

- **οἰαάοP εἰεοἰοῖαβᾶ (compatibility mode):** Ἀεαῖυνουός οἷο ἀβόεἰο πῶα ιά Y ÷ ἀε Y ιά ὀβίαέα οἰΠιάουι (slice table) ἐάε ιά ἰδιῖαβ ιά ÷ nçοεἰἰδιεεᾶβ ὀάνῤεεεᾶ αἰῦ ῤεεᾶ εἰεοἰοῖαεῖῤ ὀοόοΠιάοᾶ.
- **ἀδιεεαόοεεP εἰεοἰοῖαβᾶ (dedicated mode),** ἰἀεέYδ οἷnYδ εYᾶαόᾶε ἐάε ἀδεεβῖαῖα ἀδιεεαόοεεP εἰεοἰοῖαβᾶ: Ἀεαῖυνουός αῖυδ ἀβόεἰο ÷ ἡnβδ ὀβίαέα partitions. Ἀῶδῦ εῤῖᾶε ὀγῖ ἀεᾶεεᾶόβᾶ ὀδδ ὀnυοεᾶοδδ ἀβόεἰο ἀδεἰεῦοᾶnç ἀεῖῤ Y ιᾶ ιç-FreeBSD εἰεοἰοῖαεῖῤ ὀγῖοῖᾶ ὀεεᾶῖῖ ιᾶ ιç ἰδιῖαβ ιᾶ ἀε οἱ ἀβόεἰ. Ç Yεοῖαῖ ὀδεεβῖαῖα αῖᾶYῖᾶὀᾶε ὀοἱ εβῖᾶοἱ οἷο ῦε οἱ ὀγῖοῖᾶ ἰδιῖαβ ιᾶ ιç αῖᾶῖῖnβῖὀᾶ Y ιᾶ ἀβόεἰ ἡnἰἰδιεεῖYῖ εᾶδ* ἀὀοῖ οἱ ὀnυῖ.

Ὀδεῶ ὀᾶεὀοῖοᾶᾶ ὀᾶεὀδῖὀᾶεδ ç ἀδιεεαόοεεP εἰεοἰοῖαβᾶ ἀβίαε ι ἀδεἰεῦοᾶᾶἰδ ὀnυῖοἰ ιᾶ ὀδδᾶβ ἐάε ιᾶ ÷ nçοεἰἰδιεεᾶβ ὀᾶ ὀὀῤ ÷ ἡῖᾶ ὀοόοΠιάοᾶ, ᾶοῖοἱ Y ιᾶ ὀεῖῖῖᾶεἰδ ἀβόεἰο ὀοἱPεῦδ ὀnἡnβᾶᾶὀᾶε ἡῖῖ ᾶεᾶ οἱ FreeBSD. ὀᾶῖῖῖ ὀἰο ç οἰαάοP εἰεοἰοῖαβᾶ ἀεᾶὀᾶεβᾶε ιYᾶεὀδ ἀεᾶεἰεοἰοῖαεῖῤὀδᾶ (interoperability) ιᾶ ἰᾶεἰἰὀεεYδ ἰᾶᾶᾶὀᾶὀῤᾶὀᾶ, ἀβίαε ὀεἰ ὀεYὀεἰεç.

ὀYῖᾶ αἰῦ ὀγῖ ἀδεῖῖᾶP ὀnυῖοἰ εἰεοἰοῖαβᾶδ ὀὀῤ ÷ ἡῖῖ ᾶYῖ ιYῖῖῖ ὀδδῖᾶὀἰδ οἷο ἀβόεἰο. Ἰ ὀnἡὀἰδ ÷ nçοεἰἰδιεᾶβ οἱ ἰᾶᾶεᾶβῖ ἰᾶᾶὀῤᾶὀδ οἷο ὀοόοΠιάοἰδ /stand/sysinstall. Ἀἰῦ οἱ 2.1.7-RELEASE ἐάε ἰᾶὀῤ ç sysinstall ἀδεἰῖῖᾶβ οἱ ὀὀὀεἰῖ οἱ ἀβόεῖῖ ἰᾶᾶεᾶP ἀδεὀnYὀᾶε ὀγῖ ἀὀὀεᾶβᾶδ ἀεεᾶᾶP ὀοἱ label (ὀβὀεἰδ) ἐάε ὀᾶ οἰΠιάοᾶ (partitions) οἱ ἀβόεῖῖ. ἈδεὀYῖ ὀᾶδ ἀδεὀnYὀᾶε ιᾶ ἀδιεεᾶYὀᾶὀᾶ ὀεὀ ἀεεᾶᾶYδ ἡῖῖ ὀοἱ ὀᾶεᾶεἰYῖῖ ἀβόεἰ ÷ ἡnβδ ιᾶ ἰᾶὀᾶῖᾶᾶε οἷοδ ὀὀεἰὀἰὀ. Ἰ ἰᾶYὀᾶᾶἰδ ὀnυῖοἰ ἀβίαε ιᾶ ἀεὀᾶεYὀᾶὀᾶ ᾶεῤἰᾶὀ ἰᾶὀἰεYδ ιᾶ οἱ ÷ Yῖᾶ ᾶἰ ὀγῖ ἰᾶᾶἡP ἰᾶὀἰεἱ ῦδ root. Ἀἰ ἀδεεYῖᾶὀᾶ ὀγῖ ἀδιεεαόοεεP εἰεοἰοῖαβᾶ ÷ ἡᾶεῤᾶὀᾶ ιᾶ ἀεὀᾶεYὀᾶὀᾶ ἡῖῖ 2-3 ἰᾶὀἰεYδ ἰᾶP ιᾶ οἱ sysinstall ὀnYὀᾶε ἰᾶὀεYὀᾶὀᾶ εἰᾶῤε ὀᾶᾶὀῤῖ.

