

DGUX 4.31

TESTING 0123456789

DG/UX BS 4.30.01

sd(INSC(), 0) root/dgux

VME ASYNC I/O BOARD VDA 128
@ 600000000₁₆ BOARD 0

16384 KBYTES

14541 KBYTE AVAILABLE FOR TEST

PROM REV 5.02

single CPU rev 10

UNIT 0 MAXTOR XT-87606 DISK

UNIT 4 TANDBERG TDB 3800 G-500 TAPE

VME HOST ADAPTER BOARD 0

MODEL HPS-6945

FIRMWARE P/N 90-070154-6-05B

pinging cluster controller network

NO READY cluster controllers found

* green lights blinking

S = update report

Q = QUIT

INDEX

- ① Prereqs P1042 Avion Operations
- ② P1090 Unix Communications

1X SG ^{reference} Manuals - b

2G SG ADD ON MEMORY POSITIONS

2-7,9 SG Memory board jumpering & memory add on

3-2 Expanding the AV5000 ^{*} slot priority for option boards ^{*}
 ⇓ also

1-9 setting up VME bus options — board/slot priority

2-10 SG jumpering for open slots

2-16 ^{SG} AV5000/6000 power plug on backplane

2-26 ^{SG} FUSES AV400 / 3000 / 4000

2-28 ^{SG} jumper must be in for AV5000 running DG UX
 " " out for AV5000 running MATIC

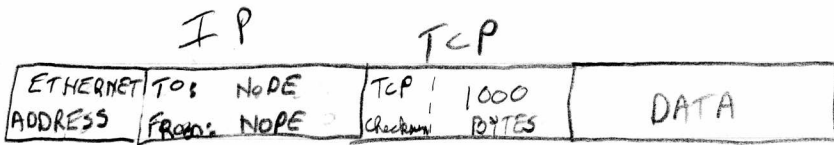
lab 17 for boot commands SG

2-7 SCM manual CORES

48 bits in ethernet address

X.25

low transmission with TCP/IP



Sequence Number

telenet STUDENT 10

host file list
/etc/hosts

128.222.13.10

network address

Internet address

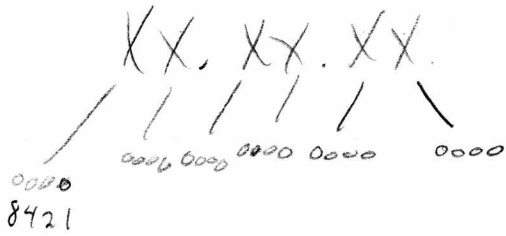
ARP TABLE

lan 10 megabits/second

ifconfig \downarrow inen \emptyset STUDENT 10 netmask 0xffff0000 broadcast
128.222.255.255

TOP MASTER 128.222.13.128

24 bits



Each field is eight bits

8 bits | 8 bits
128.222

16 bits for class b

128.222.13.10

netstat

netstat

netstat

netstat

pg =

X.25 SYNC via phone lines

UUCP ASYNC

ifconfig ^{in enp} ~~hostname~~ ^{Shows who you are}

ping STUPEHT5
STUPEHT5 is alive - hardware is OK

pg /etc/tcpip.params
7-11 5G

Broadcast Address must be same on all loops

ps -e

PORT #'S 5-32

telnet hostname PORT
17

WALL write to all

● # 5-33 to load TCP/IP

cp /etc/tcp.params /etc/tcpip.params.orig

~~* if no password *~~

After reset

scm>b sd(INSC(1),0) root:/dgux_n - S

passwd to assign a new password

or get in

write to all

- # wall --- message

etc/nfs/.params to edit and stop /P

cat /etc/nfs/.params

rwkd

● # man netstat |

netstat -i for errors

telnet

remote host

rlogin STUDENT 4

student 2
code de 2
SYSTEM BOOT PATH

[sd (INSC () ϕ) root: /dgux

who -r to get level
init 3

telnet "target host"

root prompt = supervisor

To

- Bus Grant & Bus request must be identical for each board

- WILL USUALLY ONLY CHANGE ADDRESS BITS ON BOARDS, NOT REQUESTS/^{BUS}GRANTS

- SCRIPT = MACRO (*) FOR DG UX

Unix level modes

- S - single user mode, console, root logical disk, automatically mounted, usr lduw

