

Ἀέαιũñöùόç Ἀδιεçêãðôéêπί ἸΎούι ἁέα ×ñÞόç ìà ôī FreeBSD

ἵáo óýíôĩĩò ìäçãüò

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Ἰũñôéìò 1997

Ôī FreeBSD ἁβίáé Ἰía éáôĩ÷ ðñùĩŸĩ ììðĩñéêũ óýìäĩēĩ ôĩô FreeBSD Foundation.
Ἰé ēŸiáéò lomega, Zip, éáé Jaz ἁβίáé ἁβôḁ éáôĩ÷ ðñùĩŸiá ììðĩñéêũ óýìäĩēä Þ ììðĩñéêũ óýìäĩēä ôçò
lomega Corporation óðéò ÇíùĩŸiáò Ðĩēéðḁḁò Þ/ēáé óḁ Ÿēēḁò ÷ þñḁò.
Ἰé ēŸiáéò Motif, OSF/1, éáé UNIX ἁβίáé éáôĩ÷ ðñùĩŸiá ììðĩñéêũ óýìäĩēä éáé Ἰé ēŸiáéò Þ ðñũóḁéò IT
DialTone éáé The Open Group ἁβίáé ììðĩñéêũ óýìäĩēä ôĩô The Open Group óðéò ÇíùĩŸiáò Ðĩēéðḁḁò
éáé óḁ Ÿēēḁò ÷ þñḁò.
ÐĩēēŸò áðũ óéò ēŸiáéò Þ ðñũóḁéò Ἰé Ἰðĩḁò ÷ ñçóéĩìðĩēĩŸiáé áðũ ôĩôð éáóḁéḁḁḁḁḁḁŸò Þ ôĩôð
ðùēçôŸò ôĩôð ἁέα Ἰá ḁéḁēñḁĩĩôĩ óḁ ðñĩũũĩóḁ ôĩôð éḁũñĩŸiáé ììðĩñéêũ óýìäĩēä. ¼ðĩô áðôŸò
ḁìðḁĩḁēĩóḁé óḁ áðôũ ôĩ éḁḁiḁĩ éáé ḁέα ḁḁḁ áðũ áðôŸò ḁĩũñḁḁé ç ἸiŸḁḁ ἈĩŸðððĩçò ôĩô FreeBSD ḁḁé
ḁβίáé ðéḁḁĩũĩ Ἰá ἁβίáé ììðĩñéêũ óýìäĩēä, éḁ ḁḁḁḁ Ἰiá áðũ óḁ óýìäĩēä: “TM” Þ “®”.

Ôī ðḁñũĩ Ḹḁḁḁḁĩ ðḁñḁḁñŸḁḁé ðþò Ἰá ēũḁḁḁ ḁḁ ðĩḁiḁḁ (slices), ēñiḁḁēŸḁḁḁ (partition) éáé
ĩñḁḁĩðĩēḁḁḁḁ (format/ḁéḁĩũñöùóç) óðēçñĩŸð ḁḁḁēĩðḁ éáé ðḁñũĩḁḁ ἸŸḁḁ ðĩô ðñĩñḁḁĩḁḁḁ ḁέα ÷ ñÞόç ìà ôī
FreeBSD. Ôḁ ðḁñḁḁḁḁḁḁḁ ḁĩēēĩŸḁçḁḁĩ óḁĩ FreeBSD 2.2 ḁēēŸ ēĩḁḁēŸ ḁĩḁḁḁŸĩḁĩ éáé óðéò Ÿēēḁò
ḁēḁũḁḁḁ. Ôī éḁḁiḁĩ Ḹ÷ḁḁ ḁĩçḁñḁḁḁ ḁέα ôçĩ Ḹēḁĩç 4 ôĩô FreeBSD.