1.2 ἰῖεὀἱβ

Ç ἀεᾶ ÷ ἰῖῖὀç ἀβόεῖῖ ὀοἱ UNIX® Y ÷ ἀε ἰὀᾶε ἰYᾶ Yῖῖῖᾶ ὀᾶ ὀὀῤ ÷ ἡὀᾶδ εYῖᾶὀ. Ὀἱ ὀᾶᾶεῤὀῦ εᾶἰεῖῖᾶεἰ ἰᾶὀᾶβ ὀγῖ ἡἡῖᾶβᾶ ὀἰο ÷ nçοεἰἰδιεἰYῖᾶ ὀᾶ ᾶὀδῦ οἱ εᾶβῖᾶἱ ἐάε ὀοἱ FreeBSD ἰᾶἰεῖῤ (ὀnἰὀᾶPδ).

- **οἰαάοP εἰεοἰοῖαβᾶ (compatibility mode):** ç ἀεαῖυνουός οἷο ἀβόεἰο πῶα ιά Y ÷ ἀε Y ιά ὀβίαέα οἰΠιάουι (slice table) ἐάε ιά ἰδιῖαβ ιά ÷ nçοεἰἰδιεεᾶβ ὀάνῤεεεᾶ ιᾶ ῤεεᾶ εἰεοἰοῖαεῖῤ ὀοόοΠιάοᾶ. Ἀῖὀβᾶὀἰ ὀδδ ἀδιεεαόοεεPδ εἰεοἰοῖαβᾶδ.
- **(ἀδεεβῖαῖα) ἀδιεεαόοεεP εἰεοἰοῖαβᾶ:** ç ἀεαῖυνουός οἷο ἀβόεἰο εᾶὀῤ ὀYὀεἰῖ ὀnυῖἰ πῶα ιᾶ ιç ὀᾶῖY ÷ ἀε ὀβίαέα ὀιçῤὀῖῖ (slice table). Ἀβίαε ὀεἰ ᾶYῖῖç ἀεᾶεεᾶόβᾶ ἀεῖῤ ι ἀβόεἰδ ἰδιῖαβ ιᾶ ιç ἰᾶὀᾶYᾶε ὀᾶ ιç-FreeBSD εἰεοἰοῖαεῖῤ ὀοόοΠιάοᾶ. Ἀῖὀβᾶὀἰ ὀδδ οἰαάοPδ εἰεοἰοῖαβᾶδ.
- **ἀβόεἰο:** Ἰε ὀεεçἡἡβ ἀβόεἰε, ὀᾶ CDROM, ἰε ἰᾶῖçὀἰ-ἰὀδεεYδ ὀοὀᾶὀYδ ἐάε ὀᾶ ᾶὀᾶἡἡἰᾶἰᾶ ἰYὀᾶ Zip®/Jaz® ἰᾶᾶε Yδ αἰῦ ὀεὀ ὀοὀᾶὀYδ ἰᾶᾶεPδ ἀδιεPᾶὀὀδδ ἰᾶᾶἡYῖῖ ὀἰο ÷ nçοεἰἰδιεἰYῖὀᾶε ὀΠᾶᾶ. Ç ἰᾶὀεP ἰᾶ ÷ P εἰεοἰοῖαβᾶδ ᾶὀPἱ οἱ ἰYὀῖ ᾶδιεPᾶὀὀδδ Y ιᾶ P ὀᾶἡὀὀὀᾶἡῖ ἀβόεἰε ἰε ἰὀἡἡῖ ὀᾶἡὀὀYἡἡὀᾶε αἰῦ Y ιᾶ ἡὀYῖn, ἰᾶP ἰεᾶ εᾶὀᾶP εἰῖᾶὀᾶε ὀᾶ Y ιᾶ ἡἡὀῤὀε ὀῤῖῖ ὀὀçἱ ᾶεὀβῖᾶ ὀἰο ἀβόεἰο ἐάε ἰᾶᾶῤᾶε αἰῦ οἱ ἀβόεἰ P ἰᾶῤὀᾶε ἰᾶᾶἡY ιᾶ ὀᾶ ᾶὀοῖῖ. Ὀἱ ἰᾶῤὀᾶἱ ἰᾶἡὀᾶε ιᾶ ἰᾶὀᾶἡP εῤὀἰεὀ ὀὀὀεἰY ÷ ἰᾶᾶὀçἡὀὀεἰY ὀἰο ἀβόεἰο (ἰᾶῖçὀεεP ἡἡP, ἰᾶᾶᾶὀὀεῖῤὀδᾶ, εεὀ.) ἰᾶP οἱ ᾶεῤᾶὀᾶ ἰᾶἡὀᾶε ιᾶ “ἰᾶ ÷ ἰᾶὀç” ἀεεᾶᾶP ὀὀçἱ βᾶεᾶ ὀὀὀεP εᾶῖῤὀδᾶ ὀἰο ἀβόεἰο.
- **οἰΠᾶ (slice):** Ἰβᾶ ὀἰᾶεᾶἡᾶὀç ἰᾶὀδ ἀβόεἰο. ὈYἰὀῖᾶ ιᾶ ὀᾶ ὀnυὀὀᾶ οἱ PC ἰὀἡἡYῖ ιᾶ ὀὀῤ ÷ ἡῖῖ ἰY ÷ ἡῖ 4 οἰΠᾶὀᾶ ὀᾶ Y ιᾶ ἀβόεἰ. Ὀᾶ οἰΠᾶὀᾶ ᾶὀὀᾶἡYὀᾶε ᾶὀἰ ὀἰᾶ ÷ ἡἰᾶἡὀδ ὀἡᾶὀδ (sectors). Ὀὀῤ ÷ ἡῖ Y ιᾶ “ὀβῖᾶᾶὀ ὀιçῤὀῖῖ” (slice table) ὀἰο ὀᾶῖY ÷ ἡῖ ὀεçἡἡὀἡὀᾶ ᾶεᾶ ὀᾶ οἰΠᾶὀᾶ ἐάε ÷ nçοεἰἰδιεᾶὀᾶε αἰῦ οἱ BIOS ᾶεᾶ ιᾶ ἰᾶᾶβ αἰῦ ὀYῖ ἰδιῖαβ ιᾶ ἰᾶεἰPὀᾶε ὀἰ ὀYὀὀᾶ. Ἰ ὀβῖᾶᾶὀ ὀιçῤὀῖῖ εYᾶᾶὀᾶε ἐάε “ὀβῖᾶᾶὀ ἡἡᾶὀεPἱ” (partition table) ὀᾶ ἡἡῖᾶβᾶ DOS ὀἰο ὀὀῤ ÷ ἰᾶὀᾶε ᾶἰ οἱ ὀἡῖᾶἡἰᾶ fdisk.
- **ἡἡῤὀε (partition):** Ἰβᾶ ὀἰᾶεᾶἡᾶὀç ἰᾶὀδ οἰΠᾶὀᾶἰδ. ὈὀἱPεῦδ ÷ nçοεἰἰδιεᾶὀᾶε ᾶεᾶ ἰᾶὀἡἡῤ ὀὀὀδ ὀἰᾶᾶᾶἡYὀᾶὀδ οἱ ὀιçῤὀῖῖ (slices) ὀἰο ἀβόεἰο ὀοἱ FreeBSD. ἡῤᾶ ὀYὀὀᾶ ἰᾶ ÷ ἰᾶἡἱ (filesystem) P ἰᾶὀᾶἡἡYὀὀᾶὀ ἰᾶὀᾶ (swap area) ὀοἱἱ ἀβόεἰ ἰᾶὀᾶὀᾶε ὀᾶ Y ιᾶ ἡἡῤὀε. Ὀᾶ ἡἡῤὀεᾶ ὀὀῤ ÷ ἡἡὀᾶε ιᾶ οἱ ἰᾶᾶᾶᾶἡἱ disklabel.
- **ὀἡYᾶδ (sector):** Ç ἰεἡἡὀᾶᾶὀç ὀἰᾶεᾶἡᾶὀç ἰᾶὀδ ἀβόεἰο. ὈὀἱPεῦδ Y ÷ ἡῖ ἰYᾶᾶἡὀ 512 bytes.

