HELLENIC HOWTO

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HELLENIC HOWTO

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Ekdosn 0.991127, 12−27−1999

Auto to keimevo periexei plnrofories gia tnv ru8misn tou Linux gia upostnri3n twv idiaiterotntwv twv Ellnvwv kai tns ellnvikns glwssas. This document is part of Hellenic (el) LDP project: http://www.hellug.gr/gr/howto/howto/pub/html/

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1.Eisagwgn

Auto to keimevo exei sullegmeves plnrofories gia tnv ru8misn tou leitourgikou sustnmatos Linux gia tnv upostnri3n tns ellnvikns glwssas. Skopos DEN eivai n apavtnsn gevikwv problnmatwv, alla movov autwv pou sxetizovtai me tnv ellnvikn glwssa kai tis idiaiterotntes evos Ellnva xrnstn, sumperilambavomevwv:

- tns upostnri3ns ellnvikwv se console mode kai Xwindows,
- tns xrnsns ellnvikwv se efarmoges,
- tns or8ografias,
- tns epikoivwvias me allous Ellnves xrnstes.

Gia mia grngorn Egkatastasi−Ellinikwn avatre3ate sto avtistoixo kefalaio.

Parakalw, va exete up' oyiv sas oti oi odngies gia ta ellnvika mporei va mnv xreiazovtai n va eivai mnv isxuouv me akribeia stnv periptwsn sas. Auto px sumbaivei e3' aitias mikrodiaforwv meta3u twv diavomwv (Debian, Suse, Redhat, OpenLinux klp), n epeidn me tov kairo oi luseis pou parousiazovtai edw evswmatwvovtai stis diavomes.

1.1 Suvtnrnsn tou Hellenic−HOWTO

H suvtnrnsn autou tou keimevou givetai apo tov Gewrgato Fwtn < gef@hellug.gr > kai n pio teleutaia ekdosn 8a brisketai sto URL: http://students.ceid.upatras.gr/~gef/linux/docs/HOWTO/

To keimevo auto 8a mporeite va to breite episns edw:

- http://www.hellug.gr/gr/howto/howto/pub/html/Hellenic−HOWTO.html
- http://metalab.unc.edu/LDP/HOWTO/Hellenic−HOWTO.html
- ftp://argeas.hellug.gr/pub/unix/linux/GREEK/HOWTO

1.2 Morfopoinseis tou Hellenic−HOWTO

To HOWTO auto uparxei stis e3ns morfopoinseis:

- Hellenic−HOWTO.html html me Ellnvika 928 (moiazouv me ta windows−1253)
- Hellenic−HOWTO.html eivai greeklish (xrnsimo priv stn8ouv ta ellnvika)
- Hellenic−HOWTO.sgml Eivai o pngaios kwdikas tou HOWTO, pou se suvdiasmo me ta sgml−tools paragei ola ta upoloipa.

1.3 Tropopoinseis

Gia opoiodnpote metatropn/sxoliasmo tou HOWTO, parakalw epikoivwveiste mazi mou sto gef@hellug.gr me subject: HELLENIC−HOWTO. Eav breite la8n n avakribeies sto keimevo, dnlwste to. Episns avalambavw tnv or8ografia, tovismo kai suvtaktiko elegxo gia ta keimeva, xwris auto va snmaivei oti 8a eivai ola pavta teleia :−)

Istoriko allagwv:

- 0.00 Avakoivwsn evar3ns tou keimevou stnv lista linux−greek−users (Ioulios 97)
- 0.01 Basikos skeletos tou HOWTO
- 0.1 Pros8nkn keimevou ar8rwv, epikollnsn 3evwv tmnmatwv.
- 0.2 Pros8nkes/Allages 2.4.3, 3.2.x, 6, 3.3.3
- 0.3 Gevikes allages
- 0.4 Pros8nkes/Allages/Epaln8eusn 3.x
- 0.5 Allagn 2.5
- 0.6 Pros8nkes me basn to NLS FAQ
- 0.7 Orgavwsn se SGML kai avakoivwsn upar3ns stn lista.
- 0.8 To "euxaristies" egive "spovdes" kai alla polla :−)
- 0.9 Pros8nkn kefalaiou Netscape, Timezone, dior8wseis
- 0.9p1−4 Dokimes efarmogwv me ta ellnvika
- 0.9p5,6,7,8 Proetoimasia gia telikn ekdosn
- 0.9905*,06* prefinal versions

{ Ta tmnmata pou eivai mesa se agkistra, eivai proswriva, kai dev 8a uparxouv stnv ekdosn 1.0 } { akuro, 8a meivouv } { Ta tmnmata pou exouv (???) xreiazovtai epaln8eusn n pros8nkes}

1.4 Spovdes

Ta gvwsta credits :−)

Euxaristw idiaitera tov 'Aggelo Xaritsn < ah@computer.org> (gvwstos gia tis ergasies tou gurw apo ta ellnvika twv UNIX sto HRI), gia tis ektetameves pros8nkes kai upodei3eis tou.

Polutimn, episns, ntav n bon8eia twv:

* Tasos Kapios < fadom@ccf.auth.gr> (Kefalaio gia National Language Support)
* Keramidas Giwrgos < keramida@hellug.gr> (Kefalaio gia Tex/LaTex kai alla polla)
* Ko3aras Arns < koxaras@ceid.upatras.gr> (Kefalaio gia Netscape)
* Pavagiwtns Bruwvns < vrypan@hellug.gr, http://members.xoom.com/Vrypan > (Kefalaio gia Grammatoseires, Ektupwseis kai alla)
* Swtnrns Tsimpwvns < tsimbonis@forthnet.gr>,
* Avtwvns Kabarvos < akav@hellug.gr>,
* Papadnmntriou Spuros < spapadim@csd.uch.gr>.
* Giavvns Mntsos < gmitsos@duth.gr>.

Gia tn suggrafn tou keimevou autou xrnsimeusav sav prwtes pnges ta:

* linux−danish−howto (Thomas Petersen),
* linux−italian−howto (Marco Gaio Gaiarin)

1.5 Pveumatika dikaiwmata kai adeia xrnsns.

Oi aparaitntes dieukrivnseis...

Ta pveumatika dikaiwmata autou tou HOWTO avnkouv stov Gewrgato Fwtn, alla epitrepetai n diavomn upo tous akolou8ous orous:

Ektos kai av orizetai diaforetika, ta keimeva "Linux HOWTO" eivai katoxurwmeva apo tous avtistoixous suggrafeis tous. Ta "Linux HOWTO" mporouv va avaparagovtai kai diavemovtai e3' oloklnrou n merikws, me ka8e meso fusiko n nlektroviko, arkei autn paragrafos gia ta pveumatika dikaiwmata, va diatnreitai se ka8e avtigrafo. Emporikn epavadiavomn epitrepetai kai malista evdeikvutai. Par' ola auta o suggrafeas 8a n8ele va eivai evnmerwmevos se tetoies periptwseis.

Oles oi metafraseis, paragomeves ergasies, n suv8eseis pou perilambavouv opoiodnpote "Linux HOWTO" prepei va kaluptovtai apo autnv tnv adeia. Dnladn, dev epitrepetai n paragwgn ulikou prokuptov apo auto kai n epiboln se auto epipros8etwv periorismwv osov afora tnv diadosn tou. E3aireseis mporouv va givouv kata periptwsn. Gia perissoteres plnrofories epikoivwvnste me tov suvtovistn twv Linux HOWTO.

Ev suvtomia, epi8umeitai n diadosn autwv twv plnroforiwv diamesou osov perissoterwv tropwv eivai efikto. Par' ola auta diatnrouvtai ta pveumatika dikaiwmata twv keimevwv "Linux HOWTO", kai eivai epi8umntn n evnmerwsn gia opoiodnpote sxedio diavomns autwv.

Gia perissoteres plnrofories, epikoivwvnste me tov Greg Hankins, suvtovistn twv Linux HOWTO sto email: gregh@metalab.unc.edu, n sto tnlefwvo +1 404 853 9989.

Eidika, gia tnv ellnvikn ekdosn epikoivwvnste me tov Gewrgato Fwtn, sto: gef@hellug.gr

1.6 Note to english users & Copyright

* This document explains how to setup hellenic (greek) support under Linux. This includes the environment for greek users, as well as details on the configuration of applications. The document is written in modern hellenic ISO−8859−7, but you may find a "greeklish" version as well. Hellenic HOWTO is maintained by Fotis Georgatos < gef@hellug.gr> *

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If you have questions, please contact Greg Hankins, the Linux HOWTO coordinator, at gregh@metalab.unc.edu via email, or at +1 404 853 9989.

2.Egkatastasn

Quickstart gia Ellnves xrnstes:

- Ri3te mia matia oti upostnrizetai to hardware sas sto Hardware−HOWTO.
- Stnste mia apo tis diavomes Suse , Redhat , Slackware , Debian, OpenLinux. Agoraste tis n avtigrayte tis (epitrepetai!) apo to Internet: http://www.hellug.gr/gr/whatislinux/download.html.
- Ru8miste to sustnma sas va suvergazetai me tov ektupwtn, to povtiki, to modem, kai va snkwvei to grafiko periballov me tov window manager pou 8elete.
- Stnste ta ellnvika. Bl. epomevo upokefalaio Egkatastasi−Ellinikwn
- Ru8miste tis efarmoges (Netscape , Staroffice, shells kuriws) gia ta ellnvika.

2.1 Egkatastasn ellnvikwv

Ta bnmata diaferouv apo diavomn se diavomn, polu perissotero twra pou ta ellnvika evswmatwvovtai siga siga, stis diafores diavomes (Noembrios 1999).

Eav dev exete ndn ellnvika, loipov:

- **Greek−console** Stnste to greek−console , gia va exete ellnvika stnv kovsola me aristero alt−shift. rpm −i greek−console−1.1.0−3.i386.rpm. Snmeiwste oti kavovika dev 8a deite ellnvika sto prompt, alla movo mesa se editor, kai afou zntnsete chcp 928 gia to fortwma ellnvikwv fonts.
- **GRAFIS** Stnste tis grammatoseires graphis , gia ta Xwindows: xfntgr.rpm
- **GRkbd** Stnste to grkbd (odngos plnktrologiou), gia va mporeite va grafete ellnvika sta Xwindows. GRkbd−1.2−1.i386.rpm
- **XFGreekKBD** Eav to prongoumevo (grkbd) gia kapoio logo dev douleyei, katebaste auto. Eivai snmavtika pio poluplokos o tropos leitourgias tou apo to grkbd, eseis apla stnste to me tnv evtoln rpm −i XFGreekKBD−1.2−2.noarch.rpm

2.2 Xrnsimes sumboules

- To periodiko magaz exei polla ar8ra pou eivai e3eidikeumeva pavw se 8emata pou apasxolouv polu kosmo px **Tex/Latex, Samba, Staroffice, XISP, KDE, bash, Ellnvika, NLS** klp. To magaz exei pln8os apo erwtnseis pou exouv givei sto parel8ov, kai ligo polu oi erwtnseis epavalambavovtai.
- Afierwste arketo xrovo diabazovtas gia va evnmerw8eite gurw apo to problnma pou yaxvete, MHN paraleiyete va diabasete ta HOWTO kai FAQ (/usr/doc/faq) tou LDP project.
- Prospa8nste opwsdnpote va kavete ya3imo se palies erwtnseis. Oi erwtnseis pavw se 8emata ndn apavtnmeva eivai baretes. Ya3te sxetika 8emata apo tnv selida http://lists.hellug.gr/archives.
- Eav suvavtnsete problnmata, oi Ellnves xrnstes 8a mporouv va bon8nsouv mesa apo tnv lista linux−greek−users, ta newsgroups n ta sxetika IRC channels. Episns apo ekei 8a parete sumboules, gia to pws 8a ru8misete swsta to sustnma sas.
- Ta die8vn newsgroups comp.os.linux* eivai episns xrnsima, px news://comp.os.linux.misc
- **Mnv stelvete proswpiko email se kapoiov**, giati spavia uparxei o xrovos gia apavtnsn. Avti8eta protimnste tnv lista n to newsgroup, opou n pi8avotnta va parete apavtnsn eivai polu megalutern. PX, sto diko mou mailbox, suxva ftavouv grammata autou tou tupou:

  ```
  me lene Xxxxx spoudazo yyyyyyy kai arxisa na asxoloumai me to linux.
  Tha ithela na mou peis pou mporo na bro to programma.
  oti theleis na mou to steileis sto zzz@zzzzzzzzzz.zz
  ```
  Dev apavtw tetoia email, eidika otav to HOWTO kai to FAQ exouv tis apavtnseis, avtistoixa prattouv kai alloi. Deite kai auto eav dev peistnkate: Tinamhnkanete.html

2.3 Suse

- Mia katatmnsn tou diskou me 1Gb eivai logikn epilogn gia to Suse, ka8ws erxetai me polla paketa pou 8a 8elete va dokimasete (oxi oti dev mporeite va to stnsete se 40Mb).
- Ekkivnste tnv egkatastasn apo tn disketa n to 1o CD.
- Mesa apo to periballov egkatastasns epile3te pou 8a mpei to leitourgiko, me ti parametrous, kai poia programmata 8a balete.
- Afou akolou8nsete tis odngies pou exei stnv o8ovn, 8a kataln3ete sta telika stadia ru8misewv mesa apo to **Yast**, auto eivai to ergaleio me to opoio givetai administration, eav dev exete empeiria me UNIX.
- Ru8miste povtiki, karta diktuou, ektupwtn, scanner, modem mesa apo to yast.
- Molis 3emperdeyete kai me auto, tre3te to sax, auto ru8mizei to grafiko periballov.

- Mia kaln idea eivai pai3ete me to KDE (stnste to apo to yast eav dev to exete ndn kavei), kai va suvde8eite me to Internet me to kppp, eav exete dialup suvdesn.
- To suse perilambavei to **applixware office suite**, pou mporei va avtikatastnsei to office twv windows. Evallaktika uparxei to dwreav **staroffice**, pou 8a prepei va stnsete me tov kwdiko tou apo tov kombo tns stardivision, http://www.stardivision.com.
- Ta Netscape, nedit, x11amp eivai se pollous xrnsima.
- Palaioteres ekdoseis tou Suse exouv stov katalogo gia NLS "gr_GR" avti gia "el_GR" pou eivai to or8otero. 3eperaste to problnma me tnv evtoln "ln −s el_GR gr_GR".

Mia prwtn evtupwsn apo to Suse eixe parousiastei sto magaz, http://magaz.hellug.gr/05/03_suse.html, me idiaitera euvoikn kritikn (eivai n protimnsn tou grafovtos, toulaxistov gia to 1998−99, giati eivai 8bit clean kai upostnrizei kala to NLS). Agoraste to mazi me to egxeiridio kai dev 8a xasete.

2.4 Redhat

Eivai avtistoixn me tou Suse se megalo ba8mo, edw dev tnv perigrafoume avalutika. Deite review evos palaioterou distribution apo to magaz, http://magaz.hellug.gr/01/06_redhatinst.html kai mia avalutikn perigrafn gia to pws 8a to kavete va suvergazetai me ta ellnvika http://magaz.hellug.gr/13/03_grredhat2.html.

2.5 Slackware

As upo8esoume oti egka8istoume tnv diavomn **Slackware**:

- Epibebaiwse oti to sustnma sou exei xwro (Proteivetai 1 partition 512Mb)
- Promn8eusou to apo kapoio FTP site (bl. FTP) n agorase to se CDROM (bl. distribs), kalutera to deutero. Proteivetai to Slackware 3.6, apo to Developer's Resource tns Infomagic n alln sullogn.
- Ftia3e tnv Boot kai tnv Root disketa {5 Lepta}
- 3ekiva tnv egkatastasn. Eav eisai arxarios, kalov 8a eivai va epile3eis Typical Installation. Ru8mise to Lilo gia va kaveis reboot. {30 Lepta}
- Epavekkivnse to sustnma kai mpes sto Linux, gia prwtn fora, sav root (dev 8elei password) {2 Lepta}
- Alla3e to root password me tnv evtoln passwd

Pleov 8a exeis eva sustnma pou douleuei, alla prepei va kaveis akoma ta e3ns:

- Pngaive stov upokatalogo /usr/src/linux, kai ftia3e purnva gia to mnxavnma sou. {10+20 Lepta}
- Egkatestnse tov veo purnva me to Lilo, kai epavekkivnse to sustnma sou {5 Lepta}
- Tre3e to script XF86config, kai ftia3e to arxeio /etc/XF86config. Twra exeis Xwindows (dokimase X −probeonly, startx)
- Eav suvdeesai me to Internet me dial−up, katebase kai egkatestnse to Netscape Communicator gia browser, mailer, news reader. H teleutaia ekdosn eivai suvn8ws edw: ftp://ftp.ntua.gr/pub/www/Netscape/ Ru8mise ta ellnvika tou.
- XISP gia va suvdeesai sto Internet eukola. Polu kalo kai eivai kai Ellnva (Petros Mpouras).

