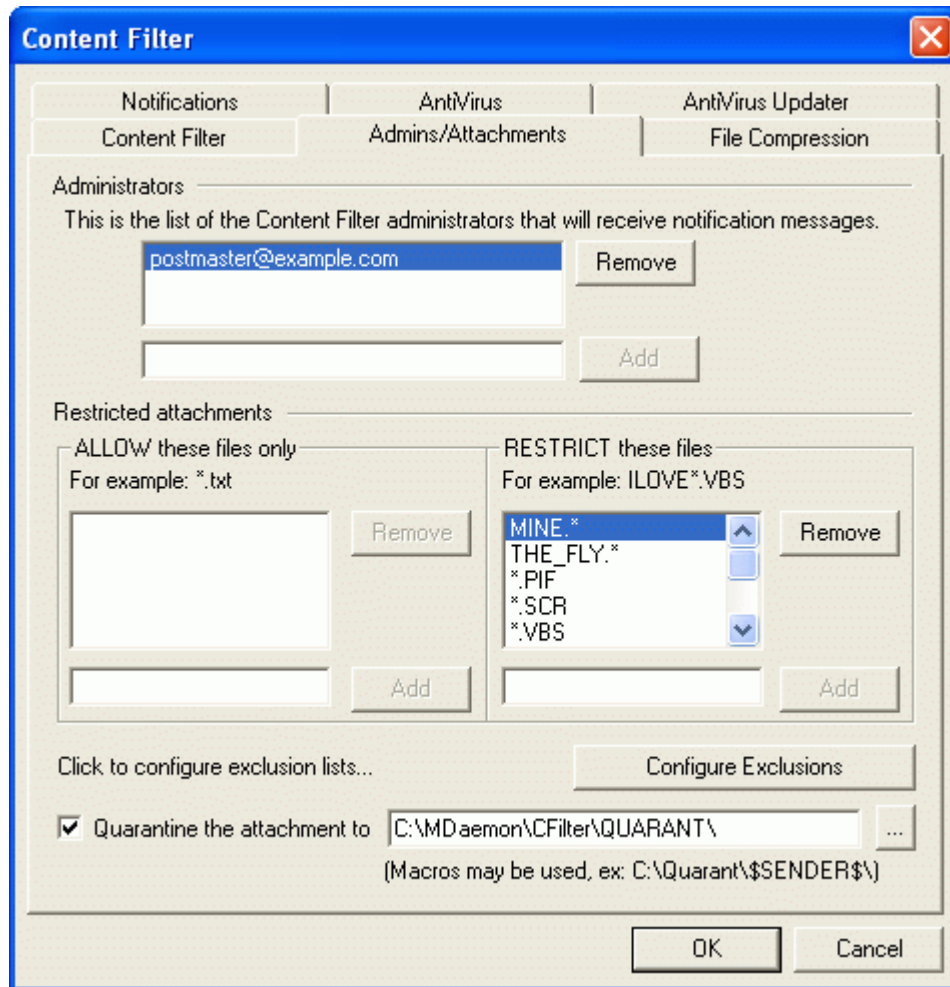
9. Click **OK**.

10. Continue creating your rule normally.

Note

For a comprehensive look at regular expressions, see *Mastering Regular Expressions* published by O'Reilly & Associates, Inc. – http://www.oreilly.com/catalog/regex2/

Admins/Attachments

Use this tab to specify attachments that you wish to classify as allowed or restricted. Attachments that are not allowed will be automatically removed from messages. There is also a section used for designating email addresses as administrators. The administrator section corresponds to the "send…to administrator" controls on the Notifications tab.

Administrators

Addresses listed in this area are considered administrators and correspond to the Administrator controls located on the Notifications tab. These addresses will receive notification messages when one of the Administrator options is selected on that tab. To add an address to this section, type it into the space provided and then click Add. To remove an address, select it from the list and then click Remove.

Restricted Attachments

Filenames specified in *RESTRICT these files* list will be stripped from messages automatically when MDaemon encounters them. If you list any files in the *ALLOW these files only* list, then only those files listed will be permitted—all other attachments will be stripped from messages. After the attachment is stripped, MDaemon will continue normally and delivery the message without it. You can use the controls on the Notifications tab to cause a notification message to be sent to various addresses when one of these restricted attachments is encountered.

Wildcards are permitted in list entries. An entry of "`*.exe`", for example, would cause all attachments ending with the `EXE` file extension to be allowed or removed. To add an entry to either of the lists, type the filename in the space provided and the click A<u>d</u>d.

Configure Exclusions

Click *Configure Exclusions* to specify addresses that you wish to exclude from attachment restriction monitoring. When a message is directed to one of these addresses MDaemon will allow the message to pass even if it contains a restricted attachment.

File Compression
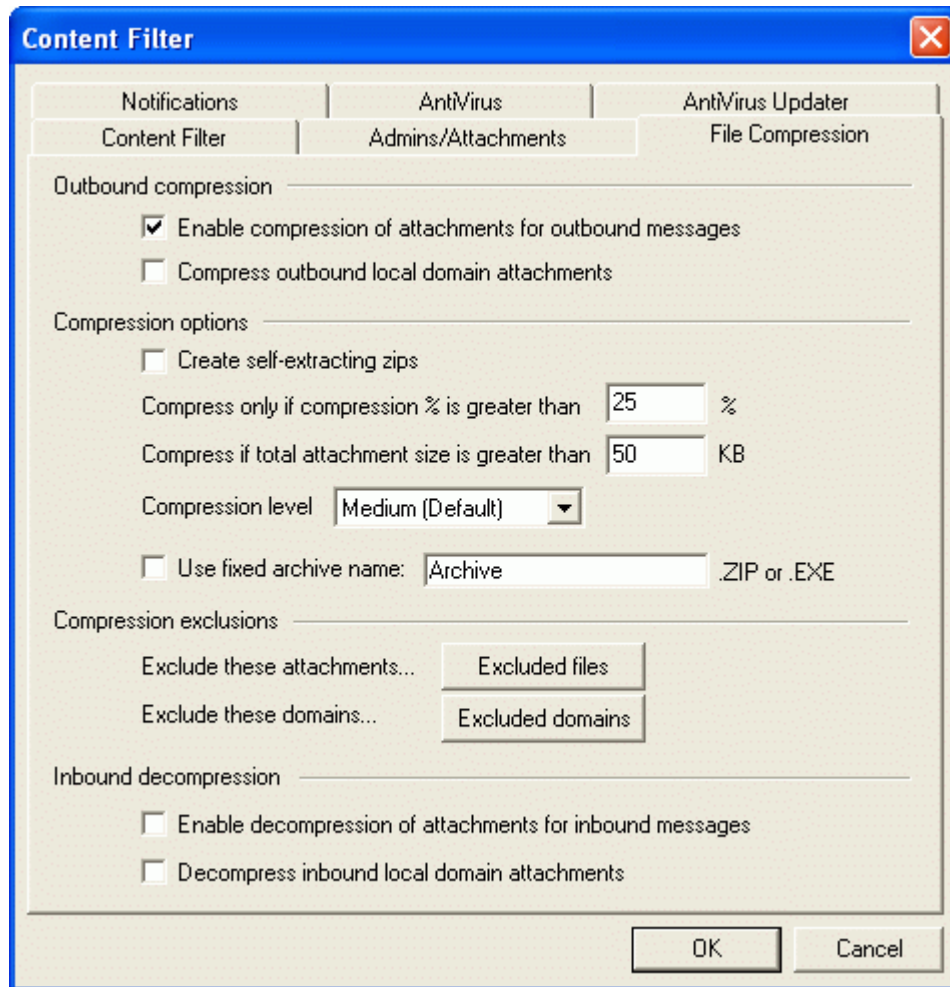
With the controls on this tab you can cause message attachments to be automatically compressed or decompressed before the message is delivered. The level of compression can be controlled as well as several other parameters and exclusions. This feature could significantly reduce the amount of bandwidth and throughput required to deliver your outbound messages.

Outbound Compression

Enable compression of attachments for outbound messages
Click this checkbox if you want to enable automatic message attachment compression for outbound remote mail messages. Enabling this control will not cause all message attachments to be compressed; it simply turns the feature on. Whether an outbound message's files are compressed or not is determined by the remaining settings on this tab.

Compress outbound local domain attachments
Enabling this control will cause the file compression settings to be applied to all outbound mail – even those messages whose destination is another local address.

Compression Options

Create self-extracting zips
Click this checkbox if you want the compression files that MDaemon creates to be self-extracting zip files with an EXE file extension. This is useful if you are concerned that the message recipients may not have access to a decompression utility. Self-extracting zip files can be decompressed simply by double-clicking on them.

Compress only if compression % is greater than XX%
MDaemon will not compress a message's attachments before sending it unless they can be compressed by a percentage greater than the value specified in this control. For example, if you designate a value of 20 and a given attachment can't be compressed by at least 21% then MDaemon will not compress it before sending the message.

> **Note**
>
> MDaemon must first compress a file to determine by what percentage it can be compressed. Thus, this feature does not prevent files from being compressed – it simply prevents file attachments from being sent in a compressed format when they cannot be compressed beyond the designated value. In other words, if after compressing the file MDaemon finds that it couldn't be compressed by more than this value, the compression will be disregarded and the message will be delivered with its attachments unchanged.

Compress if total attachment size is greater than XX KB
When automatic attachment compression is enabled, MDaemon will only attempt to compress a message's attachments when their total size exceeds the value specified here. Messages with total attachment sizes below this threshold will be delivered normally with the attachments unchanged.

Compression level
Use the drop-down list box to choose the degree of compression that you want MDaemon to apply to automatically compressed attachments. You can choose three levels of compression: minimum (fastest compression process with least compression), medium (default value), or maximum (slowest compression process but highest degree of compression).

Use fixed archive name: [archive name]
Click this checkbox and choose a name if you want the automatically compressed attachments to have a specific filename.

Compression exclusions

Exclude these attachments…
Click this button to specify files that you want to exclude from the automatic compression features. When a message attachment matches one of these filenames it will not be compressed, regardless of the compression settings. Wildcards are permitted in these entries. Therefore, you could specify "*.exe", for example, and all files ending with ".exe" would remain uncompressed.

Exclude these domains…
Click this button to specify recipient domains whose messages you wish to exclude from automatic compression. Messages bound for these domains will not have their file attachments compressed, regardless of your compression settings.

Inbound Decompression

Enable decompression of attachments for inbound messages
Click this checkbox if you want to enable automatic decompression of inbound remote mail message attachments. When a message arrives with a zipped attachment, MDaemon will decompress it before delivering it to the local user's mailbox.

Decompress inbound local domain attachments
Enable this control if you want automatic decompression to apply to local mail as well.

AntiVirus
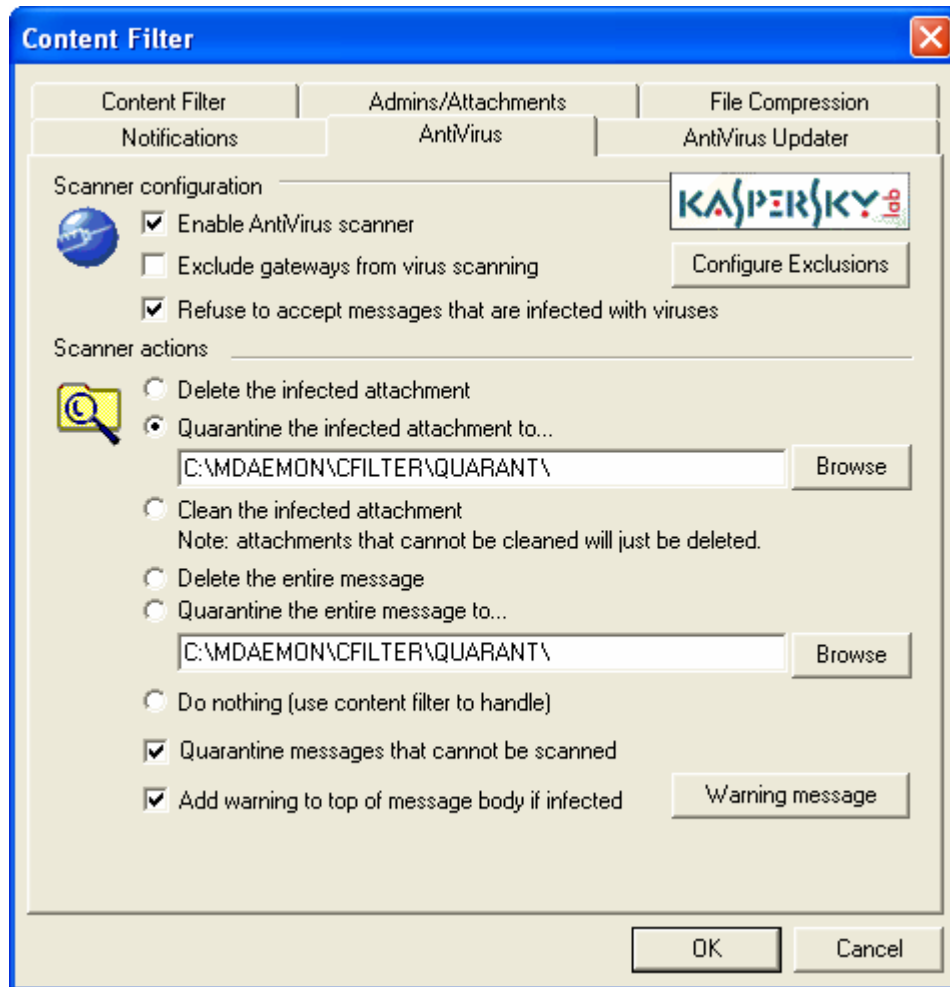
This tab (and the AntiVirus Updater tab) will only be visible when you have installed AntiVirus for MDaemon. To obtain AntiVirus for MDaemon, visit `www.altn.com`.

Scanner Configuration

Enable AntiVirus scanner
Click this checkbox to enable AntiVirus scanning of messages. When MDaemon receives a message with attachments, it will activate AntiVirus for MDaemon and scan them for viruses before delivering the message to its final destination.

Exclude gateways from virus scanning
Click this checkbox if you want messages bound for one of MDaemon's domain gateways to be excluded from virus scanning. This may be desirable for those who wish to leave the scanning of those messages to the domain's own mail server. For more information on domain gateways, see Domain Gateways – page 419.

Refuse to accept messages that are infected with viruses
Click this option is you wish to scan incoming messages for viruses during the SMTP session rather than after the session is concluded, and then reject those messages found to contain viruses. Because each incoming message is scanned before MDaemon officially accepts the message and concludes the session,

the sending server is still responsible for it—the message hasn't technically been delivered yet. Thus the message can be rejected outright when a virus is found. Further, because the message was rejected, no further AntiVirus related actions listed on this dialog will be taken. No quarantine or cleaning procedures will be taken, and no notification messages will be sent. This can greatly reduce the number of infected messages and virus notification messages that you and your users receive.

The SMTP-(in) log will show the result of AV processing. The possible results you might see are:

1) the message was scanned and found infected with a virus

2) the message was scanned and no virus was found

3) the message could not be scanned (usually because a ZIP or other type or attachment could not be opened/accessed)

4) the message could not be scanned (it exceeds the max size limit)

5) an error occurred during the scan

Configure Exclusions

Click the *Configure Exclusions* button to specify recipient addresses to exclude from virus scanning. Messages bound for these addresses will not be scanned for viruses by AntiVirus for MDaemon. Wildcards are allowed in these addresses. You could therefore use this feature to exclude entire domains or specific mailboxes across all domains. For example, "*@example.com or "VirusArchive@*".

Scanner Actions

Click one of the option buttons in this section to designate the action that MDaemon will take when AntiVirus for MDaemon detects a virus.

Delete the infected attachment

This option will delete the infected attachment. The message will still be delivered to the recipient but without the infected attachment. You can use the "*Add a warning…*" control on the bottom of this dialog to add text to the message informing the user that an infected attachment was deleted.

Quarantine the infected attachment to…

Choose this option and specify a location in the space provided if you want infected attachments to be quarantined to that location rather than deleted or cleaned. Like the "*Delete the infected attachment*" option, the message will still be delivered to the recipient but without the infected attachment.

Clean the infected attachment

When this option is chosen, AntiVirus for MDaemon will attempt to clean, or disable, the infected attachment. If the attachment cannot be cleaned, it will be deleted.

Delete the entire message

This option will delete the entire message rather than just the attachment when a virus is found. Because this deletes the whole message, the "*Add a warning…*" option doesn't apply. However, you can still send a notification message to the recipient by using the controls on the Notifications tab.

Quarantine the entire message to…

This option is like the "*Delete the entire message*" option above, but the message will be quarantined in the specified location rather than deleted.

Do nothing (use content filter to handle)

Choose this option if you wish to take none of the above actions, and have set up content filter rules to take some alternative actions instead.

Add a warning message to the top of the message body if infected

When one of the "…*attachment*" options is chosen above, click this option if you want to add some warning text to the top of the previously infected message before it is delivered to the recipient. Thus you can inform the recipient that the attachment was stripped and why.

Warning message

Click this button to display the warning text that will be added to messages when the "*Add a warning message…*" feature is used. After making any desired changes to the text, click "OK" to close the dialog and save the changes.

AntiVirus Updater
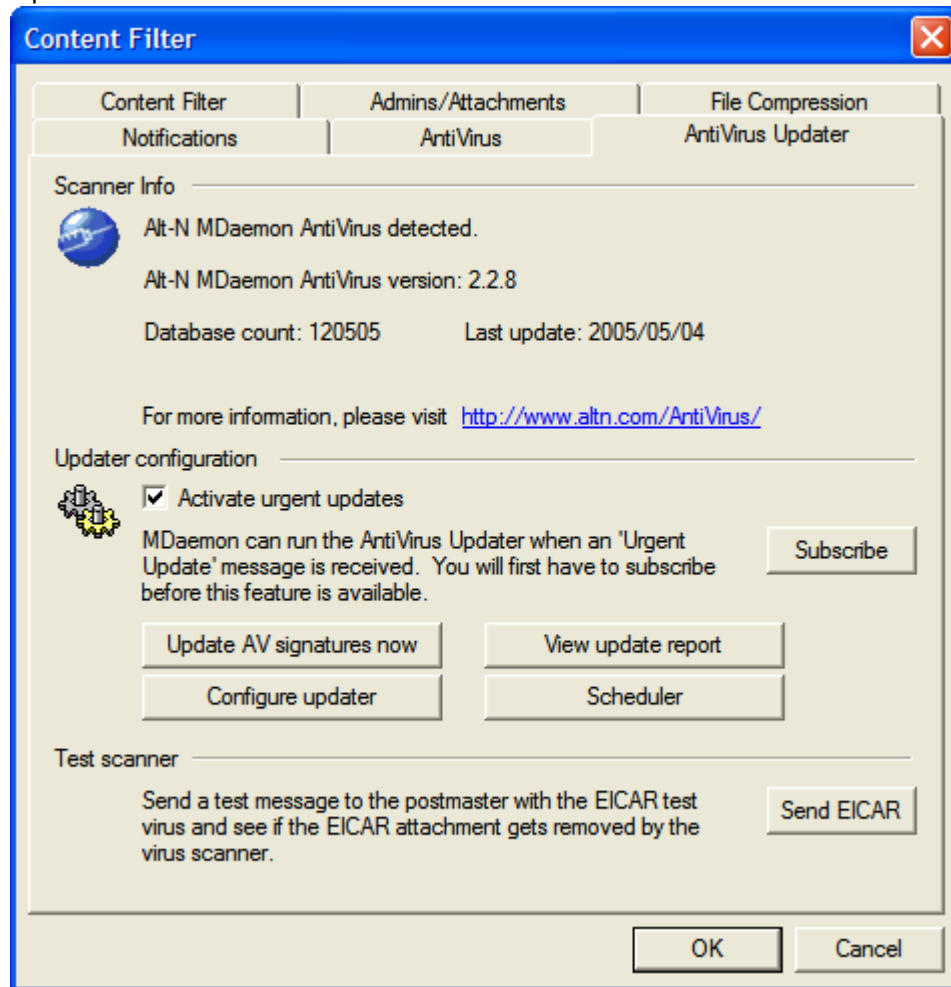
Use the controls on this tab to manually or automatically update AntiVirus for MDaemon's virus definitions. There is a scheduler for automatic updating, a report viewer so that you can review when and which updates have been downloaded, and a test feature used for confirming that you your virus scanning is working properly.

Scanner info

This section tells you whether AntiVirus for MDaemon is installed and, if so, what version you are running. It also lists the date of your last virus definition update.

Updater Configuration

Activate urgent updates

Click this checkbox to activate the urgent updates feature. With this feature enabled, AntiVirus will immediately connect to the update location and download the high-priority update whenever MDaemon receives an "Urgent Update" message. To receive these messages you must first subscribe to the "Urgent Updates" mailing list. See the *Subscribe* control below.

Subscribe

This button to opens your default browser to Alt-N Technologies' Urgent Updates subscription page. On that page enter your domain name to subscribe your domain to the Urgent Updates mailing list.

Whenever there is an urgent update to AntiVirus for MDaemon's virus definitions, an email will be dispatched to the domain. When MDaemon receives the message, AntiVirus will be updated immediately.

Update AV signatures now
Click this button to update the virus definitions manually. The updater will connect immediately after the button is pressed.

Configure updater
Click this button to open the updater. The Updater contains three tabs: Update URLs, Connection, and Proxy.

The Update URLs tab contains a list of sites to which AntiVirus for MDaemon will connect to check for virus signature updates. You can add and remove web sites to and from the list, and move the URLs up and down in the list by using the provided arrow buttons; the web sites are checked for updates from top to bottom. Clicking the control, "*Use random starting point in the URL list*" will cause the sites to be checked in random order rather than in the order that they are listed.

The Connection tab is used to designate the Internet Connection Profile that you wish AntiVirus for MDaemon to use when connecting to the update sites. The "*Use Internet Settings from Control Panel*" option uses your default Internet settings. The "*Setup Internet settings manually*" option and subsequent controls can be used to manually choose a Connection Profile and designate its user name and password settings.

The Proxy tab contains options for configuring any HTTP or FTP proxy settings that your current network configuration may require in order to connect to the update sites.

View update report
The AntiVirus for MDaemon Log Viewer is opened by clicking the *View update report* button. The viewer lists the times, actions taken, and other information about each update.

Scheduler
Click this button to open MDaemon's Event Scheduler to the AntiVirus Updates tab. The controls on this tab are similar to those on the Send & Receive Mail tab and can be used to schedule checks for virus signature updates at specific times on specific days or by a Simple Scheduling method that causes AntiVirus for MDaemon to check for updates once every so many minutes. There is also an *Activate urgent updates* option on this tab that can be used to activate or deactivate Automatic Urgent Updates. This option is the same as the control of the same name described above.

Test Scanner

Send EICAR
Click this button to send a test message to the postmaster, with the EICAR virus file attached. This attachment is harmless – it is merely used to test AntiVirus for MDaemon. By watching the Content Filter's log window on MDaemon's main interface you can see what MDaemon does with this message when it is received. For example, depending upon your settings, you might see a log excerpt that looks something like this:

```
Mon 2002-02-25 18:14:49: Processing C:\MDAEMON\LOCALQ\md75000001128.msg
Mon 2002-02-25 18:14:49: > eicar.com
(C:\MDaemon\CFilter\TEMP\cf1772420862.att)
Mon 2002-02-25 18:14:49: > Message from: postmaster@mycompany.com
Mon 2002-02-25 18:14:49: > Message to: postmaster@mycompany.com
```

```
Mon 2002-02-25 18:14:49: > Message subject: EICAR Test Message
Mon 2002-02-25 18:14:49: > Message ID:
<MDAEMON10001200202251814.AA1447619@mycompany.com>
Mon 2002-02-25 18:14:49: Performing viral scan...
Mon 2002-02-25 18:14:50: > eicar.com is infected by EICAR-Test-File
Mon 2002-02-25 18:14:50: > eicar.com was removed from message
Mon 2002-02-25 18:14:50: > eicar.com quarantined to
C:\MDAEMON\CFILTER\QUARANT\
Mon 2002-02-25 18:14:50: > Total attachments scanned    : 1 (including
multipart/alternatives)
Mon 2002-02-25 18:14:50: > Total attachments infected   : 1
Mon 2002-02-25 18:14:50: > Total attachments disinfected: 0
Mon 2002-02-25 18:14:50: > Total attachments removed    : 1
Mon 2002-02-25 18:14:50: > Total errors while scanning  : 0
Mon 2002-02-25 18:14:50: > Virus notification sent to
postmaster@mycompany.com (sender)
Mon 2002-02-25 18:14:50: > Virus notification sent to
postmaster@mycompany.com (recipient)
Mon 2002-02-25 18:14:50: > Virus notification sent to
postmaster@mycompany.com (admin)
Mon 2002-02-25 18:14:50: > Virus notification sent to postmaster@example.com
(admin)
Mon 2002-02-25 18:14:50: Processing complete (matched 0 of 12 active rules)
```

Notifications
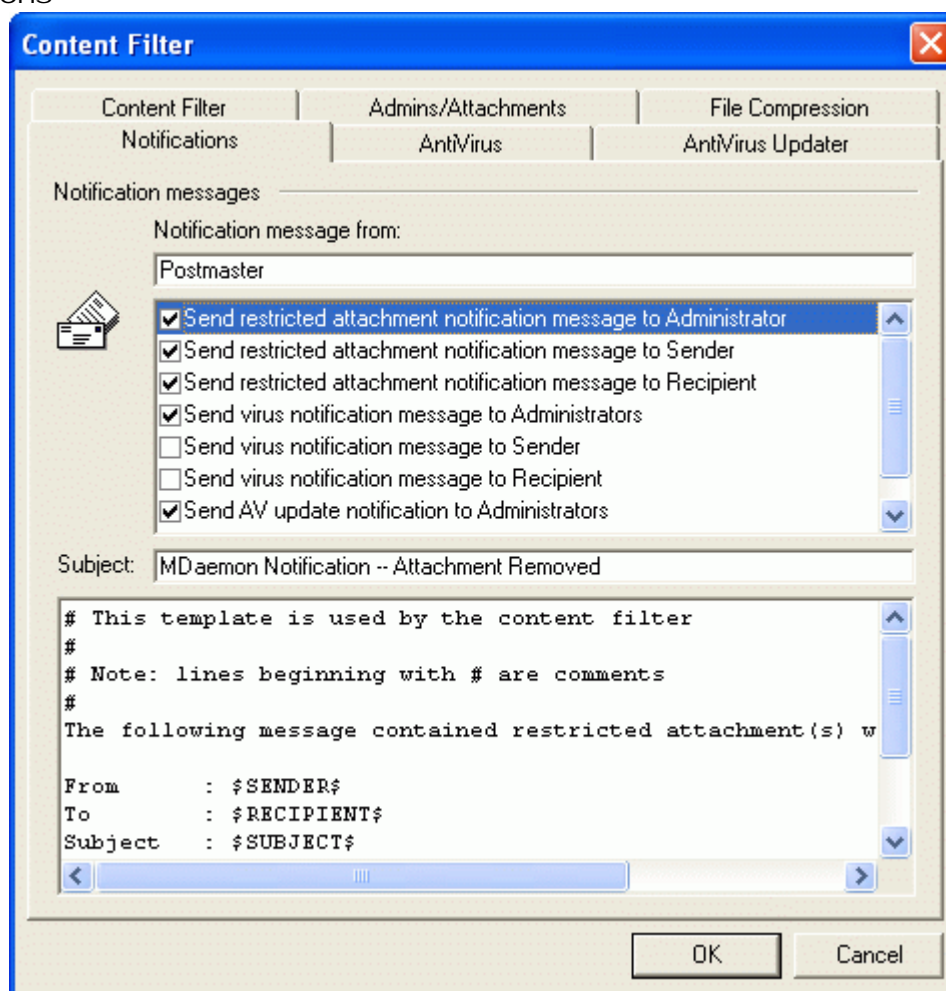
Use this tab to designate those who should receive notification messages when a virus or restricted attachment is detected.

Notification Messages

Notification message from:
Use this control for specifying the address from which you want the notification message to come.

Send virus notification message to…
When a message arrives with a file attachment containing a virus, a warning message will be sent to the individuals designated in this section. A customized warning message can be sent to the sender, recipient, and the administrators that you have designated on the Admins/Attachments tab. To customize the message for any of the three entries, select one of them from the list and then edit the message that appears on the bottom half of this tab. Each entry has its own message, though by default this isn't obvious since all three are identical.

Send restricted attachment notification message to…
When a message arrives with a file attachment matching a restricted attachment entry (listed on the Admins/Attachments tab) a warning message will be sent to the individuals designated in this section. A customized warning message can be sent to the sender, recipient, and the administrators that you have designated on the Admins/Attachments tab. To customize the message for any of the three entries, select

one of them from the list and then edit the message that appears on the bottom half of this tab. Each entry has its own message, though by default this isn't obvious since all three are identical.

Subject
This text will be displayed in the "Subject:" header of the notification message that is sent.

Message
This is the message that will be sent to the entry selected in the list above when the checkbox corresponding to that entry is enabled. You can directly edit this message from the box in which it is displayed.

Note

The actual files containing this text are located in the `MDaemon\app\` directory. They are:

`cfattrem[adm].dat`	Restricted attachment message – Admins
`cfattrem[rec].dat`	Restricted attachment message – Recipient
`cfattrem[snd].dat`	Restricted attachment message – Sender
`cfvirfnd[adm].dat`	Virus found message – Admins
`cfvirfnd[rec].dat`	Virus found message – Recipient
`cfvirfnd[snd].dat`	Virus found message – Sender

Should you desire to restore one of these messages to its original appearance, simply delete the relevant file and MDaemon will recreate it in its default state.

Message Macros

For your convenience, certain macros may be used in the notification messages and other messages that the Content Filters generate. You may use any of the following macros, many of which are listed on page 382:

`$ACTUALTO$`	Some messages may contain an "ActualTo" field which generally represents the destination mailbox and host as it was entered by the original user prior to any reformatting or alias translation. This macro is replaced with that value.
`$AV_VERSION$`	Lists the version of AntiVirus for MDaemon that you are using.
`$CURRENTTIME$`	This macro is replaced with the current time when the message is being processed.
`$ACTUALFROM$`	Some messages may contain an "ActualFrom" field which generally represents the origination mailbox and host prior to any reformatting or alias translation. This macro is replaced with that value.
`$FILTERRULENAME$`	This macro is replaced by the name of the rule whose criteria the message matched.
`$HEADER:XX$`	This macro will cause the value of the header specified in place of the "xx" to be expanded in the reformatted message. For example: If the original message has "TO: joe@mdaemon.com" then the

|	$HEADER:TO$ macro will expand to "joe@mdaemon.com". If the original message has "Subject: This is the subject" then the $HEADER:SUBJECT$ macro would be replaced with the text "This is the subject"
$HEADER:MESSAGE-ID$	As with $HEADER:XX$ above, this macro will expand to the value of the Message-ID header.
$LIST_ATTACHMENTS_REMOVED$	When one or more attachments are removed from the message, this macro will list them.
$LIST_VIRUSES_FOUND$	When one or more viruses is found in a message, this macro will list them.
$MESSAGEFILENAME$	This macro expands to the file name of the current message being processed.
$MESSAGEID$	As $HEADER:MESSAGE-ID$ above, except this macro strips "<>" from the value of the message ID.
$PRIMARYDOMAIN$	Expands to MDaemon's primary domain name, which is designated on the Primary Domain Configuration dialog (click Setup→Primary Domain).
$PRIMARYIP$	This macro expands to the IP address of your primary domain (specified on the Primary Domain Configuration dialog)
$RECIPIENT$	**This macro resolves to the full address of the message recipient.**
$RECIPIENTDOMAIN$	This macro will insert the domain name of the message recipient.
$RECIPIENTMAILBOX$	Lists the recipient's mailbox (the value to the left of "@" in the email address).
$REPLYTO$	This macro expands to the value of the message's "Reply-to" header.
$SENDER$	**Expands to the full address from which the message was sent.**
$SENDERDOMAIN$	This macro will insert the domain name of the message's sender (the value to the right of "@" in the email address).
$SENDERMAILBOX$	Lists the sender's mailbox (the value to the left of "@" in the email address).
$SUBJECT$	Displays the text contained in the message's subject.

Priority Mail

Configuring and using the Priority Mail feature.

T he **Setup→Priority Mail…** menu selection opens the Priority Mail dialog, which is used to define what constitutes Priority Mail on your system. Priority mail is delivered immediately by MDaemon regardless of scheduled mail processing intervals. When a new message arrives, MDaemon inspects its headers for a set of header/value combinations that you have specified on this dialog. If it finds them, it considers the message a high priority item and attempts to deliver it immediately.

🔔 Priority Mail
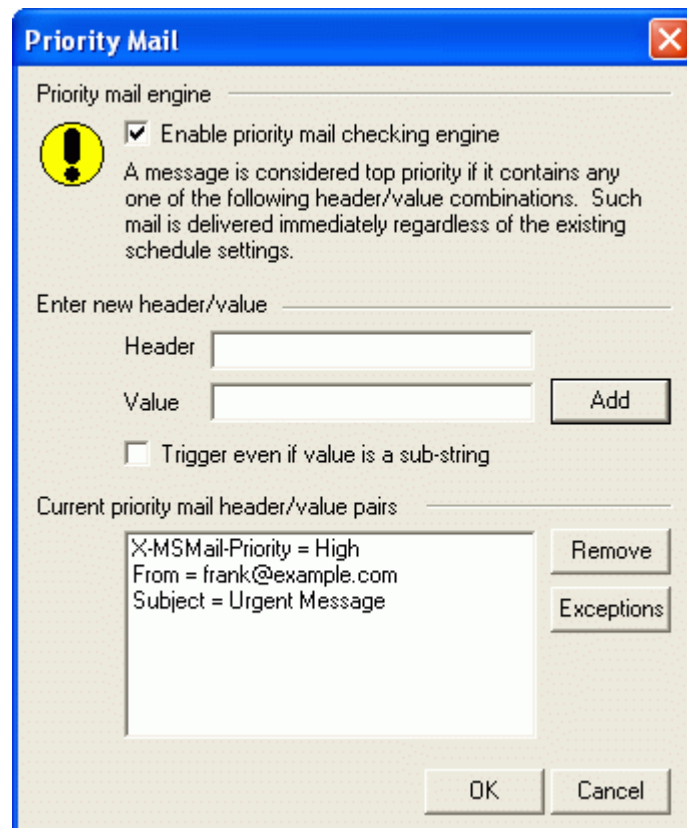
Priority Mail Engine

Enable priority mail checking engine
Click this switch to enable the Priority Mail feature. MDaemon will inspect incoming messages for priority status.

Enter New Header/Value

Header
Enter the message header in this field. Do not include the ending colon character.

Value
Enter the value that must be found in the specified header in order for the message to be considered high priority.

Trigger even if value is a sub-string
When entering a new Priority Mail setting you may select this feature to enable priority matching of a portion (or sub-string) of a header value. For example, you could create a Priority Mail Setting for the "To" header with the value "Boss". Then, any email containing "Boss@anything" in that header would be considered Priority Mail. If an entry is created without this feature enabled then the value of the header must match the entry exactly; matching only a portion will not be sufficient.

Add
After entering the Header/Value information in the specified text boxes, and after specifying whether this entry will apply to sub-strings, click the *Add* button to create the new Priority Mail entry.

Current Priority Mail Header/Value Pairs

This window lists all the currently defined priority mail header/value combinations. Double click on an item in this list to remove it.

Remove
Click this button to remove a selected entry from the *Current Priority Mail Settings* window.

Exceptions
This allows you to define field/value combinations that will cause a message to be considered an exception to the priority mail settings. This gives you more flexible control over this feature.

Chapter

16

Logging

Configuring MDaemon's Logging options.

C lick the <u>Setup</u>→Logging... menu selection (or press Alt+F7) to configure your Log settings. Logging is a useful tool for diagnosing problems and seeing what the server has been doing while unattended.

Log Mode
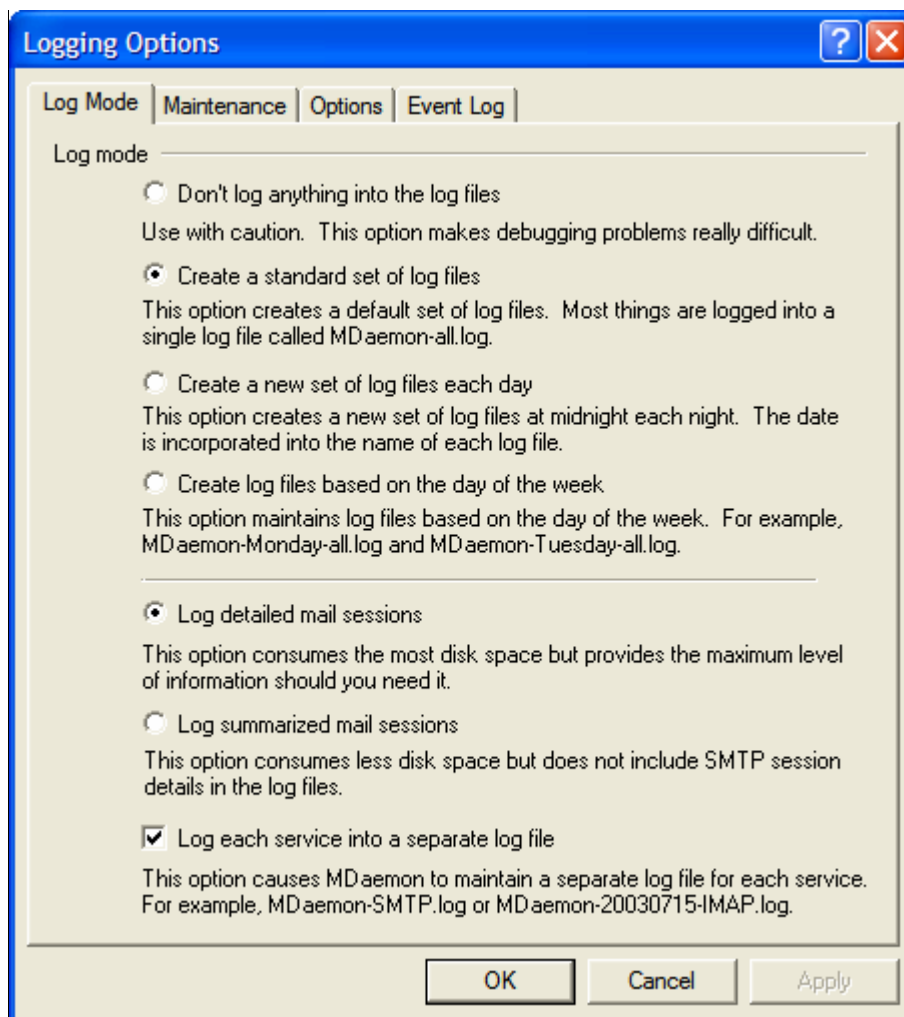
Note

There are several controls on the Miscellaneous Options dialog governing the amount of log data that may be displayed in the Event Tracking window of MDaemon's main interface. For more information, see Miscellaneous Options – GUI on page 288.

Log Mode

Don't log anything into the log files
Choosing this option will deactivate all logging. The log files will still be created, but no logging data will be written to them.

Warning!

We do not recommend using this option. Without logs it can be extremely difficult, if not impossible, to diagnose or debug any potential email-related problems you may encounter.

Create a standard set of log files
Click this option to maintain a standard single set of log files.

Create a new set of log files each day
If this option is selected then separate log files will be generated each day. The name of the files will be correspond to the date they were created.

Create log files based on the day of the week
If this option is selected, separate log files will be generated for each day of the week. The name of the log files will correspond to the day of the week on which they were created.

Log detailed mail sessions
A complete transcript of each mail transaction session will be copied to the log file when this option is active.

Log summarized mail sessions
The option causes a summarized transcript of each mail transaction session to be copied to the log file.

Log each service into a separate log file
Click this checkbox to cause MDaemon to maintain separate logs by service rather than in a single file. For example, with this switch set MDaemon will log SMTP activity in the `MDaemon-SMTP.log` file and IMAP activity in the `MDaemon-IMAP.log` file. This option must be selected when you are running a "ghost" or Terminal Services instance of MDaemon in order for the tabs on the interface to display the logged information.

Maintenance
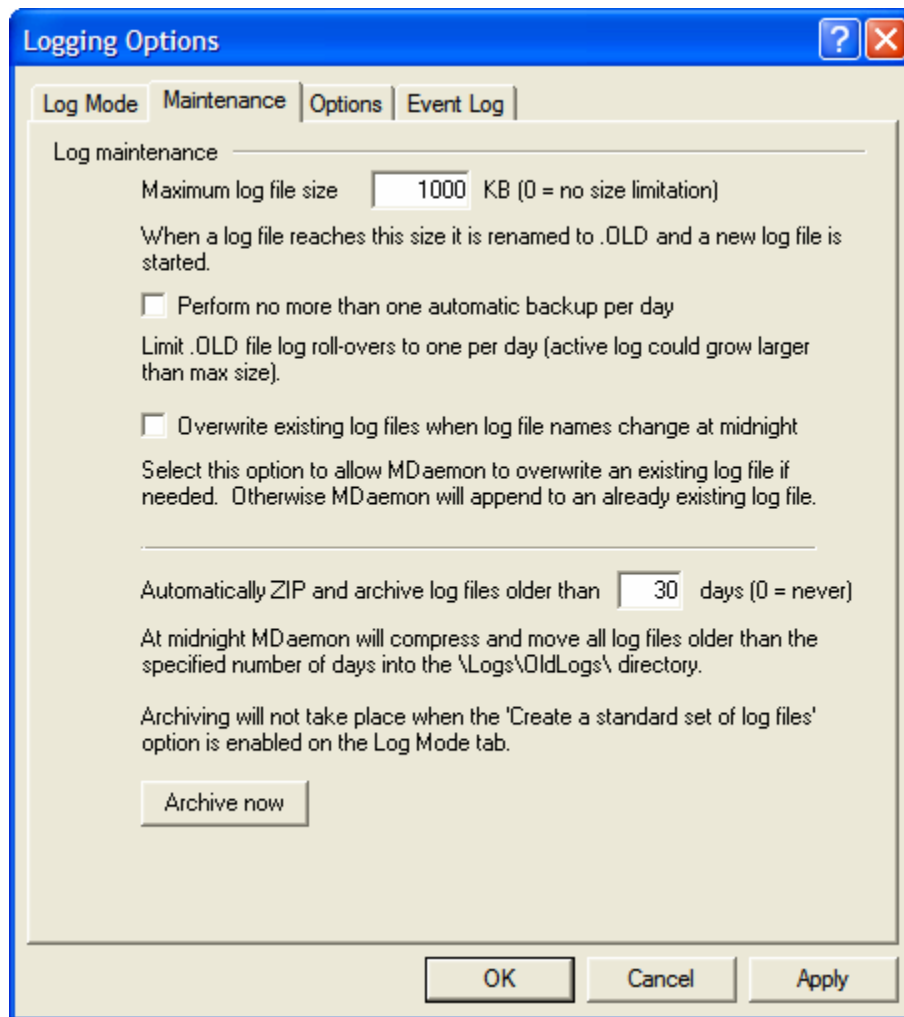
Maximum log file size [xx] KB

This is the maximum size in kilobytes that a log file may reach. Once this size is reached, the log file is `copied` to `LOGFILENAME.OLD` and a new log is started.

Perform no more than one automatic backup per day

When limiting the log file size, click this checkbox if you want no more than one log file to be backed up per day. Each day, the first time that the maximum log file size is reached it will be renamed to "`*.OLD`" and saved normally. The subsequent log file will continue to grow regardless of the maximum size specified. It will not be rolled over until the next day—even if the maximum size setting is surpassed.

Overwrite existing log files when log file names change at midnight

By default, when MDaemon changes the log file's name at midnight and the filename to which it is changing already exists, it will append newly logged information to the existing file. For example, if MDaemon is changing from Monday.log to Tuesday.log and a file named Tuesday.log already exists, it will append newly logged data to the existing file rather than overwrite it or create a new one. Click this checkbox if you want MDaemon to overwrite any existing file rather than append new data to it.

Automatically ZIP and archive log file older than XX days (0=never)
Click this option if you want MDaemon to archive each log file whose age exceeds the number of days specified. Each day at midnight, MDaemon will `ZIP` old `*.log` and `*.old` files and move them to the `\Logs\OldLogs\` subfolder (deleting the original files in the process). This process will not archive or delete files that are in use, nor will it archive files when the "_Create a standard set of log files_" option is selected on the Log Mode tab.

Archive now
Click this button to archive old log files immediately rather than waiting for MDaemon to archive them automatically at midnight.

Options
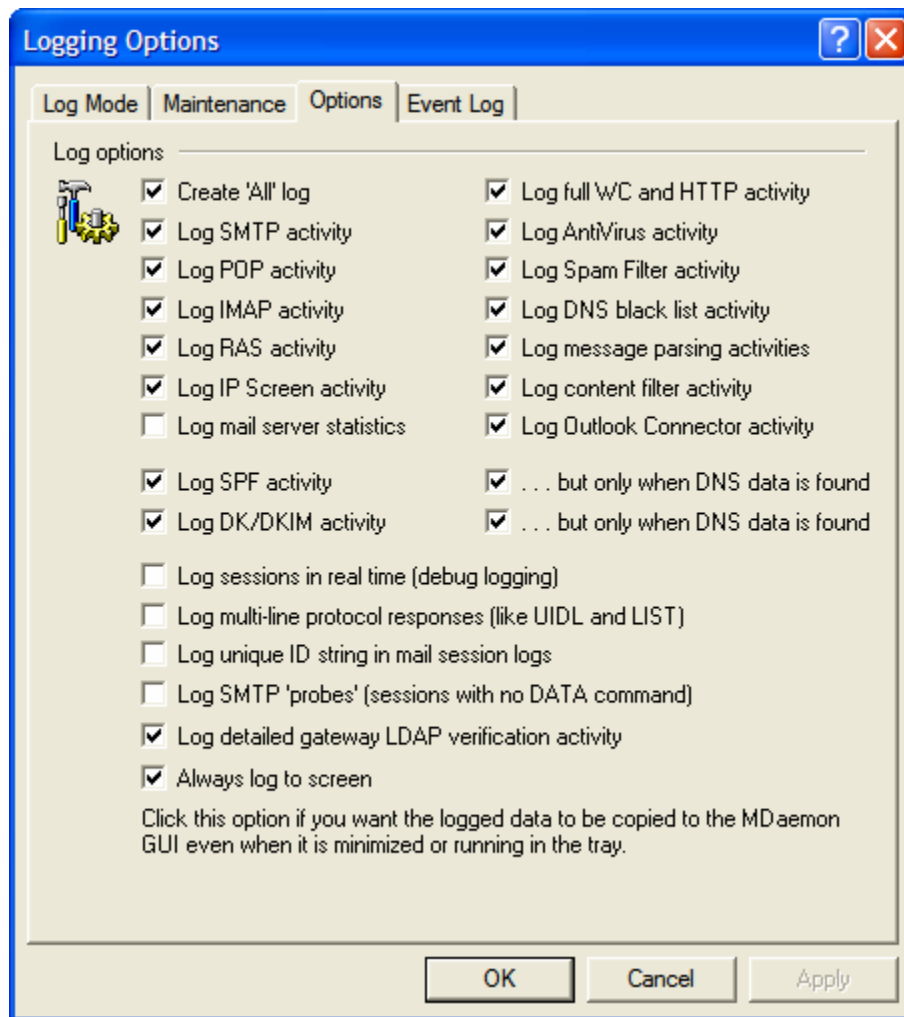
Log Options

Create 'All' log
Click this option if you want the "`*-all.log`" file to be generated, which contains a composite of all logged activities.

Log SMTP activity
Enable this option if you want to log all of MDaemon's send/receive SMTP activity.

Log POP activity
Click this checkbox to log all POP mail activity. This will log your users' POP mail collection sessions from MDaemon, and will log MDaemon's DomainPOP and MultiPOP activity.

Log IMAP activity
Enabling this option causes all of your users' IMAP sessions to be included in MDaemon's log files.

Log RAS activity
Click this switch if you want MDaemon to copy RAS dialup/dialdown activities into the log file. This information is useful for diagnosing dialup problems.

Log IP Screen activity
Click this checkbox if you want the IP Screening activities to be included in MDaemon's log file.

Log mail server statistics
Because the statistics log file can potentially use a lot of disk space and CPU power to maintain, this option makes it possible for you to control whether or not that file will be created. The switch is disabled by default.

Log full WC and HTTP activity
Click this option if you wish to log all WorldClient and HTTP activity. When disabled, WorldClient and HTTP logs will still be created showing WorldClient's startup and shutdown times, but other WC/HTTP activity will not be logged.

Log AntiVirus activity
This option logs AntiVirus for MDaemon activities

Log Spam Filter activity
Logs all Spam Filter activity.

Log DNS black list activity
This option causes MDaemon to log DNS black list activity. Using this option will allow you to have an easy reference to the sites that were logged as blacklisted.

Log message parsing activities
MDaemon periodically performs a great deal of message parsing activity when determining to whom a message should be delivered. Enable this switch if you want this information to be included in the log file.

Log content filter activity
Click this checkbox if you want to include Content Filter and AntiVirus for MDaemon activity in the log file.

Log Outlook Connector activity
This option governs whether or not Outlook Connector activities are logged.

Log SPF activity
Click this check box if you wish to log all Sender Policy Framework lookup activities.

…but only when DNS data is found
If you are logging SPF activities, click this check box if you wish to log only lookups where actual SPF data is found during the DNS lookup, rather than logging all SPF lookups.

Log DK/DKIM activity
Click this option if you wish to log DomainKeys (DK) and DomainKeys Identified Mail (DKIM) activity.

…but only when DNS data is found
Click this check box if you are logging DomainKeys activity but wish to log only those instances where DNS data is found instead of logging all activity.

<u>Log sessions in real time</u>
Ordinarily, session information is logged after the session is completed in order to conserve resources. Click this option if you want session information to be logged as in occurs.

<u>Log multi-line protocol responses</u>
Sometimes the responses to protocol requests require more than one line of information. Click this checkbox if you want to log these additional lines.

> ✋ **Caution!**
>
> Enabling this switch could potentially increase the amount of logged information a great deal. Because the number of lines in a response can't be determined in advance, and because some responses have great potential for "filling up" your log file with possibly unnecessary information (POP TOP, for example, which lists the actual contents of the message), we do not recommend using this feature if log file size or verbosity is of concern to you.

<u>Log unique ID string in mail session logs</u>
Click this check box if you wish to include [%d:%d] unique ID strings in session logs

<u>Log SMTP 'probes' (sessions with no DATA command)</u>
Click this option to log SMTP sessions were no message data is transmitted by the sending server (i.e. the sending server does not use the DATA command).

<u>Log detailed gateway LDAP verification activity</u>
Enable this option if you wish to log LDAP verification activities performed for Domain Gateways.

<u>Always log to screen</u>
Click this option if you want the logged data to be copied to the MDaemon GUI even when it is minimized or running in the tray.

When this control is cleared, log data isn't copied to the Event Tracking window when MDaemon is running in the system tray. Consequently, the most recent activity won't be listed on any of the Event Tracking window's tabs when MDaemon is first opened. It will begin displaying newly logged information from that point forward.

Event Log
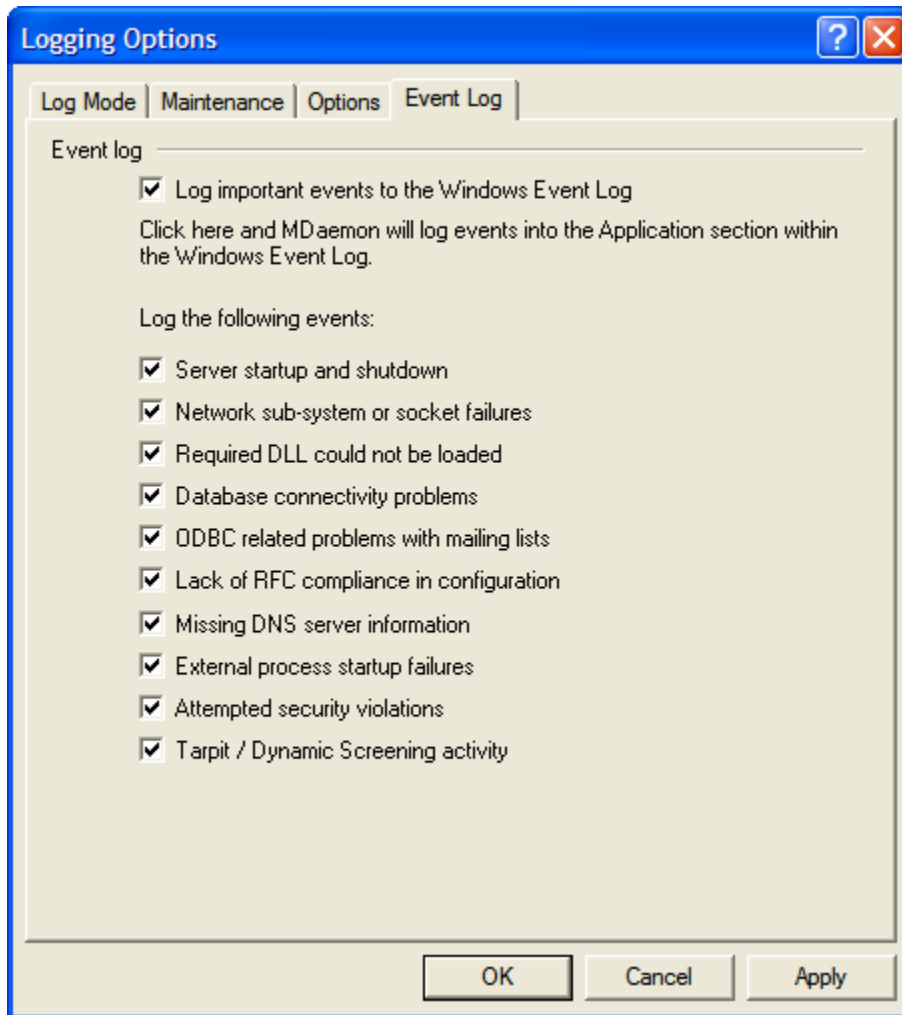
Log important events to the Windows Event Log
Click this check box if you want to log critical system errors, warnings, and certain other events into the Application section of the Windows Event Log.

Log the following events:
If you are logging Windows Events, use this set of options to specify which events you wish to log.

System Service Settings

Running MDaemon as a System Service.

U se the <u>S</u>etup→S<u>y</u>stem Service... menu selection (or press **Alt+F8**) to open the Service dialog from which you can configure MDaemon to run as a system service under Windows XP/2000/2003.

Service Settings
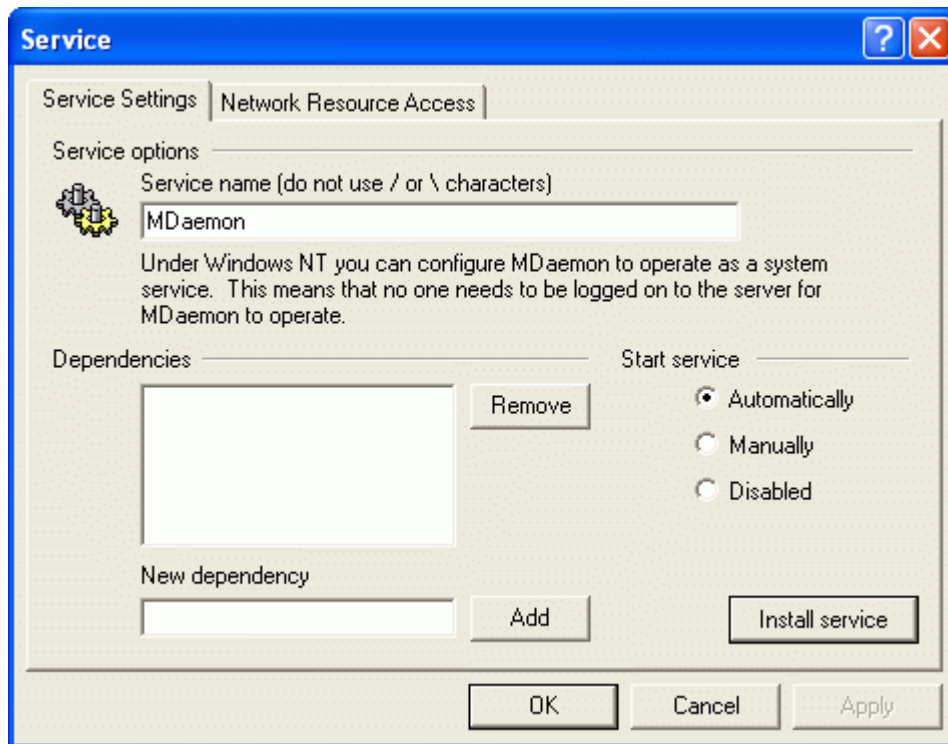
Service Options

Service name
This is the name that NT will use for the service.

Start service
This is the initial state of the service.

Dependencies
A list of Services that must be active **before** the MDaemon service should attempt to load.

Network Resource Access
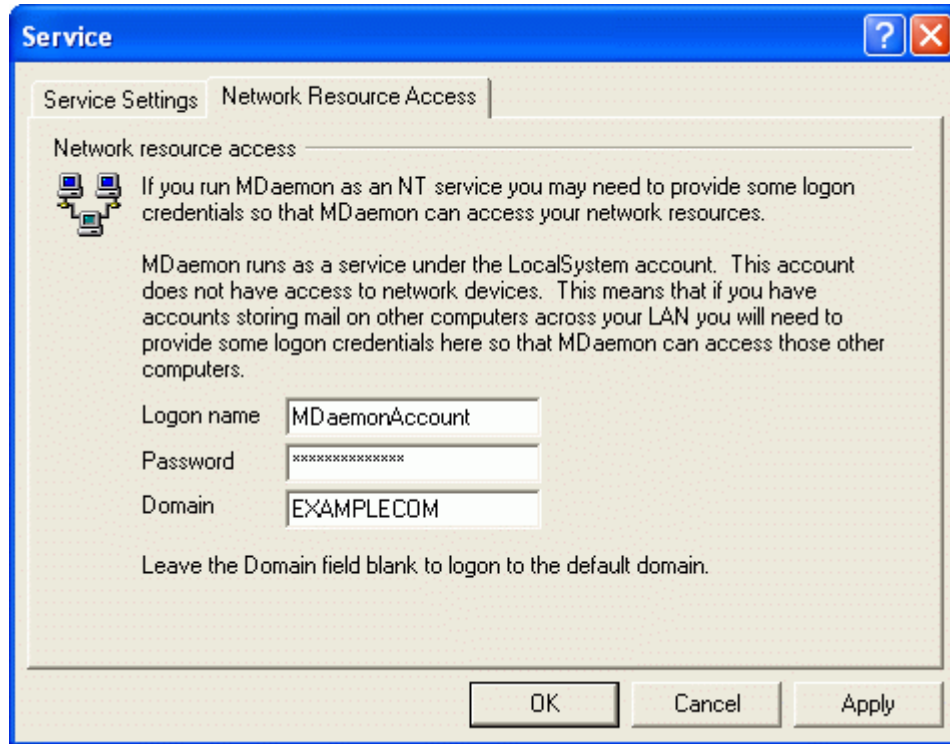
When running MDaemon as an NT/2000 system service, by default it runs under the LocalSystem account. Because this account does not have access to network devices, MDaemon will not be able to access mail if you wish to store it on other computers across your LAN. That is, not unless you provide logon credentials for an account that can be used to provide the MDaemon service access to network shares. We recommend creating a user account specifically designed for running MDaemon with whatever restrictions that you desire, but which has access to those network shares that you want MDaemon to be able to use. That way you can access network shares with UNC notation or mapped drives when running MDaemon as a service. Further, all applications launched by MDaemon (e.g. MDStats and Pre-Processing utilities) will also use the security context of this same NT Account.

Logon name
This is the logon name of the NT Account under which the MDaemon service should run.

Password
This is the NT Account's password.

Domain
This is the NT Domain on which the account resides. Leave this field blank to logon to the default domain.

