

September 2000

Volume 3, Issue 9

Inside this Issue

1

Internet Exchange 4.1 Message Store: Equipped to Meet Your Organization's Future Needs

5

Highlight of the Month:
Understanding the Different Anti-virus Error Codes

6

Questions and Answers

This Month's Tip:

Updating the Lotus VIM Library for Internet Exchange

International Messaging Associates (IMA) Ltd.

2703 China Resources Bldg.

26 Harbour Road

Wan Chai, Hong Kong

Tel: +852-2520-0300

Fax: +852-2648-5913

IMA Philippines Inc.

6/F Hanston Building

Emerald Avenue, Ortigas Center

Pasig City, Philippines

Tel: +63 (2) 637-9090

Fax: +63 (2) 637-9898

US Toll Free No.: +1 (800) 549-2762

US Fax No.: +1 (888) 562-3561

E-mail: info@ima.com

Website: www.ima.com

Internet Exchange News

Copyright © 2000 International Messaging Associates, Ltd.

NEWS FLASH!!!

Internet Exchange 4.1 Message Store: Equipped to Meet Your Organization's Future Storage Needs

If you think that the advent of anti-virus and filtering software may have solved all of your messaging problems, think again!

Recent studies show that in the next 12 months, the average number of e-mail messages received by an end user per day is expected to jump by 81 percent, with the average message size to increase by 192 percent. Please visit <http://www.nwfusion.com/cgi-bin/mail-to/x.cgi>. This phenomenon can catch your company offguard and overload your network bandwidth and storage capacity.

With Internet Exchange Messaging Server version 4.1, you can solve this problem without a hitch. This is because Internet Exchange 4.1 is equipped with a **Message Store** that allows the system administrator to limit the amount of storage space allocated to the user, preventing the user from consuming all of the available disk space in the server.

Its mail filtering utility enables the system administrator to define rules so that the LMDA (Local Mail Delivery Agent) can direct messages to pre-selected mailboxes or folders other than the user's Inbox.

Moreover, the Message Store includes both the IMAP4 and POP3 servers, which are capable of creating multiple threads to support simultaneous access to the Message Store and the retrieval of messages. It enables users to access their mailboxes via POP3- or IMAP4-capable clients, such as Microsoft Outlook, Netscape Navigator, Eudora Mail, among others.

The Internet Exchange Message Store (see **Figure 1** on page 2) incorporates the following components:

Quota Agent

The Quota Agent allows the system administrator to limit the amount of storage space allocated to per user, preventing users from consuming all of the available disk space on the server. It also allows the system administrator to monitor the total number of registered users and determine the users who have exceeded their disk quotas.

However, the Quota Agent will not be able to detect the allotted disk space for users if the Quota Agent engine is not up and running. To detect the disk quota limits, the system administrator must start the Quota engine by running the MC Responder. To run the MC Responder, go to *Start/Programs/Internet Exchange/Responder*. The Responder, by default, automatically starts all the Internet Exchange modules, including the Quota Agent Engine.

The system administrator may set a disk usage limit during the creation of a new user account or modify the disk quota of an existing user account. The creation of a new user account can be done by clicking the *Add User* link on the left-hand side of the *System Administrator Message Store* interface, while modifying an account can be done by clicking the *Find User* link on the left-hand side of the *System Administrator Message Store* interface.

For example, the system administrator creates a new user account (i.e., *john-doe@ima.com*) for John Doe. See **Figure 2** on page 3. In the *Disk Quota* input field, type the MB value (e.g., *25MB*) and click the radio button corre-