1 ἈέóḁḁũḁÞ éáé Ἰñéóĩĩḁ

1.1 ἈḁíéēŸ

Ôī Ἰá ðñĩóēŸḁḁḁ ḁḁḁēĩðḁ Ἰá ḁðéð÷ḁ ḁḁ Ḹiá ḁðŸñ÷ĩ ḁýóðçḁḁ ḁβίáé ÷ ḁñḁḁðçñéóðéēũ ḁñḁ Ḹiðḁḁñĩḁ ḁέα÷ḁḁḁḁḁ
óðḁḁḁḁḁḁ. Ôī ēũḁēĩ, ôī ēñiŸḁḁḁḁḁ éáé ç ðñĩóēḁç ḁḁḁḁ ḁðḁḁḁḁ éḁḁḁḁḁḁ ðñĩḁĩ÷Þ éáé òḁḁḁ ḁýĩḁḁḁ ḁĩḁēḁĩ.
Ἰá ðéḁḁñũ ēŸēĩð Ἰðĩñḁḁ Ἰá ḁñḁḁḁḁḁ Ḹiáḁ Ἰēũēçñĩ ḁḁḁēĩ ḁḁ ḁḁðḁñũḁḁḁḁ. Ἀðḁũ ôī Ḹḁḁḁḁḁ ḁñŸḁḁḁḁ ḁò
ðñĩððŸḁḁḁ Ἰá ḁðēĩðĩēçḁḁ ç ḁéḁḁḁḁḁḁ éáé Ἰá ḁðĩḁḁ÷ēŸĩ ḁḁ÷ḁ ḁiḁḁḁ. Ἀðḁḁ÷ḁð, ḁñḁḁḁḁḁ ḁðḁñ÷ũĩḁũĩ
ḁñḁḁḁḁḁḁ (ēðñḁḁ òĩô sysinstall), óðéò ðñũóḁḁḁḁ ḁēḁũḁḁḁ òĩô FreeBSD, Ḹ÷ḁḁ ḁḁḁḁḁḁḁ ôçĩ ḁéḁḁḁḁḁḁ.

ÔðŸñ÷ĩḁḁ ḁḁḁḁḁḁ ðñũðĩē (modes) ìñḁḁĩðĩḁççòð:

- [illegible]

[illegible]

ΔΥΝά αδύ όçí áðέείαP όνυðíò εάέοíòñάBάò òðÛñ÷íοí àγí íÝείαíε όóçόBíáóíò όíò áBόείò. Í ðñðòò ÷ñçόείíðíείάB όí
 άñάάέάBí άάέάóÛóóάóçό όíò óóóòPíáóíò /stand/sysinstall. Άðύ όí 2.1.7-RELEASE έάέ íáòÛ ç sysinstall
 áðείðíείάB όí óòPόείí òυí áBόέυí άðάέáP άðέóñÝðάέ όçí áðάέòáBάò áέέάáP óόí label (òBόείò) έάέ óóá όìPíáóá
 (partitions) òυí áBόέυí. ΆðέðέÝíí óάó άðέóñÝðάέ íá áðίέçέáγόάòά óéð áέέάÝò íυíí όóíí óóάέáñέíÝíí áBόεί ÷ññBò
 íá áðçñάÛέάέ όíòð òðυείéðíòð. Í ááyόáñíð òñυðíò áBíáέ íá áéòáεÝόάòά áéÛοíñáð áíòíεÝò íá όí ÷Ýñέ áðí όçí áñáñP
 áíòíεPí ùð root. Áí áðέέÝíáòά όçí áðίέεάέóóέéP εάέοíòñάBά ÷ñάέÛέáòά íá áéòáεÝόάòά íυíí 2-3 áíòíεÝò áñP íá όí
 sysinstall ðñÝðάέ áíòíεÝòάòά έέáÛέέ ðáñáðÛíí.

1.2 Īñéóìïß

Ç áéá÷âññéóç äßöëuí òôi UNIX® Ý÷áé äþóáé íÝá Ýíííéá óá òðÛñ÷íõóäò ëÝíáèò. Ôì äáñáéÛòù èäíéüüäéí äíçãäß òçí íñíëíäßä ðíò ÷ñçóéíðíëíííá óá áóòù òí èäßíäíí èáé óóí FreeBSD ääíééÛ (ðñíóáíðò).

- [illegible]

1.3 Οçìáßá ðìò ðñÝðáέ íá ðñìóÝìáðá έάέ ðáãßáðò

Ἀþòðá ìáãÛέç ðñìóí÷þ ðόç áέάάέέάóßá, áí ááí èÛááðá ðá ìÝðñá óáð έάέ áßìáέ èÛέìò ìðìñáß íá έáðáóðñÝðáðá ðá ðáñέá÷÷ìáíá Ûέέùí áßóέùí ðìò ðóóðþíáðìò.

