

```
kill -9 `ps aux | awk '$1=="chavez" {print $2}'
```

---

```
$ write chavez
```

```
cd /etc
```

---

```
cp inittab inittab.dist # chmod a-w inittab.dist
```

---

```
$ su $ su -
```

```
passwd Works most of the time.
```

---

```
passwd root Solaris and FreeBSD systems  
when su'd to root.
```

---

```
lsuser -a sugroups root
```

---

```
chuser sugroups="system,admins" root
```

---

```
$ su root -c "eject /cdrom" Password: root password entered
```

```
cd sudo-source-directory
```

---

```
./configure --with-logpath=/var/log/sudo.log \
```

---

```
$ write username [tty] $ write chavez@hamlet $ wall $ smit -s /dev/null -l /dev/null ... #egrep  
'^task [a-z]|^ *execute' pm.tm task pm_get_ps { $ plod [text] $ plod -g hp-ux $ ls -l
```

## chown new-owner files

---

## chown harvey brass

---

## chown -R harvey /home/iago/new/tgh

---

## chown new-owner:new-group files

---

```
$ rm copper $ ls -l $ chmod u+w lead $ chmod a+w lead $ chmod a-w lead $ chmod a=r lead $
chmod u+w,og+r-w bronze brass $ chmod -R go-rwx /home/chavez Beyond the basics $ chmod -
R +r . $ chmod go= lead $ ls -lF -rw----- drwx----- -rwx----- $ chmod go+rX * $ ls -lF -rw-r--r--
drwxr-xr-x -rwxr-xr-x $ chmod o=g * $ chmod 754 pewter Specifying the default file mode $
umask 023 $ umask Displays the current value. 23 $ ls -l gold silver $ chmod +rwx gold $ chmod
-rwx silver $ ls -l gold silver -rwxr-xr-- 1 chavez chem -----w--wx 1 chavez chem
```

## chmod u+t /tmp

---

```
$ ls -ld /tmp
```

## chmod g+s /pub/chem2

---

```
chmod 4755 # chmod 2755 # chmod 6755 #
chmod 1777 # chmod 2745 # ls -ld -rwsr-sr-x -
rwxr-sr-x -rwxr-Sr-x drwxrwxrwt -rwsr-xr-x
```

---

```
$ ln index hlink $ pwd; cd ../htdocs $ cd ../bin $ ls -l /home/chavez/htdocs $ cd /home/chavez/
htdocs/../cgi-bin; pwd /public/web2/apache/cgi-bin $ ls -lF /var/adm/c*
```

**cd /var/adm**

---

**mkcdsl pacct**

---

**ls -l pacct**

---

**ln -s "../cluster/members/{memb}/adm/pacct" ./pacct**

---

**file \***

---

\$ long\_cmd & Stop foreground process. \$ long\_cmd ^Z Stopped \$ \$ jobs \$ fg %1 \$ fg %?em \$  
long\_cmd \$ bg \$ od data.raw

**/usr/sbin/ping hamlet**

---

\$ cd /dev; ls -l \*mouse

**mount /dev/disk0a /**

---

**mount /dev/disk1e /home**

---

\$ man umount fsck newfs \$ man -a intro \$ man -a chown

**makewhatis Most systems # makewhat /usr/  
share/man Solaris**

---

\$ ps -ef | grep "[q]uake" | awk '{print \$1}' \$ (date ; ps -ef | grep "[q]uake" | awk '{print \$1 " [" \$7 "]"}'  
\ | sort | uniq) >> quaked.users

# find / -user chavez -fstype 4.2 ! -name /dev/\* -ls I \

---

```
$ sys_doc > date | awk '{print $3 $2 $6}' . hostname .sysdoc $ date +junk_%d%b%  
y%H%M%S.junk junk_08Dec01204256.junk
```

## find starting-dir(s) matching-criteria-and-actions

---

```
$ find . -name *.c -print $ find /chem -size +2048 -mtime +30 -exec ls -l {} ; $ find /chem -size  
+2048 ( -mtime +30 -o -atime +120 ) -ls
```

```
find / ( -name a.out -o -name core -o -name '*~\
```

---

```
find /home /aux1 -type f -atime +30 -size +1000  
-print \ -name core -exec rm {} ;
```

---

```
find / -type f ( -perm -2000 -o -perm -4000 ) -  
print
```

---

```
find / ( -perm -2000 -o -perm -4000 ) -print | \ diff  
- files.secure
```

---

```
find /home/chavez -exec chown chavez {} ; \ -  
exec chgrp physics {} ;
```

---

```
find /chem -name '*.c' -exec mv {} /chem1/src ;
```

---

```
find /chem -name '*.c' -exec /usr/local/bin/prettify  
{ } ;
```

---

```
touch /tmp/starting_time
```

---

```
perform some operation
```

---

```
find / -newer /tmp/starting_time
```

---

```
ps -ef | grep "[q]uake" | awk '{print $2}' | xargs  
renice +10
```

---

**ps -ef | grep "[q]uake" | awk '{print \$1}' | xargs -n1 warn\_user**

---

**ps -ef | grep "[q]uake" | awk '{print \$1}' | \ xargs -i chargefee {} 10000**

---

\$ echo a b c d e f | xargs -n3 -i echo before {} after before a b c d e f after \$ echo a b c d e f |

xargs -i -n3 echo before {} after before {} after a b c \$ tail test00\* | more

On most systems, this command displays lines only from the last file. However, I can \$ ls -1 test00\* |

xargs -i /usr/bin/sh -c

\$ ls \*.dat | xargs -i /usr/bin/sh -c "sort -u -o {} {}" Creating Several Directory Levels at Once \$

mkdir -m 755 ./people \$ mkdir -m u=rwx,go=rx ./places \$ mkdir -m g+w ./things \$ mkdir -p ./a/b/c

```
cd /chem1
```

---

```
tar -cf - -C /chem olddir | tar -xvpf - # mv olddir  
newdir
```

---

```
mkdir /chem1/newdir
```

---

```
cd /chem1/olddir
```

---

```
tar -cvf - src bin data logfile.* .profile \
```

---

```
mkdir /chem1/newdir
```

---

```
cd /chem1/newdir
```

---

```
tar -cvf - -C /chem/olddir src/viewers/rasmol | tar  
-xvpf -
```

---

```
mkdir /chem1/newdir
```

---

```
find . -print | cpio -pdvm /chem1/newdir
```

---

```
cp -pr /chem/olddir /chem1
```

---

```
mv /chem1/olddir /chem1/newdir
```

---

```
$ dircmp /chem/olddir /chem1/newdir
```

# chroot /jail sendmail -bd -q10m

---

```
$ tar -cvf /dev/rmt1 /chem /chem1 > 24oct94_tar.toc & $ tail -f 24oct94_tar.toc $ echo * $ crontab  
mycron $ crontab -l >mycron $ vi mycron $ crontab mycron $ crontab -e
```

## crontab -e adm

---

## crontab -e -u adm

---

## daily general settings

---

```
logger -p auth.alert -t DOT_FILE_CHK \ "$user's  
$file is world-writeable"
```

---

```
$ dmesg | egrep 'downlup'
```



## Description: Cause (Solution)

---

**errclear 14**

---

**/usr/lib/errdemon -l**

---

**dia | egrep '^(Event seq)|(Entry typ)|(ASCII Mes.\*[a-z])' Event sequence number 10.**

---

**dia -e s:13 e:13**

---

**global settings**

---

**Syntax:**

---

**event**

---

**network events**

---

**swatch -c /etc/swatch.config -t /var/adm/  
messages**

---

**pkginfo -l SUNWbzip PKGINST: SUNWbzip**

---

**pkgchk -l SUNWbzip | grep ^Pathname: | awk '{print \$2}' /usr** Subdirectories in the package are created on /usr/bin install if they do not already exist. /usr/bin/bunzip2

---

**pkgchk -l -p /etc/syslog.conf Pathname: /etc/syslog.conf Type: edited file**

---

**pkgadd -d /cdrom/s8-software-companion/components/sparc/Packages SFWgcc**  
Removing an installed package is also very simple:

---

**pkgrm SFWbzip**

---

**swlist -s /dev/rmt/0m**

---

**swlist -l product**

---

**swlist -l subproduct MSDOS-Utils**

---

**MSDOS-Utils**

---

**lspp -l all | grep -i compil**

---

**installp -ac -d device [items | all]**

---

# **cd /usr/ports/security/tripwire # make && make install**

---

\$ gunzip mtools-3.9.7.tar.gz \$ tar xvf mtools-3.9.7.tar \$ cd mtools-3.9.7; ls \$ ./configure \$ more Makefile

## **Generated automatically from Makefile.in by configure. # Makefile for Mtools**

---

\$ su

## **make -n install Preview first!**

---

## **make install Proceed if it looks ok. ./mkinstalldirs /usr/local/bin**

---

\$ make

## **make install PREFIX=/usr/local**

---

## **Select the right libraries for your system.**

---

#LIBS = -lcurses

define a symbol for your OS if it hasn't got one.  
See sysdep.h. SYSDEFS = -DHPUX -Ac -Ac  
says to use the K&R Edition 1 version of C.

---

^D Continue boot process to multiuser mode.  
Tue Jul 14 14:47:14 EDT 1987 Boot messages  
from the initialization files. ...

