

# RELEASE NOTES

## Internet Exchange Messaging Server 7.0

### What's New in Version 7

Internet Exchange Messaging Server (IEMS) 7 is a highly modular and scalable open architecture system. It can be used from small single machine installations to fully distributed systems linking geographically distributed sites into a common set of logical domains (see Figure 1). Its various components can be run on a single machine or in a distributed environment.

IEMS 7 introduces a new integrated Anti-Spam approach to message reception and delivery. The MTA Pass-Through technology employed by IEMS 7 allows end users (message store accounts), individual distribution list maintainers, and connector modules to define their own security profiles independent of the rest of the system. At the same time the messaging system administrator can still define an overall global security policy, where some anti-spam measures will be handled directly by the MTA (such as reliable DNS-BL identified traffic). Other measures which may be desired by part of the user community, such as DNS-BL's with known high false positive rates (at the time of this writing, SpamCop and a few others have received a lot of industry coverage for their perceived indiscriminate listing practices) can then be passed through to the users for consultation on a case by case basis.

In most conventional messaging systems, security measures are employed on a system wide basis, making the choice of tools, such as DNS-BL's, critical. IEMS MTA Pass-Through technology changes this by allowing the administrator to be able to employ many more countermeasures, enabling only those that have been proven to be universally effective at the MTA level, and letting users pick and choose what additional measures they may or may not wish to apply to their individual message traffic

This document discusses the product features of IEMS 7; and known problems and limitations that have been identified in this release. Hardware and software requirements for IEMS 7 installation are also included.

Apart from fixing some issues outstanding in version 6, this release introduces some new features:

### **Edition Support**

IEMS 7 now supports 3 Editions in a single binary distribution - Free 3-User, Standard Enterprise, and Professional Enterprise. Upgrades from the Free 3-User edition through the Professional Enterprise can be accomplished by applying a new license certificate. The Version 6 SME and SE editions have been consolidated to a single V7 SE release.

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**WHAT'S NEW IN VERSION 7**

### **MTA Content Filtering**

IEMS 7 has added MTA level support for the SpamAssassin mail filter. SpamAssassin is used for doing spam content analysis of messages as they pass through the MTA.

### **Bayesian Filtering**

Bayesian filters use statistical techniques to calculate the probability of messages being spam. The filter uses mail samples provided by each user to determine the spam probability on a user by user basis. This approach results in a robust and adaptable system with success rates commonly in excess of 98% after initial training. Bayesian filtering has been incorporated into the IEMS Local Mail Delivery Agent, allowing for highly efficient user directed filtering.

### **Integrated Anti-Spam (MTA Pass-Through)**

System administrators are often caught in the middle of conflicting sets of requirements. On one hand, it is their responsibility to protect their organization and systems from outside (and sometimes inside) attacks from virus infected messages as well as spam. At the same time, they serve the users of these systems.

Traditional spam fighting techniques are performed by the MTA based upon policies set by the administrator. These global policies normally are set to ensure the maximum protection for the organization with minimal impact on the end user. In the case of spam detection and handling, the definition of what constitutes spam can vary widely from community to community, as well as from user to user within a single organization. Sales and marketing related messages may be very welcome in a sales group, while not being tolerated in a nearby engineering group. Advertisements pitching lower mortgage rates may be undesirable by most but a small group of people looking to purchase a new home. Viagra advertisements and other personal enhancement types of advertisements may not be at home for any users, especially if the site caters to the young or corporate users.

IEMS 7 introduces a new MTA Pass-Through technology used to integrate the various anti-spam measures, and to allow the application of these measures to be adapted to the varying requirements of each user. Pass-Through technology allows the system administrator to be able to perform MTA level checks on messages, and then to optionally defer any action until being handled by an agent controlled by the end user. These agents are typically output channel processors, such as the Local Mail Delivery Agent, the Distribution List Processor, and others. As not all output channels are capable of handling deferred actions (such as the cc:Mail and Notes connector modules), the administrator can define default actions to be performed on a channel by channel basis, which will then be carried out by the preprocessor.

### **SMTP Authentication**

IEMS 7 adds support for SMTP Authentication. Remote mail clients can now use SMTP Auth to connect with an IEMS MTA, which will then permit relaying of email once the remote client has been properly authenticated.

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**WHAT'S NEW IN VERSION 7**

## SMTP SSL Support

SSL support has been added for the SMTP protocol.

