DOS and Fedora 8 Dual Boot (120)

DOS and Fedora 8 are installed on the same VM. VMware Tools are then installed on the VM.

Requirements:
- DOS 6.21 image file
  http://www.allbootdisks.com/download/dos.html
- Fedora 8 CD ISO files
  http://iso.linuxquestions.org/
- VMWare Server 1.05
  http://www.vmware.com/products/server/

Desired Installation:

Location	Type	Boot Code	Usage	Size
MBR		Microsoft		
/dev/sda1	Primary		DOS	20 MB
/dev/sda2	Primary	GRUB	/boot	100 MB
/dev/sda3	Primary		swap	256 MB
/dev/sda4	Extended			
/dev/sda5	Logical		/	4000 MB
free				624 MB
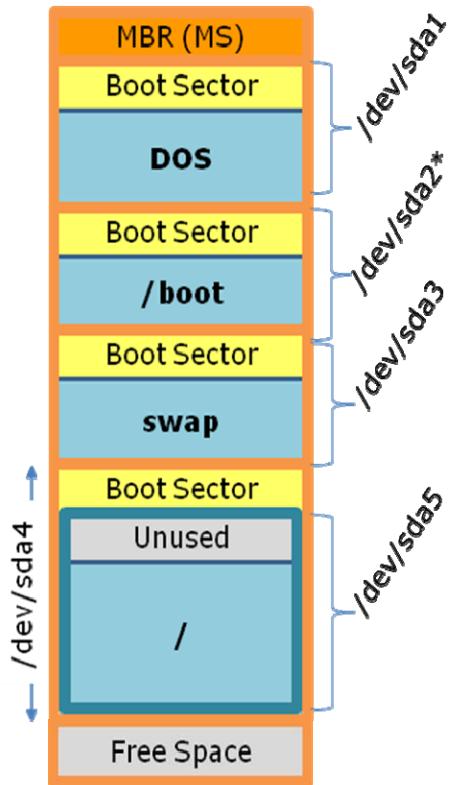
Create VM:
- Custom
- OS: Linux, Version: Other Linux 2.6.x kernel
- VM Name: Duke
- Access rights: Not private (uncheck)
- VM Account: User that powers on the VM
- # processors: One
- 256K memory
- Bridged networking
- SCSI Adapter: LSILogic
- Create a new virtual disk
- SCSI
- 5 GB drive, do not allocate space now (uncheck)

Copy floppy image of DOS 6.21 image to VM directory

Edit virtual machine settings
- Add a USB controller and floppy after VM has been created (if needed)
- Set floppy to: Use image (the DOS 6.21 floppy image file).
- Set floppy to: Connect at power on

Boot virtual machine (it will boot into DOS)
- Run `fdisk` at DOS A:\> prompt
- Create DOS partition

- o Primary
- o Do not use the maximum available size
- o Make it 20 MB
- o Make the new partition active
- Display partition information to check you have one small and active primary partition.
- Exit fdisk using Esc (and do a reboot)

Format new partition with a DOS file system.
- `format c: /s /v:dos`
- `copy *.* c:`
- `c:`
- `dir | more`

Power off VM

"Remove" floppy and insert Linux CD
- Edit VM settings
    - Set floppy to NOT Connect at power on (remove check)
    - Set CD-ROM to use ISO image (Fedora 8 ISO file)

Power on VM
- At this point you should boot into DOS and get a C: prompt
- This is because the default BIOS boot order is floppy, then hard drive, then CD. The floppy is not connected so the system is booted from the hard drive.
- Power off VM

Change BIOS boot order and continue boot
- Start up VM
- **Immediately** after the BIOS screen appears, click inside console and press F2 to enter SETUP. If you weren't fast enough and end up in DOS again, power off the VM and try again!
- Right arrow over to Boot tab, Enter to open
- Move CD-ROM drive above Hard Drive (see instructions under Item Specific Help)
- New boot order should be Floppy, then CD, then hard drive
- Exit BIOS saving changes.
- The Fedora CD should now boot up. Choose the first option to "Install or upgrade an existing system".