2.6 Pros8etes ru8miseis

- Oi xrnmatistes as avatre3ouv sxetika me to euro (8a periexetai sto latin0=iso8859−15) stnv dieu8uvsn ftp://ftp.freshmeat.net/pub/euro−patch/EURO−1.4.tgz
- Egkatestnse tov ektupwtn sou. H diadikasia diaferei apo periptwsn se periptwsn, alla sxedov pavta xreiazetai to Ghostscript. Xrnsimo eivai to a2ps.
- Egkatestnse paketa pou se evdiaferouv opws Word processors, sxediastika, klp. Pi8avotata 8a breis polu boliko gia epe3ergasia keimevou to Nedit.
- Mnv 3exaseis va ri3eis mia matia sta alla FAQs kai HOWTOs (eivai sta agglika)
- Osoi exouv suvn8isei tov Norton Commander apo to DOS, 8a epitaxuvouv polu tnv ergasia tous me tov Midnight Commander.
- Osoi eivai pragmatika polu suvn8ismevoi sto DOS, mporouv va xrnsimopoinsouv tov emulator DOSEMU tou Linux, me tov opoio 8a eivai duvatov va tre3ouv tis perissoteres efarmoges DOS, katw apo Linux. Gevika dev uparxei problnma me ta ellnvika tou DOS katw apo X n kovsola alla isws xreiastei va kavete kapoies ru8miseis.
- Osoi 8elouv efarmoges Windows uparxei gia autous to Wabi apo tnv Sun, pou trexei pln8wra efarmogwv sumperilambavomevou kai tou Office. To Wabi omws stoixizei 200$, gia auto... dokimaste to Wine, Pou prosfata exei arxisei kai deixvei snmadia snmavtikns beltiwsns.
- Gia window manager proteivoume to KDE: http://www.kde.org/

3.Ru8miseis Ellnvikwv

Oloi oi Eurwpaioi xrnstes opoioudnpote leitourgikou sustnmatos, exouv duo problnmata: To prwto eivai n emfavisn twv eidikwv xaraktnrwv (grammatwv) tns glwssas, kai to deutero eivai va evnmerwsouv tov upologistn gia tnv allagn tou plnktrologiou. Malista ta pragmata eivai xeirotera, giati oi efarmoges dev perimevouv eidikous xaraktnres kai suxva apaitouv eidikes ru8miseis n metablntes periballovtos.

Gia tnv emfavisn twv xaraktnrwv xreiazetai va 3erouv oi efarmoges oti xrnsimopoieitai to set 737 n to 928 (=ISO−8859−7 n Latin−7). Epipros8eta 8a xreiastouv grammatoseires wste va faivovtai kai va tupwvovtai swsta ta ellnvika.

Gia mia grngorn egkatastasn ellnvikwv deite to avtistoixo kefalaio: Egkatastasi−Ellinikwn

3.1 Ellnvikes grammatoseires

Gia grammatoseires gia Tex, blepe Links−gia−Tex

GRAFIS

To egxeirnma **GRAFIS** exei skopo va sulle3ei oles tis ellnvikes grammatoseires gia X−Windows pou kukloforouv eleu8eres (PUBLIC DOMAIN) sto Diktuo, va tis omadopoinsei kata tupo n/kai xaraktnristika, va dior8wsei tuxov la8n pou autes exouv, va dnmiourgnsei vees grammatoseires kai telos, va tis paradwsei stnv Ellnvikn koivotnta ws public domain. Hdn to exei petuxei, deite http://hq.hellug.gr/~graphis/

To GRAFIS perilambavei OLA ta prongoumeva paketa me kales ellnvikes grammatoseires pou exouv kuklofornsei kata kairous:

- X11−Greek−Fonts (P. Christias, 1994),
- X11greek (P. Christias, 1996)
- greekXfonts−misc, (A. Haritsis, 1995)
- hrgrXfonts−75dpi, (Th. Prwtopapas & A. Haritsis @ HRI, 1995−6)
- hrgrXfonts−100dpi, (Th. Prwtopapas & A. Haritsis @ HRI, 1995−6)
- greekXfonts−BDF−1.1, (A. Haritsis, 1995−6)
- greekXfonts−Type−1.1, (A. Haritsis, 1995−6)
- XgreekFonts (Moraitakis Konstantinos, 1997)
- XFGreekFNTS (Panagiotis Vrionis, 1998?)
- elot7x14 + elot7x14B (A. Kavarnos, 1997)
- helv_R_O_10gr+helv_R_08gr+lutB_12_14gr (P. Bouras, 1998−9)

```
======================================================================
 Shmeiwseis apo Aggelo Xaritsi [ah@computer.org]:
 * ta Type1 (k.a.) 928 fonts moy exoyn to A tonoymeno se 2 theseis wste na
   einai symbata me windows texts. Epishs exoyn kai ta symbola poy leipoyn.
 * to kbd support gia ellhnika sto rxvt (poy exw kanei contribute) exei
   yposthriksh gia anw teleia kai ellhnika omoiwmatika kathws epishs
   kai grammata me tono/dialytika. Ola ayta prepei na perasoyn
   se X11 xkb-style (ala grISOXKb).

* X11greek:
Den iksera oti den bgainei h payla! An typwseis to PS bgainei
kanonika. Ara mallon einai bug toy X Type1 rasteriser.
BTW, exw kanei ki ena aplo filtro (grpsfilter) poy epitrepei printing
greek texts mesa apo Netscape. Des parakatw!
H lysh poy allazei ola ta ksena fonts se ellhnika den einai swsth.

To greekXfonts-full-1.1.tgz egine me skopo:
* na mazepsei ta pio kala greek fonts poy yphrxan sto diktyo
  Exei ta grtex/grtt kai polla alla: grfixed, couriergr, helveticagr.
  Akoma fonts kai se 737 encodings.
* na xrhsimopoihsei "swsta" (XLFD) kai omoiogenh font names
* na prosferei Type1 scalable fonts ypshlhs poiothtas (ta opoia
  prosferontai kai xwrista) - grinet
* na doyleyei trasnsparently me Netscape
======================================================================
```

Truetype

Teleutaia uparxei n duvatotnta va xrnsimopoinsei kaveis kai **Truetype** grammatoseires, me eva true−type font engine kai metatropeis, idavika gia osous exouv sulloges apo grammatoseires gia Windows/Mac. Deite http://www.freetype.org/ kai gia va stnsete true type grammatoseires sto magaz http://magaz.hellug.gr/10/05_TTFlinux.html.

Kaveva ergaleio gia va ftia3w fonts;

Ti fonts, bitmap (px. PCF/BDF) n Scalable (p.x. Type1, TTF) ;

Gia to prwto uparxouv diafora (xmbdfed polu kalo, xfedor oxi kai toso) Gia to deutero tipota ousiastiko (dustuxws). Dustuxws oti uparxei se stul Fontographer kai Icarus eivai se polu alpha stadio. To movo sobaro programma kai kata tn gvwmn mou to kalutero eivai to METAFONT alla 8elei diabasma.

Uparxei mia polu evdiaferousa selida sto diktuo: http://members.iworld.net/bumchul/xfont.html Stnv selida autn 8a brei kaveis − ektos apo plnrofories gia to pws 8a balei kaivouria fonts sto mnxavnma tou− ergaleia metatropns: px to ttftobdf. Episns uparxei to bdftopcf.

Evdiaferousa eivai episns kai n selida: http://user.online.be/gd33771/download.html me mia poikilia ttf fonts (px. gia va mporei kaveis va grafei got8ika se xterm)

3.2 Kovsola (text mode)

Oi teleutaies diavomes prepei va exouv ta ellnvika evswmatwmeva. Tre3te:

```
#setfont iso07.f16
#loadkeys gr
```

Eav dev deite muvnmata la8ous, tote exete ellnvika stnv kovsola ndn, allazouv me aristero ALT−SHIFT.

UP' OYIN: STO SHELL (bash, tcsh) DEN EXEI ELLHNIKA, KANONIKA. DOKIMASTE SE ENAN EDITOR, PX JOE,VI.

Greek−console

Stnv kovsola mporeite va xrnsimopoinsete to greek−console tou Giwrgou Keramida. Upostnrizei kai 737 kai 928, evw exei kai eukoln egkatastasn me rpm. Ta ellnvika faivovtai me "chcp 737" kai "chcp 928" kai (ap)evergopoiouvtai me (aristera) ALT−SHIFT. Episns to de3i ALT allazei stigmiaia to plnktrologio.

Purnves 2.2 kai ellnvika

H vea gevia purnvwv 2.2.x (kai ara kai oi 2.3.x), exouv veo kwdika gia tnv diaxeirisn tns o8ovns se text mode (eivai pleov me framebuffer) kai gia auto uparxouv problnmata stnv upostnri3n twv ellnvikwv stnv kovsola (oxi sto grafiko periballov). O Swtnrns Tsimpovns brnke tnv lusn, va proste8ei sto /etc/profile to e3ns:

```
[ −t 1 ] && printf "\033(K"
```

to opoio evergopoiei ta ellnvika otav kapoios kavei interactive login.

Loipa programmata gia kovsola

O Ale3ios Xouxoulas exei grayei episns to greek−2.0.tar.gz kai o Avtwvns Kabarvos (akav@hellug.gr) to grpty, pou douleuei kai se solaris.

3.3 Grafiko periballov (Xwindows)

Oi epiloges pou exei kaveis gia va grafei ellnvika katw apo XWindows se Linux eivai (perav tou va ta ftia3ei movos tou, px me xmodmap opws leei sto HRI): to GRkbd (n gevikotern lusn) , to grISOXKb (eav apotuxei to prongoumevo) kai to kikbd (gia to KDE).

GRkbd

To paketo auto apo to Giavvn Tsakirn eivai ousiastika mia snmaia pou allazei apo tnv mia glwssa stnv alln, opws 8umouvtai polloi apo ta windows−3.x. Eivai n pio eukoln lusn gia va exete ellnvika sto Linux sas kai 8a to breite sto metalab se source me to ovoma greek12.tgz kai stov Argea se binary. To tgz arxeio pou 8a katebasete, periexei eva README, kai eva ektelesimo pou 8a balete stov katalogo /usr/local/bin. Mia snmaia pou allazei apo ellnvikn se agglikn kai avapoda se ka8e klik, n me patnma tou aristerou ALT−SHIFT, 8a emfavistei stnv o8ovn otav to ektelesete. Diabaste to README.

KiKbd

To KiKbd eivai apo tous Alexander Budnik kai Dnmntrio Mpoura kai eivai evas komyos tropos va exei kaveis ellnvika sto KDE (sumperilambavetai). Douleye swsta me KDE=1.1.1 kai Qt=1.42 (alla oxi 1.44).

xgrk

Episns, eivai ev gvwsn mas n upar3n autou tou paketou gia ellnvika: http://www.softlab.ece.ntua.gr/~sivann/xgrk/ tou Spurou Iwavvou, pou eivai katallnlo gia polla tupou UNIX leitourgika sustnmata.

grISOXKb

H prwtn ekdosn tou grISOXKb (1997) eivai proiov suvergasias twv Dnmntrn Mpoura kai Leftern Tsivtzeln. To paketo grISOXKb eivai upersuvolo twv palaioterwv GRKbd (oxi auto tou Tsakirn − apln suvwvumia...) kai grXiso. H version autn exei polla "kaloudia". Ta duo pio snmavtika eivai:

- oti dev xreiazetai shared object binaries gia to X11R6.1 (XFree86 v3.2) kai X11R6.3 (XFree86 v3.3 kai v3.3.1), kai
- oti douleuei kai me X11 clients pou upostnrizouv glwsses ektos twv Agglikwv mesw tou compose tou input extension.

Perissotera sto README tou paketou, kai sta arxeia docs/INSTALLATION.*:
ftp://argeas.hellug.gr/pub/unix/linux/GREEK/grISOXKb−1.2.tar.gz

```
======================================================================
Apo [ah@computer.org]
Ta tonoymena (; + letter) de moy bgainoyn se shells (ok se xedit).
Den exw akomh brei giati.
To package einai ontws poly kalh prospatheia. Einai akoma ateles.
Leipoyn: tonoymena+dialytika, anw teleia, ellhnika omoiwmatika
(BTW, ola yposthrizontai sto rxvt compiled me greek support).
Epishs: ypothetei oti to keyboard einai ellhniko. Yparxoyn polla kbds
(opws ta UK, IT klp) poy exoyn polla symbols se theseis diaforetikes
apo to ellhniko (eg. @, ", \ klp). Exw hdh kanei patch sto grISOXKb
gia to UK keyboard kai kalo einai na mporei kaneis me COUNTRY−X
keyboard na mporei na kanei type ellhnika xwris na allazoyn oi theseis
allwn symbols.

Mazi me fix twn parapanw to XKB X11 greek support tha einai sxedon teleio.
Ksereis an kai poy exei documentation gia XKB kai compose files.
Kapoios prepei na to teleiwsei. Doyleyei kaneis twra se ayto ?
======================================================================
```

3.4 Zwvn wras (Timezone)

H Ellada brisketai stnv Wriaia Zwvn Avatolikns Eurwpns (Eastern European Timezone,EET), pou eivai isoduvamo me tnv wra Greenwich suv 2 wres (GMT+2), kata tnv xeimerivn periodo. To kalokairi otav givetai allagn wras, n swstn diafora eivai +0300 (EET DST), opou DST snmaivei Daylight Saving Time. Prokeimevou va givetai automata n metatropn, kalutera epile3te Europe/Athens. To 1996 alla3e n nmeromnvia allagns apo kalokairivn se xeimerivn wra (apo Septembrn, twra givetai Oktwbrn). Oi vees diavomes tou Linux meta to 1996 to exouv up' oyiv tous auto, oi palaioteres 8elouv dior8wsn. Deite ta epomeva upokefalaia sxetika me to 8ema.

tzHellas

Dhmhtrhs Bouras: Me to paron 0a h0ela na anakoinwsw ena mini−paketo pou parexei ena dior0wmeno arxeio gia to Ellhniko timezone, meta tis allages pou perisy kai fetos (1996) anakoinw0hkan gia tis hmeromhnies allaghs ths "kalokairinhs" wras. Mazi me auto yparxei kai ena mikro programmataki pou diabazei tetoia arxeia kai typwnei tis plhrofories pou periexoun se an0rwpina−anagnwsimh morfh (pws leme "human−readable form" − h metafrash twn agglikwn orwn dinei kai pairnei, etsi gia na anatrixiazoun merikoi−merikoi :) :)).

To paketaki (molis 4365 bytes) 0a to breite (entos oligou) sto

ftp://argeas.hellug.gr/pub/unix/linux/GREEK/tzHellas−271097.tar.gz

Katebaste to kai diabaste to README gia perissotera. Bottom line: to timezone file "Hellas" pou periexei, parexei swstes hmeromhnies allaghs wras (symfwna me thn prosfath epishmh anakoinwsh) gia thn Ellada, mexri kai ton Oktwbrio tou 2001, h mexri na mas alla3oune pali tis hmeromhnies... :)

EET.zic

```
======================================================================
An 8elei na orisei kaneis timezone environment variable, ayth einai h
svsth:
        setenv TZ 'EET-2EET DST-3,M3.5.0/3:00:00,M10.5.0/3:00:00'
vraio e? :-)

Pio kala bebaia einai na xrhsimopoioyme to svsto zoneinfo arxeio.
Oi teleytaies ekdoseis toy linux exoyn svsta orismeno
to EET (allakse to 1996).
Oi palaioteres allazoyn thn vra to Septembrio, anti toy Oktvbrioy.
Etsi ftiaxnoyme to parakatv arxeio EET.zic:

----- CUT: EET.zic -----
Rule    E-Eur   1986    max     -       Mar     lastSun 3:00s   1:00    " DST"
Rule    E-Eur   1986    1995    -       Sep     lastSun 3:00s   0       -
Rule    E-Eur   1996    max     -       Oct     lastSun 3:00s   0       -
Zone    EET             2:00    E-Eur           EET%s
----- CUT: END OF EET.zic -----

Meta:
        zic EET.zic
(ayto ftiaxnei to /usr/lib/zoneinfo/EET)
        /bin/rm -f /var/lib/zoneinfo/localtime
        ln -s /usr/lib/zoneinfo/localtime /var/lib/zoneinfo/EET
======================================================================
```

3.5 Ektupwseis

Se auto to kefalaio 8a perigrayoume pws va ru8misete to sustnma sas wste va mporeite va ektupwsete ellnvika. Av dev eiste e3oikiwmevoi me ta basika sxetika me ta lpd kai lpr kalo 8a ntav va sumbouleuteite to Printing−HOWTO pou divei polutimes plnrofories.

Plain text se text ektupwtn pou upostnrizei ellnvika.

Eav o ektupwtns sas mporei va tupwsei plain text kai upostnrizei ellnvika, dev xreiazetai va kavete sxedov tipota. Apla steilte to keimevo gia ektupwsn me tnv evtoln lpr. Prose3te movo to 8ema tou set xaraktnrwv: bl. kefalaio greekcharsets . Eav o ektupwtns sas upostnrizei diaforetikn kwdikoselida apo autn pou eivai grammevo to keimevo, 8a prepei va to metatreyete, bl. convertgreek .

Plain text se ektupwtn pou dev upostnrizei ellnvika.

Av o ektupwtns sas dev upostnrizei ellnvika, 8a prepei va metatreyete to plain text keimevo se PostScript mesw tou a2ps (bl. a2ps) kai va to tupwsete mesw tou Ghostscript. Eav exete problnmata, ya3te gia to a2psgr.

Tupwvovtas ellnviko PostScript keimevo.

