

Internet Exchange Messaging Server

Version 4.02

Release Notes

(November 5, 1999)

These are the release notes for Version 4.02 of *Internet Exchange Messaging Server*. In successive versions, this file will contain a log of bug fixes, enhancements and other changes. The new format of the release notes will be dated chronologically, with the latest one coming first.

Introduction

Internet Exchange Messaging Server version 4 from International Messaging Associates Ltd. (IMA) is an open architecture, stand alone messaging system whose design is specifically tailored to enable legacy email systems to coexist with proprietary messaging systems while making full use of Internet messaging and directory services. It is a highly configurable and scalable messaging system that complies with proven Internet standards while offering dependable mail storage, excellent migration support, and interoperability among disparate email systems.

Key Features

IMAP4 and POP3 Support

Internet Exchange Messaging Server version 4 features IMAP4 and POP3 support to enable users to access their mailboxes via IMAP4 - and/or POP3-capable user agents, such as Microsoft Outlook and Eudora. The IMAP4 and POP3 servers are integrated in the IMAP4 Optimized Message Store.

Batch SMTP Support

Internet Exchange Messaging Server version 4 includes a batch-mode implementation of SMTP that supports the Batch SMTP Media Type (RFC 2442). This is a MIME content type for tunneling ESMTP transactions through any MIME-capable transport. Internet Exchange Messaging Server version 4 includes a BSMTP Encoder that allows for the tunneling of messages for an entire organization or addresses to pre-defined Internet addresses, while preserving the original envelope or delivery information for each message. When these messages arrive at a single POP3 account, they are picked up by the POP3 BSMTP Decoder module, which decodes the resulting messages and then submits them to the Internet Exchange MTA for further routing, with the original envelope recipients retained.

Optimized Message Handling and SMTPC Queue Management

To speed up mail delivery and save on storage resources, Internet Exchange Messaging Server version 4 uses a shared message queue structure. By using this structure, duplication of messages is avoided and processing overhead is minimized. Internet Exchange Messaging Server version 4 also features SMTPC Queue Management for providing a mechanism for efficient message priority handling, the efficient processing of server-side ETRN requests, and improved message queuing strategies.

Anti-spam Engine with RBL (Real-time Blackhole List) Support

Aside from providing the system administrator with options to create a list of unwelcome IP addresses/address ranges or a list of banned IP addresses/address ranges using simple Graphical User Interfaces (GUI's), Internet Exchange Messaging Server version 4's Anti-spam Module supports Real-time Blackhole Lists (RBLs) for optimum anti-spam protection. Internet Exchange currently supports five RBL-style systems. They are:

- MAPS-RBL (Mail Abuse Prevention System's Real-time Blackhole List)
For more information go to <http://maps.vix.com/rbl>
- MAPS-DUL (Mail Abuse Prevention System's Dial-up user List)
For more information go to <http://maps.vix.com/dul/>
- Internet Mail Relay Services Survey Project(IMRSS)
For more information go to <http://www.imrss.org/>
- ORBS (Open Relay Behavior-Modification System)
For more information go to <http://www.orbs.org/>

- DynamicIP Spam Sources List (DSSL)
For more information go to <http://www.imrss.org/dssl>

Anti-virus Engine

Internet Exchange Messaging Server version 4's Anti-virus Module is a 32-bit multi-threaded stand-alone pre-processing module capable of performing simultaneous virus scanning for MIME and non-MIME message attachments. Internet Exchange Messaging Server version 4's Anti-virus Module supports the following anti-virus packages:

- McAfee VirusScan - this software engine supports the following platforms: DOS, Windows 95, Windows 98, and Windows NT.
For more information goto: <http://www.mcafee.com>
- Sophos Anti-Virus for Windows 95/98 - this application has the capability to automatically eliminate many common viruses and can easily be installed. It can be updated monthly with the latest anti-virus technology via the World Wide Web or via a CD or floppy disk.
For more information goto: <http://www.sophos.com>
- Sophos for Windows NT - this application is specifically designed for the Windows NT platform and has the same features found in Sophos Anti-Virus for Windows 95/98.
For more information goto: <http://www.sophos.com>
- F-PROT Professional Anti-Virus Package - this is specifically designed to support Windows 95/98 and Windows NT 4.0 (Server/Workstation).
For more information goto: <http://www.datafellows.com>

