

# Sample Script of a sendmail install.

## Sendmail 8.12.2 on RedHat Linux 7.2

Commands typed by the user are **in bold and slightly larger**

Things of interest and error messages are underlined.

*My comments are in italics.*

The system prompt for this host is set to: [userid@host pwd]

The host name is "grumpy"

```
Script started on Thu Feb 21 18:15:20 2002
[harold@grumpy harold]$ cat /etc/issue
```

Red Hat Linux release 7.2 (Enigma)
Kernel 2.4.9-21 on an i686

*This install is being done on a clean RedHat Linux version 7.2 system. All patches available on Wednesday, 20 Feb 2002 have been installed before starting this sendmail install.*

```
[harold@grumpy harold]$ rpm -q -a | grep sendmail
sendmail-8.11.6-3
sendmail-cf-8.11.6-3
```

```
[harold@grumpy harold]$ telnet localhost 25
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^)'.
220 grumpy.ucns.uga.edu ESMTP Sendmail 8.11.6/8.11.6; Thu, 21 Feb 2002 18:16:08 -0500
quit
221 2.0.0 grumpy.ucns.uga.edu closing connection
Connection closed by foreign host.
```

*As you can see above, the default sendmail installed with RedHat Linux 7.2 is Sendmail 8.11.6. We will be installing The latest version, version 8.12.2.*

```
[harold@grumpy harold]$ ftp ftp.sendmail.org
Connected to ftp.sendmail.org (209.246.26.22).
220 services.sendmail.org FTP server (Version 6.00LS) ready.
Name (ftp.sendmail.org:harold): anonymous
331 Guest login ok, send your email address as password.
Password:
230- This directory contains sendmail 8.x source distributions. Those
230- interested in mirroring the sendmail distribution tree should read
230- the MIRROR file in this directory.
230-
230- The latest version is available in sendmail.8.12.2.tar.{z,gz,sig} --
```

230- the .Z file is compressed, the .gz file is the same bits gzipped, and  
230- the .sig file is a PGP signature for the uncompressed bits in either  
230- of the first two files. Please take ONLY ONE of the .Z or .gz files.  
230-

230- A commercial version of sendmail 8.11 including precompiled ``push  
230- button'' install and a GUI configuration and administration interface  
230- is available from Sendmail, Inc. (see <http://www.sendmail.com/>  
230- for details).

230-

230- Older versions are in sendmail.\${VER}.tar.{Z,gz,sig}. Except for the  
230- latest, these are unsupported by the Sendmail.ORG crew. The status of  
230- various interesting \${VER}s is:

230-

230- 8.12.2 Portability enhancements and minor bug fixes.  
230- 8.12.1 Fixes potential local security problem.  
230- 8.12.0 Enhanced security and performance; no more set-user-ID root.  
230- 8.11.6 Fixes command line processing security problem.  
230-       Support for STARTTLS and SASL encryption.  
230- 8.10.2 Detect and avoid a serious Linux capabilities security bug.  
230- 8.10.1 Bug fix release: avoids dangerous AIX 4.X linker behavior  
230- 8.10.0 Major new release: multiple queues, SMTP authentication, LDAP  
230-       integration, IPv6, enhanced SMTP status codes, and more.  
230- 8.9.3 header denial of service fixed. Minor fixes.  
230-

230- Since sendmail 8.11 and later includes hooks to cryptography, the  
230- following information from OpenSSL applies to sendmail as well.

230-

230- PLEASE REMEMBER THAT EXPORT/IMPORT AND/OR USE OF STRONG CRYPTOGRAPHY  
230- SOFTWARE, PROVIDING CRYPTOGRAPHY HOOKS OR EVEN JUST COMMUNICATING  
230- TECHNICAL DETAILS ABOUT CRYPTOGRAPHY SOFTWARE IS ILLEGAL IN SOME  
230- PARTS OF THE WORLD. SO, WHEN YOU IMPORT THIS PACKAGE TO YOUR  
230- COUNTRY, RE-DISTRIBUTE IT FROM THERE OR EVEN JUST EMAIL TECHNICAL  
230- SUGGESTIONS OR EVEN SOURCE PATCHES TO THE AUTHOR OR OTHER PEOPLE  
230- YOU ARE STRONGLY ADVISED TO PAY CLOSE ATTENTION TO ANY EXPORT/IMPORT  
230- AND/OR USE LAWS WHICH APPLY TO YOU. THE AUTHORS ARE NOT LIABLE FOR  
230- ANY VIOLATIONS YOU MAKE HERE. SO BE CAREFUL, IT IS YOUR RESPONSIBILITY.  
230-

230- \$Revision: 8.21 \$, Last updated \$Date: 2002/01/13 19:50:00 \$  
230 Guest login ok, access restrictions apply.

