ComS 252 Homework 5: Installing Packages

Group assignment (with 5% penalty per group member)

Due October 5, 2021

1 Objectives

For this assignment, you will install precompiled packages onto three different virtual machines. Be sure to run the Turnin script on each machine, as root or using sudo.

2 Installing packages using apt

2.1 Download

Download the Hw05apt.ova virtual machine. This is a minimal Ubuntu machine, where account user has password userpw and has sudo privileges (any commands that you need to run as root, run as user but type "sudo" in front of it).

2.2 Install nethack

Using apt in a shell, install nethack-console. This is an adventure game that runs in a terminal. Be sure to run nethack to make sure it installed correctly.

2.3 Submitting your work on Hw05apt.ova

Run Turnin your-username to submit your work. After you submit, you should poweroff the virtual machine.

3 Installing packages using dnf or yum

3.1 Download

Download the Hw05dnf.ova virtual machine. This is a minimal Fedora machine, where accounts root and user have passwords rootpw and userpw.

3.2 Install nethack, again

Using dnf or yum in a shell, install nethack. Make sure it installed correctly.

3.3 Submitting your work on Hw05dnf.ova

Run Turnin your-username to submit your work. After you submit, you should poweroff the virtual machine.

4 Installing packages using rpm

4.1 Download

Download the Hw05rpm.ova virtual machine. It is an old Fedora 17 virtual machine without any GUI. Again, accounts root and user have passwords rootpw and userpw, respectively. Also, download the CD image Hw05rpms.iso which contains several files you will need.

4.2 Install gcc

Use VirtualBox to map the CD drive to the file Hw05rpms.iso. In Linux, the CD drive should be device /dev/cdrom. You will need to mount the CD to some convenient mount point, so you can access the files on the CD. The (virtual) CD contains several RPMs. Using the rpm utility, install the package "gcc". This will require you to install some dependencies "by hand", which should also be installed using rpm. Everything you need is available on the virtual CD, but the hard part is finding the filenames that match the required dependencies. (This is the fault of the package maintainers; I did not change any filenames. Also, note that the ISO contains only a few RPMs, so you should be able to search through the file listing.) Note — do not install more packages than necessary. You can run gcc to make sure it installed properly.

4.3 Submitting your work on Hw05rpm.ova

Run Turnin your-username to submit your work. After you submit, you should poweroff the virtual machine.