Xerox Linux Printing – Physics CCIS

Note: You will need to have access to the root account or administrator privileges on your machine to install printing in linux. If you do not have this level of access you will need to contact the person who does to perform the installation of the printer.

Driver Installation:

Note: If multiple people use the same linux machine you will need to create multiple printers and driver files for each individual code unless they are sharing a code this is due to the hardcoded nature of the linux driver.

1. Download the custom linux print driver file from the Physics General Website to your home directory. It is under the Computing->Resources page. The driver is a generic PPD file and should work across all platforms.
2. Open a command terminal and execute the following command "sudo mkdir /var/spool/Xerox"
3. Open the driver file ~/ physIT574555driver.ppd with your preferred text editor VI, Emacs, Nano, Gedit, etc and find the following section of Code:

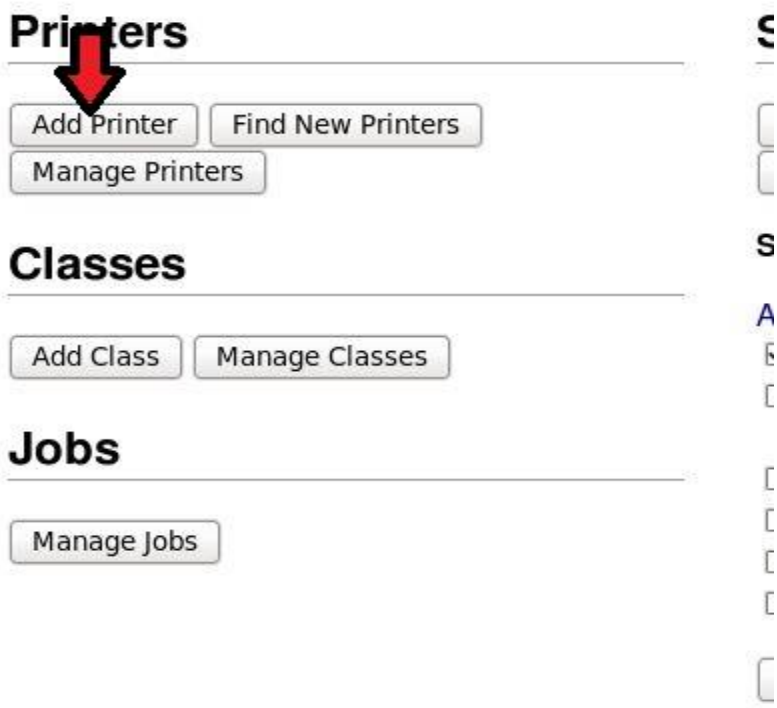
   *%Generic Accounting
   *JCLOpenUI *JCLAccounting/Accounting: Boolean
   *OrderDependency: 10.1 JCLSetup *JCLAccounting
   *DefaultJCLAccounting: True
   *JCLAccounting XSAUser/XSA User Based Accounting: "@PJL COMMENT OID_ATT_ACCOUNTING_INFORMATION_AVP <22>XRX_USERID, ####<22>;<0A>"
   *JCLAccounting False/Disabled: ""
   *JCLCloseUI: *JCLAccounting
4. In the Line "JCLAccounting XSAUser/XSA User Based Accounting: "@PJL COMMENT OID_ATT_ACCOUNTING_INFORMATION_AVP <22>XRX_USERID, **####**<22>;<0A>" replace the area **####** with the code provided to you for printing. Save the changes to the driver and close the editor. If you have multiple print codes such as Teaching and research, you will need to repeat this step but instead save the driver as a new file for example ~/ physIT574555driver.ppd becomes ~/Teachingdriver.ppd and ~/Researchdriver.ppd this is to assist you in setting up the individual printers later for each code.
5. Now copy the driver file to the Xerox folder you created in step 2. "sudo cp ~/physIT574555driver.ppd /var/spool/Xerox"
6. The file may need to have its permissions changed perform the following commands:
   a. "sudo chown <username>:<username> /var/spool/Xerox/ physIT574555driver.ppd" where <username> is your username on the system.
   b. "sudo chmod 744 /var/spool/Xerox/ physIT574555driver.ppd"

   Your drivers should now be setup.

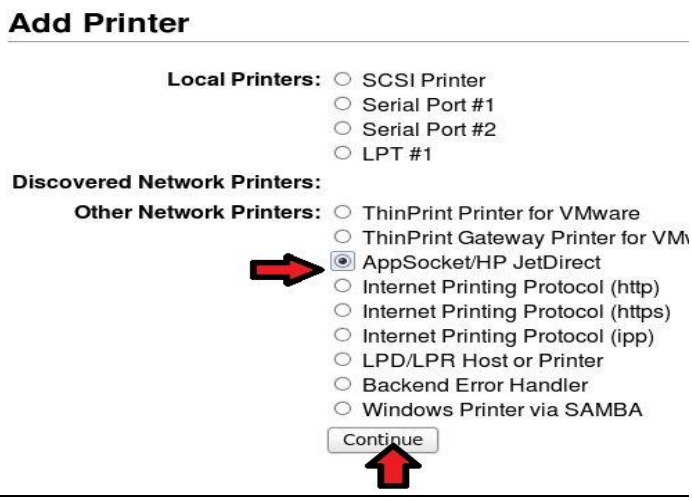
Installing and Configuring the Printer:

Note: Installation uses CUPS Version 1.4.2 other versions may look different but installation should be similar. Printers are added through cups as accounting may not properly enable if added through the printer tools in specific linux distributions, and allows for universal installation instructions.

