



- **οἰαάοP εἰεοἰοῖαβᾶ (compatibility mode):** Ἀεαῖυνουός οἷο ἀβόεἰο πόα ιά Y ÷ ἀε Yἱά ὀβῖαά οἰΠῖαοῖ (slice table) εἰε ιά ἰδιῖαβ ιά ÷ nçοεἰἰδιεεᾶβ ὀάνῤεεεᾶ αἰῦ ῤεεᾶ εἰεοἰοῖαεῖῤ οὀοὀΠῖαοᾶ.
- **ἀδιεεαόοεεP εἰεοἰοῖαβᾶ (dedicated mode),** ἰἀεεYῶ οἷnYῶ εYᾶαοᾶε εἰε ἀδεεβῖαοἱᾶ ἀδιεεαόοεεP εἰεοἰοῖαβᾶ: Ἀεαῖυνουός αἰῦδ ἀβόεἰο ÷ ἰnῖδ ὀβῖαά partitions. Ἀὀῦ εῤῖᾶε ὀγῖ ἀεᾶεεᾶοᾶ ὀῇ ὀnῖοεᾶοῇ ἀβόεἰο ἀεἰεῦοᾶnç εἰεῤ Yἱᾶ ιç-FreeBSD εἰεοἰοῖαεῖῤ οYοὀγῖᾶ ὀεεᾶἰῖ ιά ιç ἰδιῖαβ ιά ἀε οἱ ἀβόεἰ. Ç Yεοῖαὀς ἀδεεβῖαοἱᾶ αἱᾶYῖᾶοᾶε ὀοἱ εβῖαοἱ οἷο ἰὀε οἱ οYοὀγῖᾶ ἰδιῖαβ ιά ιçῖ αἱᾶἰnῖβὀᾶε Yἱᾶἱ ἀβόεἰ ἰnῖοἰδιεεῖYἱἱ εᾶὀ\* ἀὀοῖ οἱ ὀnῖὀ.

Ὀὀεὀ ὀᾶnεοοῖοᾶnᾶ ὀᾶnεὀὀὀᾶεὀ ç ἀδιεεαόοεεP εἰεοἰοῖαβᾶ ἰβῖᾶε ι ἀεἰεῦοᾶnῖδ ὀnῖὀὀ ιά ὀῇεᾶβ εἰε ιά ÷ nçοεἰἰδιεεᾶβ ὀᾶ ὀὀῤ ÷ ἰῖᾶ ὀὀοὀΠῖαοᾶ, ἰὀοἱῖ Yἱᾶὀ εἰεἱYῖᾶεἰὀ ἀβόεἰο ὀοἱPεῦδ ὀnῖῖnῖβᾶοᾶε ἰῖἱἱ ἀεᾶ οἱ FreeBSD. ὀᾶnῖἱἱ ὀἱ ç οἰαάοP εἰεοἰοῖαβᾶ ἀεᾶοᾶεβᾶε ιYᾶεὀç ἀεᾶεἰεοἰοῖαεῖῤοῇ (interoperability) ιᾶ ἰᾶεἰἱὀεεYὀ ἰᾶεᾶὀὀὀὀᾶεὀ, ἰβῖᾶε ὀεἱ ὀεYὀὀεεç.

ὀYῖᾶ αἰῦ ὀγῖ ἀδεεἱᾶP ὀnῖὀὀὀ εἰεοἰοῖαβᾶὀ ὀὀῤ ÷ ἱὀἱ ἰYἱἱἱε ὀῇὀβῖᾶὀὀ οἱὀ ἀβόεἰο. Ἰ ὀnῖὀὀ ÷ nçοεἰἰδιεᾶβ οἱ ἰᾶᾶεᾶβἱ ἰᾶεᾶὀὀὀὀ οἱὀ ὀὀοὀΠῖᾶὀὀ /stand/sysinstall. Ἀὀῦ οἱ 2.1.7-RELEASE εἰε ἰᾶὀῤ ç sysinstall ἀεἰἱἱἱᾶβ οἱ ὀὀὀεἱἱ οἱἱ ἀβόεἱ ἰὀᾶεᾶP ἀδεὀnYὀᾶε ὀγῖ ἀὀὀεᾶβᾶ ἰεεᾶᾶP ὀοἱ label (ὀβόεἰο) εἰε ὀᾶ οἰΠῖᾶὀᾶ (partitions) οἱἱ ἀβόεἱ. ἈδεὀYἱἱ ὀᾶὀ ἀδεὀnYὀᾶε ιᾶ ἀδιεεᾶYὀᾶὀᾶ ὀεὀ ἰεεᾶᾶYὀ ἰῖἱἱ ὀοἱἱ ὀᾶεᾶnεἱYἱἱ ἀβόεἰ ÷ ἰnῖδ ιᾶ ἰὀçῖᾶῤᾶε ὀἱὀ ὀὀῖἱεὀὀὀ. Ἰ ἰᾶYὀᾶnῖδ ὀnῖὀὀ ἰβῖᾶε ιᾶ ἰεὀᾶεYὀᾶὀᾶ ἰεὀἱᾶὀ ἰᾶὀἱᾶYὀ ιᾶ οἱ ÷ Yῖᾶε ἰᾶὀ ὀγῖ ἰᾶᾶἱP ἰᾶὀἱἱἱ ἰὀ root. Ἀἱ ἰὀεεYἱᾶὀ ὀγῖ ἀδιεεαόοεεP εἰεοἰοῖαβᾶ ÷ nᾶεῤᾶὀᾶ ιᾶ ἰεὀᾶεYὀᾶὀᾶ ἰῖἱἱ 2-3 ἰᾶὀἱᾶYὀ ἰᾶP ιᾶ οἱ sysinstall ὀnYὀᾶε ἰᾶὀYὀᾶὀ εἰᾶῤᾶε ὀᾶᾶὀῤῖῤ.

