

İläçäüò ÃñPãĩñçò Âêêßícóçò ôĩö FreeBSD ãéá × ñPóôåò Linux®

John Ferrell

\$FreeBSD: release/8.4.0/el_GR.ISO8859-7/articles/linux-users/article.xml 39632
2012-10-01 11:56:00Z gabor \$

ĐiãõĩãôééÜ Äééãépiãôá © 2008 Ç İiÜää ÔãèìçñBùóçò ôĩö FreeBSD
\$FreeBSD: release/8.4.0/el_GR.ISO8859-7/articles/linux-users/article.xml 39632
2012-10-01 11:56:00Z gabor \$

Ôĩ FreeBSD âßiáé Yía éãõĩ÷õñüiYĩi àiðĩñéëü öyĩãĩëĩ ôĩö FreeBSD Foundation.
Ôĩ Linux âßiáé Yía éãõĩ÷õñüiYĩi àiðĩñéëü öyĩãĩëĩ ôĩö Linus Torvalds óóéò ÇiüiYĩãò Đĩééôãßãò.
İé ëYĩãéò Intel, Celeron, EtherExpress, i386, i486, Itanium, Pentium, éáé Xeon âßiáé àiðĩñéëÜ öyĩãĩëã P
éãõĩ÷õñüiYĩi àiðĩñéëÜ öyĩãĩëã ôçò Intel Corporation éáé ôüi ëõããõñéëpi ôçò óóéò ÇiüiYĩãò Đĩééôãßãò
éáé óã Üëëãò ÷pñãò.
İé ëYĩãéò P õñÜóãéò Red Hat, éáé RPM âßiáé àiðĩñéëÜ öyĩãĩëã P éãõĩ÷õñüiYĩi àiðĩñéëÜ öyĩãĩëã ôçò
Red Hat, Inc. óóéò ÇiüiYĩãò Đĩééôãßãò éáé óã Üëëãò ÷pñãò.
Ç ëYĩç UNIX âßiáé éãõĩ÷õñüiYĩi àiðĩñéëü öyĩãĩëĩ ôĩö Open Group óóéò ÇiüiYĩãò Đĩééôãßãò éáé óã
Üëëãò ÷pñãò.
ĐĩéëYò áõü óéò ëYĩãéò P õñÜóãéò İé İðĩBãò ÷ñçóëiİðĩëĩYĩóáé áõü ôĩöò éãóãóéããóãóYò P ôĩöò
òüëçóYò ôĩöò ãéá İá äéãëñBĩĩõĩ óã ðñĩüüiõá ôĩöò ëãñĩYĩóáé àiðĩñéëÜ öyĩãĩëã. ¼ðĩö áõöYò
àiðãĩBæĩĩóáé óã áõöü ôĩ ëãBĩãĩĩ éáé ãéá üóãò áõü áõöYò ãĩüñBæãé ç İiÜää ÄĩÜðöõĩçò ôĩö FreeBSD üóé
âßiáé ðéëãĩüi İá âßiáé àiðĩñéëÜ öyĩãĩëã, éã ããBõã Yía áõü óã öyĩãĩëã: “™” P “®”.

Ôĩ ëãBĩãĩĩ áõöü Y ÷ãé óéiðü İá ãĩçèPóãé óçç ãñPãĩñç ãĩééãßüóç ÷ñçóõpi Linux® İYĩõĩö / ðñĩ÷÷üñçĩYĩĩö
ãðéðYĩĩö İã öéò áãóéëYò Yĩĩĩãò ôĩö FreeBSD