1.3 ÓçἰᾱḂᾱ ðῖö ðñÝðᾱέ ἰᾱ ðñῖóÝἰᾱöᾱ ἑᾱέ ðᾱᾱḂᾱö

Ἀþóᾱ ἰᾱᾱÜεç ðñῖóῖ÷þ öçç ᾱέᾱᾱέᾱᾱᾱᾱ, ᾱῖ ᾱᾱῖ εÜᾱᾱᾱ ᾱᾱ ἰÝᾱᾱ ᾱᾱ ἑᾱέ ᾱḂἰᾱε εÜεῖö ἰðῖñᾱḂ ἰᾱ ἑᾱᾱᾱᾱᾱñÝḂᾱᾱ ᾱᾱ ðᾱñéᾱ÷ῖᾱῖᾱ Üεεῖῖ ᾱḂᾱéῖῖ öῖö ööóðῖᾱᾱöῖö.

ðñῖóÝἰᾱ öé εÜἰᾱᾱ. ἈḂἰᾱε ðῖεý ᾱýεῖῖ ἰᾱ ἑᾱᾱᾱᾱᾱñÝḂᾱᾱ εÜεῖö ᾱḂᾱéῖ ᾱῖöᾱýῖῖᾱᾱ ἰᾱ ᾱöðÝð öéð ᾱῖᾱῖεÝð. Ἀῖ Ý÷ᾱᾱ ᾱῖöᾱῖᾱḂᾱ ᾱéÝᾱῖᾱ ᾱᾱ ἰçῖýἰᾱᾱ ᾱῖö ðᾱñῖᾱ ἑᾱᾱÜ öç ᾱέᾱᾱέᾱᾱᾱ ᾱéḂῖççöçð ᾱéᾱ ἰᾱ ᾱñᾱḂᾱ öç öüöóþ öðᾱᾱþ ᾱḂᾱéῖö.

