PUPPY LINUX 2.x INSTALLATION AND SETUP

Gregg Bruch and Clint Tinsley, Members IPCUG

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Puppy Linux can be operated on PCs without being installed to the hard drive since it can be loaded from the bootable "Live" CD. Repeated use of the CD for operation on a given PC is facilitated by the creation of a file on shutdown which contains the setup information and the contents of the user's home directory; this file can be saved to one of a number of places, i.e. a ZIP disk, NTFS or FAT hard drive partitions, a USB plug-in drive, or multiple-session CD already having the Puppy system files. Once the system is installed and rebooted to the Puppy desktop, the Puppy CD can be removed and the CD drive made available for other use since Puppy resides in RAMDisk memory. Also, the PC CMOS will need to be set to have the CD Drive as the first boot drive. If the PC has two CD drives, the primary CD drive will need to be used for the Puppy CD to boot from. On a computer with Windows installed, you can shutdown Puppy and to reboot into Windows, simply making sure the Puppy Live CD is not in the drive prior to or during the reboot of the computer. The minimum system requirements for reasonably quick operation generally should include 128 Meg of RAM and a processor having 166 MHz speed. As with any operating system, more of each (up to a point) is better for overall operating speed. There are lighter-weight versions of Puppy should there be a need to operate with less resources. It should be noted that, although a number of printer drivers are included, drivers for many more printers are not included. The initial setup should entail an early check of driver availability in the printer setup feature for any printer(s) expected to be connected. After making the CD driven installation, it will be possible to install Puppy to a Linux partition on the hard disk for booting and operation without the CD. This will generally require partitioning of the hard disk with the included Gparted utility or other partitioning utility. Such a partition can be created at any time and Puppy loaded to it to avoid use of the Puppy CD for each boot. Puppy installs the GRUB Boot loader on installation to the hard drive (if desired) and supports dual booting with another OS installed on the hard drive.

There are a number of "Puppy"s in available including grafpup, chubby puppy, puppy, puppy-opera, puppy-seamonkey, puppy 2.10, Empty Crust, PizzaPuppy Simple Puppy, etc. One example of the difficulty choosing which Puppy is for you can be found in grafpup 1.0.4 as if features a new version of Gimp 2.2.11 than available on PuppyOffice 2.0.3 and uses an older 2.4 kernel that may work better on older computers. Puppy 2.10 is an updated Puppy 2.02 and will automatically update 2.02. The September 23, 2006, or later version should be used to ensure the latest bug fix(s). Puppy Office 202 is essentially the Puppy 2.02 with Open Office 2.0.3 installed. Puppy Office 203 is a newer version available at this time which uses the same installation and setup steps. At the present time, the Puppy versions covered by this guide can be expected to work best as a stand alone dual-booting PC with its installed software. Use with other PCs (Puppy and Windows) over the home network, or with other software, is limited. *Remember, In Puppy, single click rather than double click for most operations.*

BASIC SETUP – LIVE CD USE

Gregg Bruch

Installation and Basic Setup. To begin, power-on the PC, immediately open the CD drawer, insert the Puppy CD, and close the drawer. Ensure that the foregoing are accomplished quickly so that the PC will boot from the CD. After several seconds of visible system loading, the Keyboard Map window should show. Select your keyboard type by scrolling down as needed. If the type is not specifically known, try "us qwerty," and press Enter for OK. The Puppy Video Wizard should show next.

Video Setup. At this point, different versions of Puppy have a differing sequence of video setup steps, generally similar in operation.
(1) If the Puppy Video Wizard window appears having two mode buttons, generally xvesa will work for most video systems. The monitor resolution window shows next. Click on that matching your desired resolution mode. Generally, 800x600x16 or 1024x768x16 will work for most systems. If the desktop that appears behind the Current Mode video resolution selection window is satisfactory, exit out of the selection window by clicking OK, or otherwise try another resolution.
(2) If a blank grey desktop appears, click Menu, at lower left hand corner of the desk top, and point to setup. Click xvesa Setup Wizard, obtain selection window, and select the desired trial screen resolution, and proceed as in (1) above.

