

2003 07B error (solved, but for one vhd)

Posted by sebus - 2010/11/15 13:13

If one does not want to read the whole thread: the solution is - one MUST install not only vboot driver, but also proper driver for physical hard drive controller in the machine!

OK, done 100s of conversion in my lifetime, after all it takes mostly only controller driver to boot machine on different hardware

My .vhd is created from the SAME hardware to be run on, with only difference being the vhd

The image starts loading, but then there is the (un)expected 7B error

Yes, I adjusted image with files & registry entries from vboot-2k3.img

But now looking at this image & comparing it to XP vboot.img , something is wrong.

XP txtsetup.oem has:

```
driver = d1, vbootdisk.sys, vbootdisk
```

```
driver = d2, vbootsmp.sys, vbootsmp
```

Yet 2K3 has:

```
driver = d1, vbootsmp.sys, vbootsmp
```

```
driver = d2, vbootsmp.sys, vbootsmp
```

Obviously that is wrong? Which is the actual 32-bit driver?

Also according to 2K3 vbootdisk.inf , txtsetup.oem should have:

```
value = ParametersPnpInterface,0,REG_DWORD,1
```

```
value = ParametersPnpInterface,1,REG_DWORD,1
```

```
value = ParametersDevice,BusType,REG_DWORD,0
```

```
value = ParametersDevice,DriverParameter,REG_SZ,"DeviceHarddiskVolume1 xp.vhd"
```

```
value = ParametersDevice,CreateInitiatorLU,REG_DWORD,1
```

I have done all these in my image, yet it does not boot

Any ideas? Is the driver/parameters correct?

sebus

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Re: 2003 07B error

Posted by admin - 2010/11/15 13:17

Do you mean you convert your physical pc to a vhd? then try to boot?

yes, vbootsm.sys is the one for windows 2003, not vbootdsk.sys

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Re: 2003 07B error

Posted by admin - 2010/11/15 13:20

It's better to install the vbootsm driver to your running windows 2003 instance, then convert to a vhd.

You can install vbootsm.inf using devmgmt.msc, or use devcon.exe:

devcon.exe install vbootsm.inf rootvbootsm

once the driver is working inside your living OS, after conversion to a vhd, it will boot.

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Re: 2003 07B error

Posted by sebus - 2010/11/15 13:24

Can you please make clear?

Are the 32-bit drivers in XP & 2K3 are named differently?

And why the txtsetup.oem has different parameters then .inf ?

The whole "installation" is just 2 registry entries, so no problem there

sebus

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Re: 2003 07B error

Posted by admin - 2010/11/15 13:25

xp and 2k3 are quite different. XP uses vbootdsk.sys, 2k3 must use vbootsm.sys. Yes, entries are different too.

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Re: 2003 07B error

Posted by admin - 2010/11/15 13:30

if you install w2k iso to a vhd from scratch, you would do this:

```
vboot harddisk=(hd0,1)/2k3.vhd cdrom=(hd0,1)/vboot/win2k3.iso floppy=(hd0,1)/vboot/vboot-2k3.img  
boot=cdrom
```

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Re: 2003 07B error

Posted by admin - 2010/11/15 13:32

There are many more registry entries to add, not just two. Our command line "vbootctl.exe prepare" is supposed to do that, but not available in today's release. Will be here soon.

sebus wrote:

Can you please make clear?

Are the 32-bit drivers in XP & 2K3 are named differently?

And why the txtsetup.oem has different parameters then .inf ?

The whole "installation" is just 2 registry entries, so no problem there

sebus

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Re: 2003 07B error

Posted by sebus - 2010/11/15 13:33

But you could at least keep some logical naming, now they are same names but completely different architecture

And surely vbootsmp.sys in vboot-2k3.img can not be both 32-bit & 64-bit ?

What is then vbootdsk.sys in vboot-2k3.img ?

I do not have the bootable instance, I only have 20Gb vhd file

sebus

Re: 2003 07B error

Posted by sebus - 2010/11/15 13:47

For a controller driver there are two entries:

one in

HKEY_LOCAL_MACHINE\systemControlSet001\Control\CriticalDeviceDatabase\root#\vboot\sm

and the other in

HKEY_LOCAL_MACHINE\systemControlSet001\Services\vboot\sm

Any more?

sebus

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Re:2003 07B error

Posted by thez - 2010/11/15 15:21

Hello!

I was since this morning trying to install XP-SP2 (original and modified with nLite with drivers from my Acer notebook) and I couldn't... until now.

When I tried to install XP normally, it couldn't copy the vboot\disk\drivers to windows installation, then fails in step 2 (BSOD).

After I made some changes, I received soon in installation (before choose partitions to install) the BSOD.. all with that 0x7B error.