Akomn kai eav dev dia8etete ektupwtn pou va upostnrizei PostScript, to Linux sas epitrepei va tupwvete tetoia keimeva mesw tou Ghostscript. To ghostcript eivai eva programma pou metatrepei PostScript arxeia se morfn pou mporouv va katalabouv alles suskeues (ektupwtes diaforwv eidwv, X Windows, fax k.l.). Apo auto to snmeio kai pera, "ektupwsn mesa apo to ghostscript" 8a snmaivei metatropn evos PostScript arxeiou sto format tou ektupwtn sas kai meta ektupwsn me kapoia evtoln tns morfns lpr file.

Ti 8a xreiasteite gia va tupwsete ellnvika apo to ghostview:

- Promn8euteite to ghostview (eivai tzampa) kai va to egkatastnsete.
- Na exete egkatestnmeves ellnvikes PostScript (type1) grammatoseires, kapou sto sustnma sas. Me auto evvow oti oi grammatoseires autes mporouv va briskovtai se opoiodnpote directory (p.x. kapou sto X11R6 tree, gia xrnsn mesa apo ta X Windows).
- Na tropopoinsete to arxeio Fontmap.

Dokimaste oti douleuei swsta px me tnv evtoln: {???}

gs −sDEVICE=deskjet −dNOPAUSE −sOutpoutFile=/dev/lp1 tiger.ps

Tropopoiwvtas to Fontmap

To Fontmap eivai to arxeio pou divei sto ghostscript pou 8a brei to arxeio ka8e grammatoseiras. Sto sustnma mou brisketai sto

```
/usr/share/ghostscript/3.33/Fontmap
```

. Av dev 3erete pou exei egkatasta8ei to diko sas, dwste

```
find / −name "Fontmap"
```

gia va to breite.

To Fontmap apoteleitai apo eggrafes tns morfns

```
/Charter−Roman                    (bchr.pfa)      ;
```

H grammn autn gia paradeigma deixvei oti n grammatoseira Courier−Roman brisketai sto arxeio bchr.pfa.

To movo pou xreiazetai va kavoume eivai va pros8esoume tis ellnvikes grammatoseires. Ta ovomata pou 8a dwsete stis grammatoseires sas mporouv va eivai opoiadnpote (p.x. PanosArialBold) alla kalo eivai va exouv mia logikn (p.x. to PanosArialBold va mnv avtistoixei se mia courier italic grammatoseira !!!). Av oi grammatoseires suvodeuovtai apo kapoio arxeio pou va tis perigrafei (p.x. fonts.scale) kalo 8a ntav va xrnsimopoinsete ovomata pou va eivai avtistoixa me auta pou divovtai ekei. Mporeite akomn va dwsete

```
strings filename.pfb | more
```

kai va koita3ete gia kapoia grammn tns morfns

```
/FontName /GreekArialBold def
```

Prosoxn! Ta ovomata twv arxeiwv otav dev perilambavouv to directory 8ewrouvtai pws briskovtai sto directory pou to ghostscript fulaei paromoia arxeia. Av oi grammatoseires sas briskovtai kapou allou va balete oloklnro to ovoma. Gia paradeigma,

```
/GreekArialPlain (/usr/X11/lib/X11/fonts/Type1GR/grkarip.pfb) ;
```

Av stelvete arxeia pros ektupwsn apo diafores efarmoges (p.x. Netscape) eivai polu pi8avo autes va xrnsimopoiouv kapoies default grammatoseires. Gia paradeigma, to Netscape 8a steilei opoiodnpote arxeio, ave3artnta apo tnv glwssa pou eivai grammevo, va tupw8ei me tis grammatoseires Times kai Courier. Auto 8a exei sav apotelesma va tupwvovtai ta ellnvika keimeva se akatavontn morfn (gia va to poume eugevika). H lusn eivai va pros8esete sto **telos** tou Fontmap eggrafes pou 8a avtika8istouv tis grammatoseires autes me tis ellnvikes. Gia paradeigma oi teleutaies grammes tou dikou mou Fontmap eivai:

```
/Times-Roman                    /GreekTimesPlain ;
/Times-Italic                   /GreekTimesItalic ;
/Times-Bold                     /GreekTimesBold ;
/Times-BoldItalic               /GreekBoldItalic ;
/Courier                        /GreekCourierPlain      ;
/Courier-Italic                 /GreekCourierItalic ;
/Courier-Bold                   /GreekCourierBold ;
/Courier-BoldItalic             /GreekCourierBoldItalic ;
```

H lusn autn dev eivai to idaviko alla toulaxistov douleuei.

Fontmap, pros8etes luseis

O 'Aggelos Xaritsns mou esteile tis dikes tou ru8miseis gia to problnma sxetika me to Fontmap, ka8ws kai eva programmataki, to grpsfilter (deite parakatw), me to opoio 8a mporesete va 3eperasete to problnma me to netscape xwris va peira3ete to fontmap.

```
Ta Fontmap aliases poy proteinw (kanei use ta Type1 fonts moy):
Pros to telos toy Fontmap:
===================cut==here========================================
% ----------------------------------------------------
% Elot greek fonts by Angelo Haritsis <ah@computer.org>
% ----------------------------------------------------
/GreekArialPlain                (grkarip.pfb)   ;
/GreekArialBold                 (grkarib.pfb)   ;
/GreekArialItalic               (grkarii.pfb)   ;
/GreekArialBoldItalic           (grkaribi.pfb)  ;
/Greek-Arial-Plain              /GreekArialPlain ;
/Greek-Arial-Bold               /GreekArialBold ;
/Greek-Arial-Italic             /GreekArialItalic ;
/Greek-Arial-Bold-Italic        /GreekArialBoldItalic ;
/Greek-Arial-BoldItalic         /GreekArialBoldItalic ;

/GreekTimesPlain                (grktimp.pfb)   ;
/GreekTimesBold                 (grktimb.pfb)   ;
/GreekTimesItalic               (grktimi.pfb)   ;
/GreekTimesBoldItalic           (grktimbi.pfb)  ;
/Greek-Times-Plain              /GreekTimesPlain ;
/Greek-Times-Roman              /GreekTimesPlain ;
/Greek-Times-Bold               /GreekTimesBold ;
/Greek-Times-Italic             /GreekTimesItalic ;
/Greek-Times-Bold-Italic        /GreekTimesBoldItalic ;
/Greek-Times-BoldItalic         /GreekTimesBoldItalic ;

/GreekCourierPlain              (grkcurp.pfb)   ;
/GreekCourierBold               (grkcurb.pfb)   ;
/GreekCourierItalic             (grkcuri.pfb)   ;
/GreekCourierBoldItalic         (grkcurbi.pfb)  ;
```

```
/GreekCourier                  /GreekCourierPlain ;
/Greek-Courier                 /GreekCourierPlain ;
/Greek-Courier-Plain           /GreekCourierPlain ;
/Greek-Courier-Bold            /GreekCourierBold ;
/Greek-Courier-Italic          /GreekCourierItalic ;
/Greek-Courier-Bold-Italic     /GreekCourierBoldItalic ;
/Greek-Courier-BoldItalic      /GreekCourierBoldItalic ;

% Polytoniko Greek fonts
/GreekPolyTimesPlain           (grkpolp.pfb)   ;
/GreekPolyTimesItalic          (grkpoli.pfb)   ;
/Greek-Poly-Times-Plain        /GreekPolyTimesPlain ;
/Greek-Poly-Times-Italic       /GreekPolyTimesItalic ;
===================cut==here=======================================
```

grpsfilter

```
Na kai to aplo filtro grpsfilter:
-----------------------------grpsfilter-----------------------
#!/bin/sh
# Filter to print greek from Netscape (may be used in printcap)
# (c) 1997 Angelo Haritsis <ah@computer.org>
# NB: You need my postscript greek fonts and proper Fontmap!
#
exec sed -e 's/\/Times\(.* findfont\)/\/Greek-Times\1/g' \
    -e 's/\Courier\(.* findfont\)/\Greek-Courier\1/g' \
    -e 's/\/Times-Oblique\(.* findfont\)/Greek-Times-Italic\1/g' \
    -e 's/\/Times-BoldOblique\(.* findfont\)/Greek-Times-BoldItalic\1/g'
-----------------------------grpsfilter-----------------------

An ftiakseis enan printer `grps' sto printcap poy pernaei ola ta
Postscript mesa apo to grpsfilter, tote exeis ellhnikh ektypwsh
xwris na "xalaseis" to FontMap.

Profanws to filter doyleyei kai sto cmd line. Apo Netscape print to
a file: test.ps kai meta:
  grpsfilter <test.ps | ghostview -
```

3.6 Pws kavw mount eva windows partition;

Proupo8esn gia auto eivai va exete kavei compile tov purnva me NLS, 737 kai iso−8859−7. Av 8elete va evergopoiouvtai ta ellnvika ovomata twv arxeiwv Windows automata se ka8e ekkivnsn tou sustnmatos, prepei va avtikatastnsete sto arxeio fstab stn grammn opou givetai mount tns katatmnsns me to vfat tn le3n default me tnv ru8misn iocharset=iso8859−7. Bazei kaveis parametrous sto /etc/fstab gia windows partition me ellnvika filenames, px:

```
/dev/hda1       /Win95  vfat    rw,user,codepage=737,iocharset=iso8859-7        0       0
```

n pervate tis parametrous kateu8eiav stnv evtoln mount, px:

```
mount -tvfat -onoexec,iocharset=iso8859-7 /dev/hda1 /Win95
```

3.7 Pws va grayw eva CD sto Linux;

Xrnsimopoinste to xcdroast, prose3te omws to format pou 8a diale3ete. To paradosiako protupo ISO9660 dev mporei va perilabei ola xaraktnristika pou exei eva UNIX filesystem opws auto tou Linux, to ext2. Avt' autou ta UNIX exouv to Rockridge, pou upostnrizei directories megalou ba8ous, mikra−megala grammata, ovomata me periergous xaraktnres (kai oi ellnvikoi eivai tetoioi gia ta CD), symbolic links, file permissions klp. To Romeo/Joliet pou eivai gia windows, dev eivai toso kalo oso to Rockridge (px dev grafei swsta ovomata pou arxizouv me teleia), gia auto xrnsimopoieiste stnv avagkn tnv xakia "Rockridge+Joliet", douleuei ayoga sto diabasma tou CD se polla leitourgika sustnmata.

Eav avarwtieste giati dev douleuei n egkatastasn tou Linux pou brnkate se kapoio CD, eivai polu pi8avos logos oti dev eivai Rockridge.

4.Efarmoges

Gevika, oi efarmoges prepei va metaglwttizovtai me NLS −otav uparxei− kai ws "8−bin−clean" giati ta ellnvika xrnsimopoiouv kai ta 8 bits.

Epeidn n glwssa eivai ta ellnvika, 8etoume: **export LANG=el** (bash/sh) n **setenv LANG el** (csh/tcsh). Kalov 8a eivai va oristei n metablntn periballovtos LC_CTYPE se iso_8859_7. Autn n ru8misn prepei va mpei sto /etc/profile kai sto /etc/csh.cshrc gia ru8misn se epipedo sustnmatos n sto /bashrc kai /cshrc gia xrnstes me bash/sh kai csh/tcsh kelufn avtistoixa.

Episns to /.Xdefaults n /.Xresources 8a prepei va periexei:

```
*basicLocale:   C
*timeFormat:    C
*numeric:       C
*displayLang:   iso_8859_7
*inputLang:     iso_8859_7
```

4.1 bash

Gia bash v.1.13+, pros8este to parakatw sto /etc/inputrc n sto /.inputrc, gia va exete ellnvika sto kelufos (grammn evtolwv):

```
set meta-flag on
set convert-meta off
set output-meta on
```

To idio isxuei kai gia sh.

4.2 csh/tcsh

```
    export LANG=el_GR
    export LC_CTYPE=iso-8859-7
    stty cs8 -istrip -parenb (???)

=====================================================================
     tcsh :
        Put the following in your /etc/csh.cshrc or .tcshrc file

          setenv LC_CTYPE iso_8859_7
          stty pass8

     Note: If this doesn't work your copy of tcsh was probably not compiled
     with NLS support or possibly it's version 6.03 or lower.

ftp://tesla.ee.cornell.edu/pub/tcsh.
DEN DOULEUEI (tcsh 6.06.00 13-5-95, options 8b, nls, dl ,al, sm)(???)
=====================================================================
```

4.3 ls

Gia va deite ta arxeia me ellnvika ovomata, ekteleste tnv evtoln ws "ls −N". Gia eukolia kavte tnv alias sto /.profile n balte tnv parametro −N sto $LS_OPTIONS eav dev eivai ndn:

```
export LS_OPTIONS="$LS_OPTIONS -N"
```

4.4 more

O Mavwlns Lourakns, < lourakis@csd.uch.gr> "peira3e" to "more" gia va deixvei 928 ellnvika, moreH: ftp://argeas.hellug.gr/pub/unix/linux/GREEK/moreH.tar.gz

4.5 less

Uparxouv diaforoi tropoi gia va douleyei to less, o ka8e evas me diaforetiko ba8mo duskolias:

- **less −r** (raw mode, mnv perimevete polu omorfa apotelesmata)
- **set LESSCHARSET="koi8−r"** (H pio eukoln lusn)
- **set LESSCHARDEF="8bcccbcc18b95.b128."**
- Me **upostnri3n NLS**, bl. confapps (H pio "sobarn" lusn)
- Na peira3ei to **charset.c** (Gia duvatous lutes):

```
----- CUT HERE - patch.in -----

*** charset.c.orig      Thu Aug  7 11:24:42 1997
--- charset.c   Thu Aug  7 11:25:02 1997
***************
*** 49,54 ****
```

```
--- 49,55 ----
        { "dos",        "8bcccbcc12bc5b95.b."           },
        { "koi8-r",     "8bcccbcc18b95.b128."           },
        { "next",       "8bcccbcc18b95.bb125.bb"        },
+       { "8859-7",     "8bcccbcc18b95.b128." }, /* By Antonis Kavarnos */
        { NULL }
  };
```

kai meta: **setenv LESSCHARSET "8859−7"**

4.6 a2ps

Uparxei mia eidikn metaglwttisn tou a2ps v4.0 (ascii to postscript), pou upostnrizei ellnvika, grammevn apo tov Mavwln Lourakn < lourakis@csd.uch.gr> kai tov Giavvn Mouzakn < mouzakis@csd.uch.gr>. Brisketai edw ftp://argeas.hellug.gr/pub/unix/linux/GREEK/a2ps_v4.0−greek.tar.gz { To standard a2ps tha exei syntoma swsth yposthriksh gia ellhnika. }

4.7 genscript

Evallaktika tou a2ps uparxei to **GNU enscript**, pou 8ewreitai kalutero kai perilambavei episnma upostnri3n gia ellnvika apo tnv ekdosn 1.6.0 kai meta. Gia perissoteres pnrofories deite:
http://www.csd.uch.gr/~lourakis/genscript/

4.8 vi

O vi opws tov trexete apo tis gvwstes diavomes 8a prepei va douleyei me ta ellnvika, xwris tropopoinsn, eav oxi, uparxei o viH (ellnvikos vi, 8a tov breite stov Argea) kai o vim.

```
=====================================================================
Shmeiwteon oti o vim meta thn ekdosh 4.x exei yposthriksh toy
langmap flag (prepei na ginei compile me ayto to flag - standard builds
den to exoyn synithws). To feature ayto, contributed apo ton
Angelo Haritsis <ah@computer.org>, einai meros toy standard vim
distribution kai oxi aplws ena palio patch.
Apo to documentation toy vim (:help langmap):
 langmap(lma):
     This option allows support for keyboards that have a mode for a
     special language.  The idea is that when you are typing text in
Insert mode your keyboard is switched in the special language mode, you
get different key codes for the special characters.  When in command
mode the 'langmap' option takes care of translating these special
characters to the original meaning of the key.  This means you don't
have to change the keyboard mode to be able to execute normal mode commands.
Exei kai to katallhlo setting gia ellhnika sto documentation.
Nomizw oti einai xrhsimo gia vi users...

++ Isws ena linux .rpm (properly built) tha htan xrhsimo.
=====================================================================
```

4.9 joe

O joe upostnrizei ellnvika eav evergopoinsoume 8bit support, eite trexovtas joe −asis, eite bazovtas tnv parametro −asis sto usr/(local/)/lib/joerc.

4.10 emacs

O Emacs 19+ exei diko tou tropo va diaxeirizetai to plnktrologio. Gi' auto kai dev douleuei opoiadnpote ellnvikn upostnri3n ftiaxtei gia tnv kovsola *kai* mesa stov Emacs.

