Sun™ ONE Messaging Server Release Notes

Version 5.2 Patch 2 July 2004

Part Number 817-6244-10

These Release Notes contain important information available at the time of release of Sun ONE Messaging Server 5.2 Patch 2 (Sun ONE Messaging Server was formerly iPlanet Messaging Server). New features and enhancements, known issues and limitations, and other information are addressed here. Read this document before you begin using Sun ONE Messaging Server 5.2 Patch 2.

The most up-to-date version of these release notes can be found at the Sun ONE documentation web site: `http://docs.sun.com/prod/sunone`. Check the web site prior to installing and setting up your software and then periodically thereafter to view the most up-to-date release notes and product documentation.

These release notes contain the following sections:

Release Notes Revision History

Table 1 Revision History

Date	Description of Changes
July 23, 2004	Ability to use anti-virus and anti-spam software of Brightmail, Inc., several new MTA options, three new metacharacters, known issues, and fixed problems.
April 19, 2005	Updated behavior of `mgrpAllowedDomain` schema attribute.

About Sun ONE Messaging Server 5.2

Sun ONE Messaging Server provides a powerful and flexible solution to the email needs of enterprises and messaging hosts of all sizes using open Internet standards.

Sun ONE Messaging Server combines the Messaging Server and Sun Internet Messaging Server. The most robust and highest performing components of each product work together to produce the Messaging Server. For example, the message store, Lightweight Directory Access Protocol (LDAP) directory, and Administration Console come from the Messaging Server, while the message transfer agent (MTA) and delegated administrator command line interface (CLI) come from Sun Internet Mail Server.

Because this is an integrated product, Messaging Server and Sun Internet Messaging Server customers might find that many processes and procedures for those products are different for Sun ONE Messaging Server. For complete information refer to the Sun ONE Messaging Server 5.2 documentation at `http://docs.sun.com/db/prod/s1msgsrv`.

The following list describes the features of Sun ONE Messaging Server 5.2, referred to in these release notes as Messaging Server:

- Compatibility with Sun ONE Directory Server 5.1 and 5.2.
- Integration with Sun ONE Web Server 6.0 Service Pack 2
- Enhanced Hypertext Transfer Protocol (HTTP) service with the introduction of Messenger Express Multiplexor.

- Enhanced Messenger Express, including a spelling checker, rich-text formatting for Microsoft Internet Explorer, shared folders, and user interface improvements that facilitate navigation.

  In addition, Thai character sets are supported in Messenger Express. To view Thai characters, set your preferred language to `Thai` in the user preferences.

- Message transfer agent direct LDAP lookup.
- Post Office Protocol (POP) before Simple Message Transfer Protocol (SMTP) service to support legacy POP clients that lack support for standard SMTP authentication. This service is implemented by using a new SMTP proxy component of the Messaging Multiplexor (MMP).
- The ability to import and export between the Messaging Server and UNIX `/var/mail` format folders.
- Additional support for Domain Name System (DNS) databases in the `dns_verify` program.
- The configuration variable `store.quotanotification` is no longer supported. To enable or disable quota notification, set or unset the `store.quotaexceededmsg` configuration variable. You cannot disable Internet Mail Access Protocol (IMAP) ALERT messages.
- Support for Short Messaging Service (SMS) using the SMS channel. The Messaging Server supports one-way email to an SMS gateway. Support for this feature is provided by a special SMS channel. The handling of SMS notifications (that is, replies and delivery receipts) and origination of email from SMS users (mobile-to-email) is not supported.

  For complete information on the SMS channel, refer to the Sun ONE Messaging Server Technical Notes at the Sun ONE Messaging Server Documentation web site.

- Revised and expanded MTA documentation for the *iPlanet Messaging Server Administrator's Guide* and the *iPlanet Messaging Server Reference Manual*.

This section includes:

What’s New in This Release

New features in Messaging Server 5.2 Patch 2 include:

- The ability to take advantage of the anti-spam and anti-virus software from Brightmail, Inc., is available with the Messaging Server. See “Using Brightmail Software with Messaging Server” on page 33 for more information on configuring and using these features.
- Additional MTA options, environment variables, metacharacters and other features were added to the Messaging Server. See “Documentation Updates for Messaging Server 5.x” on page 24 for more information.
- Sun Cluster 3.0 Update 3 and Veritas Cluster Server 2.0 Patch 4 are supported. See the *iPlanet Messaging Server Installation Guide* for installation and configuration information. In addition, Veritas Cluster Server 3.5 is supported. For more information, see “Veritas Cluster Server 3.5 Support” on page 21.
- The Messaging Server can be installed on Solaris 9 and Windows 2000 Service Pack 2. See the sections on “Solaris 9” on page 5 and “Microsoft Windows 2000 Service Pack 2” on page 7.

Hardware and Software Requirements

The following hardware and software are required for this release of Messaging Server.

Required Software for the Messaging Server

The Messaging Server 5.2 Patch 2 requires these Sun ONE components:

- Administration Server 4.2
- Directory Server 5.1 or 5.2

  Use Directory Server 5.2 if your system meets any of these conditions:

  - You are starting a new deployment of Messaging Server.
  - You require the Class of Service (CoS) mechanism. For more information, see: `http://docs.sun.com/source/816-5606-10/roles.htm#1115605`.
  - You require Counter Plug-in compatibility.

- Delegated Administrator for Messaging and Collaboration 1.2 Patch 1

  You cannot upgrade the Delegated Administrator from older versions of the product. Instead, you need to uninstall the previous version of Delegated Administrator and install the version that is bundled with the new Messaging Server version which you are installing.

  For more information, see the *Delegated Administrator for Messaging and Collaboration Release Notes*.

- Sun ONE Web Server Enterprise Edition 6.0 Service Pack 2 or Sun ONE Web Server 6.0.1

  Review the Sun ONE Web Server 6.0 Service Pack 2 release notes to determine any required operating system patches. See `http://docs.sun.com/db/prod/s1websrv/`.

These products are all included in the Messaging Server distribution at the download site: `http://www.sun.com/software/download/`.

CAUTION Do not use the Sun ONE Administration Console for user and group provisioning. Instead, use the Delegated Administrator for Messaging and Collaboration and the `imadmin` command line interface tool to provision users, groups, and domains for Messaging Server.

Supported Platforms

Messaging Server 5.2 Patch 2 is supported on these platforms:

- Solaris 9 for SPARC
- Solaris 2.6 and 8 for SPARC, with recommended patches
- Microsoft Windows NT 4.0 Service Pack 6a
- Microsoft Windows 2000 Service Pack 2
- Hewlett-Packard HP-UX 11.0 and 11i, with recommended patches

Solaris 9

The Messaging Server can be installed on Solaris 9 Update 1 or Solaris 9 Update 2. There are no required Solaris patches. Be aware that:

- If you use the directory server that is bundled with the Solaris 9 operating environment, you need to set and export (in ksh) `LD_LIBRARY_PATH=/usr/iplanet/ds5/lib` before running the `ims_dssetup.pl` script. Or you must run the `ims_dssetup.pl` script that is included with the Messaging Server 5.2 Hot Fix 1.07 or later.

- If you choose to perform a rolling upgrade from Solaris 8 to Solaris 9, the Solaris 9 Live Upgrade substantially reduces the service outages that are sometimes associated with an operating system upgrade. You can duplicate your current running boot environment. While the original boot environment runs, you can upgrade the duplicate environment.

  If you perform a Solaris 9 Live Upgrade, the `sendmail` link does not work. To restore `sendmail`, copy `/usr/lib/sendmail~8` to `/usr/lib/sendmail`.

Solaris 2.6 and 8

Solaris 2.6 and 8 require these patches:

- In addition to the recommended patches listed at `http://access1.sun.com`, Solaris 2.6 for SPARC requires patch 105591-09 or later versions (shared library patch for C++) and patch 106613-01 or later versions (character set conversion).

  If you install Messaging Server in the ja_JP.PCK locale, the `imadmin` command line utility does not work properly without patch 106361-10.

  Solaris 8 for SPARC requires the recommended patches listed at `http://access1.sun.com`

CAUTION On Solaris 2.6 and Solaris 8 platforms, applications that are linked with the 32-bit `libthread` (`/usr/lib/libthread.so`) or the 64-bit `libthread` (`/usr/lib/sparcv9/libthread.so.1`) library might hang. This problem can affect any process at startup time, particularly utilities in scripts, such as `mboxutil`, as well as processes that are frequently started, such as the `ims_master` channel.

Workaround
On Solaris 2.6 set the environment variable, `LD_BIND_NOW=1` in your appropriate shell before running the application. For example, in `csh` and `tcsh` shells:

```
setenv LD_BIND_NOW 1
```

Workaround
On Solaris 8 apply the following patches, available through normal support channels:

- SPARC — Solaris 8 with patch 108827-35
- Intel — Solaris 8 with patch 108828-35

See Solaris problem number 4663077 for more information.

Ensure that your Solaris setup specifies how to route to hosts that are not on the local subnet. To do this, check that:

- The `/etc/defaultrouter` file contains the Internet Protocol (IP) address of the gateway system. This address must be on a local subnet.
- The `/etc/resolv.conf` file exists and contains the proper entries for reachable DNS servers and domain suffixes.
- The `/etc/nsswitch.conf` file includes the `dns` keyword in the `hosts:` line.

If you are installing Messaging Server in a secured environment, the minimum packages you need on Solaris 8 include:

- Solaris core packages
- `SUNWxwdv`
- `SUNWxwdvx`
- `SUNWxwmod`
- `SUNWxwmox`
- `SUNWxwplt`
- `SUNWxwrtl`

Microsoft Windows NT 4.0

Windows NT 4.0 Service Pack 6a is supported.

Microsoft Windows 2000 Service Pack 2

Windows 2000 and Windows 2000 Service Pack 2 are supported when you use Messaging Server 5.2 Patch 2. See Sun problem number 4782958 to improve `imapd` performance.

You need the following components to install Messaging Server on Windows 2000 Service Pack 2:

- Sun ONE Messaging Server 5.2 for Windows NT
- Sun ONE Messaging Server 5.2 Patch 2

Configure the Direct LDAP Mode. See the *iPlanet Messaging Server Administrator's Guide* for more information.

Hewlett-Packard HP-UX

The Hewlett-Packard HP-UX 11.00 platform requires the operating system bundles and patches listed in Table 2:

Table 2 HP-UX 11.00 Operating system Bundles and Patches

Patch Number	**Description**
XSWGR1100	HP-UX 11.00 General Release Patches, September 2000
XSWHWCR110	HP-UX 11.00 Hardware Enablement and Critical Patches, September 2001
PHCO_21902	`df(1M)`cumulative patch
PHCO_22314	`libc` cumulative patch
PHCO_23499	LVM commands cumulative patch
QPK1100	HP-UX 11.00 Quality Pack, September 2001

The Hewlett-Packard HP-UX 11i platform requires the following patch:

- IPv6NCF11i

Switching the globalmutex back to native implementation can improve performance. To do so, use one of these Hewlett-Packard patches:

- 11.0 PHKL_23995
- 11i PHKL_24005

If you are running Sun ONE Web Server on an HP-UX platform, you need to ensure that the correct patches are installed on that machine, as listed in Table 3.

Table 3 HP-UX Patches for Sun ONE Web Server

Patch Number	**Description**
For HP-UX 11.00 700 Series:	
B8110AA	Java 2 software developer's kit (SDK) for HP-UX (700/800), PA1.1 + PA2.0 Add On
B8111AA	Java 2 RTE for HP-UX (700/800), PA1.1 + PA2.0 Add On
B9098AA	Java 2 Plug-in for HP-UX (700/800)
HPUXEng32RT	English HP-UX 32-bit Runtime Environment)
QPK1100	Quality Pack for HP-UX 11.00, September 2001
UXCoreMedia	HP-UX Media Kit
XSWGR1100	HP-UX Extension Pack, May 1999
XSWHWCR1100	HP-UX Hardware Enablement and Critical Patches, September 2001

Table 3 HP-UX Patches for Sun ONE Web Server

Patch Number	Description
For HP-UX 11.00 800 Series	
QPK1100	Quality Pack for HP-UX 11.00, September 2001
XSWHWCR1100	HP-UX Hardware Enablement and Critical Patches, September 2001

To identify any existing patches on your system, use the `swlist` command. To install HP-UX patches, use the `swinstall` command. Refer to the Hewlett-Packard documentation for more information.

