Vanier College

Faculty of Careers and Technical Programs

Department of Computer Science Technology

Advanced UNIX

Lab #1

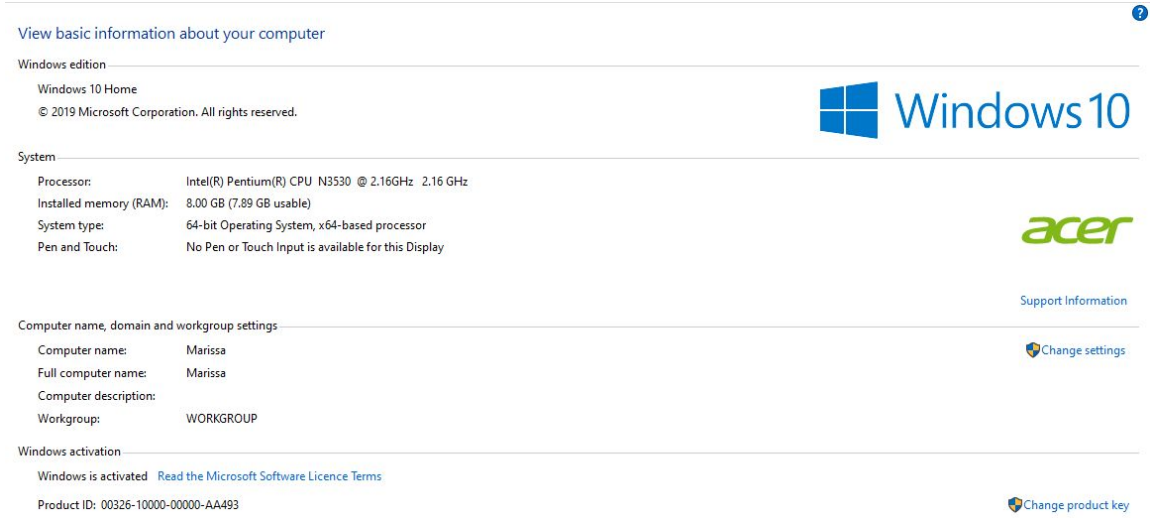
Title: Windows and Linux Fedora Installation

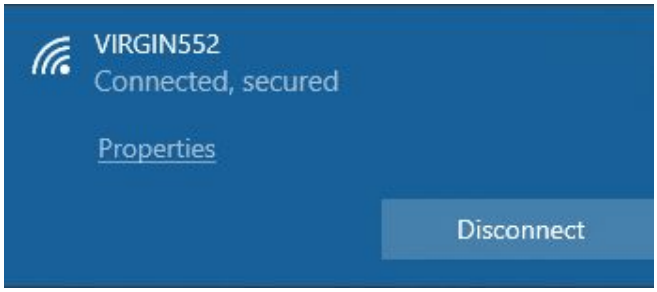
Student Name: Marissa Gonçalves

Submitted to Florin Pilat

August 28, 2020

1. *Please install the Operating System Windows 7 or 10 on your hard-disk (if you do not have any of these OS on your laptop/desktop). After installing one of these OSs (preferable Windows 10), try to connect to the Internet and your printer. Insert the successful outcomes of these two operations in your Lab_#1 report. Using the Computer Management application from the Administrative Tools icon of the Control Panel, verify how much space is used by your installed OS. Please capture the result and insert it in your Lab_#1 report.*





