

I have biosdisk read error

Posted by saj96 - 2011/01/13 11:18

Hello

I have "error: biosdisk read error" when I want to boot any image.

Here is my grub.cfg:

```
menuentry "XP VHD" {
```

```
    vboot harddisk="(UUID=ac701bd8701ba7da)/winxp.vhd"
```

```
}
```

```
menuentry "XP Install 2" {
```

```
    vboot harddisk="(UUID=ac701bd8701ba7da)/winxp.vhd"
```

```
    cdrom="(UUID=ac701bd8701ba7da)/winxp.iso" boot=harddisk
```

```
}
```

```
menuentry "XP Install 1" {
```

```
    vboot harddisk="(UUID=ac701bd8701ba7da)/winxp.vhd"
```

```
    cdrom="(UUID=ac701bd8701ba7da)/winxp.iso" floppy="(UUID=1a8412378412163b)/vboot/vboot.img"
```

```
    boot=cdrom
```

```
}
```

```
menuentry "XP VHD" {
```

```
    vboot harddisk="(hd0,1)/winxp.vhd"
```

```
}
```

```
menuentry "XP Install Step 2" {
```

```
    vboot harddisk="(hd0,1)/winxp.vhd" cdrom="(hd0,1)/winxp-sp2.iso boot=harddisk
```

```
}
```

```
menuentry "XP Install Step 1" {
```

```
    vboot harddisk="(hd0,1)/winxp.vhd" floppy="(hd0,1)/vboot/vboot.img cdrom="(hd0,1)/winxp-sp2.iso
```

```
    boot=cdrom
```

```
}
```

```
menuentry "Windows 7 VHD" {
```

```
    vboot harddisk="(hd0,1)/win7.vhd"
```

```
}
```

don't forget to press Shift-F10 to open a cmd window, then run "vbootctl setup"

```
menuentry "Windows 7 Install" {
```

```
vboot harddisk=(hd0,1)/win7.vhd cdrom=(hd0,1)/win7.iso boot=cdrom
}
```

```
menuentry "Vista VMDK" {
  vboot harddisk=(hd0,1)/vista.vmdk
}
```

Please help me

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Re: I have biosdisk read error

Posted by admin - 2011/01/13 13:00

what is the size of your virtual disk file?

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Re: I have biosdisk read error

Posted by admin - 2011/01/13 13:03

can you test this?

Once in boot menu, press "C" key to enter command mode, and enter:

```
vhd vhd0 -p (hd0,1)/xp.vhd (change the path to meet your vhd)
ls (vhd0,1)/
```

did you get any error messages?

=====

Re:I have biosdisk read error

Posted by saj96 - 2011/01/13 14:02

My size of virtual disk is 40 gb and type is expandable.

I have two errors:

VMDK: descriptor does not start as expected in '(hd0,2)/winxp.vhd'

VDI: invalid pre-header in '(hd0,2)/winxp.vhd'

=====

Re:I have biosdisk read error

Posted by admin - 2011/01/13 14:13

You can ignore these 2 errors, since it's vhd.

What results from "ls (vhd0,1)/*"?

From your grub.cfg, you didn't have any iso files, is your vhd fresh without any files? You need to install xp from an iso. If your vhd is new, you will get bios read error.

=====

Re: I have biosdisk read error

Posted by saj96 - 2011/01/14 05:40

Now I installed windows xp and it works.
But I still have "bios disk read error" for about 20 seconds.

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Re: I have biosdisk read error

Posted by admin - 2011/01/14 09:51

you can ignore those 2 errors.

