



# 1 ÅéóáãùãƆ

Οι εαβλαίη άόδου οίηβææέ όέδ æεάοιηÝò ιάόάίý οίò FreeBSD εάέ οίò Linux þóόά ιÝοίε þ ðñι÷÷ùñçιÝííε ÷ ñþóόάð οίò  
 Linux íά ιόññíýí ãñþáíñά íά ðñíóáññíóόίýí όόέð ááόέéÝò Ýííέάð οίò FreeBSD. Ðñùέæέόάé áéά ιéά όá÷÷íéþ æέόάüáþ  
 όóι FreeBSD, εάέ ááι éά áíάόáñεñýíá όά όð÷÷ι “όέέιόíόέéÝò” æέάοιηÝò ιάόάίý όüι áýí όόόόçιÝòüí.

Öi êâñîâñi áóòü òðîëÝóâë üóë Ý÷âòâ Ðäç äâëáóáóóÐóâë òì FreeBSD. Áí äâí Ý÷âòâ äâëáóáóóÐóâë òì FreeBSD Ð ÷ñâëÛâáóòâ äìÐëâëá íâ öçí äëââëëáóáâ äâëáóóóóóóóóóó òìò, ðññâëâëýíýíá íá äëáóóóóóóó òì êâòÛëâëí Áâëëëëóóóóóóóóóó òì FreeBSD ([http://www.FreeBSD.org/doc/el\\_GR.ISO8859-7/books/handbook/install.html](http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/install.html)) óòì Åã÷âëñîâëí òìò FreeBSD.

## 2 Êâëýöç: Ääí õđŮñ÷âé Bash;

[illegible][illegible]

### 3 ĐáêÝóá éáé Ports: ĐñĩóèÝóĩĩóáo ãĩãéóĩéêü óóĩ FreeBSD

[illegible]

### 3.1 ĐấêÝôá

Όά θαέΎόά αβίαέ θñĩ-iaóaaèuóóéoiΎíáo áóáñĩāΎó, èá èΎāñāi òĩ áíóβóóíé÷ĩ áéá òĩ FreeBSD òuĩ āñ÷āβuĩ .deb óá óóóóβiaóá Debian/Ubuntu éáé òuĩ āñ÷āβuĩ .rpm óá óóóóβiaóá Red Hat/Fedora. Όά θαέΎόά āāēāēβóóáíóáé ÷ñóóēñíēíβíóáó òci áíóēβ pkg\_add(1). Áéá θánŨāēēāi, ç āēuēĩōèç áíóēβ āāēāēéóóŨ òĩñ **Apache 2.2**:

```
# pkg_add /tmp/apache-2.2.6_2.tbz
```

Ç ÷ ñΠός όçò ðáñáíÝíññíð - ð ãäçããß öçí pkg\_add(1) íá éáóááÜóáé áóóñíáóá öñóí öí ðáéÝóí, üóí éáé óéó áíáñðΠóáéó öñí. éáé íá öí ääéáóáóóðóáé:

```
# pkg add -r apache22
```

```

Fetch:  ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-6.2-release/Latest/apache22.tbz... Do

```

```

Fetching ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-6.2-release/All/expat-2.0.0_1.tbz...
Fetching ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-6.2-release/All/perl-5.8.8_1.tbz... D
[snip]

```

To run apache www server from startup, add `apache22_enable="YES"` in your `/etc/rc.conf`. Extra options can be found in startup script.

**Όγιβαθός:** Άί ÷ ñçóëííðíëáßðá íëá “äðßçíç” Ýëäíóç ôíð FreeBSD (6.2, 6.3, 7.0, ëëð. ðíð äáíëëÛ ìðíñáßðá íá ääëáðáðßðáðá äðÛ CD-ROM) ç áíðíëð pkg\_add -r ëá ëáðäáÛðáë óá äáëÝðá ðíð ððëÛ÷÷çëáí äëá äððß çç ððäëäëñëíÝíç Ýëäíóç. Óá äáëÝðá äððÛ *ßóóð äáí ðáñëÝ÷íí* ðëð ðëÝíí ðäëäððáßðð äëäÛðáëð ðùí äðáñííäíí. ìðíñáßðá íá ÷ ñçóëííðíëáßðáðá ðçí íáðááäçðß ðáñëáÛëëííððð `PACKAGESITE` äëá íá ðáñáëÛíðáðá äððß ðçí ðñíäðëëäáíÝíç ðóíðáñëëòííÛ. Äëá ðáñÛáäëáíá, ëÝðííðáð ðçí `PACKAGESITE` ðóçí ðëíð <ftp://ftp.freebsd.org/pub/FreeBSD/ports/i386/packages-6-stable/Latest/> ëá ëáðäáÛðáë óá ðëí ðñüððáðá äáëÝðá ðíð ððÛñ÷ííí äëá ðç óáëñÛ 6.X.

Άέά δάνέοούοάναό δέçñïŕñßå ò÷:âôééÛ ìå ôå δåéÝôå, δάνάέάέÿÿå äéååÛôå ôçí áñúôçóå 4.4 ôïí Åå÷:åénßäéí ôïŕ  
FreeBSD: ×ñçóéíîðíépíóå òí Óýóôçíå Packages  
([http://www.FreeBSD.org/doc/el\\_GR.ISO8859-7/books/handbook/packages-using.html](http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/packages-using.html)).

