

## VBoot v2 beta feedback

Posted by ndog37 - 2011/11/16 05:55

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Hi I would like to give some feedback of the v2 beta. Maybe everyone else can post thier feedback here as well?

- Issue inside PE 3.1 environment - vbootctl.exe make command still needs to be run twice to apply wim to VHD. Are you going to fix this?

- some error when launching vbootservice.exe - failed to open disk device \.VBOOTMP .. What is that? Should I worry?

- hide switch. I hope you can drop the drive letter syntax eg hide="c:" and change to hide=(hd0,1) or hide=0,1 which is far more easier to understand (being grub based)

- When I applied a syspreped winxp wim file to vhd it does not get to mini-setup but BSOD's before this, something about autochk not being found and then BSOD. (STOP: c000021a {Fatal System Error}.. Is working no problem with vboot 1.1. So I am back to using 1.1 (until next v2.0 update and will test again :laugh: ). I noticed that it detected windows 7 (in the /make command output) rather than windows xp sp3 (which v1.1 says in /make command output). I think this is an error in the detection of windows xp and windows 7 and applying wrong driver???

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## Re: VBoot v2 beta feedback

Posted by huisinro - 2011/11/16 10:52

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(1) can you post the output message from "vbootctl mount"? we tested it, and works very well.

(2) that error is ok, it will then auto install the drivers when the device is not found.

(3) we knew this error message c000021a, you need to delete the Group value of vbootmp service from registry, then should work.

Can you double check the detected os? it must be correct, otherwise it will raise errors.

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## Re: VBoot v2 beta feedback

Posted by ndog37 - 2011/11/17 14:54

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Hi again

I tested again and the vbootctrl /make command works well. Great!

However the BSOD c000021a is still occuring and only with vboot 2. This is my log.

You mentioned "delete the Group value of vbootmp service from registry". Can you give me the command lines to do this? Thank you.

```
X:Tools>"vboot2.0 FAILtoolsx86vbootctl.exe" make "c:vhdwinxp_pro_x86.vhd"  
"u:imageswimWINXPnathanlitesysprep.wim" /imageIndex 1 /size 15
```

VMLite VBoot control program version 2.0  
<http://www.vmlite.com>

Host OS: Microsoft Windows 7 Ultimate Edition, 32-bit Service Pack 1 (build 7601), Version: 6.1  
Booted from Windows CD/DVD

```
virtual disk has been successfully created. Capacity: 15G, Format: VHD, Dynamic  
Failed to open disk device: \.VBOOTMP  
Installing vbootmp driver...  
Partition and format virtual disk...  
VDS Service Loaded  
Found disk with adapter name: VMLite VBoot HBA, target: 0, lun: 0  
Format volume...  
Mounting volume to drive 'Z:'  
ReleaseVdsService()  
The new virtual disk is mounted to Z:  
Please wait for the disk to be populated, this may take more than 30 mins...  
Progress 100%(01 mins remaining)  
Successfully started service: VBootService  
Processing mapped drive Z: of the new disk...  
Found Windows XP (32-bit) in Z:WINDOWS, version: 5.1, service pack 3  
Successfully copied driver file: X:Toolsvboot2.0  
FAILtoolsx86driversvbootmpvbootmp.sys->Z:WINDOWSSystem32driversvbootmp.sys  
Successfully copied driver file: X:Toolsvboot2.0  
FAILtoolsx86driversvbootfsvbootfs.sys->Z:WINDOWSSystem32driversvbootfs.sys  
Service stopped successfully  
VDS Service Loaded  
ReleaseVdsService()  
DismountMiniDisk(), ret=0x0, targetNumber=0, lunNumber=0  
Virtual disk has been successfully made: c:vhdwinxp_pro_x86.vhd.
```

```
X:Tools>"vboot2.0 FAILvbootedit.exe" create title="VHD Windows XP Pro SP3 English"  
harddisk=c:vhdwinxp_pro_x86.vhd boot=harddisk hide="c:"
```

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## Re: VBoot v2 beta feedback

Posted by huisinro - 2011/11/17 15:10

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It's a bit involving, you need to delete a registry value from the made vhd. These are the steps:

- (1) mount the newly created vhd after make command, let's say mounted to Z:
- (2) open regedit, click Local Machine, and load hive z:windowssystem32configSYSTEM to a key, e.g.,

S1  
(3) now go to S1ControlSet001Servicesvbootmp  
delete the Group value  
(4) unmount vhd

and try to reboot.

Let me know if this works, we will try to correct this bug. Group value is ok for other cases, only this sysprepared one has troubles.