The Welcome Woof-Woof window in the Dillo browser should show next. Read for information and click out of the Welcome window. At this point you should have a fully visible and well focused Puppy Linux desktop display. To proceed to function (sound, browser, printer, e-mail, network, etc.) installation, single click Setup on the upper icon row of the desktop to obtain the setup menu for the desired function. (If a general information window shows, read and then click out of this window to obtain the Wizard-Wizard Setup Menu window if it didn't appear first)

Sound Setup. If the woof-woof sound was heard with the Dillo Welcome Window, this verifies that a suitable sound driver was found and loaded. No further setup is necessary for sound. If there was no sound, the sound system will need to be set up. Click on the Setup icon, Click on the ALSA Sound Wizard, and try the default selections unless knowledge of your system indicates otherwise. The wizard will search for the PC's sound card(s). If more than one is found, click on the default first and follow through. If the setup is successful, you should hear a single Woof. If not, try the other.

Browser Setup. The following is for a RG-45 Ethernet connection to a router or modem. Inside the Wizard-Wizard Setup Menu, click "connect to internet by cable ethernet interface" button. Puppy then checks the PC, hopefully finds the active LAN hardware & driver, and displays what it found in the Puppy Network Setup window. If one is shown, and the interfaces paragraph confirms that it is active, click the test button in the Interfaces box and obtain the Network Setup configure window. The usual choice would be Auto DHCP for most ISPs. (Otherwise it will be necessary to enter static ISP data.) The XDiaglog window should show the selection and, if OK, then click Yes to keep the configuration. The earlier Network Setup window should show again and then click Exit. This should return to the Puppy desktop. Click the browse icon, and Puppy's jumping off page then should show after a few seconds from a file address. Read, and click on the icons for additional information as needed using the top left green return-arrow to go back to the jumping off page. Then click the Search button just to the right of the address. This should bring up Google (or some other internet home page) if the internet browser setup has been successful, and the PC has connected to the internet. Then delete the Google address, type in your desired internet home page address, and press Enter. If your desired page comes up, click out of the Browser and return to the desktop.

e-Mail Setup. Click the e-Mail icon on the desktop and the Account Wizard window should show. Select e-mail account and click Next which should provide the Identify window. Insert name and e-mail address, and click Next to obtain the Server information window. Select incoming type, along with providing incoming and outgoing server names. Click Next and verify user ID name. Click Next and verify account name. Click Next to obtain confirmation window. Correct as may be needed including the addition of a "reply-to address" and click OK. The next window will ask for your account password. Add the password, noting whether or not it should be retained in the setup file. If so, a warning window

will show. Click OK if the password is to be retained to avoid entering each time the e-mail utility is used. Click out and return to desktop. Click the e-mail icon and verify that the utility is functioning correctly, including sending and receiving a test message. Additional accounts can be added by pointing to the Edit tab, clicking on add account, and repeating the above steps. Verify that messages can be printed.

Printer Setup. Inside the Wizard-Wizard Setup Menu, click "Setup printing." This should provide a display with a black and white window over a magenta window. Clicking on the magenta window will bring it forward. At this point, the two lists should be checked for required printer driver which should be noted for later use. (It should be noted that many printers do not have drivers recognized by Puppy) Select the applicable driver in the black and white listing and click OK. The next five windows have to do with print quality, and inks. Make applicable selections and move forward by clicking OK. On the next window, select the kernel device driver for the printer port to be used and click OK to get the xpdq window. Click on the Printer tab and click on add printer. The xpdq add printer window should show. Read the information and click Next. Add the name, location and description, and click Next. Select the driver noted previously and click Next. Select paper size and click next. Select "local port", and click Next. If the printer local port was selected, note the need to specify it in Linux device language, i.e. "/dev/lp0" for LPT 1, and click Next. The next window will allow completion by clicking Finish. This should return the display to the former xpdq window. To set the entered printer as the default printer, point to the printer tab and click "set as default." Click out of the window and the display should return to the desktop. An additional printer can be added in a similar manner. The capability to print should be tested. If working, the printer setup was successful. If a color printer was installed and it is not printing in color, then on the desktop, Click Menu, then point to control panel, and click on Xpdq printer management to obtain the xpdq printer window. Click on driver options to obtain the selection window. Under color, click "print in RGB color" and then click "set as default." Click out of the xpdq window to return to desktop.

