

Ἀέαιũñöùόç Ἀδιέçêãðôéêπί ἸΎούι ἁέα ×ñÞόç ìà ôī FreeBSD

ἰάò óýíôīīīò ìäçãüò

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Ôī FreeBSD ἁβίἁé Ἰίἁ éἁôī÷ ðñùìŸīī àìðīñéêü óýìἁīēī ôīô FreeBSD Foundation.
Ἰé èŸīἁéò lomega, Zip, éἁé Jaz ἁβίἁé ἁβôἁ éἁôī÷ ðñùìŸīἁ àìðīñéêü óýìἁīēἁ Þ àìðīñéêü óýìἁīēἁ ôçò
lomega Corporation óðéò ÇìùìŸīἁò Ðīēéðἁἁò Þ/éἁé óἁ Üēἁò ÷ þñἁò.
Ἰé èŸīἁéò Motif, OSF/1, éἁé UNIX ἁβίἁé éἁôī÷ ðñùìŸīἁ àìðīñéêü óýìἁīēἁ éἁé Ἰé èŸīἁéò Þ ðñÜóἁéò IT
DialTone éἁé The Open Group ἁβίἁé àìðīñéêü óýìἁīēἁ ôīô The Open Group óðéò ÇìùìŸīἁò Ðīēéðἁἁò
éἁé óἁ Üēἁò ÷ þñἁò.
ÐīēéŸò ἁðü óéò èŸīἁéò Þ ðñÜóἁéò Ἰé Ἰðīἁò ÷ ñçóéīīðīēīŸíóἁé ἁðü ôīôð éἁóἁéἁἁðἁóðŸò Þ ôīôð
ðùēçôŸò ôīôð ἁéἁ ἰἁ ἁéἁēñἁīōī óἁ ðñīüüīóἁ ôīôð èἁùñīŸíóἁé àìðīñéêü óýìἁīēἁ. ¼ðīô ἁðôŸò
àìðἁíἁἁīóἁé óἁ ἁðôü ôī èἁἁἁīñ éἁé ἁéἁ üóἁò ἁðü ἁðôŸò ἁīüñἁἁé ç ἸiÜἁἁ ἈíÜðððīçò ôīô FreeBSD üòé
ἁβίἁé ðéἁἁīüī ἰἁ ἁβίἁé àìðīñéêü óýìἁīēἁ, èἁ ἁἁβôἁ Ἰίἁ ἁðü óἁ óýìἁīēἁ: “TM” Þ “®”.

Ôī ðἁñüī Ḃἁἁἁôī ðἁñéἁñÜóἁé ððò ἰἁ èüðἁðἁ óἁ ðīἁἁðἁ (slices), èñīἁðéÜóἁðἁ (partition) éἁé
ññôīðīēÞóἁðἁ (format/ἁéἁīüñöùóç) óèēçñīŸò ἁβóēīðò éἁé ðἁñüīἁé ἰŸóἁ ðīô ðñīñἁἁīóἁé ἁéἁ ÷ ñÞόç ìà ôī
FreeBSD. Ôἁ ðἁñἁἁἁἁἁἁἁ ἁīēēīÜóðçἁí óôī FreeBSD 2.2 ἁéèÜ èīἁἁéÜ ἁīôἁἁŸīôī éἁé óðéò Üēἁò
ἁéἁüóἁéò. Ôī èἁἁἁñ Ḃ÷ἁé ἁīçἁññèἁἁ ἁéἁ ôçī Ḃἁἁôç 4 ôīô FreeBSD.