### 3.2 Ports

Ç ääýðáñç ÿÝëïäüð äëá öçí ääëáðÜððáðç äðáññïäíí öðí FreeBSD äßíáë ç Óðëëëïäß ðüí Ports. Ç Óðëëëïäß ðüí Ports äßíáë Ýíá ðëáßðëí ëäëðíðñäëíí ðñð äñðððäëäßðáë äðð Makefiles ëáë äñ÷äß äëäðíñí (patches) ðá ïðßáá Ý÷íðí äçíëíðñäëäß äëäëëÜ, ðððá íá äßíáë äñððð Ç ääëáðÜððáðç äëÜíñí äðáññïäíí öðí FreeBSD äðð öñí ðçääßí ëðáëëá ðñðð. ¼ðáí ääëäëëððÜðá Ýíá port, ðí óýððçíá ëá ëáððäÜðáë öñí ðçääßí ëðáëëá, ëá äðáññíðáë ùëðð ðëð äðäëðýíñáñðð äëëááÝð ÷ñçóëíððñëíððð ðá patches, ëá ïáððäëüðððáë öñí ëðáëëá, ëáë öÝëíð ëá ääëáðáððððáë öçí äðáññïäß. Èá äëñëíðëððáë öçí ßäëá äëääëëáðáá ëáë äëá ïðñëááßðñíðá ðð÷í äñáñðñíáíá ðññññÜñíáðá.

Ἰδιῆνᾱβὼᾱ ἰᾱ ἁῆνᾱβὼᾱ ὀçῖ Ὤḱḱḗṛᾱᐅ ὀῠῖ Ports (ç ἰḱῖβᾱ ἰᾱḱḗṚᾱ ὀῖṇṚᾱ ἰᾱῶṚῖṇᾱὀᾱḱ ḱᾱḱ ὐὀ “ᾱṚῖὀṇῖ ὀῠῖ ports”), ὀῠῖ ḱᾱὀṚḗṛᾱ /usr/ports. Ἀὀὀῠ ᾱṚᾱḱᾱ ḱṇῖṇḱṛḗṚᾱḱ ὐὀḱ ᾱḱḱᾱὀᾱὀᐅᐅᾱὀᾱ ὀçῖ Ὤḱḱḗṛᾱᐅ ὀῠῖ Ports ḱᾱὀṚ ὀç ᾱḱṚḱḱᾱḱ ὀçὀ ᾱḱḱᾱὀᐅὀᾱὀᾱ ὀῠὀ FreeBSD. Ἀῖ ᾱῖ ὀῖ Ṛ÷ᾱὀ ḱṚῖᾱḱ, ἰδιῆνᾱβὼᾱ ἰᾱ ὀçῖ ḱṇῖṇḱṛḗṚᾱḱ ᾱḱṇ ὀῖ CD ᾱḱḱᾱὀᐅὀᾱὀᾱ ὀçὀ ἰᾱ ὀçῖ ᾱῖᐅḱᾱḱ ὀῠὀ sysinstall(8) ᐅ ἰᾱ ὀçῖ ḱᾱὀᾱᾱὀᾱὀᾱ ᾱḱṇ ὀῠὀὀ ᾱῖὀḱçṇᾱὀçṚᾱ ὀῠὀ FreeBSD ÷ṇçṛḗṛᾱḱḱḗṛᾱὀᾱ ὀçῖ ᾱῖὀṛḗᐅ csup(1) ᐅ ὀçῖ ᾱῖὀṛḗᐅ portsnap(8). Ἰδιῆνᾱβὼᾱ ἰᾱ ἁῆνᾱβὼᾱ ḱᾱḱὀṇᾱῆṇᾱβὼ ἰᾱçᾱḱᾱ ᾱḱᾱ ὀçῖ ᾱḱḱᾱὀᐅὀᾱὀᾱ ὀçὀ Ὤḱḱḗṛᾱᐅ ὀῠῖ Ports ὀçῖ ᾱῖṇὀçᾱ 4.5.1 ([http://www.FreeBSD.org/doc/el\\_GR.ISO8859-7/books/handbook/ports-using.html](http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/ports-using.html)) ὀῠὀ ᾱᾱ÷ᾱḱḱᾱḱῖὀ.

Ç ääëäóÜóóäóç äíüò port äßíäë ääíëëÜ öüöí äðëP üöí öí íá áéóÝëëäöä öüíí ëäöÜëíäí öíö ëäë íá íäëëíPóäöä öçí äëäáëëäößá íäöääëpöóëöçö. Ööí äëüëíöëí äänÜääëäíä äßíäöäë ääëäóÜóóäóç öíö **Apache 2.2** äðu öçí ÖðëëíäP öüí Ports:

```
# cd /usr/ports/www/apache22
# make install clean
```