Scalability and Multi-platform Support

Internet Exchange Messaging Server version 4's architecture is designed to support a distributed message handling environment to ensure that each module will have sufficient computing resources to perform its tasks and to provide for future expansions. In case the messaging needs of the organization outgrow the initial setup, additional Internet Exchange modules, from MTA's to connector modules can be seamlessly incorporated, providing unlimited expansion capability to meet the users' growing needs. Thus, with Internet Exchange Messaging Server version 4, the various system components can be run on multiple machines and operating systems concurrently, assuring high scalability and redundancy. Communication between the different modules is via Remote Procedure Calls (RPC) running on TCP/IP transport layer. With RPC's, a multi-platform, distributed environment is possible running on Windows 95, Windows 98, Windows NT, and UNIX.

Mailing List Management via the Distribution List Manager

Internet Exchange Messaging Server version 4 Distribution List Manager allows messages to be sent to all of a list's subscribers simply by sending the said messages to a single address. The Distribution List Manager also enables the list maintainer to create Internet electronic mailing lists that support the following features: mail blocking, adding and removing subscribers, and setting the preferred delivery options.

Flexible RAS (Remote Access Service) Scheduling

The Internet Exchange Messaging Server version 4 Dialup Scheduler allows the system administrator to choose which days of the week to run the dialup schedule for Remote Access service (RAS). RAS is the remote access service for Windows and is actively supported on all WIN32 platforms. It is a useful feature for dialup issues.

Migration Tools for cc:Mail and Lotus Notes Environments

The cc:Mail and Notes Connectors come with migration tools for moving cc:Mail and Notes users to the Internet Exchange Messaging Server version 4 mailbox system, which is based on a client/server architecture. These migration tools enable the system administrator to export the user directory of cc:Mail and Notes users to Internet Exchange Messaging Server version 4's LDAP Directory. They also allow users' mailboxes (and sub-folders) in LAN-based systems to be exported to Internet Exchange Messaging Server version 4's local message store, where they can be accessed by any POP3 or IMAP4 compliant user agent.

MailSort Utility for Sorting Incoming Messages

Internet Exchange Messaging Server version 4's MailSort utility is used for defining rules so that the local mail delivery agent can direct messages to pre-selected mailboxes/folders other than the INBOX and generate automatic replies to incoming messages based on pre-defined criteria. The MailSort engine

implements these rules, enabling users to process incoming mail based on attributes, such as the message sender and subject on the Internet Exchange Server, in the background at message delivery time.

Vacation Utility

Internet Exchange Messaging Server version 4 includes a vacation utility that enables individual users to configure their account to automatically reply to incoming messages whenever they are not available. This vacation utility is integrated in the MailSort module.

LDAP Support

Internet Exchange Messaging Server version 4's Directory Server is based on the open Internet directory standard, the Lightweight Directory Access Protocol (LDAP). Unlike its predecessor, the DAP or Directory Access Protocol, LDAP does not require the upper layers of the OSI protocol stack and runs directly on TCP/IP or other reliable transport protocol.

Web-based Administration and Management

With Internet Exchange Messaging Server version 4 Web interface, the system administrator can manage, configure, and/or monitor the server from anywhere on the Intranet or the Internet regardless of the platform used.

Support for End User Administration

Internet Exchange Messaging Server version 4 includes a Web-based interface that enables users to configure three modules: the LDAP-based Directory Server, MailSort, and the Distribution List Manager.

Windows 95 Update

To ensure the proper operation of Internet Exchange Messaging Server version 4, the Service Pack 1 and Kernel Updates must be used. They can be obtained over the World Wide Web at:

- Windows 95 Service Packs (Microsoft)
<http://www.microsoft.com/windows/SOFTWARE/servpak1/complete.htm>
- Windows 95 Kernel32 Update
http://www.microsoft.com/windows95/downloads/contents/WUAdminTools/S_WUNetworkingTools/W95Kernel32/Default.asp

VIM Libraries for cc:Mail

The VIM libraries are needed by Internet Exchange Messaging Server version 4 in order to access your cc:Mail Post Office. To download the VIM libraries, point your Web browser to:

- VIM libraries download
ftp://ftp.support.lotus.com/pub/comm/ccmail/dev_tools/vdlw32.zip

Internet Exchange Messaging Server version 4.02 (5 November 1999)

Enhancements

The web server LDAP server and the Preprocessor now able to start simultaneously

Previous versions of Internet Exchange Messaging Server version 4 required that the LDAP server be started after the license information has been entered on the web interface. The LDAP server must also be operational before the preprocessor is configured on the web. Starting from Internet Exchange Messaging Server version 4.02, the Web server, LDAP server and the Preprocessor can be started simultaneously, which simplifies the configuration of the software.