1 ἈéóἁἁἁἁÞ éἁé Ἰñéóīīἁ

1.1 ἈἁíéèÜ

Ôī ἰἁ ðñīóéŸóἁéò ἁβóēīðò ἰἁ ἁðéòð÷ἁἁ óἁ Ḃíἁ ððŸñ÷īī óýóðçἁἁ ἁβίἁé ÷ ἁñἁéðçñéóðéèü ἁñüð Ḃíðἁéñīô ἁéἁ÷ἁéñéóðÞ
óðóðἁἁðò. Ôī èüðēīī, ôī èñīÜðéἁóἁἁ éἁé ç ðñīóéÞç ἁβóèñ ἁðἁéòἁἁ éἁéἁἁðἁñç ðñīôī÷Þ éἁé óùóðÞ óýìἁīç ἁíðēþī.
ἰἁ ðéἁἁñ èÜēìð ἰðñἁἁ ἰἁ ἁñἁóἁíἁóἁé Ḃíἁí Ἰēüēçñī ἁβóēī óἁ ἁἁðἁññèἁðἁ. Ἀðôü ôī Ḃἁἁἁôī ἁñÜóðçἁἁ ùò
ðñīððÜἁἁé ἰἁ ἁðēīðīēçἁἁ ç ἁéἁἁéἁóἁἁ éἁé ἰἁ ἁðīðἁð÷èŸí ἁðò÷ἁἁðἁ. Ἀððð÷þð, ἁíἁíἁἁóἁéò ððἁñ÷üíðüī
ἁñἁἁéἁἁñ (èðñἁò ôīô sysinstall), óðéò ðñüóóἁðἁ ἁéἁüóἁéò ôīô FreeBSD, Ḃ÷ἁἁí ἁἁéðēþóἁé ôçī ἁéἁἁéἁóἁἁ.

ÔðŸñ÷ἁἁí Ḃἁἁíἁ ðñüðīé (modes) ññôīðīἁççòð:

- *δοιᾶδῶP εἰεδοῖνᾱβά (compatibility mode)*: Ἀεἰῡνῶος οῖο Ἀβῶεῖο πῶα ἰά Ὑ ÷ ᾱε Ὑἰ ὀβῖᾱεᾱ οἰπῖᾱοῖ (slice table) εᾱε ἰά ἰδῖᾱᾱ ἰά ÷ ᾱεῖοῖεῖεᾱ ὀᾱᾱῖεῖεᾱ ᾱοῖ Ὑεᾱ εᾱεοῖοᾱεῖῖ ὀοῖοπῖᾱῶ.
- *ᾱδῖεᾱεῖοῖεῖP εἰεδοῖνᾱβά (dedicated mode)*, ἰᾱεῖῖ Ὑῶ οῖᾱῖῖ Ὑῶ εῖῖᾱῶεᾱ εᾱε ᾱδῖεῖβῖᾱῶἰᾱ ᾱδῖεᾱεῖοῖεῖP εἰεδοῖνᾱβά: Ἀεἰῡνῶος ᾱῖο Ἀβῶεῖο ÷ ῡᾱῖο ὀβῖᾱεᾱ partitions. Ἀοῖ εῖῖᾱε ὀεῖ ᾱεᾱᾱεᾱῶᾱ ὀοῖ ὀῡῶεᾱοῖο Ἀβῶεῖο ᾱῶεῖοᾱᾱ ᾱεῖῖ Ὑἰ ἰε-FreeBSD εᾱεῖοῖᾱεῖοῖ ὀῶῶῖᾱ ὀεᾱῖῖ ἰά ἰε ἰδῖᾱᾱ ἰά ᾱε ὀῖ Ἀβῶεῖ. Ç Ὑεῖᾱῶ ᾱδῖεῖβῖᾱῶἰᾱ ᾱῖῶῖᾱῶ ὀῖῖ εῖβῖᾱῖ οῖο ῡεῖ ὀῖ ὀῶῶῖᾱ ἰδῖᾱᾱ ἰά ἰεῖ ᾱῖᾱῖῡᾱῖᾱεᾱ Ὑἰᾱ Ἀβῶεῖ ῖῖῖῖῖῖῖῖῖ Ὑῖ ᾱῶῖ ὀῖῖ ὀῖῖ.

[illegible]

ÐÝíá áðí ðçí áðééíáÐ ðíððíð éäéðíðíðíð ððÛí÷íð áýí ìÝéíáíé ððçðíðíððíð ðíð áðéíð. Ì ðíððíð ÷íçðéíðíéáð ðí
 áíáééáíí áäéáðÛððáçðð ðíð ððððíððíð /stand/sysinstall. Áðí ðí 2.1.7-RELEASE éäé íáðÛ ç sysinstall
 áðéíðíéáð ðí ðððéíð ðíð áðéíð áðáéáÐ áðéðíÝðáé ðçí áðáðéáðð áééááÐ ððí label (ðððéíð) éäé ððá ðíðáðá
 (partitions) ðíð áðéíð. ÁðéðéÝíð óáð áðéðíÝðáé íá áðéçéçáýðáðá ðéð áééááÝð ííðí ððíð ððáéáðéíéÝíð áðéí ÷íðíðð
 íá áðçíáÛéáé ðíðð ððéíéðíðð. Ì ááýðáííð ðíððíð áíáíé íá áéðáéÝðáðá áéÛíðíð áíðééÝð ìá ðí ÷Ýíé áðí ðçí áíáíð
 áíðéíð ùð root. Áí áðééÝíðáð ðçí áðíééáððééÐ éäéðíðíðíð ÷íðáéÛéáðá íá áéðáéÝðáðá ííðí 2-3 áíðééÝð áíð ìá ðí
 sysinstall ðíÝðáé áíðéÝðáðá ééáÛéé ðáíáðÛíð.