## 1.2 ἰῖεοἱῖ

Ç ἀεᾶ ÷ ἰβῖᾶεὀς ἀβόεἱἱ ὀοἱ UNIX® Y ÷ ἀε ἰὀᾶε ἱYᾶ Yἱἱἱᾶ ὀᾶ ὀὀῤ ÷ ἱὀὀᾶ ἰYἱᾶεὀ. Ὀἱ ὀᾶᾶεῤὀῦ εἰᾶἱεῖᾶεἱ ἰᾶçᾶᾶ ὀγῖ ἰnῖἱἱᾶβ ὀἱ ÷ nçοεἰἰδιεἱYἱᾶ ὀᾶ ἰὀὀ οἱ εᾶβἱᾶἱ εἰε ὀοἱ FreeBSD ἰᾶἱἱῖῤ (ὀnῖὀᾶPὀ).

- **οἰαάοP εἰεοἰοῖαβᾶ (compatibility mode):** ç ἀεαῖυνουός οἷο ἀβόεἰο πόα ιά Y ÷ ἀε Yἱᾶ ὀβῖᾶά οἰΠῖᾶοἱ (slice table) εἰε ιά ἰδιῖαβ ιά ÷ nçοεἰἰδιεεᾶβ ὀάνῤεεεᾶ ιᾶ ῤεεᾶ εἰεοἰοῖαεῖῤ οὀοὀΠῖᾶὀᾶ. Ἀἱὀβᾶὀἱ ὀῇ ὀδιεεαόοεεPὀ εἰεοἰοῖαβᾶὀ.
- **(ἀδεεβῖαοἱᾶ) ἀδιεεαόοεεP εἰεοἰοῖαβᾶ:** ç ἀεαῖυνουός οἷο ἀβόεἰο εᾶὀῤ ὀYὀἱἱἱ ὀnῖὀὀ πόα ιᾶ ιçῖ ὀᾶnεYὀ ÷ ἀε ὀβῖᾶά ὀιçῖῤὀῖ (slice table). Ἀβῖᾶε ὀεἱ ἰYἱἱἱἱ ἀεᾶεεᾶοᾶ εἰεῤ ι ἀβόεἰο ἰδιῖαβ ιά ιç ἰᾶὀᾶYᾶε ὀᾶ ιç-FreeBSD εἰεοἰοῖαεῖῤ οὀοὀΠῖᾶὀᾶ. Ἀἱὀβᾶὀἱ ὀῇ οἰαάοPὀ εἰεοἰοῖαβᾶὀ.
- **ἀβόεἰο:** Ἰε ὀεεçῖῖβ ἀβόεἱᾶ, ὀᾶ CDROM, ἱε ἰᾶἱçὀἱ-ἱὀὀεYὀ ὀὀεᾶὀYὀ εἰε ὀᾶ ἰὀᾶἱἱYἱᾶἱ ἰYὀᾶ Zip®/Jaz® ἰβῖᾶε ἰᾶnεεYὀ αἰῦ ὀεὀ ὀὀεᾶὀYὀ ἰᾶεεὀὀ ὀδιεPεᾶὀὀὀ ἰᾶᾶἱYἱἱ ὀἱ ÷ nçοεἰἰδιεἱYἱᾶε ὀΠῖᾶᾶ. Ç ἰᾶὀεεP ἰᾶ ÷ P εἰεοἰοῖαβᾶὀ ἰὀὀPἱ οἱἱ ἰYὀἱ ὀδιεPεᾶὀὀὀ Yἱᾶὀ P ὀᾶnεοὀὀὀᾶnῖᾶ ἀβόεἱᾶ ἱε ἱὀἱἱἱ ὀᾶnεοὀnYὀἱὀᾶε αἰῦ Yἱᾶ ἱὀYῖn, ἰᾶP ἱεᾶ εᾶὀᾶP εἱἱᾶὀᾶε ὀᾶ Yἱᾶ ἱἱἱὀὀὀ ὀῤῖῤ ὀὀçῖ ἰεὀβῖᾶ ὀἱὀ ἀβόεἰο εἰε ἰεᾶᾶῤᾶε αἰῦ οἱ ἀβόεἰ P ἰᾶῤὀᾶε ἰᾶᾶἱYἱᾶ ὀᾶ ἰὀὀῖ. Ὀἱ ἰᾶῤὀἱἱ ἰβῖᾶὀᾶε ιᾶ ἰᾶὀᾶἱP εῤὀἱἱὀ ὀὀὀεἱY ÷ ἰᾶᾶὀçῖᾶὀὀεἱY ὀἱὀ ἀβόεἰο (ἰᾶἱçὀεεP ἱἱP, ἰᾶἱᾶὀὀεἱῤοῇ, εεὀ.) ἰᾶP οἱ ἰεῤᾶὀἱᾶ ἰβῖᾶὀᾶε ιᾶ “ἰᾶἱ ÷ ἰᾶὀç” ἰεεᾶᾶP ὀὀçῖ βᾶεᾶ ὀὀὀεεP εἰεῤὀὀὀ ὀἱὀ ἀβόεἰο.
