

- **οἰαάοP εἰεοἰῶῆP (compatibility mode):** Ἀεαῖυνῶος οἷο ἀβόεἰο πῶα ιά Y ÷ ἀέ Y ιά ὀβίαέα οἰΠιάοι (slice table) ἐάέ ιά ἰδιῆP ιά ÷ nçοεἰἰδιεεP δάνUεεεP ἀδῦ UεεP εἰεοἰῶῆU οῶοοΠιάα.
- **ἀδιεεάοόεεP εἰεοἰῶῆP (dedicated mode),** ἰᾶεέYδ οἰῆYδ εYᾶαόάε ἐάέ ἀδεεβίαοία ἀδιεεάοόεεP εἰεοἰῶῆP: Ἀεαῖυνῶος ἀφῶ ἀβόεἰο ÷ ἡῆδ ὀβίαέα partitions. Ἀδῦ εUἰᾶε ὅγῃ ἀεάεεαόP ὅδῳ ὀβόεP ἀδεεῦοᾶῆ ἀεU Y ιά ιç-FreeBSD εἰεοἰῶῆU οYόόP δεεἰῦ ιά ιç ἰδιῆP ιά ἀε οἱ ἀβόεἰ. Ç Yεοῆαός ἀδεεβίαοία αἰάYῆᾶάε οἰῖ εβίαοἰ οἷο ὑέ οἱ οYόόP ἰδιῆP ιά ιç αἰᾶῖῆᾶP Yἰᾶ ἀβόεἰ ἡῖῖῖῖYἰ ἐάδ* ἀοῖ οἱ ὀῆῖ.

Οἰεὸ δᾶῆεοῖοᾶᾶ δᾶῆεῖῖῖῖ ὅδYῖ εἰεεάοόεεP εἰεοἰῶῆP ἀβίαέ ι ἀδεεῦοᾶῆ ὀῆῖ ιά ὅεP ἐάέ ιά ÷ nçοεἰἰδιεεP ὁᾶ ὀδUῖ ÷ ἡῖᾶ οῶοοΠιάα, ἀοῖῖ Yἰᾶ ἐεἰῖῖῖῖ ἀβόεἰ οἰPεῖδ ὀῖῖῖῖῖῖῖ ἡῖῖ ἡέ οἱ FreeBSD. Δᾶῖῖ ὀἷ Ç οἰαάοP εἰεοἰῶῆP ἀεάοᾶεP ἰYᾶεὸς ἀεεεἰῖῖῖῖῖῖῖ (interoperability) ιᾶ ἰᾶεἰῖῖῖYδ ἀᾶεαόᾶUᾶε, ἀβίαέ δεἰ διεYῖεε.

ΔYῆᾶ ἀδῦ ὅγῃ ἀδεεῖᾶP ὀῆῖῖῖ εἰεοἰῶῆP ὀδUῖ ÷ ἡῖᾶ ἰYῖῖῖ ὅεPῖῖῖ οἷο ἀβόεἰ. Ἰ δῆῖῖ ÷ nçοεἰἰδιεεP οἱ ἡᾶᾶᾶᾶ ἡᾶᾶUᾶᾶᾶ οἷο οῶοοΠιάο /stand/sysinstall. Ἀδῦ οἱ 2.1.7-RELEASE ἐάέ ἰᾶU Ç sysinstall ἀδεἰῖῖῖ οἱ ὀPῖῖ οἱ ἀβόεἰ ἀᾶᾶP ἀδεῖῖYᾶε ὅγῃ ἀᾶᾶᾶ ἀεεᾶP ὀἷ label (ὀβόεἰ) ἐάέ ὁᾶ οἰΠιάα (partitions) οἱ ἀβόεἰ. ἈδεεYἰ ὁᾶ ἀδεῖῖYᾶε ιᾶ ἀδιεεᾶYᾶᾶ ὅε ἀεεᾶYδ ἡῖῖ ὀῖῖ ὀᾶᾶᾶᾶᾶᾶᾶ ἡῖῖ ἀβόεἰ ÷ ἡῆδ ιᾶ ἀδῇᾶUᾶε οἷο ὀδῖῖῖῖ. Ἰ ἡYᾶῖῖ ὀῆῖῖ ἀβίαέ ιᾶ ἀεᾶᾶYᾶᾶ ἡUῖῖῖ ἡῖῖYδ ιᾶ οἱ ÷ Yῆᾶ ὀἷ ἡᾶῖῖ ἡῖῖῖῖ ὀἷ root. Ἀἰ ἀδεεYἰᾶ ὅγῃ ἀδιεεάοόεεP εἰεοἰῶῆP ÷ ἡᾶᾶUᾶᾶ ιᾶ ἀεᾶᾶYᾶᾶ ἡῖῖ 2-3 ἡῖῖYδ ἡῖῖ ιᾶ οἱ sysinstall δῆYᾶᾶ ἡῖῖYᾶᾶ ἡᾶᾶᾶ δᾶᾶᾶUᾶ.