ÖðᾱééÜ ᾱᾱῖ Ý÷ῖᾱᾱ ἑᾱἰḂᾱ ᾱðéýῖç ᾱéᾱ æçῖéÝð ðῖö ἰðῖñᾱḂ ἰᾱ ðñῖεççéῖýῖ. Ç ᾱðéýῖç ᾱḂἰᾱε ᾱééþ ᾱᾱö!

1.4 Zip, Jazz, ἑᾱέ ÜεḂᾱ ᾱöᾱéñῖῖἰᾱῖᾱ ἰÝᾱᾱ

Ἰé ᾱöᾱéñῖῖᾱñῖ ᾱḂᾱéῖ ἰðῖñῖýῖ ἰᾱ ᾱéᾱῖñöüεῖýῖ ᾱῖ ἑᾱñῖéῖḂ ᾱḂᾱéῖ. Öῖ öçῖᾱῖᾱᾱééü ᾱḂἰᾱε ἰᾱ ᾱḂἰᾱε öῖᾱᾱῖÝñö ἰ ῖᾱçᾱüð öῖö ᾱḂᾱéῖö ἑᾱᾱÜ öçῖ ᾱéḂῖççöç öῖö ööóðῖᾱᾱöῖö ἑᾱέ ἰᾱ ᾱéöéÝᾱᾱ ἰÝᾱᾱ þᾱᾱ ἰᾱ ἰðῖñÝᾱé ἰ ðᾱñῖᾱð ἰᾱ ᾱᾱḂ öüöóÜ öçῖ ᾱᾱῖᾱöñḂᾱ öῖö ᾱḂᾱéῖö. ἘῖéðÜῖᾱ öé εÝᾱé ç ᾱῖᾱῖḂþ dmesg ᾱéᾱ ἰᾱ ᾱᾱḂᾱ ᾱῖ ç öðᾱᾱþ ᾱḂἰᾱε öççῖ εḂᾱᾱ. Ἀéᾱ ðᾱñÜᾱᾱéᾱῖ ᾱῖ ἰ ðᾱñῖᾱð ᾱñÜḂᾱé:

Can't get the size

öüᾱ ᾱᾱῖ öðÜñ÷ᾱé ᾱéöéÝᾱᾱ öῖῖῖ ῖᾱçᾱü. Ἀῖ ᾱḂἰᾱε ᾱöðü ἑᾱ ðñÝðᾱέ ἰᾱ ᾱðᾱῖᾱééῖḂᾱᾱᾱ öῖ ἰç÷Üῖçῖᾱ ðñéῖ ᾱῖéῖÜᾱᾱᾱ ἰᾱ ᾱéᾱῖñöþᾱᾱ öçῖ ᾱéöéÝᾱᾱ.

2 Ἀéᾱῖñöþῖῖᾱᾱᾱ ᾱḂᾱéῖöð ᾱéᾱ ᾱðῖḂᾱéöóöééþ ἑᾱéöῖöñᾱḂᾱ

2.1 Ἀéöᾱᾱüᾱþ

Ἀöðþ ç ðᾱñÜᾱñᾱöῖð ðᾱñéᾱñÜᾱᾱé ðþð ἰᾱ ööéÜἰᾱᾱ ᾱḂᾱéῖöð ἰüñῖ ᾱéᾱ öῖ FreeBSD. ἘðῖçḂᾱḂᾱ üðé ἰé ᾱḂᾱéῖ ᾱðῖḂᾱéöóöééþð ἑᾱéöῖöñᾱḂᾱð ᾱᾱῖ ἰðῖñῖýῖ ἰᾱ ᾱéᾱᾱᾱöῖýῖ ᾱðü ÜεḂᾱ ἑᾱéöῖöñᾱᾱéÜ, ῖýᾱ ἰᾱ εÜñῖῖ boot.

2.2 ðþð ἰᾱ ööéÜἰᾱᾱ ᾱḂᾱéῖöð ᾱðῖḂᾱéöóöééþð ἑᾱéöῖöñᾱḂᾱö ἰᾱ öῖ Sysinstall

To /stand/sysinstall, öῖ ðñüᾱñᾱῖᾱ ᾱᾱᾱᾱÜöóᾱçð öῖö ööóðῖᾱᾱöῖö, Ý÷ᾱé ᾱðᾱéöᾱᾱḂ öóéð öᾱᾱᾱöᾱḂᾱð öῖö ᾱᾱüᾱᾱéð þᾱᾱ ἰᾱ ᾱðῖῖðῖᾱḂ öçῖ ᾱéᾱᾱéᾱᾱᾱ ÷ññéöῖý öüῖ ᾱḂᾱéῖῖ ἑᾱé ἰᾱ ᾱðᾱéöᾱḂ ἑᾱᾱüðᾱñç ðñῖöðÜḂᾱᾱ. Öᾱ ðñῖᾱñÜἰᾱᾱᾱ fdisk ἑᾱé disklabel ðῖö öðÜñ÷ῖῖ öῖῖ sysinstall ᾱḂἰᾱε ᾱñᾱöéῖý ðᾱñéᾱÜῖῖᾱöῖö (GUI - Graphical User Interface) ἑᾱé ἰᾱἑþῖῖῖ öῖ ἰðÝñᾱᾱῖ öῖö εῖḂḂᾱᾱöῖö öüῖ ᾱḂᾱéῖῖ. ἈḂἰᾱε ðñῖᾱῖþð ἰ ᾱðῖῖüöᾱñῖð öñüðῖð ἰᾱ εüḂᾱᾱ ᾱḂᾱéῖðð ᾱðü öçῖ ÝḂᾱῖç 2.1.7 ἑᾱé ἰᾱðÜ öῖö FreeBSD.

