

VMware ESX 3.5 Install/Upgrade reboot ...



[C.Ruhnke](#) 5 posts since

Dec 24, 2007 Configuration: Dell PE 6650, 4 CPU, 4GB, PERC 3/DC, 3 36GB drives configured as JBOD.

Trying to install ESX 3.5 from a CD burned with the ISO image from www.vmware.com/download.

After install is finished, when the server reboots it terminates with the message "Mounting root failed. Dropping into basic maintenance shell."

The same thing happens if I try to upgrade a successful installation of ESX 3.0.2 to ESX 3.5.

Booting to the "Service Console only" mode is successful and the installation root disk is successfully mounted.

This sounds like there is something hosed in the VMware startups.

Anyone else had this problem? Any suggestions to resolve this problem?


Thanks! Tags: 3.5, boot, disk



[mphodge](#) 46 posts since

Feb 3, 2004 1. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Dec 25, 2007 10:27 AM

Just had the same problem on a Dell PE 2600.

I used the upgrade tarball with esxupdate and when the server rebooted, it was not able to mount the root 

My next step was to try an install from the CD... until I read this thread.

Think I'll got and watch Dr Who then...



[C.Ruhnke](#) 5 posts since

Dec 24, 2007 2. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Dec 26, 2007 12:04 PM

I moved my hard disks from the PERC3/DC RAID controller to the Adaptec SCSI adapter and was able to successfully install and boot ESX 3.5.

After installing I moved the "working" installation back onto the RAID controller and the original problem recurred.

I suspect there is something malfunctioning in the megaraid2 driver.



[StefanST](#) 3 posts since

Apr 14, 2006 3. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Dec 27, 2007 6:00 AM

Hi all,

same problem here on DELL 1800 (PERC4,SC) and DELL 6650 (PERC4,SC) latest PERC Firmware.

VMware ESX 3.5 Install/Upgrade reboot ...

That must be a driver bug. With ESX 3.02U1 without problems.

I hope that it will give for it soon a solution.


Nice surprise between the holidays 

Stefan



[nextlevel](#) 27 posts since

Sep 15, 2004 4. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Dec 29, 2007 11:10 AM


 in response to: [StefanST](#) I can confirm this problem on a Dell 6850 4 DualCore with PERC/4...

Any solutions?



[C.Ruhnke](#) 5 posts since

Dec 24, 2007 5. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Dec 31, 2007 5:42 AM


 in response to: [nextlevel](#) Problem has been logged with support. No replies from them, yet.

--CHRis



[Texiwill](#) 10,212 posts since

Jan 13, 2004 6. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Dec 31, 2007 10:34 AM

 in response to: [C.Ruhnke](#) Hello,

I had a similar issue.... Ensure that your Hardware firmware is up-to-date. I had a downlevel disk firmware and network card, which prevented my systems from booting. The firmware was good for ESX v3 but not for 3.5.... So I would check this first.

Best regards,

Edward L. Haletky

VMware Communities User Moderator


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Author of the forthcoming 'VMWare ESX Server in the Enterprise: Planning and Securing Virtualization Servers', publishing January 2008, Copyright 2008 Pearson Education. Available on Rough Cuts at <http://safari.informit.com/9780132302074>



[C.Ruhnke](#) 5 posts since

Dec 24, 2007 7. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Dec 31, 2007 11:32 AM

 in response to: [Texiwill](#) Both the host and the MegaRAID adapter were updated to the latest firmware available from Dell prior to the installation of ESX V3.5.

--CHRis



[mtestino](#) 4 posts since

Dec 29, 2007 8. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Dec 31, 2007 2:25 PM

same problem here, we have two pe6650 running esx 3.0.2, tried to install esx3.5, mounting root failed, probably this problem will be fixed in the next "update 1" release, at least i hope so.



[nextlevel](#) 27 posts since

Sep 15, 2004 9. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 14, 2008 3:20 PM

in response to: [mtestino](#) Weird.

I do it on an identical PE6850 and it works. Same firmware of MEGARAID too

This machine doesn't work:

v2.10.7 (Release Date: Sat Jun 5 02:32:59 EDT 2004)

PERC 4/DC

Controller Type: 438/466/467/471/493/518/520/531/532

Controller Supports 40 Logical Drives

Controller capable of 64-bit memory addressing

Controller using 64-bit memory addressing

Base = 3fe02000, Irq = 153, Initial Logical Drives = 1, Channels = 2

Version =*352D*:1.10, DRAM = 128Mb

Controller Queue Depth = 254, Driver Queue Depth = 126

...

