

Linux Howtos

Mount ISO images on loopback devices (124) CIS 191 - Fall 2008

Mount image files on loopback devices (124)

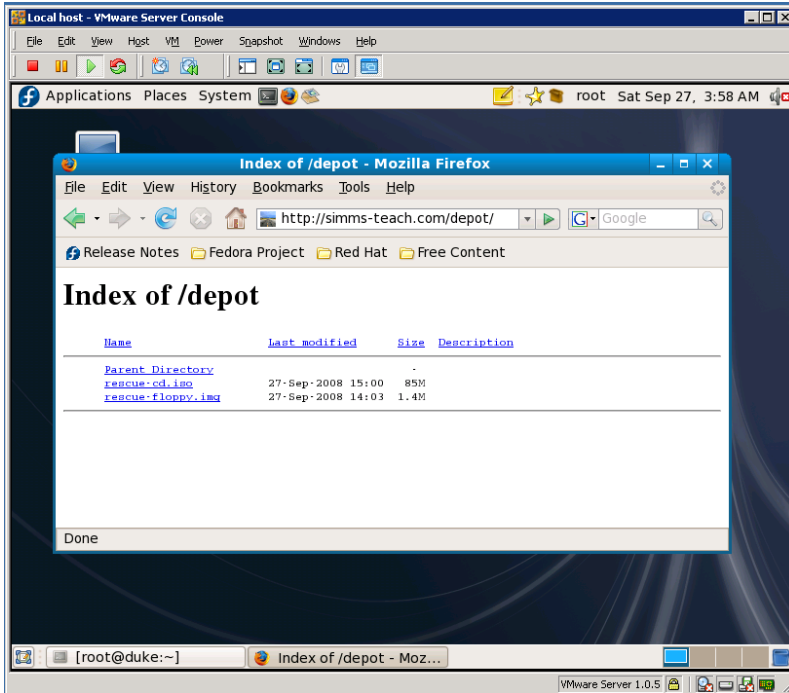
This Howto shows how to mount an ISO image and a floppy image using a loopback device. When downloading Linux distributions they often come as a set of ISO images. Usually these ISO images are burned to CD's . These image files can also be mounted in Linux using a loopback device to access one of more of the files without burning them to a CD. The same thing can be done with floppy images.

Supplies:

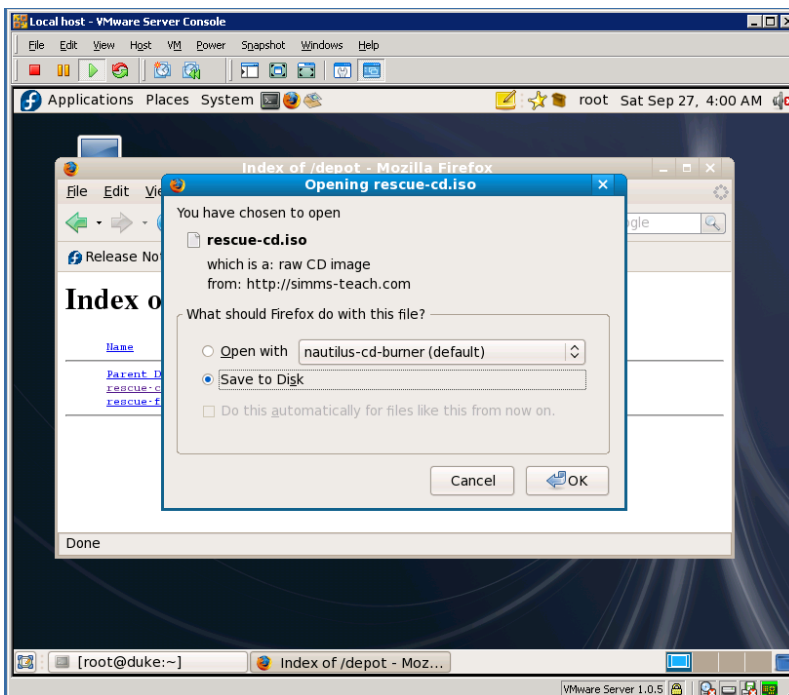
- Example CD ISO
<http://simms-teach.com/depot/>
- Example floppy image file
<http://simms-teach.com/depot/>
- Any Linux VM
The Fedora-8 duke VM will be used in this Howto
- VMWare Server 1.05
<http://www.vmware.com/products/server/>