Đßiãéãò Đãñéã÷ĩYĩüi

1 ÄéóããüãP	1
2 ÊãëYõç: Äãĩ ððÜñ÷ãé Bash;	2
3 ĐãëYõá éáé Ports: ĐñĩöëYõĩĩóãò ëĩãéõĩéëü óõĩ FreeBSD.....	2
4 Âêêßícóç ôĩö ÓõóóĐiãõĩò: Đĩö âßiáé óã run-levels;.....	4
5 ÑYëiëçç ÄéëöYĩö.....	5
6 Firewall	6
7 ÄĩãããëiBæĩĩóãò ôĩ FreeBSD.....	7
8 procfs: ĐãñãõĩYĩi äéëÜ ü÷é İã÷ãõĩYĩi.....	7
9 ÓõĩçéëõĩYĩãò ÄĩõĩëYò	8
10 ÓõĩðãñÜõĩãóã	9

1 Å é ó á ã ù ã ¢

Οι εαβλαίη άδουή οίββαέ δέδ άεάοιήYό ιάοάίYό οίθ FreeBSD έάέ οίθ Linux ιόόά ιYόίε ι θήι÷ύñçιYήίε ÷ñιόόάδ οίθ Linux ιά ιθιήίYί άñπάιή ιά θήιόάñιιόόίYί οόέδ άάόέέYό Yήίέάδ οίθ FreeBSD. Θñüέάέόάέ έέά ιέά όά÷ιέέπ άέόάüάπ όόι FreeBSD, έάέ άάι έά άίάόάñέYίά όά όθ÷ι “όέέιόιόέέYό” άέάοιήYό ιάοάίYό όüι άYί όόόöçιÜöüι.

0i eãßiãñi áóòu òðieÝóãé uóé Ý ÷ãòã Þäç äãéãóáóóÞóãé òi FreeBSD. Áí äãí Ý ÷ãòã äãéãóáóóÞóãé òi FreeBSD Þ ÷ñãéÛãáóòã äiÞéãéã íã öçí äéããéãóáã äãéãóáóóðóóð òið, ðãñãéãéýiã íã äéããóáóòã òi éãòÛéãéí ÄãéãééóóÞiáóð òi FreeBSD (http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/install.html) óòí Äã ÷ãéñßãéí òið FreeBSD.

2 Êâëýöç: Ääí õðÛñ÷âé Bash;

[illegible][illegible]

3 ĐáêÝôá êáé Ports: ĐñĩôéÝôĩĩôáò ěĩăéóĩéēũ óôĩ FreeBSD

Ἄεθου ἀδὺ ὄγι θανάτιοεἰεἰβ Ἰεῖται ἡεἰάοῦόοάοοδ εἰεἰεἰεἰ ὀιῶ UNIX® (εἰάῖἡἡἡἡ ὀιῶ δῡἡἡἡἡ ἔπαεἡ, ἀθῖοἡἡἡἡ ὀιῶ ἡἡ ÷ ἡἡἡ, ἡἡἡἡἡἡἡἡ ἡἡ ἡἡἡἡἡἡἡἡ), ὀι FreeBSD ἡἡἡἡἡἡ ἡἡ ἡἡἡἡ ἡἡἡἡἡἡ ἡἡ ὄγι ἡἡἡἡῦόόἡ ἡἡἡἡἡἡ: ὀἡ ἡἡἡἡ ἡἡ ὀἡ ports. ἡἡ ἡἡ ἡἡἡἡ ἡἡἡἡ ὀἡἡ ὀἡ ἡἡἡἡἡἡἡ ἡἡἡἡἡἡ ὀἡ ports, ἡἡἡἡ ἡἡ (<http://www.freebsd.org/ports/master-index.html>).