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### Re:VBoot v2 beta feedback

Posted by test1001 - 2011/11/17 16:05

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Hi,

I tested VBoot 2.0 beta with XP SP3 and Windows shows that the total memory amount is 499MB, where 330MB are free.

I have 8GB on my machine and without VBoot I have 2.7GB free.

On Win7 SP1 X64 it is basically the same: with VBoot I have 5.8GB free memory and without it there are 7.1GB.

Is there a way to reduce the VBoot memory requirements ?

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### Re:VBoot v2 beta feedback

Posted by huisinro - 2011/11/17 16:17

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this is very weird. VBoot 2.0 on XP uses less than 100MB memory on our test machines.

are them 64-bit cpus? so when you boot from vbooted vhds, physical memories become less. Can you try to use vboot-black-screen, and check if memory usage would change, see instructions below.

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VBoot Loader reserves a memory region for use, this might have conflicts with other devices. For example, there are reports that ATI graphic cards cause black screen during boot. If you get into this problem, you can try to use a different boot file. We provide a file "vboot-black-screen" in c:vboot folder, you need to rename this file to "vboot". Make sure you backup the original "vboot" file.

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### Re:VBoot v2 beta feedback

Posted by test1001 - 2011/11/17 16:26

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Using vboot-black-screen it does not boot at all.

I also tested with Win7 SP1 X86 where the memory problem does not occur.

I forgot to say, yes its a 64-bit CPU - an I7-2700 on a Z68 chipset motherboard.

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### Re:VBoot v2 beta feedback

Posted by huisinro - 2011/11/17 16:36

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for win7, can you try to use windows boot manager to boot, instead of vboot, and check if memory problem still exists.

you can add vboot vhd using bcdedit, then boot it without using vboot loader, only the drivers are used in this case. I want to identify whether it is the loader causing this strange problems.

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### Re:VBoot v2 beta feedback

Posted by test1001 - 2011/11/17 17:06

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Sorry, I didn't understand ... but the 'very-low-memory' problem does NOT occur on Win7 X64 or X86, its only on XP 32-Bit.

But the other question was: Is it possible to reduce the large memory usage ? (more than 2GB) on Windows 7 - 7.1GB free without VBoot and 5.8GB free when loaded from the VBoot VHD.

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### Re:VBoot v2 beta feedback

Posted by huisinro - 2011/11/17 17:16

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can you double check if running vboot v2? run devmgmt.msc, Storage Controller should display "VMLite VBoot HBA". In all of our test cases, it uses very little memory.

I wanted you to debug, by booting vhd using windows boot manager, instead of vboot GRUB2, to check if memory issue would go away. You can use native windows 7 boot manager to boot a vboot vhd (win7) file.

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### Re: VBoot v2 beta feedback

Posted by ndog37 - 2011/11/17 17:54

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huisinro wrote:

It's a bit involving, you need to delete a registry value from the maked vhd. These are the steps:

- (1) mount the newly created vhd after make command, let's say mounted to Z:
- (2) open regedit, click Local Machine, and load hive z:windowssystem32configSYSTEM to a key, e.g., S1
- (3) now go to S1ControlSet001Servicesvbootmp delete the Group value
- (4) unmount vhd

and try to reboot.

Let me know if this works, we will try to correct this bug. Group value is ok for other cases, only this sysprepared one has troubles.

OK I figured this out before I got a chnace to see your reply, and modified my install script

```

:: ===== z: mount =====
vbootctl.exe mount "c:vhdwinxp_pro_x86.vhd" z:

echo.
echo Remove group value of corrupted vbootmp
reg load HKUZZZ "z:windowssystem32Configsystem"
reg delete "HKUZZZControlSet001Servicesvbootmp" /v "Group" /f
reg unload HKUZZZ

vbootctl.exe umount z:
:: ===== z: umount =====

```

All commands completed successfully

However there is a new BSOD after this which is  
STOP: c0000218 {Registry Hive failure}  
The registry cannot load the hive (file):  
SystemRootSystem32ConfigSOFTWARE  
or its log alternate.  
It is corrupt, absent, or not writable.

So unfortunately not the fix.

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## Re:VBoot v2 beta feedback

Posted by test1001 - 2011/11/17 17:57

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Yes, I'm using VBoot 2.0, its showing '...HBA' in device manager.

When using bootmgr to boot the Win7 VHD, the memory issue is completely gone - I have now 7.0GB free - thats ok.

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**Re: VBoot v2 beta feedback**

Posted by huisinro - 2011/11/17 17:59

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ok, will add a fix to this problem in next update.

can you describe how to generate the xp wim file? need to reproduce this problem.