=====

Re: I have biosdisk read error

Posted by eranga101 - 2011/01/16 21:21

ya me too
i got the same error
it comes about 3 times, like this;

:biosdisk read error
:biosdisk read error
:biosdisk read error

ive tried so many times to fix
but it wont

=====

Re: I have biosdisk read error

Posted by qoqodqo - 2011/01/19 18:46

I have exactly the same two errors of VMDK and VDI (which I ignore now) but as well obvious: A DISK

READ ERROR OCCURED

I try to load 4 different .vhd/.vmdk, all of them fail to load:

- one .vhd made with "MS Virtual PC 2007" containing "Windows XP SP3 Tablet Edition"
- one .vhd made with "Sysinternal's Disk2Vhd" containing "Windows 2003 SP2 Enterprise"
- one .vmdk contained "Mac OS X 10.6.4"
- one .vhd converted from previous .vmdk of "Mac OS X 10.6.4"

I tested what you suggested (those lines in VBoot loader screen by pressing 'C'...) on .vhd containg "Windows XP SP3 Tablet Edition" with no errors (it lists what's inside the .vhd just fine) but only if I defined it after "vhd vhd0 -p" as "(hd1,1)" and not "UUID=" (which was case of my previos .cfg that do not work also btw). In that case VBoot loader screen including command prompt just RESTARTED MY PC (I got video of it so I am now able read what it says as error, it's: " VMDK: descriptor does not start as expected in '(UUID=)'"...and it restarts quickly)!

The only .vhd that starts to boot but soon comes to BSOD was the one with Windows 2003 SP2 made with Disk2Vhd on another PC (it is understandable as it requires probably some drivers that it do not have as this is another machine that the one it was created for...but maybe I am wrong?)

As for "Mac OS X" it runs only inside "VMware Workstation", if I try to run it (converted to .vhd) in "MS Virtual PC 2007" it just hangs - no BSOD, just stops loading in one point...and in VBoot it gives the same "A DISK READ ERROR OCCURED" as those ones before + it looks like it freezes my FDD and HDD too (cos LED's of them shine permanently with no flick until I press RESET button...to ease them!)

What is the problem causing this - anyone knows? :-)

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Re:I have biosdisk read error

Posted by qoqodqo - 2011/01/20 01:39

+ as I noticed elsewhere (some post here in forum about Linux .vdi not booting) - do I need copy/put some kind of "VBoot bootloader" in my .vhd/.vmdk files that doesn't work or it just apply to virtualized Linux OS only?

If so (that I need to put your bootloader in my .vhd/.vmdk): can you point me to those files - which they are and where them to put?

=====

Re:I have biosdisk read error

Posted by bitartrate - 2011/08/13 21:21

It seems to happen to some bios and not others. I have discovered the answer or workaround. It is floppy related and probably only hardware floppy drive related. If you disable the floppy controller in your bios the error should not appear. If you don't have that luxury (you still use a floppy drive like real technicians) you can put a formatted floppy in the drive and that should cause the error to go away too. Although I have found a bios out in my collection that tries to boot from any floppy having MBR or not.

It is a bug in the bootloader. Perhaps our friends at VMLite can fix it soon? :)

As always thank you very much!

P.S. Admin: I am very much looking forward to using Vboot with Win95,98,ME, and even DOS. ;)

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Re:I have biosdisk read error

Posted by admin - 2011/08/14 11:43

Thanks for the discovery.

This error is very annoying, and we couldn't find the cause. Now that you have found it, we will try to fix it.

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Re:I have biosdisk read error

Posted by tslc - 2011/12/20 01:30

Hi,
My experience ?

Note : I am very interested by the high VBoot' features (snapshot, restore, immutable, ...) and I try to test TRIAL V2 with this configuration :

- Machine : AMD Athlon 64 3800 2,4Ghz, Phoenix bios, 4Go Ram
- W7 Ultimate on hard disk system () : only 1 OS installed
- VBoot Loader installed directly on external disk usb drive (as instructions 2.2 Installing VBoot Loader directly to a hard disk or external USB drive) : OK
- Windows7 installed to VHD 20Go fixed diskfile (as instructions 7. Install Windows 7, to a virtual disk file using a simple command line), VHD diskfile => on disk system (hd0,1) : OK
- Configure grub.cfg for starting W7 VHD diskfile (with using LABEL format) : OK

When I boot from USB disk, all seems to be right : VBoot menu options and W7 start correctly, BUT I have noted these two points which are quiet annoying because :

- 1 - from Vboot, I have always the same error that in this thread 'Error : bios disk error' which comes two times
- 2 - Also, there is 3, 4 minutes for this error, before W7 starting :(??

