



Software Applications

Introduction and/or Background

In Linux, software is referred to as packages. There are several kinds of packages available, and different approaches to installing them. Each distribution has its own preferred package format and method for installing software. In Debian, the apt, dpkg, and a graphical method is available to download and install software on the system.

A Debian package file normally will be named something like program-version-other.deb. When a system is running in a virtual environment, the addition of VMware Tools, a suite of tools installed into the guest OS, can be used to enhance the interactions between the host and the guest machines.

Objectives

In this project/lab the student will:

- Gain familiarity with Linux software applications
- Install VMware tools to enhance the operation of a virtual machine
- Install software packages in a Virtual Machine
- Using the graphical user interface (GUI) installation method

Equipment/Supplies Needed

- As specified in lab 0.0.1.

Procedure

Perform the steps in this lab in the order they are presented to you. Answer all questions and record the requested information. Use the Linux Virtual Machine to perform lab activities as directed. Unless otherwise stated, all tasks done as a non-root user. If root access is needed use the sudo command.

Assignment

Open VM Tools Installation

VMware Tools provides drivers for the machines virtual network adapters, and provide for smoother operation of the mouse, sound, and graphical performance of a virtual machine. VMware tools help the host system to cleanly power off the guest OS, and provides the ability to copy/paste files between the Linux Software Applications.

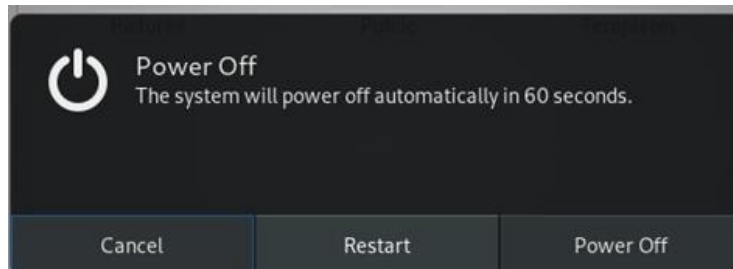
Open a Terminal window.

As root, use **apt-get** to install the open-vm-tools package

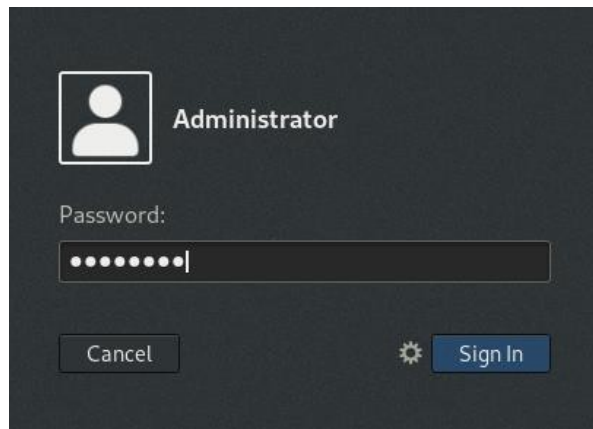
1. `apt-get install open-vm-tools-desktop -y`

```
administrator@debian: ~  
File Edit View Search Terminal Help  
administrator@debian:~$ sudo apt-get install open-vm-tools-desktop -y  
[sudo] password for administrator: █
```

VMWare Tools Installation Confirmation should appear. Restart the VM.



Log into the root (Administrator) account.



Open a Terminal window and paste the following command to view version installed:

2. `vmware-toolbox-cmd -v`

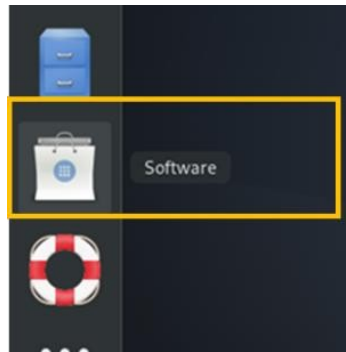
Record a screenshot and submit it for credit. Example:

```
File Edit View Search Terminal Help
administrator@debian:~$ vmware-toolbox-cmd -v
10.3.10.11 (build-13959562)
administrator@debian:~$
```