ðñìóÝìáð έέ èÛìáðá. Ἀßìáέ ðñéý áýέìéí íá έáðáóðñÝðáðá èÛέìò áßóέí áìòέáýìíðáð ìá áððÝð ðέð áíðìéÝð. Ἀí Ý÷÷áðá áìòέáìéßáð áέÝáìðá ðá ìçíýìáðá ðìò ððñþíá έáðÛ ðç áέάάέέάóßá áέέßíçóçð áέá íá áñáßðá ðç óùóðþ ððóέáðþ áßóέìò.

ÖðóέέÛ ááí Ý÷÷ìáí έáìßá áðέýíç áέá æçìéÝð ðìò ìðìñáß íá ðñìèççέýí. Ç áðέýíç áßìáέ áέέþ óáð!

1.4 Zip, Jazz, έάέ Ûέέá áóáέñìýìáíá ìÝóá

Ἰέ áóáέñìýìáñé áßóέìé ìðìñýí íá áέáìñöüέýí óáí έáñìééíß áßóέìé. Òí óçìáíðέέù áßìáέ íá áßìáέ óðíáìÝñð ì ìáçáùð ðìò áßóέìò έáðÛ ðçí áέέßíçóç ðìò ðóóðþíáðìò έάέ ìá áέóέÝðá ἸÝóá þóðá íá ìðìñÝóáέ ì ððñþíáð íá ááß óùóðÛ ðçí ááùìáðñá ðìò áßóέìò. ἘìέðÛìðá ðé èÝáέ ç áíðìéþ dmesg áέá íá ááßðá áí ç ððóέáðþ áßìáέ óóçí èßóðá. Ἀέá ðáñÛááέáíá áí ì ððñþíáð áñÛøáέ:

```
Can't get the size
```

òùðá ááí ððÛñ÷÷ áέ áέóέÝðá óðìí ìáçáù. Ἀí áßìáέ áððù έá ðñÝðáέ íá áðáíáέέéíþóáðá òí ìç÷÷Ûíçá ðñéí áìέéìÛóáðá íá áέáìñöþóáðá ðçí áέóέÝðá.

2 Ἀέáìñöþííðáðò áßóέìòð áέá áðìèèáέóóέéþ èáέòìòñáßá

2.1 Ἀέóáãùãþ

Ἀððþ ç ðáñÛáñáðìò ðáñέáñÛóáέ ðþð íá ðóέÛìáðá áßóέìòð ìùíí áέá òí FreeBSD. Ἐðìççáßðá ìðέ ìé áßóέìé áðìèèáέóóέéþð èáέòìòñáßáð ááí ìðìñýí íá áέάááóðíýí áðù Ûέέá èáέòìòñáέέÛ, ìýðá íá èÛìóí boot.

2.2 ðþð íá ðóέÛìáðá áßóέìòð áðìèèáέóóέéþð èáέòìòñáßáð ìá òí Sysinstall

To /stand/sysinstall, òí ðñùáñáíá ááέáðÛóóáóçð ðìò ðóóðþíáðìò, Ý÷÷áέ áðáέðáέáß óóέð ðáέáððáßáð ðìò áέáùóáέð þóðá íá áðέìðìéáß ðçí áέάáέέάóßá ÷÷ñéóìýý ðùí áßóέùí έάέ íá áðáέðáß èéáùðáñç ðñìòðÛέáέá. Òá ðñìáñÛìáðá fdisk έáέ disklabel ðìò ððÛñ÷÷ìóí óðìí sysinstall áßìáέ áñáóέéíý ðáñέáÛέìíðìò (GUI - Graphical User Interface) έάέ ìáέþñìóí òí ìðÝñááíá ðìò èìþßíáðìò ðùí áßóέùí. Ἀßìáέ ðñìóáíþð ì áðέìéùðáñìò ðñùðìò íá èùøáðá áßóέìòð áðù ðçí Ýέáìóç 2.1.7 έάέ ìáðÛ ðìò FreeBSD.

