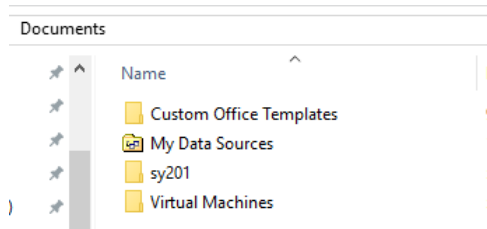
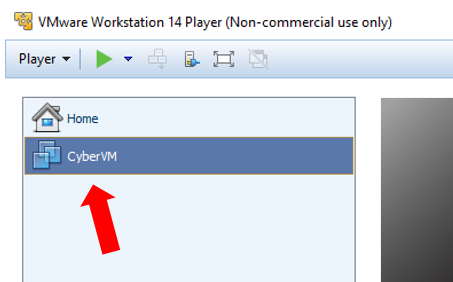


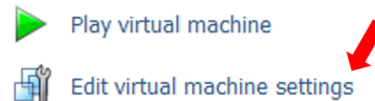
1. You can set up a connection between your Host Machine (Windows) and the Linux Virtual Machine running in VMware Player. This will allow you to not only easily move content from the virtual machine to your Windows machine, but it serves as a great backup strategy if you should ever have an issue with your Ubuntu VM.
2. Start by creating a folder, somewhere on your **Windows Machine** to hold all your SY201 content. You can put it anywhere you want and call it anything you want. “**sy201**” is probably a good name, and in the screenshot below I’ve put it in my “**Documents**” folder.



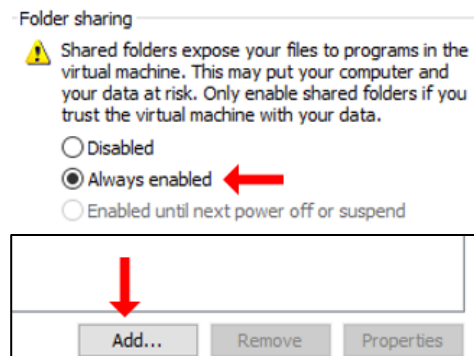
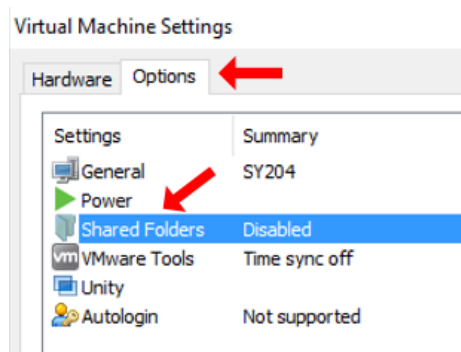
3. Next, open the VMware Player software and click (once) on your “**CyberVM**”. If your VM is already running, shut it down inside Ubuntu (don’t just restart); then reopen the VMware Player software and click once of your “**CyberVM**”. When you’re ready, click on “**Edit virtual machine settings**” to continue.



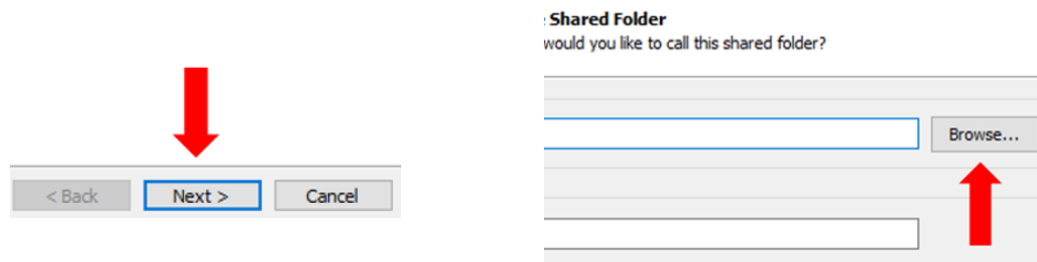
Version: Workstation 14.x virtual machine
RAM: 2 GB