Fedora 8 Install
- No need to test the media if it has been used successfully before.
- Click "Next" all the way to drive partitioning taking the defaults
- **Stop** at Partitioning and choose "Create Custom Layout" then click Next

Fedora 8 Install – Custom Partitions
- Look for the existing DOS partition (Type = vfat)
- Add new 100 MB ext2 /boot partition (force to be primary)
- Add new 256 MB swap partition (force to be primary)
- Add new 4000 MB ext3 / partition in the extended partition.
- Note we are leaving some free space at the end of the drive.
- Your custom partitions should look like:

Device	Label	Mount Point/ RAID/Volume	Type	Format	Size (MB)	Start	End
▽ Hard Drives							
▽ /dev/sda							
/dev/sda1			vfat		24	1	3
/dev/sda2		/boot	ext2	✓	102	4	16
/dev/sda3			swap	✓	259	17	49
▽ /dev/sda4			Extended		4730	50	652
/dev/sda5		/	ext3	✓	4001	50	559
Free			Free space		730	560	652

Fedora 8 Install – Boot Loader
- Note we want to keep the DOS boot program in the MBR and install GRUB on /dev/sda2.
  - Add a second OS (label = DOS, device = /dev/sda1)
  - Make default boot Fedora
  - **Check** the "Configure advanced boot loader options" and click Next
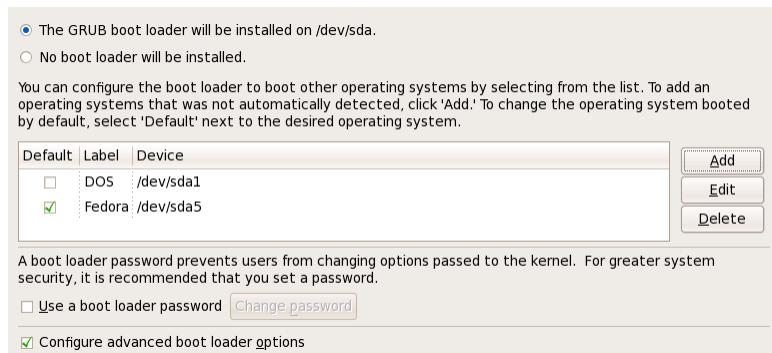
  - On next screen, choose: Install Boot Loader record on: /dev/sda2 (not the MBR)

Fedora 8 Install - Network
- Use DHCP for network settings.
- Manually set hostname to `duke.localdomain`

Fedora 8 Install – set root password to what is shown on whiteboard.

Fedora 8 Install – keep it small
- Remove check from: Office and Productivity (and any others)
- Select: Customize Later

Fedora 8 – Install

- 821 packages and some 30 minutes later
- Be sure and remove (edit) your virtual CD settings before rebooting:
  - CD-ROM should not be connected or set to connect at power on

Test the system
- The first partition is still active so system will boot to DOS
- Use DOS `fdisk` to set the second partition as active
- Reboot into Fedora 8
- Enable the firewall and check SSH as a trusted service
- Set SELinux to permissive
- Make a user named cis191 using password on whiteboard

VMware Housekeeping
- Take a snapshot of your fresh install. You can always revert back to a snapshot later if you mess up your system.

VMware Tools
- VMware nags you when you don't have VMware Tools installed. VMware Tools do provide some nice benefits so lets install them.

- On the VMware Server Console, select Install "VMware Tools…" under the VM menu.
- When the VMware Tools CD gets mounted double-click on the VMwareTools-1.0.5-80187.i386.rpm icon.