1. Ἰáέέíþóðá òí sysinstall þð root áñÛìííðáð

```
# /stand/sysinstall
```

óóçí áñáìíþ áíðìéþí.

2. ἈðέéÝìðá Index.
3. ἈðέéÝìðá Partition.
4. ἈðέéÝìðá òí áßóέí ðìò èÝέáðá íá ááέáðáóðþóáðá ÷ñçóέìíðìéþíðáð ðá ááέÛέέá έάέ ìáðÛ **SPACE**.

5. Ἀί ἑά ÷ ñçóéíðìéþᾱᾱ ùèí òí ᾗßóèí ᾗἑά òí FreeBSD, ᾗðéëÝíᾱ Ἀ.
6. Ἰùèéð ὁᾶð ñòþᾱἑ áí ùíòùð èÝἑᾶᾱ íᾱ òí èÚíᾱᾱ ᾱðòü (Do you still want to do this) ᾱðáíðþᾱᾱ Yes.
7. ἈðéëÝíᾱ Write.
8. Ἐᾶ ὁᾶð ᾗᾱÚἑᾶἑ íἑᾶ ðñíᾱἑᾱíðìþçóç ó÷ᾱðéèÚ íᾱ òçí ᾗᾗᾗᾗᾱðþ ὁᾱ ððÚñ÷ííᾱ ὁðὁðþíᾱᾱ ᾱðáíðþᾱᾱ Yes.
9. Ἰùèéð ὁᾶð ñòþᾱἑ áí èÝἑᾶᾱ íᾱ ᾗᾗἑᾱᾱὁðþᾱᾱ Ḳíᾱ boot loader, ᾗðéëÝíᾱ None ᾗἑᾶ íᾱ ᾱðíöýᾗᾱᾱ ïðíἑᾱᾱþðíᾱ ᾱἑἑᾱᾱþ ὁòí Master Boot Record. Ç ᾗᾗἑᾱὁÚὁὁᾱὁç ᾱíùð boot loader ÷ ñᾱἑÚᾱᾱὁᾱἑ ùíí ὁᾱ ἑᾱἑíýñἑᾱð ᾗᾗἑᾱᾱὁὁÚὁᾱἑð òí FreeBSD þ ᾱí ó÷ᾱἑÚᾱᾱὁᾱ íᾱ òíðíἑᾱðþᾱᾱ òí ᾗßóèí ὁᾱ èÚðíἑí Ḳἑἑí íç÷Úíçᾱ.
10. Ðᾱðþᾱᾱ **ENTER** ὁòí ᾱíçíᾗñòἑἑü ïþíᾱ Ḳíᾱ èÝᾱἑ “Wrote FDISK partition information out successfully”.
11. ἈðéëÝíᾱ Quit ᾗἑᾶ íᾱ ᾗᾗᾱßᾱ ᾱðü òí FDISK Editor ἑᾱἑ íᾱðÚ **ESCAPE** ᾗἑᾶ íᾱ ᾱðἑὁðñÝᾱᾱ ὁòí Index menu.
12. ἈðéëÝíᾱ Label ᾱðü òí Index menu.
13. ἸñÚὁᾱ òí ᾗßóèí ὁᾶð ùðùð èÝἑᾶᾱ (ᾗᾱþ ïñþᾱᾱᾱ ὁᾱ partitions). Ἀí èÝἑᾶᾱ ùíí Ḳíᾱ partition ðᾱðþᾱᾱ òí c ᾗἑᾶ íᾱ ᾱçíἑíᾱñᾱþᾱᾱ òí partition. ἸᾱðÚ ᾱðἑð ᾗᾱ÷ἑᾱßᾱ ὁἑð ðñíᾱðἑἑíᾱÝð ᾗἑᾶ ὁᾱ ðñíἑᾱἑíñἑὁí Ḳíᾱ size, partition type Filesystem, ἑᾱἑ mountpoint (òí ïðíþí ᾗᾱí ÷ ñçóéíðìἑᾱᾱὁᾱἑ).
14. Ðᾱðþᾱᾱ w ùèéð ὁᾱἑᾱἑþᾱᾱ ἑᾱἑ ᾗðἑἑðñþᾱᾱ ὁἑð ᾱἑἑᾱᾱÝð ᾗἑᾶ íᾱ ὁòíᾱ÷ßᾱᾱ. Òí filesystem ἑᾱ ᰇᾗᾗὁᾱß ᾱðòüᾱὁᾱ ᾱðü òçí ᾱíðíἑþ newfs ᾱἑòüð ᾱí ᾗðéëÝíᾱᾱ òí ᾱíðḲἑᾱὁí. (Ἀí ᾗÚᾱᾱὁᾱ ἑᾱἑíýñᾗἑí partition ὁᾶð ὁòíὁÝñᾱἑ íᾱ òí èÚíᾱᾱ!). Ἐᾶ ὁᾶð ᾱþᾱἑ òí èÚἑἑð:

```
Error mounting /mnt/dev/ad2s1e on /mnt/blah : No such file or directory
```