## Non-Delivery Notification Special Handling

One of the biggest problems a mail administrator has to deal with is maintaining outbound SMTP queues. This problem is made more difficult in this age of rampant spam by the number of non-delivery notification (NDN) messages generated when messages arrive for non-existent users. Most times the return addresses are un-replyable, resulting in huge message backlogs in the outbound SMTP queues.

IEMS 7 adds several tools to assist the administrator in dealing with growing mail queues of non-delivered spam mail. Messages that have been identified by the system as spam candidates which result in non-delivery can have different time to live values assigned to them in the SMTP queue. For instance, while a normal message may be permitted to hang around until it gets delivered or say 3 days (typical), a spam tagged NDN message on the other hand can be configured for a much smaller value - say 4 hours. This special handling allows for the automatic management of the outbound queues, not only keeping them at reasonable levels, but also allowing the administrator to be able to finally see through all the junk messages to valid

## Web Folders

Online storage features have been added to the Web Mail Client. This new subsystem includes the following features:

- Login through webmail login interface
- A file manger like user interface (e.g. Internet Explorer)
- Webmail client can detach attachments from email message and store the attachment inside the online storage area
- Provides easy uploading and downloading facilities
- Ability to launch local application to view / edit files being stored in the online storage area

## Domain Administration

IEMS has always been able to support multiple domains on a single machine. Administration of these domains is done through the mail system administrator interface. IEMS 7 adds the ability to delegate domain administration (message store, distribution list) to sub-administrators.

## Open Client API

IMA provides two sets of Application Programming Interfaces (APIs) for messaging system developers. Developers looking to build gateway modules, or other applications that need to tightly integrate with the IEMS MTA and Pre-processor should use the Message Queue (MQ) API. This API provides the tools necessary to directly manipulate the MTA Shared Message Queue. In addition, programmers can make use of this API to build new Preprocessor filter modules.

Developers needing to write user applications or other applications that sit outside of the messaging system should use the Client API's. The IEMS Client API provides both C++ as well as PHP interfaces to the application devel-

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**PRODUCT FEATURES**

oper. It encapsulates most of the functional details provided by the different IEMS subsystems and provides a simplified API. The Client API provides a simple to use interface to the IEMS Message Store, and provides simple tools for message submission. User authentication and password management tools are also included.

**Licensing - Anti-Virus**

Anti-Virus functions are now standard in all licensed IEMS versions, except the free (non-licensed) 3-user version.

**PRODUCT FEATURES****Internet Standards Support**

IEMS 7 is specifically designed to conform to Internet standards to ensure system stability and flexibility. These standards include:

- **SMTP (Simple Mail Transfer Protocol)**  
IEMS communicates with mail hosts on the Internet using the SMTP. This protocol is used for the submission as well as the reception of messages. To communicate well with the Internet, IEMS implements SMTP as two separate modules. A client program, SSMTPC (Simple Mail Transfer Protocol Client), delivers messages to the Internet. The server program, SMTPD (Simple MailTransfer Protocol Daemon), listens for incoming messages on the Internet.
- **BSMTP (Batch Simple Mail Transfer Protocol)**  
IEMS includes a batch-mode implementation of SMTP supporting the BSMTP Media Type (RFC-2442). This is a MIME (Multipurpose Internet Mail Extensions)-content type that is used to tunnel ESMTP (Extended SMTP) transactions through any MIME-capable transport. This feature allows the tunneling of a group of messages to a pre-defined Internet address while preserving the original envelope or delivery information of each message.
- **IMAP4 (Internet Mail Access Protocol version 4)**  
IEMS supports for IMAP4 allows users to access their mailboxes via IMAP4-capable clients, such as Microsoft Outlook Express, Netscape Communicator, among others. By utilizing IMAP4, users can manipulate their mailboxes/folders on the server without having to download them to a local hard disk.
- **POP3 (Post Office Protocol version 3)**  
IEMS supports for POP3 provides POP3-capable clients with another means of accessing their mailbox. Using POP3, users can retrieve messages from the local Message Store Inbox and store them in a local hard disk so they can be read in an off-line or disconnected state. The POP3 server supports multithreading for fast message retrieval.
- **LDAP (Lightweight Directory Access Protocol)**  
The IEMS Directory Server incorporates LDAP, an open directory access protocol especially designed to effectively manage information about users, groups, mailing lists, alias processing and mail rout-

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**PRODUCT FEATURES**

ing. LDAP also has a rich set of searching capabilities that makes directory look up fast and efficient.