---

bootlist -m normal cd1 hdisk0 hdisk1 rmt0

---

alog -f /var/adm/ras/bootlog -o

---

/sbin/fsck -p /dev/disk2e

---

^D

---

mount -o rw,remount /

---

mount -u -o rw /

---

\$ who -r

# telinit 6

---

## cd /sbin

---

## In init telinit

---

## set default init level -- multiuser mode with networking

---

\$ ls -C /etc/rc2.d

**and then the S-files:**

---

**cp -p /etc/rc /etc/rc.orig**

---

**cp -p /etc/rc.local /etc/rc.local.orig # chmod a-w /etc/rc\*.orig**

---

**cd /etc**

---

**mv rc rc.orig; cp rc.orig rc**

---

**mv rc.local rc.local.orig; cp rc.local.orig rc.local # chmod a-w rc.orig rc.local.orig**

---

**shutdown -y -g 15 -i s "system going down"  
Solaris # shutdown -y 15 HP-UX**

---

**shutdown -y -g 0 -i 6 "system reboot" Solaris #  
shutdown -y -r now HP-UX**

---

**shutdown +60 "System going down for regular  
maintenance"**

---

**shutdown -h -t 5 now**

---

**sync # sync**

**ps -ax | grep shutdown BSD-style**

---

**ps -ef | grep shutdown System V-style**

---

**ps -ef | grep shutdown**

---

**kill -9 25723**

---

**echo /etc/rc\***

---

**. /etc/rc.dist**

---

**ifconfig lo0 localhost up**

---

**ifconfig eth0 inet 192.168.1.9 netmask  
255.255.255.0**

---

**ifconfig tu0 192.168.9.6/24 Ethernet interface  
names**

---

**\$ ifconfig eth0 \$ ifconfig -l en0 en1 lo0**

**ifconfig hme0 plumb**

---

**ifconfig hme0 inet 192.168.9.2 netmask + up**

---

**ifconfig hme0 dhcp**

---

**route add -net 192.168.2.0 netmask  
255.255.255.0 192.168.3.100**

---

**route add -net 192.168.2.0 -netmask  
255.255.255.0 192.168.3.100 Linux uses a  
slightly different form for the route command:**

---

**route add -net 10.1.2.0 netmask 255.255.240.0  
gw 10.1.3.100 The gw keyword is required.**

---

**netstat -r Routing Table: IPv4**

---

**route delete -net 192.168.1.0 netmask  
255.255.255.0 192.168.2.100**

---

**\$ ping hamlet \$ ping duncan duncan is alive**



**arp -a**

---

**cd /etc**

---

**cp passwd passwd.sav Save a copy of the current file**

---

**chmod go= passwd.sav Protect the copy (or use a umask that does this) # emacs passwd**

---

\$ groups chavez users bio \$ newgrp chem \$ id \$ setgroups -a phys,bio \$ setgroups -r phys \$ setgroups -d phys \$ setgroups

**ls -l /etc/pass\* /etc/group\* /etc/ shad**

---

**chsh -s /bin/tcsh chavez**

---

**passwd chavez**

---

**mkdir /home/chavez**

---

**chown chavez.chem /home/chavez # chmod  
755 /home/chavez**

---

**cp /etc/skel/.bash\* /home/chavez**

---

**cp /etc/skel/.log{in,out} /home/chavez # cp /etc/  
skel/.tcshrc /home/chavez**

---

**chown chavez.chem /home/chavez/.[a-z]\***

---

**sample .login file**

---

**suppress core files**

---

**set default umask**

---

**enable messages via write**

---

**enable new mail messages**

---

**add items to the system path**

---

**set an application-specific environment variable**

---

**default printer**

---

**preferred editor**

---

**make more always clear screen**

---

**sample .cshrc file**

---

**the next alias shows the method for including a replaceable**

---

**command line parameter within an alias  
definition: !:1 => \$1**

---

**set shell variables to specified various features**

---

**remember 100 commands**

---

**save 100 commands across logins**

---

**never beep!**

---

**logout after 1 hour idle time**

---

**warn about overwriting files**

---

**don't interpret ^D as logout**

---

**define some aliases**

---

**try to correct mistyped commands**

---

**2 ^D's => logout**

---

**confirm rm \* commands**

---

**prompt is: hostname:dir-cmd\_num>>**

---

**remove id alias**

---

**chown -R chavez:chem /home/chavez**

---

**su - harvey**

\*\*\*\*\*

**\*\* Regular Maintenance from 20:00 - 23:00**

**today \*\***

\*\*\*\*\*

**harvey@phoenix /home/harvey>> clear**

---

**useradd -g chem -G bio,phys -s /bin/tcsh -c  
"Rachel Chavez" -m chavez**

---

**useradd normal options -x  
logon\_hours=Wk0900-1700 chavez**

---

**useradd -D -g chem -b /abode -f -1**

---

**usermod -m -l vasquez chavez**

---

**chsh -s /bin/ksh harvey**

---

**chfn -f "Harvey Thomas" -o 220 -p 555-9876 -h  
555-1234 harvey**

---

**chfn -f "Harvey Thomas" -r 220 -w 555-9876 \ -h  
555-1234 harvey**

---

**userdel chavez**

---

**groupadd socio**

---

**gpasswd -a chavez drama**

---

**gpasswd -A root,nielsen bio**

---

**adduser -s**

---

**#Changing user database information for zelda.**

**rmuser zelda**

---

**mkuser home=/home/chavez gecost="Rachel Chavez" pgrp=chem chavez**

---

**#!/bin/csh**

**rmuser -p chavez**

---

**mkgroup users=lasala,yale,cox,dubail webart**

---

**no username**

---

**send mail unless told not to**

---

**save username**

---

**force password change**

---

**loop over options**

---

**process each option**

---

**don't send mail**

---

**\$ echo cerise xyzzy | spell -l xyzzy \$taRTra#**

**passwd -n 7 -x 365 chavez**

---

**chage -m 7 -M 365 chavez**

---

**chuser maxage=52 minage=1 chavez**

---

**usermod -x password\_min\_change\_time=7 \**

---

**chage -l harvey Minimum: 0 Maximum: 99999  
Warning: 0 Inactive: -1 Last Change:**

---

## **Content controls**

---

### **Minimum password length**

---

**unshadow /etc/passwd /etc/shadow > /secure/  
pwdtest**

---

**chmod go= /secure/pwdtest**

---

**john -rules -wordfile:/usr/dict/many\_words /  
secure/pwdtest**

---

**kill -HUP pid**

---

**john -status**

---

**john -status:urgent**

**/etc/init.d/ldap start**

---

**Domain entry**

---

**Manager entry**

---

**ldapadd -x -D "cn=Manager,dc=ahania,dc=com"  
-W -f /tmp/entry0 Enter LDAP Password: Not  
echoed**

---

**ldapsearch -x -b 'dc=ahania,dc=com' -s base  
'(objectclass=\*)' version: 2**

---

**ahania,dc=com**

---

**ldapsearch -x -b 'dc=ahania,dc=com' -S cn \ '(&  
(objectclass=person)(cn=Mike\*))' \  
telephoneNumber description**

---

**ldapsearch -H ldap://bella.ahania.com -x -b  
'dc=ahania,dc=com' \ '(cn=Mike\*)'  
telephoneNumber description**

---

**ldapsearch -x '(cn=Mike\*)' telephoneNumber  
description**

---

**migrate\_passwd.pl /etc/passwd passwd.ldif**

---



**getent passwd**

---

**List of allowed hosts**

---

**Limit host access to the specified users**

---

**cd /usr/ssl/cert**

---

**openssl req -newkey rsa:1024 -x509 -days 365 \**

---

**openssl rsa -in slapd\_key.pem -out  
slapd\_key.pem # chown slapd-user.sldap-group  
sl\*.pem**

---

**chmod 600 sl\*.pem**

---

**ngrep 'bbb' port 636 or port 389**

---

**ldapsearch -H ldaps://10.0.49.212:636 -w bbb -x  
\ -D 'uid=a2,ou=People,dc=ahania,dc=com'  
'uid=a\*'**

---

**cd /bin**

---

**mv login login.save**

---

**ln -s opielogin login**

---

# opiepasswd -c chavez

---

```
$ opiekey 123 ab4567 $ opiekey -n 3 123 ab4567
```

## passwd -F /etc/d\_passwd /bin/sh

---

## chuser auth1=LOCALAUTH chavez

---

## chuser auth1=SYSTEM,LOCALAUTH chavez

---

## cp /bin/sh /tmp/.junk # chmod 4755 /tmp/.junk

---

```
$ echo $PATH /usr/ucb:/bin:/usr/bin:/usr/bin/X11:/usr/local/bin:$HOME/bin:.
```

## chmod u+s files setuid access # chmod g+s files setgid access

---

```
$ ls -lo /bin/passwd $ aclput -i metal.acl gold 356 | Chapter 7: Security $ aclget silver | aclput  
emerald $ ls *.dat *.old | xargs -i /bin/sh -c "aclget silver | aclput {}" $ chacl "(%.bio,r--) (hill.%,r-x)"  
silver $ chacl "%.bio = r, hill.% = rx" silver $ chacl "%.chem -w+r, harvey.% +r" silver $ chacl -r  
"@.% = 7, %.@ = rx, %.bio = r, %.% = " *.dat $ chacl -f silver *.dat $ chacl -r " cat acl.metal  
" *.dat
```

**setfacl -m user:harvey:r-x,group:geo:r-- gold Tru64**

---

**setacl -u user:harvey:r-x,group:geo:r-- gold**

---

**getfacl gold > acl; setfacl -f acl silver Linux**

---

**getfacl gold > acl; setfacl -S acl silver Tru64**

---

**getacl gold > acl; setacl -b -U acl silver**

---

**setfacl -m d x /metals Linux**

---

**setfacl -d -m o:r-x /metals Tru64**

---

**setacl -d -u o:r-x /metals**

---

**getfacl -R --skip-base / > backup.acl # setfacl --restore=backup.acl**

---

\$ crypt key1 < clear-file | crypt key2 | crypt key3 > encr-file \$ rm clear-file \$ gpg -kg \$ gpg --gen-key \$ gpg -ka key-file \$ gpg --import key-file \$ gpg -kxa key-file \$ gpg -a --export -o key-file username \$ gpg -e -s file [chavez@ahania.com](mailto:chavez@ahania.com) \$ gpg -e -s -r [chavez@ahania.com](mailto:chavez@ahania.com) file Simply encrypting a file for privacy purposes is much simpler; you just use the -c \$ gpg -c file \$ gpg -c file \$ gpg encrypted-file \$ gpg -d encrypted-file

**chuser roles=ManageAllUsers aefrisch**

---

\$ profiles Operator \$ auths | sed 's/,/ /g' | fold -s -w 30 | sort solaris.admin.printer.delete solaris.admin.printer.modify solaris.admin.printer.read solaris.admin.usermgr.pswd solaris.admin.usermgr.read #STYLE = -DPROCESS\_OPTIONS # Enable language extensions.