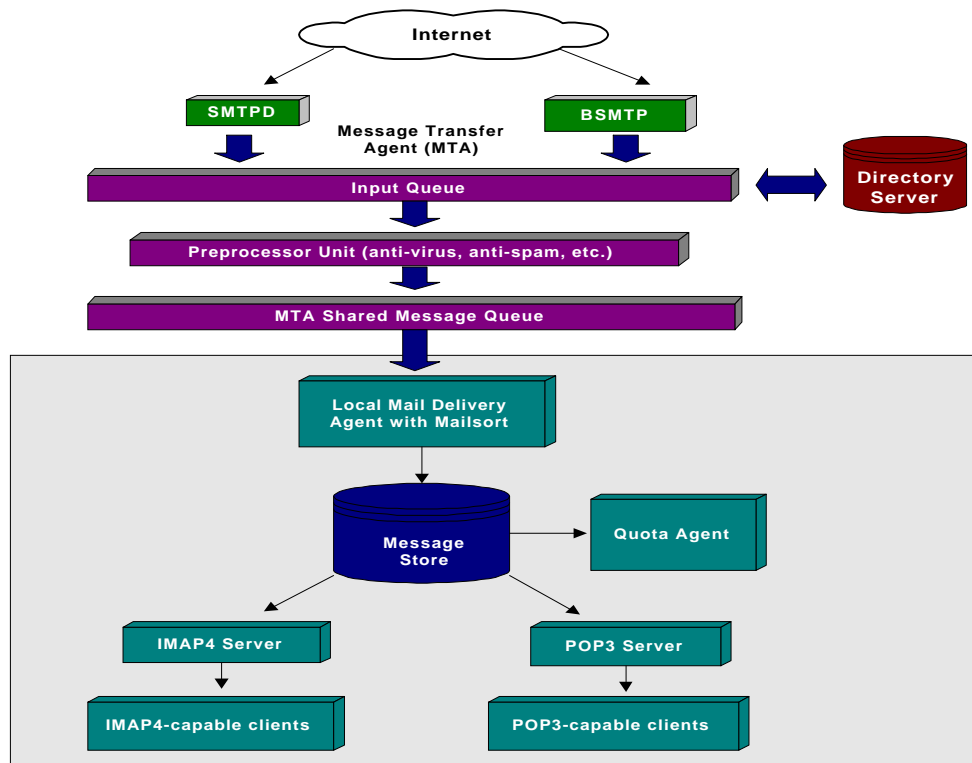


Figure 1: Message Store System Architecture

sponding to it. This means that the user's allotted disk space is 25MB.

Clicking the *Configure Quota Agent* link on the left-hand side of the Message Store interface will bring you to the *Message Store Agent* screen (see **Figure 3** on page 3). This interface will allow the system administrator to set a *Default Size of the User Account* (e.g. *Unlimited*) for the succeeding Message Store users. This means that the system administrator need not set the disk quota everytime he creates a new user. Setting the default quota via this interface will not affect the disk quota limit of the existing Message Store users.

The *Warning Level* refers to the Threshold Setting of the Message Store Quota Agent. The default value for this attribute is 90%. This means that when the user's disk space usage reaches 90% of the disk space allotted to his account, a warning message will be sent to that particular user stating that he is given a grace period from the date of notification to reduce his disk space usage below the allotted quota.

Say, the user has a disk quota of 20MB, he will receive a warning message when his disk usage is already 18MB. The system administrator may change the default value.

The *Grace Period* is given to a user who exceeded his disk quota. It tells the user to reduce his disk usage before this given time is over. The value for the grace period will either be 1 week or 2 weeks upon receipt of the notification message.

The notification message includes the *Date* and the *Quota* assigned to the user. The *Date* is determined depending on the grace period. If the grace period is set for two weeks, the current date will be adjusted to two weeks ahead of time. This will be the grace period for the user to reduce his disk consumption below the allotted disk quota. The same applies if the grace period is set to one week. The quota will also be displayed.

When the grace period has expired and the user account still exceeds the disk quota, a notification message will be sent to the user stating that his account has been disabled.

For tracking purposes, the system administrator will also receive a copy of the notification message sent to the Message Store user.

The system administrator may specify the time when the Quota Agent should start traversing and retrieving the disk quota and disk consumption of all the Message Store user in the *Check Mailbox Quota at*:

The Quota Agent has two scheduling options: *Daily* and *Weekly*.