VMwareTools-1.0.
5-80187.i386.rpm

VMwareTools-1.0.
5-80187.tar.gz
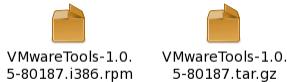
- Install the RPM using the RPM GUI tool (accept the warning).
- Bring up a terminal (Applications > System Tools > Terminal)
- Become superuser:

      su –

- Install the c compiler and kernel development packages:

      yum install gcc kernel-devel

- Look for the directory with the kernel headers:

      ls -d /usr/src/kernels/$(uname -r)*/include

- Run the VMware configuration tool:

      vmware-config-tools.pl

- Take the defaults when building modules. Note: vmhgfs will not be built (we are OK with that and will leave for a rainy day to solve). At the end select 800x600 for VGA resolution (this can be changed later if desired).
- Restart the network:

      service network restart

- No more nagging about VMware Tools:
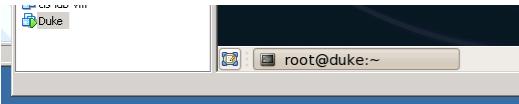
- Note, you may have to reconfigure the X server on the next boot. If so just enter the root password and take the defaults.

Summary

You now have dual boot VM with DOS in the first partition and Linux in the other partitions. You can select the OS to boot when you see the GRUB screen and QUICKLEY hit any key to enter the GRUB boot selection menu.
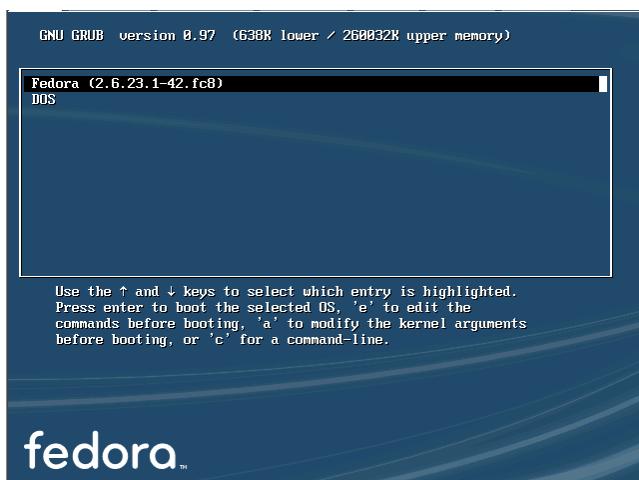
You can also boot into DOS by using fdisk to make the first partition active again.

Here is the resulting system:

Partition Table

```
[root@duke ~]# fdisk -l

Disk /dev/sda: 5368 MB, 5368709120 bytes
255 heads, 63 sectors/track, 652 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
Disk identifier: 0x0003b76d

   Device Boot      Start         End      Blocks   Id  System
/dev/sda1               1           3       24066    4  FAT16 <32M
/dev/sda2   *           4          16      104422+  83  Linux
/dev/sda3              17          49      265072+  82  Linux swap / Solaris
/dev/sda4              50         652     4843597+   5  Extended
/dev/sda5              50         559     4096543+  83  Linux
[root@duke ~]#
```

Mounts

```
[root@duke ~]# mounts
-bash: mounts: command not found
[root@duke ~]# mount
/dev/sda5 on / type ext3 (rw)
proc on /proc type proc (rw)
sysfs on /sys type sysfs (rw)
devpts on /dev/pts type devpts (rw,gid=5,mode=620)
/dev/sda2 on /boot type ext2 (rw)
tmpfs on /dev/shm type tmpfs (rw)
none on /proc/sys/fs/binfmt_misc type binfmt_misc (rw)
sunrpc on /var/lib/nfs/rpc_pipefs type rpc_pipefs (rw)
[root@duke ~]#
```

/boot

```
[root@duke ~]# ls /boot
config-2.6.23.1-42.fc8  initrd-2.6.23.1-42.fc8.img  System.map-2.6.23.1-
42.fc8
grub                    lost+found                  vmlinuz-2.6.23.1-42.fc8
[root@duke ~]#
```