# nmap kali

---

```
grep '^[^:]*::' /etc/passwd
```

```
root::Nql27UZyZoq3.:0:0:SuperUser:/:/bin/csh
```

```
demo::7:17:Demo User:/home/demo:/bin/sh
```

```
::0:0:::
```

---

```
$ su ""
```

## No password prompt!

---

```
grep ':00*:' /etc/passwd
```

```
root:Nql27UZyZoq3.:0:0:SuperUser:/:/bin/csh
```

```
harvey:xyNjgMPtdlx*Q:145:0:Thomas G.
```

```
Harvey:/home/harvey:/bin/ksh
```

```
badguy:mksU/.m7hwkOa:0:203:Bad Guy:/home/
```

```
bg:/bin/sh larooti:lso9/.7sJUhhhs:000:203:George
```

```
Larooti:/home/harvey:/bin/csh
```

---

```
grep ':0:' /etc/passwd | grep -v root This won't  
catch everything.
```

---

```
diff /etc/passwd /usr/local/bin/old/opg
```

---

```
$ cd /etc; ls -l passwd shadow
```

**Make sure output file is empty. /usr/bin/cp /dev/null perm.ck**

---

**find / ( -perm -2000 -o -perm -4000 ) -type f -print**

---

**find / -type f ( -perm -2000 -o -perm -4000 ) \**

---

**\$ ls -lsid /etc/rc\* \$ cksum /bin/\* 09962 4 /bin/[ 05519 69 /bin/adb ...**

---

## **Pathname**

---

**\$ ps axww | egrep 'PID|harvey' \$ ps aux | egrep 'PID|smith' \$ ps -auxc | egrep 'PID|smith' \$ ps -ef**

---

**egrep '^[^ ]: \$login\_coun' /etc/security/user | \**  
**awk '{if (NF>1 && \$3>3) {print s,\$0}} ; NF==1**  
**{s=\$0}' chavez: unsuccessful\_login\_count = 27**

---

**\$ last \$ last chavez \$ last dalton console \$ last reboot \$ lastcomm \$ lastcomm chavez calculus \$**  
**acctcom \$ acctcom -u root -n vi COMMAND \$TTL time \$ORIGIN domain \$GENERATE range**  
**record-template \$INCLUDE path \$TTL 24h Lifetime for cached mappings. @ SOA IN**  
**ns.ahania.com. chavez.dalton.ahania.com. ( \$ORIGIN 88.168.192.in-addr.arpa. 1 IN CNAME**  
**1.sub0 \$ORIGIN 88.168.192.in-addr.arpa. \$GENERATE 1-30 \$ IN CNAME \$.0-31**

**Define a list of our name servers.**

---

**Define another list.**

---

**dnskeygen -H 128 -h -n apricot-mango.ahania.com. # dnssec-keygen -a HMAC-MD5 -b 128 -n HOST \**

---

**cat Kapricot-mango.ahania.com.+157+52961.private Private-key-format: v1.2**

---

**mknod /named-root/dev/null c 1 3 # mknod /named-root/dev/random c 1 8**

---

**/etc/init.d/named restart**

---

**kill `cat /var/run/named.pid`**

---

**rndc reload Reload configuration and zone file.**

---

**ndc reload**

---

**rndc -s apricot stop Terminate a remote name server process.**

---

**\$ nslookup > mango Server: Address: \$ nslookup \$ dig @bonita.ahania.com version.bind txt chaos ...**

**enable RIP**

---

**Dynamic DNS update commands**

---

**dadmin -h kumquat -q 192.168.44.23**

---

**touch /var/lib/dhcp/dhcpd.leases**

---

**dhcrelay 10.10.30.1**

---

**bprelay 10.10.30.1**

---

**stopsrc -g tcpip # stopsrc -s named # startsrc -s  
inetd # startsrc -g nfs**

---

**lssrc -g nfs Subsystem**

---

**netstat | grep -v localhost**

---

**netstat -i**

---

**netstat -i 5 | awk 'NR!=3 {print \$0}'**

---

**netstat -s ...**

---

**ping beulah 64 5**

---

**traceroute [www.fawc.org](http://www.fawc.org)**

---

**tcpdump -e -t host romeo**

---

**tcpdump -X -s 0 src mozart and dst salieri**

---

**tcpdump src ( mozart or salieri ) and tcp port 21  
and not dst vienna**

---

**cd /dev; MAKEDEV pfilt**

---

**pfconfig +p +c network-interface**

---

**snoop -o file -q # snoop -i file**

---

**snoop -v [-p n]**

---

**snmpget beulah somethingsecure sysLocation.0  
system.sysLocation.0 = "Receptionist Printer"**

---

**snmpget beulah somethingsecure laLoad.2  
enterprises.ucdavis.laTable.laEntry.laLoad.2 =  
1.22**

---

**snmpwalk beulah somethingsecure  
host.hrSystem  
host.hrSystem.hrSystemUptime.0 = Timeticks:  
(31861126)**

---



```
snmpset beulah somethingelse sysContact.0 s "
chavez@ahania.com " system.sysContact.0 = c
havez@ahania.com
```

---

```
snmptrap -v2c dalton anothername "
.1.3.6.1.6.3.1.1.5.3 \ ifIndex i 2 ifAdminStatus i 1
ifOperStatus i 1
```

---

```
snmpinfo -c somethingsecure -h beulah -m get
sysLocation.0 system.sysLocation.0 =
"Receptionist Printer"
```

---

```
snmp_request beulah somethingsecure get
1.3.6.1.2.1.1.6.0
```

---

## Net-SNMP-specific items: conditions for error flags

---

```
#keyw [args] limit(s) #view name #group grp name model sec. name #view name #community
#trap [version] community destination[:port] #service[host] =label;; when;;; notify;;;;; check-
command service[callisto]=TELNET;0;24x7;4;5;1;admins;960;24x7;0;0;0;;check_telnet service
[callisto]=PROCS;0;24x7;4;5;1;admins;960;24x7;0;0;0;;snmp_nproc!commune!250!400 service
[ingres]=HPJD;0;24x7;4;5;1;localhost;960;24x7;0;0;0;;check_hpjd
```

## pine configuration file

---

### set some options

---

start editor immediately when composing mail message

---

Make quoted messages in replies as short as possible

---

- *-muttrc* -

---

### PGP command formats for PGP 6.

---

Programs that message text is piped into prior to display display-filters= *BEGINNING*("-----  
*BEGIN PGP*") /usr/bin/pgp4pine -d -i TMPFILE #  
Programs that message text is piped into prior to sending sending-filters=/usr/bin/pgp4pine -e -i TMPFILE -r RECIPIENTS

---

### Post Office Protocol - Version 3

---

### Post Office Protocol - Version 3

---

### Internet Message Access Protocol

---

# Internet Message Access Protocol

---

```
$ echo | sendmail -bt -d0 $ telnet pauling 25
```

```
/sbin/init.d/sendmail restart
```

---

```
startsrc -s sendmail # refresh -s sendmail
```

---

```
cd build-dir
```

---

```
emacs test.mc
```

---

```
./Build test.cf
```

---

```
cp /etc/mail/sendmail.cf /etc/mail/  
sendmail.cf.save # cp test.cf /etc/mail/  
sendmail.cf
```

---

```
chmod 444 /etc/mail/sendmail.cf
```

---

```
kill -HUP head -1 /location/sendmail.pid
```

---

```
make test.cf
```

---

```
m4 ../m4/cf.m4 test.mc > test.cf
```

---

```
$ grep Mlocal /etc/sendmail.cf
```

**cd /etc/mail; makemap hash senders < senders.txt**

---

**mailq**

---

**sendmail -oQ/var/spool/save\_queue -q**

---

**mailstats**

---

**hoststat**

---

**telnet kevin 25**

---

**sendmail -v [chavez@ahania.com](mailto:chavez@ahania.com) < /dev/null**

---

**sendmail -bv chavez**

---

**sendmail -bt**

---

**sendmail -v -d11.2 trucks < /dev/null**

---

**/usr/sbin/sendmail -d27 lilith < /dev/null alias (lilith)**

---

**postfix reload**

---

**postmap hash:canonical**

---

**postmap virtual**

---

**telnet kevin.ahania.com 25**

---

**fetchmail mailer.notaol.com**

---

**Global parameters**

---

**Append log to modified messages.**

---

**Don't log to standard error also.**

---

**Keep logging brief.**

---

**Sanitize incoming shell scripts.**

---

**Sanitize active HTML content.**

---

**Sanitize forwarded messages.**

---

**Use type-based scanning.**

---

**We will define 3 groups.**

---

**Rewrite risky constructs.**

---

**Scan these file types for macros, viruses**

---

```
$score += 99 while ($buff =~ s/\000Macro recorded/x$1/i);
```

## cat mail-file | /path/sanitizer.pl config-file

---

```
$ vacation -l $ from $ grepmail -i hilton ~/Mail/conf/acs_w01 | grep -i telephone Telephone:  
619-231-4040
```

## ls -saC /chem

---

## mount /dev/dsk/c1d1s2 /chem # ls -saC /chem

---

## du -s /chem

---

## mkdir /users2

---

## mount /dev/dsk/c1t4d0s7 /users2

---

## mount -r /dev/dsk/c1t4d0s7 /mnt

---

```
$ fuser -u /dev/dsk/c1t1d0
```

**FreeBSD**

---

**device**

---

**Linux**

---

**device**

---

**HP-UX**

---

**device**

---

**Tru64**

---

**device**

---

**swap partition is defined in /etc/sysconfigtab**

---

**mount /chem**

---

**umount /dev/disk1 d**

---

**mount -a -t advfs**

---

**mount -tnomsdos,nfs -a**

---

**umount -h dalton**

---

**fsck /dev/rdisk1 e**

---

**fsck -F ufs -o p /dev/dsk/c0t3d0s2**

---

**reboot -n**

---

**mknod name l major minor**

---

\$ cd /dev/dsk; ls -l c1d\* Major, minor device numbers. \$ cd /dev/rdisk; ls -l c1d1\*



```
mknod /dev/dsk/c1d3s2 b 0 178 # mknod /dev/  
rdsk/c1d3s2 c 3 178
```

---

```
cd /dev
```

---

```
./MAKEDEV sdb
```

---

```
fdisk -i /dev/da1
```

---

```
newfs /dev/da1a
```

---

```
fsck /dev/da1a
```

---

```
growfs /dev/da1a
```

---

```
cd /dev; ./MAKEDEV sdp
```

---

```
fdisk /dev/sda # cfdisk /dev/sda
```

---

```
mkfs -t ext3 -j /dev/sda1
```

---

```
tune2fs -l /dev/sdb1 Filesystem magic number:  
0xEF53
```

---

```
tune2fs -i 0 -c 25 /dev/sdb1
```

---

```
tune2fs -j /dev/sdb2
```

---

**umount /dev/sdc1**

---

**e2fsck -f /dev/sdc1**

---

**resize2fs -p /dev/sdc1 200000**

---

**mkreiserfs /dev/sdb3**

---

**reiserfsck -x /dev/sdb3**

---

**#####**

**mount -o remount,resize=200000 /dev/sdc1**

---

**format /dev/rdisk/c0t2d0s2**

---

**newfs /dev/rdisk/c0t2d0s0**

---

**fsck -y /dev/rdisk/c0t2d0s0**

---

**dump 0 /dev/sda1**

---

**restore -t**

---

**mke2fs -b 4096 -j /dev/sda1**

---

**lsvg rootvg**

---

**lsvg -l rootvg**

---

**\$ lsdev -C -c disk**

**mkvg -y "chemvg" hdisk5 hdisk6**

---

**extendvg chemvg hdisk4**

---

**mklv -y "chome" chemvg 64**

---

**crfs -v jfs2 -g chemvg -a size=50000 -a  
frag=1024 -m /organic2 -A yes # mount /  
organic2**

---

**chfs -a size=+50000 /inorganic**

---

**umount /chem2**

---

**rmfs /chem2**

---

**rmlvcopy chlv2 2 hdisk4**

---

**shutdown -r now**

---

**chpv -v r hdisk4**

---

**reducevg chemvg2 hdisk4 # rmdev -l hdisk4 -d**

---

**mklv -y cdata -S 64K chemvg 125 hdisk5 hdisk6**  
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---

**mklv -c 2 -s s -w y biovg 500 hdisk2 hdisk3**

**mklv -y chome -ac chemvg 64**

---

**vgdisplay vg00**

---

**pvcreeate /dev/rdisk/c2t0d0**

---

**mkdir /dev/vg01**

---

**mknod /dev/vg01/group c 64 0x010000**

---

**vgcreate /dev/vg01 /dev/dsk/c2t0d0**

---

**vgcreate /dev/vg01 -g groupa /dev/dsk/c2t2d0 /  
dev/dsk/c2t4d0 # vgextend /dev/vg01 -g groupb  
/dev/dsk/c1t0d0 /dev/dsk/c1t1d0**