Chapter

18

Miscellaneous Options

MDaemon's Miscellaneous Options settings.

U se the **Setup→Miscellaneous Options…** menu selection to edit various global toggles, set SMTP message size limitations, configure Disk Space Monitoring, and specify default window sizes for Server startup and Mail Sessions.

GUI
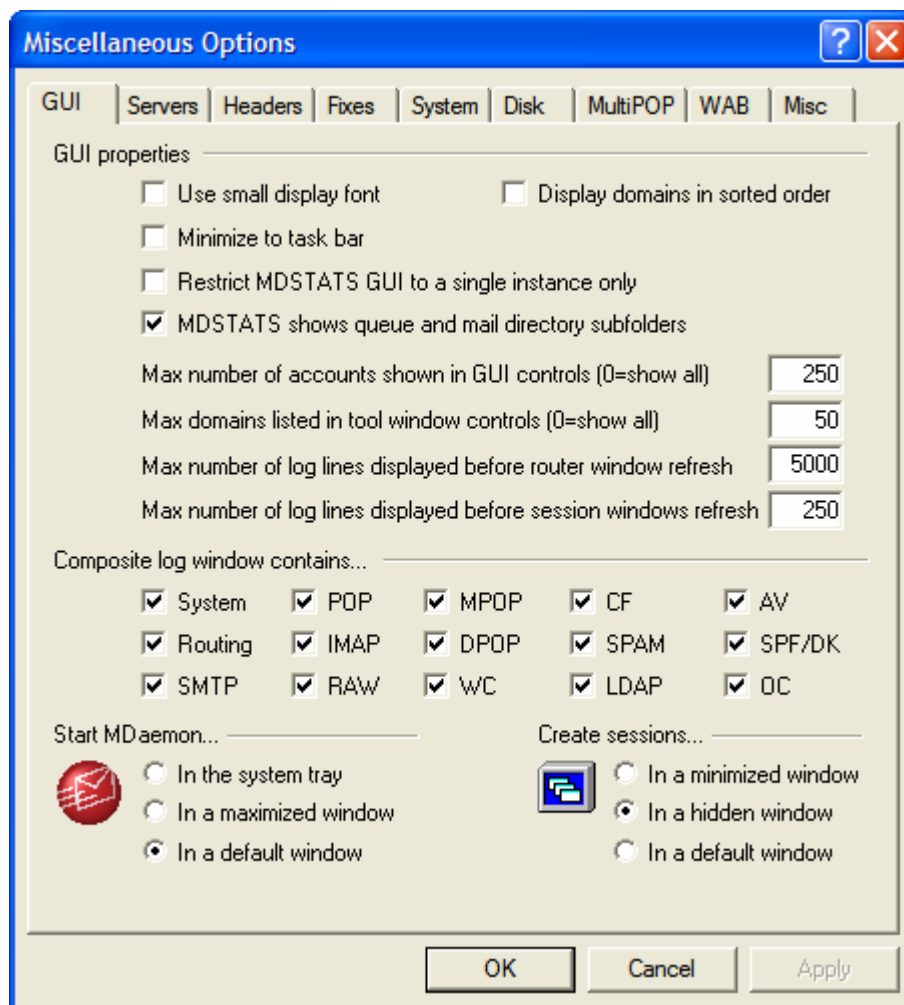
> **Note**
>
> The controls on this tab do not affect the amount of data that is actually stored in the log files – they only affect the information displayed in the Event Tracking window of MDaemon's main interface.

GUI Properties

Use small display font on router & session windows
Enables the small display font in the Event Tracking and Session windows.

Minimize to task bar
When this control is enabled and MDaemon is minimized, it will appear on both the taskbar and in the system tray. Clear this checkbox if you do not want MDaemon to appear on the Windows taskbar when the program is minimized; only the tray icon will be visible.

Display domains in sorted order
Click this option to cause the list of domains in the Tools menu on MDaemon's main interface to be sorted alphabetically. If you clear this option, the domains will be listed in the order in which they appear in the domains.dat file located in MDaemon's \app\ directory. When this setting is changed, the new sort order will not be reflected in the GUI until you either restart the server or open and close the Secondary Domains dialog.

Restrict MDStats GUI to a single instance only
Click this checkbox if you do not want more the one copy of MDaemon's queue and statistics manager to be able to run at once. Attempting to launch MDStats when it is already running will simply cause the currently running instance to become the active window.

MDStats shows queue and mail directory subfolders
Click this checkbox if you want the queue statistics manager to display subfolders contained in the various queues and user mail directories.

Max number of accounts shown in GUI controls (0=show all)
This is the maximum number of accounts that will be shown in the drop-down list boxes on various dialogs. Further, when the value in this control is set to anything other than "0" (show all) the "Edit Account" and "Delete Account" options will no longer appear on the Accounts menu. Those functions will only be available from the Accounts Manager. You must restart MDaemon before any changes to this control will go into effect.

Max domains listed in tool window controls (0=show all)
This is the maximum number of secondary domains that will be listed under the "Servers" controls in the main display's tool window. After changing this value, you must press F5 or restart MDaemon before the change will be visible in the tool window. This control cannot be set to anything less than 50.

Max number of log lines displayed before router window refresh
This is the maximum number of lines that will be displayed in the log window of the main display. When this number of lines is reached the window will be cleared. This has no affect on the log file. Only the display will be cleared.

Max number of log lines displayed before session windows refresh
This is the maximum number of lines that will appear in each session Connection window before it is cleared. This has no affect on the log file.

Composite log window contains...

Located on the <u>W</u>indows menu of MDaemon's menu bar is a <u>C</u>omposite log view option. Clicking that option will add a window to MDaemon's main display that will combine the information displayed on one or more of the Event Tracker's tabs. Use the controls in this section to designate which tabs' information to combine in that window. The information contained on the following tabs can be combined:

> System – Displays MDaemon's system activity such as initializing services and enabling/disabling any of MDaemon's various servers.

> Routing – Displays the routing information (To, From, Message ID, and so on) for each message that is parsed by MDaemon.

> SMTP – All send/receive session activity using the SMTP protocol is displayed.

> POP – When users collect email from MDaemon using the POP3 protocol, that activity is logged.

> IMAP – Mail sessions using the IMAP protocol are logged.

> RAW – RAW or system generated message activity is logged.

> MPOP – Displays MDaemon's MultiPOP mail collection activities.

> DPOP – Displays MDaemon's DomainPOP activity.

> WC – Displays all WorldClient activity.

> CF – MDaemon's Content Filter operations are listed.

> SPAM – Displays all Spam Filtering activity.

> LDAP – Displays LDaemon/LDAP activity.

> AV – AntiVirus operations are display in the composite view.

> SPF/DK – Displays all Sender Policy Framework and DomainKeys activity.

> OC – Displays all Outlook Connector activity.

Start MDaemon...

<u>*In the system tray*</u>
Choose this option if you want MDaemon's interface to be minimized at startup.

<u>*In a maximized window*</u>
Choose this option if you want MDaemon's interface to be maximized at startup.

<u>*In a default window*</u>
Choose this option if you want MDaemon's interface to appear in a default window at startup.

Create Session...

<u>*In a minimized window*</u>
If this option is selected MDaemon will create new mail session windows in a minimized state.

<u>*In a hidden window*</u>
If this options is selected MDaemon will create new mail session windows that are completely hidden from view.

<u>*In a default window*</u>
If this option is selected MDaemon will create new mail session windows using the default settings provided by Windows which relate to size and visibility.

🛠️ Servers
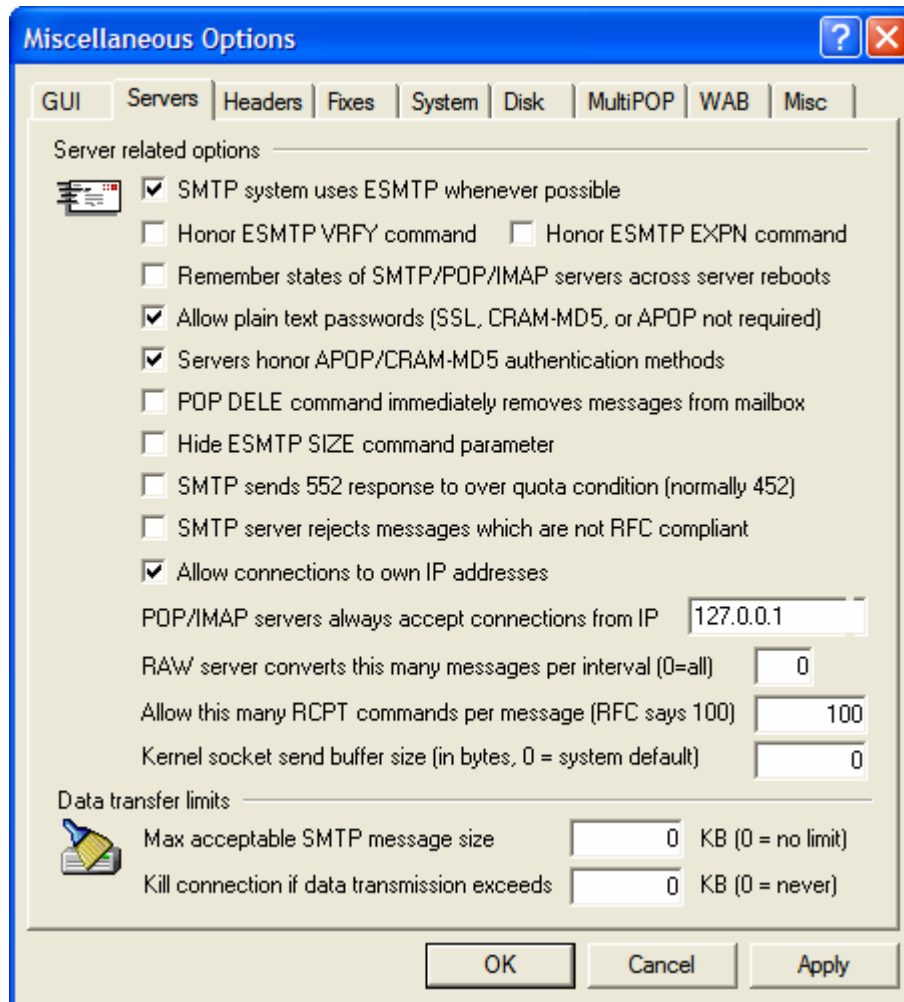
Server Related Options

SMTP system uses ESMTP whenever possible
Select this switch if you wish to enable support for extended SMTP commands.

Honor ESMTP VRFY commands
Click this switch to allow ESMTP VRFY commands.

Honor ESMTP EXPN commands
Click this checkbox if you want MDaemon to honor ESMTP EXPN commands.

Remember states of SMTP/POP/IMAP servers across server reboots
If this control is enabled, MDaemon will ensure that the state of its servers (enabled or disabled) remains the same after a reboot.

Allow plain text passwords
This option governs whether or not MDaemon will accept passwords sent in plain text to the SMTP, IMAP, or POP3 servers. If disabled, the POP3 USER, POP3 PASS, IMAP LOGIN, IMAP AUTH LOGIN, and SMTP AUTH LOGIN commands will return an error unless the connection is using SSL.

Servers honor APOP/CRAM-MD5 authentication methods
Enable this control if you want MDaemon's servers (POP, IMAP, and so on) to honor the APOP and CRAM-MD5 methods of authentication. These methods provide extra security by making it possible for users to be authenticated without sending clear text passwords.

POP DELE command immediately removes messages from mailbox
Click this switch and MDaemon will delete immediately messages that a user has retrieved even if the POP session does not complete properly.

Hide ESMTP SIZE command parameter
Click this checkbox if you want the ESMTP SIZE command parameter to be hidden.

SMTP sends 552 response to over quota condition (normally 452)
Enabling this control will cause a 552 response ("Requested mail action aborted: exceeded storage allocation") when delivery is attempted to a recipient whose account exceeds its quota. Normally there would be a 452 response ("Requested action not taken: insufficient system storage").

SMTP server rejects messages which are not RFC compliant
By default, MDaemon will accept messages that are not compliant to RFC internet standards—it has the ability to bring non-compliant messages into compliance later. If, however, you wish to reject non-compliant messages then click this checkbox. Non-compliant messages will be rejected during the SMTP process. MDaemon will reject messages missing a Date, Sender, or From header, and these required headers must have a corresponding value—they cannot exist as empty headers.

POP/IMAP servers always accept connections from IP [IP address]
The POP and IMAP servers will always accept connections from the IP Address entered into this field regardless of screening and shielding settings.

RAW server converts this many messages per interval
Use this control if you wish to limit the number of RAW messages that may be converted during any given mail processing interval. If the limit is reached then MDaemon will wait until the next processing interval before converting further messages.

Allow this many RCPT commands per message (RFC says 100)
Use this control if you wish to limit the number of RCPT commands that can be sent per message.

Kernel socket send buffer size (in bytes, 0=system default)
If you wish to designate a non system-default socket send buffer size then you can use this control to do so. Specify the new size (in bytes) in the space provided.

Data Transfer Limits

Max acceptable SMTP message size
Setting a value here will prevent MDaemon from accepting or processing SMTP delivered mail that exceeds a certain fixed size. When this feature is active MDaemon will attempt to use the ESMTP SIZE command specified in RFC-1870. If the sending agent supports this SMTP extension then MDaemon will determine the message size prior to its actual delivery and will refuse the message instantly. If the sending agent does not support this SMTP extension then MDaemon will have to begin acceptance of the message, track its size periodically during transfer, and finally refuse to deliver the message once the transaction has completed.

Kill connection if data transmission exceeds XX KB

If the transmission of data during an MDaemon connection exceeds this threshold, MDaemon will close the connection.

Headers
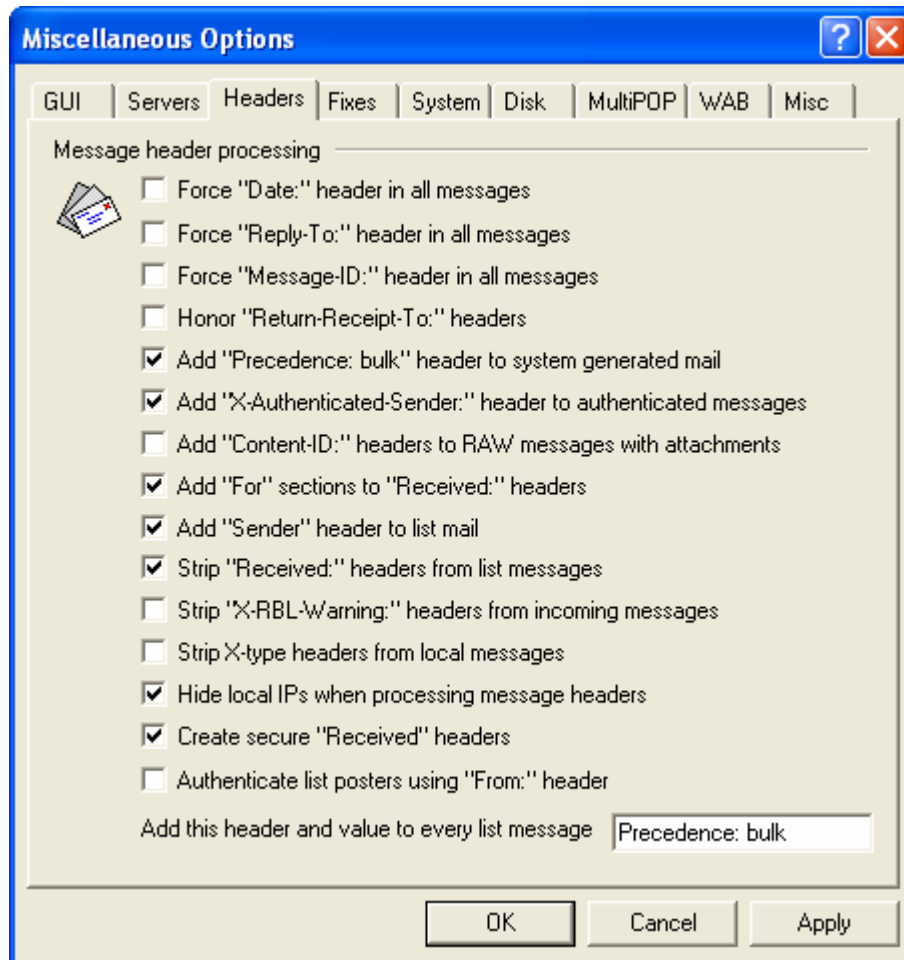
Message Header Processing

Force "Date" header in all messages
When a message is encountered that doesn't have a "`Date:`" header, MDaemon will create one and add it to the message file if this option is enabled. It will be the date on which MDaemon first receives the message, not when it was created by the sender. There are some mail clients that do not create this header, and since some mail servers refuse to honor such messages this feature will enable them to be delivered.

Force "Reply-To" header in all messages
When this option is enabled and a message is encountered that doesn't have a "`Reply-To`" header, MDaemon will create and add one to the message file using the address found in the "`From`" header. If a "`Reply-To`" header is present but **empty**, MDaemon will create the header like this: `Reply-To: ""`. This fixes problems for some mail clients.

Force "Message-ID" header in all messages
When a message is encountered which doesn't have a "`Message-ID`" header, MDaemon will create one at random and insert it into the message.

Honor "Return-Receipt-To" headers
Click this check box if you wish to honor requests for delivery confirmation from incoming messages and send a confirmation message to the sender. Click this check box to ignore delivery confirmation requests.

Add "Precedence: bulk" header to system generated mail
Click this option if you want all system generated messages (welcome messages, warnings, "could not deliver" messages, and so on) to have a "Precedence: bulk" header inserted.

Add "X-Authenticated-Sender:" header to authenticated messages
Check this switch if you want MDaemon to add an "X-Authenticated-Sender:" header to messages that arrive on an authenticated session using the AUTH command.

Add "Content-ID:" headers to RAW messages with attachments
Click this switch if you wish to add unique MIME Content-ID headers to messages that MDaemon creates from a RAW file that contains attachments.

Add "For" sections to "Received:" headers
Click this switch if you want "For [SMTP Recipient]" sections to be added to the message's "Received:" header added by MDaemon.

Add "Sender" header to list mail
Enable this option if you wish to insert the Sender header into mailing list messages. **Note:** because the Sender header is required when DomainKeys signing list messages, this option will have no effect when you have configured MDaemon to DomainKeys sign them—all list mail will have a Sender header.

Strip "Received:" headers from list messages
Click this switch if you wish to strip all existing "Received:" headers from list messages. This is sometimes useful for Mailing List mail.

Strip "X-RBL-Warning:" headers from incoming messages
In previous versions of MDaemon, any RBL header inserted by another MDaemon earlier in the message delivery process was automatically removed. In most configurations this data should be preserved. Click this checkbox if you want MDaemon to continue to strip out RBL headers inserted earlier in the delivery chain. By default, this feature is *not* enabled.

Strip X-type headers from local messages
MDaemon uses many server specific headers called X-Type headers in order to route mail and perform various MDaemon specific functions. This switch will force MD to clean up after itself and remove these headers from messages as they are moved into local mailboxes. **Note:** this option does not remove X-RBL-Warning headers.

Hide local IPs when processing message headers
Click this option to prevent MDaemon from placing local IP addresses into message headers when it processes mail.

Create secure 'Received' headers
Click this check box if you want to mask IP addresses, PTR lookup results, and local machine names from Received header stamps when the IP address is local or the message is received via an authenticated session. This option is enabled by default.

Authenticate list posters using "From:" header

Usually senders to private lists are checked using the MAIL FROM value passed during the SMTP session. If you would rather have your system use the message's "FROM:" header then enable this switch.
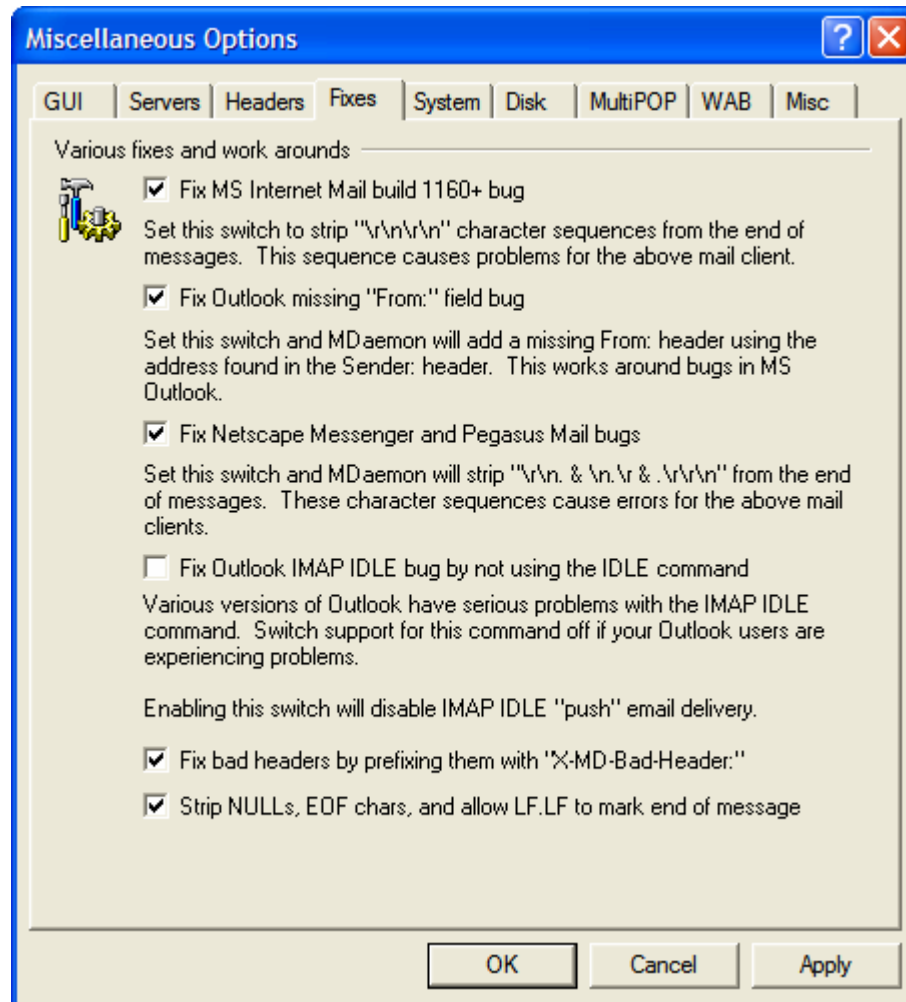
Add this header and value to every list message [`header`]

If you wish to add a static header/value combination (such as "Precedence: bulk") to all list messages, then specify it here.
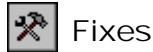
🛠 **Fixes**

Various Fixes and Work Arounds

Fix MS Internet mail build 1160+ bug
This switch has been added in an attempt to deal with the Microsoft Internet Mail problem of messages not appearing on the display after they are downloaded. With this switch turned on, MDaemon will strip consecutive `CRLFCRLF` sequences from the end of the message body. Three sets of `CRLF` pairs at the tail end of a message file is the cause of the Microsoft problem.

Fix MS Outlook missing "from" field bug
Some versions of Microsoft Outlook fail to create a FROM header when you compose a message. The `FROM` field information is instead placed in the `SENDER` field. This can confuse downstream mail servers as well as the recipient of your message. Select this switch and MDaemon will create the missing FROM field using the address found in the `SENDER` field.

Fix Netscape Messenger and Pegasus Mail bugs
This switch adds support for correcting three bugs present in various versions of Netscape Messenger and Pegasus Mail. Without this switch set messages collected with those clients have the potential to be mishandled by them. When the option is checked `\r\n.`, `\n.\r`, and `.\r\r\n` will be stripped from the end of messages.

Fix Outlook IMAP IDLE bug by not using the IDLE command

Some versions of Microsoft Outlook have problems with the IMAP IDLE command. If you notice that your Outlook users are experiencing problems then click this checkbox to disable support for the IMAP IDLE command.

Fix bad headers by prefixing them with "X-MDaemon-Bad-Header:"

When this option is enabled and MDaemon encounters a bad message header, it will prefix the bad header with "X-MDaemon-Bad-Header:"

Strip NULLs, EOF chars, and allow LF.LF to mark end of message

Allow Nulls, EOF characters, and LF.LF for end of message mark in addition to the normal CRLF.CRLF sequence.

⚒ System
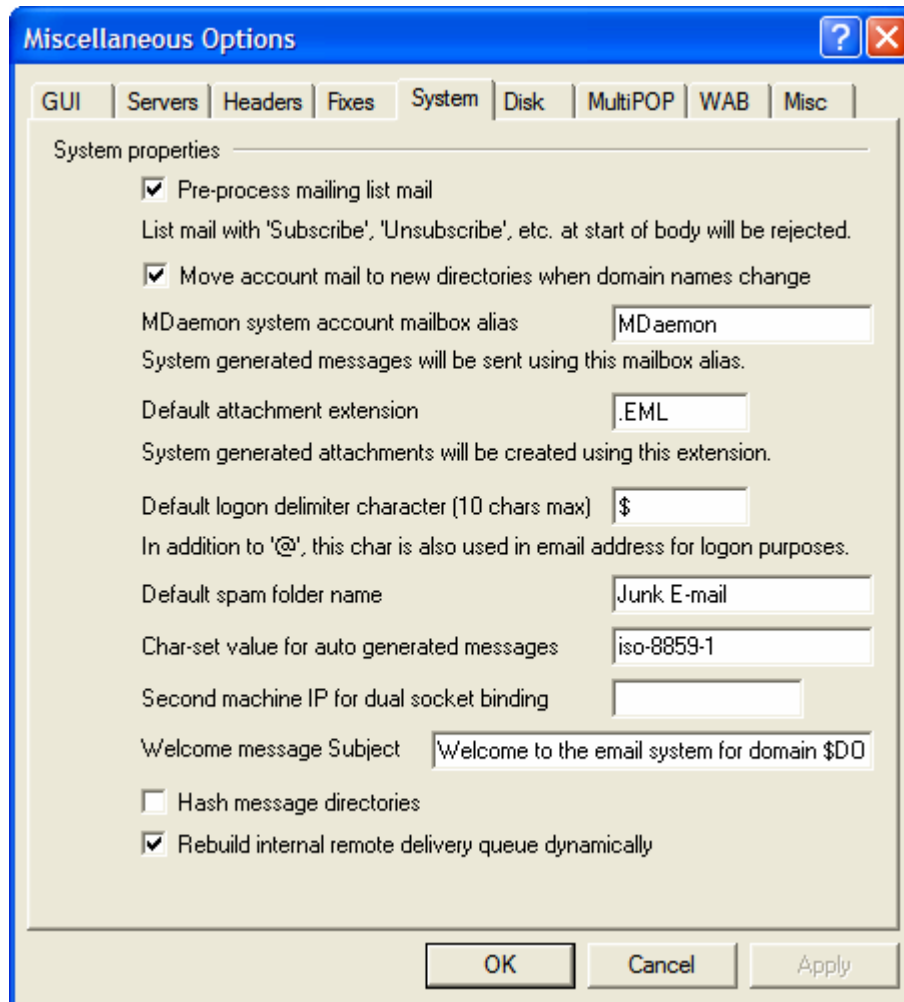
System Properties

Pre-process mailing list mail
When a message arrives for a mailing list that should have been directed to the system address, MDaemon will reject it when this control is enabled. For example, a user may join or leave a list by placing the Subscribe or Unsubscribe command at the beginning of an email message and sending it to the system address. Oftentimes users erroneously try to send these messages to the list itself. Enabling this control will prevent these messages from being posted to the list.

Move account mail to new directories when domain names change
If this checkbox is enabled when you rename a domain, that domain's existing account mail will be moved to directories with the new name. Otherwise, MDaemon will continue to use the old mail directory names.

MDaemon system account mailbox alias [address]
This is the email address from which system generated messages will come. Subscription confirmations, "Could not deliver" messages, various notification messages, and so on are all system messages.

Default attachment extension
System generated messages will be created using this extension. This will also be the extension assigned to attachments included with system generated messages. For example, if MDaemon generates a warning message to the postmaster about a specific message it will attach that message with an extension of ".md".

Default logon delimiter character (string of 10 characters max)
When using an email address as the account logon parameter, this character or string of characters can be used as an alternative to "@". This may be necessary for some users that have email clients which do not support "@" in the logon field. For example, if you used "$" in this field then users could login using "user@domain.com" or "user$domain.com".

Default spam folder name
Use this text box to specify the default name for the Spam folder that MDaemon can create automatically for your users. The default name is "Junk E-mail" to match the Microsoft Office 2003 default.

Char-set value for auto-generated messages
Specify the character set that you wish to be used for auto-generated messages. The default setting is iso-8859-1.

Second machine IP for dual socket binding
If you want the Primary domain to be bound to an additional IP address then include it here.

Welcome message Subject:
MDaemon typically sends a "Welcome" message to new accounts. This text will appear as the message's "Subject" header. The welcome message is constructed from the `Welcome.dat` file contained in the `…/MDaemon/app/` directory, and this subject header may contain any macros permitted in auto response scripts.

Hash message directories
Click this check box if you wish to enable directory hashing—MDaemon will hash certain directories by making up to 65 sub-directories. Hashing can increase performance for certain hi-volume sites but may degrade performance slightly for typical MDaemon sites. This option is disabled by default.

Rebuild internal remote delivery queue dynamically
By default, MDaemon will dynamically reorder messages waiting in the delivery queue whenever necessary. This is to allow newly arrived messages of a higher priority to be delivered before other messages that may have been awaiting delivery in the queue longer. When very large numbers of messages are queued, this can potentially cause slowdowns and unresponsiveness since MDaemon is being forced to constantly rebuild internal data structures. If you do not wish to allow MDaemon to dynamically reorder messages in the queue, clear/disable this option.

⚒ **Disk**
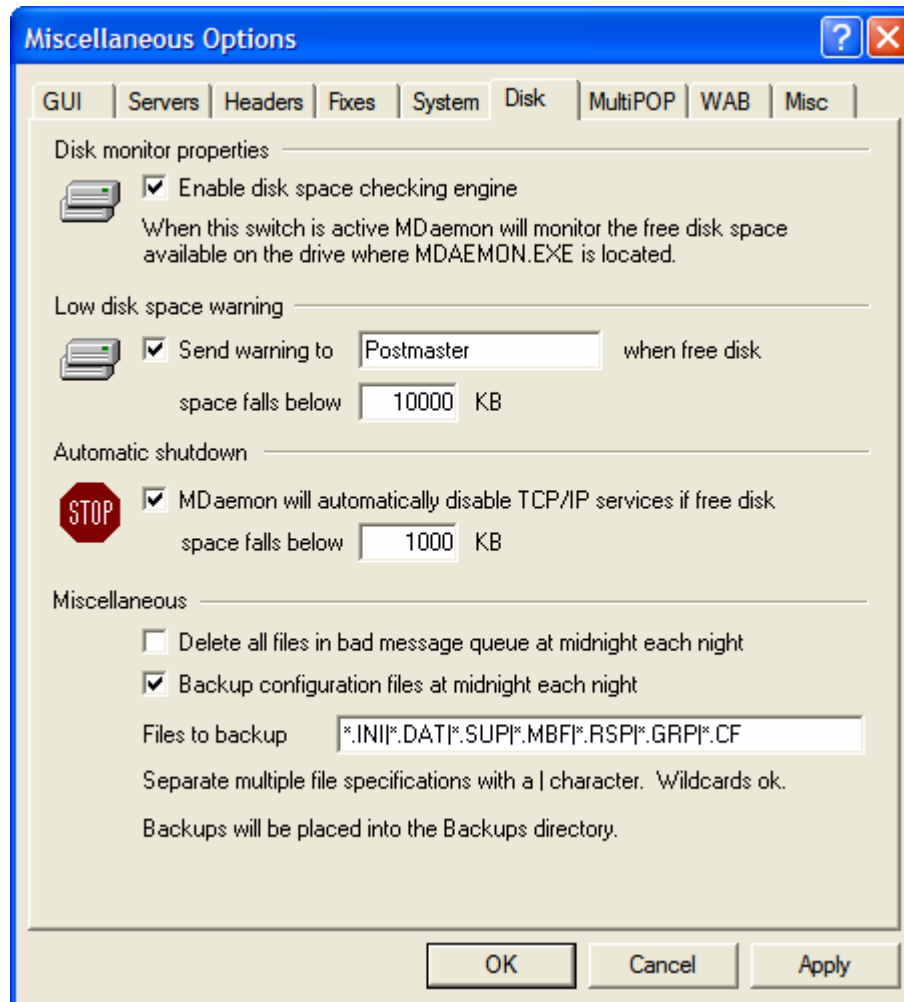
Disk Monitor Properties

Enable disk space checking engine
Activate this checkbox if you want MDaemon to monitor the amount of disk space that is available on the drive where the `MDAEMON.EXE` is located.

Low Disk Space Warning

Send warning to [user or address] when free disk space falls below [xx] KB
By using this option you can configure MDaemon to send a notification message to the user or address of your choice when disk space drops below a certain level.

Automatic Shutdown

MDaemon will automatically disable TCP/IP services if free disk space falls below [xx] KB
Enable this feature if you want MDaemon to disable TCP/IP Services if free disk space drops to a certain level.

Miscellaneous

Delete all files in bad message queue at midnight each night
Click this checkbox if you want MDaemon to delete all files from the bad message queue each night at midnight. This can help to conserve disk space.

Backup configuration files at midnight each night
Click this checkbox if you want to archive all MDaemon configuration files at midnight each night to the Backups directory.

Files to backup
Use this text box to specify exactly which files and file extensions to back up. Wildcards are permitted and each filename or extension must be separated be the "|" character.

MultiPOP
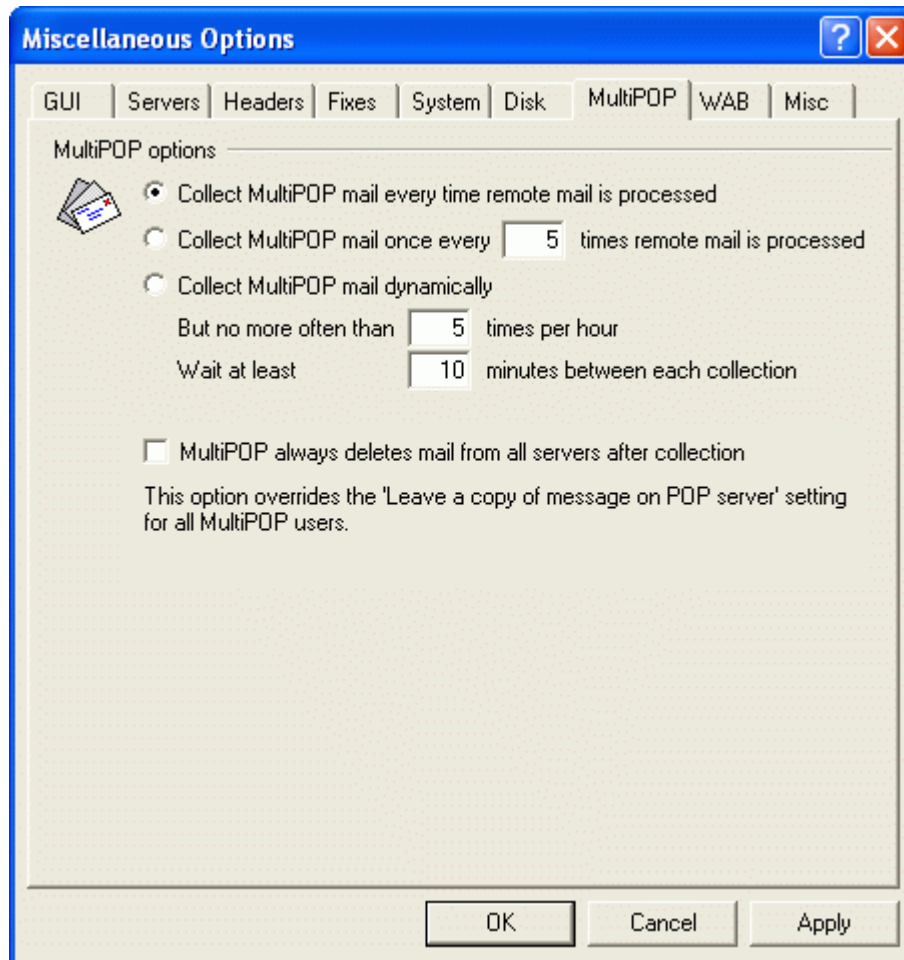
MultiPOP Collection Frequency

Collect MultiPOP mail every time remote mail is processed
Click this option if you want MDaemon to collect all MultiPOP mail every time that remote mail is processed.

Collect MultiPOP mail once every XX times remote mail is processed
Click this option button and specify a numeral in the box if you want MultiPOP mail to be collected less often than remote mail is processed. The numeral denotes how many times remote mail will be processed before MultiPOP mail will be collected.

Collect MultiPOP mail dynamically
Click this checkbox if you wish to collect MultiPOP messages dynamically. Ordinarily, MuliPOP is collected for all users at the same time at each remote mail processing interval, or at every x number of intervals. When collected dynamically, MultiPOP messages are collected for each individual user when that user checks his or her local mail via POP, IMAP, or WorldClient rather than for all users at once. However, because MultiPOP collection is triggered by a user checking his email, any new MultiPOP messages collected will not be visible to the user until he checks his mail *again*. Thus, he would need to check his mail twice in order to see new MultiPOP messages – once to trigger MultiPOP and a second time to see the mail that was collected.

But no more often than XX times per hour

In order to reduce the load that extensive use of MultiPOP can potentially place on your MDaemon, you can use this control to specify a maximum number of times per hour that MultiPOP can be collected for each user.

Wait at least XX minutes between each collection

This option can help to reduce the load on the mail server by limiting how frequently MultiPOP messages can be collected by each user. It will restrict MultiPOP mail collection to once every so many minutes per user. Specify the number of minutes that you wish to require the user to wait before being allowed to check MultiPOP again.

MultiPOP always deletes mail from all servers after collection

Click this check box if you wish to override the *Leave a copy of message on POP server* option (located on the MultiPOP tab of the Account Editor) for all users. All messages will be deleted from each MultiPOP server after they are collected.

WAB
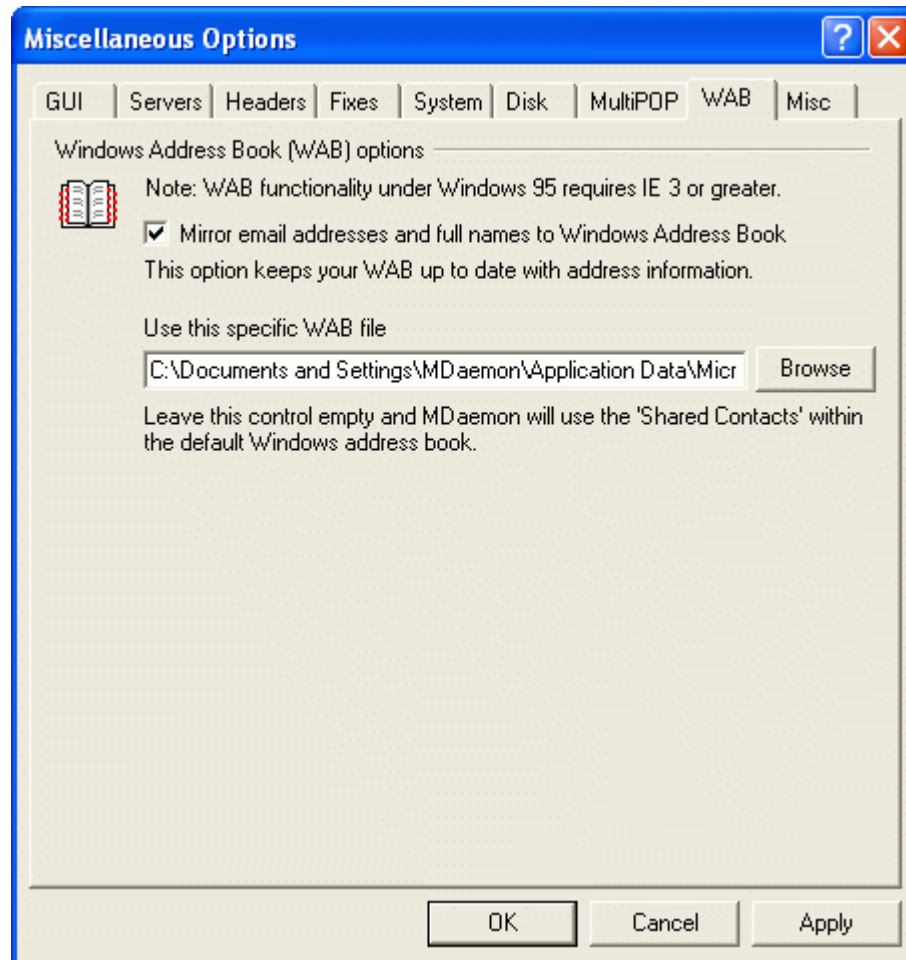
MDaemon has the ability to automatically keep a Windows Address Book file (*.wab) or Microsoft Outlook Contact Store current with each account's full name and email address. This is desirable for those who wish to share an address book amongst users of products like Outlook, but do not wish to use an LDAP server or ComAgent for that purpose.

Windows Address Book (WAB) Options

Mirror email addresses and full names to Windows Address Book
Enable this checkbox if you want your users' names and email addresses to be mirrored to a *.wab file or the Microsoft Outlook Contact Store. In the Windows Address Book, on the Tools→Options menu, you can configure whether or not your Windows Address Book will share contact information between Outlook and other applications by storing data in the Microsoft Outlook Contact Store or an address book (*.wab) file.

Use this specific WAB file
Specify the path to the *.wab file in which you wish to mirror your user information. If you leave this control empty then MDaemon will use the shared contacts store within the default Windows Address Book.

Misc
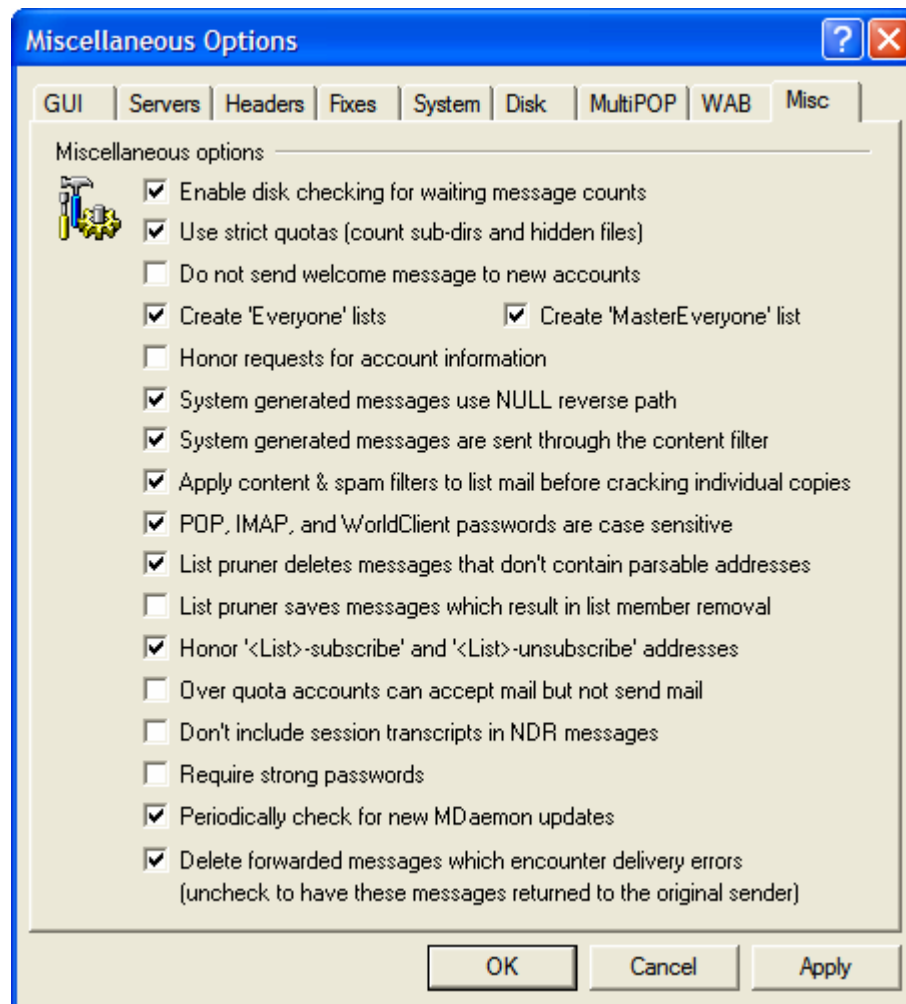
Enable disk checking for waiting message counts
This switch governs whether MDaemon will check the disk to count waiting messages in the mail queues. Doing so can cause excessive disk spin over the long term.

Use strict quotas (count subdirectories and hidden files)
When this box is checked, all files and subdirectories will apply toward any size or message number limitations placed on a user's account mailbox. Otherwise, only actual message files will count toward these limitations.

Do not send welcome message to new accounts
By default, MDaemon will generate a Welcome message based upon the `welcome.dat` file and distribute it to new users when their account is created. Enable this control if you want to prevent the message from being generated.

Create "Everyone" lists
Clear this checkbox if you do not wish "Everyone" mailing lists to be created and maintained for your domains. Maintaining mailing lists of every user on every MDaemon domain could be a potential waste of resources if the lists are never used or are for very large numbers of users. Clear this checkbox if you do not want MDaemon create these lists.

Create "MasterEveryone" list

Enable this option if you want there to be a "MasterEveryone" mailing list. Everyone on all of your domain-specific "everyone" lists will be included on this list.

Honor requests for account information

Provides the user list when requested via EXPN or LISTS commands.

System generated messages use NULL reverse path

Click this checkbox if you want auto-generated emails to be sent with a NULL reverse path. This switch is checked by default in order to comply with SMTP email standards, but in spite of these standards some servers refuse to accept emails which are generated with a NULL reverse path, so you can clear this switch if you desire. However, in some cases (such as auto-responders for example) using anything other than a NULL reverse path can lead to mail loops.

System generated messages are sent through the Content Filter

Click this option if you want system generated messages (such as AV notifications, for example) to be processed through the Content Filter.

Apply content filter rules to list mail before individual messages for list members are cracked

When the *MDaemon will crack list mail* option is chosen on the Routing tab of the mailing list editor, enabling this control will cause the content filter rules to be applied to list messages before they are cracked and distributed to list members.

POP, IMAP, and WorldClient passwords are case sensitive

POP, IMAP, and WorldClient passwords will be case-sensitive when this control is checked.

List pruner deletes messages that don't contain parsable addresses

When you have configured MDaemon to scan messages that are returned to a Mailing List in an attempt to delete list members that cannot be reached, this control will cause those messages to be deleted that do not contain a parsable address. For more information, see the *Automatically remove dead addresses from list membership* control on the Members tab of the Mailing List editor (page 390).

List pruner saves messages which result in list member removal

When MDaemon scans returned list messages in an attempt to remove member addresses that cannot be reached, this control will cause messages that result in a list member's removal to be saved.

Honor '<List>-subscribe' and '<List>-unsubscribe' addresses

Click this checkbox if you want MDaemon to recognize email addresses of this format as valid (as long as the list actually exists) in order to facilitate an easier method for users to join and leave your mailing lists. For example: suppose you have a list called `MyList@altn.com`. People will be able to subscribe/unsubscribe to your list by sending an email message to `MyList-Subscribe@altn.com` and `MyList-Unsubscribe@altn.com`. The content of the subject and message body is irrelevant. Also, when this feature is active MDaemon will insert the following header into all list messages:

```
List-Unsubscribe: <mailto:<List>-Unsubscribe@domain.com>
```

Some mail clients can pick up on this and make an UNSUBSCRIBE button available to users automatically.

Over quota accounts can accept mail but not send mail

Normally, when an account has a message quota restriction placed on it the accountholder will no longer be able to receive any further messages once the quota is reached. Until he or she deletes some of the messages no more mail will be accepted by MDaemon for the account. The user can, however, still *send*

messages with the over-quota account. Click this option of you want the restriction to be handled in the exact opposite manner—while the account is over the quota it can still *receive* email but cannot *send* it.

Don't include session transcripts in NDR messages
Click this option if you do not want to include SMTP session transcripts in delivery error and warning messages.

Require strong passwords
By default, MDaemon now requires stronger and more secure passwords when creating new accounts or changing existing passwords. Clear this check box if you want to disable this strong passwords restriction.

Strong and secure passwords:

- Must be at least a specified number of characters long (six by default).

- Must contain both letters and numbers.

- Must contain both upper and lower case letters.

- May not contain the account mailbox or full name data.

You can designate the minimum password length by editing the following key in MDaemon.ini:

```
[Special]
MinPasswordLength=XX (default 6)
```

Periodically check for new MDaemon updates
When enabled, this option will cause MDaemon to periodically check to see if an update for the software is available. When a new version is available, MDaemon will notify you so that you can choose whether or not to download and install it.

Delete forwarded messages which encounter delivery errors
This option causes forwarded messages that encounter delivery errors to be deleted. If you clear this option then those messages will be returned to the original sender.

SECTION II

MDAEMON® VERSION 9.0.0

MDaemon's Account Features

Chapter

19

Managing MDaemon Accounts

Managing and editing your MDaemon User Accounts.

his section contains information on MDaemon's Account Database Options, the Account Manager, and New Account Defaults. The Account Database Options dialog (**Ctrl+M** or **A**ccounts→A**c**count database...) is used to designate the method that you want MDaemon to use to maintain your user accounts: ODBC, LDAP, or the local USERLIST.DAT system. The Account Manager (**Alt+M** or **A**ccounts→**A**ccount manager...) is used to maintain, create, and delete your user accounts. The New Account Defaults dialog (**Alt+F10** or **A**ccounts→Ne**w** account defaults...) is used to designate the default settings that will be used for newly created accounts.

Account Database Options

Account DB
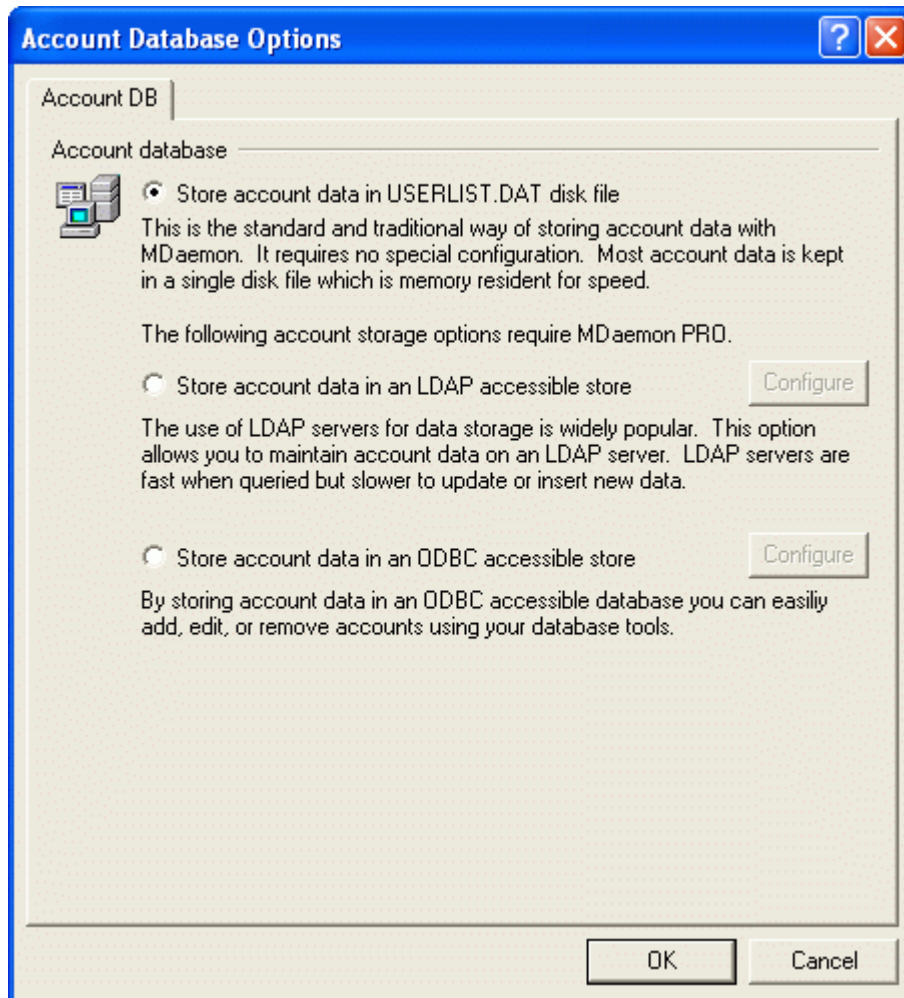
Store account data in USERLIST.DAT disk file

Choose this option if you want MDaemon to use its internal `USERLIST.DAT` file as the account database. This is MDaemon's default setting and causes all of the MDaemon user account information to be stored locally. Most information is stored in a single file, which is memory resident to increase efficiency and speed.

Store account data in LDAP accessible store

Choose this option if you want MDaemon to use your LDAP server as the MDaemon user database rather than ODBC or its local `USERLIST.DAT` system. You might want to use this method of maintaining your user account data if you have multiple MDaemon servers at different locations but want them to share a single user database. Each MDaemon server would be configured to connect to the same LDAP server in order to share user information rather than storing it locally. LDAP servers typically respond quickly and efficiently to queries but are slower to update or insert new data.

Configure
When the LDAP account data option is selected, click this button to open the LDAP Options dialog for configuring your LDAP server settings.

For more information on the LDAP Options dialog, see: LDAP Options—page 114.

Store account data in an ODBC accessible store
Choose this option if you want to use an ODBC compliant database as your MDaemon account database.

Configure
When the ODBC account data option is selected, click this button to open the ODBC Selector wizard for selecting and configuring your ODBC compliant database. See ODBC Selector Wizard below for more information.

ODBC Selector Wizard
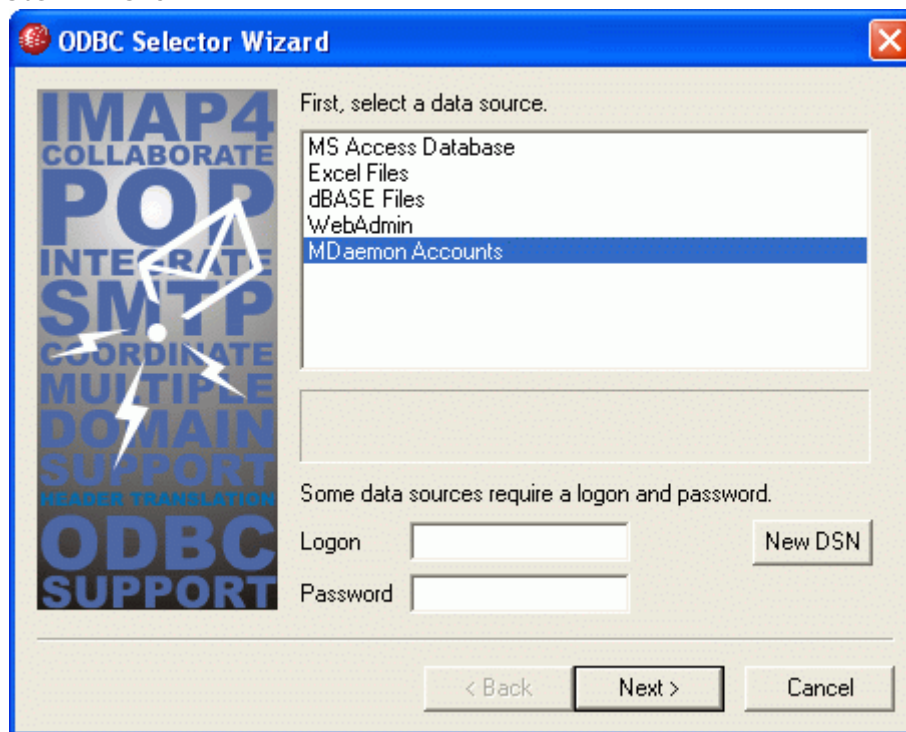
Use this wizard to select or configure an ODBC compliant system data source to use as your MDaemon accounts database. To open this wizard, click **Ctrl+M** or **Accounts→Account database**... within MDaemon. Then, choose the option labeled, "_Store account data in an ODBC accessible store._" Finally, click the "_Configure_" button beside that option.

First, select data source
This area lists all of your ODBC system data sources. Choose the one that you wish to use as MDaemon's user account database.

For step by step instructions on switching your account database to an ODBC accessible store, see:

Migrating Your Account Database to an ODBC Accessible Store—page 313

Some data sources require a logon and password
If your selected data source requires a logon and password to access it then enter that information here.

New DSN
If there is not a compatible system data source listed, or if you need to create a new one, click *New DSN*.

For step by step instructions on creating a new system data source, see:

Creating a New System Data Source —page 314

Migrating Your Account Database to an ODBC Accessible Store
To use an ODBC accessible database as your MDaemon account database:

1. On the Account Database Options dialog (**A**ccounts→Account **d**atabase...), click **Store account data in an ODBC accessible store**, and then click **Configure** to open the ODBC Selector Wizard.

2. Select the **data source** that you wish to use for your account database. If there is not a compatible data source listed, create a new one by following the instructions listed under **Creating a New System Data Source—page 313**.

3. Click **Next**.

4. If the data source already contains the tables that are required by MDaemon, go to **Step 7**. Otherwise, click **Run a script to create the necessary tables...**.
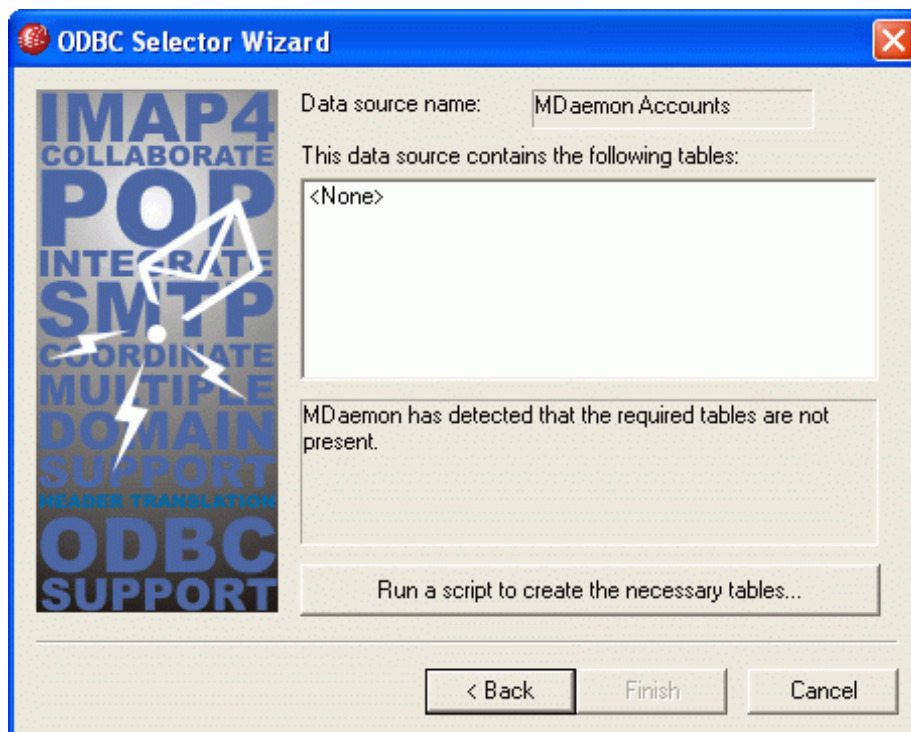
5. Type the file path (or **Browse**) to the desired script file that you wish to use to create the tables for your database application. The `\MDaemon\app\` folder contains scripts for several of the most popular database applications.