Printers & scanners

Brother MFC-7860DW

Open queue | Manage | Remove device

Fax

Microsoft Print to PDF

Microsoft XPS Document Writer

OneNote for Windows 10

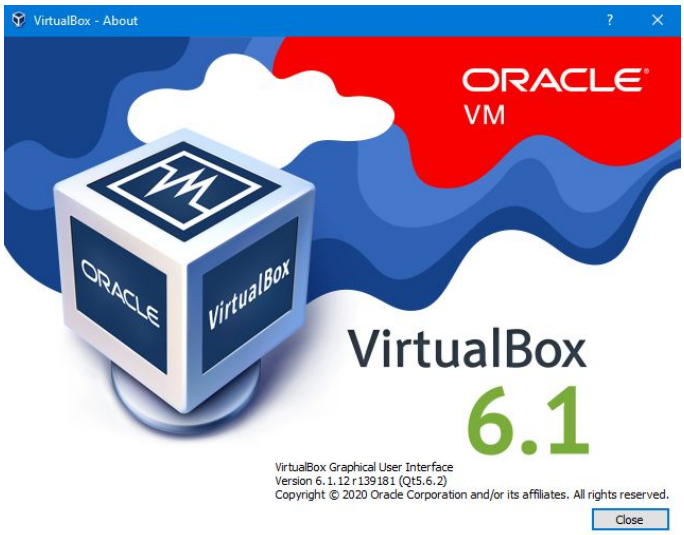
Brother PC-FAX
v.2.2

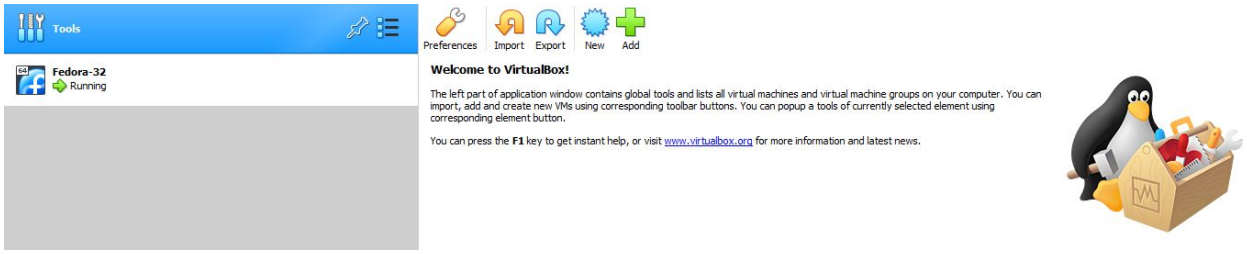
Volume	Layout	Type	File System	Status	Capacity	Free Space	% Free
(Disk 0 partition 1)	Simple	Basic		Healthy (Recovery Partition)	600 MB	600 MB	100 %
(Disk 0 partition 2)	Simple	Basic		Healthy (EFI System Partition)	300 MB	300 MB	100 %
(Disk 0 partition 5)	Simple	Basic		Healthy (Recovery Partition)	16.18 GB	16.18 GB	100 %
Acer (C:)	Simple	Basic	NTFS	Healthy (Boot, Page File, Crash Dump, Primary Partition)	448.57 GB	198.68 GB	44 %

Disk 0
Basic
465.64 GB
Online

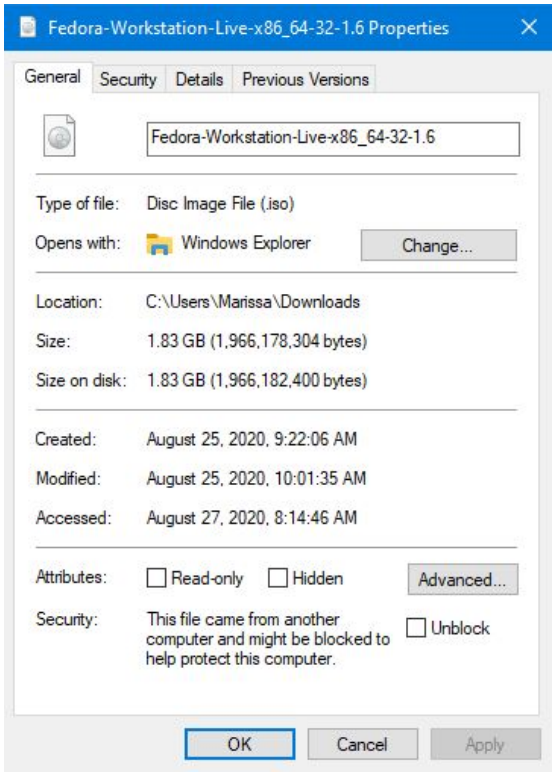
600 MB	300 MB	**Acer (C:)**	16.18 GB
Healthy (Recovery P	Healthy (EFI Syste	448.57 GB NTFS Healthy (Boot, Page File, Crash Dump, Prima	Healthy (Recovery Partition)

2. *Inside the OS you have installed (Windows 7 or Windows 10), download and install a VMWare player or a VMWare workstation that you will find on the Internet. (You may also use VBox as an open-source hosted hypervisor for x86 virtualization, instead of a VMWare product).*



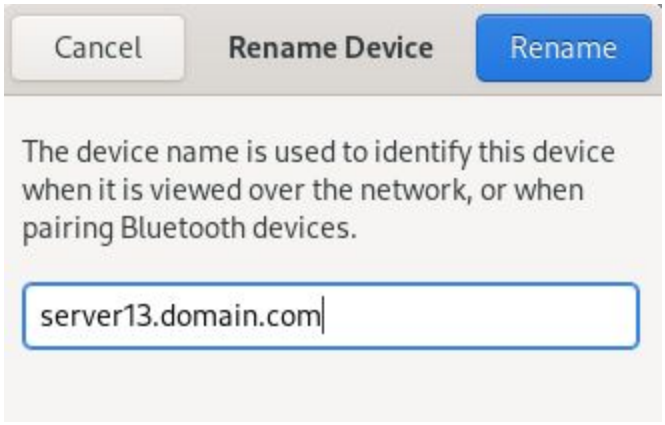


3. *After installing the hosted hypervisor (VMWare or VBox), using Windows 7 or 10, continue by downloading from Internet the .iso file of the version of Fedora you found (Fedora 20/ or 26/ or a newer version, 32 bits or 64 bits depending on your machine). Take a notice of the place where you saved that .iso file.*