This machine works:

v2.10.7 (Release Date: Sat Jun 5 02:32:59 EDT 2004)

PERC 4/DC

Controller Type: 438/466/467/471/493/518/520/531/532

Controller Supports 40 Logical Drives

Controller capable of 64-bit memory addressing

Controller using 64-bit memory addressing

Base = 0b402000, Irq = 153, Initial Logical Drives = 1, Channels = 2

Version =*352A*:1.10, DRAM = 128Mb

Controller Queue Depth = 254, Driver Queue Depth = 126

*The ONLY difference is the **REVISION** (Correction:FIRMWARE) of the controller*

VMware ESX 3.5 Install/Upgrade reboot ...



[Texiwill](#) 10,212 posts since

Jan 13, 2004 10. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 3, 2008 6:46 AM

👤 in response to: [nextlevel](#) Hello,

A Revision change can make a difference! If the rev is newer than the one tested or older than the one supported there could be issues. I suggest you open a call with your VMware Support Agent to at least get the HCL updated.

Best regards,

Edward L. Haletky

VMware Communities User Moderator

====

Author of the book 'VMWare ESX Server in the Enterprise: Planning and Securing Virtualization Servers', Copyright 2008 Pearson Education. Available on Rough Cuts at <http://safari.informit.com/9780132302074>



[nextlevel](#) 27 posts since

Sep 15, 2004 11. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 14, 2008 3:18 PM

👤 in response to: [Texiwill](#) But it is the NEW 3.5 ESX that does not work on the NEW firmware, where 3.0.2 works!

There ist <http://kb.vmware.com/kb/5966817>

But it is related to 3.0.x, not 3.5 and not exactly hits the problem.



[rpartmann](#) 223 posts since

Feb 8, 2007 12. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 14, 2008 3:34 PM

Hi,

probably is it like with some SATA Controllers.

Check the PCI id and try the procedure as mentioned in the thread below.

I think you should look into these files:

/etc/vmware/pciid/ aacraid_esx30.xml or

megaraid2.xml.

<http://communities.vmware.com/message/833574#833574>

kind regards,

Reinhard.

ps: Award points if you find answers helpful. Thanks.

VMware ESX 3.5 Install/Upgrade reboot ...



[a18041967](#) 120 posts since

Mar 11, 2005 13. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 15, 2008 9:19 AM

👤 in response to: [rpartmann](#) I've experienced a very similar problem using the MegaRaid in a whitebox solution, I'll be watching this thread to see if there's a solution.



[wolvie724](#) 2 posts since

Nov 13, 2007 14. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 30, 2008 7:20 AM

👤 in response to: [nextlevel](#) I have a 2500 with a Perc3/DC in the test environment that I tested installing 3.5 on. I had it up to firmware level 199D and got the "mounting root failed" error.

I took the firmware back one level to firmware level 199A. And the install went fine (boots up fine). I going to have to test a Perc4 to see what happens. But maybe that is a place to start looking



[phenneberry](#) 2 posts since

Mar 29, 2006 15. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 21, 2008 3:15 PM

👤 in response to: [wolvie724](#)

I'm using an IBM xSeries 336 and the same issue others have experienced holds true with this model.

I'm booting from a SAN via qllogic HBA, and have disabled the internal RAID controller. I also have upgraded to the latest firmware but to no avail.



[99matt99](#) 2 posts since

Jan 22, 2008 16. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 22, 2008 2:13 AM

👤 in response to: [phenneberry](#) Interestingly we ran into a problem with our upgrade from 3.0.2 to ESX 3.5 in that the initrd file was too big to fit into the default ramdisk so the upgraded server would boot to service console but not full esx (kernel panic).

We edited the grub kernel parameter and set the ramdisk_size parameter to be bigger than the initrd for full ESX. The server would then boot into esx. Why the initrd file ended up being 92MB in size for only used about 18 MB of files puzzles me but at least the server came up.



[Rkelly](#) 40 posts since

May 26, 2005 17. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 28, 2008 3:17 PM

👤 in response to: [99matt99](#)

Add me to the list with this problem.

IBM x3650

VMware ESX 3.5 Install/Upgrade reboot ...

Upgrading from ESX 3.0.2 update 1 to 3.5



[rpartmann](#) 223 posts since

Feb 8, 2007 18. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 28, 2008 4:15 PM

in response to: [a18041967](#) Hi,

if possible start your ESX box in troubleshooting mode and do a `lspci -v` and `lspci -v -vv` and post the vendorID:deviceID

and the type of your scsi/sas/sata card.

kind regards,

Reinhard.

ps: Award points if you find answers helpful. Thanks.