## Security

To ensure the security of the messaging system, IEMS 6 has several layers of built-in security features, such as:

- **Anti-Virus Capability**

IEMS performs simultaneous virus scanning on MIME and non-MIME message attachments. Once a virus is detected, the message can either be deleted, bounced back to the sender, or archived to a pre-defined location/directory for later manual processing.

- **Anti-Spam Capability**

The new integrated anti-spam in IEMS 7 (MTA Pass-Through) allows for the establishment of separate security policies for the system and individual users (the later being a subset of the global policy). Connection and MTA level checks can be identified, and acted upon (per the global system security policy) in manners setup by each individual user.

- **Auto Text Insertion Engine**

The auto text insertion engine provides the capability to insert disclaimer messages into messages passing through the MTA. The administrator can add different disclaimer messages based on the message source channel. The engine, which supports non-MIME and MIME message structure types, allows the system administrator to use plain and/or HTML text file format in the insertion process.

- **Attachment Removal Filter**

An Open Source Message Queue Open API application able to remove file attachments with extensions or MIME media types.

- **SSL Support**

Transport level security through SSL is available for IMAP4 and POP3 protocols to remote email clients, as well as the HTTP protocol for remote web administration and web mail client.

## Scalability

The IEMS architecture is designed to support a distributed messaging environment to ensure that each IEMS component will have sufficient computing resources to perform its tasks and to provide for future expansions. Thus, the various components can be run on different machines and operating systems concurrently.

## Mailing List Management

The Distribution List Manager allows messages to be sent to all list's subscribers by simply submitting the said messages to a single address. The module also enables the system administrator or list owner to create electronic mailing lists that support the following features: mail blocking, adding and removing subscribers, and setting the preferred delivery options.

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**PRODUCT FEATURES**

IEMS Distribution List Archives allows members and non-members of the mailing list to view the archived messages of a mailing list.

**Mailing List Subscription and Unsubscription**

IEMS also allows both members and non-members of a mailing list to subscribe to or unsubscribe from the mailing list available in the server.

**Mail Storage**

IEMS features a Message Store that acts as a dedicated mail repository for storing, retrieving and manipulating messages, while also enabling users to access their mailboxes via POP3- and/or IMAP4-capable clients.

**Filtering and Vacation Utility**

The Mailsort utility allows both the system administrator and end user to define rules so that the LMDA can copy, forward or move messages to pre-selected mailboxes/folders other than the Inbox. It can also generate automatic replies to incoming messages based on a predefined criteria. The Mailsort filtering utility implements rules based on certain attributes (i.e., message sender, recipient or subject) to process incoming mail at message delivery time. Another function is its ability to reject messages coming from the defined email addresses.

**Disk Quota Management**

The Quota Agent allows the system administrator to set and enforce disk quotas on all Message Store user accounts. This feature limits the amount of resources that is allocated to the individual users to prevent them from consuming all of the available disk space in the server. The Quota Agent generates reports in HTML and text file format that can be used by the system administrator in checking and verifying Message Store performance and space usage.

**Excellent File Attachment Handling and Support**

Transferring file attachments among disparate electronic messaging systems have long been a problem for many messaging systems. With IEMS, attachment file names and attributes are transferred among disparate mail systems fully preserved, preventing the loss and corruption of data regardless of the source and destination systems.

**Optimized Message Handling and Queue Management**

To speed up mail delivery and save on storage resources, IEMS uses a Shared Message Queue structure. By using this structure, duplication of messages is avoided and processing overhead is minimized. IEMS also features an SMTPC Queue Management that provides a mechanism for efficient message priority handling, the efficient processing of server-side ETRN (Extended Turn) requests, and improved message queuing strategies.

**Migration Support**

Comprehensive migration tools are provided to help users move to an Internet standards-based environment smoothly and reliably. All address and mailbox information is transferred to the new system transparently, causing end users very minimal disruption. In addition, it supports the most common client software available in the market, allowing end users to immediately make use of system after the messaging system (backend) migration is complete.

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**PRODUCT FEATURES****Messaging Connectivity for cc:Mail and Lotus Notes**

Connector modules are provided for Lotus cc:Mail and Lotus Notes, allowing seamless integration of these legacy systems with IEMS 6.