6. Click **Run script and create database tables now**, Click **OK**, and click **Close**.
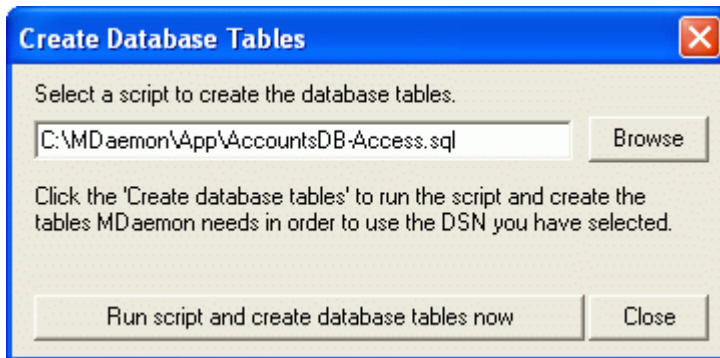
7. Click **Finish**, and click **OK** to close the Account Database Options dialog.

8. A database migration tool will migrate all of your user accounts to the ODBC data source and then close MDaemon. Click **OK**, and then restart MDaemon and begin using the new ODBC account database.

Creating a New System Data Source

To create a new ODBC system data source:

1. On the Account Database Options dialog, click **Store account data in an ODBC accessible store**, and then click **Configure** to open the ODBC Selector Wizard.

2. Click **New DSN** to open the Select Data Source dialog. Switch to the **Machine Data Source** tab.

3.   Click **New...** to open the Create New Data Source dialog.

4.   Select **System Data Source**, and click **Next**.

5. Select the **database driver** for which you wish to set up the data source, **and click <u>Next</u>**.

6. Click <u>**Finish**</u> to display the driver-specific setup dialog. The appearance of this dialog will vary based on which driver you have selected (Microsoft Access Setup dialog shown below).

7. Designate a **Data Source Name** for your new data source and provide any other information required by the driver-specific dialog (such as creating or specifying a database, choosing a directory or server, and so on).

8. Click **OK** to close the driver-specific dialog.

9. Click **OK** to close the Select Data Source dialog.

Active Directory

Using the options located on the Active Directory and AD Options tabs of the Account Database Options dialog, MDaemon can be configured to monitor Active Directory and automatically create, edit, delete and disable MDaemon accounts when their associated accounts are altered in Active Directory.

Creating Accounts

When set to monitor Active Directory, MDaemon will query for changes at a designated interval and then create a new MDaemon user account whenever it finds that a new Active Directory account has been added. This new MDaemon user account will be created using the full name, logon, mailbox, description, and enabled/disabled state found within Active Directory.

By default, new MDaemon accounts created as a result of Active Directory monitoring will be added to MDaemon's primary domain. Alternatively, you can choose to have those accounts added to the domain found within the account's "UserPrincipalName" Active Directory attribute. When using this option, if an account requires a domain that doesn't yet exist within MDaemon, a new secondary domain will be created automatically.

Deleting Accounts

MDaemon can be configured to take one of the following actions when an account is deleted from Active Directory: do nothing, delete the associated MDaemon account, disable the associated MDaemon account, or freeze the associated MDaemon account (i.e. the account can still receive mail but the user can't collect it or access it).

Updating Accounts

When MDaemon detects changes to Active Directory accounts, it will automatically update the associated properties in the matching MDaemon account.

Synchronizing MDaemon with Active Directory

A "*Perform full AD scan now*" option is available to cause MDaemon to query the Active Directory database and then create or modify MDaemon user accounts as necessary. When an Active Directory account is found that matches an already existing MDaemon account, the MDaemon account will be linked to it. Then, any future changes made to the Active Directory accounts will be propagated to the MDaemon accounts automatically.

Dynamic Authentication

Accounts created by MDaemon's Active Directory feature will be setup for Dynamic Authentication by default. With Dynamic Authentication, MDaemon has no need to store the account's password within its own user database. Instead, the account holder will use his or her Windows login/password credentials and MDaemon will pass those to Windows for authentication of the associated account.

To use Dynamic Authentication with Active Directory, a Windows domain name must be present in the space provided on this dialog. This is the Windows domain that MDaemon will use when attempting to authenticate accounts. In most cases, MDaemon will detect this Windows domain name automatically and fill it in for you. However, you can use an alternate domain in this option if you choose, or you can use "NT_ANY" if you wish to allow authentication across all of your Windows domains instead of limiting it to a specific one. If you leave this option blank then MDaemon will not use Dynamic Authentication when new accounts are created. Instead it will generate a random password, which you will have to edit manually before users will be able to access their mail accounts.

Persistent Monitoring

Active Directory monitoring will continue to work even when MDaemon is shut down. All Active Directory changes will be tracked and then MDaemon will process them once it restarts.

Active Directory File Security

It is worth noting that MDaemon's Active Directory features do not alter the Active Directory schema files in any way—all monitoring is one-way from Active Directory to MDaemon. MDaemon will not alter your directory.

Active Directory Template

Whenever MDaemon adds or makes changes to accounts due to Active Directory monitoring and scanning, it will use an Active Directory template ("/app/ActiveDS.dat") to link certain Active Directory attribute names to MDaemon's account fields. For example, MDaemon links the Active Directory attribute "cn" to MDaemon's "FullName" field by default. These links, however, are not hard-coded. You can easily edit this template with Notepad if desired and alter any of the default field mappings. For example, "FullName=%givenName% %sn%" could be used as a replacement for the default setting: "FullName=%cn%". See ActiveDS.dat for more information.

Active Directory
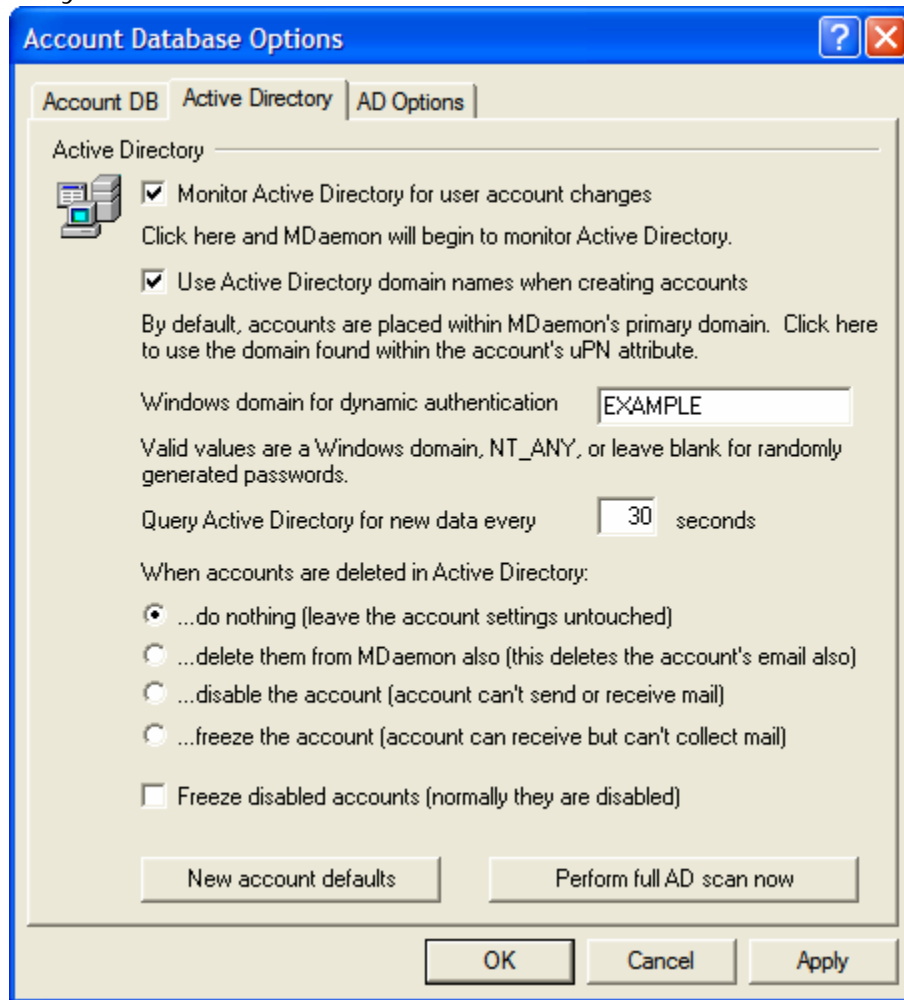
Active Directory

Monitor Active Directory for user account changes
Click this option to activate Active Directory monitoring.

Use Active Directory domain names when creating accounts
Use this option if you would like new accounts created as a result of Active Directory monitoring to be added to the domain found within the account's "UserPrincipalName" Active Directory attribute. When using this option, if an account requires a domain that doesn't yet exist within MDaemon, a new secondary domain will be created automatically. Clear/disable this option if you would like all new accounts to be added to MDaemon's primary domain.

Windows domain for dynamic authentication
Specify a Windows domain name here if you wish to use Dynamic Authentication for accounts created by Active Directory monitoring. If you leave this field blank then new accounts will be assigned random passwords. You will then have to edit those passwords manually in order for the accounts to be accessed.

Query Active Directory for new data every XX seconds
This is the interval at which MDaemon will monitor Active Directory for changes.

When accounts are deleted in Active Directory:

The option selected below determines the action MDaemon will take when an MDaemon account's associated Active Directory account is deleted.

…do nothing

Choose this option if you do not wish MDaemon to make any changes to an MDaemon account when its associated account is deleted from Active Directory.

…delete them from MDaemon

Choosing this option will cause the MDaemon account to be deleted when its associated account is deleted from Active Directory.

> ✋ **Caution!**
>
> This will cause the associated MDaemon account to be completely removed. All of the account's messages, message folders, address books, calendars, and so on will be deleted.

…disable the account

When this option is selected and an Active Directory account is deleted, its corresponding MDaemon account will be disabled. This means that the MDaemon account will still exist on the server, but it cannot send or receive email or be accessed by anyone.

…freeze the account

When this option is selected MDaemon will still accept the account's incoming mail but effectively "lock" it so that it cannot be accessed. In other words, incoming mail addressed to that account will not be rejected or deleted by MDaemon but the account holder will not be able to collect or access that mail as long is the account is frozen.

Freeze disabled accounts

By default, when you disable an account in Active Directory, MDaemon will also disable the associated account in MDaemon. This makes the account inaccessible and MDaemon will neither accept nor deliver messages for it. However, if you prefer to have the associated MDaemon account frozen instead of disabled, click/enable this option. MDaemon will still accept messages for frozen accounts, but users will not be able to access those accounts to collect or send their email.

New Account Defaults

Click this button to open the New Account Defaults dialog. Use that dialog to review or edit the default settings for new accounts.

Perform full AD scan now

Click this button to cause MDaemon to query the Active Directory database and then create, edit, or delete accounts as necessary. When an Active Directory account is found that matches an already existing MDaemon account, the MDaemon account will be linked to it.

AD Options

Note

Access to Active Directory may require special permissions to be set for all features to function.

Active Directory Options

Base entry DN

This is the Distinguished Name (DN) or starting point in the Directory Information Tree (DIT) at which MDaemon will search your Active Directory for accounts and changes. By default MDaemon will begin searching at Root DSE, which is the topmost entry in your Active Directory hierarchy. Designating a more precise starting point closer to the location of your user accounts in your particular Active Directory tree can reduce the amount of time required to search the DIT for accounts and account changes. Leaving this field blank will restore the default setting of `LDAP://rootDSE`.

Search filter
This is the LDAP search filter that will be used when monitoring or searching your Active Directory for accounts and account changes. Use this filter to more precisely locate the desired user accounts that you wish to include in Active Directory monitoring.

Bind DN
This is the DN that MDaemon will use when binding to Active Directory using LDAP. Active Directory permits the use of a Windows account or UPN when binding.

Note

When using a DN in this option rather than a Windows logon, you must disable/clear the "*Use secure authentication*" option below.

Password
This is the password that corresponds to the DN or Windows logon used in the *Bind DN* option above.

Test
Click this button to test MDaemon's Active Directory configuration.

Search scope:
This is the scope or extent of your Active Directory searches.

Base DN only
Choose this option if you wish to limit your search to only the base DN specified above. The search will not proceed below that point in your tree (DIT).

1 level below base DN
Use this option if you wish to extend your Active Directory search to one level below the supplied DN in your DIT.

Base DN and all children
This option will extend the scope of your search from the supplied DN to all of its children, down to the lowest child entry in your DIT. This is the default option selected, which when combined with the default Root DSE setting above means that the entire DIT below the Root DSE will be searched.

Options:

Use secure authentication
Click this checkbox if you wish to use secure authentication when performing your Active Directory searches. You cannot use this option when you are using a DN rather than a Windows logon in the *Bind DN* option above.

Use SSL authentication
Click this checkbox if you wish to use SSL authentication when performing your Active Directory searches.

> **Note**
>
> Use of this option requires an SSL server and infrastructure on your Windows network and Active Directory. Contact your IT department if you are unsure if your network is setup this way, and to find out if you should enable this option.

Page size

If the results of an Active Directory query exceed a specified number of entries, then they will be returned in separate "pages" in order to retrieve all the results. This setting is the maximum number of entries that will be included per page.

Email address attribute

This attribute is used for MDaemon mailing lists and is only available when accessing the Active Directory options via the Mailing Lists dialog. See the AD tab of that dialog for more information.

Account Manager

To better manage the selection, addition, deletion, or modification of your accounts, MDaemon contains the Account Manager (Accounts→Account Manager... or Alt+M). This dialog provides access to account information and can be used to sort accounts by mailbox, domain, real name, or mail directory. The Account Manager dialog is resizable and you can open multiple copies of it.
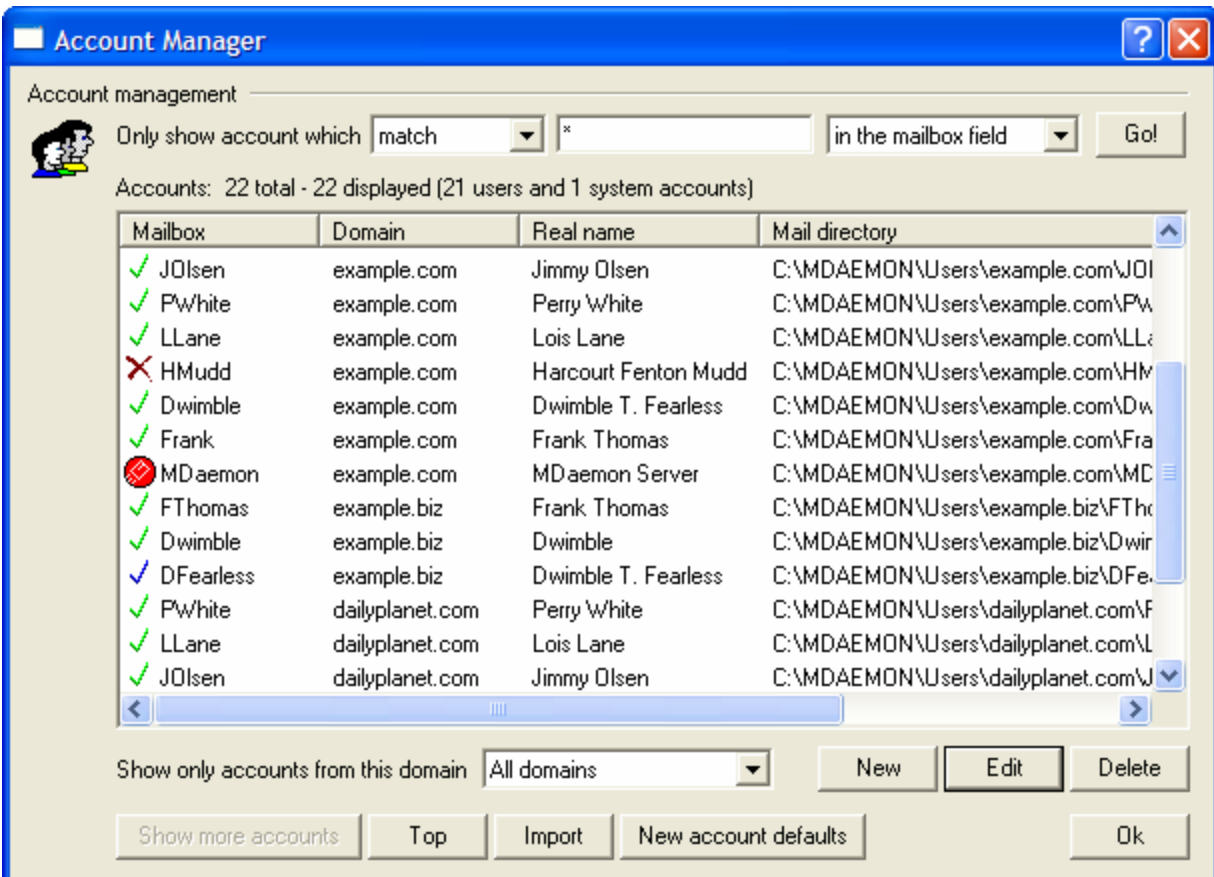
Account List

Above the Account List you will see two statistics regarding the list. The first number is the total number of MDaemon user accounts that currently exist on your system. The second number is the number of those accounts currently displayed in the Account List. Which accounts that will be displayed is contingent upon what you have chosen in the *Show only accounts from this domain* option. If you have selected "All Domains" then all of your MDaemon accounts will be displayed in the list.

Each Account List entry contains an Account Status Icon (see below), the Mailbox, the Domain to which it belongs, the "Real Name" of the account holder, and the Mail Directory in which the account's messages are stored. This list can be sorted in ascending and descending order by whichever column that you prefer. Click any column heading to sort the list in ascending order by that column. Click the column again to sort it in descending order.

Note

By default, only 500 accounts at a time will be displayed in this list. If you want to see more accounts from the currently selected domain (or All Domains, if you have selected that option) then you must click the "**Show More Accounts**" button to display the next 500. If you want to be able to display more than 500 accounts at a time then open the `MDaemon.ini` file and change the `MaxAccountManagerEntries=500` key to whatever value that you prefer.

Account Status Icons

✓	Full access account. Both POP and IMAP access are enabled.
✓	Restricted access account. Either POP or IMAP access is disabled.
✓	Restricted access account. Both POP and IMAP access are disabled.
✗	Disabled account. All access to the account is disabled.
●	System Account. This is the MDaemon system account.

Show only accounts from this domain
Choose "All Domains" from this drop-down list box to display all MDaemon accounts. Choose a specific domain to show only that domain's accounts.

New
Click this button to open the Account Editor in order to create a new account.

Edit
Select an account from the Account List and then click this button to open it in the account editor.

Delete
Select an account from the Account List and then click this button to delete it. You will be asked to confirm you decision to delete the account before MDaemon will proceed.

Show more accounts
The account list will only display 500 accounts at a time. If there are more than 500 accounts in the domain that you have chosen then click this button to display the next 500. See the note above for instructions on how to increase the maximum number of accounts that may be displayed.

Top
Click this button to quickly move to the top of the Account List.

Import
This opens the OPEN dialog from which you can choose a text file to import accounts from. This button is identical to the **Accounts→Import→From a text file…** menu selection.
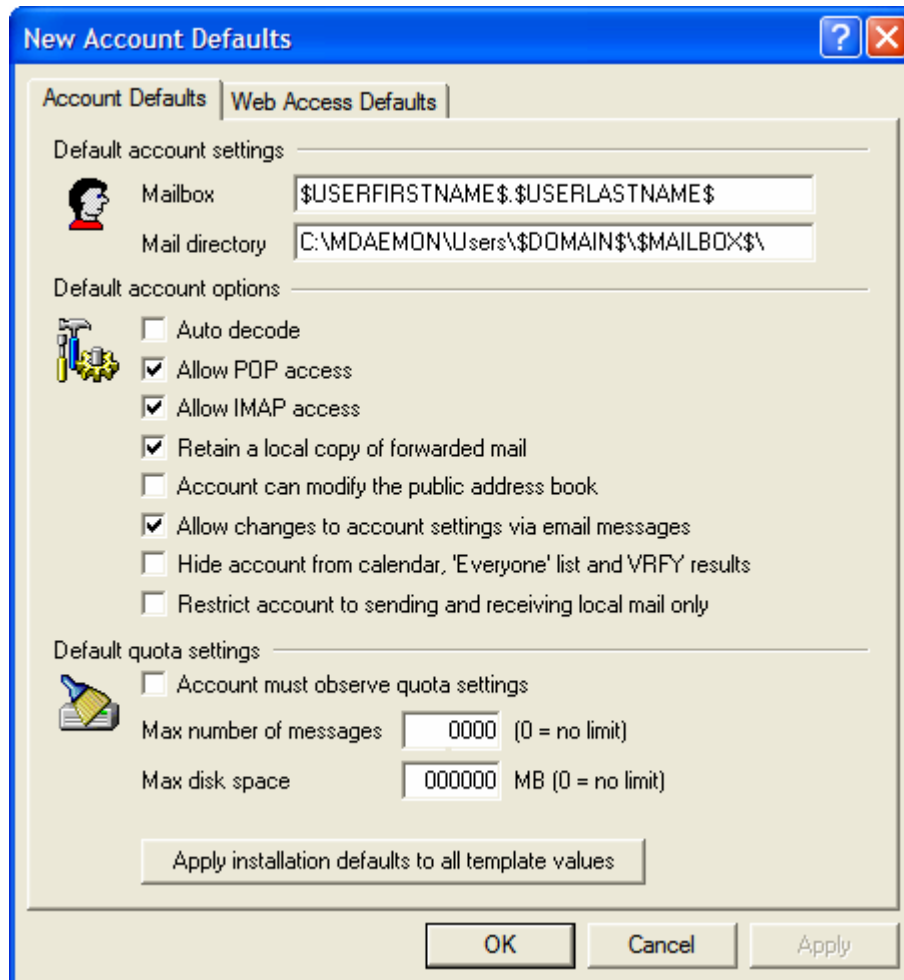
New account defaults

Click this button to open the New Account Defaults dialog. See page 328 for more information.

Creating an MDaemon User Account

Create a new MDaemon user account by clicking the new account button on the toolbar or **New** on the Account Manager. This will open the Account Editor for configuring the account. You can designate default settings for new accounts by using the New Account Defaults dialog (page 328).

New Account Defaults

Use the **Accounts→New Account Defaults...** menu selection to edit your Account Defaults and Web Access Defaults.

Account Defaults

Account Defaults contains various account setting controls and template strings. Templates make it possible for you to specify default values for common user account components. The various string values associated with accounts such as *Mailbox* and *Mail directory* can be constructed using a variety of special macros that will be replaced by actual values when an account is being created or imported. Use of these templates can greatly simplify and automate new account management.

Default Account Settings

Mailbox

Use this field to specify a default Mailbox name template for new accounts. In addition to being the Mailbox, this value will be the name passed in the USER POP command, which enables access to a mailbox from a remote location or POP aware mail clients. See *Macros* below for a list of the Macros that can be used in this template string. "$USERFIRSTNAME$.$USERLASTNAME$" is the default template

for this option. So, creating an account for Frank Thomas under the example.com domain would result in his mailbox being set to "`Frank.Thomas@example.com`".

Mail directory

Use this field to specify a default mail directory for new accounts. These directories are where the actual mail files delivered to the mailbox will be stored. Care must be taken to ensure that once expanded, the template provided here will form a valid file path.

Note

MDaemon supports a basic system for directory hashing. Under NTFS, for example, keeping multiple directories under the same root can cause performance problems. To reduce this problem you can use the new macro $MAILBOXFIRSTCHARSn$ where "n" is a number between 1 and 10. This will expand to the first "n" characters of the mailbox name. Changing your default mail directory template to something like the following will achieve a decent directory hashing system:

```
D:\MailboxRoot\$MAILBOXFIRSTCHARS4$\$MAILBOXFIRSTCHARS2$\$MAILBOX$\
```

Default Account Options

These switches are used for designating default values for various account settings. For more information on these switches, see **Account Editor**—page 334.

Default Quota Settings

These controls are used for designating default values for a new account's quota settings. For more information on these controls, see **Account Editor**—page 334.

Apply Installation Defaults to All Template Values

Clicking this button will cause the options on this tab to be reset to their original installation default settings.

Template Macros

Below is a quick reference to the macros available for automating your account setup.

$DOMAIN$	This variable will resolve to the domain name selected for the account.
$DOMAINIP$	This variable will resolve to the IP associated with the domain currently selected for the account.
$MACHINENAME$	This macro returns the machine name field from the Domain tab of the Primary Domain dialog. The macro is now used in the default account information script (ACCTINFO.DAT) for new installations.
$USERNAME$	This variable resolves to the full first and last name of the account holder. This field is equivalent to "$USERFIRSTNAME$ $USERLASTNAME$"
$USERFIRSTNAME$	This variable resolves to the first name of the account holder.
$USERLASTNAME$	This variable resolves to the last name of the account holder.
$USERFIRSTINITIAL$	This variable resolves to the first letter of the account holder's first name.
$USERLASTINITIAL$	This variable resolves to the first letter of the account holder's last name.
$MAILBOX$	This variable resolves to the mailbox name of the current account. The value will also used as the POP user name used in POP3 mail sessions. This is the value expected in the USER command during POP session handshaking.

⬛ Web Access Defaults

The Web Access Defaults dialog is used for designating the default access rights that new accounts will have for WorldClient and WebAdmin. You can designate whether or not accounts will be able to access their email via WorldClient and whether or not users will be able to configure their accounts via WebAdmin. In addition, if you are granting access to WebAdmin, you can control which settings that accounts will be allowed to edit.
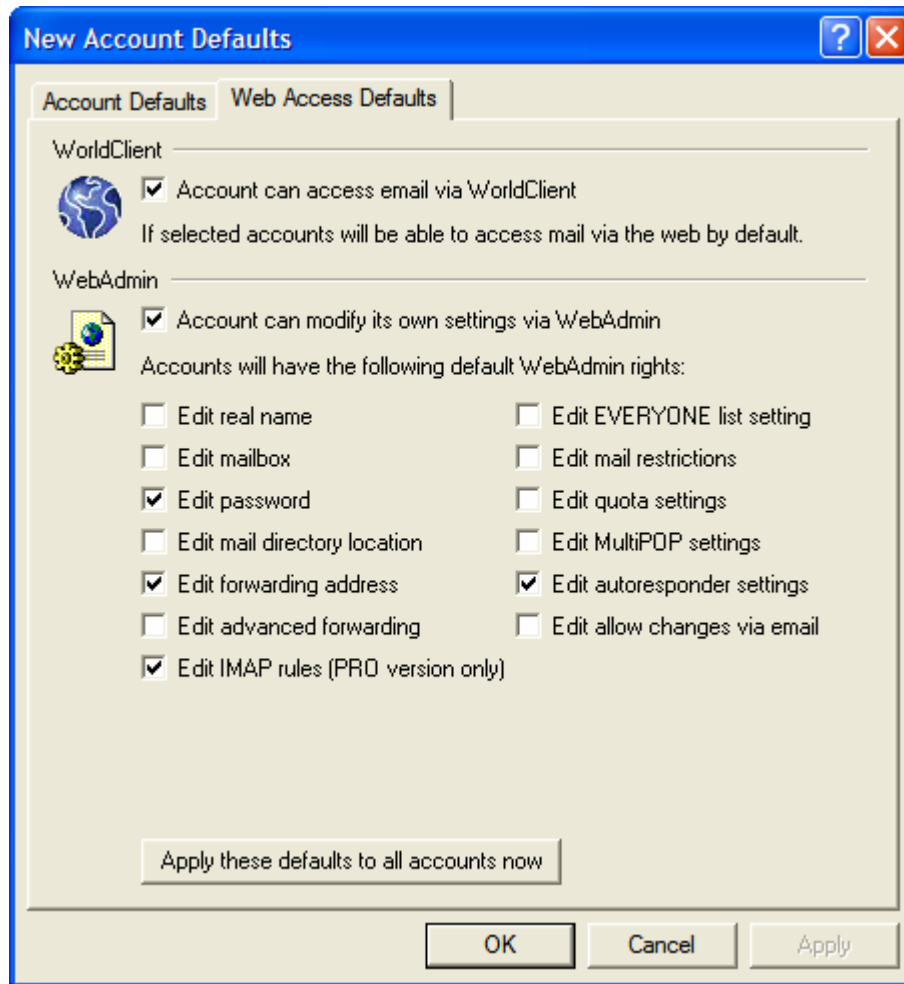
Web-based Mail Access Defaults

Account can access email via WorldClient
Enable this checkbox if you would like new accounts to be able to access the WorldClient server, which enables them to check their email via a web browser.

Web-based Remote Configuration Defaults

Account can modify its own settings via WebAdmin
Enable this feature if you want to grant MDaemon users permission to modify their account settings via WebAdmin. They will only be able to edit those settings that you designate on this dialog.

When this feature is enabled, and the WebAdmin server is active, users will be able to log in to WebAdmin using their browser by pointing it to **http://mdaemonsdomain.com:Port**. They will first

be presented with a logon screen and then a screen that contains the settings that they have been given permission to edit. All they need to do is edit whatever settings they choose and then click the *Save Changes* button. They can then close their browser; there is no need to logoff or do anything further.

Accounts that have been given administrative permission (designated on the individual account's Web tab) will see a different screen after they log in to WebAdmin. For a discussion on the administrative options within WebAdmin, see the WebAdmin section.

By default, accounts can do the following via WebAdmin:

Edit real name
Enabling this feature will allow users to modify their *Real Name* setting.

Edit mailbox
Enabling this feature will allow the user to modify the name of his or her *mailbox*.

Note

Because the *mailbox* setting is equivalent to the account's email address, changing it means that the user will be changing his or her actual email address, which could result in any future messages directed to the old address being rejected, deleted, or the like.

Edit password
Click this checkbox if you wish to allow users to modify their *POP Password*.

Edit mail directory location
This control is used to give users permission to modify the location of their *Message Directory*.

Note

You should exercise caution in granting this permission to users. Giving users the ability to change their mail directory could effectively give them access to any directory on your system.

Edit forwarding address
When this feature is enabled users will be able to modify their forwarding address settings.

Edit advanced forwarding
When this feature is enabled users will be able to modify their *Advanced Forwarding Options*.

Edit IMAP rules (PRO version only)
Use this control to enable users to create and manage their own IMAP Mail Rules (see page 354). This feature is only available in MDaemon PRO.

Edit EVERYONE list setting
This feature allows users to control whether or not they will be included on MDaemon's EVERYONE *Mailing List*.

Edit mail restrictions

This checkbox controls whether or not accounts will be able to edit their "local mail only" settings.

Edit quota settings

Click this checkbox if you wish to allow accounts to modify their quota settings.

Edit MultiPOP settings

Click this switch if you wish users to be able to enable and disable MultiPOP collection.

> **Note**
>
> This permission doesn't grant users the ability to create, delete, or edit MultiPOP entries in any way. MultiPOP entries must be created by the administrator using the MDaemon interface. This feature is for allowing users to control whether or not MultiPOP Mail Collection for their account is turned on.

Edit autoresponder settings

Click this checkbox if you want users to be able to add, edit, or delete AutoResponders for their account.

Edit allow changes via email

Click this checkbox if you wish to allow users to modify their *Account Settings* via specially formatted email messages.

Apply these defaults to all accounts now

Click this button to cause these default settings to be applied to all MDaemon accounts. Any alternate settings that have been specified under individual accounts will be lost; the Web settings of all current MDaemon users will be changed to the settings specified here.

Chapter

20

Account Editor

Using MDaemon's Account Editor to create and edit accounts.

The Account Editor contains all settings specific to MDaemon accounts. It is used for creating new user accounts and for editing existing accounts. When creating a new account, most fields will be automatically filled in while typing the Real Name of the user. This auto-generated information is based on the templates and settings found in New Account Defaults (page 328).

See:

Account Editor

Account

Personal Information

Full name
Enter the user's first and last name here. When setting up a new mail account, the templates are reapplied each time the value in this field is changed. Real names cannot contain "!" or "|".

POP/IMAP Account Information

Mailbox
This field specifies a unique name for the mailbox, and is also used as the account's POP/IMAP logon. In addition, the Mailbox must be unique and cannot contain spaces. After entering the name of the mailbox, click the drop-down list box and choose the domain to which this account's mailbox will apply. MDaemon's Primary Domain will appear in this control by default. Mailbox names cannot contain "!" or "|".

Password

Enter an account password in this field. Below the field you will see a short statement that will tell you whether or not Dynamic NT Authentication is being used for the account (see page 364).

Note

You should always provide a Password even if you do not wish to allow POP/IMAP access to the mail account. In addition to mail session verification, user and password values are used to allow remote account manipulation and remote file retrieval. If you wish to disallow POP/IMAP access, use the *Disable POP and IMAP access for this account* option. If you wish to disallow all access, then use the *Disable all access to this account* option.

Disable all access to this account

Click this option if you wish to disable all access to the account. The user will not be able to access the account by any means, nor will MDaemon accept mail for it. MDaemon will operate as if the account doesn't exist. It will, however, still count toward the number of accounts used in your license's account limit.

Enable POP access

Clear this check box if you do not want the user to be able access his or her account via POP. The account may still be accessed via IMAP, WorldClient, or WebAdmin if those options are enabled for the account.

Enable IMAP access

Clear this check box if you do not want the user to be able access his or her account via IMAP. The account may still be accessed via POP, WorldClient, or WebAdmin if those options are enabled for the account.

Enable Outlook Connector support for this account

Click this option if you wish to allow the account to share Microsoft Outlook folders using Outlook Connector for MDaemon. **Note:** this option will only be available when Outlook Connector is installed.
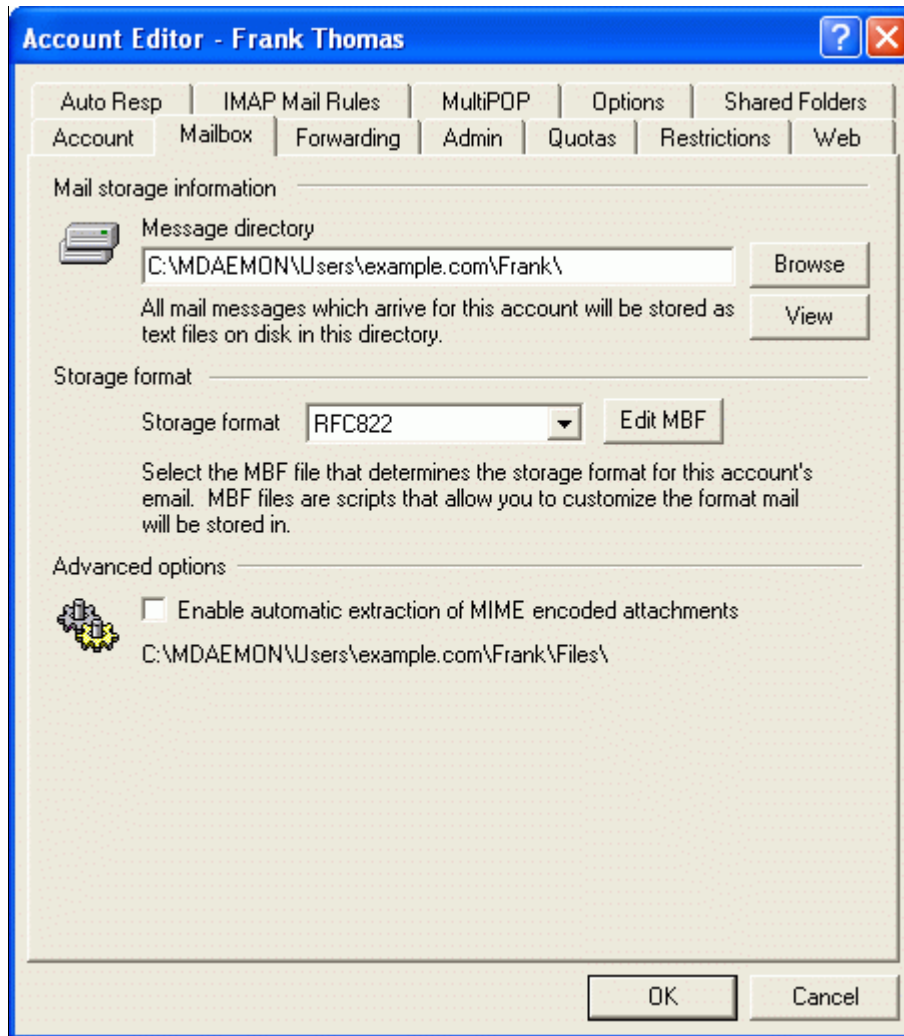
Notes/Comments on this Account

Use this text area for detailing any notes or comments regarding the account.

Aliases

Aliases

Click this button to open the Alias Editor, which will have the current account displayed and any aliases assigned to the account listed. You can use this dialog to edit previously configured aliases or create new ones.

🗿 Mailbox

Mail Storage Information

Message directory
Enter the directory where inbound mail messages destined for this account's mailbox should be placed.

Storage Format

Storage format
This window allows you to attach an MBF to the mailbox message directory. MBF files provide a method of mail system compatibility which may be useful in integrating your existing mail system with MDaemon. For a complete discussion of MBF files and how to construct them see **Creating and using MBF files** .

Edit MBF
This button will allow easy editing of the account's MBF file.

Advanced Options

Enable automatic extraction of MIME encoded attachments
If set, this switch causes MDaemon to automatically extract any Base64 MIME embedded file attachments found within incoming mail messages. Extracted files are removed from the incoming mail message, decoded, and placed in the account's *File Directory*, or in some other directory if you have enabled the Attachment Linking feature (see page) and designated an alternate directory. A notice is placed within the textual portion of the mail message in place of the encoded data which states where the file was placed and what the file name is. If Attachment Linking is enabled then an html hyperlink will appear in the message that can be used to download the file. This feature is extremely useful for mail transport systems and clients that do not have built in MIME capability or that require encoded parcels to be extracted and placed in separate directories from the textual portions of the mail message before being submitted into the mail stream.

Users who access their accounts through mail clients such as Eudora or Microsoft Outlook or Outlook Express may not wish to use this option since those more powerful email clients can properly handle MIME Base64 encoded attachments.

For more information on the new Attachment Linking feature, see: **Attachment Linking**—page 107.

👤 Forwarding

Mail Forwarding Options

This account is currently forwarding mail
This switch governs whether or not mail will be forwarded to the address specified in the *Forwarding Address* field.

Forwarding address(es)
This field allows you to specify an address where copies of all inbound mail messages destined for this account will be automatically forwarded once they arrive at the server and are delivered to the account's local mail directory. A copy of each new message arriving at the server will be automatically generated and forwarded to the address specified in this field provided the *This Account Is Currently Forwarding Mail* switch is selected.

Retain a local copy of forwarded mail
If the account is forwarding mail to another address it may not be necessary for MDaemon to retain a copy of the message in the users local mailbox. This switch governs that action.

Advanced Forwarding Options
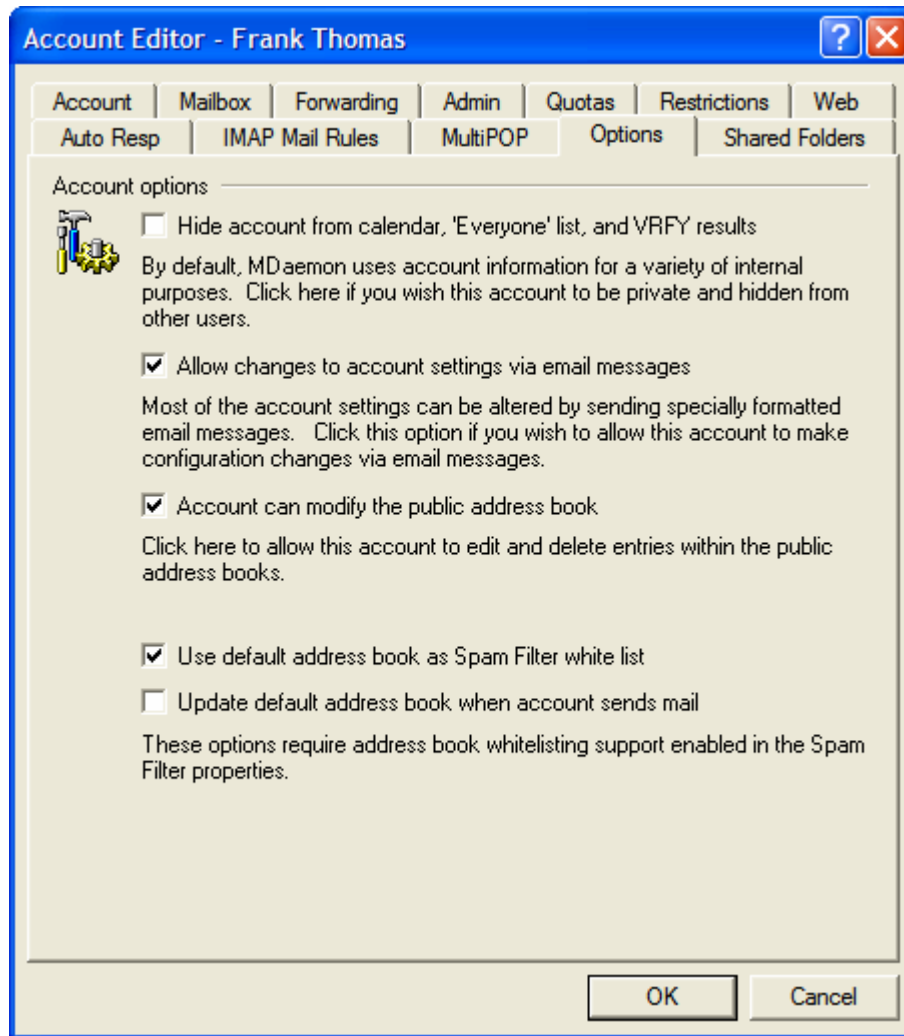
**Forward the message to this host**

If a mail host is specified here the forwarded message will be delivered to it rather than to the domain specified by the value found in the _Forwarding Address_ field.

**Use this address in SMTP envelope**

If an address is specified here, this address will be used in the SMTP "Mail From:" statement used during the session handshaking with the accepting host. Normally, the sender of the message is used in this portion of the SMTP envelope. If you require an empty SMTP "Mail From:" command (looks like this: MAIL FROM <>) then enter "[trash]" into this control.

**Use this TCP port**

MDaemon will send this message on the TCP port specified here rather than the default SMTP outbound port.

Options

Account Editor - Frank Thomas

| Account | Mailbox | Forwarding | Admin | Quotas | Restrictions | Web |

| Auto Resp | IMAP Mail Rules | MultiPOP | Options | Shared Folders |

Account options

☐ Hide account from calendar, 'Everyone' list, and VRFY results

By default, MDaemon uses account information for a variety of internal purposes. Click here if you wish this account to be private and hidden from other users.

☑ Allow changes to account settings via email messages

Most of the account settings can be altered by sending specially formatted email messages. Click this option if you wish to allow this account to make configuration changes via email messages.

☑ Account can modify the public address book

Click here to allow this account to edit and delete entries within the public address books.

☑ Use default address book as Spam Filter white list

☐ Update default address book when account sends mail

These options require address book whitelisting support enabled in the Spam Filter properties.

OK   Cancel

Account Options

Hide account from calendar 'EVERYONE' list, and VRFY results
MDaemon automatically maintains a mailing list called MasterEveryone@primary-domain.com that can be used to address every account on the server. It also maintains lists for each secondary domain called Everyone@users-domain.com that can be used to address all users of specific domains. By default MDaemon will include all accounts of all domains when it constructs the MasterEveryone list, and all accounts of the each separate domain for the individual Everyone lists. Click this checkbox if you want the account to be private and hidden from these lists. This will also hide the account from the calendar system and VRFY results.

By default, users are added to the MasterEveryone list in "Read Only" mode. If you want them to be added in "normal" mode then change the following key in the MDaemon.ini file located in MDaemon's \app\ subfolder to the following setting:

    MasterEveryoneListReadOnly=No (default setting is Yes)

If you wish to completely disable the Master Everyone list feature then change the following

`MDaemon.ini` setting to the following value:

```
[Special]
CreateMasterEveryoneList=No (default setting is Yes)
```

Allow changes to account settings via email messages
This switch determines whether the user has access to account variables through remote email messages. This feature allows the user to perform common account maintenance such as changing passwords or mail directories by sending specially formatted mail messages to the server. For a complete discussion on remote account manipulation see **Remote Server Control Via Email** .

Account can modify the public address book
Click this option if you want the account to be able to add and delete entries from the WorldClient or LDAP-based public address books.

> ✋ **Caution!**
>
> If the Account is synchronizing folders with ComAgent then modifications could be propagated to all users. Exercise caution when enabling this feature.

### *Use default address book as Spam Filter white list*
The Spam Filter's White List (auto) tab contains a global option that can be used to cause Spam Filter processing to be skipped when the sender of a message is found in the local recipients default address book file. This option controls that feature for this specific account. If you have enabled the Spam Filter's global option but do not wish to apply address book white listing to this MDaemon user, then clear this check box.

Note: Keeping your address book updated and synchronized with WorldClient, the Windows Address Book, and other MAPI mail clients that use the Windows Address Book, can be easily done using ComAgent.

Update default address book when account sends mail
Click this option if you wish to add to this account's address book all non-local email addresses to which it sends mail. When used in conjunction with the option to use the default address book file as the white list, the number of Spam Filter false positives can be drastically reduced. The option "*Enable automatic address book updating*", located on the Spam Filter dialog's White List (auto) tab, must be enabled before you can use this feature.

Note: This option is disabled when the account is using an auto-responder.
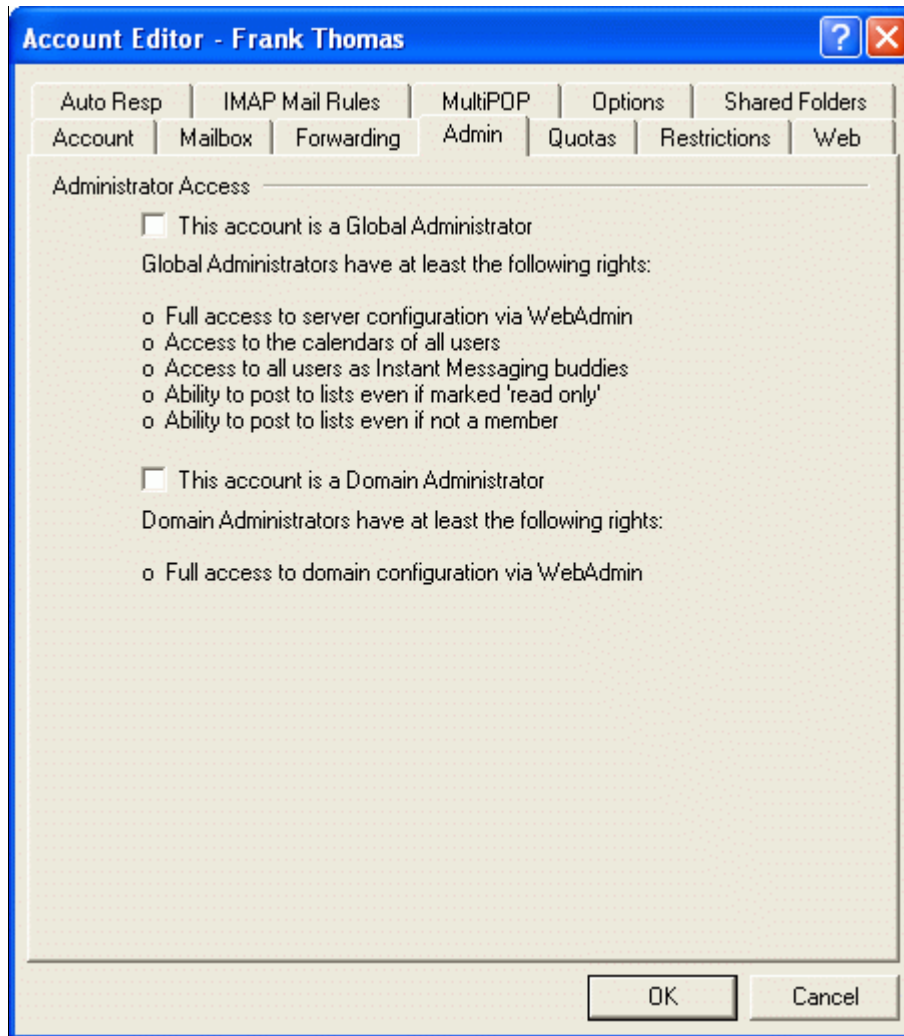
 Admin

Administrator Access

*This account is a Global Administrator*
Enable this checkbox to grant the user server-level administrative access. Users with server level administrative access have:

- Full access to server configuration, all users, and all domains via WebAdmin

- Access to all calendars of all users

- Access to all MDaemon users of all MDaemon domains as Instant Messaging buddies.

- The ability to post to all mailing lists even if flagged as "Read Only".

- The ability to post to all mailing lists even if not a member.

The user will have complete access to MDaemon's files and options. For a discussion on the administrative options within WebAdmin, see the WebAdmin section.

This account is a Domain Administrator

Click this checkbox to designate the user as a Domain Administrator. Domain Administrators are similar to global or server level admins except that their administrative access is limited to the domain to which they belong. For more information on Domain Administrators see the WebAdmin section.

� Quotas
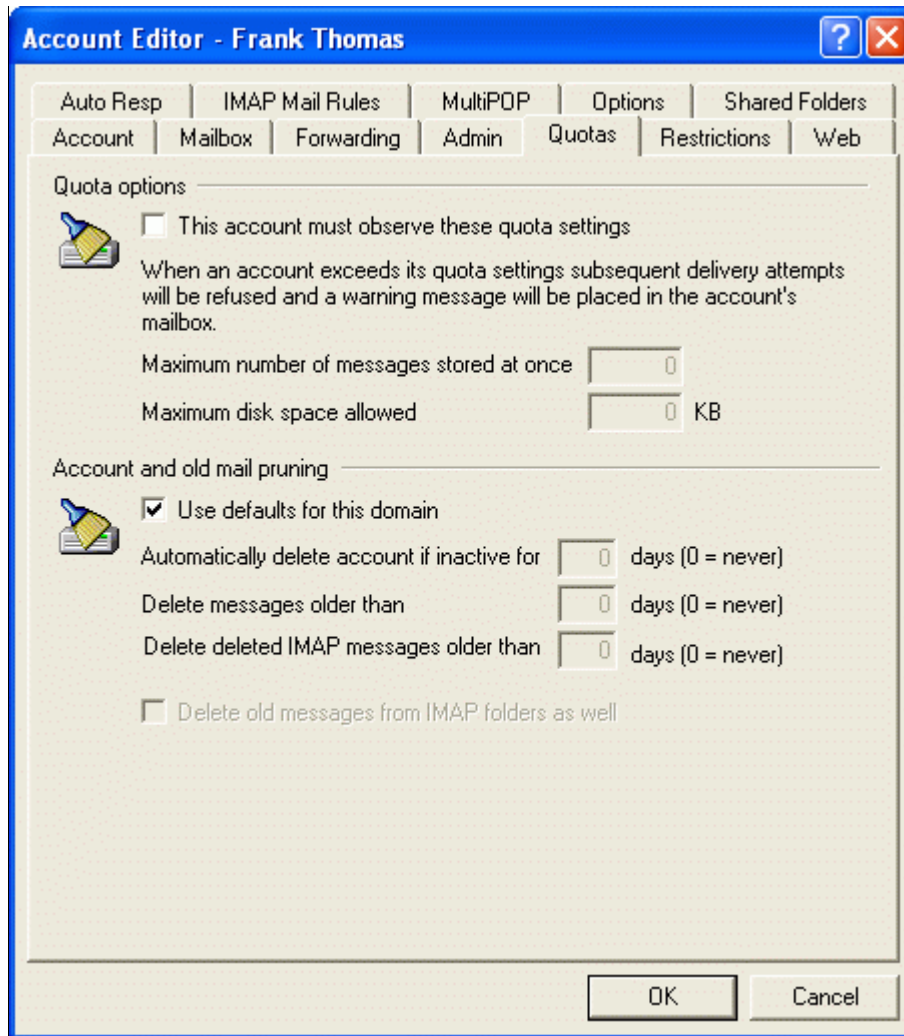
Quota Options

This account must observe these quota settings

Here you can specify the account's maximum number of allowable messages and the maximum amount of disk space (in kilobytes) that the account can consume (this includes any decoded file attachments in the account's *File Directory*). If a mail delivery to the account is attempted which would exceed the maximum messages limit or the maximum disk space allocated then the message is forwarded to the postmaster along with an appropriate warning. If a MultiPOP collection would exceed the account's maximum a similar warning is issued and the account's MultiPOP entries are automatically switched off (but not removed from the database).

Account and Old Mail Pruning

The controls in this section are used to designate when or if this account will be deleted by MDaemon if it becomes inactive. You can also designate whether or not old messages belonging to the account will be deleted after a certain time period. Each day at midnight, MDaemon will remove all messages that have exceeded the time limits stated, or it will delete the account completely if it has reached the inactivity limit. The default controls for these settings are located in the Primary Domain Configuration (page 60) and

Secondary Domains (page 67) dialogs, but the controls on this tab can be used instead if you want this account's settings to override the domain defaults.

Use defaults for this domain
If you want to use the default Account and Old Mail Pruning settings for the domain to which this account belongs then click this checkbox. The default settings are located on either the Primary Domain Configuration (page 60) or Secondary Domains (page 67) dialog, depending on which type of domain the account belongs to.

Automatically delete account if inactive for XX days (0 = never)
Specify the number of days that you wish to allow the account to be inactive before it will be deleted. A value of "0" in this control means that the account will never be deleted due to inactivity.

Delete messages older than XX days (0 = never)
A value specified in this control is the number of days that any given message may reside in the account's mailbox before it will be deleted by MDaemon automatically. A value of "0" means that messages will never be deleted due to their age.

### Delete deleted IMAP messages older than XX days (0 = never)
Use this control to specify the number days that you wish to allow IMAP messages that are flagged for deletion to remain in this user's folders. Messages flagged for deletion longer than this number of days will be purged. A value of "0" means that messages flagged for deletion will never be purged due to their age.

Delete old messages from IMAP folders as well
Click this checkbox if you want the "*Delete messages older than…*" control to apply to messages in IMAP folders as well. When this control is disabled, messages contained in IMAP folders will not be deleted, regardless of their age.

Note

When old messages are pruned, rather than actually delete them, MDaemon will move them to the "…\BADMSGS\[Mailbox]\" folder where they can be manually deleted later by the administrator or a nightly process. This only applies to pruned old messages – when an account is pruned, it will be deleted along with its messages instead of moved. See AccountPrune.txt in the "…MDaemon\App\" folder for more information and command line options.

Restrictions
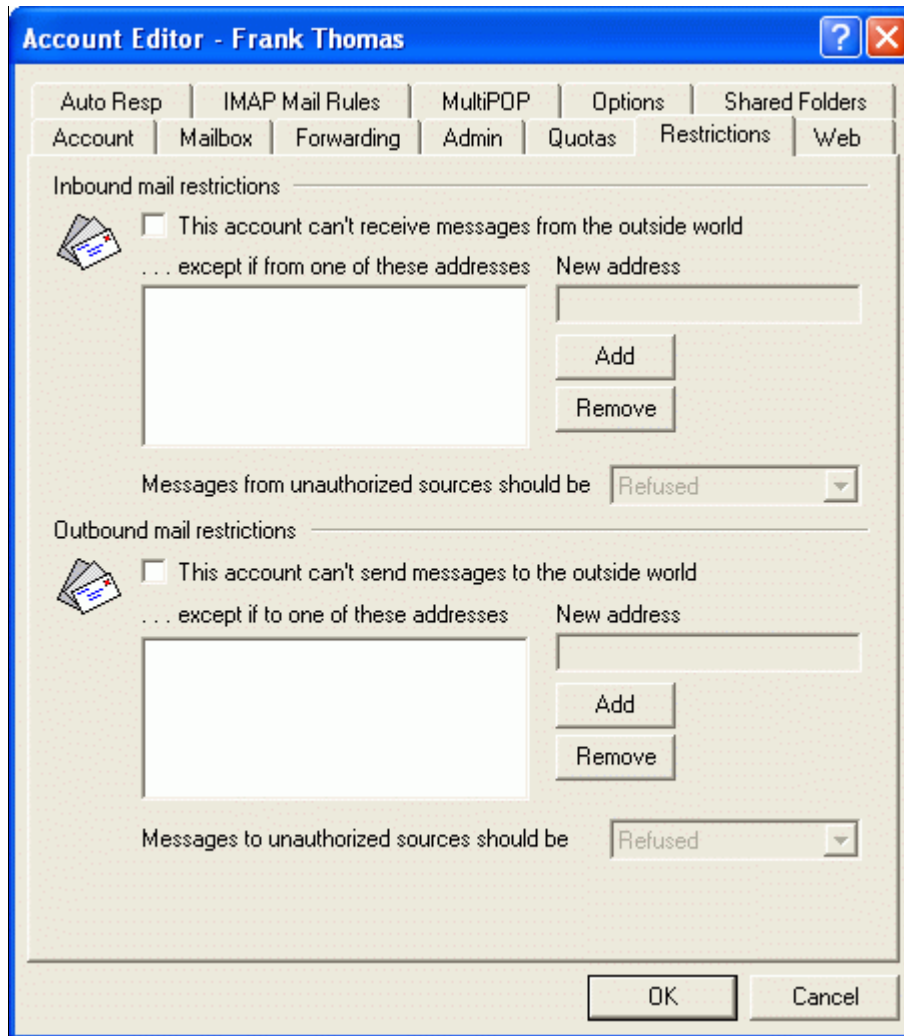
Use the controls on this tab to govern whether or not the displayed account will be able to send or receive mail to or from non-local domains (domains located somewhere other than your Local Area Network). There is a switch on the New Account Defaults dialog (page 328) for designating whether or not new accounts will have this restriction enabled by default.

Inbound Mail Restriction

This account can't receive messages from the outside world
Click this checkbox if you want the displayed account to be prevented from receiving email messages from non-local domains.

…except if from one of these addresses
Addresses specified in this area are exceptions to the Inbound Mail restriction. Wildcards are permitted. Thus if you designated "*@altn.com" as an exception then all inbound messages from any address at altn.com would be accepted and delivered to the account.

New address
If you wish to add an address exception to the Inbound Mail Restrictions list then type it here and click the add button.

Add
After entering an address into the *New address* control, click this button to add it to the exceptions list.

Remove
If you wish to remove an address from the restrictions list, select the address and then click this button.

Messages from unauthorized sources should be…
The options in this drop-down list box govern what MDaemon will do with messages that are destined for this account but originate from a non-local or otherwise unauthorized domain. You may choose any of the following options:

Refused – Restricted messages will be refused by MDaemon.

Returned to sender – Messages from restricted addresses will be returned to the sender.

Sent to postmaster – Messages that are restricted will be accepted but delivered to the postmaster instead of this account.

Outbound Mail Restriction

This account can't receive messages to the outside world
Click this checkbox if you want the displayed account to be prevented from sending email messages to non-local domains.

…except if from one of these addresses
Addresses specified in this area are exceptions to the Outbound Mail restriction. Wildcards are permitted. Thus if you designated "*@altn.com" as an exception then all outbound messages to any address at altn.com would be delivered normally by MDaemon.

New address
If you wish to add an address exception to the Outbound Mail Restrictions list then type it here and click the add button.

Add
After entering an address into the *New address* control, click this button to add it to the exceptions list.

Remove
If you wish to remove an address from the restrictions list, select the address and then click this button.

