

A Sane Mail System

Or: fetchmail, procmail, Courier-IMAP-SSL, Maildir, exim
and SpamAssassin

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Why?

- Ever increasing amounts of email
 - Needs to be sorted or we go insane
- Ever increasing amounts of SPAM
 - Needs to be filtered or we go insane
- Needs to be efficient or we go insane!

Fetchmail

- It's job is to **fetch mail** from POP or IMAP servers
- You only need to use it if you do not receive mail directly (i.e. people send mail to you@yourserver.stuff)

What you need to know

- The server you get mail from (e.g. mail.myisp.com.au)
- Your username (e.g. fred)
- Your password (e.g. azy68fie)
- The type of server you're connecting to (It's probably POP3)

~/.fetchmailrc

- This is where you store your fetchmail configuration
- Must have permissions of 0600 (u=rw,g=,o=) (think chmod 600 .fetchmailrc)
- The man page is useful

Example .fetchmailrc

```
set daemon 660  
poll mail.myisp.com.au  
protocol pop3  
user fred  
password azy68fie  
fetchall
```

The 'set daemon 660' line tells fetchmail to
check for mail every 660 seconds

Where does fetched mail go?

- As each message is retrieved fetchmail normally delivers it via SMTP to port 25 on the machine it is running on (localhost), just as though it were being passed in over a normal TCP/IP link. The mail will then be delivered locally via your system's MDA (Mail Delivery Agent, usually sendmail(8) but your system may use a different one such as smail, mmdf, exim, or qmail). All the delivery-control mechanisms (such as .forward files) normally available through your system MDA and local delivery agents will therefore work.
- i.e. you need some mail server software!

Exim

- Default Mail Transfer Agent (MTA) on Debian
- Small, relatively efficient, sane to set up.

Why sendmail is evil

```
# my name
DnMAILER-DAEMON
# UNIX header format
DlFrom $g $d
# delimiter (operator) characters
Do.:%@!^=/[ ]
# format of a total name
Dq$?x$x $.<$g>
# SMTP login message
De$j Sendmail $v ($V) $b

# more miscellaneous cleanup
R$+:$*;$*          @$1:$2;$3          list syntax
R$+@$+             $:$1<@2>          focus on domain
R$+<$+@$+>        $1$2<@3>          move gaze right
R$+@$+<@$+>       $1$2<@3>          a@b@c@d ->a%b%c@d

##### special local conversions (exit path from S3)
S7
R$*<@%$+$+>$*    $1$2<@3>$4          move @ right after
%
R$*<@$. $E>$*    @$1<@2.$E.$P>$3       hide .$E under $P
R$*<@$. $F>$*    @$1<@2.$F.$P>$3       hide .$F under $P
R$*<@$. $=K>$*   @$1<@2.$M.$P>$4       .=K -> $M.$P
```

Debian Exim Configuration

- Is done when you install Debian/exim
- Asks you some (simple!?) questions
- As long as you get it to deliver local mail, that's all we care about here.

- If you don't use Debian: you should!

What We have now

fetchmail

Exim

How Exim Delivers Mail

- According to rules ("transports")

```
# This transport is used for local delivery to user mailboxes. On debian
# systems group mail is used so we can write to the /var/spool/mail
# directory. (The alternative, which most other unixes use, is to deliver
# as the user's own group, into a sticky-bitted directory)
```

```
local_delivery:
  driver = appendfile
  group = mail
  mode = 0660
  mode_fail_narrower = false
  envelope_to_add = true
  return_path_add = true
  file = /var/spool/mail/${local_part}
```

What We have now

fetchmail

Exim

`/var/spool/mail/username`

Why this is bad

- The default setup delivers into mbox format mail boxes
 - mbox is the 'traditional' UNIX mailbox format
 - All messages are in one file
 - There is no index
 - It doesn't scale well (100s of messages, 100s of MBs)

The Answer?

Forty-Two

Maildir

- Each message is in a file
- A mail folder is its own directory
- no nasty locking issues (esp over NFS)

- Originally for qmail, now everywhere!