Required Software for Messenger Express

For Messenger Express, the Messaging Server requires a JavaScript-enabled browser. For optimal performance, use the browsers listed in Table 4:

Table 4 Recommended Browers for Messenger Express

Browser	For Solaris 2.6 and Solaris 8, Use Browser Version:	For HP-UX, Use Browser Version:	For Windows 98, 2000, or NT, Use Browser Version:
Netscape	4.76	4.78	4.78
Internet Explorer	Not applicable	Not applicable	5.5 Service Pack 2

Disc Space Requirements

The minimum disk and memory requirements for Messaging Server are:

- Approximately 1GB of disk space to support the product binaries and a minimum message store.
- 128MB of RAM.
- Adequate file system space for your user mailboxes (message store), database, log files, and message queue directory. These can grow in size dramatically depending on the size of your site, so be sure to allocate space accordingly.

NOTE The actual performance of your Messaging Server depends on many factors, including CPU power, available memory, disk space, file system performance, usage patterns, network bandwidth, and so on. For example, throughput is directly related to file system performance. If you have questions about sizing and performance, contact your Sun ONE representative.

Systems with limited disk space should not install Patch 2. The installation process requires enough disk space for installation and administrative tasks in the `/`, `/var`, or *server-root* directories, which is where the patch is typically installed. The exact amount of space depends on the components as well as the difference in the size of the new objects. Do not apply Patch 2 on a system with less than 50 MB of available space in each of these directories (`/`, `/var`, or *server-root*). Running out of disk space during installation might result in a partially loaded distribution. Ensure that a recent full system backup is available in case a problem occurs.

Installation Procedures for Patch 2

Patch 2 contains a bundle of updates to Messaging Server 5.2. It includes corrections and enhancements for the core Messaging Server product, such as the MTA and the message store. It also includes updates to Messenger Express, the Messaging Multiplexor, Simple Network Management Protocol (SNMP), Sun Cluster high availability (HA) agents, and Veritas HA agents. Updates to Delegated Administrator for Messaging and Collaboration are not included in this distribution. See the *Delegated Administrator for Messaging and Collaboration 1.2 Patch 1 Release Notes* for more information.

The following topics outline the patch installation procedures:

- "High Availability Notes" on page 11
- "Saving Original Files" on page 12
- "Installation Instructions for Patch 2" on page 12
- "Post-Installation Processing" on page 13
- "Uninstalling Patch 2" on page 14

NOTE The installation instructions are written for UNIX platforms. On Windows NT, replace the term "super user" with "Administrator", and replace backward slash characters (\) with forward slash characters (/) in the file path syntax.

High Availability Notes

This section describes how to install high availability when upgrading to Messaging Server 5.2 Patch 2. Table 5 lists the supported versions of Sun Cluster Server and Veritas Cluster Server for the Messaging Server.

Table 5 Sun Cluster and Veritas Cluster Servers

Cluster	Supported Versions
Sun Cluster Server	Sun Cluster 3.0, Sun Cluster 3.0 Update 1, Sun Cluster 3.0 Update 2, Sun Cluster 3.0 Update 3 If you are running Sun Cluster 3.0 Update 3 on a Solaris 8 platform, install Solaris Patch 110648-22 or later. If you are running Sun Cluster 3.0 Update 3 on a Solaris 9 platform, install Solaris Patch 112563.
Veritas Cluster Server	Veritas Cluster Server 2.0, Veritas Cluster Server 2.0 Patch 4, Veritas Cluster Server 3.5

Sun Cluster 3.x

The patch for the Sun Cluster 3.*x* HA agents, Solaris Patch 112882-*xx*, is included with the Patch 2 distribution. The Patch 2 installation script checks whether you need other patches.

Sun Cluster 2.2, Sun Cluster3.x, and Veritas Cluster Servers

On all cluster nodes in the Messaging Server resource group, perform these steps to apply Patch 2:

1. Apply the patch on the first node of the cluster. Specify the Messaging Server and HA agent components in the Perl script `imspatch.pl`.

   With Veritas Cluster Server, even though the script file only suggests the Veritas Cluster Server 2.0 agent in item 4, the same agent works with Veritas Cluster Server 3.5.

2. Backup the *server-root*/`patch`/*patch_version*/`backout` directory.

3. Apply the patch to the second and subsequent nodes of the cluster. Specify only the HA agent component in the Perl script `imspatch.pl`. Be sure to back up your software after applying the patch on each node.

4. Backup the *server-root*/`patch`/*patch_version*/`backout` directory after applying the distribution on the second and subsequent nodes of the cluster.

5. If you need to remove the patch, you must restore the appropriate `backout` directory for the cluster node before running the Perl script `imspatch.pl -u`.

6. Note that `/usr/lib/sendmail` is now patched if you specify the Sun Cluster 2.2, Sun Cluster 3.*x* HA Agent, or Veritas 2.0 HA Agent components of the patch distribution.

Saving Original Files

The installation procedure saves the Messaging Server files that are being replaced. The original files are placed in the *server-root*/`patch`/*patch_version* directory. The installer script cannot determine if enough system disk space is available in *server-root*/`patch` to save these files.

NOTE You do not need to back out older versions of Messaging Server patches prior to installing the new version.

Installation Instructions for Patch 2

1. If the Messaging Server 5.2 Patch 2 distribution is a `.zip`, `.tar`, or `.tar.gz` file, unzip, untar, or uncompress it into an empty directory within the existing Messaging Server root directory.
2. Ensure that all current messaging services are stopped, including `dirsync`, Direct LDAP, and `smtp_server`. Verify that all processes have stopped before proceeding to the next step.
3. Go to the distribution directory and run the Perl script `imspatch.pl` with super user privileges. For example:

   ```
   # cd distribution_directory
   ```

   ```
   # server-root/install/perl imspatch.pl
   ```

   The installation program displays this text:

   ```
                       Welcome to the iMS Patch Installation tool.
   This tool updates your messaging server installation to iPlanet Messaging
   Server 5.2 Patch 2.

   Note that webmail patches will overwrite HTML and Javascript files. These files
   need to be modified for the specific site, and any user changes needs to be
   merged into the new file.

   Please make sure you have stopped your messaging server before proceeding
   ```

```
Do you want to continue [y]:

Please enter the full path to the directory where iPlanet Messaging Server was
installed.

Messaging server root [/usr/iplanet/server5] :

Please select from the following components:

[1] Messaging MTA/Store/Webmail/Command Line Utilities
[2] Messaging Multiplexor
[3] Sun Cluster 2.2 HA Agent
[4] Veritas 2.0 HA Agent
[5] Sun Cluster 3.x HA Agent

Which of the above component(s) do you have installed [1]:

Current Installed Version is iPlanet Messaging Server 5.2.
```

The progress of the installation script is displayed on your terminal, including the output of the `imsimta version` and the output of the `imsimta test -rewrite` commands.

4. If errors are encountered during the installation, error messages are displayed. More details about failures can be found in the log file *server-root*/`patch`/*patch_version*/`log`. If this log file already exists, the latest installation data is written to the file’s end so check there for error messages.

Post-Installation Processing

The following post-installation processes occur while `ims_patch.pl` is applying Patch 2. You do not have to manually perform any of these procedures.

1. The MTA `imsimta cnbuild` and `imsimta chbuild` commands in the *server-root*/`msg-`*instance* directory are run to rebuild the MTA configuration files.
2. The MTA `imsimta cleandb` command (*server-root*/`msg-`*instance* directory) is run.
3. The MTA `imsimta recover-crash` command (*server-root*/`msg-`*instance* directory) is run. However, if you are not running the `dirsync` command, this command is not run.
4. The MTA `imsimta test -rewrite -debug postmaster` command (*server-root*/`msg-`*instance* directory) is run to test the MTA.
5. The MTA command, `imsimta version`, located in *server-root*/`msg-`*instance* directory, is run. The output shows the new patch version and build date. A one-line log message of the patch installation is added to the end of the *server-root*/`README.txt` file.

6. The *NDAStartPage* variable has these strings embedded in it:

   a. *msg.da.Host* - Delegated Administrator host name.

   b. *msg.da.Por*`t` - Delegated Administrator port number.

   c. *msg.cfgldap.service.DefaultDomain* - default mail domain.

   These variables must be replaced with their correct values. Consult the old `main.js` files for the proper values. If *NDAStartPage* is not updated, the Delegated Administrator link on the Messenger Express Options page will point to a non-existent URL.

7. Messenger Express problem fixes overwrite Hypertext Markup Language (HTML) and JavaScript (`.js`) files, which means that any user customizations are overwritten. User customizations should be merged into the new files.

Once the post-installation processes are complete, you can restart the Messaging Server services.

Uninstalling Patch 2

To uninstall the Messaging Server 5.2 Patch 2 distribution, follow these steps:

1. Ensure that all Messaging Server services are stopped.

2. Run the `imspatch.pl` Perl script as the super user with the `-u` flag from the back out directory (*server-root* / `patch` / *patch_version*).

   It is very important to run the command from the back out directory and not from the patch distribution directory. For example:

   ```
   # cd server-root / patch/iMS5.2hf1.09

   # server-root / install/perl imspatch.pl -u
   ```

Information about the script's progress is displayed on your terminal. It should look like this:

```
                Welcome to the iMS Patch Uninstallation tool.

This tool rolls back your messaging server installation from 5.2p2. Please make
sure you have stopped your messaging server before proceeding
Do you want to continue [y]:

Please enter the full path to the directory where iPlanet Messaging Server was
installed.

Messaging server root [/usr/iplanet/server5/patch/patch_version]:

New Installed Version is 5.2
```

3. Certain configuration files are not removed automatically. These are the files in the *server-root*/`patch`/*patch_version*/`save` directory. For example, customizations to your `imta.cnf` and `job_controller.cnf` files are stored in this directory. If you want to remove those changes, you must do so manually.

Bugs Fixed in This Release

The following table describes the problems fixed in Messaging Server 5.2 Patch 2:

Table 6 Fixed Bugs in Messaging Server 5.2 Patch 2

Bug Number	Description
4353836	If the name service cache daemon (nscd) is not running in a Solaris operating environment, the services can fail.
4532764	The mail-forwarding address field is limited to 1024 characters with `imsimta dirsync`.
4533913	The `ldapsearch` command fails in the ko locale on Solaris platforms.
4534356	LDAP search performance is significantly impacted by access control items in Directory Server 4.*x*.
4535717, 4811599	As of Messaging Server 5.1, logging to `mail.log_current` is turned off by default.
4536098	New Messaging Server sites that want to use Sun Cluster 3.0 high availability will need to use Sun Cluster 3.0 Update 1 or later.
4537320	When installing Messaging Server on a Windows platform, you must also install the Administration Server components.
4537597	Testing dynamic criteria for email-only membership does not work correctly**.**

Table 6 Fixed Bugs in Messaging Server 5.2 Patch 2 *(Continued)*

Bug Number	Description
4538016	On Windows NT, if you want Messaging Server and the Messaging Multiplexor component on the same machine, you must install them at the same time.
4538055	The `ims_dssetup.pl` script requires the version of Perl found in the root directory where the server is installed.
4538240	On Windows NT, installation of only the MMP component fails if the Messaging Server component is not unchecked first.
4538253	The stored command does not recognize interface addresses to which servers might be bound (as in high availability configurations).
4538273	The MMP BadGuy configuration parameter, BGExcluded, does not work.
4538276	If you are using an existing configuration directory, the user/group directory is determined from it.
4538305	If you specify a custom mail store during a custom installation on UNIX or Windows NT, you must create the directory manually after installation.
4538366	To take effect, changes made using `configutil` often require a restart of the affected server or servers.
4538376	In Sun Cluster 2.2 and Veritas Cluster Server 1.1 environments, uninstalling Messaging Server fails.
4538472	During the upgrade process, you are unnecessarily prompted for information about Delegated Administrator for Messaging and Collaboration.
4539474, 4811806	On Windows NT, the stored process does not always start. Even if no process is running, the message, “Can not start stored. Looks like popd is already running”, is still displayed.
4539553	The personal Address Book within Messenger Express only supports a limited number of objectclasses when creating nodes in the Directory Server.
4539837	Place users at the correct DIT level when they are created in the Administration Console.
4539844	On a Solaris client with a browser, Administration Console can only launch Help if the browser is already open. On Windows NT, Administration Console does not launch Help if a browser is already open.
4539912	Cannot enter 8-bit characters in certain fields.
4540131	You must install Messaging Server into an empty or non-existent directory.
4540156	When the Server Firewall screen appears during an installation on Windows NT, the Return key does not function.
4540185	During uninstallation, the `/usr/lib/sendmail` link is not restored.
4540494	During an express installation, the installer chooses a random administration port.
4540532	CRAM-MD5/DIGEST-MD5 do not work with external SMTP connections.
4540780	`mailautoreplysubject` does not have multi-language support from the Administration Console.

