Installing the Oracle VirtualBox Tool

To prepare your Physics 3340/6361 assignments you may either use the Linux machines in the Physics department or a virtual Linux system on your personal laptop or desktop computer. A virtual Ubuntu Linux system has been prepared for you that is similar to the Ubuntu Linux systems in the department.

To run the virtual Ubuntu Linux system as a guest operating system on your own computer, a supervising virtualizer tool is needed that runs on your host machine. The first step is to download and install the free Oracle VirtualBox tool. Go to the home page:

https://www.virtualbox.org/

for information and documentation, and

https://www.virtualbox.org/wiki/Downloads

to download the version appropriate for your computer's operating system: Windows, MacOS, etc.



These examples show the installation process for the Windows version, and the MacOS version will be similar.



Just click "Next"



🕼 Oracle VM VirtualBox 6.0.10 Setup	×
Custom Setup	
Select the way you want features to be installed.	
Click on the icons in the tree below to change the way features will be installed.	
VirtualBox Application VirtualBox USB Support VirtualBox USB Support	
VirtualBox Networking VirtualBox Bridger VirtualBox Host-C VirtualBox Python 2.x Su VirtualBox Python 2.x Su	
< >	
Location: C:\Program Files\Oracle\VirtualBox\ Browse	
Version 6.0.10 Disk Usage < Back Next > Cancel	

Accept the defaults and click "Next"



🕼 Oracle VM VirtualBox 6.0.10 Setup	×
Custom Setup	
Select the way you want features to be installed.	
Please choose from the options below:	
Create start menu entries	
Create a shortcut on the desktop	
Create a shortcut in the Quick Launch Bar	
Register file associations	
Version 6.0.10 < Back Next > Cancel	

Select your preferences and click "Next"





Click "Yes"



d Oracle VM VirtualBox 6.0.10 Setup	×
Ready to Install	
The Setup Wizard is ready to begin the Custom installation.	
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	
Version 6.0.10 < Back Install Can	cel

Click "Install"



Assuming all goes well with the installation, you should get:



Click "Finish"



When started initially, the new virtualizer tool has no virtual machines to manage:



Download the pre-configured Ubuntu 20.04 Linux operating system from the physics web server at www.physics.smu.edu/fattarus/Ubuntu20.ova Note: This file is over 2GB in size, since it contains an entire computer operating system and development applications. Store the file on your computer.



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~ Import Virtual Appliance

Appliance to import

VirtualBox currently supports importing appliances saved in the Open Virtualization Format (OVF). To continue, select the file to import below.

Click on the orange "Import" button on the virtualizer tool to pop up this dialog to specify a virtual operating system ("appliance") to manage:	
Click on the file select button and use the next dialog to point to the Ubuntu20.ova file you downloaded to your computer	FrenchMade



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Quick access	Name 1208970787_ANT_USB_Drivers ANTwarell 4.100	Date modified 7/15/2019 6:35 PM 7/15/2019 6:37 PM	Type File folder File folder	Size		
🕹 Downloads 🛛 🦻	Ubuntu18	8/29/2019 2:34 PM	Open Virtualizatio	2,448,102 KB		
 Pictures Music Videos OneDrive This PC Network 			ß			
					~	Open Virtualization
File	name: Ubuntu18					



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Import Virtual Appliance

Appliance to import

VirtualBox currently supports importing appliances saved in the Open Virtualization Format (OVF). To continue, select the file to import below.

C:\Users\memo\Downloads\Ubuntu18.ova





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Import Virtual Appliance

Appliance settings

These are the virtual machines contained in the appliance and the suggested settings of the imported VirtualBox machines. You can change many of the properties shown by double-clicking on the items and disable others using the check boxes below.

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This dialog allows you to override the setting for how much of your native computer hardware will be consumed by the virtual machine. If these defaults look OK, click "Import"



You can modify the base folder which will host all the virtual machines. Home folders can also be individually (per virtual machine) modified.





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Starting Your Virtual Linux System





Starting Your Virtual Linux System



A new application window will pop up that is a virtual simulation of the hardware display screen of a physical computer running the Ubuntu Linux operating system that has just booted up, but running on your computer. The login credentials are the same as in the Physics department lab machines, with a user name of 'user' and a password as 'Fondrenlabuser'



Starting Your Virtual Linux System

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After logging in, you can right-click on the little screen icon to resize the display 'Virtual Screen 1' to something large, but that fits on your hardware screen.



Running Your Virtual Linux System

Use the mouse icon in the upper left corner to pull up the dialog to start Linux applications for program development. You will need the terminal emulator, the gedit file editor, the Firefox web browser, and others.





Running Your Virtual Linux System

By default, files in the virtual system are isolated within the virtual system. But you can always use the Firefox browser to upload assignment files to Canvas or email them. In addition, right-clicking on the **USB** or File System icons will allow setting up shared file folders.





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Shutting Down Your Virtual Linux System



Important!

Always use the virtual shutdown button to properly shut down your virtual Linux system, just as you would any physical computer system.



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