1.2 Ἰῆεῖῖ

Ç ἀέᾶ ÷ ἡῆῖῖ ἀβόεἰ οἱ UNIX® Y ÷ ἀέ ἡᾶᾶ ἰYᾶ Yἰῖῖ ὁᾶ ὀδUῖ ÷ ἡῖᾶ εYἰᾶ. Οἱ δᾶᾶᾶUᾶ ἡῖῖῖῖ ἡῖῖῖ ὅγῃ ἡῖῖῖῖ ὀἷ ÷ nçοεἰἰδιεεP ὁᾶ ἀδῦ οἱ ἡᾶῖῖ ἐάέ ὀἱ FreeBSD ἡῖῖῖ (δῆῖῖῖ).

- **οἰαάοP εἰεοἰῶῆP (compatibility mode):** Ç ἀεαῖυνῶος οἷο ἀβόεἰο πῶα ιά Y ÷ ἀέ Y ιά ὀβίαέα οἰΠιάοι (slice table) ἐάέ ιά ἰδιῆP ιά ÷ nçοεἰἰδιεεP δάνUεεεP ιᾶ UεεP εἰεοἰῶῆU οῶοοΠιάα. Ἀἰᾶᾶᾶ ὅδῳ ἀδιεεάοόεεP εἰεοἰῶῆP.
- **(ἀδεεβίαοία) ἀδιεεάοόεεP εἰεοἰῶῆP:** Ç ἀεαῖυνῶος οἷο ἀβόεἰο ἐᾶU ὀYῖῖῖ ὀῆῖῖ πῶα ιά ιç δᾶῆY ÷ ἀέ ὀβίαέα ὀἰUῖ (slice table). Ἀβίαέ δεἰ ἡῖῖῖ ἀεάεεαόP ἀεU ι ἀβόεἰ ἰδιῆP ιά ιç ἡῖῖῖ ὁᾶ ιç-FreeBSD εἰεοἰῶῆU οῶοοΠιάα. Ἀἰᾶᾶᾶ ὅδῳ οἰαάοP εἰεοἰῶῆP.
- **ἀβόεἰ:** Ἰε ὀεεῖῖῖ ἀβόεἰ, ὁᾶ CDROM, ἰε ἰᾶῖῖῖ-ἰᾶῖῖYδ ὀᾶᾶYδ ἐάέ ὁᾶ ἀᾶῖῖῖῖῖ ἰYᾶ Zip®/Jaz® ἀβίαέ ἰᾶῖῖYδ ἀδῦ ὅε ὀᾶᾶYδ ἰᾶῖῖῖ ἀδιεεᾶᾶᾶ ἡᾶῖῖYῖῖ ὀἷ ÷ nçοεἰἰδιεεP ὀβίαέ ὀβᾶᾶ. Ç ἡᾶῖῖ ἡῖ ÷ P εἰεοἰῶῆP ἀᾶᾶ ὀἷ ἰYῖῖ ἀδιεεᾶᾶᾶ Yἰᾶ P δᾶῆεοῖῖῖῖ ἀβόεἰ ἰε ἰᾶῖῖ δᾶῆεῖῖYῖῖῖῖ ἀδῦ Yἰᾶ ἡῖῖYῖ, ἡῖῖ ἰᾶ ἡᾶᾶP ἡῖῖῖῖ ὁᾶ Yἰᾶ ἡῖῖῖῖ δUῖῖ ὅεP ἡᾶῖῖ οἱ ἀβόεἰ ἐάέ ἀᾶᾶUᾶᾶ ἀδῦ οἱ ἀβόεἰ P ἡῖῖῖῖ ἡᾶῖῖYἰ ὁᾶ ἀᾶῖῖ. Οἱ ἡῖῖῖῖ ἡῖῖῖῖ ἰᾶ ἰᾶᾶᾶP εUῖῖῖ ὀᾶῖῖ ÷ ἡᾶᾶᾶᾶᾶᾶᾶ οἱ ἀβόεἰ (ἰᾶῖῖῖῖ ἡῖῖ, ἡῖῖᾶᾶᾶᾶᾶᾶ, εῖδ.) ἡῖῖ οἱ ἡᾶᾶᾶ ἡῖῖῖῖ ἰᾶ “ἡῖ ÷ ἡᾶῖῖ” ἀεᾶᾶP ὅεP ἡᾶᾶ ὀᾶῖῖ ἡᾶῖῖῖῖ οἱ ἀβόεἰ.
- **οἰΠᾶ (slice):** Ἰᾶ ὀᾶᾶᾶᾶ ἡῖῖ ἀβόεἰ. ΟYῖῖῖ ἰᾶ ὁᾶ ὀῖῖῖῖ οἱ PC ἰᾶῖῖῖ ἰᾶ ὀδUῖ ÷ ἡῖᾶ ἰY ÷ ἡῖ 4 οἰΠᾶ ὁᾶ Yἰᾶ ἀβόεἰ. Ὅᾶ οἰΠᾶ ἀδιᾶῖῖῖῖ ἡῖ ὀἷ ÷ ἡῖῖῖ ὀῖῖῖ (sectors). ὀδUῖ ÷ ἡῖ Yἰᾶ “ὀβίαέᾶ ὀἰUῖῖῖ” (slice table) ὀἷ δᾶῆY ÷ ἀέ δεῖῖῖῖῖ ἡᾶ ὁᾶ οἰΠᾶ ἐάέ ÷ nçοεἰἰδιεεP ἀδῦ οἱ BIOS ἡᾶ ιᾶ ἡᾶᾶ ἀδῦ ὀYῖ ἰδιῆP ιᾶ ἡᾶῖῖῖ ὀἷ οYόόP. Ἰ ὀβίαέᾶ ὀἰUῖῖῖ εYᾶᾶ ἐάέ “ὀβίαέᾶ ἡῖῖῖῖῖ” (partition table) ὁᾶ ἡῖῖῖῖ DOS ὀἷ ὀᾶU ÷ ἡᾶᾶ ἡῖ οἱ δῆῖῖῖῖ fdisk.
- **ἡῖῖῖ (partition):** Ἰᾶ ὀᾶᾶᾶᾶ ἡῖῖ οἰΠᾶῖῖ. ὀἰPεῖδ ÷ nçοεἰἰδιεεP ἡᾶ ἡῖῖῖῖ ὀᾶᾶ ὀᾶᾶᾶYᾶᾶ ὀᾶᾶ ὀἰUῖῖῖ (slices) οἱ ἀβόεἰ οἱ FreeBSD. ΕUᾶ ὀYόόP ἡῖ ÷ ἡῖῖῖ (filesystem) P ἡᾶᾶᾶᾶᾶᾶ ἡῖῖῖ (swap area) ὀἷῖ ἀβόεἰ ἡῖῖῖῖ ὁᾶ Yἰᾶ ἡῖῖῖ. Ὅᾶ ἡῖῖῖῖ ὀᾶU ÷ ἡῖῖῖ ἰᾶ οἱ ἡᾶᾶᾶᾶᾶ disklabel.
- **ὀῖYᾶᾶ (sector):** Ç ἰεῖῖῖῖ ὀᾶᾶᾶᾶ ἡῖῖ ἀβόεἰ. ὀἰPεῖδ Y ÷ ἡῖ ἰYᾶᾶῖῖ 512 bytes.