The Quota Agent generates reports in HTML format and text files, which the system administrator uses to check and verify the Message Store performance and disk usage. The reports in

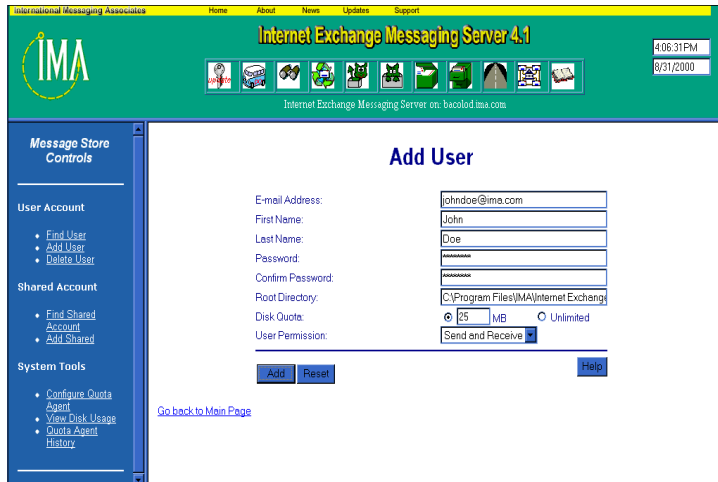


Figure 2: Setting the disk quota for single account

HTML format are available through the Internet Exchange Messaging Server web interface, while text file reports are sent to the system administrator as file attachments. Previous reports generated by the Quota Agent engine can be viewed by the system administrator via the Message Store *Quota Agent History Report*.

The Quota Agent can be configured only by the system administrator via the System Administrator *Message Store* web-based interface. Please see <http://www.ima.com/pdf/adminman2.pdf> for the configuration procedure.

Mailsort

Mailsort is the mail filtering utility used for defining rules that the LMDA will implement to deliver messages to a pre-selected mailboxes or folders other than the user's Inbox. Using this feature, Internet Exchange users can selectively sort incoming messages according to any of the following header fields: *From*, *To*, *Cc*, *Bcc*, *Sender*, *Any sender*, *Any recipient* and *Subject* and apply any of the following actions: *move to*, *copy to*, *forward*, *send vacation message* or *reject*.

For example (see **Figure 4** on page 4), select the header field *From*. Type a word, phrase or e-mail address (e.g. *news*) in the *contains* input field that the Mailsort engine must search for in the selected header of the message. Click the *move to* radio button, then select the folder (e.g. *News*) from the drop-down list where you wish the message to be sent. Click the *Yes* radio button of the *Filter Continuously?* This will instruct the Mailsort engine to filter messages from the first filter rule up to the last filter rule. This means that once a filter is matched, the Mailsort engine will continue processing the succeeding filter rules.

Note: Selecting "No" will turn off the Filter Continuously option. This will disable certain filters

and will tell the Mailsort engine to stop the filtering process once a filter is matched.

Click the *OK* button for the filter rules to take effect.

Using the above example, the Mailsort engine will scan the *From* header field and search for the word *news*, which is entered in the *contains* input field. Once this pattern has been matched, the Mailsort engine will tell the LMDA to send the message to the *News* folder. This prevents messages from accumulating in the user's Inbox.

The Mailsort module also includes a vacation utility that enables individual users to automatically reply to incoming messages whenever they are not available.

This mail filtering utility can be configured by the system administrator via the System Administrator *Mailsort* web-based interface. The end user, meanwhile, may configure this filtering utility via the End User *Message Store* web-based interface. Please see <http://www.ima.com/pdf/adminman2.pdf> for the configuration procedure.

POP3 Server

The POP3 (Post Office Protocol version 3) Server provides POP3-capable client users a means of accessing their mailbox. Using POP3, users can retrieve messages from the Internet Exchange Message Store Inbox and store them in a local hard disk so they can be read in an offline or disconnected mode. The POP3 Server supports multi-threading for fast message retrieval.