Remote system type is UNIX.  
Using binary mode to transfer files.

ftp> **cd pub/sendmail**  
250 CWD command successful.

ftp> **dir**

227 Entering Passive Mode (209,246,26,22,200,69)  
150 Opening ASCII mode data connection for '/bin/ls'.  
total 81460

drwxrwx--x	2	gshapiro	sendmail	512	Oct 17	18:54	.alpha
drwxrwx--x	2	gshapiro	sendmail	512	Jan 15	04:48	.beta
-rw-rw-r--	1	gshapiro	sendmail	2222	Jan 14	00:09	.message
-rw-rw-r--	1	gshapiro	sendmail	321	Jul 31	2001	FAQ
-rw-rw-r--	1	gshapiro	sendmail	9519	Jan 14	00:09	KNOWNBUGS
-rw-rw-r--	1	ca	sendmail	4117	Sep 8	16:22	LICENSE
-rw-rw-r--	1	gshapiro	sendmail	1510	Jul 31	2001	MIRROR
-rw-rw-r--	1	ca	sendmail	54971	Dec 19	19:10	PGPKEYS
-rw-rw-r--	1	ca	sendmail	426979	Jan 14	00:09	RELEASE_NOTES

```

-r--r--- 1 gshapiro sendmail      39672 Jul 15 2000 bsdworkshop93.ps
drwxrwxr-x 2 gshapiro sendmail      2048 Aug 28 00:21 past-releases
lrwxr-xr-x 1 ca     sendmail       21 Jan 14 00:09 sendmail-current.tar.Z ->
sendmail.8.12.2.tar.Z
lrwxr-xr-x 1 ca     sendmail       22 Jan 14 00:09 sendmail-current.tar.gz ->
sendmail.8.12.2.tar.gz
lrwxr-xr-x 1 ca     sendmail       23 Jan 14 00:09 sendmail-current.tar.sig ->
sendmail.8.12.2.tar.sig
-r--r--- 1 gshapiro sendmail      7233 Jul 15 2000 sendmail.8.10.0.AIX-SECURITY
-r--r--- 1 gshapiro sendmail      1757767 Jul 15 2000 sendmail.8.10.0.tar.Z
-r--r--- 1 gshapiro sendmail      1255157 Jul 15 2000 sendmail.8.10.0.tar.gz
-r--r--- 1 gshapiro sendmail      365 Jul 15 2000 sendmail.8.10.0.tar.sig
-r--r--- 1 gshapiro sendmail      4924 Jul 15 2000 sendmail.8.10.1.LINUX-
SECURITY
-r--r--- 1 gshapiro sendmail      1756872 Jul 15 2000 sendmail.8.10.1.tar.Z
-r--r--- 1 gshapiro sendmail      1254539 Jul 15 2000 sendmail.8.10.1.tar.gz
-r--r--- 1 gshapiro sendmail      365 Jul 15 2000 sendmail.8.10.1.tar.sig
-r--r--- 1 gshapiro sendmail      1760614 Jul 15 2000 sendmail.8.10.2.tar.Z
-r--r--- 1 gshapiro sendmail      1256459 Jul 15 2000 sendmail.8.10.2.tar.gz
-r--r--- 1 gshapiro sendmail      365 Jul 15 2000 sendmail.8.10.2.tar.sig
-r--r--- 1 ca     sendmail      1925764 Aug 20 2001 sendmail.8.11.6.tar.Z
-r--r--- 1 ca     sendmail      1374835 Aug 20 2001 sendmail.8.11.6.tar.gz
-r--r--- 1 ca     sendmail      366 Aug 20 2001 sendmail.8.11.6.tar.sig
