

```
initializing ...

polling for units on kzpba0, slot 1, bus 0, hose 1 ...
  pka0.0.0.1.1          PKA0          Q-Logic/ISP PCI SCSI HBA

... enter console

CHARON-AXP (AlphaServer 4100), Version 4.9 (Build 19400)
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P00>>>
P00>>>b dka0
  (boot dka0.0.0.1.1)
jumping to bootstrap code

UNIX boot - Sun May 14 05:34:40 EDT 2000

Loading vmunix ...
Loading at 0xfffffc0000230000

Sizes:
text = 2772960
data = 458128
bss = 846800
Starting at 0xfffffc00003eeb00

Alpha boot: available memory from 0xed6000 to 0x1ffffe000
Digital UNIX V4.0G (Rev. 1530); Fri Jul 12 19:19:19 ??? 2019
physical memory = 512.00 megabytes.
available memory = 497.17 megabytes.
using 1958 buffers containing 15.29 megabytes of memory
Firmware revision: 6.0
PALcode: UNIX version 1.23
AlphaServer 4100
pci1 at mcbus0 slot 5
isp0 at pci1 slot 1
isp0: QLOGIC ISP1040B/V2
isp0: Firmware revision 5.57 (loaded by console)
scsi0 at isp0 slot 0
rz0 at scsi0 target 0 lun 0 (LID=0) (DEC      RZ29      (C)DEC 0100) (Wide32)
rz4 at scsi0 target 4 lun 0 (LID=1) (ATAPI   QZMFAHA QNK5E78H 0200) (Wide32)
gpc0 at eisa0
pci0 at mcbus0 slot 4
eisa0 at pci0
configure_console: No serial driver from get_info
No kernel_console driver installed
dli: configured
i2c: Server Management Hardware Present

WARNING: preposterous time in TOY clock# -- CHECK AND RESET THE DATE!!

panic (cpu 0): System does not have a console configured.
syncing disks... done

DUMP: 401408 blocks available for dumping.
DUMP: 39858 wanted for a partial compressed dump.
```

```
DUMP: Allowing 397310 of the 401406 available on 0x800001
device string for dump = SCSI 1 1 0 0 0 0 0.
DUMP.prom: dev SCSI 1 1 0 0 0 0 0, block 262144
DUMP: Header to 0x800001 at 401406 (0x61ffe)
device string for dump = SCSI 1 1 0 0 0 0 0.
DUMP.prom: dev SCSI 1 1 0 0 0 0 0, block 262144
DUMP: Dump to 0x800001: .: End 0x800001
device string for dump = SCSI 1 1 0 0 0 0 0.
DUMP.prom: dev SCSI 1 1 0 0 0 0 0, block 262144
DUMP: Header to 0x800001 at 401406 (0x61ffe)
succeeded

halted CPU 0

halt code = 5
HALT instruction executed
PC = fffffc00003f0790
P00>>>b dka0 -file genvmunix

resetting all I/O buses

initializing ...

polling for units on kzpba0, slot 1, bus 0, hose 1 ...
    pka0.0.0.1.1          PKA0          Q-Logic/ISP PCI SCSI HBA

(boot dka0.0.0.1.1 -file genvmunix)
jumping to bootstrap code

UNIX boot - Sun May 14 05:34:40 EDT 2000

Loading genvmunix ...
Loading at 0xffffffff00000000
Mapping Image Address Space
Mapping complete

Sizes:
text = 6650608
data = 2047760
bss = 4310224
Starting at 0xffffffff00275d20

Alpha boot: available memory from 0x176e000 to 0x1ffffe000
Digital UNIX V4.0G (Rev. 1530); Sun May 14 06:21:37 EDT 2000
physical memory = 512.00 megabytes.
available memory = 489.35 megabytes.
using 1958 buffers containing 15.29 megabytes of memory
emx: dynamic addressing enabled
Firmware revision: 6.0
PALcode: UNIX version 1.23
AlphaServer 4100
pci1 at mcbus0 slot 5
isp0 at pci1 slot 1
isp0: QLOGIC ISP1040B/V2
isp0: Firmware revision 5.57 (loaded by console)
scsi0 at isp0 slot 0
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```

```

gpc0 at eisa0
pci0 at mcbus0 slot 4
eisa0 at pci0
ace0 at eisa0
ace1 at eisa0
lvm0: configured.
lvm1: configured.
lvm2: configured.
kernel console: ace0