[Rkelly](#) 40 posts since

May 26, 2005 19. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 28, 2008 4:31 PM

in response to: [rpartmann](#)

Adaptec IBM serve Raid 8k



[99matt99](#) 2 posts since

Jan 22, 2008 20. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 29, 2008 10:57 AM

in response to: [rpartmann](#) 01:00.0 RAID bus controller: Adaptec Adaptec Rocket (rev 02)

Subsystem: International Business Machines ServeRAID 8k/8k-l8

Flags: bus master, fast devsel, latency 0, IRQ 22

Memory at e7a00000 (64-bit, non-prefetchable) [size=2M](#)

Memory at e7e00000 (64-bit, prefetchable) [size=128K](#)

I/O ports at 5000 [size=256](#)

Expansion ROM at <unassigned> [disabled size=32K](#)

Capabilities: [40 #10 0001](#)

Capabilities: [e0](#) Message Signalled Interrupts: 64bit+ Queue=0/2 Enable-



[phenneberry](#) 2 posts since

Mar 29, 2006 21. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 29, 2008 12:15 PM

in response to: [99matt99](#)

On the IBM 336 xSeries running VMware ESX 3.5, LSPCI -v shows:

VMware ESX 3.5 Install/Upgrade reboot ...

00:if.2 IDE Interface: Intel Corporation 82801EB (ICH5) SATA Controller

On the same machine when running ESX 3.02 which works fine, LSPCI -v shows:

00:if.2 IDE Interface Intel Corporation Unknown device 24d1



[sthoppay_wipro](#) 43 posts since

Jan 25, 2008 22. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 29, 2008 12:27 PM

I have Dell 6850. Executed the following command to increase the queue depth

```
esxcfg-module -s ql2xmaxqdepth=64 qla2300_707_vmw
```

```
and esxcfg-boot -r
```

After reboot, I got the same error "Mounting root failed" and busybox prompt.

I can login into troubleshooting mode without any issues & it mounts the root volume.

I tried executing

```
esxcfg-boot -p
```

```
esxcfg-boot -r
```

but, no luck.



[mphodge](#) 46 posts since

Feb 3, 2004 23. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 30, 2008 1:12 AM

in response to: [mphodge](#)

Managed to fix my "mounting root failed"...

Downgraded the Perc 3/DC firmware from 199D to 199A and now ESX 3.5 boots up 😊

VMware officially do not support this RAID card, don't know why?!



[mtestino](#) 4 posts since

Dec 29, 2007 24. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 30, 2008 4:22 AM

in response to: [mphodge](#)

where the 199A firmware can be downloaded? I've searched on the dell site but i could only find the latest version.

thanks



[wolvie724](#) 2 posts since

Nov 13, 2007 25. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 30, 2008 6:34 AM

in response to: [mtestino](#)

Here is a the link to 199A

http://support.dell.com/support/downloads/format.aspx?c=us&cs=04&l=en&s=bsd&SystemID=PWE_PNT_P3C_2550&servicetag=&os=WNET&osl=en&deviceid=1370&libid=31&impid=-1&typecnt=0&vercnt=9&releaseid=R126654

and if you need to do the same with other PERC cards go to the current firmware page. Click on the firmware you want to DL and under the Download Now link you will see a link called Other Versions. Click that link and you will get links to all the old firmwares.



[C. Ruhnke](#) 5 posts since

Dec 24, 2007 26. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 30, 2008 7:11 AM

Confirmed! Downgrading the firmware on the PERC 3/DC controller from rev 199D to rev 199A resulted in a bootable VMware 3.5 server.



[mtestino](#) 4 posts since

Dec 29, 2007 27. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 30, 2008 7:20 AM

 in response to: [wolvie724](#) thank you!



[Svante](#) 30 posts since

Mar 29, 2006 28. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Jan 31, 2008 2:49 AM


Same/similar problem here. HP BL460c, internal RAID used for ESX installation. Had 3.0.2, all patches installed, running just fine, used the 3.0-3.5 tarball to upgrade. Everything seemed fine, no disks anywhere near going full, no error messages during upgrade. After reboot, can't mount root. I figured the quickest solution for me was to do a clean 3.5 installation rather than trying to find out what went wrong. Feels more clean anyway, but of course a serious problem for those not having that option.