0 - shutdown mode

1 - console + TTY => administrative mode => root, usr, tmp are mounted, SYSADM knows mode for devices

multiuser levels

2 - multiuser + comm " " " all above + com or lduw is operational

4

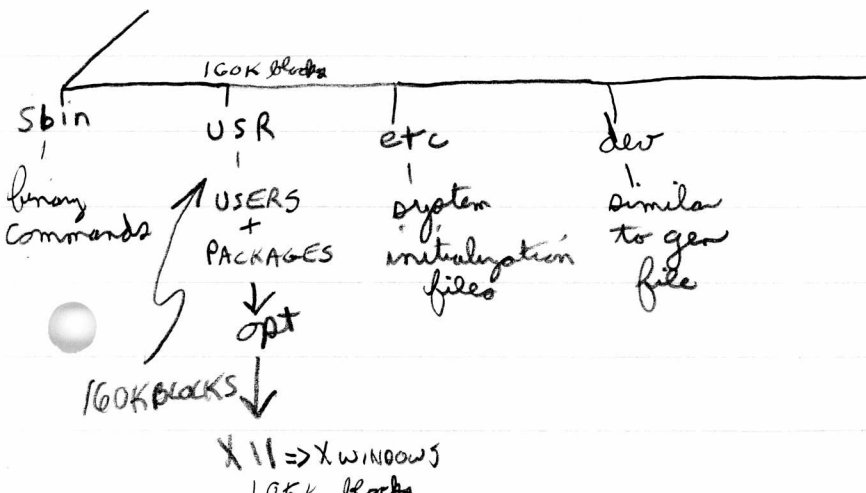
5

6

who - r to check run levels

512 byte blocks

/ = root directory, 25,000 blocks min, default 40,000



init 3 to get to run level 3 and bring up network

/dguip = custom kernel in root

/dguip starter

SCM> b sd (HSC⁽¹⁾) usr:/stand/diskman

DISKMAN - DG/UX only - on install tape
for installation, and to create a system

SYSAM to get to menu, #1 = DISKMAN

1-5 SYSADM - from AT & T - has a version of diskman
- add users
- add printers
- add ttys

SYSADM => main menu select 2, next menu option 2 will let you build a
custom kernel, must edit file, comment out using vi p.2-113

SCM> b sd (HSC⁽¹⁾) root:/dguip.starter - If dguip is gone
or /dguip.old

* can display ldu layout 2-3 installing/managing DG/UX

RBO5 - LAN TEST w/ PROMPT

TO TEST LAN NODE TO NODE

- can also get addresses of other systems in the LAN
 - ↳ or get lan address at power up
- run lan test w/ census to get your own lan address
- ? - other machines must be up & running lan test
- run test node to node
- answer yes to 2nd question
- # left to get out of another machine

- telnet > bye to get back to #

STUDENT 4	08 00 1B 18 0E D4
chaz # 3	08-00-1b-18-0d-f4
WP # 2	08-00-1D-18-0E:BA

* MAY NOT SIZE ANOTHER MACHINE THROUGH LAN
MUST MANUAL SIZE

test mode - node to node

show mode - no

fixed node list - yes \Rightarrow must to get a census

conduct census -

↑↑ this will display your own node address,
you must do this at each machine and then
manually add the other to test both

: 1, 105 / old pattern / new pattern / p

VI editor

/etc/inittab

cat /etc/passwd

#> Vi filename

:! ENV ↖ shell command to see ~~environmental~~ environmental

.EXRC

: colon to get to last line mode

: set all

• : set showmode to see whole screen + mode you are in

* hit esc to get out of a mode *

: set number

CONTROL not shift

h - left

j - right

k - up

l - down

↙
AD - to go down 1/2 page

AU - to go up

AF - up 1 page

Ab - down 1 page

a - append

i - insert

• R - replace multiple

r - replace single character

V dd delete whole line

to look for a particular pattern
: / pattern

to get to a particular line
ESC
20G

to write to disk
ESC shifted ZZ
or
ESC ZZ to get out and write to disk
or

: W to write to disk

or

: W filename to create it under another file

• PROFILE will change.