H lusn eivai to paketo greek−mode.el, pou exei ftia3ei o Saravtos Kapidakns < sarantos@csd.uch.edu>. Gia perissoteres plnrofories, to idio to paketo mas parapempei stnv dieu8uvsn: http://www.ics.forth.gr/~sarantos/EMACS+GREEK opou uparxouv odngies egkatastasns. To idio to paketo mporei kaveis va to brei eukola kai stis selides tou Hellenic Resources Institute (HRI) sto tmnma pou avaferetai se Ellnvika gia UNIX.

```
=====================================================================
     emacs :
        In version 19.26 or later of GNU emacs you can simply  set the
        environment variable LC_CTYPE to iso_8859_7 like you do for tcsh
        and elm. If you use an older version put the following in your
        /usr/lib/emacs/site-lisp/default.el file:

          (standard-display-european t)

          (set-input-mode (car (current-input-mode))
                  (nth 1 (current-input-mode))
                  0)

     Dead key functionality should work under GNU emacs provided you use
     GNU emacs v19.30 or higher and XFree86 v3.1.2 or higher, so don't
     start researching available elisp packages implementing "electric
     keys" or anything like that. If you want to implement European
     keyboard conventions in emacs without upgrading the best choice is
     probably the remap package available from the AUC FTP server (see
     section ``References and FTP sites''.)
=====================================================================
```

4.11 xemacs

Gia va xrnsimopoinsei kaveis xemacs mazi me to kikbd (evdexomevws gevika), prepei va orisei duo grammes sto .xemacs−options:

```
(global-set-key 'Dacute_accent '"")
(global-set-key 'Ddiaeresis '"")
```

4.12 pine

To pine to movo pou xreiazetai eivai va oristouv sav "alternative editor" o joe n o viH. Upostnrizei movo 928, arkei sto setup, configure va balei kapoios character−set= ISO−8859−7 kai dev 8elei tipota allo (o pico 8a dexetai 8bit input).

4.13 elm

http://www.cs.columbia.edu/ akonstan/en/greek/elm−greek.txt

elm: Set the following environment variables

```
LANG=C
LC_CTYPE=iso_8859_7
```

Some versions of elm require that you put the following definitions in your /.elm/elmrc/ file:

```
charset = iso−8859−7
displaycharset = iso−8859−7
textencoding = 8bit
```

Kai to palio−kalo elm yposthrizei ellhnika, me ton katallhlo editor. Epishs yparxei mia nekranasthmenh ekdosh poy yposthrizei kai alla kaloydia, to elm−me: ftp://ftp.ozone.fmi.fi/KEH

{ −Me elm 2.4PL5, DEN DOULEYE− OXI PANTA TOYLAXISTON (???) }

4.14 metamail

To configure the metamail package for ISO 8859−7 input/output, set the MM_CHARSET environment variable with "setenv MM_CHARSET ISO−8859−7". Also, set the MM_AUXCHARSETS variable with "setenv MM_AUXCHARSETS iso−8859−7" (???)

4.15 telnet

To telnet 8a prepei va douleuei xwris problnma. Eav oxi, balte autn tnv grammn sto arxeio /.telnetrc:

```
set binary true
```

4.16 rlogin

Eav exete problnmata me to rlogin, dokimaste: "rlogin −8" n "rlogin −L".

4.17 xterm

Tre3te to e3ns: (n opoiadnpote ellnvikn grammatoseira)

```
xterm -f sc-elot16
```

n akoma kalutera pngaivoume sto arxeio /.Xresources, kai pros8etoume kapou (px sto telos) tnv grammn autn me to font pou 8eloume, px xterm*font:
−misc−fixed−medium−r−semicondensed−−0−0−75−75−c−0−iso8859−7

4.18 rxvt

To `rxvt` gia va mporesei va grayei kai va dei3ei swsta ta ellnvika xreiazetai duo pragmata

1. Ellnvikes Grammatoseires sta X11, bl. Ellinikes−grammatoseires
2. Kapoies parametrous stn grammn evtolwv, gia va gurisei se 8−bit mode kai va mnv agvoei to bit pou 3exwrizei ta ellnvika apo ta agglika. Oi magikes parametroi pou kavouv to `rxvt` sas ellnvikotato eivai:

   ```
   % rxvt -8 -meta 8thbit -font GREEKFONT ...
   ```

   kai mporeite safws va tis xrnsimopoinsete **mazi** me o,ti parametrous xrnsimopoieite kavovika sto `rxvt` sas.

```
======================================================================
To rxvt (xterm clone that uses less memory and runs slightly faster)
exei standard support gia full ellhniko keyboard (928 kai 437) poy exw balei
edw kai poly kairo.  Download the latest source kai compile me
#define GREEK_SUPPORT
sto feature.h

To rxvt yposthrizei ellhnika se efarmoges poy doyleyoyn mesa sto
rxvt terminal. Yposthrizei full set ellhnikwn (including:
tono-dialytika, anw teleia, ellhnika omoiwmatika).
Epitrepei kaneis na kanei type taytoxrona se 928 kai 437 se 2 katallhla
diaforetika rxvt windows.
Read file README.greek gia leptomereies.

H swsth lysh gia X11 bebaia einai ena complete XKB package poy tha
yposthrizei to plhres set ellhnikwn. Mexri tote to rxvt einai akoma
xrhsimo (epishs gia 737 taytoxrona me 928 keyboard).

++ Isws ena linux .rpm (properly built) tha htan xrhsimo.
======================================================================
```

4.19 minicom

To minicom eivai eva programma epikoivwviwv gia modem, pou 8umizei evtova Telix. H ellnvikn ekdosn upostnrizei 737, xrnsimo gia va mpaivei kaveis se BBS pou douleuouv katw apo DOS (sxedov oles oi ellnvikes eivai tetoies): ftp://argeas.hellug.gr/pub/unix/linux/GREEK/minicom−1.75−elf.tar.gz Perissoteres plnrofories: < roryt@hellug.gr>

```
{
Fantazomai minicom mesa se rxvt me 737 font kai encoding tha doylepsei
kanonika xwris tropopoihsh tou idioy toy programmatos (arkei na einai
8-bit clean).
}
```

4.20 samba

To Samba stis teleutaies ekdoseis (>=1.9.17 ?) dev xreiazetai tipota gia va blepoume ellnvika ovomata arxeiwv. Stnv 1.9.18p, dokimastnke auto me epituxia, tre3te to /usr/doc/packages/samba/examples/validchars gia va deite oti upostnrizovtai eav exete amfibolies.

Eav prepei pros8esete ta ellnvika, 8a pate sto [global] tou /etc/smb.conf, va pros8esete tnv grammn "valid chars = 0xa0 0xa1 0xa2 ... klp"

4.21 ispell

O Giavvns Kabaklns < kavaklis@hellug.gr> exei tropopoinsei to ispell, gia va upostnrizei 928 ellnvika. Episns exei eva le3iko sto paketo auto. To FTP site eivai: ftp://argeas.hellug.gr/pub/unix/linux/GREEK/ispellH.tar.gz Evallaktika tou ispell uparxei to aspell.

```
=====================================================================
ftp://ftp.cs.ucla.edu/pub/ispell/languages/ (???)

     ispell - Spell checking in Danish:
        First make sure you install version 3.1 instead of version 4.0
        of ispell.  The latter is obsolete and multiply brain-damaged.
        You can download the sources for ispell at the GNU archive at
        prep.ai.mit.edu, and you can get a Danish dictionary via FTP
        from ftp.iesd.auc.dk in /pub/packages/dkispell/. Follow the
        compilation instructions and you should have no trouble (One
        caveat: When defining the variables necessary for compilation
        you should slightly confusingly tell ispell that Linux is a Sys
        V type OS by defining the variable USG.)
        When you have installed the Danish dictionary for ispell you
        can check the spelling of a Danish language file by executing
        the command:

        ispell -d danish -T latin1 -w "??????" <your_danish_text_file>

        (Note for non-Danish readers: You can find dictionaries for most
        Western languages by reading the file Where included with the
```

```
        sources for ispell.)
=====================================================================
```

4.22 Midnight Commander

H emfavisn ellnvikwv ovomatwv kai periexomevwv arxeiwv sto mc evergopoieitai apo to mevou Options −> Display bits −> Full 8 bits output. Gia va grayei kaveis ellnvika stov epe3ergastn keimevou kai ta pedia dialogou tou mc, prepei va evergopoinsei sto idio mevou tnv epilogn Full 8 bits input. [N.Christou@S.andB.gr]

4.23 Staroffice

Gia office suite proteivoume to StarOffice 5.1.

Gia tov e3ellnvismo tou diabaste to eidiko keimevo StarOffice−and−Greek.

4.24 Netscape

Ta Netscape 3.x & 4.x exouv eggevn (merikn) upostnri3n ellnvikwv. Prwta apo ola, prepei va exoume kavei swsto Configuration twv X windows wste va "blepouv" ellnvikes grammatoseires. Av auto exei givei tote prepei va kavoume ta e3ns 3 bnmata gia va apeikovizovtai ta ellnvika PANTOU sto netscape.

- Na dnlwsoume swsto encoding/fonts
- Na peira3oume ta resources tou Netscape
- Na "ftia3oume" aliases gia ellnvikes grammatoseires iso8859−1 (vai, iso8859−1) kai Windows−1253 wste va blepoume ta ellnvika stis formes (to netscape mperdeuetai kai apekovizei tis formes movo me iso8859−1 grammatoseires). Oi grammatoseires windows−1253 xreiazovtai giati merikoi avegkefaloi web masters bazouv eskemmeva n apo agvoia sta .html tous: charset=windows−1253

Arxizoume :

- Exovtas avoixto to netscape, apo to mevou view−>encoding dialegoume to "Greek (ISO−8859−7)" kai pali apo to idio mevou to "Set Default Encoding". Meta apo to Edit−>Preferences, Appearence−>Fonts epilegoume sto pedio "For the encoding" to "Greek (ISO−8859−7)" kai sta 2 lists pio katw ta agapnmeva mas ellnvika fonts (ta helvetica kalutera!). Kavoume click sto OK.
- Sto directory tou netscape uparxei eva arxeio Netscape.ad. Eivai ta Resources. Av upo8esoume oti to netscape exei egkatasta8ei swsta px sto /usr/local/netscape, tote ekteloume sav "root" ta parakatw pou leitourgouv swsta toulaxistov sto netscape 4.03. (Proupo8esn va exoume ta fonts −greek−helvetica).

```
cd /usr/X11/lib/X11/app-defaults
\rm -f Netscape
grep -v 'fontList:' /usr/local/netscape/Netscape.ad >/tmp/Netscape
echo "*fontList: \
     -greek-helvetica-medium-r-normal-*-*-120-*-*-*-*-iso8859-7" \
     >>/tmp/Netscape
```

```
grep -v '^*defaultCharset:' /tmp/Netscape >Netscape
echo '*defaultCharset:       iso-8859-7' >>Netscape
chmod 644 Netscape
\rm -f /tmp/Netscape
```

* Sav root, sto directory pou exoume ta agapnmeva mas ellnvika fonts dnmiourgoume ta aliases ws e3ns:

```
cd /usr/X11/lib/X11/fonts/greek
mkfontdir
awk '{printf "%s %s\n", $2, $2}' fonts.dir |sed -e \
 's/iso8859-7/iso8859-1/' >>fonts.alias
awk '{printf "%s %s\n", $2, $2}' fonts.dir |sed -e \
 's/iso8859-7/windows-1253/' >>fonts.alias
```

* 3ekivoume ta X kai dialegoume sto edit−>preferences−>Appearance−>fonts ellnvika fonts gia to charset 'windows−1253' kai 'iso8859−1'. (vai ellnvika fonts gia to western charset iso8859−1!!!!).

Plnrofories 8a breite episns sto: http://www.ntua.gr/help.html

Netscape widgets

lazaros sotiriadis:

```
A epishs gia na vlepete ellinika se ola ta widgets prepei na dosete ti sosti gramatoseira sto
Netscape.ad i se arxeio pou tha kanete xrdb -merge i sto .Xdefaults tis exhs 4 seires :

*fontList: -*-couriergr-medium-r-*-*-*-120-*-*-*-*-iso8859-*
*XmTextField.fontList: -*-couriergr-medium-r-*-*-*-120-*-*-*-*-iso8859-*
*XmText.fontList: -*-couriergr-medium-r-*-*-*-120-*-*-*-*-iso8859-*
*XmList*fontList: -*-couriergr-medium-r-*-*-*-120-*-*-*-*-iso8859-*

Etsi tha blepete ellinika se Ola ta widgets se oles tis selides asxetos
an exoun sto source tous charset=windows-1253 kai akoma tha vlepete
ellinika sta bookmarks kai tha grafete fisika se ola ta widgets (p.x http://...)
```

Netscape fonts

```
Shmeiwteon  to greekXfonts-full-1.1.tgz prosferei 3 dynatothtes
gia ellhnika se Netcsape:
 * grinet (Type1),
 * grtex/grtt,
 * helveticagr/couriergr.
Ta Type1 einai to kalytero option (logw oti einai scalable) alla
dystyxws se XFree86 de fainontai toso kala logw kakoy Type1 rasteriser twn XFree.
Se alla unix/X exw anafores oti fainontai poly kalytera.

Polla sites exoyn dymanic font information gia ta keimena opote to Netscape
aytomatws tha dialseksei to katallhlo font. Ayth h praktikh synistatai
se webmasters ellhnikwn keimenwn.
```

5.National Language Support

To National Language Support (suvtomografia NLS) eivai mia duvatotnta pou exouv ta pio polla UNIX, wste va evnmerwvovtai oi efarmoges gia tis glwssikes ru8miseis tou xrnstn kai va parousiazouv ta muvnmata tous stnv avtistoixn glwssa.

To NLS xrnsimopoieitai apo polla GNU tools, eidika auta pou trexouv se periballov grammns evtolwv (Command Line Interface − CLI, dnladn to gvwsto prompt), kai upostnrizetai prosfata kai sto grafiko periballov (px KDE). H evnmerwsn twv efarmogwv givetai mesa apo metablntes periballovtos, me evtoles tou tupou LANG="el_GR". Apo Noembrn 1998 ta ellnvika 8a ru8mizovtai ws el_GR (me basn ta avtistoixa ISO protupa), kai elpizoume oti n allagn autn 8a perasei suvtoma stis diavomes.

Ergasia gurw apo to NLS exei kavei kai o Simos 3evitellns, deite to Greek−nls−HOWTO kai auto to ar8ro sto periodiko magaz: http://magaz.hellug.gr/09/04_nls.html.

PROSOXH: To parov kefalaio eixe graftei apo tov Taso Kapio, se mia epoxn pou to NLS dev upnrxe pavta stnmevo sto linux, kai to protupo ntav arketa asta8es (px, mporei va breite va leei gia gr_GR, avti el_GR).

5.1 Proetoimasia

PRWTA blepe poses kai poies eivai oi biblio8nkes tns C pou uparxouv sto sustnma sou. p.x.

```
ttyp3:~#ldconfig −v | grep libc.so
libc.so.4 => libc.so.4.7.2
libc.so.6 => libc−2.0.4.so
libc.so.5 => libc.so.5.4.33
```

Uparxouv 5 katngories libc kai dev eivai sumbates meta3u tous, osov afora ta locale pavta. (Autn tnv stigmn oi pio polloi exouv tis ekdoseis 4 kai 5)

1. libc 4 ??? (a.out)
2. libc 5.0.9−5.3.12
3. libc 5.4.x
4. glibc 1.x ??? (sav libc 5 gia merikes arxitektovikes Linux)
5. glibc 2.x.x (libc 6)

5.2 Egkatastasn Ellnvikwv Locale

Xreiazeste tis topikes ru8miseis (localedata), tov compiler localedef kai to diagvwstiko ergaleio locale.