Já óçíáíóééü ðéäñÝéðçíá òçð ÷ ñÞóçð ports óòçí áäéáðÜóóáóç ëñäéóíééñý áñíáé ç ééáíúòçóá ðññóáñññäÞð òùí áðééñäÞí áäéáðÜóóáóçð. Áéá ðáñÜáäéäñíá, ùóáí áäéáééóóðÜóá òñí **Apache 2.2** áðñ óá ports ðñññáßòá íá áñáññäññéÞóáòá òçí áðééñäÞ **mod\_ldap** èÝññíóáó áðéðð òéñÞ óòç íàðáäéçðÞ **WITH\_LDAP** òñð **make(1)**:

```
# cd /usr/ports/www/apache22
# make WITH_LDAP="YES" install clean
```

ÀéááÜôá ôçí áíúôçá 4.5 ôïð Åã÷ãéñéãßïð ôïð FreeBSD, ×ñçóéïïðíéðíóáð ôçí Ports Collection ([http://www.FreeBSD.org/doc/el\\_GR.ISO8859-7/books/handbook/ports-using.html](http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/ports-using.html)), áéá ðãñéóóüðãñãð ðëçñïïñßãð ó÷ãóéêÛ ïá ôç Óõëëïãß ðùí Ports.

### 3.3 Ports Þ ááêÝôá, ôé ðñÝðáé íá ÷ñçóéìðïéÞòù;

Ὁ ἀ ἀέΎδα ἀβίαε ὀόϗι δῆαῖαδὲεὐδὲοῶ ἀδὲρῶ δῆι-ιαδῶαἔεὐδὲοῶεῖιΎία ports, Ὑῆα ἀβίαε δῆαῖεόουδῶαῖι ἐΎία ἀδὲεραῖδὲ αῖ  
 ἀβίαε ἀδὲεδὲϗδὲρῶ ϐ ἱαῖαδὲὐδῶαός ἀδὺ οῖι δῆαῖβι ἐρῶεῖα ϐ ἀδὺ Ὑδὲεῖα ἀεῶαἔΎοῖα. Εὐῆα Ὑῆεραῖδὲ Ὑ÷αε ὁῶ  
 δὲαῖιῖαδὲρῶαδῶ ὀϗδ:

## ĐáêÝôá (Ýôïëíà àêôãëÝóéíà)

- Δεί ἀνθρωπίνως ἀγαπᾷ τοὺς ἀδελφεοὺς καὶ τοὺς ἀδελφές ὡς ἑαυτὴν ἀγαπᾷ.
- Ἄλλοι δὲ ἀγαπᾶνε ὡς τὸν ἑαυτοῦ ἀδελφόν καὶ οὐκ ὡς ἑαυτὴν ἀγαπᾷ.
- Ἄλλοι δὲ ἀγαπᾶνε ὡς τὸν ἑαυτοῦ ἀδελφόν καὶ οὐκ ὡς ἑαυτὴν ἀγαπᾷ.

## Ports (őçääßïò êpäéêáo)

- **Έξαιρούσθε τὸν ἀνθρώπου τοῦτον ἀπὸ τοῦ λαοῦ.** (Ὁ θεὸς λέγει ὅτι οὗτος ὁ ἀνθρώπος ἐστὶν ὁ ἐκείνός σου). Ἡ δὲ ἡμετέρα σου ἀποστολή ἐστὶν ἡ ἀποστολή τοῦ λαοῦ, οὗτοι οἱ ἄνθρωποι ἐστὶν ὁ λαός σου, οὗτοι οἱ ἄνθρωποι ἐστὶν ὁ λαός σου, οὗτοι οἱ ἄνθρωποι ἐστὶν ὁ λαός σου.
- **Ὁ ἀνθρώπος ἐστὶν ὁ λαός σου.** (patches) ἀπὸ τοῦ ἀνθρώπου ἐστὶν ὁ λαός σου.

[illegible]

#### 4 ΑέεΒίçç ôĩõ ÓóóôΠιάôĩò: Ðĩõ áΒιάέ ôá run-levels;

Οι Linux ÷ ηςοείηδιέαβ οι όύοόγια âêêβίςοςδ SysV, âηρ οι FreeBSD ÷ ηςοείηδιέαβ οι δάνάαιόεαεη όύοόγια âêêβίςοςδ BSD. Οι όύοόγια init(8) όýδιθ BSD, ââι όδÜñ÷ιθι run-levels, ιýðâ οι âñ÷âβι /etc/inittab. Αίθβ âέα äòðÜ, ç âêêβίςος âeYâ÷âðáe äðü Ýíâ script âêêβίςοςδ, οι rc(8). Το script /etc/rc âέαÜÜæáe οι âñ÷âβι /etc/defaults/rc.conf êáe οι âñ÷âβι /etc/rc.conf âέα íá êáèηñðáe ðíêäð ðδçηâðâð ðηueâéðáe íá íâêeηðιθι. Íe ðδçηâðâð äòðÝð íâêeÜíá íâ ðçí âêðÝêáος ðηι áíθβòιθι÷üι script âêêβίςοςδ ðιθ âñβóeηθáe óòιθð êáðáeüηθðð /etc/rc.d/ êáe /usr/local/etc/rc.d/. Óá scripts äòðÜ âβíáe δάνüηíeá íâ óá scripts ðιθ âñβóeηθáe óòιθ êáðÜêeηñ /etc/init.d/ óâ óðóðβιðáâ Linux.