---

**lvlnboot -r -s /dev/vg01/swaplv**

---

**newfs /dev/vg01/rchemvg**

---

**lvcreate -n cdata -L 200 -m 1 -s g /dev/vg01**

---

**lvcreate -n tyger -L 400 -i 4 -l 64 /dev/vg01**

---

**showfdmn root\_domain Describe this domain.**

---

**mountlist -v root\_domain#root**

---

**showfsets usr\_domain**

---

**addvol /dev/disk/dsk2c chem\_domain # balance  
chem\_domain**

---

**mkfset chem\_domain bronze**

---

**mkfset chem\_domain silver**

---

**mount chem\_domain#bronze /bronze # mount  
chem\_domain#silver /silver**

---

**renamefset chem\_domain lead gold**

---

**voldiskadd dsk3 dsk4 ...**

---

**voldg -g dg1 adddisk dsk9 dsk10 dsk11**

---

**volassist -g dg1 make chemvol 2g dsk3 dsk4**

---

**volassist -g dg1 mirror chemvol init=active  
layout=nolog dsk5 dsk6 # volassist addlog  
chemvol dsk7**

---

**volassist -g dg1 make stripevol 2g layout=stripe nstripe=2 dsk3 dsk4** This command creates a two-way striped volume named stripevol.\* The following command will create a 3 GB RAID 5 volume:

---

**volassist -g dg1 make raidvol 3g layout=raid5 nstripe=5 disks**

---

**voledit -g dg1 set spare=on dsk9 # volwatch -s |**  
**[smadmin@ahania.com](mailto:smadmin@ahania.com)**

---

**metadb -a -f c0t0d0s7** Create initial state database replicas. **# metadb -a -c 2 c1t3d0s2** Add replicas on this slice.

---

**umount /docs**

---

**metainit d10 2 1 c0t0d0s6 1 c2t3d0s2** Add additional disk space.

---

**vi /etc/vfstab** Change the filesystem's devices to **/dev/md/[r]dsk/md10. # mount /docs**

---

**growfs -M /dev/md/rdsk/d10** Increase the filesystem size to the volume size.

---

**metainit d2 1 2 c1t1d0s2 c2t2d0s2 -i 64k**

---

**metainit d20 -f 1 1 c0t3d0s2 # umount /dev/dsk/  
c0t3d0s2**

---

**metainit d21 1 1 c2t1d0s2**

---

**metainit d22 -m d20**

---

**vi /etc/vfstab**

---

**mount /dev/md/dsk/d22 # metattach d22 d21**

---

**metaparam -r geometric -w parallel d22**

---

**metainit d30 -r disks -i 96k**

---

**metareplace -e d30 c2t5d0s2**

---

**metainit hsp001 c3t1d0s2 c3t2d0s2 #  
metaparam -h hsp001 d30**

---

**metainit d7 -p c2t6d0s2 2g**

---

**metainit d8 -p -e c2t5d0s2 3g**

---

**fdisk /dev/sdb1**

---



**pvccreate /dev/sdb1 /dev/sdc2**

---

**vgcreate vg1 /dev/sdb1 /dev/sdc2**

---

**lvcreate -L 800M -n chem\_lv vg1**

---

**mke2fs -j /dev/vg1/bio\_lv**

---

**umount /dev/vg1/bio\_lv**

---

**e2fsadm /dev/vg1/bio\_lv -L+100M**

---

**vinum create /etc/vinum.big.conf**

---

**newfs -v /dev/vinum/big**

---

**vinum create file**

---

**vinum init mirror.p1 Wait for command to finish.**  
**# vinum start mirror.p1**

---

**vinum list**

---

**vinum create file Create the volume.**

---

**vinum init safe.p0 Initialize the subdisks.**

---

**vinum create file**

---

**vinum init zebra.p0 zebra.p1 # vinum start  
zebra.p1**

---

\$ mediainit -v -i2 -f16 /dev/rdisk/c0t1d0 \$ newfs -n /dev/rdisk/c0t1d0 ibm1440 \$ doscp /dev/rdisk/  
c0d1s0:paper.txt paper.new

**fdformat /dev/fd0**

---

**mkfs -t msdos /dev/fd0 # mount /dev/fd0 /mnt**

---

**cp prop2.txt /mnt**

---

**umount /mnt**

---

**fdformat /dev/fd0**

---

**newfs\_msdos /dev/fd0 # mount /dev/fd0 /mnt #  
cp prop2.txt /mnt**

---

**umount /mnt**

---

\$ volcheck \$ fdformat -d -b g04 \$ volcheck \$ cp ~/proposals/prop2.txt /floppy/g96 \$ cp /floppy/  
g96/drug888.dat ./data \$ eject \$ mdir \$ mren prop43\_1.txt prop43\_1.old \$ mcopy a:refcard.doc .  
\$ mcopy proposal.txt a: \$ mmd data2 \$ mcopy gold\* a:data2 \$ mcopy "a:\data\*.dat" ./data  
Copying NA.DAT \$ mdel silver.dat

```
mount -t msdos /dev/hda1 /mnt # cd /mnt
```

---

```
tar -c -f /tmp/dos.tar *
```

---

```
umount /mnt
```

---

```
mount -t msdos /dev/hda1 /mnt # cd /mnt
```

---

```
tar -x -f /tmp/dos.tar
```

---

```
cd /; umount /mnt
```

---

```
mkdev -c cdrom -r cdrom1 -s scsi -p scsi0 -w  
5,0 cd0 available
```

---

```
crfs -v cdrfs -p ro -d cd0 -m /cdrom -A no
```

---

```
$ lsfs -v cdrfs
```

**mount**

---

**device**

---

**kill -QUIT 34216**

---

**mount /rings**

---

**mount -t nfs -o rw,hard,bg,intr duncan:/ether /mnt**

---

**exportfs -a**

---

**kill -HUP** `cat /var/run/mountd.pid`

---

**showmount -a brazil:/organic spain:/organic**

---

**automount -tl 600 /homes /etc/auto.homes /- /etc/auto.direct**

---

**kill** `ps -ea | grep automoun | awk '{print $1}'`

---

**\$ smbstatus**

```
cat /etc/passwd | mksmbpasswd.sh > /etc/samba/private/smbpasswd
```

---

```
mount -t smbfs -o  
username=user,password=xxx //vala/depot /  
win_stuff
```

---

```
mount_smbfs -l vala //chavez@vala/depot /mnt  
Password: Not echoed.
```

---

## remote share mount point type options

---

```
$10 $120 $70 $140 $300 $340 $150 $150 $700 $700 $0.25 $8 $5 $12 $80 $100 $0.85 $1 $8  
$40 $600 $550 $700 $1200 $1200 $2500 $3700 $900 $2600 $3900 $4000 $6000 $2300 $2700  
N/A N/A $8 $6 $12.50 $26 $6 $36 $45 $79 $85 $105 $70 $150 $65 $93 $2-3/GB $10/GB $ lsattr  
-E -H -l rmt0
```

```
chdev -l rmt0 -a block_size=1024 -a  
compress=no -a ret=no
```

---

```
$ tar -c /home $ tar -cf /dev/rmt1 /home /home2 /chem/public $ tar -cf /dev/rmt1 -C /home . -C /  
home2 . -C /chem public $ tar cvfX /dev/rst0 Dont_Save /home -l Other_User_Files -l Misc
```

---

```
#Archive=Device
```

---

```
$ tar xzf funsoftware.tgz $ find /home -print | cpio -o >/dev/rmt0 $ find /home -cpio /dev/rmt0 $  
find /home -mtime -1 ! -name *.o -print | cpio -o >/dev/rmt1 $ tar c1 find /home -mtime -1 ! -  
name '*.o' ! -type d -print $ touch /backup/home_full $ find /home -print | cpio -o > /dev/  
rmt0 $ touch /backup/home_incr_1 $ find /home -newer /backup/home_full -print | cpio -o > /dev/  
rmt0 $ pax -w -f /dev/rmt0 /home /chem $ find /home /chem -mtime -1 -print | pax -w -f /dev/rmt0  
$ pax -w -X -f /dev/rmt0 / $ dump option-letters corresponding-arguments filesystem $ dump 0sd  
s-argument d-argument filesystem
```

**fbackup -0u -f /dev/rmt/1m -i /chem**

---

**fbackup -1u -i /chem -i /bio -e /bio/med**

---

**fbackup -1u -f /dev/rmt/0m -f /dev/rmt/1m -i /chem**

---

**fbackup -0u -g /backup/chemists.graph -l /backup/chemists.TOC**

---

\$ dd if=/dev/rmt0 of=/chem/data/c70o.dat \ ibs=1024 fskip=2 conv=swab \$ mt [-f tape-device] command \$ mt -f /dev/rmt1 rewind \$ mt -f /dev/nrsa0 comp on density 0x26 \$ tar -xp /home/chavez/freeway/quake95.data \$ cpio -im ' quake95.data' < /dev/rmt0 \$ tar -xp /home/harvey \$ cpio -imd '/home/harvey' < /dev/rmt0 \$ pax -f /dev/rmt0 -v \$ pax -r '/h95/ .exe' \$ pax -r /home/chavez \$ pax -r -f my\_archive -c '.o' # pax -r -pe -f /dev/rmt0 \$ pax -r -s '^/home/chavez/,/home/harvey/, ' \ -f /dev/rmt0 /home/chavez \$ restore option-letters corresponding-arguments [files-and-directories]

**restore -x -f /dev/rmt1 chavez/mystuff others/myprogram**

---

\$ restore -i -f /dev/rmt1 restore > help \$ mt -f /dev/rmt0 rewind If necessary \$ mt -f /dev/nrmt0 fsf 2

**frecover -x -i /chem/fullerenes # frecover -r -f /dev/rmt/1m**

---

\$ dd if=/dev/rmt1 conv=swab | tar tvf - \$ today='date +%d%b%Y' \$ tar -cv /home > /backup/home\_full\_\$today.TOC \$ tar -cv /home | tee /backup/home\_full\_\$today.TOC \$ find /home -print | cpio -ov > /dev/rmt0 2> \$toc \$ cpio -itv < /dev/rmt0 > \$toc \$ find /home | cpio -o | tee /dev/rmt0 | cpio -t -i -v > \$toc #!/bin/csh

