June 2000
Volume 3, Issue 6

Internet Exchange News

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Inside this Issue

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NEWS FLASH!!!

Filter Your Mail Using Internet Exchange Messaging Server's Mailsort Utility

Sorting 1,000 e-mail messages in your Inbox a day is surely a very tedious task. A perfect solution to this trivial yet tedious job is to have a filtering mechanism that will organize your mail according to your preferences. **Internet Exchange Messaging Server 4.1** includes a Mailsort filtering utility that enables you to automate the distribution and track your incoming mail. For additional introductory information, please go to *http://www.ima.com/faq/msgsrv/mailsort.html* and *http://www .ima.com/product/v4/message_store/ mstore.pdf.*

The Mailsort filtering utility is used to define rules so that the LMDA (Local Mail Delivery Agent) can direct messages to pre-selected mailboxes/folders other than the INBOX. It can also selectively forward messages to other addresses. This feature enables you to sort incoming mail based on attributes, such as the message sender and subject, without having to go through all the messages. For example, a user may want to store messages in folders according to sender or subject line. This can easily be done using the Mailsort utility.

Mailsort is divided into two modules--the engine and the web configuration interface. The *engine* is used by the LMDA to determine the destination of messages whose recipients maintain filtering information in their respective Message Store directories. The *web interface* allows the users to create and edit filter files used by the engine to inform the LMDA of the destination of the messages.

The Mailsort provides a utility for preprocessing incoming e-mail on a per user and per message basis. Incoming messages delivered to the Message Store through the LMDA are sorted according to the rules set by the user. The engine will read the filter file (*filter.txt*) and perform a very simple recursive-decent parsing to speed up the interpretation of the filter file.

The recursive-decent parsing scheme is divided into two steps--*scanning* or *lexical analysis* and *parsing*. The engine uses a *lexical analyzer* on the filter file to divide the file input into meaningful units. A *parser* is used to determine the relationships among these units. For this kind of input, the units are lines of text, with a distinction between lines that contain a match of the target strings and the lines that do not. The division into units, which are usually called *tokens*, is known as *lexical analysis*. The token descriptions are regular expressions that are used by the lexical analyzer to scan the input text. As the input is divided into tokens, the parser establishes the relationships among them. This task is known as *parsing* and the list of rules that define the relationships is a *grammar*. The parser automatically detects whenever a sequence of input tokens matches one of the rules in the grammar and also detects a syntax error whenever its input does not match any of the rules.

CONFIGURING MAILSORT

Internet Exchange provides a separate Web Interface for the system administrator and end users in configuring the Mailsort module. The system administrator can configure the module via the *System Administrator Web Interface*, while the end users are provided with

Figure 1: Mailsort sorts out messages according to the user's specific filter statements

the *End User Web Interface*. To go to the System Administrator Web Interface, the system administrator must click on the *System Administrator* link from the *Main Web Interface*, while the end users must click on the *End User* link. The system administrator as well as end users can perform the following functions using their Mailsort module:

- create new filter blocks
- add filter blocks
- delete filter blocks
- edit the existing filter files
- move up/down existing filter files
- create vacation messages

Before the system administrator/end users can perform the above mentioned list operations, he/she must log in to the IEMS main web configuration page. The system administrator/end user login screen presents a username and password for proper authentication. Once he/she is successfully logged in, the *System Administrator Main Web Interface*/*End User Main Web Interface* will appear. The *System Administrator Main Web Interface's* Top Menu displays the various icons of the IEMS modules, while the *End User Main Web Interface* displays only the Directory Service, Message Store and Distribution List icons. The system administrator must click on the *Mailsort* icon, while the end users must click on the *Message Store* icon.

The system administrator needs to select the *Edit Filter* button from the left frame of the Mailsort user interface. He can then select the username of the person to apply the filtering rule/s. On the other hand, the end users must click on the *Configure Mailsort* button from the Message Store web interface. If you do not have any filter statements, a web interface for starting to define filter statements will be displayed. If you already have declared filters for you mail, the *Filter Information* user interface will be shown to display the different Filter statements.

Creating a Filter Block

After selecting the mailsort page, click on the *New* button. Another web interface for entering the information needed to create a filter file is invoked (See **Figure 1**). To create a new filter block:

- Select the header field (*From:*, *To:*, *Cc:*, *Bcc:*, *Subject:*) which the Mailsort engine must scan to compare the *pattern*.

  A *pattern* is a word, phrase or e-mail address that matches the chosen header of the message. Using the example in **Figure 1** above, the chosen header is *From:* and the pattern is *news*. This means that Mailsort will filter all incoming mail with the word *news* in the *From:* header.

- In the opposite text box, enter the *pattern* that the Mailsort engine must search for in the selected header.