1.2 Ĩnéóìïß

Ç áéá÷âßñéóç äßöêùí òôí UNIX® Ý÷áé äþóáé íÝá Ýíñíé óá òðŨñ÷íõóáð ëÝíáéð. Ôí ðáñáéŨòù èáñéëüüáéí áîçáâðçí ìñíëüäßá ðíõ ÷ñçóéñðíëíüíá óá áóòù òí èáßíáñí èáé òòí FreeBSD äáñééŨ (ðñíõóáðð).

- [illegible]

1.3 ΟçἰᾱḂᾱ ðῖò ðñÝðᾱé ἰᾱ ðñῖóÝἰᾱðᾱ éᾱé ðᾱᾱḂᾱð

Ἀþóðᾱ ἰᾱᾱÜεç ðñῖóῖ÷þ ðόç ᾱέᾱᾱééᾱóḂᾱ, ᾱῖ ᾱᾱῖ εÜᾱᾱðᾱ ðᾱ ἰÝðñᾱ óᾱð éᾱé ᾱḂἰᾱé εÜεῖð ἰðῖñᾱḂ ἰᾱ éᾱᾱóðñÝðᾱðᾱ ðᾱ ðᾱñéᾱ÷ῖᾱῖᾱ Üεεῖῖ ᾱḂóεῖῖ ðῖò ðóððῖᾱðῖð.

ðñῖóÝἰðᾱ ðé εÜἰᾱðᾱ. ἈḂἰᾱé ðῖεý ᾱýεῖῖ ἰᾱ éᾱðᾱóðñÝðᾱðᾱ εÜεῖð ᾱḂóεῖ ᾱῖðéᾱýῖῖðᾱð ἰᾱ ᾱððÝð ðéð ᾱῖðῖεÝð. Ἀῖ Ý÷ᾱðᾱ ᾱῖðéᾱῖḂᾱð ᾱéÝᾱἰðᾱ ðᾱ ἰçῖýἰᾱðᾱ ðῖò ððñῖᾱ éᾱðÜ ðç ᾱέᾱᾱééᾱóḂᾱ ᾱéêḂῖçóçð ᾱéᾱ ἰᾱ ᾱñᾱḂᾱ ðç óùóðþ ððóéᾱðþ ᾱḂóεῖð.

ÖðóééÜ ᾱᾱῖ Ý÷ῖðἰᾱ éᾱἰḂᾱ ᾱðéýῖç ᾱéᾱ æçῖéÝð ðῖò ἰðῖñᾱḂ ἰᾱ ðñῖéççεῖýῖ. Ç ᾱðéýῖç ᾱḂἰᾱé ᾱééþ óᾱð!

1.4 Zip, Jazz, éᾱé Üεéᾱ ᾱóᾱéñῖῖἰᾱῖᾱ ἰÝóᾱ

Ἰé ᾱóᾱéñῖῖᾱñé ᾱḂóεῖῖ ἰðῖñῖýῖ ἰᾱ ᾱéᾱῖñöùεῖýῖ óᾱῖ éᾱñῖéῖḂ ᾱḂóεῖῖ. Õῖ óçἰᾱῖðééü ᾱḂἰᾱé ἰᾱ ᾱḂἰᾱé óðῖᾱἰÝñð ἰ ῖᾱçᾱüð ðῖò ᾱḂóεῖð éᾱðÜ ðçῖ ᾱéêḂῖçóç ðῖò ðóððῖᾱðῖð éᾱé ἰᾱ ᾱéóéÝðᾱ ἰÝóᾱ þóðᾱ ἰᾱ ἰðῖñÝóᾱé ἰ ððñῖᾱð ἰᾱ ᾱᾱḂ óùóðÜ ðçῖ ᾱᾱῖᾱðñḂᾱ ðῖò ᾱḂóεῖð. ἘῖéðÜἰðᾱ ðé εÝᾱé ç ᾱῖðῖεþ dmesg ᾱéᾱ ἰᾱ ᾱᾱḂᾱ ᾱῖ ç ððóéᾱðþ ᾱḂἰᾱé óóçῖ εḂóðᾱ. Ἀéᾱ ðᾱñÜᾱᾱéᾱῖᾱ ᾱῖ ἰ ððñῖᾱð ᾱñÜðᾱé:

Can't get the size

öüðᾱ ᾱᾱῖ ððÜñ÷ᾱé ᾱéóéÝðᾱ óðῖῖ ῖᾱçᾱü. Ἀῖ ᾱḂἰᾱé ᾱððü éᾱ ðñÝðᾱé ἰᾱ ᾱðᾱῖᾱééῖþóᾱðᾱ ðῖ ἰç÷Üῖçἰᾱ ðñéῖ ᾱῖéçῖÜóᾱðᾱ ἰᾱ ᾱéᾱῖñöþóᾱðᾱ ðçῖ ᾱéóéÝðᾱ.

2 Ἀéᾱῖñöþῖῖἰᾱðᾱ ᾱḂóéῖðð ᾱéᾱ ᾱðῖééᾱéóóéêþ éᾱéðῖðñᾱḂᾱ

2.1 Ἀéóᾱᾱüᾱþ

Ἀððþ ç ðᾱñÜᾱñᾱðῖð ðᾱñéᾱñÜóᾱé ðþð ἰᾱ ððéÜἰᾱðᾱ ᾱḂóéῖðð ἰüñῖ ᾱéᾱ ðῖ FreeBSD. ἘðῖçéᾱḂᾱ üðé ἰé ᾱḂóéῖῖ ᾱðῖééᾱéóóéêþð éᾱéðῖðñᾱḂᾱð ᾱᾱῖ ἰðῖñῖýῖ ἰᾱ ᾱéᾱᾱóóðῖýῖ ᾱðü Üεéᾱ éᾱéðῖðñᾱééÜ, ῖýðᾱ ἰᾱ εÜñῖóῖ boot.

2.2 Ðþð ἰᾱ ððéÜἰᾱðᾱ ᾱḂóéῖðð ᾱðῖééᾱéóóéêþð éᾱéðῖðñᾱḂᾱð ἰᾱ ðῖ Sysinstall

To /stand/sysinstall, ðῖ ðñüᾱñᾱῖᾱ ᾱᾱéᾱðÜóóᾱóçð ðῖò ðóððῖᾱðῖð, Ý÷ᾱé ᾱðᾱéðᾱéᾱḂ óóéð ðᾱéᾱððᾱḂð ðῖò ᾱéᾱüóᾱéð þóðᾱ ἰᾱ ᾱðῖῖðῖéᾱḂ ðçῖ ᾱéᾱᾱééᾱóḂᾱ ÷ññéóῖῖý ðüñ ᾱḂóεῖῖ éᾱé ἰᾱ ᾱðᾱéðᾱḂ ééᾱüðᾱñç ðñῖððÜéᾱéᾱ. Õᾱ ðñῖᾱñÜἰᾱðᾱ fdisk éᾱé disklabel ðῖò ððÜñ÷ῖóῖ ðῖò sysinstall ᾱḂἰᾱé ᾱñᾱöééῖý ðᾱñéᾱÜεῖῖðῖð (GUI - Graphical User Interface) éᾱé ἰᾱéþῖῖóῖ ðῖ ἰðÝñᾱἰᾱ ðῖò εῖðḂἰᾱðῖð ðüñ ᾱḂóεῖῖ. ἈḂἰᾱé ðñῖóᾱῖþð ἰ ᾱðéῖεüðᾱñῖð ðñüðῖð ἰᾱ éüðᾱðᾱ ᾱḂóéῖðð ᾱðü ðçῖ Ýéᾱῖóç 2.1.7 éᾱé ἰᾱðÜ ðῖò FreeBSD.

1. Ἰᾱééῖþóðᾱ ðῖ sysinstall þð root ᾱñÜῖῖῖðᾱð

```
# /stand/sysinstall
```

óóçῖ ᾱñᾱῖþ ᾱῖðῖεþῖ.

2. ἈðééÝἰðᾱ Index.
3. ἈðééÝἰðᾱ Partition.
4. ἈðééÝἰðᾱ ðῖ ᾱḂóεῖ ðῖò εÝéᾱðᾱ ἰᾱ ᾱᾱéᾱóᾱóðþóᾱðᾱ ÷ñçóéῖῖðῖéþῖðᾱð ðᾱ ᾱᾱéÜééᾱ éᾱé ἰᾱðÜ **SPACE**.