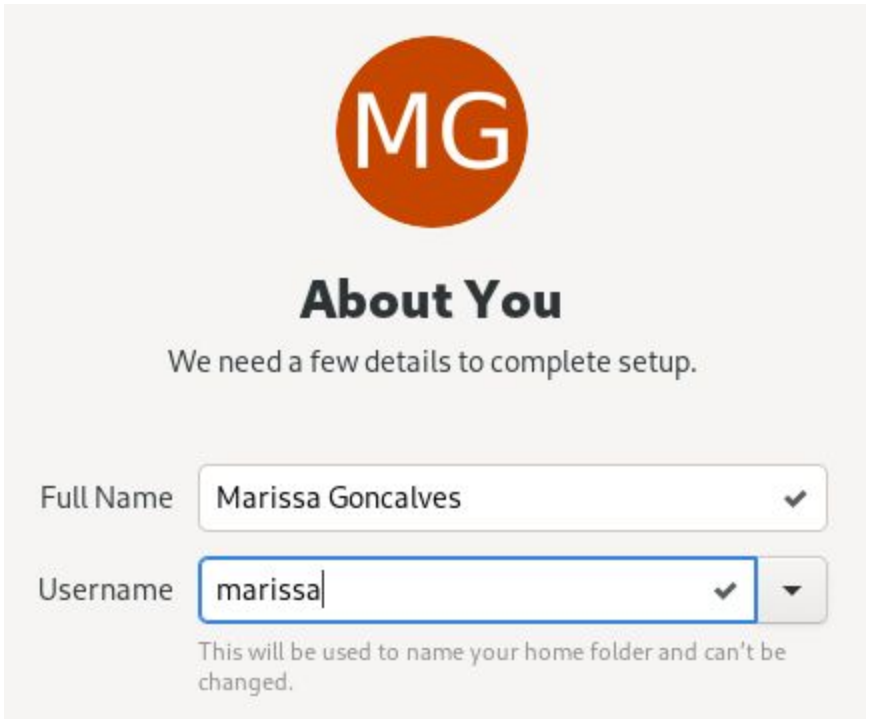


4. *Install the chosen version of Fedora on the hosted hypervisor you have just installed.*

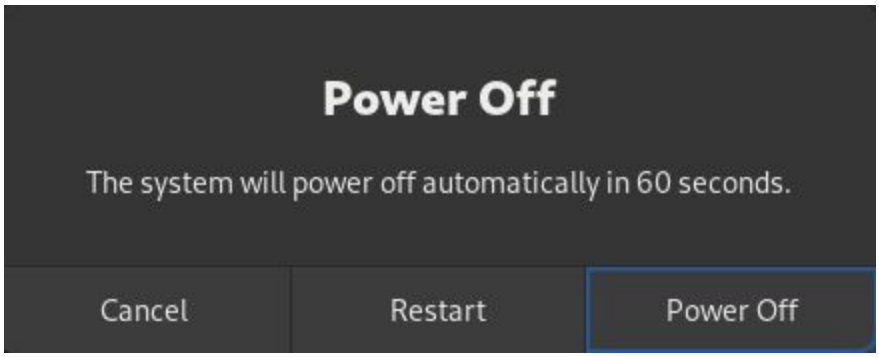
5. *During the installation enter the name (server**xx** .domain.com) for your Fedora and click on next.*



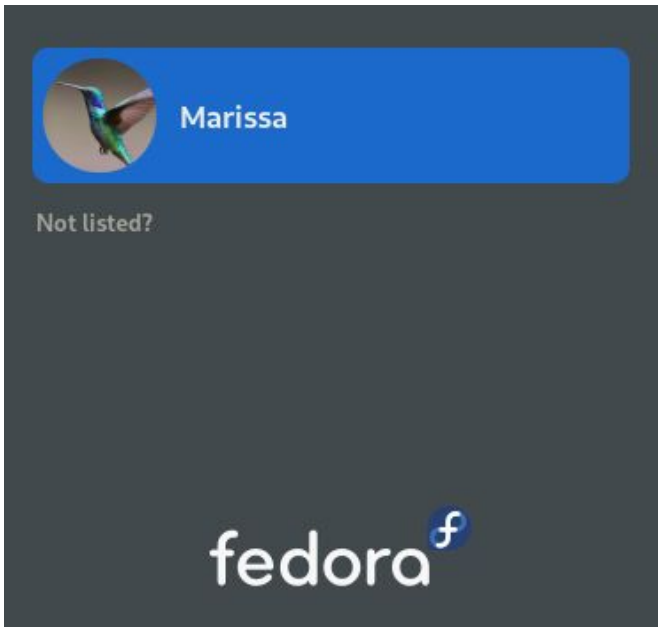
6. *Fedora by default creates a user named 'root' who has complete control over the system. You can call him the system administrator. For this account, a password is mandatory and must enter it at the above screen. Make a note of the password somewhere so you do not forget.*