INIT: SINGLE-USER MODE
# ^D
INIT: New run level: 3
Checking local filesystems
/sbin/ufs_fsck -p
/dev/rrz0a: 1082 files, 51545 used, 77206 free (86 frags, 9640 blocks, 0.1%
fragmentation)
/dev/rrz0g: File system unmounted cleanly - no fsck needed
Mounting / (root)
user_cfg_pt: reconfigured
Mounting local filesystems
/dev/rz0a on / type ufs (rw)
/proc on /proc type procfs (rw)
/dev/rz0g on /usr type ufs (rw)
Jul 12 19:30:09 update: started

Checking for crash dumps
System went down at Fri Jul 12 19:29:28 2019
Saving 1591808 bytes of image in vmzcore.1
Initializing paging space
Mounting Memory filesystems
    The following STREAMS devices were created:
                Name          Major      Minor
                ----          -
                /dev/streams/bba      32          59
Streams autopushes configured
Configuring network
hostname: axp001
Loading LMF licenses
System error logger started
Binary error logger started
Setting kernel timezone variable
ONC portmap service started
NFS IO service started
Mounting NFS filesystems
Preserving editor files
security configuration set to default (BASE).
Successful SIA initialization

Clearing temporary files
Unlocking ptys
SMTP Mail Service started.
Environmental Monitoring Subsystem Configured.
Using snmp service entry port 161.
Can't get a local IP address.
Extensible SNMP master agent started
Base O/S sub-agent started
Server System sub-agent started
Server Management sub-agent started

```

Compaq Management sub-agent started
Insight Manager Agent started
Internet services provided.
Cron service started
Printer service started
Collecting data from crash dumps in /var/adm/crash/crash-data.1
The system is ready.

Digital UNIX Version V4.0 (axp001) console

Login: root

Password:

Can't find an OSF-BASE, UNIX-WORKSTATION, or UNIX-SERVER license PAK

Last login: Fri Jul 12 19:29:19 on console

Digital UNIX V4.0G (Rev. 1530); Sun May 14 06:21:37 EDT 2000

The installation software has successfully installed your system.

There are logfiles that contain a record of your installation.

These are:

/var/adm/smlogs/install.cdf	- configuration description file
/var/adm/smlogs/install.log	- general log file
/var/adm/smlogs/install.FS.log	- file system creation logs
/var/adm/smlogs/setld.log	- log for the setld(8) utility
/var/adm/smlogs/fverify.log	- verification log file

ls -l /sys/conf/

```
total 191
-rwxr--r--  1 bin      bin      2095 May 14  2000 #.mrg..param.c
-r--r--r--  1 bin      bin      14319 May 14  2000 .new..param.c
-r--r--r--  1 bin      bin      14319 May 14  2000 .proto..param.c
-rw-r--r--  1 root     system   2069 Jul 12 19:18 AXP001
-r--r--r--  1 bin      bin      3269 May 14  2000 BINARY
-r--r--r--  1 bin      bin     39091 May 14  2000 GENERIC
drwxr-xr-x  2 root     system    512 May 14  2000 alpha
lrwxr-xr-x  1 root     system    13 Jul 12 19:16 config -> ../bin/config
-r--r--r--  1 bin      bin      786 May 14  2000 copyright
-r--r--r--  1 bin      bin     46717 May 14  2000 files
-r--r--r--  1 bin      bin      8 May 14  2000 filesystems
-r--r--r--  1 bin      bin     4187 May 14  2000 newvers.sh
-r--r--r--  1 bin      bin     14319 May 14  2000 param.c
lrwxr-xr-x  1 root     system    19 Jul 12 19:16 sourceconfig ->
../bin/sourceconfig
-r--r--r--  1 bin      bin     17310 May 14  2000 template.mk
-r--r--r--  1 bin      bin     19702 May 14  2000 template.std.mk
-r--r--r--  1 bin      bin      0 May 14  2000 version.banner
-r--r--r--  1 bin      bin      4 May 14  2000 version.baselevel
-r--r--r--  1 bin      bin      5 May 14  2000 version.build
-r--r--r--  1 bin      bin      2 May 14  2000 version.major
-r--r--r--  1 bin      bin      2 May 14  2000 version.minor
-r--r--r--  1 bin      bin      2 May 14  2000 version.patch
-r--r--r--  1 bin      bin     11 May 14  2000 version.product
-r--r--r--  1 bin      bin      2 May 14  2000 version.type
-r--r--r--  1 bin      bin      2 May 14  2000 version.variant
```

```
-r--r--r-- 1 bin bin 28 May 14 2000 version.vendor
# cat /sys/conf/AXP001
```

Instead of AXP001 use your configuration name!