IMAP4 Server

The IMAP4 (Internet Message Access Protocol version 4) Server operates both in online and offline access mode. It allows a "client" e-mail program to access and manipulate e-mail messages on a server. It permits manipulation of remote message folders, called mailboxes, on the server without having to download them to a local hard disk, saving precious bandwidth resources. For example, e-mail messages stored on IMAP server can be manipulated from a desktop computer at

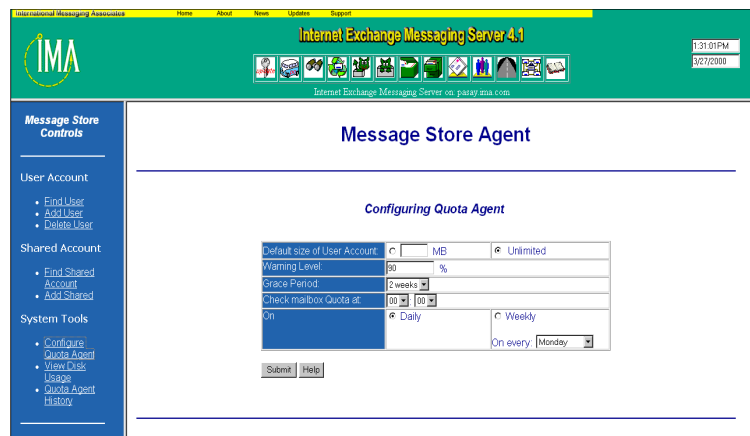


Figure 3: Configuring the Quota Agent

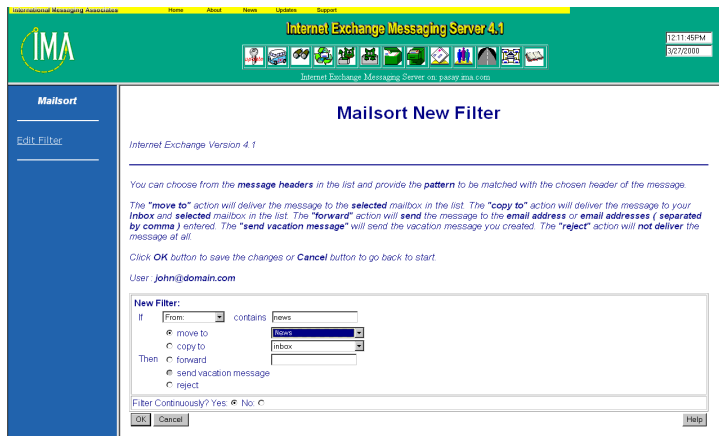


Figure 4: Configuring the Mailsort Filter

home, a workstation in the office and a notebook computer while travelling without the need to transfer messages or files back and forth between these computers.

The IMAP operations also includes creating, deleting and renaming mailboxes; checking, searching and deleting messages. Users may also search for messages on the server based on various attributes, such as message size, headers and message sender, as well as to separate attached files from the text and header portions of the message.

Aside from the above mentioned components of the Internet Exchange Message Store, users will benefit from the following features:

Shared Mailbox Support

The Internet Exchange Message Store provides shared mailbox support that allows the system administrator to create mailboxes that can be shared by two or more users. The shared

mailbox support also allows users to have both personal and shared mailboxes, which can be accessed using a single account. This feature makes the management of e-mail for a group of people fairly easy since there is no need to create a group login name. In addition, the process of creating multiple copies of a single message to be sent to different people is eliminated.

Nested Mailbox Support

The Nested Mailbox Support feature is made possible by the presence of the IMAP4 Server in the Message Store. The IMAP4 Server supports nesting of mailboxes. With this feature, users may create a sub-folder (e.g. *News*) of its primary mailbox (i.e., *Inbox*). Having this feature gives Message Store users added flexibility in managing their messages since they can easily organize their mailboxes in such a way that they can group their mail and file them in different sub-folders.

For more information about the Message Store, please go to the following references:

- <http://www.ima.com/pdf/adminman2.pdf> (Messaging Server Administrator's Guide)
- <http://www3.ima.com/faq/msgsrv/msgstore.html> (Internet Exchange Message Store FAQ)
- http://www.ima.com/product/v4/message_store/index.html (Internet Exchange Message Store Data Sheet)
- <http://www.ima.com/pdf/ienews/vol2no3.pdf> (Internet Exchange 4.0's IMAP4 Optimized Message Store offers support for POP3- and IMAP4-based e-mail systems)

Question and Answer.....