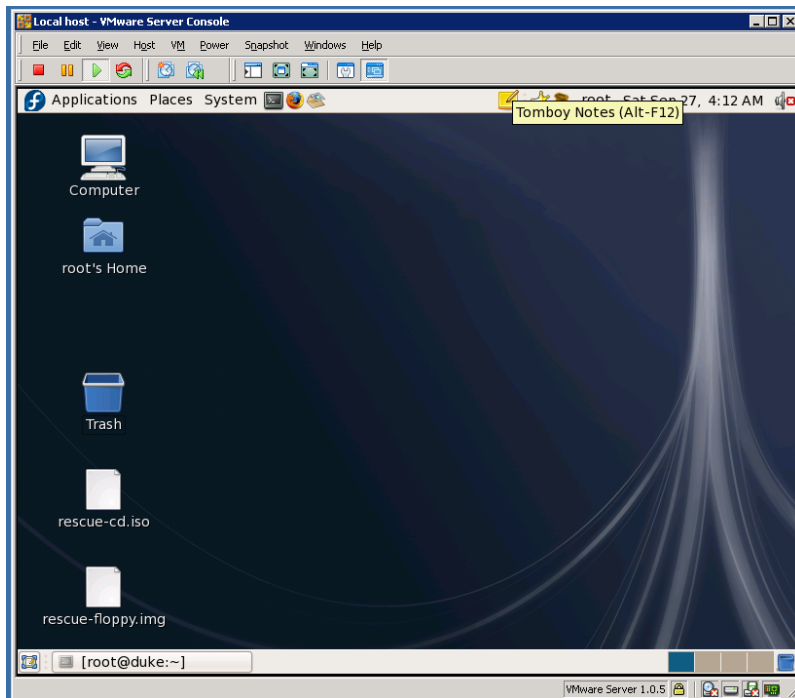
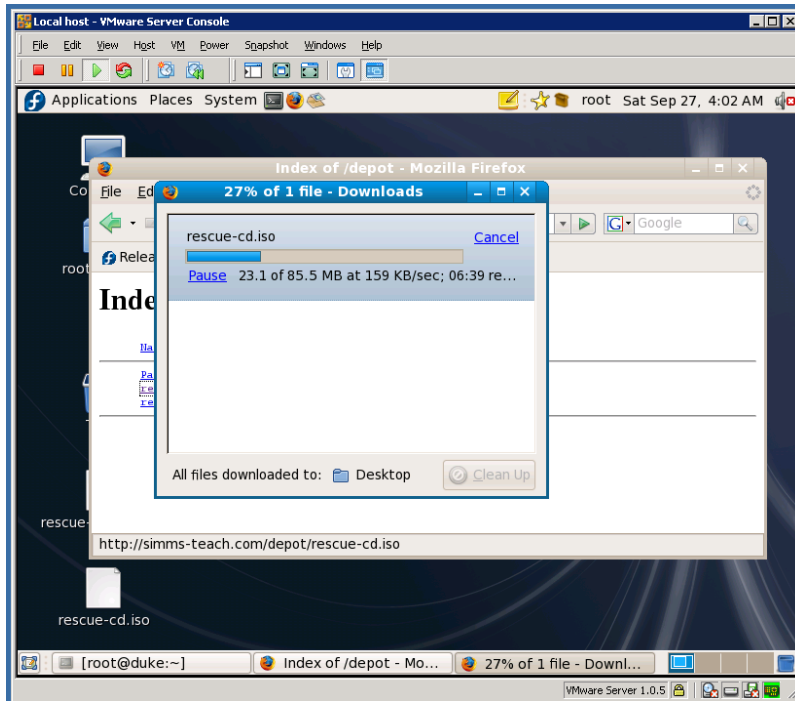
Run the VM and download images

- Start VM and login as root
- In your VM browse to: <http://simms-teach.com/depot>



- Download the CD ISO image (rescue-cd.iso) to the desktop
- Download the floppy image (rescue-floppy.img) to the desktop