/boot /grub

```
[root@duke ~]# ls /boot/grub/
device.map      grub.conf          minix_stage1_5      stage2
e2fs_stage1_5   iso9660_stage1_5   reiserfs_stage1_5   ufs2_stage1_5
fat_stage1_5    jfs_stage1_5       splash.xpm.gz       vstafs_stage1_5
ffs_stage1_5    menu.lst           stage1              xfs_stage1_5
[root@duke ~]#
```

grub.conf

```
[root@duke ~]# cat /boot/grub/grub.conf
# grub.conf generated by anaconda
#
# Note that you do not have to rerun grub after making changes to this file
# NOTICE:  You have a /boot partition.  This means that
#          all kernel and initrd paths are relative to /boot/, eg.
#          root (hd0,1)
```

```
#              kernel /vmlinuz-version ro root=/dev/sda5
#              initrd /initrd-version.img
#boot=/dev/sda2
default=0
timeout=5
splashimage=(hd0,1)/grub/splash.xpm.gz
hiddenmenu
title Fedora (2.6.23.1-42.fc8)
        root (hd0,1)
        kernel /vmlinuz-2.6.23.1-42.fc8 ro root=LABEL=/1 rhgb quiet
        initrd /initrd-2.6.23.1-42.fc8.img
title DOS
        rootnoverify (hd0,0)
        chainloader +1
[root@duke ~]#
```

Volume name of /dev/sda5 (used as LABEL on kernel command)

```
[root@duke ~]# dumpe2fs /dev/sda5 | grep volume
dumpe2fs 1.40.2 (12-Jul-2007)
Filesystem volume name:   /1
[root@duke ~]#
```

MBR boot code (conventional)

```
[root@duke ~]# xxd /dev/sda | more
0000000: fa33 c08e d0bc 007c 8bf4 5007 501f fbfc  .3.....|..P.P...
0000010: bf00 06b9 0001 f2a5 ea1d 0600 00be be07  ................
0000020: b304 803c 8074 0e80 3c00 751c 83c6 10fe  ...<.t..<.u.....
0000030: cb75 efcd 188b 148b 4c02 8bee 83c6 10fe  .u......L.......
0000040: cb74 1a80 3c00 74f4 be8b 06ac 3c00 740b  .t..<.t.....<.t.
0000050: 56bb 0700 b40e cd10 5eeb f0eb febf 0500  V.......^.......
0000060: bb00 7cb8 0102 57cd 135f 730c 33c0 cd13  ..|...W.._s.3...
0000070: 4f75 edbe a306 ebd3 bec2 06bf fe7d 813d  Ou...........}.=
0000080: 55aa 75c7 8bf5 ea00 7c00 0049 6e76 616c  U.u.....|..Inval
0000090: 6964 2070 6172 7469 7469 6f6e 2074 6162  id partition tab
00000a0: 6c65 0045 7272 6f72 206c 6f61 6469 6e67  le.Error loading
00000b0: 206f 7065 7261 7469 6e67 2073 7973 7465   operating syste
00000c0: 6d00 4d69 7373 696e 6720 6f70 6572 6174  m.Missing operat
00000d0: 696e 6720 7379 7374 656d 0000 0000 0000  ing system......
00000e0: 0000 0000 0000 0000 0000 0000 0000 0000  ................
00000f0: 0000 0000 0000 0000 0000 0000 0000 0000  ................
0000100: 0000 0000 0000 0000 0000 0000 0000 0000  ................
0000110: 0000 0000 0000 0000 0000 0000 0000 0000  ................
0000120: 0000 0000 0000 0000 0000 0000 0000 0000  ................
0000130: 0000 0000 0000 0000 0000 0000 0000 0000  ................
0000140: 0000 0000 0000 0000 0000 0000 0000 0000  ................
0000150: 0000 0000 0000 0000 0000 0000 0000 0000  ................
0000160: 0000 0000 0000 0000 0000 0000 0000 0000  ................
0000170: 0000 0000 0000 0000 0000 0000 0000 0000  ................
0000180: 0000 0000 0000 0000 0000 0000 0000 0000  ................
0000190: 0000 0000 0000 0000 0000 0000 0000 0000  ................
00001a0: 0000 0000 0000 0000 0000 0000 0000 0000  ................
00001b0: 0000 0000 0000 0000 6db7 0300 0000 0001  ........m.......
00001c0: 0100 04fe 3f02 3f00 0000 04bc 0000 8000  ....?.?.........
00001d0: 0103 83fe 3f0f 43bc 0000 cd2f 0300 0000  ....?.C..../....
00001e0: 0110 82fe 3f30 10ec 0300 e116 0800 0000  ....?0..........
```

```
00001f0: 0131 05fe bf8b f102 0c00 9bd0 9300 55aa   .1............U.
```