Clean 3.5 installation went fine, and it boots. Having some iSCSI problems now, but that is another story.. Back on 3.0.2 for now (I had mirrored disks so I could go back to 3.0.2 with minimal effort)



[henka01](#) 1 posts since

Jan 10, 2006 29. **Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Feb 7, 2008 2:21 AM

 in response to: [Svante](#)

I had the same issue during upgrade from 3.0.2 to 3.5 with esxupdate on 4 DELL PE 2950. This solved the problem for me:

<http://kb.vmware.com/kb/1003801>



[DeGreat](#) 3 posts since

Feb 1, 2006 30. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Feb 10, 2008 3:11 PM

I had the same issue. I have a PE2600 with Perc 4Di. I had the latest firmware ans was getting the same error. I rolled back the FW to the following and 3.5 works great.

<http://support.us.dell.com/support/downloads/download.aspx?c=us&l=en&s=gen&releaseid=R71754&formatcnt=5&libid=0&fileid=93120>

Let me know if this helped. **Attachments:**

- [perc4di-pe2600-248-A14.exe](#) (1.1 MB)



[cybermage](#) 4 posts since

Sep 28, 2006 31. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Mar 9, 2008 12:44 AM

in response to: [C.Ruhnke](#)

Running firmware 199A does indeed allow 3.5 to boot and appear to be working.

I have however another problem. If I install 2-3 VMs on the local VMFS it works fine. Any subsequent VMs seem to get disk corruption.

I would run chkdsk on a VM and it would find errors, it will then repair and if I run chkdsk again it will again find errors, the errors are also not the same.

I have tried creating new VMs, restore exising VMs, nothing seem to work part around 2-3 VMs.

3.0.2 works just fine, Even VMs that seem to have corruption work if I leave the VMFS volume intact when downgrading from 3.5 to 3.0.2.

Rolling back to 3.0.2 again.



[DeGreat](#) 3 posts since

Feb 1, 2006 32. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Mar 10, 2008 9:59 AM

in response to: [cybermage](#) I have only 2 VMs on my PE2600. They are in production. I would love to add couple of more to test. The VMs that are getting corrupted are the new VMs or the old VMs?



[Rkelly](#) 40 posts since


May 26, 2005 33. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Mar 10, 2008 11:26 AM

in response to: [DeGreat](#) I was able to get mine working. Call technical support. Apperently in the ESX 3.5 Build I had there was an RPM that did not run during the upgrade. VMWare has since released a new build that corrects this problem.



[cybermage](#) 4 posts since

Sep 28, 2006 34. Re: **VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Mar 11, 2008 2:17 AM

 in response to: [DeGreat](#)

I tried it with both existing and new VM's. I have rebuild the server between each test.


Also installing 3.0.2 over 3.5 and only keeping the VMFS then those VMs work again.. It is really strange.

I have actually installed the latest iso thinking that it might have to do with the rpm issue, but it wasn't.



[shaymandel](#) 1 posts since

Oct 21, 2008 **35. Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Oct 21, 2008 10:32 PM

 in response to: [Svante](#)

I ran into the same issue, with ESX 3.5, running a HP Proliant DL 145, 2 CPUs with 4GB RAM. I have tried starting in troubleshooting mode, and got this error:

Initialization of vmkernel failed, status 0xbad0013

I found a solution for this here:

<http://www.shocknetwork.com/forum/vmware-discussion-f20/esx-vmkernel-doesn-load-0xbad0013-t89.html>

and followed the description there, which said that the DIMM memory cards should be installed as 2 per each CPU, and not 4 for one CPU. This solved my issue.


I am posting this here, as the initial issue I saw was Mounting Root Failed and I invested quite some time following the messages in this thread without luck, and with a lot of work.

I hope this will help some more people.



[cheipler](#) 2 posts since

Jun 9, 2008 **36. Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Sep 14, 2009 7:25 PM

 in response to: [sthoipay_wipro](#) I had a similar issue today after updating the ql4xmaxqdepth setting for my QLogic 4062's on 2 of my ESX boxes. After rebooting I was getting the "Mounting root failed". Ended up rebooting into troubleshooting mode and then removing the last line in the /etc/vmware/esx.conf file, which referenced the setting changes I had made (looked something like "vmkernel.....esxcfg-module -options ql4xmaxqdepth=200.....").

Anyway hope that helps someone now I have to find out what the proper value is seeing how the EqualLogic documents say it should be 200.



[tom howarth](#) 7,351 posts since

Jul 25, 2005 **37. Re: VMware ESX 3.5 Install/Upgrade reboot error "Mounting root failed."** Sep 15, 2009 2:53 AM

Thread moved to the correct sub-forum

If you found this or any other answer useful please consider the use of the Helpful or correct buttons to award points

Tom Howarth VCP / vExpert

VMware Communities User Moderator

Blog: www.planetvm.net

Contributing author for the upcoming book " [VMware vSphere and Virtual Infrastructure Security: Securing ESX and the Virtual Environment](#)". Currently available on roughcuts

