

Practical Exercise 7-1: Installing RPM Packages

This Practical Exercise will take students through the process of downloading a package with `wget` and installing an application (Nano) with the `rpm` utility.

Open VirtualBox and start the openSUSE VM. Run snapshot 8-2 for the correctly configured environment. To run snapshot 8-2:

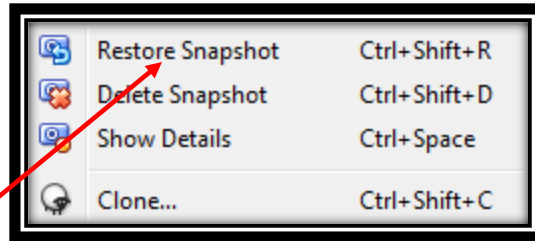
1. Open the Oracle VM VirtualBox manager by double clicking this icon on your desktop:



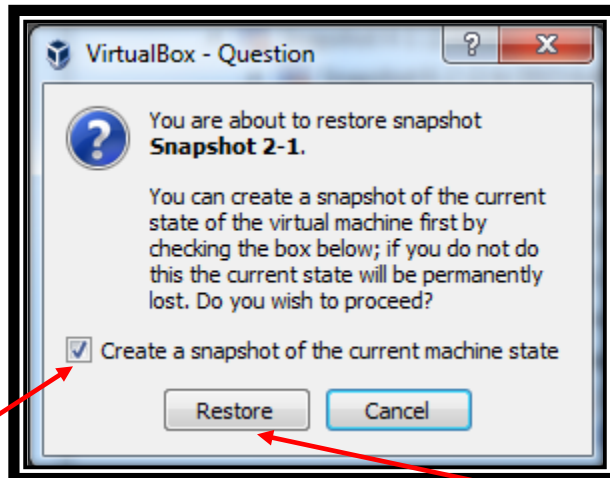
2. Click "Snapshots" in the top right of the Oracle VM Virtualbox Manager.



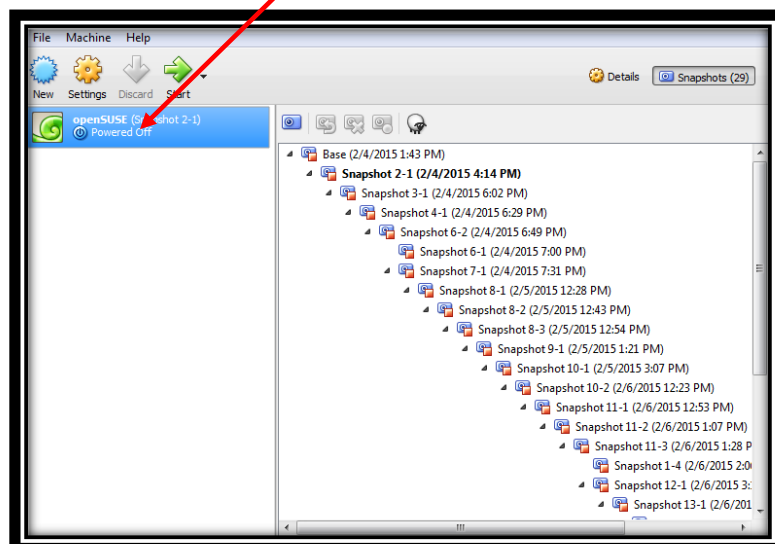
3. In the right side box populated with snapshots scroll up and find the one titled "Snapshot 8-2" and right click on it. The following box should appear:



4. Select "Restore Snapshot" and the following pop-up should appear:



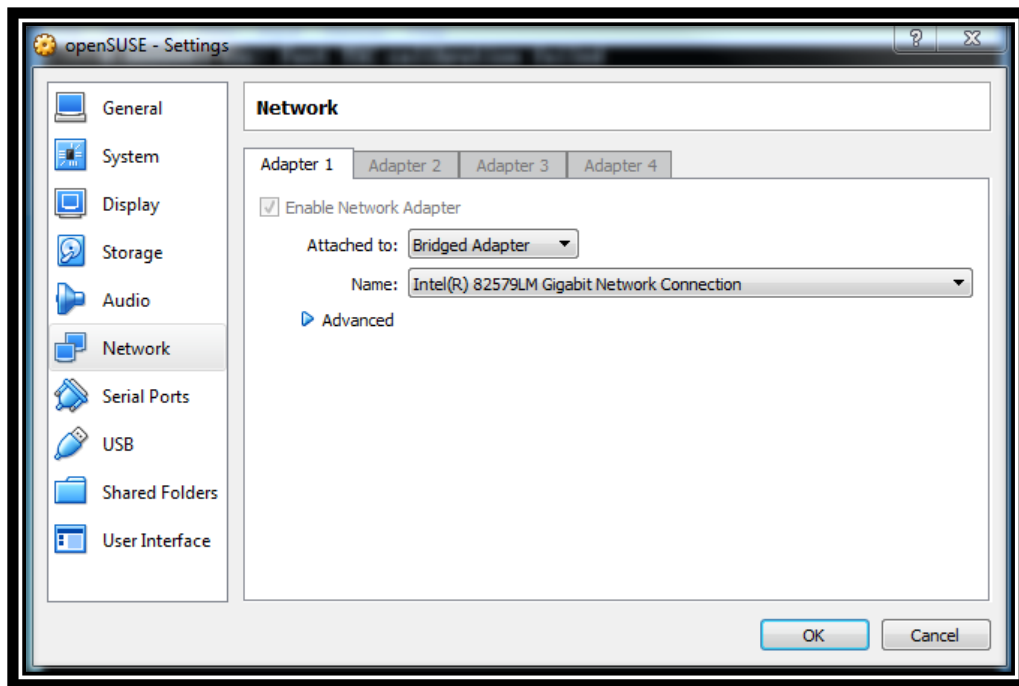
5. Uncheck the "Create a Snapshot of the current machine state" box and then click the "Restore" button.
6. You should now see in the left box the openSUSE (Snapshot 8-2) with a status of "Powered Off." Power it on by double clicking it.



7. In this Practical Exercise we will also have to bridge the network adapter for virtual box to the hosts network interface card, To do this at the bottom right of the Virtual Box window find the icon with two computer screens:



8. Right click the icon and select the network settings.
9. Under the Adapter 1 tab ensure the "Enable Network Adapter" box is checked. Set the "Attached to" to Bridged Adapter. Once that is done the Name should auto populate.



10. Press OK and the Network Settings window will close.
11. A separate window with openSUSE should be available..
12. Press **CTRL+ALT+F1** to bring up the terminal login and log in as root with the username: **root** and the password: **student**.
13. You should be in the home directory, if not enter **cd ~**.
14. Let's use the wget utility to download a text editor application called Nano.

15. You may have this package on a disk or you could get the package from a trusted on-line site like <https://software.opensuse.org/422/en>. In this Practical Exercise we are going to download the package from the website using **wget**.
16. While in the home directory let's make a directory called Downloads by entering **mkdir Downloads**.
17. Enter **cd Downloads** to move to that newly created directory.
18. Prior to downloading the application let's restart the network interfaces by entering **systemctl restart network**. Wait until the command prompt returns.
19. Now let's download the Nano package by entering **wget "http://download.opensuse.org/repositories/openSUSE:/13.2/standard/i586/nano-2.3.6-1.1.i586.rpm"**.

Note If this command failed, verify you entered it correctly. If you are sure the syntax is correct, enter **reboot** and let the system restart, login as root to the terminal again and enter the **wget** command again.
20. You can do a quick **ls** and you should see the red package file for Nano.
21. Let's go ahead and install the package using the rpm utility. Enter **rpm -ihv nano-2.3.6-1.1.i586.rpm**. The Nano package should install with progress bars.
22. Ok, let's run Nano. Enter **nano file1** and the Nano text editor should open.
23. Press **Ctrl-X** to exit the Nano text editor.
24. Enter **whereis nano** and the directory locations for where Nano was installed should be listed.
25. Do not close the image as it will be used in the next Practical Exercise.

--End of Practical Exercise--