Boot code in /dev/sda2 partition (GRUB)

```
[root@duke ~]# xxd /dev/sda2 | more
0000000: eb48 9000 0000 0000 0000 0000 0000 0000   .H..............
0000010: 0000 0000 0000 0000 0000 0000 0000 0000   ................
0000020: 0000 0000 0000 0000 0000 0000 0000 0000   ................
0000030: 0000 0000 0000 0000 0000 0000 0000 0302   ................
0000040: 8000 0080 4518 0100 0008 fa90 90f6 c280   ....E...........
0000050: 7502 b280 ea59 7c00 0031 c08e d88e d0bc   u....Y|..1......
0000060: 0020 fba0 407c 3cff 7402 88c2 52be 7f7d   . ..@|<.t...R..}
0000070: e834 01f6 c280 7454 b441 bbaa 55cd 135a   .4....tT.A..U..Z
0000080: 5272 4981 fb55 aa75 43a0 417c 84c0 7505   RrI..U.uC.A|..u.
0000090: 83e1 0174 3766 8b4c 10be 057c c644 ff01   ...t7f.L...|.D..
00000a0: 668b 1e44 7cc7 0410 00c7 4402 0100 6689   f..D|.....D...f.
00000b0: 5c08 c744 0600 7066 31c0 8944 0466 8944   \..D..pf1..D.f.D
00000c0: 0cb4 42cd 1372 05bb 0070 eb7d b408 cd13   ..B..r...p.}....
00000d0: 730a f6c2 800f 84ea 00e9 8d00 be05 7cc6   s.............|.
00000e0: 44ff 0066 31c0 88f0 4066 8944 0431 d288   D..f1...@f.D.1..
00000f0: cac1 e202 88e8 88f4 4089 4408 31c0 88d0   ........@.D.1...
0000100: c0e8 0266 8904 66a1 447c 6631 d266 f734   ...f..f.D|f1.f.4
0000110: 8854 0a66 31d2 66f7 7404 8854 0b89 440c   .T.f1.f.t..T..D.
0000120: 3b44 087d 3c8a 540d c0e2 068a 4c0a fec1   ;D.}<.T.....L...
0000130: 08d1 8a6c 0c5a 8a74 0bbb 0070 8ec3 31db   ...l.Z.t...p..1.
0000140: b801 02cd 1372 2a8c c38e 0648 7c60 1eb9   .....r*....H|`..
0000150: 0001 8edb 31f6 31ff fcf3 a51f 61ff 2642   ....1.1.....a.&B
0000160: 7cbe 857d e840 00eb 0ebe 8a7d e838 00eb   |..}.@.....}.8..
0000170: 06be 947d e830 00be 997d e82a 00eb fe47   ...}.0...}.*...G
0000180: 5255 4220 0047 656f 6d00 4861 7264 2044   RUB .Geom.Hard D
0000190: 6973 6b00 5265 6164 0020 4572 726f 7200   isk.Read. Error.
00001a0: bb01 00b4 0ecd 10ac 3c00 75f4 c300 0000   ........<.u.....
00001b0: 0000 0000 0000 0000 0000 0000 0000 0000   ................
00001c0: 0000 0000 0000 0000 0000 0000 0000 0000   ................
00001d0: 0000 0000 0000 0000 0000 0000 0000 0000   ................
00001e0: 0000 0000 0000 0000 0000 0000 0000 0000   ................
00001f0: 0000 0000 0000 0000 0000 0000 0000 55aa   ..............U.
```