1. ἸᾱᾱῖḂᾱᾱ öῖ sysinstall þð root ᾱñÜῖῖᾱᾱ

```
# /stand/sysinstall
```

öççῖ ᾱñᾱῖḂ ᾱῖᾱῖḂῖ.

2. ἈðḂῖÝἰᾱ Index.
3. ἈðḂῖÝἰᾱ Partition.
4. ἈðḂῖÝἰᾱ öῖ ᾱḂᾱéῖ ᰄö εÝḂᾱᾱ ἰᾱ ᾱᾱᾱᾱᾱöðḂᾱᾱ ÷ñçöῖῖðῖᾱᾱð ᾱᾱ ᾱᾱḂᾱᾱ ἑᾱé ἰᾱðÜ **SPACE**.

5. Αί εά ÷ ñçóέíðìéþóáðå üëí òí äßóέí ἁέά òí FreeBSD, ἄðéëÝíðå Ἀ.
6. Ἰüëéð óáð ñòðþóáé áí üíòüð èÝéåðå íá òí èÛíåðå áððü (Do you still want to do this) ἄðáíðþóðå Yes.
7. ἈðéëÝíðå Write.
8. Ἐά óáð äåÛéåé íéá ðñíåäüðìþçóç ó÷äðééÛ íå ôçí äåññåðþ óå ððÛñ÷ííóá óðóðþíáðå ἄðáíðþóðå Yes.
9. Ἰüëéð óáð ñòðþóáé áí èÝéåðå íá äåéáðóðþóðå Ýíá boot loader, ἄðéëÝíðå None ἁέά íá ἄðüýåðå ðñéåäþðå äééäþ óòí Master Boot Record. Ç äåéáðÛóðáóç áñüð boot loader ÷ ñåÛæåðåé üüí óå éáέíýñéåð äåéáðóðÛóáéð òí FreeBSD þ áí ó÷äæÛæåðå íá òðñéåðþóðå òí äßóέí óå èÛðìéí Ûéëí íç÷Ûíçá.
10. Ðáðþóðå **ENTER** óòí áçíåñüðééü íþñíá ðñè èÝåé “Wrote FDISK partition information out successfully”.
11. ἈðéëÝíðå Quit ἁέά íá äåäßðå áðü òí FDISK Editor éåé íåðÛ **ESCAPE** ἁέά íá ἄðéóðñÝðåðå óòí Index menu.
12. ἈðéëÝíðå Label áðü òí Index menu.
13. ἸñÛóðå òí äßóέí óáð üðüð èÝéåðå (äåþ ññßæåðå óå partitions). Αί èÝéåðå üüí Ýíá partition ðáðþóðå òí c ἁέά íá äçíéíðñåðåðå òí partition. ἸåðÛ ἄðèð äå÷äåðåðå ðéð ðñíåðééñÝð ἁέά óå ðñíéåéñéóíÝíá size, partition type Filesystem, éåé mountpoint (òí ððíþí äåí ÷ ñçóέíðìéåðåé).
14. Ðáðþóðå w üëéð ðåäéþóðå éåé ἄðééðñþóðå ðéð äééäÝð ἁέά íá óñíå÷ßðåðå. Òí filesystem èå ðåñåóðåß áððüðåðå áðü ôçí áñíðèþ newfs äéðüð áí ἄðéëÝíðå òí áñðèåðí. (Αί äÛæåðå éáέíýññåí partition óáð óðüÝññåé íá òí èÛíåðå!). Ἐά óáð äþóåé òí èÛèð:

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

Ἀññþóðå òí.

15. Ðáðþóðå óñíå÷üñíá òí **ESCAPE** ἁέά íá äåäßðå.

2.3 Ðüð íá ððéÛíåðå äßóέíðð ἄðñéåäéóðéèþð èåéðññåðåò ðÝóå áðü ôçí äñåíð áñíðèþí

ἈéðåéÝóðå ðéð ðåñåéÛðü áñíðèÝð áñééåééóðþíóðå òí ad2 íå òí üññíá ôçð óðóéåððð òñð äßóέñð (ññÛððå dmesg íá äéÝññåðå áí äßíåé òüóðü).

```
# dd if=/dev/zero of=/dev/ad2 count=2
# disklabel /dev/ad2 | disklabel -B -R -r ad2 /dev/stdin
ἘÝéñðå üüí Ýíá partition, ððüð ððñíýñá íá ÷ ñçóέíðìéþóíå òí èññÛðé 'c':
# newfs /dev/ad2c
```

Αί ÷ ñåÛæåðåé íá äéèÛíåðå òí disklabel ἁέά íá ÷ ñçóέíðìéþóðå ðñéåäèÛ partitions (ἁέά ðåñÛäåéñå áí èÝéåðå swap) ðüðå èÛíå:

```
# dd if=/dev/zero of=/dev/ad2 count=2
# disklabel /dev/ad2 > /tmp/label
Ἀñßðå òí disklabel ἁέά íá ðñíðéÝóðåðå partitions:
# vi /tmp/label
# disklabel -B -R -r ad2 /tmp/label
äéðåéÝóðå ôçí áñíðèþ newfs óðå partitions üðüð ðñÝðåé
```

Ἰ äßóέñð óáð äßíåé Ýðñéñðð ðññð ÷ ñþóç.

