LAB 1 – CENTOS INSTALLATION IN VIRTUALBOX

Description

Install CentOS Linux in Oracle VirtualBox from a DVD ISO file.

Introduction

In this lab you will install the CentOS Linux operating system with LibreOffice from a CentOS 6.7 ISO file. Be sure to document the settings you make during the installation.

Procedure

Follow the instructions below to install CentOS Linux in Oracle VirtualBox on your laptop or desktop computer at home. This will be in a virtual environment, so it will not affect the operating system on your personal computer. This first lab is crucial to your success in the course, because all other labs and activities will require you to perform them in the CentOS Linux virtual machine you create in this lab.

Deliverables

Using the assignment link in Blackboard. Submit screenshots of:

1. Oracle VirtualBox showing the CentOS 6.7 virtual machine.
2. The running CentOS 6.7 virtual machine with you logged into it.

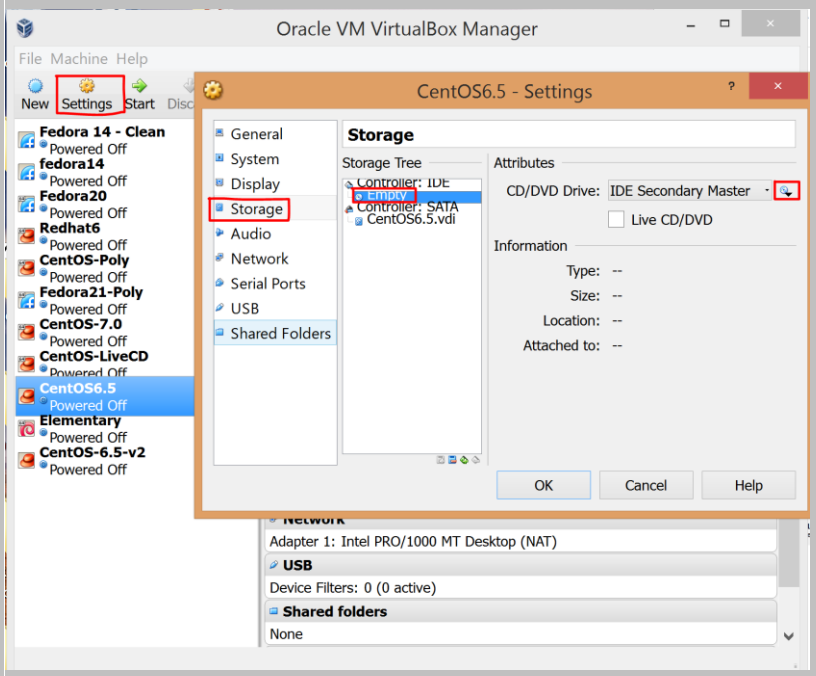
Steps	Instructions
1.	**Download and install Oracle VirtualBox on your computer.** - You can download Oracle VirtualBox from the following link: https://www.virtualbox.org/wiki/Downloads - Select the VirtualBox binaries for the appropriate platform of your computer: Windows hosts, OS X hosts, or Linux hosts. Most of you will have either a Windows computer or an Apple Mac with OS X. - Select the default settings during installation.
2.	**Download the CentOS 6.7 ISO file** - You can download the CentOS 6.7 ISO file from the following link: http://archive.kernel.org/centos-vault/6.7/isos/x86_64/ - Then click on the CentOS-6.7-x86_64-bin-DVD1.iso link. You will only need the DVD1 iso.
3.	**Create a virtual machine in Oracle VM VirtualBox:** - Open Oracle VM VirtualBox - Click on "New", and then click Next - Enter or select the following: Name: CentOS6.7 Operating System: Linux