Ἀέάββ ὁδῦñ÷ῖοι ἄγρ ὀιδιῖῖῖῖῖῖῖ Ἀέᾶ ὀᾶ scripts Ἀέῖῖῖῖῖῖ ὀῖῖ ὀδῖῖῖῖῖῖῖ; Ὀᾶ scripts ὀῖῖ ἄῖῖῖῖῖῖῖῖ ὀῖῖῖ ἑᾶὀῖῖῖῖῖ /etc/rc.d/ ἄῖῖᾶῖ Ἀέᾶ ἄὀᾶῖῖῖῖῖῖῖ ὀῖῖ ἄῖῖῖῖῖῖ ὀῖῖ “ᾶὀῖῖῖῖ” ὀῖῖὀῖῖῖ. (Ἀέᾶ ὀᾶῖῖῖῖῖῖῖ, ὀῖὀ cron(8), sshd(8), syslog(3), ἑᾶῖ ῖῖῖῖῖῖῖῖ). Ὀᾶ scripts ὀῖῖ ἄῖῖῖῖῖῖῖῖ ὀῖῖῖ ἑᾶὀῖῖῖῖῖ /usr/local/etc/rc.d/ ἄῖῖᾶῖ Ἀέᾶ ἄὀᾶῖῖῖῖῖῖ ὀῖῖ ῖῖ÷ῖῖῖ ἄῖῖὀὀὀὀὀὀὀὀὀὀ ἄῖῖ ὀῖὀὀ ÷ῖῖῖὀὀὀ, ῖῖὀὀ Ἀέᾶ ὀᾶῖῖῖῖῖῖῖ ῖ **Apache**, ὀῖ **Squid**, ἑ.ῖ.ὀ.

Διέα ἀβιάε ς εἰάοῖνῸ ἰαόάτῃ οῖο “ἀαόεῖρ” ὁόόόΠιάοῖο ἐάε οὐῖ ἀοάνῃᾱΠῖ ÷ ñΠόός; Οῖ FreeBSD αἰάόόγῶάόάε ὑὸ ῼῖᾱ ὁῖΠῃᾶ ἑάεοῖοῃᾶεῖο ὅγῶόόῖᾱ. Ἰᾶ Ὸεῖᾱ εὔᾱῖᾱ, ῖ ὁῃῃΠῖᾱό, ῖῖ ᾱᾱῖῖῖῖῖῖᾱ ὁῖο ὁόόόΠιάοῖο, ῖῖ ᾱάόῖῖῖῖ ᾱῖόῖῖῖῖ (userland, ὁᾱ ὁῃῃᾱῃῖῖᾱόᾱ ὁῖὑὸ ὁῖ ls(1), cat(1), cp(1) ἔῖῖ.), αἰάόόγῶόῖῖᾱῖᾱ ἑᾱῖ ᾱῖῖῖῖῖῖῖᾱῖᾱῖᾱ ῖᾱᾱᾱ, ὑὸ ὅγῃῖῖ. Ἀόοῖ αἰάόῖῃᾱῖᾱῖᾱ ἑᾱῖ ὑὸ “ᾱᾱόῖῖ” ὅγῶόόῖᾱ. Ἰῖ ᾱῖᾱῃῃῖῖῖῖ ὁῖο ᾱᾱῖᾱῖῖῖῖῖῖῖᾱῖᾱ ᾱῖῖ ὁῖῖὁ ÷ ñΠῶῖᾱ, ᾱᾱῖ ᾱῖῖῖῖῖ ὁῖῖ “ᾱᾱόῖῖ” ὅγῶόόῖᾱ, ἑᾱῖ ὁῖῖῖῖᾱ ᾱβῖᾱ ᾱῖᾱ ὁᾱῖῖῖῖῖῖ ῖ **Apache**, ὁῖ **X11**, ῖ **Mozilla Firefox**, ἔῖῖ. Ἀόῖῖῖ ὁῖο ᾱῖᾱῖῖὁ ῖῖ ᾱῖᾱῃῃῖῖῖῖ, ᾱῖῖῖῖ ᾱᾱῖᾱῖῖῖῖῖῖῖᾱῖᾱ ῖᾱ ὁς ÷ ñΠῶς ὁςὁ Ὀόῖῖῖῖᾱ ὁᾱῖῖῖῖ ἑᾱῖ Ports (article.html#SOFTWARE) ὁῖο FreeBSD. Ἀῖᾱ ῖᾱ ῖᾱ÷ῖῖῖῖῖῖ ᾱῖῖ ὁῖ ὁῖῖῖῖῖῖῖ “ᾱᾱόῖῖ” ὅγῶόόῖᾱ, ῖῖ ᾱῖᾱῃῃῖῖῖ ÷ ñΠόός ὁῖῖῖᾱ ᾱᾱῖᾱῖῖῖῖῖῖῖᾱῖᾱ ὁᾱ ὁῖῖῖᾱὁᾱῖῖᾱῖὁ ὁῖο /usr/local/. ὁῖῖ ὁᾱ ᾱῖὁᾱῖῖῖῖᾱ ὁῃῃῖῖῖῖῖῖ ᾱῖῖῖῖῖῖῖῖῖᾱῖᾱ ὁῖῖῖᾱ ὁῖῖ ἑᾱόῖῖῖῖᾱ /usr/local/bin/, ὁᾱ ᾱῖὁῖὁῖῖ÷ᾱ ᾱῖᾱ÷ᾱᾱ ῖὁῖὁῖὁᾱῖ ὁῖὁὁ ὁῖῖ ἑᾱόῖῖῖῖᾱ /usr/local/etc/, ἔ.ῖ.ἔ.