Messages to unauthorized sources should be…
The options in this drop-down list box govern what MDaemon will do with messages that originate from this account but are destined for a non-local or otherwise unauthorized domain. You may choose any of the following options:
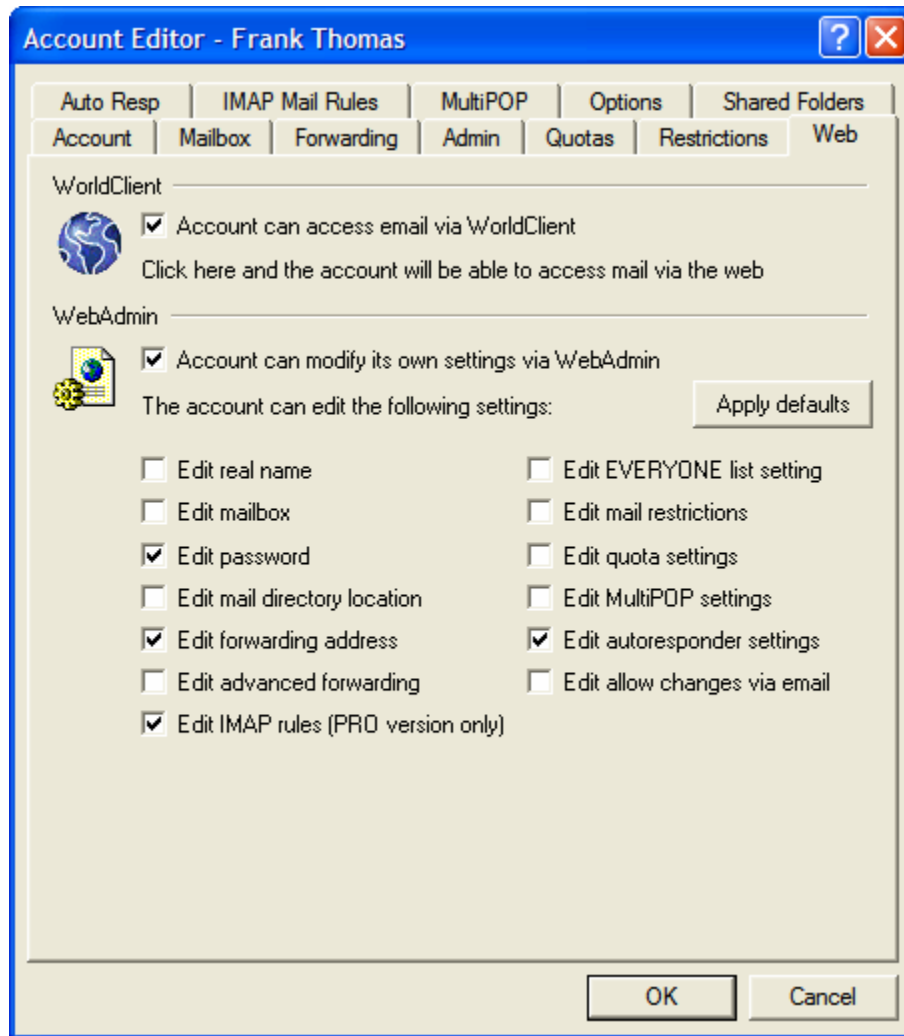
Refused – Messages to unauthorized addresses will be refused by MDaemon.

Returned to sender – Messages from restricted addresses will be returned to the sender.

Sent to postmaster – Messages that are restricted will be accepted but delivered to the postmaster instead of the designated recipient.

Web

Web-based Mail Access

Account can access email via WorldClient
Enable this checkbox if you want the account to be able to access the WorldClient server, which enables them to check their email using a web browser.

Web-based Remote Configuration Permissions

Account can modify its own settings via the WebAdmin
Enable this feature if you wish to grant the MDaemon user permission to modify their account settings via WebAdmin. They will only be able to edit those settings that you enable below.

When this feature is enabled and the WebAdmin server is active, users will be able to log in to WebAdmin using their browser by pointing it to **http://mdaemonsdomain.com:Port**. They will first be presented with a logon screen and then a screen that contains the settings that they have been given permission to edit. All they need to do is edit whatever settings they choose and then click the *Save changes* button. They can then logout and close their browser.

If the user has been given Global or Domain Administrative permission (designated on the Admin tab) they will see a different screen after they log in to WebAdmin. For a discussion on the administrative options within WebAdmin, see the WebAdmin section.

Edit real name
Enabling this feature will allow the user to modify their *Real Name* setting.

Edit mailbox
Enabling this feature will allow the user to modify the name of his or her *mailbox*.

> **Note**
>
> Because the *mailbox* setting is equivalent to the account's email address, changing it means that the user will be changing his or her actual email address, which could result in any future messages directed to the old address being rejected, deleted, or the like.

Edit password
Click this checkbox if you wish to allow the user to modify their *Account Password.*

Edit mail directory location
This control is used to give the user permission to modify their *Message Directory* location.

> **Caution!**
>
> You should exercise caution in granting this permission to users. Giving users the ability to change their mail directory could effectively give them access to any directory on your system.

Edit forwarding address
When this feature is enabled, the user will be able to modify their forwarding address settings.

Edit advanced forwarding
When this feature is enabled, the user will be able to modify their *Advanced Forwarding Options.*

Edit IMAP rules (PRO version only)
Use this control to enable users to create and manage their own IMAP Mail Rules (see page 354). This feature is only available in MDaemon PRO.

Edit EVERYONE list setting
This feature allows the user to control whether or not they will be included on MDaemon's EVERYONE *Mailing List.*

Edit quota settings
Click this checkbox if you wish to allow the account to modify their quota settings.

Edit MultiPOP settings
Click this switch if you wish the user to be able to enable and disable MultiPOP collection.

This control doesn't grant the user the ability to create, delete, or edit MultiPOP entries in any way. MultiPOP entries must be created by the administrator using the MDaemon interface. This feature is for allowing users to control whether or not MultiPOP Mail Collection for their account is turned on.

Edit autoresponder settings
Click this checkbox if you want the user to be able to add, edit, or delete AutoResponders for their account.
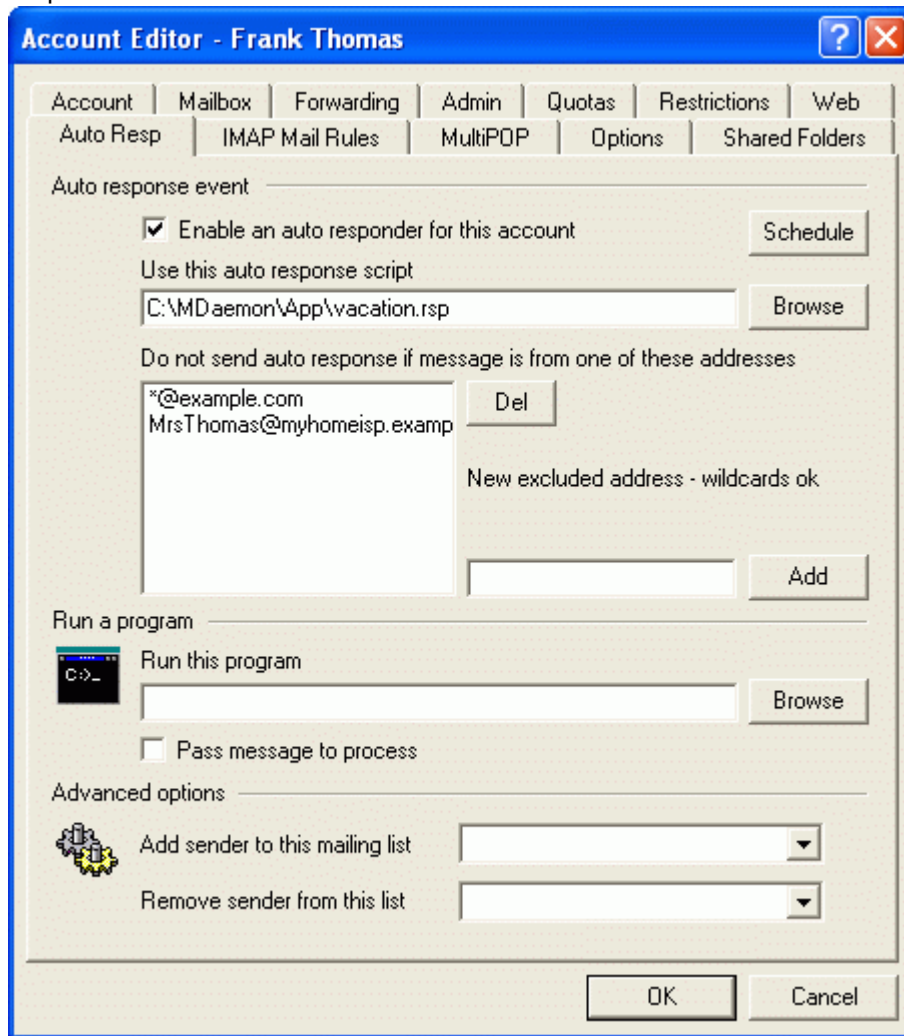
Edit allow changes via email
Click this checkbox if you wish to allow the user to modify their *Account Settings* via specially formatted email messages.

Apply defaults
Click this button to cause the default settings designated on the Web Access Defaults dialog (page 330) to be applied to this MDaemon account. Any alternate settings that have been specified on this individual's account will be replaced by the Web Access Defaults settings.

Auto Responder

Auto Response Event

Enable an auto responder for this account
Enable this control to activate an auto responder for the account. For more information on auto responders see:

> **Auto Responders and MBF Files**—page 375

Use this auto response script
This field specifies the full path and filename of the response file (`*.RSP`) that will be processed and dispatched to the message sender. This file will first be passed through the filtering mechanism associated with MBF files. Any template string available for use in an MBF file will also be available for use in an auto-response file.

See:
> **Creating Auto Response Scripts**—page 380
> **Creating and Using MBF Files**—page 381

Schedule
Click this button to open the Schedule dialog on which you can set a start and end date and time for the Auto Responder to be active. Leave the Schedule blank if you want the Auto Responder to be active continually.

Do not send auto response if message is from one of these addresses
Here you can list addresses that you wish to be excluded from responses initiated by this Auto Responder.

Note

Occasionally Auto Response messages may be sent to an address that returns an Auto Response of its own. This can create a "ping-pong" effect causing messages to be continually passed back and forth between the two servers. You can use this feature to prevent an MDaemon Auto Responder from sending responses to one or more of these addresses by entering them here.

Del
Click this button to delete selected entries from the list of excluded addresses.

New excluded address—wildcards okay
If you wish to add an address to the list of excluded addresses enter it here and then click the *Add* button.

Add
After entering an address in the *New Excluded Address* text box, click this button to add it to the list of excluded address.

Run a Program

Run this program
This field specifies the full path and filename to a program that will be launched when new mail arrives at the specified mailbox. Care must be taken to ensure that this process terminates properly and can run unattended. Optional command line parameters can be entered immediately following the executable path if desired.

Pass message to process

Select this option and the process specified in the *Run This Process* field will be passed the name of the triggering message as the first available command line parameter. Note that by the time the message name is passed to the specified process the account's MBF file will already have been applied. This is useful in that applying an MBF can reformat the message into a consistent structure regardless of the source of the original message. When the auto responder is setup on an account which is forwarding mail to another location and **not** retaining a local copy in its own mailbox (see **Forwarding**—page 338) then this function will be disabled.

Note

By default, MDaemon will place the name of the message file as the last parameter on the command line. You can override this behavior by using the `$MESSAGE$` macro. Use this macro in place of where the message file name should be placed. This allows more flexibility in the use of this feature since a complex command line such as this will be possible:

```
logmail /e /j /message=$MESSAGE$ /q
```

Advanced Options

Add sender to this mailing list

If a mailing list is entered in this field then the sender of the mail message will be automatically joined to that mailing list. This is a very handy feature for building automatic lists.

Remove sender from this mailing list

If a mailing list is entered in this field then the sender of the mail message will be automatically removed from the specified mailing list.

Tip

Auto-Response events are always honored when the triggering message is from a remote source. For messages originating locally, whether or not an Auto Responder will but triggered is contingent upon a setting on the **Miscellaneous Options** dialog (page 288). The control is: *Auto Responders are triggered by Local as well as Remote Traffic*. Enable the control if you want Local mail to trigger an auto response.

IMAP Mail Rules
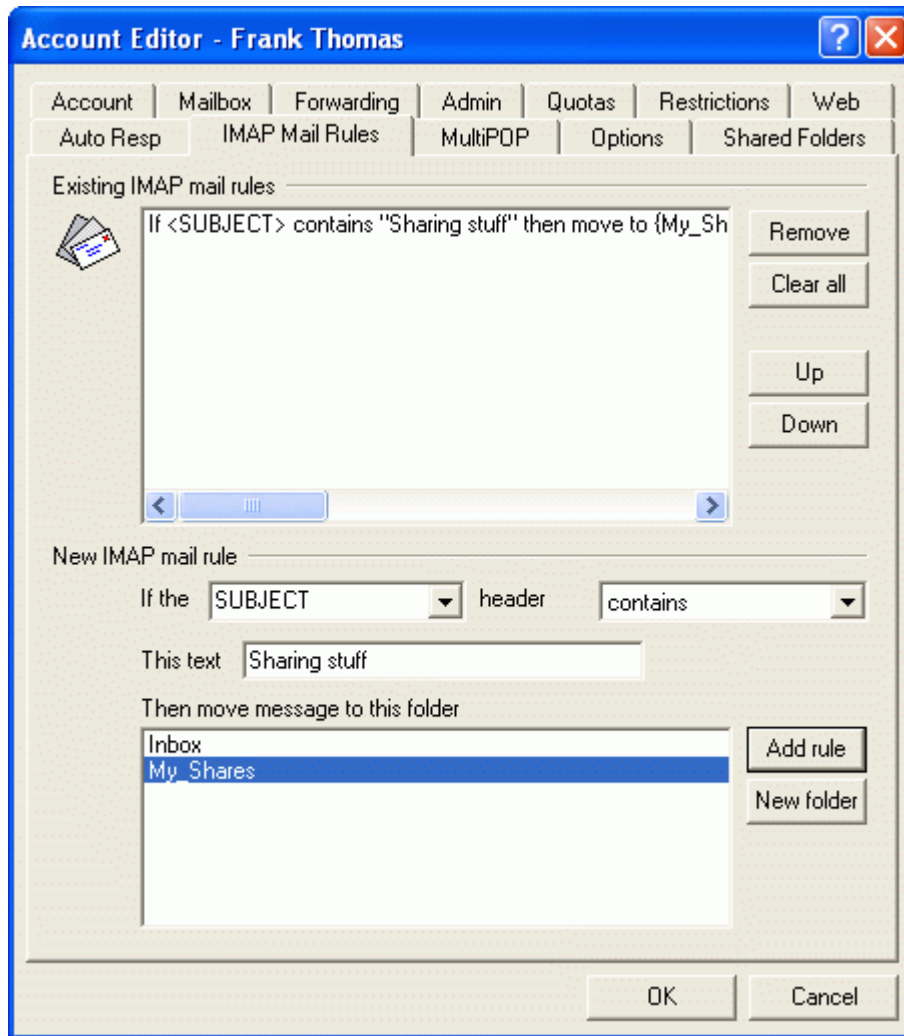
With MDaemon, IMAP users can have their mail routed automatically to specific folders on the server. Similar to the Content Filters, MDaemon will examine the headers of each message and then compare them to rules. When a message for the account holder matches one of their rules, MDaemon will move it to the folder specified in that rule. This method is much more efficient (for both the client and server) than attempting to filter the messages at the client, and since some IMAP clients do not even support message rules or filtering, IMAP Mail Rules provides this functionality to them.

IMAP Mail rules and messages folders can be created directly on the server via the IMAP Mail Rules tab of the Account Editor. They can also be created by the users themselves via specially formatted email messages (see page 460). Support for managing IMAP Mail Rules has also been added to WebAdmin. By simply logging in to WebAdmin with their browser they can manage their own account rules and settings that you have given them permission to manage. Thus, by using WebAdmin you can give your users total control over their own rules and avoid having to manage those functions for them.

Existing IMAP Mail Rules

This box displays the list of all rules that have been created for the user's account. Rules are processed in the order in which they are listed until a match is found. Therefore, as soon as a message matches one of

the rules it will be moved to the folder specified in that rule and then rule processing for that message will cease. Use the Up and Down buttons to move rules to different positions in the list.

Remove
Click a rule in the list and then click *Remove* to delete it from the list.

Clear all
Clicking this button will delete all of the user's IMAP Mail Rules.

Up
Click a rule in the list and then click this button to move it to a higher position in the list.

Down
Click a rule in the list and then click this button to move it to a lower position in the list.

New IMAP Mail Rule

Use the controls in this section to create new IMAP Mail Rules for the users.

If the [message header] header
Type a message header into this box or choose one from the drop-down list. MDaemon will search this header in all of the account's incoming messages for the text contained in the "*This text*" control below. Then, based upon the type of comparison being made, it will determine which messages should be moved to the rule's specified folder.

Comparison drop-down list box

This is the type of comparison that will be made when a message's headers are compared to the IMAP Mail Rule. MDaemon will search the specified header for the text contained in the "*This text*" field and then proceed based upon this control's setting—does the header's complete text match exactly, not match exactly, contain the text, not contain it at all, start with it, and so on.

This text
Enter the text that you want MDaemon to search for when scanning the message header that you have specified for the rule.

Then move message to this folder
After specifying the various parameters for the rule, click the folder that you want messages matching it to be moved to and then click the *Add rule* button to create it.

New folder
Click this button to create a new folder. This will open the Create Folder dialog on which you will assign a name for the folder. If you want it to be a subfolder of an existing folder then choose the folder from the drop-down list.

👤 MultiPOP
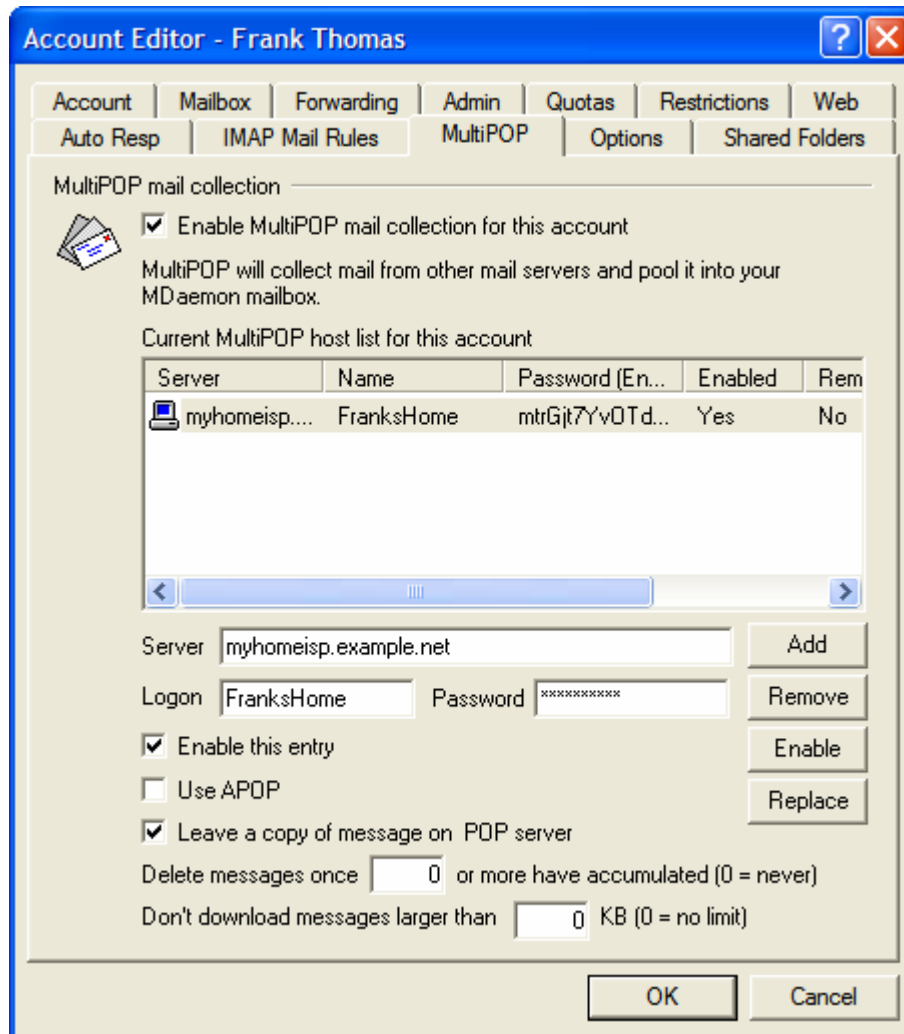
The MultiPOP feature (located on the Account Editor) allows you to script an unlimited number of POP host/user/password combinations for collection of mail messages from multiple sources. This is useful for your users who have mail accounts on multiple servers but would prefer to collect and pool all their email together in one place. Before being placed in the user's mailbox, MultiPOP collected mail is first placed in the local queue so that it can be processed like other mail having auto responders and Content filters applied to it.

MultiPOP Mail Collection

Enable MultiPOP mail collection for this account
This switch must be enabled for MultiPOP processing to occur for the account.

Server
Enter the POP3 server from which you wish to collect mail. Additionally, if you wish to specify a port to collect the mail from other than MDaemon's current default POP port, you can do so by appending a new port value to the host name separated by a colon. For example, using "`mail.altn.com`" as a MultiPOP host will connect to that host using the default outbound POP port while using "`mail.altn.com:523`" will connect to that host on port 523.

Logon
Enter the POP3 USER or LOGON name that accesses the mail account on the specified server.

Password
Enter the POP3 or APOP password used for accessing the mail account on the specified server.

Use APOP
Click this checkbox is you want the MultiPOP entry to use the APOP method of authentication when retrieving mail from its corresponding host.

Leave a copy of message on POP server
Click this checkbox if you want to leave a copy of collected messages on the server. This is useful when you plan to retrieve these messages again at a later time from a different location.

Delete messages once [xx] or more have accumulated (0 = never)
This is the number of messages that MultiPOP will leave on the remote POP server. Any further messages will be deleted from the server when you collect them. The oldest messages are the ones that will be stored. For example, if you specify "200" in this option then the oldest 200 messages will remain in the remote server's mailbox. Each time MultiPOP is used to collect mail from that server those messages will remain, but any further messages will be downloaded and deleted. Specify "0" if you do not wish to delete any messages, regardless of the number stored.

> **Note**
>
> Some ISP's limit the number of messages that may be stored so you should check with them about any restrictions that may apply to your account.

Don't download messages larger than [XX] KB (0 = no limit)
Enter a value here if you wish to limit the size of messages that may be downloaded.

Remove
Click this button to remove the selected MultiPOP entries from the list.

Enable/disable
Clicking this button toggles the state of the selected MultiPOP entries. This switch gives you control over whether MDaemon will collect mail for this entry or skip over it when it performs its MultiPOP processing.
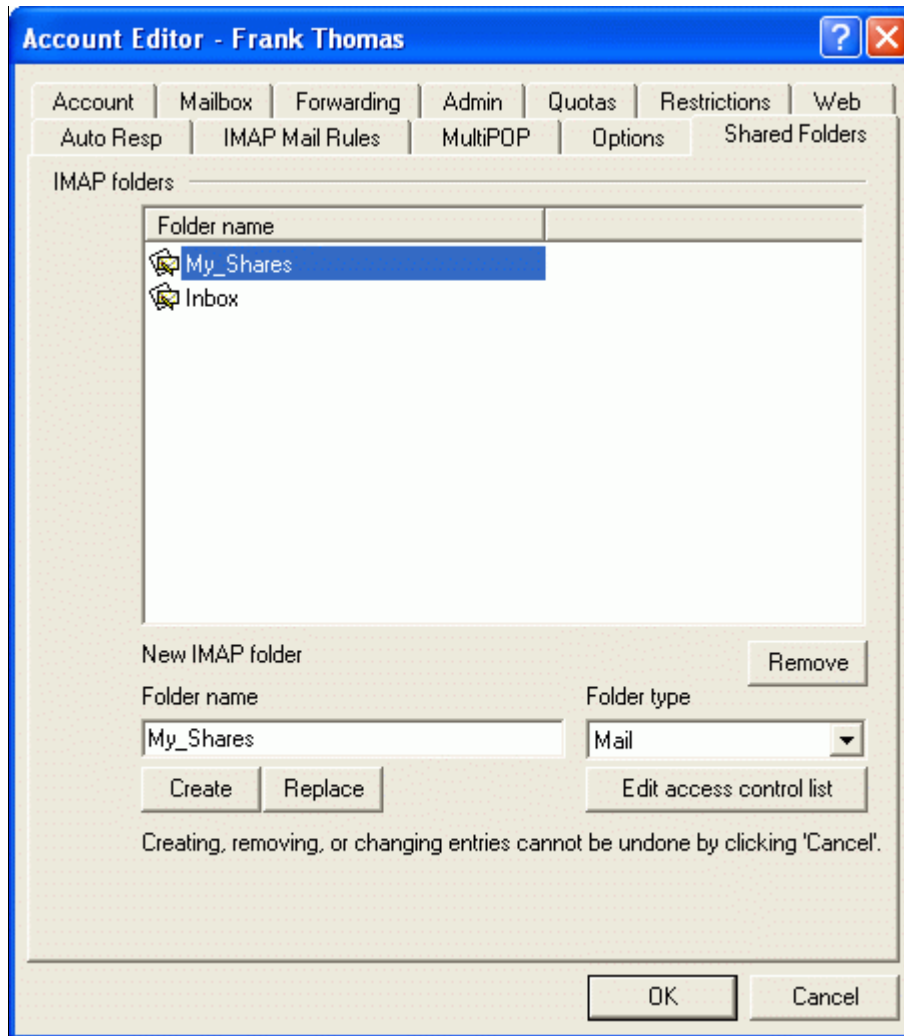
Add
Press this button to add your values to the list of MultiPOP records.

Replace
When an entry is selected from the list it will be presented for editing. After making any desired changes, click this button to apply them.

🦊 Shared Folders

Note: This tab is only available when the *Enable user folder sharing* option is enabled on the Shared Folders dialog (click Setup→Shared folders…, or press Ctrl+F).

IMAP Folders

This area displays all of the user's IMAP Folders and can be used to share access to them with other MDaemon users. When the account is first created, this area will be empty until you use the *Folder name* and *Create* options (or the options on the IMAP Mail Rules tab) to add a folder to it. Subfolders in this list will have the folder and subfolder names separated by the delimiter character designated on the Shared Folders tab of the Shared Folders dialog (click Setup→Shared folders…→Shared Folders).

Remove
To remove a Shared IMAP folder from the list, select the desired folder and then click the Remove button.

New IMAP Folder

<u>Folder name</u>

To add a new folder to the list, specify a name for it in this control and click *<u>Create</u>*. If you want the new folder to be a subfolder of one of the folders in the list, then prefix the new folder's name with the parent folder's name and the delimiter character designated on the Shared Folders tab of the Shared Folders dialog. For example, if the delimiter character is '/' and the parent folder is "My Folder" then the new subfolder name would be "My Folder/My New Folder". If you don't want it to be a subfolder then name the new folder "My New Folder" without the prefix.

<u>Create</u>

After specifying a folder's name click this button to add the folder to the list.

<u>Replace</u>

If you wish to edit one of the Shared Folders, click the entry, make the desired change, and then click *Replace*.

<u>Edit access control list</u>

Choose a folder and then click this button to open the Access Control List dialog for that folder. Use the Access Control List dialog to designate the users that will be able to access the folder and the permissions for each user.

Access Control List
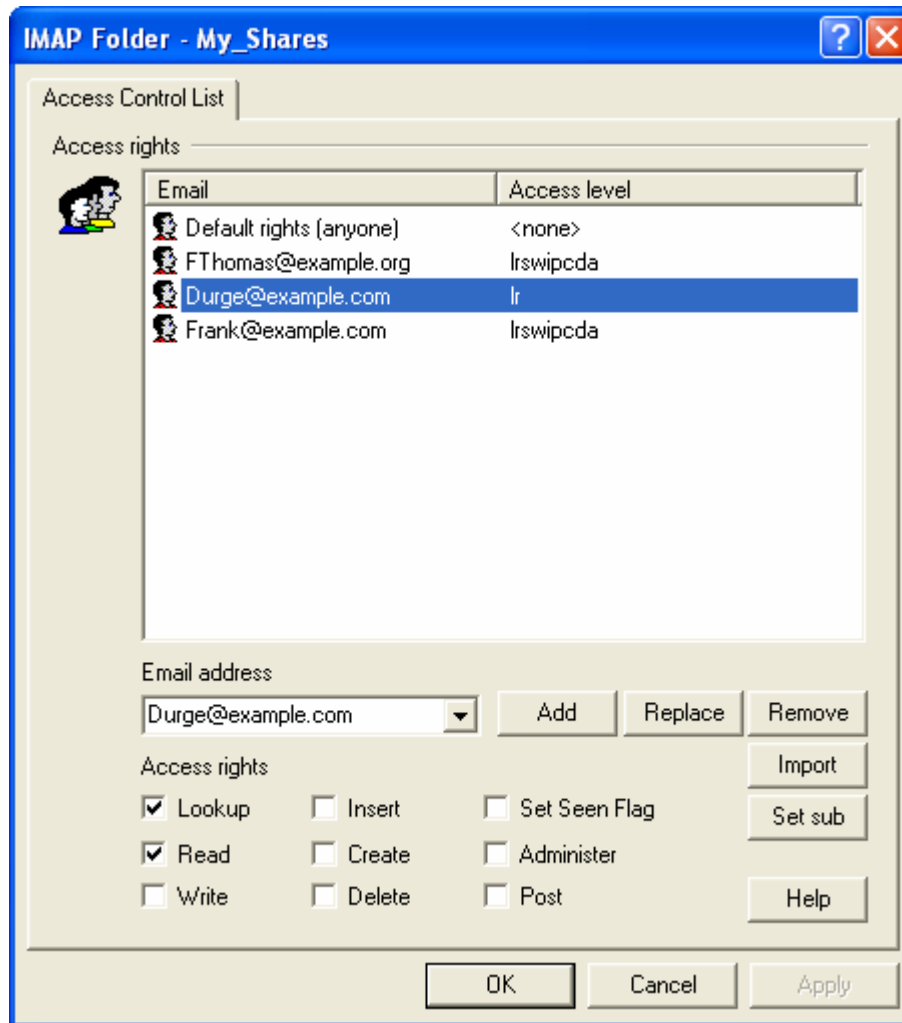
Access Rights

This area is for designating the MDaemon user accounts that you wish to grant access to the shared folder, and for setting the access permissions for each one. You can reach this dialog from the Shared Folders tab of the Account Editor (click Accounts→Account Manager...→User Account→Shared Folders). Double-click the desired folder, or click the folder and then click *Edit access control list*, to open the Access Control dialog for that folder. Each entry lists the email address of the account and a one letter Access Level abbreviation for each Access Right that you grant to the user.

Email address
From the drop-down list, choose the MDaemon account that you wish to grant access to the shared folder.

Add
After choosing an Email Address from the list, and the access rights that you wish to grant to the user, click *Add* to add the account to the list.

Replace

To modify an existing Access Rights entry, select the entry, make any desired changes to the Access Rights, and then click *Replace*.

Remove

To remove an entry from the Access Rights list, select the desired entry and then click *Remove*.

Import

With the *Import* feature you can add the members of an existing Mailing List to the list of users with Access Rights. Choose the access rights that you wish to grant to the users, click Import, and then double-click the desired list. All of the list's members will be added to the list with the rights that you set.

Access Rights

Choose the rights that you wish to grant to individual users by clicking the desired options in this area and then clicking *Add* for new entries or *Replace* for existing entries.

You can grant the following Access Control Rights:

> **Lookup (l)** – user can see this folder in their personal list of IMAP folders.
>
> **Read (r)** – user can open this folder and view its contents.
>
> **Write (w)** – user can change flags on messages in this folder.
>
> **Insert (i)** – user can append and copy messages into this folder.
>
> **Create (c)** – user can create subfolders within this folder.
>
> **Delete (d)** – user can delete messages from this folder.
>
> **Set Seen Flag (s)** – user can change the read/unread status of messages in this folder.
>
> **Administer (a)** – user can administer the ACL for this folder.
>
> **Post (p)** – user can send mail directly to this folder (if folder allows).

Help

Click *Help* to display a list of the access rights and their definitions.

Importing Accounts

Importing user accounts into MDaemon.

M Daemon supports multiple methods of importing user accounts. They may be imported from a SAM database, an SLMail user database, or directly from a text file. MDaemon's import features are reached from the <u>Accounts</u>→<u>I</u>mporting... menu selection.

Importing Accounts From a Text File

Click the **Accounts→Importing…→Import accounts from a comma delimited text file…** menu selection to access this account generation feature. It can also be reached by clicking the *Import* button on the Account Manager (page 325). This is a simple method for importing and automatically generating mail accounts. MDaemon will read a text file and generate new mail accounts using as little as just the first and last names of the user. If you are careful to setup your account template strings properly (see **New Account Defaults**—page 328) you can generate unique accounts using only the first and last names, but you can also include many other options for specific user settings if you want to override the new account defaults. All fields must be separated by commas.

Each line of the comma delimited text file must contain only a single entry. The first line must be a base line giving the names and sequence of the fields in subsequent lines. A sample file would look something like this:

```
"Mailbox", "FullName", "MailDir", "AllowAccess"
"arvel", "Arvel Hathcock", "C:\Mail\Arvel\", Y
"frank", "Frank Thomas", "C:\Mail\Frank\", N
```

Note

The field names in the base line are used by MDaemon to determine the data sequence and can therefore appear in any order. Each of the field names must be in quotes.

All "String" values must be contained in quotes, and a "bool" field value is considered FALSE unless the first char is: y, Y, 1, t, or T.

First, middle, and last names are acceptable in each full name. However, you may not use commas in them.

After running the import process, MDaemon will create TXIMPORT.LOG, detailing the

import results and listing which accounts imported successfully and which failed. Typical reasons why an account might not be imported would include a conflict with an existing account's mailbox, name, or directory information, a conflict with an existing alias to an account, or a conflict with a mailing list name.

See the description of the `MD_ImportUserInfo()` and the `MD_ExportAllUsers()` within the `MD-API.HTML` file located in your `\API\` directory, for more information on the field mappings.

Use the following values in the base line to map to MDaemon account fields:

Field Name	Type
MailBox	string
Domain	string
FullName	string
MailDir	string
Password	string
AutoDecode	bool
IsForwarding	bool
AllowAccess	bool
AllowChangeViaEmail	bool
KeepForwardedMail	bool
HideFromEveryone	bool
EncryptMail	bool
ApplyQuotas	bool
EnableMultiPOP	bool
MaxMessageCount	int
MaxDiskSpace	int
FwdAddress	string
FwdHost	string
FwdSendAs	string
FwdPort	string
NTAccount	string
MailFormat	string
AutoRespScript	string
AutoRespProcess	string
AddToList	bool
RemoveFromList	bool
PassMessageToProcess	bool
MaxUIDLCount	int
MaxMessageSize	int
RecurseIMAP	bool
MaxInactive	int
MaxMessageAge	int

MaxDeletedIMAPMessageAge	int
Comments	string
UserDefined	string

Windows Account Integration

MDaemon supports Windows Account integration. This support consists of a SAM/Active Directory import engine, which can be reached through the MDaemon menu selection Accounts→Importing…→Inport accounts from SAM/Active directory… Additionally, support for dynamic authentication of users is embedded into the MDaemon user management code. It is possible to specify a Windows domain in an account's password field and then MDaemon will dynamically authenticate such accounts in real-time, using the specified Windows domain's security system. Under such a scheme, changing the account's password in Windows user management will automatically update MDaemon. Therefore, your users will only have to remember one set of authentication credentials. This also makes for very easy account setup for new installations.

✋ Important!

The security context of the account running MDaemon **must** have the **SE_TCB_NAME** privilege (i.e. "To act as part of the Operating System"). If the process is a service running in the *Local System* account, it will have this privilege by default. Otherwise, it must be set in the Windows user manager for the account under which MDaemon is running.

SAM/Active Directory Account Importer
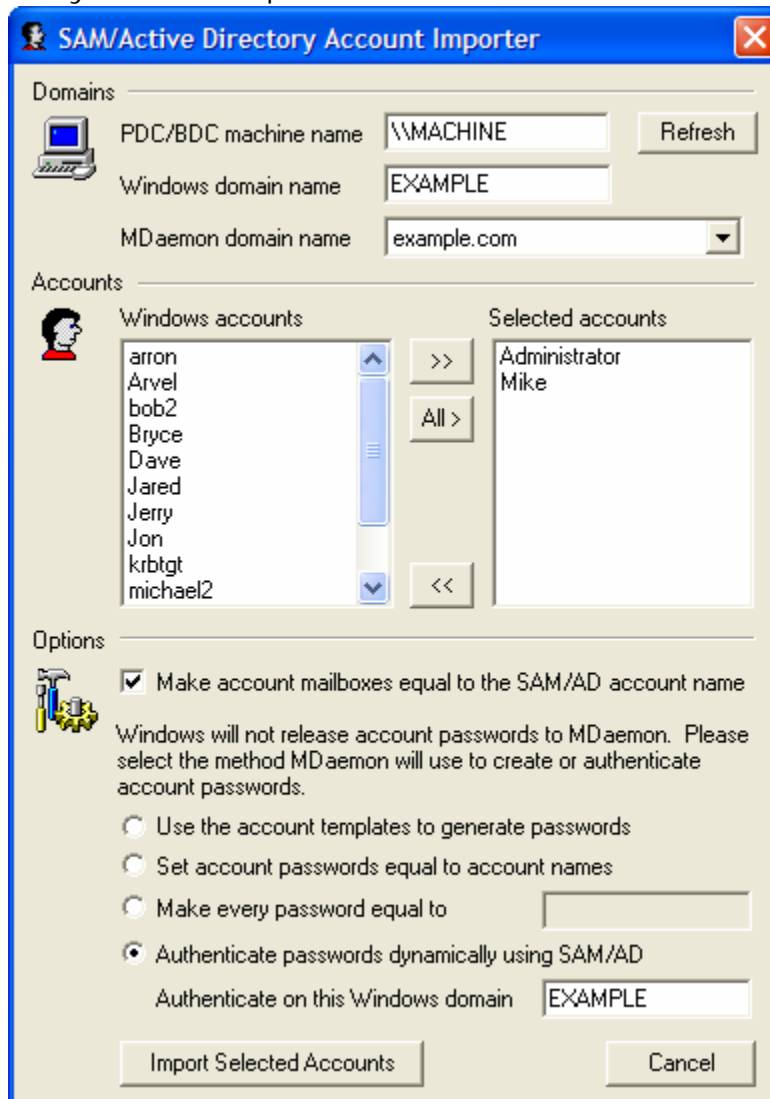
Domains

PDC/BDC Machine name
This field allows you to specify the machine name from which MDaemon will read Windows account database information. You can specify \\<DEFAULT> and MDaemon will read data from the local machine.

Refresh
Click this button to refresh the Windows Accounts listing.

Windows domain name
Type the Windows domain name from which you wish to import accounts.

MDaemon domain name
Choose from the drop-down list box the MDaemon domain into which the accounts will be imported.

Accounts

Windows accounts
This window contains a list of all the account names collected from the Windows account database.

Selected accounts
This window contains all the account names that you have selected and wish to import.

>>
Click this button to move the highlighted account names from the "Windows Accounts" window into the "Selected Accounts" window.

<<
Click this button to remove the highlighted entries from the "Selected Accounts" window.

Options

Make account mailboxes equal to the SAM/AD account name
Click this switch to force each imported user's Windows account name to be used as their Mailbox value. With this method, you will not need to worry about setting up the correct New Account Template macros (page 328).

Use the account template to generate passwords
This option causes MDaemon to generate passwords for imported accounts using the account template settings (see New Account Defaults—page 328).

Set account passwords equal to account names
This switch causes MDaemon to use the account name as the account password.

Make every password equal to…
This switch allows you to specify a static password value that will be used by all imported accounts.

Authenticate passwords dynamically using SAM/AD
This switch enables dynamic authentication of imported accounts. Rather than specifying a password MDaemon will simply authenticate the mail client supplied USER and PASS values using the Windows database in real-time.

Authenticate on this Windows domain
Enter the name of the Windows domain that MDaemon will use when authenticating connections dynamically. **This is not the machine name of the domain controller. It is the actual name of the Windows Domain.**

> **Note**
>
> When accounts are configured for dynamic authentication, the name of the Windows domain preceded by two backslash characters is used in the account's PASSWORD field and is stored unencrypted within the USERLIST.DAT file. For example, if an account is configured for dynamic authentication on a Windows domain called ALTN, the account's password field will contain the value \\ALTN. The two backslash characters preceding the domain name signify to MDaemon that the password field actually contains the name of a

Windows domain and that MDaemon should attempt to authenticate the USER and PASS values provided by the mail client using that domain's account database. For that reason you must not start a password with two backslash characters unless the account is configured for dynamic authentication as described above. In other words, you can't just have regular passwords that start with two backslashes. Passwords beginning with two backslashes are always assumed to be providing a Windows domain name and not a password.

Note

You may enter the two backslashes and Windows domain name combination into an account's password field in the regular Account Editor. You need not restrict yourself to using the importer in order to setup accounts for dynamic authentication.

Chapter

22

Address Aliases

Setting up Address Aliases.

T he **Accounts→Address Aliases…** menu selection is used to open the Alias Editor. The Alias Editor makes it possible for you to create "fictitious" mailbox names for your accounts or mailing lists, which is extremely useful when you want multiple mailbox names resolved to a single user account or list. For example, if Frank@altn.com handled all billing inquiries to your domain, but you wanted to tell everyone to send them to Billing@altn.com, then you could create an Address Alias so that messages addressed to Billing@altn.com would actually go to Frank@altn.com. Or, if you were hosting multiple domains and wanted all messages addressed to the Postmaster (regardless of the domain) to go to a single user, then you could create the alias "Postmaster@*=Henry@altn.com".

Because a "Postmaster" must exist at each Internet mail site, MDaemon will check your defined aliases at program startup and issue a warning if you have failed to create such an alias.

Aliases
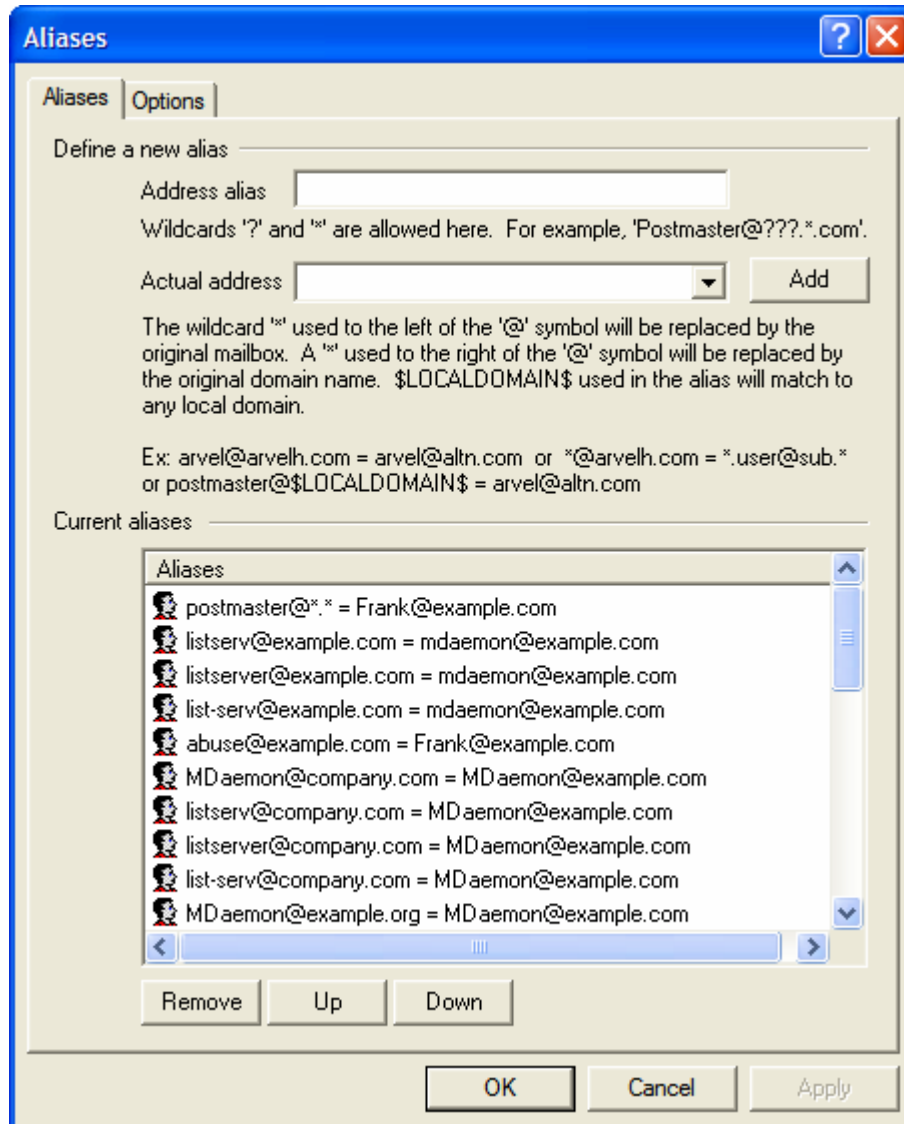
Define a New Alias

Address alias
Enter the email address that you wish to be an alias of the "*Actual address*" listed below. Wildcards of "?" and "*" are acceptable, and you can use "@$LOCALDOMAIN$" in the address alias as a wildcard that will match only your local domains. For example: "`frank@example.*`", "`*@$LOCALDOMAIN$`", or "`frank@$LOCALDOMAIN$`".

Actual address
Select an account from the drop-down list or type a new address or mailing list into this space. This is the actual address that will receive the message when it is addressed to a corresponding alias.

<u>*Add*</u>

Click the <u>*A*</u>*dd* button to register the account alias request. The contents of the *Address Alias* and *Actual Address* fields will be combined and placed in the *Current Aliases* window.

Current Aliases

This window contains all current Address Aliases that you have created.

<u>*Remove*</u>

Click this button to remove a selected entry from the *Current Aliases* list.

<u>*Up*</u>

Aliases are processed in the order in which they are listed. You can move an Alias to a higher position in the list by selecting it and then clicking this button.

<u>*Down*</u>

Aliases are processed in the order in which they are listed. You can move an Alias to a lower position in the list by selecting it and then clicking this button.

Options
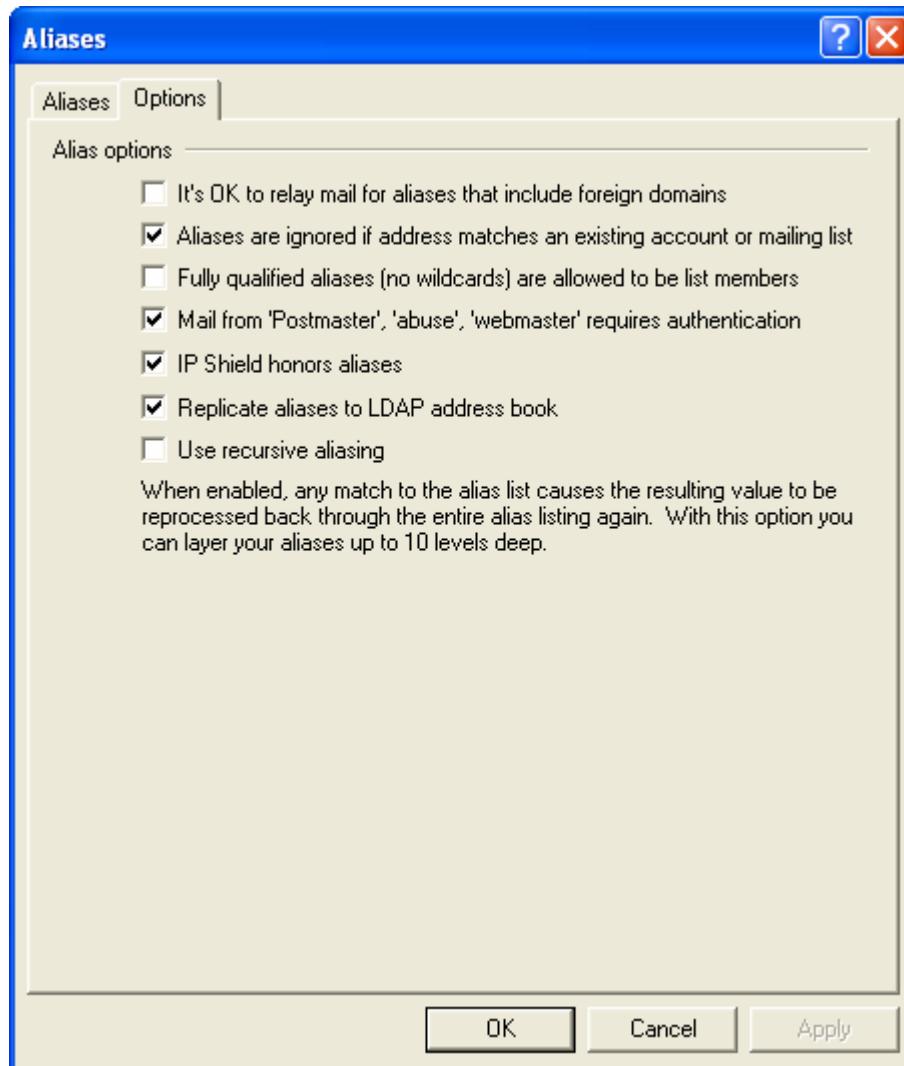
Alias Options

It's OK to relay mail for aliases that include foreign domains
Click this control if you want MDaemon to relay mail for Address Aliases regardless of your Relay Control settings (page 189).

Aliases are ignored if address matches an existing account or mailing list
Sometimes you may want to create an alias that will be applied to some addresses but not others when they match an existing account. For example: you could create an alias using a wildcard stating that "*@mycompany.com=me@mycompany.com" which would cause all messages containing "@mycompany.com" to go to "me@mycompany.com" even if the addresses matched existing accounts. But, with this control activated only addresses that didn't match an account would have that alias applied to them.

Fully qualified aliases (no wildcards) are allowed to be list members
Click this checkbox if you want to allow address aliases to be members of MDaemon mailing lists. Only actual accounts can be list members if this control is not enabled. Note: address aliases containing wildcards are not permitted to be list members even if this control is enabled.

Mail from 'Postmaster', 'abuse', 'webmaster' requires an authenticated session
Click this checkbox to require messages claiming to be from one of your "postmaster@...", "abuse@..." or "webmaster@..." aliases or accounts to be authenticated before MDaemon will accept them. Spammers and hackers know that these addresses might exist, and may therefore attempt to use one of them to send mail through your system. This option will prevent them and other unauthorized users from being able to do so. This option is also available on the SMTP Authentication tab in Security Settings (Sec**u**rity→IP S**h**ielding/AUTH/...→SMTP Authentication, or Ctrl+F8). Changing the setting here will be reflected there as well.

IP Shield honors aliases
Click this option if you want the IP Shield (Sec**u**rity→IP Shielding...) to honor address aliases when checking domain/IP address shields. If *IP Shield honors aliases* is clicked, the IP Shield will translate an alias to the true account to which it points and thus honor it if it passes the shield. Without this option enabled, the IP Shield will treat each alias as if it is an address independent of the account that it represents. Thus, if an alias' IP address violates an IP Shield then the message will be refused. This option is mirrored on the IP Shield editor—changing the setting here will be reflected on that dialog.

Replicate aliases to LDAP address book
Click this check box if you want aliases to be replicated to the LDAP address book. Alias replication is necessary for the remote LDAP verification feature to work reliably, but if you are not using that feature then replicating aliases to the LDAP address book is unnecessary. If you are not using remote verification then you can safely disable this feature to save processing time. For more information on remote LDAP verification see page 114.

Use recursive aliasing
Click this check box if you want to process aliases recursively. Any alias match causes the resulting value to be reprocessed back through the entire alias list—it is possible to nest aliases up to 10 levels deep. For example, you could set up something like this:

```
durge@example.com = frank@example.com
frank@example.com = x@x.com
x@x.com = dwimble@my-example.net
```

This is logically identical to the single alias:

```
durge@example.com = dwimble@my-example.net
```

It also means that:

```
frank@example.com = dwimble@my-example.net
```

Chapter

23

Auto Responders and MBF Files

Creating and Using Auto Responders and MBF Files.

A uto responders are useful tools for automating events to be triggered by an incoming email message. One popular use for auto responders is to send back a user-defined message to any person who sends an email to a user who will be unable to read it due to a vacation, illness, or some other circumstance. Using the auto-response mechanisms provided with MDaemon (located in **Accounts→Auto Responders…**), incoming mail can act as a trigger generating automated and personalized replies or as the cause of a server hosted process in which the message itself is passed as a command line parameter. Automated response message files (`*.RSP` files) can contain any template string available to an MBF file (page 381).

MBF or Mailbox Format Files are text files designed to allow cross compatibility with other email transport systems that can accept ASCII text files into their mail streams. MBF files are essentially templates that contain a set of special formatting macros that enable MDaemon to transform an RFC-822 message into a variety of other text-based formats. Using MBFs, MDaemon can be configured to automatically reformat incoming mail into specific alternatives on a per mailbox basis. When a message arrives for an MDaemon account, the account's MBF file is used to reformat the incoming data before distributing it to the user.

See **Creating Auto Response Scripts**—page 380 for more information on creating automated response message files to be used by Auto Responders.

See **Creating and Using MBF Files**—page 381 for more information on MBF files.

Auto Responders

Accounts
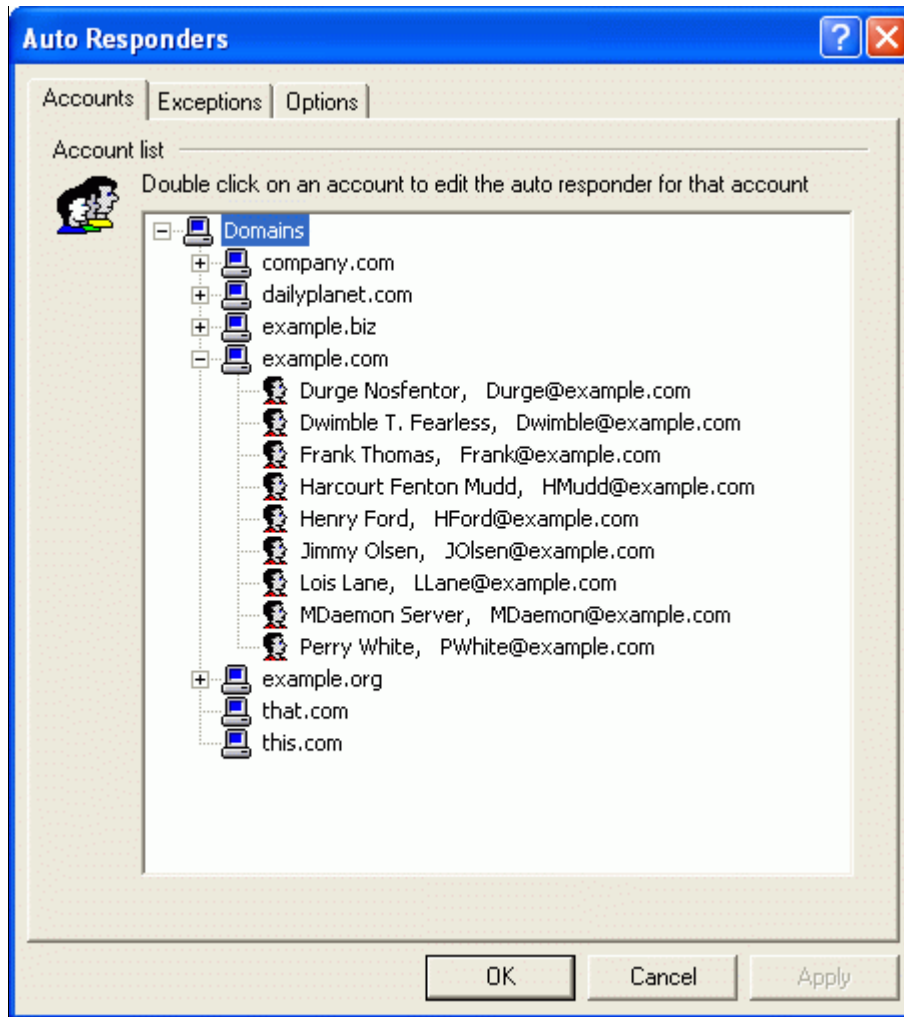
Account List

This control lists all available local mailboxes that can host an auto responder. Double-click an account in this list to open its corresponding Auto Resp dialog. Use the Auto Resp dialog, which is outlined below, to configure an auto responder for the account.

Auto Responders

Auto Response Event

Enable an auto responder for this account

Enable this control to activate an auto responder for the account. For more information on auto responders see:

> **Auto Responders and MBF Files**—page 375

Use this auto response script

This field specifies the full path and filename of the response file (`*.RSP`) that will be processed and dispatched to the message sender. This file will first be passed through the filtering mechanism associated with MBF files. Any template string available for use in an MBF file will also be available for use in an auto-response file.

See:
> **Creating Auto Response Scripts**—page 380
> **Creating and Using MBF Files**—page 381

Schedule
Click this button to open the Schedule dialog on which you can set a start and end date and time for the Auto Responder to be active. Leave the Schedule blank if you want the Auto Responder to be active continually.

Do not send auto response if message is from one of these addresses
Here you can list addresses that you wish to be excluded from responses initiated by this Auto Responder.

Note

Occasionally Auto Response messages may be sent to an address that returns an Auto Response of its own. This can create a "ping-pong" effect causing messages to be continually passed back and forth between the two servers. You can use this feature to prevent an MDaemon Auto Responder from sending responses to one or more of these addresses by entering them here.

Del
Click this button to delete selected entries from the list of excluded addresses.

Add
After entering an address in the *New Excluded Address* text box, click this button to add it to the list of excluded address.

New excluded address
If you wish to add an address to the list of excluded addresses enter it here and then click the *Add* button.

Run a Program

Run this program
This field specifies the full path and filename to a program that will be launched when new mail arrives at the specified mailbox. Care must be taken to ensure that this process terminates properly and can run unattended. Optional command line parameters can be entered immediately following the executable path if desired.

Pass message to process

Select this option and the process specified in the *Run This Process* field will be passed the name of the triggering message as the first available command line parameter. Note that by the time the message name is passed to the specified process the account's MBF file will already have been applied. This is useful in that applying an MBF can reformat the message into a consistent structure regardless of the source of the original message. When the auto responder is setup on an account which is forwarding mail to another location and **not** retaining a local copy in its own mailbox (see **Forwarding**—page 338) then this function will be disabled.

Note

By default, MDaemon will place the name of the message file as the last parameter on the command line. You can override this behavior by using the $MESSAGE$ macro. Use this macro in place of where the message file name should be placed. This allows more flexibility in the use of this feature since a complex command line such as this will be possible:

```
logmail /e /j /message=$MESSAGE$ /q
```

Add sender to this mailing list

If a mailing list is entered in this field then the sender of the mail message will be automatically joined to that mailing list. This is a very handy feature for building automatic lists.

Remove sender from this mailing list

If a mailing list is entered in this field then the sender of the mail message will be automatically removed from the specified mailing list.

Tip

Auto-Response events are always honored when the triggering message is from a remote source. For messages originating locally, whether or not an Auto Responder will but triggered is contingent upon a setting on the **Miscellaneous Options** dialog (page 288). The control is: *Auto Responders are triggered by Local as well as Remote Traffic.* Enable the control if you want Local mail to trigger an auto response.