Steps	Instructions

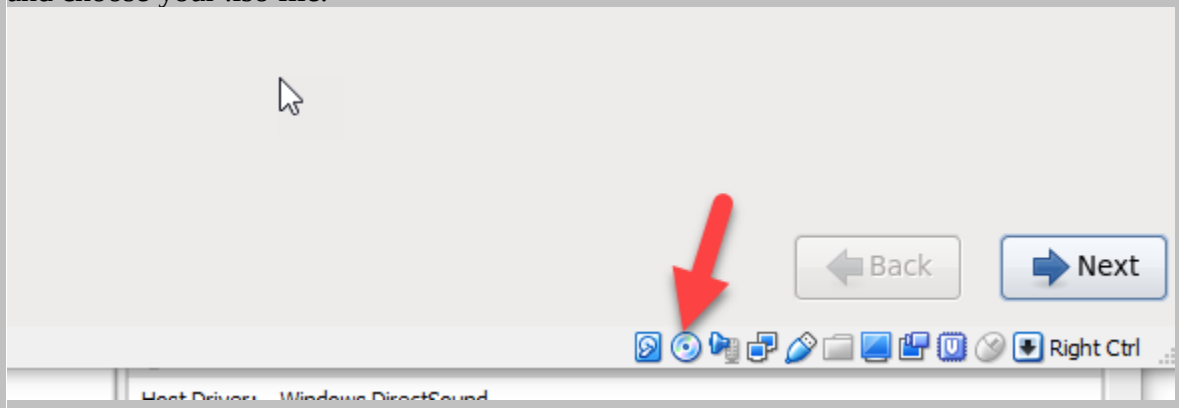
Version: Red Hat (64 bit)
- Click “Next”
- Memory – 1024MB (If your computer permits, please bump up to 2GB aka 2048 MB)
- Click “Next”
- Select “Create New Hard Disk”
- Click “Next”
- File Type – select VDI
- Click “Next”
- Storage Details – select “Dynamically Allocated”
- Size – 60GB
- Click “Next”
- Click “Create”
- Click “Create”

Note: Even though you are selecting 60GB for the virtual machines hard drive size, the virtual machine will only take up about 4GB of hard drive space on your computer. That is why we select Dynamically Allocated, so the size of the VDI grows as needed.

4. Preparing the installation on your virtual machine:
- Open Oracle Virtual Box
- Select the new virtual machine you created, then click on “Settings”
- Click on “Storage”, then click on “Empty” (located under IDE Controller)
- Click on the **CD icon** on the right side of IDE Secondary Master
- Select “Choose a virtual CD/DVD disk file …”

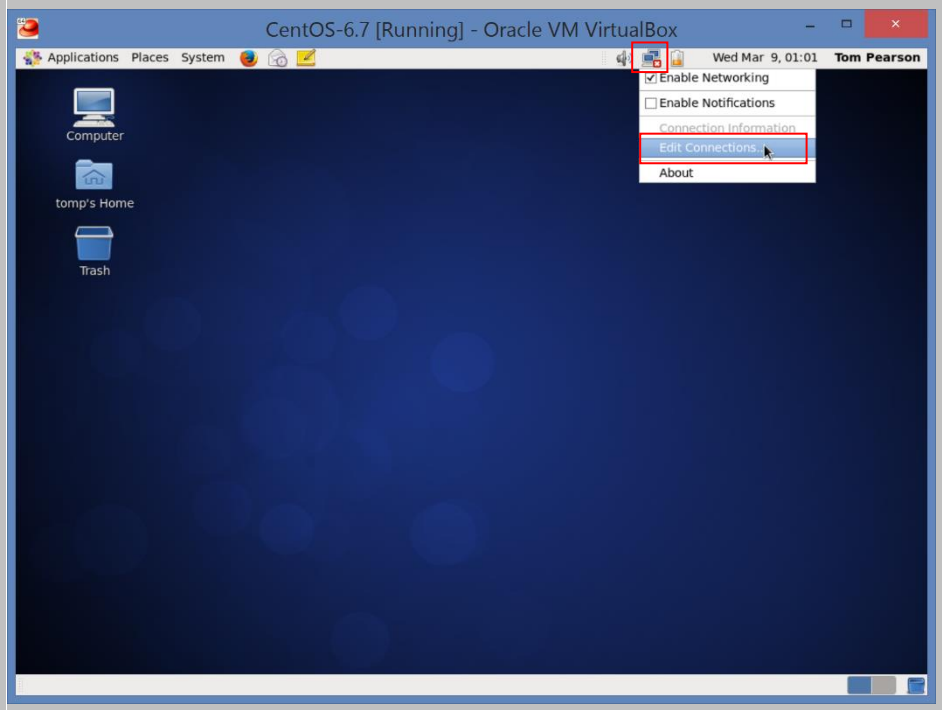


- Browse to and select the “CentOS-6.7-x86_64-bin-DVD1.iso” file that you downloaded in step 2, then select “Open”

Steps	Instructions
	- Click on OK in CentOS6.7 settings box - Highlight the CentOS6.7 virtual machine and click the green Start arrow - Click OK - After VM is started make sure .iso file is in virtual DVD slot by checking at the bottom of your VM, please see image below. If the DVD icon is gray out, right click on that icon and choose your .iso file.
	
