

Strange vmxnet issue in Linux VM after ...



wally 147 posts since

Nov 25, 2004 We're having a very strange issue with the new vmtools for linux (so far seems reproducible with FC5/6 and RHEL4/5) that comes with (**critical**) patch ESX3199476.

vmware -v : VMware ESX Server 3.0.1 build-39823

vxpa -v: VMware VirtualCenter Agent Daemon 2.0.1 build-40644

Virtual Infrastructure Client 2.0.1 build 40644

Virtual Infrastructure Server 2.0.1 build 40644

Physical hardware: HP DL385G1/Intel Pro 1000GT (quad port)

We use an installation/recovery .iso that uses the pcnet32 driver.

- When we boot our .iso on this VM we have NO network connection (pcnet32 driver)

(- Edit settings remove/add network adapter does not fix this)

- We boot with the .iso -> WORKING network connection (pcnet32 driver)

So somehow installation of the new vmtools seem to mess with the virtual (nic) hardware. Strange enough this can (only?) be undone with a revert to snapshot but this snapshot does not involve the .iso from which we boot so I have no clear vision about what is going on, except that it appears that something about the virtual (nic) hardware or vmtools version is stored in the VM's vmdk file.



aciarlotta 4 posts since

Jan 15, 2008 **1. Re: Strange vmxnet issue in Linux VM after patch ESX3199476** Jan 15, 2008 10:11 AM

Was this issue ever resolved?

I've been fighting with Linux guests in VI 2 since day one. After running vmware-config-tools.pl, the network doesn't work. I run the commands suggested by the script to remove the pcnet32 driver and load the vmxnet driver, and STILL no network.

Reboot. No network.

Remove the VMwareTools RPM, reinstall, run vmware-config-tools.pl again. YAY! Network.

Reboot. No network. WTH is going on?

This is currently happening to me on a guest that was cloned from one that was working perfectly, although it's also happened with a brand new guest. I have to fight with it, uninstall, reinstall, manually nuke the module file, re-run the config tools multiple times until it finally decides to stick.

I never had these problems in GSX server or the updated VMware Server.

VI Version 2.0.2, build 62327

The VMware Tools it provides when using "Install vmware tools" is VMwareTools-3.0.2-55869, which doesn't seem right.

RedHat ES 4 Update 6 - No kernel or other OS customizations of any kind.

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Ideas?

UPDATE: I gave up on the RPM after messing with this virtual for 45 minutes. I unpacked the tarball instead, and then ran the vmware-install.pl script there. It detected an existing install of vmware, so I interrupted it and manually deleted every single vmware file I could find on the OS, then re-ran the vmware-install.pl script.

FINALLY I have a working network connection, even after multiple reboots. It seems to have picked vmxnet this time as well.

Frustrating.



[hitchhiker](#) 23 posts since

Jan 8, 2008 **2. Re: Strange vmxnet issue in Linux VM after patch ESX3199476** Jan 15, 2008 10:56 AM

You can always force the virtual adapter to either vmxnet / pcnet32 or e1000 by editing the guest's config (.vmx) file.

"EthernetX.virtualDev = vmxnet", will force it to vmxnet (where X is the adapter number).

"EthernetX.virtualDev = vlance" to pcnet32 and "EthernetX.virtualDev = e1000" to e1000.



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Jan 15, 2008 **3. Re: Strange vmxnet issue in Linux VM after patch ESX3199476** Jan 15, 2008 11:01 AM

in response to: [hitchhiker](#) Sure I could, but cloning a perfectly working guest should produce another perfectly working guest.



[hitchhiker](#) 23 posts since

Jan 8, 2008 **4. Re: Strange vmxnet issue in Linux VM after patch ESX3199476** Jan 15, 2008 11:07 AM

in response to: [aciarlotta](#) One would think nothing would change, but it's a little bit tricky. When you move to different platform, the virtual device emulation underneath the changes, which your older driver might not be prepared for. Also likely, the order in which devices are enumerated has changed, which may cause a different load ordering inside the guest. It's hard to say without looking at the guest.



[aciarlotta](#) 4 posts since

Jan 15, 2008 **5. Re: Strange vmxnet issue in Linux VM after patch ESX3199476** Jan 16, 2008 1:32 PM

in response to: [hitchhiker](#) While creating another RH ES 4 guest today, I had more problems with the network. I forced it to use e1000 as the driver, and the problems disappeared.

Unfortunately, there isn't a way to change it from the Virtual Center GUI like there was in GSX/VMware Server. The only option is "flexible", which has proven to be quite flexible in terms of whether it feels like working or not.

As much as a headache as this has been, I suppose it's not that big of a deal.



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Jan 8, 2008 **6. Re: Strange vmxnet issue in Linux VM after patch ESX3199476** Jan 16, 2008 8:50 PM

in response to: [aciarlotta](#)

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Yeah, "flexible" isn't all that flexible in Linux at times. If I remember correctly, the thinking behind this whole thing went something like this... one would not have to switch adapters after an install - the "flexible" adapter would show up as pcnet32 and would then **switch** to vmxnet when the vmxnet driver was loaded. All that works fine if the load order of modules is just that - pcnet32 followed by vmxnet. But in Linux, it's not all that well controlled and if your guest gets the order wrong, you end up with a vmxnet adapter and pcnet32 driver - which doesn't work. I wish they would just force the adapter to vmxnet by default after tools install and forget about the magic transformation from pcnet32 to vmxnet...

Complain and complain loudly if you have a support contract.