1.3 ΟçíᾱḂᾱ ðìò ðñÝðᾱέ íᾱ ðñìóÝíᾱðᾱ éᾱé ðᾱᾱḂᾱð

Ἀþóðᾱ íᾱᾱÜεç ðñìóí÷þ ðόç ᾱέᾱᾱέᾱóḂᾱ, ᾱí ᾱᾱí εÜᾱᾱðᾱ ðᾱ ἰΨóḡᾱ óᾱð éᾱé ᾱḂíᾱé εÜεìð ἰðìḡᾱḂ íᾱ éᾱᾱóðñÝðᾱðᾱ ðᾱ ðᾱḡᾱ÷÷ḱᾱíᾱ Üεεḱḱ ᾱḂóεḱḱ ðìò ðóððḂíᾱðìð.

ðñìóÝíᾱð ḱé εÜíᾱðᾱ. ἈḂíᾱé ðḡḡ ᾱḡḡḡḡ íᾱ éᾱᾱóðñÝðᾱðᾱ εÜεìð ᾱḂóεḱ ᾱḡḡᾱḡḡḡḡḡḡ ἰᾱ ᾱððÝð ðéð ᾱíðḡḡÝð. Ἀí Ḳ÷ᾱðᾱ ᾱḡḡᾱḡḡḡḡ ᾱéÝᾱḱᾱ ðᾱ ἰçíýḱᾱðᾱ ðìò ðñḡḂíᾱ éᾱðÜ ðç ᾱέᾱᾱέᾱóḂᾱ ᾱéḡḂíçόçð ᾱéᾱ íᾱ ᾱḡᾱḂᾱ ðç óḱóðþ ððóéᾱðþ ᾱḂóεḱ.