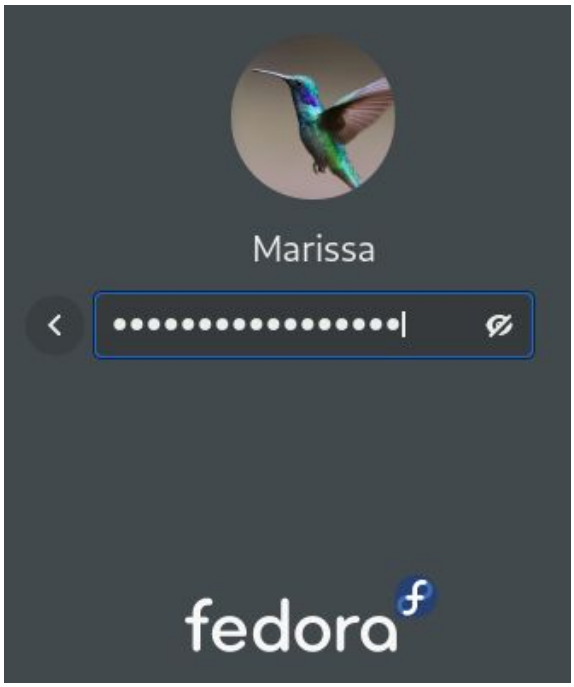


7. *The final screen states the successful installation of Fedora 20/ 26/ or newer on your computer. Click on 'Close' and then go to System>Reboot. Reboot the PC and you will be able to boot into that version of Fedora after answering a few simple post-installation screens.*

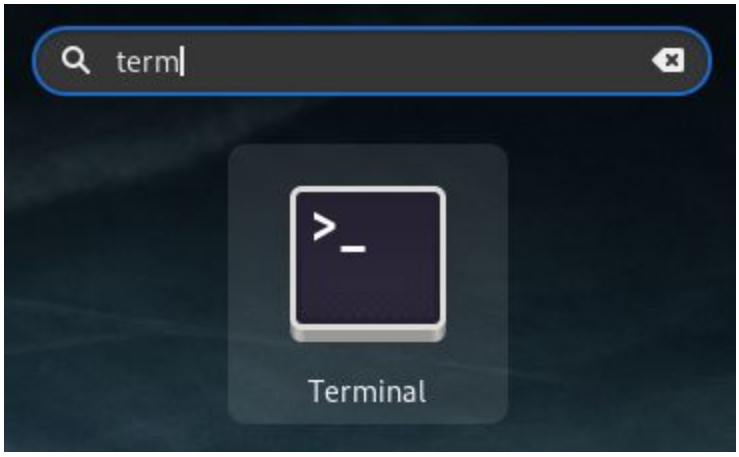


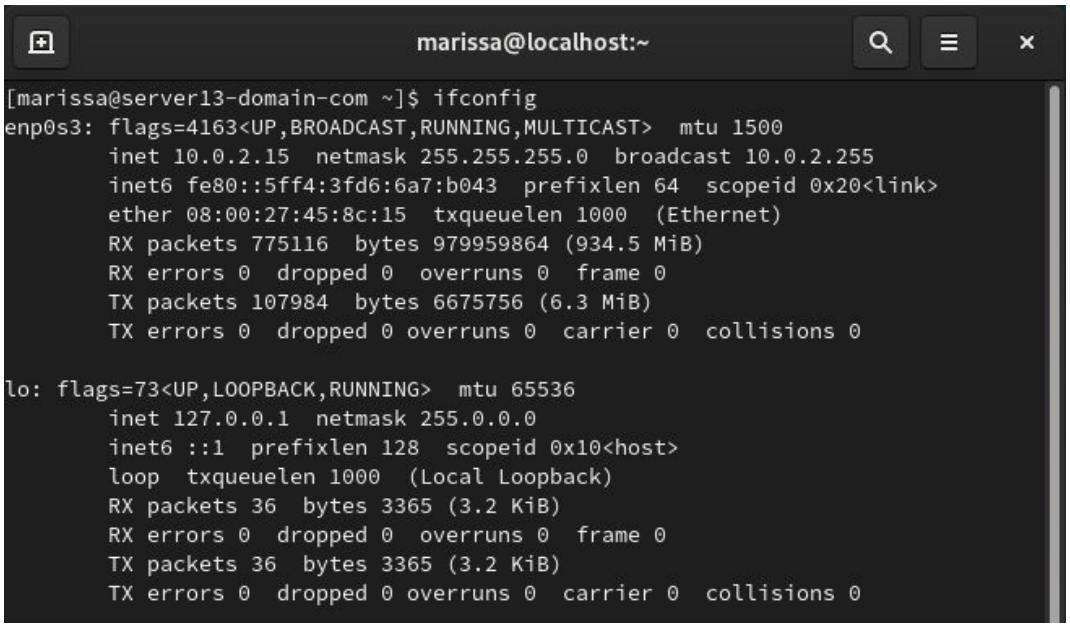
8. *After rebooting, Welcome → forward, License Info → forward, create a user having the <username> → "your first name", enter the full name, password and then forward (search for Settings and the Users icon): Hardware profile. Do not send a profile, Finish. Capture a screen proofing that you have created a user called "your first name" and insert the capture in your Lab_#1 report.*