-r--r--- 1 ca     sendmail      2543085 Sep  8 17:40 sendmail.8.12.0.tar.Z
-r--r--- 1 ca     sendmail      1783911 Sep  8 17:40 sendmail.8.12.0.tar.gz
-r--r--- 1 ca     sendmail      348 Sep  8 17:40 sendmail.8.12.0.tar.sig
-rw-r--- 1 ca     sendmail      2560266 Oct  1 16:00 sendmail.8.12.1.tar.Z
-rw-r--- 1 ca     sendmail      1790933 Oct  1 16:00 sendmail.8.12.1.tar.gz
-rw-r--- 1 ca     sendmail      348 Oct  1 16:00 sendmail.8.12.1.tar.sig
-rw-r--- 1 ca     ca          2603981 Dec 18 16:02 sendmail.8.12.2.Beta3.tar.Z
-rw-r--- 1 ca     ca          1824153 Dec 18 16:04 sendmail.8.12.2.Beta3.tar.gz
-rw-r--- 1 ca     ca          152 Dec 18 16:04
sendmail.8.12.2.Beta3.tar.sig
-rw-r--- 1 ca     sendmail      2614141 Jan 14 00:07 sendmail.8.12.2.tar.Z
-rw-r--- 1 ca     sendmail      1834935 Jan 14 00:07 sendmail.8.12.2.tar.gz
-rw-r--- 1 ca     sendmail      152 Jan 14 00:07 sendmail.8.12.2.tar.sig
-r--r--- 1 gshapiro sendmail      1467354 Jul 15 2000 sendmail.8.9.0.tar.Z
-r--r--- 1 gshapiro sendmail      1041425 Jul 15 2000 sendmail.8.9.0.tar.gz
-r--r--- 1 gshapiro sendmail      152 Jul 15 2000 sendmail.8.9.0.tar.sig
-r--r--- 1 gshapiro sendmail      172632 Jul 15 2000 sendmail.8.9.1.patch
-r--r--- 1 gshapiro sendmail      1475311 Jul 15 2000 sendmail.8.9.1.tar.Z
-r--r--- 1 gshapiro sendmail      1046322 Jul 15 2000 sendmail.8.9.1.tar.gz
-r--r--- 1 gshapiro sendmail      152 Jul 15 2000 sendmail.8.9.1.tar.sig
-r--r--- 1 gshapiro sendmail      12195 Jul 15 2000 sendmail.8.9.1a.patch
-r--r--- 1 gshapiro sendmail      5327 Jul 15 2000 sendmail.8.9.1a.patch.README
-r--r--- 1 gshapiro sendmail      284 Jul 15 2000 sendmail.8.9.1a.patch.sig
-r--r--- 1 gshapiro sendmail      409886 Jul 15 2000 sendmail.8.9.2.patch
-r--r--- 1 gshapiro sendmail      1499042 Jul 15 2000 sendmail.8.9.2.tar.Z
-r--r--- 1 gshapiro sendmail      1063534 Jul 15 2000 sendmail.8.9.2.tar.gz
-r--r--- 1 gshapiro sendmail      285 Jul 15 2000 sendmail.8.9.2.tar.sig
-r--r--- 1 gshapiro sendmail      123078 Jul 15 2000 sendmail.8.9.3.patch
-r--r--- 1 gshapiro sendmail      1492367 Jul 15 2000 sendmail.8.9.3.tar.Z
-r--r--- 1 gshapiro sendmail      1068290 Jul 15 2000 sendmail.8.9.3.tar.gz
-r--r--- 1 gshapiro sendmail      285 Jul 15 2000 sendmail.8.9.3.tar.sig
226 Transfer complete.