But now, I thought about NTFS permissions, then I made this way:

Drive C: -- BOOT (System current reserved partition from my Windows 7 Home Professional installation - 100 Mb)

Drive D: -- Windows 7 Home Premium 64-bit installation.

c: contains the BCD boot from Windows 7 and vboot files.

d: contains:

- d:\winxp-sp22.iso (ripped Original XP installation from a DELL CD using ImgBurn)

- d:\owinxpnew.vhd (created by vbootctl.exe, 40 Gb dynamic from a Windows XP in virtual machine)

Then it worked! I was tried in d:\winxp.vhd, but when I created an path "o" in d:... and put the vhd there, I could install the XP-SP2 (original from a DELL notebook CD) without problems!

Everytime I try to copy some file to d:, it always asked for Admin rights, for d:o no, maybe vboot/grub maintains the NTFS permissions from Windows 7 System?

Admin, if you want I can try some other stuff later, right now I'm going to take a break and wait the XP finish the install and runs to make feedbacks.

Regards!

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Re:2003 07B error

Posted by admin - 2010/11/15 15:28

Sebus, can you do this, then you can use the command line?

create driversvbootcmp folder under c:vboottoolsx86, and copy vbootcmp.inf, vbootcmp.sys, vbootcmp.cat to c:vboottoolsx86driversvbootcmp.

When drivers are there, you can try to run:

vbootctl.exe prepare your-file.vhd

I will release the full command later this weekend, if not working, you have to wait till then before you can convert offline vhds.

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Re:2003 07B error

Posted by admin - 2010/11/15 15:31

also create c:vboottoolsx86driversvbootdsk folder and copy other files to it.

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Re:2003 07B error

Posted by sebus - 2010/11/16 03:04

C:vboottoolsx86>vbootctl.exe /?
VMLite VBoot control program version 1.0
<http://www.vmlite.com>

Host OS: Microsoft Windows 7 Enterprise Edition, 64-bit (build 7600), Version: 6
.1

Please run the 64-bit version of vbootctl.exe directory on AMD64 systems.
The 64-bit version of vbootctl.exe is usually inside this folder: C:vboottools
amd64.

Expecting soon?

sebus

Re:2003 07B error

Posted by sebus - 2010/11/16 04:08

And trying to do it on Win XP 32-bit one gets:

```
C:\vboottoolsx86>vbootctl.exe prepare e:\VHDServer2003.vhd
VMLite VBoot control program version 1.0
http://www.vmlite.com
```

```
Host OS: Microsoft Windows XP Professional Service Pack 3 (build 2600), Version:
5.1
```

```
Loading virtual disk ...
```

```
Connecting to Logical Disk Manager Administrative Service...
```

```
Connected to Logical Disk Manager Administrative Service successfully.
```

```
InstallFromInf(): SetupDiGetINFClass() failed, last error: 0x2
```

```
Can't open device: \.vbootdiskmp, err=2
```

```
Make sure the miniport virtual disk driver is installed.
```

```
MountMiniDisk(), ret=0x2, targetNumber=255, lunNumber=255
```

```
The system cannot find the file specified.
```

```
, error code: 2InstallFromInf(): SetupDiGetINFClass() failed, last error: 0x2
```

```
Can't open device: \.vbootdiskmp, err=2
```

```
Make sure the miniport virtual disk driver is installed.
```

```
MountMiniDisk(), ret=0x2, targetNumber=255, lunNumber=255
```

```
The system cannot find the file specified.
```

```
, error code: 2 The system cannot find the file specified.
```

```
, error code: 2Disk failed to mount.
```

EDIT

One needs to install XP supplied drivers into the host OS on which one tries to edit the offline image with

```
devcon.exe install vbootdisk.inf rootvbootdisk
```

After reboot vbootctl works OK

sebus

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Re:2003 07B error

Posted by admin - 2010/11/16 07:49

We will release the rest end of this weekend, including 64-bit and other OSes supports.

sebus wrote:

```
C:\vboottoolsx86>vbootctl.exe /?
VMLite VBoot control program version 1.0
http://www.vmlite.com
```

Host OS: Microsoft Windows 7 Enterprise Edition, 64-bit (build 7600), Version: 6
.1

Please run the 64-bit version of vbootctl.exe directory on AMD64 systems.
The 64-bit version of vbootctl.exe is usually inside this folder: C:\vboottools
amd64.

Expecting soon?

sebus

Re:2003 07B error

Posted by sebus - 2010/11/16 11:32

Lets get it clear.
While XP works absolutely fine,
Server 2003 R2 32-bit does NOT WORK AT ALL!!!

07B error is ever present

It does not work while supplied drivers are installed into:

- live OS & then imaged to .vhd
- offline image with supplied vbootctl
- offline with utilities like driverinject
- offline by hand

- while installing to vhd using F6 (few seconds after driver is loaded is BSoD)

I have also tried XP driver disk with F6 & same as above happens

Can you please test it again?

sebus

Re:2003 07B error

Posted by sebus - 2010/11/16 22:52

Any progress on 2003 drivers?

sebus

Re:2003 07B error

Posted by admin - 2010/11/16 22:57

Windows 2003 works very well under our testing. You can play more when we release the full version. Most likely, this weekend.

