Ellhniko NT OS Loader + Linux mini-HOWTO

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1 Perilhch

Ayto to keimeno perigrafei thn xrhsh toy Windows NT boot loader gia thn ekkinhsh toy Linux. Oi diadikasies aytes exoyn elegx8ei me ta Windows NT 4.0 WS kai to Linux 2.0.

2 Pws doyleuei o NT OS Loader

Ston NT OS loader aresei na exei to boot sector twn allwn dia8esimwn leitoyrgikwn systhmatwn dia8esimo san arxeio. Diabazei to arxeio ayto kai ekkinei to epilegmeno leitoyrgiko susthma, p.x. NT se diaforetikous tropoys leitoyrgias (modes) h kapoio allo leitoyrgiko.

3 Symboyles gia to pws 8a egkatasthsete Windows NT kai Linux sto idio Susthma

3.1 Egkatastash twn Windows NT

Prospa8hste na egkatasthsete prwta ta NT. An 8elete na xrhsimopoihsete NTFS gia thn katatmhsh twn Windows NT, shmeiwste pws, h shmerinh ekdosh toy Linux den mporei na exei prosbash se katatmhseis NTFS.

Enas alpha odhgos poy mporei na diabazei katatmhseis NTFS diati8etai sto `http://www.informatik.hu-berlin.de/~loewis/ntfs`. Mporeite na dhmioyrghsete mia jexwristh katatmhsh FAT gia antallages dedomenwn h 8a prepei na xrhsimopoihsete DOS-formatted disketes.

3.2 Katatmizontas

Ena allo Mini-howto synista na mhn xrhsimopoieite ton "Disk Administartor" twn NT gia na dhmioyrghsete tis katatmhseis Linux swap kai root. Arkei na doume mono ton eleu8ero xwro. Kai egw epishs systhnw thn xrhsh toy linux fdisk, se metepeita bhma.

3.3 Egkatastash Linux

Ekkinhste to linux (p.x. apo disketes), kai dhmioyrghste tis katatmhseis toy swap kai toy root. To fdisk 8ewrei thn katatmhsh ntfs ws mia katatmhsh HPFS. Ayto einai fysiologiko. Ekkinhste jana kai egkatasthste to Linux sas, opws 8elete.

Gia thn periptwsh poy h diadikasia egkatastashs proteinei pws 8a mporousate na prosarthsete kai thn katatmhsh HPFS poy brhke: Agnohste to.

3.4 Lilo

Otan ftasete sto Tmhma toy Lilo, prosdioriste thn kuria katatmhsh Linux san thn syskeyh ekkinhshs sas, giati o Master Boot Record (MBR) toy sklhrou sas diskoy exei katalhf8ei apo ta Windows NT. Ayto shmainei pws h eggrafh gia root kai h eggrafh gia boot sto `/etc/lilo.conf` sas, exoyn thn idia timh. An exete enan sklhro disko IDE kai h katatmhsh toy Linux einai h 2h, h eggrafh boot sas sto `/etc/lilo.conf` moiazei san:

```
boot=/dev/hda2
```

An exete duo diskoys kai to Linux edreuei sthn prwth katatmhsh toy deuteroy diskoy sas, h boot eggrafh sto `/etc/lilo.conf` moiazei me:

```
boot=/dev/hdb1
```

Trejte to lilo me enan pyrhna poy kanei gia to susthma sas. Elegjte ton pyrhna ekkinwntas prwta apo disketa an den eisaste sigoyroi.

An den mporeite na ekkinhste Windows NT twra, exete kapoio problhma. Elpizw na exete dhmioyrghsei prosfate mia disketa repair .

4 Bootpart

Yparxei ena programma gia ta NT poy legetai bootpart, grammeno apo ton G. Vollant, poy mporei na kanei tis doyleies twn epomenwn dyo bhmatwn gia esas. To Bootpart diati8etai sto `http://ourworld.compuserve.com/homepages/gvollant/bootpart.htm`.

An 8elete na ma8ete pws synergazontai metaju toys ta pragmata, xrhsimopoihste tis diadikasies poy perigrafontai sta shmeia 5 kai 6.

5 To Linux meros ths doyleias

8a prepei na ekkinhsete me disketes mexri na ftiaxtei to NT meros ths doyleias.

Twra 8a prepei na ejagete ena bootsector mesw ths katatmhshs toy Linux-root. An /dev/hda2 einai h katatmhsh toy linux, h entolh dd einai:

```
# dd if=/dev/hda2 of=/bootsect.lnx bs=512 count=1
```

Yparxei kati la8os an to bootsect.lnx exei mege8os megalutero apo 512 bytes.