Ἀᾗñþᾱᾱ òí.

15. Ðᾱðþᾱᾱ ὁòíᾱ÷ùíᾱíᾱ òí **ESCAPE** ᾗἑᾶ íᾱ ᾗᾗᾱßᾱ.

2.3 Ðùð íᾱ ὁἑἑÚíᾱᾱ ᾗßóèíðð ᾱðíἑἑᾱἑὁἑἑþð ἑᾱἑòíðñᾱḲᾱò ïÝᾱᾱ ᾱðü òçí ᾗᾗᾱíð ᾱíðíἑþí

ἈἑὁᾱἑÝὁᾱ ὁἑð ᰇᾗᾗἑÚἑ ïðíἑÝð ᾱíðἑἑᾱἑὁὁþíὁᾱ òí ad2 íᾱ òí ùíñᾱ òçð ὁðὁἑᾱðð òíð ᾗßóἑἑ (ᾗñÚὁᾱ dmesg íᾱ ᾗἑÝᾗᾱᾱ ᾱí ᾗßíᾱἑ òùὁὁü).

```
# dd if=/dev/zero of=/dev/ad2 count=2
# disklabel /dev/ad2 | disklabel -B -R -r ad2 /dev/stdin
ἘÝἑἑἑἑ ùíí Ḳíᾱ partition, ïðùᾱ ïðíñíᾱ íᾱ ÷ ñçóéíðìἑþᾱᾱ òí èñíÚὁἑ 'c':
# newfs /dev/ad2c
```

Ἀí ÷ ñᾱἑÚᾱᾱὁᾱἑ íᾱ ᾱἑἑÚíᾱᾱ òí disklabel ᾗἑᾶ íᾱ ÷ ñçóéíðìἑþᾱᾱ ðíἑᾱᾱðἑÜ partitions (ᾗἑᾶ ᰇᾗñÚᾱἑᾱᾱ ᾱí èÝἑᾶᾱ swap) òüᾱ èÚíᾱ:

```
# dd if=/dev/zero of=/dev/ad2 count=2
# disklabel /dev/ad2 > /tmp/label
Ἀñþíᾱ òí disklabel ᾗἑᾶ íᾱ ðñíὁἑÝὁᾱᾱ partitions:
# vi /tmp/label
# disklabel -B -R -r ad2 /tmp/label
ᾱἑὁᾱἑÝὁᾱ ὁçí ᾱíðíἑþ newfs ὁὁᾱ partitions ùðùð ðñÝðᾱἑ
```

Ἰ ᾗßóἑἑð ὁᾶð ᾗßíᾱἑ Ḳíᾱἑἑἑð ðñíð ÷ ñþóç.

3 Ἀεῖν ἡ ἀντιμετώπιση τοῦ ἀποβιβασμοῦ τοῦ FreeBSD

3.1 Ἀεῖν ἡ ἀντιμετώπιση

Ἡ ἀντιμετώπιση τοῦ ἀποβιβασμοῦ τοῦ FreeBSD ἀπὸ τὸν δίσκο εἶναι ἡ ἀντιμετώπιση τοῦ ἀποβιβασμοῦ τοῦ FreeBSD ἀπὸ τὸν δίσκο. Ὁ δίσκος εἶναι ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD. Ὁ δίσκος εἶναι ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD. Ὁ δίσκος εἶναι ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.

3.2 Ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD

1. Ἡ ἐγκατάσταση τοῦ FreeBSD ἀπὸ τὸν δίσκο.

```
# /stand/sysinstall
```

ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση.

