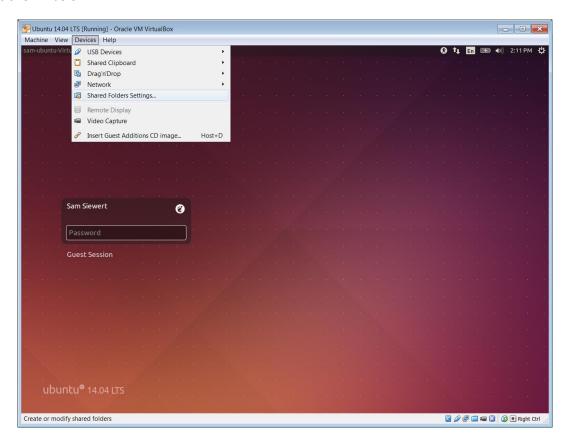
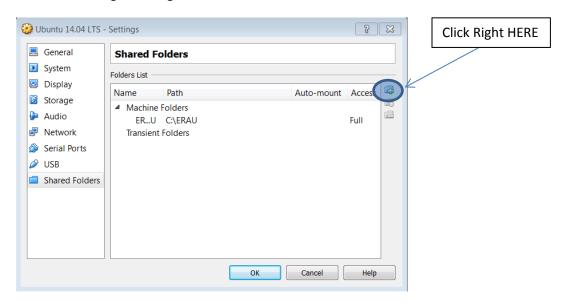
Making an automatic mount from your Virtual Box Host file system to VM file system

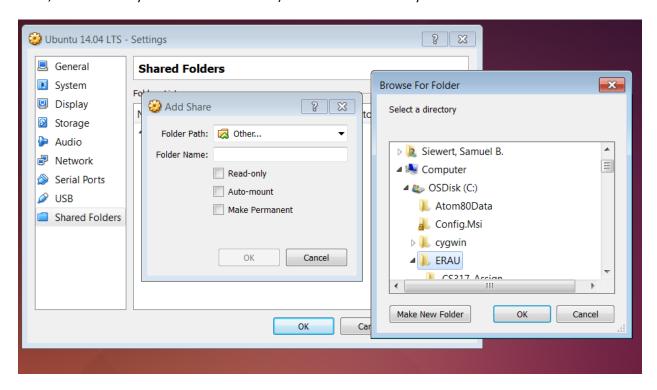
<u>Step 1:</u> You must first install <u>Oracle Virtual Box</u>, then install <u>Ubuntu Linux</u> LTS, and finally <u>install Virtual Box</u> <u>Guest Additions</u> so that you have the Devices Menu and option to add "Shared Folders and Settings ..." as shown below:



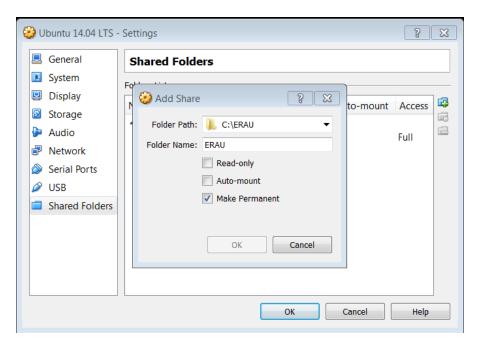
Step 2: In the Shared Folders Settings... Dialog, click on the +Folder icon circled in the screenshot below:



Step 3: Make a folder on your Host Windows or Macintosh system (I use the name "ERAU" on my C: drive, but use what you will remember best). Now browse to it as your "Folder Path:" as shown below:



Step 4: The Folder Name will take on the name of the folder from the path you browsed to and just make sure to check the "Make Permanent" box as shown here and just complete with "OK":



<u>Step 5</u>: Create a mounting point for the Host Shared Folder with "sudo mkdir /mnt/ERAU" or whatever name you want in place of "ERAU" (that's just what I use). To verify, enter "df" and "Is /mnt" and you should see something like this:

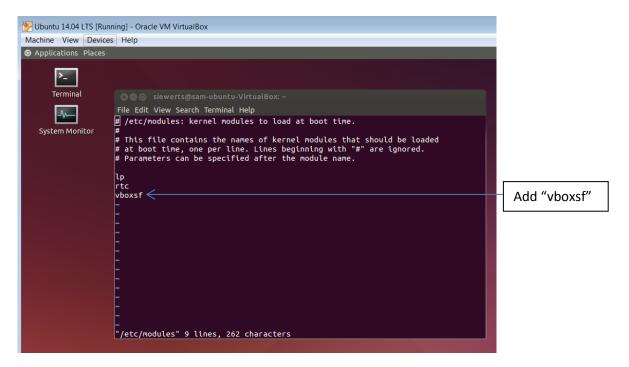
```
siewerts@sam-ubuntu-VirtualBox: ~
File Edit View Search Terminal Help
siewerts@sam-ubuntu-VirtualBox:~$ df
                              Used Available Use% Mounted on
Filesystem
                1K-blocks
                 24638844 9004780 14359440
/dev/sda1
                                                39%
                                                 0% /sys/fs/cgroup
1% /dev
1% /run
none
                                 0
                  4077852
udev
                                 4
                                      4077848
                               880
                                       816840
tmpfs
                   817720
                                                 0% /run/lock
1% /run/shm
                     5120
                                 0
                                         5120
none
                  4088592
                                200
                                      4088392
none
                   102400
                                44
                                       102356
                                                 1% /run/user
none
siewerts@sam-ubuntu-VirtualBox:~$ ls /mnt
siewerts@sam-ubuntu-VirtualBox:~$
```