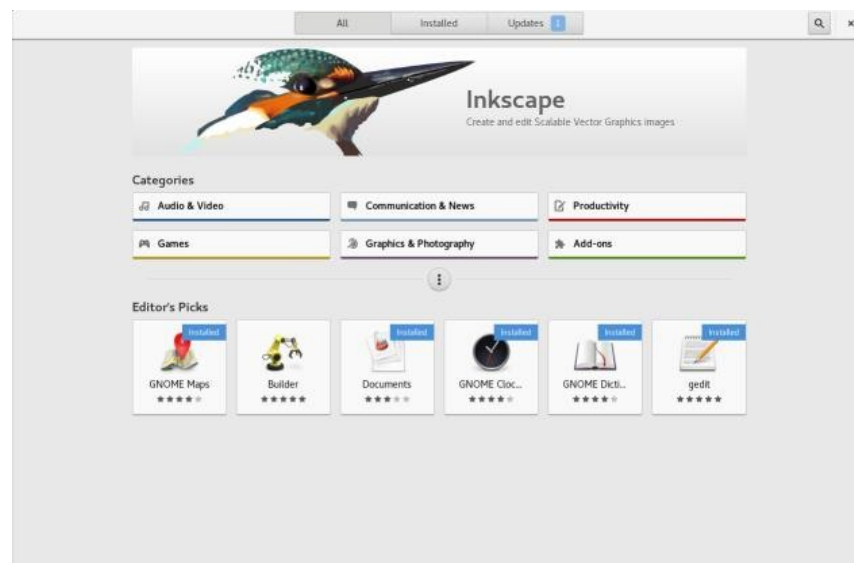
GNOME Software Mgr GUI for Application Installation

Software Mgr provides the same features as the apt-get command line utility with a GUI front-end. It enables you to install, update and remove packages in a user friendly GUI.

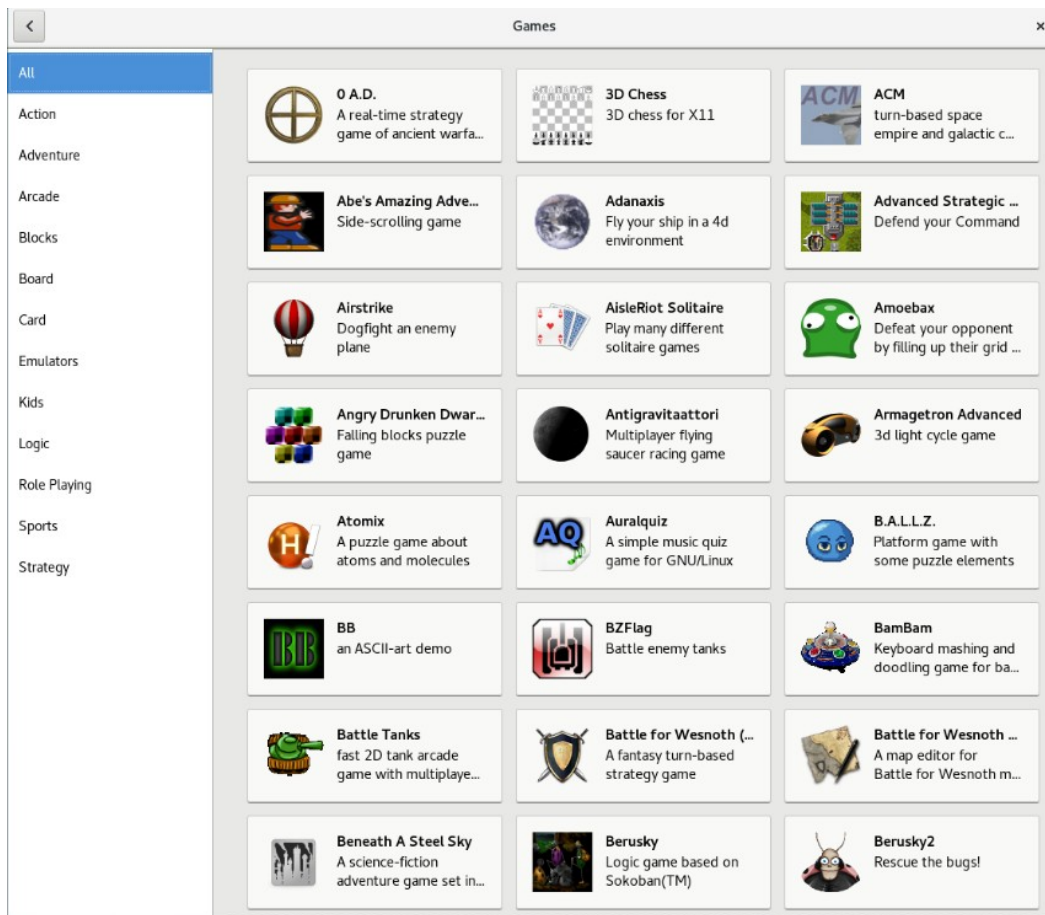
Click the Activities menu, then select the Software icon.