Bug Fixes

Preprocessor Channel Action matrix file problem

The preprocessor runs messages through the channel action matrix twice, the first pass is the detection phase, and the second pass is the action phase. Under certain circumstances, the status passed from these two phases was incorrect. This has been fixed in Internet Exchange Messaging Server version 4.02.

Migration Tools problem

The migration tools at times misses some address book entries from the cc:Mail address book when migrating users to Internet Exchange Messaging Server version 4. This problem has been fixed.

Memory leak in Notes and cc:Mail connectors

There was a memory leak in the Notes and the cc:Mail connector modules; the system would run out of virtual memory. This has been fixed in Internet Exchange Messaging Server version 4.02.

LDAP server not responding when migrating users to Internet Exchange Messaging Server version 4

Migrating users to Internet Exchange Messaging Server version 4 causes LDAP integrity problems, the LDAP server stops responding to requests. This problem has been fixed in Internet Exchange Messaging Server version 4.02.

IMAP folder rebuild problem

The message store has a built in rebuild function in case the message store database gets corrupted. However, after doing a rebuild of the message store database the nested folders would not longer be accessible from IMAP. This has been fixed in Internet Exchange Messaging Server version 4.02.

Local mail delivery problem

When transferring a message from the message queue to the local message store, local mail delivery placed an exclusive lock on the message itself. This prevented other connector modules from accessing the message file until delivery was completed. This has been fixed in Internet Exchange Messaging Server version 4.02.

SMTPD

The SMTP Daemon crashed whenever the message line had a length of exactly 1024 characters. This has been fixed in Internet Exchange Messaging Server version 4.02.

CCIN Connector Module

Certain messages of the RTF attachment type may cause the connector to stop processing messages. This has been fixed.

cc:Mail / Notes as default delivery channel.

cc:Mail and Notes required a user entry in the LDAP server when it is set as the default local delivery channel. Default address mapping has been implemented in the Message Switch.

Local Mail Delivery Problem

When delivering message to a user with filter defined (using Mailsort), Local Mail Delivery Agent had limitations of 1KB when processing the TO field of the message. This has been fixed.

Known Issues

Low on disk space.

Internet Exchange Messaging Server version 4 may have problems when the disks containing the user accounts gets low on disk space. In extreme cases, Local mail Delivery Agent (LMDA) will crash. If this happens, space must be recovered by removing unnecessary files from that physical disk. It is also recommended that the rebuild utility, which is included in the installation, be run to rectify the problem.

New Applications

Rebuild Utility

Internet Exchange Messaging Server version 4 contains a utility, which is used to rebuild the internal databases that the Message Store applications uses to speed up access to mail data.

The rebuild utility is installed as part of the Message Store applications, and must be manually invoked by the system operator to refresh the databases if the system encounters problem, or as advised by IMA technical support.

To use the rebuild utility, it is recommended that all Message Store applications are first terminated as listed below:

- *IMAPD*
- *POP3D*
- *Message Store Server*
- *Locmail Server*
- *LMDA*

If the responder was used to start them, terminating the responder will also terminate these applications.

To use the rebuild utility, first open a MSDOS window, and change the current directory to the MsgStore sub-directory of the main installation directory for Internet Exchange.

Rebuild may be run in one of three different modes:

- *Rebuild of the entire message store (Internet Exchange Message Store is on drive d:\iev4):*

d:\iev4\rebuild.exe -F

The utility will traverse all accounts and rebuild all related database files in all folders and sub-folders. This may take some time, and should not be interrupted.

- *Rebuild of a single user account, ima@ima.com*

d:\iev4\rebuild.exe ima@ima.com

The utility will rebuild all the folders and sub-folders for that specific user.

- *Rebuild of a single folder.*

d:\iev4\rebuild.exe ima@ima.com "distribution list"

The utility will rebuild only the given folder; no other folders will be rebuilt. However, it is better to rebuild an entire user account, it will update the folder databases as well as the message databases.