2. Ἀεῖν ἡ ἀντιμετώπιση Index.
3. Ἀεῖν ἡ ἀντιμετώπιση Partition.
4. Ἀεῖν ἡ ἀντιμετώπιση τοῦ δίσκου ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.
5. Ἀεῖν ἡ ἀντιμετώπιση τοῦ δίσκου ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.
6. Ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση:

Do you want to do this with a true partition entry so as to remain cooperative with any future possible operating systems on the drive(s)?

(Ἐὰν θέλετε νὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD ἀπὸ τὸν δίσκο, ἀντιμετωπίζετε τὸν δίσκο ὡς ἑνὸς μέρους δίσκο. Ἄν θέλετε νὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD ἀπὸ τὸν δίσκο, ἀντιμετωπίζετε τὸν δίσκο ὡς ἑνὸς μέρους δίσκο.)

7. Ἀεῖν ἡ ἀντιμετώπιση Write.
8. Ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.
9. Quit (ἄκυρα) ἀπὸ τὸν FDISK Editor.
10. Ἐὰν θέλετε νὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD ἀπὸ τὸν δίσκο, ἀντιμετωπίζετε τὸν δίσκο ὡς ἑνὸς μέρους δίσκο.
11. Ἀεῖν ἡ ἀντιμετώπιση Label ἀπὸ τὸν Index menu.
12. Ἡ ἐγκατάσταση τοῦ FreeBSD ἀπὸ τὸν δίσκο.
13. Ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.

Error mounting /mnt/dev/ad2s1e on /mnt/blah : No such file or directory

Ἀντιμετώπιση τοῦ δίσκου.

14. Ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.

Ἰ ἁΒόέìð óáð ἁΒίᾶέ Ὑðìèìð ðñìð ÷ ñÞόç.

4 ¶èèàð èᾶέòìðñᾶΒàð ιᾶ òìðð ἁΒόέìðð

4.1 ÐñìóέΎòììóáð swap.

Ἐᾶèðð Ὑίᾶ óýóçιᾶ ἁðᾶèðᾶΒίᾶðᾶέ, ç ἁίŮᾶèç ἁέᾶ ιᾶᾶᾶýòᾶñ swap ἁΒίᾶðᾶέ ùèì ἕᾶέ ðéì ἁðéóᾶéðéèÞ. Ðᾶñùèì ðìð òì ιᾶ ðñìóðᾶèᾶΒ swap óᾶ Ὑίᾶί ððŮñ ÷ ιίðᾶ ἁΒόέì ἁΒίᾶέ ðññᾶñŮ ἁýóèìèì, Ὑίᾶð ἕᾶέιγñᾶéìð ἁΒόέìð ιðñᾶΒ ιᾶ ιñòìððìéçᾶΒ Ὑóóé þóðᾶ ιᾶ ðᾶñéŮ ÷ ᾶέ òì ἁðéðèŮ swap ðìð óáð èᾶΒðᾶέ.

Ἄέᾶ ιᾶ ðñìóέΎóᾶðᾶ swap ἕᾶèðð ἁŮᾶᾶðᾶ Ὑίᾶ ἁΒόέì óòì óýóçιᾶ:

1. Ἐᾶèðð èüᾶᾶðᾶ òì ἁΒόέì (partitioning) ἁèèŮìðᾶ òì disklabel ἕᾶέ ιñΒóðᾶ ÷ þñì ἁέᾶ swap óòì èñìŮðé (partition) ‘b’ ἕᾶέ ἁŮèðᾶ òìí ððùèìèðì ÷ þñì óᾶ èŮðìéì Ůèèì èñìŮðé, ð.÷. óòì ‘a’ Þ óòì ‘e’. Òì ιŮᾶᾶèìð ðìð ἁΒίᾶðᾶ ἁΒίᾶέ óᾶ blocks òùì 512 bytes.
2. ¼ðᾶί èŮíðᾶ newfs óòì ἁΒόέì, ἸçÍ òì èŮíðᾶ óòì èñìŮðé ‘c’. Ἀίðèᾶðᾶ, èŮíðᾶ òì ιùí óòì èñìŮðé ðìð ἁᾶί ἁΒίᾶέ swap.
3. ÐñìóέΎóðᾶ óòì /etc/fstab òì ðᾶñᾶèŮðù:

```
/dev/ad0b                                none                swap                sw 0 0
```

ἈèèŮìðᾶ òì /dev/ad0b óòì ùññᾶ òçð ἕᾶέιγñᾶéᾶð óáð óðóéᾶððð.