**Centralized Monitoring and Control Module**

The MC (Monitoring Control) Responder is used to automatically start or stop IEMS components. The MC Responder serves as a centralized monitoring and control module that manages the different modules running across multiple machines and operating systems.

**Web-Based Administration**

The web-based interfaces of IEMS allow users to manage the system via the Internet using any web browser.

**Web-Based User Administration**

This web-based interface allow each user to manage a number of properties of his/her own account. This interface is multilingual: besides English, it supports Simplified Chinese (GB3212). In future releases, support will be added for Traditional (BIG5) Chinese, French, German and Spanish; a white paper will then be release to document how the Administrator may add support for custom languages.

**Web Mail Client**

The Web-based mail client allows users to compose, reply and forward messages using any web browser. This interface is also multilingual, with the same characteristics as the Web-Based User Administration. In addition, it is also possible to display (and reply to) mail messages written in still unsupported languages (e.g., Japanese) as long as the browser used supports the relative encoding. Please note that the multilingual support in older browsers is often limited and buggy; for best results, we recommend to avoid versions of Microsoft Internet Explorer prior to 5.5, and versions of Netscape Navigator prior to 6.

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**SOFTWARE AND HARDWARE REQUIREMENTS****SOFTWARE AND  
HARDWARE  
REQUIREMENTS**

For optimum performance, it is recommended that IEMS and its components to be installed using the following minimum configurations:

**Windows 98 (Anti-Virus Processing Only)**

- Pentium or higher
- Minimum recommended RAM: 64MB
- Minimum recommended hard disk space for applications: 200MB
- Minimum recommended hard disk space for message store: 1GB or dependent on the number of users

**Windows XP, 2000 and NT 4.0 with SP4**

- Pentium or higher
- Minimum recommended RAM: 96MB
- Minimum recommended hard disk space for applications: 200MB
- Minimum recommended hard disk space for message store: 1GB or dependent on the number of users

**Linux**

- Pentium or higher
- Minimum recommended RAM: 64MB
- Minimum recommended hard disk space for applications: 200MB
- Minimum recommended hard disk space for message store: 1GB or dependent on the number of users

**Supported Distributions:**

- RedHat 6.2 - 9.0
- Mandrake 8.2 - 9.1
- SCO Linux Server 4.0 (United Linux 1.0)
- RedFlag
- Cosix (CS&S)

**New Features****Password Retrieval**

A new password management system where users can store pre-defined questions and answers, and use this information later to recover lost passwords has been established. This optional system is used together with the User Auto-Registration system, and allows users to recover forgotten passwords.

**User Auto-Registration**

Many sites providing messaging services need to provide an interface for new users to register their email account on the web without the help of the system administrator. A new interface is provided for this purpose. This interface presents a form asking for user first name, last name, desire email address, password, Question and answer to be used by Password recovery procedure and an external email address.

**Account Opening Agent**

This is a simple command line program to assist in automate account creation. It can facilitate administrator manipulation of IEMS users via means



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other than IEMS web interface. An administrator can use this tool from a script to create a batch of IEMS users automatically.

### **WMC: Bookmarks / Address Book Enhancements**

Several enhancements, including enhanced message sorting, message search, enhanced Address Book, and online bookmarks have been added.

### **WMC: Multiple Folder Search**

It is now possible to search across multiple folders using the web mail client. Folders with matching results are presented, and the user can then select on a per-folder basis the subset of messages that have met the search criteria.

### **WMC: Automatic Trash Collection**

A new server process has been established to run once a day to automatically empty user email trash bins.

### **WMC: Multiple Signature Files**

Support has been added for multiple signature files within the web mail client. When sending a message, the user can now choose between these several stored signatures.

### **DNS-BL Whitelist**

DNS-BL checking checks for blacklisted sites to deny access to. Many of the DNS-BL sites are either over aggressive, or contain selected entries that may not be desirable for all sites. This enhancement will allow a site administrator to override networks where they wish to receive mail from, even if targeted by one or more configured DNS-BL's. The configuration interface is found in the Anti-SPAM page.

### **SMTPD Message Flow Control**

This enhancement is designed to prevent authenticated SMTP users from using the server to send or relay mass volumes of email (e.g. SPAM). The administrator can enable/disable/specify the maximum number of messages that an SMTP authenticated user can send or relay through IEMS. The administrator can also enable / disable / specify a maximum volume of total messages that an SMTP authenticated user can send through IEMS.