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Re:2003 07B error

Posted by sebus - 2010/11/17 02:08

It might work, but definitely not with the drivers supplied so far!

If you do release something better, of course I will try is ASAP

sebus

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Re:2003 07B error

Posted by sebus - 2010/11/17 04:40

OK, I managed to install Server 2003 on one hardware just fine.

But no matter what I try I can NOT get converted machine to start, as it always BSoD

As I said, it is not a rocket science to move 2003 from one hardware to another, but in this case it does not work

sebus

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Re:2003 07B error

Posted by sebus - 2010/11/18 03:58

Ok, here it goes, I was wrong & you were right (surprise?)

Server 2003 R2 works absolutely fine, but one needs to install ALSO the driver for the physical HD controller

So in my case I was not getting 07B error from vboot, but from Standard Dual Channel IDE Controller (pcicc_0101)

Once this was added to CriticalDeviceDatabase - <http://support.microsoft.com/kb/314082>
Server 2003 R2 converted image (with VMDK(VMWare) to VHD Converter)
works absolutely fine

sebus

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Re:2003 07B error

Posted by sebus - 2010/11/20 14:01

So far in my testing I used different 2003 images & done few clean installs.

On overall it works fine, but I have one image created from existing hardware that works perfectly fine on that hardware. So while booted to it I installed vboot with devcon & created .vhd from this partition

No matter what I do, image booted with vboot this will ALWAYS give 07B BSoD
I spent so far 2 days testing, redoing the image, adjusting services/drivers etc

Other images on same hardware convert/install fine, but NOT this one

This vhd works absolutely fine when used in Vmlite Workstation

So there must be something that does not agree with vboot BIG time (yet I have no idea what! it could be)

sebus

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Re:2003 07B error

Posted by admin - 2010/11/20 14:22

Are you booting the vhd on the same computer? Sometimes, there are hard disk signature problems, as your cloned vhd has exactly same disk signature as your host. You can try to change the disk signature of the vhd.

If nothing works, you can try to attach a debugger to check if vbootmp.sys is indeed loaded at boot stage. You will need 2 pcs to debug, and install windbg on the host pc, and change boot.ini to enable debug option inside vhd file.

If vbootmp.sys is loaded well, you will see it from debugger module list.

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Re:2003 07B error

Posted by sebus - 2010/11/20 14:35

The disk signature of the vhd is distinctly different from the signature of the disk (partition) it was created from (so this is not the issue)

Would that be for debugging?

<http://www.microsoft.com/whdc/devtools/debugging/debugstart.mspx#a>

sebus

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Re:2003 07B error

Posted by admin - 2010/11/20 14:48

yes, that's the tool.

You may first want to get to know the steps using a vm as guest pc. Install Windbg on your host pc.

inside the guest, add the following to boot.ini:

```
/debug /debugport=COM1 /baudrate=115200
```

google for more info on debugging using VirtualBox, same can be done on vmlite.

Once you are familiar with vm debugging, you can connect 2 pcs using 1394 cable, USB cable, or COM serial cable.

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Re:2003 07B error

Posted by admin - 2010/11/21 11:56

It just occured to me, this might be to do with partition number of your vhd 2003. Is it on first partition? How many partitions do you have? If it's multiple partitioned, and your windows is not on 1st partition, it may have problem. Will double check this.

sebus wrote:

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sebus

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Re:2003 07B error

Posted by sebus - 2010/11/29 07:01

And what break point would I need to set?

I think firewire would be the easiest option for connection with

/debug /debugport=1394 /CHANNEL=3

As to the setup:

1 SATA drive with 3 partitions:

System7

Data

System2003

2003 vhd is located on partition 2 (Data)

boot.ini in the vhd is set to:

default=multi(0)disk(0)rdisk(0)partition(1)WINDOWS

and it is correct, as otherwise 2003 would not boot at all

I have additional 2 images (both 2003, one installed from scratch on this hardware via vboot, another one converted), each one boots fine!

I checked & re-checked all the entries, there is nothing obvious to me that looks different between all 3 images as far as vboot/nvidia raid driver are concerned

Thanks

sebus

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Re:2003 07B error

Posted by sebus - 2011/11/30 13:52

After a year or so, I went back with current vboot version 2 to the same image, upgraded the drivers (which by now changed names), yet the same BSOD happens
Other W2K3 images upgraded the same way work (as previously) fine

I can boot physical W2K3 partition, so I even re-created vhd from this W2K3 partition

Same BSoD 07B

sebus

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Re:2003 07B error

Posted by huisinro - 2011/12/01 09:53

07B indicates the virtual disk file can't be loaded. Will change to other bugcheck code for easy debugging.

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Re:2003 07B error

Posted by sebus - 2011/12/04 05:19

I know what 07B means.

But what is the most odd that on same hardware plain install of same flavour Server 2003 R2 boots using vhd same vboot version just fine

I have checked all required services, no problem there.

Yet obviously there is something else that loads in this converted image that makes vboot choke

Help appreciated

sebus

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