My bios is configured with floppy hardware option disabled (no floppy drive) and I try to load many times with option disabled (bitartrate workaround) and option enabled, but this error always appears.

Any idea for these points ?

Note : When I start W7 VHD directly from W7 bootmgr (BCD configured for this entry), I don't note any incidence from the start of W7 (~ 1 minute)

Thanks in advance.
Christian

=====
Re:I have biosdisk read error

Posted by huisinro - 2011/12/20 10:57

4min for windows 7 boot is way too slow. In our tests, it should be same as original windows vhd.

When you started w7 vhd from W7 bootmgr, did you use vboot drivers? The same vboot vhd for windows 7 can also be started from bootmgr. If this is much quicker, that means our boot loader has bugs. You can verify which driver is using by running diskmgmt.msc, and check disk 1's properties to determine whether it's vboot or MSFT VHD driver.

vboot v2 has very good performance, so 4 mins is not acceptable.

those two biosdisk read errors are ok, not to do with this slow boot.

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Re:I have biosdisk read error

Posted by bitartrate - 2011/12/20 11:48

I would be interested to know what motherboard you have. I bet your bios handles your external usb drive more like a hardware floppy drive. If that makes sense. Or to put it another way, your bios is causing the same error message as my bios caused on hardware floppy drive. Have you tried booting into vboot off of your internal hard drive instead?

I believe the bios disk errors are responsible for the slow boot. The bios times out until it's timer is satisfied in then resumes on that error.

=====
Re:I have biosdisk read error

Posted by tislc - 2011/12/21 01:15

Hi,

PS : excuse for my approximative english please
Thank you for your replies.

Machine/ Configuration :
NEC PC Tower, WA 1310 motherboard, ATHLON 64 3800+, 4Go RAM
Bios Phoenix (No Floppy hardware -> floppy hardware option disabled)
500 Go SATA disk (Disk System, 3 partitions) : Windows 7 ultimate (C:), W7 VHD diskfile (20Go) on C:
500 Go external USB2 disk : VBoot installed (only)

The results :

1 - Boot W7 from W7 bootmgr (on Disk System)
From Shutdown

=====

Re:I have biosdisk read error

Posted by bitartrate - 2011/12/21 06:04

The next bits of information I would be curious to know would be:

- a. what are your system bios settings for USB storage
- b. a printout of your grub.cfg

Have you tried such things as trying to access only a floppy image without a harddrive image to see if the error remains. Try to access the floppy image from your system harddrive and see if the error sets. Are you attaching a floppy image when you try and boot your Win7 VHD? If not then I have to go back to it must be the way your bios handles USB harddrives in correlation with VBoot.

I also think it would be informative to try and boot your Win7 VHD from your internal harddrive not USB with Vboot not bootmgr. That maybe the best experiment in this case. The next test would be to boot VBoot from internal drive and boot the Win7 VHD from USB. My guess is booting Vboot itself from USB is causing the error. Once you try several different configurations and isolate the error you can eliminate it if possible.

Your right those errors can be ignored and wont cause any damage or further problems but they are quite annoying and do cause a pause in boot up.

P.S. I think your English is very good :)

=====

Re:I have biosdisk read error

Posted by tislc - 2011/12/21 11:21

Hi,

--- System bios settings -----
System bios settings for USB storage (Bios Phoenix) : only these settings
-->OnChip USB --> V1.1, V2.0
--> Hard Disk Boot Priority -->
1 - Internal SATA Disk
2- USB-HDD
3- Bootable Add-in Cards
When I Boot from BOOT MENU, I selecte the entry