### **SMTPD Minimum Incoming Size Control**

An option was added to control the minimum size of the incoming SMTP message. This can be configured via the following option. A value of '0' will disable this checking. By default, this option is disabled.

```
[Options]
MinInboundMessageSize=0
```

### **Login IP Address Logging**

IEMS 7 adds support for the logging of connecting IP address for POP3/IMAP/WMC users in the IEMS log file. Note that if a connection is passing through a proxy/firewall (with NAT/IP MASQ), the real IP address may not be shown, but rather than of the proxy/firewall.

## NEW FEATURES

## Mail For Invalid Local Users

Non-deliverable messages for invalid local users are usually bounced back to the originator. This can cause a great system performance overhead in todays systems due to spam abuse. In these situations it can result in a large number of bouncing messages queued in the IEMS outgoing SMTPC queue. A new option is added to IEMS such that administrator can define how to handle these types of messages. The default is 'Bounce'. This can be configured via the following option in the IEMS configuration file (iemta.ini under Windows, /etc/iems.conf under Linux).

```
[Options]
MailForInvalidLocalUser=Bounce | Delete | Postmaster
```

## IMAP / POP3 Default Login Domain

When user login to the mail system (POP3/IMAP/WMC), as IEMS is a multi-domain capable system, the user name is the full email address (user@ima.com). This may cause inconvenience for some sites where users are accustomed to login using only the local part of the e-mail address. Options have been added allow users to use localpart (username) without the domain name to login POP3/IMAP/WMC. The POP3/IMAP/WMC server will append a configured default domain name to the login name without domain name when authenticating the user. The default domain name can be set by the options shown below. By default, the local domain of IEMS will be used to append to the localpart of the login name.

```
[Connection]
IMAP4DefaultDomain=ima.com
POP3DefaultDomain=ima.com
WMCDefaultDomain=ima.com
```

## SMTPC MTA Header Stripping

IEMS MTA Pass-Through introduces the ability to defer action on messages that for one reason or another have been identified as potential spam. It does this by the application of one of many IEMS specific additions to messages as they pass through the system(s). This information is later picked up by one or more channel processors.

This is all well and good within the confines of IEMS, however it is usually not appropriate to export internal control information to the outside world. One notable exception where it is desirable is in firewall situations where spam checking is done in a DMZ network, and the primary organization MTA is inside the firewall. In these situations, the deferred spam information needs to be conveyed across the firewall, so maintaing internal spam tagging in this situation is necessary.

IEMS 7 will by default strip all MTA Pass-Through control information prior to sending messages outside of the local domain. For situations where this information needs to be passed through to an internal downstream MTA, such as the firewall scenario just described, a peer domain can be defined, where spam tag stripping is disabled.

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**BUG FIXES****Separation of BSMTTP Client / Server Licensing**

The BSMTTP Client is now available for all licensed IEMS versions (PE and SE).

**Domain Aliasing**

Domain aliasing provides a one way domain mapping between domain names on incoming messages. In other words if jade.net is aliased to ima.com, and bart@ima.com is a valid message store account, mail addressed to bart@jade.net will be delivered to bart@ima.com. On the other hand, if there exists a message store account homer@jade.net but no equivalent ima.com account, messages sent to homer@ima.com will go undelivered. If homer had message store accounts on both ima.com and jade.net, messages would get delivered to the actual message store account to which they were addressed.

**User Anti-Spam - Whitelist Support**

Users can specify mail senders or networks that bypass user spam control through individual white lists.

**Quota Reports**

With the introduction of Bayesian Filtering, Bayesian database files are stored together with the message files in the same directory hierarchy. The Quota agent has been modified to make sure that it excludes space used by these new databases. The Quota Report module also has also been updated to report BOTH the message disk consumption as well as Bayesian Filter database usage.

**Relocation of Calendaring / Scheduling Link to Message Store Controls**

The Calendaring and Scheduling link previously present in the MTA section of the Administrator's interface has been moved under the Message Store Controls.

**Bug Fixes****POP3 Client (BSMTTP) Hangs After Loss of Connection**

When the connection to the Internet is severed, any active BSMTTP sessions can hang on the client side. This has been resolved.

**POP3 Daemon Server Process Hangs After Loss of Connection**

This is the same as the client problem above, however it affects the POP3D process on the server.