Continued from page 6

Clicking the *Update* button will transfer John Doe's account, including all of John Doe's folders and messages, to the new directory (*D:\Program Files\IMA\Internet Exchange Messaging Server 4.1\MsgStore*).

You may also assign the Message Store accounts of your future users to this directory.

Internet Exchange News

A monthly publication of International Messaging Associates, Ltd.

Staff

Editor..... Ana Cruz
 Writers..... Rio Peralta, Karen Madrid
 Editorial Consultant..... Tim Kehres
 Graphic Artists..... Ana Cruz, Rio Peralta
 Contributors.....Ogie dela Cruz, Medivic Lozada

Please send your comments and suggestions to doc@ima.com

Highlight of the Month

Understanding the Different Anti-virus Error Codes

The Internet Exchange Messaging Server's anti-virus module supports multiple anti-virus software, such as McAfee Viruscan, Sophos Anti-Virus for Windows 95/98/NT and F-PROT Professional Anti-Virus Package, allowing the system administrator to choose their preferred anti-virus to work with Internet Exchange.

The system administrator may use more than one anti-virus software at the same time to increase the virus detection capability of the system because some of the latest viruses cannot be detected by just one anti-virus package.

The anti-virus software may be installed either in the machine where the Internet Exchange software is running, in the machine where the Internet Exchange Preprocessor module is running or in a remote machine. Once the anti-virus software is installed, the system administrator must configure the various features of the Internet Exchange anti-virus module. For anti-virus configuration procedure, please see <http://www.ima.com/pdf/adminman2.pdf>. Additional information related to the anti-virus module can be found at <http://www.ima.com/faq/msgsrv/antivirus.html>.

When creating or editing an anti-virus profile, you must specify the *Virus scanner type*, *Program path*, *Command line parameters*, *No error code value(s)*, *Error code value(s)* and *Detected virus code value(s)*.

Lets say you have a McAfee Viruscan software installed in your machine, in the *No error code(s)* field, enter the value 0 which corresponds to the *no errors occurred; no viruses were found* condition of the McAfee viruscan software. In the *Error code(s)* field, you may enter several values to indicate the error(s) that can be detected by your anti-virus software. Finally, the *Detected virus code(s)* field indicates that a virus has been detected by your anti-virus software. For this field, you must enter the error codes 13 or 10. The McAfee viruscan error code 13 indicates that one or more viruses or hostile objects were found, while error code 10 indicates that a virus was found in memory.

The table below lists a summary of the error codes used in Internet Exchange.

Internet Exchange Anti-virus Module Error Code Classification	McAfee Viruscan	Sophos Sweep	F-PROT
No error code(s)	0 - No errors occurred; no viruses were found	0 - No errors are encountered	0 - Normal exit; nothing found
Error code(s)	<ul style="list-style-type: none"> 2 - Driver integrity check failed 6 - A general problem 8 - Could not find a Driver 15 - Viruscan self-check failed; it may be infected or damaged 20 - Scanning prevented due to the / FREQUENCY switch 102 - User quit via ECS-X, ^C or Exit button. This can be disabled with the /NOBREAK command-line option. 	<ul style="list-style-type: none"> 1 - If the user interrupts the execution by pressing the ESCkey. 2 - If some error preventing further execution is discovered. 	<ul style="list-style-type: none"> 1 - Abnormal termination-unrecoverable error. This can mean any of the following: <ul style="list-style-type: none"> - Internal error in the program - DOS version prior to 3.0 was used - ENGLISH.TXO, SIGN. DEF or MACRO.DEF corrupted or not present. 2 - Selftest failed- program has been modified 5 - Program terminated with ^C or ESC 7 - Insufficient memory to run the program 6 - A virus was removed 8 - At least one suspicious file was found, but no infections
Detected Virus code(s)	<ul style="list-style-type: none"> 10 - A virus was found in memory 13 - One or more viruses or hostile objects were found 	<ul style="list-style-type: none"> 3 - If viruses or virus fragments are discovered 	<ul style="list-style-type: none"> 3 - A Boot/File virus infection found 4 - Virus found in memory

Table: A summary table of the Different Anti-Virus Error Codes

Questions & Answers

Q: I have just installed Internet Exchange version 4.02. As I was installing the license certificate "imacert.imc", an error occurred stating that Internet Exchange 4.02 cannot validate the license certificate. Why is this happening and what can I do about it?