**bkup+toc - perform dump and verify tape/make TOC file**

---

**\$1 = filesystem**

---

**\$2 = dump level (default=0)**

---

**frecover -r -Nv -f /dev/rmt/0m > \$toc**

---

**fbackup -0u -f backuphost:/dev/rmt/1m -i /chem**  
**The Amanda Facility**

---

**fundamental parameters**

---

**incremental level bump parameters**

---

**number of tapes in use**

---

**#changerdev "/dev/whatever" #tpchanger "script-path" #runtapes 4**

**When media is unavailable, save this % of holding space # for degraded-mode incremental backups.**

---

**amount of space to use (+) or save (-); 0=use all (default) use -2 Gb Always leave this much space.**

---

**use 24-hour clock without punctuation**

---

**host**

---

**Win2K system**

---

**dump all alone**

---

**\$ amlabel Daily DAILY05 \$ amlabel Chem CHEM101 slot 5**

**amadmin Daily tape**

---

**amrecover Daily**

---

**\$CWD '/home/chavez/data' is on disk '/home' mounted at '/home'. 200 Disk set to /home.**



**mksysb -i /dev/rmt0**

---

**restore -s 4 -x -q -f /dev/rmt0 ./bin/csh ./etc/mf**

---

**savevg -i chemvg /dev/rmt1**

---

**restvg -q -f /dev/rmt1**

---

**restvg -q -s -f /dev/rmt1 hdisk4 hdisk5**

---

**restore -f /dev/rmt1 -T -q**

---

**restore -f /dev/rmt1 -x -q -d ./chem/src/h95**

---

**dd if=/cdrom/floppies/fixit of=/dev/rfd0c bs=36b**

---

**make\_recovery -p -A -d /dev/rmt/1mn**

---

**emacs /var/opt/ignite/recovery/arch.include #  
make\_recovery -r -A -d /dev/rmt/1mn -C**

---

**cd /**

---

**mt -t /dev/rmt/1mn fsf 1**

---

**tar xvf /dev/rmt/1m relative-pathname(s)**

---

**dd if=/boot/file of=/dev/fd0**

---

**dd if=/cdrom/disks/rescue of=/dev/fd0 bs=18k**

---

**cd /dev**

---

**./MAKEDEV tty4**

---

**mknod /dev/cul0p4 c 1 0x401 # mknod /dev/  
cua0p4 c 1 0x401**

---

**\$ hostname \$ tty \$ rlogin duncan**

**cap\_mkdb /usr/share/misc/termcap**

---

**\$ tset -m "?:vt100" TERM = (vt100) \$ TERM= tset - -Q -m "?:vt100" Bourne and Korn  
shells \$ export TERM \$ eval tset -sQ -m "?:vt100" \$ stty option [value] \$ grpe^H^H \$ stty  
erase ^h \$ stty -a**

**login prompt #next label**

---

**\$ chdev -1 tty0 -a login=enable -a speed=19200 -a term=vt100 \ -a  
runmodes='hupcl,cread,table3' \**

**chdev -l tty0 -a login=share ...**

---

**kill -HUP 1**

---

**to submit to the will of SAF. Why did we ever let them change inetd? # /usr/sbin/inetd -s**

---

**sacadm -l**

---

**sacadm -a -p mux0 -t ttymon -c /usr/lib/saf/  
ttymon \ -v ttyadm -V -y "MUX 0 ttymon" -n  
9999**

---

\$ pmadm -l -p zsmon Use -L for a compact format.

**pmadm -a -p zsmon -s ttyb -i root -f u -v  
ttyadm -V \**

---

**pmadm -a -p zsmon -s ttya -i root -f u -v  
ttyadm -V \**

---

\$ sttydefs -l 57600E ----- 57600E:57600 hupcl evenp:57600  
evenp::57600E -----

**sttydefs -a 57600i -n 57600i -i "57600 erase ^h"  
\ -f "57600 sane crt erase ^?"**

---

**sttydefs -r 1200**

---

\$ ps -t15

**cat file > /dev/ttyn**

---

**lsuser -fa ttys rlogin root root:**

---

**chuser ttys="/dev/lft,/dev/tty0" rlogin=false root**

---

**chuser ttys="!/dev/tty0,!/dev/tty1 " rlogin=false  
root**

---

**\$ sendfax -s na-let \ -T 5 -t 2 \**

**faxstat -s -l List faxes to send. HylaFAX  
scheduler on dalton.ahania.com: Running**

---

**faxstat -r -l List faxes that have been received.  
HylaFAX scheduler on dalton.ahania.com:  
Running**

---

**\$ faxrm 4 \$ faxrm -a -h mahler 28 Password:**

**su chavez -c "faxrm 4"**

---

**\$ faxalter -p bulk -a 21:00 24**

**faxinfo fax00027.tif /var/spool/fax/recvq/  
fax00027.tif:**

---

**faxadduser -a olympus mercury This is the  
resulting entry:**

---

**faxadduser -a olympus 'mercury@.\*ahania.com'**

---

**dmesg | grep usb**

---

**usbdevs**

---

**mount -t msdos /dev/da0s4 /zip**

---

**disklabel -w -r da0 zip250**

---

**newfs /dev/da0c**

---

**mount -t ufs /dev/da0c /somewhere**

---

**lsusb | grep Bus**

---

**usbmodules --device /proc/bus/usb/001/002  
usbmouse**

---

**mount -t vfat /dev/sda4 /zip**

---

**mount -F pcfs /dev/dsk/c1t0d0s0:c /zip**

**lprm -P ps 15**

---

**lprm -P plot -**

---

**lpc topq ps 12**

---

**lpc lpc>**

---

**lpc**

---

**ps aux | grep lpd**

---

**kill -9 208**

---

**rm -f /dev/printer /var/spool/lpd.lock**

---

**/usr/lib/lpd**

---

**/etc/init.d/lpd restart**

---

**laser printer**

---

**cd /var/spool/lpd**

---

**mkdir newps**

---

**chown daemon.daemon newps**

---

**chmod 755 newps**

---

**ls -ld newps**

---

**touch /var/adm/lp\_acct/ps3**

---

**chown daemon /var/adm/lp\_acct/ps3 # chmod 755 /var/adm/lp\_acct/ps3**

---

**lpc up ps3**

---

**/usr/sbin/lprsetup**

---

**lpadmin -dPS2**

---

**\$ lpstat -d**

**lpstat -uchavez,jones**

---

**\$ lpstat -pPS,LP2 \$ lpstat -alaser**

**cancel PS2 PS3 -uchavez -uharvey**

---

**lpmove request-IDs new\_dest # lpmove  
old\_dest new\_dest**

---

**reject PS # accept PS**

---

**disable -r"Changing toner cartridge; back by 11"  
PS # lpstat -pPS**

---

**enable PS**

---

**\$ lpstat -r scheduler is running**

**lpshut**

---

**/sbin/init.d/lp start**

---

**\$ lpadm -pPS4 -ePS3 -v/dev/ttd2 \$ lpadm -pWorkhorse -v/dev/ttd5 -mlaserjet4**



# **lpadmin -xSlow Managing device classes**

---

## **lpadmin -pPS2 -claser**

---

## **lpadmin -pPS1 -rlaser**

---

## **lpadmin -pPS7 -v/dev/ttd2 -mpostscript -claser**

---

## **lpadmin -pPS0 -g2**

---

## **lpalt -p7 PS0-21**

---

## **lpusers -d15**

---

\$ lp -dlaser -q25 long\_file \$ lp -dlaser -q10 imp\_file

**lpusers -d15**

---

**lpusers -q10**

---

**lpusers -q5 -uchavez,wang # lpusers -q0 -  
uharvey**

---

**lpusers -ustein**

---

**lp -iPS-313 -q2**

---

**lp -iPS-314 -Himmediate**

---

**lp -iPS-314 -Himmediate # lp -iPS-209 -Hhold**

---

**lp -iPS-209 -Hresume Printer interface programs**

---

**#!/bin/sh #!/bin/sh cat \$6 2>&1**

**Construct the banner page unless suppressed**

---

**Print the files**

---

**lpadmin -phamlas -v/dev/null -mrmodel -ob3 -ormhamlet -orplaser**

---

**lpadmin -pColor -shamlet!dj200**

---

**lpadmin -pdj200 -shamlet**

---

**lpadmin -php4k -v/dev/null -mnetstandard -o protocol=tcp \ -o dest=engprt**

---

**accept PS3; enable PS3**

---

**lpadmin -pPS1 -uallow:duncan!all,hamlet!all**

---

**lpadmin -plaser -udeny:!harvey,wang**

---

**lpadmin -pPS1 -udeny:duncan!idaho**

---

**lpadmin -p exp2 -v /dev/term/b -c exper \**

---

**lpalt -n1 -p7 -dPS6 laser-23 request id is PS6-78 (1 file)**

---

**lpana**

**qcan -P laser -X**

---

**qmov -m laser -# 8**

---

**qmov -m laser -P inkjet**

---

**qmov -m laser -P inkjet -u chavez**

---

**qhld -# 8**

---

**qhld -P laser**

---

**qhld -r -# 8**

---

**qhld -r -P laser**

---

**enq -# job-number -R new-priority**

---

**enq -# 45 -R 22**

---

**qadm -D laser:lp0**

---

**chque -q laser -a "up = FALSE"**

---

**chgsys -s qdaemon -O Turn off autorestarting**

---

**enq -G Stop the queueing subsystem**

---

**lssrc -s qdaemon**

---

**lsvirprt -q queue -d device | more** Creating and modifying print queues

---

**/usr/lib/lpd/pio/etc/piomkpq -A local -p generic -v osp \ -s parallel -r ppa0 -w 0** Parallel port information

---

**/usr/lib/lpd/pio/etc/piomkpq -A local -p generic \**

---

**chque -q laser -a "discipline = sjn"**

---

**chqueuedev -q laser -d lp0 -a "header = never"**

---

**rmqueuedev -q tek -d lp2 # rmque -q tek**

---

**lsdev -C -l lp2**

---

**startsrc -s lpd**

---

**kill -9 pid-of-lpd-process # /usr/lib/lpd**

---

**lpshut**

---

**/etc/init.d/lp start**

---

**enq -G**

\$ lpr -Pmatisse@painters files

**lpc class laser check**

---

**lpc class laser off**

---

**lpc class laser A**

---

**lpadmin -plj4 -D"Finance LaserJet" -L"Room 2143-A" \ -vsocket://192.168.9.23 -mlaserjet.ppd**

---

**grep found no matches**

---

**Look for extra system accounts**

---

**opg is the previously saved copy**

---

**lines only in /etc/passwd**

---

**lines only in ./opg**

---

**\$1 = cutoff in blocks for new directories**

---

**\$2 = cutoff as block change for old directories #**

**\$3 = starting directory**

---

**\$4 = flags to du**

---

**ignore blank lines**

---

# Assumes IDE disks.

---

```
#!/bin/csh
```

## doc\_sys - document system configuration--AIX version

---

```
$ ls -l /usr/local/admin/mail/last_lucia #!/usr/bin/perl -w Executable location varies. # dr - copy all the files on a DOS diskette
```

