

ÃâêáôÛóôáóç áíüò CVS Repository — ï ôñüðïò ôïõ FreeBSD

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

ΔιάöιάôêêÛ Äêêáéþιάôá © 2001, 2002, 2003 Stijn Hoop

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Ôï FreeBSD áβιάé Ýία éáôï÷ ðñüìÝïí àìðñéêêü óýìáïëï òïõ FreeBSD Foundation.

ÐïëëÝò áðü óéò ëÝíáéò þ òñÛóáéò ïé ïðïßáð ÷ ñçóéïïðïëïýíóáé áðü òïõ éáóáóéáóáóôÝò þ òïõ ðüëçôÝò òïõ áéá íá áéáêñßïïí óá ðñïüüíóá òïõ èáññïýíóáé àìðñéêêü óýìáïëá. ¼ðïõ áðôÝò àìðáïßæïïóáé óá áðü òï èáßíáïí éáé áéá üóáð áðü áðôÝò áíüñßæáé ç ìïÛáá ÁíÛððôïçò òïõ FreeBSD üóé áβιάé ðééáíüí íá áβιάé àìðñéêêü óýìáïëá, éá ááßóá Ýία áðü óá óýìáïëá: “TM” þ “®”.

Ôï Ûñëñï áðü ðáñéáñÛóáé óá áßιάóá ðïõ Ýéáíá áéá íá áäéáóáóðþü Ýία CVS repository ðï ÷ ñçóéïïðïëïáß óá ßáéá áñ÷áßá äÝóïçò áñôïëþï (scripts) íá áðôÛ ðï ÷ ñçóéïïðïëïáß éáé òï FreeBSD project óçç áéêþ ðïõ áäéáðÛóáóç. Ç óðáéáêñïíÝç ðñïÝááéóç Ý÷áé áñéáðÛ ðéáñíáéðßιάóá Ýíáíóé ïéáð ðððïðïëïýíçð CVS áäéáðÛóáóç, üðü ðéï èáððñáñþ Ýéá÷ ÷ ðñüóááóçð óðï äÝíïñï òï èþáééá éáèþ éáé áðüüíáð ðáñááüþ áðáíÛáñüóüí email íá èáððñÝñáéð áéá êÛèá áééáþ óðï ðçááßï èþáééá (commit).

1 Áéóáãüãþ

Ôá ðáñéóóüðáñá projects áéäýéáñï ëïáéóïëïý (free software) éáé áñé÷÷ïý èþáééá (open source) ÷ ñçóéïïðïëïýíï òï CVS óáí óýóçíá áéÝá÷ï òï èþáééü òïð. Ðáñüëï ðï òï CVS áβιάé ðïëý éáéü óá áðüíï òï òñÝá Ý÷áé áðü òï ïáñßáéü òï óá áéáððßιάóá éáé áäïíáßáð. ïéá áðü áðôÝò óéò áäïíáßáð áβιάé òï üóé ç êïëïþ ÷ ñþç èþáééá ïðñáß áñþáñíá íá ïáçáþáé óá Ýíáí áéá÷áéóóéêü áðéÛéð, áéáéêÛ áí òðÛ÷áé ç áðééðßá íá ðñïóááðððïýí ïñéóïÝíá êñïðéá òï äÝíïñï òï èþáééá áðü êïëïþ ðñüóááóç.

Ç ñÛáá áíÛððôïçò òïõ FreeBSD ÷ ñçóéïïðïëïáß áéðáñþ òï CVS. ÁéáéÝóáé áððóçð ïéá ïáÛéç áÛóç áðü ðñáñáñíáðéóôÝò áðü ðïëëÝò áéáðñáðééÝò ÷ þñáð. Áíáððý÷éçáí êïëüí ïáñéêêü áñ÷áßá äÝóïçò áñôïëþ áéá íá êÛñïí ðçí áéá÷áßñéóç òï repository ðéï äýëïç. Ðñüóááð óá áñ÷áßá áðôÛ áíáéáññþçéáí éáé éáññéëïðïëïýí áðü òï Josef Karthausser <joe@FreeBSD.org> áéá íá áβιάé ðéï äýëïí íá ÷ ñçóéïïðïëïýí éáé óá Ûééá Ýñáá. Ôï Ûñëñï áðü ðáñéáñÛóáé ïéá ïÝëïñ ÷ ñþçð áððï ðüí íÝñí áñ÷áßá äÝóïçò áñôïëþ.

