

Pengalaman berpindah dari Lilo ke Grub (quick and dirty)

Written by Administrator

Saturday, 28 August 2004 15:10 -

Alasan :

- Saya membutuhkan memuat beragam system operasi dalam PC saya, karena tuntutan pekerjaan. Dengan adanya beragam System Operasi dalam PC saya maka hal tersebut menuntut bootloader yang bisa meload beragam OS dalam HD saya tersebut. Dalam beberapa hal, saya menyukai LILO. Namun keterbatasan LILO dalam menangani kondisi yang saya harapkan membuat saya harus memikirkan bootloader lain. Salah satu bootloader lain yang saya kenal adalah GRUB (GRand Unified Bootloader). **Pendahuluan :**

- - GRUB Mendukung GNU Linux, FreeBSD, NetBSD, OpenBSD, GNU HURD, DOS, Windows 95, 98, NT, maupun 2000 (XP dan *BSD saya belum coba,..)

- - Dalam PC saya terinstall 4 macam OS, yaitu :

hda1 --> Windows 2000

hda2 --> Slackware 8.1

hda3 --> Debian Woody 3.0

hda5 --> Linux Mandrake 8.2

Berikut output dari cfdisk :

cfdisk 2.11n

Disk Drive: /dev/hda

Size: 10005037056 bytes

Heads: 255 Sectors per Track: 63 Cylinders: 1216

Name	Flags	Part Type	FS Type	[Label]	Size (MB)
hda1		Primary	Win95 FAT32		3676.71
hda2		Primary	Linux ext2		1497.01
hda3	Boot	Primary	Linux ext2		1497.01
hda5		Logical	Linux ext2		1497.01
hda6		Logical	Linux swap		386.59
hda7		Logical	Win95 FAT32		1447.65

- Setelah utuk-utek sebentar, akhirnya saya temukan quick and dirty dalam implementasi GRUB.

1. Mother OS tempat GRUB Dikontrol

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- Saya memilih debian sebagai 'mother OS' untuk memanje grub, dimana dari tabel partisi HD saya terletak di hda3.

(Fans baru debian, rek...! :D)

Kemudian mencari paket grub :

```
buraq:~# apt-cache search grub
grub - GRand Unified Bootloader
```

Instal pake grub :

```
apt-get -y install grub
```

Atau dalam redhat dan mandrake :

```
rpm -Uvh /path-ke-dir-RPMS-dalam-redhat-atau-mandrake/RPMS/grub*****
```

Cek apakah dir /boot/grub sudah ada atau belum, bila belum maka kita buat :

```
buraq:~# mkdir /boot/grub/
buraq:~# cp /usr/lib/grub/i386-pc/stage1 /boot/grub/
buraq:~# cp /usr/lib/grub/i386-pc/stage2 /boot/grub/
buraq:~# cp /usr/lib/grub/i386-pc/stage2 /boot/grub/
buraq:~# cp /usr/lib/grub/i386-pc/e2fs_stage1_5 /boot/grub/
```

Test grub :

```
buraq:~# grub
Probing devices to guess BIOS drives. This may take a long time.
GRUB version 0.91 (640K lower / 3072K upper memory)
```

[Minimal BASH-like line editing is supported. For the first word, TAB lists possible command completions. Anywhere else TAB lists the possible completions of a device/filename.]

```
grub> root (hd0, <-- ketik [TAB disini])
```

Possible partitions are:

```
Partition num: 0, Filesystem type is fat, partition type 0xb
Partition num: 1, Filesystem type is ext2fs, partition type 0x83
Partition num: 2, Filesystem type is ext2fs, partition type 0x83
Partition num: 4, Filesystem type is ext2fs, partition type 0x83
```

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```
Partition num: 5, Filesystem type unknown, partition type 0x82  
Partition num: 6, Filesystem type is fat, partition type 0xb
```

```
grub> root (hd0,
```

Sedikit bingung ?

begini konversinya : cfdisk membaca dari angka 1 sedangkan grub dari 0

Sehingga (cek dengan output cfdisk saya):

```
hda1 --> Partition num: 0, Filesystem type is fat, partition type 0xb
```

```
hda2 --> Partition num: 1, Filesystem type is ext2fs, partition type 0x83
```

```
...dst
```

2. Setting Up GRUB

```
=====
```

Sekarang hapus ketikan anda di grub sheel dan ketik :