5. Ἀί εά ÷ ñçóéíðìéþóáðå ùèí òí ἁβóèí ἁέά òí FreeBSD, ἁðéëÝíðå Ἀ.
6. Ἰùèéð óáð ñòðþóáé áí ùíòò ò ἔÝéåðå íå òí èÝíåðå áððù (Do you still want to do this) ἁðáíðþóðå Yes.
7. ἈðéëÝíðå Write.
8. Ἐά óáð ἁḗÛéåé íéå ðñíåäíðìþçόç ó÷ḗðéèÛ íå òçí ἁḗñåðþ óå ððÛñ÷ííóå óðóðþíáðå ἁðáíðþóðå Yes.
9. Ἰùèéð óáð ñòðþóáé áí èÝéåðå íå ἁḗéåðóððóáðå Ḃíå boot loader, ἁðéëÝíðå None ἁέå íå ἁðñóýḗåðå ððéåḗþðìå ἁèèḗḗþ òðí Master Boot Record. Ç ἁḗéåðÛóðáóç ḗñò boot loader ÷ ñḗéÛḗåðåé ùñí óå éåéñýñéåð ἁḗéåðóððóáðéð òí FreeBSD þ áí ó÷ḗḗéÛḗåðå íå òððéåðþóáðå òí ἁβóèí óå èÛðìéí Ûèèí íç÷Ûíçå.
10. Ðáðþóðå **ENTER** òðí ḗçíḗñòðéèù ððòíå ḗñ ḗÝḗé “Wrote FDISK partition information out successfully”.
11. ἈðéëÝíðå Quit ἁέå íå ἁḗḗðå ἁðù òí FDISK Editor éåé ððÛ **ESCAPE** ἁέå íå ἁðéóðñÝðåðå òðí Index menu.
12. ἈðéëÝíðå Label ἁðù òí Index menu.
13. ἸñÛóðå òí ἁβóèí óáð ùðò ò ἔÝéåðå (ḗþ ðñþḗåðå òå partitions). Ἀí èÝéåðå ùñí Ḃíå partition ðáðþóðå òí c ἁέå íå ḗçíèðñḗðåðå òí partition. ἸðÛ ἁðèð ἁḗ÷èḗðå òéð ðñíḗðéèḗÝð ἁέå òå ðñíéḗñéíéóíḂíå size, partition type Filesystem, éåé mountpoint (òí ðððí ḗḗ ÷ ñçóéíðìéþåðå).
14. Ðáðþóðå w ùèéð òḗḗèþóáðå éåé ḗðéèðþóðå òéð ḗèḗḗÝð ἁέå íå òðíḗ÷þóðå. Òí filesystem èå ðḗñåóðḗ ἁððñḗðå ἁðù òçí ḗíðèþ newfs ḗèðò ḗ ἁðéëÝíðå òí ḗíðèḗðí. (Ἀí ḗÛḗåðå éåéñýñḗéí partition óáð òðòÝñḗḗ íå òí èÝíåðå!). Ἐά óáð ḗþóḗ òí èÛèð:

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

Ἀḗñþóðå òí.

15. Ðáðþóðå òðíḗ÷ḗḗḗ òí **ESCAPE** ἁέå íå ἁḗḗðå.

2.3 Ðò ò íå òðéÛíåðå ḗβóèíðò ἁðìèèḗéóðéèþò èḗéðíðñḗḗò ðÝóå ἁðù òçí ḗñḗñþ ḗíðèþí

ἈèðḗÝóðå òéð ðḗñḗèÛò ḗíðèḗÝð ḗíðéḗééóððíóðå òí ad2 íå òí ùñíå òçð òðóéḗðð òí ḗβóèí (ḗñÛððå dmesg íå ḗèÝḗñåðå ḗ ḗḗḗé òððò).

```
# dd if=/dev/zero of=/dev/ad2 count=2
# disklabel /dev/ad2 | disklabel -B -R -r ad2 /dev/stdin
ἘÝèðå ùñí Ḃíå partition, ðððå ððñýñå íå ÷ ñçóéíðìéþóðå òí èñÛðé 'c':
# newfs /dev/ad2c
```