Save Setup Information. To build the setup file to retain and use the foregoing setup information, plus any stored files created in Puppy in future boots, first click the Menu button at the lower left of desktop. This should give a menu having Shut Down. Point to this to obtain a new menu which has the Power-off Computer button. Click on this to obtain the menu for the setup file location. The original video resolution selection window may show at this point. Click on OK which should return the display to the Puppy desktop. Repeat the shut down steps from the desktop Menu and the menu for setup file location should appear. Several choices then will be available i.e. save to file, save to a writable CD, or to quit at this point. If the setup has gone well, generally the setup information should be saved at this point to facilitate future boots and to store any created files. Press Enter to accept the default "Save File."

Use Plug-in USB Device. Insert the USB Drive and note its recognition on the window. Press Enter, which then should give the device selection menu. Scroll to this drive and use space bar to select with an "X" and press Enter for OK. The system should go through shutdown and turn off the PC if its motherboard and power supply is so equipped.

Use PC's Hard Drive. Having pressed Enter without a USB device being inserted should give a partition selection window. Scroll (if more than one partition shows) to the desired partition, press space bar to provide "X," and press Enter for OK. Use of the PC's NTSF or FAT partitions does require prior defragmenting to assure that the saved setup file itself is not fragmented. A warning window will appear asking if the partition had been de-fragmented. If so press Enter for OK. (If not, pres Esc.) OK should give a choice of dedicated drive space for both the setup and created file use. Use of the recommended

512 Mb generally is a good choice unless available drive space or future use indicates otherwise. The file generally will have the name "/pup_save.3fs." If OK, press Enter. A Final Sanity Check window should appear. If all looks good, press Enter. File creation may take a few minutes. As with use of a plug-in device, the system should go through shutdown and turn off the PC if its motherboard and power supply is so equipped. If, at a later date, it is decided to discontinue use of Puppy on the PC, the save file should be located and deleted from the hard drive.

Pressing the PC's Power On button should quickly boot the PC and present the Puppy desktop ready for use. Test the shutdown feature using Menu, shutdown and then click Power-off Computer, verifying the automatic power-off shutdown if your PC is so equipped, if not, you will need to manually turn off the PC.

The foregoing represents the booting, configuration and use of Puppy from the LiveCD. If all is working well, and further use of Puppy is desired, installing to the hard drive to avoid use of the CD can be considered. This will require preparation a Linux partition if one does not exist, installing Puppy to the hard disk Linux partition, and installation of the GRUB boot loader for booting or dual booting with another OS on the hard drive. These topics along and others are covered as a part of Advanced Setup.

ADVANCED SETUP

Clint Tinsley

Now that you have booted up Puppy Linux from the LiveCD and configured it so that you can use it and save your configurations, there is more that you can do with the Puppy.

While all these tasks can be done by a new user, they do entail more technical tasks. The tasks include Home Networking in being able to access shared files located on other computers on your home network, Advanced Printing to printers located on other computers. Linux Partitioning and Installing to a hard drive will guide you in installing Puppy Linux to a hard drive (speeds things up a lot and no saving when closing down), partitioning, and dual booting the Puppy with a pre-existing operating system already on the hard drive such as Windows.