4. Click on the “**Options**” tab, then click on “**Shared Folders**”, select “**Always Enabled**”, then click “**Add...**”

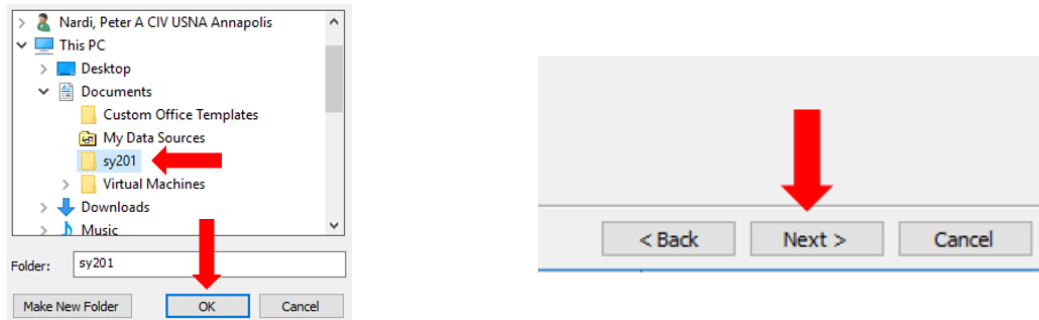


- You'll then see the VM **"Add Shared Folder Wizard"**. Click **"Next >"**. When prompted for Host path, click **"Browse..."**

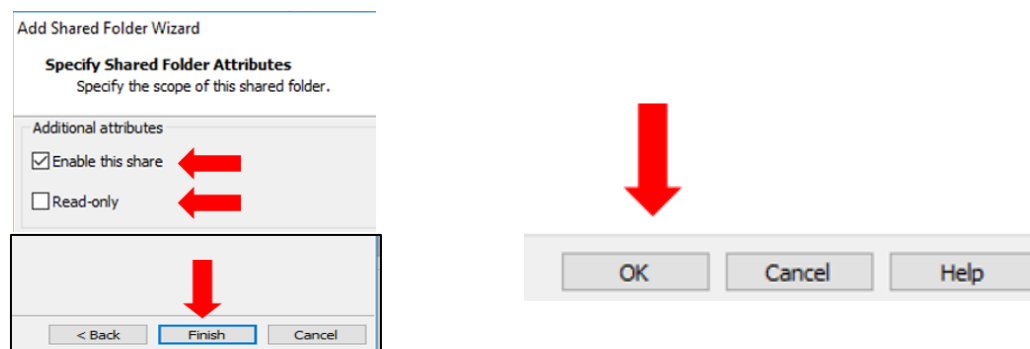


- Navigate to the folder you created in Windows; select it and click **"OK"**. When you return to the **"Add Shared Folder Wizard"**, click **"Next >"**

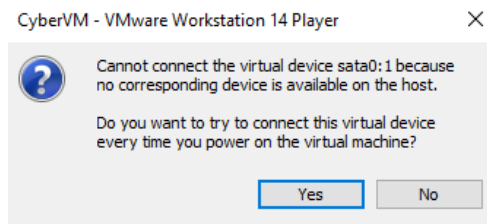
NOTE! Do not select the CyberVM folder in "Virtual Machines". That's where your VM lives. In the example below, I navigated to c:\Users\Nardi\Documents\sy201.



- In the **Specify Shared Folder Attributes Window**, ensure that **"Enable this share"** is checked and **"Read-only"** is unchecked. Click **"Finish"**. When you return to the **Virtual Machine Settings** window, click **"OK"**. (**Note: If the "Enable this share" option is greyed-out, your VM is probably running. If so, shut it down and restart at step 3).**



8. Start your virtual machine and login. If you get the error below about “**SATA Devices**”, click “**No**”. Once we setup your shared folders that error will disappear the next time you start your VM.