if .EXRC file exists ^{create w/ vi and save w/ ZZ} for showmode & redraw & number

:! q! to get out of a session w/o saving

UNIAM -a to find out which system you're on
EXIT to get out of system

load to disk

(unlocked)
raw
no
tape

Block size

dd \wedge /f = /dev/rmt \wedge /p \wedge of = /usr/stand/diags \wedge bs = 16K

X DIAG

4/4 run test 4 for 4 passes

Restart RBOS @ 60,000

scm > ST 60000

Newest AT&T UNIX = 5.4
95% of commands

AT&T 5.3

+

95% of commands
UCAL @ BERKLEY

= UNIX

↑↑
bourne
shell

↓↓

superuser prompt
\$ regular user prompt

↑↑

C shell

↓↓

superuser
% regular user prompt

↓↓

to get to C shell from bourne shell

> CSH
get you to %

OSF - open software foundation

300

• ethernet address 08:00:1B:18:0E:BA

16 MB

ect/log/fsk

df -t = disk space

Pwd = DR

• dev/disk/root

root - login

TO BOOT RBOS TAPE

at correct time hit 1P then use DG REMOTE FE for password

AU 300 SCM > b ST(INSC(0),4

To BOOT RBOS FROM DISK (if loaded)
↳ standalone or cold bootable files

AV300 scm > B usr: /stand /diags
full boot command

b ^ sd (INSC(), 0) usr: /stand /diags

hit 1P at correct time? then dgremote fe for password
give 5 options next menu

To LOAD DIAG FROM TAPE TO DISK Ø

dd ^ if = /dev/rmt/Ø ^ of = /usr/stand/diags ^ bs = 16Kb

RBOJ

- AD to stop tests

To VIEW OR CHANGE BOOT PARAMETERS

scm > F

UNIX Trouble Shooting

run level 3 for UNIX starts com processes

DG/UX ^{D.G.'s} proprietary UNIX

Dos can reside in UNIX

NO CBT training on A1110N'S as yet

Low based machine

CRU - customer replaceable units

- if ends in thousands - its designed to be a communications server

- up to 28 mb of memory

300/400 up to 28 mb Inen - intelligent ethernet

server - 5000 up to 208 mb Inen bank ethernet

↑ disk ESDI, tape SCSI

INEN - low

Inen

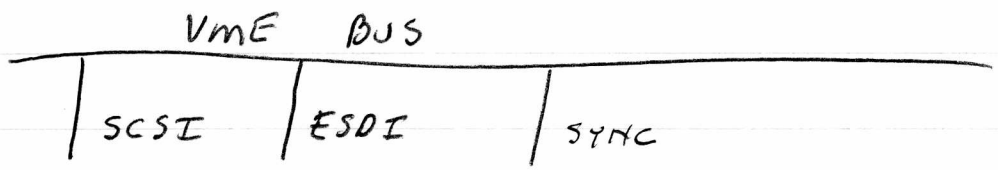
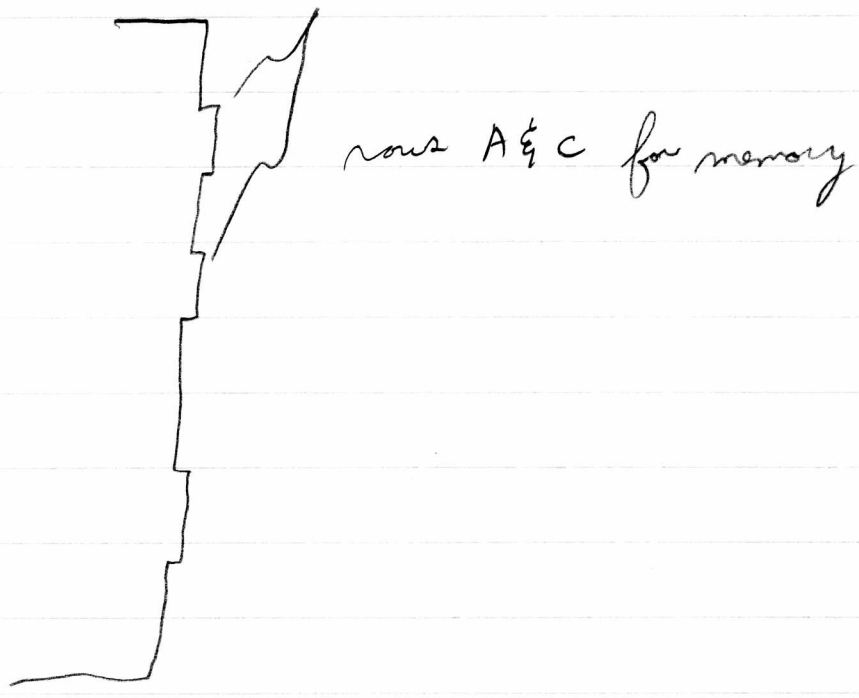
SMD - faster than - storage module drives