5.	**CentOS 6.7 Installation:** Oracle VirtualBox will detect the CentOS6.7 installation DVD ISO file and start the installation process. - Choose "Install a new system or upgrade an existing system". Then press "enter" - You may be asked to check media. At this point it would be safe to assume the media is ok and therefore select "skip" by using the "tab" key. Then press "enter". - When the CentOS 6 screen displays, click "Next"
	- The next screen will default to "English" as the preferred language. Click "Next"
	- The next screen defaults to a "U.S. English" keyboard. Click "Next"
	- Your system has a normal hard disk. Choose "Basic Storage Devices" for the type of installation you want to perform. Then click "Next"
	- A storage device warning box may pop up with a "The storage device below may contain data" error. If so, select "Yes, discard any data"
	- Enter a hostname for your system as follows: *<your firstname and first initial of lastname>.local (example: adamst.local).* Click "Next"
	- Select the proper timezone: *Phoenix, AZ.* and make sure "System clock uses UTC" is checked. Then click "Next"
	- Set the root password: *secret*

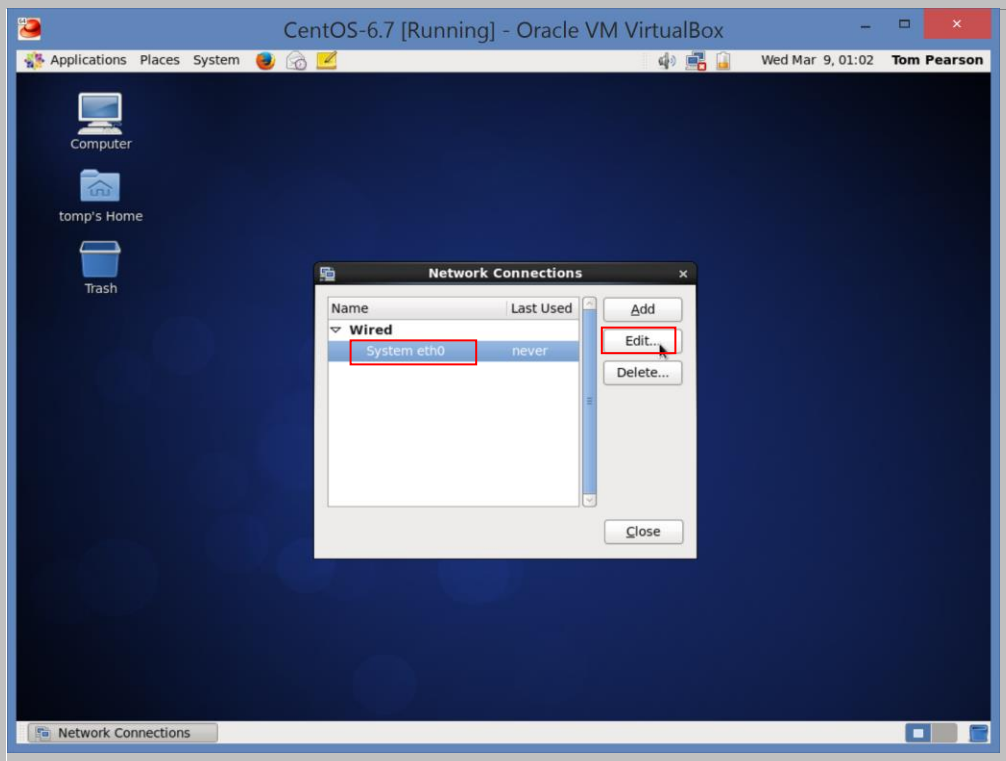
Steps	Instructions
	- Click “Next” and click “Use Anyway” when prompted.
	- Choose your partitioning strategy: **Use All Space** - Then click “Next”
	- In the “Writing storage configuration to disk” window, click on “Write changes to disk”
	- Software Installation Window: Leave the default settings. Desktop CentOS selected for the repository Customize Later - Click “Next”
	- A screen will appear indicating CentOS is being installed and it will indicate the number of packages to be installed and monitor the progress. This will take 15 – 30 minutes.
	- After all the packages have been loaded you will see a congratulations screen. Click “Reboot”.
	- When the Welcome screen appears, click “Forward” to move to the next screen. - You will then see the “License information” screen. Select “Yes, I agree to the License Agreement”, then click “Forward”
	- The next screen requires you to create a new non-root user. Use your first name and last initial (ex: pyisonew) for the username and use *secret* as your password. Also make sure you enter your full name in the appropriate field. Click “Forward”. It will complain that the password is a weak password, use it anyway. Click “Yes” - Set Date and Time. Click “Forward” - If you receive an “Insufficient memory to auto-enable kdump” error, click on “OK”. - Click on “Finish”. - -You’re done! Click on your name to log in to your new virtual Linux machine.
6.	**Enable the Network Interface:** - Locate the network icon (the one with two computers) and right click on it. Then click on “Edit Connections”. See the screenshot below.