Table 6 Fixed Bugs in Messaging Server 5.2 Patch 2 *(Continued)*

Bug Number	Description
4541432	The Personal Address Book does not work with replica LDAP directory servers for localized version of Messaging Server.
4541448	Administration Server access control host names are case-sensitive.
4541640	On HP-UX platforms, the Messaging Server installation process intermittently fails if you select option 1 (to indicate you are using a Smart Host) on the Smart Host option installation screen.
4541748	On a Solaris client with a browser, Administration Console can only launch Help if the browser is already open.
4542514	Cannot create expiration rules through the command line.
4542726	Domain cache does not refresh.
4542729	The % character does not work correctly in expiration rules.
4542738	Administration Console does not create `sslpassword.conf` for MMP.
4542767	Installing the MTA as a relay requires the installation of the message store.
4543159	The `mgrpErrorsTo` attribute is a single-valued attribute.
4543187	Group attribute `mgrpMsgRejectAction` does not work.
4543259	Anonymous log in for IMAP is not supported.
4543405	You must install Messaging Server into an empty or non-existent directory.
4543930	If you use Microsoft Outlook Express as your IMAP mail client, the read and unread flags might not properly work. This is a known problem with Outlook Express.
4547718	Upgrading to Messaging Server 5.2 with Sun Cluster 3.x requires additional steps.
4547759	On Windows platforms, installation paths that contain spaces are not supported.
4547986	`mboxutil` and `reconstruct` should keep the `mboxlist` partition and `mailMessageStore` attribute current.
4548498	After installing the second Messaging Server instance, the access control item is missing.
4549239	If you are using Communicator, messages might shut down your browser on rare occasions.
4555153	Some options in the `quotacheck` utility are not working properly.
4557494	Installation fails when BaseDN contains spaces.
4558055	On Microsoft Internet Explorer 5.0, very large messages are truncated when placed into the Sent folder.
4558408	On a Solaris client with a browser, certain fonts for Japanese Kanji characters might not display properly.
4560660	The program delivery function requires the Messaging Server user to have a home directory.
4560999	Messenger Express with Greek on Communicator creates various issues.

Table 6 Fixed Bugs in Messaging Server 5.2 Patch 2 *(Continued)*

Bug Number	Description
4561469, 4561550	Japanese Extended UNIX Code (EUC) locale issues when using Communicator browser on Solaris.
4562861	On Solaris, upon startup, Administration Console might display spurious error messages related to the Sun Cluster environment.
4564207	As of Messaging Server 5.1, logging to `mail.log_current` is turned off by default.
4566005	Incremental `dirsync` and high availability.
4569703	Accessing Messaging Server through the standard portal gateway can cause JavaScript problems.
4575870	Installing the MTA as a relay requires the installation of the message store.
4576530	For a short period of time (default is 15 minutes), it might be possible to log in to the account of a user marked for deletion.
4579429	When using Communicator 4.*x* with Messenger Express, any window resize causes the session to return to the Inbox message list.
4588068	For a short period of time (default is 15 minutes), it might be possible to log in to the account of a user marked for deletion.
4618291	When the number of messages in a folder exceeds one page, getting mail from the last page of the folder generates an error.
4621317	The `mail.log_current` file has a file size limitation.
4622136	To enable spell checking, you need to create your own dictionary.
4629001	Access control filters do not work if the short form domain is used in the `/etc/hosts` file
4631446	In a high availability environment, you cannot send outgoing messages through Messenger Express if the `service.http.smtphost configutil` parameter is not properly configured.
4633206	Clicking Send or Save Draft generates an error if your client web browser is Internet Explorer 6.0.
4634975	Because the `imsimta cleanup` utility does not work on a Windows platform, upgrading from Messaging Server 5.1 on a Windows NT platform results in hung MTA processes.
4637048	The MTA Direct LDAP comment in the `imta.cnf` file is incorrect.
4638109	Some MTA configuration file settings are not present after upgrade.
4638111	The Event Notification Service on Windows NT platforms is not set for automatic startup after an upgrade.
4638310	In Sun Cluster 3.0 U2 (Update 2), the `nsldap` resource goes into STOP_FAILED state and the resource group does not failover, even after reaching the `Retry_count` limit.
4643634	Administration Console 4.2 is unresponsive if you attempt to select the Server Group that corresponds to Directory Server 5.1.
4666448	When a maximum number of Personal Address Book user entries is reached, Messenger Express produces a JavaScript error.

Table 6 Fixed Bugs in Messaging Server 5.2 Patch 2 *(Continued)*

Bug Number	Description
4670621	When Single Sign-on is enabled, you might be unable to log out from Messenger Express.
4693557	Enabling `service.ldapmemcache` causes error messages in Messenger Express.
4697690	Messenger Express Multiplexor does not work with non-default port numbers for backend Messenger Express (HTTP) servers.
4721749	A large welcome message prevents server startup.
4726564	The `imsimta test -expression` command does not work as designed.
4726720	The Compose Message window cancellation confirmation dialog box does not close.
4729595	Localized versions of quotacheck notification incorrectly convert the % and the $ signs.
4732760	Messenger Express client in Microsoft Internet Explorer (plain-text mode) emits lines longer than 1024 characters.
4737794	There can be performance degradation when using Messaging Server 5.2 Patch 1**.**
4742425	Filters are ignored when there are errors in Sieve filters.
4745337	Messenger Express incorrectly allows users to change their passwords to high ASCII characters.
4773665, 4868612	The Messaging Server Event Notification Service (ENS) does not start when Calendar ENS is running.
4775089	MMP is not supported on Windows 2000 Service Pack 2 platforms.
4817233	The Copy to Folder feature in Messenger Express has been removed from versions of Messaging Server 5.2 and later.
4825161	Difference in behavior between `imsimta dirsync` and the Direct LDAP mode exposes syntactically illegal addresses.

Important Information

This section contains the latest information that is not contained in the core product documentation. This section covers the following topics:

- "Unsupported Features" on page 20
- "Localized Versions of Messaging Server" on page 21
- "Veritas Cluster Server 3.5 Support" on page 21
- "Documentation Updates for Messaging Server 5.x" on page 24

Unsupported Features

- Directory Server 4.*x*

  You can configure Directory Server 5.1 or 5.2 support as of this release. Support of Directory Server 4.16 ended on January 24, 2003. See the *iPlanet Messaging Server Installation Guide* for more information on installing Messaging Server and Directory Server.

- Delegated Administrator for Messaging and Collaboration component

  Delegated Administrator for Messaging and Collaboration will not be supported in the next major release of Messaging Server.

- `imsimta dirsync` command

  The new MTA direct LDAP lookup feature replaces the `imsimta dirsync` command in the next major release. For more information about using the direct LDAP lookup feature, see the *iPlanet Messaging Server Administrator's Guide*.

- Sun Cluster 2.2

  If you use Sun Cluster 2.2, use Sun Cluster 3.*x*. Support for Sun Cluster 2.2 will be removed in the next release of Messaging Server. For more information on Sun Cluster 3.*x*, see the *iPlanet Messaging Server Installation Guide*.

- Veritas Cluster Server 1.*x* support

  Veritas Cluster Server 1.*x* support will be removed in the next release of Messaging Server.

- Multiple instances of Messaging Server that share the same *server-root* directory

  While you can still perform this function, the preferred method is to install multiple Messaging Server instances on the same disk and host in separate *server-root* directories. In the next Messaging Server release, the ability to install multiple instances in the same *server-root* directory will be removed.

- Platform Support

  - Solaris 2.6 support will be removed in the next major release.

  - Windows NT is not supported as of Messaging Server 5.2 release.

- Vanity Domains

  In a future release, vanity domains will be unsupported. If you currently use vanity domains, consider switching to hosted domain provisioning.

Localized Versions of Messaging Server

Messaging Server 5.2 Patch 2 includes all the necessary resources to support your localization needs.

Veritas Cluster Server 3.5 Support

Messaging Server 5.2 Patch 2 can now be configured with Veritas Cluster Server 3.5. Be sure to review the Veritas Cluster Server documentation prior to following these procedures.

NOTE

- Veritas Volume Manager (V*x*VM) has a cluster feature that requires a separate license. This feature provides a global view of the file systems on shared storage, similar to the Sun Cluster 3.0 global file system. See the Veritas Cluster Server documentation for more information.
- `FsckOpt` was optional in pre-3.5 Veritas releases. However, it is required for configuring the `Mount` resource. `FsckOpt` must include a `-y` or `-n`, otherwise the resource will not come online.
- Veritas Cluster Server 2.0 Explorer cannot be used to manage Veritas Cluster Server 3.5.

Configuration and Installation Notes

The following instructions describe how to configure Messaging Server as an HA service, using Veritas Cluster Server 3.5. For more information on high availability, see the *iPlanet Messaging Server Installation Guide for UNIX*.

The default `main.cf` configuration file sets up a resource group called `ClusterService` that launches the `VCSweb` application. This group includes network logical host IP resources like `csgnic` and `webip`. In addition, the `ntfr` resource is created for event notification.

1. Launch Cluster Explorer from one of the nodes.

   Note that these Veritas Cluster Server instructions assume you are using the graphical user interface (GUI) to configure Messaging Server as an HA service.

   To launch Cluster Explorer, run the following command:

   ```
   # /opt/VRTSvcs/bin/hagui
   ```

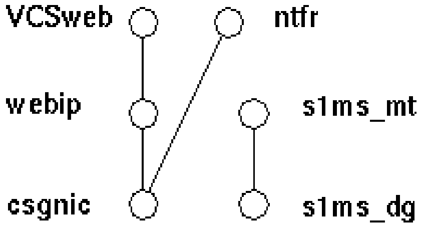
   The `VRTScscm` package must be installed in order to use the GUI.

2. Add `s1ms_dg` disk group resource of type `DiskGroup` and enable it.
3. Add `s1ms_mt` mount resource of type `Mount`.

  a. Unlike in Veritas Cluster Server 2.0, you must add `-y` (or `-n`) to `FsckOpt`. Null options cause `Mount` to hang. See the Sun man page for more information on `fsck_vxfs`.

  b. Be sure to click the Link button to enable linking resources, if they are not already enabled.

4. Create a link between `s1ms_mt` and `s1ms_dg`. Enable the resource `s1ms_mt`. See the following dependency tree:



5. Run the Messaging Server `setup` program from the primary node (for example, Node_A) to install Messaging Server.

  a. Select `Custom Installation` as your installation type.

  b. Provide the logical host name and the logical IP address whenever a host name or an IP address is required during the installation.

  c. When selecting Messaging Suite components, choose `Sun Cluster2.2/Veritas HA for Messaging Server` in addition to your other Messaging components.

  Messaging Server and the Veritas agent are now installed on Node_A.

