

Frequently Asked Questions about Guest OSes

Disclaimer: This is a personal document and is not official or endorsed by VMware. Feedback and suggestions are welcome.

This document is intended to address common questions about common guest OSes, and is a complement to [Frequently Asked Questions about VMware Fusion](#). You may also be interested in the [official Fusion FAQ](#), the [official Fusion support FAQ](#), the [release notes](#), or anything else in the Fusion forum [documents category](#). It may also answer questions in more depth than is appropriate for a normal forum post. The document assumes familiarity with common terms such as *guest* or *host*; see [A Beginner's Guide to VMware Fusion](#) for an explanation.

In addition to this document, be sure to check out the documentation for your guest OS. If a problem affects real hardware, there's a good chance it affects a virtual machine as well.

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Windows

Booting XP from CD

If you used Easy Install and need to boot from the XP install CD for some reason (e.g. to repair your installation), there's a good chance the CD will not recognize the virtual disk.

Explanation

This is because Easy Install causes Fusion to use a virtual SCSI disk (as opposed to a virtual IDE disk). XP doesn't come with the proper SCSI drivers; we can provide them during Easy Install, but if you need to boot from the XP CD yourself, you need to be ready to tell XP where to get them.

First, download (and unzip if necessary) the [drivers](#). This is a .flp floppy image, similar to how an .iso is a CD image. With the virtual machine shut down (suspended doesn't count), go to the virtual machine's Settings and add a floppy drive if one doesn't already exist. Set the floppy drive to use the .flp image.

When booting from the XP CD, there should be a point at which it asks for drivers (I believe you're supposed to press F6; on some Mac keyboards you may need Fn-F6). Do so. Your virtual hard disk should now be recognized.

See also [Re: How can I repair XP in VMware Fusion 2](#)

PCI-to-PCI Bridge Loop When Upgrading Virtual Hardware

Upgrading a virtual machine's virtual hardware may trigger many notifications about PCI-to-PCI bridges being detected.

Explanation

Fusion 2.0 understands a newer virtual hardware version than Fusion 1.x does; you can keep the old virtual hardware version (probably a good idea for older guests might get confused by the new hardware and which won't benefit anyway) or upgrade. Upgrading a virtual machine's virtual hardware may trigger Windows to show many notifications about PCI-to-PCI bridges being detected. It's **not** a loop, there are just a lot of them (32 or so). There's not much we can do about this - Windows is the one providing the standard driver, and Windows is the one deciding to show the prompts. This should be a one-time event.

If this persists even after dismissing all the prompts (and/or the install fails), this may be due to a corrupted Windows driver database. You can clear out the cache by doing the following:

Start the virtual machine and log in. Immediately (before clicking on anything in new hardware wizard) go to Start > Run, and run cmd.exe. Run the following commands:

```
c:\n> cd \windows\inf\n> del infcache.1\n> exit
```

After that click on 'Next' in hardware wizard. It will take long time because the whole infcache needs to be regenerated, but after that it should install driver for first new device. After installing first device (when asked to click 'Finish') just restart guest. After you log in again, all your drivers should be installed without prompting.

BSoD in es1371mp.sys driver

es1371mp.sys is a Creative driver, provided by Microsoft. Version 6.0.0.0 is known to cause BSoDs.

Explanation

This is a bug in the driver and acknowledged by Microsoft, it also [appears on physical hardware](#). Downgrade to the 5.1.2535.0 driver.

Additional Safely Remove Hardware Choices

Upgrading a virtual machine's virtual hardware may cause new devices to show under Safely Remove Hardware.

Explanation

Fusion 2.0 understands a newer virtual hardware version than Fusion 1.x does; you can keep the old virtual hardware version (probably a good idea for older guests might get confused by the new hardware and which won't

benefit anyway) or upgrade. Certain version of Windows will show additional choices in the Safely Remove Hardware menu, including "VMware Accelerated AMD PCNet Adapter" and "Creative AudioPCI (ES1371,ES1373) (WDM)". These are expected, and it is actually possible to have removable devices like this - see for example [hotplug](#).

Boot Camp virtual machine has a Blue Screen of Death with error code 0x0000007b

See [Re: Bluescreen trying to run Fusion 1.1.2 from Boot Camp partition on MacBook Air](#).

All Linux

Can't Write to HGFS Shared Folders

Even if you have write permissions to a HGFS shared folder (e.g. it works in Windows guests) and the virtual machine's Settings allow writing, you still might not be able to write to a HGFS shared folder. This may affect all non-Windows guests.

Explanation

Although Fusion is letting you write to the folder, the guest OS may be looking at the UID/GIDs of the files and the guest user, finding they don't match, and preventing you from writing. The solution is to edit the guest's `/etc/fstab` and add `uid/gid` arguments. For example, if the line is currently

```
.host: /  
/mnt/hgfs          vmhgfs defaults,ttl=5      0 0
```

and the **guest** uid/gid is 1000, you would change this to

```
.host: /  
/mnt/hgfs          vmhgfs defaults,ttl=5,uid=1000,gid=1000  
0 0
```

You will have to remount the HGFS mountpoint; if you're not sure how to do this, restarting the guest should work.

vSMP and Guest Hangs

Multiprocessor guests may occasionally become unresponsive and not recover. This is known to affect Ubuntu 7.04 (32-bit)/7.10 (32, 64-bit)/8.04 (32, 64-bit) and RHEL 5 (32-bit). Other distros are also affected.