Exception List
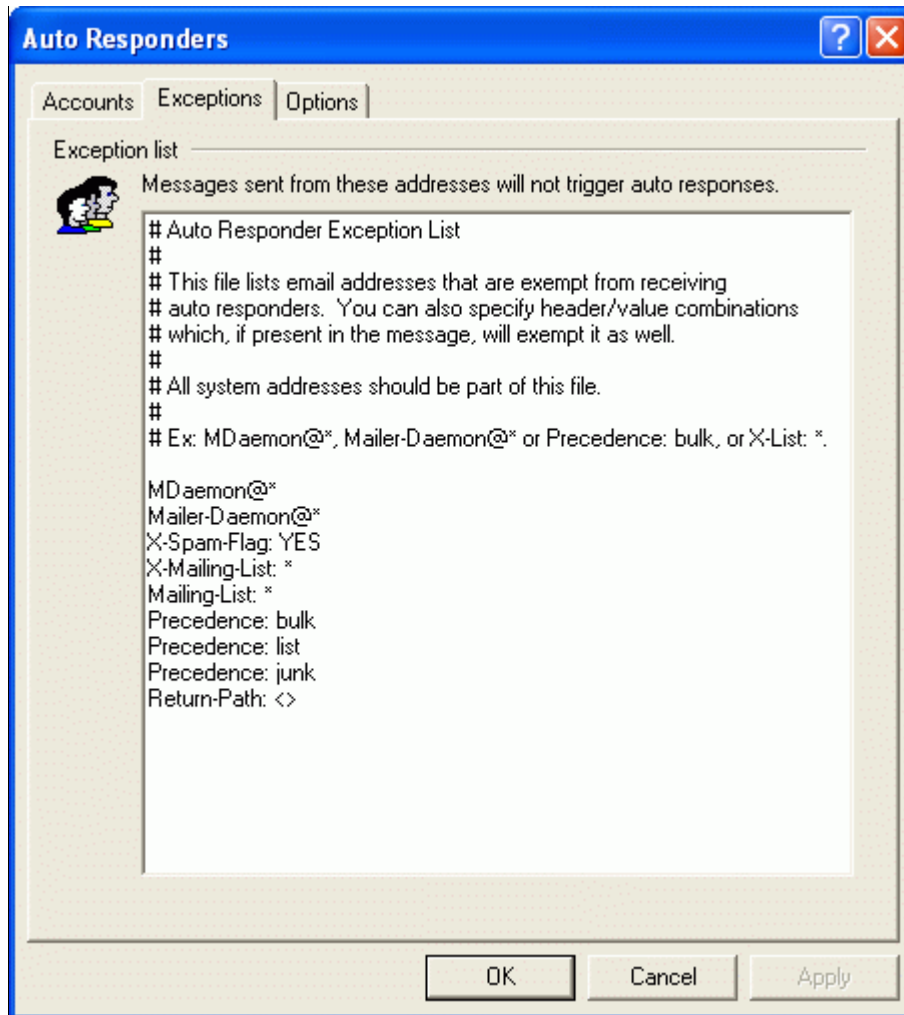
Exception

Use the Exception List to configure global exceptions to auto responders—messages from entries in the list will not receive any auto responders. Both email addresses and header/value pairs can be included on the list. Enter one address or header/value pair per line. Wildcards are permitted.

> **Note**
>
> All system addresses (i.e. mdaemon@*, mailer-daemon@*, and so on) should be listed to help prevent mail loops and other problems.

Options
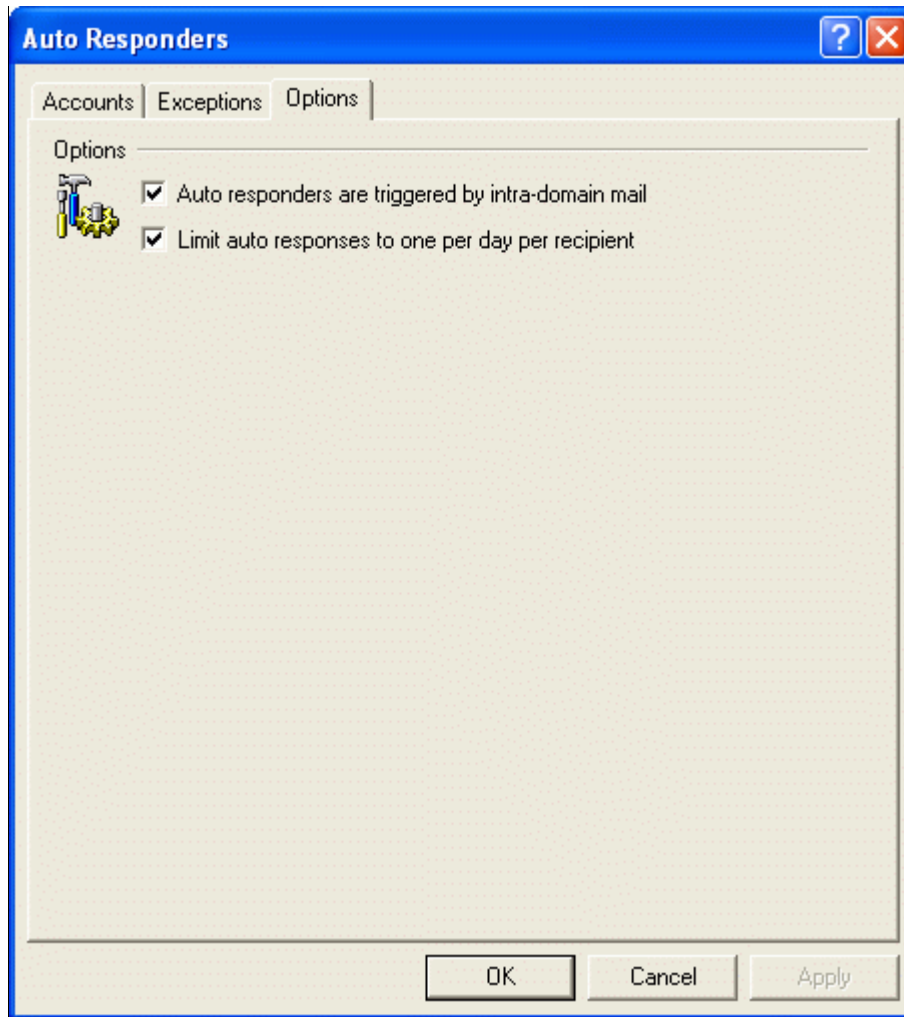
Options

Auto responders are triggered by intra-domain mail
Click this option if you want local mail to trigger Auto Responders.

Limit auto responses to one per day per recipient
Click this option to limit the number of auto responder generated messages to one per day per recipient. This will prevent a person from receiving the same redundant auto response message from you over and over again in the same day every time he or she sends you an email.

Creating Auto Response Scripts

Auto Response scripts define the messages that are returned as the result of an auto-response event. They are constructed the same as MBF files and can contain the same macros (page 382). However, several additional macros are provided which allow you to develop more powerful auto-response messages.

In addition to those template variables defined for MBF files, auto-response scripts can use any or all of the following macros, which override the values parsed from the original message:

%SetSender%
ex: `%SetSender%=mailbox@host.org`
MDaemon will treat this address as if it had sent the original message.

%SetRecipient%
ex: `%SetRecipient%=mailbox@host.org`
Sets the address that will receive the auto-response message, regardless of the original sender.

%SetReplyTo%
ex: `%SetReplyTo%=mailbox@host.org`
Controls the value of the RFC-822 ReplyTo header

%SetActualTo%
ex: %SetActualTo%=mailbox@host.org
Changes who MDaemon thinks the "actual" recipient of the mail message should be.

%SetSubject%
ex: `%SetSubject%=Subject Text`
Replaces the value of the message's subject.

%SetMessageId%
ex: `%SetMessageId%=ID String`
Changes the ID string of the message.

%SetPartBoundary%
ex: `%SetPartBoundary%=Boundary String`
Changes what MDaemon thinks is the part boundary.

%SetContentType%
ex: `%SetContentType%=MIME type`
Changes what MDaemon thinks is the content-type of the message.

%SetAttachment%
ex: `%SetAttachment%=filespec`
Forces MDaemon to attach the specified file to the newly generated auto-response message.

Auto Response Script Samples

A typical auto response script might be called `VACATION.RSP` and look like this:

Greetings $SENDER$

You're message regarding '$SUBJECT$' won't be read by me because I'm on vacation so LEAVE ME ALONE!

Yours truly (yeah right!),

$RECIPIENT$

This is essentially the `VACATION.RSP` file that shipped with the first version of MDaemon. This example script uses macros developed for MBF files. Using the macros defined in the above table you can also control the headers which will be generated when this auto-response script is processed and mailed back to $SENDER$.

Let's amend our old `VACATION.RSP` file to use some of the new macros:

> *Greetings $SENDER$*
>
> *You're message regarding '$SUBJECT$' won't be read by me because I'm on vacation so LEAVE ME ALONE!*
>
> *Yours truly (yeah right!),*
>
> *$RECIPIENT$*
>
> *%SetSubject%=RE: $SUBJECT$*
> *%SetAttachment%=c:\windows\bugoff.exe*

The new message, which will be generated using this script as a template, will have a custom subject line and will have the specified file encoded as a MIME attachment.

The `%SetSubject%=RE: $SUBJECT$` instruction is handled in this way:

1. The `$SUBJECT$` portion is expanded and replaced by the original message's subject text. This makes the string equivalent to: `%SetSubject%=RE: Original Subject Text`.

2. MDaemon replaces the original subject, which it has stored in its internal buffers, with this newly calculated one. From then on any call to `$SUBJECT$` or use of the subject field will return the new result.

Note the placement of the new macros - they are listed at the bottom of the response script. This is needed to avoid side effects. For example, if the `%SetSubject%` macro were placed before the `$SUBJECT$` macro, which appears in the third line of the response script, the subject text will have been changed by the time the `$SUBJECT$` macro is expanded. Therefore, instead of replacing `$SUBJECT$` with the content of the original message's "Subject:" header, it will be replaced with whatever you have set the value of `%SetSubject%` to be.

Creating and Using MBF Files

MBF or Mailbox Format Files are text files designed to allow cross compatibility with other email transport systems that can accept ASCII text files into their mail streams. MBF files are essentially templates that contain a set of special formatting macros that enable MDaemon to transform an RFC-822 message into a variety of other text-based formats. Using MBFs, MDaemon can be configured to automatically reformat incoming mail into specific alternatives on a per mailbox basis. When a message arrives for an MDaemon account, the account's MBF file is used to reformat the incoming data before distributing it to the user.

MBFs are constructed as plain ASCII text files ending with the "`*.MBF`" file extension. They are scanned by the server for macros, which will be replaced by actual data from an incoming message. Lines beginning with the "#" character are ignored and are used for comments. Lines beginning with the ";" character are used to control the value of the reformatted message's file name. When the MBF processor

sees a line that begins with the ";" character it assumes that the text following this character will describe either the prefix or the extension which the processor should use when creating new files.

The syntax is:

```
; msg-prefix = SMF<cr><lf>
; msg-ext = <cr><lf>
```

If an MBF file contained lines as shown above, all reformatted mail messages created using the MBF file would take the form "SMFxxxx" where "xxxx" represents a random but unique identifier. The maximum length of the prefix component is four characters. The maximum extension that can be specified is three characters. Note that the above example purposely excludes an extension. These directives are optional and are not required to be present in any MBF file. However, their inclusion provides a means of directly manipulating message file names, which may be useful in integrating MDaemon with an existing MTA. The default msg-prefix value is "MD" and the default msg-ext is "MSG".

Attachment file names can be similarly manipulated using the following syntax:

```
; attach-prefix = ATTH<cr><lf>
; attach-ext = ZIP<cr><lf>
```

This example would generate unique names for file attachments of the form "ATTHxxxx.ZIP" where "xxxx" represents a random yet unique identifier. Like those for message file names, these directives are optional.

> **Note**
>
> These directives will have no effect on accounts that are not auto-extracting embedded attachments.

It is sometimes important to retain the original file's extension while generating a unique file name for it. To accomplish this use the "; attach-ext = ???" syntax. This causes MDaemon to retain the attachment's original extension. By default, auto-extracted attachments are decoded and stored in the user's FILES directory under their original file names.

MBF Macros and Examples

The following is a list of all macros available for use when constructing an MBF file. Following this list is a series of examples.

$HEADERS$	This macro will be replaced by all the original RFC-822 message headers - each separated by a CRLF delimiter. Using this macro the MBF will obtain all the headers contained in the incoming message. Text immediately preceding this macro will be duplicated at the start of each expanded line. For example: O-SMTP-HEADER: $HEADERS$ would place each of the original RFC-822 headers into the reformatted message each preceded by the text string "O-SMTP-HEADER:"

$HEADER:XX$	This macro will cause the value of the header specified in place of the "xx" to be expanded in the reformatted message. For example: If the original message has "TO: joe@mdaemon.com" then the $HEADER:TO$ macro will expand to "joe@mdaemon.com". If the original message has "Subject: This is the subject" then the $HEADER:SUBJECT$ macro would be replaced with the text "This is the subject"
$BODY$	This macro will be replaced by the entire message body. In an attempt to preserve character sets for different languages, MDaemon will read the message body as stream binary data rather than pure text, thus allowing a byte-for-byte copy of the message body.
$BODY-AS-TEXT$	This macro will be replaced by the entire message body as with the $BODY$ macro, except that MDaemon will read this as text rather than binary. This may not be compatible with all char sets. Text immediately preceding this template variable will be duplicated at the start of each expanded line; thus: >>$BODY-AS-TEXT$ would place each of the original RFC-822 message lines into the reformatted message with the addition of the string text ">>" preceding them. Text could also be added to the right of this macro.
$ATTACHMENTS$	This macro will be replaced by the entire list of all attached files extracted from the original message. Text immediately preceding this template variable will be duplicated at the start of each expanded line; thus: FILE-LIST $ATTACHMENTS$ would place each of the attachment file names into the reformatted message, each preceded by the text string "FILE-LIST". NOTE: This macro is only available when you are extracting attachments from the account.
$ATTACHMENTCOUNT$	This macro will be replaced with an integer value equal to the number of attachments extracted from the original message. NOTE: This macro is only available when you are extracting attachments from the account.
$ATTACHMENT(X)$	This macro will be replaced with the attachment file name of the relative attachment number passed in the X parameter. If the value in X is greater than the total number of attached files then the entire variable is removed and replaced with nothing.
$SENDER$	This macro resolves to the full address of the message originator and corresponds to the RFC-822 "From:" header.
$SENDERMAILBOX$	This macro resolves to the mailbox of the message originator. The mailbox is the portion of the email address to the left of the "@" symbol.
$SENDERDOMAIN$	This macro resolves to the domain of the message originator. This is the portion of the email address to the right of the "@" symbol.
$RECIPIENT$	This macro resolves to the full address of the message recipient.
$RECIPIENTMAILBOX$	This macro resolves to the mailbox of the message recipient. The mailbox is the portion of the email address to the left of the "@" symbol.
$RECIPIENTDOMAIN$	This macro resolves to the domain of the message recipient. The domain is the portion of the email address to the right of the "@" symbol.
$SUBJECT$	This macro resolves to the value of the RFC-822 "Subject" header.
$MESSAGEID$	This macro resolves to the value of the RFC-822 "Message-ID" header.
$CONTENTTYPE$	This macro resolves to the value of the RFC-822 "Content-Type" header.
$PARTBOUNDARY$	This macro resolves to the value of the MIME "Part-Boundary" value found in the RFC-822 "Content-Type" header for multipart messages.
$DATESTAMP$	This macro expands to an RFC-822 style date-time stamp line.
$ACTUALTO$	Some messages may contain an "ActualTo" field which generally represents the destination mailbox and host as it was entered by the original user prior to any reformatting or alias translation.
$ACTUALFROM$	Some messages may contain an "ActualFrom" field which generally represents the origination mailbox and host prior to any reformatting or alias translation.
$REPLYTO$	This macro resolves to the value found in the RFC-822 "ReplyTo" header.
$PRODUCTID$	This macro expands to the **MDaemon Server v9** version information string.
\\XXX	This variable specifies an ASCII character code (000 - 255) that should be inserted into the MBF file. This variable is always 5 characters long with the first two characters being "\\". This instructs the server to expect a three digit number which represents an ASCII character code. For example, \\012 will place the ASCII character 12 (a formfeed character) into the MBF file. The numeric value specified must be three characters long and padded with zeros if necessary.

Sample MBF file(s):

1) RFC-822.MBF

```
# RFC-822.mbf - mailbox format for standard RFC-822 translations
# version 1.1
$HEADERS$
X-MBF-FILE: MDaemon Gateway to RFC-822 (RFC-822.MBF v3)

$BODY$
```

2) SMF70.MBF

```
# smf70.mbf - mailbox format for SMF minimal submission format
# version 1.1
; msg-prefix = SMF
; msg-ext =
SMF70
TO: $RECIPIENTMAILBOX$ @ $RECIPIENTDOMAIN$
FROM: $SENDER$
SUBJECT: $SUBJECT$
DATE: $DATESTAMP$
ATTACHMENT: $ATTACHMENTS$
O-SMTP-HEADER: $HEADERS$

$BODY$
```

3) DIGEST.MBF

```
# digest.mbf - default message format for digest mail
# version 1.0
Date: $HEADER:DATE$
From: $HEADER:FROM$
Subject: $HEADER:SUBJECT$

$BODY$
```

SECTION III

M D A E M O N ® V E R S I O N 9 . 0 . 0

Additional MDaemon Features

Chapter

24

Mailing Lists

Using MDaemon's Mailing List Features.

ailing Lists, sometimes called Email Groups or Distribution Lists, allow groups of users to be addressed as if they all shared a common mailbox. Copies of email messages sent to the list are distributed to each of the list's members. Lists may contain members with local and/or remote destination addresses, be public or private, moderated or open, be sent in Digest or normal message format, and more.

Mailing List Editor

The **Mailing List Editor** is used to create and maintain Mailing Lists and can be reached from the **Lists→New List…** or **Lists→Edit List…** menu selection.
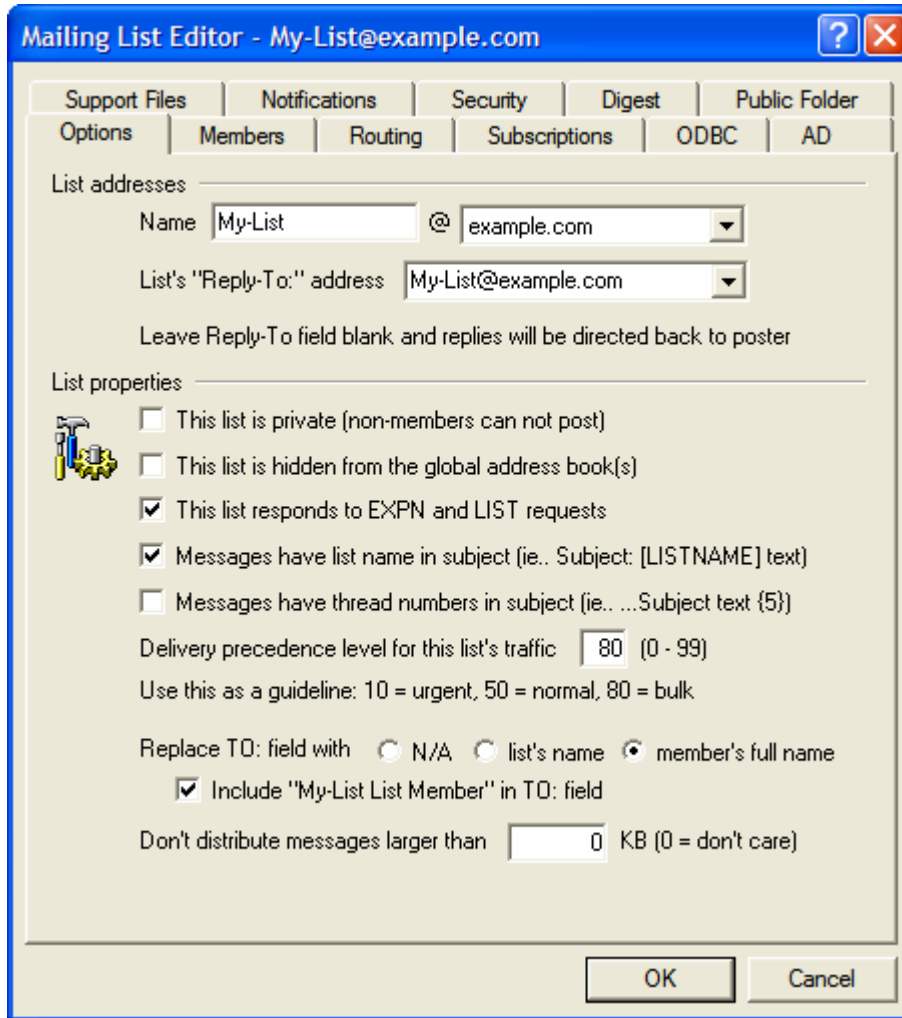
Creating a New Mailing List

When the **Lists→New List…** menu selection is chosen, the Mailing List Editor will be opened for creating the new list. Naming the list and designating the domain to which it will belong are the only required parameters for creating it. All other options will contain default settings. You can change these settings while creating the list or you can change them later by editing it.

Modifying an Existing Mailing List

Click the **Lists→Edit List…** menu selection to open the Select Mailing List dialog. This dialog is used to choose the Mailing List that you wish to edit. When a list is selected from this dialog it will be opened in the Mailing List Editor for editing or review.

🖼 Options

List Addresses

Name
Specify a name for the mailing list and then choose the domain to which the list will belong form the drop-down list box. Messages directed to this list will use the name and domain specified here (e.g. `mylist@mydomain.com`). List names cannot contain "!" or "|".

List's "Reply-To:" address
Type the email address to which you want replies to this list to be directed. Enter the list's address if you want replies to be directed back to it. You may enter an address other than the list name, or choose an address from the drop-down list if you want replies to this list to be directed to an alternate address. If you leave this field blank then replies to any list message will be directed back to the sender of that message.

List Properties

This list is private (non members can not post)
When this control is enabled, the list will only propagate messages from list members. Messages originating from non-members will be deleted.

This list is hidden from the global address book(s)
Click this option to hide the mailing list from the WorldClient and LDAP public address books.

This list responds to EXPN and LISTS requests
If this option is selected the membership of the list will be reported in response to an EXPN or LISTS command during a mail session. Otherwise, the list's membership will be kept private.

Messages have list name in Subject
This setting causes MDaemon to enclose the name of the list in brackets (e.g. [ListName]) and add it to the beginning of the Subject: in all messages sent to the list.

Messages have thread numbers in Subject (ie…Subject text {5})
This switch allows you to toggle whether thread numbers will be displayed in the Subject: header of list messages. They are appended to the end of the subject line in braces and used as a pseudo-thread number. Sorting your inbox by subject will align list mail in chronological order.

Delivery precedence level for this list's traffic
Enter a number from 0-99 in this control. This value signifies the relative sort order of the messages during the delivery process. The lower the value, the higher its importance and the further up it will be in the sort order within a message queue. As a guideline for assigning values: 10 = Urgent, 50 = Normal, and 80 = Bulk.

Replace 'TO:' field with: N/A, list's name, member's full name
Use these options to designate what address will be displayed in the TO: field whenever MDaemon receives a message directed to the list.

> **N/A -** When **N/A** is selected MDaemon will make no changes to the address displayed. The address contained in the TO: field will appear exactly as the sender of the message entered it.

> **List's name -** This option displays the address of the Mailing List in the 'TO:' field.

> **Member's full name -** When this option is selected, the 'TO:' field will contain the full name and email address of the list member to whom the message is directed, or just the email address if the full name is not available.

> **Note**
>
> The Member's Name option can only be chosen when "*MDaemon Will Crack List Mail*" has been selected on the Routing tab of the Mailing List Editor. When "*Route A Single Copy…*" is selected, MDaemon will default to the List's Name option.

Include "[Listname] List Member" in TO: field
When this feature is enabled, "[Listname] List Member" will be displayed in the "real name" portion of the message's TO: field.

> **Note**
>
> Not all email clients support the displaying of "real names" in the TO: field of messages. In such clients only the actual email address designated in the "*Replace TO: Field With…*" feature will appear.

Don't distribute messages larger than XX bytes

This control places an upper limit on the size of a message accepted for this mailing list. Messages larger than this limit are sent to the bad message directory.

Members
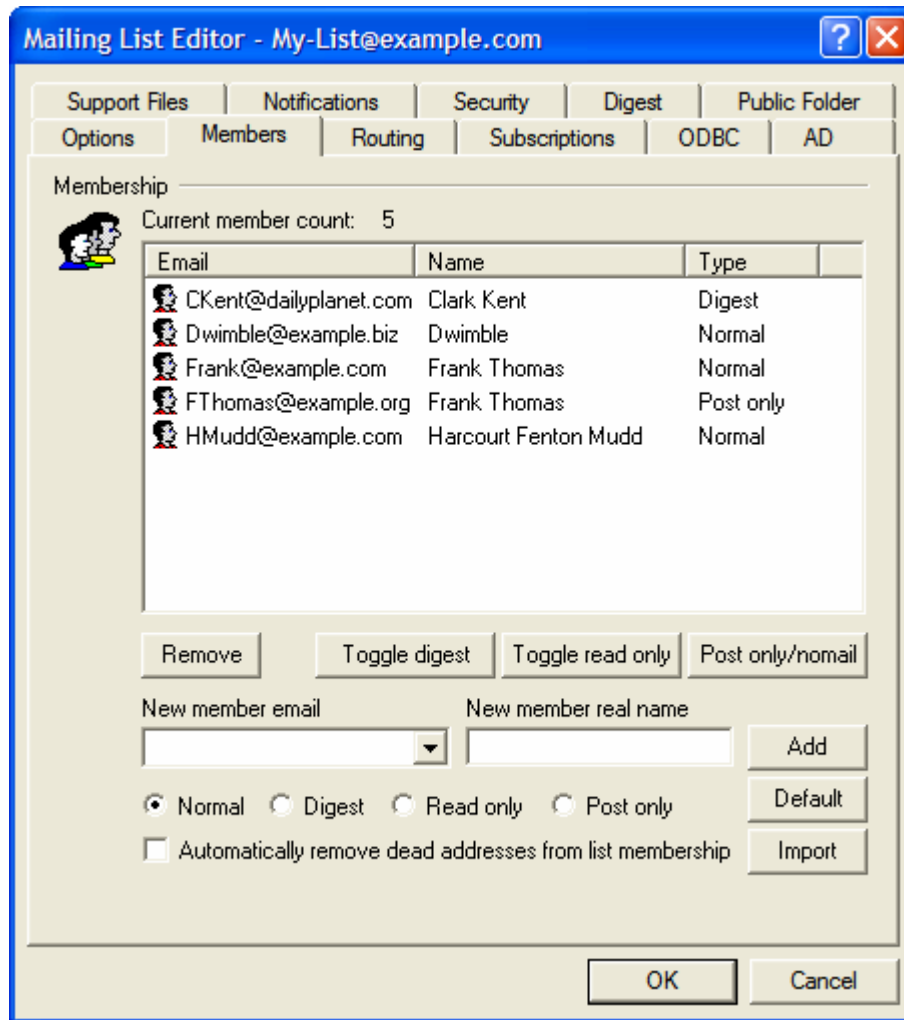
Membership

Current member count:
This control displays the current number of users subscribed to the list and lists them in the box below. Each member's entry also states his or her "type" of membership: normal, digest, read only, or post only.

Remove
This button removes the selected entries from the *Current Members* list.

Digest
Select a member and then click this button to make it a "Digest" membership. See **Digest** (page 413) for more information on Digest mail.

Read only
Click this button after selecting a list member to give their membership "Read Only" status. They will still receive messages from the list but will not be allowed to send them to it.

Post only/no mail
Clicking this button after selecting a member will set their membership to "Post Only". They will be allowed to send messages to the list but will not receive any.

New member email
Enter the email address of the person you wish to add to the mailing list. Member's addresses cannot contain "!" or "|".

New member real name
Enter the member's name in this field. This name will appear in the "To:" field of their list messages when the "*Replace 'TO:' field with: member's full name*" option is selected on the Options tab.

Normal, Digest, Read only, Post only
Click the option that you want to be applied to the *New Member's Email Address*.

Add
This button adds the entry in the *New Member's Email Address* control to the *Current Members* list.

Default
Click any one of the options next to this button (*Normal, Digest, Read Only, Post Only*) and then click the button to make that option the default setting for new members.

Import
Click this button to import list members from a text file that has its fields separated by commas (i.e. a comma delimited file). Each entry must be on its own line and all of its fields must be separated by commas. Further, the first line of the file (the baseline) must list the names of the fields and the order in which they appear in the remaining lines. One of the fields must be called "`Email`" and contain email addresses, and you can have an optional field called "`FullName`" containing the list member's name. All other fields will be ignored by the importer.

For example:

```
"Email", "FullName", "Address", "telephone"
"frank@altn.com", "Frank Thomas", "123 Frank St", "817.555.1234"
```

Imported members do not receive the list welcome packet (if any), and the importer will not check for member duplicates.

Automatically remove dead addresses from list membership
When this feature is enabled, MDaemon will automatically remove an address from the *Members* list when it encounters a permanent fatal error while attempting delivery. Addresses will also be considered "dead" and removed when their message is moved to the Retry system and subsequently expires from that system.

> **Note**
>
> The *Automatically remove dead addresses…* switch is only designed to assist in situations where the remote mail server refuses to accept messages. This will only work when you have configured MDaemon to crack the mailing list (page 393) and not use a smart host. If you

are routing list messages to a smart host then see Enhanced List Pruning below for more information.

Enhanced List Pruning

When the *Automatically remove dead addresses…* control is enabled and you have specified a local mailbox as the return path for the list's messages (see the Returned Mail control on the Notifications tab), each day at midnight MDaemon will attempt to parse problem addresses from the returned mail and remove those members that couldn't be reached. This will aid in more efficiently pruning invalid addresses from mailing lists, especially when you are routing the list's messages to a smart host rather than delivering them directly.

On the Misc tab of Miscellaneous Options (page 306) there are two controls related to this feature. One of them will cause returned messages that do not contain a parsable address to be deleted. The other will cause all messages that result in a list member being deleted to be saved.

🖼 Routing
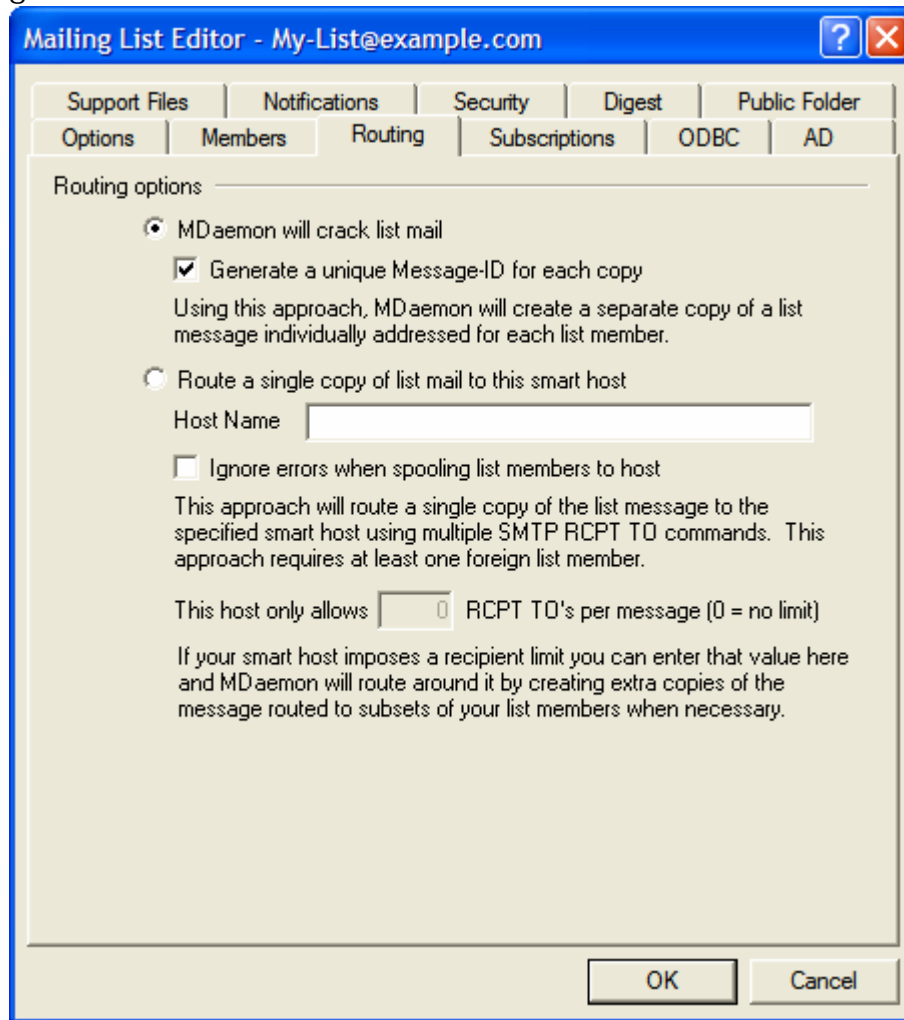
MDaemon will crack list mail

If selected, individual list messages will be created and dispatched to each list member. This will result in numerous individual messages being created which could affect the server's performance. This option is appropriate for a mailing list of around 15 members or less.

Generate a unique Message ID for each copy

When MDaemon cracks list mail it creates an individual copy of the message for each member. If you wish, MDaemon can make certain that each copy of the list message contains a unique identifier.

Route single copy of list mail to this smart host | Host Name

If selected, MDaemon will route a single copy of each list message to the specified smart host. This method employs multiple RCPT TO commands during the SMTP session with the specified host.

Ignore errors when spooling list mail to host

Since some smart hosts will refuse to queue or spool mail for certain domains, the routed approach to list delivery could cause numerous problems. An error code returned from the smart host as a result of this refusal would ordinarily cause MDaemon to abort the delivery attempt. If this switch is set MDaemon will

ignore error codes returned from the smart host during delivery of routed list mail thus allowing those members that are accepted a chance to receive the list message.

This host allows [XX] RCPT TO's per message (0=no limit)

Some hosts limit the number of RCPT TO statements that they will accept when you are attempting to route a single copy of a message through them. If you specify the limit in this control then MDaemon will work around it by creating additional copies of the message and dividing the list into smaller groups. Then it will deliver the message to those groups thus avoiding the need to exceed the limitation. This is similar to "cracking" the list, but into groups instead of individuals.
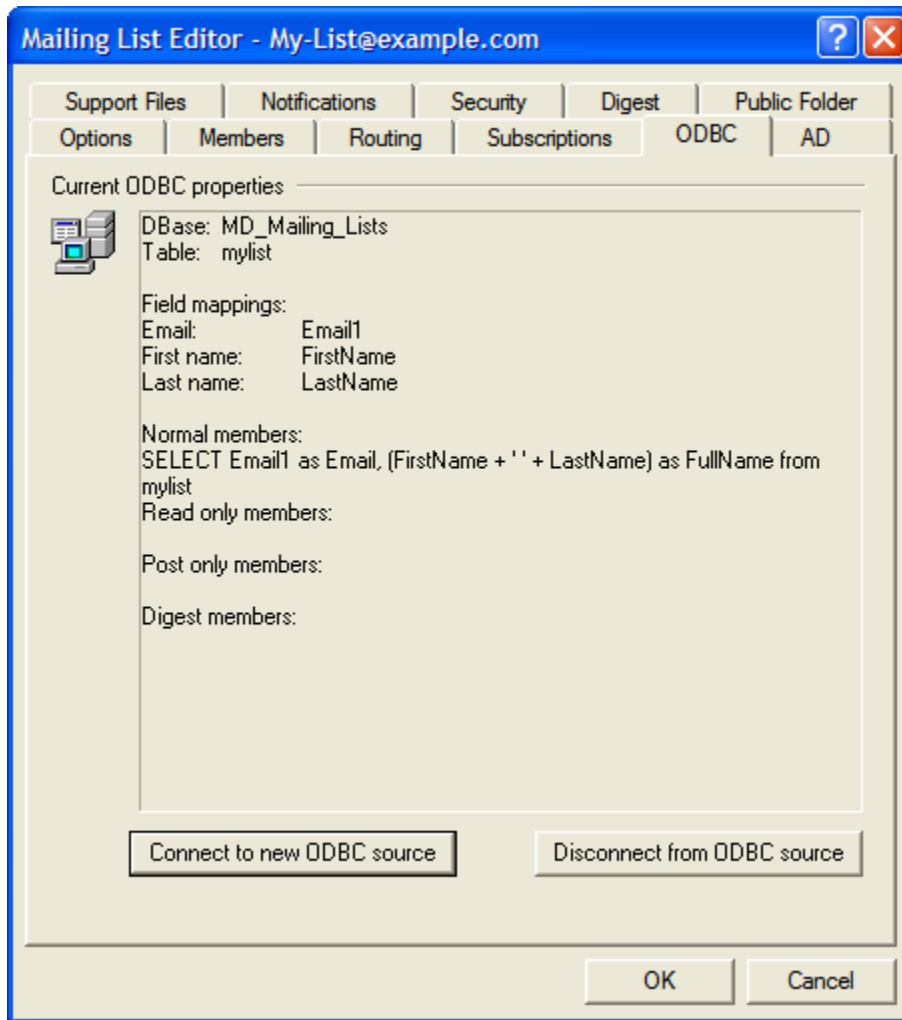
ODBC

You can now maintain your mailing lists' membership lists in an ODBC compliant database. The ODBC tab of the Mailing List editor is used to select a data source, table, and field mappings for MDaemon to link to the list. When messages arrive for your list one or more SQL queries will be performed automatically and the resulting email addresses will be treated as part of the list's membership.

You can add, remove, and modify members of your list in the database using whatever ODBC compliant database application you choose.

Current ODBC Properties

This section displays the current ODBC properties that you have set up for the mailing list. It displays the database's field mappings and the SQL queries that you have configured to designate each member's membership status (i.e. Normal, Post Only, Read Only, and/or Digest mode).

Connect to new ODBC source

Click this button to open the ODBC Selector Wizard for choosing the system data source that you wish to use for the mailing list.

Selecting and Configuring an ODBC System Data Source for a Mailing List

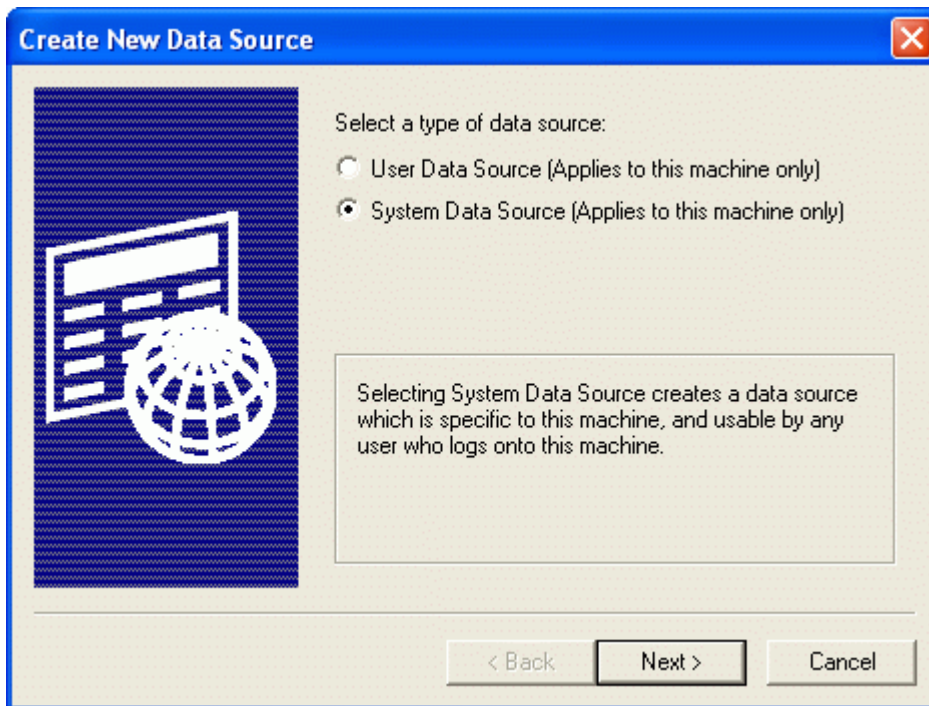To use an ODBC accessible database with a mailing list:

1. Open a mailing list (**Ctrl+E** or **Lists→Edit List...**), switch to the ODBC tab, and click **Connect to new ODBC source** to open the ODBC Selector Wizard.
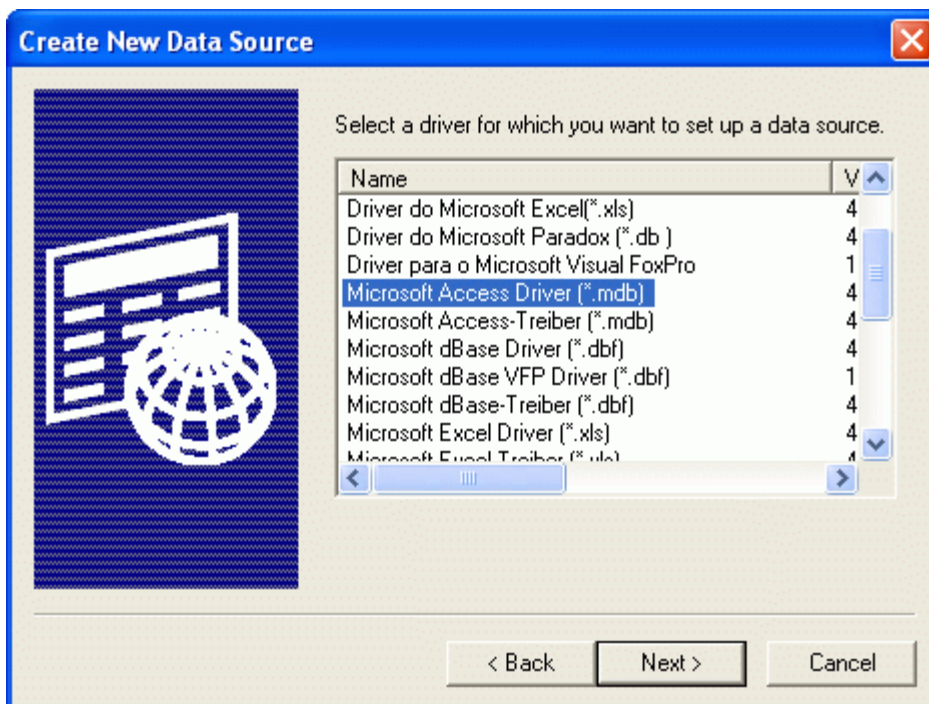
2. Select the **data source** that you wish to use for the mailing list. If there is not a compatible data source listed, create a new one by following the instructions listed under **Creating a New System Data Source—page 398**.

3. Click **Next**.
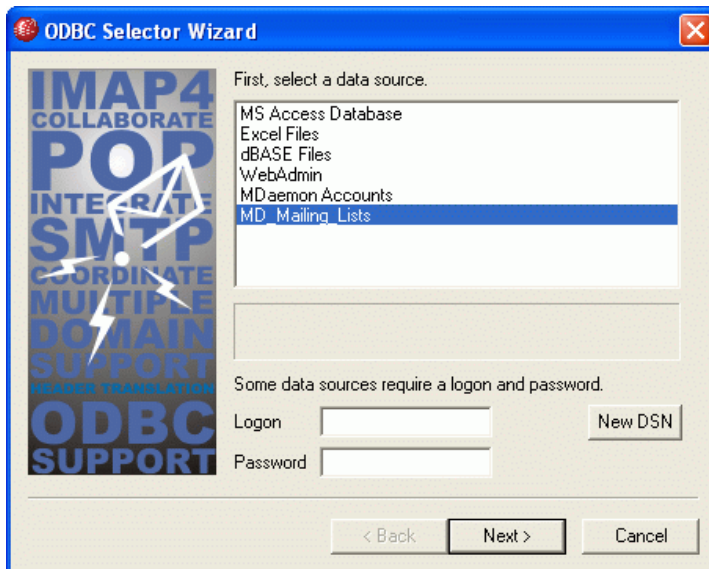
4. The data source must contain at least one table with fields for email address and name. If the data source contains one or more qualifying tables, choose the desired table and click **Next**. Otherwise, click **Cancel** to exit the ODBC Selector Wizard and then use your database application to add a table to the relevant database before continuing.
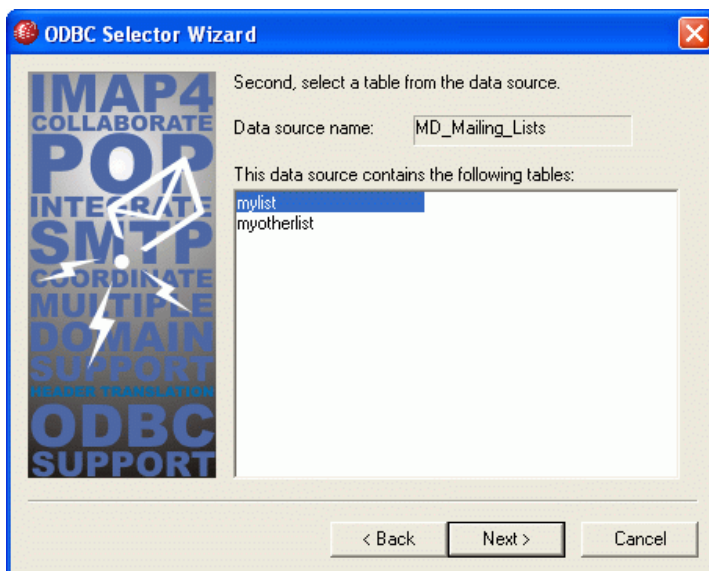
5. Use the drop-down list boxes to designate the table fields that will correspond to **email address**, **first name**, and **last name**. Click **Next**.

6. The ODBC Selector Wizard will construct an SQL query statement based on your selections in **Step 5**. MDaemon will use it to retrieve normal list member data from your database. You can edit this statement as desired, and include other query statements in the remaining controls to cause members to receive messages in Digest mode, and to designate members as Read Only or Post Only. A Test button is provided beside each control so that you can test your query statements to make sure they retrieve the proper data.

7. Click **Next**, and click **Finish**.

Creating a New System Data Source

To create a new ODBC system data source for use by a mailing list:

1. Open a mailing list (**Ctrl+E** or **Lists→Edit List...**), switch to the ODBC tab, and click **Connect to new ODBC source** to open the ODBC Selector Wizard.

2. Click **New DSN** to open the Select Data Source dialog. Switch to the **Machine Data Source** tab.

3.   Click **New...** to open the Create New Data Source dialog.

4.   Select **System Data Source**, and click **Next**.

5.   Select the **database driver** for which you wish to set up the data source, **and click Next**.

6. Click **Finish** to display the driver-specific setup dialog. The appearance of this dialog will vary based on which driver you have selected (Microsoft Access Setup dialog shown below).

7. Designate a **Data Source Name** for your new data source and provide any other information required by the driver-specific dialog (such as creating or specifying a database, choosing a directory or server, and so on).

8. Click **OK** to close the driver-specific dialog.

9. Click **OK** to close the Select Data Source dialog.

AD

Use the options on this tab if you wish to pull some list member addresses from Active Directory.

Active Directory Options

Base entry DN
Specify the Distinguished Name (DN) or starting point in the Directory Information Tree (DIT) at which MDaemon will search Active Directory for addresses. You can use "LDAP://rootDSE" in this option to begin searching at Root DSE, which is the topmost entry in your Active Directory hierarchy. Designating a more precise starting point closer to the location of your user accounts or desired group of addresses in your particular Active Directory tree can reduce the amount of time required to search the DIT. Leave this field blank if you do not wish to pull any list addresses from Active Directory.

Search filter
This is the LDAP search filter that will be used when for searching Active Directory. Use this filter to enable MDaemon to more precisely locate the desired user accounts or addresses that you wish to treat as list members.

Bind DN
This is the DN that MDaemon will use when binding to Active Directory using LDAP. Active Directory permits the use of a Windows account or UPN when binding.

> **Note**
>
> When using a DN in this option rather than a Windows logon, you must disable/clear the "*Use secure authentication*" option below.

<u>*Password*</u>
This is the password that corresponds to the DN or Windows logon used in the *Bind DN* option above.

<u>*Test*</u>
Click this button to your Active Directory configuration.

Search scope:
This is the scope or extent of your Active Directory searches.

<u>*Base DN only*</u>
Choose this option if you wish to limit your search to only the base DN specified above. The search will not proceed below that point in your tree (DIT).

<u>*1 level below base DN*</u>
Use this option if you wish extend your Active Directory search to one level below the supplied DN in your DIT.

<u>*Base DN and all children*</u>
This option will extend the scope of your search from the supplied DN to all of its children, down to the lowest child entry in your DIT.

Options:

<u>*Use secure authentication*</u>
Click this checkbox if you wish to use secure authentication when performing your Active Directory searches. You cannot use this option when you are using a DN rather than a Windows logon in the *Bind DN* option above.

<u>*Use SSL authentication*</u>
Click this checkbox if you wish to use SSL authentication when performing your Active Directory searches.

<u>*Page size*</u>
If the results of an Active Directory query exceed a specified number of entries, then they will be returned in separate "pages" in order to retrieve all the results. This setting is the maximum number of entries that will be included per page.

> **Note**
>
> Use of this option requires an SSL server and infrastructure on your Windows network and Active Directory. Contact your IT department if you are unsure if your network is setup this way, and to find out if you should enable this option.

Email address attribute

You must use this field to specify the attribute that will contain the email addresses used by this list. For example, if you used "`Mail`" in this field, then each Active Directory account that you wish to be treated as a list member must have the "`Mail`" attribute, and that attribute must contain an email address.

🖼 Subscriptions
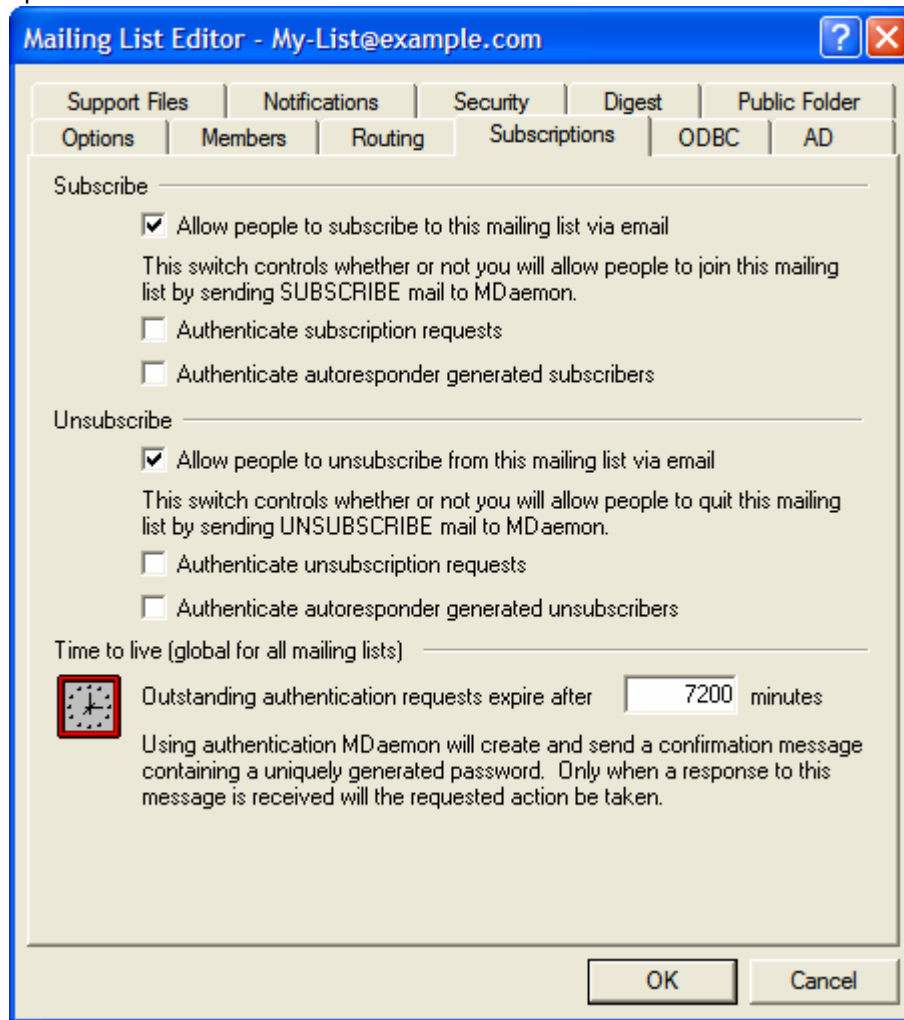
Subscribe

Allow people to subscribe to this mailing list via email
This switch controls whether or not the list will allow potential members to subscribe to the mailing list by sending a subscription request to MDaemon.

Authenticate subscription requests
With this switch set MDaemon will attempt to authenticate the subscription request. The mechanism employed to accomplish this consists of MDaemon generating a unique password string for the subscription transaction. A message is sent to the potential member which contains this unique password. Once the potential member responds by replying to this message MDaemon will then add the member to the mailing list's membership.

Authenticate autoresponder generated subscribers
Click this option if you want authentication to be required when the member is added via the *Add Sender to This Mailing List* Auto responder feature (page 375).

Unsubscribe

Allow people to unsubscribe from this mailing list via email

This switch controls whether or not the list will allow members to quit the mailing list by sending an unsubscription request to MDaemon.

See:

Remote Server Control Via Email - page 460

Authenticate unsubscription requests

With this switch set MDaemon will attempt to authenticate the unsubscription request. See *Authenticate Subscription Requests* for a discussion of the mechanism employed to accomplish this.

Authenticate autoresponder generated unsubscribers

Click this option if you want authentication to be required when the member is removed via the *Remove Sender From This List* Auto responder feature (page 375).

Time to Live (global for all mailing lists)

Outstanding authentication requests expire after XX minutes

When someone is subscribed or unsubscribed, this is the amount of time that they have to confirm the subscription command before it will be discarded. MDaemon will generate a confirmation message and send it the subscribed address. The recipient must reply to the message within the designated time limit before the subscription command will be considered valid. This value is global; it applies to all MDaemon mailing lists not just the one that is currently being edited.

Subscribing To Mailing Lists

To subscribe to a mailing list, send an email message addressed to `MDaemon` (or any alias thereof) at the domain hosting the mailing list, and place the `Subscribe` command as the first line of the message body. For example, there is a mailing list called `MD-Support` being hosted by `altn.com`. You can subscribe to the list by composing a message addressed to "`mdaemon@altn.com`" and placing the value: `SUBSCRIBE MD-Support@altn.com` as the first line of the message body. The message subject is irrelevant and can be left blank.

For complete details on how to form this and other control messages, see:

Remote Server Control via Email - page 460

You can also utilize MDaemon's Auto Responder features to automatically subscribe members to a list when they send messages to an auto-responder enabled account. See page 375 for details on this feature.

Finally, MDaemon has a subscription feature that can be used to cause MDaemon to recognize email addresses of the formats "`[list]-subscribe@domain.com`" and "`[list]-unsubscribe@domain.com`" (as long as the list actually exists) in order to facilitate an easier method for users to join and leave your mailing lists. For example: suppose you have a list called `MyList@altn.com`. People will be able to subscribe/unsubscribe to your list by sending an email message to `MyList-Subscribe@altn.com` and `MyList-Unsubscribe@altn.com`. The content of the subject and message body is irrelevant. Also, when this feature is active MDaemon will insert the following header into all list messages:

```
List-Unsubscribe: <mailto:<List>-Unsubscribe@domain.com>
```

Some mail clients can pick up on this and make an UNSUBSCRIBE button available to users automatically.

This new feature is located on the Misc tab of Miscellaneous Options (page 306).

Note

Occasionally, users will attempt to subscribe/unsubscribe to lists via email by sending the commands to the list itself rather than to the MDaemon system account. This results in the command being posted to the list rather than the user being subscribed or unsubscribed. To prevent these sorts of messages from being posted to mailing lists, enable the *Pre-process mailing list mail* control on the System tab of Miscellaneous Options (page 299).

This will cause messages containing subscribe, unsubscribe, and signoff commands in the first line of the message body to be rejected when those commands contain the list name and are sent to the list's address rather than the system account.

🖼 Support Files
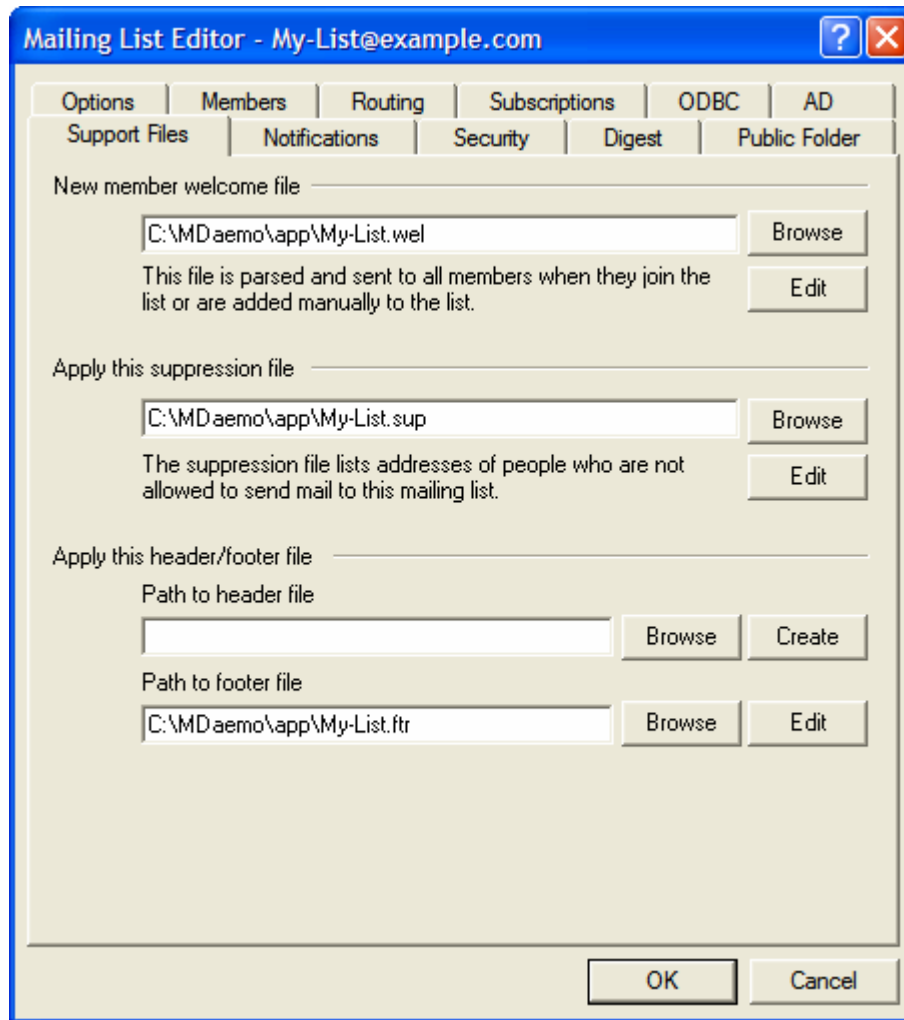
New Member Welcome File

If specified, the file listed here will be processed and have its contents emailed to all new members just after they subscribe. You may use the following macros in a new member welcome file:

$PRIMARYDOMAIN$	This macro expands to MDaemon's primary domain name, which is designated on the Primary Domain Configuration dialog (click Setup→Primary Domain).
$PRIMARYIP$	This macro will return the IP associated with MDaemon's Primary Domain.
$MACHINENAME$	This macro returns the contents of the "*Machine name*" on the Domain tab of the Primary Domain dialog.
$LISTEMAIL$	Displays the list's email address. Example: `MyList@example.com`
$LISTNAME$	Displays the name of the mailing list. Example: `MyList`
$LISTDOMAIN$	This macro returns the mailing list's domain. Example: `example.com`
$SETSUBJECT$	Use this macro to designate an alternate subject for the Welcome message. The designated subject text can include other list macros such as `$LISTEMAIL$`. Example: `$SetSubject$=Welcome to my $LISTNAME$ list.`

Apply This Suppression File

If specified, the file listed here will be used to suppress messages sent from specified users. For a discussion on suppression files see **Address Suppression**—page 175.

Apply This Header/Footer File

The contents of the files specified here will be used as the header and/or footer file for list messages.