Ἀí ÷ ñḗéÛḗåðå íå ḗèÛíåðå òí disklabel ἁέå íå ÷ ñçóéíðìéþóðå ððéḗḗðè partitions (ḗéå ðḗñÛḗḗḗḗ ḗ ḗÝéåðå swap) òððå èÛíå:

```
# dd if=/dev/zero of=/dev/ad2 count=2
# disklabel /dev/ad2 > /tmp/label
Ἀñþðå òí disklabel ḗéå íå ðñíðéÝóððå partitions:
# vi /tmp/label
# disklabel -B -R -r ad2 /tmp/label
ḗèðḗÝóðå òçí ḗíðèþ newfs òðå partitions ùðò ðñÝðḗ
```

Ἰ ḗβóèí óáð ḗḗḗé Ḃíèèð ðñò ÷ ñþóç.

3 Ἀεάιιñöþííîáò ἁβóêîðð ἁέά óîîááðþ ἑἁέôîññḗḄḗ

3.1 Ἀέóáḗḗḗþ

Ç ἁñḗḗþ ἁíðêþí ἁβḗḗ íáí í ἁðêðêḗðḗñð ðñḗðð ἁέḗ íḗ ððêḒḒḗðḗ ἁβóêîðð ἁðíêêḗéóðéêþð ἑἁέôîññḗḄḗ ἁêêḒ ἁβḗḗ ἑἁé í ἁððêðêḗðḗñð ἁέḗ íḗ ððêḒḗðḗ óîîááðýð ἁβóêîðð. Õí fdisk ἁðḗ ὅçí ἁñḗḗþ ἁíðêþí èÝêḗ ðḗñéóóḗðḗñḗð ἁíþḗḗð ἱḗçíḗðéêþí ἑἁé ðíêêḒ ἁíþḗḗð ò÷ḗðêêḒ íḗ ὀí ḗβḗḗḗ êñḗḗðéþí, êḒðé ðíð ðñḗḗíþð ἁḗí ÷ñḗḒḗḗðḗé íḗ ἱḒḗḗðḗ. Ἀé ἁððḗ ÷ñçóéíðíêḒðḗð òí sysinstall ἁέḗ íḗ ððêḒḒḗðḗ óîîááðýð ἁβóêîðð ἁêðêðêþíðḗð ðéð ἱḗçḗḄḗð ḗḗñḗḒḗðḗ.

3.2 Ðþð íḗ ððêḒḒḗðḗ ἁβóêîðð óîîááðþð ἑἁέôîññḗḄḗð íḗ ὀí Sysinstall

1. ἸḗêêḒðḗð òí sysinstall þð root ἁñḒḗíðḗð

```
# /stand/sysinstall
```

óðçí ἁñḗḗþ ἁíðêþí.

2. ἈðêêḒÝḗðḗ Index.
3. ἈðêêḒÝḗðḗ Partition.
4. ἈðêêḒÝḗðḗ òí ἁβóêî ðíð èÝêḗðḗ íḗ ἁḗéḗðḗððḗðḗð ÷ñçóéíðíêḒðḗð ðḗ ἁḗḒḗḗḗ ἑἁé ἱḗðḒ **SPACE**.
5. Ἀí éḗ ÷ñçóéíðíêḒðḗð ḗêḒ ὀíḗ ἁβóêî ἁέḗ ὀí FreeBSD, ἁðêêḒÝḗðḗ A.
6. ¼ḗḗí óḗð æçðçèḗḄ:

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) ?

(èÝêḗðḗ íḗ ὀí êḒḒḗðḗ ἁððḗ íḗ ḗñḗḗḗðéêḒ êñḗḒḗḗ ἁέḗ íḗ ḗḗñḗḗḗḗḗ óîîááðḗð íḗ Ḓḗḗḗ ἑἁέôîññḗḒḗḒḗ
óðððḒḗḗḗ?) Ἀðḗíððḗð Yes.

