Installing VMware Player and Ubuntu Linux – Easier Way

Check that you are connected to the internet before beginning (open Internet Explorer or Firefox or similar).

Installing VMware Player

- Obtain the installation/setup file for VMware Player (VMware-player-5.0.2-1031769.exe) Copy this file from the provided media or Download it from: <u>http://www.vmware.com/products/player/</u>
- Also copy the Virtual Machines/UbuntuStudent folder and all its files to your laptop. Recommend copying this to your Documents folder. Thus you will have a folder: Documents/Virtual Machines/UbuntuStudent The files in that folder will be used later.
- 3. Run the setup file (VMware-player-5.0.2-1031769.exe). Allow it to make changes to your computer if asked.



4. Follow the instructions given (allow drivers to be installed if asked).

| VMware Player Setup | | | |
|--|---------------------|----------------------|----------------|
| Destination Folder Click Next to install to this folder or clic | k Change to install | to a different folde | r. 🙀 |
| Install VMware Player to: C:\Program Files (x86)\VMware\ | VMware Player\ | | <u>C</u> hange |
| (| < <u>B</u> ack | <u>N</u> ext > | Cancel |

5. Continue following the instructions

| VMware Player Setup | | | |
|--|----------------------|-----------------------|-------------|
| Software Updates When would you like to check for upd | ates of your softwa | are? | R. |
| Check for product updates on sta | artup | | |
| When VMware Player starts, check software components. | c for new versions o | f the application and | l installed |
| Learn More | | | |
| | < <u>B</u> ack | <u>N</u> ext > | Cancel |

6. And continue



7. Keep going



8. Continue



9. Continue



10. Keep Going



11. And now to Ubuntu Linux...

Installing Ubuntu Linux - Easy Way

This way provides you a "pre-setup" Ubuntu Linux virtual machine. It *should* allow you to avoid some time consuming downloads and installation waiting. It has most, if not all, the software you will need for the class already installed. Thus it will be called the "easy way." You are free to try the "from scratch way" if you want. But this easy way is strongly encouraged at least for the initial effort.

- If you have not already done so, Copy the provided Virtual Machines/UbuntuStudent folder and all its files to your laptop. Suggest you copy this to your Documents folder. Thus you will have a folder: Documents/Virtual Machines/UbuntuStudent
- 2. Run VMware Player and Select: Open Virtual Machine You do NOT need to upgrade to VMware Workstation, so "skip" it if asked.

| VMware Player (Non-commercial use only) | |
|---|--|
| Player 👻 🕨 🖷 🗐 | |
| Home | Welcome to VMware Player |
| | Create a New Virtual Machine Create a new virtual machine, which will then be added to the top of your library. |
| | Open a Virtual Machine Open an existing virtual machine, which will then be added to the top of your library. |
| | Upgrade to VMware Workstation Get advanced features such as snapshots, developer tool integration, and more. |
| | Help View VMware Player's help contents. |
| | This product is not licensed and is authorized for non-commercial use only. For commercial use, purchase a license. Buy now. |

3. Browse to where you copied the UbuntuStudent folder (and then press open or double click) e.g. Documents/Virtual Machines/UbuntuStudent

| 🛐 Open Virtual Machine | | | |
|---|---------------------------------------|--|-----------|
| 🚱 🔾 🗢 📕 Virtual Machines 🕨 🔹 😽 Search Virtual Machines 🔎 | | | |
| Organize 🔻 New fold | er | !≡ ▼ □ | 0 |
| ★ Favorites ■ Desktop | Documents library Virtual Machines | Arrange by: Folde | er 🔻 |
| Downloads | Name | Date modified T | /pe |
| Recent Places | 퉬 Ubuntu CS 244 | 8/24/2013 6:42 PM Fi | le folder |
| 🕞 Libraries | 퉬 Ubuntu_cs244a | 8/24/2013 8:34 PM Fi | le folder |
| Documents | 🔑 UbuntuStudent | 8/25/2013 6:35 PM Fi | le folder |
| jgo here Music ■ Pictures Videos | | | |
| 🍓 Homegroup | < III | | + |
| File n | ame: 🗸 🗸 | All supported files Open Can | ► cel |

4. Select the UbuntuStudent.vmx file (and press the open button or double click the file)

| Gopen Virtual Machine | | a la late | × |
|--|------------------------------|---------------------|--------------|
| 🕞 🗢 🔍 🕊 Virtual M | lachines 🕨 UbuntuStudent 👻 🐓 | Search UbuntuStuden | t 🔎 |
| Organize 🔻 New fold | er | :== • | |
| Favorites | Documents library | Arrange by: F | older 🔻 |
| Downloads | Name | Date modified | Туре |
| Recent Places | 🗗 UbuntuStudent | 8/25/2013 6:09 PM | VMware virtı |
| ☐ Libraries ☐ Documents ☐ go here → Music ☐ Pictures ☑ Videos | | | |
| 🍓 Homegroup | < | | • |
| File n | ame: UbuntuStudent 👻 | All supported files | ▼ Cancel |

5. This will add the virtual machine to your VMware Player. You should now see something like:



6. Select/highlight UbuntuStudent on the left side and Press the green play button



7. You may or may not see notifications such as: Just press OK.



This is okay. Just press the OK button.