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**Re: VBoot v2 beta feedback**

Posted by ndog37 - 2011/11/17 18:42

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Ok sure.

I will give you the instructions in about 2 days time. meanwhile I will upload the wim and give you a download link via PM.

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**Re: VBoot v2 beta feedback**

Posted by test1001 - 2011/11/17 19:01

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I did not use a .wim file, I did it this way:

- normal XP install (CD -> HDD)
- disk2vhd.exe (SysInternals) to get the VHD image from the HDD
- vbootctl.exe prepare to inject the drivers
- vbootedit.exe install /drive C: /mbr to make grub2/VBoot the primary boot manager

Btw., I did it that way because using the grub.cfg template, it failed in step 1, saying the vbootmp.sys couldn't be copied.  
After that, I injected the VBoot 2.0 drivers into the XP installation ISO using nLite and booted without the 'floppy=' option. The result was a BSOD 0x0000007B.

=====

**Re: VBoot v2 beta feedback**

Posted by huisinro - 2011/11/17 19:07

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need to comments out LoadOrderGroup from vbootmp.inf, then inject to xp. refer to the floppy for more details. vbootmp needs to be configured differently in setup and afterwards.

; LoadOrderGroup = SCSI Miniport

test1001 wrote:

I did not use a .wim file, I did it this way:

- normal XP install (CD -> HDD)
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### Re: VBoot v2 beta feedback

Posted by ndog37 - 2011/11/18 00:59

huisinro can I message you offline? I need to send you a test wim file. Cheers.

=====

### Re: VBoot v2 beta feedback

Posted by huisinro - 2011/11/18 10:08

pls send it to INFO AT VMLITE DOT COM  
thanks

ndog37 wrote:

huisinro can I message you offline? I need to send you a test wim file. Cheers.

=====

### Re:VBoot v2 beta feedback

Posted by Vortex - 2011/11/18 14:01

Hi huisinro,

I tested VBoot v2 to install Windows 2000 on a raw image file but the issue reported in the message below is continuing :

[http://vmlite.com/index.php?option=com\\_kunena&Itemid=158&func=view&catid=17&id=6846#6858](http://vmlite.com/index.php?option=com_kunena&Itemid=158&func=view&catid=17&id=6846#6858)

I always get the error 7B : INACCESSIBLE\_BOOT\_DEVICE after the message Press F6 to ... is displayed in text mode phase of the Windows 2000 installation.

```
menuentry "Windows 2000 Install Step 1" {  
  vboot harddisk="(hd0,1)/win2000.img" floppy="(hd0,1)/vboot/vboot-2k.img cdrom="(hd0,1)/w2000.iso  
  boot=cdrom
```

Replacing vboot-2k.img with vboot.img didn't have any effect

=====

## Re:VBoot v2 beta feedback

Posted by huisinro - 2011/11/18 16:11

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Thanks for reporting the bug. Honestly speaking, we still haven't done much test on Windows 2000. Will debug this over next few days.

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## Re:VBoot v2 beta feedback

Posted by huisinro - 2011/11/18 16:59

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Make sure to press F6 for Windows 2000, then press S to select the floppy.

Vortex wrote:  
Hi huisinro,

I tested VBoot v2 to install Windows 2000 on a raw image file but the issue reported in the message below is continuing :

[http://vmlite.com/index.php?option=com\\_kunena&Itemid=158&func=view&catid=17&id=6846#6858](http://vmlite.com/index.php?option=com_kunena&Itemid=158&func=view&catid=17&id=6846#6858)