Home Networks - LinNeighborhood. To access shared files from PC's on your home network can be done using the LinNeighborhood, which you can start from the Puppy Menu, Network, and select LinNeighborhood Samba Client which opens the LinNeighborhood window. In using LinNeighborhood, it is helpful if your home network uses a common Network name on all the workstations such as WORKGROUP or MSHOME (XP Default). You can obtain the workgroup name on your Windows computer by clicking Start, click My Computer, click System information under System Tasks, click the Computer Name tab where the Workgroup name is displayed.

Back in LinNeighborhood, a couple of settings you need to make on first use. First click on the "Prefs" tool bar button and replace the – (hyphen) in the workgroup name with Workgroup name used on your network, and clicking on " Always scan as user" "Use samba port". Then select the Miscellaneous tab, enter a Default User, select "Save Default Password" and enter a password (Gregg suggests puppy and puppy as the user and password). Finish by clicking on "Save" then and "Close". Now you can select Options on the menu bar and select Browse the Entire Network and then in the dialog window that pops up, select "Browse as user" and click OK. You may have to wait a couple of minutes (more or less) for the browse to complete but when it is done, you should see all the PC's on your network and the computers that have open shares, there will be a little plus mark beside them which you can click on and

see the actual shares on that PC. If you right click on a share folder, you can then mount the share locally by clicking on the "Mount" button on the Mount Dialog that comes up; everything else should be filled in for you. Note that shares are mounted at /root/mnt/ and you can access those share points, once mounted, just as though they are on the local drive.

One note, some shares in the Windows world require the special permissions of an "user" on the system which means you have to use the User ID of that user and the user password. When you can't see a share that you know is there or when mounting, you just use the unique user name and password when scanning as user or mounting.

Gregg provided a couple other notes on things to check if you can't browse the network or have problems mounting shares. Click on Preferences to obtain the Preferences window. Click Post Mount tab and verify if the two selection lines have MIDNIGHT COMMANDER] "xterm-e mc $MOUNTPOINT", and rox-d $MOUNTPOINT. If so, click Save and then Close. If not, first change to the foregoing. On the Miscellaneous tab, ensure that "RootMountDir/machine/share" is selected and the Root mount dir is "/root/mnt" and Memorize Mounted Shares / Remount on next Startup, are selected. Click Save and Close. More detail on LinNeighborhood setup can be found at http://home.nycap.rr.com/danleff/puppy/lin.html.

Advanced Printing: One of the concerns with using Linux is its limited printer support and connectivity options. PuppyLinux does not support printing to an SMB or Windows shared printer however it does support BSD-LPD printing and Windows XP does provide a service called "Print Services for Unix" which allows you to share Windows connected printers via LPD with Puppy Linux as well as other variants of Linux. An small application can also be installed on Windows 98 that provides an LPD server; that application is called JustLPD and it is free for downloading.

Here is the procedure for enabling Windows XP "Print Services for Unix":

1) Go into the control panel | Add/Remove Programs | Add/Remove Windows Components.
2) When you get a list of the components, scroll down to Other Network File and Print Services, select it and click on the Details button, check "Print Services for Unix" Close and Apply. You will probably need to have your Windows XP installation CD available during this procedure. You may also have to browse the CD, selecting the folder I386 so that its contents will show on the CD and select the file with the same name windows wants and click open to install.
3) Click on My Computer, select Manage and then select services in the left window pane. Scroll down through the services in the right window pane, select TCP/IP Print Server, right click, select properties, start the service if not already started, and set the startup to "Automatic."
4) Create a local windows printer if not already created. Rename the printer some simple 8 character or less single lowercase name such as laserjet or deskjet. You do not need to "share" the printer and give it a name there unless you want to share it with other Windows computers. If already shared, renaming the printer will not affect the printer share name already set.
5) When you setup the printer on Puppy or other Linux, the LPD host will be the IP address of the host (Windows XP) computer where the printer is connected. The LPD queue will the printer name "laserjet" or other name that you used in step 5. Note that "laserjet" does not have to be unique among Windows XP host computers as you could have multiple hosts all with "laserjet" printers on the them and have Linux use them without any naming conflict. What you can't do is name more than on computer on a computer as "laserjet" as printer names on a single computer do have to be unique.