[illegible]

Οἱ ἀεὺἐρὸἐῖ ἀδὺοδάοιὰ ἀδὺ οἱ ἀν÷ᾶβι /etc/rc.conf αἰἀναῖθιέαβ ὁçí òðçñάόβά sshd(8) ἐαé οἷῖ **Apache 2.2**. Ἀðßòçð  
ἐαèñβæáé υῶè í **Apache** ἐà ἱαèέρΠράé ἰα αἰἀναῖθιέçῐÝῐç ὁç äöíaðuðüçôá SSL.

```
# enable SSHD
sshd_enable="YES"
# enable Apache with SSL
apache22_enable="YES"
apache22_flags="-DSSL"
```

Ἄδῡ ὁϙ ὀόεἰἵP ḏiō iéá ὀδϙñáḡḡá áíáñḡḡiḡéϙéḡḡ ὀḡi ḡñ÷ḡḡi /etc/rc.conf, ḡḡḡḡḡḡḡ ḡá ὁϙi ḡḡééiḡḡḡḡḡ ḡḡḡḡḡḡḡ  
 ḡḡḡ ὁϙ ḡḡḡḡḡP ḡiḡḡḡḡ (÷ḡḡḡ ḡá ÷ñḡḡUḡḡḡḡ ḡá ḡḡḡḡḡééiḡḡḡḡ ḡi ὀḡḡḡḡḡ ḡḡḡ):

```
# /etc/rc.d/sshd start
```

Áí íéá òðçñáòßá ááí Ý ÷ áé áíññãñðíéçéãß óóí áñ ÷ ãßí áóòü, ìðññáßòá íá áíáíáãéÚóòáò òçí áêêßíçòç òçò áðü òçí ãñáñíß áíóíèþí ìá òçí áðééñãß forcestart:

```
# /etc/rc.d/sshd forcestart
```

## 5 Ñýèìéóç Äéeôýĩõ

## 5.1 ÄéåđáöÝò Äéeêôýĩõ

Άϊός άέά οϊ άαίέου άίάάϋνέοόέου όγδϊό *ethX* δϊό ÷ñçóéïðïέάß οϊ Linux άέά όçí άίάάßñέόç ιέάό άέάδáoðò áέέόýïð, οϊ FreeBSD ÷ñçóéïðïέάß ùò άίάάϋνέοόέου οϊ ùññά οϊò ðñññÙñάοïð ïáßαçόçò áέíεíοεíýññ άδù Ýíá άνέέιù. Ç áέυεíοεç Ýññäð άδù όçí άíόíεß ifconfig(8) άάß÷íáέ άýí ËÙñòäð áέέόýïð Intel® Pro 1000 (ñá άίάάϋνέοόέέÛ em0 and em1):

```
% ifconfig
em0: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    options=b<RXCSUM, TXCSUM, VLAN_MTU>
    inet 10.10.10.100 netmask 0xffffffff00 broadcast 10.10.10.255
    ether 00:50:56:a7:70:b2
    media: Ethernet autoselect (1000baseTX <full-duplex>)
    status: active
em1: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    options=b<RXCSUM, TXCSUM, VLAN_MTU>
    inet 192.168.10.222 netmask 0xffffffff00 broadcast 192.168.10.255
    ether 00:50:56:a7:03:2b
    media: Ethernet autoselect (1000baseTX <full-duplex>)
    status: active
```

## 5.2 ÑõèìΒóáéò Äéáõðèýíóαùí IP

[illegible]

```
hostname="server1.example.com"
ifconfig_em0="inet 10.10.10.100 netmask 255.255.255.0"
defaultrouter="10.10.10.1"
```

×ñçóëiïðíéÞóôâ ôçí áêüëiðèç êáôá÷þñçóç ãéá íá êáèiñßóáôâ üôé iéá áéåðáôÞ èá êáìâÛiáé ñôèißóáèò iÝòù DHCP:

```
hostname="server1.example.com"
ifconfig_em0="DHCP"
```

## 6 Firewall

Όλοι Linux ÷  $\eta\kappa\epsilon\iota\tau\epsilon\iota\sigma\tau\epsilon\iota\varsigma$  **οι IPTABLES** οι  $\tau\iota\beta\epsilon\iota$   $\delta\alpha\lambda\acute{\nu}\epsilon\iota$  ÷  $\acute{\alpha}\epsilon$   $\delta\epsilon\chi\eta\sigma\alpha\mu\epsilon\sigma\alpha\iota$  firewall  $\acute{\omicron}\acute{\alpha}$   $\acute{\alpha}\delta\beta\lambda\alpha\iota\tau\epsilon\iota$   $\delta\omicron\eta\mu\acute{\alpha}$ . Οι FreeBSD  $\delta\alpha\lambda\acute{\nu}\epsilon\iota$  ÷  $\acute{\alpha}\epsilon$   $\acute{\alpha}\delta\beta\lambda\alpha\iota\tau\epsilon\iota$  firewall  $\acute{\iota}\acute{\gamma}\omicron\upsilon$   $\delta\iota\omega$   $\delta\omicron\eta\mu\acute{\alpha}$ .  $\acute{\Alpha}\epsilon\acute{\alpha}$   $\delta\epsilon\iota$   $\acute{\alpha}\epsilon\eta\beta\acute{\alpha}\acute{\alpha}\epsilon\acute{\alpha}$ , οι FreeBSD  $\delta\alpha\lambda\acute{\nu}\epsilon\iota$  ÷  $\acute{\alpha}\epsilon$   $\delta\eta\mu\acute{\alpha}$  firewalls:

- IPFWALL ([http://www.FreeBSD.org/doc/el\\_GR.ISO8859-7/books/handbook/firewalls-ipfw.html](http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/firewalls-ipfw.html))
- IPFILTER ([http://www.FreeBSD.org/doc/el\\_GR.ISO8859-7/books/handbook/firewalls-ipf.html](http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/firewalls-ipf.html))
- PF ([http://www.FreeBSD.org/doc/el\\_GR.ISO8859-7/books/handbook/firewalls-pf.html](http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/firewalls-pf.html))

[illegible]

ĐánÜäëàlà áíuò éáíuíá ôiõ **IPFW** ðiõ ãðëõñÝðäé áéóãñ÷ùìáíá äããñÝíá ðñið ôçí õðçñãóá **SSH**:

```
ipfw add allow tcp from any to me 22 in via $ext_if
```

Ôi **IPFILTER** áðíáé íéá áóáñíáP firewall ðíó áíáððýóóáðáé áðú ôíí Darren Reed. Äáí Ý÷-áé öðéá÷-ðáß áéáéÜ áéá ôí FreeBSD, éáé Ý÷-áé íáðóáññéáß éáé óá Üëéá éáéðíõñáéÜ, óðíðãñééáíááííÝíúí ðúi NetBSD, OpenBSD, SunOS, HP/UX, éáé Solaris.

ĐánŨäâëàíà áíüò êáíuíá ãéá ôí **IPFILTER** ðĩõ ãđéõñÝđăé áéóăñ÷:ùìáíá áăăñÝíá ðñĩò ôçí òđçñăóóă **SSH**:

```
pass in on $ext_if proto tcp from any to any port = 22
```

Ç òàèãòòàáá àòàñìràP firewall, òì **PF**, áíáðóýòóòàéé áðü òì OpenBSD project. Ôì **PF** àçìéròñãPèçèà ùò áíòééáòáóòÜòçò òìò **IPFILTER**, éáé Ýòóé ç óýíòáç òìò **PF** àáíáé àñèàòÜ ðañüüíéá íá áòòP òìò **IPFILTER**. Ôì **PF** ìðññáá íá óóíáòáóòàá íà òì altq(4) áéá íá ðánÝ ÷ áé òðçñáóáò òýðìò QoS.

ĐánÜäåëâîá êáíuíá ôiõ **PF** ðiõ ãðéônÝðäé áéóãñ÷ùiáíá äãäiñÝíá ðñiò ôçí òðçñáóßá **SSH**:

```
pass in on $ext_if inet proto tcp from any to ($ext_if) port 22
```

## 7 Άίαâáèìβæïïôáò ôï FreeBSD

ÖðÜñ÷ïïï ññáéð ìÝëïäïë áéá ôçï áíááÜëïéóç áñuð óóóóPiáðïrð FreeBSD: ÌÝóù òïð ðçááßïrð êpáééá, ìÝóù Ýðïëïùì  
(binary) áíáááèìßóáùì, êáé ìÝóù òùì CD äãêäðÜóóáóçð.

Ç ääëäöÜöäöäç ìÝóü öïð ðçäâßïð ëðäëä äßíäë ç ðëí ðíëýðëíëç, äëëÜ ðñíóóÝñäë ëäë öç ìäääëýöäñç äöíäðP äöäëëíßä. Ç äëääëëäößä äöðP ðäñëëäíäÜíäë öí ööä÷ñííëöíü öïð öíðëëëý áíöëäñÜöíð öïð ðçäâßïð ëðäëä öïð FreeBSD ìä öíí ëðäëëä öïð FreeBSD ðíð äñßöëäðäë öóíðð äíððçñäðöçÝð CVS (Concurrent Versioning System). Äðü öç öóëäñP ðíð öí öíðëëü áíößäñäöí ðçäâßïð ëðäëä äßíäë áíáíäüñÝñ, ìðññäßä ìä ìäöäëüöðößäðä ìÝäð äëäüäüäëð öïð ððñPíä ëäë öüí ääöëëþí ðñíäñäñÜöüí. Äëä ðäñëöóóüðäñäð ðëçñíöíñßäð ö÷äðëëÜ ìä öí öýöðçíä áíáäÜëíëöçð ìÝóü ðçäâßïð ëðäëä, ääßä ðí ëäðÜëäëí ÄíçìÝñóöç ëäë ÁíáäÜëíëöç ([http://www.FreeBSD.org/doc/el\\_GR.ISO8859-7/books/handbook/updating-upgrading.html](http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/updating-upgrading.html)) öóí Ää÷äëñäëí öíð FreeBSD.