**Unable To Recognize Mailboxes under INBOX (IMAP)**

IEMS IMAP implementation did not handle the notification of mailboxes residing under the INBOX properly. Mailboxes here can be properly rendered with the WMC, and indeed are present, but problems within IEMS IMAP prevented this information from being conveyed properly to IMAP clients.

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**BUG FIXES****Back Buttons For DL I/F**

In the DL Owner administrative i/f, there were no "Back to main" or "Back" link/buttons on some pages.

**Responder Start Error under Linux**

When starting the responder under Linux, an error "sh:/opt/iems/rebuild-aliasdb: no such file or directory" used to appear under certain conditions.

**Attachment Filter Module Crash**

When "\*"/\*:" was selected as the filter in the Attachment Filter module, the module would crash, and subsequently cause the Preprocessor to crash.

**DL Owner Login / Logout**

When the DL owner logged in and out via the separate DL configuration i/f, other message store users could also login the DL admin page.

**WMC Address Book Port Assignment**

The address book capabilities did not function properly if the WMC was configured to use an http port other than 80.

**WMC "Internal Server Error"**

Clicking on "Compose" in the WMC gave an "Internal Server Error" using Caldera OpenLinux.

**WMC Security**

After a WMC user logged out, if they clicked on the 'Back" button on the browser, they would still access the function of 'Password', Calendaring, and Distribution List.

**No Error Checking In MBXUTIL module**

No error checking was done for the directories and subdirectories of mbxutil module. Error checking is now provided for the directories and subdirectories under each account in the message store.

**Non-DL Owner Login for DL Configuration**

When using the DL Configuration as a non-DL owner, it would display the DL owner page instead of the non-DL owner page.

**Left Frame Disappears in DL Configuration**

When logging in as DL owner and clicking on any of the DL controls, the left frame would disappear.

**DL User Authentication**

When authenticating a user account in the DL, the first login using the correct name and password displayed the unauthorized user page.

**DL Control Logout**

After logging out from the DL Controls, the subsequent login page was wrong.

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**BUG FIXES****Admin / User Port Separation**

The release of V6 removed the two separate entry points (administrator and user) for IEMS. In V6, both pages point to the same administrator login page. This broke the ability to separate administrator and user access across different http ports. This has been fixed for V7.

**Login-HTML INI Option for WMC Login/Logout Reference**

The administrator can define a login URL link to which WMC will be redirected when user logout. When a user login fails, they will be prompted to login again, and this option was not being used. This is fixed such that user will be redirected to the defined login URL to re-login again.

**SMTP Auth Default Domain Names**

Features were added so that a default domain will be appended when users supply login names without the @domain component.

**Quota Agent Decimal Number Recognition**

The Quota Agent does not recognize decimal numbers when entered into the web interface. This has been updated to return an error to the user that only integer values are permitted.

**Excessive PreProcessor Processes**

Fixed a bug in the Anti-Virus RPC code that caused excessive amount of instances of PreProcessor processes.

**Anti-Virus Able to Accept %f in different positions**

In the Anti-virus configuration interface page, the "%f" keyword for the option "Command line parameters" is used to refer to the filename that IEMS pass to the Anti-virus engine. In V6.0, "%f" can only be placed at the end of the parameter list. This will cause compatibility problem with some Anti-virus engines that require the filename parameters specified in the first position of the parameter list. This has been fixed.

**SMTPC Hanging / CPU Utilization**

If the SMTPC Queue database gets corrupted, under some conditions it will cause SMTPC to hang. This has been fixed.

**Wrong CGITop Display for Distributed Environment**

When run in a distributed environment, the top frame did not properly display the appropriate modules and their links.

**POP3 Daemon Locking / Lockout**

From time to time the POP3 Daemon process can return errors that it cannot obtain locks on the server side and will terminate the POP3 session without transferring any mail. Shutting down of IEMS and restarting did not clear the problem, even if the message database is rebuilt before a full restart. A system reboot however did clear the problem. The cause is left over IPC resources from a previous process that did not terminate properly. This has been resolved.

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**BUG FIXES****LDAP Termination (Windows)**

In the Free 3-user edition, LDAP terminated when there is an imacert.imc file in the C:\cert directory.