- Uparxouv treis ekdoseis twv topikwv ru8misewv (Diaferouv elaxista)

    1. H pio palia apoteleitai apo ta

    ```
    ftp://dkuug.dk/i18n/WG15−collection/locales/gr_GR             (2679 bytes)
    ftp://dkuug.dk/i18n/WG15−collection/charmaps/ISO_8859−7:1987   (19768 bytes)
    ftp://dkuug.dk/i18n/WG15−collection/locales/en_DK             (101080 bytes)
    ```

    2. H alln, pio prosfatn ftp://ftp.debian.org/debian/ ... /sources/admin/wg15−locale_2.orig.tar.gz

(n se diafora CDROM me to debian) kai periexei ta

```
locales/gr_GR
locales/en_DK
charmaps/ISO_8859-7,1987
```

(Prepei va douleuei movo gia libc 5.4.x)

3. H pio kaivourgia ekdosn brisketai eite sto paketo pngaiou kwdika tns glibc 2.0.5 eite sav 3exwristo paketo sav glibc−localedata−2.0.5 Uparxei sto debian (ftp.debian.org),sto redhat (ftp.redhat.com) kai se mirrors tns gnu kai periexei ta gr_GR,en_DK,ISO−8859−7

- Ta localedef kai locale uparxouv sta paketa me tov pngaio kwdika twv libc 5 kai glibc 2. Episns kukloforouv se binary morfn apo to debian kai redhat kai sav tar.gz apo tnv gnu kai n ekdosn tous prepei va eivai idia me tnv libc pou exete (locale−5.x.y gia tnv libc 5.x.y kai to glibc−localedata−2.x.y gia tnv glibc−2.x.y)

Prwta pngaivete stov upokatalogo opou briskete gr_GR kai trexete tnv evtoln

```
>sed -e 's/am_pm "";""/am_pm   "<P*><M*>";"<M*><M*>"/' gr_GR > el_GR
```

(Gia duvatotnta ellnvikou PM kai MM kai n allagn ovomatos gia sumbatotnta me ta X) Kai gia elegxo

```
> tail -n 5 el_GR | grep am_pm
am_pm  "<P*><M*>";"<M*><M*>"
t_fmt_ampm ""
END LC_TIME
```

Twra sav root dnmiourgnste tous e3ns upokatalogous

```
# mkdir -m 755 -p /usr/share/locale/el_GR/LC_MESSAGES
# mkdir -m 755 -p /usr/share/i18n/charmaps
# mkdir -m 755 -p /usr/share/i18n/locales
# ln -sf /usr/share/i18n/charmaps /usr/share/i18n/charmap
```

Egkatastnste sta swsta mern ta el_GR, en_DK, ISO−8859−7 (n ISO_8859−7:1987 n ISO_8859−7,1987)

```
# cd (ekei pou eivai ta localedata)
# cp e?_??  /usr/share/i18n/locales
# cd ../charmaps
# cp ISO[-_]8859-7* /usr/share/i18n/charmaps
# cd /usr/share/i18n/charmaps
# ln -s ISO_8859-7,1987 ISO-8859-7
```

Metaglwttiste, av dev ta exete ndn se binary morfn, ta locale kai localedef. Auto givetai peripou etsi:

```
> cd ~/src
> gzip -dc libc-x.y.z.tar.gz | tar xvf -
> cd libc-x.y.z
> ./configure
> make clean; make depend
> cd locale
> make programs
> su -f root -c 'install -m 755 locale localedef /usr/bin'
```

Kai twra eiste etoimoi gia tnv metaglwttisn twv topikwv ru8misewv. Sav root:

```
# cd /usr/share
```

Se periptwsn pou exete mia libc

```
# localedef -ci locale/el_GR -f i18n/charmap/ISO-8859-7 el_GR
```

Se periptwsn pou exete duo p.x. libc−5.4.33 kai libc−2.0.4

```
# localedef-2.04   -ci el_GR -f ISO-8859-7 el_GR
# localedef-5.4.33 -ci el_GR -f ISO-8859-7 el
```

```
# chmod -cR a+r locale
```

Twra prepei va uparxouv auta katw apo to /usr/share/locale/el_GR (kai to el)

```
# ls locale/el_GR
LC_COLLATE    LC_CTYPE      LC_MESSAGES/  LC_MONETARY   LC_NUMERIC     LC_TIME
```

Mia dokimn. Gia kelufos tupou csh p.x. tcsh:

```
> setenv LANG el_GR
```

Gia kelufos tupou sh p.x. bash, ksh:

```
> LANG=el_GR ; export LANG
```

Dokimaste:

```
> locale
LANG=el_GR
LC_CTYPE="el_GR"
LC_NUMERIC="el_GR"
LC_TIME="el_GR"
LC_COLLATE="el_GR"
LC_MONETARY="el_GR"
LC_MESSAGES="el_GR"
LC_ALL=
> locale -c LC_TIME | head
LC_TIME
Kur;Deu;Tri;Tet;Pem;Par;Sab
Kuriakn;Deutera;Tritn;Tetartn;Pemptn;Paraskeun;Sabbato
Iav;Feb;Mar;Apr;Mai;Iouv;Ioul;Aug;Sep;Okt;Noe;Dek
Iavouarios;Febrouarios;Martios;Aprilios;Maios;Iouvios;Ioulios;Augoustos;Septembrios;Oktwbrios;Noembrios;Dekembrios
PM;MM
%a %d %b %Y %T %Z
%d/%m/%Y
%T
```

(H diamorfwsn allazei apo libc se libc)

Twra mporeite va dokimaste merikes efarmoges (arkei va exouv givei compile me mia sumbatn libc)

```
> unsetenv LESSCHARSET n unset LESSCHARSET
> less kapoio-keimevo-me-ellnvika
> cal
   Augoustos 1997
Ku De Tr Te Pe Pa Sa
                1  2
 3  4  5  6  7  8  9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31
```

Kai sto Netscape 4 (me libc 5.4.x x > 4) avoi3te to Mail & Discussions kai 8a deite sto Date tous mnves stnv mesn px 31/08/1997 kai tis nmeres sta ellnvika. Telos :–)

Egkatastasn Ellnvikwv mnvumatwv diaforwv efarmogwv

Edw uparxouv duo ave3artnta paketa to gencat kai to gettext a)To **gencat** erxetai mazi me tov pngaio kwdika tns ka8e libc (katw apo to nls/) n se binary p.x. gencat−x.y.z kai eivai e3artnmevo apo autnv opws kai to localedef. Metaglwttizei arxeia tupou International language text (.m) se katalogous.

b)To **gettext**, eivai ave3artnto apo tnv libc, kai uparxei suvn8ws se mirrors tns gnu p.x.ftp.kernel.org/pub/mirrors/gnu/gettext−0.10.tar.gz kai sta debian,redhat. (Gia va breite mia prosfatn ekdosn pate sto http://las.ml.org ya3te gia gettext) To xrnsimopoiouv sxedov ola ta paketa tns GNU {file,sh,text,net}−utils kai polla alla paketa p.x. (WindowMaker). Gia plnrofories deite to ftp.kernel.org/pub/mirrors/gnu/ABOUT−NLS, steilte mnvuma stnv ellnvikn omada sto el@li.org n gia va bon8nste mpeite stnv lista el−request@li.org me tnv le3n "subscribe" sto swma tou mnvumatos.

Autn tnv stigmn, apo o,ti gvwrizw, plnrws ellnvika mnvumata exei movo to tcsh 6.07.02 (me patches tou debian) kai xrnsimopoiei, dustuxws, to gencat.

5.3 Egkatastasn tou tcsh

Katebaste to **tcsh >= 6.07.02**. Breite to gencat (pngaios kwdikas libc,se binary apo redhat,debian) Protou metaglwttiste to tcsh. n

- Epe3ergasteite to config_f.h kai alla3te to #undef NLS_CATALOGS se #define NLS_CATALOGS Alla3te apo ola ta ellnvika arxeia nls/greek/* ta \",\',\v se ",',\n avtistoixa. Alla3te sto nls/Makefile to GENCAT=gencat se GENCAT=gencat −new −lang ANSIC n
- Katebaste to patch gia tnv ekdosn 6.07.02 apo to debian (ftp.debian.org/debian/hamm/hamm/source/shells/)

Metaglwttiste, egkatastnste, dokimaste to tcsh

```
>make
>make catalogs
>su -f root -c 'make install'
>su -f root -c 'install -m 644 tcsh.greek.cat /usr/share/locale/el_GR/tcsh'
>/bin/tcsh
>setenv LANG el_GR
>unsetenv NOREBIND (gia va afnvei grafete sta ellnvika)
>fkjg
fkjg: H evtoln de bre8nke.
```

Av dev sas bgalei ellnviko mnvuma tote

- Eleg3te to /usr/share/locale/el_GR/tcsh kai to /bin/tcsh

```
>ls -l /usr/share/locale/el_GR/tcsh
-rw-r--r--   1 root     root        47443 Iouv 12 21:27 /usr/share/locale/el_GR/tcsh
>file /usr/share/locale/el_GR/tcsh
/usr/share/locale/el_GR/tcsh: data
>ls -l /bin/tcsh
-rwxr-xr-x   1 root     root       270476 Sab Aug 10:23 /bin/tcsh
>date
Sab Aug   9 10:38 EET DST 1997
```

- Bebaiw8eite oti to gencat erxetai apo mia sumbatn libc

```
> gencat -V
localedef (GNU libc) 2.0.4
```

```
Copyright (C) 1995, 1996, 1997 Free Software Foundation, Inc.
This is free software; see the source for copying conditions.  There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
Written by Ulrich Drepper.
> ldd /bin/tcsh
       libnsl.so.1 => /lib/libnsl.so.1 (0x40003000)
       libncurses.so.4 => /usr/lib/libncurses.so.4 (0x4000a000)
       libcrypt.so.1 => /lib/libcrypt.so.1 (0x4004a000)
       libc.so.6 => /lib/libc.so.6 (0x40078000)
       /lib/ld-linux.so.2 => /lib/ld-linux.so.2 (0x00000000)
```

Av to mnvuma eivai kapws etsi

```
fkjg: ^H ^e^v^t^o^l^n ^d^e ^b^r^e^8^n^k^e.
```

1. Eleg3te ta permissions stnv /usr/share/locale/el_GR

```
> ls -l /usr/share/locale/el_GR
total 96
drwxr-xr-x   3 root     root         1024 Iouv 25 20:40 ./
drwxr-xr-x  68 root     root         2048 Aug   6 10:41 ../
-rw-r--r--   1 root     root        29156 Iouv 25 20:36 LC_COLLATE
-rw-r--r--   1 root     root        10428 Iouv 25 20:36 LC_CTYPE
drwxr-xr-x   2 root     root         1024 Iouv 25 20:34 LC_MESSAGES/
-rw-r--r--   1 root     root           95 Iouv 25 20:36 LC_MONETARY
-rw-r--r--   1 root     root           27 Iouv 25 20:36 LC_NUMERIC
-rw-r--r--   1 root     root          536 Iouv 25 20:36 LC_TIME
-rw-r--r--   1 root     root        47443 Iouv 12 21:27 tcsh
```

2. 3avakavete compile tis topikes ru8miseis me to localedef
3. Eleg3te tnv ekdosn tou localedef kai tns libc wste va eivai idies

```
> localedef -V
localedef (GNU libc) 2.0.4
Copyright (C) 1995, 1996, 1997 Free Software Foundation, Inc.
This is free software; see the source for copying conditions.  There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
Written by Ulrich Drepper.
> ldd /bin/tcsh
       libnsl.so.1 => /lib/libnsl.so.1 (0x40003000)
       libncurses.so.4 => /usr/lib/libncurses.so.4 (0x4000a000)
       libcrypt.so.1 => /lib/libcrypt.so.1 (0x4004a000)
       libc.so.6 => /lib/libc.so.6 (0x40078000)
       /lib/ld-linux.so.2 => /lib/ld-linux.so.2 (0x00000000)
```

4. Katebaste mia pio prosfatn ekdosn twv topikwv ru8misewv
5. Avaba8miste tnv libc

5.4 Ru8miseis diaforwv efarmogwv

Oi pio polles efarmoges to movo pou xreiazovtai eivai to LANG se el_GR.

- X gevika: a)Pros8este sto /usr/X11R6/lib/X11/locale/locale.alias to el_GR.ISO−8859−7 el_GR.ISO8859−7 b) Gia ellnvikous titlous kai ovomata eikovidiwv *titleEncoding: ISO8859−7 *iconNameEncoding: ISO8859−7
- LESS: MHN DHLWNETE TO LESSCHARSET. Me swsta locale, tnv swstn libc, kai to LANG se el_GR deixvei ta ellnvika kavovika. Efarmoges me mnvumata gettext

(/usr/share/locale/el_GR/LC_MESSAGES/*.mo): To LANGUAGE se el_GR.
- TCL/TK: Gia va sas afnvei va grafete ellnvika alla3te sto /usr/X11R6/lib/X11/locale/compose.dir apo iso8859−1/Compose C se #iso8859−1/Compose C
- XTERM: Parte tnv ekdosn tou xterm apo tnv Xfree86 3.3 (diaferei apo tnv ekdosn twv X11R6.3) kai metaglwttiste me −DI18N.
- SH−UTILS,FILE−UTILS,TEXT−UTILS: Merika programmata tous 8elouv glibc 2 gia dei3ouv ellnvikes nmeromnvies.
- SYSLOGD:???????
- Dikes sas efarmoges: Gia va mporeite va bazete mexri kai ellnvikes parametrous.

```
#include <locale.h>
.....
setlocale(LC_ALL,"");
.....
>dokimn --ola
```

Alles efarmoges kaveis;

5.5 Problnmata

Polla ;−).

Problnmata me tnv C Library (libc)

H METAGLWTTISMENH MORFH APO TA LOCALEDEF KAI GENCAT SUNH8WS ALLAZEI APO LIBC SE LIBC KAI ENA PROGRAMMA METAGLWTTISMENO ME TOUS HEADERS MIAS LIBC MPOREI NA MHN MPOREI NA DIABASEI THS TOPIKES RU8MISEIS FTIAGMENES APO ALLH BIBLIO8HKH.

Problnmata me ta X

Locale not supported from X library.(n kati paromoio) Eleg3te ta dikaiwmata stous upokatalogous

```
# chmod -cR a+r /usr/share/locale /usr/X11R6/lib/locale
```

Eleg3te ta Xresources kai ya3te gia tipota upopto

```
>xrdb -query
```

Blepe problnmata me tnv biblio8nkn tns C.

Problnmata pou dnmiourgouvtai otav ola eivai swsta ;−)

O daimovas syslogd apo8nkeuei ta dedomeva sta 7−bit kai polles efarmoges 8a tou stelvouv tis nmeromnvies sta ellnvika p.x.to PAM me apotelesma merikes fores va mnv mporeis deis tov mnva.

Merika programmata 8a perimevouv gia apavtnsn se erwtnsn "yes/no" avti gia "y" n "n"ta "v" kai "o" avtistoixa.

Stnv kovsola kalo eivai va exete mia grammatoseira iso−8859−7(ELOT−928). Eidika me ellnviko tcsh.

5.6 Epipleov plnrofories

- Linux Locales Mini HOWTO: ftp://metalab.unc.edu/pub/Linux/doc/HOWTO/mini/locales
- NLS repository: http://www.iro.umontreal.ca/contrib/po/
- NLS utilities for Linux: ftp://metalab.unc.edu/pub/Linux/utils/nls
- Public domain locale and charmap sources: ftp://dkuug.dk/i18n

Uparxouv ta man pages: locale.5 locale.7 setlocale.2

6.Tex/LaTex

To TeX/LateX eivai eva sustnma stoixeio8esias (typesetting), pou briskotav se eureia xrnsn stnv dekaetia 75−85. Eivai kai snmera xrnsimo gia tnv suggrafn epistnmovikou keimevou, ka8ws upostnrizei polu kala tis ma8nmatikes parastaseis (peta3te to word gia pavta), ta (polutovika) ellnvika kai luvei polla idioru8ma tupografika problnmata.

Ta sxetika me to TeX/LateX, uparxouv pleov se eva 3exwristo HOWTO: GreekTeXFAQ. Deite gia ta sxetika kai to kefalaio Links−gia−Tex .

To TeX eivai eva programma pou eftia3e arxika o ka8ngntns Donald E. Knuth tou Stanford University, gia to grayimo keimevwv me polla ma8nmatika. Arxika to TeX dev upostnrize ellnvika, para movo ta liga ellnvika sumbola pou xrnsimopoiouv oi ma8nmatikoi polles fores gia va dnlwsouv metablntes se e3iswseis opws:

```
$ y = \alpha\,x^2 $
```

opou to TeX avtika8ista to `\alpha` me to ellnviko "a".

Auto omws dev eivai kai toso boliko, giati to TeX xeirizetai kapws diaforetika ta ellnvika se math−mode (to eidiko mode tou TeX sto opoio grafetai ka8e e3iswsn) kai diaforetika se horizontal−mode pou grafetai to aplo keimevo. Kai safws kaveis dev 8a n8ele va prepei va grafei tragika pragmata opws:

```
{$\Epsilon$}$\lambda${$\lambda$}$\'\alpha${$\delta$}$\alpha$.
```

movo kai movo gia va grayei "Ellada".

Mia prwtn lusn nr8e me to project BABEL tou TeX−Users−Group, n opoia perigrafetai parakatw.

6.1 To project BABEL

To project BABEL mporei va bre8ei se ola ta Comprehensive−TeX−Archive−Network (CTAN) mirrors. Eivai sto directory `.../tex-archive/babel/` kai n ellnvikn upostnri3n tou BABEL uparxei sto `.../tex-archive/babel/greek/*` .

To project BABEL exei ftiax8ei kuriws apo 3evous, omws, pou dev grafouv se "pragmatika ellnvika", alla se greeklish. Etsi, gia paradeigma n le3n "Ellada" grafetai sav:

```
\GR{}Ella'da\EN{}
```

Pou eivai safws mia beltiwsn apo to apaisio `$...$` kolpo.

Me ta katallnla filtra to BABEL mporei va ftiax8ei etsi wste va upostnrizei pragmatika ellnvika, kai telika va grafei kaveis:

```
Ellada
```

kai to filtro va to metatrepei sto prongoumevo paradeigma, wste to BABEL va douleyei swsta!

6.2 Prospa8eies e3ellnvismou tou Tex/LaTex

Sto ITU (Ivstitouto Texvologias Upologistwv), uparxei eva project me to ovoma GRTeX. Blepe "Diplwmatikn ergasia GRTeX, Stefavos Maggavarns, Iouvios 1989, Patra, Tmnma Mnx. H/U kai Plnr."

Episns, o G. Spnliwtns exei kavei diplwmatikn ergasia sto Pav/mio A8nvas gia Ellnvika sto TeX/LaTeX.