Ίε Υόιειάο (binary) αίαάειβόαέο, αβίαέ δάνυιρέαο ιά ος ÷ñΠός οςο αίοιρέΠο yum P apt-get αέα οςι αίαάΥειέος αίυο  
 οόοόΠιάοιò Linux. Ç αίοιρέP freebsd-update(8) έα έαόάΥόαέ οέο αίαάειβόαέο έαέ έα οέο αάεάοάοόΠοάέ. Ιδιñαβόα ιά  
 έάειñβόαόα οςι αόδυιáος, αίΥ όάέòΥ έάέάοΠιάόά άέòΥέάος οςό, ιά ος ÷ñΠός οίò cron(8).

**Όγιὰβυός:** Αί δñüēάέόάέ íá ÷ ñçόέííðíéΠόάòå ðí cron(8) áéá ðñĩāñáííàòéóíÝíàò áíáááèíßóáéó, ááááéúèåßòå ìóé ÷ ñçόέííðíéåßòå όγι áíðíēΠ freebsd-update cron όðí áñ÷:åßí crontab(1) áéá íá åéå÷:éóóíðíéçèåß ç ðééáíüòçòå íá åßíáóáé áíáíÝüóç όγι Βéåå óóéåìΠ åóü Ýíá íååÜēí åñèèü ïç÷:áíçÜòüí.

```
0 3 * * * root /usr/sbin/freebsd-update cron
```

Ç öâëãöôâáá äðëëïãP áíááÛëíóçð, ìÝòù òùì CD äãëáðÛóóáóçð, âáíáë äñëãðÛ íäëÛëãñ. Áðëð ãëëëíPóðã áðu òì  
 CD äãëáðÛóóáóçð ëáë äðëëÝíðã òçì áíððóðíë÷ç äðëëïãP áíááÛëíóçð (upgrade).

**8 procfs:** ÐǎñáóìÝĩí áëëÜ ü÷é Îǎ÷áóìÝĩí

Ói Linux, é ÷ñááóâá íá áââôâ ôi /proc/sys/net/ipv4/ip\_forward áé íá éâëññóáôâ áí áíáíé áíáññíðéííÍí c ðñíðécó IP (IP forwarding). Ói FreeBSD é ðñÝðáé íá ÷ñcéííðééóáôâ ôi sysctl(8) áé íá áââôâ

ἀόδῖ ἐάε Ὑεῖαδ ἡεὶβόαέδ οἷο ὁδὸδῖαδῖο, ἐάεῖδ οἷ procfs(5) ἐαῦἡαβόαέ δᾶἡῦ÷çìÝîí ὁᾶ δἡῦὁᾶᾶδ ᾶεῦὁᾶέδ οἷο ἐᾶεὠἡᾶεῖ. (Αἷ ἐάε ç ᾶἱὠἡῖῖ sysctl ᾶβἱᾶέ ᾶδῖόçδ ᾶέᾶῖῖῖ ἐάε ὁἱ Linux).

Ὀἱ δᾶἡὙᾶεᾶἱ ὁçδ δἡἡῖῖῖῖ IP, ἐᾶ ÷ἡçὁῖἡἡἡἡἡἡ ὁçἱ ᾶεῦἡὠῖç ᾶἱὠἡῖῖ ᾶέᾶ ἱᾶ ἐᾶἡἡὠἡἡἡ ᾶἱ ç ᾶὠἡὠὠὠὠὠ ᾶὠὖ ᾶβἱᾶέ ᾶἡᾶἡἡἡἡἡἡἡἡἡ ὁᾶ Ὑἱᾶ FreeBSD ὁῖὠὠἡἡ:

```
% sysctl net.inet.ip.forwarding
net.inet.ip.forwarding: 0
```

Ç ᾶὠἡἡῖῖῖ -a ÷ἡçὁῖἡἡἡἡἡἡ ᾶέᾶ ἱᾶ δὙἡἡἡἡ ἱᾶ ἡὠὠᾶ ἱᾶ Ὑεῖαδ ὁῖο ἡεὶβόαέδ οἷο ὁδὸδῖαδῖο:

```
% sysctl -a
kern.ostype: FreeBSD
kern.osrelease: 6.2-RELEASE-p9
kern.osrevision: 199506
kern.version: FreeBSD 6.2-RELEASE-p9 #0: Thu Nov 29 04:07:33 UTC 2007
root@i386-builder.daemonology.net:/usr/obj/usr/src/sys/GENERIC

kern.maxvnodes: 17517
kern.maxproc: 1988
kern.maxfiles: 3976
kern.argmax: 262144
kern.securelevel: -1
kern.hostname: server1
kern.hostid: 0
kern.clockrate: { hz = 1000, tick = 1000, profhz = 666, stathz = 133 }
kern.posix1version: 200112
...
```