- Check the action (*move to, copy to, forward to, send vacation message, reject*) that you want to be taken by the Mailsort engine for messages that meet the defined criteria. This will tell the LMDA where to send a particular message.

- Select either *Yes* or *No* to configure the filtering action. Selecting *Yes* will turn on the *Filter Continuously* op-

tion. This will instruct Mailsort to filter messages starting from the first filter statement up to the last filter statement. It means that Mailsort will filter messages sequentially from the first filter rule up to the last filter rule when multiple filtering rules are defined. A possible example would be for a single message to match multiple rules. This option is set to handle this case.

Selecting *No* will turn off the *Filter Continuously* option. This will disable certain filters and will not continue filtering the succeeding messages. This will tell Mailsort to stop the filtering process when a filter is matched. Otherwise, the process will continue sorting mail using the other filter statements.

- Click on the *OK* button to save the new filter information for that particular filter block.

For example, a user may want the LMDA to deliver all messages with a *Subject:* field containing *music* to be delivered to the *classics* mailbox. To do this*:*

- Select the *Subject:* field and enter *music* in the opposite text box.
- Select the action *move to* and click on *classics* from the list of mailboxes.
- Select *Yes/No* to configure the filtering action.
- Click the *OK* button to create the new filter block.

After creating a filter block, a new screen will be displayed containing your filter information. The *Mailsort Filter Information* screen enables you to add, edit or delete your existing filter blocks (See **Figure 2**). It also allows you to create your vacation auto-replies to your incoming mail.

Adding a Filter Block

To add new filter blocks, click on the *Add* button. A screen for creating new filter statements will be displayed. The *Mailsort Add Filter* web interface contains the same information when creating new filter blocks. Just follow the same procedure in creating a new filter block.

Deleting a Filter Block

To delete any of the filter statements, click on the *Delete* button beside the *Edit* button on the right-end side of the filter block.

Editing an existing filter file

After creating a filter block, a new page showing the filter block information will be displayed. Information contained in existing filter blocks can be changed, moved or updated. Users with existing filter files are automatically brought to the *Mailsort Filter Information* window upon logging on to Mailsort. To display and edit a filter block, click on the *Edit* button for that filter block. To change the positioning of any of the filter statements, click on the *Move Up* or *Move Down* button. To go back to the main screen, click on the *Exit* button.

Continued on page 6 -->

Figure 2: The Mailsort Filter Information screen lets you add, delete, edit your filter files

Highlight of the Month

Monitor and Manage your Internet Exchange components in a Distributed Environment Using the Monitor Control (MC) Responder

In a distributed system, the different components of Internet Exchange are allowed to run on multiple machines all at the same time. Therefore, a centralized monitoring and control module to manage the different modules running across multiple machines and operating systems is required.

The **Internet Exchange Messaging Server (IEMS) version 4.1** uses an enhanced Monitor Control (MC) user interface to combine the module status/control and the MC Responder's local components configuration on a single HTML page. The Responder is responsible for starting/stopping the different IEMS components installed in your system. The new user interface provides simpler management tools and centralized control for the system administrators to monitor all the IEMS components in a distributed system. A major enhancement in the functionality and appearance of version 4.1 is it allows the system administrator to start/stop the Responder module remotely, which will thereby start/stop all the installed modules all at the same time.

The main page of the new MC user interface displays the host name's location and Responder's status (see **Figure 3**). To view the details of all the available components running within the "Internet Exchange Machine", click on the *Show Details* button. An established Remote Procedure Call (RPC) connection to the Responder module displays the Responder Status as "Running". However, if the RPC connection is unavailable, the Responder module is shown as "Not Running". The MC user interface is only able to retrieve the "Internet Exchange Machine" host name list if the IEMS Server Directory is running.

When the system administrator clicks the *Stop Responder* button, the Responder will be told to quit. The remote Responder then carries out the normal termination procedure to stop all the local modules that are automatically enabled on the machine. Clicking the *Show Details* button will list all the MTA modules located within the machine with their corresponding status.

Location
Displays the Internet host name of the machine running the MTA components.

Status
Displays the current status returned by the MTA components.

When the administrator clicks the *Show Details* button, the MC user interface retrieves a list of status information from a particular host. The Responder module returns the complete module information while the RPC updates the local components in the MC user interface. This allows the system administrator to modify the Auto Start, Auto Restart, Auto Stop and Wait Time value for any module controlled by the Responder. If the component is already running, a *Stop* button is displayed in the Status column. If the component is not running, a *Start* button is displayed in the Status column.

