

# Don't Fear Sendmail

## Sendmail

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The most recent stable version is 8.10.2

8.11 is in beta

# Sendmail

Where to get the source:

- [ftp://ftp.sendmail.org/pub/ \ sendmail/sendmail.8.10.2.tar.gz](ftp://ftp.sendmail.org/pub/sendmail/sendmail.8.10.2.tar.gz)

LOTS of information is available:

- <http://www.sendmail.org/>
- <http://www.sendmail.net/>
- <http://www.sendmail.com/>

# Sendmail Features

8.10

- SMTP Authentication
- Performance improvements (multiple queues, memory-buffered pseudo-files, and more control over resolver timeouts)
- Support for "message submission agent" (RFC 2476)
- Ability to connect to servers running on named sockets
- IPv6 support
- LDAP support
- Virtual hosting
- ~~Even better anti-spam features~~

## Sendmail Features

8.11

- Crypto support via OpenSSL

## Building Sendmail

Get and unpack the source (8.10.2)

READ THE 'README' FILE!

READ <http://www.sendmail.org/compiling.html>

Build any secondary packages (db, ldap, etc)

In the toplevel directory, type `'/bin/sh ./Build'`

- Creates a directory called something like  
`./obj.AIX.4.3.PPC`

## Building Sendmail

Once everything is built, type `'/bin/sh ./Build install'`

This will install the following programs:

- mailstats
- makemap
- praliases
- sendmail
- smrsh
- vacation

## Configuring Sendmail

`cd into sendmail-8.10.2/cf/`

Note: even though the use of `.m4` files greatly simplifies the configuration of sendmail, it can still be a daunting task to accomplish. I'd strongly recommend that one always read the configuration manual (`sendmail-8.10.2/cf/README`) and the configuration section found in <http://www.sendmail.org/>

# Configuring Sendmail

Create a domain file (domain/XYZ.umn.edu.m4):

```
VERSIONID(`@(#)XYZ.umn.edu.m4`)  
MASQUERADE_AS(XYZ.umn.edu)dnl  
FEATURE(use_cw_file)dnl  
FEATURE(local_procmail, /soft/local/bin/procmail)dnl  
FEATURE(redirect)dnl  
FEATURE(smrsh)dnl  
FEATURE(rbl)dnl
```

This describes the features common to all sendmail installation within your domain. Note that I choose to use procmail(8) and smrsh(8) as well as enabling the RBL for some spam filtering. You may not want all of these features.

# Configuring Sendmail

Create a client file (cf/client.m4):

```
VERSIONID(`@(#)client.mc`)  
OSTYPE(aix4)dnl  
FEATURE(nullclient, xyz.umn.edu)dnl
```

This turns all of your email clients into "null clients". They will simply pass all email to your email hub for delivery.

# Configuring Sendmail

Create a email hub file (cf/hub.m4):

```
VERSIONID(`@(#)hub.mc')dnl
OSTYPE(aix4)dnl
DOMAIN(xyz.umn.edu)dnl
FEATURE(nouucp, reject)dnl
MAILER(local)dnl
MAILER(smtp)dnl
```

This defines the email hub for your domain. No UUCP addressing will be allowed. Only local and SMTP delivery will happen.

# Configuring Sendmail

Create the final configuration files:

```
cd sendmail-8.10.2/cf/cf/
make -n client.cf
make -n hub.cf
```

These commands will turn the .m4 files into .cf files that are ready for use as /etc/mail/sendmail.cf

# Configuring Sendmail

## Final configurations

- Create `/etc/mail/`
- Copy the correct `.cf` file into `/etc/mail/sendmail.cf`
- Create `/etc/mail/aliases` with at least:
  - `MAILER-DAEMON: postmaster`
  - `abuse: root`
  - `postmaster: root`
  - `root: sysadmin@dept.umn.edu`
- ~~Rebuild the aliases database with 'newaliases'~~

# Running Sendmail

The best way to run sendmail is in a single hub configuration. Only one machine accepts email on TCP port 25 (the email hub). And all other computers within the domain simply send all email through the email hub (the email clients). This configuration has the advantage that it makes maintenance and debugging much simpler since all email flows through a single computer.

## Running Sendmail

To accomplish this configuration run sendmail as follows.

On your email hub:

/usr/sbin/sendmail -bd -q15m

On your clients:

/usr/sbin/sendmail -q15m

## Running Sendmail

There are many more flags to sendmail. Read the manual for more information on them. The two flags that I use have the following meanings:

-bd

- enables daemon mode (opens TCP port 25 to receive email)
- ONLY DO THIS ON YOUR EMAIL HUB TO REDUCE YOUR VULNERABILITY TO SPAM!**

-q15m

- flushes the email queues every 15 minutes.

## Other topics

### Continuing to relay for some machines

- Add this to your domain file:
  - `FEATURE('access_db', 'hash -o /etc/mail/access.db')dnl`
  
- The create `/etc/mail/access` as:
  - `spammer@aol.com REJECT`
  - `cyberspammer.com REJECT`
  - `spam@buyme.com 550 Spammers Go Away!`
  - `128.101.ABC RELAY`
  
- Rebuild the access database:
  - `makemap hash /etc/mail/access < /etc/mail/access`

## Other topics

### Other Anti-Spam features:

- <http://www.sendmail.org/m4/anti-spam.html>

### Fixing open-relays:

- <http://maps.vix.com/tsi>

### All other topics:

- <http://www.sendmail.org/>