

Re: 2 HD, 2 OS, and grub issues

Source: <http://linux.derkeiler.com/Newsgroups/comp.os.linux.setup/2006-06/msg00260.html>

- *From:* Larry Luther <larry.luther@xxxxxxxxxx>
 - *Date:* Wed, 21 Jun 2006 14:03:43 GMT
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iforone wrote:

Larry Luther wrote:

ggtuki@xxxxxxxxxx wrote:

Friends,

While there are a ton of posts about how to fix the problem I'm currently having, none of them actually seems to fix it. It's likely due to my negligence, but I can't figure it out. Here's the problem:

I have two hard SATA hard drives on my Dell XPS 600. The first is a 160GB Samsung, running Windows XP Pro (also has a recovery partition from Dell). The second is a 100GB Maxtor, onto which I have installed Fedora Core 5 from a dvd. When I did the installation, I manually partitioned the 100GB (/dev/sdb) into three (/boot, swap, and /), and had grub install itself onto /boot. All seemed to go okay, but when I rebooted, it went straight to XP. Not unusual, I thought, since it's not really loading into the MBR.

So then I did a linux rescue, and went to /boot, where I did the dd trick (dd if=/dev/sdb1 of=/mnt/floppy/bootlinux.bin size=512 count=1) to copy 512 bytes onto a floppy.

Re: 2 HD, 2 OS, and grub issues

I then rebooted, copied the bootlinux.bin file to C: and inserted a line into my boot.ini.

Rebooted again, and gave me an option to boot into XP or Linux. Chose Linux. On a new screen, I received "Grub _" on the upper left corner.

Tried reinstalling grub using "grub-install /dev/sdb1" and then rebooted after doing the dd trick again, and still no luck.

Here's some info:

```
# more device.map
(hd0) /dev/sda
(hd1) /dev/sdb
```

```
#fdisk -l
Disk /dev/sda: 160GB
/dev/sda1 Dell Utility
/dev/sda2 (active) HPFS/NTFS
Disk /dev/sdb: 100GB
/dev/sdb1 (active) Linux
/dev/sdb2 Linux swap
/dev/sdb3 Linux
```

```
#df
/dev/sdb3 mounted on /
/dev/sdb1 mounted on /boot
```

Hope someone can help!!! Thanks in advance,

Kartik

Ditto here, I used to have this working under 64 bit SUSE 10.0 but when I switched to 32 bit I couldn't get it to work. My first 4 disks are SATA soft raid and are not accessible from Linux. My 5th IDE disk is devoted to Linux. I too got "Grub _". If I write a MBR record to the Linux disk and move it over I get a worse error.

Hi;
realize the OP is likely long-gone – but I must reply

[Requoted from above]

So then I did a linux rescue, and went to /boot, where I did the dd

Re: 2 HD, 2 OS, and grub issues

```
trick (dd if=/dev/sdb1 of=/mnt/floppy/bootlinx.bin size=512
count=1) to
copy 512 bytes onto a floppy.
```

You should've likely use the "bs=1024" --- why ? (besides, there is no "size=" option AFAIK in 'dd') ...because GRUB stage 1.5 does NOT reside in the first 512Bytes (the MBR(440bytes)+ MPTs (64bytes)) in CHS 0,0,1 – IIRC stage 1.5 lives in the next 512bytes, but I may be wrong...but either way stage 1.5 is needed to reach stage 2 (the Bootup Options screen) in Grub.

Besides that – you should've installed Grub into the MBR, but OK – I understand as Larry states – who's likely using a buggy Mobo Onboard RAID setup and Controllers (and it's likely 2 separate controllers to manage 4 SATA ports). FWIW – atleast Kernel 2.6.x is necessary for SATA disks, but remember --- many Onboard SATA RAID scenarios are a type of SoftRAID (they're Emulated) and NOT a true Hardware RAID ...Cheap is Cheap – so be it...it's Ok

Remember Microshaft's MBR (since FAT32 era) spans MORE than the first 512bytes, and is called a VBR or xMBR --- and occupies atleast 3 full 512 byte sectors...usually 63–65 – and the mirror is not far away. The NTFS MBR also contains NTFS specific info within the bytes between 440 and 446 of the 1st 512Byte block on the HDD

Hope you get 'something/anything' out of the info;

Regards

bs=1024 didn't change the behavior
"GRUB_" is still the only thing I see.

My motherboard is a Tyan dual Opteron with NVIDIA RAID.
The first 2 disks are mirrored and the second 2 are striped.
But the gist of the NVIDIA RAID is that it is not supported by the Kernel and can't be booted. I did have this working under 64 bit Linux.