6. Switch to the backup node (for example, Node_B).

7. Run the Messaging Server `setup` program on the backup node (Node_B), but only install the Veritas agent by selecting `Sun Cluster2.2/Veritas HA for Messaging Server`. Do not install other Messaging Server components on this node.

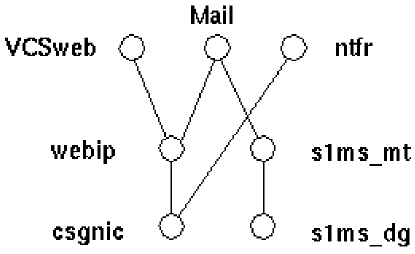
   The Veritas agent is now installed on Node_B.

8. From the Cluster Explorer, Select Import Types... from the File menu which will display a file selection box.

9. Import the `MsgSrvTypes.cf` type from the `/etc/VRTSvcs/conf/config` directory. Import this type file. Note that you need to be on a cluster node to find this file.

10. Now create a resource of type `MsgSrv` (for example, `Mail`). This resource requires the instance name and logical host name properties to be set.

11. The `Mail` resource depends on `s1ms_mt` and `webip`. Create links between the resources as shown in the following dependency tree:



   a. Enable all resources and bring `Mail` online.

   b. All servers should be started.

12. Switch over to Node_A and check if the HA configuration is working.

13. Change the group attribute `OnlineRetryLimit` from `3` to `0`, otherwise the failed-over service might restart on the same node.

MsgSrv Attributes

This section describes additional `MsgSrv` attributes that govern the behavior of the `mail` resource. Refer to Table 7 to configure Messaging Server with Veritas Cluster Server:.

Table 7 MsgSrv Attributes

Attribute	Description
`FaultOnMonitorTimeouts`	If unset (=`0`), monitor (probe) time outs are not treated as resource fault. Set this attribute to 2. If the monitor times out twice, the resource will be restarted or failed over.
`ConfInterval`	Time interval, in seconds, over which faults or restarts are counted. Previous history is erased if the service remains online for this duration. Use `600` as the value for this attribute.
`ToleranceLimit`	Number of times the monitor should return OFFLINE for declaring the resource FAULTED. Use the default value of `0`.

Documentation Updates for Messaging Server 5.x

This section describes any errors or changes to the Messaging Server 5.2 documentation set.

Administrator’s Guide

This section describes any errors or changes to the *iPlanet Messaging Server Administrator’s Guide*.

The ability to use the anti-virus and anti-spam products of Brightmail, Inc., was introduced in the Messaging Server 5.2 Patch 2 release. (no problem number)

See “Using Brightmail Software with Messaging Server” on page 33 for information to administer and use the anti-virus and anti-spam products.

The MTA options LDAP_HOST, LDAP_USERNAME, LDAP_PASSWORD and LDAP_PORT were introduced in the Messaging Server 5.2 release. (no problem number)

The new options, LDAP_HOST, LDAP_USERNAME,LDAP_PASSWORD, and LDAP_PORT, override the MTA’s use of the local.ugldaphost, local.ugldapbinddn, local.ugldapbindred, and local.ugldapport parameters when accessing the LDAP directory. The default values of the new options are the values of the local.ugldap* parameters.

A jettison action for the Sieve function was introduced in the Messaging Server 5.2 release. (no problem number)

The new jettison action is similar to a discard action in that it causes messages to be silently discarded. The difference between jettison and discard is that jettison forces a message discard. This difference is relevant when multiple Sieve scripts are involved. For example, a system level discard can be overridden by a user Sieve script specifying keep, whereas a system level jettison overrides anything defined in a user Sieve script.

Six environment variables were introduced in the Messaging Server 5.2 Patch 2 release. (no problem number)

The new environment variables for the conversion channel program are summarized in Table 8.

Table 8 Conversion Channel Environment Variables

Environment Variable	Description
ATTACHMENT_NUMBER	The attachment number of the current message part. This has the same format as the ATTACHMENT-NUMBER conversion parameter.
CONVERSION_TAG	The current list of active conversion tags. This corresponds to the TAG conversion parameter.
INPUT_CHANNEL	The channel that queued the message to the conversion channel. This corresponds to the IN-CHANNEL conversion parameter.

Table 8 Conversion Channel Environment Variables

Environment Variable	Description
OUTPUT_CHANNEL	The channel where the message is headed for. This corresponds to the OUT-CHANNEL conversion parameter.
PART_NUMBER	The part number for the current message part. This has the same format as the PART-NUMBER conversion parameter.
PART_SIZE	The size, in bytes, of the message part being processed.

The new MTA option, LDAP_TIMEOUT MTA, was introduced in the Messaging Server 5.2 Patch 2 release.

LDAP_TIMEOUT defines a timeout value for LDAP searches performed by the MTA. This option does not affect LDAP searches performed by domain map. The default value, 180000, represents 180,000 milliseconds.

Three new metacharacters, $K, $V, and $Z, were introduced in the Messaging Server 5.2 Patch 2 release. (no problem number)

Table 9 describes the new metacharacters.

Table 9 New Metacharacters

Metacharacter	Description
$K	This metacharacter substitutes a search filter to check the objectclass to determine whether it matches the criteria established for users or groups. $K is intended for use in the REVERSE_URL MTA option to avoid spurious matches against, for example, personal address book entries.
$V	The metacharacter is used with the access mappings ORIG_SEND_ACCESS, SEND_ACCESS, ORIG_MAIL_ACCESS, and FROM_ACCESS. When used, $V causes a forced discard of messages to be performed for all recipients.
$Z	The $Z metacharacter is used with the access mappings ORIG_SEND_ACCESS, SEND_ACCESS, ORIG_MAIL_ACCESS, and FROM_ACCESS. When used, $Z causes a forced jettison of messages to be performed for all recipients.

In Appendix B, Enabling Direct LDAP Mode, Step 7 was clarified. (no problem number)

Step 7 was changed from:

Compiled the modified MTA configuration. This must happen before it comes into effect.

to:

Compile the modified MTA configuration (`imsimta refresh`). This must happen before it comes into effect.

Messenger Express

This section describes any errors or changes to the on-line help and *iPlanet Messaging Server Administrator's Guide* for Messenger Express.

The method for saving a message's attachment has changed in the Messaging Server 5.2 Patch 2 release.

To save an attachment:

1. Use the Save As function of your browser to save the attachment.

   Or

   Click the name of the attached file in the message header. (In the case of GIF or JPEG files, which are displayed inline, you will need to right-click on the image.)

2. Click Save in the dialog box.

   Or

   Choose Save Target As from the drop-down menu.

3. The "Save As" dialog box appears.
4. In the File Name field, enter the name of the attachment to be saved.
5. Click Save.

Customize Address Search to return more LDAP attributes. (problem number 4778717)

The new configuration attribute, `local.service.http.ldapaddresssearchattrs`, accepts a list of LDAP attributes to return on an LDAP search. For example,

```
configutil -o local.service.http.ldapaddresssearchattrs -v "cn, mail, sn, telephoneNumber"
```

This attribute does not apply to Personal Address Book searches.

Migration Guide

This section describes any errors or changes to the *iPlanet Messaging Server Migration Guide*.

Directory Server 4.12 is referenced in the guide. (no problem number)

The only supported directory servers are Messaging Server Directory Server 5.1 and 5.2.

Reference Manual

This section describes any errors or changes to the *iPlanet Messaging Server Reference Manual*.

A new option for the imsrestore utility was introduced in the Messaging Server 5.2 release. (bug number 4536650)

To restore a file larger than 2 GB, use the `imsrestore` utility with the `-s` option.

The MTA option HEADER_LIMIT was introduced in the Messaging Server 5.2 release. (no problem number)

`HEADER_LIMIT` sets a limit on the maximum size of the primary or outermost message header . Primary message headers are truncated without notice when the limit is reached. The default value is no limit on size.

An SMTP option, 552_PERMANENT_ERROR_STRING, was introduced in the Messaging Server 5.2 release. (no problem number)

The option `552_PERMANENT_ERROR` is used to determine if a 552 response should be treated as a permanent error. This option goes in the relevant `tcp_*_option` file. Normally, as defined by RFC 2821, 552 responses are treated as if they are 4*xx* responses and temporary in nature. Some older SMTP servers use the 552 response to indicate a permanent error. The option was added to allow for this behavior.

When a 552 response is received, the text associated with it, including any *xx.xx.xx* extended error code but excluding any leading spaces, is compared with the value of the `552_PERMANENT_ERROR_STRING`. If it matches the value, the response is treated as permanent, otherwise it is treated as a retryable error.

The MTA option, SIEVE_USER_CARRYOVER, was introduced in the Messaging Server 5.2 release. (no problem number)

The new option controls how Sieve scripts are combined when forwarding a message. This is a bit-encoded value. Only one bit is defined, bit 0. When set to `1` in the MTA `option.dat` file, it causes user-to-user message forwarding to cancel the domain and Sieve scripts associated with the original user entry. The default value is `0`.

NOTE Setting this option is usually not a good idea because it prevents you from filtering your mail before forwarding it. `SIEVE_USER_CARRYOVER` was added to workaround a problem with `fileinto` actions cascading from one user to the next and possibly causing inappropriate folder creation. The correct solution is to disable automatic folder creation and access when forwarding mail messages.

The MTA channel keywords, headerfoldpreserve and headertrailingpreserve, were introduced in the Messaging Server 5.2 release. (RFE 4882962)

The new source channel keywords, `headerfoldpreserve` and `headertrailingpreserve`, are useful when Messenger Express is processing messages that use a multi-byte language set, such as Japanese. For a multi-line Subject, the keywords preserve the original placement of multi-byte characters in each line.

The keywords are described in the following table:

Keyword	Description
`headerfoldpreserve`	When used with `headertrailingpreserve`, `headerfoldpreserve` prevents the MTA from rewriting (folding or unfolding) a message's Subject when it is comprised of more than one line. **Syntax:** `headerfoldpreserve`
`headertrailingpreserve`	When used with `headerfoldpreserve`, `headertrailingpreserve` prevents the MTA from rewriting (folding or unfolding) a message's Subject when it is comprised of more than one line. **Syntax:** `headertrailingpreserve`

The local.ldapconnectionload configutil attribute is no longer supported. (no problem number)

The attribute originally enabled a temporary solution to a `libldap` problem. As of the Messaging Server 5.2 Hot Fix 0.4 bundle, the underlying problem has been resolved. Consequently, the `local.ldapconnectionload` attribute of `configutil` is no longer needed.

The BANNER_HOST SMTP channel option was prematurely documented in the Messaging Server 5.2 release. (no problem number)

The `BANNER_HOST` SMTP channel option will not be implemented until the next major release.

The MTA channel keywords, alternatechannel, alternateblocklimit, alternatelinelimit, and alternaterecipientlimit, were introduced in the Messaging Server 5.2 release. (no problem number)

Use the new MTA channel keywords, described in Table 10, on destination channels when you want to send large messages to an alternate channel:

Table 10 New MTA Channel Keywords

Keyword	Description
`alternatechannel`	Specifies an alternate channel to which to enqueue a message when at least one of the following channel keywords, `alternateblocklimit`, `alternatelinelimit`, or `alternaterecipientlinelimit`, is exceeded. If any of the `alternate*limit` channel keyword limits is exceeded, the message will get diverted to the `alternatechannel`. Using one or more `alternate*limit` keywords without using `alternatechannel` does not cause an error; instead, it is merely ignored. Therefore, using `alternate*limit` keywords have no effect unless the `alternatechannel` keyword is specified. **Syntax:** `alternatechannel` *channel_name*
`alternateblocklimit`	Specifies the maximum number of MTA blocks allowed per message on the original channel where the `alternatechannel` keyword is placed. Messages exceeding this number of blocks are forced to the channel's `alternatechannel`. Note that the interpretation of block size can be changed in the MTA options file by modifying the `BLOCK_SIZE` option. **Syntax:** `alternateblocklimit` *integer* Default: no limit
`alternatelinelimit`	Specifies the maximum number of lines allowed per message on the original channel where the `alternatechannel` keyword is placed. Messages exceeding this number of lines are forced to the channel's `alternatechannel`. **Syntax:** `alternatelinelimit` *integer* Default: no limit

Table 10 New MTA Channel Keywords

Keyword	Description
`alternaterecipientlimit`	Specifies a limit on envelope recipients for a message copy on the original channel where the `alternatechannel` keyword is placed. Messages exceeding this number of envelope recipients on a message copy are forced to the channel's `alternatechannel`. The `alternaterecipientlimit` value is checked before addresses are split up into separate files due to channel keywords such as `addrsperfile`, `single`, or `single_sys`. Consequently, the `alternaterecipientlimit` value is compared against the total number of recipients (of the message in question) being enqueued to the channel in question, rather than being compared against the possibly smaller number of such recipients that may be stored in a particular disk file in the channel in question's queue area. **Syntax:** `alternaterecipientlimit` *integer* Default: no limit

In the following channel block example, large messages over 5K that would go through the `tcp_local` channel to the Internet, instead go through the `tcp_big` channel:

```
tcp_local smtp ... rest of keywords ... \

    alternatechannel tcp_big alternateblocklimit 5

tcp-daemon


tcp_big smtp ...rest of keywords...

tcp-big-daemon
```

There are many ways to use the `alternate*` channel keywords:

- If you want to deliver large messages at a delayed or off-hours time, you can control when the `alternatechannelruns`, for example, `tcp_big`.