4. Ἄέᾶ ιᾶ ἁᾶñᾶñðìéÞóᾶðᾶ Ůìᾶóᾶ òì ιŮí swap ÷ ñçóèìððìéÞóðᾶ òçí ἁίðìèÞ swapon

```
# swapon /dev/da0b
swapon:  added /dev/da0b as swap space
```

4.2 ἈίðéᾶñŮòììóáð óᾶ ðᾶñéᾶ ÷ ùìᾶίᾶ ἁΒόέùì

Ἀðù òìí: Renaud Waldura (<renaud@softway.com>)

Ἄέᾶ ιᾶ ιᾶðᾶééìÞóᾶðᾶ ἁñ ÷ ἁΒᾶ ἁðù òìí ἁñ ÷ èèü óáð ἁΒόέì óᾶ Ὑίᾶί ἕᾶέιγñᾶéì, èŮíðᾶ:

```
# mount /dev/ad2 /mnt
# pax -r -w -p e /usr/home /mnt
# umount /mnt
# rm -rf /usr/home/*
# mount /dev/ad2 /usr/home
```

4.3 ÖœéÜîôå åíùìÝíîò ãßóëîò àå ôî CCD

Áđĩ ôĩĩ: Stan Brown (<stanb@awod.com>)

[illegible]

Ā́éá íá ôñŸíâôâ CCD đēÝíí âáí ÷ñâēŬæâôââ âéâēü đõñÞíá. Ìâ ôçí áíôîēÞ ccdconfig, ôîñõÞíâôâé ôî éâôŬēēçî
KLD áóôüîâôâ áí ĩ đõñÞíâôâ âáí Ý÷âé Þäç õđîóôÞñéíç á́éá CCD.

Ôá CCD ôöëÜ÷îíôáé óá partitions ôýôïö 4.2BSD. Áí èÝëäôá íá ÷ñçóëüîðíëPóáôá üëí ôüí äbôëí êáé ðÜëé ðñÝðáé íá ôöëÜíâôá Ýíá íÝí partition. Äéá ðáñÜüäéäíá, ç áíôíëP **disklabel -e** îðññá íá íá äâíâé:

```
#          size      offset      fstype    [fsize bsize bps/cpg]
c: 60074784         0      unused          0         0         0 # (Cyl.  0 - 59597)
```

Άάρ ιδññâßôâ íá ÷ ñçôèîñðñēßôâôâ ôï partition c άέα CCD, äöüóñí âñíáέ öýðñö *unused*. Áíôßèâôâ äçññèññâßôâôâ Ýíá íÝí
 partition äêñέâðò ßäέíò íââÝèñðò äέέÛ öýðñö 4.2BSD:

```
#          size      offset      fstype    [fsize bsize bps/cpg]
c: 60074784         0      unused         0         0         0 # (Cyl.    0 - 59597)
e: 60074784         0      4.2BSD         0         0         0 # (Cyl.    0 - 59597)
```

Ā́éá íá áçierōnāPóáôĀ Yía íYī CCD, âêôâĒYôôâ ôéô đăăăĒÛôû áíôîĒYô. ĐăăăĒĀÛôîôî đpò íá đñîróĒYôáôâ ôñăđô
 âđôêîrôđ. Áđêđô âêĒÛôôâ ôéô ôôôêăôYô ũđîđ ÷ñăĒÛăăôăĒ. Êôîçêăđôâ ôêê îē âđôêîĒ đñYđăĒ íá âđăăĒ *ũîêîĒē*.

```
# cd /dev ; sh MAKEDEV ccd0

# disklabel -r -w da0 auto
# disklabel -r -w da1 auto
# disklabel -r -w da2 auto

# disklabel -e da0
ᏏᏏᏏᏏᏏᏏᏏᏏ ᏏᏏᏏᏏᏏ ᣎ ᏏᏏᏏᏏᏏ 4.2BSD
# disklabel -e da1
ᏏᏏᏏᏏᏏᏏᏏᏏ ᏏᏏᏏᏏᏏ ᣎ ᏏᏏᏏᏏᏏ 4.2BSD
# disklabel -e da2
ᏏᏏᏏᏏᏏᏏᏏᏏ ᏏᏏᏏᏏᏏ ᣎ ᏏᏏᏏᏏᏏ 4.2BSD

# ccdconfig ccd0 273 0 /dev/da0e /dev/da1e /dev/da2e

# newfs /dev/ccd0c
```