--- Grub.cfg -----

DO NOT EDIT THIS FILE

It is automatically generated by /usr/sbin/grub-mkconfig using templates

```
# from /etc/grub.d and settings from /etc/default/grub
#

### BEGIN /etc/grub.d/00_header ###
if ; then
  have_grubenv=true
  load_env
fi
set default="0"
if ; then
  saved_entry=${prev_saved_entry}
  save_env saved_entry
  prev_saved_entry=
  save_env prev_saved_entry
fi

if loadfont /vboot/fonts/unicode.pf2 ; then
  set gfxmode=1024x768
  insmod gfxterm
  insmod vbe
  if terminal_output gfxterm ; then true ; else
    # For backward compatibility with versions of terminal.mod that don't
    # understand terminal_output
    terminal gfxterm
  fi
fi

insmod jpeg
background_image /vboot/grub/vmlite-logo.jpg

if ; then
  set timeout=-1
else
  set timeout=10
fi
### END /etc/grub.d/00_header ###

### BEGIN /etc/grub.d/05_debian_theme ###
set menu_color_normal=white/black
set menu_color_highlight=red/white
### END /etc/grub.d/05_debian_theme ###

### BEGIN /etc/grub.d/30_os-prober ###

menuentry "VHD W7-32 FR" {
  vboot harddisk=(LABEL=W7Syst)/VHD-W7-32FR.vhd
}

### END /etc/grub.d/30_os-prober ###

### BEGIN /etc/grub.d/40_custom ###
```



```
# This file provides an easy way to add custom menu entries.  Simply type the
# menu entries you want to add after this comment.  Be careful not to change
# the 'exec tail' line above.
### END /etc/grub.d/40_custom ###
```

```
--- TEST for VBoot installed on harddisk Disk System -----
- Vbootldr.mbr, vbootldr, entry added to BCD --> suucesfully installed on harddisk C:
- W7 VHD diskfile (20 Go) --> on disk system C:
- Configure grub.cfg (C:vbootgrub) for starting W7 VHD diskfile (with using LABEL format) : OK
- Reboot --> bootmgr --> select VBoot --> W7 VHD
- The results : exactly the same for --> 3 - Boot W7 VHD from VBoot (on external USB2 Disk) and these
2 errors always appears
From VBoot menu
```

```
=====
```

Re:I have biosdisk read error

Posted by huisinro - 2011/12/21 11:30

Hi tislc,

I just wanted to make sure, exactly same vhd (with vboot driver) takes much longer to boot from vboot loader than from bootmgr, right? in either case, vboot driver is used, instead of microsoft's builtin driver.

This definitely indicates a problem in our boot loader code. the vboot kernel driver seems to be fine.

```
=====
```

Re:I have biosdisk read error

Posted by tislc - 2011/12/21 12:13

Hi huisinro,

Yes : I've used exactly same W7 VHD diskfile (VHD 20Go fixed diskfile -> create as instructions 7) on disk system (C:)
- Tested with VBoot Loader installed on Disk System (as instructions)

Microsoft drivers for W7 VHD Disk 'VMLite VBootMP SCSI Disk Device' -> disk.sys, partmgr.sys -
Microsoft driver v6.1.7600 21/06/2006 : It's correct ?

Thanks for your reply

--

Christian

```
=====
```

Re:I have biosdisk read error

Posted by bitartrate - 2011/12/22 05:28

I don't see any problems w/ your grub.cfg. Grub has had this same type problem ongoing. I recall working with el-torito-ISO image format from system RAM causes the same error on a lot of different bios.

Our friends at VMLite could explore ignoring this error inside the bootloader code. The logic would be something similar to - "resume on error, next"

The workarounds for any particular motherboard are trying different bios (upgrade or downgrade system bios versions). Trying to boot from different media. Like boot Vboot loader from system drive and then the image from system drive then try from USB, etc different combinations. I couldn't dig up a manual on your computer but if your bios can change the way it handles USB media like USB-HDD, USB-floppy, try changing the way it defines USB media.

We just have to try different things to see what works. Unfortunately since the PC specification is not standard (anymore and hasn't been for decades) some hacking is involved. We do need to remember that motherboard manufacturers don't intend on us running anything on their hardware, hahaha. That is kind of a joke but there is some truth in it. Certainly they don't foresee us running a software bootloader to circumvent their schemes. But we all have great success to varying degrees and definitely can find something that works well on each motherboard.

I hope this helps in some way :)

=====