Note how the applications are separated into different Categories. Click each Category and examine their contents.

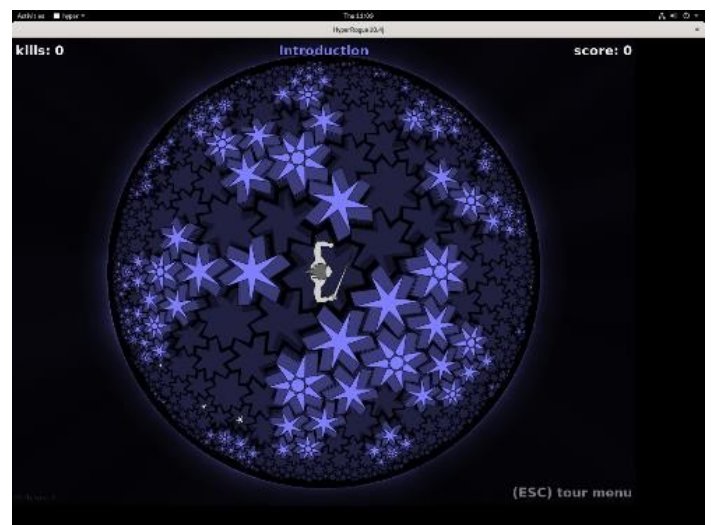
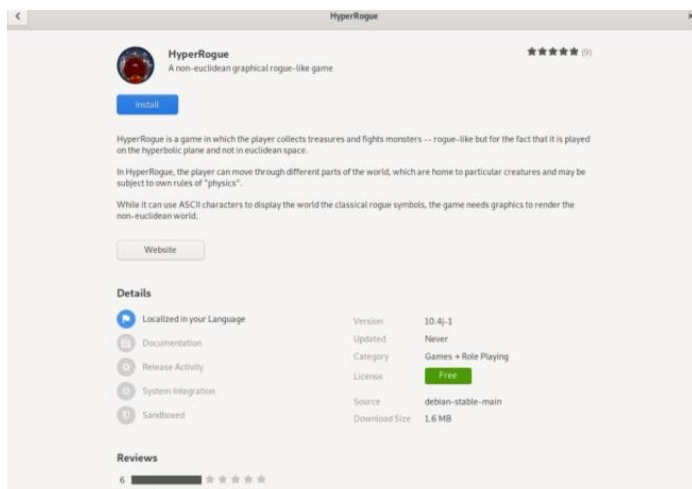


Click on Games. Pick on an application that looks interesting. Example: HyperRogue



Click its Install button and wait for it to finish installation.

Click the Launch button and take a snapshot with the program running.



Lab Submissions Proof: Provide screenshots as indicated in the lab; upload your proof to Canvas for grading.

Rubric

Checklist/Single Point Mastery

<u>Concerns</u> Working Towards Proficiency	<u>Criteria</u> Standards for This Competency	<u>Accomplished</u> Evidence of Mastering Competency
	Criteria #1:Recorded screenshot of vmware-toolbox-cmd -v command (50 points)	
	Criteria #2:Recorded screenshot of game installed via GUI and running (50 points)	