Lotus Notes Connector Setup

Make sure that the following requirements have already been accomplished before setting up the Notes Connector. Check if the Notes Server where Internet Exchange Messaging Server version 4 will connect to is up and running. Run notessetup.exe from the Internet Exchange Messaging Server version 4 installation directory (default is C:\Program Files\Ima\Internet Exchange 4.0) and enter the values for the following:

Notes Mail Server	Company.com/ Jade_Network
Local Notes Mail Domain	Sales
User / Server ID File in Use	lmeed.id
Password for the ID file	*****
Lotus Notes Server Administrator	Joe Smith/Jade_Network
SMTP Domain Name	leln

Then click on Check button. You should see a confirmation if the password entered is correct.

Once the password for the id you are using is verified, click on Save to save the settings in the configuration file. Click on the Notes Connector button on the web administration interface. Click on Notes Domain Configuration and supply the values for the following entries:

Notes Mail Server	company.com/ Jade_Network
Local Notes Mail Domain	Sales
User / Server ID File in Use	lmeed.id
Password for the ID file	*****
Lotus Notes Server Administrator	Joe Smith/Jade_Network
Local Internet Hostname	Mindoro
Local Internet Domain	Company.com
SMTP Domain Name	leln

Click on Submit to effect the changes. Once the configuration is set, you can now run the NotesIn and NotesOut modules from the Programs menu.

Internet Exchange Messaging Server Version 4.01 (20 August 1999)

Enhancements¹

Improved message queue recovery

Internet Exchange Messaging Server version 4.01 features an improved message queue recovery scheme, in which messages are inserted in the appropriate queues and not just in the input queue. During startup of the Preprocessor Unit, all messages in the Message Queue are verified. If a corrupted message is found, the message queue recovery scheme is run. Unrecoverable messages are moved to the "bad" subdirectory of the Message Queue (which is defined as the "MQ Local Directory" in the Preprocessor Web Configuration Page).

New option for handling of invalid messages for Distribution List Manager

In Internet Exchange Messaging Server version 4, if a non-member sends a message to a close mailing list for posting, the message is forwarded to the list owner by default and the message sender is not informed that his/her message is not posted. In Internet Exchange Messaging Server version 4.01, a new feature for handling invalid message postings is added. Using this feature, the system administrator is provided with several options for handling messages sent to close lists by non-members. He/she do the following:

- Bounce the message to sender
- Forward the message to list owner
- Bounce the message to the sender and forward a copy to the list owner
- Discard the message

This new method of handling invalid message postings is applied when:

¹ Please see *Messaging Server, Administrators Guide: 4.01 Supplement* for details about the enhancements made in Internet Exchange Messaging Server version 4.01

- When a non-member sends a message to a closed mailing list, or
- When a blocked (but registered user) sends a message to the mailing list (open and closed)

Automatic subscription to closed mailing lists

In Internet Exchange Messaging Server version 4, applicants are not allowed to subscribe to a close mailing list automatically via email; the list owner needs to add an applicant's email address to the mailing list being subscribed to via a Web-based interface. Internet Exchange Messaging Server version 4.01 features a new subscription option which, when enabled, supports automatic subscription via email.

Support for Distribution List message disclaimers in HTML format

The Distribution List Manager bundled with Internet Exchange Messaging Server version 4 allows the insertion of disclaimers in messages in simple text format only. In Internet Exchange Messaging Server version 4.01, the Distribution List Manager is capable of inserting disclaimers in messages in HTML format. This feature is particularly useful for messages that originate from mail clients such as Microsoft Outlook Express and Netscape Mail, which support the multipart/alternative message format. Messages of this type contain both the TEXT/PLAIN and TEXT/HTML body parts.

Support for subscription messages in multipart/alternative format

In Internet Exchange Messaging Server version 4, the Distribution List Manager can only handle subscription/auto-reply messages written in non-MIME or single-part TEXT/PLAIN format. This poses a limitation to subscribers using mail clients such as Microsoft Outlook Express and Netscape Mail, which generate messages in multipart/alternative format. The Distribution List Manager bundled with Internet Exchange Messaging Server version 4.01 solves supports this problem by providing support for the multipart/alternative message format.

New SMTPC Queue Management and Monitoring Tool

With Internet Exchange Messaging Server version 4.01, a new Web-based interface has been added to the SMTPC Module configuration page for allowing the system administrator to monitor the number of messages in the pending and Deferred Queues. For the Deferred Queue, information for each channel in the queue is provided, such as the channel retry time, message sender, and message recipients. This tool can also be used to start the processing of any channels in the Deferred Queue.