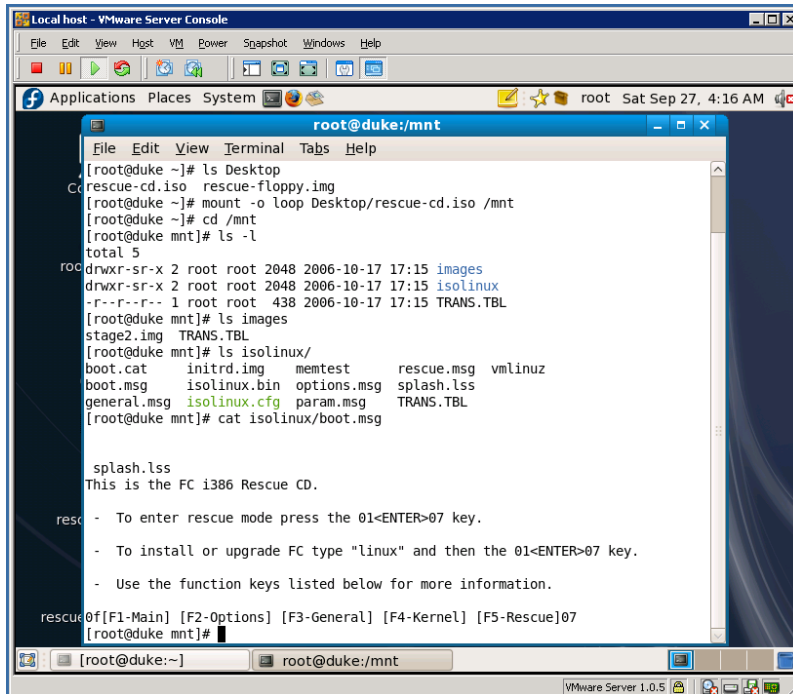




The two downloaded files appear on the desktop. The path to each file is:

- /root/Desktop/rescue-cd.iso
- /root/Desktop/rescue-floppy.img

Mount and browse the CD ISO image



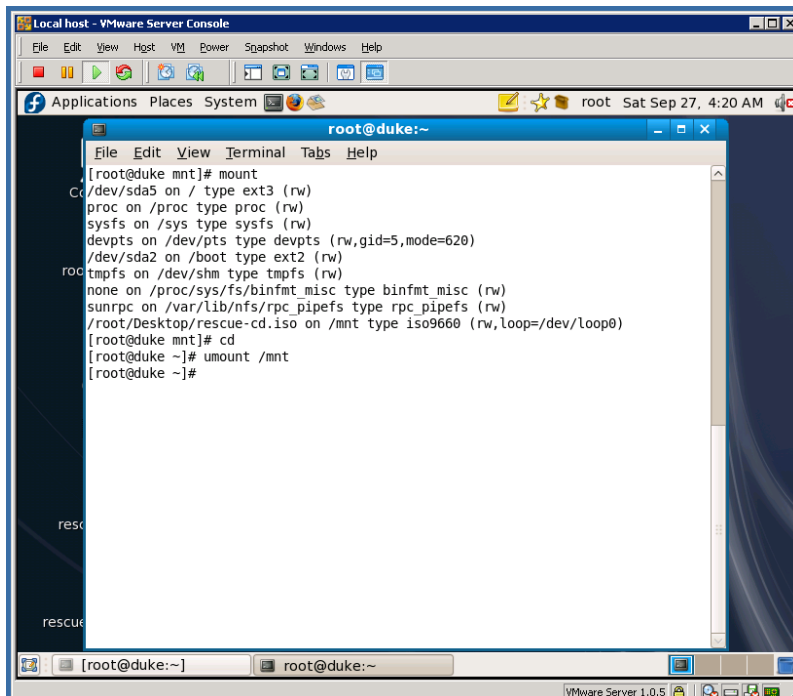
```
Local host - VMware Server Console
File Edit View Host VM Power Snapshot Windows Help
Applications Places System root Sat Sep 27, 4:16 AM
root@duke:/mnt
[root@duke ~]# ls Desktop
rescue-cd.iso rescue-floppy.img
[root@duke ~]# mount -o loop Desktop/rescue-cd.iso /mnt
[root@duke ~]# cd /mnt
[root@duke mnt]# ls -l
total 5
drwxr-sr-x 2 root root 2048 2006-10-17 17:15 images
drwxr-sr-x 2 root root 2048 2006-10-17 17:15 isolinux
-r--r--r-- 1 root root 438 2006-10-17 17:15 TRANS.TBL
[root@duke mnt]# ls images
stage2.img TRANS.TBL
[root@duke mnt]# ls isolinux/
boot.cat initrd.img memtest rescue.msg vmlinuz
boot.msg isolinux.bin options.msg splash.lss
general.msg isolinux.cfg param.msg TRANS.TBL
[root@duke mnt]# cat isolinux/boot.msg

splash.lss
This is the FC i386 Rescue CD.

rescue - To enter rescue mode press the 01<ENTER>07 key.
        - To install or upgrade FC type "linux" and then the 01<ENTER>07 key.
        - Use the function keys listed below for more information.

rescue 0[F1-Main] [F2-Options] [F3-General] [F4-Kernel] [F5-Rescue]07
[root@duke mnt]#
```