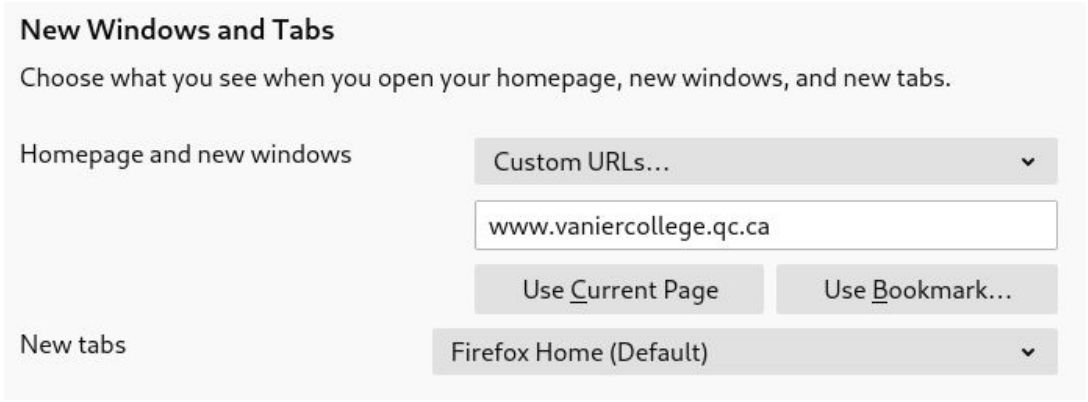


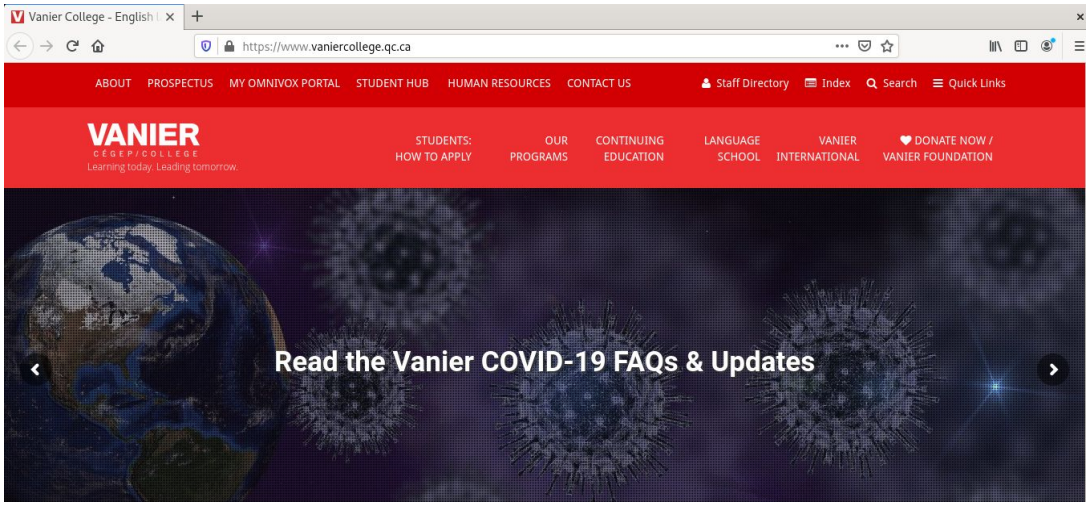
9. *After rebooting again, login as <username>, open a terminal window (**term**), and type in there **ifconfig**. You normally should see eth0, eth1, l/O interfaces with some IP addresses already assigned. Capture and display that screen with IP addresses of interfaces.*