```
grub> quit
```

Pindah ke /boot/grub

```
buraq:~# cd /boot/grub/
```

Buat file yang berisi daftar yang ingin di load

```
buraq:/boot/grub# vi menu.lst
```

```
#-----start file-----
```

```
default 0
```

```
timeout 30
```

```
color white/blue blue/green
```

```
title Windows-2000
```

```
root (hd0,0)
```

```
makeactive
```

```
chainloader +1
```

```
title Slackware
```

```
kernel (hd0,1)/boot/vmlinuz root=/dev/hda2
```

```
title Debian
```

```
kernel (hd0,2)/boot/vmlinuz root=/dev/hda3
```

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```
title Mandrake
kernel (hd0,4)/boot/vmlinuz root=/dev/hda5 devfs=mount
initrd (hd0,4)/boot/initrd.img
```

```
title Slackware-failsafe
kernel (hd0,1)/boot/vmlinuz root=/dev/hda2 failsafe
```

```
title Debian-failsafe
kernel (hd0,2)/boot/vmlinuz root=/dev/hda3 failsafe
```

```
title Mandrake-failsafe
kernel (hd0,4)/boot/vmlinuz root=/dev/hda5 failsafe devfs=nomount
initrd (hd0,4)/boot/initrd.img
#-----end file-----
```

Keterangan :

Baris-baris ini :

```
#-----
title Windows-2000
root (hd0,0)
makeactive
chainloader +1
```

```
#-----
Untuk meload OS Windows
```

Baris-baris berikut :

```
#-----
title Slackware
kernel (hd0,1)/boot/vmlinuz root=/dev/hda2
```

```
title Debian
kernel (hd0,2)/boot/vmlinuz root=/dev/hda3
```

```
title Mandrake
kernel (hd0,4)/boot/vmlinuz root=/dev/hda5 devfs=mount
initrd (hd0,4)/boot/initrd.img
```

```
#-----
Untuk meload OS Linux
```

Baris-baris berikut :

```
#-----
title Slackware-failsafe
kernel (hd0,1)/boot/vmlinuz root=/dev/hda2 failsafe
```

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```
title Debian-failsafe
kernel (hd0,2)/boot/vmlinuz root=/dev/hda3 failsafe
```

```
title Mandrake-failsafe
kernel (hd0,4)/boot/vmlinuz root=/dev/hda5 failsafe devfs=nomount
initrd (hd0,4)/boot/initrd.img
#-----
Akan memberikan efek seperti kita mengetikkan :
LILO: linux -s
```

Kemudian simpan file /boot/grub/menu.lst

3. Menuliskan GRUB ke MBR menggantikan LILO

```
=====
Masuk ke dalam shell grub :
```

```
buraq:/boot/grub# grub
Probing devices to guess BIOS drives. This may take a long time.
```

```
GRUB version 0.91 (640K lower / 3072K upper memory)
```

```
[ Minimal BASH-like line editing is supported. For the first word, TAB
lists possible command completions. Anywhere else TAB lists the possible
completions of a device/filename. ]
```

```
grub> root (hd0, <<-- ketik [TAB]
Possible partitions are:
Partition num: 0, Filesystem type is fat, partition type 0xb
Partition num: 1, Filesystem type is ext2fs, partition type 0x83
Partition num: 2, Filesystem type is ext2fs, partition type 0x83
Partition num: 4, Filesystem type is ext2fs, partition type 0x83
Partition num: 5, Filesystem type unknown, partition type 0x82
Partition num: 6, Filesystem type is fat, partition type 0xb
```

```
grub> root (hd0,2)
Filesystem type is ext2fs, partition type 0x83
```

```
grub> setup (hd0)
Checking if "/boot/grub/stage1" exists... yes
Checking if "/boot/grub/stage2" exists... yes
Checking if "/boot/grub/e2fs_stage1_5" exists... yes
Running "embed /boot/grub/e2fs_stage1_5 (hd0)"... 16 sectors are embedded.
succeeded
Running "install /boot/grub/stage1 d (hd0) (hd0)1+16 p (hd0,2)/boot/grub/stage
```

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```
2 /boot/grub/menu.lst"... succeeded
Done.
```

```
grub> quit
```

OK selesai setting Up GRUB. Silahkan reboot PC anda dan voila.... GRUB anda telah berjalan

NOTE :

- - Tidak seperti LILO yang tiap kali ada perubahan untuk boot harus menuliskan ke dalam MBR, GRUB cukup mengedit file /boot/grub/menu.lst
- - Masih banyak lagi feature-feature GRUB. More fun if you read all the manual first....

Bacaan :

<http://www-105.ibm.com/developerworks/education.nsf/dw/linux-onlinecourse-bytitle>

Note: *bermanfaat sekali dan kereeen. makasih xeno!*