7. ἈðêêḒÝḗðḗ Write.
8. ¼ḗḗí óḗð æçðçèḗḄ íḗ ἁḗéḗðḗððḗðḗð ὀíḗ boot manager, ἁðêêḒÝḗðḗ None íḗ ὀí **SPACE** ἑἁé ἱḗðḒ **ENTER** ἁέḗ OK.
9. Quit (ḗḗḗḄḗð) ἁðḗ ὀí FDISK Editor.
10. Ἐḗ óḗð ñḗððḗḗ êḒðé ò÷ḗðêêḒ íḗ ὀíḗ boot manager ḗḒḗḗ, ἁðêêḒÝḗðḗ None íḗḒḗ.
11. ἈðêêḒÝḗðḗ Label ἁðḗ ὀí Index menu.
12. ἸñḒḗðḗ ὀí ἁβóêî ḗððð èÝêḗðḗ (ḗḗþ éḗ ἸñḒḗðḗð ḗḗ partitions). Ἀí èÝêḗðḗ ἱḗñḗ Ḓḗḗ partition ἁðêþð ḗḗ÷ḗḄḗð ðéð ḗñḗḗðéêḒḗð ἁέḗ ḗḗ ḗñḗḗḗñḗóíḒḗ Ḓḗḗ size, partition type filesystem, ἑἁé mountpoint (ὀí ἱðḗḒḗ ἁḗí ÷ñçóéíðíêḒḗḄḗḗ).
13. Õí filesystem éḗ ḗḗñḗðḗḗ ἁððḗḗḗḗ ἁðḗ ὅçí ἁíðêþḒ newfs ἁéðḗð ḗḗ ἁðêêḒÝḗðḗ ὀí ḗíðḗḗḗ. Ἀí ἁḒḗḗḗ ἑἁéñḗḗḗḗ partition óḗð óðḗḒḗḗ íḗ ὀí êḒḒḗðḗ! Ἐḗ óḗð ἁþḗḗ ὀí êḒḒḗð:

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

ἈññḒðḗð ὀí.

14. Ðḗððḗðḗ óðíḗ÷ḗḗḗ ὀí **ESCAPE** ἁέḗ íḗ ἁḗḗḗðḗ.

4.3 ÖöéÛîôå åíùìÝíĩòò äßóêĩõò àå ôĩ CCD

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

Ià òi Concatenated Disk Driver, Ð àèèèþò CCD, ìðññàðòá íá Ý÷-àòà ðreerýò uùieréòð àðóèrèð àèèÛ íá òòìðñèòèÝñííòáé uò Ýíàð. Ç àéááééàóá éÝÑàðáé òðá÷þíàðóç (striping). Ià òçì àðèèèèèçòç Ý÷-àòà éáéýòàñá àðìòàéÝòíàðá òðçì òá÷-ýòçòá àðàèäÞ ìèñÛÑèíòáé íé ààññàòÝð éáé íé áíááñþòáéð òòìðð àðóèrèð. ÁéááÛòòà òéð manual pages ccd(4) éáé ccdconfig(8) Ð òçì áñ÷èèÞ òàèÞáá òìò CCD (<http://stampede.cs.berkeley.edu/ccd/>) áéá ðñèóòòòàññàð èððòñÝñèáéð.

Ἀέα ία ὀñŸίάοᾶ CCD ḁēŸίί ᾱάί ÷ ñāēŸēāōᾶᾶ ᾱēāēēū ḁōñḆίá. ἰᾶ ὀçί ᾱíōīēḆ_{ccdconfig}, öñḱḆίáḁáē öί ēáöŸēēçēī
 KLD ᾱḁöüüíᾱᾶ ᾱί í ḁōñḆίáḁ ᾱάί Ÿ ÷ ᾱē Ḇäç ḁḁíḁḁḆñēíç ᾱēá CCD.

Όά CCD όόεŨ÷ññόάε όά partitions όýđř 4.2BSD. Άí εŸεάόά íá ÷ñçόέíñđíεPόάόά üēř όñř äßóēř έάε đŨεē đñŸđάε íá όόεŨíñάόά Ÿíá íŸí partition. Άέά đánŨüάέäíá, ç ářđřεP **disklabel** -e đřññäß íá ääßíáε:

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

Äär iðriñaðöa ía ÷ ñçöéúðriëÐaðöa öi partition c áéa CCD, äöüüíí áðíáé öýðíö *unused*. Áíððèäöä äçìèröñäÐööä Ýíá íÝí partition áéñéäðð Ðæíró iääÝèíöð äèÛ öýðrö 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)
```

Ἄεά ἰά ἀγέρεῖτῶνάΠοάοά Ὑῖά ἰῤῥῖ CCD, ἀεοάεῤῥοά οεό δᾶᾤάεῤῥοῦ ἀφῶρεῤῥο. Δᾶᾤεᾤᾤῥοῖοι θῖο ἰά θᾤῖοεῤῥοάοᾤ ὠᾤᾤᾤ ᾤᾤοεῖοδ. Ἀθῖοᾤ ᾤεῤῥοᾤ οεό ὠᾤᾤᾤᾤῥοῦ ὑᾤῖο ÷ ᾤᾤᾤᾤᾤᾤᾤ. Ἐῖοῖεᾤᾤᾤᾤ ὑᾤᾤ ἰᾤ ᾤᾤᾤᾤᾤ ὠᾤῤῥᾤᾤ ἰά ᾤᾤᾤᾤ *uirere*.