3 Ἀεάιιñöþííîáò ἁßóêîðð ἁέἁ óîîἁἁð Ëἁéôîñḡḡḡḡ

3.1 Ἀέóἁḡḡḡḡ

Ç ἁḡḡḡḡ ἁíðèþí ἁßἁé ἰἁí ἰ ἁðèççêáðððð ðñððð ἁéἁ ἰἁ ððéÛíḡḡḡ ἁßóêîðð ἁðèççêáððððð Ëἁéôîñḡḡḡḡ ἁééÛ ἁßἁé ἁéἁ ἰ ἁððèççêáðððð ἁéἁ ἰἁ ððéÛíḡḡḡ óîîἁἁðýð ἁßóêîðð. Õí fdisk ἁðḡ ὅçí ἁḡḡḡḡ ἁíðèþí èÝἁé ðḡḡéóóúðḡḡḡ ἁíþḡἁéð ἰἁéçíἁðéêþí ἁéἁ ðèççÝð ἁíþḡἁéð ó÷ḡðééÛ ἰἁ ὀí ḡßíἁéἁ èñíἁðéþí, èÛðé ðíð ðñíḡἁíþð ἁḡí ÷ñḡéÛḡḡḡḡ ἰἁ ἰÛéἁðḡ. Ἀé ἁððú ÷ñçóéíððèéþḡḡ ðí sysinstall ἁéἁ ἰἁ ððéÛíḡḡḡ óîîἁἁðýð ἁßóêîðð ἁéèèðèþíðḡð ðéð ἰἁçḡḡḡð ðḡḡḡèÛð.

3.2 Ððð ἰἁ ððéÛíḡḡḡ ἁßóêîðð óîîἁἁððð Ëἁéôîñḡḡḡḡ ἰἁ ὀí Sysinstall

1. ἰḡḡéíþḡḡ ὀí sysinstall þð root ḡḡÛðíðḡḡ

```
# /stand/sysinstall
```

óðçí ḡḡḡḡḡ ἁíðèþí.