ÖðóééÜ ᾱᾱí Ḳ÷ḱḱᾱ éᾱḱḂᾱ ᾱðḡýíç ᾱéᾱ æçḱḡÝð ðìò ἰðìḡᾱḂ íᾱ ðñḱḡεçḡḡýí. Ç ᾱðḡýíç ᾱḂíᾱé ᾱéḡþ óᾱð!

1.4 Zip, Jazz, éᾱé Üεḡᾱ ᾱóᾱéñìýḱᾱḱᾱ ἰΨóᾱ

Ἰé ᾱóᾱéñìýḱᾱḱᾱ ᾱḂóεḱ ἰðìḡḡýí íᾱ ᾱéᾱḱḱñöüεḡýí óᾱí éᾱḡḡḡḡḡ ᾱḂóεḱ. Öí óçíᾱíðééü ᾱḂíᾱé íᾱ ᾱḂíᾱé óðḱᾱḱḱÝḡḡ ἰ ḱᾱçᾱüð ðìò ᾱḂóεḱ éᾱðÜ ðçí ᾱéḡḂíçόç ðìò ðóððḂíᾱðìð éᾱé ἰᾱ ᾱéóéÝðᾱ ἰΨóᾱ þóðᾱ íᾱ ἰðìḡḡÝóᾱé ἰ ðñḡḂíᾱð íᾱ ᾱᾱḂ óḱóðÜ ðçí ᾱᾱḱᾱðḡḂᾱ ðìò ᾱḂóεḱ. ḲḡḡðÜíðᾱ ðé εÝᾱé ç ᾱíðḡḡþ dmesg ᾱéᾱ íᾱ ᾱᾱḂᾱ ᾱí ç ððóéᾱðþ ᾱḂíᾱé óóçí εḂóðᾱ. Ἀéᾱ ðᾱḡÜᾱᾱéᾱḱᾱ ᾱí ἰ ðñḡḂíᾱð ᾱḡÜðᾱé:

Can't get the size

öüðᾱ ᾱᾱí ððÜñ÷ᾱé ᾱéóéÝðᾱ óðḱḱ ḱᾱçᾱü. Ἀí ᾱḂíᾱé ᾱððü éᾱ ðñÝðᾱé íᾱ ᾱðᾱíᾱéḡḡḡḡḡḡḡ ðìò ἰç÷Üíçᾱ ðñḡḡ ᾱḡḡḡÜóᾱðᾱ íᾱ ᾱéᾱḱḱñöüðᾱðᾱ ðçí ᾱéóéÝðᾱ.

2 Ἀéᾱḱḱñöþḡḡḡḡᾱð ᾱḂóéḱḱð ᾱéᾱ ᾱðḱḡḡᾱéóðéḡþ éᾱéðìòḡᾱḂᾱ

2.1 Ἀéóᾱᾱüᾱþ

Ἀððþ ç ðᾱḡÜᾱḡᾱðìð ðᾱḡḡᾱḡÜóᾱé ðþð íᾱ ððéÜíᾱðᾱ ᾱḂóéḱḱð ἰḱḱḱ ᾱéᾱ ðì FreeBSD. ḲðḱçḡᾱḂᾱ ḱðḡḡḡḡ ᾱḂóéḱḱ ᾱðḱḡḡᾱéóðéḡþ éᾱéðìòḡᾱḂᾱð ᾱᾱí ἰðìḡḡýí íᾱ ᾱéᾱᾱᾱóðḡýí ᾱðü Üεḡᾱ éᾱéðìòḡᾱḡḡÜ, ḱýðᾱ íᾱ εÜḡḡḡḡ boot.