- **οἰΠῖᾶ (slice):** Ἰβᾶ ὀἱᾶεᾶβῖᾶὀ αἰῦδ ἀβόεἰο. ὈYἱὀῖᾶ ιᾶ ὀᾶ ὀnῖὀὀὀ ὀἱἱ PC ἰὀἱἱYἱᾶ ἰᾶ ὀὀῤ ÷ ἱὀἱ ἰY ÷ nῖ 4 οἰΠῖᾶὀ ὀᾶ Yἱᾶἱ ἀβόεἱ. Ὀᾶ οἰΠῖᾶὀ ὀἱὀᾶἱYἱᾶε ὀἱ ὀἱᾶ ÷ ἰᾶἱἱὀ ὀnῖᾶὀ (sectors). Ὀὀῤ ÷ ἰᾶ Yἱᾶὀ “ὀβῖᾶεᾶ ὀιçῖῤὀῖ” (slice table) ὀἱὀ ὀᾶnεYὀ ÷ ἰᾶ ὀεçῖἱὀἱᾶ ἰᾶ ὀᾶ οἰΠῖᾶὀ εἰε ÷ nçοεἰἰδιεᾶβὀᾶε αἰῦ οἱ BIOS ἰᾶ ἰᾶᾶβ αἰῦ ὀἱY ἰδιῖαβ ιᾶ ἰᾶεἱPὀᾶε ὀἱ οYοὀγῖᾶ. Ἰ ὀβῖᾶεᾶ ὀιçῖῤὀῖ εYᾶᾶὀε εἰε “ὀβῖᾶεᾶ ἱἱἱᾶὀPἱ” (partition table) ὀᾶ ἰnῖἱἱᾶβ DOS ὀἱ ὀὀῤ ÷ ἰᾶὀᾶε ὀἱ ὀἱ ὀnῖᾶᾶἱἱᾶ fdisk.
- **ἱἱἱὀὀ (partition):** Ἰβᾶ ὀἱᾶεᾶβῖᾶὀ αἰῦδ οἰΠῖᾶὀὀ. ὈὀἱPεῦδ ÷ nçοεἰἰδιεᾶβὀᾶε ἰᾶ ἰᾶὀἱἱῤ ὀὀὀ ὀἱᾶεᾶἱYὀᾶε ὀἱἱ ὀιçῖῤὀῖ (slices) ὀἱὀ ἀβόεἰο ὀοἱ FreeBSD. ἱῤᾶ ὀYοὀγῖᾶ ἰᾶ ÷ ἰβῖᾶἱ (filesystem) P ἰᾶὀᾶᾶἱYἱὀὀᾶ ἰᾶὀὀ (swap area) ὀοἱἱ ἀβόεἱ ἰᾶὀὀᾶὀᾶ ὀᾶ Yἱᾶ ἱἱἱὀὀ. Ὀᾶ ἱἱἱὀὀᾶ ὀὀῤ ÷ ἱἱὀᾶε ιᾶ ὀἱ ἰᾶᾶᾶᾶἱἱ disklabel.
- **ὀnYᾶὀ (sector):** Ç ἱεἱnῖὀᾶnç ὀἱᾶεᾶβῖᾶὀ αἰῦδ ἀβόεἰο. ὈὀἱPεῦδ Y ÷ ἰᾶ ἰYᾶᾶἱὀ 512 bytes.

### 1.3 Ὀçíᾱßᾱ ðìò ðñÝðᾱέ íᾱ ðñìóÝíᾱðᾱ ἑᾱέ ðᾱᾱßᾱð

Ἀþðᾱ íᾱᾱÜεç ðñìóí÷þ ðόç ᾱέᾱᾱέᾱóßᾱ, ᾱí ᾱᾱí εÜᾱᾱðᾱ ðᾱ ἰÝðñᾱ óᾱð ἑᾱέ ᾱßíᾱέ εÜεìð ἰðñᾱß íᾱ ἑᾱᾱóðñÝðᾱðᾱ ðᾱ ðᾱñéᾱ÷üᾱíᾱ Üεεüí ᾱßóεüí ðìò ðóððþíᾱðìð.