Ἀέα ἰά ἰδῖν Ὑοὰὸ ἰά ÷ ἡ̇ς̇ειρῖδιεβόαὸ ἰά οἱ εἰεῦοἶνι ὠνυθῖ δεδ θε̇γνῖονβᾶδ ἀδοῖϋ οἱο ὐνεπῖο ἐα θη̇Υδαε ἰά
 ἄφινβᾶαὸ δεδ ἄσοε̇Υὸ ἰἄευῖτοδ εἰεδοῖναβᾶδ οἱο **CVS**.

2 Đñþôç ÃêáôÜóôáoç

[illegible]

2.1 Áñ÷éêïðïßçóç ôïõ repository

Οι ὁηρῶι ὁηῦᾶι ὁῶ εᾶ ὁηῦᾶε ἰᾶ εῦἰᾶῶ ὑῶἰ ὀῶᾦᾶῶ ῒἰ ἰῦἰ repository ᾶἰᾶᾶ ἰᾶ ᾶᾶῶ ὀῶἰ CVS ἰᾶ ὀἰ
 ᾶἰ÷εἰῖᾶἰᾶᾶ:

```
% cvs -d path-to-repository init
```

Áðöü ëÝáë óöî **CVS** íá äciéiõñãÞóáë öîî öÜêæî äéá÷äÞñéócò **CVSROOT**, üðîõ óðîíááßîíîí üêàò íé ðáñáîíäðñîðîéÞóáëò.

2.2 C iñÜää ôiõ repository

Όπως έα άγιείονάΠοίονά όςί νΰάά όόςί ιδίβά έα άίΠέάε όί repository. ¼είε ίε committers έα δñÝδαέ ίά άίΠείοί όά άόδΠ όςί νΰάά, πόόά ίά ιδñίίί ίά άñÜοίό όόί repository. Άέά όί όείδñ άόδñ έα ÷ñςόέιδñΠοίονά όςί βάέά νΰάά δñ ÷ñςόέιδñέάβ άέ' άόδñ όί όείδñ έάέ όί FreeBSD, όςί νΰάά ncvs.

```
# pw groupadd ncvs
```

ÌàòÙ, èà ðñÝðàé íá àèòàéÝóàòà òçí áíòíèÞ chown(8) óðíí òÙèàèí ìá ðánÙìàðñí òçí ñÙáá ðíò ìùèò ðñíòéÝóáòà, èÝòííóáò Ýóóé òçí ñÙáá óòçí ìðíßá áíðèàé ì èáòÙèíàò:

```
# chown -R :ncvs path-to-your-repository
```

Áõôü âíáóöäëβææ üôé êáíáβò äáí èà ìðĩñáβ íá ãñÛøæé óôĩ repository áí äáí áíÐêæé óôcí óúóôÐ ñÛäá.

2.3 Đáßñĩĩĩôáo ôĩĩ ỏçãáßĩ êpăéeêá

[illegible]

2.4 ÁíóéãñÜöííôáò ôá scripts ôíõ FreeBSD

ἄφωδᾶνα, ἀφωέανῶροισι οἱ ῥααβὶ ἐπαέέα αἰο οἱ CV\$ROOT εἰοῦῆιαι οἷο FreeBSD οἱ ἀέέυ ιᾶο repository. Αἱ ἄβωᾶ ὀφίεέοι ῶρο ιᾶ οἱ CVS, βούο ιᾶ οᾶο ὄανῶᾶε αἰο οἱ ιοᾶέι ιᾶ ὄνιᾶᾶεβᾶᾶᾶ ιᾶ εῦιᾶᾶ import ᾶᾶ scripts, ᾶᾶ ιεᾶ

[illegible]

Άἱ ἁβιάε ἐαέ οὐοῖ ὀρίαιόεεῦ οἱ αἱ ς ὀανάδῴῦ ὀάνῴᾱνάοῖδ ἁαῖ οἶο ὀάβῳάε δῖεῖ ἱαέῴεαῖς—οἱ ὀαέεεῦ ἀδῖοῴεῖῴα
 ἁβιάε οἱ βᾱεῖ. Ἀδέῴ ἁεῖᾱῖοᾱ οἱῖ `CVSROOT` ὀῴεαεῖ ἐαέ αἰόεᾱῖῴῶᾱ ὀά `FreeBSD` ἁῖ÷ᾱβᾱ ὀῴῖ ἁδῖ ὀά ἁέεῴ οἶδ
 οἱδῆεῴ (ἁδᾱβῖᾱ÷ὀᾱ) αἰὀβᾱῖᾱὀᾱ:

```
% cvs -d path-to-your-repository checkout CVSROOT
% cd CVSROOT
% cp ../CVSROOT-freebsd/* .
% cvs add *
```