Installing VMware Tools

```
[root@duke ~]# rpm -qa | grep gcc
libgcc-4.1.2-33
[root@duke ~]# rpm -qa | grep kernel
kernel-2.6.23.1-42.fc8
[root@duke ~]# yum install gcc kernel-devel
Setting up Install Process
Parsing package install arguments
Resolving Dependencies
--> Running transaction check
---> Package kernel-devel.i686 0:2.6.23.1-42.fc8 set to be updated
---> Package gcc.i386 0:4.1.2-33 set to be updated
--> Processing Dependency: glibc-devel >= 2.2.90-12 for package: gcc
--> Running transaction check
---> Package glibc-devel.i386 0:2.7-2 set to be updated
```

```
--> Processing Dependency: glibc-headers for package: glibc-devel
--> Processing Dependency: glibc-headers = 2.7-2 for package: glibc-devel
--> Running transaction check
---> Package glibc-headers.i386 0:2.7-2 set to be updated
--> Processing Dependency: kernel-headers for package: glibc-headers
--> Processing Dependency: kernel-headers >= 2.2.1 for package: glibc-headers
--> Running transaction check
---> Package kernel-headers.i386 0:2.6.23.1-42.fc8 set to be updated
--> Finished Dependency Resolution


Dependencies Resolved


================================================================================
 Package              Arch        Version           Repository        Size
================================================================================
Installing:
 gcc                  i386        4.1.2-33          fedora            5.2 M
 kernel-devel         i686        2.6.23.1-42.fc8   fedora            4.8 M
Installing for dependencies:
 glibc-devel          i386        2.7-2             fedora            2.0 M
 glibc-headers        i386        2.7-2             fedora            609 k
 kernel-headers       i386        2.6.23.1-42.fc8   fedora            669 k

Transaction Summary
================================================================================
Install      5 Package(s)
Update       0 Package(s)
Remove       0 Package(s)

Total download size: 13 M
Is this ok [y/N]: y
Downloading Packages:
(1/5): kernel-headers-2.6 100% |=========================| 669 kB    00:09
(2/5): glibc-devel-2.7-2. 100% |=========================| 2.0 MB    00:17
(3/5): gcc-4.1.2-33.i386. 100% |=========================| 5.2 MB    00:42
(4/5): kernel-devel-2.6.2 100% |=========================| 4.8 MB    00:34
(5/5): glibc-headers-2.7- 100% |=========================| 609 kB    00:06
warning: rpmts_HdrFromFdno: Header V3 DSA signature: NOKEY, key ID 4f2a6fd2
Importing GPG key 0x4F2A6FD2 "Fedora Project <fedora@redhat.com>" from
/etc/pki/rpm-gpg/RPM-GPG-KEY-fedora
Is this ok [y/N]: y
Importing GPG key 0xDB42A60E "Red Hat, Inc <security@redhat.com>" from
/etc/pki/rpm-gpg/RPM-GPG-KEY
Is this ok [y/N]: y
Running rpm_check_debug
Running Transaction Test
Finished Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing: kernel-headers                ####################### [1/5]
  Installing: glibc-headers                 ####################### [2/5]
  Installing: glibc-devel                   ####################### [3/5]
  Installing: kernel-devel                  ####################### [4/5]
  Installing: gcc                           ####################### [5/5]

Installed: gcc.i386 0:4.1.2-33 kernel-devel.i686 0:2.6.23.1-42.fc8
Dependency Installed: glibc-devel.i386 0:2.7-2 glibc-headers.i386 0:2.7-2
```

```
kernel-headers.i386 0:2.6.23.1-42.fc8
Complete!
[root@duke ~]#

[root@duke ~]# uname -r
2.6.23.1-42.fc8
[root@duke ~]# rpm -q kernel-devel
kernel-devel-2.6.23.1-42.fc8

[root@duke ~]# ls -d /usr/src/kernels/$(uname -r)*/include
/usr/src/kernels/2.6.23.1-42.fc8-i686/include
[root@duke ~]# rpm -q kernel-devel
kernel-devel-2.6.23.1-42.fc8
[root@duke ~]#


[root@duke ~]# vmware-config-tools.pl

Stopping VMware Tools services in the virtual machine:
    Guest operating system daemon:                        [  OK  ]
