

GUI/Terminal Overview

Introduction and/or Background

The Linux operating system offers both a graphical user interface (GUI) and/or command line interface (CLI) for user interaction with the computer. The GUI provides graphical icons, images, and menus to enable performing tasks, while the CLI requires directly writing commands to perform tasks.

Objectives

In this project/lab the student will:

• Examine and gain familiarity with the Linux Graphical User Interface (desktop) and the Terminal Command Line Interface (CLI).

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

Graphical User Interface

 Turn on the Linux Virtual Machine and login with your username. Enter the password, and sign in. The gnome desktop will appear. [By the way, GNOME is officially pronounced "guh-NOME". However, many people pronounce GNOME as just "NOME"]

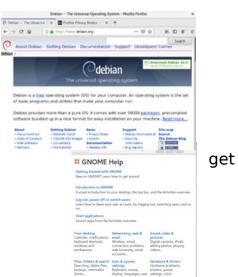


2. By default, if no choice is made on a desktop during the installation process, Debian installs the gnome GUI desktop. Examine/familiarize yourself with the desktop components. Click on **Activities** to access the basic tasks (windows and applications) installed.

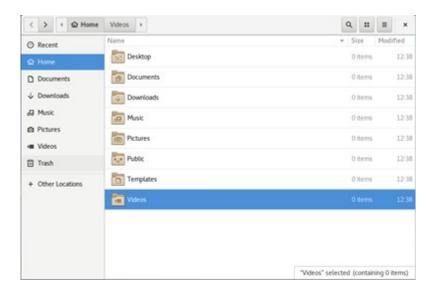


- 3. Click on the Web Browser, and confirm that the Internet connection is working.

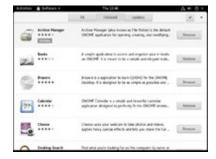
 Record a screenshot of the browser.
- 4. Click on the Help icon. Review where to help with gnome.



5. Click on the **files icon** to view the initial file structure. Take a screenshot. Close it.



6. Click on the Software icon . Click on the installed tab to see what "comes with" this installation.



7. Select the applications icon to view the icons to access the software installed.



8. Click on the drop down arrow at the top right to view network settings and user account information. Record a screenshot of the Network (Wired) Settings and User settings screen.





Close out the windows.

- 9. Adjust the monitor display. [Default settings is 800 x 600 (4:3)]
 - a. Right-click on the desktop to access the display settings. Click on **Display Settings**.



- b. Click on the display listed (unknown).
- c. Click on the **Resolution** drop down box.
- d. Adjust the setting to suit you and your computer. Example: 1920 X 1200 (16:10)



- e. Click on Apply.
- f. Right-click on the desktop to access the display settings. Click on **Change Background**. Click on **Background** again.



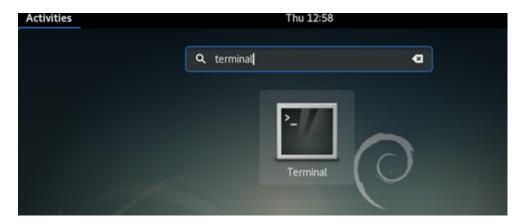
g. Select/Change the existing default background to one provided in the wallpaper or colors tabs. Record a screenshot of the new background. Change it back to the default if you want.

Terminal [command shell]

The terminal emulator is a program that opens a window to interact with the shell. There are several terminal emulators available that 'come with' Linux distributions. Examples are: gnome-terminal, konsole, xterm, rxvt, kvt, nxterm, and eterm.

If you are a KDE user, the terminal program is called "konsole," in Gnome it's called "gnome-terminal."

1. Open a terminal window from your desktop by accessing **Activities** and selecting the applications icon if from the menu. In the search, enter **terminal**. Select the terminal icon.



2. The terminal window will appear with the shell prompt, containing user_name@computer_name followed by the dollar sign.



If a # is shown instead of the \$, you are logged in as the root/administrator account [administrative privileges]. Unless you absolutely need administrative privileges, do not operate as root. Logout and back in as a standard user.

Command History

- 1. Click inside the terminal. Type your name and press the enter key. This is not a command that Linux understands so an error message should appear.
- 2. Press the up-arrow key and then the down-arrow key on the keyboard. Note that you can view any previous commands entered. This is good when you enter a bad command or need to revise something previously entered. Using the left and right-arrow keys, the cursor can be positioned anywhere in the command line. Great for editing a command. Record a screenshot of your terminal window showing your history.

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

Rubric

Checklist/Single Point Mastery

<u>Concerns</u> Working Towards Proficiency	<u>Criteria</u> Standards for This Competency	Accomplished Evidence of Mastering Competency
	Criteria #1: Provide a screenshot showing you have successfully opened Firefox in your Linux VM (16 points)	
	Criteria #2: Provide a screenshot showing you have successfully opened the files icon in your Linux VM (16 points)	
	Criteria #3: Provide a screenshot showing you have successfully opened the Network Settings in your Linux VM (16 points)	
	Criteria #4: Provide a screenshot showing you have successfully opened the User Settings in your Linux VM (16 points)	
	Criteria #5: Provide a screenshot showing you have successfully changed the background in your Linux VM (16 points)	
	Criteria #6: Provide a screenshot showing you have successfully shown terminal history in your Linux VM (20 points)	