[illegible]

2.5 Tá scripts

[illegible]

- `access` - οἱ ἀν÷ἄβι ἀδού ἀὰ ÷ ñçóεἰῖῖεἶἄβδᾶέ ὀδέδ ὀῖçééοἱÝῖᾶδ ἄἄἔᾶδᾶὀὀὀὀὀὀ **CVS**. × ñçóεἰῖῖεἶἄβδᾶέ ἱῖῖ ὀὀçῖ ἄἔἔἔἔἔἔ ἄἔἔᾶὀὀὀὀὀὀ ὀῖῖ FreeBSD project, ἄἔᾶ ἰᾶ ἄἔÝᾶ÷ᾶὀᾶἔ ç ðñῖὀᾶὀὀç ὀὀῖ repository. Ἰὀῖῖἄβδᾶ ἰᾶ ἄὀἔῖῖÝὀᾶὀᾶ ἄὀὀὀ ὀῖ ἄñ÷ᾶβῖ ἄἰ ἄἄἰ ὀᾶὀ ἄἰἔᾶὀÝῖἄἔ ἰᾶ ÷ ñçóεἰῖῖεἶἔἔἔἔἔἔ ἔὀὀἔ ὀÝὀἰἔἰ ὀὀç ἄἔἔἔ ὀᾶὀ ἄἄἔᾶὀὀὀὀὀὀ.
- `avail` - οἱ ἀν÷ᾶβῖ ἀδού ἄἔÝᾶ÷ᾶἔ ὀçῖ ðñῖὀᾶὀὀç ὀὀῖ repository ἄἰὀ ἔᾶὀὀἔἔἔἔἔἔ ἔ ἄñ÷ᾶβῖ. ἸÝὀᾶ ὀᾶ ἄὀὀὀ, ἰὀῖῖἄβδᾶ ἰᾶ ἔᾶἔἔἔἔἔἔἔἔἔ ἰὀὀὀὀ ÷ ñçóὀἔἔ ὀὀὀὀ ἰὀἔἔἔὀ ἔÝἔᾶὀᾶ ἰᾶ ἄἔὀᾶὀᾶ ðñῖὀᾶὀὀç ὀὀῖ repository, ὑὀὀὀ ἄὀὀὀç ἔᾶἔ ἰᾶ ἄὀἄἄἄἄἄÝὀᾶὀᾶ commits ὀᾶ ἄὀὀὀἄἄἄ ἔᾶὀἔὑἄἄἄἄἄ ἔ ἄñ÷ᾶβῖ. ἔᾶ ὀñÝὀᾶἔ ἰᾶ ὀῖ ðñῖὀᾶἄἄἄὀᾶὀᾶ ἔὀᾶ ἰᾶ ὀᾶἔÝ÷ᾶἔ ὀἔὀ ἰὀὀὀὀ ÷ ñçóὀἔἔ ἔᾶἔ ὀῖὀὀ ὀᾶἔÝἔἔὀὀ ὀῖὀ ἔᾶ ὀὀὀñ÷ᾶἄἄἄ ὀὀῖ ἄἔἔὑ ὀᾶὀ repository.
- `cfg.pm` - οἱ ἀν÷ᾶβῖ ἀδού ἄñῖçῖᾶÝᾶἔ ὀἔὀ ñὀἔἔἔὀᾶἔὀ ὀᾶὀ ἔᾶἔ ὀᾶñÝ÷ᾶἔ ὀἔὀ ὀἄἄἄἄἄὀᾶ ἄὀὀὀ ὀῖ ἀñ÷ᾶβῖ. Ἀἰὀἔἔᾶὀᾶ, ἔᾶ ὀñÝὀᾶἔ ἰᾶ ὀῖὀἔἔᾶὀὀὀὀᾶ ὀἔὀ ἄἔἔÝὀ ὀᾶὀ ἄἔἔᾶÝὀ ὀἔὀὀ ñὀἔἔἔὀᾶἔὀ ὀὀῖ ἀñ÷ᾶβῖ `cfg_local.pm`.