If you absolutely have to use a SMB or Windows shared printer, you can implement such functionality but it requires the installation of CUPs to Puppy. There is a procedure on doing this at http://www.murga.org/~puppy/viewtopic.php?t=9876. Beware that this is a work in process procedure and your results may not be favorable.

Linux Partitioning. When booting from the CD, Puppy will use a swap partition if one is available and this generally results in a large amount of memory being available. If installing to a HD, Puppy needs only a root partition plus swap. One note, when installing to a HD, existing Linux partition, Puppy will see that there is a Linux install existing, and even if you tell to take over the partition, i.e. a new install, it doesn't erase the old Linux and you can get unexpected results so it is best to format the existing partition so completely clean it and get a fresh install. Puppy will support dual booting but it is not automatically configured and you must use "expert" mode when setting up the GRUB boot loader.

Installing to a hard disk. Puppy has something called the Puppy Universal Installer and will install Puppy to a wide variety of devices including USB Flash/Hard Drives, CF Flash, IDE, ZIP, LS12, SATA, SCSI. It is very to use, you simply tell it where to install and it simply copies the files from CD to that location and sets up the boot loader, all automatically if you give it a fresh hard drive or other device to install to. After the file copy is done, it will walk you through the "standard" GRUB setup quite quickly. The universal installer also supports Puppy upgrades. However, upgrades may not be seamless in that things that worked before may not work.

As was mentioned when we first showed Puppy back in August, one sometimes has to manually copy the root directory from the LiveCD to the installed Puppy on the hard drive in order to get desktop shortcuts and icons. This done after completing the install to the hard drive and before rebooting. Doing this will also copy any documents stored in the home directory as well. The commands for doing this are as follows:

```
sh-3.1# mount -o rw /dev/hda2 /mnt/hda2
sh-3.1# cd /root
sh-3.1# cp -R * /mnt/hda2/root/.
```

Dual Booting: Most typically, your existing Windows installation uses the entire hard drive. The first thing you need to do is assess your current hard disk utilization. Unless you are doing a videos, music compilations, or a lot of photo's, or have a very old system, you are probably only using a few gigabytes of that large hard drive.

Hard drive partitioning, a very short course. Your primary Drive 0 (first hard drive) is "boot" drive, the one that your system is always going to look to for startup unless there is a floppy drive or the CD Drive to boot from. On your primary hard drive, you are generally allowed one boot record, and up to 4 primary partitions. After the first partition, an "extended" partition can be created which allows for almost an unlimited number of partitions on a single hard drive. On a normal system, where you only have a drive C and Windows installed, the boot record is being set to automatically boot the Primary partition number 1 which is Windows. For Linux to install, it has to have a "readable" primary partition that is within the active bootable range of the BIOS. On older systems, this limit was about 8 GB such that a "primary" boot partition had to be before the 8 GB boundary of the hard drive and some partitioning tools including Partition Magic will warn you of this limitation as a cautionary. Newer systems are not constrained by this limitation but be aware of it. A universal warning! Always backup anything you care about before changing your hard drive configuration.

Okay, you've had the short course. Now, fire up Windows and check what you have on your drive C. Open up your "My Computer" icon or someplace you can see the contents of your C drive. In the example that follows, the C drive is 30 GB containing Windows98se. I want to have around 10 GB for the Puppy so I will need to reduce the size of that 30 GB C drive partition by about 20 GB. You'll want a minimum of 2 GB for Puppy plus 500 MB for the swap area on your hard drive for Puppy. I will also the Disk Cleanup button (tools) and do some house cleaning to gain some more free space in that Windows partition along with defragging and backing up anything that I care about so it doesn't get lost in the process. Defragging the hard drive does two things. It will move data down the hard drive to the "front" and put it all in one little tight area. Most computer professionals will recommend that you turn off your system "paging file" in the control panel, system, before defragging and if you are comfortable with doing this go ahead but usually Windows is smart enough to deal with its paging file but remember to turn it back on after defragging.