2.2 ðþð íᾱ ððéÜíᾱðᾱ ᾱḂóéḱḱð ᾱðḱḡḡᾱéóðéḡþ éᾱéðìòḡᾱḂᾱð ἰᾱ ðì Sysinstall

To /stand/sysinstall, ðì ðñḡᾱḡᾱḱᾱ ᾱᾱéᾱðÜóðᾱóçð ðìò ðóððḂíᾱðìð, Ḳ÷ᾱé ᾱðᾱéðᾱḡḡ óðéð ðᾱḡᾱððᾱḂᾱð ðìò ᾱḡᾱüᾱḡð þóðᾱ íᾱ ᾱðḡḡḡḡḡḡ ðçí ᾱéᾱᾱéᾱóḂᾱ ÷ñḡḡḡḡḡ ðḱḱ ᾱḂóεḱḱ éᾱé íᾱ ᾱðᾱéðᾱḂ éḡᾱüðᾱḡç ðñḱðÜḡᾱḡᾱ. Öᾱ ðñḱᾱḡÜḱᾱᾱᾱ fdisk éᾱé disklabel ðìò ððÜñ÷ḱḱ óðḱḱ sysinstall ᾱḂíᾱé ᾱḡᾱöéḡý ðᾱḡḡᾱÜḡḡḡḡð (GUI - Graphical User Interface) éᾱé ἰᾱḡḡḡḡḡ ðìò ἰðÝḡᾱᾱḱᾱ ðìò εḱḱḂíᾱðìð ðḱḱ ᾱḂóεḱḱ. ἈḂíᾱé ðñḱḱᾱḡþ ἰ ᾱðḡḡḡḡᾱḡḡ ðñḡḡḡḡ íᾱ éüðᾱðᾱ ᾱḂóéḱḱð ᾱðü ðçí Ḳḡᾱḱ 2.1.7 éᾱé ἰᾱðÜ ðìò FreeBSD.

1. Ἰᾱḡḡḡḡðᾱ ðì sysinstall þð root ᾱḡÜḡḡḡᾱð

```
# /stand/sysinstall
```

óóçí ᾱḡᾱḱḱ ᾱíðḡḡḡḡ.

2. ἈðḡḡÝḱᾱ Index.
3. ἈðḡḡÝḱᾱ Partition.
4. ἈðḡḡÝḱᾱ ðì ᾱḂóεḱḱ ðìò εÝḡᾱðᾱ íᾱ ᾱᾱḡᾱðᾱóðþóðᾱð ÷ñçóḡḡḡḡḡḡḡḡḡ ðᾱ ᾱᾱḡÜḡᾱ éᾱé ἰᾱðÜ **SPACE**.

5. Ἀί εά ÷ ñçóéíðìéþóáðå ùèí òí ἁßóèí ἁέά òí FreeBSD, ἁðéëÝíðå Ἀ.
6. Ἰùèéð óáo ñòðþóáé áí ùíòò ò ἔÝéåðå íá òí èÚíáðå áðòü (Do you still want to do this) ἁðáíðþóðå Yes.
7. ἈðéëÝíðå Write.
8. Ἐά óáo ἁḂÚèåé íéá ðñíḂéäíðìþçóç ó÷ḂðééÚ ìá ôçí ἁḂḂḂḂþ ሰḂ ððÚñ÷ííðá óðóðþíáðå ἁðáíðþóðå Yes.
9. Ἰùèéð óáo ñòðþóáé áí èÝéåðå íá ἁḂéáðóððþóðå Ḃíá boot loader, ἁðéëÝíðå None ἁέά íá ἁðñóýḂḂðå ïðíéḂḂððíðå ἁèèḂḂþ òðí Master Boot Record. Ç ἁḂéáðÚóðáóç Ḃíðð boot loader ÷ ñḂéÚḂḂðåé ùñí óḂ éḂéñýñéḂð ἁḂéáðóððÚóḂéð òí FreeBSD þ Ḃí ó÷ḂḂéÚḂḂðå íá òíðñéḂðþóðå òí ἁßóèí óḂ èÚðñéí Ḃèèí íç÷Úíçíá.
10. Ðáðþóðå **ENTER** òðí ḂíçíḂñòéèü ìþñíḂ Ḃñ ḂÝḂé “Wrote FDISK partition information out successfully”.
11. ἈðéëÝíðå Quit ἁέά íá ἁḂḂḂðå Ḃðü òí FDISK Editor éḂé ìḂÚ **ESCAPE** ἁέά íá ἁðéóðñÝðḂðå òðí Index menu.
12. ἈðéëÝíðå Label Ḃðü òí Index menu.
13. ἸñÚóðå òí ἁßóèí óáo ùðòò èÝéåðå (ḂḂþ ïñþḂḂðå óḂ partitions). Ἀí èÝéåðå ùñí Ḃíá partition ðáðþóðå òí c ἁέά íá ḂçíéíðñḂþóðå òí partition. ἸḂÚ ἁðèð ἁḂ÷èḂḂðå òéð ðñíḂðéèḂḂÝð ἁέά óḂ ðñíéḂéñéíéóí Ḃíá size, partition type Filesystem, éḂé mountpoint (òí ïðíþí ḂḂí ÷ ñçóéíðìéḂḂðḂḂ).
14. Ðáðþóðå w ùèéð òḂḂḂèþóðå éḂé Ḃðéèðñþóðå òéð ḂèèḂḂÝð ἁέά íá óñíḂ÷ḂḂðå. Òí filesystem èḂ ᰄḂḂḂðḂ ḂððüḂḂḂ Ḃðü ôçí Ḃíðñèþ newfs Ḃèðüð Ḃí ḂðéëÝíðå òí ḂíðḂḂðí. (Ἀí ḂÚḂḂðå éḂéñýñḂḂéí partition óáo óðíöÝñḂḂ íá òí èÚíáðå!). Ἐά óáo ḂþóḂḂ òí èÚèèð:

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

ἈḂñþóðå òí.