```

```
ftp> bin
200 Type set to I.

ftp> prompt
Interactive mode off.

ftp> get sendmail.8.12.2.tar.gz
local: sendmail.8.12.2.tar.gz remote: sendmail.8.12.2.tar.gz
227 Entering Passive Mode (209,246,26,22,200,70)
150 Opening BINARY mode data connection for 'sendmail.8.12.2.tar.gz' (1834935
bytes).
226 Transfer complete.
1834935 bytes received in 12 secs (1.5e+02 Kbytes/sec)
ftp> quit
221 Goodbye.
```

```
[harold@grumpy harold]$ ls -F
sendmail.8.12.2.tar.gz
```

*Extract the sendmail package from the downloaded tar archive file.*

```
[harold@grumpy harold]$ tar zxf sendmail.8.12.2.tar.gz
[harold@grumpy harold]$ ls -F
sendmail-8.12.2           sendmail.8.12.2.tar.gz
[harold@grumpy harold]$ cd sendmail-8.12.2/
```

*Now, lets set up a site configuration file to provide for the compilation of sendmail using the CMU Cyrus sasl client server authentication library.*

```
[harold@grumpy sendmail-8.12.2]$ cd devtools/Site
[harold@grumpy Site]$ vi site.config.m4
[harold@grumpy Site]$ cat site.config.m4
APPENDDEF(`conf_sendmail_ENVDEF', `'-DSASL')
APPENDDEF(`conf_sendmail_LIBS', `'-lsasl')
```

*Now, compile the sendmail package*

```
[harold@grumpy Site]$ cd ../..
[harold@grumpy sendmail-8.12.2]$ sh Build
Making all in:
/home/harold/sendmail-8.12.2/libsm
Configuration: pfx=, os=Linux, rel=2.4.9-21, rbase=2, rroot=2.4, arch=i686, sfx=,
variant=optimized
Using M4=/usr/bin/m4
Creating /home/harold/sendmail-8.12.2/obj.Linux.2.4.9-21.i686/libsm using
/home/harold/sendmail-8.12.2/devtools/OS/Linux
Including /home/harold/sendmail-8.12.2/devtools/Site/site.config.m4
Making dependencies in /home/harold/sendmail-8.12.2/obj.Linux.2.4.9-21.i686/libsm
```

```

make[1]: Entering directory `/home/harold/sendmail-8.12.2/obj.Linux.2.4.9-
21.i686/libsm'
rm -f sm_os.h
ln -f -s ../../include/sm/os/sm_os_linux.h sm_os.h
cc -M -I. -I../../include -DNEWDB assert.c debug.c errstring.c exc.c heap.c
match.c rpool.c strdup.c strerror.c strl.c clrerr.c fclose.c feof.c ferror.c
fflush.c fget.c fpos.c findfp.c flags.c fopen.c fprintf.c fpurge.c fput.c fread.c
fscanf.c fseek.c fwrite.c fwalk.c fwrite.c get.c makebuf.c put.c refill.c rewind.c
setvbuf.c smstdio.c snprintf.c sscanf.c stdio.c stroc.ungetc.c vasprintf.c
vfprintf.c vfscanf.c vprintf.c vsnprintf.c vsprintf.c vsscanf.c wbuf.c wsetup.c
string.c stringf.c xtrap.c strto.c test.c path.c strcasecmp.c strrevcmp.c signal.c
clock.c config.c shm.c mbdb.c strexit.c cf.c ldap.c nprop.c mpeix.c
>> Makefile
make[1]: Leaving directory `/home/harold/sendmail-8.12.2/obj.Linux.2.4.9-
21.i686/libsm'
Making in /home/harold/sendmail-8.12.2/obj.Linux.2.4.9-21.i686/libsm
make[1]: Entering directory `/home/harold/sendmail-8.12.2/obj.Linux.2.4.9-
21.i686/libsm'
cc -O2 -I. -I../../include -DNEWDB -c -o assert.o assert.c
cc -O2 -I. -I../../include -DNEWDB -c -o debug.o debug.c

----- snip -----

Making all in:
/home/harold/sendmail-8.12.2/vacation
Configuration: pfx=, os=Linux, rel=2.4.9-21, rbase=2, rroot=2.4, arch=i686, sfx=,
variant=optimized
Using M4=/usr/bin/m4
Creating /home/harold/sendmail-8.12.2/obj.Linux.2.4.9-21.i686/vacation using
/home/harold/sendmail-8.12.2/devtools/OS/Linux
Including /home/harold/sendmail-8.12.2/devtools/Site/site.config.m4
Making dependencies in /home/harold/sendmail-8.12.2/obj.Linux.2.4.9-
21.i686/vacation
make[1]: Entering directory `/home/harold/sendmail-8.12.2/obj.Linux.2.4.9-
21.i686/vacation'
rm -f sm_os.h
ln -f -s ../../include/sm/os/sm_os_linux.h sm_os.h
cc -M -I. -I../../sendmail -I../../include -DNEWDB -DNOT_SENDMAIL vacation.c
>> Makefile
make[1]: Leaving directory `/home/harold/sendmail-8.12.2/obj.Linux.2.4.9-
21.i686/vacation'
Making in /home/harold/sendmail-8.12.2/obj.Linux.2.4.9-21.i686/vacation
make[1]: Entering directory `/home/harold/sendmail-8.12.2/obj.Linux.2.4.9-
21.i686/vacation'
cc -O2 -I. -I../../sendmail -I../../include -DNEWDB -DNOT_SENDMAIL -c -o
vacation.o vacation.c
cc -o vacation vacation.o /home/harold/sendmail-8.12.2/obj.Linux.2.4.9-
21.i686/libsmdb/libsmdb.a /home/harold/sendmail-8.12.2/obj.Linux.2.4.9-
21.i686/libsmutil/libsmutil.a /home/harold/sendmail-8.12.2/obj.Linux.2.4.9-
21.i686/libsm/libsm.a -ldb -lresolv -lcrypt -lssl -ldl
groff -Tascii -man vacation.1 > vacation.0 || cp vacation.0.dist vacation.0
make[1]: Leaving directory `/home/harold/sendmail-8.12.2/obj.Linux.2.4.9-
21.i686/vacation'