Explanation

There is a known bug in the Linux kernel, introduced in 2.6.18 (32-bit)/2.6.21 (64-bit) and resolved in 2.6.26 where it can't deal with time going backwards. Each core has its own notion of the time, and these can drift out of sync. If the kernel switches from one that's fast to one that's slow, it will think time has gone backwards and panic. This drift can happen on physical hardware, but is more likely to happen in a virtual environment.

To work around this, set the `clocksource=acpi_pm` kernel option as described in [KB 1007020](#) or update to a kernel past 2.6.26.

vsock Tools module fail to load on kernels 2.6.26 and above if CONFIG_MODVERSIONS is defined

We're working on this. Most people probably don't need the vsock module anyway, but if you do, a workaround is to copy the `Modules.symvers` from the build directory of the vmci module into the vsock build directory before building vsock. The kernel build system should then pick up that `Modules.symvers` file and use symbols with these versions. Another alternative is to use `open-vm-tools`, which has the fix.

Ubuntu

Mouse integration is not correct in Ubuntu 8.10 (Intrepid Ibex)

On a completely stock Ubuntu 8.10 install with no updates, `soft ungrab` does not work, and mouse clicks may be displaced

Explanation

[Soft ungrab not working](#) and [mouse clicks being displaced](#) are known Ubuntu `vmmouse` bugs which have been fixed. Apply updates to get the fix.

Fedora

Mouse Offset in Fedora 9

The apparent mouse position doesn't match the actual mouse position, e.g. clicks select something somewhere else. This is position dependent, e.g. the further out you go, the more difference there is.

Explanation

This is a bug in Fedora 9, and documented in their [release notes](#). As noted in the release notes, a workaround is to edit `/etc/X11/xorg.conf` and add `Option NoAutoAddDevices` to the `ServerFlags` section. If you don't already have a `ServerFlags` section, add one as follows:

```
Section "ServerFlags"
    Option      "NoAutoAddDevices"
EndSection
```

OS X

10.5.6 guests

There are [three main known problems with 2.0\(.1\) and 10.5.6 guests](#). If you have Tools installed, you will get only a gray window in the guest (as opposed to the normal UI). Keyboard does not work, nor does a guest reboot. All three will be fixed in the next release of Fusion; in the meantime, we recommend that if possible, 10.5 guests **not** be updated to 10.5.6.

Workarounds

10.5.6 guests do not successfully reboot in Fusion 2.0.1. The workaround is to shut down the virtual machine, then start again.

The keyboard might not work in 10.5.6 guests. This is due to a bug in our virtual USB device handling. You can work around it by editing the .vmx (when neither the virtual machine nor Fusion is running) and changing

```
usb:1.deviceType = "hub"
```

to

```
usb:1.deviceType = "keyboard"
```

Note that you will be unable to use any other USB devices in the virtual machine (since there is now virtual hub to plug into). Remember to undo this change when the next release of Fusion is available.

If you install Tools, the guest's window server will not start, which will make the guest show just a gray screen. There is a workaround, but you need to have MacFUSE (this is installed by default with Fusion):

1. Power off the virtual machine
2. Locate the virtual machine in the Finder (default location is /Users/\${USER}/Documents/Virtual Machines/). Another way to get locate the virtual machine is that you can ctrl-click on the Virtual Machine Library entry and select Show in Finder.
3. Ctrl-click on the virtual machine and select **More > Mount Virtual Disk > Mount All**.
4. Browse to the mounted virtual machine volume in Finder, then go to the virtual machine's /Library/LaunchDaemons folder.
5. Open the file com.vmware.launchd.tools.plist and change the value of RunAtLoad to false. Save.
6. Unmount the virtual disk. Tools should now no longer start automatically in the guest.

Remember to undo this change when the next release of Fusion is available.

Can I run Tiger or the non-Server version of Leopard?

No. Apple's licensing explicitly allows only Leopard Server to be run in a virtual machine. Petition Apple.

Leopard Server won't install on my Core Duo MacBook/MacBook Pro/Mac mini

OS X guests are a bit different than other guests; we need a 64-bit Mac to handle them (even if you're running the 32-bit version of Leopard Server). This is documented in the [release notes](#).

Minix

ASSERT vmcore/private/iospace_shared.h bugNr=64440

When you attempt to power on a Minix virtual machine, you might encounter this ASSERT, which will prevent you from using the virtual machine.

Explanation

This is due to the way that Minix detects devices and how we react to the guest doing so. While the virtual machine is powered off and Fusion isn't running, edit the .vmx config file (see [A Beginner's Guide to VMware Fusion](#) for help locating it) and remove the following line (and anything similar):

```
pciBridge0.present = "TRUE"
```