  One method is to use the `imsimta qm` utility's `STOP` *channel_name* and `START` *channel_name* commands, executing these commands periodically through your own custom periodic job that is run by the Job Controller or through a `cron` job.

- When you want the Job Controller to process large messages or messages with many recipients in their own pool, you might also use `alternatechannel`.

  You can separate small messages or messages with few recipients from the large messages or messages with many recipients, since the latter might take longer for remote SMTP servers to process and accept; you might not want the larger messages to delay delivery of the smaller messages.

  Note that the Job Controller's regular scheduling of messages and assigning of messages to threads and processes are acceptable in most configurations.

- When you want to set special TCP/IP channel timeout values for large messages or for messages with many recipients, you can use the `alternatechannel`.

  In particular, setting special TCP/IP channel timeout values can be helpful if you want to send messages to remote hosts that take exceptionally long to receive large messages or messages with many recipients.

  The default automatic timeout adjustment should be sufficient for most configurations. At most, you might want to adjust the values from the defaults and not use a special channel. In particular, see the channel options `STATUS_DATA_RECV_PER_ADDR_TIME` and `STATUS_DATA_RECV_PER_BLOCK_TIME` in the *iPlanet Messaging Server Reference Manual*.

- When you want special Multipurpose Internet Mail Extension (MIME) message fragmentation for especially large messages, use the `alternatechannel` and the `alternateblocklimit` channel keywords along with the `maxblocks` channel keyword.

  Typically, you would put the desired `maxblocks` size on your regular outbound TCP/IP channels, when you want to fragment messages over a specified size. The `maxblocks` channel keyword is normally both the threshold at which to perform fragmentation and the size to make the fragments.

  But, if you want to have a larger threshold trigger and make smaller actual fragments, you can use the `alternatechannel` and `alternateblocklimit` on the outbound TCP/IP channel. You can then use the `maxblock` size on your alternate channel to fragment messages over a particular size.

- You might use the `alternatechannel` with special filtering. For instance, a message with many recipients might need more careful scrutiny of its content in case it is spam. You might want to do different filtering based on the outgoing channel (See the `destinationfilter` channel keyword in the *iPlanet Messaging Server Reference Manual*).

  If you are performing relatively resource-intensive scanning (such as virus filtering) through the conversion channel, very large messages might have a resource issue. You might want to use an alternate conversion channel. Or, you might want to do special conversion procedures within the regular conversion channel, based on the outgoing channel.

- You can use the alternatechannel when you want large outgoing messages to have their own channel, so that they stand out when you analyze the mail.log* file or in counters displays.

  Furthermore, if you are trying to do careful analysis of delivery statistics, it is useful to process large messages in their own channel. This is because large messages or messages with many recipients that are sent to remote SMTP hosts are likely to take longer to finish processing, thus creating different delivery statistics for larger messages than for typical messages.

imsimta dirsync usage message parameters need to be documented. (problem number 4713515)

The description for the imsimta dirsync command in Chapter 2, Message Transfer Agent Command-line Utilities is missing descriptions for the options -c, -C, and -u.

The descriptions for these options are listed in the following table:

Option	Description
-c	Copies the databases from the backup directory to the database directory. This is a step included in the imsimta recover-crash command.
-C *call*	Allows you to specify any custom loadable calls to be used during the directory synchronization process.
-u *path*	Allows you to specify the directory path of the temporary directory to be used.

The MTA channel keywords, wrapsmtp and truncatesmtp, were introduced in the Messaging Server 5.2 release. (problem number 4547335)

The new channel keywords, wrapsmtp and truncatesmtp, are described in the following table:

Keyword	Description
wrapsmtp	Wrap line instead of truncating it. If the wrapsmtp keyword is placed on a channel, a line over 1000 characters wraps to the next line. This keyword must be applied to the initial channel used for submission, such as tcp_local. It does not affect any channel that is switched to subsequently. **Syntax:** wrapsmtp

Keyword	Description
truncatesmtp	Truncate the line when it is over 1000 characters. If the truncate keyword is placed on a channel, a line over 1000 characters is truncated. This keyword must be applied to the initial channel used for submission, such as tcp_local. It does not affect any channel that is switched to subsequently. **Syntax:** truncatesmtp

Schema Reference

mgrpAllowedDomain schema attribute behavior has been updated (problem number 6255335)

Identifies domains or subdomains from which users are allowed to send messages to the mail group. Note that glob-style wildcarding can be used in the domains. In other words, any part of the domain specification can be wildcarded.

If no instances of this attribute exist on the inetMailGroup entry, then there are no restrictions on who can send messages to the mail group unless the mgrpAllowedBroadcaster, mgrpDisallowedBroadcaster, and mgrpDisallowedDomain attributes are used.

Examples:

mgrpAllowedDomain: siroe.com will only match the siroe.com domain.

mgrpAllowedDomain: *.siroe.com will match any subdomain of the siroe.com domain.

mgrpAllowedDomain: *.com will match any *.com domain.

mgrpAllowedDomain: siroe.* will match any top-level domain beginning with siroe.

Setting the Directory Server attribute mailDomainStatus to unused for a domain tells the MTA to ignore the domain entirely. (no problem number)

Using Brightmail Software with Messaging Server

Brightmail Inc. is a company that provides an anti-spam and anti-virus software solution for email servers. The Brightmail solution consists of the Brightmail server along with real-time anti-spam and anti-virus rule updates downloaded to email servers.

How Brightmail Works

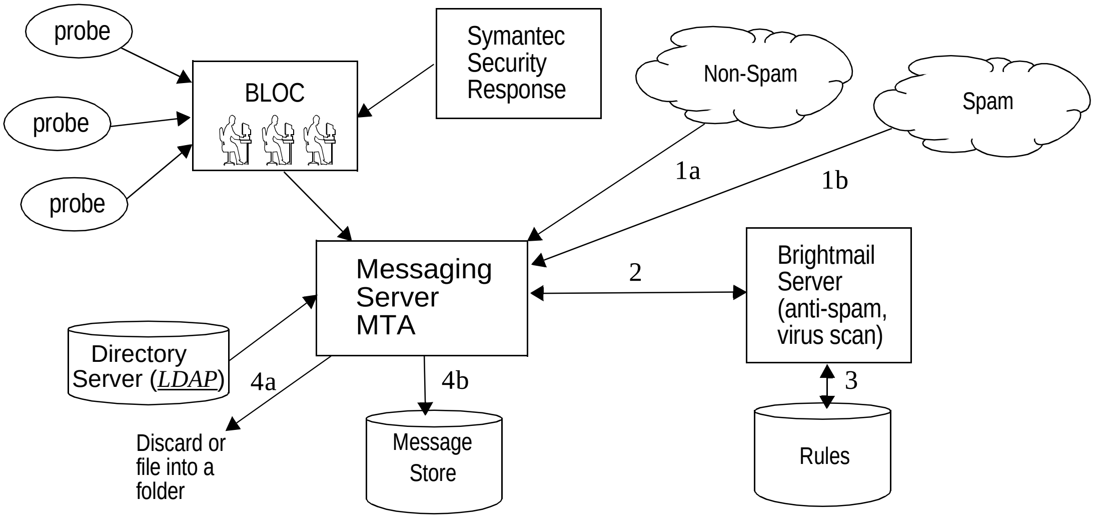
Brightmail products have email probes set around the internet for detection of new spam. Brightmail technicians create custom rules to block this spam in realtime. These rules are downloaded to Brightmail servers also in realtime (the servers are installed at your site). The Brightmail database is updated and Brightmail server runs this database filter against the email for the specified users or domains.

To support Brightmail, you must set up Messaging Server to operate in direct LDAP lookup mode. Brightmail is not supported on systems that operate in the `dirsync` mode.

Brightmail Architecture

Figure 1 depicts the Brightmail architecture.

Figure 1 Brightmail and Messaging Server Architecture



When the Brightmail Logistics and Operations Center (BLOC) receives spam from email probes, operators immediately create appropriate anti-spam rules, which are downloaded to Brightmail customer machines. Similarly, the Symantec Security Response real-time virus rules are also sent from Brightmail. These rules are used by your Brightmail servers to catch spam and viruses.

The MTA uses the Brightmail software developer's kit (SDK) to communicate with the Brightmail server. The MTA dispatches messages based on the response back from Brightmail. After the mail (1a) or (1b) is received by the MTA, the MTA sends the message to the Brightmail server (2). The Brightmail server uses its rules and data to determine if the message is a spam or virus (3), and returns a verdict back to the MTA. Based on the verdict, the MTA either (4a) discards the message or files the message into a folder, or (4b) delivers it normally to the destination.

Because the Brightmail SDK is third party software, it is not included in Patch 2 distribution. You must obtain the Brightmail SDK and server software through Brightmail Inc. The MTA has configuration settings to tell it whether and where to load the Brightmail SDK to enable Brightmail integration.

Once the SDK is loaded, Brightmail message processing is determined by several factors and levels of granularity (the term used by Brightmail to specify active processing is *optin*). This is specified by the following criteria:

- whether the source or destination channel is enabled for Brightmail (`imta.cnf`)
- whether there is a channel default for the services opted in (`imta.cnf`)
- whether there is a per-domain optin (LDAP)
- whether there is per-user optin (LDAP)

For any particular message recipient, the optin's and defaults above are combined, which means, if the channel default is already specified for both spam and virus, then there is no reason to bother with per-user optin. That is, if the system administrator decides to do spam and virus filtering for everyone, then there is no reason to expose to the user the ability to optin for spam or virus. There is no way to opt out of processing, that is, you cannot say you do not want the service if it is already configured for you.

There are only two services offered, virus or spam detection. Brightmail also provides a "content-filtering" service, but this function is provided with Messaging Server by using Sieve. There is no added value to have Brightmail do the Sieve filtering.

When a message is determined to be a virus, the Brightmail server can be configured to clean the virus and resubmit the cleaned message back to the MTA. When the message is spam, the verdict back from the Brightmail along with the configuration in Brightmail allows the MTA to determine what happens to the message. Basically, three things can happen: the message is discarded, it is filed into a folder, or it is delivered normally to the Inbox folder.

The Brightmail servers can be located on the same system as the MTA, or it can be on a separate system. In fact, you can have a farm of Brightmail servers serving one or more MTAs. The Brightmail SDK uses the Brightmail configuration file to determine which Brightmail server to use. It is not something the MTA has to worry about.

Brightmail Requirements and Performance Considerations

- Brightmail servers must run on the Solaris Operating System or Windows 2000.
- If Brightmail implements both spam and virus checking, MTA message throughput can be reduced by as much as 50%. To keep up with MTA throughput, you may need two Brightmail servers for each MTA.