Trying to find a suitable vmhgfs module for your running kernel.

None of the pre-built vmhgfs modules for VMware Tools is suitable for your
running kernel.  Do you want this program to try to build the vmhgfs module
for
your system (you need to have a C compiler installed on your system)? [yes]

Using compiler "/usr/bin/gcc". Use environment variable CC to override.

What is the location of the directory of C header files that match your
running
kernel? [/lib/modules/2.6.23.1-42.fc8/build/include]

Extracting the sources of the vmhgfs module.

Building the vmhgfs module.

Using 2.6.x kernel build system.
make: Entering directory `/tmp/vmware-config0/vmhgfs-only'
make -C /lib/modules/2.6.23.1-42.fc8/build/include/.. SUBDIRS=$PWD
SRCROOT=$PWD/. modules
make[1]: Entering directory `/usr/src/kernels/2.6.23.1-42.fc8-i686'
  CC [M]  /tmp/vmware-config0/vmhgfs-only/cpName.o
  CC [M]  /tmp/vmware-config0/vmhgfs-only/cpNameLinux.o
  CC [M]  /tmp/vmware-config0/vmhgfs-only/dev.o
  CC [M]  /tmp/vmware-config0/vmhgfs-only/driver.o
/tmp/vmware-config0/vmhgfs-only/driver.c: In function
'HgfsChangeFileAttributes':
/tmp/vmware-config0/vmhgfs-only/driver.c:763: error: 'struct inode' has no
member named 'i_blksize'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsInitializeInode':
/tmp/vmware-config0/vmhgfs-only/driver.c:835: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsIget':
/tmp/vmware-config0/vmhgfs-only/driver.c:884: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsCreate':
```

```
/tmp/vmware-config0/vmhgfs-only/driver.c:1535: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsLookup':
/tmp/vmware-config0/vmhgfs-only/driver.c:1635: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsMkdir':
/tmp/vmware-config0/vmhgfs-only/driver.c:1727: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsDelete':
/tmp/vmware-config0/vmhgfs-only/driver.c:1854: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsRename':
/tmp/vmware-config0/vmhgfs-only/driver.c:2046: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c:2048: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsRevalidate':
/tmp/vmware-config0/vmhgfs-only/driver.c:2288: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsSetattr':
/tmp/vmware-config0/vmhgfs-only/driver.c:2425: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsOpen':
/tmp/vmware-config0/vmhgfs-only/driver.c:2801: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsDirOpen':
/tmp/vmware-config0/vmhgfs-only/driver.c:3414: error: 'struct inode' has no
member named 'u'
/tmp/vmware-config0/vmhgfs-only/driver.c: In function 'HgfsClearInode':
/tmp/vmware-config0/vmhgfs-only/driver.c:4105: error: 'struct inode' has no
member named 'u'
make[2]: *** [/tmp/vmware-config0/vmhgfs-only/driver.o] Error 1
make[1]: *** [_module_/tmp/vmware-config0/vmhgfs-only] Error 2
make[1]: Leaving directory `/usr/src/kernels/2.6.23.1-42.fc8-i686'
make: *** [vmhgfs.ko] Error 2
make: Leaving directory `/tmp/vmware-config0/vmhgfs-only'
Unable to build the vmhgfs module.


The filesystem driver (vmhgfs module) is used only for the shared folder
feature. The rest of the software provided by VMware Tools is designed to
work
independently of this feature.
If you wish to have the shared folders feature, you can install the driver by
running vmware-config-tools.pl again after making sure that gcc, binutils,
make
and the kernel sources for your running kernel are installed on your machine.
These packages are available on your distribution's installation CD.
[ Press Enter key to continue ]

pcnet32                 31429  0
Unloading pcnet32 module

Trying to find a suitable vmxnet module for your running kernel.

None of the pre-built vmxnet modules for VMware Tools is suitable for your
running kernel.  Do you want this program to try to build the vmxnet module
for
```