- `cfg_local.pm` - οἱ ἀν÷ᾶβῖ ἀδού ὀᾶñἔÝ÷ᾶἔ ὀἔὀ ὑἔᾶὀ ὀἔὀ ñὀἔἔἔὑἄἄἄἄἄ ὀᾶñἄἄÝὀñῖὀὀ ὀῖὀ ὀὀὀὀὀᾶὀὀ. ἔᾶ ὀñÝὀᾶἔ ἰᾶ ἔὀὀᾶὀᾶ ἰὀἔᾶὀᾶἔὀὀᾶ ñὀἔἔἔὀᾶἔὀ ὀᾶὀ ἄἄἔ, ὑὀὀὀ ὀᾶ ὀἔᾶ ἄἔᾶἔὀῖὀç ἔᾶ ὀὀÝἔἔἔὀᾶἔ ὀᾶ email ἄὀὀ ἔὀἔᾶ commit, ὀᾶ ὀἔἔὀὀ ὀᾶ ἄὀἔὀñÝὀᾶὀᾶ ἰᾶ ἄἄἄἄὀᾶἔ commit, ἔἔὀ. ὀᾶñἔὀὀὀὀᾶñᾶὀ ὀἔçñῖὀἄἄἄ ὀ÷ᾶὀἔἔὀ ἰᾶ ἄὀὀὀ ἔᾶ ἄñᾶὀᾶ ὀᾶñἔὀὀ.
- `checkoutlist` - οἱ ἀν÷ᾶβῖ ἀδού ὀᾶñἔἔἔἄἄὀᾶἔ ὑἔᾶ ὀᾶ ἀñ÷ᾶβᾶ ὀῖὀ ἄñὀἔἔἄὀᾶἔ ἔὀὀὀ ἄὀὀ ὀῖὀ ὀἔᾶᾶ÷ῖ ὀῖὀ **CVS** ὀὀῖὀ ἔᾶὀὀἔἔἔἔἔἔ ἄὀὀὀ—ὑἔᾶ ἄἔὀὀὀ ἄὀὀ ὀᾶ ὀñῖἔἔἔἔἔὀἔὀἔὀ ἄñ÷ᾶβᾶ ὀῖὀ ἄἔἔἔὀᾶñᾶᾶ ç ἄἰὀἔἔἔ `cvs init`. ἔᾶ ὀñÝὀᾶἔ ἰᾶ ὀῖ ἄἔἔὀᾶὀᾶ ἄἔᾶ ἰᾶ ἄὀἔῖῖÝὀᾶὀᾶ ἰᾶñἔἔὀ, ὀ÷ᾶὀἔἔὀ ἰῖῖῖ ἰᾶ ὀῖ FreeBSD, ἀñ÷ᾶβᾶ.
- `commit_prep.pl` - οἱ script ἄὀὀὀ ἄἔὀᾶἔᾶἔ ἄἔὀὀἄἄἄὀ ἄἔÝᾶ÷ῖὀὀ ὀñἔἰ ἄὀὀ ἔὀἔᾶ commit, ἄἰὀἔἔᾶ ἰᾶ ὀἔὀ ñὀἔἔἔὀᾶἔὀ ὀῖὀ Ý÷ᾶὀ ἔὀᾶἔ ὀὀῖ ἀñ÷ᾶβῖ `cfg_local.pm`. Ἀἄἄ ἔᾶ ÷ ñἔᾶὀὀὀᾶ ἰᾶ ὀᾶἔἔὀᾶὀᾶ ὀὀὀ ὀῖ ἀñ÷ᾶβῖ.
- `commitcheck` - οἱ script ἄὀὀὀ ἔᾶἔᾶὀᾶἔ ἄὀᾶὀἔᾶὀᾶ ἄὀὀ ὀῖ **CVS**. ὀñἔὀᾶ ἄἔÝᾶ÷ᾶἔ, ÷ ñçóεἰῖῖεἶἔἔἔἔἔἔ ὀῖ ὀñῖᾶἄἄἄ `cvs_acls.pl`, ἄἰ ἰ committer Ý÷ᾶἔ ὀñῖὀᾶὀὀç ὀὀῖ ὀὀἔᾶἔᾶñἔἔἔἔἔ ἰÝῖῖὀ ὀῖὀ ἄÝἰὀụὀ ὀῖὀ ἔἔᾶἔᾶ, ἔᾶἔ ἰᾶὀὀ ἄἔὀᾶἔᾶἔ ὀῖ `commit_prep.pl` ὀῖὀ ἄἔὀᾶἔᾶἔ ὀῖὀ ἄἔὀὀἄἄἄὀ ἔἔᾶἔᾶ ἄἔÝᾶ÷ῖὀὀ. Ἀἰ ἄἄἄ ὀὀὀñῖᾶἔ ἔὀὀἔἔ ὀñῖᾶἔἔἄ ὀὀὀὀ