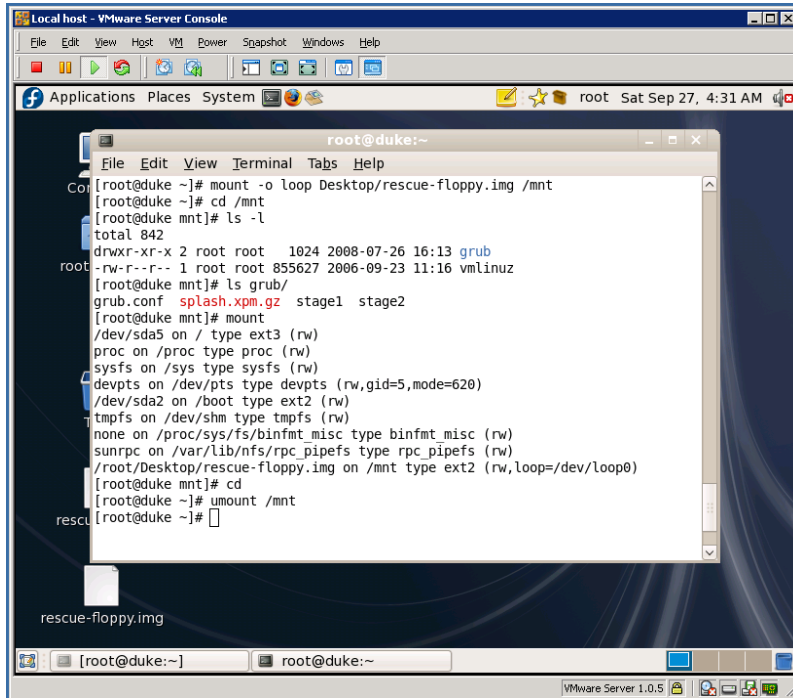
- Mount with: `mount -o loop Desktop/rescue-cd.iso /mnt`
- Browse files on the CD
- Show the mount points with: `mount`
- Un-mount with: `umount /mnt`



```
Local host - VMware Server Console
File Edit View Host VM Power Snapshot Windows Help
Applications Places System root Sat Sep 27, 4:20 AM
root@duke:~
[root@duke mnt]# mount
cd /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/Desktop/rescue-cd.iso on /mnt type iso9660 (rw,loop=/dev/loop0)
[root@duke mnt]# cd
[root@duke ~]# umount /mnt
[root@duke ~]#
```

Mount and browse the floppy image

- Mount with: `mount -o loop Desktop/rescue-floppy.img /mnt`
- Browse files on the CD
- Show the mount points with: `mount`
- Un-mount with: `umount /mnt`



```
Local host - VMware Server Console
File Edit View Hgst VM Power Snapshot Windows Help
Applications Places System root Sat Sep 27, 4:31 AM

root@duke:~
File Edit View Terminal Tabs Help
[root@duke ~]# mount -o loop Desktop/rescue-floppy.img /mnt
[root@duke ~]# cd /mnt
[root@duke mnt]# ls -l
total 842
drwxr-xr-x 2 root root 1024 2008-07-26 16:13 grub
-rw-r--r-- 1 root root 855627 2006-09-23 11:16 vmlinuz
[root@duke mnt]# ls grub/
grub.conf splash.xpm.gz stage1 stage2
[root@duke mnt]# 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/Desktop/rescue-floppy.img on /mnt type ext2 (rw,loop=/dev/loop0)
[root@duke mnt]# cd
[root@duke ~]# umount /mnt
[root@duke ~]#

rescue-floppy.img
[ root@duke:~ ] [ root@duke:~ ]
VMware Server 1.0.5
```