Deploying Brightmail

This section describes how to deploy Brightmail for the following configurations:

- "To Activate Brightmail Processing for All Users on a Destination or Source Channel" on page 36
- "To Activate Brightmail Processing for Selected Users" on page 38
- "To Activate Brightmail Processing for Selected Domains on a System" on page 39

BrightMail filtering is enabled in Messaging Server using channel keywords or the Brightmail LDAP attribute. The method of filtering on the system is additive. That is, it is the combination of both keywords and the attribute.

To Activate Brightmail Processing for All Users on a Destination or Source Channel

1. Install and configure the Brightmail server.

   To install Brightmail on your system, see your Brightmail, Inc., representative.

2. Set the Brightmail library and configuration file parameters by adding the following two MTA options to the `options.dat` file:

   `Brightmail_Library=`*path_and_filename_of_libbmiclient.so*
   `Brightmail_config_file=`*path_and_filename_of_brightmail_config_file*

3. Specify the desired Brightmail options in the MTA options file (Table 14) and Brightmail configuration file (Table 16).

4. Specify the channels and email direction (source or destination) on which Brightmail processing will occur.

   Set the keyword `sourcebrightmailoptin` or `destinationbrightmailoptin` on a channel block.

   `sourcebrightmailoptin` specifies that every message coming from the channel be processed by Brightmail software.

   `destinationbrightmailoptin` specifies that every message going to the channel be processed by Brightmail software.

   Valid values for these attributes are as follows:

   `spam` - filter for spam
   `virus` - filter for viruses
   `spam,virus` - filter for spam and viruses

Examples

1. In the following example, mail going into the tcp_siroemail channel will be filtered by Brightmail for spam and viruses:

```
tcp_siroemail smtp mx single_sys remotehost inner switchchannel \ identnonelimited subdirs
20 maxjobs 7 pool SMTP_POOL \
maytlsserver maysaslserver saslswitchchannel tcp_auth \
destinationbrightmailoptin spam,virus
tcp_siroemail-daemon
```

2. In the following example, mail coming from `the tcp_local` channel will be filtered by the Brightmail for spam:

```
tcp_local smtp mx single_sys remotehost inner switchchannel \
identnonelimited subdirs 20 maxjobs 7 pool SMTP_POOL \
maytlsserver maysaslserver saslswitchchannel tcp_auth \
destinationbrightmailoptin spam
tcp-daemon
```

To Activate Brightmail Processing for Selected Users

This section describes how to activate Brightmail processing for selected users. Note that in this Patch 2 release, you cannot enable per-user Brightmail processing from an access layer MTA. In other words, the MTA which calls the Brightmail server must be on the same machine as the message store containing the user.

1. Install and configure the Brightmail software.

   To install Brightmail on your system, see your Brightmail representative.

2. Set the Brightmail library and configuration file parameters.

   Use the following two MTA options in the `options.dat` file:

   `Brightmail_Library=`*path_and_filename_of_libbmiclient.so*
   `Brightmail_config_file=`*path_and_filename_of_brightmail_config_file*

3. Specify the desired Brightmail options in the MTA options file (Table 14) and Brightmail configuration file (Table 16).

4. Specify the LDAP attribute that will be used to activate Brightmail processing on specified users.

   Set `LDAP_SPARE_2=mailAntiUBEService` in the `option.dat` file.

5. Set LDAP attribute `mailAntiUBEService` in the user entries to receive Brightmail processing.

   Valid values for `mailAntiUBEService` are `spam` (filter for spam) and `virus` (filter for viruses).

Example

Assume that `LDAP_SPARE_2` was set to `mailAntiUBEService` in the `option.dat` file. If the user, Otis Fanning, has the `mailAntiUBEService` attribute set to `spam` and `virus` in his user entry, then his mail will be filtered by Brightmail for spam and viruses. The following example shows the Brightmail enabled user entry for Otis Fanning.

Code Example 1 Example to Filter Mail for Spam and Viruses

```
dn: uid=fanning,ou=people,o=sesta.com,o=ISP
objectClass: person
objectClass: organizationalPerson
objectClass: inetOrgPerson
objectClass: inetUser
objectClass: ipUser
objectClass: inetMailUser
objectClass: inetLocalMailRecipient
```

Code Example 1 Example to Filter Mail for Spam and Viruses

```
objectClass: nsManagedPerson
objectClass: userPresenceProfile
cn: Otis Fanning
sn: fanning
initials: OTF
givenName: Otis
pabURI: ldap://ldap.siroe.com:389/ou=fanning,ou=people,o=sesta.com,o=isp,o=pab
mail: Otis.Fanning@sesta.com
mailAlternateAddress: ofanning@sesta.com
mailDeliveryOption: mailbox
mailHost: manatee.siroe.com
uid: fanning
dataSource: iMS 5.0 @(#)ims50users.sh 1.5a 02/3/00
userPassword: password
inetUserStatus: active
mailUserStatus: active
mailQuota: -1
mailMsgQuota: 100
mailAntiUBEService: virus
mailAntiUBEService: spam
```

To Activate Brightmail Processing for Selected Domains on a System

1. Install and configure the Brightmail software.

   To install Brightmail on your system, see with your Brightmail, Inc., representative.

2. Set the Brightmail library and configuration file parameters.

   Set the following two MTA options in the `options.dat` file:

   `Brightmail_Library=`*path_and_filename_of_libbmiclient.so*
   `Brightmail_config_file=`*path_and_filename_of_brightmail_config_file*

3. Specify the desired Brightmail options in the MTA options file (Table 14) and Brightmail configuration file (Table 16).

4. Specify the LDAP attribute that will be used to activate Brightmail processing on specified domains.

   Set `LDAP_DOMAIN_ATTR_OPTIN=mailAntiUBEService` in the `option.dat` file.

5. Set the LDAP attribute `mailAntiUBEService` in the domain entries (in the DC tree) whose email will receive Brightmail processing.

   Valid values for `mailAntiUBEService` are `spam` (filter for spam) and `virus` (filter for viruses).

Example

Assume that LDAP_DOMAIN_ATTR_OPTIN was set to mailAntiUBEService in the option.dat file. The mailAntiUBEService attribute is set to spam and virus in the example.com domain entry in the DC tree. The following example shows the Brightmail-enabled domain entry.

Code Example 2 Domain Entry to Enable Brightmail Software

```
dn: dc=sesta,dc=com,o=internet
objectClass: domain
objectClass: inetDomain
objectClass: mailDomain
objectClass: nsManagedDomain
objectClass: icsCalendarDomain
description: DC node for sesta.com hosted domain
dc: sesta
inetDomainBaseDN: o=sesta.com,o=isp
inetDomainStatus: active
mailDomainStatus: active
mailDomainAllowedServiceAccess: +imap, pop3, http:*
mailRoutingHosts: manatee.siroe.com
preferredMailHost: manatee.siroe.com
mailDomainDiskQuota: 100000000
mailDomainMsgQuota: -1
mailClientAttachmentQuota: 5
mailAntiUBEService: spam
mailAntiUBEService: virus
```

Brightmail Options and Keywords

Table 14 and Table 15 show the Messaging Server's Brightmail options and keywords. Selected Brightmail configuration file options are shown in Table 16. The latest and complete listing of Brightmail configuration file options can be obtained from Brightmail, Inc.

Table 11 Brightmail MTA Options (option.dat)

Option	Description and Default
Brightmail_library	Required to activate Brightmail. Full file path and name of the Brightmail SDK shared library. When specified along with Brightmail_config_file, this library is loaded by the MTA at run time. Can also be used with SpamAssassin. Example: /opt/mailwall/lib/libbmiclient.so Default: None

Table 11 Brightmail MTA Options (option.dat)

Option	Description and Default
Brightmail_config_file	Required to activate Brightmail. Full file path and name of the Brightmail configuration file. When specified along with Brightmail_library, the MTA is enabled for Brightmail integration. Can also be used with SpamAssassin. Example: /opt/mailwall/config Default: None
LDAP_SPARE_2	The name of the LDAP attribute used to activate Brightmail on a per-user basis. This should be an attribute in the inetMailUser objectclass. If you do not have another predefined attribute, use mailAntiUBEService. The attribute itself (example: mailAntiUBEService) is multi-valued, case-sensitive. Its value could be either spam or virus in lowercase. If the user is opting for both, then he would have two such attributes, one containing spam, one containing virus. Default: none
LDAP_domain_attr_optin	The name of the LDAP attribute used to activate Brightmail on a per-domain basis. It applies to the destination domain. It is just like LDAP_SPARE_2 above except it should be in the objectclass mailDomain. Default: none
Brightmail_verdict_*n*	Brightmail_verdict_*n* and Brightmail_action_*n* are matched pairs, where *n* is a number from 0 to 9. These options are not normally specified if you take the default interpretation of Brightmail verdicts. The possible values for this option are only spam and virus. Default: none
Brightmail_action_*n*	As a pair with the matching Brightmail_verdict_*n* option, this can specify a Sieve command with optional if-then-else statement (see example following this table) to execute. For example, if you want to reject spam, then you may have the pair: Brightmail_verdict_0=spam Brightmail_action_0=data:,require "reject"; reject "Rejected by Brightmail"; The template for the Sieve command is: data:,[require "*command*";] *command*; Where the require statement is needed for reject and fileinto. Default: none

Table 11 Brightmail MTA Options (`option.dat`)

Option	Description and Default
`Brightmail_null_action`	Specifies a Sieve command with optional `if-then-else` statement (see example following this table) to execute when the verdict from Brightmail matches the Null action in the Brightmail configuration file. For example, if the Brightmail configuration file has: `blSWClientDestinationLocal: spam|` where the null or nothing after the | means the null action. If the verdict for the message is `spam`, matching the word `spam` before the |, then the null action will be taken by the MTA. There is usually no reason to specify this option, since the default action is `discard`, matching what Brightmail means by the null action. The template for the Sieve command is: `data:,[require “`*command*`”;]` *command;* Where the `require` statement is needed for `reject` and `fileinto`. Default: `data:,discard;`

`Brightmail_string_action`	Specifies a Sieve command with optional `if-then-else` statement (see example following this table) to execute when the Brightmail verdict matches an action which is a string in the Brightmail configuration file. For example, if in the Brightmail configuration file you have:
	`blSWClientDestinationLocal: spam|spam-folder`
	then `spam-folder` is a string. If the verdict is `spam`, then you have a string which matches the verdict. This option is rarely used, because the default action when a string is specified is to file the message into that folder.
	The template for the Sieve command is:
	`data:,[require “`*command*`”;]` *command;*
	Where the `require` statement is needed for `reject` and `fileinto`.
	`Default: data:,require "fileinto"; fileinto "$U”;`
	`$U` is the string to the right of | in the `blSWClientDestinationLocal` value (in the example above it would be `spam-folder`)

Here is an example of an optional `if-then-else` statement in the `option.dat` file. Note that this can be used for `Brightmail_action_`*n*, `Brightmail_null_action` and `Brightmail_string_action`.

```
Brightmail_string_action=data:,require "fileinto";\
  if header :contains ["resent-from"] ["User-1"] {\
  fileinto "testspam";\
  } else {\
  fileinto "spam";};
```

Table 12 MTA Channel Keywords for Brightmail

Channel Keyword	Description
`sourcebrightmail`	Specifies that all messages originating from this channel receive Brightmail processing. All recipient addresses will be made known to Brightmail regardless of destination channel if the recipient or the recipient's domain has opted in through the LDAP attribute. Looks at recipient's LDAP attribute `mailAntiUBEService` (or equivalent) to determine whether spam, virus or both or none are filtered. If `mailAntiUBEService` doesn't specify either spam or virus, then mail is not sent to the Brightmail server for filtering. **Syntax**: `sourcebrightmail`
`destinationbrightmail`	Specifies that all messages destined to this channel be subject to Brightmail processing if the recipient has opted in through the LDAP attribute `mailAntiUBEService` (or equivalent). **Syntax**: `destinationbrightmail`

`sourcebrightmailoptin`	Specifies that all messages originating from this channel will be subject to the specified Brightmail processing (either spam or virus or both) even if those services have not been opted in by the user or domain through the LDAP attribute.The system-wide default filter list follows the keyword. The list following must be either `spam` or `virus` or `spam,virus` or `virus,spam`.
	Example 1:
	`tcp_local sourcebrightmailoptin spam,virus . . .`
	Specifies that mail be scanned for both spam and virus by Brightmail regardless of the user's LDAP attribute.
	Example 2:
	`tcp_local sourcebrightmailoptin virus . . .`
	Specifies that mail will default to only virus scanning. In this case, spam filtering can be enabled on a per user basis, or by destination domain through the LDAP attributes.