New Option for customizing initial greeting for SMTPD

The default SMTP greeting message includes the FQDN, MTA product version number and the local time. Some sites consider this information confidential and prefer not to disclose it for security reasons. From Internet Exchange version Messaging Server version 4.01 the SMTPC greeting message is user configurable via the web interface to any greeting message. Please see *Messaging Server, Administrators Guide: 4.01 Supplement* for details.

Bug Fixes

Domain name lookup in the Preprocessor Unit now case insensitive

In Internet Exchange Messaging Server version 4, domain name lookup is case sensitive. Therefore, if a mail recipient, say hans@IMA.COM, will not be recognizable as belonging to a local domain if the domain name is specified in the Preprocessor as "ima.com". Thus, messages intended for that recipient will be rejected. In Internet Exchange Messaging Server version 4.01, domain name lookup in the Preprocessor is already case insensitive.

SMTPC Queue Processor bug fixed

In Internet Exchange Messaging Server version 4, when a message has multiple envelope recipients specified in both the Deferred and pending queues, only the recipients in the Deferred Queue get a copy of the message. This bug has been fixed in Internet Exchange Messaging Server version 4.01.

LDAP Web Interface bug fixed

In Internet Exchange Messaging Server version 4, when the *Update* button on the *Edit user* page is clicked without actually modifying any entries, an exception error occurs. This has been fixed in Internet Exchange Messaging Server version 4.01.

Preprocessor now recognizes both the hostname and the FQDN of the machine running the MQ server

In Internet Exchange Messaging Server version 4, only the hostname (i.e. *palawan*) of the machine that runs the MQ Server can be specified in the Preprocessor Unit's configuration interface. If an FQDN (i.e. *palawan.ima.com*) is entered in this field, the Preprocessor will not run. Internet Exchange Messaging Server version 4.01 accepts either the hostname or the FQDN of the machine that runs the MQ Server, provided that the hostname has a valid IP address.

Internet Exchange now automatically defines the hostname of the machine running the MQ server as the default value instead of 'localhost'

In Internet Exchange Messaging Server version 4, the default value for the machine that will run the MQ Server is 'localhost'. In Internet Exchange Messaging Server version 4.01, Internet Exchange enters the actual name of the host machine in the field provided for defining the MQ Server host. The 'MQ Server Access Mask' field is set to a proper IP address for this host and the 'MQ Remote Access Directory' field is provided with a better default value.

Distribution List Manager now retains all TO and CC fields

In Internet Exchange Messaging Server version 4, the Distribution List Manager removes all original TO and CC fields in the RFC822 header, with the entry in the TO field being replaced by the mailing list address. This prevents the mailing list member to send a reply to all the recipients of the message as specified by the original message sender. In Internet Exchange Messaging Server version 4.01, all TO and CC fields are retained so that the mailing list member can reply to all the recipients (as well as the original sender) of the message.

REPLY TO field bug fixed

In Internet Exchange Messaging Server version 4, the email address of the mailing list is entered by the Distribution List Manager in the REPLY TO of the message header before the message is sent to that particular list's members. Thereby, the list members have no way of replying to the message since the email address of the original sender is not specified in the REPLY TO field.

Preprocessor access mask now requires a proper IP address

The Preprocessor Unit bundled with Internet Exchange Messaging Server version 4.01 now requires a proper IP address for the 'MQ Server Access Mask' entry in the Preprocessor Web-based configuration page. Previous installations of Internet Exchange Messaging Server version 4 may need to change this value from the default of 127.0.0.1 to the actual IP address of the system. In Internet Exchange Messaging Server version 4.01, the 'MQ Server' and 'MQ Server Access Mask' fields are already provided with the proper values during the installation process. Previous installations may also get a message in the log file as well as in the Preprocessor application window, like the one below:

```
Sat 14 Aug 20:17:00 PreProcessor: [Diagnosis] MQ Responder, Rejected connection from
202.77.8.103, IP address not included in the 'MQ Server Access Mask'
```

If this message is issued by a system that should have had access to the Preprocessor, modify the 'MQ Server Access Mask' field to include the appropriate entries. Entries in this field should be of any of the following formats:

aa.bb.cc.dd	single ip address.
aa.bb.cc.dd - xx.yy.zz.ww	Range of ip addresses
aa.bb.cc.dd/mm	IP address with netmask of mm bits.

More than one entry can be added, separated by a comma ",", e.g.

202.77.8.103,208.13.8.0/24,203.77.8.7 - 203.77.8.9