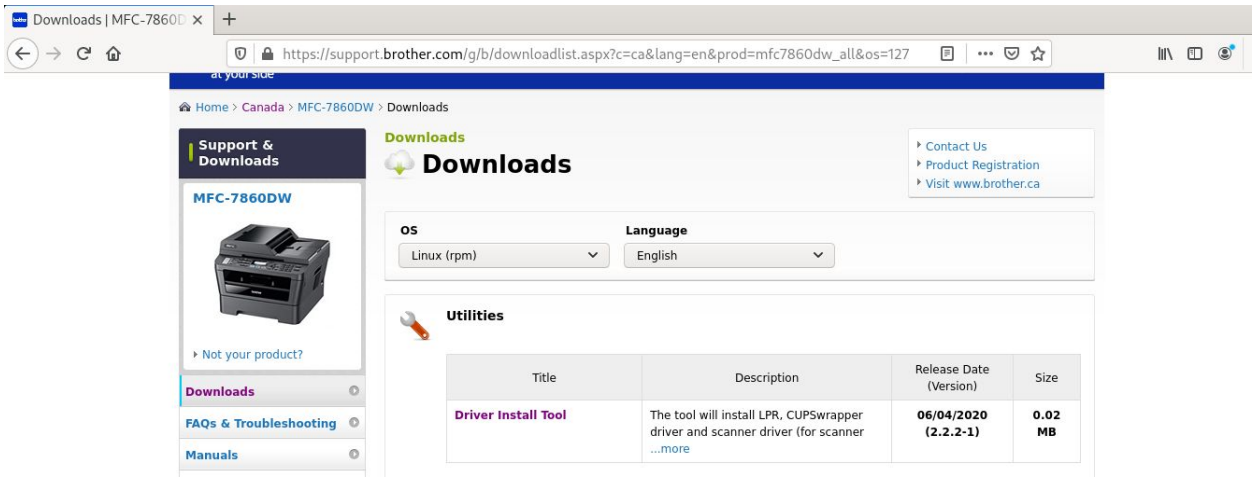
10. *Setup the homepage of your Internet browser to www.vaniercollege.qc.ca. Capture and display the outcome.*

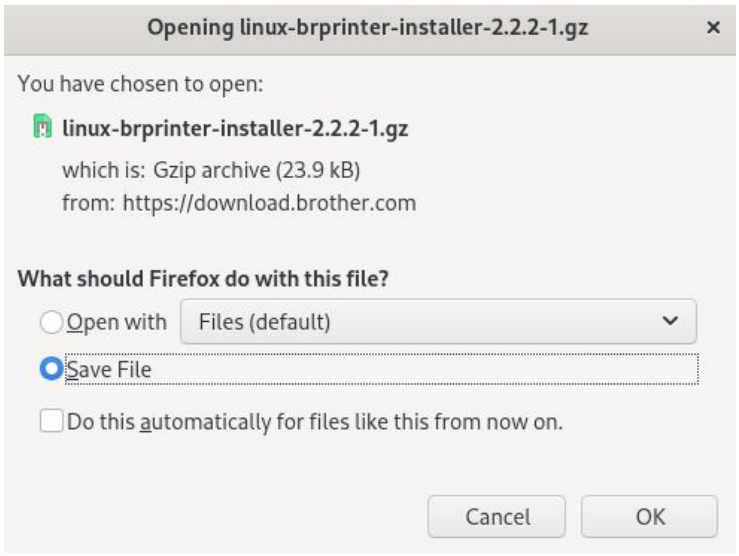




11. *Setup a printer. Ping the IP address of your printer to see if there is a connectivity between your laptop/desktop and the printer. Go to Settings, Admin, Printers, new Printer, select AppSocket / HP Direct. Enter as IP address - the IP address of your home printer (e.g.192.168.50.238) click on forward, select the model of the printer, and print a test page that will be attached to the Lab_#1 report. Send this report to your instructor using MIO, or LEA, or Vanier's email.*

To recognize my Brother MFC-7860DW printer, I had to install the "Driver's Install Tool" from Brother's website on Fedora.





Once the program has been downloaded in the Downloads section of my system, I go to my Fedora terminal to execute some commands.


```
[marissa@server13-domain-com Downloads]$ sudo su
[root@server13-domain-com Downloads]# bash linux-brprinter-installer-2.2.2-1 MFC-7860DW
You are going to install following packages.
   mfc7860dwlpr-2.1.0-1.i386.rpm
   cupswrapperMFC7860DW-2.0.4-2.i386.rpm
   brscan4-0.4.9-1.x86_64.rpm
   brscan-skey-0.3.1-1.x86_64.rpm
OK? [y/N] ->y
```

```
rpm -ihv --nodeps --replacefiles --replacepkgs mfc7860dwlpr-2.1.0-1.i386.rpm
Verifying...                          ################################# [100%]
Preparing...                          ################################# [100%]
Updating / installing...
   1:mfc7860dwlpr-2.1.0-1             ################################# [100%]
rpm -ihv --nodeps --replacefiles --replacepkgs cupswrapperMFC7860DW-2.0.4-2.i386.rpm
Verifying...                          ########################################
Preparing...                          ########################################
Updating / installing...
cupswrapperMFC7860DW-2.0.4-2          ########################################
lpadmin: Printer drivers are deprecated and will stop working in a future version of CUPS.
```