## remove newline char

---

## loop until an argument doesn't begin with a "-"

---

```
#!/usr/bin/perl -w
```

## wgrep - windowed grep utility

---

```
$before = 3; $after = 3; $show_stars = 0; $show_nums = 0; $sep = "*****\n"; $show_fname = 1; $show_sep = 1;
```

## default window size

---

```
$after = 0; $fhandle = $file eq "STDIN" ? STDIN : NEWFILE; $lnum = "00000"; $nbef = 0; $naft = 0; $matched = 0; $matched2 = 0;
```



**Jump to LOOP label**

---

**loop over the lines in the file**

---

**increment line number**

---

**we're printing the match window**

---

**if current line matches pattern**

---

**reset the after window count,**

---

**print preliminary stuff,**

---

**and print the line**

---

**current line does not match**

---

**end else not in after window**

---

**end else curr. line not a match**

---

**end if we're in a match**

---

**after window is done**

---

**no longer in a match**

---

**reset the after window count**

---

**end elseif before window is nonzero**

---

**end else not in a match**

---

**end while loop over lines in this file**

---

**end foreach loop over list of files**

---

**end of script proper**

---

**we're still looking for a match**

---

**we found one**

---

**so set match flag**

---

`$print_flag = $_[0]; $i = 0; $j = 0;`

**print before window**

---

**end while**

---

**end if print\_flag**

---

**clear line\_buf array**

---

**end of subroutine**

---

**Extract the date from line 1.**

---

**Window title.**

---

```
$label=$main->Label(-text => "Message of the Day"); $label->pack;
```

**Window's text area.**

---

```
$text=$main->Scrolled('Text', -relief => "sunken", $text->insert("1.0", "$text_block"); $text->pack(-side=>"top", -expand=>1, -fill=>"both");
```

**Window's status area (bottom).**

---

```
$status = $main->Label(-text=>"Last updated on $date", $status->pack(-side=>"top", -fill=>"x");
```

**Add a Close button.**

---

```
$button=$main->Button(-text => "Close Window", $button->pack; #!/usr/local/bin/expect  
Executable location may vary. # run_test_user - check security of user acct
```

**run the Unix clear command**

---

**run the specified command**

---

**put terminal in raw mode**

---

**wait for a character**

---

**get the root password (once!)**

---

**assign password to variable**

---

**turn off echoing**

---

**prompt for password**

---

**get and remember it**

---

**turn echo back on**

---

**ssh failed**

---

**just go on to next host**

---

**got a prompt**

---

**install new files**

---

**regular prompt: su failed**

---

**exit su shell**

---

**wait for prompt**

---

**all done with this host**

---

**accept anything**

---

**terminate spawn command**

---

**end for loop**

---

**success, so set done to 1**

---

**line in use; wait a bit**

---

**poll failed so try again**

---

**end expect**

---

**end while**

---

`#include <stdio.h> #include <sys/types.h> #include <unistd.h> main(argc,argv)`

**cfrun smiley toby percy**

---

**cfrun -v -- -- linux solaris**

---

**end cell A**

---

**listen for connections**

---

**send input to cell to this address**

---

**input map: multiplex input**

---

**output map: set destination for inputs**

---

**end cell sw**

---

**chat\_cli.stem**

---

**create a portal for communicating with other hubs**

---

**listen for messages from other hubs**

---

**accept messages from any host**

---

**define cell attributes**

---

**target switch cell**

---

# target hub

---

# label string

---

# called when the cell is created (boilerplate code)

---

# called whenever data is received by the cell

---

# switch cell name

---

# chat server hub name

---

```
$ nroff -man file | more $ ps -ef $ ps -el | head -1 ; ps -el | sort -nr10 | head -5 $ pstree init+-  
alarmd $ ls /proc/1234 $ cat /proc/cpuinfo
```

# cd /proc/sys/kernel # cat panic

---

# echo "60" > panic

---

```
$ ulimit -a $ ulimit -Ha time(seconds) file(blocks) data(kbytes) stack(kbytes) memory(kbytes)  
coredump(blocks) $ ulimit -t unlimited $ ulimit -m 65536
```

# kill [-signal] pids

---

# killall -KILL find Processes that won't die

---

```
$ /bin/nice - [[-] n] command $ /bin/nice -6 bigjob
```

**nice -5 bigjob**

---

**/bin/nice --5 bigjob**

---

\$ vmstat interval [count]

**renice 5 8201**

---

\$ renice -n 12 8201

**renice -n 10 3769**

---

**ps -l -p 3769**

---

**prctl -s -p new-pri -i pid proc-id**

---

**prctl -s -p -5 -i pid 8733**

---

**prctl -s -p -5 -i ppid 8720**

---

**schedtune -r 15 -d 15**

---

**schedtune -t 1**

---

\$ disadmin -g -c TS



# Time Sharing Dispatcher Configuration

---

**ts\_quantum ts\_tqexp ts\_slpret ts\_maxwait  
ts\_lwait PRIORITY LEVEL**

---

**dispadmin -c TS -s /etc/ts\_sched.new**

---

**priocntl -s -m -5 27163**

---

**sysconfig -m proc**

---

**sysconfig -q proc autonice\_penalty**

---

**sysconfig -Q proc autonice\_penalty**

---

**sysconfig -r proc autonice\_penalty=6**

---

**\$ pagesize 4096 \$ free -m -o \$ vmstat 5 4 \$ vmstat 5 procs \$ vmstat 5 procs**

**schedtune**

---

**vmtune**

---

**of remote pgs sched-pageout = 0**

---

**sysctl kern.maxprocperuid kern.maxprocperuid:  
531**

---

**sysctl kern.maxprocperuid=64  
kern.maxprocperuid: 531 -> 64**

---

**echo "5 33 80" > /proc/sys/vm/buffermem  
Solaris**

---

**kstat -m unix -n system\_pages | grep 'free '  
cachefree 1966 Units are pages. lotsfree 1966**

---

**\$ lsps -a**

**swapinfo -tam**

---

**mkfile 50m /chem/page\_1**

---

**swap -a /chem/page\_1 0 102400**

---

**swapon -l 5000 -r 10000 /chem**

---

**lvcreate -l 125 -n swap2 -C y -r n /dev/vg01 #  
swapon /dev/vg01/swap2**

---

**dd if=/dev/zero of=/swap1 bs=1024 count=8192  
# mkswap /swap1 8192**

---

**sync; sync**

---

**swapon /swap1**

---

**dd if=/dev/zero of=/swap1 bs=1024 count=8192  
Create 8MB file.**

---

**vnconfig -e vnc0 /swap1 swap Create pseudo  
disk /dev/vn0c**

---

**mkps -a -n -s 50 chemvg**

---

**chps -s 10 paging01**

---

**swap -d /dev/dsk/c1d1s1 0 # swap -d /chem/  
page\_1 0**

---

**rmpps paging01**

---

**\$ iostat 6 \$ sar -d interval [count] \$ sar -d 5 10**

**lvcreate -L 800M -n bio\_lv -r 8 -C y vg1 The  
valid range for -r is 2 to 120.**

---

**chdev -l sys0 -a maxpout=33 -a minpout=16**

---

**\$ du -k /home/chavez \$ du -k -s /home/chavez 34823 /home/chavez \$ du -k / | sort -rn**

**quot file-system**

---

**quot / /dev/sd0a (/): 6472 root 5234 bin**

---

**\$ find / -name ".BAK." " -o -name "~" -print**

```
find / /bio /corp -atime +7 ( -name ".BAK.*" \
```

---

```
cat /dev/null > /var/adm/sulog
```

---

```
cd /var/adm
```

---

```
tail -100 sulog >tmp # cat tmp > sulog
```

---

```
cd /chem
```

---

```
touch quotas
```

---

```
chmod 600 quotas
```

---

```
edquota username(s)
```

---

```
edquota -p chavez wang harvey Setting the soft  
limit expiration period
```

---

```
quotaon filesystem # quotaon -a
```

---

```
quotaon /chem
```

---

```
repquota -v /chem
```

---

```
$ quota -g chem $ netstat -s -p tcp Output shortened. tcp: $ nfsstat -rc Client rpc:
```