1. Open your web browser and enter the following url: http://localhost:631
2. The browser should bring you to the CUPS 1.4.2 Main page you should see a menu bar with tabs in the webpage listing Home, Administration, Classes, etc. Click on the Administration Tab.
3. Under the Printers section choose the option Add Printer. A popup should appear asking you to authenticate. If you have an administration user you can enter your username and password for that user now. If you do not you will need to use the root username and root password to proceed. If you enter the information incorrectly you will need to delete your web history for the website otherwise you will see an error Forbidden on the CUPS administration page. This can easily be done by switching to private viewing in firefox or clearing the cookies/cache for the previous hour.

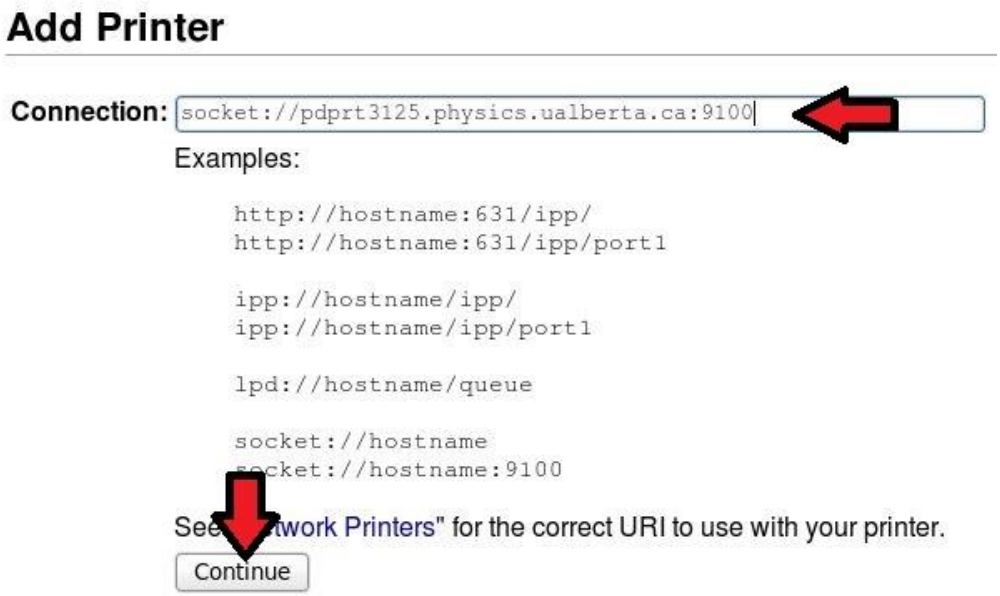


4. If you successfully enter the authentication information you should see a page listing printers and options. Here find the option labeled AppSocket/HP JetDirect and click Continue.

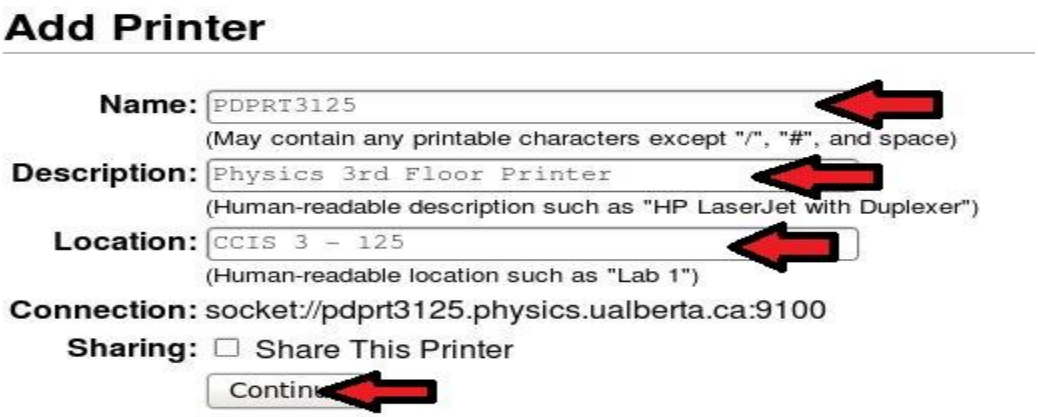


5. In the new page you will see a field next to an option labeled Connection that you can add your printer ip information to this will be one of the following
   - For 2nd Floor:
     Socket://pdprt2122.physics.ualberta.ca:9100
   - For 3rd Floor:
     Socket://pdprt3125.physics.ualberta.ca:9100
   - For 4th floor Mail Room:
     Socket://pdprt4194.physics.ualberta.ca:9100