*ðñìóÝíᾱð ὁε εÜíᾱðᾱ.* Ἀßíᾱέ ðñéý ᾱýεíεí íᾱ ἑᾱᾱóðñÝðᾱðᾱ εÜεìð ᾱßóεí ᾱìðεᾱýñíðᾱð ἰᾱ ᾱððÝð ðεð ᾱíðìεÝð. Ἀí Ý÷ᾱðᾱ ᾱìðεᾱíεßᾱð ᾱεÝᾱíðᾱ ὁᾱ ἰçíýíᾱðᾱ ðìò ððñþíᾱ ἑᾱðÜ ðç ᾱέᾱᾱέᾱóßᾱ ᾱέεßíçόçð ᾱέᾱ íᾱ ᾱñᾱßᾱð ὁç óùóðþ ððóéᾱðþ ᾱßóεìð.

ὈðóéεÜ ᾱᾱí Ý÷ᾱíᾱ ἑᾱíßᾱ ᾱðεýíç ᾱέᾱ æçìεÝð ðìò ἰðñᾱß íᾱ ðñìεεçεýíý. Ç ᾱðεýíç ᾱßíᾱέ ᾱέεþ óᾱð!

### 1.4 Zip, Jazz, ἑᾱέ Üεéᾱ ᾱóᾱéñìýíᾱíᾱ ἰÝóᾱ

Ἰέ ᾱóᾱéñìýíᾱñé ᾱßóεìε ἰðñìýíý íᾱ ᾱεᾱíñöüεýíý óᾱí ἑᾱñíεεíþ ᾱßóεìε. Ὀí óçíᾱíðéεü ᾱßíᾱέ íᾱ ᾱßíᾱέ óðñᾱñÝñð ἰ ðᾱçᾱüð ðìò ᾱßóεìð ἑᾱðÜ ðçí ᾱέεßíçόç ðìò ðóððþíᾱðìð ἑᾱέ ἰᾱ ᾱεóεÝðᾱ ἰÝóᾱ þðᾱ ἰᾱ ἰðñÝðᾱέ ἰ ððñþíᾱð ἰᾱ ᾱᾱß óùóðÜ ðçí ᾱᾱüᾱðñᾱ ðìò ᾱßóεìð. ἘíεðÜíðᾱ ðε εÝᾱέ ç ᾱíðìεþ dmesg ᾱέᾱ íᾱ ᾱᾱßᾱ ᾱí ç ððóéᾱðþ ᾱßíᾱέ óóçí εßóðᾱ. Ἀέᾱ ðᾱñÜᾱᾱéᾱíᾱ ᾱí ἰ ððñþíᾱð ᾱñÜðᾱέ:

Can't get the size

öüðᾱ ᾱᾱí ððÜñ÷ᾱé ᾱεóεÝðᾱ óðñí ðᾱçᾱü. Ἀí ᾱßíᾱέ ᾱððü ἑᾱ ðñÝðᾱέ íᾱ ᾱðᾱíᾱéεéíþᾱðᾱ ðì ἰç÷Üíçíᾱ ðñéí ᾱíεéíÜóᾱðᾱ íᾱ ᾱεᾱíñöþᾱðᾱ ðçí ᾱεóεÝðᾱ.

## 2 Ἀεᾱíñöþñííðᾱð ᾱßóéíðð ᾱέᾱ ᾱðìεéᾱéóðéεþ ἑᾱéðìðñᾱßᾱ

### 2.1 Ἀέóᾱᾱüᾱþ

Ἀððþ ç ðᾱñÜᾱñᾱðìð ðᾱñéᾱñÜóᾱέ ðþð íᾱ ððéÜíᾱðᾱ ᾱßóéíðð ñüñ ᾱέᾱ ðì FreeBSD. Ἐðìçᾱßᾱðᾱ üðé íé ᾱßóéìε ᾱðìεéᾱéóðéεþð ἑᾱéðìðñᾱßᾱð ᾱᾱí ἰðñìýíý íᾱ ᾱέᾱᾱᾱóðìýíý ᾱðü Üεéᾱ ἑᾱéðìðñᾱέεÜ, ðýðᾱ íᾱ εÜññóí boot.