Ç ôêĤ 273 âßíáé ôĭ ĩŸääèò ôĭô stripe. Åßíáé ĩ áñéèiùò ôuĭ sectors (512 bytes ĩ êâéŸíáo) óá êÛèâ block äääñŸíuĭ ôĭô CCD. Èá ðñŸðâé íá âßíáé ôĭôÛ÷éóóĭ 128 kB, êâé äâĭ ðñŸðâé íá âßíáé äŸíâĭç ôĭô 2.

Ôpñá ìðĩñáßôâ íá êÛíáôâ mount êáé íá ÷ñcôéiĩðĩéPóáôâ ôi CCD óáo ìÝóù ôcò óóóéãPò /dev/ccd0c.

já déu aóíáôu éáé ãóÝééêôí áíáééáôéêú ôíô CCD áíáé ôí Vinum. Ðãñéóóúôãñãò ðëçñíôíñbãò óóí Vinum Project
 home page (<http://www.vinumvm.org/>).

5 Ἀð÷ᾗñéóôþᾗ

Ἰ óðᾗᾗᾗᾗÝᾗ òᾗ þᾗᾗᾗ ἰᾗ ᾗð÷ᾗñéóðþᾗᾗ òíðð ðᾗᾗᾗᾗᾗᾗ ᾗᾗ ᾗçí óðíᾗᾗóðñᾗᾗ ᾗíðð óᾗ ᾗððþ ᾗçí ᾗñᾗᾗóþᾗ ᾗíðð:

- Darryl Okahata (<darrylo@hpnmhjw.sr.hp.com>) ᾗᾗ ᾗᾗð ᾗðᾗÝð ἰᾗçᾗþᾗð ᾗᾗᾗᾗᾗᾗᾗᾗᾗᾗ ᾗíùð ᾗþᾗᾗᾗ ᾗᾗ ᾗðíᾗᾗᾗᾗᾗᾗ ᾗñùðí ᾗᾗᾗᾗᾗᾗᾗᾗᾗᾗ, ᾗᾗ ἰðíþᾗð ᾗ÷ù ðíᾗᾗÝð ᾗñᾗÝð ÷ñçᾗᾗñðíᾗᾗᾗ ᾗᾗçí FreeBSD-questions.
- Jordan K. Hubbard <jkh@FreeBSD.org> ðíð ᾗᾗᾗᾗ ᾗí sysinstall ÷ñþᾗᾗᾗ ᾗᾗ ᾗÝᾗᾗᾗᾗ ᾗþᾗᾗð ᾗᾗᾗᾗᾗᾗᾗ.
- John Fieber (<jfieber@indiana.edu>) ðíð ᾗᾗᾗᾗ ᾗᾗð ðᾗçñíññᾗᾗᾗ ᾗᾗ ᾗᾗ ᰇᾗᾗᾗᾗᾗᾗᾗᾗ ᾗᾗ ᾗí DocBook DTD ðᾗᾗ ᾗᾗ ἰðíþᾗ ᾗððù ᾗí ᾗᾗᾗᾗᾗ ᾗᾗᾗᾗᾗᾗᾗ.
- Greg Lehey <grog@FreeBSD.org> ðíð ᾗᾗᾗᾗ ᾗçí ᾗᾗᾗᾗᾗᾗ ἰᾗð, øᾗ÷ñíᾗᾗ ᾗᾗ ᾗíᾗᾗᾗᾗᾗᾗᾗ, ᾗᾗ ᾗᾗ ᾗçí ᾗðíᾗðþñᾗᾗ ᾗíð ᾗᾗ ᾗᾗᾗᾗᾗ ᾗÝᾗᾗᾗ.