your system (you need to have a C compiler installed on your system)? [yes]

Extracting the sources of the vmxnet module.

Building the vmxnet module.

Using 2.6.x kernel build system.
make: Entering directory `/tmp/vmware-config1/vmxnet-only'
make -C /lib/modules/2.6.23.1-42.fc8/build/include/.. SUBDIRS=$PWD
SRCROOT=$PWD/. modules
make[1]: Entering directory `/usr/src/kernels/2.6.23.1-42.fc8-i686'
  CC [M] /tmp/vmware-config1/vmxnet-only/vmxnet.o
/tmp/vmware-config1/vmxnet-only/vmxnet.c: In function 'vmxnet_open':
/tmp/vmware-config1/vmxnet-only/vmxnet.c:671: warning: 'deprecated_irq_flag'
is deprecated (declared at include/linux/interrupt.h:64)
/tmp/vmware-config1/vmxnet-only/vmxnet.c:671: warning: passing argument 2 of
'request_irq' from incompatible pointer type
  Building modules, stage 2.
  MODPOST 1 modules
  CC   /tmp/vmware-config1/vmxnet-only/vmxnet.mod.o
  LD [M] /tmp/vmware-config1/vmxnet-only/vmxnet.ko
make[1]: Leaving directory `/usr/src/kernels/2.6.23.1-42.fc8-i686'
cp -f vmxnet.ko ./../vmxnet.o
make: Leaving directory `/tmp/vmware-config1/vmxnet-only'
The module loads perfectly in the running kernel.

Detected X.org version 1.3.

No drivers for X.org version: 1.3.

Please choose one of the following display sizes (1 - 13):

[1]   "640x480"
[2]   "800x600"
[3]   "1024x768"
[4]   "1152x864"
[5]   "1280x800"
[6]   "1152x900"
[7]   "1280x1024"
[8]   "1376x1032"
[9]   "1400x1050"
[10] "1680x1050"
[11] "1600x1200"
[12] "1920x1200"
[13] "2364x1773"
Please enter a number between 1 and 13:

[3] 2

Starting VMware Tools services in the virtual machine:
    Switching to guest configuration: [OK]
    Guest vmxnet fast network device: [OK]

```
        DMA setup:                                          [  OK  ]
        Guest operating system daemon:                      [  OK  ]


The configuration of VMware Tools 1.0.5 build-80187 for Linux for this
running
kernel completed successfully.

You must restart your X session before any mouse or graphics changes take
effect.

You can now run VMware Tools by invoking the following command:
"/usr/bin/vmware-toolbox" during an X session.

To make use of the vmxnet driver you will need to rebooot.
Enjoy,

--the VMware team

[root@duke ~]#
[root@duke ~]# service network status
Configured devices:
lo eth0
Currently active devices:

[root@duke ~]# ifconfig
[root@duke ~]# service network restart
Shutting down loopback interface:                          [  OK  ]
Bringing up loopback interface:                            [  OK  ]
Bringing up interface eth0:
Determining IP information for eth0... done.
                                                           [  OK  ]
[root@duke ~]# ifconfig
eth0      Link encap:Ethernet  HWaddr 00:0C:29:C3:13:B6
          inet addr:192.168.0.30  Bcast:192.168.0.255  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fec3:13b6/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:33 errors:0 dropped:0 overruns:0 frame:0
          TX packets:24 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:4320 (4.2 KiB)  TX bytes:4391 (4.2 KiB)
          Interrupt:18 Base address:0x1424

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:1770 errors:0 dropped:0 overruns:0 frame:0
          TX packets:1770 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:2785764 (2.6 MiB)  TX bytes:2785764 (2.6 MiB)


[root@duke ~]#
```