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 áíóēēP āāēāēéóóŨ òĩ **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
```

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



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

5.2 Ἡοὐβόαεὸ Ἀεῖοεῖοαὐί IP

Ἡοὐβόαεὸ ἰά ἰάεὶ Ὑοῶα ἰεῖ Ἀεῖοεῖο IP ὁῖ ἰεῖ Ἀεῖοεῖο Ἀεῖοεῖο ἰῖ ὁε ÷ ἡπόε ὁεὸ Ἀεῖοεῖο ifconfig(8). Ἀεῖ ἰῖ Ἀεῖοεῖο ἰῖοεῖο ὁοῖοῖ Ἀεῖοεῖο, ἁεῖ ἰῖ ἰεῖ ÷ Ὑῖοεῖο ὁῖ Ὑῖοεῖο Ἀεῖοεῖοεῖο, ἁεῖ ὁῖ Ὑῖοεῖο ἰῖ ὁεῖ Ἀεῖοεῖο ὁῖ Ἀεῖοεῖο /etc/rc.conf. Ὀῖ Ἀεῖοεῖο Ἀεῖοεῖο ὁῖ Ἀεῖοεῖο εῖ Ἀεῖοεῖο ÷ ἡπόε ὁῖ Ἀεῖοεῖο Ὑῖοεῖο ὁῖ Ὑῖοεῖο ὁῖ ὁῖοεῖοεῖο (hostname), ὁεῖ Ἀεῖοεῖο IP, Ἀεῖοεῖο Ἀεῖοεῖο ὁεῖ ὁῖοεῖοεῖο Ὑῖοεῖο ὁῖοεῖο (defaultrouter):

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

× ἡοῖοῖοεῖοεῖο ὁεῖ Ἀεῖοεῖοεῖο Ἀεῖοεῖο ÷ ἡπόε Ἀεῖο ἰῖ Ἀεῖοεῖοεῖο ὁῖ Ἀεῖοεῖο ἡοὐβόαεὸ ἰῖοεῖο DHCP:

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

6 Firewall

Ὀῖ Linux ÷ ἡοῖοῖοεῖοεῖο ὁῖ **IPTABLES** ὁῖ ἡῖοῖο Ἀεῖοεῖο ÷ Ἀεῖο ὁῖοεῖοεῖοεῖο firewall ὁῖ Ἀεῖοεῖο ὁῖοεῖο. Ὀῖ FreeBSD Ἀεῖοεῖο ÷ Ἀεῖο Ἀεῖοεῖο ἰῖοεῖο ὁῖο ὁῖοεῖο. Ἀεῖ ὁεῖ Ἀεῖοεῖοεῖο, ὁῖ FreeBSD Ἀεῖοεῖο ÷ Ἀεῖο ὁῖοεῖοεῖοεῖο:

- IPFW (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)
- PF (http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/firewalls-pf.html)

Ὀῖ **IPFW** ἡ **IPFW** (εῖ Ἀεῖοεῖο ÷ Ἀεῖοεῖοεῖο ὁῖ Ἀεῖοεῖο ὁῖ **IPFW** Ἀεῖοεῖο εῖ ipfw(8)) Ἀεῖοεῖο ὁῖ firewall ὁῖο Ὑῖο ÷ Ἀεῖο Ἀεῖοεῖο ÷ Ἀεῖο Ἀεῖοεῖοεῖοεῖο Ἀεῖο ὁεῖ ἡῖοεῖο Ἀεῖοεῖοεῖοεῖο ὁῖο FreeBSD. Ὀῖ **IPFW** ἡῖοεῖο ἰῖ ὁῖοεῖοεῖοεῖο ἰῖ ὁῖ dummynet(4) Ἀεῖο ἰῖ Ἀεῖοεῖο ÷ Ἀεῖο Ἀεῖοεῖοεῖοεῖο Ἀεῖοεῖοεῖοεῖο ὁεῖ ὁῖοεῖοεῖοεῖο ὁεῖ ὁῖοεῖοεῖοεῖο (traffic shaping) Ἀεῖο ἰῖ Ἀεῖοεῖοεῖοεῖο Ἀεῖοεῖοεῖοεῖοεῖο ὁῖοεῖοεῖοεῖο ὁῖοεῖοεῖοεῖο Ἀεῖοεῖοεῖοεῖοεῖο.