6.3 Suvdesmoi gia Tex/LaTex

- http://magaz.hellug.gr/04/05_babel.html 1o ar8ro sto magaz gia ellnviko TeX/LateX
- http://magaz.hellug.gr/08/07_GreekTeXFAQ.html 2o ar8ro sto magaz gia TeX (Odngies egkatastasns – FAQ)
- ftp://ftp.tex.ac.uk:/pub/tex/fonts/greek/ Autos eivai o katalogos gia ellnvika sto CTAN
- ftp://obelix.ee.duth.gr/pub/TeX Kaln sullogn gia TeX kai ellnvika
- http://obelix.ee.duth.gr/eft/ Sullogos Ellnvwv filwv tou TeX
- http://obelix.ee.duth.gr/eft/Greekinf/ Diafora ergaleia gia LateX
- http://ctan.unsw.edu.au/tex−archive/help/greek/greek.faq faq gia ellnviko LateX, alla palio (4/94)

Oi e3upnretes tou **CTAN** (Comprehensive TeX Archive Netowrk) eivai:

- ftp.tex.ac.uk (128.232.1.87)
- ftp.dante.de (129.206.100.192)
- ftp.cdrom.com/pub/tex/ctan
- ftp.ee.up.ac.za

7.Hlektrovikn tekmnriwsn kai biblia

7.1 Linux Documentation Project

To Linux Documentation Project (LDP) eivai mia prospa8eia va graftei oln n tekmnriwsn tou Linux nlektrovika, kai va orgavw8ei eviaia. Ola ta HOWTO, FAQ, manual pages, Guides avnkouv sto LDP, kai briskovtai stov kombo tou metalab (http://metalab.unc.edu/LDP/). Na snmeiw8ei oti kai auto to keimevo eivai tmnma tou LDP kai brisketai: http://metalab.unc.edu/LDP/HOWTO.

Epimevete ellnvika omws kai protimate tous ka8reptismous (!) tou LDP:

- http://linux.forthnet.gr/LDP/, Contact: Sotiris Tsimbonis, tsimbonis@forthnet.gr, Updated: DAILY, Location: Katerini, Greece
- http://www.ichannel.gr/linux/LDP/, Contact: Dimitris Demiris, ddemiris@ichannel.gr, Updated: DAILY, Location: Volos, Greece

Olo to metalab (prwnv sunsite) uparxei kai stnv Ellada sto: http://sunsite.ics.forth.gr/

To tmnma gia linux eivai: ftp://sunsite.ics.forth.gr/sunsite/linux

7.2 Periodika

To ellnviko on−line periodiko **magaz** eivai prwtns dialogns: http://magaz.hellug.gr.

To **Linux Gazette** eivai eva kalo on−line periodiko stnv agglikn glwssa kai brisketai stnv dieu8uvsn: http://www.ssc.com/lg/. Mirror tou uparxei kai edw: http://www.eexi.gr/mirrors/lg/lg_frontpage.html.

To movo evtupo periodiko pou kukloforei stnv Ellada gia to Linux, eivai to (amerikaviko) **Linux Journal**, pou mporei va to promn8eutei kaveis apo ta texvika bibliopwleia kai katastnmata H/U, kuriws.

7.3 Biblia eidika gia Linux

Mark G. Sobell, A Practical Guide to Linux, Addison−Wesley Pub Co, ISBN: 0201895498 (*) Suvistatai avepifulakta, deite apo to amazon.com to e3wfullo tou: http://www.amazon.com/exec/obidos/ASIN/0201895498/.

M. Welsh, L. Kaufman, Running Linux, O'Reilly & Associates, ISBN: 1565921518 (*)

O. Kirch, Linux Network Administrator's Guide, O'Reilly & Associates, Inc. (*)

LDP, The Linux Bible 3rd Edition, Yggdrasil Computing, Inc.

7.4 Unix gia Arxarious

B.Kernighan, R.Pike, The UNIX programming Environment, 1984, ISBN 0−13−937681−X E3ngnsn tou Unix gia arxarious. Pukvogrammevo alla katavonto. Klassiko biblio pavepistnmiakwv sxolwv. (*) (**GR)

H. Hahn, A Student's Guide to Unix, McGraw Hill, 1993, ISBN: 0−07−025511−3 Eva polu kalo eisagwgiko biblio gia to Unix. Se apln glwssa o suggrafeas e3ngei stov arxario oti 8elei va 3erei gia to Unix kai to Internet. DEN APAITEITAI PROEMPEIRIA (*)

M. Waite, D. Martin e S. Prata, The Waite Group's Unix System V Primer, Sams, 1992, ISBN: 0−672−30194−6 Eva e3aireto egxeridio gia Unix/SVR4. (**GR)

D. Libes, S. Ressler, Life with Unix − A Guide for Everyone, Prentice Hall, 1990, ISBN: 0−13−536657−7 Otidnpote 8a 8elate va ma8ete gia to Unix. Periexei duseuretes plnrofories.

7.5 Unix gia Proxwrnmevous

M. J. Bach, The design of the Unix operating system, Prentice−Hall International, 461 pp, ISBN: 0−13−201757−1 Sumfwva kai me tov titlo tou, perigrafei tnv sxediasn tou Unix se ba8os.

P. Abrahams, B. Larson, Unix for the Impatient, Addison Wesley, 1995, ISBN: 0−201−55703−7 Keimevo avaforas sto Unix, suvoptiko alla kai plnres. Eivai katallnlo gia va briskei kaveis grngora kai me akribeia, apavtnseis se problnmata. (*)

W.R. Stevens, Advanced Programming in the UNIX Environment, Addison Wesley, 1996, ISBN: 0−201−56317−7 To katallnlo biblio gia opoiov 8elei va programmatisei sto Unix. (*)

W.R. Stevens, UNIX Network Programming, Addison Wesley, 1996, ISBN: 0−13−90012−X Eav skefteste va asxoln8eite me programmatismo se diktuo (px Internet, TCP/IP) nr8e n wra va agorasete auto to biblio. (*)

7.6 Diaxeirisn Sustnmatos

E. Nemeth, G. Snyder, S. Seebass, Unix System Administration Handbook, Prentice−Hall, 1995, ISBN: 0−13−933441−6 Klassiko biblio, biblos tou diaxeiristn (*)

D. r, B. Hunter, B. Smith, Unix System V Release 4 Administration, Hayden, 1991, ISBN: 0−672−22810−6 Sxoliazetai ws to aparaitnto biblio gia tnv orgavwsn evos praktikou, apodotikou kai paragwgikou Unix.

AEleen Frisch, Essential System Administration 2nd Edition, O'Reilly & Associates, 1996, ISBN 15659212755 Eva e3airetiko biblio gia Diaxeirisn Sustnmatos me polles plnrofories eidika gia to Linux. (*)

7.7 Asfaleia Sustnmatos sto Unix

S. Garfinkel, G. Spafford, Practical Unix Security and Internet, O'Reilly, 1996, ISBN: 0−937175−72−2 Ola ta aparaitnta metra gia va kavete to sustnma sas oso to duvatov asfalestero. (*)

7.8 Unix kai Internet

AA.VV., Building a Unix Internet Server, New Riders, ISBN: 1−56205−494−5 Periexei CD me ola ta xrnsima ergaleia, gia tnv egkatastasn evos Internet Server.

Que, Running perfect internet site with linux, U. Hoepli ed., 1995, ISBN 0789705141

7.9 Ellnvika biblia gia to UNIX

Osa biblia apo ta parapavw eivai me (*), uparxouv stnv Ellada, av kai ametafrasta. Osa biblia apo ta parapavw eivai me (**GR), uparxouv stnv Ellada metafrasmeva. Kalutera bebaia rwtnste sta bibliopwleia gia sigouria (bl. CDdistribs)

8.To Linux stnv Ellada

Oi evergoi Ellnves xrnstes prepei va eivai pleov pavw apo xilioi (Okt. 98) kai exouv sxnmatisei eva diktuo meta3u tous, pou perilambavei kombous FTP, news hosts me omades suzntnsewv, IRC channels kai proswpikes selides sto Internet. Ta pio snmavtika snmeia pou prepei kaveis va episkeftei eivai tov kevtriko ellnviko kombo www.linux.gr kai tis selides tou vomika avagvwrismevou sullogou Hellug, stnv dieu8uvsn www.hellug.gr. To −peripou mnviaio− periodiko magaz eivai evdeiktiko twv epituxnmevwv ellnvikwv prospa8eiwv: magaz.hellug.gr.

8.1 Listes kai omades suzntnsewv (Newsgroups)

H taktikn epikoivwvia Ellnvwv gia to Linux givetai apo tnv **linux.greek.users**, arxika ftiagmevn me prwtoboulia tou Giavvn Iwavvou, stov Argea (tote argeas.argos.hol.gr, vuv argeas.hellug.gr) kai twra trexei sto mnxavnma tou sullogou, Epeidn tnv lista tnv diabazouv polloi, pou pi8avov dev exouv ellnvika, eivai kaln taktikn va xrnsimopoiouvtai greeklish:

```
ayta edv, as poume, einai greeklish.
```

Uparxei kai list−news gateway tns **linux.greek.users** stnv dieu8uvsn: news://edessa.topo.auth.gr/local.linux.greek.users To gateway xrnsimeuei gia va summetexei kaveis kai va blepei ta 8emata xwris va xreiazetai va graftei. Ri3te mia matia, kai epavel8ete otav exete apories. Uparxei kai META FAQ stnv dieu8uvsn http://linux.forthnet.gr/~stsimb/linux/meta−faq.html.

Ektos apo tnv **linux−greek−users**, uparxei kai n **linux−howto** (apokleistika gia osous suvtnrouv keimeva tou linux sta ellnvika n avalambavouv va ektelesouv kapoies ergasies) kai n **hellug** (sxetika me tov pavellnvio sullogo).

H selida me tnv lista twv listwv mas eivai sto http://lists.hellug.gr/,

8.2 IRC

IRC channel, xrnsimo gia ameses erwtnseis kai suzntnseis, eivai to **#linux−gr**. H selida tou eivai http://www.co.umist.ac.uk/~vp/irc/ Aln8eia eivai oti to kavali eivai suxva xwris polukosmia, se tetoia periptwsn protimnste tnv linux−greek−users.

8.3 Fidonet

Sto Fidonet, uparxei n sxetikn omada suzntnsns "gr.unix", pou suvn8ws exei kai postings sxetika me to Linux. Tnv omada autn, mporei va tnv parakolou8nsei kaveis, apo tis BBS ellnvikou Fidonet (bl. http://www.fidonet.gr) Prosoxn 8elei to oti merikes fores suvavtame 737 ellnvika n/kai flames.

Kai edw uparxei fido−news gateway: news://news.fidonet.gr/fido.gr.unix kai news://edessa.topo.auth.gr/fido.gr.unix

8.4 Omades Ellnvwv Xrnstwv tou Linux

O sullogos HELLUG eivai de facto o pavellnvios sullogos twv xrnstwv tou Linux. 3ekivnse stnv A8nva apo tov Kwsta Blassn me autes tis selides stnv compulink: http://www.compulink.gr/linux/.

Mn episnma avagvwrismeves omades uparxouv stnv 8essalovikn (TheLUG) kai tnv Patra (PLUG). Oi omades eivai avoixtes se vea meln kai evdiaferomevous gia to Linux.

Eav evdiafereste gia tnv dnmiourgia evos LUG stnv perioxn sas, diabaste prwta auto: http://www.ntlug.org/archive/lug−howto/index.html.

HELLUG

O sullogos Ellnvwv Xrnstwv kai Filwv Linux HELLUG eivai evas mn kerdoskopikos, vomika avagvwrismevos sullogos apo tov Noembrio tou 1998. Osoi asxolouvtai me to Linux stnv Ellada, eivai kalo va eivai toulaxistov evnmerwmevoi gia tnv upar3n tou. O sullogos ev8arruvei opoiadnpote prospa8eia prow8nsns tou Linux, kai eivai pro8umos gia suvergasia me etaireies n idiwtes gia tnv prow8nsn tou Linux stnv Ellada kai tnv evnmerwsn gurw apo auto.

Gia perissoteres plnrofories deite: http://www.hellug.gr

PLUG

Stnv Patra, sto tmnma Mnxavikwv H/U kai Plnroforikns, edreuei to PLUG (Patras Linux Users Group). http://students.ceid.upatras.gr/~glavas/linux/

TheLUG

Stnv 8essalovikn, uparxei to TheLUG, pou edreuei se ...taberva. Deite sto http://hal.csd.auth.gr/thelug/

8.5 Egw pws mporw va bon8nsw

Kat' arxn yaxvovtas kai diabazovtas prwta kai meta rwtwvtas, giati kaveis dev exei kairo gia xasimo. Afou breite mia lusn pou dev eivai gvwstn, parakaloume evnmerwste kai tous upoloipous.

Oi pleov snmavtikes ergasies eivai:

- Lexis, Le3iko orologias plnroforikns (Aggloellnviko, gia omoiogeveia metafrasewv)
- Ellnvika HOWTOs, FAQs kai avtistoixn tekmnriwsn
- E3ellnvismos tou periballovtos kai twv muvnmatwv tou KDE, GNOME
- Upostnri3n ellnvikwv mesw NLS
- E3ellnvismos diavomwv, swstn upostnri3n ellnvikwv. To Suse brisketai ndn se kalo dromo.

Deite sto http://server.hellug.gr/LUGistics/el/pub/PRJ_main.php3 gia avalutikoteres plnrofories. Eav pisteuete oti eiste se 8esn va suveisferete se kapoio apo ta parapavw, parakaloume kavte to.

Eivai polu snmavtiko eav breite tnv lusn se kapoio problnma kai dev avaferetai stov kwdika n stnv tekmnriwsn (px se auto to keimevo), va avatre3ete stov avtistoixo suggrafea kai va tov evnmerwsete, n va grayete eva diko sas ar8ro gia to magaz n akoma kai HOWTO to opoio 8a prepei va mas steilete sto Hellug, gia va mpei mazi me ta alla ellnvika keimeva.

Eav prokeitai gia allagn se kapoio programma (px 8bit patch), apeu8uv8eite stov sxetiko programmatistn, n etoimaste mia compiled ekdosn gia tov ftp server tou Hellug. Prospa8eiste va kavete osov to duvatov pio oloklnrwmevn douleia kai akolou8eiste ta protupa kai me8odous pou akolou8ouv oloi oi alloi.

8.6 Internet Sites

WWW

- http://www.linux.gr
- http://www.hellug.gr
- http://magaz.hellug.gr

FTP

Episnmo pleov **FTP site** gia oti afora Ellnves kai Ellnvika sto Linux
ftp://argeas.hellug.gr/pub/unix/linux/GREEK/

Gia diavomes tou Linux deite:

- FTP.LINUX.GR − /pub/
- NTUA − /pub/linux
- Forthnet − /pub/linux
- Compulink /pub/linux

Komboi tns Allodapns :−)

- http://metalab.unc.edu/LDP/ Edw stegazetai to Linux Documentation Project, to kevtriko snmeio tekmnriwsns tou Linux
- http://www.linux.org/ Auto eivai to linux.org. 8ewrntika 8a eprepe apo edw va pngaivei kaveis grngora opoudnpote, alla auto dev sumbaivei pavta stnv pra3n. Eivai bebaia eva polu snmavtiko site.
- http://www.linux.eu.org/ To paveurwpaiko diktuo kombwv.
- http://www.li.org/ Edw brisketai to Linux International, meln tou eivai (megales) etaireies plnroforikns
- http://www.linuxnow.com/ O kombos autos eivai kaivourios kai arketa orgavwmevos. Periexei SOFTWARE, HOWTOs, FAQs, klp.
- http://www.ssc.com/lj/ H selida tou Linux Journal, mnviaiou amerikavikou periodikou gia to Linux
- http://www.ssc.com/lg/ H selida tou Linux Gazette, mnviaiou nlektrovikou periodikou gia to Linux
- http://www.linuxmall.com/ Autos o kombos eivai eva emporiko kevtro afierwmevo sto Linux.
- Yahoo.com−>computers−>operating_systems−>Linux H selida tou 8ematikou euretnriou tou Yahoo gia to Linux. Exei arketa pragmata.

8.7 Diavomes kai CD

To Linux epeidn eivai ftiagmevo apo pollous kai xwris kevtrikn orgavwsn, dia8etei polles "diavomes" (distributions), ka8e mia me ta dika tns xaraktnristika kai oxi aparaitnta kalutern se ola apo tis upoloipes:

- **Slackware** Palaiotera ntav n pio suvn8ismevn. H teleutaia ekdosn (5/99) eivai n 3.6, deite http://www.slackware.org
- **Redhat** Exei grafiko periballov egkatastasns kai eivai pio polu gia arxarious. Episns n egkatastasn ekkiveitai eukola apo DOS, grafovtas apla REDHAT. Megaln eukolia eivai to RPM pou epitrepei eukoln (ap)egkatastasn efarmogwv. Blepe http://www.redhat.com
- **Debian** Legetai kai GNU/Linux kai idiaitero xaraktnristiko eivai oti eivai upo tnv epibleyn tns GNU. Deite: http://www.debian.org
- **Hellenic** Ellnvikn diavomn, apo tnv Synaptic Ltd "Software Development & Trade". H diavomn autn exei e3avtln8ei kai eivai sxetika palia.
- **OpenLinux** Apo tnv Caldera, arketa sovarn diavomn me megaln apnxnsn stnv Amerikn. Deite http://www.calderasystems.com/products/openlinux
- **Yggdrasil** To prwto plug−n−play Linux. Deite: http://www.yggdrasil.com
- **Suse** H pio megaln se pwlnseis stnv Eurwpn. Uparxei se germavikn, agglikn, italikn, gallikn distribution. Deite: http://www.suse.de/e Apo tnv ekdosn 6.0 kai meta exei upostnri3n ellnvikwv evswmatwmevn, akoma kai egkatastasn sta ellnvika.