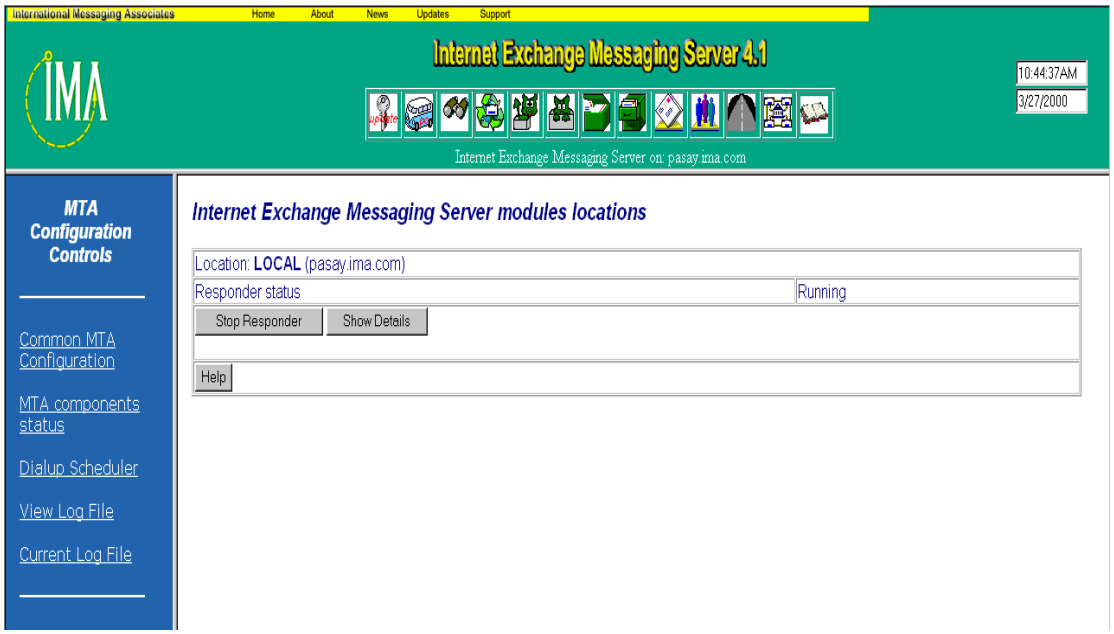

Figure 3: The MC Component Status

Questions & Answers

Q: I am using Internet Exchange for cc:Mail 3.13 and I am having trouble receiving messages with HTML attachments. The HTML attachment is embedded as straight text in the body of the message. Can I alter the settings of Internet Exchange so that the HTML attachments will be preserved?

A: Yes, you can alter the settings of Internet Exchange. You just need to add the setting below under the [Options] section of the IMA.INI file and then restart Internet Exchange.

```
[Options]
ImportMIMETextAsAttachment=
YES
TextSubtypeList=HTML,HTM
```

Q: We are using Internet Exchange Messaging Server (IEMS) 4.1. Everything was working out just fine until we changed our ISP and the IP address of our mail server. Now when I start the IEMS, the Preprocessor starts for a while and then terminates. The other modules also will not start. I checked the log file and read the error: "Could not authenticate to Preprocessor on server jade". Below is a portion of the IEMTA.log file:

Mon Jun 05 18:34:04 Preprocessor: [Informational] MQResponder; Waiting for connections on port 1235

Mon Jun 05 18:34:04 Preprocessor: [Informational] Connecting to MQResponder jade

Mon Jun 05 18:34:04 LDAP Server: [Informational] conn=11 fd=1 connection from unknown (202.75.2.114)

Mon Jun 05 18:34:04 LDAP Server: [Informational] conn=11 op=0 BIND dn="root" method=128

Mon Jun 05 18:34:04 Preprocessor: [Informational] MQResponder; Rejected connection from 202.75.2.114, IP address not included in "MQ Server Access Addresses"

Mon Jun 05 18:34:04 LDAP Server: [Informational] conn=11 op=2 fd=4904 closed error=0

Mon Jun 05 18:34:04 jade-Preprocessor-MQAPI: [Error] MQInit; Could not Authenticate to Preprocessor on server jade

Mon Jun 05 18:34:04 Preprocessor: [Error] MQinit Failed, exiting

Mon Jun 05 18:34:04 Preprocessor: [Informational] MQResponder; Received Termination request

Mon Jun 05 18:34:04 Preprocessor: [Informational] MQResponder; Listening thread terminated

Mon Jun 05 18:34:04 LDAP Server: [Informational] conn=9 op=4 fd=4900 closed error=0

A: IEMS could not authenticate the Preprocessor due to IP address mismatch. The IP address assigned to your mail server is different from the one set in the Preprocessor. The Preprocessor probably was not updated and still uses the old IP address which conflicts with the newly acquired IP address of the mail server, thus causing the Preprocessor to terminate. To solve this problem, first shutdown all of the IEMS components, then manually start the LDAP-enabled Directory Server. Go to the Preprocessor Configuration screen and enter the new IP address of the mail server in the "MQ Server Access Mask" field. Then, restart the MTA.