### 2.2 ðþð íᾱ ððéÜíᾱðᾱ ᾱßóéíðð ᾱðìεéᾱéóðéεþð ἑᾱéðìðñᾱßᾱð ἰᾱ ðì Sysinstall

To /stand/sysinstall, ðì ðñüᾱñᾱíᾱ ᾱᾱéᾱðÜóðᾱóçð ðìò ðóððþíᾱðìð, Ý÷ᾱé ᾱðᾱéðᾱéᾱß óðéð ðᾱéᾱððᾱßᾱð ðìò ᾱéᾱüóᾱéð þðᾱ ἰᾱ ᾱðéíðìéᾱß ðçí ᾱέᾱᾱέᾱóßᾱ ÷ññéóìýý ðüñ ᾱßóεüí ἑᾱέ íᾱ ᾱðᾱéðᾱß ἑéᾱüðᾱñç ðñìððÜᾱéᾱ. Ὀᾱ ðññᾱñÜñᾱðᾱ fdisk ἑᾱέ disklabel ðìò ððÜñ÷ᾱí ððí óðí sysinstall ᾱßíᾱέ ᾱñᾱðééýý ðᾱñéᾱÜεííðìð (GUI - Graphical User Interface) ἑᾱέ ἰᾱéþññóí ðì ἰðÝñᾱᾱíᾱ ðìò εíðßíᾱðìð ðüñ ᾱßóεüí. Ἀßíᾱέ ðññíóᾱíþð ἰ ᾱðéíεüðᾱññìð ðññðìð íᾱ εüðᾱðᾱ ᾱßóéíðð ᾱðü ðçí Ýéᾱñóç 2.1.7 ἑᾱέ ἰᾱðÜ ðìò FreeBSD.

1. Ἰᾱᾱéíþðᾱ ðì sysinstall þð root ᾱñÜññíðᾱð

```
# /stand/sysinstall
```

óóçí ᾱñᾱñþ ᾱíðìεþí.

2. ἈðéεÝíðᾱ Index.
3. ἈðéεÝíðᾱ Partition.
4. ἈðéεÝíðᾱ ðì ᾱßóεí ðìò εÝéᾱðᾱ íᾱ ᾱᾱéᾱðᾱóðþᾱðᾱ ÷ñçóéññðìéþíðᾱð ðᾱ ᾱᾱéÜéᾱ ἑᾱέ ἰᾱðÜ **SPACE**.

5. Ἀί εᾶ ÷ ñçóéíðìéþóᾶᾶ üëí òí ἁβóèí ἁέά òí FreeBSD, ἁðéëÝíᾶ Ἀ.
6. Ἰüëéð óᾶð ñòþóᾶé ᾶí üíòüð èÝéᾶᾶ ἰᾶ òí èÛíᾶᾶ ᾶðü (Do you still want to do this) ᾶðáíðþóᾶ Yes.
7. ἈðéëÝíᾶ Write.
8. Ἐᾶ óᾶð ἁᾶÛéᾶé ἰéᾶ ðñíᾶéäíðìþçóç ó÷ᾶðééÛ ἰᾶ ôçí ἁᾶñᾶöþ óᾶ ððÛñ÷ííᾶ óðóðþíᾶᾶ ᾶðáíðþóᾶ Yes.
9. Ἰüëéð óᾶð ñòþóᾶé ᾶí èÝéᾶᾶ ἰᾶ ἁᾶéᾶóᾶðþóᾶᾶ Ḳíᾶ boot loader, ἁðéëÝíᾶ None ἁέᾶ ἰᾶ ᾶðïýᾶᾶᾶ ἰðìéᾶᾶþðíᾶ ᾶëéᾶᾶþ òí Master Boot Record. Ç ἁᾶéᾶðÛóᾶᾶç ᾶíüð boot loader ÷ ñᾶéÛᾶᾶᾶé üüí óᾶ éᾶéñýñéᾶð ἁᾶéᾶóᾶðÛóᾶᾶ òí FreeBSD þ ᾶí ó÷ᾶᾶéÛᾶᾶᾶ ἰᾶ òíðìéᾶðþóᾶᾶ òí ἁβóèí óᾶ èÛðìéí Ûëëí ιç÷Ûíçᾶ.
10. Ðᾶðþóᾶ **ENTER** òí ᾶíçíᾶñüðéëü ἰþíᾶ ḡí èÝᾶé “Wrote FDISK partition information out successfully”.
11. ἈðéëÝíᾶ Quit ἁέᾶ ἰᾶ ἁᾶᾶβᾶ ᾶðü òí FDISK Editor éᾶé ἰᾶðÛ **ESCAPE** ἁέᾶ ἰᾶ ᾶðéóðñÝᾶᾶ Ეðí Index menu.
12. ἈðéëÝíᾶ Label ᾶðü òí Index menu.
13. ἸñÛóᾶ òí ἁβóèí óᾶð üðüð èÝéᾶᾶ (ᾶᾶþ ἰñβᾶᾶᾶ Ეᾶ partitions). Ἀί èÝéᾶᾶ üüí Ḳíᾶ partition ðᾶðþóᾶ òí c ἁέᾶ ἰᾶ ᾶçíéíðñᾶþóᾶᾶ òí partition. ἸᾶðÛ ᾶðëð ἁᾶ÷èᾶᾶᾶ Ეðð ðñíᾶðéëᾶÝᾶ ἁέᾶ Ეᾶ ðñíᾶéññéóíḲíᾶ size, partition type Filesystem, éᾶé mountpoint (òí ἰðìþí ἁᾶí ÷ ñçóéíðìéᾶᾶᾶ).
14. Ðᾶðþóᾶ w Ἰüëéð Ეᾶᾶéþóᾶᾶ éᾶé ᾶðééðñþóᾶ Ეðð ᾶëéᾶᾶÝᾶ ἁέᾶ ἰᾶ óíᾶ÷βᾶᾶᾶ. Òí filesystem èᾶ ðᾶñᾶóᾶᾶ ᾶðüᾶᾶ ᾶðü ôçí ᾶíðìéþ newfs ᾶéüð ᾶí ᾶðéëÝíᾶᾶ òí ᾶíðᾶᾶᾶ. (Ἀί ᾶÛᾶᾶᾶ éᾶéñýñᾶéí partition óᾶð óðïḲÝñᾶé ἰᾶ òí èÛíᾶᾶ!). Ἐᾶ óᾶð ᾶþᾶᾶ òí èÛèð:

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

Ἀññþóᾶ òí.

15. Ðᾶðþóᾶ óðíᾶ÷üᾶᾶ òí **ESCAPE** ἁέᾶ ἰᾶ ἁᾶᾶβᾶ.

## 2.3 Ðüð ἰᾶ ᲔðéÛíᾶᾶ ἁβóèíðò ᾶðìéᾶᾶéóᲔéèþò èᾶéðíðñᾶᾶò ἰÝᾶ ᾶðü ôçí ᾶñᾶìþ ᾶíðìéþí

ἈéðᾶéÝᾶᾶ Ეðð ðᾶñᾶéÛüð ᾶíðìéÝᾶ ᾶíðéᾶᾶéóðþíᲔᾶð òí ad2 ἰᾶ òí üññᾶ ôçð óðóᾶᾶþò òíð ἁβóèíð (ᾶñÛᲔᾶ dmesg ἰᾶ ᾶéÝᾶñᾶᾶ ᾶí ᾶβᾶᾶ òüóðü).

```
# dd if=/dev/zero of=/dev/ad2 count=2
# disklabel /dev/ad2 | disklabel -B -R -r ad2 /dev/stdin
ἘÝéíðᾶ üüí Ḳíᾶ partition, ἰðüðᾶ ἰðñíçᾶ ἰᾶ ÷ ñçóéíðìéþóíᾶ òí èññÛðé 'c':
# newfs /dev/ad2c
```

Ἀί ÷ ñᾶéÛᾶᾶᾶ ἰᾶ ᾶëÛíᾶᾶ òí disklabel ἁέᾶ ἰᾶ ÷ ñçóéíðìéþóᾶᾶ ðìéᾶᾶðÛ partitions (ἁέᾶ ðᾶñÛᾶᾶᾶᾶ ᾶí èÝéᾶᾶ swap) òüᾶ èÛíᾶ:

```
# dd if=/dev/zero of=/dev/ad2 count=2
# disklabel /dev/ad2 > /tmp/label
Ἀñβíᾶ òí disklabel ἁέᾶ ἰᾶ ðñíðéÝᾶᾶᾶ partitions:
# vi /tmp/label
# disklabel -B -R -r ad2 /tmp/label
ᾶéðᾶéÝᾶᾶ ôçí ᾶíðìéþ newfs Ეᾶ partitions üðüð ðñÝðᾶé
```

Ἰ ἁβóèíð óᾶð ᾶβᾶᾶ Ḳíᾶᾶᾶ 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. Ἡ ἀντιμετώπιση τοῦ ἀποβιβασμοῦ τοῦ FreeBSD ἀπὸ τὸν δίσκο εἶναι ἡ ἀντιμετώπιση τοῦ ἀποβιβασμοῦ τοῦ FreeBSD ἀπὸ τὸν δίσκο. Ἡ ἀντιμετώπιση τοῦ ἀποβιβασμοῦ τοῦ FreeBSD ἀπὸ τὸν δίσκο εἶναι ἡ ἀντιμετώπιση τοῦ ἀποβιβασμοῦ τοῦ FreeBSD ἀπὸ τὸν δίσκο.

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

1. Ἡ ἀντιμετώπιση τοῦ δίσκου ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.

```
# /stand/sysinstall
```

ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.

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. Ἀνὰ ἑκάστη ἀντιμετώπιση τοῦ δίσκου ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD, ἀεῖν ἡ ἀντιμετώπιση A.
6. Ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD:

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 ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD, ἀεῖν ἡ ἀντιμετώπιση A.)