<u>Step 6</u>: Test your Shared Folder as a mount on your Virtual Box Linux system by opening an terminal and entering the mount command "sudo mount –t vboxsf ERAU /mnt/ERAU" and aftwards enter "df" and you should now see the Host Shared Folder mounted on your Linux VM installation:

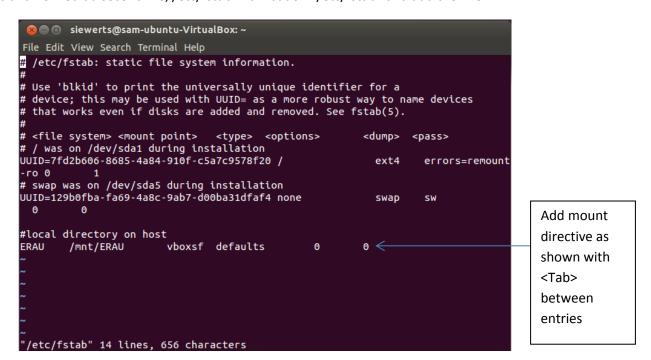
```
🔊 🖨 📵 siewerts@sam-ubuntu-VirtualBox: ~
File Edit View Search Terminal Help
siewerts@sam-ubuntu-VirtualBox:~$ df
ilesystem
               1K-blocks
                            Used Available Use% Mounted on
                24638844 9004780 14359440
/dev/sda1
none
                                              0% /sys/fs/cgroup
                 4077852
                                    4077848
                                              1% /dev
udev
                                    816840
                                              1% /run
tmpfs
                  817720
                             880
                    5120
                                      5120
                                              0% /run/lock
none
                 4088592
                             200
                                    4088392
                                              1% /run/shm
none
                  102400
                              44
                                     102356
                                              1% /run/user
siewerts@sam-ubuntu-VirtualBox:~$ ls /mnt
ERAU
siewerts@sam-ubuntu-VirtualBox:~$ sudo mount -t vboxsf ERAU /mnt/ERAU
siewerts@sam-ubuntu-VirtualBox:~$ df
Filesystem
               1K-blocks
                              Used Available Use% Mounted on
/dev/sda1
                24638844
                           9004780
                                    14359440
                                               39%
none
                                 0
                                                0% /sys/fs/cgroup
                 4077852
                                      4077848
                                                1% /dev
udev
tmpfs
                  817720
                               880
                                       816840
                                                1% /run
                    5120
none
                                 0
                                        5120
                                                0% /run/lock
none
                 4088592
                               200
                                      4088392
                                                1% /run/shm
none
                  102400
                                44
                                       102356
                                                1% /run/user
               488384508 470726804
ERAU
                                     17657704
                                               97% /mnt/ERAU
siewerts@sam-ubuntu-VirtualBox:~$
```

<u>Step 7 (optional)</u>: If you just want this done AUTOMATICALLY every time you start up your VB-Linux instance, then you need to make an entry in a system file to specify this as well as telling Ubuntu to load the vboxsf (Virtual Box Extension Support) at boot time [this normally works, but if a mount fails for some reason, you can normally just "Skip" the mount]. If you are new to "vi", you may want to make sure you use an alternate editor such as "nano" or learn "vi" and use the cheat sheet of commands of vi found here, or here. E.g. if you delete the host Shared Folder, this automatic mount will fail and

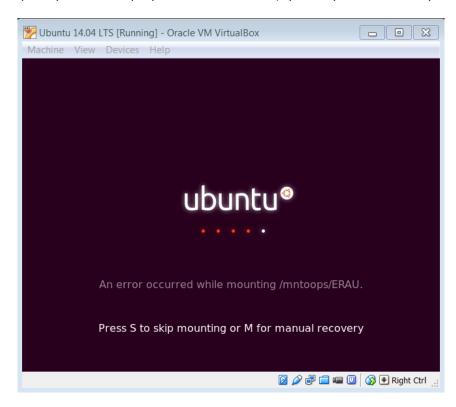
hang up your boot until you let the boot loader know that it's OK to skip this automatic mount. This is why I list this step as optional. You can always just repeat Step #6 manually whenever you need to after boot. But, it is horribly convenient to have an automatic mount – I do it so I can easily grade Linux C/C++ programming assignments. Here's what you do. First, edit /etc/modules and add vboxsf as shown with "sudo vi /etc/modules":



Save this and now edit a second file, /etc/fstab with "sudo vi /etc/fstab" and add the line



<u>Step 8 (optional)</u>: Verify your automatic mount by restarting your Linux installation VM and after it boots, just login and use "df" to verify that you in fact see the mount. If you fat-finger something (I made my mount point path bad on purpose to demonstrate), you may see this when you reboot:



Just enter S to skip and fix the error in /etc/fstab and try again. It's also possible that your Kernel module "vboxsf" did not load for some reason and/or your VB extensions are not working. Verify both manually, look for errors in /etc/modules and /etc/fstab and you should be able to get the automatic going as long as you have no unresolvable manual mount issues.