The first time you run (press the play button) you may see the following:
 Press the "I copied it" button



9. You may, or may not, also see more notifications like the following. Just press OK.





10. If all is well, you will eventually see something like:



11. The password for student is: passCS244

- 12. The teacher account is there just in case something goes wrong with the Student account.
- 13. Login as the Student using the above password and you should see something like:



- 14. On the left side you will see a variety of programs have already been installed.
- 15. One that might be useful to this class is Geany.Its tile looks like a teapot.If you click on it you will see something like:

| UbuntuStudent - VMware Player (Non | -commercial use only) |
|------------------------------------|--|
| Player 🔻 🔛 🖛 🧮 🏹 | > 🗔 💿 🗟 🍓 🔕 🗐 |
| Geany | 🖂 📬 🜒) 4:50 PM 👤 Student 🔱 |
| 📕 😣 💿 helloWorld. | cpp - /home/student/Documents/ExamplePrograms - Geany |
| 🔕 🖪 • 🗎 • 🖄 | |
| Symbols 🕨 | helloWorld.cpp 🗱 |
| Punctions Main [52] | 1 // 2 // Program: helloWorld 3 // |
| V 🖗 Other | 4 // Written by: Brent Dingle |
| @ std [51] | 5 // Date Created: August 2013 |
| | 6 // Last Updated: August 2013 |
| | / // 8 // Description: |
| | 9 // This is a basic test program written in C++ |
| | 10 // |
| | 11 // All the lines begining with two slashes are comments |
| | 12 // The program begins (far) below with the line |
| | 13 // #Include <lostream></lostream> |
| | 15 // From a terminal prompt you may build it by typing: |
| | 16 // g++ helloWorld.cpp [press enter] |
| | 17 // This should generate an a.out file |
| | 18 // To run the program type: |
| | 19 // ./a.out [press enter] |
| | 20 // You should then see |
| | 21 // Hello World. |
| Geany | 22 // printed to the screen |
| | |
| | 24 // IT you are using the Geany editor: 25 // Wake sure this is the surrent file (i.e. selected tab) |
| | 25 // make sure this is the current file (i.e. selected tab) 26 // Press the compile button |
| | 27 // It has a blue pyramid with a vellow |
| Ctature 16:50:08: Th | is is Geory 0.21 |

- 16. This is one of many Integrated Development Environments you may find useful for this class. It is already linked to the C++ compiler (GNU's g++). So you may compile, build, and test run your programs using this IDE. It seems to support copy/paste between itself and programs running in windows.
- 17. You do NOT have to use this IDE, you may use any like. Instructor support will vary.
- 18. You may also opt to NOT use any IDE and instead open a terminal window and use editors such as *vi* and then type the compile/build commands by hand.
- 19. HOWEVER, read the assignments carefully. They may specifically state your programs be able to be compiled, built and run in specific ways (usually to facilitate grading).

20. You may log out, or turn off the virtual machine by clicking the upper right power symbol. Be sure you save everything before logging off or shutting down.



21. Firefox is the default web browser in Ubuntu Linux.

When you first go somewhere using it (like www.uwstout.edu)
the university's network may require you to "register your machine."
This should have happened the first time you opened a web browser in windows also.
For it to actually work, it may require you to be physically connected to the network.
(i.e. Ethernet cable plugged into the wall)



22. You may also want to maximize the screen to cover up everything in Windows.
Press the expand screen button near the top left-ish part of the window.
Once expanded, you may reverse this (shrink the screen back to a window) by pressing a similar button you will see near the top of the fully expanded screen.
If you toggle between expanded and windowed and expanded and windowed and...
Things may get a little messed up.
This can usually be fixed by logging off the virtual machine, or shutting it down.

Be sure to save everything before logging off or shutting down.



Other Items

IMPORTANT:

You may potentially create a large number of programs and files while logged into the Ubuntu Linux Virtual Machine.

These files are stored "inside" the virtual machine.

Windows will NOT be able to see them.

If the virtual machine becomes corrupted, deleted, or you change/lose/forget your password(s) to the virtual machine account(s) you will likely lose all those files.

There are several ways to minimize the risk of this loss occurring.

Because you will have internet access while logged into the virtual machine, you may, among other things, email important files to yourself.

Another option is:

It seems some of the editors when running in the virtual machine WILL ALLOW you to select all, copy, and then paste them into a program running on Windows. Example:

In Ubuntu Linux (running as a window in Windows)

Run Geany Open or create a file Select all (CTRL-A) Copy the selection (CTRL-C) In Windows Run Wordpad (or Notepad or Word) Create a new document Paste (CTRL-V)

Note: This copy-paste is slow and tedious. Likely best reserved as a final effort. It may not work with all editors. It may only work sometimes. So test it out for small cases before depending on it to work.

In similar fashion, the Ubuntu Linux Virtual Machine CANNOT see files saved by Windows programs.

So do not try to write your program using a program running in windows and then try to compile the files in Ubuntu Linux, you will not be able to find them.

However, you might be able to reverse the above steps to move files from Windows to Ubuntu. (i.e. email them to yourself, then use the browser in Ubuntu to check your email, then download them to someplace in Ubuntu Linux, OR open the file in a Windows editor and try to paste it into an editor that is running in Ubuntu Linux)

Trouble Shooting

If Firefox does not seem to open/go anywhere you may not have a network connection.

This may be outdated...

First thing to try:

On the VMware Player screen click the Devices menu at the top. Select Network Adapter and then NAT.

Second thing to try:

Also go to Ubuntu (login as Student) Find the networking icon (two computers), Or the icon for signal strength/radio signal bars, on the top bar near the far right. Double click it. If available select "Auto eth2" or "Auto eth3" This should find the internet connection.