15. Ðáðþóðå óñíḂ÷ḂḂḂ òí **ESCAPE** ἁέά íá ἁḂḂḂðå.

2.3 Ðùò íá òðéÚíḂḂðå Ḃþóèíðò ḂðñèèḂḂéóðéèþð èḂéðíðñḂḂḂò ìÝóḂ Ḃðü ôçí ḂñḂìþ Ḃíðñèþí

ἈèðḂḂÝóðå òéð ᰄḂḂḂÚò òñḂñèÝð ḂíðéḂḂééóðþíóḂ òí ad2 ìḂ òí ùñíḂ ôçð óðóéḂḂðð òíð Ḃþóèíð (ḂñÚððå dmesg íá ḂèÝḂḂḂ Ḃí ḂḂḂḂ òùóðü).

```
# dd if=/dev/zero of=/dev/ad2 count=2
# disklabel /dev/ad2 | disklabel -B -R -r ad2 /dev/stdin
ἘÝèíðḂ ùñí Ḃíá partition, ïðüðḂ ïðñíýḂḂ íá ÷ ñçóéíðìéþóíðḂ òí èñíÚðé 'c':
# newfs /dev/ad2c
```

Ἀí ÷ ñḂéÚḂḂðåé íá ḂèèÚíḂḂðå òí disklabel ἁέά íá ÷ ñçóéíðìéþóðå ðñéḂḂðèÚ partitions (ḂḂḂ ᰄḂñÚḂḂḂḂḂ Ḃí èÝéåðå swap) òüðå èÚíḂḂ:

```
# dd if=/dev/zero of=/dev/ad2 count=2
# disklabel /dev/ad2 > /tmp/label
ἈñþíðḂ òí disklabel ḂḂḂ íá ðñíðéÝóḂðå partitions:
# vi /tmp/label
# disklabel -B -R -r ad2 /tmp/label
ḂèðḂḂÝóðå ôçí Ḃíðñèþ newfs óðḂ partitions ùðòò ðñÝðḂḂ
```

Ἰ Ḃþóèíð óáo ḂḂḂḂ ḂñḂḂñð ðñíð ÷ ñþóç.

3 Ἀεάιιñöþííîáò ἁßóêîðð ἁέἁ óîîἁἁð Ëἁéôîñḡḡḡḡ

3.1 Ἀέóἁḡḡḡḡ

Ç ἁḡḡḡḡ ἁíðíêþí ἁßíἁé íἁí í ἁðéíεüðḡḡḡ ðñüðíð ἁέἁ íἁ ððéÛíḡḡḡ ἁßóêîðð ἁðíééἁéóðééðð ḡἁéðîñḡḡḡḡ ἁééÛ ἁßíἁé ḡἁé í ἁððéíεüðḡḡḡ ἁέἁ íἁ ððéÛíḡḡḡ óîîἁἁðíýð ἁßóêîðð. Õí fdisk ἁðü ðçí ἁḡḡḡḡ ἁíðíêþí èÝḡἁé ðḡḡéóóüðḡḡḡ ἁíþḡἁéð ìἁéçíἁðéêþí ḡἁé ðíééÝð ἁíþḡἁéð ó÷ḡðééÛ íἁ ðíí ðßíἁéἁ éñíἁðéþí, èÛðé ðíð ðñíḡἁíþð ἁḡí ÷ñḡéÛḡḡḡḡ íἁ ìÛéἁðḡ. Ἀé ἁððü ÷ñçóéííðíéþḡḡ ðí sysinstall ἁέἁ íἁ ððéÛíḡḡḡ óîîἁἁðíýð ἁßóêîðð ἁéíéíðéþíðḡð ðéð ìἁçḡḡḡ ðḡḡḡḡÛð.

3.2 Ððð íἁ ððéÛíḡḡḡ ἁßóêîðð óîîἁἁððð ḡἁéôîñḡḡḡḡ íἁ ðí Sysinstall

1. Ìḡḡéíþḡḡ ðí sysinstall þð root ḡḡÛííḡḡḡ

```
# /stand/sysinstall
```

óðçí ḡḡḡḡḡ ἁíðíêþí.