**Ὀçἡᾶὠὠὠ:** ἘὙὠἡᾶδ ᾶὠὠ ὁῖο ὁῖὙὠ δἡὠ ᾶᾶὖ÷ἱᾶέ ç ᾶἱὠἡῖῖ sysctl ᾶβἱᾶέ ἱὠἡἡ ᾶέᾶ ᾶἱὙᾶἡὠὠ.

ὈδὙἡ÷ἡὠἱ δᾶἡῖδὠὠὠὠ Ὑὠἡὠ ᾶδᾶῖὠᾶὠὠ ὠἱ procfs, Ὑὠὠὠ ᾶέᾶ δᾶἡὙᾶῖᾶἡᾶ Ὑὠᾶἱ ᾶῖὠᾶῖᾶὠᾶ δᾶῖῖὠὠἡἡἡ ἡἡᾶῖῖῖ, ὠἱ ἡὠἡἡ ἡὙἱᾶέ ÷ἡὠὠ ὁçδ ᾶἱὠἡῖῖδ truss(1) ᾶέᾶ ὁçἱ ᾶἡὖ÷ἱᾶὠὠ ὠἡἱ ἡῖὠὠᾶἡἡ ὁδὸδῖαδῖο, ἐᾶέ ᾶέᾶ ὁçἱ Ὀὠἡᾶὠὠὠὠ ἱᾶ Ἀῖὠᾶῖῖὠὠ ὠἡὠ Linux ([http://www.FreeBSD.org/doc/el\\_GR.ISO8859-7/books/handbook/linuxemu.html](http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/linuxemu.html)). (Αἷ ἐάε ç Ὀὠἡᾶὠὠὠὠ ἱᾶ Ἀῖὠᾶῖῖὠὠ ὠἡὠ Linux ÷ἡçὁῖἡἡἡἡἡ ὠἱ ᾶῖῖὠ ὁçδ procfs, ὠἱ linprocfs(5)). Αἷ ÷ἡᾶῖὙᾶᾶὠὠ ἱᾶ δἡἡὠᾶἡὠὠὠ ὠἱ procfs, ἡὠἡᾶὠὠ ἱᾶ δἡἡὠῖὠὠὠ ὁçἱ ᾶῖῖὠὠὠ ᾶᾶἡᾶὠὠ ὁἱ ᾶἡ÷ᾶἡἱ /etc/fstab:

```
proc                /proc                procfs    rw,noauto            0            0
```

**Ὀçἡᾶὠὠὠ:** Ç ᾶὠἡἡῖῖῖ noauto ἐᾶ ᾶἡἡᾶὠὠ ὁçἱ ᾶὠὠἡᾶὠὠ δἡἡὠὙἡὠὠὠ οἷο /proc ἐᾶὠὙ ὁçἱ ᾶῖὠὠὠὠ οἷο ὁδὸδῖαδῖο.

δἡἡὠᾶἡὠὠὠ ἡᾶὠὠὠἡἡ ὁçἱ procfs ÷ἡçὁῖἡἡἡἡὠὠ ὁçἱ ᾶῖῖὠὠὠ ᾶἱὠἡῖῖ:

```
# mount /proc
```



9 ÓõĩçèéóìÝíàò ÅíôïëÝò

## 9.1 Äéá÷åßñéóç ÐáêÝòùí

Αίσιπ όιό Linux (Red Hat/Debian)	Αίσιπ όιόίε÷ç αίσιπ FreeBSD	Όίσιπύο
yum install <i>package</i> / apt-get install <i>package</i>	pkg_add -r <i>package</i>	ΆάέάόÜóóάόç άάέÝóĩó áđü áđñáēñóóíÝñí áĩóđçñáóçôß
rpm -ivh <i>package</i> / dpkg -i <i>package</i>	pkg_add -v <i>package</i>	ΆάέάόÜóóάόç άάέÝóĩó
rpm -qa / dpkg -l	pkg_info	Ëßóóá áāēáóáóóçíÝñíúí άάέÝóúí

## 9.2 Äéá÷βñéóç ÓõóôÞíáôïò

ΆίόϊεP Linux	Άίόβόόίε÷ç αίόϊεP FreeBSD	Όείδύο
lspci	pciconf	ΈΒόόά όόόεάορί PCI
lsmod	kldstat	ΈΒόόά öïñòùíÝíúí áñèñùíÛòùí ðõñPíá
modprobe	kldload / kldunload	Öüñòùóç/Áðíöüññòùóç áñèñùíÛòùí ðõñPíá
strace	truss	Άίβ÷íáðóç êëPóáùí óóóóPíáôïð

# 10 ÓõìďǎñŮóìáôá

Ἀποδείξεόσ' ἵνα ὑμεῖς ἀποδείξετε ὅτι ἐὰν βάλῃς ὁμάδα ἀνὰ ἀνὰ ἑξῆς τοὺς δῆθεν ἐκτελεσθέντες ἀπὸ τοῦ FreeBSD. Ἀνὰ δὲ ἀποδείξεο ὅτι ἐὰν ἐκτελεσθῇ ὁ δῆθεν ἐκτελεσθέντων, ἀνὰ ἀνὰ ἑξῆς ἵνα ἀνὰ ἑξῆς τοῦ FreeBSD ([http://www.FreeBSD.org/doc/el\\_GR.ISO8859-7/books/handbook/index.html](http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/index.html)) ὅτι ἵνα ἀποδείξεο ὅτι ἐὰν ἐκτελεσθῇ ὁ δῆθεν ἐκτελεσθέντων ἀπὸ τοῦ FreeBSD.