```
ident "AXP001"

options UERF
options OSF
options _LMF_
options BIN_COMPAT
options COMPAT_43
options MACH
options MACH_IPC_TCACHE
options MACH_IPC_WWA
options MACH_IPC_XXXHACK
options BUFCACHE_STATS
options INOCACHE_STATS
options STAT_TIME
options VAGUE_STATS
options UFS
options NFS
options NFS_SERVER
options STRKINFO
options STREAMS
options LDTTY
options RPTY
options INET
options UIPC
options SYSV_COFF
options QUOTA
options LABELS
options SL
options SNMPINFO
options DLI
options BSD_TTY
options BPARAM
options FFM_FS
options PROCFS

#
# Standard options.
#
options UNIX_LOCKS
options SER_COMPAT
options RT_PREEMPT
options RT_SCHED
options RT_SCHED_RQ
options RT_PML
options RT_TIMER
options RT_SEM
options RT_CSEM
options RT_IPC
#
makeoptions CDEBUGOPTS="-g3"
makeoptions CCOMPRESS="-compress"
makeoptions PROFOPTS="-DPROFILING -DPROFTYPE=4"
```

```

makeoptions      LOADADDR="ffffffc0000230000"

#
# Max number of processors in the system (DO NOT CHANGE)
#
processors      16

#
# Special options (see configuring the kernel chapter
# in the Guide to System Administration)
#
dfldsiz         134217728
maxdsiz         1073741824
dfllsiz         2097152
maxssiz         33554432
cpu             "DEC4100"
maxusers        32
config          vmunix  swap generic

bus             mcbus0      at nexus?
bus             pci1        at mcbus0      slot 5
callout after_c "../bin/mkdata pci"
bus             isp0        at pci1        slot 1 vector  ispintr
controller      scsi0       at isp0        slot 0
bus             pci0        at mcbus0      slot 4
bus             eisa0       at pci0        slot 1
callout after_c "../bin/mkdata eisa"
controller      gpc0        at eisa0       slot 0 vector  gpcintr
controller      ace0        at eisa0       slot 4 vector  aceintr

#
# Static Driver Definitions
#

#
# Pseudodevice Definitions (see configuring the
# kernel chapter in the Guide to System Administration)
#
pseudo-device   sysv_hab
pseudo-device   svid_three_hab
pseudo-device   svr_four_hab
pseudo-device   soe_two_hab
pseudo-device   rt_hab
pseudo-device   ether
pseudo-device   loop
pseudo-device   ws
# vi /sys/conf/AXP001

```

Using the vi editor locate the line defining ace0 and change slot No from 4 to 8:

```

...
controller      ace0        at eisa0       slot 48 vector  aceintr
...

```

That's all. Save file with SHIFT-ZZ combination and leave vi. Proceed as follows (with your configuration name):

```
# doconfig -c AXP001

*** KERNEL CONFIGURATION AND BUILD PROCEDURE ***

Saving /sys/conf/AXP001 as /sys/conf/AXP001.bck

Do you want to edit the configuration file? (y/n) [n]: [Enter]

*** PERFORMING KERNEL BUILD ***
    Working....Fri Jul 12 19:33:11 ???? 2019

The new kernel is /sys/AXP001/vmunix
# cp /sys/AXP001/vmunix /
# shutdown -r now
Shutdown at 19:33 (in 0 minutes) [pid 1141]
#

##          *** FINAL System shutdown message from root@axp001 ***

System going down IMMEDIATELY

##System shutdown time has arrived##
syncing disks... done

resetting all I/O buses

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gpc0 at eisa0
pci0 at mcbus0 slot 4
eisa0 at pci0
ace0 at eisa0
kernel console: ace0
```

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INIT: SINGLE-USER MODE
```

```
# ^D
```

```
INIT: New run level: 3
```

```
Checking local filesystems
```

```
/sbin/ufs_fsck -p
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/dev/rrz0a: 1083 files, 51547 used, 77204 free (84 frags, 9640 blocks, 0.1% fragmentation)
```

```
/dev/rrz0g: File system unmounted cleanly - no fsck needed
```

```
Mounting / (root)
```

```
user_cfg_pt: reconfigured
```

```
Mounting local filesystems
```

```
/dev/rz0a on / type ufs (rw)
```

```
/proc on /proc type procfs (rw)
```

```
/dev/rz0g on /usr type ufs (rw)
```

```
Jul 12 19:34:37 update: started
```

```
Checking for crash dumps
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Initializing paging space
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Mounting Memory filesystems
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```
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```
Configuring network
```

```
hostname: axp001
```

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Successful SIA initialization
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Insight Manager Agent started
```



```
Internet services provided.  
Cron service started  
Printer service started  
The system is ready.
```

Voi la!