Antigracte to arxeio bootsect.lnx se mia DOS formarismenh disketa, an aytos einai o tropos sas na antallassete arxeia me thn katatmhsh NTFS-Windows.

Mporeite na to antigracete me

```
# mcopy /bootsect.lnx a:
```

h me

```
# mount -t msdos /dev/fd0 /mnt
# copy /bootsect.lnx /mnt
# umount /mnt
```

6 To Windows NT meros ths doyleias

Antigracte to arxeio apo th disketa sto `C:\\bootsect.lnx`. Den 8a sas pw pws na to kanete ayto.

Oti einai to lilo.conf gia to linux einai to `c:\\boot.ini` gia ta Windows NT. Apomakrunetai tis idiothtes (attributes), system kai read-only prin to tropopoihsete me:

```
C:\attrib -s -r c:\boot.ini
```

Twra allajte to arxeio boot.ini me kapoion epejergasth, to notepad gia paradeigma, ws akolou8ws:

```
[boot loader]
timeout=30
default=multi(0)disk(0)rdisk(0)partition(1)\WINNT
[operating systems]
multi(0)disk(0)rdisk(0)partition(1)\WINNT="Windows NT Workstation ...
multi(0)disk(0)rdisk(0)partition(1)\WINNT="Windows NT Workstation ...
C:\BOOTSECT.LNX="Linux"
```

Mono h teleytaia grammh proste8hke, sto paradeigma ayto. Epanaferete tis idiothtes toy arxeioy afou swsete `boot.ini` me:

```
C:\attrib +s +r c:\boot.ini
```

Meta apo ena shutdown sta Windows NT kai mia epanekkinhsh 8a prepei na deite ta parakatw:

```
  OS Loader V4.00

  Please select the operating system to start:

  Windows NT Workstation Version 4.0
  Windows NT Workstation Version 4.0 [VGA mode]
  Linux

Epilejte Linux kai deite

  LILO loading zImage ....
```

7 Play it again Sam

Ena neo antigrafo toy bootsect.lnx prepei na metafer8ei sto `C:\BOOTSECT.LNX` ka8e fora poy o bootsector ths katatmhshs linux tropopoieitai. Ayto symbainei gia paradeigma otan egka8istate ena neo pyrhna me to lilo. Opws mporeite na deite, ena tetoio susthma den einai idaniko gia testarisma peiramatikwn pyrhnwn.

8 Epilysh problhmatwn

An ta pragmata den phgan opws perimenate, elegjte thn dynatothta ekkinhshs me disketa. Me thn `/dev/hdb1` ws thn Linux katatmhsh sas, to `/etc/lilo.conf` exei tis parakatw eggrafes:

```
root=/dev/hdb1
boot=/dev/fd0
```

Trejte to lilo me th disketa mesa. Twra prospa8hste na ekkinhsete apo th disketa. An to Linux einai sto `/dev/hdb1` den mporei na ekkinh8ei, kai o NT OS loader 8a apotuxei epishs na to ekkinhsei. An deite polla `01 01 01 01`, o root diskos sas den einai prosbasimos. Elegjte an oloi oi diskoi sas einai gnwstoi sto bios.

An h disketa jekinaei to Linux sas , mporeite na ejagete to boot-sector gia xrhsh me ton NT OS loader, me:

```
# dd if=/dev/fd0 of=/bootsect.lnx bs=512 count=1
```

Mporeite na krathsete ayth th disketa san disketa rescue, apla gia thn periptwsh poy h egkatastash twn Windows NT sas xalasei.

9 Parapompes

- To Linux+WindowsNT mini-HOWTO
- To FAQ gia FreeBSD 2.X

10 Eyxaristies

- Ston Xiaoming Yi <z3c20@ttacs.ttu.edu> gia thn ypodeijh pws oi diadikasies doyleuoyn kai gia alloys diskoys, ektos toy prwtoy.
- Ston Frank Dennler <Frank.Dennler@zkb.ch> gia to texnasma me th disketa.

11 Anadrash

Ka8e sxolio einai eyprosdekto.

Gia sxolia, parathrhseis, dior8wseis, enhmerwseis peri ths Ellhnikhs metafrashs aytou toy HOWTO, steilte email sthn Boula Sanida : `voulariba@hellug.gr` h ston Eyripidh Papakwsta : `evris@hellug.gr` kai enallaktika : `ep@rocketmail.com`