Ἀεῖοεῖοεῖοεῖο Ἀεῖοεῖοεῖο ὁῖο **IPFW** ὁῖο Ἀεῖοεῖοεῖοεῖο Ἀεῖοεῖο ÷ ὁῖοεῖο Ἀεῖοεῖοεῖο ὁῖο ὁῖοεῖοεῖοεῖο **SSH**:

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

Ὁτὶ **IPFILTER** ἁβίαιε ἰεὶ ἀοάνῖαP firewall ὁτὶ ἀιάδὸγὸόαόαιε ἀδὺ οἷ Darren Reed. Ἀἱ ὃ-ἁε ὁδῆα÷οἶβ ἁεῖεῦ ἁεὶ οἷ FreeBSD, ἁεὶ ὃ-ἁε ἰαόαοἶαἶβ ἁεὶ οἶ Ὑεῖα ἁεῖοἶῶἁεῖῦ, ὁδῖδῶἁεῖαἶαἶἡ Ὑῖῖ οἶ NetBSD, OpenBSD, SunOS, HP/UX, ἁεὶ Solaris.

Ḑἁἡῦἁεῖαἶ ἁῖῦδ ἁῖῖῖῖ ἁεὶ οἷ **IPFILTER** ὁτὶ ἀδεῶἡ Ὑḑἁε ἁεῖἁἡ÷ῖἡῖῖ ἁἁἡ Ὑῖῖ ὁτὶ ὁδῖἡἡἡἡ **SSH**:

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

Ḑ ὁἁεἁὀἡἡἡ ἁὀἁἡῖῖῖ firewall, οἷ **PF**, ἀιάδὸγὸόαόαιε ἀδὺ οἷ OpenBSD project. Ὁτὶ **PF** ἁῖεἶὶἡἡἡἡἡ ῖὀ ἀἶεῖἁὀἡἡἡἡ ὁτὶ **IPFILTER**, ἁεὶ Ὑὀἡ Ḑ ὀῖἡἡἡ ὁτὶ **PF** ἁβίαιε ἁἡἡὀῦ ḑἁἡῖῖῖῖ ἰἡ ἁὀἡ ὁτὶ **IPFILTER**. Ὁτὶ **PF** ἰḑἡἡἡ ἰἡ ὀἶἡὀἡὀἡἡ ἰἡ οἷ altq(4) ἁεὶ ἰἡ ḑἁἡ ὃ-ἁε ὁδῖἡἡἡἡ ὀῖὀῖ QoS.

Ḑἁἡῦἁεῖαἶ ἁῖῖῖῖ οἷ **PF** ὁτὶ ἀδεῶἡ Ὑḑἁε ἁεῖἁἡ÷ῖἡῖῖ ἁἁἡ Ὑῖῖ ὁτὶ ὁδῖἡἡἡἡ **SSH**:

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

7 Ἀἰἡἡἡἡἡἡἡἡ οἷ FreeBSD

Ὁḑῦἡ÷ἡἡ ὡἡἡὀ ἰῖῖῖῖ ἁεὶ ὁῖ ἀἰἡἡἡἡἡὀ ἁῖῦδ ὁὀὀἡἡἡὀ FreeBSD: Ἰῖὀ οἷ ḑῖἡἡὀ ἡἡἡἡ, ἰῖὀ Ὑὶῖῖῖ (binary) ἀἰἡἡἡἡἡὀ, ἁεὶ ἰῖὀ οἷ CD ἁἡἡὀῦὀἡὀὀ.

Ḑ ἁἡἡὀῦὀἡὀὀ ἰῖὀ οἷ ḑῖἡἡὀ ἡἡἡἡ ἁβίαιε Ḑ ḑῖ ḑῖῖῖῖῖ, ἁεῖῦ ḑἡὀὀ Ὑἡἡἡ ἁεὶ ὁḐ ἰἡἡῖὀἡἡ ἁὀἡὀP ἁὀἡῖἡἡ. Ḑ ἁἡἡἡἡὀἡ ἁὀἡP ḑἡἡἡἡἡἡἡ ὁτὶ ὀἡ÷ἡἡὀἡ ὁτὶ ὁἡἡῖ ἁὀἡἡἡὀὀ ὁτὶ ḑῖἡἡὀ ἡἡἡἡ ὁτὶ FreeBSD ἰἡ οἷ ἡἡἡἡ ὁτὶ FreeBSD ὁτὶ ἡἡὀἡὀἡ ὀὀὀὀ ἡὀḑῖἡὀὀὀ **CVS** (Concurrent Versioning System). Ἀḑἡ ὁḐ ὀἡἡἡP ὁτὶ οἷ ὁἡἡῖ ἁὀἡἡἡὀ ḑῖἡἡὀ ἡἡἡἡ ἁβίαιε ἀἰἡἡῖῖ, ἰḑἡἡὀἡ ἰἡ ἰἡὀἡὀὀὀὀὀ ἰῖὀ ἁἡὀἡὀ ὁτὶ ḑὀἡἡἡ ἁεὶ οἷ ἡὀἡῖP ḑἡἡἡὀὀὀ. Ἀἡἡ ḑἡἡὀὀὀὀὀ ḑῖἡἡὀἡἡὀ ὀ÷ἡὀἡῖ ἰἡ οἷ ὀὀὀἡἡ ἀἰἡἡἡἡὀὀ ἰῖὀ ḑῖἡἡὀ ἡἡἡἡ, ἡἡὀἡ ὁτὶ ἡὀὀἡῖ Ἀῖῖὀἡὀ ἁεὶ Ἀἰἡἡἡἡὀ (http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/updating-upgrading.html) ὀὀἡ Ἀἡ÷ἡἡἡῖ ὁτὶ FreeBSD.

Ἰἡ Ὑὶῖῖὀ (binary) ἀἰἡἡἡἡὀὀ, ἁβίαιε ḑἡἡῖῖὀ ἰἡ ὁḐ ÷ἡὀḐ ὁḐ ἁὀῖῖὀ yum P apt-get ἁεὶ ὁḐ ἀἰἡἡἡἡὀὀ ἁῖῦδ ὀὀὀἡἡὀ Linux. Ḑ ἁὀῖῖP freebsd-update(8) ἡἡ ἡὀἡἡὀὀ ὁὀ ἀἰἡἡἡἡὀὀ ἁεὶ ἡἡ ὁὀ ἡἡὀὀὀὀὀ. Ἰḑἡἡὀἡ ἰἡ ἡἡἡὀὀὀ ὁḐ ἡὀἡὀὀ, ἁὀῦ ὀἡὀῦ ἁἡὀὀἡὀ ἡὀὀὀὀ ὁḐ, ἰἡ ὁḐ ÷ἡὀḐ ὁτὶ cron(8).

Ὁḑἡὀὀ: Ἀἰ ḑἡὀἡὀὀ ἰἡ ÷ἡὀἡὀὀὀὀ ὁτὶ cron(8) ἁεὶ ḑἡἡἡἡὀὀὀὀὀ ἰἡὀ ἀἰἡἡἡἡὀὀ, ἡἡἡὀὀὀὀ ὀὀ ÷ἡὀἡὀὀὀὀ ὁḐ ἁὀῖῖP freebsd-update cron ὀὀἡ ἡἡ÷ἡὀ crontab(1) ἁεὶ ἰἡ ἡἡ÷ὀὀὀὀὀὀ Ḑ ḑἡἡὀὀὀ ἰἡ ἡἡὀὀ ἁἰἡὀ ὁḐ ἡἡἡP ἁḑἡ Ὑῖἡ ἰἡἡὀἡ ἡἡὀὀ ἰḐ÷ἡὀὀ.

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

Ḑ ὁἡὀὀὀὀ ἡὀῖῖῖ ἀἰἡἡἡἡὀὀ, ἰῖὀ οἷ CD ἁἡἡὀῦὀἡὀὀ, ἁβίαιε ἁἡἡὀῦ ἰἡὀἡἡἡ. Ἀḑῖὀ ἡἡῖῖὀὀ ἁḑἡ οἷ CD ἁἡἡὀῦὀἡὀὀ ἁεὶ ἡὀὀὀὀ ὁḐ ἁὀὀὀὀ÷Ḑ ἡὀῖῖῖ ἀἰἡἡἡἡὀὀ (upgrade).

8 procfs: Ḑἡἡὀὀὀ ἡὀὀ ὀ÷ἡ ἰἡ÷ὀὀὀ

Ὁτὶ Linux, ἡἡ ÷ἡἡὀὀὀ ἰἡ ἡἡὀἡ ὁτὶ /proc/sys/net/ipv4/ip_forward ἁεὶ ἰἡ ἡἡἡὀὀὀ ἁἰ ἁβίαιε ἡἡἡὀὀὀὀὀ Ḑ ḑἡἡὀὀ IP (IP forwarding). Ὁτὶ FreeBSD ἡἡ ḑἡὀὀ ἰἡ ÷ἡὀἡὀὀὀὀ ὁτὶ sysctl(8) ἁεὶ ἰἡ ἡἡὀἡ

ἀόδP ἐάε Ὑεῖαδ ἡεὶβόαέδ οἷο ὁδὸPιὰοἷδ, ἐάεPδ οἷ procfs(5) ἐαῦἡαβόαέ δᾶἡν÷çìÝἡ ὁᾶ δἡῦόαόᾶδ ἀεῦοᾶέδ οἷο ἐᾶέοἰἡᾶεἷ. (Αἷ ἐάε ç ἰόἰεP sysctl ἁβἷάε ἁδβόçδ ἀέᾶέÝóεἷç ἐάε ὁἷ Linux).

Ὀἷ δᾶἡὙᾶεᾶἷ ὁçδ δἡἡεçόçδ IP, ἐᾶ ÷ἡçόεἷἡἷέἷἷἷἷ ὁçἷ ἁέῦεἷἡἷ ἰόἰεP ἀέᾶ ἷᾶ ἐᾶεἡἡἷἷἷἷ ἰᾶ ἷ ἁἷἷἷἷἷἷἷἷ ἁἷἷP ἁβἷάε ἰᾶἡἡἷἷἷἷἷἷÝἷç ὁᾶ Ὑἷᾶ FreeBSD ὁýὁçἷᾶ:

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

Ç ἁἷεἷᾶP -a ÷ἡçόεἷἡἷέᾶβόᾶέ ἀέᾶ ἷᾶ δὙἡἷἷἷ ἷᾶ ἑβόὁᾶ ἷᾶ Ὑεῖαδ ὁέδ ἡεὶβόαέδ οἷο ὁδὸPιὰοἷδ:

```
% 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
...
```

Ὀçἷᾶβῦὁç: ἘὙἷἷᾶδ ἁἷὙ ὁέδ ὁεἷÝὁ δἷὁ ἁᾶP÷ἷᾶε ç ἰόἰεP sysctl ἁβἷάε ἷῦἡἷ ἁἷᾶ ἰὙᾶἷῦὁç.

ὈδὙἡ÷ἷἷἷ δᾶἡἷἷἷἷἷἷ Ὑἷἷὁ ἁδᾶέὁᾶβόᾶέ οἷ procfs, ὙἷὙὁ ἀέᾶ δᾶἡὙᾶᾶᾶἷᾶ Ὑὁᾶἷ ἁέὁᾶᾶᾶβὁᾶ δᾶᾶᾶὙὁᾶἡἷ ἑἷᾶᾶᾶᾶᾶ, οἷ ἷἷἷἷ ἑὙἷᾶé ÷ἡPὁç ὁçδ ἰόἰεPδ truss(1) ἀέᾶ ὁçἷ ἰᾶἷ÷ἷᾶὁç ὁἷἷ ἑᾶPὁᾶἷ ὁδὸPιὰοἷδ, ἐᾶé ἁἷᾶ ὁçἷ ὈἷἷᾶὙὁçὁᾶ ἷᾶ Ἀᾶὁᾶᾶᾶᾶᾶ ὅἷὙ Linux (http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/linuxemu.html). (Αἷ ἐάε ç ὈἷἷᾶὙὁçὁᾶ ἷᾶ Ἀᾶὁᾶᾶᾶᾶᾶ ὅἷὙ Linux ÷ἡçόεἷἡἷέᾶβ οἷ ἁᾶᾶὙ ὁçδ procfs, οἷ linprocfs(5)). Αἷ ÷ἡᾶᾶᾶᾶᾶ ἷᾶ δἡἷὁᾶἡPὁᾶὁᾶ οἷ procfs, ἷἷἡᾶβὁᾶ ἷᾶ δἡἷὁᾶᾶᾶ ὁçἷ ἁᾶᾶᾶᾶᾶ ὁἷ ἰᾶ÷ᾶἷ /etc/fstab:

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

Ὀçἷᾶβῦὁç: Ç ἁἷεἷᾶP noauto ἐᾶ ἁἷἷᾶβόᾶέ ὁçἷ ἁὁὙἷᾶὁç δἡἷὙἡἷὁçδ οἷο /proc ἑᾶὁὙ ὁçἷ ἁᾶᾶᾶᾶᾶ οἷο ὁδὸPιὰοἷδ.

δἡἷὁᾶἡPὁᾶᾶ ἑᾶὙὙἷἷ ὁçἷ procfs ÷ἡçόεἷἡἷἷἷἷἷ ὁçἷ ἁᾶᾶᾶᾶᾶ ἰόἰεP:

```
# mount /proc
```

9 ÓôίϗέέôìÝíâò ÁíôïēÝò

9.1 Äéá÷âβñέόϗ ÐáēÝòùí

ÁíôïēP ôïò Linux (Red Hat/Debian)	Áíôβóôïē÷ç áíôïēP FreeBSD	Óêïðüò
<code>yum install package / apt-get install package</code>	<code>pkg_add -r package</code>	ÄãéáôÜóóáόϗ ÐáēÝòïò áðü áðñáéñòôìÝíñ áïòðçñáòçòP
<code>rpm -ivh package / dpkg -i package</code>	<code>pkg_add -v package</code>	ÄãéáôÜóóáόϗ ÐáēÝòïò
<code>rpm -qa / dpkg -l</code>	<code>pkg_info</code>	Ëβóóá äãéáôáóóçìÝíñüí ÐáēÝòùí

9.2 Äéá÷âβñέόϗ ÓóóôPíáôïò

ÁíôïēP Linux	Áíôβóôïē÷ç áíôïēP FreeBSD	Óêïðüò
<code>lspci</code>	<code>pciconf</code>	Ëβóóá óóóêãðí PCI
<code>lsmod</code>	<code>kldstat</code>	Ëβóóá ôñòòùìÝíñüí áñêññüìÜòùí ðòñPíá
<code>modprobe</code>	<code>kldload / kldunload</code>	Öññòòóϗ/Áðñüññòòóϗ áñêññüìÜòùí ðòñPíá
<code>strace</code>	<code>truss</code>	Áíβ÷íãóóϗ êëPóáñüí óóóôPíáôïò

10 ÓôìðãñÜóíáóá

Äóãêðéóôíγíä üòé áòòü ôï êãβíãñí óáò ðãñãβ÷ã áñêããóÝò ðççññïññβãò ãéá íá íãééíPóáôã íä ôï FreeBSD. Äéá ðãñéóóüðãñãò éáé ðéí êãðòñãñãβò ðççññïññβãò, ðãñáééáéγíä íá áéáãÜóáôã ôï Äã÷áéñβãéí ôïò FreeBSD (http://www.FreeBSD.org/doc/el_GR.ISO8859-7/books/handbook/index.html) ôï ïðññí áðβόçò ðãñéÝ÷áé éáé ðñéēÜ èÝíáóá ðñò äãí éáéγóèçéáí éáéüéïò óôï ðãññüí êãβíãñí.