Apo tis diavomes autes prokuptouv kai ta avtistoixa CD:

- Walnut Creek (http://www.cdrom.com) Exei to Slackware.
- Redhat (http://www.redhat.com) Exei tnv omwvumn diavomn. Teleutaia ekdosn n 6.0
- SuSe (http://www.suse.com) Exei tnv omwvumn diavomn. Teleutaia agglikn ekdosn n 6.3 (Noembriou 1999)
- Infomagic http://www.infomagic.com Exei ta parapavw, tnv Debian KAI tous katalogous tou metalab.unc.edu kai tsx−11.mit.edu. Legetai "Linux Developer's Resource" eivai ligo apo ola kai exei 6 CD.

8.8 Bibliopwleia kai diavomeis twv CD

To Linux se CD to briskei kaveis sta e3ns katastnmata:

A8HNA:

- STEP, Aktn Moutsopoulou 36, TK18536, Peiraias, 4181239, Exei to Suse Linux (http://www.step.gr)
- Papaswtnriou A.E., Stourvarn 3, TK10682, A8HNA, 3809821, 3848254 (http://www.papasotiriou.gr)
- Papaswtnriou A.E., Kolokwtrwvn 10, Emp. Kevtro Kerasies Knfisias, 6231854
- Ekdoseis Kleidari8mos, Stourvarn 37, TK10682, A8HNA, 3829629, 3841021, 3300104 (http://www.klidarithmos.gr)
- Vertigo EPE, Mpotasn 6, TK10682, A8HNA, 3824536, 3806801 (+FAX)

8ESSALONIKH:

- Informatics Services Application, Dwdekavnsou 61, TK55131, Kalamaria, 031−424512, (http://www.suse.gr)

- Malliarns Paideia, Aristotelous 9 (http://www.malliaris.gr)
- Papaswtnriou A.E., E8v. Amuvns 40, 243660

PATRA:

- Papaswtnriou A.E., Maizwvos 58, TK 26221, 061−624918, 061−624917

H parapavw lista evdexomevws dev eivai plnrns. Eav gvwrizete kapoia stoixeia pou mou eivai agvwsta n avakribn, parakalw evnmerwste me.

9.FAQ

9.1 Pws 3ekivnse to Linux;

To Linux eivai ousiastika movo o purnvas tou Leitourgikou sustnmatos, kai 3ekivnse to 1990 apo evav fivlavdo foitntn tov Linus Torvalds, sav omadikn peiramatikn idea stov tote kaivourio 386. Ta upoloipa ta gvwrizete...

9.2 Ti logous exw gia va egkatastnsw to Linux;

Eav 8elete eva a3iopisto leitourgiko sustnma, me kaln apodosn, xwris kollnmata kai pln8wra efarmogwv kai dev fobaste eva kaivourio periballov ergasias, tote to Linux eivai gia esas. Mporeite px me ?.000drx va to agorasete se 6 CD, mazi me tis polles efarmoges tou, n va dwsete kati parapavw gia va parete mia eukoln sto stnsimo diavomn mazi me egxeiridio xrnsns.

To Linux eivai eva ka8ara 32bit Leitourgiko Sustnma, me poluepe3ergastikes (multitasking) duvatotntes. Stnv pra3n auto snmaivei, oti mporeite va trexete polles efarmoges tautoxrova, xwris kivduvo va "kremasei" o upologistns. To Linux exei:

- kalutern a3iopoinsn tou sustnmatos apo to DOS, Win 3.x
- kalutero multitasking apo ta Windows 95,
- kalutern apodosn apo ta Windows NT,
- polles efarmoges se sugkrisn me to OS/2.

To Linux ws gvnsio Unix, exei eggevws ulopoinmevo to TCP/IP, to prwtokollo tou Internet. Eivai katallnlo gia diktuakes efarmoges, kai mporei va douleyei me a3iopistia ws dromologntns n proxy. Exei POSIX compliance kai upostnrizei TCP/IP & SPX/IPX, SNMP & RIP, NCP, SMB. Ws server eivai polu duvato se oles autes tis periptwseis: file server, printer server, web server, ftp server, news server, mail (pop) server. Mporei va avtikatastnsei eva sustnma me Windows NT n Novell Netware DIAFANA gia tous clients. To Linux eivai suvufasmevo me to GNU project tns Free Software Foundation (FSF). To GNU ekfrazei mia filosofia suvergasias, opou kapoios pou grafei eva programma to dia8etei se olous aveu amoibns. Apotelesma autou eivai n eleu8ern avtigrafn tou, kai oti eivai dwreav. Stnv periptwsn twv CD, plnrwvei kaveis movo to kostos tous.

9.3 Pws mporw va ma8w ta basika gia to Linux;

Polu ektevns avalusn, ka8ws kai kala epilegmevo didaktiko uliko, sta agglika, uparxei edw: http://basiclinux.hypermart.net/basic/index.html#lessons.

9.4 Sumbatotnta;

Kat' arxnv to Linux diabazei ola ta fileystems twv allwv leitourgikwv (FAT, VFAT, FAT32, NTFS, HPFS, HFS, ISO9660, Rock−Ridge, Joliet, UFS klp).

- To DOSEMU 8a sas epitreyei va tre3ete efarmoges tou DOS pou trexouv se eikovikes mnxaves upo tov elegxo tou purnva (vm86). Douleuei polu a3iopista kai diati8etai dwreav opws to Linux.
- To WABI 8a sas epitreyei va tre3ete 16bit efarmoges twv WIN3.11, alla stoixizei 199$
- To WINE kavei tnv idia douleia dwreav, alla oxi toso kala. Teleutaia (1999) deixvei sobara snmadia wrimavsns.
- To Executor mporei va tre3ei efarmoges gia Macintosh.

Oi pio polloi evdiaferovtai gia va mporouv va diabazouv arxeia doc pou proerxovtai apo Office kai uparxei gia autous to StarOffice 5.1, pou diabazei mexri kai Word 97 keimeva. Eav apo8nkeuate ta dedomeva sas xrnsimopoiwvtas avoixta protupa (txt, dbf, html, rtf), 8a breite toulaxistov eva ergaleio gia va douleyete me auta, eav oxi...

9.5 Ti SOFTWARE upostnrizetai;

Praktika ta pavta, arkei va milame gia avoikta kai diadedomeva protupa kai prwtokolla: sxedov pote dev eiste o prwtos pou exei eva sugkekrimevo problnma kai kapoios allos to exei lusei gia esas.

To metalab eivai to kat' e3oxnv snmeio gia va brei kaveis programmata gurw apo to avtikeimevo pou tov evdiaferei, deite http://metalab.unc.edu/pub/Linux/

To Linux Software Map (LSM) exei olo to uparxov logismiko. Mporeite va kavete kai avazntnsn me le3eis kleidia. http://www.boutell.com/lsm/

Episns polu dnmofileis eivai kai oi selides tou Bill Latura: http://www.xnet.com/~blatura/linapps.shtml

9.6 Ti eivai to compile tou purnva;

Sto Linux tov purnva mporei kaveis va tov ftia3ei o idios, me mia diadikasia pou legetai compile. Av kai eivai duvatov va douleyei kapoios me evav etoimo, eivai kaln idea va ftia3ei evav purnva prosarmosmevo sto sustnma tou, idiaitera eav 8elei e3eidikeumeves duvatotntes. H diadikasia suvistatai idiaitera se autous pou 8elouv va mple3ouv me ta evdotera tou leitourgikou sustnmatos.

Oi evtoles pou xreiazovtai gia eva tupiko compile eivai (ta # eivai sxolia):

```
cd /usr/src/linux
make config      # n make menuconfig n make xconfig, exei kai help.
make dep
make clean
make zImage  # meta apo auto, uparxei o purnvas sto /usr/src/linux/arch/i386/boot/zImage
make modules # Ta modules ftiaxvovtai priv arxisei n diadikasia egkatastasns
make modules_install # Egkatastasn twv modules sto /lib
make install # prosoxn va uparxouv oi swstes ru8miseis sto /etc/lilo.conf
```

H teleutaia evtoln eivai autn pou 8a stnsei tov purnva (suvn8ws sto /vmlinuz), suvdeovtas tov me tov boot loader LILO. Eva reboot, 8a balei tov veo purnva se xrnsn... (molis brnkate tov movadiko logo pou kavei kaveis reboot me linux).

9.7 Ti eivai auto to SIG11;

To SIG11 eivai ousiastika eva sfalma prostasias (Protection Fault). Eivai arketa pi8avo va sumbei tnv wra pou ftiaxvoume purnva kai n aitia eivai oti to sustnma ekeivn tnv wra zorizetai − DIABASTE: Polla SIG11 snmaivouv kako uliko n problnmata sumbatotntas me tnv mvnmn,tov epe3ergastn, tnv mntrikn. Gia perissoteres plnrofories, deite: http://www.bitwizard.nl/sig11/

9.8 Uparxouv alla eleu8era Unix;

Sto xwro tou Unix exoume ta e3ns eleu8erns xrnsns leitourgika:

- Linux
- GNU Hurd
- FreeBSD
- NetBSD
- OpenBSD

Apo ola auta movo to FreeBSD exei praktikn a3ia, eivai idiaitera gvwsto gia tnv sta8erotnta tou kai tnv apodosn tou se sustnmata e3upnretwv me evtovn xrnsn (px ftp.cdrom.com). Eivai par' ola auta pio dusxrnsto apo to Linux, kai dev exei tetoia pln8wra logismikou. Teleutaia, trexei ta pio polla programmata tou Linux me e3omoiwsn. Eav 8elete va peiramatisteite me tupou BSD UNIX, a3izei va asxoln8eite mazi tou.

9.9 Basikn orologia

i18n

I{−− 18 letters −−}n = Internationalization

e13n

Europeanization

l10n

Localization

ANSI

American National Standards Institute, the US member of ISO

ASCII

American Standard Code of Information Interchange

CP

Code Page

CP850

Code Page 850, the most widely used MS DOS code page

CR

Carriage Return

CTAN server

Comprehensive TeX Archive Network, the world's largest repository for TeX related material. It consists of three sites mirrowing each other: ftp.shsu.edu, ftp.tex.ac.uk, ftp.dante.de. The current configuration, including known mirrows, can be obtained by fingering ctan_us@ftp.shsu.edu

DEC

Digital Equipment Corp.

DIN

Deutsche Industrie Norm (German Industry Norm)

DOS

Disk Operating System

EBCDIC

Extended Binary Coded Decimal Interchange Code −−−a proprietary IBM character set used on mainframes

ECMA

European Computer Manufacturer's Association

emacs

Editing Macros, a family of popular text editors

Esperanto

A synthetic, universal language developed by Dr. Zamenhof in 1887.

FSF

Free Software Foundation

FTP

File Transmission Protocol

GNU

GNU's not Unix, an FSF project

GPL

General Public License

IBM

International Business Machines Corp.

IP

Internet Protocol

ISO

International Standards Organization

KOI8

???−−−a popular encoding for Cyrillic on UNIX workstations

LaTeX

A macro package for TeX

MCS

DEC's Multilingual Character Set−−−the ISO 8859−−1 draft standard

MIME

Multi−Purpose Internet Mail Extension

OS

Operating System

POSIX

Portable Operating System Interface (an IEEE UNIX standard)

PS

PostScript, Adobe's printer language

RFC

Request for Comment, an Internet standard

sed

stream editor, a UNIX file manipulation utility

TCP

Transmission Control Protocol

TeX

Donald Knuth's typesetting program

URL

a WWW Uniform Resource Locator

US−ASCII

the US national variant of ISO 646, see ASCII

VMS

Virtual Memory System−−−DEC's proprietary OS

WWW

World Wide Web

X11

X Window System

10.Pivakes xaraktnrwv, character sets

O H/U gia va parastnsei ta glwssika sumbola xrnsimopoiei 1byte=8bit, dnladn exoume 2^8=256 diaforetika grammata. O kwdikas ASCII (American Standard Code for Information Interchange) orizei austnra movo ta prwta 128 sumbola (7bit). Ta alla misa sumbola xrnsimopoiouvtai gia apeikovisn eidikwv sumbolwv allwv glwsswv alla kai grafikwv sumbolwv. Avti8eta, me alles eurwpaikes glwsses ta ellnvika eivai e3' oloklnrou sta 8bit. O profavns logos eivai ta polla diaforetika sumbola pou exei n ellnvikn glwssa se sxesn me tis upoloipes.

Pros8etes plnrofories gia ta ellnvika sto Diadiktuo, mporeite va breite sto RFC 1947, "Greek Character Encoding for Electronic Mail Messages". Deite sxetika http://andrew2.andrew.cmu.edu/rfc/rfc1947.html

10.1 Tupopoinseis twv ellnvikwv

Ta ellnvika uparxouv se polles diaforetikes tupopoinseis. Oi pio suvn8ismeves apo autes, eivai ta 737 kai ta 928. Amfotera eivai gia movotovika ellnvika. Ta mev 737 xrnsimopoiouvtai apo to DOS, ta de 928 apo ola ta UNIX kai Windows (me mikres parallages). To Linux exei sav kuria kwdikoselida ta 928. To oti exoume gia Ellnvika duo kai pleov protupa, fusika, eivai megalo problnma, pou 3epervietai me eidikous metatropeis, gia allagn apo to eva set sto allo.

Apo tnv tekmnriwsn tns Oracle gia to Linux kai ta egxeiridia tou server, mporei kaveis va brei ta diadedomeva ellnvika protupa pou xrnsimopoiouvtai se baseis dedomevwv (ara kai sta pio snmavtika sustnmata H/U) kai tous tupopoinmevous (ma pali;) kwdikous tous:

- EL8ISO8859P7, Dnl. to ISO8859−7 gia to UNIX & Internet. Eivai gvwsto kai ws 928 & Latin7.
- EL8MSWIN1253, Ta Windows ellnvika
- EL8PC737, Ta DOS ellnvika
- EL8MACGREEK, O Macintosh xrnsimopoiei ELOT−823 (IBM 851).
- EL8MACGREEKS
- EL8PC437S
- EEC8EUROPA3
- EL8EBCDIC875, IBM mainframes greek character set
- EL8DEC, Auta eivai logika ta DEC, VAX/VMS ellnvika. (kaveis palios???)

Episns, to OS/2 xrnsimopoiei tnv kwdikoselida 869 kai 851 gia ta ellnvika.

10.2 737

Ta 737 eivai episns gvwsta kai ws 437G (=437Greek), giati proekuyav apo tropopoinsn twv amerikavikwv 437. Ta 737 prwtoemfavistnkav stis ellnvikes EPROM twv MDA kai Hercules kartwv grafikwv twv prwtwv PC, opou briskovtav dnladn sto HARDWARE. Xrnsimopoin8nkav kata korov sto DOS, kai gia auto ola ta arxeia pou proerxovtai apo ekei avamevetai va eivai 737. Epeidn ta 737 8ewrouvtai pleov kataloipo tou DOS, eivai kalutera va metatreyete ta arxeia pou eivai 737 se 928, bl. convertgreek . Sto Linux, n kwdikoselida 737 upostnrizetai plnrws movo stnv kovsola (text−mode), alla uparxouv kai merikes grammatoseires gia X−Windows.

Tropopoinsn purnva gia upostnri3n 737

Exouv avafer8ei periptwseis, opou to "d" (DELTA mikro) dev plnktrologeitai se kapoious purnves kai auto sumbaivei giati sumpiptei me to 128+ESC (128+27=155=asc("d")). Pngaivete sto /usr/src/linux/drivers/char/console.c, kapou leei:

```
              && (c != 127 || disp_ctrl)
              && (c != 128+27);
alla3te se
              && (c != 127 || disp_ctrl)
              /*      && (c != 128+27)*/;
```

kai kavete compile eva veo purnva.

737 se X−windows

Ta 737 upostnrizovtai se merikes apo tis fixed grammatoseires pou eivai sto paketo Grafis: graphis .

```
[ah@computer.org]'s report for names (from xlsfonts):
-misc-grfixed-medium-r-normal--0-0-75-75-c-0-grpc-737
-misc-grfixed-medium-r-normal--0-0-85-85-m-0-grpc-737
-misc-grfixed-medium-r-normal--14-110-75-75-c-75-grpc-737
-misc-grfixed-medium-r-normal--16-120-75-75-c-75-grpc-737
-misc-grfixed-medium-r-normal--23-179-85-85-m-120-grpc-737
-misc-grfixed-medium-r-semicondensed--0-0-75-75-c-0-grpc-737
-misc-grfixed-medium-r-semicondensed--10-100-75-75-c-60-grpc-737
-misc-grfixed-medium-r-semicondensed--13-120-75-75-c-60-grpc-737
-misc-grvga-medium-r-normal--0-0-75-75-c-0-grpc-737
-misc-grvga-medium-r-normal--13-120-75-75-c-60-grpc-737
  (nomizw kapoia exoyn bugs kai exw skopo na ta diorthwsw se next release).
```

10.3 928

Ta ellnvika 928 eivai n pio sugxrovn kai diadedomevn tupopoinsn kai ka8ierw8nke arxika apo tov ELOT. Argotera egivav apodekta kai apo tov ISO ws ISO−Latin−8859−7, n apla Latin7, akoma kai n UNICODE upostnri3n ellnvikwv basizetai se auta. Ta 928 xrnsimopoiouvtai se oles tis efarmoges twv UNIX, sto Internet kai apotelouv to snmerivo protupo kai gia to Linux. To protupo 928 upostnrizetai, kai stnv kovsola (text−mode), kai se grafiko periballov (X−Windows).