ESDI ← faster than SCSI

ESDI ← extended small systems device interface - 1 data ↔ is ^{control} ↔ is ^{shared} data

SCSI ← small computer systems interface - 1 data ↔ is ^{shared} data

90 boards
VME



VME
Versa Modula Europa

X DIAG

SCM > f to view or change format

6 change testing parameters or set ECW
set bit 15

SCM > xdiag

PG FEMOPE

esc shifted ZZ

① # SYSADM loadpackage => from tape

X11 n

dtk n

tcp y

hfs n

yp n

to load only tcp/ip

② # Sysadm setuppackage give you necessary system files to run the package

③ build a custom kernel

cd /var/build

pg system.ways to view present configuration

cd/usr/lib

editreadrc.proto

#cp editreadrc.proto /editreadrc DGUX only

1 A enables write left line

or command esc to see last command

man .editreadrc.proto

069-701035-01

get Using the DG/UX system
login: root

Cd ^{object} /usr/opt/x11
Change dir
INIT^3 go to level 3
Pwd^ present working directory

ls -l - ^{long file listing} list directory permissions
d rwx rw - r - -
↑ ↑ ↑ ↑ ↑
directory read write & execute read read only
owner group anyone

who -r to check run level

\$ Chmod - change modifiers
4 2 1 4 2 1 4 2 1 6 5 4
r w x r w x r w x rw rx read only

- #twho d to see if you are on a remote host

- CAT ^{file a} => Type out or view a file - use 'S if it is a long file

- pg file a => view file one screen at a time, hit enter to view next screen

- more file a => same as above

- file, file c tells if ASCII, you can view (cat, pg, more) if 88K - this is executable and cannot (cat)

* structure of command - mt: llo

SHELLS

SHELLS are Command Line Interpreters

AT&T

superuser

\$ user

| pipe - send to next command
| more \Rightarrow view 1 screen at a time

mount_(cr) links directories

MKDIR - make directory

diskman

Berkley

#

% USER

MKFS - make file system

df_h -t \Rightarrow disk free total

12000 - remaining/ldu
40000 - original/ldu

@ 90% usage all but root is shut out
or 4000 remaining all users are shut out

ldu - can be a physical disk or piece of a physical disk

MAILX USER@SYSTEM

Problem

- cannot find host file
- ping or telnet does not work
- + all remote hosts are down
- * cannot open /etc/hosts
- * changed broadcast
- * cannot due if config STUDENT2
- * UP, LOOPBACK, RUNNING, STARTED
- net int 7-6 5G

/srv/release/primary/root/mi Host/etc/hosts

reloaded TCP/IP

PING STUDENT 3

OK

TELNET STUDEN 3

OK

Problem

IF CONFIG INEVD

socket: address family not supported by protocol

X DIAG FAIL S of CPU subtest

cpu subtest #1 CPU level 4 trap @ 0xFFC0018

Data Access Exception