A: Internet Exchange version 4.02 does not recognize the certificate file "imacert.imc". The certificate file name it recognizes is "imacert.der". You should rename the "imacert.imc" file to "imacert.der" for it to be recognized as a valid license by Internet Exchange 4.02.

Q: I have an existing user currently defined in LDAP as Johndoe@domain.com with a configured SMTP connector, johndoe@hotmail.com which forwards all his mail to the johndoe@hotmail account. I have changed his SMTP connector from johndoe@hotmail.com to jdoe@yahoo.com. When I tried sending a test message to Johndoe@domain.com, the log file still shows that the SMTP connector is still johndoe@hotmail.com. When will the new address in the SMTP connector take effect?

A: The Internet Exchange LDAP (Lightweight Directory Access Protocol) Server uses a caching mechanism, which caches all LDAP queries. By default, the LDAP Server cache time-out is 60 minutes. This means, the new address will take effect after 60 minutes. However, if you wish the new address in the SMTP connector to take effect immediately, you have to re-start the Preprocessor to disregard all the previous LDAP results cached and read the new address.

Q: Our company is using Internet Exchange Messaging Server 4.1 in a machine with a limited disk space. Some of our users have unlimited message store accounts while others are given a specific amount of disk space to utilize.

Since I cannot approximate the disk space usage of the unlimited message store accounts, I think it would be better if the limited accounts can be separated from the unlimited accounts. Would it be possible to transfer the latter to a new hard disk with a bigger capacity? If yes, how?

A: Yes, you can transfer your existing unlimited message store accounts into another hard disk. To do this, simply follow the instructions given below.

After successfully installing your new hard disk and you wish to transfer say, John Doe's message store account to the new hard disk (D:), all you need to do is go to the Message Store Administration web interface. From the Message Store web interface,

1. Click on the *Find User* hyperlink.
2. Find the user account of John Doe by typing John on the *First Name* field, Joe on the *Last Name* field and his e-mail address john@ima.com on the *Mail* field.
3. Click the *Edit* button
4. Modify the value in the *root directory* input text box. For example, if the input text box contains:
C:\Program Files\IMA\Internet Exchange Messaging Server 4.1\MsgStore\modify this to *D:\Program Files\IMA\Internet Exchange Messaging Server 4.1\MsgStore*
5. Click the *Update* button.

Continued on page 4-->

"The Internet is like a vault with a screen door on the back. I don't need jackhammers and atom bombs to get in when I can walk through the door."

-- Anon

This Month's Tip

Updating the Lotus VIM Library for Internet Exchange

Internet Exchange communicates with cc:Mail using the Lotus VIM (Vendor Independent Messaging) protocol. Hence, you must install the Lotus VIM (32-bit Windows version) in your machine in order for Internet Exchange to work properly with cc:Mail.

You may download the latest Lotus version 6.3 VIM Library at http://techsupport.services.ibm.com/ftp/pub/comm/ccmail/dev_tools/. If you are using Internet Exchange 3.x or 4.x, select the "vdlw32.zip" file. If you are using Internet Exchange 2.x, select the "vldwin.zip" file.

To install the Lotus VIM Library, extract all the files from the *vdlw32.zip* archive to the C:\Windows\System or C:\Winnt\System32 path (if you are using Windows NT).

To update an existing Lotus VIM Library, overwrite the existing files with the latest version of the VIM Library. Before updating the file, make sure that the Internet Exchange software is not running otherwise, the VIM file will not be updated. It is recommended to re-start your computer after updating the VIM file for the changes to take effect.

Note: Make sure that you do not have multiple copies or different versions of the Lotus VIM Library in your system.

For more information on the cc:Mail VIM support, please go to <http://www.ima.com/pdf/ccmailn.pdf> or <http://www.ima.com/whitepaper/2.0/vim6db8.html>