Assuming you can get your Windows "C:" drive down to around 20 GB with some growing space. If your hard drive is larger, you can get away with larger than 20 GB partitions for your Windows system but I just wouldn't push it in that you might run the risk of loosing something. Just a recommendation. On older systems with BIOS limitations or old hard drives, this "maximum" primary partition becomes 8 GB and you still need a couple of gigabytes for normal growth and drive utilization. Used space is what you are trying to get to. The free space can be very large, over a hundred gigabytes or more if your drive is that large and can be used for either Windows or Linux after installing the Puppy.

Reviewing, on a 30 GB drive, we are going to use GParted, to reduce the Windows Partition to 20 GB, create a 9.5 GB partition for Linux and .5 GB partition for the swap file. The step-by-step:

1) Open Gparted from the Control Panel Menu group (main menu). Gparted will open and do a scan of any attached hard drives present. Click in the Windows partition, /dev/hda1 to select , then click the Resize/Move button on the tool bar. Then in the Resize window that opens, grab the right edge of the bar and move it to the left, changing the New Size to 20 GB and then finish by clicking on the Resize/Move button, lower right corner. This will create one pending operation.
2) Next, click in the gray, unallocated area on the right, right click and choose New from the menu. And then, as you did in resizing the first partition, drag the right edge of the bar enough that you have about 500 mb of Free Space following. Note that you a couple of choices to make. Create as defaults to Primary Partition. I would leave it that way unless you are going to have more than 4 partitions on this drive. Or second choice is the Filesystem type, it defaults to the older ext2 but I would recommend changing it to the newer ext3 journaled file system. Then click the +Add button, lower right corner.
3) Then, click again in the small remaining gray area, right click and choose New again. This time, all you need to do is choose the filesystem type as linux-swap and then finish by clicking on the +Add button.
4) Nothing has been done or written to the hard drive yet. The final step in partitioning is to click on the Apply button in the tool bar and sit back for Gparted to do its work. Hope you remembered to backup anything you cared about before you started. After it is done, Gparted will do another scan of the hard drive(s). Close Gparted. In this example, you will have three "primary" partitions using 30 GB of hard drive after installing Linux and depending how much big a hard drive you have, any remaining space can be used by Windows or for other Linux volumes. If you have the luxury of starting with a new hard drive, you could simply install Windows XP in an 8 GB to 20 GB partition, then install Linux in a 10 GB partition (or larger), and then finish up by allocating any remaining disk space to Windows partitions for applications and data.

5) While Puppy will let you go ahead and do an install at this point, you should removed the Puppy LiveCD, reboot the computer from the Puppy menu and make sure Windows still boots okay. Another reason for rebooting is so the BIOS will read the new partition . Then reboot one more time, this time with the Puppy LiveCD in the cd drive.
6) After booting the Puppy from the LiveCD and getting to the desktop, select the Puppy Universal Installer from the Setup Menu Group, main menu.

a) Choose the IDE (ATA) internal hard drive and click OK.

b) Choose the drive and click OK.

c) On the next screen, choose Install Puppy to hda2. Two things you can note here is that hda1 will be the larger and/or the first drive since it was already on the hard drive before you started. Hda2 will the second drive, ext3, and what ever size you set it to in Gparted.

d) You will then get a confirming window where you can click OK to commit to the actual install. And then on the next screen, you will click on the CD for where the Puppy files are (assuming you have not removed the LiveCD from the cd drive when you booted it.) Then click OK to actual start the copying process of Puppy Linux to your hard drive.