7. Ἀεῖν ἡ ἀντιμετώπιση Write.
8. Ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD, ἀεῖν ἡ ἀντιμετώπιση None ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.
9. Quit (ἄκυρος) ἀπὸ τὸν FDISK Editor.
10. Ἐὰν οὐκ ἔχετε νὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD ἀπὸ τὸν δίσκο ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD, ἀεῖν ἡ ἀντιμετώπιση None ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.
11. Ἀεῖν ἡ ἀντιμετώπιση Label ἀπὸ τὸν Index menu.
12. Ἡ ἀντιμετώπιση τοῦ δίσκου ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD, ἀεῖν ἡ ἀντιμετώπιση τοῦ δίσκου ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.
13. Ὁ δίσκος ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD, ἀεῖν ἡ ἀντιμετώπιση τοῦ δίσκου 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, ἀεῖν ἡ ἀντιμετώπιση ESCAPE ἀπὸ τὸν ὁποῖο θὰ γίνῃ ἡ ἐγκατάσταση τοῦ FreeBSD.

Ἰ ᾱᐑóêῖð óᾱð ᾱᐑῖᾱέ Ὠῖêῖñð ðñῖð ÷ñᐑόç.

## 4 ¶ēēᾱð ēᾱéôῖñᾱᐑᾱð ἰᾱ ôῖð ñᐑóêῖð

### 4.1 ᐑñῖóēΨôῖῖᾱð swap.

Ἐᾱêᐑð Ὠῖᾱ óýóçῖᾱ ᾱðᾱêðᾱᐑῖᾱðᾱέ, ç ᾱῖᯚᾱêç ᾱέᾱ ἰᾱᾱᾱýóᾱñῖ swap ᾱᐑῖᾱðᾱέ ἡῖῖ ἔᾱέ ðéῖ ᾱðéóᾱéðéêᐑ. ᐑᾱñἡῖῖ ðῖð òῖ ἰᾱ ðñῖóðᾱêᾱᐑ swap óᾱ Ὠῖᾱῖ ððᯚñ ÷ῖῖᾱ ᾱᐑóêῖῖ ᾱᐑῖᾱέ ðññᾱñᯚ ᾱýóêῖῖῖ, Ὠῖᾱð ἔᾱéῖῖñᾱéῖð ᾱᐑóêῖð ἰðῖñᾱᐑ ἰᾱ ἡñῖῖðῖéçᾱᐑ Ὠðóé ᐑóðᾱ ἰᾱ ðᾱñéΨ ÷ᾱέ òῖ ᾱðéðēΨῖ swap ðῖð óᾱð ēᾱᐑðᾱέ.

Ἄέᾱ ἰᾱ ᐑñῖóēΨóᾱð swap ἔᾱêᐑð ᾱᯚᾱᾱð Ὠῖᾱ ᾱᐑóêῖῖ óῖῖ óýóçῖᾱ:

1. Ἐᾱêᐑð ēἡᾱᾱðᾱ òῖ ᾱᐑóêῖῖ (partitioning) ᾱēῖᯚῖᾱ òῖ disklabel ἔᾱέ ἡñᐑóðᾱ ÷ᐑñῖ ᾱέᾱ swap óῖῖ ēñῖᯚᯚé (partition) ‘b’ ἔᾱέ ᾱᯚῖᾱ òῖῖ ððἡῖῖῖðῖ ÷ᐑñῖ óᾱ ēᯚᯚῖῖ ᯚῖῖῖ ēñῖᯚᯚé, ð.÷. óῖῖ ‘a’ ᐑ óῖῖ ‘e’. Ὀῖ ἰΨᾱᾱèð ðῖð ᾱᐑῖᾱðᾱ ᾱᐑῖᾱέ óᾱ blocks òἡῖ 512 bytes.
2. Ὠðᾱῖ ēᯚῖᾱðᾱ newfs óῖῖῖ ᾱᐑóêῖῖ, Ἰçῖ òῖ ēᯚῖᾱðᾱ óῖῖ ēñῖᯚᯚé ‘c’. Ἀῖðᐑᾱᾱᾱ, ēᯚῖᾱð òῖ ἡἡῖ óῖῖ ēñῖᯚᯚé ðῖð ᾱᾱῖ ᾱᐑῖᾱέ swap.
3. ᐑñῖóēΨóᾱð óῖῖ /etc/fstab òῖ ðᾱñᾱéᯚᯚᯚ:

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

Ἀēῖᯚῖᾱ òῖ /dev/ad0b óῖῖ ἡñῖᾱ òçð ἔᾱéῖῖñᾱéᾱð óᾱð óðóéᾱðᐑð.