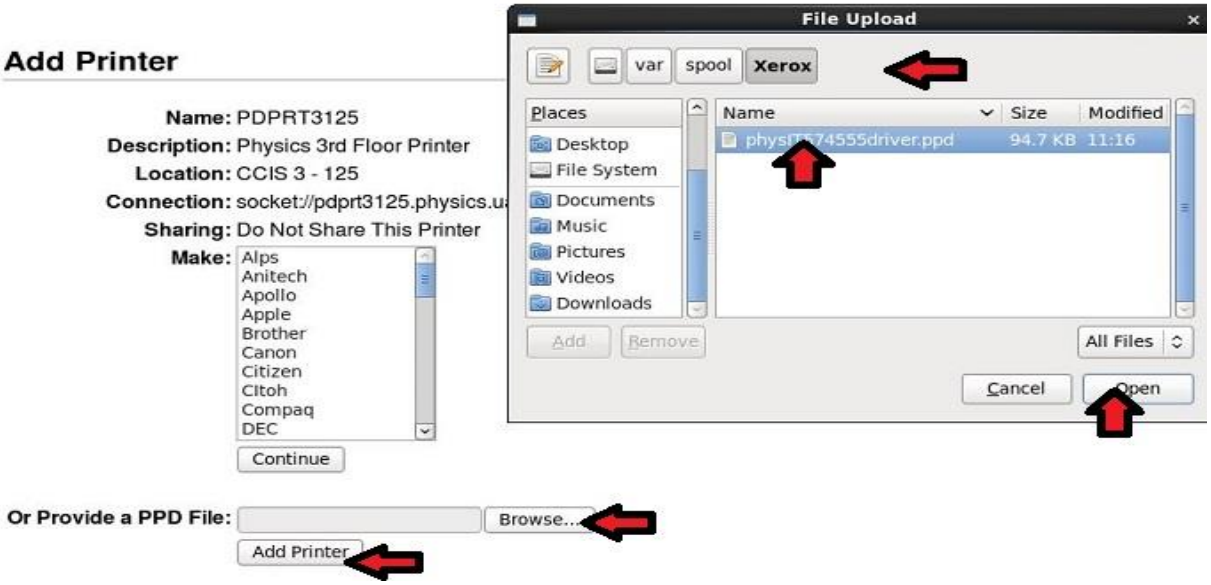
   After you enter the information click continue.



6. Here you enter the identification information for your printer, here is an example of how it should look:
   If you will have multiple printers you should name them PDPRT####TEACHING, PDPRT####RESEARCH as a suggestion.



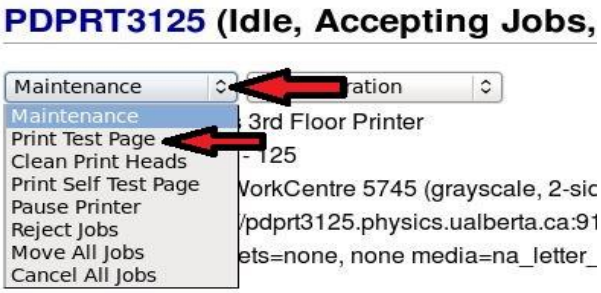
7. After you click continue you will be asked to select the driver, DO NOT select a Make, instead choose the option to Provide a PPD File. When you click Browse, navigate to the /var/spool/Xerox/ folder and select the physIT574555driver.ppd file you configured earlier be sure to select the correct driver file if doing multiple printers. Once you have the file selected click Add Printer.



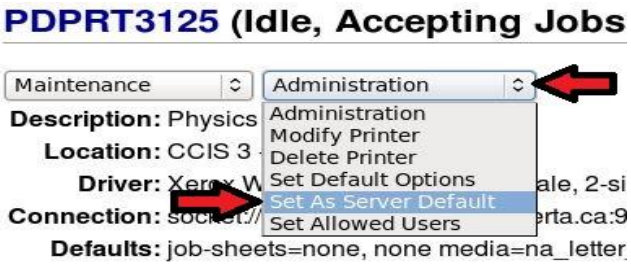
Note: If you are setting up access to printers on multiple floors, you will use the same driver file for each printer for example if you are setting up one print code on 3 printers you will have only 1 driver for all 3 not 1 for each. If you were setting up a Teaching and Research Driver for 3 printers you would have 2 drivers for all 3 printers but 2 printers for each floor giving 6 total printers but still only 2 drivers.

8. After the printer is added your browser should change to a JCL page Here make sure you have XSA User Based Accounting selected if not select it. Banner Sheet, if you leave this option you will print an extra Title page in front of your printing that lists your name from your print code. Turning this off saves paper and avoids the extra page cost per print job. After you have your options selected click the Set Default Options button.

9. You should then see a success page for adding the printer. If you click on the Printer name or wait a few moments you will redirect to the printers options page. Here you can click on the Maintenance drop down and choose to Print a Test Page. If successfully configured you should see the linux test page for your OS. If you encounter a Xerox Error Page check the Common Print issues on the Physics General Website under Computing -> Resources.



10. If you want to set the printer as your system default, click on the administration list and select Set as Server Default.



<u>Note: In order to print you must be on either the CCIS Grad, Research or Admin wired networks or on CCIS UWS.</u>