æeYā÷iōð aōōiYō, ōūðā ði **CVS** eā āðēōñYøæ ēðī commit íá óōfā÷βóæ. Äāf eā ÷ñæáóóðß íá ðæēñŪiāðā áōðū ði āñ÷āßi.

- [illegible]

[illegible]

- [illegible]

2.6 Ôñïðïðïépíôáò ôá scripts

[illegible]

1. Áí aái ēYēāōā íá ÷ñçóéúíðíēíPóāōā óēō ēāēōíōñāāōō óúí scripts íē íðíāō ÷ñçóéúíðíēíYíōāē āðíēēāēóōēēŪ āðū òí FreeBSD, íðíñāōā íá āōāēñYóāōā íā āóōŪēāēā òí āñ ÷āñ access:

```
% cvs rm -f access
```

- [illegible]

[illegible]

3. Αέινεηπόά οί άν÷άβι cfg_local.pm πόά ίά άανέΥ÷άέ οέό άδέεραΥό ότö άδέεοιαβόά. Δεί οάάέάεινέΥία, έά όηΥάέ ίά άέΥάαόά οέό άάηάέÜü όηιόιόέπόέιαό άδέεραΥό:

- `%TEMPLATE_HEADERS` - ΆόόΥό ιέ άόέέάόάέβääό άάάίάñáŰæííóáé áđú óá log scripts, éáé òíðíèääòííóáé èŰòù áđú òí mail òíò èŰèá commit áí òðŰñ÷íòí éáé äáí äßíáé èáíŸó òòí íßíóíá òíò commit. ÄáíéèŰ, íðíñáßòá íá áóáénŸóáòá òéò éáóá÷ ùñßóáéò PR éáé MFC after—áóíŸ áóòŸó ò÷ äòßæííóáé íá òí bug tracking óýóóçíá òíò FreeBSD éáé òíí òñùðí ðíò áéá÷ áénñæáòáé òí FreeBSD óá branches òíò repository òíò. Éáé òòóéèŰ íðíñáßòá íá ðñíóéŸóáòá òéò äééŸó óáð.
- `$MAIL_BRANCH_HDR` - Áí èŸŸèáòá íá ðñíóðßèáòáé áóòùíáóá íéá áðéèáòáéßää óá èŰèá commit íßíóíá mail, ç íðíßá éá ðñééñáŰóáé òí branch óòí íðíßí Ÿáéíá òí óòáèèñéíŸí commit, íñßóòá òçí òèíß áóòß íá óáéñéŰæáé íá òçí áéèß óáð äáèáòŰóóáóç. Áòßóòá òçí èáíß áí äáí áðéèòíáßòá íá ðñíóðßèáòáé áóòùíáóá íéá óŸóíéá áðéèáòáéßää.
- `@COMMIT_HOSTS` - Íñßóòá òçí òèíß áóòß óá íéá èßóóá áđú óóóòßíáóá (hosts), áđú óá íðíßá áðéòñŸðáòáé íá äßíííóáé commits.
- `$MAILADDRS` - Ñòèíßóòá áóòß òçí òèíß óòí email òíò áéá÷ áéñéóòß ß óá íéá áéáyèðíóç èßóóáð óòçí íðíßá èŸŸèáòá íá ðçääáßííòí óá mail òùí commit íçíòíŰòùí.
- `@LOG_FILE_MAP` - ÁèèŰíðá áóòù òí array ùðòù áðéèòíáßòá. ÈŰèá regexp áíðéóóíé÷ áß óòí óòáèèñéíŸí òŰèáèí óòíí íðíßí áßíáóáé òí commit, éáé òí log íßíóíá òíò commit áðíèçèáyáóáé èŰòù áđú òíí éáòŰèíäí CVSROOT, óòíí òðíéáòŰèíäí commitlogs, óòí äñ÷ áßí ðíò áíáóŸñáòáé óòçí áíóßóóíé÷ ç äääñáòß òíò ðßíáéá `@LOG_FILE_MAP`.
- `$COMMITCHECK_EXTRA` - Áí äáí èŸŸèáòá íá ÷ñçóéííðíéßóáòá òíòð ßáéíòð äèŸā÷íòð ðñùóááóçð íá òí FreeBSD, éá ðñŸðáé íá áóáénŸóáòá òíí íñéóíù òçð òèíðð `$COMMITCHECK_EXTRA` áđú òí äñ÷ áßí áóòù.

Όχι!Βουό: Ç äëäãP öçø ðãñáíYõññø §IDHEADER äßíáë äããöçíYññ üöë èä äñöëYðäë üññ óä ðëäðöññíàð FreeBSD. ÁíãñðÜðäë äðü äëäëëYð ïàðáðñññYð öñø FreeBSD óññ **CVS**.

Ἰδιναβόα ἰά ἀεΨάραόα ὀι ἀν÷αβῖ cfg. pm ἀέα ἰά ἀαβόα θιεΨό Ὑεεάο θαῖαῖΨὀνιροδ ἰθιναβόα ἰά ἀεεῤῗαόα, ἀεεῤ ἰε θαῖαόῤῗῦ ἀβῖάε ἰε ὀεί ὀῶῖῤεαέο ἀ῀εεῖαΨό.

4. Άðáíññάάόðáðá ðí áñ÷áßí exclude áέά íά áóáέñÝóáðá ðέð áέáέέÝð éάóá÷ññðóáέð ðíð FreeBSD (üðüð üέáð ðέð ãñáñÝð ðíð íáέέñíýí íá ^ports/ έðέ.). Άέðüð áððíý, áÜέðá óá ó÷üέέá ðέð ãñáñÝð ðíð íáέέñíýí íá ^CVSROOT/, έάέ ðñíóέÝóóá íέά ãñáñÞ ðíð έá ðáñέÝ÷άέ íüñí ðí ^CVSROOT/. Áóíý ááέάðáóðáέáß í wrapper, íðññáðá íά ðñíóέÝóóá ðí áέέü óáð header óóá áñ÷áßá ðíð ãñáðέñíóáέ íÝóá óóñí έάðÜέíñí CVSROOT έάέ íά áðáíáðÝñáðá ðέð ãñáñÝð áððÝð, áέέÜ ðñíð ðí ðáññí áðέÜ έá óáð áçíέíññáðóíðí ðñíáέðíáðá üðáí έá ðñíóðáέðóáðá íά έÜíáðá commit áññüðáñá.
5. Áñíßíðá ðí áñ÷áßí modules, έάέ áóáέñÝóóá üέáð ðέð ó÷áðέέÝð íá ðí FreeBSD έάóá÷ññðóáέð. ðñíóέÝóóá óá áέέÜ óáð modules áí ðí áðέέðíáðá.
- 6.

Όçíáßüόç: Όí áðíá áððü áßíáέ áðáñáððçðí íüñí áí Ý÷áðá ãñáðáέ έÜðíέá ðέíð óççí ðáñÜíáðñí \$IDHEADER ðíð áñ÷áßíð `cfg_local.pm` (ç íðñá ãíðέáýáέ íüñí áðüóñí ÷ñçóέñíðíέáßáðá óççí ðñíðíðíέçíÝçç Ýέáñόç ðíð CVS ðíð Ý÷άέ ðí FreeBSD).

Άέíñέðóáð ðí áñ÷áßí `options` þóðá íά óáέñέÜáέ íá ðí tag ðíð ãñáðáðá óðí áñ÷áßí `cfg_local.pm`. Íέά áíáάðçόç έάέ áíðέέáðΰóóáόç ðíð FreeBSD óá üέí ðí áñ÷áßí áßíáέ áñέáð.