Steps	Instructions

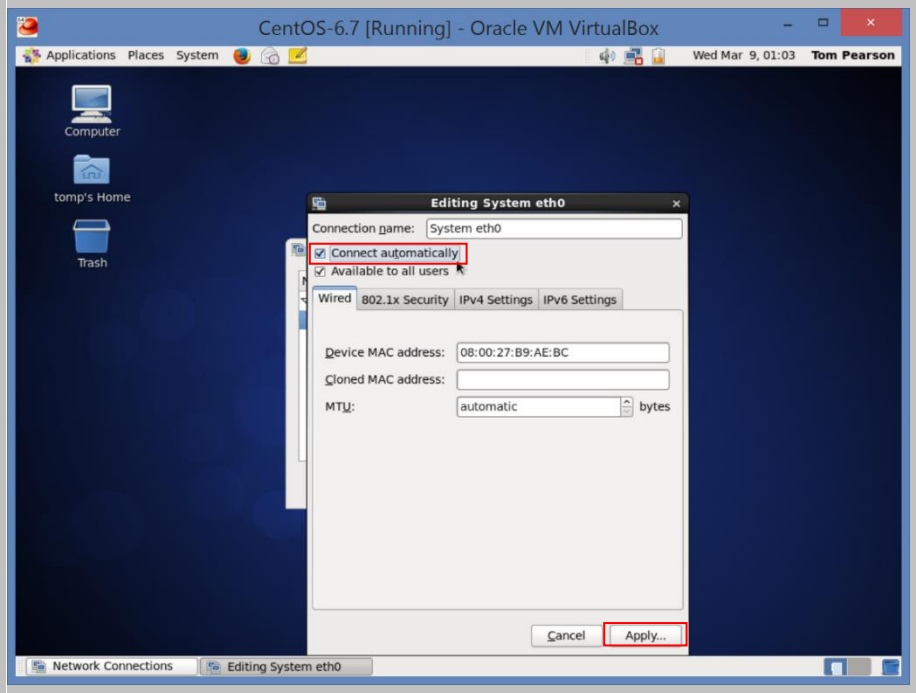


- Click on “System eth0” in the “Network Connections” window, then click on “Edit”.

Steps **Instructions**

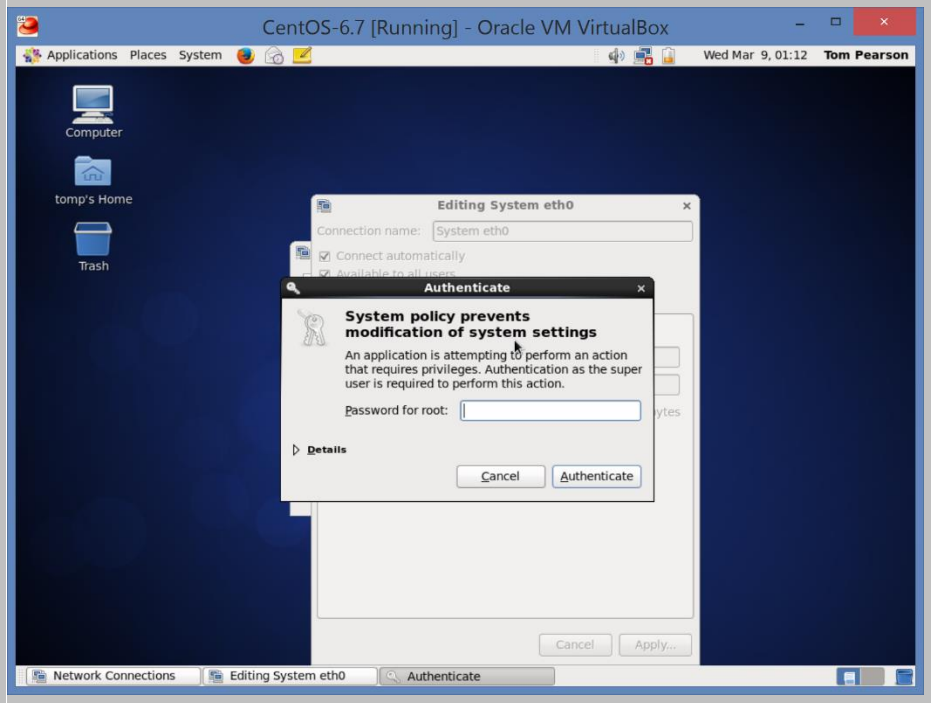


- Click on the “Connect automatically” checkbox, then click on “Apply”



Steps	Instructions

- You will then be prompted to enter the password for root. Enter “secret” for the password or whatever you used when setting the password for root during the installation. Then click “Authenticate”



- Click on “Close” in the “Network Connections” window.

- Open up the Firefox web browser and validate that you have network connectivity.