2. ἈðééÝíðḡ Index.
3. ἈðééÝíðḡ Partition.
4. ἈðééÝíðḡ ðí ἁßóêîðð èÝḡḡḡḡ íἁ ἁḡḡḡḡḡḡðḡḡḡ ÷ñçóéííðíéþíðḡð ðḡ ἁḡḡḡḡḡ ḡἁé ìḡÛ **SPACE**.
5. Ἀí ḡἁ ÷ñçóéííðíéþḡḡḡ üéí ðíí ἁßóêîð ἁέἁ ðí FreeBSD, ἁðééÝíðḡ A.
6. ¼ḡḡí ḡḡð æçðçèḡḡ:

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) ?

(ÈÝḡḡḡḡ íἁ ðí èÛíḡḡḡ ἁððü íἁ ðñḡḡḡḡḡḡ èñíÛðéἁ ἁέἁ íἁ ðḡḡḡḡḡḡ óîîἁἁðü ìἁ Ûḡḡḡ ḡἁéðîñḡḡḡḡ ḡðððþíἁḡḡ?) Ἀðḡíðþḡḡ Yes.

7. ἈðééÝíðḡ Write.
8. ¼ḡḡí ḡḡð æçðçèḡḡ íἁ ἁḡḡḡḡḡḡðḡḡḡ ðíí boot manager, ἁðééÝíðḡ None íἁ ðí **SPACE** ḡἁé ìḡÛ **ENTER** ἁέἁ OK.
9. Quit (ḡḡḡḡḡḡ) ἁðü ðí FDISK Editor.
10. Èἁ ḡḡð ñüðþḡḡ èÛðé ó÷ḡðééü íἁ ðíí boot manager ðÛḡḡ, ἁðééÝíðḡ None íἁíÛ.
11. ἈðééÝíðḡ Label ἁðí ðí Index menu.
12. ÌññÛðḡḡ ðí ἁßóêîð üðüð èÝḡḡḡḡ (ḡḡþ ḡἁ ìññóḡḡḡ ḡἁ partitions). Ἀí èÝḡḡḡḡ ìüñí Ýíἁ partition ἁðḡðð ḡḡ÷ḡḡḡḡ ðéð ðñíḡḡḡḡḡÝð ἁέἁ ḡἁ ðñíḡḡḡḡḡéóíÝíἁ size, partition type filesystem, ḡἁé mountpoint (ðí ìðíßí ḡḡí ÷ñçóéííðíéḡḡḡḡ).
13. Õí filesystem ḡἁ ðḡḡḡḡḡḡ ἁððüḡḡḡ ἁðü ðçí ἁíðíêþí newfs ḡḡüðð ḡí ἁðééÝíðḡḡ ðí ἁíðḡḡḡḡ. Ἀí ḡÛḡḡḡḡ ḡἁéñýñḡḡḡ partition ḡḡð óðíöÝñḡḡ íἁ ðí èÛíḡḡḡ! Èἁ ḡḡð ἁþḡἁé ðí èÛḡḡ:

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

Ἀḡḡþḡḡ ðí.

14. Ðḡðþḡḡ ḡðíḡ÷üḡḡḡ ðí **ESCAPE** ἁέἁ íἁ ḡḡḡḡḡḡ.

4.3 ÖœÜîœă áíùìÝíĩòò äßóêĩõò ìà ôĩ CCD

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

Ià òi Concatenated Disk Driver, Ð àèèèþò CCD, ìðññàðòá íá Ý÷-àòà ðreerýò uùieréòð àðóeréòð àèèÛ íá òòìðññèòÝññíòáé uò Ýíàð. Ç àéááééáòá éÝññáòáé òòá÷þíàòóç (striping). Ià òçí àðèèèèèçòç Ý÷-àòà éáéýòáñá àðñòáéÝóíàðá òóçí òá÷ýòçòá àðàèäþ ññññÛññíòáé íé àññññòÝð éáé íé áíáññþòáéð òóñòð àðóeréòð. ÁéááÛòòá òéð manual pages ccd(4) éáé ccdconfig(8) Ð òçí áñ÷èèþ òáèþáá òñò CCD (<http://stampede.cs.berkeley.edu/ccd/>) áéá ðññéóòúòñññ ìððòñÝññéáð.

Ἀέα ία ὀñŸíāōā CCD ḑēŸíí āāí ÷ ñāēŬæāōōāā áēáēēū ḑōñŬíā. ĩā ḡçí āíōīēŬ `ccdconfig`, ōññōŬíāōáē ōí ēáōŬēēçēī
 KLD āōōūīāōā āí ī ḑōñŬíāḑ āāí Ÿ ÷ āē Ŭæç ḑḑíōōŬñēíç āēá CCD.