```

[harold@grumpy sendmail-8.12.2]\$ **su -**

Password:

*Now, there are several things we need to do. First ts to create the special group and userid used by sendmail 8.12 to own the sendmail process and files. We also need to create a symbolic link so that the install procedure can find the man page directories. RedHat version 7 moved them and sendmail has not yet picked this up.*

```
[root@grumpy root]# groupadd -g 25 -r smmsp  
[root@grumpy root]# useradd -u 25 -r -g smmsp smmsp  
[root@grumpy root]# ln -s /usr/share/man /usr/man
```

*Backup the old sendmail executables and configuration files*

```
[root@grumpy root]# cd /usr/sbin  
[root@grumpy sbin]# cp -p sendmail sendmail.old  
[root@grumpy sbin]# cd /etc  
[root@grumpy etc]# cp -p sendmail.cf sendmail.cf.old
```

*Install the new version of sendmail*

```
[root@grumpy etc]# cd ~harold/sendmail-8.12.2/  
[root@grumpy sendmail-8.12.2]# sh Build install  
Making all in:  
/home/harold/sendmail-8.12.2/libsm  
Configuration: pfx=, os=Linux, rel=2.4.9-21, rbase=2, rroot=2.4, arch=i686, sfx=,  
variant=optimized  
Making in /home/harold/sendmail-8.12.2/obj.Linux.2.4.9-21.i686/libsm  
make[1]: Entering directory `/home/harold/sendmail-8.12.2/obj.Linux.2.4.9-  
21.i686/libsm'  
make[1]: Nothing to be done for `install'.  
make[1]: Leaving directory `/home/harold/sendmail-8.12.2/obj.Linux.2.4.9-  
21.i686/libsm'  
----- snip -----  
  
Making all in:  
/home/harold/sendmail-8.12.2/vacation  
Configuration: pfx=, os=Linux, rel=2.4.9-21, rbase=2, rroot=2.4, arch=i686, sfx=,  
variant=optimized  
Making in /home/harold/sendmail-8.12.2/obj.Linux.2.4.9-21.i686/vacation  
make[1]: Entering directory `/home/harold/sendmail-8.12.2/obj.Linux.2.4.9-  
21.i686/vacation'  
install -c -o bin -g bin -m 555 vacation /usr/bin  
install -c -o bin -g bin -m 444 vacation.0 /usr/man/man1/vacation.1  
make[1]: Leaving directory `/home/harold/sendmail-8.12.2/obj.Linux.2.4.9-  
21.i686/vacation'
```

*Find and kill the old sendmail*

```
[root@grumpy sendmail-8.12.2]# ps ax | grep sendmail
```

```
978 ? S 0:00 sendmail: accepting connections
18333 pts/1 S 0:00 grep sendmail
[root@grumpy sendmail-8.12.2]# kill 978
```

*Start the new sendmai, This also illustrates that sendmail 8.12 has moved the configuration file from /etc to /etc/mail*

```
[root@grumpy sendmail-8.12.2]# /usr/sbin/sendmail -bd -q1h
451 4.0.0 /etc/mail/sendmail.cf: line 0: cannot open: No such file or directory
[root@grumpy sendmail-8.12.2]# cd ~harold/send-mail-8.12.2/cf/cf
[root@grumpy cf]# cp generic-linux.cf /etc/mail/sendmail.cf
[root@grumpy cf]# /usr/sbin/sendmail -bd -q1h
[root@grumpy cf]# telnet localhost 25
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
220 grumpy.ucns.uga.edu ESMTP Sendmail 8.12.2/8.12.2; Thu, 21 Feb 2002 18:31:35 -
0500
quit
221 2.0.0 grumpy.ucns.uga.edu closing connection
Connection closed by foreign host.
```

```
[root@grumpy cf]# ps ax | grep sendmail
18342 ? S 0:00 sendmail: accepting connections
18347 pts/1 S 0:00 grep sendmail
```

```
[root@grumpy cf]# cd /etc/mail
[root@grumpy mail]# ls -F
maccess helpfile Makefile submit.cf
maccess.db local-host-names sendmail.cf trusted-users
domaintable mailertable sendmail.mc virtusertable
domaintable.db mailertable.db statistics virtusertable.db
```

```
[m[root@grumpy mail]# sendmail -bi
newaliases: cannot open /etc/mail/aliases: No such file or directory
[root@grumpy mail]# mv /etc/aliases /etc/mail
[root@grumpy mail]# sendmail -bi
/etc/mail/aliases: 41 aliases, longest 14 bytes, 413 bytes total
```

```
[root@grumpy mail]# mailq
/var/spool/mqueue is empty
Total requests: 0
```