Windows−1253

H kuria apoklisn twv Windows ellnvikwv (Windows−1253) apo tnv tupopoinsn ELOT 928, eivai o xaraktnras "A", (A tovoumevo) tou 928 o opoios sta Windows avtistoixei sto Paragraph mark. Apo ta Windows−1253 leipouv episns n avw teleia, kai ta ellnvika omoiwmatika << kai >>. Epeidn moiraia 8a prepei va apodextoume tov periorismo auto pou mas 8etouv ta MS−Windows, kai epeidn arketoi xrnstes xrnsimopoiouv wintel platforma ergasias, kalo 8a eivai va apofeugetai to < A tovoumevo > kata tnv apostoln e−mails, postings, klp. Evallaktika mporeite va xrnsimopoieite to 'A (' = SHIFT+") Paromoia problnmata uparxouv kai me ta 'E kai 'O. Gia eukolia sas, auta eivai ola ta tovoumeva kata 928: AEHIOYO.

10.4 Unicode

Ta UNICODE (ISO 10646) eivai 16bit (dnl. 65536 suvdiasmoi) kai perilambavouv polles glwsses, mazi me ta vea ellnvika, pou exouv offset #370 kai ta arxaia ellnvika me offset #1F00. Upostnrizovtai apo ta vea mexri ta arxaia (polutovika) ellnvika kai Grammikn B! To Linux upostnrizei eswterika ta UNICODE, alla akoma n xrnsn tous dev eivai diadedomevn, giati e3artatai kai apo tnv uio8etnsn tous apo tis efarmoges. Gia perissotera deite: http://linuxdoc.org/HOWTO/Unicode−HOWTO.html

```
====================================================================
Vasilis Vasaitis <vas@hal.csd.auth.gr>:
 Av kai dev exw asxoln8ei ektevws me to avtikeimevo, mporw va suveisferw
kapoia gvwsn pou exw epi tou 8ematos. Loipov, exoume kai leme:

  Kapoia stigmn, se avupopto xrovo, eixa katebasei eva Unicode fixed font
gia ta X windows. Epeidn duskola sbnvw auta pou katebazw, to brnka va
ka8etai akoma sto disko mou. H grammatoseira autn dev periexei to plnres
Unicode, afou auto apoteleitai apo perissoterous apo 38000 xaraktnres, apo
tous opoious oi perissoteroi eivai Kivezika/Iapwvika/Koreatika, pou etsi ki
alliws sto 6x13 tou fixed dev mpaivouv. Omws me peripou 2800 xaraktnres (n
ekdosn pou exw egw toulaxistov) kaluptei plnrws tnv lativikn, ellnvikn,
kurillikn, armevikn, gewrgiavn kai ebraikn grafn, suv kapoia texvika kai
ma8nmatika sumbola. H grammatoseira autn mporei va xrnsimopoin8ei ws protupo
apo opoiovdnpote evdiaferetai va sxediasei grammatoseires me pollous
xaraktnres sxetika me pio praktikes efarmoges, deite parakatw. H selida tou
tupou pou tnv eftia3e, av eivai akoma n idia, eivai:

  http://www.cl.cam.ac.uk/~mgk25/

        Upostnri3n stnv kovsola:

  H kovsola upostnrizei Unicode edw kai kati aiwves, mesw bebaia tou UTF8
(gia osous dev 3erouv, to UTF8 eivai mia avaparastasn tou UniCode me
metablnto mege8os, to opoio gia gia tous 128 prwtous xaraktnres exei tnv
idia morfn me to ASCII). To 8ema eivai oti etsi ki alliws n upostnri3n tns
VGA gia xaraktnres pou emfavizovtai sugxrovws eivai polu periorismevn (256,
512 xwris to avabosbnma).

        Upostnri3n sta X:

  H grammatoseira pou avaferw parapavw douleuei mia xara, kai n teleutaia
fora pou tn dokimasa ntav priv polu kairo. Episns, tuxaivei va exw evav X
server me evswmatwmevn upostnri3n TrueType fonts (dev fortwvw font server),
kai blepw oti kai ta TrueType douleuouv mia xara. Gia osous dev 3erouv, ta
XFree86 4.0 8a erxovtai me evswmatwmevn upostnri3n TrueType. H Microsoft
(dev exw apo alln etaireia) xrnsimopoiei stis grammatoseires tns to Windows
Glyph List 4 (WGL4), to opoio eivai uposuvolo tou ISO 10646−1 (ligo polu
auto pou exei n grammatoseira pou periegraya arxika).

        Efarmoges:

  Edw katarreouv ola. Autn tn stigmn uparxouv kava duo programmata pou
kavouv metatropn apo/pros UTF8, to yudit kai to Netscape pou mazeuouv apo
edw ki apo ekei gia va brouv arketa sumbola tou Unicode, kai apo ekei kai
pera to xaos. Pavtws kalov 8a eivai va arxisei prospa8eia gia ta fonts, kai
favtazomai oti oi efarmoges 8a koita3ouv va akolou8nsouv.

---------------

Report apo Panagioti Vrioni:
```

```
Gnwrizw oti o Giannis Gyftomitros <yang@hellug.gr> exei hdh arxisei
na asxoleitai me thn dunatothta dhmiourgias Unicode grammatoseirwn
pou na periexoun kai ta ellhhnika (Project Grafis, bl. GRArial k.l.),
isws na exei proxwrhsei kai parapera...

Apo thn ekdosh 6.0, o XFS pou periexetai sto Red Hat exei patch wste
na mporei na emfanisei Trye Type Fonts. Bl. sxetiko "White Paper" stho
"support" ths http://www.redhat.com/ . An balete Unicode TTFonts
(px. ths M$) auta paizoun, me thn ennoia oti fainontai dia8esima
ta fonts me xilia-duo diaforetika encodings. Den kserw omws an paizoun
kai san unicode grammatoseira, px. gia na dei kapoios ena keimeno
me ellhnika, agglika kai kinezika tautoxrona sto Netscape.

=====================================================================
```

Unicode Links

Uparxei mia fixed grammatoseira gia Xwindows, deite sxetika:
http://www.cl.cam.ac.uk/~mgk25/ucs−fonts.html

Uparxei kai evas text editor gia Unicode, me to ovoma Yudit,
ftp://metalab.unc.edu/pub/Linux/apps/editors/X/yudit−1.1.tar.gz

To protupo UTF−8 eivai pleov standard sto Internet, deite to sxetiko RFC:
http://andrew2.andrew.cmu.edu/rfc/rfc2279.html

Perissotera gia ta vea ellnvika sta Unicode edw: http://charts.unicode.org/Unicode.charts/normal/U0370.html

10.5 Metatropeis ellnvikwv

gr2gr

O Aggelos Xaritsns < ah@computer.org> exei grayei tov metatropea autov:
ftp://ftp.hri.org/pub/greek/programs/gr2gr.prl Trexei me perl (5 n 4). Suvepws douleuei se opoio leitourgiko sustnma exei egkatasta8ei perl (unix, dos, win32, os2, mac, vms ...).

Upostnrizei polla diaforetika ellnvika, opws:

- 928: ELOT 928
- 437: IBM 437 (*default* input)
- lat: latin greek form, aka greeklish (*default* output)
- 437b: IBM 437b
- win: Windows
- mac: Macintosh
- 851: 851
- 869: 869
- quad: quadtek

- sym: standard Symbol font codes (English garbled)
- wgr: WinGreek (Windows shareware prg) encoding
- troff: troff symbol font escape sequences, no diacritics (dialytika)
- kdtex: Dryllerakis TeX (only conversions _to_ kdtex work)
- ibytex: ibygrk TeX (only conversions _to_ ibygrk work)

grfilter

Sto Ivstitouto Texvologias Upologistwv uparxei to grfilter: ftp://ftp.cti.gr/pub/src/grfilter.tar

greek2lat

Sto directory ftp://corfu.forthnet.gr/pub/greek2lat uparxei evas metatropeas apo 928 se greeklish, katallnlos kai gia WEB sites.

trans120.tar.gz

O Kwstas Kwstns, < kosta@kostis.net > exei grayei episns autov tov metatropea, pou upostnrizei kai polla ellnvika, alla kai alles glwsses: http://www.kostis.net/freeware/trans120.tar.gz

gkconv

Uparxei kai eva programma tou Giwrgou Spnliwtn, metatrepei 437, Win95, X win. H dieu8uvsn tou agvoeitai.

recode

Auto eivai eva programmataki gevikns xrnsns apo to GNU project, to opoio upostnrizei metatropeis gia polles diaforetikes glwsses (kai ellnvika). Isws 8a eprepe ola ta upoloipa programmata kapoia stigmn va evswmatw8ouv se auto. Deite stnv dieu8uvsn http://www.delorie.com/gnu/docs/recode/recode_toc.html

10.6 Tupoi arxeiwv kai metatropn tous

.txt, .doc

Avaloga me tnv periptwsn, blepe convertgreek

.dbf

Suvn8ws eivai 737, 8elouv prosoxn stnv metatropn, afnste to gia kava guru.

.diz,

Suvn8ws eivai 737, blepe convertgreek

.html,

Prepei va eivai 928, kai faivovtai kavovika.

.mov, .avi

Av exei upotitlous sta ellnvika, 8a eivai OK :−)

.exe, .com

peta3te ta

10.7 Ti uparxei akoma sto Internet sxetika me ellnvika;

Xrnsimoi suvdesmoi:

- Ellnviko Fortune: http://kronos.eng.auth.gr/~arvan/fortunes/
- Virgo help on greek: http://www.virgo.gr/baza/greek.html
- Hellenic Resources Institute (HRI): http://www.hri.org
- Font pivakes sto HRI: http://www.hri.org/fonts/unix/pinakec.html
- fonts@argeas: ftp://argeas.hellug.gr/pub/unix/linux/GREEK/fonts/
- fonts@HRI: ftp://ftp.hri.org/pub/greek/fonts/x−win/
- Selida tou Pavagiwtn Bruwvn gia grammatoseires: http://users.hol.gr/~vrypan/cactus/grfonts−1.html
- Unix Greek Language Software (old): http://www.cs.columbia.edu/~akonstan/en/greek/software.html
- Unicode Organization: http://www.unicode.org
- I18N FAQ: http://www.vlsivie.tuwien.ac.at/mike/i18n.html
- ISO fonts: ftp://ftp.vlsivie.tuwien.ac.at/pub/8bit/ISO−fonts
- International fonts: ftp://ftp.vlsivie.tuwien.ac.at/pub/8bit/i18n−fonts
- Using 8 bit characters: ftp://ftp.ulg.ac.be/pub/docs/iso8859/
- ISO−8859 sets: http://wwwwbs.cs.tu−berlin.de/~czyborra/charsets/
- Much charactersets info (kermit?): ftp://kermit.columbia.edu/kermit/charsets/
- http://www.ora.com/homepages/comp.fonts/

Yaxte va breite oti xreiazeste me auto to search engine: http://www.google.org

---

11.TODO

To kefalaio auto periexei diafores ata3ivomntes plnrofories eite giati dev eivai epibebaiwmeves eite giati dev eivai akoma safes pws 8a topo8etn8ouv stnv domn tou basikou HOWTO. Eav mporeite, avalabete eva sugkekrimevo 8ema, breite tnv lusn tou, katagrayete tnv kai steilte tnv.

11.1 sgmlutils

To sgml2html htan ok. A na po oti ekana mia allagh sthn consola gia ta ellhnika (to paketo me to chcp enos apo thn patra) kai ka8e fora pou trexo thn perl mou bgazei: perl: warning: Setting locale failed. perl: warning: Please check that your locale settings: LC_ALL = (unset), LC_CTYPE = "iso_8859_7", LANG = (unset) are supported and installed on your system. perl: warning: Falling back to the standard locale ("C"). −−−−−−−−− Prepei na dwseis sgml2txt −−charset=latin. Panayotis.

11.2 groff

Deite sxetika to ar8ro apo tov Giwrgo Keramida sto magaz: http://magaz.hellug.gr/09/03_groff.html

```
=====================================================================
[...]
H alln lusn (pio hackeradikn) eivai va kaveis to GROFF sou (to basiko
ergaleio pou xrnsimopoieitai apo to sgml2txt) va katalabaivei OLOUS
tous 8-bit characters, pairvovtas to SHAR pou stelvw parakatw kai
kavovtas oti leei to README tou.
Giorgos.

--- cut here : shell archive follows ---
#!/bin/sh
[...]
exit 0
=====================================================================

The GNU replacement for nroff, groff, has an option to generate ISO
8859-1 coded output, instead of plain ASCII.  Thus, you can preview
nroff documents with correctly displayed accented characters.  Invoke
groff with the "groff -Tlatin1" option to achieve this.

Groff is free software. It is available from URL
<htmlurl url="ftp://prep.ai.mit.edu/pub/gnu" name="ftp://prep.ai.mit.edu/pub/gnu">
and many other GNU archives around the world.
```

11.3 KDE

O Pavagiwtns Bruwvns < vrypan@hellug.gr> exei 3ekivnsei tnv metaglwttisn tou KDE, evos grafikou periballovtos gia Linux/Unix. Deite sxetika: http://users.hol.gr/~vrypan/cactus/kde.html, H ergasia autn eivai polu snmavtikn ka8ws ola deixvouv oti to KDE 8a epikratnsei gia eva megalo xroviko diastnma, suvdiazovtas eukolies pou parexovtai se alla grafika periballovta, opws to drag'n'drop, polla xrnsima utilities me koiva xaraktnristika (copy−paste), eukolia xeirismou klp.

11.4 vim,viH

```
Den doyleyoyn oloi oi vi 8-bit, oyte deixnoyn ta ellhnika svsta:
Yparxei enas (toylaxisto) vi clone poy legetai vim (vi improved)

        http://www.math.fu-berlin.de/~guckes/vim/
        ftp://ftp.oce.nl/pub/misc/vim

Aytos ektos apo alla kaloydia, einai 8-bit clean kai exei kai ena
language feature, to opoio energopoieitai dior8vnontas to arxeio
        src/feature.h

Ekei poy leei:
        #if 0
        # define HAVE_LANGMAP
        #endif
to kanoyme bebaia
        #if 1
        # define HAVE_LANGMAP
        #endif

Meta bazoyme sto ~/.vimrc to parakatv:
----- .vimrc CUT -----
version 4.6
set langmap=AAAAA?CEEEEIIII?NOOOOO?OUaaaaa?ceeeeiiii?nooooo?ou;ABGDEZHUIKLMNJOPRWSTYFXCVabgdezhuiklmnjoprwstyfxcv
----- END OF .vimrc CUT-----
kai meta oi entoles poy dinoyme sto vi mporei na einai kai me ellhnika grammata.
(kserete ti spasimo einai na exeis to plhktrologio gyrismeno sta ellhnika
kai na mhn dexetai entoles).
```

11.5 nn

(???) === Add the line −−−−−−−−−−−−−−−−−− set data−bits 8 −−−−−−−−−−−−−−−−−− to your /.nn/init (or the global configuration file) in order for nn to be able to process 8 bit characters ===

11.6 tin

(???)

11.7 mtools

```
        Deixnoyn, ypoti8etai, ellhnikoys xarakthres an baloyme to
parakatv sto ~/.mtoolsrc h sto /etc/mtools.conf:

        country="30,737,/dosfs/c/win/command/country.sys"
```

```
Mallon 8a yparxei mperdema me ta ellhnika (737 h 928?)
Den to exv dokimasei.
```

11.8 jove

```
to new JOVE 4.16 if compiled with CTYPE enabled ( -DUSE_CTYPE
-UNO_SETLOCALE) kanei mia xara ellhnika. Prepei omvs na exeis
swsto 8859-7 locale ellhnikvn sto systhma
Mexri kai svsto Upper kai lower casing kanei ! dokimaste to
[From: Angelos Karageorgiou <angelos@incredible.com>]
```

11.9 pcal

```
{
Ftiaxnei Postscript calendars se 7 diaforetikes glwsses. To
internationalisation toy pcal egine apo ton A.Haritsis
 <<htmlurl url="mailto:ah@computer.org" name="ah@computer.org">>
kai erxetai me sxedon plhres ellhniko eortologio (me kinhtes kai
akintes eortes aytomata topothetoymenes).
Ta hmerologia poy paragontai einai highly customisable (mporei kaneis
eykola na balei proswpikes hmeromhnies).
Yparxei kai ena WWW front-end sto:
http://www-asds.doc.ic.ac.uk/cgi-bin/grcal
Ta latest sources toy pcal einai sto:
http://uptown.turnpike.net/~rogers/
}
```

11.10 kermit

(???) ===
kermit : This is as close as I can get, but not completely satisfying yet: Put the following in your /.kermrc file

```
          set terminal bytesize 8
          set command bytesize 8
          set file bytesize 8
          set language danish
          set file character-set latin1-iso
          set transfer character-set latin1-iso
          set terminal character-set latin1-iso
```

I think there are more variables to set, but they are hiding. You would have to modify these settings if the remote system is DOS or OS/2 based.
===

11.11 SHMEIWSEIS

```
{tty -s}
------------
       "language"_"country"."character_encoding"
        el_GR.8859-7

It looks as if "language" is the two-letter code for the language from
ISO 639, and "country" is the two-letter code for the country from ISO
3166, but I don't know of any standard specifying "character_encoding".
------------
```

Opoios eftase ws edw sigoura 8a paei polu mprosta...