📝 Notifications
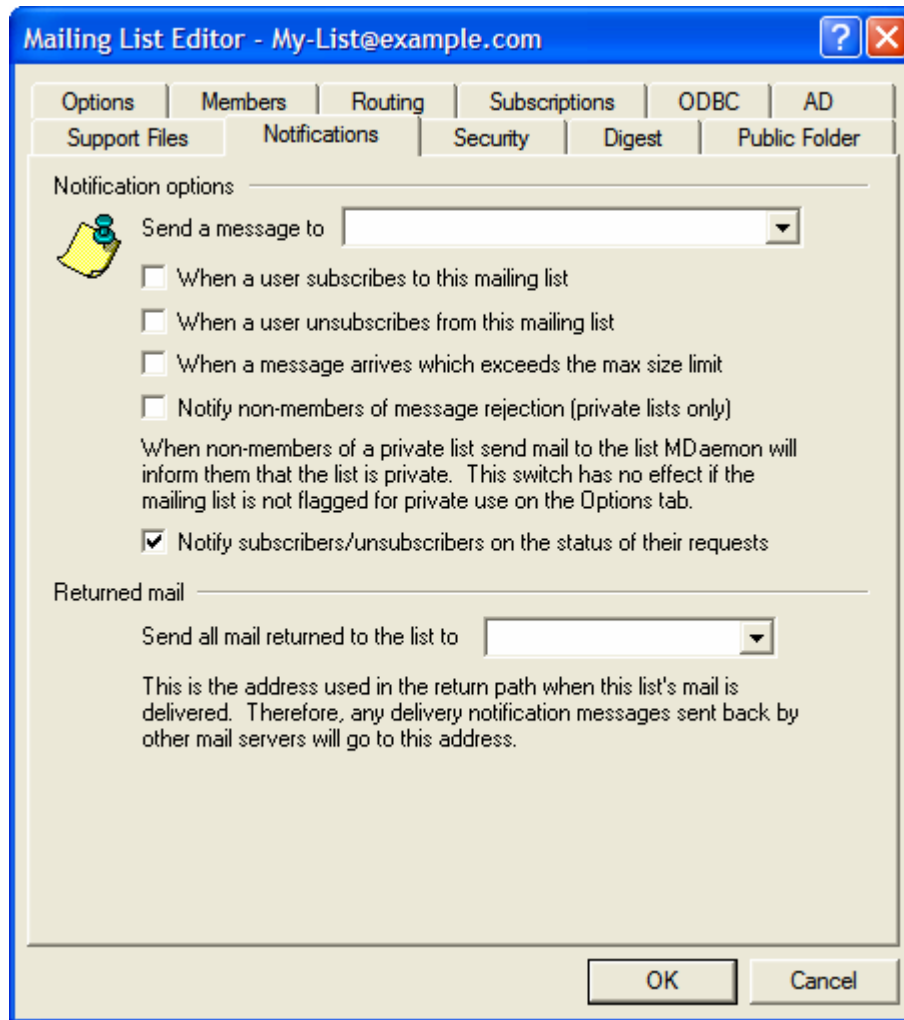
Notification Options

Send a message to
This control lists an address that will be notified when the selected events take place.

When a user subscribes to this mailing list
If selected, a note will be sent to the address specified in the associated control each time someone subscribes to the mailing list.

When a user unsubscribes to this mailing list
If selected, a note will be sent to the address specified in the associated control each time someone unsubscribes to the mailing list.

When a message arrives which exceeds the max size limit
If selected, a note will be sent to the address specified in the associated control each time someone sends a message to the mailing list that is larger than the maximum acceptable size. Such messages are moved into the bad message directory.

Notification Options

Notify non-members of message rejection (private lists only)
When non-members of a private list send mail to the list, MDaemon will inform them that the list is private. They will also be given instructions on how to subscribe to lists.

Notify subscribers/unsubscribers on the status of their requests
When this checkbox is enabled MDaemon will send a completion notification message to the user that has been subscribed/unsubscribed to the Mailing List.

Returned Mail

Send all mail returned to the list to
Here you specify who should receive any returned mail generated from list traffic. For example, a mailing list with 100 recipients will generally have 10-20 undeliverable addresses either due to address changes or down servers or whatever. The SMTP system will generate and return to the sender of the message notification mail concerning these undeliverable conditions. You can configure who should receive these messages for your mailing lists. You can also specify that no one should receive them in which case MDaemon will place list mail into the mail stream in such a way that return mail will not be possible.

Security

List Administration

Password
Enter the lists access password in this control.

List Moderation

This list is moderated by
If set, the list will be moderated by the specified user. Moderated lists forward all posts to the moderator. The moderator alone may submit or forward messages to the list.

Anyone can post who knows the list's password
If this option is checked the moderator can assign a password to the mailing list. Messages submitted to a moderated list that have the appropriate password specified as the first X characters of the subject line will not be subject to moderation - that is, the message will be immediately posted as if it had come from the moderator.

For example: to bypass the moderator on a moderated list called MDSUPP, which has a password of ALTN, make ALTN the first 4 characters of the message subject.

Membership limit

Limit this list's membership to [xx] members (0=no limit)

With this feature you can place an upper limit on the number of people who are allowed to subscribe to the Mailing List. Enter a zero into this field if you do not wish to limit list subscriptions.

> **Note**
>
> This limit is only placed upon those who can Subscribe to the list through the Subscribe command. This limit does not apply to subscriptions entered through the MDaemon interface, or through Subscription commands that are accompanied by the list Password.

🖼 Digest
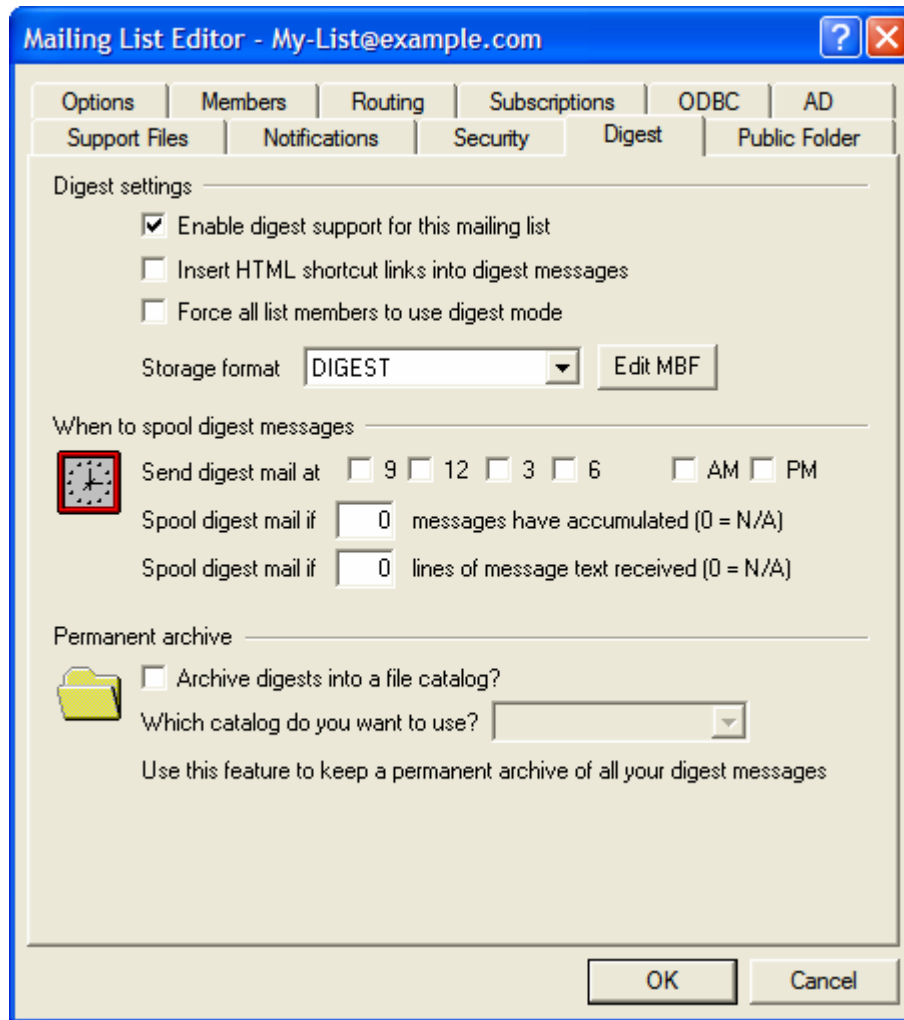
Digest Settings

Enable digest support for this mailing list
This control determines whether this mailing list support message digests. When digest support is enabled, a copy of each message sent to the mailing list will be archived. Members of the mailing list who have elected to receive traffic from this list in digest form will be sent these archived messages in a compact and easy to use indexed format.

Insert HTML shortcut links into digest messages
When this control is enabled, MDaemon will convert all URLs found within digest messages to hypertext links.

Force all members to use digest mode
By default, list members can control whether they wish to receive list traffic in digest or regular format. This control forces all members to use digest mode irrespective of the mode they may have chosen for themselves.

Storage format
Select the MBF file that individual messages placed into the digest will be conformed to. The default

`DIGEST.MBF` file provides typical functionality comparable to most other mailing list software. For complete details on how to create MBF files see **Creating and Using MBF Files**—page 381.

Edit MBF
Click this button to edit the Mailbox Format file listed in the *Storage format* control.

When to Spool Digest Messages

Send digest mail at 9, 12, 3, 6 am and/or pm
Mailing list digests must periodically be sent to those list members who are set to receive mail in digest format. These controls allow you to configure when you wish MDaemon to do this.

Spool digest mail if [XX] messages have accumulated (0 = N/A)
Sometimes digests should be sent to list members based upon the number of messages that have accumulated rather than (or in addition to) specific times. This control allows you to specify the number of messages that the list will accumulate before sending the digests to digest mode list members.

Spool digest mail if [XX] lines of message text received(0 = N/A)
This control will cause Digest mail to be sent immediately when a digest grows to this many lines of text.

Permanent Archive

Archive digests into a file catalog / which catalog do you want to use?
These controls allow you to place digest messages into a file catalog so that back-issues of the digests can be collected in the future. MDaemon will generate a unique archive name for each digest and place it into the catalog you specify.

For complete information on how to work with catalogs see:

Creating A New Catalog—page 417

🖼 Public Folder
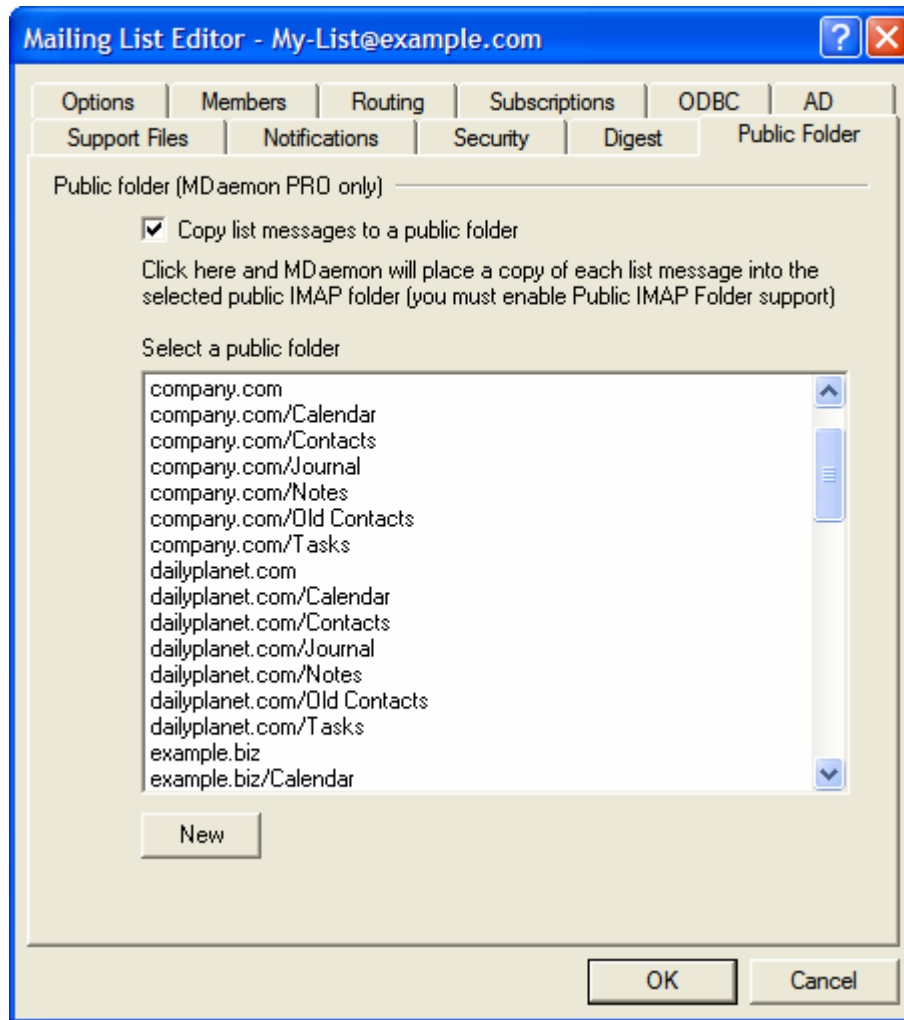
New to this version of MDaemon is support for Public IMAP Folders. Public folders are extra folders that are available to multiple IMAP users, unlike personal IMAP folders, which are typically only accessible by a single user. The controls on this tab are used to cause all messages destined for this Mailing List to be automatically copied to one of your public folders. For more information on Public Folders see page 120.

Public Folder

Copy list messages to a public folder
Enable this control if you want this list's messages to be copied to one of your Public Folders in addition to being delivered to the list as usual.

Select a public folder
Click the Public Folder that you wish to associate with this list's messages.

New
Click the *New* button if you wish to create a new Public Folder for use with this list. This will cause the Public Folders dialog (page 120) to be opened.

Chapter

25

Catalogs

Utilizing MDaemon's Catalogs feature.

U se the **Catalogs→New Catalog…** or **Catalogs→Edit Catalog…** menu selection to open the Catalogs Editor for creating or editing a file catalog. Catalogs give users the ability to request files across the network and have them encoded and mailed back to them. Catalogs work by allowing the mail administrator to assign "magic names" (shortcuts) to files on disk. Magic names are like aliases which point to a specific file located somewhere accessible to MDaemon. A user can then use a special type of email message to request the file using the magic name. The format of this special email message is described in the **Remote Server Control** section (see the **GET** command in **Mailing List and Catalog Control**—page 461).

Catalog Editor

Catalog Editor

Catalog properties

Catalogs are password protected lists of files on your network. Each file is given a "magic" name (shortcut) which is used with the GET command to have MDaemon MIME encode and email you the associated file. See the manual for a deeper understanding of how catalogs work.

Name My_Data   Password ********

Enter a name and a password for this catalog.

Add new file

Click here to add a new file to this catalog.   Add file

File listing

Data, C:\MDaemon\App\data.txt

Remove   OK   Cancel

Catalog Properties

Name
Use this field to enter a name for the file catalog.

Password
Use this field to enter a password for the file catalog.

> **Note**
>
> Passwords are not required for all catalogs. You may choose to make catalogs accessible without a password.

See:

> **Mailing List and Catalog Control - page 461**

Add New File

Add file
Click this button to add a file to the catalog. After choosing the file that you wish to add you will be prompted for the "Magic name" that you wish to assign.

File Listing

This window displays all the files and their associated "magic names" currently registered as members of the specified catalog. Double click on an entry in this window to remove it from the catalog.

Remove
Click this button to remove a selected entry from the *File Listing*.

The PUBLIC Catalog
The PUBLIC catalog is an exception to the normal rules governing access to file catalogs. Typically, to access a catalog requires a password that has been assigned to the catalog. With the PUBLIC catalog the password is not required. Files listed in the PUBLIC catalog are available to anyone who knows the file's magic name.

Chapter

26

Domain Gateways

Adding and configuring domains for which MDaemon will act as a Gateway.

T he Gateway Editor is reached by clicking the **Gateways**→**New Gateway…** or **Gateways**→**Edit Gateway…** menu selection on the menu bar of the main interface. This feature provides a limited yet useful secondary level of support for hosting multiple domains and acting as a backup mail server. When a message arrives for a domain for which MDaemon is acting as a gateway, it is separated from the main mail stream and delivered to the directory specified for it in the Gateway Editor. Additionally, attachments can be automatically extracted and placed in the specified attachment directory. Further, all mail is re-formatted according to its specified MBF file. You can host as many domains as you like using this method.

An example will prove useful here:

Suppose you want to "partially" host a domain for another department. You want to collect its mail and deposit it in a directory but do not want to maintain its accounts on your server. Let's use "company.com" as its name. The first thing you will do is enter "company.com" in the *Domain Name* field on the Gateway tab of the Gateway Editor. Then, you will select and enter the disk directory where incoming mail messages and file attachments should be stored. You don't have to use the auto-extraction of attachments feature unless it is needed. Finally, either select an existing MBF file or install a new one. The default RFC-822 MBF file will ensure that all mail stored for "company.com" will be in RFC-822 format. Once all the settings have been entered click *Apply* or *Ok.*

Now that the domain "company.com" has been installed as a client domain, MDaemon will store all messages that it receives for that domain in the directory specified, and in the format you have dictated—regardless of to whom the messages are directed. In other words, **all mail** for that domain will be pooled into a single directory on disk. You will setup this directory, and a POP/IMAP account for the domain to access, directly from the Gateway Editor by entering a name and password on the Gateway Editor's *MUA Access* tab and then clicking the *Create/Update Account* button. All that remains is for the domain to collect its mail from MDaemon via its account. This can be done by either a mail client or another MDaemon, which could utilize its DomainPOP feature to further distribute the mail to the domain's users (as would be the case in our example). Alternatively, you can use the controls on the Dequeuing tab so that the domain can collect and distribute its mail to its users via ESMTP instead of POP, DomainPOP, or IMAP.

This all works perfectly for LAN and WAN based systems that can easily be configured to resolve an arbitrarily assigned domain name like the "company.com" example. However, how can Internet email support be provided for "company.com" if the domain doesn't really exist on the Internet? There are two ways to cope with this problem. First, the domain can be registered with the Internet authorities and configured to resolve to the same IP address as the MDaemon that you want to collect its mail. Better yet,

it can be registered as an alias to the primary domain name. Failing this, a message can still be delivered by "hiding" "`company.com`" within a primary domain address. Using this method, addresses can be constructed that will pass through the primary domain and on to the users of the domain for which MDaemon is acting as a gateway. For example, if an outside Internet mail user wishes to send a message to "`bob@company.com`", which is a domain gateway served by "`mydomain.com`", then the sender would need to address his email message to "`bob{company.com}@mydomain.com`". Because "`mydomain.com`" is a registered domain hosted by MDaemon, this message will be delivered properly. When MDaemon receives a message with an address in this format it will convert the address to "`bob@company.com`" and deliver the message to the disk directory specified for that domain. Of course the simplest method is still to just register the domain's name and point its DNS or MX record information to the same MDaemon that is acting as its gateway or backup server.

Gateway Editor

The *Gateway Editor* includes the following tabbed dialogs:

Gateway
This dialog contains the domain name of the particular domain that you are working with, as well as the path to the directory used for storing messages and file attachments addressed to this domain. Here you will also assign an MBF file to be used when MDaemon delivers mail to this domain's mailbox.

Dequeuing
Using the options on this dialog, you can configure how MDaemon will respond to ETRN and/or ATRN requests made on behalf of the domain in order to dequeue its messages. You can also configure several other dequeuing related options.

Forwarding
With this dialog you can declare a host or address to which the domain's mail will be forwarded as soon as it arrives. There are also options for stating whether a copy of these messages should be kept locally and for designating the port on which the forwarded messages should be sent.

MUA Access
Here you can create a POP or IMAP user account that will have access to this domain's stored mail. Using the name and password that are assigned here, a mail user agent (MUA) such as an ordinary email client or another MDaemon installation can access the domain's mailbox and collect its mail.

Quotas
This dialog is used for assigning a limit to the amount of disk space that the domain may use and the maximum number of messages that may be stored.

LDAP
If the gateway's remote domain is keeping an LDAP server up to date with all of its mailboxes, aliases, and mailing lists, you can use this tab to specify that server and thus verify recipient addresses of incoming messages. When a recipient address is found to be invalid the message will be rejected. With this method you can avoid having to accept all messages bound for the gateway's domain regardless of their validity.

Options
This tab contains a number of other options that will apply to the selected domain gateway. For example, you can enable/disable AntiVirus and AntiSpam scanning for the gateway, designate whether or not

authentication is required when dequeuing mail, designate an authentication password, designate IP address connection restrictions, and several other options.

Automatic Gateways Creation

The controls on this dialog (Gateways→Automatic Gateway Creation...) are used to configure MDaemon to automatically create a Domain Gateway (page 420) for a previously unknown domain when another source attempts to deliver that domain's messages to MDaemon, and a DNS query lists MDaemon's location as a valid MX record.

🖳 Gateway
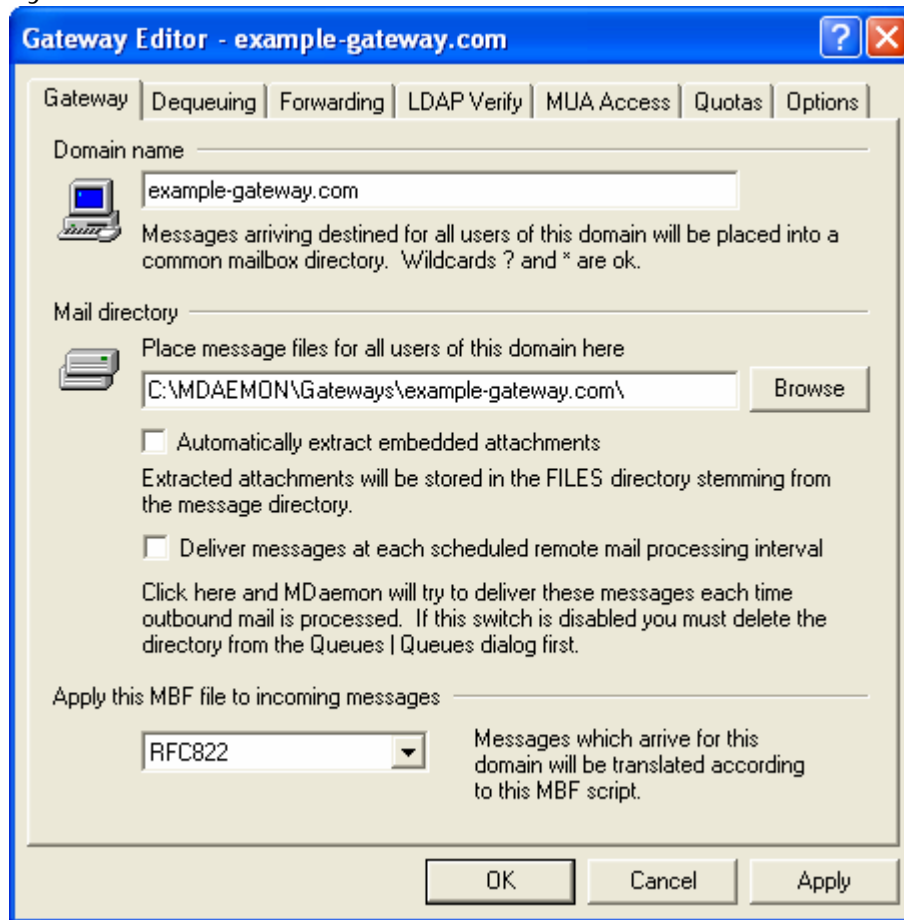
Domain Name
Enter the name of the domain for which you wish MDaemon to act as an email gateway.

Mail Directory

Place message files for all users of this domain here
Enter the directory where you want to store incoming mail for the domain.

Automatically extract embedded attachments
Some mail systems require attached files be extracted before submission of mail messages to the mail stream. To facilitate this, MDaemon can auto-extract incoming MIME attachments and place them in the \Files\ subdirectory underneath the domain's message directory. This directory will only be used if the "Auto-Extract" switch is selected.

Deliver messages at each scheduled remote mail processing interval
Ordinarily, when MDaemon receives mail that is intended for one of its Domain Gateways it will store the messages until in that domain connects to MDaemon to collect it. In some situations you may want MDaemon to attempt to deliver the mail directly via SMTP rather than waiting for the domain to collect it. When this control is enabled, MDaemon will attempt to deliver the domain's messages at each remote mail processing interval. The gateway's mailbox will temporarily act as a remote queue and delivery will be attempted. Any messages that cannot be delivered will simply remain in the gateway's mailbox until they

are collected by the domain or are successfully delivered later; they will not be moved into the remote queue or retry system.

Apply this MBF File to Incoming Messages

The MBF file specified here will be applied to all incoming messages that arrive for the domain. This allows for any special reformatting that may be required.

🖥 Dequeuing
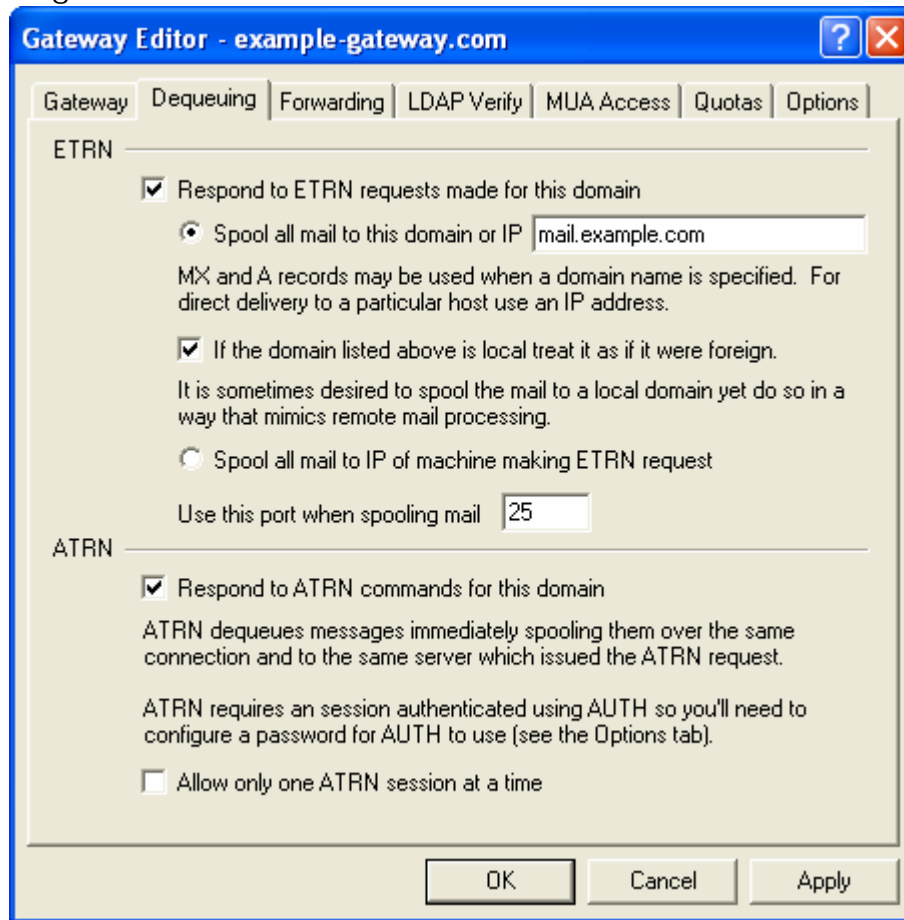
ETRN

Respond to ETRN requests made for this domain
When this switch is enabled MDaemon will respond to ETRN requests made by qualified hosts on behalf of the domain for which MDaemon is acting as an email gateway. The ETRN command is an SMTP extension that signals a server storing mail for a particular domain that it is time to begin spooling the mail. When MDaemon receives an ETRN request for a domain, it will immediately begin spooling the stored mail for delivery using subsequent SMTP transactions. Please note that the SMTP session that issues an ETRN request will not be the one that receives any stored mail. MDaemon will use subsequent independent SMTP transactions to send any mail it has stored for the domain. This preserves the message envelope and is more secure. Also note that the host to which MDaemon will spool any stored mail may not immediately begin reception of these messages. ETRN only guarantees that any stored mail is *spooled* for delivery. The actual *process* of delivery is subject to other administrator-imposed restrictions and may have to wait in the outbound mail queue for the next scheduled remote mail processing event to take place. Because of these limitations we recommend using On-Demand Mail Relay (ODMR) and its ATRN command rather than ETRN. This method is not supported by all clients and servers, however, and will therefore only be available to client domains using a server that does so. MDaemon fully supports ODMR on both the client and server side.

Note

By default MDaemon requires that the connecting host issuing the ETRN request first authenticate itself via ESMTP AUTH using the gateway's domain name and the password designated on the Options tab as its login credentials. If you do not wish to require authentication than you can disable it on the Options tab by clearing the *ETRN dequeuing requires authentication* option.

Spool all mail to this domain or IP

This is the host name or IP address to which any stored mail will be sent when an ETRN request is received and honored. The receiving machine must be running an SMTP server to receive these messages. Note: when a domain name is specified in this option, A and MX records may be used, depending on the DNS results during delivery. If you wish to deliver the messages to a particular host then specify an IP address instead of a domain name, which would require a DNS lookup for delivery.

If the domain listed above is local treat it as if it were foreign

Activate this control if the domain is local but you want its mail to be spooled as if it is remote.

Spool all mail to IP of machine making ETRN request

Selecting this option will cause MDaemon to send any stored mail to the IP address of the machine that made the ETRN request. The requesting machine must be running an SMTP server to receive these messages.

Use this port when spooling mail

Use this control to specify the port on which the domain's mail will be spooled.

ATRN

Respond to ATRN commands for this domain

Activate this control if you want MDaemon to respond to ATRN commands from the domain specified in the section above. ATRN is an ESMTP command used in On-Demand Mail Relay (ODMR), which is currently the best relay method available for mail hosting. It is superior to ETRN and other methods in that in requires authentication before mail is dequeued and does not require a static IP address. A static IP address isn't required because the flow of data between MDaemon and the client domain is immediately reversed and the messages are despooled without having to make a new connection—unlike ETRN, which uses a separate connection after the ETRN command is sent. This enables client domains using a dynamic (non-static) dialup account to collect their messages without having to use POP or DomainPOP to distribute them to their users because the original SMTP envelope is preserved.

Note

ATRN requires a session using the AUTH command. You can configure the authentication credentials on the Gateway Editor's Options tab.

Allow only one ATRN session at a time

Click this check box if you wish to restrict ATRN to one session at a time.

Forwarding
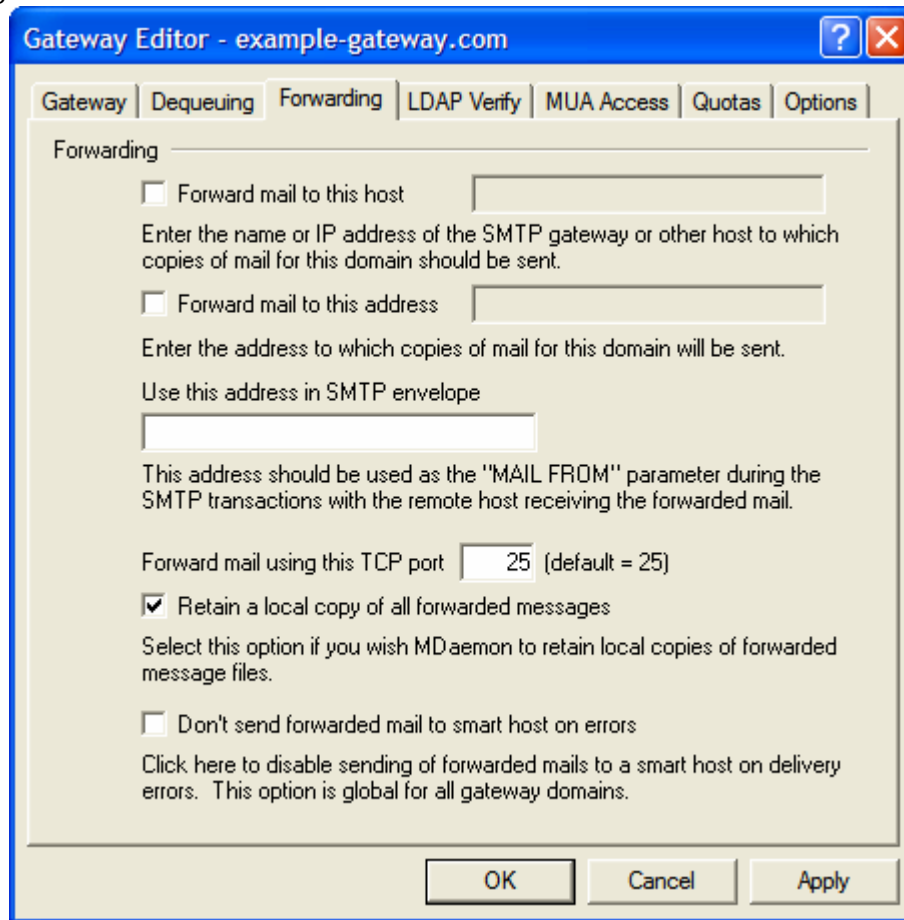
Forwarding

Forward mail to this host
Sometimes it is advantageous to simply forward a copy of all messages for a domain as they arrive. If you wish to configure MDaemon to do this then enter the name or IP address of the SMTP server to which copies of incoming mail for this domain should be sent.

Forward mail to this address
Use this feature if you wish to forward to a specific email address all email messages destined for this client domain.

Use this address in SMTP envelope
MDaemon will use this address in the SMTP "Mail From" transaction.

Forward mail using this TCP port
MDaemon will forward this mail using this TCP port.

Retain a local copy of all forwarded messages
Select this option if you wish MDaemon to retain a copy of a message locally once it has been forwarded.

Don't send forwarded mail to smart host on errors
Click this option to prevent the sending of forwarded emails to the host specified above when delivery errors occur. This is a global setting applying to all domain gateways, and it is disabled by default.

LDAP Verify

One common problem with domain gateways and backup servers is that they don't usually have a method for determining whether or not the recipient of an incoming message is valid. For instance, if a message comes to example.com's backup server for frank@example.com then the backup server has no way of knowing whether or not there is actually a mailbox, alias, or mailing list at example.com for "frank". Thus the backup server has no choice but to accept all of the messages. MDaemon contains a method for verifying these addresses and solving this problem. The remote domain's MDaemon can be configured to keep an LDAP server up to date with all of its mailboxes, aliases, and mailing lists (see page 114 for more on this feature). Then, you can use the options on the Verification tab of the Domain Gateway editor on the backup server to specify the LDAP server on which this information is stored. Now, when a message arrives for example.com the backup server can look up the recipient's address on the LDAP server and discover whether or not it is valid. If it isn't then the message will be rejected.

LDAP Options

Verify accounts using an LDAP server
Click this check box to activate remote address verification. Whenever a message arrives for the remote domain its LDAP server will be queried to determine whether or not the recipient is valid. If it isn't valid the message will be rejected.

Host name or IP
Enter the host name or IP address of the domain's LDAP server. This is the LDAP server to which MDaemon will connect in order to verify the domain gateway's address information.

> **Note**
>
> Although any LDAP server may be used, we recommend using the latest version of Alt-N Technologies' LDAP server, LDaemon 2.1, because of its integrated features and ease of setup. You can obtain LDaemon free of charge from www.altn.com.

Port
Specify the port that the domain's LDAP server is monitoring. MDaemon will use this port when verifying the account information.

Test
Click this button to test whether or not you have the remote address verification settings configured properly. MDaemon will simply attempt to connect to the designated LDAP server and verify that it responds to the specified information.

Bind password
This password will be passed to the domain's LDAP server along with the *Bind DN* value for authentication.

Object class
Specify the object class to which each MDaemon user's LDAP address book entry belongs. Each entry will contain the `objectclass=` attribute with this as its value.

Bind DN
Enter the DN of the account that has administrative access to the domain's LDAP server so that MDaemon can verify the gateway's address information. This is the DN used for authentication in the bind operation.

Base entry DN
This is the base entry (root DN) that will be used in all of the domain gateway's address information used for remote verification.

Attribute(s) containing email address (separate each with a comma)
You can use this text box to specify multiple mail attributes when using LDAP servers to verify domain gateway mail recipients. This is sometimes needed when the LDAP server contains one attribute to store the mail address and a different attribute to store aliases. Separate each attribute with a comma.

Using multiple configurations for LDAP verification queries
You can specify multiple LDAP configurations for your gateway domains. To specify extra sets of LDAP parameters, setup your first set normally and then manually edit the `GATEWAYS.DAT` file using Notepad.

Your new set of parameters should be created using the following format:

```
LDAPHost1=<host name>

LDAPPort1=<port>

LDAPBaseEntry1=<base entry DN>

LDAPRootDN1=<root DN>

LDAPObjectClass1=MDaemonContact

LDAPRootPass1=<password>

LDAPMailAttribute1=mail
```

For each new set of parameters, increase the numeral in each parameter's name by 1. For example, in the sample set above, each parameter's name ends with "1". To create an additional set each name would end with "2". In another set, each would end "3", and so on.

When the LDAP queries take place, MDaemon will perform multiple LDAP queries in sequence to find a match. If an error or a match is found no further checks are performed.

MUA Access
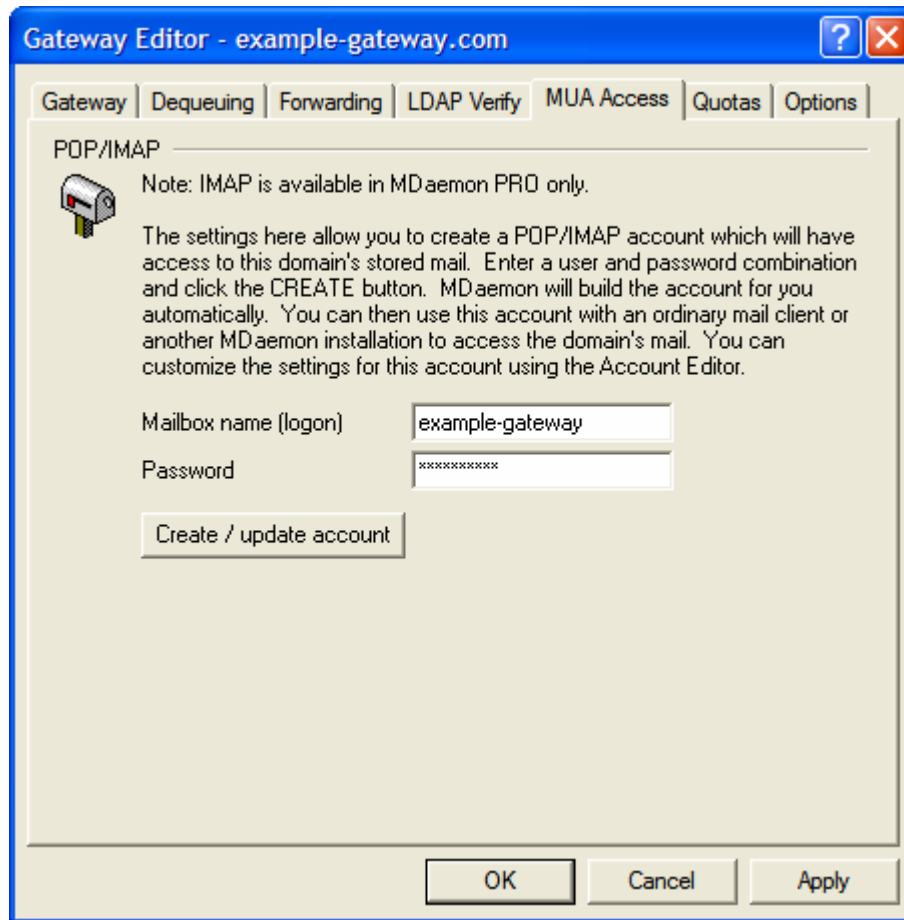
Early versions of MDaemon pioneered a method of mail collection known as DomainPOP (see page 239). Besides using MDaemon to collect mail via DomainPOP it can also be used to act as a DomainPOP host for other domains for which your MDaemon is acting as an email gateway. In other words, all messages for the domain can be collected in a single mailbox on your server. Then, the domain can connect to you and collect them by using their own MDaemon or an MUA (mail user agent) such as an ordinary POP or IMAP email client, although in the latter case DomainPOP parsing would not be available to them. The options on this dialog are used to create the account that MDaemon will use for storing the Domain Gateway's mail.

Because MDaemon Pro supports the IMAP email protocol, accounts created in MDaemon Pro can be accessed by clients using either IMAP or POP. Otherwise, the POP protocol is required for MUA access.

Mailbox name (logon)
Enter the mailbox name (i.e. the user account name) that the client domain will use to access the messages stored in its mailbox.

Password
Enter the password that the client's domain will use to access the messages stored in its mailbox.

Create/update account

Click here to create an account or to update the Mailbox name and Password values if the account already exists.

Note

You can completely edit (or even remove) an account using the Account Editor. Be careful if you remove an account because that will delete the account's mail and file directories - which also happen to be the ones the gateway is using.

Quotas

Quotas

This gateway must observe these quota settings
Here you can specify the domain's maximum number of allowable messages and the maximum amount of disk space (in kilobytes) that it can consume. This includes any decoded file attachments in its Files directory.

Place a warning message in gateway mail directory when over quota
If this control is enabled and a mail delivery to the domain is attempted that would exceed the maximum message or disk space limitations, the message will be forwarded to the designated address along with an appropriate warning.

Address warning message to
Specify the address to whom the over quota warning message should be sent.

Address warning message from
Specify the address from whom the over quota warning message should appear to have been sent.

Options
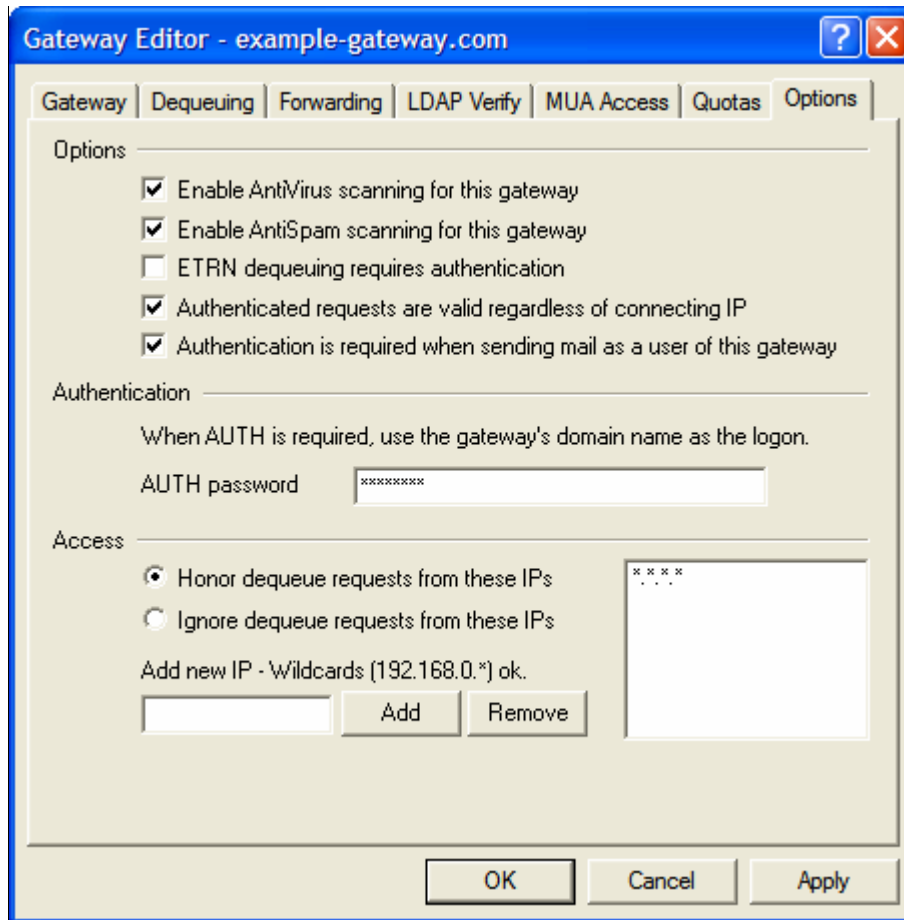
Options

Enable AntiVirus scanning for this gateway
Click this option if you have installed AntiVirus for MDaemon and want this domain gateway's messages to be scanned. If you clear this option then AntiVirus will not scan this gateway's messages.

Enable AntiSpam scanning for this gateway
Click this option if you want to apply the Spam Filter settings to this domain gateway's messages. Otherwise, they will be excluded from Spam Filter scanning.

ETRN dequeuing requires authentication
When you configure the settings on the Dequeuing tab to accept ESMTP ETRN requests, this option will be used by default to require the connecting host to first authenticate using the ESMTP AUTH command. When this option is enabled, you must designate an authentication password in the "Auth password" box provided below.

Clear this checkbox if you do not wish to require authentication of hosts making ETRN requests.

__Authenticated requests are valid regardless of connecting IP__
Enable this checkbox if you wish to honor authenticated requests regardless of the IP address from which they are coming. If this control is not enabled then only requests from those IP addresses specified in the Access section will be honored.

__Authenticated is required when sending mail as a user of this gateway__
Click this check box if you want all messages claiming to be from this domain to require authentication. If a message is purported to be from this domain then it must be using an authenticated connection (or connecting from a Trusted IP address) or it will be refused. This option is enabled by default.

When new domain gateways are created, this option will be enabled by default. If you wish to change the default setting so that new gateways will have this option disabled, then edit the following key in the `MDaemon.ini` file:

```
[Special]
GatewaySendersMustAuth=No (default is Yes)
```

Authentication

__AUTH password__
When using ATRN to dequeue this gateway's mail, or when you are requiring authentication via the *ETRN dequeuing requires authentication* option above, designate the gateway's AUTH password here.

> **Note**
>
> The domain for which MDaemon is acting as an email gateway must use its domain name as the logon parameter. For example, if the domain gateway is "example.com" and is using ATRN to dequeue its mail, then it would authenticate using the login credentials "example.com" and the password specified here.

Access

__Honor dequeue requests from these IPs__
Select this switch and MDaemon will honor ETRN/ATRN requests made from any IP listed in the associated address list.

__Ignore dequeue requests from these IPs__
Select this switch and MDaemon will ignore ETRN/ATRN requests that are made from any IP listed in the associated address list.

__Add new IP__
To add a New IP to the current list simply enter the IP into this text box and click the ADD button.

__Remove__
Click this button to remove a selected entry from the list of IP addresses.

Automatic Gateway Creation

Automatic Gateway Creation

Automatic Gateways

Automatic gateway creation (PRO only)

Click here to have MDaemon automatically create a domain gateway when the DNS system lists a local domain as a valid MX record for an unknown recipient. Be warned: spammers can use this to relay mail through your server.

☑ Automatically create domain gateways based on DNS lookup results

☐ Don't create domain gateways when sender of message is a local user

☐ Require confirmation before rendering the gateway active

Send creation confirmation message to [   ]

Confirmation must be received within [1440] minutes

A confirmation must be sent to this email address and returned within the specified time in order to keep the gateway from being deleted.

☑ Deliver gateway's mail to higher MX hosts at each queue run

Use this gateway as a pattern [▼]   New

OK   Cancel   Apply

Automatic Gateway Creation (PRO only)

The controls on this tab are used to configure MDaemon to automatically create a Domain Gateway (page 420) for a previously unknown domain when another source attempts to deliver that domain's messages to MDaemon, and a DNS query lists MDaemon's location as a valid MX record.

For example:

With automatic gateway creation enabled, if MDaemon's primary domain IP address is `1.2.3.4` and a message is delivered via SMTP for an unknown domain `example.com`, MDaemon will perform MX and A-record queries on `example.com` to see if `1.2.3.4` is a known mail relay host for it. If the results of the DNS queries state that MDaemon's IP address is a valid MX host for `example.com` then MDaemon will automatically create a new Domain Gateway for it and accept its email. Messages for `example.com` will then be stored in a special folder and, if you so choose, spooled to higher level MX hosts at each remote mail processing interval. This feature effectively enables you to become a backup server for another domain by simply configuring the DNS system to use your IP as an alternate MX host.

To help secure this feature, MDaemon can be configured to send a confirmation request to an email address of your choice. While MDaemon is waiting for the confirmation response, messages for the domain will be accepted and stored but not delivered. Confirmation requests must be replied to within an amount of time that you designate or the automatically created gateway will be removed and all stored

messages deleted. If confirmation is received before the time has expired then the stored messages will be delivered normally.

> ✋ **Caution!**
>
> It might be possible for a malicious person or "spammer" to attempt to exploit this feature by configuring their DNS server to list your MDaemon's IP address as one of their MX hosts. Automatic Gateway Creation must therefore be used with caution. To aid in preventing possible exploitation we recommend utilizing the *Send creation confirmation message to…* feature whenever possible.

<u>Automatically create domain gateways based on DNS lookup results</u>
Click this checkbox if you want MDaemon to automatically create Domain Gateways based upon the results of DNS queries.

<u>Don't create domain gateways when sender of message is a local user</u>
Enable this control if you do not want messages originating from local users to trigger automatic gateway creation.

<u>Require confirmation before rendering the gateway active</u>
When this control is enabled, MDaemon will send a confirmation message to the email address of your choice in order to determine whether the automatically created gateway is valid. MDaemon will continue to accept messages for the domain in question but will not deliver them until confirmation is received.

<u>Send creation confirmation message to</u>
Use this textbox to list the address to which you wish confirmation messages to go.

<u>Confirmation must be received within XX minutes</u>
This control is for designating the number of minutes that MDaemon will wait for a response to any given confirmation message. If this time limit expires then the Domain Gateway in question will be deleted.

<u>Deliver gateway's mail to higher MX hosts at each queue run</u>
If you want MDaemon to attempt to deliver this gateway's messages to higher level MX hosts each time that the remote queue is processed then enable this control.

<u>Use this gateway as a pattern</u>
Choose a Domain Gateway from this drop-down list and MDaemon will use its settings as a template for all future automatically created gateways.

<u>New</u>
Clicking the *New* button will open the Gateway Editor, which can be used to create a new Domain Gateway.

Queue and Statistics Manager

Using MDStats, MDaemon's queue and statistics manager.

MDaemon's queue and statistics manager (**MDStats**) is accessed directly from within MDaemon by choosing the **Queues→Queue and Statistics Manager…** menu selection. **MDStats** is made up of a four-page dialog. Each of these pages has been designed to serve a distinct and specific purpose while also maintaining a simple format that makes them very easy to use.

Queue Page

The default tab is the *Queue Page*. From this page you can easily manage all of MDaemon's standard mail queues, as well as the User Account mailbox folders. By simply clicking on the queue or user of your choice, a list of all message files contained within the specified queue will be displayed along with several key pieces of pertinent information about each message: the sender, the recipient, the content of the "Deliver-To" header, the subject of the message, its size, and how long it has been at its current location. In addition, controls are provided that make it easy to copy or move messages between folders, or delete them completely.

User Page

The *User Page* displays a list of all MDaemon users. This list includes their full name, mailbox name, the number of messages in their mailbox, the amount of disk space that their account is taking up, and the date that they last checked their mail. This list can also be saved to disk as a text file, or it can be saved in comma delimited format for use with databases.

Log Page

With this dialog you can display MDaemon's *Log Files* in a simple list format. This feature is very useful for quickly examining the history of MDaemon's mail transactions because it condenses the selected *Log File* into a columnar list which contains: the Type of the message (POP Inbound, DomainPOP, RFC822, and so on), the Host to which MDaemon connected during the transaction, the sender, the recipient, the message size, the date that each message was processed, and whether or not the transaction was successful. You can also examine the detailed portion of the log regarding any of the entries on the list by double clicking the desired entry. This will display the portion of the log where that transaction was made. Logs displayed on the *Log Page* can be saved as a text file or in comma delimited format for use with databases.

Report Page

The last tab is the *Report Page*. With this feature you can produce a report containing all of MDaemon's configuration settings, written in a plain text readable format. Because of the large number of optional

settings and configurations in MDaemon, this can greatly speed the process of administering configuration changes as well as aid in diagnosing possible configuration problems. Additionally, this report is displayed in a text editable format that makes it possible to Copy/Paste the information it contains (using the right-click shortcut menu), or add notations or other information to the file before saving it.

Queue Page
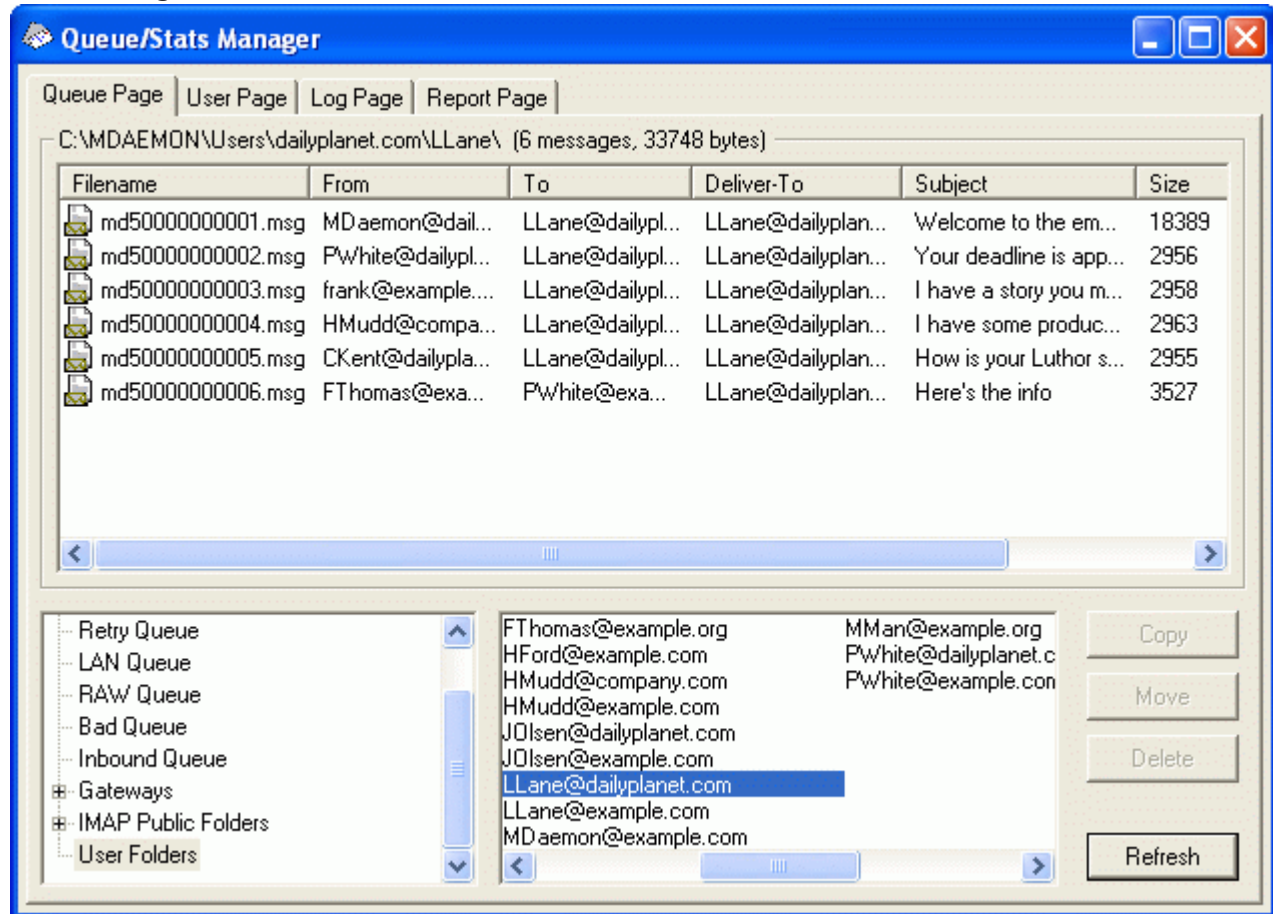
Queue Page list box

When a queue or user is chosen from the *Message Queues* area or the user list box beside it, a list of all message files contained within the selected queue will be displayed in the main list box on this page. This list contains each message's file name, the sender, the recipient, the content of the "Deliver-To" header, the subject of the message, its size, and how long it has been at its current location (listed by date and time).

Above this box the complete file path to the currently displayed directory is given, as well as the number of messages displayed and the size of the directory.

You may copy, move, or delete one or more files by selecting them from the list and then clicking the appropriate button below it.

The content of these files may also be edited directly from the *Queue Page* list box. Simply double-click the file that you wish to edit (or choose "Edit" from the right-click shortcut menu) and MDStats will open the file for editing in Window's Notepad.

> **Note**
>
> If you want MDStats to open an editor other than Notepad by default, then you must edit the "mdstats.ini" file located in the \mdaemon\app\ directory. Change the "Editor=" key located under the [QueueOptions] section heading to "editor=youreditor.exe" (without the quotes). If the file path of the *.exe file is not in your current path, then you will have to include the path here as part of the file name.

The list box can be navigated by using the vertical or horizontal scroll bars, or you can click anywhere within the list box and use the ARROW keys for navigation. You can sort information contained in the *Queue Page* list box by whichever column you choose. Simply click once on the desired column to sort it in ascending order (A-Z, 1-2), or click twice to sort it in descending order (Z-A, 2-1). Columns can also be resized by positioning the pointer over the line between any of the column headings until it changes shape and then dragging the column to the desired width.

Selecting Files

To select files individually   Click the desired file.

To select contiguous files   Click the first file in the contiguous list of files that you wish to select, then while holding down the SHIFT key, click the last contiguous file in the desired list.

Alternatively, you may use the ARROW, HOME, END, PAGE UP, and PAGE DOWN keys, while holding down the SHIFT key, to select files in contiguous order.

To select non-contiguous files   Click on the desired files in the *File Name* column while holding down the CTRL key.

Message queues
Click an entry in the lower left pane and a list of all files contained within the specified queue will be displayed in the *Queue Page* list box. If you click the *User Folders* option, a list of all MDaemon users will be displayed in the *User List Box* to the right of the *Message Queues* section.

Users list box
This box displays a list of all MDaemon users when the *User Folders* option is clicked in the *Message Queues* section (lower left pane). Click a user's name to display a list of all message files currently contained in the user's mailbox folder.

Refresh
Because mail queues are dynamic while MDaemon is active - with message files constantly being transferred to and from them - you should regularly click this button to refresh any list of files that you may have displayed.

> **Note**
>
> You can edit the MDstats.ini file to cause displayed lists to automatically refresh. To do this simply open the MDstats.ini file located in MDaemon's \app\ directory and edit the AutoRefresh key under the [QueueOptions] heading to reflect the number of seconds that you wish to elapse between refreshes. Entering the value 0 means that you do not want the list to automatically refresh. Example: AutoRefresh=15 (the list would refresh every 15 seconds).

Copy

When one or more files are selected, click this button to copy the selected files to another queue or user's mailbox folder. After clicking this button the *Copy Message(s)* dialog box will open, from which you can select the desired location to which you wish to copy the selected files.

Move

When one or more files are selected, click this button to move the selected files to another queue or user's mailbox folder. After clicking this button the *Move Message(s)* dialog box will open, from which you can select the desired location to which you wish to move the selected files.

> **Note**
>
> Files copied or moved to other queues will rarely retain their original file names. To avoid overwriting files of the same name that may already be in the queue, MDaemon always calculates the next destination filename based on the HIWATER.MRK file located in the destination folder.

Delete

When one or more files are selected in the *Queue Status List Box*, click this button to delete the selected files. After clicking this button a confirmation box will open asking if you really do wish to delete the selected files.

> **Note**
>
> Mail queues are dynamic while MDaemon is active - with message files constantly being transferred to and from them. For this reason you should be aware that when copying, moving, or deleting files you may at times encounter a message from MDStats stating that it cannot complete the action that you are attempting. This will occur when the message file that you are attempting to work with has already been removed by MDaemon before the desired action has begun. By clicking the *Refresh* button, you can update the current list of files displayed in the list box.
>
> You can prevent messages from being moved out of the queue while you are editing them by editing the MDstats.ini file. To do this simply open the MDstats.ini file located in MDaemon's \app\ directory and change the LockOnEdit=No key under the

[QueueOptions] heading to LockOnEdit=Yes. This will cause a LCK file to be created whenever you are editing a message, which will prevent it from being moved out of the queue until you are finished with it.