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```
menuentry "Windows 2000 Install Step 1" {  
  vboot harddisk="(hd0,1)/win2000.img" floppy="(hd0,1)/vboot/vboot-2k.img cdrom="(hd0,1)/w2000.iso  
  boot=cdrom
```

Replacing vboot-2k.img with vboot.img didn't have any effect

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## Re:VBoot v2 beta feedback

Posted by huisinro - 2011/11/18 17:47

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It's about time to make windows 2k install to work, we will try to update in next build in a few days, with some support to install 2k to a vhd.

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=====  
**Re:VBoot v2 beta feedback**

Posted by Vortex - 2011/11/19 03:01

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huisinro wrote:

Make sure to press F6 for Windows 2000, then press S to select the floppy.

Hi huisinro,

This time, I hit F6 to select the virtual floppy. Setup detected successfully the driver. I selected the virtual partition marked as I to start the installation. C, D and E are my real Windows partitions. The report of Windows 2000 installer :

131070 Mb Disk 0 at ID 0 on bus on atapi

C : unformatted or damaged  
D : NTFS  
E : NTFS

1020 MB Disk 0 at ID 0 on bus 0 on vbootdsk

( I created here a new partition marked as I by setup to install Windows 2000 )

I selected "I" to continue but setup reports that my C driver is damaged or unformatted and states that it should be formatted. I had to stop the installation as C is my real Windows XP system partition.

I will wait for the next release of vboot to test again Windows 2000

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=====  
**Re:VBoot v2 beta feedback**

Posted by huisinro - 2011/11/19 09:15

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yes, that's the bug on w2k, we should be able to fix that soon.

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=====  
**Re:VBoot v2 beta feedback**

Posted by huisinro - 2011/11/21 08:55

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We have find the cause for the win2k bug, will some more days to bring win2k about same level of support as xp.

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### Re:VBoot v2 beta feedback

Posted by huisinro - 2011/11/22 22:03

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we have fixed the windows 2000 bug, will be available in next update.

Windows 2000 will have some limits on file system, you have to make sure ntfs.sys inside windows 2000 can recognize the volumes where you place vboot, iso and vhd files. This may enforce you to have a windows 2000 partition, then you place files there.

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### Re:VBoot v2 beta feedback

Posted by ndog37 - 2011/11/25 17:28

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Hi vboot team.

Just wondering if you had any success with the windows xp wim to vhd STOP c000021a error? Did you test the wim file I sent or should I just post instructions how to make it for you instead?

Cheers :laugh:

=====

### Re:VBoot v2 beta feedback

Posted by huisinro - 2011/11/25 17:38

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downloaded the wim file. Is this normal? when I boot the wim prepared vhd, it modifies the host disk signature, and I had to manually restore the old signature in order to boot my host.

We've been working on the win2k bug, will now start to look into this bug.

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### Re:VBoot v2 beta feedback

Posted by ndog37 - 2011/11/25 19:53

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That is strange.

I know is the wim file works ok using imagex to a raw harddisk and it works with vboot 1.1. I have tested win7 x64 with wim to vhd in vboot 2.0 and it works, I noticed it says the same autochk error as windows

xp(on first boot), but it still manages to work.

Can you comment on the hide command? I am trying to make this work properly but I don't understand what d: or c: means. My hard disk has 2 partitions one is 50GB where vboot and vhd files are stored, the other is the remaining space with flat files of my work.

I have tried

hide="C:"

hide="D:"

hide="C:,D:"

In none of the cases did it hide the vboot partition (same partition where vhd is hosted) so I keep using parttool, using