7. Άðáíññάάόðáðá ðí áñ÷áßí `rcstemplate` þóðá íά ðáñέÝ÷άέ óá ðáέά keywords íá áððÜ ðíð Ý÷áðá ãñáðáέ óðí `cfg_local.pm`.
8. ðñíáέñáðέέÜ, áóáέñÝóóá ðíðð áέÝá÷íðð ðíð FreeBSD áðü ðí áñ÷áßí `tagcheck`. Íðññáðá áðέÜ íά ðñíóέÝóóáðá `exit 0` óççí áñ÷áßí ðíð ãñá÷áßí áέά íά áðáíññáñðíέðóáðá üέíðð ðíðð áέÝá÷íðð óðí tagging.
9. Όí óáέáððáßí ðñÜñíá ðíð ðñÝðáέ íά áßíáέ, áßíáέ íά óέáññáððóáðá üέέ óá commitlogs íðñíýí íά áðíέçέáððíýí. Óá CVS scripts ðíð FreeBSD áðíέçέáýíðí áððÜ óá logs óðñí ððíέáðÜέíñí commitlogs ðíð έáðáέüññí CVSROOT. Άððüð í ðÜέáέðð ðñÝðáέ íά áçíέíññáçέáß, íðüðá έÜíðá óá áέüέíðέá:

```
% mkdir commitlogs
% cvs add commitlogs
```

Όðñá, áóíý áέÝáñáðá óá ðÜíðá ðñíóáέðέέÜ, έá ðñÝðáέ íά έÜíðáðá commit ðέð áέέááÝð óáð. Õññíðóóá íά áßóóá óßáññíέ üέέ Ý÷áðá áðóáέ óðñí ááððü óáð ðñüóááόç óðñí ðÜέáέí CVSROOT íÝóá áðü ðí áñ÷áßí `avail` ðñέí έÜíáðá íðέáððíðá, áðüóñí óççí áíðßέáðç ðáñßððüόç έá έέáέððóáðá ðñí ááððü óáð Ýñ. Íðüðá, ðññíðóóáðá óá ðÜíðá íά áßíáέ üðüð áðέέðíáðá, έάέ íüñí ðüðá áðóðá óá áέüέíðέá:

```
% cvs commit -m '- Initial FreeBSD scripts commit'
```

2.7 ΆñέέíÜáέííðáð óççí Άáέáðΰóóáόç

Άßóðá Ýóíέííέ áέá óççí ðñðçç óáð áñέέíð: íά forced commit óðí áñ÷áßí `avail`, áέά íά óέáññáððóáðá üέέ üέá áñðέáýíðí üðüð έá Ýðñáðá.

```
% cvs commit -f -m 'Forced commit to test the new CVSROOT scripts' avail
```

¶í üέá ðÜíá έáέÜ, óðá÷áñçðÞñέá! ,÷áðá έáðáðÝñáέ íά óððóáðá íέά ðέÞñüð έáέíññáέέÞ ááέáðΰóóáόç ðñí FreeBSD scripts áέá ðí repository óáð. Óççí ðáñßððüόç ðíð ðí CVS áñáέíñέáß íά ðáñáðñíέÝóáέ áέá έÜðέ, áðέóðñÝððá óóέð ðñíçáñýíáíáð áíüðçðáð έάέ áέÝáñðá íáíÜ üέέ Ý÷áðá áέðáέÝóáέ óüóðÜ üέá óá ðñíçáñýíáíá áðíáðá.

3 Άεάέê Þ ÅæäáÜóóάόç ðïð FreeBSD Project

Ôï Þäéï ðï FreeBSD project ÷ñçóéïïðïéåß íéå æéåðñð æéåðñäóéê Þ æéåáÜóóάόç, ç ïðïßá ÷ñçóéïïðïéåß åðßóçð åñ÷åßå áðü ðïð ððïðÜéåïï freebsd ðïð CVSROOT ðïð ÷ñçóéïïðïéåßðóåé óðï FreeBSD. Ôï project ÷ñåÜæåðåé êÜðé ðÝðïéï euau ðïð íååÜéïð åñééïï ðüï committers, ðïð æéåðñäóéêÜ éå Ýðñåðå íå áíðéïïï ïééé óðï Þäéï group. Þóé, åçïéïñåðççå Ýíåð åðüð wrapper ï ïðïßð áðïï ðñðåå åíåððåßæåé óå óüóðÜ æéåðéóðåððñéå ðüï committers, æéêÜæåé íåðÝðåéóå ðï group id óå áðüð ðïð repository.

Áí éåé ðï æéêü óåð repository ÷ñåÜæåðåé êÜðé áíÜéïïï, óå åðíåðå ðïð éå ðñÝðåé íå æéïéðéðóåðå æéïéðéïï ðåñåéÜðü. ÅéêÜ ðñðåå áð êÜïïïå íéå óýïïñç åðéóéüðçóç ðüï ó÷åðéðí åñ÷åßåí.