**Server Process Signal Handlers**

Some attributes, such as anti-spam settings while being written to the configuration database upon change, did not take effect in the system until the appropriate server modules are shut down and restarted. In the case of relay control in the anti-spam configuration, SMTPD needed to be restarted. Now, when configuration changes are made, the corresponding CGI program signals the proper daemons to re-read their configuration settings and adjust accordingly.

**Installer: proftpd Default Run State**

Under Linux, the proftpd daemon was running by default. This has been disabled before starting the professional edition.

**FTPD Shutdown (Linux)**

FTPD was not properly being shut down when the responder was stopped.

**SMTPC Virtual Queue Cleanup**

SMTPC creates directories for each of the virtual queues it creates in the SMTPC mqueue area. Unfortunately these were not always removed after a given channel has been cleared. SMTPC has been updated to make sure that proper cleanup is done after flushing each virtual queue.

**DCE-RPC Installer**

On several Linux distributions, including Mandrake 9.1, the DCE-RPC installer reported errors on installation. These have been fixed.

**Mandrake 9.1 Use of httpd2.conf**

Mandrake 9.1 in their configuration of Apache 2, uses by default the configuration file /etc/httpd/conf/httpd2.conf rather than httpd.conf. The installer has been updated to check for this.

**Mailsort Crashes When Referencing Non-existing Folder**

MailSort, when delivering to a non-existent folder, would crash blocking all further local mail delivery.

**SMTPD: Unnecessary DNS-BL Lookups**

When a connection is established between SMTPD and a remote MTA, the IP address of the calling MTA is checked with the IEMS database of banned hosts / networks. If a match is found, SMTPD continued to also perform the associated DNS-BL lookups for the remote MTA. The later is unnecessary in cases where a local match has already been found, and results in additional processing and network overhead.

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**KNOWN LIMITATIONS****Installer: httpd.conf edit**

The V6 Linux installer performed editing on the mail httpd.conf file, changing the DocumentRoot declaration to /opt/iems/htdocs/iems. It did this for the global setting rather than utilizing the definition in the VirtualHost section.

**Rebuild Utility Received Date**

The rebuild utility did not compute the received date properly when doing a full rebuild, resulting in clients such as Outlook Express reporting the received date for all messages as the time and date of the rebuild.

**KNOWN  
LIMITATIONS****cc:Mail migration tools do not migrate nested folders**

The cc:Mail mailbox migration tools will not migrate nested folders as the cc:Mail VIM API does not include support for this.

**cc:Mail/Notes mailbox converter does not migrate empty folders**

When no message are found in a folder, the migration tool skips the conversion process for the empty folder. This is due to a lack of support within the cc:Mail / Notes API's that the IEMS migration tools utilize to communicate with these environments.

**Notes migration authentication fails if server.id is used to connect to the Domino server 4.x**

The Notes migration authentication to the Notes server will fail if the server.id is used to connect to the Domino 4.x server. The Notes VIM interface requires that a user ID is used to open the Notes address book.

**Shared mailboxes not visible in WMC**

When using the Web Mail Client (WMC), the shared mailbox available for the local user will not be visible in the list of folders in WMC. Shared folder access is only accessible using any IMAP compatible client, such as Outlook Express, Netscape, Eudora, etc.

**Deleting 300+ Message Store users returns "Internal Server Error"**

Deleting approximately 300 Message Store accounts or more at a time returns "Internal Server Error". The CGI library for deleting Message Store user limits the total characters to be posted per transaction. When the data posted exceeds this limit, the program will display "Internal Server Error". To solve this problem, limit the users to be deleted at a time to around 200 accounts or less.

**Adding 200+ mailing list members returns "Internal Server Error"**

Adding 200+ mailing list members at a time returns "Internal Server Error" The CGI library for adding mailing list members at a time limits the total characters to be posted per transaction. When the data posted exceeds this limit,

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**KNOWN LIMITATIONS**

the program will display "Internal Server Error". To solve this problem, limit the users to be added at a time to approximately 100 email addresses or less.

**Defining 50+ lines of data for the LDAP address field returns "Internal Server Error"**

The system returns an "Internal Server Error" message when more than 50 lines of data is entered in the address field/attribute of user in LDAP.

**IEMS modules lose connection to LDAP server under Windows 98**

Windows 98 TCP stack can run out of memory under certain conditions. When this happens, IEMS modules and all TCP base client software will not be able to make new TCP connection. It is recommended that Windows 98 be replaced with a more robust operating system, like Windows NT or Linux.