Continued on page 6 --->

"Internet is so big, so powerful and pointless that for some people it is a complete substitute for life."

-Andrew Brown

This Month's Tip

How to Run the Database Compaction for Internet Exchange for Lotus Notes 3.14

Internet Exchange for Lotus Notes 3.14 features a "Database Compaction" to enable the system administrator to instruct Internet Exchange when to shutdown the four opening sessions to both SMTP.BOX and MAIL.BOX file.

The system administrator needs to configure the Notes Server when to compact those database files based on their preferences. He has to check if there are any other tasks operating on the two database files during compaction. For R5 users, you do not need to use the "Database Compaction" feature because live database compaction is already allowed.

To run the database compaction feature, you need to first select the "Enable database compaction" button from the *Internet Exchange for Lotus Notes setup* screen. Then, you must input both the *start* and *stop* time for the database compaction to take place. You are also provided with an option to run the database compaction on a *daily* or *weekly* basis. After setting the schedule, click on the *OK* button for the new settings to take place.

Make a good estimate on how much time the database compaction will be required to work in your environment to help determine the stopping time. Usually, 10-15 minutes is sufficient enough to compact both SMTP.BOX and MAIL.BOX. Compacting your database on a daily basis is recommended only for extremely high traffic. Otherwise, run the database compaction on SMTP.BOX and MAIL.BOX on a weekly basis.

Filter Your Mail.....

Continued from page 3

Vacation Utility
The Vacation utility allows you to send automatic replies to incoming messages. This feature is useful when you are on leave or when you are unable to reply to your messages for an extended period of time.

To create a vacation message, do the following:

- Select the header field (*From:, To:, Cc:, Bcc:, Subject:*) which the Mailsort engine must scan to compare the pattern.

  If you want all your incoming mail to receive a vacation message, choose the *To:* header. This will instruct Mailsort to filter all incoming mail sent to you to receive your vacation message.

- In the opposite text box, enter the pattern that the Mailsort engine must search for in the selected header.

  If you want all your incoming mail to receive a vacation message, type your e-mail address in the specified textbox.

- Check the *Send Vacation Message* action. This will tell the LMDA where to send a vacation message to all mail messages that match the criteria defined.

- Select either *Yes* or *No* to configure filtering action.

- Click the *OK* button to save the new filter information for that particular filter block.

In order to activate the vacation utility, click on the *Vacation Message* button. The following information needs to be specified in order to enable this feature:

Message Subject
Use this field to specify the vacation message subject/header.

Message Body
Use this field to compose the message that will be sent.

Click on the *Save* button to save the message. This message will be used when replying to incoming messages.

When the filter with the *send vacation message* action matches the mail messages received, the Mailsort utility will send a vacation message to the sender. Only one vacation message will be sent to the sender within seven days even if the sender sends multiple messages to you.

Vacation messages will not be generated for some types of messages such as the *standard formatted distributed list messages (i.e., subscription requests)* or the bounced messages from the *Mailer Daemon (i.e., messages from postmaster@domain.com)*. Mailsort will check for these keywords in the message header. When a match is found, it will not generate a vacation message to the sender of this message.

Question and Answer.....

Continued from page 5

Q: We are currently running Internet Exchange for cc:Mail 3.13 and I noticed that when Internet Exchange bounces a message, it uses the address *postmaster@FQDN* as the "From:" address. How can I change this?

A: By default, Internet Exchange will append the FQDN of the Internet Exchange machine if there is no domain part for the bounce sender address specified. To change the default address used by Internet Exchange, go to Internet Exchange/Configure/Setup/Options tab/Advanced/Bounce sender field.

Q: When checking the notes password in notesetup.exe during installation of Internet Exchange Messaging Server (IEMS) 4.1, I get an error message saying "pwdhook.dll not properly installed, please run setup again". I've already reinstalled the IMA4 notes connector and then applied the IEMS 4.1 patch with no luck. I've followed the instructions and moved NOTES.INI to C:\Winnt folder. The notes client is version 5.02a.

A: This problem usually happens when you do not move the NOTES.INI file to the C:\Winnt directory and re-boot before proceeding with the installation. To solve this problem, you can manually modify the NOTES.INI file, add the setting to the last line and re-run the notesetup.exe procedure again.

[Notes]

ExtMgr_AddIns=pwdhook

Internet Exchange News

A monthly publication of International Messaging Associates, Ltd.

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