



## CIS 191 Linux Lab Exercise

Lab X2: Custom rooting with OpenSUSE  
Fall 2008

### Lab X2: Custom rooting with OpenSUSE

This lab an extra credit lab where you install an OpenSUSE 11 system, add a new hard drive, add a small root file system to the new hard drive, then add a new startup option in GRUB that roots the kernel to the new file system.

#### Procedure

##### Build the OpenSUSE VM

Follow: <http://simms-teach.com/howtos/110-openSUSE-11-install.pdf>

##### Extend VM with 2<sup>nd</sup> Drive, add root file system and boot option

Follow: <http://simms-teach.com/howtos/112-create-root-file-system.pdf>

#### Extra Credit (10 points)

- 2 points - For setting up the VM as specified
- 2 points - For setting up drive partitions as specified
- 2 points - For making root file system as specified
- 2 points - For configuring GRUB as specified
- 2 points – For successful startup rooting to 2<sup>nd</sup> drive

#### To submit lab

Startup with normal OpenSUSE boot option

- `mount /dev/sdb1 /mnt`
- `ls -lR /mnt > labx2`
- `fdisk -l >> labx2`

- `mount >> labx2`
- `cat /boot/grub/menu.lst >> labx2`
- `dd if=/dev/sda bs=512 count=1 | xxd >> labx2`

```
scp labx2 cis191@opus.cabrillo.edu:labx2.logname
```