User Page
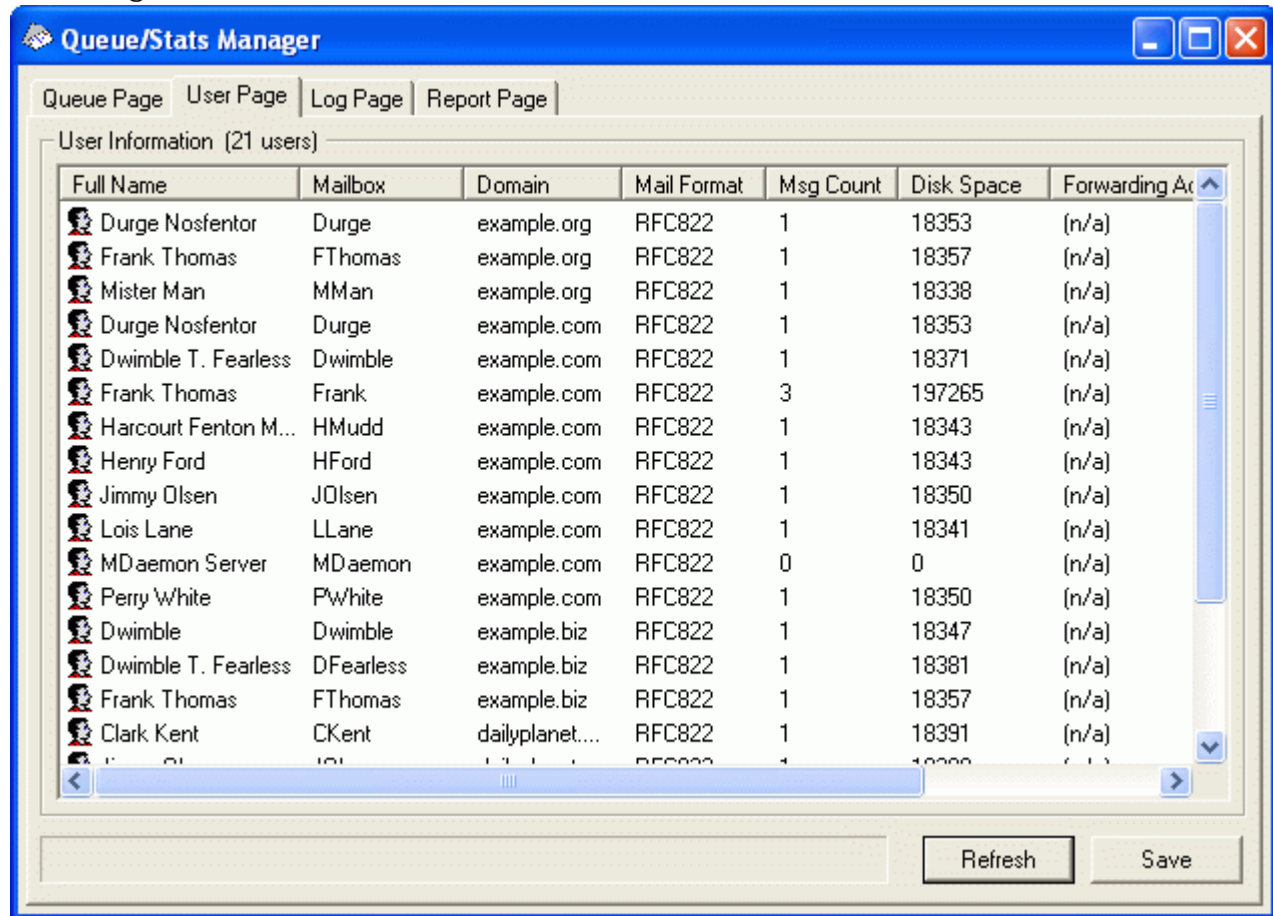
User information

When the *User Page* is chosen MDStats immediately loads a list of all MDaemon accounts into the *User Information* list box. This list contains each user's full name, the name of their mailbox, the domain to which the account belongs, the number of messages it contains, its mail format, the amount of disk space (in kilobytes) that the account is taking up, their forwarding address, and finally, the date that their mail was last checked. Given that the information contained in this list is constantly changing, it can be easily updated by clicking the *Refresh* button.

The list box can be navigated by using the vertical and horizontal scroll bars, or you can click anywhere within the list box and use the ARROW keys for navigation. You can sort information contained in the *User Information* list box by whichever column you choose. Simply click once on the desired column to sort it in ascending order (A-Z), or click twice to sort it in descending order (Z-A). Columns may also be resized by positioning the pointer over the line between any of the column headings until it changes shape and then dragging the column to the desired width. Further, you can double-click any entry and MDStats will be shifted to the *Queue Page* with the contents of their mailbox folder displayed.

Note

By default, the list displays the Message Count not file count, and the Disk Space used *by messages* not the space used by all files in the directory. This is the *Quota* information reported by MDaemon. Alternatively, MDStats can display the *file* count and disk space used by all *files* instead of by messages. To change this setting simply open the MDstats.ini file located in MDaemon's \app\ directory and change the ShowQuota=Yes key under the [UserOptions] heading to ShowQuota=No.

🖑 Warning!

User folders contain a file called "**hiwater.mrk**" that **MDStats** reads to determine some of this user information. You should avoid deleting this file unnecessarily as it will prevent **MDStats** from being able to obtain some of the information listed in the *User Information* list box.

Refresh

User statistics such as the number of messages contained in their mailboxes, and the amount of disk space that their accounts are using, are constantly changing. You can easily update the information contained in the *User Information* list box by clicking the *Refresh* button. This will immediately make all displayed information current.

Progress indicator

Because *User Information* lists can at times be very large, below the *User Information* list box is a progress indicator bar that provides a visible indication that the program is still operating when large files are being loaded by MDStats.

Save

The information contained in the *User Information* list box can be saved as a file in comma delimited format for use with databases, or as a plain ASCII text file by clicking the *Save* button. After choosing a name and location for this file in the Windows Save As dialog, MDStats will ask you whether you want to save the file in comma delimited format or as a plain text file.

Log Page
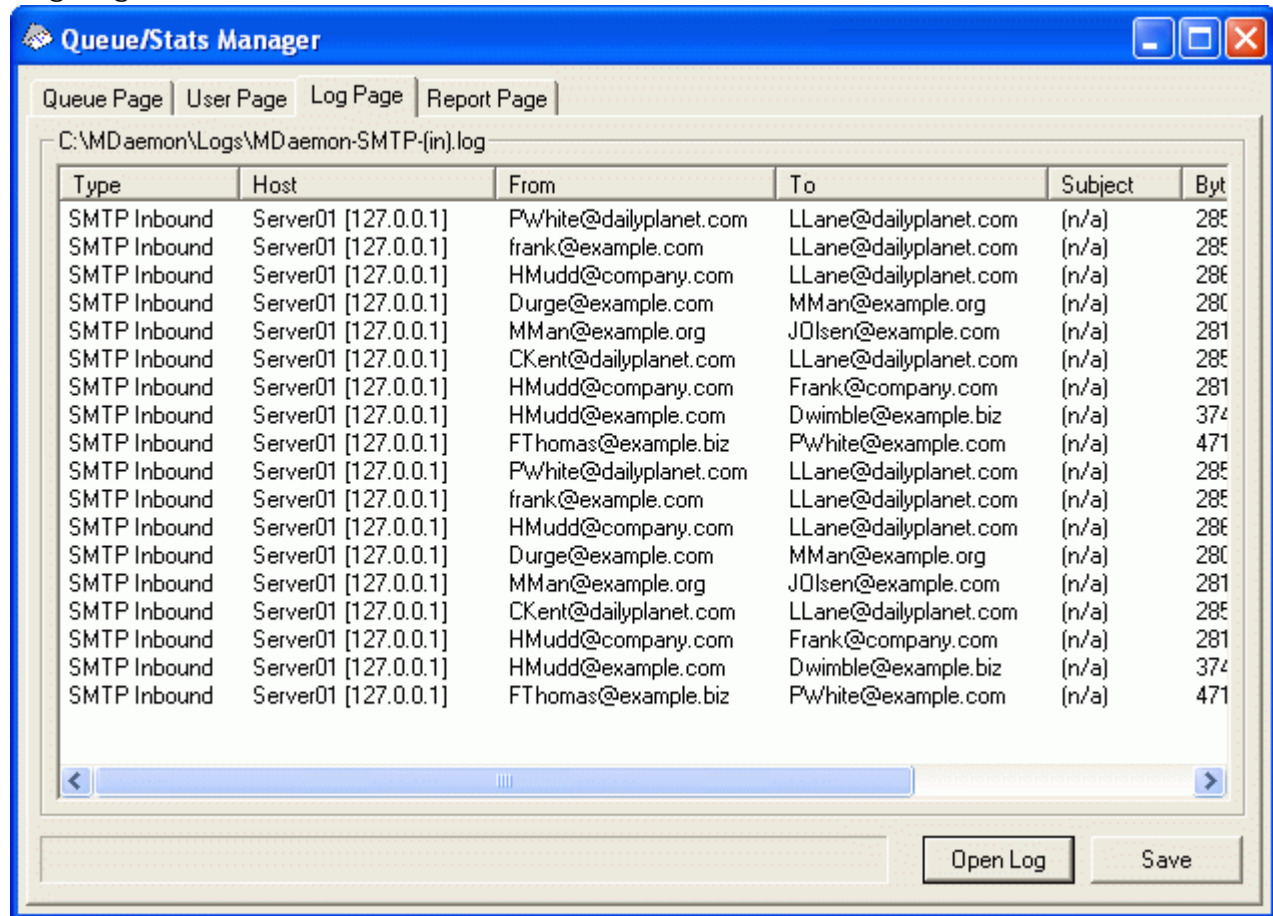
Log report

The *Log Report* list box displays MDaemon's detailed log files that you select through the *Open Log* button and the Windows Open dialog that follows it. The *Log Report* display provides a quick and easy way to review the history of mail transactions that MDaemon has processed without having to sort through the large volume of information that MDaemon log files may sometimes contain. When a *Log Report* is displayed in this list box MDStats breaks it down into a simple format containing: the Type of the message (POP Inbound, DomainPOP, RFC822, and so on), the Host to which MDaemon connected during the transaction, the sender, the recipient, the message size, the date that each message was processed, and whether or not the transaction was successful.

You can also examine the detailed portion of the log regarding any of the entries on the list by double clicking the desired entry. This will display the portion of the log where that transaction was made. Using the right-click shortcut menu you can copy/paste this detailed log portion to a text editor for saving or editing should you desire to do so.

The list box can be navigated by using the vertical and horizontal scroll bars, or you can click anywhere within the list box and use the ARROW keys for navigation. You can resize the list box's columns by positioning the pointer over the line between any of the column headings until it changes shape and then dragging the column to the desired width.

Note

The *Log Page* will display log files that have been compiled using either the *Log Detailed Mail Sessions* or the *Log Summarized Mail Sessions* option located in MDaemon's **Setup→Logging...** menu selection. However, we highly recommend that you use the *Log Detailed Mail Sessions* option instead of the *Summarized* option. When using the *Log Summarized Mail Sessions* format you will find that there is very little information that will be displayed in your *Log Report*. Because the *Log Page* itself condenses the detailed log into a summary view of MDaemon's activity, while still providing the ability to look at the detailed view of every transaction when necessary (by double-clicking an entry), there is no need to have MDaemon summarize the log file while compiling it.

Open log

Click this button to open the Windows Open dialog for choosing which log file that you wish to view. If you click this button when there is a *Log File* already displayed in the *Log Report* list box, MDStats will give you the option to append the new file to the one that is already displayed.

After a log is displayed, a message box will be opened which contains a summary of the selected log. When saving a Log Report as a text file, this log summary will be appended to it.
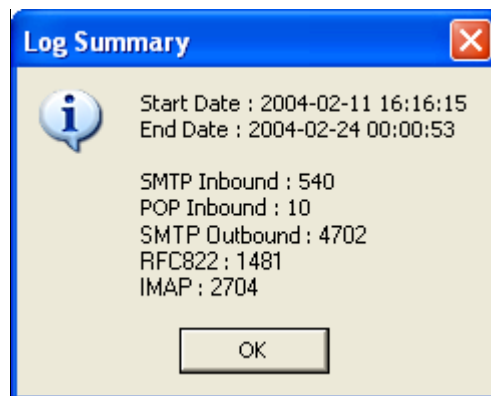
Progress indicator

Because *Log Files* can be very large, below the *Log Report* list box is a progress indicator bar that provides a visible indication that the program is still operating when large files are being loaded or saved by MDStats.

Save

The information contained in the *Log Report* list box can be saved as a file in comma delimited format for use with databases, or as a plain ASCII text file by clicking the *Save* button. After choosing a name and location for this file in the Windows Save As dialog, MDStats will ask you whether you want to save the file in comma delimited format or as a plain text file.

Report Page
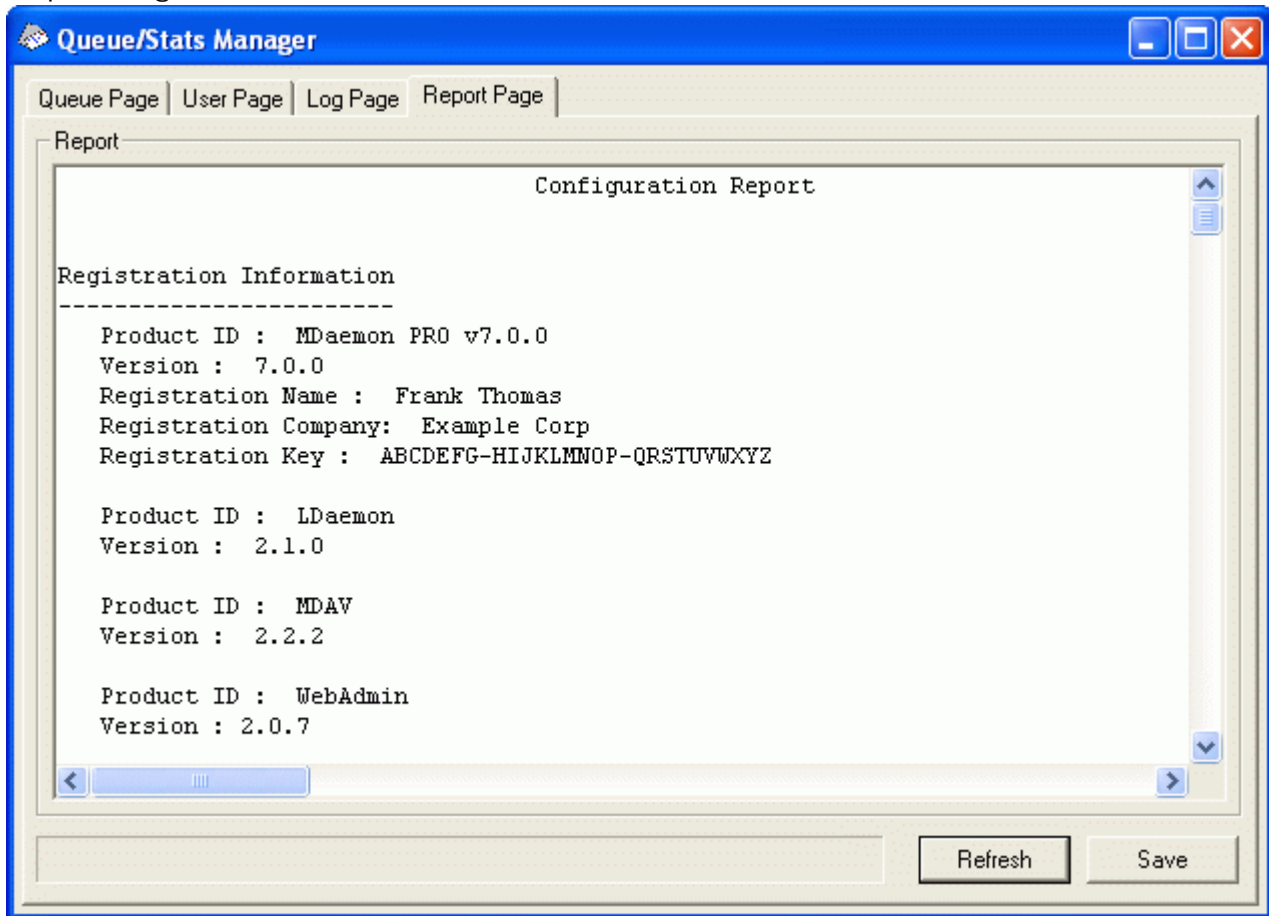
Report

When the *Report Page* is clicked MDStats will produce a comprehensive report that lists every setting within MDaemon in an easily readable text format. This feature greatly decreases the amount of time needed by an administrator to check MDaemon's many configuration settings, and it can aid in quickly solving possible configuration problems.

You can navigate through this report using either the scroll bars or the CURSOR keys, and the *Report* display is also a text editor - making it possible to insert notations or additional information that you may want on the report before saving it to a file. Additionally, you can use the shortcut menu to Cut, Copy, and Paste, to and from this display by right-clicking your mouse and making the desired selection from the menu that opens.

Refresh

Click this button to update the currently displayed *Report* of MDaemon settings.

Progress indicator

As with the other tabs in MDStats, the *Report Page* contains a progress indicator bar that serves as a visible indicator that the program is still operating while large files are being loaded or saved.

Save

Click this button to save the currently displayed *Report*. After clicking this button a standard Save As dialog will open so that you can designate a file name and location where you want to save it.

Customizing the Queue/Statistic Manager

The following is a list of settings that can be modified in the MDstats.ini file located in MDaemon's \app\ directory:

MDstats.ini File

[MDaemon]	
AppDir=C:\mdaemon\app\	Location of MDaemon's \app\ directory.
[QueueOptions]	
Editor=NOTEPAD.EXE	Editor to use when a message is double-clicked, or when a message is right-clicked and then Edit is selected.
LockOnEdit=No	Whether or not to create a LCK file when editing a message. This will prevent a message from being moved out of the queue while it is being edited.
AutoRefresh=Yes	Time (in seconds) between auto refreshes of the message listing. 0 means no auto refresh.
ShowDirectories=Yes	Show subdirectories of the queues in the list box in addition to the messages. Directories will appear as <DirectoryName>.
[UserOptions]	
ShowQuota=Yes	Determines whether the user listing displays quota information (message count and disk space just like MDaemon calculates it) or file information (number of files and total disk space).
[LogOptions]	
ShowUnknown=Yes	Show sessions that MDStats couldn't determine if they were inbound or outbound, SMTP or POP.
ShowSmtpInbound=Yes	Show SMTP inbound sessions.
ShowPopInbound=Yes	Show POP inbound sessions (mail checks).
ShowSmtpOutbound=Yes	Show SMTP outbound sessions.
ShowPopOutbound=Yes	Show POP outbound sessions (MultiPOP, DomainPOP).
ShowRFC822=Yes	Show RFC822 local mail deliveries.
ShowSmtpHelo=Yes	For SMTP inbound sessions, show HELO domain in the Host column.
IgnoreEmptyPop=Yes	Ignore mail checks when no mail was deliverd.

ShowImap=Yes	Shows IMAP Sessions.
[Remap]	Drive letter remapping; for running MDStats from a different machine than the one MDaemon is on.
C:=\\server\c	When reading from MDaemon.ini, replace "C:" with "\\server\c".
[Special]	
OnlyOneInstance=No	Allow only one instance of MDStats to run. Attempting to open it again will activate the instance that is already running. This option can be set on the GUI tab of Miscellaneous Options by enabling or disabling the control: "Restrict MDStats GUI to a single instance only".

MDStats Command Line Parameters

Note: All command line parameters are <u>not</u> case sensitive.

Number 1 through 8	Display a specified queue in the Queue Page.
	1 = Remote Queue
	2 = Local Queue
	3 = Retry Queue
	4 = LAN Queue
	5 = RAW Queue
	6 = Bad Queue
	7 = SmtpIn Queue
	8 = Save Queue
/L[N] [InputFile] [OutputFile]	Produce a log file report. Specifying an 'N' after the 'L' means do not save as a comma delimited file.
/A	If producing a log file report, append new information to the output file rather than overwriting it.

Chapter

28

Additional MDaemon Features

Additional Features, Functions, and Statistics of MDaemon v9.

Bandwidth Throttling

The new Bandwidth Throttling feature makes it possible for you to police the consumption of bandwidth used by MDaemon. You can control the rate at which sessions or services progress— different rates can be set for each of MDaemon's major services on a per-domain basis, including both primary and secondary domains and Domain Gateways. You can also set limits on local connections by selecting "Local traffic" from a drop down box. This will allow you to create special bandwidth settings that will take effect if the connection is either from or to a local IP address or domain name. Screens have been created to allow you to configure your own list of local IP addresses and domain names.

Bandwidth Throttling can be applied on either a per-session or per-service basis. When using the per-session mode, each session will be independently throttled to the associated rate. Thus multiple sessions of the same service type occurring simultaneously could exceed a service's configured value. When configured to throttle bandwidth on a per-service basis, MDaemon will monitor the combined use of all sessions of the same service type and allocate equal fractions of the total bandwidth to each. Multiple sessions will then share the configured maximum bandwidth equally. This will allow you to set a limit on an entire service.

When extending Bandwidth Throttling to a Domain Gateway, it must be handled a bit differently than a normal domain since a Domain Gateway doesn't have a specific IP address associated with it. MDaemon must use the value passed in the RCPT command to determine whether or not an inbound SMTP session is bound for the gateway. If it is, then inbound SMTP bandwidth throttling will be applied. Due to the limitations of SMTP, if even one recipient of a multiple recipient message is destined for a Domain Gateway then the entire session will be throttled.

The Bandwidth Throttling system is calibrated in kilobytes per second (KB/s). A value of "0" means that no limit will be applied to the speed at which a session (or service) progresses, thus it will use the maximum amount of available bandwidth. A value of "10", for example, will force MDaemon to deliberately throttle back on the speed of transmission so as to remain at or slightly above 10 KB/s.

Bursts of activity at the beginning of a session can and will exceed the fixed limits. Throttling takes place and becomes more defined as the session progresses.

Bandwidth Throttling
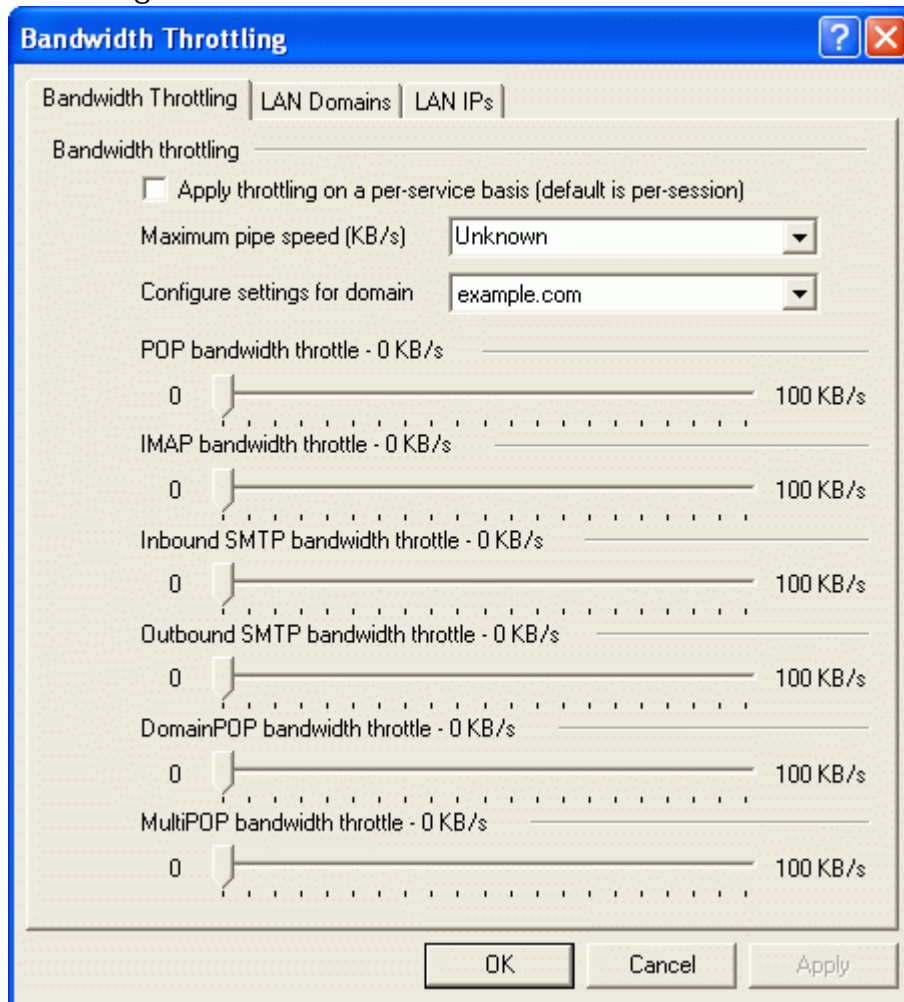
Bandwidth Throttling

Apply throttling on a per-service basis (default is per-session)
Click this checkbox if you want to throttle bandwidth on a per-service basis rather than the default per-session basis. When throttling on a per-service basis, the service's designated amount of bandwidth will be divided equally among all active sessions of the given service type. Thus, the total amount of bandwidth used, for example, by multiple IMAP clients connecting at the same time could never exceed the designated amount regardless of how many clients were connected. If throttling on a per-*session* basis, then no single IMAP session could exceed the designated limit but the total of multiple simultaneous sessions could.

Maximum pipe speed (KB/s)
From the drop-down list box, choose the maximum speed of your connection in Kilobytes per second.

Configure settings for domain
Choose a domain from the drop-down list box and then adjust the options corresponding to the various services to configure bandwidth throttling for the selected domain. A setting of "0" in any particular control means no bandwidth limit is set for that service type. In the drop-down list box, the bottom entry listed is *Local traffic*. Setting bandwidth throttling for this option will determine the limits placed on local

traffic (i.e. sessions and services occurring on your local LAN rather than externally). The LAN Domains and LAN IPs tabs can be used for listing domains and IP addresses that should be treated as local.

[Service type] bandwidth throttle – XX KB/s

After selecting a domain from the drop-down list box, adjust these controls to set bandwidth limitations for the selected domain. A setting of "0" means no bandwidth limit is applied to that particular service type. Setting a slider to any number other than "0" will limit the maximum bandwidth to that number of Kilobytes per second for the designated service.

LAN Domains
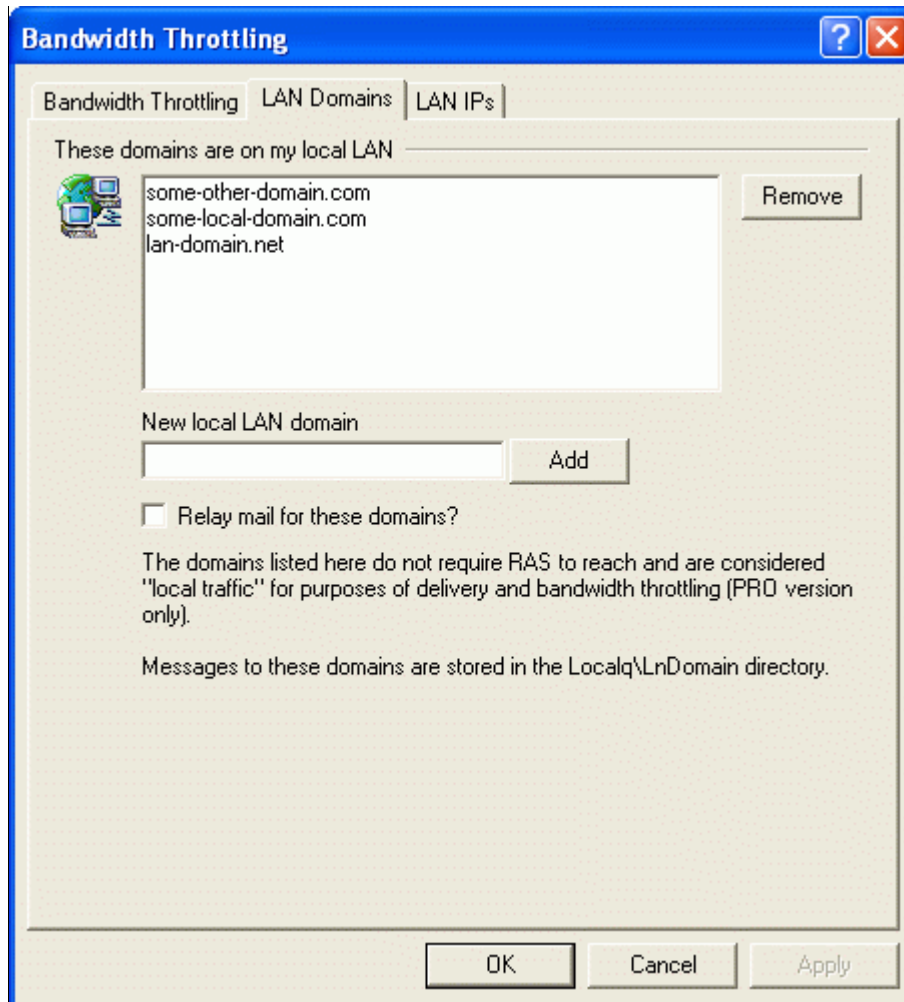
Note: This dialog is identical to the dialog of the same name located in RAS Dialup Settings (page 235). Changes made to the settings on either dialog will appear on both.

These domains are on my local LAN

The domains listed here are considered by MDaemon to be part of your local LAN. The Local Traffic setting on the Throttling tab will therefore be used to determine Bandwidth Throttling for them.

New local LAN domain
Enter a domain name to add to the local domain list, and click the *Add* button to add it.

Relay mail for these domains
If this switch is selected MDaemon will relay mail for these domains. This provides some measure of control over the traffic sent to and from these domains.

Add
Click this button to add an entry to the list of LAN domains.

Remove
Click this button to remove a selected entry from the list of LAN Domains.

LAN IPs

Note: This dialog is identical to the dialogs of the same name located in RAS Dialup Settings (page 236) and Security Settings (page 198). Changes made to the settings on any one of these dialogs will appear on all of them.

These IPs are on my local LAN

This tab is used to list IP addresses that reside on your LAN (local area network). These IP addresses therefore do not require RAS to reach them, and they are treated as local traffic for the purposes of bandwidth throttling. Further, there are various other security and spam prevention restrictions that they may be exempt from since they are local addresses.

Remove
Select an IP address from the list and then click this button to remove it. You may also double click an entry to remove it.

New local LAN IP
Enter an IP address to add to the local IP list and click *Add*. Wildcards like 127.0.*.* are permitted.

Add
After entering an IP Address into the *New local LAN IP* control, click this button to it to the list.

Hide local IPs when processing message headers
Click this check box if you want MDaemon to hide all local IP addresses when it creates received headers.

…hide these LAN IPs also
If MDaemon is configured to hide local IP addresses, click this check box if you want to hide these LAN IP addresses as well.

Signature Files
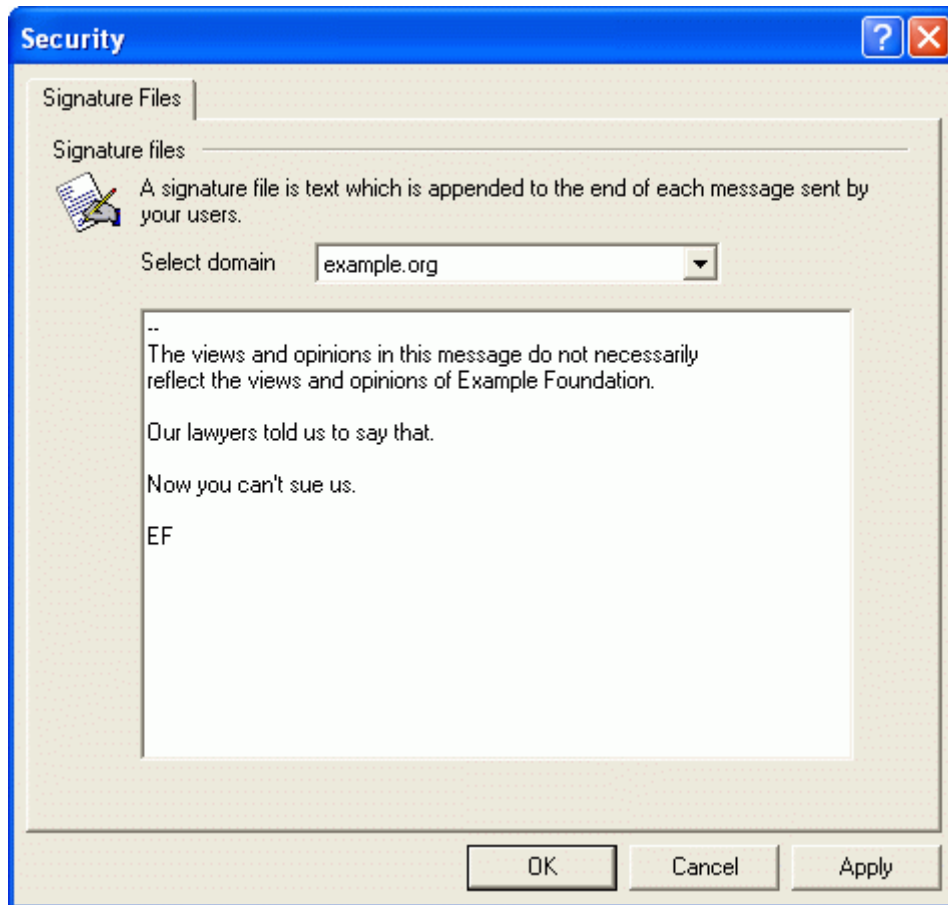
Signature Files

This dialog makes it possible for you to easily create default and per-domain message signature text. If the default signature text is present it will be appended to all messages sent from all local users—unless there is alternative text supplied for the user's specific domain. When domain-specific text if found, that is given priority over the default text.

MDaemon's Text Editor

MDaemon provides a **Text Editor** which may be opened with the **FILE→NEW** menu selection. The Text Editor can be useful for quickly creating *data* files for use with **Auto Responders** and various other MDaemon features, such as **MBF** and **RAW** files.

```
Editor - Document                                    _ □ ✕
After creating your document, select FILE | SAVE AS
from the Menu Bar, and then choose a name for your
file including the appropriate file extension.
Such as: *.mbf for MBF files, *.rsp for Auto Responders,
*.dat for MDaemon's data files, and *.raw for RAW files.
```
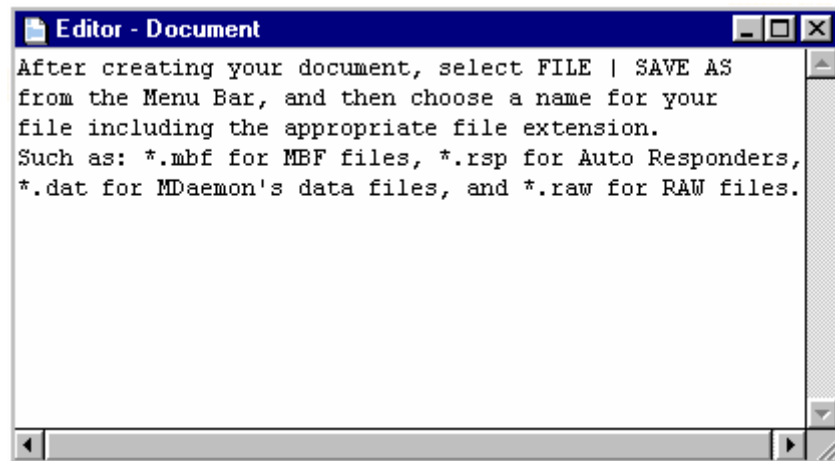
Editing MDaemon Files

MDaemon's text editor can also be used to edit a number of existing files used by MDaemon. You can open these files by using the menu option: **File→Open→[Filename]**. If the file that you wish to edit is not listed on the **Open** menu then click the **Generic Document** option. When you have finished editing the file click **File→Save** or **Save As…**

Here is a list of all the documents currently listed on the **Open** menu:

▪ Current version release notes

____

▪ Server usage policy statement

▪ HELP message

▪ New user welcome message

▪ Account information message

▪ Transient delivery failure message

▪ Permanent delivery failure message

▪ Delivery return-receipt message

▪ "No valid command found" message

▪ "No such user here" message

____

▪ MX cache database

▪ IP cache database

- IP shield database

- No-cache database

- Relay control database

- Address alias database

- Header translation database

- MIME type definition database

- IP screen database

- Priority mail database

The RAW Message Specification

MDaemon has inherent support for a simple and powerful mail message format known as RAW mail. This specification was developed in 1994 for a corporation that needed a custom MTA focusing on easy mail client development. The purpose of the RAW system is to provide a simple and standard format which software systems such as MDaemon can use to create the much more complex RFC-822 compliant message. Use of mail transport agents such as RAW allow client software to offload to the server all the complicated work of maintaining adherence to Internet mail standards.

RAW mail consists of a series of required and optional text headers followed by a message body. Most headers consist of a token followed by a value enclosed in <> symbols. Each header line ends with a <CRLF> combination of characters. Headers are separated from the message body by a blank line and are case insensitive, and the *from* and *to* headers are the only ones that are required. All text, headers and body, are plain ASCII text and must be contained in a file that ends with the extension, "RAW" (for example "my-message.raw"). Then, to queue the message for delivery, place the *.raw file in MDaemon's RAW queue.

Bypassing the Content Filter

By default, RAW messages are passed through the Content Filter like normal messages. If you want a given RAW message to bypass the filter then start the name of the file with "p" or "P". For example, "P_my-message.raw" would bypass the Content Filter but "my-message.raw" would be processed through it normally.

Note

Bypassing the Content Filter will prevent messages from being DK or DKIM signed. If you have configured MDaemon to sign all messages then this could potentially cause some delivery problems. If you want MDaemon to sign RAW messages configured to bypass the Content Filter then you can do so by using the x-flag=sign option outlined below.

RAW Headers

From <mailbox@host.com>	This field contains the email address of the sender.
To <mailbox@host.com [, mailbox@host.com]>	This field contains the email address(es) of the recipient(s). Multiple recipients can be specified by separating each one with a comma character.
ReplyTo <mailbox@host.com>	An optional email address where replies to this message will be directed.
CC <maibox@host.com [, mailbox@host.com]>	An optional list of carbon copy recipients of this message. Multiple carbon recipients can be specified by separating each one with a comma character.
Subject <text>	An optional subject for the message.
Header <Header: Value>	Allows you to explicitly place Header/Value combinations into the message. This makes it possible for you to place custom or other non-standard headers into your *.raw messages.

Special fields supported by RAW v3.1

File attachment and encoding
```
x-flag=attach <filepath, method> [-x]
```

Example: `x-flag=attach <c:\utils\pkzip.exe, MIME> -x`

This X-FLAG specifies the value "ATTACH" along with two parameters within the <> characters. The first parameter is a complete path to the file which should be attached to the message. The second parameter which is separated from the first by a comma character and specifies the method of encoding that is to be used when attaching the message. MDaemon supports two values for this parameter. The method of MIME instructs the server to use the Internet standard Base64 method of message encoding. The method of ASCII instructs the server to simply import the file into the message. An optional -X parameter at the end of the string instructs the server to remove the file from disk once it has been attached.

Delivery Status Notification
```
x-flag=confirm_delivery
```

When converting a RAW message which contains this flag into RFC-822 mail, the string is transformed to the "Return-Receipt-To: <sender@host.org>" construct.

Placing Specific Header/Value Combinations into the RFC-822 Message
```
header <header: value>
```

If you wish to place a specific header/value combination into the RFC-822 message that will be generated from a RAW file, you will need to use the HEADER macro listed in the RAW Headers section above. For example, if you want the header "Delivered-By: mail-machine@domain.com" to be placed into the RFC-822 message you would place this: "header <Delivered-By: mail-machine@domain.com>" in the RAW message. Note that the "header" macro requires both the field and value. You can place as many "header" macros as you need into a RAW message.

DK/DKIM Signing RAW Messages
```
x-flag=sign
```

Including this special command in a `*.raw` file will cause the RAW message to be DK/DKIM signed. This should only be used in RAW messages that you have configured to bypass the Content Filter (by starting their filenames with "p" or "P"). You should not use this command in normal RAW Messages that are processed through the filter. Those messages will be signed normally.

Note

All RAW messages that are generated by the Content Filter will use the `x-flag=sign` command automatically.

Sample RAW mail messages:

1)

```
from <mdaemon@altn.com>
to <JohnSmith@somewhere.com>

Hello John!
```

2)

```
from <JohnSmith@nowhere.com>
to <President@Whitehouse.gov>
subject <Secret FBI Files>
X-FLAG=CONFIRM_DELIVERY
X-FLAG=ATTACH <c:\secret\files\dole.zip, MIME> -X

Here are all those files you asked for.
```

Remote Server Control Via Email

Many functions of MDaemon can be accessed remotely using the email transport system itself. For example, users can gain access to various aspects of their accounts and change or reconfigure them by sending email messages to the server. MDaemon maintains an account for its own use in the user base. This account is reached by sending mail to the mailbox "`MDaemon@MDaemonsDomain.com`". Messages sent to the server are stored in the server's message directory just like any other user. At queue run time the server will cycle through all the mail it has received and parse each message for special instructions.

Some of these control messages require a valid account on the server, and are password protected. Users can gain access to their accounts using their account password, and the messages to the server must be directed to "MDaemon@mydomain.com". For those commands which require a valid account on the server, the **Subject** field of the message must contain the user's email address and password separated with a comma character (e.g. "Bill@mydomain.com, MyPassword"). Commands are placed within the body of the message. There can be only one command per line but multiple commands can be batched in the same message.

Account Access and Control

The following section lists the current account access and control commands available to account holders. All of these commands require a "Login, Password" construction in the subject line. Parameters contained in **[brackets]** are optional. For example: "name [address]" could be entered as "Lois" alone, or with the optional parameter added ("Lois LLane@dailyplanet.com").

COMMAND	PARMS	DESCRIPTION
ACCOUNT INFO	none	The status of the account passed in the subject line is mailed back to the originator. Ex: ACCOUNT INFO
PASSWORD	new password	The password of the account passed in the subject line will be changed to the one specified. Ex: PASSWORD kryptonite
MAILFORMAT	MBF file	The mailbox storage format of the account specified in subject line will be changed to the one specified. A listing of the available formats can be obtained via the MAIL FORMATS command (see General Email Controls section below). Ex: MAILBOX RFC-822
AUTODECODE	Y/N	Automatic decoding of incoming MIME attachments for the account specified in the subject line will be turned on or off. Y=on, N=off. Ex: AUTODECODE Y
BEGIN SIGNATURE	none	Begins recording of a new signature file to be appended to messages generated by the account passed in the subject line. Subsequent lines will be treated as the text of the signature file until the word END is encountered on a line by itself or the end of the control message is reached. **NOTE:** The signature file feature is only available for RAW format messages. RFC-822 mail that arrives at the server using SMTP or POP will not append the signature file. In these cases see your mail client's documentation for information concerning signature files.
BEGIN AUTORESPONDER	none	Begins recording of a new autoresponder file. Subsequent lines will be treated as the text of the autoresponder until the word END is encountered on a line by itself or the end of the control message is reached. Ex: BEGIN AUTORESPONDER I'm on vacation right now. I'll get back to you ASAP. END To erase an active autoresponder, use the same command but without any response text. Ex: BEGIN AUTORESPONDER END

FORWARD TO	address	The forwarding address for the account passed in the subject line will be changed to [address] and mail forwarding will be activated for the account. Ex: FORWARD TO vacationing@myhost.com
UNFORWARD	none	Mail forwarding will be deactivated for the account specified in the subject line. Ex: UNFORWARD
MULTIPOP	on/off	MultiPOP will be enabled/disabled for the account specified in the subject line. Ex: MULTIPOP ON Ex: MULTIPOP OFF

Mailing List and Catalog Control

None of these commands require an account on the server; thus the subject line need not contain any special value when specifying these instructions. Parameters contained in **[brackets]** are optional. For example: "name [address]" could be entered as "Clark" alone, or with the optional parameter added: "Clark CKent@dailyplanet.com". Command parameters listed in "{ }" or "( )" require those symbols to be used.

COMMANDS	PARMS	DESCRIPTIONS
USERS	none	A listing of all user accounts which are not flagged to hide their information will be mailed back to the message originator. Ex: USERS
LIST	none	A listing of all non-concealed named lists (*Mailing Lists* that are configured to respond to LIST commands) along with the names and addresses of all members will be mailed back to the message originator. Ex: LIST
	[listname]	Retrieves the membership of the list "LISTNAME" if it is configured to respond to the LIST command. Ex: LIST MDSUPP
	[listname (listpass)]	This command retrieves the membership of the list "LISTNAME" even if it is configured to ignore the LIST command; as long as the list password is correct. Parentheses around the list password ARE required. Ex: LIST MDSUPP (THERIGHTPASSWORD)
SUBSCRIBE	listname [address] [{real name}] [(pass)]	The originator is added to the membership of the specified list provided that list exists and allows remote subscriptions. If an optional address is specified after the list name then that address is added to the list's membership rather than the address found in the FROM: field of the subscription message. A real name can be added for the subscriber by including it in braces (e.g. {Frank Thomas}. If the list's password follows this command (parentheses around it are required) then the command will be honored even if this list's subscribe function is switched off. Ex: SUBSCRIBE mdsupp Ex: SUBSCRIBE mdsupp me@mydomain.com {Frank Thomas} Ex: SUBSCRIBE mdsupp you@yourdom.com (MDPASS)
UNSUBSCRIBE or SIGNOFF	listname [address] [(pass)]	The originator is removed from the membership of the specified list provided that list exists and contains the originator as a current member. If an optional address is specified after the list's name then that address is removed from the list's membership rather than the address found in the FROM: field of the unsubscribe message. If the list's password follows this command (parentheses around it are required) then the command will be honored even if this list's unsubscribe function is switched off. Ex: UNSUBSCRIBE MDSUPP (MDSPASS) Ex: SIGNOFF MDSupportList me@mydomain.com

UPDATE   listname old-address new-address {real name} (password)
                                      Removes "old-address" from the list and replaces it with "new-address". An optional real
                                      name and password value may be given.
                                      Ex: UPDATE mdsupp@altn.com old@my.com new@my.com {Mr. M}
                                      Ex: UPDATE mdsupp@altn.com old@my.com new@my.com (pass)

SUPPRESS   listname address (password)
                                      This command adds 'address' to the lists suppression file. The list's password must be
                                      provided and the list must already have a suppression file associated with it.
                                      Ex: SUPPRESS list@mydomain.com
                                      Ex: SUPPRESS me@mydomain.com (PASS)

UNSUPPRESS   listname address (password)
                                      This command removes 'address' from the lists suppression file. The list's password must be
                                      provided and the list must already have a suppression file associated with it.
                                      Ex: UNSUPPRESS list@mydomain.com
                                      Ex: UNSUPPRESS me@mydomain.com (PASS)

DIGEST   listname [address] The sender is set to receive mail from the list in digest format. If an optional address is
                                      specified after the list name then that address is set to digest mode.
                                      Ex: DIGEST MDSupportList
                                      Ex: DIGEST mdsupp joe@mdaemon.com

NORMAL   listname [address] The sender is set to receive mail from "list" in normal (non-digest) format. If an optional
                                      address is specified after the list name then that address is set to receive in normal format
                                      instead of the sender.
                                      Ex: NORMAL MDSupportList@mydomain.com
                                      Ex: NORMAL mdsupp@mydomain.com joe@mdaemon.com

NOMAIL   listname [address] This command sets 'address' to nomail mode. The account will enter a suspended state and
                                      will no longer receive list traffic. If no address is specified then the originator of the
                                      message will be used.
                                      ex: NOMAIL list@mydomain.com me@mydomain.com

MAIL   listname [address] This command returns 'address' to normal mode from nomail mode. If no address is specified
                                      then the originator of the message will be used. Ex: MAIL list@mydomain.com
                                      Ex: MAIL list@mydomain.com me@mydomain.com

REALNAME   listname [address] {real name}
                                      This command sets the real name value for "address" who is a member of list "listname" to
                                      the given value. The real name must be enclosed in { and } characters.
                                      Ex: REALNAME mdsupp@altn.com {Frank Thomas}

GET   catalog magic-name (password)
                                      Retrieves a file from the specified catalog, MIME encodes it in an email message, and sends
                                      that message to the originating account or to the one specified in a RESULTS TO directive.
                                      Ex: GET utils myutil (mypass)
                                      **<u>NOTE</u>: The special PUBLIC catalog doesn't require a catalog name or password in
                                      order to retrieve a file.**

DIR   catalog   Retrieves a directory of the files and magic names available through the catalog.
                                      Ex: DIR public.

General Email Controls

COMMANDS	PARMS	DESCRIPTIONS
HELP	none	A copy of the help.dat is processed and mailed back to the message originator.
RESULTS TO	address	The results of subsequent instructions are redirected to the email address specified rather than to that of the message originator. Ex: RESULTS TO someone@somewhere.com LIST MDSUPP
STATUS	none	A status report on server operations and current conditions will be mailed back to the message originator. Since the information contained in this status report is considered private the subject of the requesting message must contain the an Administrator level user and password such as: Administrator, Password Ex: STATUS

MAIL FORMATS	none	A listing of all the supported mailbox formats will be mailed back to the originator. Ex: MAIL FORMATS
GET ADDRESS	none	MDaemon will send a message back to the originator which will contain the current machine name and IP address assigned to MDaemon's computer. This is useful when you want to find out the IP address assigned by your ISP when using a dynamic dial-up situation. Since the information contained in this message is considered private the subject of the requesting message must contain an Administrator level user and password such as: Administrator, Password Ex: GET ADDRESS

MDaemon and Proxy Servers

MDaemon was purposely designed to be highly versatile. Consequently, it can be configured for use with a wide variety of network configurations and various other products, and its flexibility allows it to work well with LAN proxy servers. To configure MDaemon to work through any proxy server, all you must do is make sure that the port settings (see **Ports**—page 44) you are using do not conflict with any that may be set in the proxy server itself. For example, SMTP email normally takes place on port 25. Since an IP address can only have a single port 25, two servers cannot both listen for SMTP email at the same time on the same machine. When attempting to integrate MDaemon with a proxy**,** it is recommended that you allow MDaemon as much control over mail processing and delivery as possible. To that end, SMTP, POP, IMAP, and several other ports in the proxy server may need to be disabled so that MDaemon can handle mail delivery independently.

However, should you find it necessary to channel mail through a proxy, MDaemon allows you to configure the ports which it will use to send and receive SMTP/POP/IMAP transactions. You may need to set these ports to non-standard values in order to filter your SMTP/POP/IMAP transactions through a proxy server or firewall.

For more detailed information on configuring MDaemon to work with a proxy server, please consult the resources available at www.altn.com.

Miscellaneous Information

▪ If you send a message to "procnow@mydomain.com" MDaemon will generate the PROCNOW.SEM file. As a result of this, you can't use "procnow" as an email mailbox for one of your accounts.

▪ If you send a message to "getaddress@mydomain.com" MDaemon will send a message back to you telling you the domain name and IP address that has been assigned to MDaemon's computer. This is useful if you want to know what IP address has been assigned to your computer from your ISP when you have a dynamic dial-up situation.

Appendix A

Semaphore Files

MDaemon responds to numerous semaphore files that can be used for a variety of useful purposes. Periodically MDaemon will scan the \APP\ subdirectory for the existence of these files. If it finds one, the associated behavior is triggered and the semaphore file is removed. This provides for a simple mechanism that enables administrators and developers to manipulate MDaemon without actually handling the interface. The following is a list of all the semaphores and what they do:

FILENAME	ACTION
RESTART.SEM	Restarts MDaemon.
DISPLAY	If DISPLAY.SEM is found, the entire contents of the file is dumped line-for-line into MDaemon's system log.
USERLIST.SEM	Forces MDaemon to reload the USERLIST.DAT file and rebuild the EVERYONE.GRP mailing list. Use this when you make modifications to the USERLIST.DAT and need MDaemon to reload it.
EDITUSER.SEM	This semaphore is used to update specific records within the USERLIST.DAT file without a potentially time consuming complete rebuild. To update a specific record within USERLIST.DAT you first construct a complete replacement record according to the format specified in the Account Management Functions section of the MDaemon API (see MD-API.html in MDaemon's \docs\API\ subfolder).. The new record will reflect the changes that need to be updated within USERLIST.DAT. How does MDaemon know which record in USERLIST.DAT to update? This is accomplished by prepending the new record with the original record's email address followed by a comma. The EDITUSER.SEM file can contain multiple records to update – each on its own line. MDaemon will process the file one line at a time. You can create EDITUSER.LCK to lock the file while you are updating it and MDaemon will not touch EDITUSER.SEM until EDITUSER.LCK is deleted. To see a sample EDITUSER.SEM file open EDITUSER.SMP in your APP directory with a text editor.
ADDUSER.SEM	This semaphore creates new accounts. It is used to force MDaemon to append new records to the end of the USERLIST.DAT file without causing a potentially time consuming complete rebuild of the user database. Each line in this file must be a complete account record of the form specified in the Account Management Functions section of the MDaemon API (see MD-API.html in MDaemon's \docs\API\ subfolder). Multiple new accounts can be specified – one account record per line. MDaemon will process the file one line at a time and add each new account. You can create ADDUSER.LCK to lock the file while you are updating it and MDaemon will not touch ADDUSER.SEM until ADDUSER.LCK is deleted. To see a sample ADDUSER.SEM file open ADDUSER.SMP in your APP directory with a text editor.
DELUSER.SEM	You can use this semaphore file to delete one or more user accounts. Create a text file containing the addresses of each account that you want to be deleted (one address per line), name the file "DELUSER.SEM" and then move it to MDaemon's ...\app\ directory. MDaemon will delete the accounts and then delete the DELUSER.SEM file.
RELOADCACHE.SEM	Reloads all cached settings and files except for Content Filter settings and files..
PROCNOW.SEM	MDaemon will immediately go into mail processing mode.
PROCREM.SEM	MDaemon will immediately go into mail processing mode and transact all remote mail.
PROCDIG.SEM	Forces *Digests* to be sent immediately.
PROCRETR.SEM	Forces the Retry Queue to be processed.

PROCBAD.SEM	Forces the Bad Message Queue to be processed.
EXITNOW.SEM	MDaemon will terminate and remove itself from memory.
SCHEDULE.SEM	Forces MDaemon to reload the SCHEDULE.DAT file.
PRIORITY.SEM	Forces MDaemon to reload the PRIORITY.DAT file.
EXCPTION.SEM	Forces MDaemon to reload the EXCPTION.DAT file.
ALIAS.SEM	Reloads the alias file.
TRANSLAT.SEM	Reloads the header translation file.
SPAMEXCEPT.SEM	Reloads the DNS-BL exception file.
AUTORESPEXCEPT.SEM	Reloads the Auto Responder exception file.
MXCACHE.SEM	Reloads the MX cache file.
UPDATEAV.SEM	Forces an AntiVirus update.
PRUNE.SEM	Runs the old mail and account pruner program (the same thing that happens at midnight).
CFILTER.SEM	Reloads the content filter, including AntiVirus and AntiSpam settings.
EXPORTLDAP.SEM	Exports account information to LDAP address books (requires LDaemon).
BAYESLEARN.SEM	This SEM manually starts the Bayesian learning process. This is like clicking the Learn button on the Bayesian tab of the Spam Filter. **Note:** this will start the Bayesian learning procedure even if you have Bayesian learning disabled.
HANGUPR.SEM	Forces a "rude" hang-up of a connected RAS session. This is an immediate and unconditional hang-up without regard to mail sessions which may be in progress across the connection so watch out!
HANGUPG.SEM	Forces a "graceful" hang-up of a connected RAS session. MDaemon will wait for any pending mail sessions to close and will then hang-up the RAS session.
QUEUERUN.SEM	Just before a mail session begins MDaemon will create this semaphore file. Inside the file will be a datestamp indicating the time and date of the most recent mail processing interval.
ONLINE.SEM	MDaemon will create this semaphore file once it makes a successful connection using RAS to the ISP. MD will remove the semaphore once the connection has been terminated. This is useful if you want to know when MD is using the RAS sub-system.
PREDIAL.SEM	MDaemon will create this file just before trying to use RAS/DUN. This will allow other software to detect when it should free the dialup port so that MDaemon can use it.
POSTDIAL.SEM	MDaemon will create this file immediately after a connection made by MDaemon is taken down.
TRAY.SEM	Redraws MDaemon's icon in the system tray
SUPPRESS.SEM	Reloads the suppressed address list for all domains.
GRPLIST.SEM	Reloads Mailing List names dynamically.
CATLIST.SEM	Reloads Catalog names dynamically.
WATCHDOG.SEM	MDaemon will check for and remove this semaphore from the APP directory at approximately 10-20 second intervals. This file can be used by external apps to check if MDaemon is running. If this file remains in the APP directory for more than 20 seconds, that is a good indication that MDaemon is no longer running.
TARPIT.SEM	Reloads the memory resident TARPIT.DAT file thus implementing any Tarpitting changes.
ALERT.SEM	Displays in a pop-up window the contents of the semaphore file to all WorldClient users who are logged in when the file is created. It is not, however, displayed to all users immediately—it is displayed to each user individually the next time his or her browser makes a request to the WorldClient server.
	Note: Unlike other semaphore files, this file is WorldClient specific. Instead of placing it in MDaemon's \app\ directory it must be placed in the \MDaemon\WorldClient\ directory.

Appendix B

Message Precedence System

This feature makes it possible for you to assign a "Precedence" value (level of importance) of 0 to 99 to messages. This value signifies the relative sort order of the messages during the delivery process. The lower the value, the higher its importance and the further up it will be in the sort order within a message queue. Thus, MDaemon will attempt to deliver a message with a value of 10 before one with a value of 90. As a guideline for assigning Precedence values: 10 = Urgent, 50 = Normal, and 80 = Bulk.

You will find controls related to this feature on the Headers tab of Miscellaneous Options (page 294) and on the Options tab of the Mailing List Editor (page 387). You can also use the "Add Extra Header Item To Message" action of the Content Filters (page 254) to insert the `Precedence` header into any message.

Appendix C

Customizing SMTP and POP Protocol Strings

MDaemon contains a mechanism for altering the SMTP and POP protocol strings that it uses. You can provide custom strings for most of the SMTP and POP dialog. Each string that MDaemon uses has a unique number and a specific default value. These defaults will be used unless a custom string is found in the [Custom-SMTP] or [Custom-POP] sections in the MDAEMON.INI file.

When creating custom SMTP strings, pay close attention to the following:

1. Some SMTP default strings start with a blank space character (see chart below). Any replacement for these strings must also start with a blank space character. **Failure to do so will result in server failure!**

2. You must enclose the custom string in quotation marks when you place it into the `mdaemon.ini` file. **Failure to do so will result in server failure!**

3. Some strings contain macros such as "%s" or "%d". These macros are dynamically filled in with data when the string is loaded and used. Custom strings are not required to use these macros. However, a custom string may duplicate these macros provided they are placed in the same sequence as they appear in the default string. **Failure to place macros in the same sequence within a custom string will result in instant server failure!**

When creating custom POP strings, pay close attention to the following:

1. All POP default strings start with either "+OK" or "-ERR" (see chart below). Any replacement for these strings must also start with "+OK" or "-ERR". **Failure to properly use "+OK" or "-ERR" text at the start of a custom string will result in server failure!**

2. Some strings contain macros such as "%s" or "%d". These macros are dynamically filled in with data when the string is loaded and used. Custom strings are not required to use these macros. However, a custom string may duplicate these macros provided they are placed in the same sequence as they appear in the default string. **Failure to place macros in the same sequence within a custom string will result in instant server failure!**

Here is a list of the unique numbers and default string values used by MDaemon. Only the following strings can be changed. **Attempting to change a string that is not listed here will result in server failure!**

SMTP STRING CODES
```
7000="%s ESMTP service ready [%d]"
7002="%s Hello %s, pleased to meet you"
7004="<%s>, Sender ok"
7062="<%s>, Sender ok (alias for %s)"
7006="<%s>, Recipient ok"
7008="<%s>, Recipient ok (alias for %s)"
```

```
7010="Enter mail, end with <CRLF>.<CRLF>"
7011="See ya in cyberspace"
7012="What? I don't understand that."
7013="Ok, message saved"
7014="%s is not a valid maildrop.  Please check the address and try again."
7015="Sorry, try later.  Can't create temporary mail file. :("
7016="RSET?  Well, OK."
7017="Why is there an NOOP instruction?"
7018="Yeah, I know that one.  He (or she) is %s <%s>."
7019="<%s>?  Never heard of 'em."
7020="<%s>?  There's more than one possible match to that query on this
      server."
7021="Yeah, there's a list here by that name.  Mail to <%s>."
7022="<%s>?  There's no mailing list here by that name."
7023="<%s>?  There's more than one possible match to that query on this
      server."
7024="Hey!  I don't let remote systems TURN on me."
7025="Help system currently inactive."
7033="%s Hello %s, did you know your name is really %s?"
7034="Unexpected command or sequence of commands."
7037="Sorry, SMTP server too busy right now (%d).  Try again later."
7038="SMTP session successful, %ld bytes transferred!"
7039="SMTP session abnormally terminated, %ld bytes transferred!"
7041="Sending <%s> to [%s]"
7042="Connection timed out!"
7043="Spooling mail to default gateway"
7044="This server does not accept routed mail"
7046="Node <%s> does not store mail here"
7047="Your IP address <%s> does not have access to node <%s>"
7048="No messages waiting for node <%s>"
7050="<%d> pending messages for node <%s> started"
7051="Unable to queue message for node <%s>: Internal processing error"
7052="This server configured to NOT honor EHLO at present."
7053="Sorry, <%s> is not allowed access from your location"
7055="<%s>, Sender unknown"
```

You can see from the table that the initial SMTP greeting string is coded 7000. Therefore to create a custom SMTP greeting string place the following entry into the MDAEMON.INI file:

```
[Custom-SMTP]
7000=" Alt-N Technologies ESMTP server"
```

Note that you must enclose the custom string in quotations. Note also that this example string does not use any %s macros like the default one does. This is fine.