Since my printer has a USB connection, I input “N” when being asked for a Device URI.

```
Will you specify the Device URI? [Y/n] ->n

Test Print? [y/N] ->y

wait 5s.
lpr -P MFC7860DW /usr/share/cups/data/testprint
You are going to install following packages.
   brscan4-0.4.9-1.x86_64.rpm
rpm -ihv --nodeps --replacefiles --replacepkgs brscan4-0.4.9-1.x86_64.rpm
Verifying...                          ################################# [100%]
Preparing...                          ################################# [100%]
Updating / installing...
   1:brscan4-0.4.9-1                  ################################# [100%]
This software is based in part on the work of the Independent JPEG Group.
You are going to install following packages.
   brscan-skey-0.3.1-1.x86_64.rpm
rpm -ihv --nodeps --replacefiles --replacepkgs brscan-skey-0.3.1-1.x86_64.rpm
Verifying...                          ################################# [100%]
Preparing...                          ################################# [100%]
Updating / installing...
   1:brscan-skey-0.3.1-1              ################################# [100%]
```

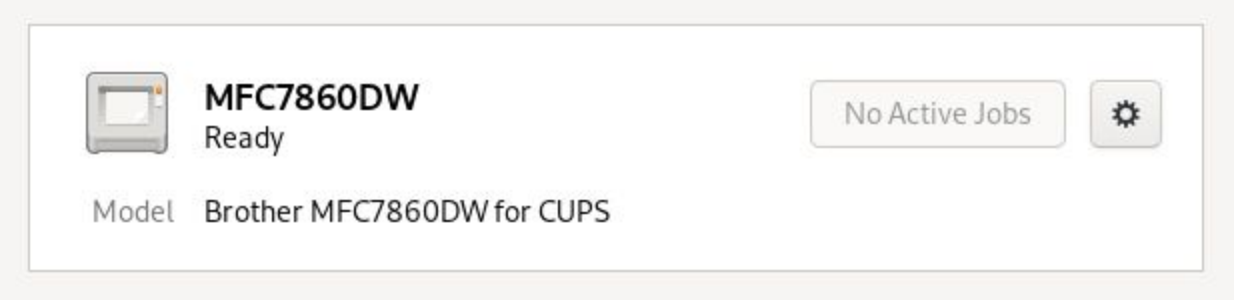
```
[root@server13-domain-com Downloads]# su -c "chmod +x linux-brprinter-installer-2.2.2-1"
[root@server13-domain-com Downloads]# su -c ./linux-brprinter-installer-2.2.2-1
Input model name ->MFC-7860DW

You are going to install following packages.
   mfc7860dwlpr-2.1.0-1.i386.rpm
   cupswrapperMFC7860DW-2.0.4-2.i386.rpm
   brscan4-0.4.9-1.x86_64.rpm
   brscan-skey-0.3.1-1.x86_64.rpm
OK? [y/N] ->y
```

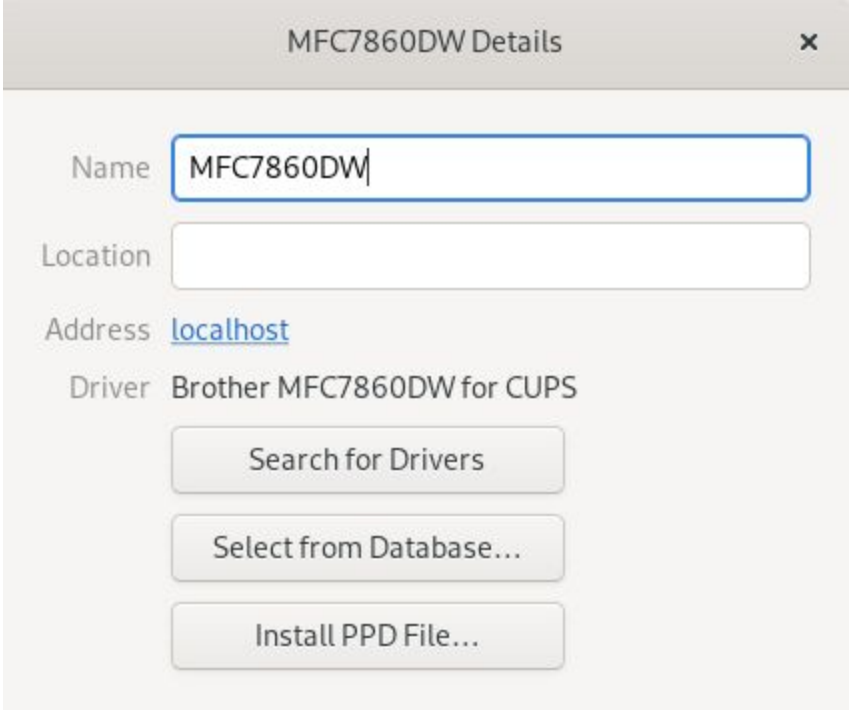
```
rpm -ihv --nodeps --replacefiles --replacepkgs mfc7860dwlpr-2.1.0-1.i386.rpm
Verifying...                          ################################# [100%]
Preparing...                          ################################# [100%]
Updating / installing...
   1:mfc7860dwlpr-2.1.0-1             ################################# [100%]
rpm -ihv --nodeps --replacefiles --replacepkgs cupswrapperMFC7860DW-2.0.4-2.i386.rpm
Verifying...                          ########################################
Preparing...                          ########################################
Updating / installing...
cupswrapperMFC7860DW-2.0.4-2          ########################################
lpadmin: Printer drivers are deprecated and will stop working in a future version of CUPS.
```