3.1 Åñ÷åßå ðïð ÷ñçóéïïðïéïïéåé óóçí æéåéê Þ æéåáÜóóάόç ðïð FreeBSD

- `access` - ðï åñ÷åßå áðüð æéÝá÷æé óéð ðççñïïññðåð æéå óå æééåðíåðåð ðñüóååóçð. Èå ðñÝðåé íå ðï åðåñåñåóðåðåé áíÜéïïï Ýðéé þóðå íå ðåñééåíåÜíåé ïéå ïéå óå ïÝçç ðïð project óåð.
- `freebsd/commitmail.pl` - ðï åñ÷åßå áðüð ååí ÷ñçóéïïðïéåßðóåé ðéå, æéêÜ ðåñåñÝíåé æéå éóðïñééïï euäïðð. Ååí éå ÷ñåéåóðåß íå åðåñåñåóðåðåé áðüð ðï åñ÷åßåí.
- `freebsd/cvswrap.c` - ðñüéåéóåé æéå ðïð ðççåßåí êðåééå ðïð CVS wrapper ðïð éå ðñÝðåé íå æéåéåóðåððóåðåé æéå íå ïðñÝóïïï ïééé íé Ýéåå÷é ðñüóååóçð ðæéêÜ íå äïðéÝðïï. ðåñéóüððåñåð ðççñïïññðåð æéå óç æéåéåéåóðåé áðð Þ åñåðåðå ðåñåéÜðü. Èå ðñÝðåé íå æéñðéðåðåé óå paths óéðð ACCESS éåé REALCVS íåññïïïéÝð þóðå íå ðåéñéÜéïï íå óç æéê Þ óåð æéåáÜóóάόç.
- `freebsd/mailex.c` - ðï åñ÷åßå áðüð ÷ñåÜæåðåé æéå óçí ó÷åðéê Þ óéð éßóðåð óå÷ðåññåßï æéåáÜóóάόç ðïð FreeBSD. Ååí éå ÷ñåéåóðåß íå ðæñÜíåðå ðï åñ÷åßå áðüð.

3.2 Ç æéåééåéåóðå

1. Åéñðéðåðå ðï åñ÷åßå `access` þóðå íå ðåñéÝá÷æé ïïð ðï æéêü óåð username.
2. Åéñðéðåðå ðï åñ÷åßå `cvswrap.c` þóðå íå ðåñéÝá÷æé ðï óüóðü path æéå óç æéê Þ óåð æéåáÜóóάόç. Åðü ïñðåðåé ïð íéå íåññïïïéïð ðïð ïññÜæåðåé ACCESS. Èå ðñÝðåé åðßóçð íå æéêÜðåé éåé ðï ïññå åñ÷åßå ðïð ðñåñåðééï çvs binary áí áðð Þ ððÜñ÷æé ååí åßíåé ç óüóð Þ æéå óç æéê Þ óåð ðåññððüç. Ôï éåññééü `cvswrap.c` éåññåß ðüð éå áíééåéåóðåððóåðåé óçí áíéïð çvs óå åðßðåññéåððéåð ïå ðï cvwrap, êé ç åñ÷éê Þ áíéïð çvs éå íåðåðåññåß óðï åñ÷åßå `/usr/bin/ncvs`.

Ôï æéêü ïïð áíéððððï ðïð åñ÷åßå `cvswrap.c` Ýáé óå æéüéïðéå:

```
#define ACCESS "/local/cvsroot/CVSROOT/access"
#define REALCVS "/usr/bin/ncvs"
```

3. Ôï åðüññåí åðíå åßíåé íå æéåéåóðåððïïïå ðïð wrapper æéå íå åßíåðåé óðåññéééééé éå åßíåðåé ç íåðåðññ Þ óðï óüóðü group ïðåí åßíåðåé commit. Ï ççåßïð êðåééåð æé' áðüð åñðéåðåé óðï åñ÷åßå `cvswrap.c` óðïé éåðÜéïï CVSROOT.

Íåðåéüðððóðå ðïð êðåééåð ðïð Ýáéðå Þç æéñðéðåé þóðå íå ðåñéÝá÷æé óå óüóðÜ paths:

```
% cc -o cvs cvswrap.c
```