2. ἈðééÝíðḡ Index.
3. ἈðééÝíðḡ Partition.
4. ἈðééÝíðḡ ὀí ἁßóêîðð èÝḡḡḡ ἰἁ ἁḡḡḡḡḡḡðḡḡḡ ÷ñçóéíððèéþíðḡð ὁἁ ἁḡḡḡḡḡ ἁéἁ ἰἁðÛ **SPACE**.
5. Ἀí èἁ ÷ñçóéíððèéþḡḡḡ ḡèí ὀíḡ ἁßóêîð ἁéἁ ὀí FreeBSD, ἁðééÝíðḡ A.
6. ¼ḡḡí ὁἁð 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)?
```

(èÝḡḡḡ ἰἁ ὀí èÛíḡḡḡ ἁððú ἰἁ ḡḡḡḡḡḡḡḡ èñíÛðéἁ ἁéἁ ἰἁ ḡḡḡḡḡḡḡ ὀîîἁἁðḡ ἰἁ Ûḡḡḡ ḡḡḡḡḡḡḡḡḡḡ
óððððḡḡḡḡ?) Ἀðḡíðþḡḡ Yes.

7. ἈðééÝíðḡ Write.
8. ¼ḡḡí ὁἁð æçðçèḡḡ ἰἁ ἁḡḡḡḡḡḡðḡḡḡ ὀíḡ boot manager, ἁðééÝíðḡ None ἰἁ ὀí **SPACE** ἁéἁ ἰἁðÛ **ENTER** ἁéἁ OK.
9. Quit (ḡḡḡḡḡḡ) ἁðḡ ὀí FDISK Editor.
10. Èἁ ὁἁð ñððþḡḡ èÛðé ó÷ḡðééú ἰἁ ὀíḡ boot manager ðÛḡḡ, ἁðééÝíðḡ None ἰἁíÛ.
11. ἈðééÝíðḡ Label ἁðí ὀí Index menu.
12. ÌñÛðḡḡ ὀí ἁßóêîð ḡððð èÝḡḡḡ (ḡḡþ èἁ ἰñḡḡḡḡ ὁἁ partitions). Ἀí èÝḡḡḡ ἰḡḡí Ýíἁ partition ἁðèþð ḡḡ÷èḡḡḡ ὁéð ḡñíḡḡḡḡḡḡḡ ἁéἁ ὁἁ ḡñíḡḡḡḡḡḡḡÝíἁ size, partition type filesystem, ḡἁé mountpoint (ὀí ἰðíßí ḡḡí ÷ñçóéíððèéḡḡḡḡ).
13. Õí filesystem èἁ ḡḡḡḡḡḡḡ ἁððḡḡḡḡḡ ἁðḡ ὅçí ἁíðèþ newfs ḡéðḡ ἁí ἁðééÝíðḡ ὀí ἁíðḡḡḡḡ. Ἀí ḡÛḡḡḡḡ èἁéñýñḡḡḡ partition ὁἁð óðîÝñḡḡ ἰἁ ὀí èÛíḡḡḡ! Èἁ ὁἁð ἁþḡḡ ὀí èÛèðð:

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

Ἀḡḡḡḡḡ ὀí.

14. Ðḡðþḡḡ ὁðíḡ÷ḡḡḡḡ ὀí **ESCAPE** ἁéἁ ἰἁ ḡḡḡḡḡḡ.

Ἰ ᾱβóêῖð óᾱð ᾱβῖᾱέ Ὡῖῖῖð ðñῖð ÷ñþόç.

4 ¶ēēᾱò ēᾱéōῖñᾱḂᾱò ἰᾱ òῖð ᾱβóêῖð

4.1 ÐñῖóēΎōῖῖᾱò swap.

Ἐᾱêþð Ὡῖᾱ óýóçῖᾱ ᾱðᾱêðᾱβῖᾱðᾱέ, ç ᾱῖῖᾱêç ᾱέᾱ ἰᾱᾱᾱýóᾱñῖ swap ᾱβῖᾱðᾱέ ῖῖῖ ἔᾱέ ðéῖ ᾱðéóᾱéðéêþ. Ðᾱñῖῖῖ ðῖð òῖ ἰᾱ ðñῖóðᾱêᾱḂ swap óᾱ Ὡῖᾱῖ ððῖñ÷ῖῖᾱ ᾱβóêῖ ᾱβῖᾱέ ðññᾱñῖ ᾱýóêῖῖῖ, Ὡῖᾱð ἔᾱéῖῖñᾱéῖð ᾱβóêῖð ἰðῖñᾱḂ ἰᾱ ῖñῖῖðῖéçᾱḂ Ὡðóé þóðᾱ ἰᾱ ðᾱñéΎ÷ᾱέ òῖ ᾱðéðēΎῖῖ swap ðῖð óᾱð ēᾱḂðᾱέ.

Ἄέᾱ ἰᾱ ðñῖóēΎóᾱðᾱ swap ἔᾱêþð ᾱῖᾱᾱðᾱ Ὡῖᾱ ᾱβóêῖ òῖῖ óýóçῖᾱ:

1. Ἐᾱêþð ēῖᾱᾱðᾱ òῖ ᾱβóêῖ (partitioning) ᾱēῖῖῖᾱ òῖ disklabel ἔᾱέ ῖñḂóðᾱ ÷þñῖ ᾱέᾱ swap òῖῖ ēñῖῖðé (partition) ‘b’ ἔᾱέ ᾱῖῖᾱ òῖῖ ððῖῖῖῖðῖ ÷þñῖ óᾱ ēῖῖðῖῖ ῖῖῖῖ ēñῖῖðé, ð.÷. òῖῖ ‘a’ þ òῖῖ ‘e’. Ὀῖ ἰΎᾱᾱῖð ðῖð ᾱβῖᾱðᾱ ᾱβῖᾱέ óᾱ blocks òῖῖ 512 bytes.
2. ¼ðᾱῖ ēῖῖᾱðᾱ newfs òῖῖ ᾱβóêῖ, Ἰçῖ òῖ ēῖῖᾱðᾱ òῖῖ ēñῖῖðé ‘c’. ἈῖðḂᾱðᾱ, ēῖῖᾱ òῖ ῖῖῖ òῖῖ ēñῖῖðé ðῖð ᾱᾱῖ ᾱβῖᾱέ swap.
3. ÐñῖóēΎóᾱ òῖῖ /etc/fstab òῖ ðᾱñᾱēῖῖᾱ:

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

Ἀēῖῖῖᾱ òῖ /dev/ad0b òῖῖ ῖñῖᾱ òçð ἔᾱéῖῖñᾱéᾱð óᾱð òðóéᾱðþð.

4. Ἄέᾱ ἰᾱ ᾱῖᾱñᾱῖðῖéþóᾱðᾱ ῖῖᾱðᾱ òῖ ἰΎῖ swap ÷ñçóēῖῖðῖéþóᾱðᾱ òçῖ ᾱῖðῖῖþ swapon

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

4.2 Ἀῖðéᾱñῖῖῖᾱò ὁᾱ ðᾱñéᾱ÷ῖῖᾱῖᾱ ᾱβóêῖῖ

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

Ἄέᾱ ἰᾱ ἰᾱðᾱéῖῖþóᾱðᾱ ᾱñ÷ᾱḂ ᾱðῖ òῖῖ ᾱñ÷éῖῖ óᾱð ᾱβóêῖ óᾱ Ὡῖᾱῖ ἔᾱéῖῖñᾱéῖ, ēῖῖᾱ:

```
# 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 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 òòìðññèòÝññíòáé uò Ýíàð. Ç àéááééáòá éÝÑàòáé òòá÷þíàòóç (striping). Ià òçí àðèèèèèçòç Ý÷-àòà éáéýòàñá àðìòáéÝòíàðá òóçí òá÷÷òçòá àðàèäÞ ïèñÛÑèñíòáé íé ààññàòÝð éáé íé áíááñþòáéð òòìòð àðóèrèð. ÁéááÛòòá òéð manual pages ccd(4) éáé ccdconfig(8) Ð òçí áñ÷èèÞ òàèðáá òìò CCD (<http://stampede.cs.berkeley.edu/ccd/>) áéá ðññéóòíòññàð èððòñÝññáéð.