`destinationbrightmailoptin`	Specifies that all messages destined to this channel will be subject to the specified Brightmail processing (either spam or virus or both) even if those services have not been opted in by the user or domain through the LDAP attribute. The filter list follows the keyword. The list following must be either `spam` or `virus` or `spam,virus` or `virus,spam`. Example 1: `ims-ms destinationbrightmailoptin spam,virus. . .` All mail destined for the message store is scanned for both spam and virus by Brightmail

Table 13 Selected Brightmail Configuration File Options

Brightmail Option (Not Case-sensitive)	Description (value of the attributes are case-sensitive)
blSWPrecedence	A given message can have multiple verdicts. This specifies the precedence order. So if a message is processed for virus first, then for spam if you specified this option as virus-spam the verdicts are separated by hyphens (-).
blSWClientDestinationDefault	Specifies how to deliver normal messages, that is, not a spam or virus, and thus have no verdict. Usually you want to deliver this message normally, so you would specify inbox as the value. There is no default.
blSWLocalDomain	This attribute specifies what domain(s) are considered to be local. There can be multiple lines of this attribute specifying several domains which are all considered local. Local versus foreign domain is used to specify two different handling for a verdict. See blSWClientDestinationLocal and blSWClientDestinationForeign in this table. For example, you can specify: blSWLocalDomain=siroe.com

blSWClientDestinationLocal	This specifies the verdict and action pair for the local domain. You would normally have two lines for this, one for spam and one for virus. The value is of the form verdict|action, For example,
	blSWClientDestinationLocal=spam|spambox
	blSWClientDestinationLocal=virus|
	The default Brightmail interpretation for the “null” action, meaning nothing to the right of the |, is to discard the message. So the example above discards the message if it has a verdict of virus. And if the verdict is spam, the above example files the message into the folder called spambox. If the message is not spam or virus, then the verdicts do not match, and the mail is delivered normally based on what’s set in the blSWClientDestinationDefault setting above.

blSWClientDesintationForeign	Same format and interpretation as blSWClientDestinationLocal above, except this applies to users in the domain which are *not* local.
blSWUseClientOptin	Always set this to TRUE when used with the Sun ONE Messaging Server.
blswcServerAddress	Is of the form ip:port[,ip:port,...] to specify one or more Brightmail server’s IP address and port numbers

Common Brightmail Deployment Scenarios

There are several common deployment Brightmail scenarios that are discussed in this section. These are:

- Processing incoming messages to the local message store (ims-ms channel).
- Processing messages going out to the internet (tcp-local channel).
- Processing messages coming in from the internet (tcp-local channel).
- Processing messages going to a specific domain (see "To Activate Brightmail Processing for Selected Domains on a System" on page 39).
- Processing messages going to specific users (see "To Activate Brightmail Processing for Selected Users" on page 38).
- Setting up Brightmail processing as a Class-of-Service Option (see the Class of Service section in the *iPlanet Messaging Server Provisioning Guide*).

Brightmail Processing on Local Incoming Messages

You may wish to configure your system so that all mail delivered locally is screened for spam and viruses. To set up Brightmail processing of all incoming messages to the local message store (that is, to the ims-ms channel in `imta.cnf`), add the `destinationbrightmailoptin` keyword to the `ims-ms` channel definition. Example:

```
ims-ms defragment subdirs 20 backoff “pt5m” “pt10” “pt30” “pt1h” \
“pt2h” “pt4h” maxjobs 1 pool IMS_POOL fileinto $U+$S@$D filter \
ssrd:$A ims-ms-daemon destinationbrightmailoptin spam,virus
ims-ms-daemon
```

Brightmail Processing on Incoming Messages from the Internet

You may wish to configure your system so that all mail coming from the internet is screened for spam. To set up Brightmail processing of all incoming messages from the internet, add the sourcebrightmailoptin keyword to the tcp-local channel definition. Example:

```
tcp_local smtp mx single_sys remotehost inner switchchannel \
identnonelimited subdirs 20 maxjobs 7 pool SMTP_POOL maytlsserver \
maysaslserver saslswitchchannel tcp_auth sourcebrightmailoptin spam
tcp-daemon
```

NOTE Brightmail allows you to either discard spam messages, or save them in a designated spam folder. If the ability to designate a spam folder is not available for the receiving system, then the address syntax for the spam folder will be meaningless to that system.

Brightmail Processing on Outgoing Messages to the Internet

You may wish to configure your system so that all mail going to the internet is screened for spam. To set up Brightmail processing of all outgoing messages to the internet, add the destinationbrightmailoptin keyword to the tcp-local channel definition on the outgoing MTA. Example:

```
tcp_local smtp mx single_sys remotehost inner switchchannel \
identnonelimited subdirs 20 maxjobs 7 pool SMTP_POOL maytlsserver \
maysaslserver saslswitchchannel tcp_auth \
destinationbrightmailoptin spam
tcp-daemon
```

Brightmail Processing on Incoming Messages to a Specific Backend Message Store Host

To configure your system so that all mail coming into a specific backend message store host is screened for virus and spam, do the following:

1. Add a rewrite rule in the imta.cnf file of all inbound SMTP servers that will send messages to the backend message store host. Example:

```
msg_store1.siroe.com   $U@msg_store1.siroe.com
```

2. Add a channel corresponding to that rewrite rule with the `destinationbrightmailoptin` keyword. Example:

```
tcp_msg_store1 subdirs 20 backoff “pt5m” “pt10” “pt30” “pt1h” \
“pt2h” “pt4h” maxjobs 1 pool IMS_POOL fileinto $U+$S@$D \
destinationbrightmailoptin spam,virus
msg_store1.siroe.com
```

Using SpamAssassin

Messaging Server supports the use of SpamAssassin, a freeware mail filter used to identify spam. SpamAssassin consists of a library written in Perl and a set of applications and utilities that can be used to integrate SpamAssassin into messaging systems.

SpamAssassin calculates a score for every message. Scores are calculated by performing a series of tests on message header and body information. Each test either succeeds or fails, and the score is adjusted accordingly. Scores are real numbers and may be positive or negative. Scores that exceed a certain threshold, typically 5.0, are considered to be spam.

SpamAssassin is highly configurable. Tests may be added or removed at any time and the scores of existing tests may be adjusted. This is all done through various configuration files. Further information on SpamAssassin can be found on the SpamAssassin web site.

The same mechanism used for calling out to the Brightmail spam and virus scanning library can be used to connect to the SpamAssassin `spamd` server. The module provided with Messaging Server is called `libspamass.so`.

SpamAssassin Requirements and Performance Considerations

- SpamAssassin software and knowledge of operation.
- While no specific numbers are available, SpamAssassin reduces throughput more than Brightmail software does.

Deploying SpamAssassin

This section provides step-by step instructions for deploying SpamAssassin on Messaging Server.

1. Install and configure SpamAssassin.

   The SpamAssassin web site provides all the necessary information to do this on a variety of different systems.

2. Set the Brightmail library and configuration file parameters to SpamAssassin.

   Set the following two MTA options in the `options.dat` file:

   `Brightmail_Library=`*path_and_filename_of_libspamass.so*
   `Brightmail_config_file=`*path_and_filename_of_SpamAssassin_config_file*

3. Create a SpamAssassin options file.

   Specify this file with the `Brightmail_config_file` option in the MTA `option.dat` file. The SpamAssassin options file consists of lines of the form `option=value`. Options are described in Table 17.

4. Configure SpamAssassin as desired.

   The default behavior for this interface (implied by the default `mode=0`) is to discard mail identified as spam. No additional options need to be set in order to accomplish this.

   Other behavior can be obtained through a combination of setting of SpamAssassin options and Brightmail MTA options. For example, to reject all mail identified as spam, set the `BRIGHTMAIL_NULL_ACTION` MTA option to something like:

   ```
   data:,require "reject"; reject "Suspected spam message rejected";
   ```

   Similarly, spam could be filed to a SPAM folder by setting `BRIGHTMAIL_NULL_ACTION` to:

   ```
   data:,require "fileinto"; fileinto "SPAM";
   ```

   Trickier combinations are possible. For example, the spam result could be included in the reject message by setting the `BRIGHTMAIL_STRING_ACTION` option in the MTA to something like:

   ```
   data:,require "reject"; reject "Message rejected [$U]";
   ```

   and setting `MODE=1` in the SpamAssassin option file.

5. Start the spamd daemon. This is normally done with a command of the general form:

```
spamd -d
```

spamd defaults to only accepting connections from the local system. If SpamAssassin and Messaging Server are running on different systems you will require a command of the form:

spamd -d -i <*listen_ip_address*> -A <*allowed_hosts*>

where *listen_ip_address* is the address on which to listen and *allowed_hosts* is a list of authorized hosts or networks (using IP addresses) which can connect to this spamd instance.

Table 14 SpamAssassin Options

Spam Assassin Options	Description	Default
host	The name of the system where spamd is running	localhost
port	Port number where spamd listens for incoming requests.	783
debug	0 or 1. Specifies whether to turn on debugging in the libspamass.so. Debugging of spamd itself is controlled by the command line invoking spamd.	0
mode	Controls the translation of SpamAssassin results to Brightmail verdict information. Three different modes are available: 0 - Return the verdict string specified by the verdict option if the message is found to be spam; return a default SpamAssassin verdict if it is not. A null verdict is returned if the verdict option is empty or unspecified. 1 - Return the SpamAssassin result as a verdict if the message is found to be spam. 2 - Reserved	0
verdict	A string, specifying the verdict string used for MODE 0	“”
field	A string specifying the SpamAssassin result string prefix. SpamAssassin result strings generally look like: Spam-Test: False ; 0.0 / 5.0 or Spam-Test: True ; 27.7 / 5.0 The field option provides the means for changing the “Spam-Test” part of the result. Note that the “: “ will also be removed if an empty field value is specified.	“Spam-test”

Table 15 MTA Options for SpamAssassin

MTA Options for Spam Assassin	Description	Default
`Brightmail_library`	Full file path and name of the SpamAssassin shared library.	None
`Brightmail_config_file`	Full file path and name of the SpamAssassin configuration file.	None
`Brightmail_null_action`	Sieve rule specifying what to do with the message when the SpamAssassin verdict returns as null.	`data:,discard;`
`Brightmail_string_action`	Sieve rule specifying what to do with the message if the verdict is a string. Default: `data:,require "fileinto"; fileinto "$U;` `$U` is the string `verdict` returned.	See description

Known Issues and Limitations

This section contains a list of the known issues with Messaging Server and its components. The following product areas are covered:

- "Installing Messaging Server" on page 50
- "Migrating to a Newer Version of Messaging Server" on page 51
- "Messaging Server 5.x" on page 52
- "Messenger Express" on page 55

Installing Messaging Server

The section describes the known problems, issues, and considerations of the installation and uninstallation processes of the Messaging Server.

ims_dssetup.pl does not regenerate the index. (no problem number)

If you are running Messaging Server with Directory Server 4.x, and you run the `ims_dssetup.pl` script to prepare the Directory Server for the Messaging Server installation, the script does not regenerate the indexes. Consequently, search operations might be erratic.

The `ims_dssetup.pl` script properly updates the indexes for Directory Server 5.1 and 5.2.