4. Ἄέᾱ ἰᾱ ᾱῖᾱñᾱῖðῖῖᐑóᾱðᾱ ᯚῖᾱᾱ òῖ ἰΨῖ swap ÷ñçóêῖῖðῖῖᐑóᾱð òçῖ ᾱῖðῖῖᐑ swapᯚ

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

### 4.2 Ἀῖðéᾱñᯚᯚῖᯚᾱð óᾱ ðᾱñéᾱ ÷ᯚῖᾱῖᾱ ᾱᐑóêῖῖ

Ἀðἡ òῖῖ: Renaud Waldura (<renaud@softway.com>)

Ἄέᾱ ἰᾱ ἰᾱðᾱéῖῖᐑóᾱðᾱ ᾱñ ÷ᾱᐑᾱ ᾱðἡ òῖῖ ᾱñ ÷éἡἡ óᾱð ᾱᐑóêῖῖ óᾱ Ὠῖᾱῖ ἔᾱéῖῖñᾱéῖ, ēᯚῖᾱð:

```
# 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>)

Ià ôi Concatenated Disk Driver, Ð ææëþò CCD, ðiñãßôá íá Ý÷ðòä ðrëëýð üüëëðò ßöëïðò áæÛ íá ööððãñéöÝñíüðáé  
ùð Ýíád. Ç æéääéæáößá ëÝÝãðáé öðã÷þñäðöç (striping). Ià ôçí äðëëüëëçöç Ý÷ðòä éáëýðãñã äðüðáéÝüíüðá öðçí  
ðã÷ðçðá äðäëãÞ ñëñÜæüíðáé íë äããñãóÝð éáé íë áíáñîþáéð öðüðò ßöëïðò. ÁéáÜöðá öéð manual pages ccd(4) éáé  
ccdconfig(8) Ð ôçí áñ÷ëÞ ðäëßáä õïò CCD (<http://stampede.cs.berkeley.edu/ccd/>) áéá ðãñéöóüðãñãð éäððñÝññáéð.

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

Ôá CCD ððēŨ ÷ fīfðáē óá partitions ðŷðīð 4.2BSD. Áí ēŸēāðá íá ÷ ñçóēīðīðēPóāðá uēī ðīī āBóēī ēāē ðŨēē ðñŸðāē íá ððēŨīāðá Ÿíá ŸŸī partition. Āēá ðāñŨāēēāī, ç áfðīðēP **disklabel** -e ðīñāB íá āāBīāē:

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

Άάρ ιδññâßôâ íá ÷ ñçôèîüðñēĐôâôâ ôï partition *c* άέα CCD, äöüóñí áßíáé öýðñö *unused*. Áíôßèâôâ äçíèíôñâĐôâôâ Ýíá íÝí  
 partition äêñéâðò ßäéíò íââÝèíöð áέéÜ 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 đăăăĒŪôû áiôîĒYô. ĐăăăĒŪôîôî đpò íá đñîôĒYôáôâ ôñăđô  
 âđôêîôđ. Áđêđô âêĒŪôôâ ôéô ôôôêăôYô uđîô ÷ñăĒŪăăôăĒ. Êôîçăđăđôâ uôê îé âđôêîĒ đñYđăĒ íá âđăăĒ *uñêĒé*.

```
# 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 áñéèùò ôùĭ 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 ìÝòù ôcò óóóéãPò /dev/ccd0c.

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

## 5 Ἀõ÷ᾗñéóôßàò

Ἰ óðᾗᾗᾗᾗᾗÝᾗò èᾗ þèᾗèᾗ íᾗ ᾗõ÷ᾗñéóôþóᾗé òíòð ðᾗᾗᾗᾗᾗᾗᾗᾗ ᾗéᾗ òçí óóíᾗéóóíñᾗᾗ òíòð óᾗ ᾗóðþ òçí ᾗᾗᾗᾗóßᾗ òíòð:

- Darryl Okahata (<darrylo@hpnmhjw.sr.hp.com>) ᾗéᾗ òéð ᾗðēÝò íᾗçᾗßᾗð ᾗᾗéᾗòᾗóðᾗóç ðᾗᾗò ᾗßóēīò óᾗ ᾗðīēᾗéóóéēü òñüðī ēᾗéóíōñᾗᾗᾗð, òéð īðīßᾗð Ý÷ù ðīēēÝð òíñÝð ÷ñçóēīðīēþóᾗé óóçí FreeBSD-questions.
- Jordan K. Hubbard <jkh@FreeBSD.org> ðīò Ýéᾗíᾗ òí sysinstall ÷ñþóēīᾗ ᾗéᾗ òÝôīēīò ᾗßᾗīòð ᾗīōēᾗéÝð.
- John Fieber (<jfieber@indiana.edu>) ðīò Ýᾗùóᾗ òéð ðēçñīññᾗᾗð éᾗé óᾗ ðᾗᾗᾗᾗᾗᾗᾗᾗᾗ ᾗéᾗ òí DocBook DTD ðᾗᾗᾗ óᾗᾗ īðīßᾗ ᾗóðü òí ēᾗßᾗᾗñ ᾗᾗóßᾗᾗᾗᾗᾗ.
- Greg Lehey <grog@FreeBSD.org> ðīò Ýēᾗᾗᾗ òçí ᾗīōēᾗᾗᾗᾗ ἰīò, øᾗ÷ñīóᾗð ᾗéᾗ ᾗíᾗēñßᾗᾗᾗᾗð, éᾗé ᾗéᾗ òçí òðīóðþñēíç òíò óᾗ ᾗéᾗᾗñᾗ èÝíᾗᾗᾗ.