*Now, let's test the new sendmail*

```
[root@grumpy mail]# sendmail -v harold@uga.edu
this is a test
•
```

```

harold@uga.edu... Connecting to localhost via relay...
220 grumpy.ucns.uga.edu ESMTP Sendmail 8.12.2/8.12.2; Thu, 21 Feb 2002 18:33:46 - 
0500
>>> EHLO grumpy.ucns.uga.edu
250-grumpy.ucns.uga.edu Hello localhost.localdomain [127.0.0.1], pleased to meet
you
250-ENHANCEDSTATUSCODES
250-PIPELINING
250-EXPN
250-VERB
250-8BITMIME
250-SIZE
250-DSN
250-ETRN
250-DELIVERBY
250 HELP
>>> MAIL From:<root@grumpy.ucns.uga.edu> SIZE=15
250 2.1.0 <root@grumpy.ucns.uga.edu>... Sender ok
>>> RCPT To:<harold@uga.edu>
>>> DATA
250 2.1.5 <harold@uga.edu>... Recipient ok
354 Enter mail, end with "." on a line by itself
>>> .
250 2.0.0 g1LNXknU018354 Message accepted for delivery
harold@uga.edu... Sent (g1LNXknU018354 Message accepted for delivery)
Closing connection to localhost
>>> QUIT
221 2.0.0 grumpy.ucns.uga.edu closing connection

```

*Ok, now we're done unless you need to be able to selectively  
relay mail from other sites. To do this, you need to re-build the  
sendmail.cf file with this option turned on.*

```

[root@grumpy mail]# cd ~harold/sendmail-8.12.2/cf/cf
[root@grumpy cf]# cp generic-linux.mc grumpy.mc
[root@grumpy cf]# vi grumpy.mc
[root@grumpy cf]# cat grumpy.mc

--- snip ---
OSTYPE(linux)dnl
DOMAIN(generic)dnl
FEATURE(access_db)dnl
MAILER(local)dnl
MAILER(smtp)dnl

[root@grumpy cf]# make grumpy.cf
rm -f grumpy.cf
m4 ./m4/cf.m4 grumpy.mc > grumpy.cf || ( rm -f grumpy.cf && exit 1 )
chmod 444 grumpy.cf

[root@grumpy cf]# cp grumpy.cf /etc/mail/sendmail.cf

```

*Use the text editor to edit the file /etc/mail/access, adding lines in accordance with the instructions in the README file found in sendmail-8.12.2/cf. In this case, I added one line to the default file, and you can see the results below:*

```
[root@grumpy cf]# cd /etc/mail
[root@grumpy mail]# vi access
[root@grumpy mail]# cat access
# Check the /usr/share/doc/sendmail-8.11.2/README.cf file for a description
# of the format of this file. (search for access_db in that file)
# The /usr/share/doc/sendmail-8.11.2/README.cf is part of the sendmail-doc
# package.
#
# by default we allow relaying from localhost...
localhost.localdomain      RELAY
localhost                  RELAY
127.0.0.1                  RELAY
harold.ucns.uga.edu      RELAY

[root@grumpy mail]# ps ax | grep sendmail
18342 ?      S      0:00 sendmail: accepting connections
18372 pts/1    S      0:00 grep sendmail
[root@grumpy mail]# kill 18342
[root@grumpy mail]# /usr/sbin/sendmail -bd -q1h
[root@grumpy mail]# exit
logout
[harold@grumpy sendmail-8.12.2]$ exit
Script done on Thu Feb 21 18:39:41 2002
```