Do not install Messaging Server and Directory Server 5.1 in the same root directory, because they use two different versions of the Administration Server. (no problem number)

Migrating to a Newer Version of Messaging Server

Upgrading to Messaging Server 5.2, while continuing to use Directory Server 5.1, causes an error when updating the schema entries. (problem numbers 4679495, 4882202)

If you migrate to Messaging Server 5.2 but use Directory Server 5.1, letter case issues arise when running the `imsdirmig` command to update your schema entries. You receive the following error message:

```
Invalid Entry Type <0>
```

Workaround
Change the value of `nsslapd-return-exact-case` in the Directory Server configuration file, `dse.ldif`, to `off`. Run `imsdirmig` again. After the command successfully updates the schema entries, change the value of `nsslapd-return-exact-case` to `on`.

The Event Notification Service on Windows NT platforms is not set for automatic startup after an upgrade. (problem number 4638111)

By default, the Event Notification Service is set for manual startup in Messaging Server 5.1. However, with Messaging Server 5.2, the ENS service performs an automatic startup on reboot. After upgrading to Messaging Server 5.2, the setting does not change from manual to automatic.

Workaround
Change the default setting of the ENS Service from manual to automatic startup:

1. After the upgrade, select Services from the Control Panel.
2. Select the ENS service.
3. Click Startup.
4. Change Start Type from Manual to Automatic.
5. Click OK.

If you start the ENS service prior to upgrading, you must manually shut it down, otherwise the upgrade process fails with a message stating that the `msglinks.nt.inf` could not be run. The `iplanet-msg-install.log` will indicate that the file `libchartable.dll` cannot be removed.

Messaging Server 5.x

Messaging Server 5.2 does not support Sun Cluster 3.1 when using HAStoragePlus. (problem number 4910187)

Messaging Server 5.2 does not support Sun Cluster 3.1 with HAStoragePlus, however, it does support Sun Cluster 3.1 with HAStorage. For more information on Sun Cluster 3.1, see “High Availability Notes” on page 11 and the *iPlanet Messaging Server Installation Guide*.

DOMAIN_UPLEVEL has been modified. (no problem number)

The `DOMAIN_UPLEVEL` default value has changed from `1` to `0`.

The following characters cannot be used in the User ID: $ ~ = # * + % ! @ , { } ( ) / < > ; : " ‘ [ ] & ? (no problem number)

This constraint is enforced by Delegated Administrator for Messaging and Collaboration as well as the MTA when operating in direct LDAP mode. Allowing these characters in a user ID can cause problems in the message store. If you want to change the list of characters forbidden by the MTA, set LDAP_UID_INVALID_CHARS in the *server-root*`/msg-`*instance*`/imta/config/options.dat` file with a string of the forbidden characters’ ASCII values. For example:

```
LDAP_UID_INVALID_CHARS=32,33,34,35,36,37,38,40,41,42,43,44,47,58,59,60,61,62,63,64,91,92,9
3,96,123,125,126
```

You are strongly advised not to relax this constraint.

The SMTP server’s default behavior will change in the next major release after the Messaging Server release. (no problem number)

The SMTP server’s default behavior accepts various line terminators. Currently, the `smtp` keyword is the same as using the `smtp_crorlf` channel keyword on the `tcp` channels. While this behavior complies with the original SMTP specification (RFC 821), it does not comply with the latest revision of the SMTP specification (RFC 2821).

In the next major release of Messaging Server (after the Messaging Server 5.2 Patch 2 release), the meaning of the `smtp` keyword and the default behavior of the `tcp` channels will comply with the revised standard. Specifically, the `smtp` keyword will become synonymous to the `smtp_crlf` channel keyword. For more information, see the section on “Channel Protocol Selection and Line Terminators” in the chapter on Configuring Channel Definitions in the *iPlanet Messaging Server*

Administrator's Guide.

NFS is not supported for mail stores. (no problem number)

NFS is not supported for several reasons, including: open with O_EXCL is non-atomic. This technique is used for synchronizing deferred handling between various threads.

Notifications can be customized and localized. (no problem number)

To customize or localize notifications, you create a complete set of return_*.txt files for each locale and/or customization and store it in a separate directory. For example, you could have French notification files stored in one directory, Spanish for another, and notifications for a special unsolicited bulk email channel stored in a third. Sample files for French, German, and Spanish are included in this release. These files can be modified to suit your needs. Refer to Chapter 6 of the *Messaging Server Administrator's Guide* for complete information on Customizing and Localizing Notification Messages.

When using the MTA direct LDAP operation, you should run the imsimta restart command to immediately implement newly modified alias cache sizes or timeout values, or to immediately clear the alias cache. (no problem number)

You can now use the Direct LDAP Lookup feature which cancels the need to use the imsimta dirsync command. For more information, refer to Appendix B in the *Messaging Server Administrator's Guide*.

Administration Server access control host names are case-sensitive. (problem number 4541448)

When configuring "Host Names to allow" for the Administration Server, the access control list is case-sensitive. If the domain name service (DNS) uses mixed-case host names in the IN-ADDR records (used when translating from an IP address to a domain name), the access control list must use the same case. For example, if your host is test.Sesta.Com, the access control list must include *.Sesta.Com.

For example, if the user/group base suffix is o=isp, the distinguished name (DN) of the service administrator group is cn=Service Administrators,ou=groups,o=isp. To designate the account uid=ofanning, o=sesta.com, o=isp, you add the account's DN to the group. In the following modify record, the designated user is added as a group member in the Lightweight Directory Interchange Format (LDIF):

```
dn: cn=Service Administrators,ou=groups,o=isp
changetype: modifyadd: uniquemember
```

```
uniquemember: uid=ofanning, o=sesta.com, o=isp
```

Furthermore, for users to have service administrator privileges, the attribute `memberof` must be added to the user entry and set to the Service Administrator Group. For example:

```
dn: uid=ofanning, o=sesta.com, o=isp
changetype: modify
add: memberof
memberof: cn=Service Administrators, ou=groups, o=isp
```

The % character does not work correctly in expiration rules. (problem number 4542729)

If you use Microsoft Outlook Express as your IMAP mail client, the read and unread flags might not properly work. This is a known problem with the Microsoft Outlook Express client. (problem number 4543930)

Workaround
Set this configuration variable:

```
configutil -o local.imap.immediateflagupdate -v yes
```

If, while using the work-around, you experience performance issues, change the configuration variable to its original setting.

Access control filters do not work if the short form domain in used in the /etc/hosts file. (problem number 4629001)

If there is a short-form version of a domain name in the `/etc/hosts` file, there will be problems if you use a host name in an access control filter. When the IP address lookup returns a short-form version of the domain name, the match fails. Ensure you use a fully qualified domain name in the `/etc/hosts` file.

Windows 2000 Service Pack 2 platforms might encounter performance degradations. (problem number 4782958)

Restrict the number of imapd threads with the following `configuril` command:

```
configutil -o service.imap.maxthreads -v 10
```

Messenger Express Multiplexor (MEM) does not have a configuration option to make use of the operating system resolver as well as the name service cache daemon. (problem number 4823042)

Workaround
Configure your system as a caching-only DNS server to gain the benefit of caching `MX` and `A` records.

If indirect dependencies already exist between Sun Cluster resources, scds_hasp_check() may prevent HAStoragePlus from being supported with those existing configurations. (problem number 4827911)

This behavior is observed in Sun Cluster 3.0 Update 3. To work around this problem, create a weak dependency for the existing resources on the HAStoragePlus resource.

Messenger Express

With Directory Server 5.1 or 5.2, you cannot enter multiple email IDs for a single contact in the Personal Address Book. (problem number 4633171)

The Directory Server is exhibiting correct behavior. Because of a problem in Directory Server 4.x, you cannot enter multiple email IDs.

The toolbar does not reflect a font change made within a Compose window. (problem number 4984602)

A URL in a mail message does not display properly. (problem number 4830696)

A URL does not display properly when it contains characters surrounded by greater than (<) and less than (>) characters.

Problem when editing an existing Personal Address Book contact. (problem number 4875476)

You cannot edit an existing Personal Address Book contact unless the Display Name or Email Address fields are changed.

Checking for duplicate Personal Address Book entries is not always done. (problem number 4658077)

Messenger Express checks for duplicate entries in the Personal Address Book when creating a new contact, but it does not check for duplicates when you rename a contact.

A JavaScript error occurs when logging out of Messenger Express. (problem number 4662739)

Messenger Express deletes a blank character at the beginning of a line. (problem number 4668749)

If you try to add a user's address to the Personal Address Book that doesn't have a host name (*userid@domain_name*), you receive a "duplicates ignored" error message. (problem number 4742061)

Messages are not sorted in the order requested when there are quotation characters (") in the message's Subject or email address. (problem number 4877419)

The Compose window goes behind the main window when you click on Save Draft. (problem number 4899790)

An active Compose window does not stay in the correct position on the screen when you click Save Draft. The Compose window moves behind the main window, causing you to click on the Compose window to move it to the front.

Emoticons are not displayed in the pop-up window. (problem number 4903300)

When you click on the emoticons icon on the toolbar, an empty pop-up window displays.

Problems with the search results from the Personal Address Book. (problem number 4791170)

When searching the Personal Address Book, the results of the search are limited to 500 items. Items returned after the 500 limit are lost. There can also be pagination problems with the display of the returned entries.

The spell checker does not properly recognize or display the German umlaut character. (problem number 4546195)

Deleting a user with the iplanet Delegated Administrator who is on the authorized senders list of a mailing list causes the authorized senders list to disappear temporarily, and in some cases, permanently. (problem number 4830738)

Attempting to access Messenger Express from Safari running on Apple Mac 10 might not work because the Safari browser is not supported. (problem number 5076649)

Redistributable Files

Sun ONE Messaging Server 5.2 Patch 2 contains the following set of files which you may use and freely distribute in source (HTML and JavaScript) or binary (GIF) form only within a licensed distribution:

- `msg_svr_base/config/html` (and subdirectories)
- `msg_svr_base/install/config/html` (and subdirectories)

You are not permitted to distribute these files in any other way.

You can copy and use, but not modify, the following header files solely to create and distribute programs to interface with the Messaging Server application programming interface (APIs), to compile customer-written code using the documented API to interoperate or integrate with Messaging Server, and only as expressly provided in the Messaging Server documentation:

- `msg_svr_base/examples/meauthsdk/expapi.h`
- `msg_svr_base/examples/tpauthsdk/authserv.h`
- All files in the `msg_svr_base/include` directory (default location)

The following files are provided solely as reference for writing programs that use the API to integrate with the Messaging Server:

- `msg_svr_base/examples/meauthsdk/`
- `msg_svr_base/examples/tpauthsdk/`
- `msg_svr_base/examples/mtasdk/`

How to Report Problems and Provide Feedback

If you have problems with Sun ONE Messaging Server, contact Sun customer support using one of the following mechanisms:

- Sun Software Support services online at `http://www.sun.com/service/sunone/software`

  This site has links to the Knowledge Base, Online Support Center, and ProductTracker, as well as to maintenance programs and support contact numbers.
- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

Sun Welcomes Your Comments

Sun is interested in improving its documentation and welcomes your comments and suggestions. Use the web-based form to provide feedback to Sun:

`http://www.sun.com/hwdocs/feedback`

Please provide the full document title and part number in the appropriate fields. The part number is a seven-digit or nine-digit number that can be found on the title page of the book or at the top of the document. For example, the part number of these Release Notes document is 817-6244-10.

Additional Sun Resources

Internet locations:

- Sun ONE Documentation
  `http://docs.sun.com/prod/sunone`
- Sun ONE Professional Services
  `http://www.sun.com/service/sunps/sunone`
- Sun ONE Software Products and Service
  `http://www.sun.com/software`
- Sun ONE Software Support Services
  `http://www.sun.com/service/sunone/software`
- Sun ONE Support and Knowledge Base
  `http://www.sun.com/service/support/software`
- Sun Support and Training Services
  `http://training.sun.com`
- Sun ONE Consulting and Professional Services
  `http://www.sun.com/service/sunps/sunone`
- Sun ONE Developer Information
  `http://sunonedev.sun.com`
- Sun Developer Support Services
  `http://www.sun.com/developers/support`

- Sun ONE Software Training
  http://www.sun.com/software/training
- Sun Software Data Sheets
  http://wwws.sun.com/software