9. Open a terminal window and create a directory called “**shares**” in your home directory by typing:

```
mkdir ~/shares
```

10. Now open your profile settings with a text editor by typing:

```
nano ~/.profile
```

11. Your terminal window should look something like this:

```
GNU nano 2.5.3      File: /home/nardi/.profile

~/.profile: executed by the command interpreter for login shells.
# This file is not read by bash(1), if ~/.bash_profile or ~/.bash_login
# exists.
# see /usr/share/doc/bash/examples/startup-files for examples.
# the files are located in the bash-doc package.

# the default umask is set in /etc/profile; for setting the umask
# for ssh logins, install and configure the libpam-umask package.
#umask 022

# if running bash
if [ -n "$BASH_VERSION" ]; then
    # include .bashrc if it exists
    if [ -f "$HOME/.bashrc" ]; then
        . "$HOME/.bashrc"
    fi
fi

# set PATH so it includes user's private bin directories
[ Read 23 lines ]
^G Get Help  ^O Write Out ^W Where Is  ^K Cut Text  ^J Justify   ^C Cur Pos
^X Exit      ^R Read File ^\ Replace   ^U Uncut Text ^T To Spell  ^_ Go To Line
```

12. Hold the down-arrow key until you get to the very end of the file and add the following line below the last line:

```
vmhgfs-fuse ~/shares -o auto_unmount -o nonempty
```

```
if [ -d "$HOME/.local/bin" ] ; then  
    PATH="$HOME/.local/bin:$PATH"  
fi  
  
vmhgfs-fuse ~/shares -o auto_unmount -o nonempty
```

13. Press and hold the Control Key and type the letter **x** (**cntl-x**) to save your changes. You should see the following at the bottom of your terminal window:

```
Save modified buffer? (Answering "No" will DISCARD changes.)  
Y Yes  
N No      ^C Cancel
```

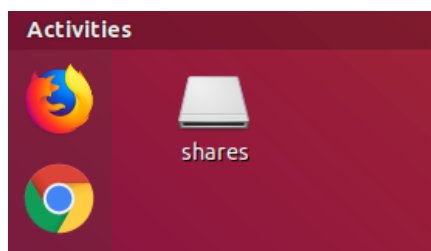
14. Press the letter **y**. You should now see:

```
File Name to Write: /home/nardi/.profile  
^G Get Help      M-D DOS Format    M-A Append       M-B Backup File  
^C Cancel        M-M Mac Format    M-P Prepend      ^T To Files
```

15. Press enter to save your changes and quit the **"nano"** text editor.
16. Restart your VM, by typing the following command in a terminal window:

```
reboot
```

17. If everything was successful, you should see your new **"shares"** folder mounted on your Ubuntu desktop as a network drive icon. You can double-click on it to navigate it, similar to the way you navigate your Windows machine using the file explorer:



18. Let's make a clone of the git repository for the course. Git is a tool used to manage collaborative software development projects. We'll use it in this course to allow your instructors to share code templates and other files with you.

Open a terminal window and clone the repository by typing the four commands below. **NOTE!** **The trailing space and period (.) after "git" in the command below are very important.**

```
cd
mkdir repo201
cd repo201
git clone https://github.com/geozeke/sy201.git .
```

Don't forget the space
and period at the end!



19. Now let's tweak your **.bashrc** settings to make for a more elegant terminal presentation. In the same terminal window change to the **~/repo201/tools** directory and replace your existing **.bashrc** file with a new one, by typing the two commands below (carefully note the periods in the second command):

```
cd ~/repo201/tools
cp bashrc.txt ~/.bashrc
```

If you receive an alert like this:

```
cp: overwrite '/home/nardi/.bashrc'?
```

Type **"y"** and press return.

Note: For the changes to take effect, close all open terminal windows and reopen them.

20. Your VM is ready to go! You can now easily move content between your host (Windows) and VM (Ubuntu Linux) by moving files in and out of the shared folders. To reinforce: both folders below will have the same content, no matter which environment you're in (*replace Nardi with your login name*):

```
Ubuntu VM: ~/shares/sy201
Windows: c:\Users\Nardi\Documents\sy201
```