```
parttool (hd0,1) hidden+
```

```
vboot harddisk="(hd0,1)/vhd/win7x64.vhd"
```

=====

## Re:VBoot v2 beta feedback

Posted by huisinro - 2011/11/25 19:58

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(1) make sure you have installed vbootfs.sys to the vhd. It's automatically installed if you use the standard way as described by vboot instructions.

(2) C: D: is the drive letter when you boot to the vhd without "hide" option.

(3) you may want to try hide="0" option which hides the whole disk, you can still save to the vhd file.

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## Re:VBoot v2 beta feedback

Posted by test1001 - 2011/11/25 20:09

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I also observed a change of the host disk signature after a boot failure under WinXP SP3 with a BSOD 0xC000021A.

This error was raised because I added another HDD.

Using the (UUID=) syntax in grub.cfg lead to a BSOD 0x0000007B.

The solution to both errors was to adjust the values under HKLMSYSTEM\MountedDevices and to delete the LoadOrderGroup value from Servicesvbootmp.

For the "WinXP-has-only-500MB-available"-problem I described earlier in this thread, I found that it is triggered by the enabled onboard graphics of the I7. Using a PCI-E card and disabeling onboard, the memory is fully available.

Re:VBoot v2 beta feedback

Posted by huisinro - 2011/11/25 20:13

yes, we noted v2 introduced a new bug on (UUID=), fixed now. Next update will contain the fix. Still investigate on the disk signature change cause. Probably, we will update the binary over the weekend.

Re:VBoot v2 beta feedback

Posted by qoqodqo - 2011/11/26 13:35

Hi

First: I have my vboot in clean SDD without OS (just the vboot and files) and I boot right away to my vhd's like that, no problem, BUT: today I updated my vboot to vboot 2 (removed previous vboot 1.1 folder and copied vboot 2 folder to SDD root (folder name: "vboot"), also copied files "vbootldr" and "vbootldr.mbr" to SDD root as obvious, finally I copied my grub.cfg from v1.1 with all the settings to my v2 folder), I did update all my vhd's (vbootctl update ) with success, it shows vboot loader screen OK, I choose my vhd (OS - W7 32bit) and it strats booting, but as it come to welcome screen it restarts automaticaly and I am again presented at vboot loader screen (blue background and white letters) - in v1.1 there wa sno such problem, so isn't it a bug???. Please, help! :-)

Re:VBoot v2 beta feedback

Posted by huisinro - 2011/11/26 13:51

are you using UUID format? if so, try to change it to (hd) format. we just discovered a serious bug on this for v2.

Re:VBoot v2 beta feedback

Posted by qoqodqo - 2011/11/26 14:01

Re:VBoot v2 beta feedback

Posted by qoqodqo - 2011/11/26 14:01

are you using UUID format? if so, try to change it to (hd) format. we just discovered a serious bug on this for v2.

sorry, no: I am using LABEL format

=====  
**Re:VBoot v2 beta feedback**

Posted by huisinro - 2011/11/26 14:25

try to change to (hd) format too, LABEL same bugs, will update the binary next few days.

=====  
**Re:VBoot v2 beta feedback**

Posted by qoqodqo - 2011/11/26 14:50

try to change to (hd) format too, LABEL same bugs, will update the binary next few days.

many thanx for your quick answer but I am affraid I will have to wait for the update cos the reason I was pushed to use LABEL format was that I have errors using HD or UUID formats cos if I used UUID it was completly and all the time mess (see I am not using any loading OS, I have vboot on a clean SDD), and if used with HD format as I am using also another real HDD when booted to my vhd there were many errors cos for some reason HD is different in BIOS and different in differens OS (like WinXP, W7 etc.)... :-)

=====  
**Re:VBoot v2 beta feedback**

Posted by MagicAndre1981 - 2011/12/17 13:05

huisinro wrote:  
MagicAndre1981,

there is no way to determine which exe to run under PE (i.e., when you boot windows 7 from cdrom). 32-bit exe won't run in 64-bit system.

vista D still doesn't work, it's in our plan, will try to fix it next build, just need to change some registry entries.

ok, thanks.

I tried to install Vista, but Setup from ISO doesn't work. After the first reboot I only saw a black screen with a mouse pointer and setup stuck.

## Re:VBoot v2 beta feedback

Posted by huisinro - 2011/12/17 13:19

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MagicAndre1981,

did you download latest .zip file? check vbootvboot modified data, it must be in Nov 2011, otherwise, it's old build.

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## Re:VBoot v2 beta feedback

Posted by MagicAndre1981 - 2011/12/17 16:41

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sure. I downloaded the version on December 16th ;) Files are from November and driver date is December 15th.

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## Re:VBoot v2 beta feedback

Posted by huisinro - 2011/12/17 17:10

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c:vbootvboot is dated on Nov 2011? I made an update after first upload on Dec 15, 2011, which is why I wanted to confirm.

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## Re:VBoot v2 beta feedback

Posted by MagicAndre1981 - 2011/12/18 07:44

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yes :angry:

I check the setuperr.log and found this:

```
2011-12-17 01:43:35, Error    IBS   CollectTempDriveRequirements:Invalid install disk and partition
numbers,
2011-12-17 01:43:35, Error    IBS   Callback_PickTempDrive: Failed to collect temp drive
requirements. HRESULT error code
2011-12-17 01:44:08, Error    IBSLIB SetCheckpoint(StartPhaseSystemVolumeSelectedCheckpoint):
threw exception.: class UnBCL::DirectoryNotFoundException: \?C:Boot*: path not found.
void __stdcall UnBCL::File::ThrowWinIOErr(long,const class UnBCL::String *)

2011-12-17 01:44:08, Error    IBSLIB
RollbackSetCheckpoint(StartPhaseSystemVolumeSelectedCheckpoint): threw exception.: class
UnBCL::DirectoryNotFoundException: \?C:Boot*: path not found.
void __thiscall OSRollbackService::CCheckpointImpressario::SetCheckpoint(const unsigned short
```

```
*,struct OSRollbackService::ICheckpointParameters *)  
void __stdcall UnBCL::File::ThrowWinIOErr(long, const class UnBCL::String *)
```

```
2011-12-17 01:49:46, Error    IBSLIB RollbackSetCheckpoint(WinPEBootSectorRestoreCheckpoint)  
failed. Disabling Rollback.
```

```
2011-12-17 01:49:46, Error    IBS    IBSSetCheckpoint: Couldn't set checkpoint !
```

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## Re:VBoot v2 beta feedback

Posted by jeonluz - 2011/12/26 21:33

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It is about time to make windows 2k install to work, we will try to update in next build in a few days, with some support to install 2k to a vhd.

=====