**cd /**

---

**mkdir -p /usr/src/sys If not already present. #  
mount /cdrom**

---

**cat /cdrom/src/ssys.[a-d]\* | tar xzvf -**

---

**shutdown -r now**

---

**bcheckrc or lsmbstartup # sizer -n NEWDEVS**

---

**cd /usr/src/sys/i386/conf # cp GENERIC  
NEWKERN**

---

**chmod +w NEWKERN**

---

**emacs NEWKERN**

---

**cd /usr/sys/conf**

---

**cp GENERIC NEWKERN**

---

**chmod +w NEWKERN**

---

**emacs NEWKERN [/tmp/NEWDEVS]**

---

**#options QUOTA Tru64**

# **config NEWKERN**

---

```
cd ../../compile/NEWKERN # make depend
```

---

```
make
```

---

```
mv /kernel /kernel.save # make install
```

---

```
doconfig -c NEWKERN # cd ../NEWKERN
```

---

```
make depend
```

---

```
make vmunix
```

---

```
mv /vmunix /vmunix.save # cp ./vmunix /
```

---

```
sysctl -a
```

---

```
sysctl kern.maxfiles=1066 kern.maxfiles: 1064 -  
> 1066
```

---

```
boot0cfg -B /dev/ad0
```

---

```
boot0cfg -B -m 0x4 /dev/ad0
```

---

```
disklabel -B /dev/ad0s1
```

---

```
sysconfig -s
```

---

**sysconfig -m | grep dynamic hwautoconfig:  
dynamic**

---

**sysconfig -Q lsm Parameters for the Logical  
Storage Manager lsm:**

---

**sysconfig -q lsm Enable\_LSM\_Stats lsm:**

---

**sysconfig -r lsm Enable\_LSM\_Stats=1  
Enable\_LSM\_Stats: reconfigured**

---

**cd /stand**

---

**mv vmunix vmunix.save**

---

**cd build**

---

**/usr/sbin/sysadm/system\_prep -v -s system**

---

**kmtune -s var=value -S /stand/build/system**

---

**mk\_kernel -s ./system -o ./vmunix\_new**

---

**kmupdate /stand/build/vmunix\_new**

---

**mv /stand/system /stand/system.prev**

---

**mv /stand/build/system /stand/system**



**sysdef**

---

**cp /boot/vmlinuz /boot/vmlinuz.save**

---

**cd /usr/src**

---

**bzip2 -dc linux-2.4.x.tar.bz2 | tar xvf -**

---

**for p in patch-list; do**

---

**cd /usr/src/linux**

---

**cp arch/i386/config.in{,.save}**

---

**cp .config .config.save**

---

**make mrproper**

---

**make xconfig**

---

**ls -ld /usr/include/{linux,asm}**

---

**ls -ld include**

---

**make dep**

---

**make clean**

---

**emacs Makefile**

---

**make bzImage # make install**

---

**make modules**

---

**make modules\_install**

---

**mkinitrd /boot/initrd-suffix suffix**

---

**lilo -C /etc/lilo.conf**

---

**first boot selection**

---

**kernel argument for ancient Sony CD-ROM**

---

**another Linux boot selection**

---

**a Windows 2000 selection**

---

**lilo -b /dev/hda1 -C /etc/lilo.conf**

---

**dd if=/dev/hda2 of=linux.ldr bs=512 count=1**

---

**lilo -r /mnt The boot.message file**

---

**grub-install '(hd0)'**

---

**grub-install -root-directory /boot '(hd0)'**

---

**mount -t msdos /dev/fd0 /floppy Mount floppy. #  
cp /boot/vmlinuz /floppy Copy kernel.**

---

**umount /floppy**

---

**syslinux /dev/fd0 Add loader program to floppy.**

---

**modinfo -d 3c59x Description**

---

**map generic Ethernet interface to the specific  
device type alias eth0 3c59x**

---

**lsattr -EHl sys0**

---

**chdev -l sys0 -a maxuproc=500**

---

**cd /var/adm**

---

**/usr/sbin/accton**

---

**mv pacct pacct.sav**

---

**cat /dev/null > pacct**

---

**/usr/sbin/accton pacct**

---

```
sa -s pacct.sav > /dev/null # rm -f pacct.sav
```

---

```
mv /var/adm/acct /var/adm/acct.sav # touch /  
var/adm/acct
```

---

```
sa -s /var/adm/acct.sav >/dev/null # rm -f /var/  
adm/acct.sav
```

---

```
sa 11238 4299 12648 6489 4
```

---

```
sa -D 225 4299 9205
```

---

```
sa -b -r
```

---

```
sa -m
```

---

```
sa -l 11238 4299 12648
```

---

```
sa -f -v 100
```

---

```
ac
```

---

```
ac chavez wang fine total 1588.65
```

---

```
ac -d
```

---

```
ac -d -p chavez wang
```

---

**cd /var/adm/acct**

---

**mkdir -m 755 fiscal nite sum # chown adm.adm  
fiscal nite sum**

---

**chargefee chavez 10**

---

**chfs -a accounting=true /chem**

---

**/bin/su - adm -c /usr/sbin/acct/startup**

---

**OF PROCS**

---

**DISK SAMPLES**

---

**projadd -c "Animation Project" -U chavez -G  
grarts,design -p 105 animate**

---

**projadd cad**

---

**projmod -U chavez,wong animate**

---

**projmod -l cae cad**

---

**projdel y2k**

---

**projects chavez default chemdev animate**

---

\$ newtask -p animate

**acctadm -e extended,host,mstate -f /var/adm/  
exact/task task**

---

**acctadm -e extended,host,mstate -f /var/adm/  
exact/pacct process**

---

**acctadm**

---

**upacct cmds.hamlet -p /var/adm/pact**

---

**upacct cmds.0 cmds.hamlet cmds.dalton  
cmds.garden**

---

**ucomm.sh chavez l510.exe -- tail -- top --**

---

**pac -m -p0.12 -Plistings**

---

#!/bin/sh \$ cat show\_shift #!/bin/sh \$ show\_shift a1 a2 a3 a4 a1 a2 a3 \$0 refers to the command or script name, as in this example: \$? \$\$ \$! \$ cat braces #!/bin/sh \${var-string} \${var+string} \${var=string} \${var?string} \$var string \$var string (set var=string) \$var (display var:string only) \$ name=rachel \$ echo \${name-tatiana} \$ echo \${name2-tatiana} \$ echo \${name=tatiana} \$ echo \${n2=tatiana}; echo \$n2 tatiana \$ echo \${name+tatiana} \$ echo name3=\${name3+tatiana} name3= \$ name4=\${name3?"no name given"} name3: no name given \$ echo name4=\$name4 \$ dir=\${name- pwd }; echo \$dir rachel \$ dir=\${name3- pwd }; echo \$dir /home/chavez \$ names="applepearplum" \$ echo \${names:5} pearplum \$ echo \${names:5:4} pear \$ echo \${names:(-4):4} plum \$ names="applepearplum" \$ echo \${names#apple} pearplum \$ echo \${names#a p} \$ echo \${names#pear} applepearplum \$ echo \${names##a p} Remove longest match. lum \$ echo \${names%%e\*m} appl

## extract service name

---

```
$ names="applepearplum" $ echo ${names/p/X} aXplepearplum $ echo ${names//p/X}  
aXXleXearXlum $ echo ${names/%plum/kumquat} applepearkumquat
```

## NETDEV\_n

---

### value of NETDEV\_n

---

## IFCONFIG\_n

---

### value of IFCONFIG\_n

---

```
$ cat choose.bash #!/bin/bash $ choose.bash 1) aix $ who -r $ echo $6 $ a=c; b=m; c=d;  
cmd=date $ echo $a$b$c $ eval $ echo $a$b$c $ eval tset -sQ -m "?:vt100"
```

## pages=21; host=hamlet; user=chavez

---

```
printf '%7.2ft%s:%s\n' "$pages" "$host" "$user"
```

---

```
n=27; n1=-23
```

---

```
printf ' %7.1f %-7.1f\n' $n $n
```

---

```
printf '%-5.1fn%-5.1fn%-+5.1fn%- 5.1fn' $n  
$n1 $n $n 27.0
```

---

```
$ cat count_to_5 #!/bin/sh $ count_to_5 1
```

# add one to i

---

```
$ echo $(( 5+8/2-1 )) 8 $ a='1+2'; echo $a 1+2 $ let a='1+2'; echo $a $ declare -i a; a='1+2'; echo $a 3 $ a=(aaa bbb [5]=eee ddd) $ echo ${a[4]} ${a[5]} ddd eee $ echo ${a[3]:-undefined} undefined $ a=(x y z); echo ${a[4]:-undefined} undefined $ echo ${#a[@]} 3
```

## sserv: function to start a server

---

## args: \$1=daemon pathname; \$2!=" " means use startsrc

---

\$1 fi } MX records, 429 \$TTL directive, 429 \$GENERATE directive, DNS, 435 generic top-level domains, 415 GENERICS\_DOMAIN\_FILE macro, 556 generics\_entire\_domain sendmail Index I 1135 \$TTL directive, DNS, 429 ttmkfdir package, 884