```
# cd /dev ; sh MAKEDEV ccd0

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

# disklabel -e da0
ᐃᑦᑦᑦᑦᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ 4.2BSD
# disklabel -e da1
ᐃᑦᑦᑦᑦᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ 4.2BSD
# disklabel -e da2
ᐃᑦᑦᑦᑦᑦᑦᑦᑦᑦᑦ ᐃᑦᑦᑦᑦᑦᑦ 4.2BSD

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

# newfs /dev/ccd0c
```

Ç öειΡ 273 αβίαι öι Υΰααεìò öìò stripe. Άβίαι ι ανέειυò öìυρ sectors (512 bytes ι έαεΰιάò) óα εΰεα block ααανΰιυρ öìò CCD. Έα ðñΥðαι ία αβίαι öìρεΰ ÷ έóóιρ 128 kB. έαι ααρ ðñΥðαι ία αβίαι άΰιαιç öìò 2.

Ôpñá ìďĩñáßôâ íá êÛíáôâ mount êáé íá ÷ñcôéiĩđiépóáôâ ôi CCD óáo ìÝòù ôcò óóóêãõPò /dev/ccd0c.

ἵά θεῦ ἀοῖάου ἐάε ἀὼΎέέοῖ ἀῖαέεάέοέεῦ ὀῖο CCD ἀῖῖάέ ὀῖ Vinum. Δᾶñέοόῦδᾶñᾶ ὀέçñῖῡῖñḂᾶ ὀῖῖ Vinum Project home page (<http://www.vinumvm.org/>).

5 Ἀð÷ᾗñéóôþᾗ

Ì óðᾗᾗᾗᾗÝᾗ òᾗ þḗᾗᾗ ἰᾗ ᾗð÷ᾗñéóðþᾗ òíðð ðᾗᾗᾗᾗᾗᾗ ᾗᾗ ὁçí óðᾗᾗóðñᾗᾗ ὁíðð óᾗ ᾗððþ ὁçí ᾗᾗᾗᾗᾗᾗ ὁíðð:

- Darryl Okahata (<darrylo@hpnmhjw.sr.hp.com>) ᾗᾗ ὁḗð ᾗðḗÝò ἰᾗçᾗᾗð ᾗᾗᾗᾗᾗᾗᾗᾗᾗ ᾗᾗᾗ ᾗðḗḗḗ ὁᾗ ᾗðḗᾗᾗᾗᾗᾗ ὁñüðí ḗᾗᾗᾗᾗᾗᾗᾗð, ὁḗð ἰðíᾗᾗ Ḃ÷ù ðḗḗÝð ὁñᾗÝð ÷ñçóḗñðḗḗþᾗᾗ ὁçí FreeBSD-questions.
- Jordan K. Hubbard <jkh@FreeBSD.org> ðḗᾗ Ḃḗᾗᾗ ὁí sysinstall ÷ñþḗḗᾗ ᾗᾗ ὁÝḗḗḗᾗ ᾗᾗᾗð ᾗḗḗᾗᾗᾗᾗ.
- John Fieber (<jfieber@indiana.edu>) ðḗᾗ Ḃᾗᾗᾗ ὁḗð ðḗçñḗḗñᾗᾗᾗ ḗᾗ ὁᾗ ᰇᾗᾗᾗᾗᾗᾗᾗᾗ ᾗᾗ ὁí DocBook DTD ðᾗᾗ ὁᾗ ἰðíᾗ ᾗððü ὁí ḗᾗᾗᾗᾗ ᾗᾗᾗᾗᾗᾗᾗ.
- Greg Lehey <grog@FreeBSD.org> ðḗᾗ Ḃḗᾗᾗ ὁçí ᾗḗḗᾗᾗᾗᾗ ἰḗᾗ, øᾗ÷ñḗᾗᾗ ᾗᾗ ᾗᾗᾗᾗᾗᾗᾗᾗ, ḗᾗ ᾗᾗ ὁçí ὁðḗḗðþñḗḗ ὁíð ὁᾗ ᾗḗᾗᾗᾗ ḗÝᾗᾗᾗ.