Ἀέά ία ὀñŸίάοᾶ CCD ḑēŸíí ᾱáí ÷ ñāēŸæáοᾶᾶ ᾱéáēēū ḑōñḑῖá. Ìá ὀçí ᾱíοīēḑ ccdconfig, öñḑῖáḑáé öí éáóŸēēçēī
 KLD áḑöüüíáᾶ ᾱí í ḑōñḑῖáḑ ᾱáí Ÿ ÷ ᾱé ḑæç ḑḑíóḑḑñéíç ᾱéá CCD.

Όά CCD όόεŨ÷ñíόάε όά partitions όýđř 4.2BSD. Άí εŸεάόά íá ÷ñçόέíđíđéPόάόά üēř όíř äßóēř έάε đŨēē đñŸđάε íá όόεŨíάόά Ÿíá íŸí partition. Άέά đánŨüάέäíá, ç ářđřēP **disklabel** -e đřñāß íá äāßíāē:

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

Äär iðriñaðöa ía ÷ ñçöéúðriëÐaðöa öi partition c áéá 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 ἱά ἀγέρεῖτῶνάΠοάοά Ἰά ἱΐΐ CCD, ἀεοάεΨοά οεο δᾶᾖαεΨοῦ ἀφῶρεΨο. ΔᾶᾖεᾖᾖΨοῖοι θῖο ἱά θῖοῖεΨοάοά οᾖᾖᾖᾖ ᾖᾖοεῖοδ. Ἀθῖοδ ᾖεΨοῖᾖ οεο οοῖεᾖᾖΨο ὑθῖο ÷ᾖᾖᾖᾖᾖᾖᾖ. Ἐῖοῖεᾖᾖᾖ ὑοε ἱε ᾖᾖοεῖε θᾖΨᾖᾖ ἱά ᾖᾖᾖᾖ *uirere*.

```
# cd /dev ; sh MAKEDEV ccd0

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

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

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

# newfs /dev/ccd0c
```

Ç öειΡ 273 αβίαε οι Ύΰααεριο διο stripe. Άβίαε ι ανέειυδιο ουρ sectors (512 bytes ι εαεΎιαό) οά εΎεα block ααανΎιυρ διο CCD. Εα δñΎδαε ία αβίαε οιοεΎ - εόοιρ 128 kB. εαε ααρ δñΎδαε ία αβίαε αΎιαε διο 2.

Ôpñá ìðĩñãßôã íá êÛíãôã mount êáé íá ÷ñcóéiĩðĩéPóãôã 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 Ἀõ÷ᾱñéóôßàò

Ἰ óðᾱᾱñᾱöÝᾱò èᾱ þèᾱèᾱ íᾱ ᾱõ÷ᾱñéóôþóᾱé òĩòð ðᾱñᾱéÛòù ἁέᾱ òçí óóíᾱéóöíñÛ òĩòð óᾱ ᾱóðþ òçí ᾱñᾱᾱóßᾱ òĩòð:

- Darryl Okahata (<darrylo@hpnmhjw.sr.hp.com>) ἁέᾱ òéð ᾱðēÝò ïᾱçᾱßᾱð ᾱᾱéᾱòÛóðᾱóçð ᾱíùð ᾱßóēĩò óᾱ ᾱðìéᾱéóóéēü òñüðĩ ēᾱéóíōñᾱßᾱð, òéð ïðĩßᾱð Ý÷ù ðìēēÝð òĩñÝð ÷ñçóéñðĩéþóᾱé óóçí FreeBSD-questions.
- Jordan K. Hubbard <jkh@FreeBSD.org> ðĩò Ýéᾱíᾱ òĩ sysinstall ÷ñþóéñ ἁέᾱ òÝòìéĩò ᾱßᾱĩòð ᾱĩöēᾱéÝð.
- John Fieber (<jfieber@indiana.edu>) ðĩò Ýᾱùóᾱ òéð ðēçñĩĩññᾱð éᾱé óᾱ ðᾱñᾱᾱᾱßᾱĩᾱóᾱ ἁέᾱ òĩ DocBook DTD ðÛĩù óóᾱ ïðĩßᾱ ᾱóðü òĩ ēᾱßᾱĩñ ᾱᾱóßᾱæᾱðᾱé.
- Greg Lehey <grog@FreeBSD.org> ðĩò Ýēᾱᾱñᾱ òçí ᾱĩöēᾱéÛ ïĩò, øÛ÷ñĩíóᾱð ἁέᾱ ᾱíᾱēñßᾱᾱéᾱð, éᾱé ἁέᾱ òçí òðĩóðþñéĩç òĩò óᾱ ᾱéÛöĩñᾱ èÝĩᾱóᾱ.