## Network Commands

---

```
bsd4# ps -aux bsd4# netstat -a bsd1# netstat -rn Routing tables bsd1# netstat -i bsd2# lsof
COMMAND PID swapper 0 swapper 0 init 1 init 1 init 1 ... bsd2# lsof -i bsd2# lsof -
i@sloan.lander.edu bsd1# ifconfig -a sol1# arp -a bsd1# portscan 205.153.63.239 1 10000 -vv
lnx1# telnet 205.153.63.239 25 bsd1# ipfw list sol1# ndd /dev/arp ? ? sol1# ndd /dev/arp
arp_cache_report bsd1# sysctl net.inet.ip.forwarding net.inet.ip.forwarding: 0 sol1# ping
205.153.63.30 205.153.63.30 is alive sol1# sol1# ping www.microsoft.com no answer from
microsoft.com sol1# bsd1# ping www.bay.com bsd1# ping 172.16.4.1 bsd1# ping 172.16.3.10
bsd1# ping 172.16.3.10 bsd1# ping -f 172.16.2.12 bsd1# ping -f 172.16.2.20 bsd1# fping
172.16.2.10 172.16.2.11 172.16.2.12 172.16.2.13 172.16.2.14 172.16.2.13 is alive bsd1# fping -u
172.16.2.10 172.16.2.11 172.16.2.12 172.16.2.13 172.16.2.14 172.16.2.14 bsd1# echoping -v
lnx1 bsd1# echoping -v -h /ms.htm www.microsoft.com:80 bsd2# arping -v -c3 00:10:7b:66:f7:62
bsd1# traceroute 205.160.97.122 bsd1# pathchar 165.166.0.2 bsd1# ping -e10 -c1 205.153.60.2
165.166.36.17 bsd2# tcp -r -s bsd1# tcp -t -s 205.153.63.239 bsd1# netserver bsd1# netperf
bsd1# netserver bsd2# netperf -H 205.153.60.247 bsd2# netperf -H 205.153.60.247 -tTCP_RR
bsd2# iperf -s -p3000 bsd2# treno 205.153.63.30 bsd2# netstat -i bsd2# netstat -lep0 lnx1#
netstat -i bsd2# netstat -lep0 bsd1# spray -c1000 205.153.63.239 bsd2# netstat -lep0 Name Mtu
Network ep0 1500 bsd2# netstat -s -s ip: bsd2# netstat -p tcp -s -s tcp: bsd1# tcpdump -l | tee
outfile bsd1# tcpdump -w outfile & bsd1# tcpdump: listening on xl0 bsd1# kill 70260 bsd1#
tcpdump -w rawfile bsd1# tcpdump -r rawfile > textfile bsd1# tcpdump -c100 bsd1# tcpdump -i
xl1 bsd1# tcpdump -s200 bsd1# tcpdump -c1 host 192.31.7.130 bsd1# tcpdump -c1 -f host
192.31.7.130 bsd1# hexdump -C tracefile bsd1# tcpdump host 205.153.63.30 bsd1# tcpdump
ether host 0:10:5a:e3:37:c bsd1# tcpdump dst 205.153.63.30 bsd1# tcpdump net 205.153.60
```



```

bsd1# tcpdump net 205.153.60.0 mask 255.255.255.0 bsd1# tcpdump net 205.153.60.0 bsd1#
tcpdump ip bsd1# tcpdump tcp bsd1# tcpdump ip proto ospf bsd1# tcpdump ip proto 89 bsd1#
tcpdump ip proto 6 bsd1# tcpdump port 53 bsd1# tcpdump udp port domain bsd1# tcpdump
greater 200 bsd1# tcpdump "ip[9] = 6" bsd1# tcpdump tcp bsd1# tcpdump 'ether[0] & 1 != 0'
bsd1# tcpdump "tcp[13] & 0x03 != 0" bsd1# tcpdump host 205.153.63.30 bsd1# tcpdump host
205.153.63.30 and ip bsd1# tcpdump host 205.153.63.30 and not ip bsd1# tcpdump host lnx1
and udp or arp bsd1# tcpdump "host lnx1 and (udp or arp)" lnx1# tcpdump -n "not (tcp port telnet
and host lnx1 and host bsd1)" bsd1# sanitize-tcp tracefile bsd1# tcpdpriv -P99 -C4 -M20 -r
tracefile -w outfile bsd1# tcpdpriv -P99 -C4 -M20 -r tracefile -w -l tcpdump -r bsd1# tcp-reduce
tracefile > outfile bsd1# tcp-reduce out-file l tcp-summary bsd1# tcpshow < trace-file bsd1#
tcplice 934224220.0000 in-file > out-file bsd1# tcptrace -l telnet.trace bsd2# ifconfig ep0 bsd1#
nmap sol1 bsd1# nmap lnx1/24 bsd1# nmap 172.16.2.230-235,240 bsd1# nmap -sP lnx1/24
bsd1# nmap -sP -PI lnx1/24 bsd1# grep arpwat /var/log/messages > /tmp/arp.list bsd1# telnet
172.16.2.233 25 bsd1# telnet 172.16.2.230 80 Trying 172.16.2.230... Connected to
172.16.2.230. Escape character is '^]'. GET HTTP/1.0 bsd1# queso 172.16.2.230
172.16.2.230:80 * Windoze 95/98/NT bsd1# queso 172.16.2.1 bsd1# queso -p23 172.16.2.1
bsd1# queso -p23 172.16.2.232/29 172.16.2.233:23 * Solaris 2.x bsd1# queso -p23
205.153.60.1 bsd1# nmap -O 172.16.2.230 bsd1# nmap -p80 -O 172.16.2.230 bsd2# tcsh8.2 %
bsd4# scotty bsd4# cat /etc/hosts 127.0.0.1 205.153.63.239 205.153.63.239 205.153.60.231
205.153.60.233 205.153.60.234 bsd4# snmpget 172.16.1.5 public .1.3.6.1.2.1.1.1.0 bsd4#
snmpget 172.16.1.5 public iso.org.dod.internet.mgmt.mib-2.system.sysDescr.0
system.sysDescr.0 = "APC Embedded PowerNet SNMP Agent (SW v2.2, HW vB2, Mod: AP9
605, Mfg 08/10/96, SN: WA9632270847, Agent Loader v1.0)" bsd4# snmpget 172.16.1.5 public
system.sysDescr.0 bsd4# snmpget 172.16.1.5 public .1.3.6.internet.2.1.system.1.0 bsd4#
snmpget 172.16.1.5 public upsBasicIdentModel.0
enterprises.apc.products.hardware.ups.upsIdent.upsBasicIdent.upsBasicIdentModel.0 = "APC
Smart-UPS 700 " bsd4# snmpget 172.16.1.5 public .1.3.6.1.4.1.318.1.1.1.1.1.0
enterprises.apc.products.hardware.ups.upsIdent.upsBasicIdent.upsBasicIdentModel.0 = "APC
Smart-UPS 700 " bsd4# snmpget -On 172.16.1.5 public .1.3.6.1.4.1.318.1.1.1.1.1.1.0 bsd4#
snmpget 172.16.1.5 public ip.ipForwarding.0 ip.ipForwarding.0 = not-forwarding(2) bsd4#
snmpget -Oe 172.16.1.5 public ip.ipForwarding.0 ip.ipForwarding.0 = 2 bsd4# snmpget -Os
172.16.1.5 public enterprises.318.1.1.1.1.1.1.0 upsBasicIdentModel.0 = "APC Smart-UPS 700 "
sd4# snmpget -OS 172.16.1.5 public enterprises.318.1.1.1.1.1.1.0 PowerNet-
MIB::upsBasicIdentModel.0 = "APC Smart-UPS 700 " bsd4# snmpget -Of 172.16.1.5 public
enterprises.318.1.1.1.1.1.1.0
.iso.org.dod.internet.private.enterprises.apc.products.hardware.ups.upsIdent.
upsBasicIdent.upsBasicIdentModel.0 = "APC Smart-UPS 700 " bsd4# snmpget -Os 172.16.1.5
public sysDescr.0 bsd4# snmpgetnext -Os 172.16.1.5 public sysDescr.0 sysObjectID.0 = OID:
smartUPS700 bsd4# snmpgetnext -Os 172.16.1.5 public sysObjectID.0 sysUpTime.0 =
Timeticks: (77951667) 9 days, 0:31:56.67 bsd4# snmpgetnext -Os 172.16.1.5 public
sysUpTime.0 sysContact.0 = Sloan bsd4# snmpwalk 172.16.1.5 public system bsd4# snmpwalk
172.16.2.1 public enterprises l wc 3320 10962 121987 bsd4# snmptable -Cb -Cw 80 172.16.2.1
SNMP table: ip.ipRouteTable bsd4# snmpset 172.16.1.5 private sysContact.0 s "el Zorro"
system.sysContact.0 = el Zorro bsd4# snmptranslate system.sysContact.0 .1.3.6.1.2.1.1.4.0

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```
bsd4# snmptranslate -On .1.3.6.1.2.1.1.4.0 system.sysContact.0 bsd4# snmptranslate -Ofn
system.sysContact.0 .iso.org.dod.internet.mgmt.mib-2.system.sysContact.0 bsd4# snmptranslate
-IR sysContact.0 .1.3.6.1.2.1.1.4.0 bsd4# snmptranslate -On -lb 'sys.*ime' system.sysUpTime
bsd4# snmptranslate -Td system.sysContact .1.3.6.1.2.1.1.4 bsd4# snmptranslate -Tp system
+--system(1) bsd4# snmpnetstat 172.16.2.234 public -an bsd4# snmpnetstat 172.16.2.1 public -
rn Routing tables bsd4# snmpnetstat 172.16.2.1 public -i bsd4# snmpnetstat 172.16.2.1 public -s
-P ip ip: bsd4# snmpstatus 172.16.2.1 public bsd4# snmpwalk 172.16.2.234 public dskTable
enterprises.ucdavis.dskTable.dskEntry.dskIndex.1 = 1
enterprises.ucdavis.dskTable.dskEntry.dskPath.1 = /
enterprises.ucdavis.dskTable.dskEntry.dskDevice.1 = /dev/sda1
enterprises.ucdavis.dskTable.dskEntry.dskMinimum.1 = 10000
enterprises.ucdavis.dskTable.dskEntry.dskMinPercent.1 = -1
enterprises.ucdavis.dskTable.dskEntry.dskTotal.1 = 202182
enterprises.ucdavis.dskTable.dskEntry.dskAvail.1 = 133245
enterprises.ucdavis.dskTable.dskEntry.dskUsed.1 = 58497
enterprises.ucdavis.dskTable.dskEntry.dskPercent.1 = 31
enterprises.ucdavis.dskTable.dskEntry.dskErrorFlag.1 = 0
enterprises.ucdavis.dskTable.dskEntry.dskErrorMsg.1 = lnx1# df -k / bsd4# snmpwalk
172.16.2.236 private extTable enterprises.ucdavis.extTable.extEntry.extIndex.1 = 1
enterprises.ucdavis.extTable.extEntry.extNames.1 = datetest
enterprises.ucdavis.extTable.extEntry.extCommand.1 = /bin/date -j -u
enterprises.ucdavis.extTable.extEntry.extResult.1 = 0
enterprises.ucdavis.extTable.extEntry.extOutput.1 = Mon Jun 26 14:10:50 GMT 2000
enterprises.ucdavis.extTable.extEntry.extErrFix.1 = 0
enterprises.ucdavis.extTable.extEntry.extErrFixCmd.1 = bsd4# snmpset 172.16.2.236 private
versionUpdateConfig.0 i 1 enterprises.ucdavis.version.versionUpdateConfig.0 = 1 bsd4# snmpd -
f -L -d bsd4# snmpd -f -L -V lnx1# scotty lnx1# intop -i eth0 bsd2# cfgmaker public@172.16.2.1 >
mrtg.cfg bsd2# cat test.cfg bsd2# indexmaker mrtg.cfg > /usr/local/www/data/mrtg/index.html
bsd2# mrtg test.cfg bsd2# snmptranslate -Tp rmon.statistics +--statistics(1) bsd2# snmpwalk
172.16.1.9 public rmon.1.1.1.5 rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.1 =
36214 rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.2 = 0
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.3 = 3994
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.4 = 242
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.5 = 284
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.6 = 292
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.7 = 314548
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.8 = 48074
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.9 = 36861
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.10 = 631831
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.11 = 104
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.12 = 457157
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.25 = 0
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.26 = 0
rmon.statistics.etherStatsTable.etherStatsEntry.etherStatsPkts.27 = 0 lnx1# hping 205.153.63.30
```

```
lnx1# hping2 -a 205.153.63.30 172.16.2.236 bsd2# hping -2 -p 53 -E data.dns -d 31
205.153.63.30 bsd2# hping -c 1 -j 172.16.2.230 bsd2# nemesiis-tcp -v -D 205.153.63.30 -S
205.153.60.236 bsd2# nemesiis-tcp -S 172.16.2.236 -D 205.153.63.30 -fS -fA -y 22 bsd2#
nemesiis-icmp -v -S 172.16.2.236 -D 205.153.63.30 -i 8 bsd2# nemesiis-dns -v -S 172.16.2.236 -
D 205.153.63.30 -q 1 -P data.dns bsd2# ipssend -v -i ep0 -g 172.16.2.1 -d 205.153.63.30 bsd1#
nc -l -p 2000 bsd2# nc 172.16.2.231 2000 bsd1# socket -s 2000 bsd2# socket 172.16.2.231
2000 bsd1# nc -l -p 2000 > tmp bsd2# cat README | nc 172.16.2.231 2000 ^C punt! bsd2#
spray sol1 sol1# spray bsd2 bsd2# mgen -i ep0 demo bsd2# telnet mail.lander.edu 25 Trying
205.153.62.5... Connected to mail.lander.edu. bsd2# telnet mail.lander.edu 110 Trying
205.153.62.5... bsd2# telnet localhost http lnx1# telnet bsd2 ftp sol1# nslookup 205.153.60.20
Server: lab.lander.edu bsd2# nslookup www.lander.edu sol1# nslookup bsd2# dig @lander.edu www.lander.edu bsd2# dig -x 205.153.63.30 bsd2# doc lander.edu. bsd2# dnswalk lander.edu.
bsd2# ripquery 172.16.2.1 bsd2# rtquery 172.16.2.1 bsd2# rpcinfo -p bsd1 program vers proto
port bsd2# nfsstat -c Client Info: bsd1# xwd -out xwdfile bsd1# arp -a | tee outfile bsd1# script
scriptfile bsd1# #Well, the foo program didn't work. \>Let's try the bar program. bsd1# exit bsd1#
script scriptfile ifconfig -a bsd1# kill -HUP 127 bsd1# logger -p local7.debug "testing" bsd2#
ntpdate 205.153.60.20 bsd2# ntpq -p 172.16.2.1 bsd2# ntptrace 172.16.2.1 bsd2# siggen siggen

C:>arp -a C:>ping www.cabletron.com C:> C:>ping www.microsoft.com C:>ping C:>tracert
205.153.61.178 C:>iperf -c205.153.60.236 -p3000 C:>netstat -e Interface Statistics
```