POP STRING CODES
```
7200="+OK %s POP service ready"
7201="+OK %s... Recipient ok"
7235="-ERR Access denied.  Contact postmaster@%s for more information."
7234="-ERR sorry, POP server too busy right now.  Try again later."
7202="-ERR sorry, there's no mailbox for %s here"
7203="-ERR that command is valid only in the AUTHORIZATION state!"
7204="-ERR that command is valid only in the TRANSACTION state!"
7205="-ERR that command is valid only in the UPDATE state!"
```

```
7233="-ERR maildrop already locked"
7206="+OK %s... see ya in cyberspace"
7207="-ERR access denied"
7208="+OK %s's mailbox has %d total messages (%ld octets)."
7210="+OK %d messages (%ld octets)"
7219="-ERR no such message"
7220="-ERR no such message, only messages 1 thru %d are present in your
      inbox"
7222="+OK %s %s POP Server signing off (mailbox empty)"
7223="+OK %s %s POP Server signing off (%d messages left)"
7214="-ERR unknown POP command!"
7213="+OK message %d deleted"
7224="-ERR message %d already marked for deletion"
7216="Sending TOP of message %d (unbuffered operation…)"
7241="Sending <%s> to [%s]"
7242="Connection timed out!"
7243="Transmission Complete <%s>"
7247="Message %d (%ld bytes) exceeds max message size limit of %ld bytes"
7248="Collecting Message %d (%ld bytes) would exceed account's max disk space
      limit of %ld bytes"
7249="Collecting Message %d would exceed account's max stored message limit
      of %ld"
7237="POP session complete, %ld bytes transferred!"
7238="POP session timed out, %ld bytes transferred!"
```

Appendix D

Route Slips

The concept of a "route slip" has been present in MDaemon since the beginning but has never been documented. Typically, a message file that is waiting in a queue contains within itself all the information that is needed to get the message delivered to the proper location. There are headers stored within the .MSG file (such as the X-MDaemon-Deliver-To header) which provide MDaemon with instructions as to where and to whom the message should be delivered. Sometimes however it is necessary or useful to override this information and provide specific alternatives to where and to whom an .MSG file must be sent. The route slip provides just such a mechanism. A route slip is a file which provides MDaemon with very specific instructions as to where and to whom a message file should be sent. If a route slip is present for a particular message file then the settings within the route slip - and not those within the .MSG file itself - control where and to whom the message is sent.

Route slips end with the extension .RTE. For example, if a message file waiting to be sent is called MD0000.MSG then the corresponding route slip file for this message will be called MD0000.RTE and must be located in the same directory (mail queue) as the message file.

The format of a route slip is as follows:

```
[RemoteHost]
DeliverTo=remote-domain.com
```

This section of a route slip provides MDaemon with the server to which the corresponding .MSG file is to be sent. MDaemon will always attempt a direct connection to this host attempting to route the message in as short a time as possible. Only one host may be specified.

```
[RemoteHost]
IgnoreRcptErrors=Yes (or No)
```

It is possible to specify an unlimited number of recipients of the .MSG file being sent. Sometimes hosts might refuse a particular address to which you are attempting to send a copy of the message. Ordinarily under SMTP regulations the session should be aborted. This switch will allow MDaemon to proceed to the next recipient in the list without aborting the session completely.

```
[Port]
Port=xxx
```

This switch specifies the port that the TCP/IP connection and delivery attempt should be made on. 25 is the default for SMTP email.

```
[LocalRcpts]
Rcpt0=address@my-domain.com
Rcpt1=other-address@my-domain.com
Rcpt2=yet-another-address@my-domain.com
```

```
[RemoteRcpts]
Rcpt0=address@foreign-domain.com
Rcpt1=other-address@foreign-domain.com
Rcpt2=yet-another-address@foreign-domain.com
```

These sections of the route slip allow you to specify any number of local and remote recipients who should receive a copy of the associated .MSG file. Local and remote recipient addresses must be kept separate and placed in their corresponding [LocalRcpts] and [RemoteRcpts] sections.

Route slips provide a good mechanism for delivering or redirecting email but they are not generally necessary. One use that MDaemon makes of route slips is in the case of "routed" mailing list mail. When you have a mailing list that is set to route a single copy of the list message to some remote host a route slip is employed to accomplish this. It is a very efficient method of mail delivery when you have bulk addresses to deliver mail to since only a single copy of the message is required while any number of recipients of the message can be specified. Not all remote hosts allow this sort of routing to occur however. Since it is ultimately they who will have to deliver a copy of the message file to each address some hosts place an upper limit on the number of recipients they will allow you to specify.

Appendix E

MDaemon Technical Support

Technical Support for the MDaemon Server is provided by Alt-N Technologies and is offered on several different levels, outlined below. Please review the support options and select whichever is appropriate for your needs.

All of the following options are located and fully discussed at the MDaemon web site.

> **http://www.mdaemon.com**

Telephone Support for All Users

MDaemon Technical Support is available via telephone for a per incident flat rate fee of $60.00. Paid telephone support is available between the hours of 9:00am and 6:00pm, Central Standard Time, Monday through Friday (excluding holidays), at 817.525.2005. When calling, please have credit card information ready.

Free Technical Support Options

Support for all users is provided via the MDaemon Help Desk and the MDaemon Open Discussion Forum, which allows for dialog within a threaded, searchable, and intuitive forum environment.

▪ **MDaemon Help Desk**— http://www.altn.com/Support/Default.asp?product_id=MDaemon

The MDaemon Help Desk outlines a number of resources to help you learn more about MDaemon, troubleshooting problems, and so on. By utilizing the Help Desk you can often avoid the need to contact Technical Support. The MDaemon Help Desk contains a number of useful resources including:

> **MDaemon Knowledge Base**— You can search our support database for answers to your questions. With support for time-based, natural language, and article-based searching, plus a listing of Frequently Asked Question, you're sure to find the right answer!
>
> **Helpful Articles**— The Help Desk contains a number of useful articles addressing various MDaemon configuration issues and other related topics.
>
> **Free Add-on & Complimentary Software**— Here you can download free supplementary software and utilities written by MDaemon's developers and users.

▪ **MDaemon Support Mailing List**—The MD-Support email discussion group is a mailing list hosted by Alt-N Technologies. It is an open membership list where users can get help and discuss MDaemon with other users. MDaemon's Development Team, other support staff, and a large mix of MDaemon users regularly participate in the discussion and contribute feedback and help. Odds are that someone will have an answer to your MDaemon question in the MD-Support email group. To join **MD-Support**, send a message to **mdaemon@altn.com** with the following in the first line of the body:

> **SUBSCRIBE md-support@altn.com myaddress@mydomain.com**

- **MDaemon Open Discussion Forum**— Come join in the MDaemon Open Discussion Forum to get help on your questions from both the MDaemon Tech Support Staff and other MDaemon users. It's a great way to learn, share, and exchange ideas! The Forum allows for dialog within a threaded, searchable, and intuitive forum environment. It is located at

  ```
  http://lists.altn.com
  ```

- **Free Email Support for All Users**— Free Unlimited Email Support is available for all MDaemon users. To obtain this free support via email, please submit your technical support request using the Technical Support Request Form located at:

  ```
  http://www.altn.com/Support/Default.asp?product_id=MDaemon
  ```

  The Technical Support Request Form can also be reached via link from the MDaemon web site.

Reseller Purchase

Users who purchased their copy of MDaemon from an Official Alt-N Partner will be referred back to them for support. If you would like to receive technical support from Alt-N Technologies, you will be required to pay the telephone support charge for a per incident flat rate fee of $60.00. For information about Official Alt-N Partners, or to locate a reseller near you visit:

```
http://www.altn.com/Partners/
```

Sales and Reseller Inquiries

Sales questions (of a non-technical nature) relative to MDaemon software should be directed to <**sales@altn.com**>. Alternatively, you can call Alt-N Technologies at 817.601.3222.

Contacts

MDaemon, WorldClient, and RelayFax are trademarks of Alt-N Technologies, LTD.

Alt-N Technologies, LTD.

2550 SW Grapevine Parkway, Suite #150
Grapevine, TX 76051
http://www.altn.com
817.601.3222
817.601.3223 fax

Sales and Reseller Inquiries

Sales questions (of a non-technical nature) relative to MDaemon software should be directed to <**sales@altn.com**>. Alternatively, you can call Alt-N Technologies at 817.525.2005.

You can locate an MDaemon reseller near you by using the Alt-N partner Database located at:

```
http://www.altn.com/partners/
```

Documentation Issues

mdaemon-docs@altn.com

MDaemon Beta Testing

Alt-N Technologies maintains an open policy on Beta-team participation. If you would like to join Alt-N's Beta-test Team and receive advance beta-copies of future MDaemon releases, Service Packs, and other Alt-N software, simply send a message to mdaemon@altn.com with the following in the first line of the body:

SUBSCRIBE md-beta@altn.com myaddress@mydomain.com

Our system will return an information packet to you with instructions for obtaining Beta software and participating in Beta testing. For more information on the **MDaemon Beta Team** visit:

http://www.altn.com/Beta/Default.asp

Note

The Beta Team is for those who wish to acquire Alt-N software before its general release and aid in its testing; it is not a technical support alternative. Technical support for MDaemon will only be provided through those methods outlined in the **MDaemon Technical Support** section. If you would like to subscribe to the MDaemon support Mailing List hosted by Alt-N Technologies, send a message to mdaemon@altn.com with the following in the first line of the body of the message and you will be added to the mailing list:

SUBSCRIBE md-support@altn.com myaddress@mydomain.com

Glossary

ACL—Stands for **A**ccess **C**ontrol **L**ists. ACL is an extension to the Internet Message Access Protocol (IMAP4) that makes it possible for you to create an access list for each of your IMAP message folders, thus granting access to your folders to other users whom also have accounts on your mail server. Further, you can set permissions governing the extent to which each user has control over those folders. For example, you can designate whether or not a user is allowed to delete messages, flag them as read or unread, copy messages to folders, create new subfolders, and so on. Only email clients that support ACL can be used to share this access and set permissions. However, if your email client doesn't support ACL you can still set these permissions from the MDaemon GUI.

ACL is fully discussed in RFC 2086, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc2086.txt
```

ASCII—Pronounced as-key, ASCII is an acronym for "**A**merican **S**tandard **C**ode for **I**nformation **I**nterchange". It is the worldwide standard code for representing all upper and lower-case Latin letters, numbers, and punctuation as a 7 digit binary number, with each character assigned a number from 0 to 127 (i.e. 0000000 to 1111111). For example, the ASCII code for uppercase M is 77. The majority of computers use ASCII codes to represent text, which makes it possible for them to transfer data to other computers. Most text editors and word processors are capable of storing files in ASCII format (sometimes called ASCII files). However, most data files—particularly those containing numeric data—are not stored in ASCII format.

Several larger character sets have 128 additional characters because they use 8 bits instead of 7. These extra characters are used to represent symbols and non-English characters. The DOS operating system uses a superset of ASCII called extended ASCII or high ASCII. A standard that is closer to universal, however, is ISO Latin 1, which is used by many operating systems and Web browsers.

ATRN—See ETRN and ODMR below.

Attachment—A file attached to an email message. Most email systems only support sending text files as email, therefore if the attachment is a binary file or formatted text file (e.g. a word processor document), it must first be encoded as text before it is sent and then decoded once it is received. There are a number of encoding schemes—two of the most prevalent being Multipurpose Internet Mail Extensions (MIME) and Unix-to-Unix encode (Uuencode). For incoming messages, Alt-N's MDaemon server can be configured to either leave the decoding process to the recipient's email client or automatically decode attachments and store them in a specific location before delivering the message to the local user.

Backbone—A line or series of connections that form the major pathway within a network. This term is relative since the non-backbone lines in a large network might be larger than the backbone in a smaller network.

Bandwidth—The amount of data that can be transmitted in a fixed amount of time through a network or modem connection, usually measured in bits-per-second (bps). A full page of English text is about

16,000 bits, which a fast modem could transfer in about 1 to 2 seconds. Full-motion full-screen video would require roughly 10,000,000 bits-per-second, depending on compression.

A good illustration of bandwidth is a highway. The highway represents the connection while the cars traveling on it represent the computer data. The wider the highway (the greater the bandwidth) the more cars that will be able to travel on it.

Baud—Baud rate is a measure of how frequently carrier signals change value on a phone line. It is a reference to the speed at which a modem transmits data. Usually, slower modems are described in terms of Baud rate while higher speed modems are described in bits per second. "Baud rate" and "bits per second" are not necessarily synonymous terms since each signal can encode more than one bit in high-speed connections.

Bit—A single **B**inary dig**it**. It is the smallest unit of computer data; a single digit number in base-2 (i.e. 0 or 1). It is usually abbreviated with a lower case "b" as in "bps" (bits per second). A full page of text is approximately 16,000 bits.

Bitmap—Most pictures you see on your computer, including all the ones found on the Internet, are bitmaps. A bitmap is a really just a map of dots (or bits) that looks like a picture as long as you're not to close to the screen, or have the bitmap magnified too much, to see the shape they make. Common Bitmap file types include BMP, JPEG, GIF, PICT, PCX, and TIFF. Because bitmap images are made up of a bunch of dots, if you zoom in on a bitmap it looks blocky rather than smooth. Vector graphics (usually created in CorelDraw, PostScript, or CAD formats) scale up much better because they are geometric shapes generated mathematically rather than simply being made of seemingly "random" dots.

Bps—"**B**its **P**er **S**econd" is a measurement of how fast computer data can be moved from one place to another. For example, a 33.6 kbps modem can transfer 33,600 bits per second. Kilobits (1000 bits) per second and megabits (1.000,000 bits) per second are abbreviated "Kbps" and "Mbps" respectively.

Browser—Short for "Web browser", it is an application used to display web pages. It interprets HTML code, text, hypertext links, images, JavaScript, and so on. The most widely distributed browsers are Internet Explorer and Netscape Communicator.

Byte—A set of bits (usually eight) that represent a single character. There are 8 bits in a byte, sometimes more, depending on how the measurement is being made. "Byte" is abbreviated with an uppercase "B".

Cache—Pronounced like "cash". There are various types of caches, but all are used to store recently used information so that it can be accessed quickly later. For example, a web browser uses a cache to store the pages, images, URLs, and other elements of web sites that you have recently visited. When you return to a "cached" page the browser will not have to download these elements again. Because accessing the cache on your hard disk is much faster than accessing the Internet, this significantly speeds up browsing.

MDaemon's IP Cache stores the IP addresses of domains to which you have recently delivered messages. This prevents MDaemon from having to lookup these addresses again when delivering additional messages to the same domains. This can greatly speed up the delivery process.

CGI—**C**ommon **G**ateway **I**nterface is a set of rules that describe how a Web Server communicates with another piece of software on the same machine, and how the other piece of software (the "CGI program") talks to the web server. Any piece of software can be a CGI program if it handles input and

output according to the CGI standard. However, a CGI program is usually a small program that takes data from a web server and does something with it, like putting the content of a form into an email message, or doing something else with that data. CGI programs are often stored in a web site's "cgi-bin" directory and therefore appear in a URL that accesses them, but not always.

cgi-bin—The most common name of the directory on a web server in which CGI programs are stored. The "bin" part of "cgi-bin" is short for "binary" because most programs used to be referred to as "binaries". In reality, most cgi-bin programs are text files; scripts executed by programs located elsewhere.

CIDR—"**C**lassless **I**nter-**D**omain **R**outing" is a new IP addressing system that replaces the older system, which was based on classes A, B, and C. CIDR IP addresses look like normal IP addresses followed by a slash and number, called the IP prefix. For example:

123.123.0.0/12

The IP prefix defines how many addresses are covered by the CIDR address, with lower numbers covering more addresses. In the above example, the IP prefix of "/12" can be used to address 4,096 former Class C addresses.

CIDR addresses reduce the size of routing tables and make more IP addresses available within organizations.

CIDR is addressed in RFCs 1517-1519, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc1517.txt
http://www.rfc-editor.org/rfc/rfc1518.txt
http://www.rfc-editor.org/rfc/rfc1519.txt
```

Client—A software program that is used to contact and obtain data from or send data to a *server* software program. The server is usually located on another computer, either on your local network or at some other location. Each *client* program is designed to work with one or more specific kinds of *server* programs, and each server requires a specific kind of client. A web *browser* is a specific kind of client that communicates with web *servers*.

Common Gateway Interface—See CGI above.

Cookie—In computer terminology, a *cookie* is data sent by a web server to your web browser, which is saved and later used for various purposes when you return to the same site or go to another location on the site. When a web server receives a request from a web browser that includes a cookie, it is able to use the information the cookie contains for whatever purpose it was designed, such as customizing what is sent back to the user, or for keeping a log of the user's requests. Typically, cookies are used for storing passwords, usernames, preferences, shopping cart information, and similar things related to the site to which they correspond so that the site can appear to "remember" who you are and what you've done there.

Depending on your browser's settings, you may accept or not accept the cookies, and save them for various amounts of time. Usually cookies are set to expire after a predetermined amount of time and are saved in memory until the web browser software is closed down, at which time they may be saved to disk.

Cookies **cannot** read your hard drive. They can, however, be used to gather information about you related to your usage of their particular web sites, which would be impossible without them.

Dial-up Networking—A component in Windows that enables you to connect your computer to a network via a modem. Unless your computer is connected to a Local Area Network (LAN) with access to the Internet, you will need to configure Dial-Up Networking (DUN) to dial a Point of Presence (POP) and log on to your Internet Service Provider (ISP) before you will have Internet access. Your ISP may need to provide certain information, such as the gateway address and your computer's IP address.

DUN is accessed through the My Computer icon. A different dialup profile can be configured for each online service that you use. Once configured, you can copy a profile shortcut to your desktop so that all you need to do to make a connection is double-click the connection icon.

Default—This term is used to refer to the preset value for options in computer programs. Default settings are those settings which are used when no specific setting has been designated by the user. For example, the default font setting in Netscape Communicator is "Times". This setting will remain "Times" unless you change it to something else. Default settings are usually the value that most people will choose.

Frequently the term *default* is also used as a verb. If a custom setting won't work or the program lacks some needed bit of data for completing a task, it will usually "default" to a specific setting or action.

DHCP—An acronym for "**D**ynamic **H**ost **C**ontrol **P**rotocol". Network servers use this protocol to dynamically assign IP addresses to networked computers. A DHCP server waits for a computer to connect to it and then assigns it an IP address from a stored list.

DHCP is addressed in RFC-2131, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc2131.txt
```

Domain Gateway—See Gateway below.

Domain Name—This is the unique name that identifies an Internet web site. For example, "altn.com" is the domain name of Alt-N Technologies. Each domain name contains two or more parts separated by dots; the leftmost part is the most specific while the rightmost part is the most general. Each domain name also points to the IP address of a single server, but a single server may have more than one domain name. For example, "mail.altn.com", "alt-n.com", and "somedomain.com" could all point to the same server as "altn.com", but "altn.com" could not point to two different servers. There are, however, methods for designating alternate servers to which clients will be directed if the main server goes down or is otherwise unavailable.

It is also common for a domain name to be registered but not be connected to an actual machine. The usual reason for this is the domain name's owner hasn't created a web site yet, or so that they can have email addresses at a certain domain without having to maintain a web site. In the latter case, there must be a real Internet machine to handle the mail of the listed domain name.

Finally, it is common to see the term "domain name" shortened and referred to as simply "domain". The word "domain" has other meanings and can refer to other things, such as a Windows NT domain or a class of values, so you should be aware of the distinction in order to avoid confusion.

Domain Names are addressed in RFCs 1034-1035, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc1034.txt
http://www.rfc-editor.org/rfc/rfc1035.txt
```

DomainPOP—Developed by Alt-N Technologies to be a part of the MDaemon server, DomainPOP makes it possible to provide email services for an entire LAN or workgroup from a single ISP POP mailbox. In the past, unless a company's email server had on constant "live" connection to the Internet, the only way to provide Internet email services to a workgroup was for each person to have their own mailbox on the company's ISP from which they could collect their mail. With DomainPOP only a single mailbox is required. The ISP pools all mail for the company's domain name into the mailbox from which it is periodically collected by DomainPOP. Then, DomainPOP parses the messages to determine the intended recipients of each and distributes them to the appropriate local user mailboxes. Thus email is provided for an entire network from a single dialup ISP account.

Download—The process by which your computer retrieves or obtains data from another computer. For example, information is obtained from the Internet by *downloading* it from other computers. The reverse of this is *uploading*. If you wish to send information to another computer then you will *upload* it to them.

Driver—A small program that communicates with a certain hardware device. Drivers contain information needed by the computer and other programs to control and recognize the device. Windows-based computers often have drivers packaged as a dynamic link library (DLL) file. Most hardware devices used with Macs do not need drivers, but when a driver is necessary it will usually come in the form of a System Extension.

DUN—See Dial-up Networking above.

Email—Stands for **"**Electronic mail". This term also appears in the forms: "E-mail", "e-mail", and "email"; all have the same meaning. Email is the transmission of text messages over communications networks. Most computer networks have some form of email system. Some email systems are confined to a single computer network, but others have gateways to other networks (which enables them to communicate with multiple locations), or to the Internet (which enables them to send email anywhere in the world).

Most email systems include some form of *email client* (also referred to as a *mail client* or just *client*) which contains a text editor and other tools for composing messages, and one or more *servers* which receive the email from the clients and route it to its appropriate destination. Typically, a message is composed using the client, passed to a server for delivery to the *email address* (or addresses) specified in the message, and then routed by the server to another server that is responsible for storing messages destined for that address. If the message's destination is a local address for which the original server is responsible then it may be stored on the original server rather than routed to another. Last, the recipient of the message will connect to their server and retrieve the message by using their email client. This entire process of transferring an email message from your client to its destination server usually only takes a few seconds or minutes.

Besides containing simple text, email messages may also include file *attachments*. These attachments can be any type of file that you desire: pictures, text files, program files, other email messages, and so on. However, since most email systems only support sending text files, attachments must first be encoded

(converted to a text format) before they can be sent, and then decoded when they arrive at their final destination. This process is usually done automatically by the sending and receiving mail clients.

All Internet Service Providers (ISPs) offer email. Most also support gateways so that you can exchange email with users of other email systems. Although there are many different protocols used for processing email by many different email systems, several common standards make it possible for users on virtually all systems to exchange messages.

Email Address—A name or string of characters that identifies a specific electronic mailbox on a network to which email can be sent. Email addresses are the locations to and from which email messages are sent. Email servers need email addresses so that they can route messages to their proper destinations. Different types of networks have different formats for email addresses, but on the Internet all email addresses have the form: "mailbox@domain.com".

For example,

   Frank.Thomas@altn.com

Email Client—Also called a *mail client* (or just *client*), an *email client* is a software application that enables you to send, receive, and organize email. It is called a client because email systems are based on client-server architecture; a client is used to compose the email and then send it to a server, which then routes it to the recipient's server from which it will be retrieved by the recipient's client. Usually, email clients are separate software applications installed on the user's machine, but products such as Alt-N Technologies' WorldClient Server contain a built in client that is "served" to the user's web browser. Thus, their browser is used as the client rather than needing to install one on their machine. This greatly enhances the portability and convenience of email.

Encryption—A security measure, *encryption* is the coding or scrambling of information in a file so that it will only be intelligible when it has been decoded or decrypted. Encryption is frequently used in email so that if a third party intercepted the email they would not be able to read it. The message is encrypted when it is sent and then decrypted at its final destination.

Ethernet—The most common type of connection used in a Local Area Network (LAN). Two of the most widely used forms of Ethernet are 10BaseT and 100BaseT. A 10BaseT Ethernet can transfer data at speeds up to 10 mbps (megabits per second) through a cable or wireless connection. A 100BaseT Ethernet transfers data at speeds up to 100 mbps. A Gigabit Ethernet can transfer data at rates up to 1000 mbps and is employed by some Apple computers.

ETRN—An acronym meaning **E**xtended **TURN**. It is an extension to SMTP that enables an SMTP server to send a request to another SMTP server to send, or "dequeue", mail that is being held for it. Because SMTP by itself cannot request mail (email is usually requested via the POP or IMAP protocols), this makes it possible for the SMTP server making the ETRN request to cause the remote server to start an SMTP session and begin sending the stored email to the host specified in the request.

The TURN command used for this purpose posed a security risk because it caused the SMTP session to reverse direction and begin sending the stored mail immediately without any verification or authentication that the requesting server was actually who it claimed to be. ETRN starts a new SMTP session rather than reversing direction. Thus if the server making the request is a "spoofed" host, the sending server will still

attempt to deliver the mail to the real host instead. There is now a proposed standard that introduces Authenticated TURN (`ATRN`), which, like `TURN`, reverses the direction of the SMTP session but requires authentication before doing so. This new standard is On-Demand Mail Relay (ODMR). Alt-N Technologies' MDaemon server supports both ETRN and ODMR's ATRN.

ETRN is addressed in RFC 1985, which can be viewed at:

> `http://www.rfc-editor.org/rfc/rfc1985.txt`

ODMR is addressed in RFC 2645, which can be viewed at:

> `http://www.rfc-editor.org/rfc/rfc2645.txt`

FAQ—Pronounced together as "fack" or as separate letters "F-A-Q", FAQ stands for "**F**requently **A**sked **Q**uestions". FAQs are documents that provide answers to the most commonly asked questions on a given subject. They usually appear in some form of list format with each question listed first followed by its answer. In larger FAQs, oftentimes all of the questions will be listed at the beginning of the document with references (or hyperlinks, in online FAQs) to the location of the question and answer in the document. FAQs are frequently used as a starting point for technical support and instructions—a great deal of time and effort can be saved if you have access to a FAQ that answers your question instead of being forced to contact technical support.

File Transfer Protocol—See FTP below.

Firewall—In computer terminology, a *firewall* exists when you undertake security measures, through either software or hardware means, to separate a computer network into two or more parts, or otherwise limit access to it to certain users. For example, you might want to let everyone view the home page of a web site hosted on your network but allow only your employees to get to an "employee only" area. Regardless of the method that you use to accomplish this—requiring a password, allowing connections from only certain IP addresses, or the like—the employee area is said to be behind a firewall.

FTP—Acronym for "**F**ile **T**ransfer **P**rotocol." It is a common and efficient method of transferring files via the Internet from one computer to another. There are specific client/server applications designed for this purpose called "FTP servers" and "FTP clients"—FTP Voyager and CuteFTP are two of the most common clients. Usually FTP clients can perform quite a few other functions besides simply transferring files and are thus highly useful products. Some web browsers also contain support for File Transfer Protocol, though sometimes for downloading only. Additionally, most FTP servers are "anonymous FTP", which means that anyone can log in to them in order to download files—usually by specifying "anonymous" as the user name and then your email address as the password. Oftentimes you can download files from anonymous FTP sites without having to log in at all—they can be retrieved by simply clicking on a link. For browsers that support FTP, usually all that needs to be done is to connect to the FTP site using "ftp://…" in its URL rather than "http://…"

FTP is addressed in RFC-959, which can be viewed at:

> `http://www.rfc-editor.org/rfc/rfc959.txt`

Gateway—Computer hardware or software that translates data between two applications or networks with protocols that are dissimilar. "Gateway" is also used to describe any means by which access is provided from one system to another. For example, your ISP is a gateway to the Internet.

Alt-N Technologies' MDaemon email server can function as an email gateway for other domains through the use of its Domain Gateways feature. It acts as an intermediary, or Gateway, by collecting the domain's email and then holding it until the domain collects it. This is useful both for domains that do not maintain a continuous connection to the Internet and for domains that require a backup server in case theirs goes down.

GIF—"**G**raphics **I**nterchange **F**ormat" is a popular format for image files and is the most common format of images found on the Internet. GIF uses indexed colors or a palette of a certain number of colors, which greatly reduces file size—especially when the image contains large areas of the same color. The reduced size enables them to be quickly transferred between systems and accounts for their popularity on the Internet. The GIF compression formula was originally developed by CompuServe and thus you will often see GIF referred to as CompuServe GIF.

Graphical User Interface—See GUI below.

GUI—Pronounced "gooey", this acronym stands for "**G**raphical **U**ser **I**nterface". A GUI makes it possible to interact with your computer or application by using a pointing device to click graphical elements on the screen rather than typing in text at a command line. The Microsoft Windows and Apple Mac operating systems are both GUI-based, but—although first introduced by Apple—the idea of a graphical user interface actually originated from Xerox.

Host—Any computer on a network that acts as a server for other computers on the same network. The host machine may be running a web server, email server, or other services, and it is common for it to provide several services at once. Host is also often used in the verb form "to host". For example, a machine running an email server would be "hosting" the email.

On peer-to-peer networks it is common for machines to be both hosts and clients at the same time. For example, your machine may host your network's printer but also be used by you as a client to collect email and download files from another host.

HTML—An acronym for "**H**ypertext **M**arkup **L**anguage. It is the coding language used to create Hypertext documents used on the World Wide Web. Simply put, an HTML document is a plain text document that contains formatting codes and tags that the user's web browser interprets and presents as a web page complete with formatted text and colors. For example, a browser receiving an HTML document containing the text "<B>Text</B>" would present the word "Text" in Bold. Because plain text files are very small, this makes it possible for them to be quickly transferred over the Internet.

HTTP—Hypertext **T**ransfer **P**rotocol (HTTP) is the protocol used for transferring *hypertext* files between computers over the Internet. HTTP requires a client program on one end (usually a web browser) and an HTTP server on the other end.

HTTP is addressed in RFC-2616, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc2616.txt
```

Hypertext—Any text that contains a hyperlink or jump to another document or place within the same document is called hypertext. Sometimes the text is also called a hypertext link or simply link. Hypertext can be either a word or phrase and has the link embedded in it so that clicking it will move you to the "book marked" location or cause the linked document to be displayed. Usually hypertext links are apparent because the text is underlined and a different color, but that is not required. Sometimes hypertext will look no different than normal text, but will almost always be indicated by some sort of graphical change to your pointer when the mouse pointer is paused over it.

Hypertext Markup Language—See HTML above.

IMAP—Developed by Stanford University, **I**nternet **M**essage **A**ccess **P**rotocol (IMAP) is a protocol used for managing and retrieving email messages. The latest version is IMAP4 and is similar to POP3 but with a number of additional features. IMAP4 is best known as a protocol used for managing email messages on the server rather than on the user's local machine—messages can be searched for keywords, organized in folders, specifically selected for downloading, and other features, all while they are still on the server. Thus IMAP places less demand on the user's machine and centralizes email so that it can be accessed from multiple locations.

IMAP is addressed in RFC-2060, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc2060.txt
```

IMAP4 ACL extension—See ACL above.

Internet—The Internet was created in 1969 by the United States military, originally to be a communications network that couldn't be destroyed during a nuclear war. It now consists of millions of computers and networks all over the world. By design, the Internet is decentralized—it is not controlled by any company, organization, or country. Each host (or machine) on the Internet is independent of the others and can provide whatever information or services its operators wishes to make available. Nevertheless, most information transferred over the Internet at some point passes through "backbones", which are extremely high-bandwidth high-speed connections controlled by the largest Internet Service Providers and organizations. Most people access the Internet through an online service such as AOL or through an Internet Service Provider (ISP) that maintains or is connected to one of these backbones.

Many people believe that the *World Wide Web* (WWW) and the Internet are the same thing, but this is not the case. The WWW is only one part of the Internet not the Internet itself. It is the most visible and popular part, largely driven by commerce, but still only a part.

Intranet—Simply put, an intranet is a small or private Internet used strictly within a company or organization's network. Although intranets vary widely from organization to organization, they may contain any of the features available on the Internet. They may have their own email systems, file directories, web pages to be browsed, articles to be read, and so on. The primary difference between an intranet and the Internet is that an intranet is relatively small and confined to an organization or group.

IP—An acronym for "**I**nternet **P**rotocol" (e.g. as in TCP/IP). Internet protocols make it possible for data to be transferred between systems over the Internet. Regardless of each machine's platform or operating system, if the same Internet Protocol is used by each machine then they will be able to transfer data to each other. The term "IP" is also commonly used as a further abbreviation of the term "IP Address". The current standard Internet Protocol is IP version 4 (IPv4).

Internet Protocol is addressed in RFC-791, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc791.txt
```

IP Address—Occasionally called an IP Number, IP Address stands for **I**nternet **P**rotocol Address and is used to identify a particular TCP/IP network and the hosts or machines on that network. It is a 32-bit numeric address containing four numbers between 0 and 255 separated by dots (e.g. "127.0.0.1"). Within an isolated network, each computer must have a unique IP address, which can be assigned at random. But, every computer on the Internet must have a registered IP address to avoid duplication. Each Internet IP address can be either static or dynamic. Static addresses do not change and always represent the same location or machine on the Internet. Dynamic IP addresses change and are usually assigned by an ISP to computers that are only on the Internet temporarily—such as when a user with a dial-up account accesses the Internet. However, it is still possible for a dial-up account to have a static IP address assigned to it.

ISPs and large organizations usually attempt to acquire a range or set of IP addresses from the InterNIC Registration Service so that all clients on their network or using their service may have similar addresses. These sets are broken up into three classes: Class A, B, and C. Class A and B sets are used by very large organizations and support 16 million and 65,000 hosts respectively. Class C sets are for smaller networks and support 255 hosts. Class A and B sets are now very difficult to get due to the shortage of available addresses; consequently most companies have to settle for multiple class C sets instead. Because of this IP address shortage, there is a new IP address protocol called Classless Inter-domain Routing (CIDR) that is gradually replacing the older system.

The current Internet Protocol standard, IPv4, is addressed in RFC-791, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc791.txt
```

IP version 6 (IPv6) is addressed in RFC-2460 at:

```
http://www.rfc-editor.org/rfc/rfc2460.txt
```

CIDR is addressed in RFCs 1517-1519 at:

```
http://www.rfc-editor.org/rfc/rfc1517.txt
http://www.rfc-editor.org/rfc/rfc1518.txt
http://www.rfc-editor.org/rfc/rfc1519.txt
```

IP Number—See *IP Address* above.

ISP—An **I**nternet **S**ervice **P**rovider (ISP) is a company that provides Internet access and services to the end user. Most ISPs provide multiple Internet services to their customers, such as: WWW access, email, access to newsgroups and news servers, and so on. Typically, users will connect to their ISP via dial-up, or some other form of connection, and then the ISP will connect them to a router, which will in turn route them to the Internet backbone.

Java—Developed by Sun Microsystems, Java is a network-oriented computer programming language with syntax much like C/C++ but is structured around classes instead of functions. In Internet

applications it is commonly used for programming applets, which are small programs embedded in web pages. These programs can be automatically downloaded and executed by a user's browser in order to provide a large number of functions that wouldn't ordinarily be possible with just HTML or other scripting languages, and without fear of viruses or harm to your computer. Because Java is both efficient and easy to use, it is becoming popular among many software and hardware developers.

JavaScript—Not to be confused with Java, JavaScript was developed by Netscape as a scripting language designed to extend the capabilities of HTML and create interactive web pages. It is a highly pared down and easy to use programming language, which makes it much easier to use than Java and other languages but also limits it to some degree. It spite of its limitations it is very useful for adding a number if interactive elements to web sites. For example, JavaScript is useful when you want data to be preprocessed before it is submitted to the server, or when you want your pages to respond to user interaction with links or form elements. It can also be used to control plug-ins and applets based on user choices, and to accomplish a large number of other functions. JavaScript is included within the text of HTML documents and is interpreted by web browsers in order to perform the functions.

JPEG—A graphics file format that is very efficient at compressing high-color and photographic images—much more so than the GIF format. While GIF is the best choice for images containing regular shapes and large areas of repeating color patterns, JPEG is much more suited to images with irregular patterns and large numbers of colors. JPEG is the most commonly used format for high-color and photographic images on the Internet. The acronym JPEG stands for "**J**oint **P**hotographic **E**xperts **G**roup"—the group that developed the format.

Kbps—Commonly used when referring to modem speeds (e.g. 56 Kbps), this acronym stands for "**K**ilo**b**its **P**er **S**econd". It is the number of kilobits (1000 bits) of data being moved or processed every second. Note that this is kilo*bits* not kilo*bytes*—a kilobyte would be eight times more data than a kilobit.

Kilobyte—A kilobyte (K or KB) is a thousand bytes of computer data. Technically it is 1024 bytes (2^{10} = 1024) but in normal usage it is usually rounded off to 1000 for simplicity.

LAN—A **L**ocal **A**rea **N**etwork (LAN) is a computer network limited to a single building or area, usually having all nodes (computers or workstations) connected together with some configuration of wires or cables or some other form of media. Most large companies have a LAN, which greatly simplifies the management and sharing of information amongst employees and offices. Most LANs utilize some form of email or chat system, and share devices such as printers in order to avoid having to have a separate device for each station. When the network's nodes are connected together via phone lines, radio waves, or satellite links it is called a Wide Area Network (WAN) instead of LAN.

Latency—The time it takes a data packet to move across a network connection. While a data packet is being sent, there is "latent" time during which the sending computer waits for a confirmation that the packet has been received. In addition to bandwidth, latency is one of the factors that determine the speed of your connection.

LDAP—**L**ightweight **D**irectory **A**ccess **P**rotocol (LDAP) is an online directory service protocol that is a simplification of Directory Access Protocol (DAP). The directory system is in a hierarchical structure consisting of the following levels: The "root" or starting directory, country, organization, organizational unit, and individual within that unit. Each LDAP entry is a collection of attributes with a unique identifier, called a distinguished name (DN). Because it is an open protocol, is efficient, and has the ability to be

distributed across many servers, LDAP may eventually make it possible for virtually any application on any platform to access directory information for locating email addresses, organizations, files, and so on worldwide.

LDAP is addressed in RFC-2251, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc2251.txt
```

Link—See *Hyperlink* above.

List server—A server application that is used to distribute email messages to multiple recipients by simply addressing the message to a single address. Simply put, when an email message is addressed to a *mailing list* maintained by the list server it will be automatically broadcast to the members of the list. Mailing lists typically have a single normal email address (for example, listname@example.com) but that address refers to a whole list of recipients rather than to a specific person or mailbox. When someone *subscribes* to a mailing list, the list server will automatically add the address to the list and distribute future emails directed to the list to that address, or member, and all other members. When someone unsubscribes, the list server simply removes the address so that it will receive no further list messages.

Frequently the term listserv is used generically to refer to any mailing list server. However, Listserv® is a registered trademark of L-Soft international, Inc. and is a specific program developed by Eric Thomas for BITNET in 1986. Besides other list servers, Alt-N Technologies' MDaemon server is equipped with an entire suite of list server, or mailing list, functions and features.

Logon—a unique code or series of characters used to gain access or otherwise identify yourself to a server or machine. In most cases a password must accompany the logon in order to gain access.

There are many terms used synonymously with "logon", such as *login*, *username*, *user name*, *user ID*, *sign-in*, and others. Frequently, "logon" is also used as a verb. For example, "I am going to *logon* to the mail server". In that context, however, the more common usage (and perhaps more proper) is "I am going to *log on* to the mail server".

Mailbox—An area in memory or on a storage device that is assigned to a specific email address and where email messages are stored. In any email system, each user has a private mailbox in which messages are stored when that user's mail server receives them. It is also common for the term "mailbox" to be used when referring to the leftmost portion of an email address. For example, "Frank" in "Frank@altn.com" is the mailbox while "altn.com" is the domain name.

Mailing List—Also called email groups, a mailing list is a list or group of email addresses identified by a single email address. For example, "listname@example.com". Typically when a list server receives an email message addressed to one of its mailing lists that message will be automatically distributed to all of the list's members (i.e. the addresses included in the list). Alt-N Technologies' MDaemon server is equipped with an extensive suite of mailing list features that enable lists to be public or private (anyone can post or join, or only members can post or join), moderated (each message must be approved by someone before it will go to the list), sent in digest format or as individual messages, and used in a variety of other ways.

Megabyte—Though technically 1,048,576 bytes (or 1024 kilobytes), a megabyte is more commonly rounded off and used to refer to a million bytes. Megabyte is abbreviated: "MB", as in "20 MB".

MIME—Defined in 1992 by the Internet Engineering Task Force (IETF), **M**ultipurpose **I**nternet **M**ail **E**xtensions (MIME) is the standard encoding method used for attaching non-text files to standard Internet email messages. Because typically only plain text files can be transferred via email, non-text files must first be encoding into a plain text format and then decoded after reaching their destination. Thus, an email program is said to be MIME Compliant if it can both send and receive files using the MIME standard. When a MIME-encoded message attachment is sent, generally both the type of file being sent and the method that should be used to turn it back into its original form are specified as part of the message. There are many predefined MIME content types, such as "image/jpeg" and "text/plain". However, it is also possible to define your own MIME types.

The MIME standard is also used by web servers to identify the files they are sending to web browsers. Because web browsers support various MIME types, this enables the browser to display or output files that are not in HTML format. Further, by updating the browser's lists of MIME-Types and the software used for handling each type, new file formats can be readily supported.

MIME is addressed in RFCs 2045-2049, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc2045.txt
http://www.rfc-editor.org/rfc/rfc2046.txt
http://www.rfc-editor.org/rfc/rfc2047.txt
http://www.rfc-editor.org/rfc/rfc2048.txt
http://www.rfc-editor.org/rfc/rfc2049.txt
```

Mirror—A server (usually an FTP server) that has a copy of the same files that are on another server. Its purpose is generally to provide an alternate location from which the mirrored files can be downloaded should the original server go down or be overloaded. The term "mirror" can also refer to a configuration whereby information is written to more than one hard disk simultaneously. This is used as a redundancy measure so that if one disk fails the computer can continue to operate without losing any vital data.

Modem—An acronym derived from **mo**dulator-**dem**odulator. A modem is a device connected to a computer that enables the transfer of data to other computers over telephone lines. The modem converts the computer's digital data to an analog format (modulates) and then transmits it to another modem where the process is reversed (demodulates). Put simply, a modem is an analog-to-digital and digital-to-analog converter. The speed at which the data is transferred is expressed in either baud-rate (e.g. 9600 baud) or kilobits per second (e.g. 28.8 kbps).

MultiPOP—A component of Alt-N Technologies' MDaemon email server that can be configured to collect email, via the POP3 protocol, simultaneously from various email servers on behalf of MDaemon's users. This makes it possible for MDaemon account holders who have email accounts elsewhere on other email servers to have that email collected and pooled with their MDaemon account email. Thus storing all of their email in a single mailbox.

NAT—See Network Address Translation below.

Network—Two or more computers connected together in some fashion. The purpose of a network is to enable the sharing of resources and information between multiple systems. Some common examples are: multiple computers sharing printers, DVD-ROM drives, hard disks, individual files, and so on.

There are many types of networks, but the most broadly defined types are Local Area Networks (LANs) and Wide Area Networks (WANs). In a LAN, the individual computers (or nodes) are geographically close together—usually in the same building. They are also usually connected together directly with wires, although wireless connections are becoming common as well. The nodes in a WAN are usually farther apart (in another building or city) and connected via telephone lines, satellite hook-up, or some other form of connection.

The Internet itself is a network. It is often described as a network of networks.

Network Address Translation—Network address translation (NAT) is a system whereby two sets of Internet Protocol addresses (IP addresses) are used by a single network—one for external traffic and the other for internal traffic. This is mainly used as a firewall measure to help ensure network security. Your computer will appear to have a certain IP address to computers outside your LAN while your actual IP address is altogether different. Hardware or software placed "between" your network and the Internet performs the translations between the two addresses. Using this method, it is common for multiple computers in a LAN to "share" one company IP address. Thus there is no way for someone outside your network to know your actual address and directly connect to your computer without it first being qualified or authenticated during the translation.

Network Interface Card—A network interface card (NIC) is a computer circuit board that enables a computer to be connected to a network. NICs provide a full-time network connection whereas a modem (used by most home computers to dial-in to a network via telephone lines) usually provides only a temporary connection. Most NICs are designed for specific types of networks and protocols, such as Ethernet or token ring and TCP/IP.

Network News Transfer Protocol—See NNTP below.

NIC—See Network Interface Card above.

NNTP—**N**etwork **N**ews **T**ransfer **P**rotocol (NNTP) is the protocol used to transfer and distribute messages on USENET newsgroups. The most common and popular browsers and email clients now have NNTP clients built-in.

NNTP is addressed in RFC-977, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc977.txt
```

Node—Any single computer connected to a network.

ODMR—**O**n-**D**emand **M**ail **R**elay is a new protocol designed to enable mail servers with only an intermittent connection to a service provider, and which do not have a static IP address, to receive mail similarly to those servers that do have one and use the `ETRN` command. If the system has a static IP address, the ESMTP ETRN command can be used. However, systems with dynamic IP addresses have no widely deployed solution. ODMR solves this problem. Among other things, ODMR introduces the Authenticated TURN command (`ATRN`) which causes the flow of an SMTP session to be reversed (like the older TURN command) but with the added security of requiring that the requesting server be authenticated. This makes it possible for an SMTP server with a dynamic IP address to connect to its ISP and have one or more host's email delivered to it via SMTP rather than collect it via POP or IMAP. This

helps meet the widespread demand for a low-cost solution for those companies that need to their own mail server but cannot afford a static IP address or dedicated online presence.

ODMR is addressed in RFC 2645, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc2645.txt
```

OEM—Original **E**quipment **M**anufacturer (OEM) is an often confusing and misunderstood term. An OEM is a company that uses another company's equipment or products in its own product that is packaged and sold under a different brand or company name. For example, HyperMegaGlobalCom, Inc. is an OEM because it purchases computer components from one or more different companies, puts them all together into a single customized product, and then sells it with "HyperMegaGlobalCom" stamped on it. The company that sold HyperMegaGlobalCom the components might also be an OEM if they in turn got their components from someone else as well. "OEM" is an unfortunate misnomer because OEMs are not actually the original manufacturers; they are the "packagers" or "customizers". In spite of this, many people still often use the term "OEM" when referring to the actual hardware manufacturers instead of those who repackage it—and understandably so.

On the fly—The term "on the fly" is commonly used it two different ways. First, it is often used to denote something that can be done "in a hurry" or easily while "in the middle" of performing some other task. For example, a bookkeeping product might support creating accounts "on the fly" while in the middle of entering sales figures—"Simply stop entering figures, click button X, enter a name, and then continue entering more figures." The other way that "on the fly" is used is in referring to something that can be generated dynamically or automatically instead of manually or statically. For example, by using the information stored in a "cookie" a customized web page might be generated "on the fly" when a user returns to a web site. Rather than requiring someone to manually create a page customized to the user's tastes, it would be generated dynamically based upon that person's actions while browsing.

Original Equipment Manufacturer—See OEM above.

Packet—A unit of computer data sent over a network. Any time you receive data from another computer on your LAN or over the Internet it comes to your computer in the form of "packets". The original file or message is divided into these packets, transmitted, and then recombined at the destination. Each packet contains a header containing its source and destination, a block of data content, and an error-checking code. It is also "numbered" so that it can be connected to related packets being sent. The process of sending and receiving packets is known as "packet-switching". Packets are also commonly called "datagrams".

Packet Switching—The process of sending and receiving packets over a network or the Internet. In contrast to circuit switching (such as in an analog telephone), which sends the data in a continuous stream over a single path or circuit, packet switching transmits the data broken up into "packets", which may not necessarily take the same route to get to their destination. Further, because the data is in separate units, multiple users can send different files simultaneously over the same path.

Parameter—A parameter is a characteristic or value. In computing, it is any value passed to a program by a user or another program. Your name and password, a preference setting, font size, and so on are all parameters. In programming, a parameter is a value that is passed to a subroutine or function for processing.

PDF—Portable **D**ocument **F**ormat (PDF) is a highly compressed multi-platform file format developed by Adobe Systems Incorporated that captures document formatting, text, and images from a variety of applications. This makes it possible for the document to appear the same and print accurately on multiple computers and platforms (unlike many word processors). Viewing a PDF file requires the Adobe Acrobat Reader, a free application distributed by Adobe Systems. There is also a plug-in for viewing PDF files with your web browser. This makes it possible to view PDF files posted on a web site directly instead of having to download them first and then view them with a separate program.

Parse—In linguistics, to parse is to divide language into its grammatical components that can be analyzed. For example, dividing a sentence into verbs, adjectives, nouns, and so on.

In computers, to parse is to divide a computer language statement into parts that can be made useful for the computer. A parser in a compiler is takes each program statement that a developer has written and divides it into parts that can then be used for developing further actions or for creating the instructions that form an executable program.

Alt-N Technologies' MDaemon server and other products often parse email messages to determine their destination or to process them through filters and other tools.

Ping—An acronym for **P**acket **In**ternet **G**roper. It is a basic Internet program used to determine whether a specific IP address is reachable and accepting requests. It does this by sending an Internet Control Message Protocol (ICMP) Echo request and waiting for a response. "Ping" is commonly used as a verb when referring to this process. For example, "I am going to ping that server to see if it is online." "Pinging" an IP address is usually as simple as typing "ping" followed by the IP address or domain at the DOS prompt. For example "Ping 1.2.3.4."

ICMP is addressed in RFC-792 and the Echo protocol is addressed in RFC-862. These can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc792.txt
http://www.rfc-editor.org/rfc/rfc862.txt
```

POP—Stands for **P**ost **O**ffice **P**rotocol. POP (also commonly appears as POP3) is the most commonly used email protocol for retrieving email from a mail server. Most email clients use the POP protocol although some also support the newer IMAP protocol as well. POP2 became a standard in the mid 1980s and required SMTP to send messages. It was replaced by the newer version, POP3, which can be used with or without SMTP. POP is sometimes used as a verb when referring to collecting your email from a server. For example, "I'm going to POP my mailbox to get my mail."

POP3 is addressed in RFC-1939, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc1939.txt
```

Port—In TCP/IP and UDP networks and the Internet, a port is the endpoint of a logical connection and is identified by a number from 0 to 65536. Ports 0 to 1024 are reserved for use by certain privileged protocols and services. For example, web servers typically are listed on port 80, SMTP servers typically communicate on port 25, and POP servers send and receive mail on 25. Generally, only one program at a time can use, or "bind", to any given port on each machine. When browsing the Internet, oftentimes certain servers will be running on non-default ports, which require you to specify the port in the URL after a colon. For example, "www.example.com:3000."

Port can also be used to refer to the sockets on a computer used for connecting peripheral devices and hardware to it. For example, serial ports, parallel ports, USB ports, and so on.

Finally, port is often used to describe the process of making a program designed for a specific platform or machine function on another platform. For example, "to port a Windows application to UNIX" or "to create a UNIX port for an application."

Post—In Internet messaging, such as email or newsgroups, it is a single message entered into a network communications system for others to see. For example, a message displayed on a newsgroup, mailing list, or discussion board is a post. It can also be used as a verb, as in "post a message to the mailing list or on the newsgroup."

PPP—Stands for "Point to Point Protocol." It is the Internet standard for dial-up connections. PPP is a set of rules that defines how your modem connection exchanges packets of data with other systems on the Internet.

PPP is addressed in RFC-1661, which can be viewed at:

```
http://www.rfc-editor.org/rfc/rfc1661.txt
```

Protocol—In computing, a protocol is a set of guidelines or standards by which servers and applications communicate. There are many different protocols used for many different purposes, for example, TCP/IP, SLIP, HTTP, POP3, SMTP, IMAP, FTP, and so on.

Registry—A database used by Microsoft Windows to store configuration information about software installed on the computer. This includes things like user settings, file extension associations, desktop background, color schemes, and many others. It has the following six parts:

HKEY_User—Stores user information for each user of the system.

HKEY_Current_User—Preferences for the current user.

HKEY_Current_Configuration—Stores settings for the display and printers.

HKEY_Classes_Root—File associations and OLE information.

HKEY_Local_Machine—Hardware, operating system, and installed application settings.

HKEY_Dyn_Data—Performance data.

When programs are installed on your computer the installer usually writes some information to the registry automatically. You can manually edit the registry, however, by using the regedit.exe program that is built in to Windows. But, you should exercise extreme caution when doing this because altering the wrong setting in the registry could cause your computer to function improperly, or not at all.

RFC—Request **F**or **C**omments is the name of the result and the process for creating a standard on the Internet. Each new standard and protocol is proposed and published on the Internet as a "Request For Comments". The Internet Engineering Task Force facilitates discussions on the new standard and eventually it is established. In spite of the fact that the standard is established and no further "comments" are "requested", the standard still retains the "Request for Comment" acronym along with its identifying number. For example RFC-822 is the official standard, or RFC, for email. However, those protocols that are officially adopted as "standards" do have an official standard number associated with them that is listed in the Internet Official Protocol Standards document (which itself is STD-1 and currently RFC-

2900). You can find RFCs on the Internet at many locations but the authoritative source is The RFC Editor, located at `http://www.rfc-editor.org/`.

The Internet Official Protocol Standards document is located at:

`http://www.rfc-editor.org/rfc/std/std1.txt`

RTF—Rich **T**ext **F**ormat is a universal file format developed by Microsoft that is supported by nearly all word processors. In contrast to plain text format, RTF enables you to retain formatting, font information, text color, and so on. The file size of RTF files can be very large when compared to other file formats such as Word 2000's document format (*.doc) and Adobe PDF.

Server—A computer, or program, that provides a specific kind of service to client software running on other computers. The term can refer to a particular piece of software, such as an SMTP server, or a machine on which the software is running. A single server *machine* could have many different server *programs* running on it concurrently. For example, your network's server might be running a web server, email server, FTP server, fax server, and others all at once.

SMTP—An acronym for **S**imple **M**ail **T**ransfer **P**rotocol. It is the primary protocol used to send email on the Internet from one server to another or from a client to a server. SMTP consists of a set of rules for how a program sending mail and a program receiving mail should interact. Once a server has received email via SMTP it is usually stored there and can then be retrieved by a client via the POP, IMAP, or other protocol.

The SMTP protocol is addressed in RFC-821, which can be viewed at:

`http://www.rfc-editor.org/rfc/rfc821.txt`

Spam—Junk mail on the Internet. "Spam" is most commonly used to refer to unsolicited bulk email, although it is often used to refer to any unwanted email in general. A "spammer" will obtain hundreds, thousands, or even hundreds of thousands of email addresses from various sources and then "spam" the list with a message or solicitation. "Spam" can, however, be used to refer to a newsgroup or discussion board posting as well, when the posting is some unwanted or unrelated advertisement for a product or web site.

Spam is quickly becoming a serious problem on the Internet, tying up a great deal of time and server resources. And because spammers oftentimes use various techniques to attempt to mask the origin of the message—such as "spoofing" their addresses to appear to be someone else or attempting to relay the spam covertly through multiple mail servers—preventing it can be a challenge. Alt-N Technologies' MDaemon server is equipped with a number of features designed specifically to aid in fighting spam, such as: DNS Black Lists, IP Shielding, IP Screening, Relay Control, and others.

The origin of using the term "Spam" to refer to junk email is debated, but it is generally accepted that it comes from a popular Monty Python sketch in which the word "spam" is repeated over and over and periodically accompanied by Vikings singing, "Spam spam spam spam, spam spam spam spam…" However, it may simply be a disparaging comparison to the trademarked Hormel meat product of the same name—everybody gets it at one time or another, but does anyone ever really ask for it or like it?

TCP/IP—Transmission **C**ontrol **P**rotocol/**I**nternet **P**rotocol (TCP/IP) has been described as the foundation of the Internet. It is the basic suite of communication protocols used on the Internet to connect hosts. It is the most commonly used protocol on Local Area Networks as well. It is a two-layer system, the topmost layer being TCP, which manages the disassembling and assembling of files into packets for transmitting over the network. IP, which is the lower layer, handles the addressing of the packets so that they get to the proper destinations. TCP is addressed in the following RFC-793. IP is addressed in RFC-791. These RFCs can be found at:

> TCP – `http://www.rfc-editor.org/rfc/rfc793.txt`
>
> IP – `http://www.rfc-editor.org/rfc/rfc791.txt`

Telnet—A command and program used to log on to Internet sites that support Telnet access. The Telnet command gets you to the logon prompt of the Telnet server. If you have an account on that server, you can access your permitted resources such as your files, email, and so on. The downside of Telnet is that it is a command line program that uses Unix commands.

The TELNET protocol is addressed in RFCs 854-855, which can be viewed at:

> `http://www.rfc-editor.org/rfc/rfc854.txt`
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> `http://www.rfc-editor.org/rfc/rfc855.txt`

Terminal—A device that allows you to send commands to a remote computer. A terminal is a keyboard, display screen, and some simple circuitry. Oftentimes, however, personal computers are used to "emulate" terminals.

Tiff—An acronym for **T**agged **I**mage **F**ile **F**ormat. It is a graphics file format created to be a universal graphics translator across multiple computer platforms. TIFF can handle color depths ranging from 1-bit to 24-bit.

UDP—User **D**atagram **P**rotocol (UDP) is one of the protocols that make up the TCP/IP suite of protocols used for data transfers. UDP is a known as a stateless protocol because it doesn't acknowledge that packets being sent have been received.

UDP is addressed in RFC-768, which can be viewed at:

> `http://www.rfc-editor.org/rfc/rfc768.txt`

Unix—Unix, or UNIX, is an operating system created by Bell Labs in the 1960s. Designed to be used by many users at the same time, it is the most popular operating system for servers on the Internet. There are now many different operating systems based on UNIX such as Linux, GNU, Ultrix, XENIX, and others.

URL—Every file or server on the Internet has a **U**niform **R**esource **L**ocator (URL). It is the address that you enter into your web browser to get to that server or file. URLs cannot have spaces and always use forward slashes. They have two parts separated by "://". The first part is the protocol being used or resource being addressed (for example, http, telnet, ftp, and so on) and the second part is the Internet address of the file or server (for example, www.altn.com or 127.0.0.1).

Uuencode—A set of algorithms for converting files into a series of 7-bit ASCII characters for transmission over the Internet. Although it stands for Unix-to-Unix encode, it is no longer exclusive to

UNIX. It has become a universal protocol used to transfer files between different platforms. It is an encoding method commonly used in email.

WAN—A WAN, or **W**ide **A**rea **N**etwork, is similar to a Local Area Network (LAN) but is usually spread across multiple buildings, or even cities. WANs are sometimes composed of smaller LANs that are interconnected. The Internet could be described as the biggest WAN in the world.

Zip—Refers to a compressed or "zipped" file, usually with the "`.zip`" file extension. "Zipping" is compressing one or more files into a single archive file in order to save space for storage or to facilitate faster transfer to another computer. To use a zip file, however, you'll need to unzip it first with the appropriate program such as PKZIP or WinZip. There are multiple compression/decompression utilities available—both shareware and freeware—from many sites on the Internet. Hopefully you won't have to unzip the utility before you can install it.

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