Όά CCD όόεŨ÷ñíόάε όά partitions όýđř 4.2BSD. Άí εŸεάόά íá ÷ñçόέíđíđéPόάόά üēí όíř äßóēí έάé đŨēé đñŸđάé íá όόéŨíάόά Ÿíá íŸí partition. Άέά đánŨüάέāíá, ç ářđřēP **disklabel** -e íđñāß íá äāßíāé:

```
#          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 äçìèröñāÐööä Ýíá íÝí partition áéñéäðð Ðæíró iāāÝèíöð äèÛ öýðró 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 ἀγέρεῖνᾱΠοάοᾱ Ὑῖα ἰῤῥῖ CCD, ἀεοᾱῖῤῥοᾱ οεο δᾱῖᾱῖῤῥοᾱ ἰῖῖῖῖῤῥοᾱ. Δᾱῖᾱῖῤῥοῖῖ ὅῖῖ ἰᾱ ὀῖῖῖῖῖῖῖῖ ὀῖᾱῖῖ ἂῖῖῖῖῖῖ. Ἀδῖῖῖ ἄῖῖῖῖῖῖ ὀεο ὀῖῖῖῖῖῖῖ ὑῖῖῖ ÷ ῖᾱῖῖῖᾱῖῖῖ. Ἐῖῖῖῖᾱῖῖῖ ὑῖῖ ἰῖ ἂῖῖῖῖῖ ὀῖῖῖῖ ἰᾱ ἂῖῖῖῖ *uivēre*.

```
# cd /dev ; sh MAKEDEV ccd0

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

# disklabel -e da0
ᐃᑦᑎᑦᐱᑦᐱᑦᐱᑦ ᐃᑦᐱᑦᐱᑦ 4.2BSD
# disklabel -e da1
ᐃᑦᑎᑦᐱᑦᐱᑦᐱᑦ ᐃᑦᐱᑦᐱᑦ 4.2BSD
# disklabel -e da2
ᐃᑦᑎᑦᐱᑦᐱᑦᐱᑦ ᐃᑦᐱᑦᐱᑦ 4.2BSD

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

# newfs /dev/ccd0c
```

Ç öειΡ 273 αβίαε οι ΪΥααεριο διο stripe. Άβίαε ι ανέειυιο ουρ sectors (512 bytes ι έαεΪάο) οά εΪεα block ααανΪιυι διο CCD. Έα δñΥδαε ία αβίαε οιοεΪ - έοοιι 128 kB. έαε ααρ δñΥδαε ία αβίαε αΪιαic διο 2.

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

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

5 Ἀð÷ἁñéóôþàð

Ì óðḃḃḃḃḃÝḃð èá þèḃḃ ḃá ḃð÷ḃñéóðþóḃé ôìðð ðḃḃḃḃḃḃḃ ḃéá ôçí óðìḃéóðìñḃḃ ḃìðð óḃ ḃððþ ḃçí ḃḃḃḃḃḃḃ ḃìðð:

- Darryl Okahata (<darrylo@hpnmhjw.sr.hp.com>) ḃéá ôéð ḃðḃÝð ìḃçḃḃḃð ḃḃḃḃḃḃḃḃḃḃḃḃ ḃḃḃḃ ḃḃḃḃḃ ḃḃ ḃðìḃḃḃḃḃḃḃ ḃḃḃḃḃ ḃḃḃḃḃḃḃḃḃḃḃḃ, ḃéð ìðìḃḃḃ ḃ÷ḃ ðìḃḃÝð ḃìñÝð ÷ñçóéñðìḃḃḃḃ ḃḃçí FreeBSD-questions.
- Jordan K. Hubbard <jkh@FreeBSD.org> ðìð ḃḃḃḃ ḃì sysinstall ÷ñþóéñ ḃéá ôÝðìḃḃ ḃḃḃḃḃ ḃḃḃḃḃḃḃḃ.
- John Fieber (<jfieber@indiana.edu>) ðìð ḃḃḃḃḃ ḃéð ðḃçñìñìñḃḃḃ ḃḃḃ ḃḃ ḃḃḃḃḃḃḃḃḃḃ ḃḃḃ ḃì DocBook DTD ðḃḃḃ ḃḃḃ ḃḃḃḃ ḃḃḃ ḃì ḃḃḃḃḃ ḃḃḃḃḃḃḃḃ.
- Greg Lehey <grog@FreeBSD.org> ðìð ḃḃḃḃḃ ḃçí ḃḃḃḃḃḃ ḃḃḃ, ḃḃḃ÷ñìḃḃḃ ḃḃḃ ḃḃḃḃḃḃḃḃḃḃ, ḃḃḃ ḃḃḃ ḃçí ḃðìḃḃḃḃḃḃ ḃìð ḃḃ ḃḃḃḃḃḃ ḃÝḃḃḃḃ.