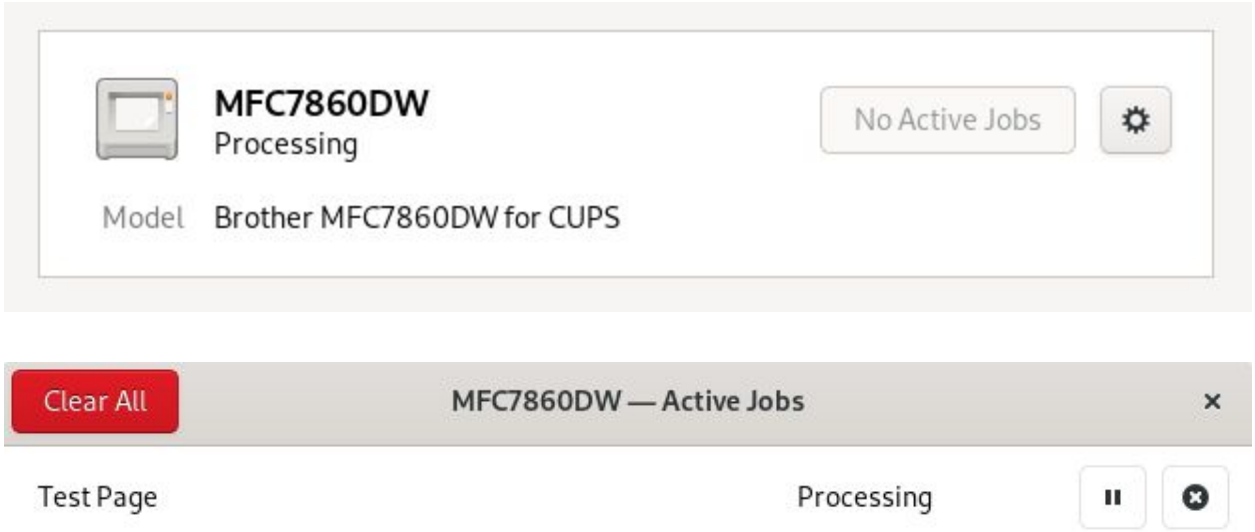
```
Will you specify the Device URI? [Y/n] ->n

Test Print? [y/N] ->y

wait 5s.
lpr -P MFC7860DW /usr/share/cups/data/testprint
You are going to install following packages.
   brscan4-0.4.9-1.x86_64.rpm
rpm -ihv --nodeps --replacefiles --replacepkgs brscan4-0.4.9-1.x86_64.rpm
Verifying...                          ################################# [100%]
Preparing...                          ################################# [100%]
Updating / installing...
   1:brscan4-0.4.9-1                  ################################# [100%]
This software is based in part on the work of the Independent JPEG Group.
You are going to install following packages.
   brscan-skey-0.3.1-1.x86_64.rpm
rpm -ihv --nodeps --replacefiles --replacepkgs brscan-skey-0.3.1-1.x86_64.rpm
Verifying...                          ################################# [100%]
Preparing...                          ################################# [100%]
Updating / installing...
   1:brscan-skey-0.3.1-1              ################################# [100%]
```

```
[root@server13-domain-com Downloads]# dnf install glibc.i686
Last metadata expiration check: 0:54:43 ago on Fri 28 Aug 2020 02:40:07 PM.
Package glibc-2.31-4.fc32.i686 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@server13-domain-com Downloads]# dnf install psutils
Last metadata expiration check: 0:55:08 ago on Fri 28 Aug 2020 02:40:07 PM.
Package psutils-1.23-17.fc32.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@server13-domain-com Downloads]# setsebool -P cups_execmem 1
```

As you can see in this screenshot, my printer is finally recognized. I can easily add printing jobs to the queue. However, nothing is printed out even though I installed LPR and CUPSwrapper.






MFC7860DW
Processing
No Active Jobs
Model
Brother MFC7860DW for CUPS
Clear All
MFC7860DW — Active Jobs
Test Page
Processing