Issue: On more than one occasion, the LiveCD has not been mounted and the installation will fail because it can't find the files on the CD. You'll have to bail out of the install process as it fails. If this happens to you, open the computer looking icon labeled console and type this command:
sh-3.00# mount /dev/hdc /mnt/cdrive (this assumes you Puppy LiveCD is in the first cd drive on your system).

e) After copying finishes, you will get a window for installing GRUB, you want to install GRUB so click on it, and then OK on the following screen that comes up but note the advice given there. On the next screen, since you are installing a dual boot system, you will have to choose “expert User expert GRUB setup menu” and click OK, and don't be timed here, it doesn't take an expert to do this.

f) You be presented with a menu that begins with Begin already selected for you so click OK to Begin. On the Frame Buffer Console, just use “standard” which is already selected for you and click OK. On the next screen, choose MBR (at the bottom, remember the advice in e) and click OK; don't worry about the possibly unsafe thing. On the next screen, just accept the default, Puppy knows where it is going live (In this example it is /dev/hda2) . Next, you are going add Linux to GRUB so select and click OK, then click OK on the next screen which should have selected /dev/hda2 as our Linux partition. On the next screen, you can actually give Linux a name such as Puppy Linux 2.10 and click OK. On the next screen, for experts only, just click OK and do the same on the boot options screen (experts only), click OK. Now, from the Expert GRUB Installation screen, choose Other adding your Windows partition to the GRUB menu. On the next screen, /dev/hda1, should already be selected for you along with some other information filled in, Click OK. Next Screen allows you to give a name to your Windows boot partition, such as Windows, click OK. Finally, choose Install from the Expert GRUB Installation menu and click OK. Installing the GRUB loader... successful! Click OK. Click NO (this is the only time) on the next screen as you are done and GRUB is installed. Reboot the computer with LiveCD removed from the drive during the reboot (push that eject button during the reboot).

g) Now you will have to go through all the configuration stuff you did to get the LiveCD working, such as networking and printing, but it will be worth it!

The Puppy is in his home.

Credits: This project was the brain child of Gregg Bruch, and without his work on this paper, it would not exist. Gregg wrote the Basic Setup section and the second section on the “advanced topics” was written by Clint Tinsley.

Removing Dual Boot from a Computer

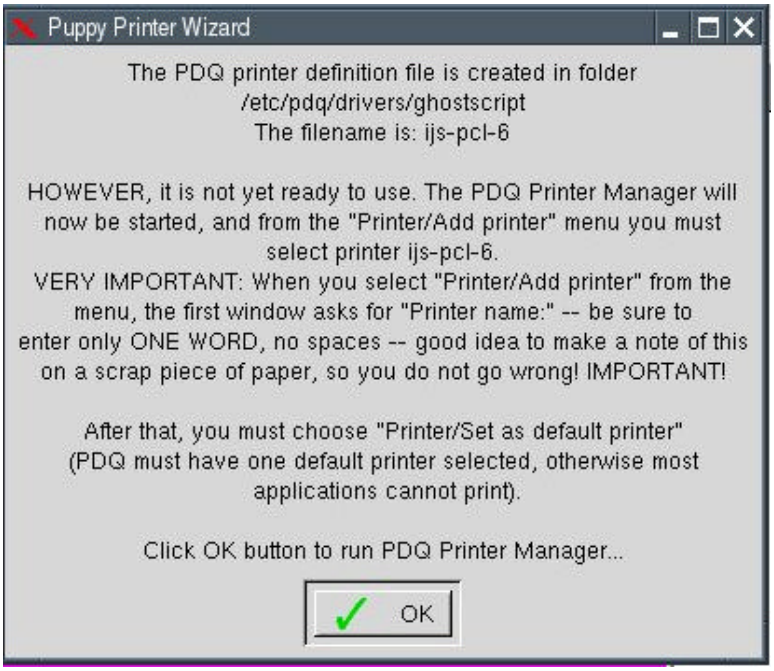
If things don't go right or you decide that you want remove the dual boot configuration so that your existing Windows installation boots automatically and you are not going to use Linux anymore on that computer. The first thing you wan to do is restore the master boot record to the hard drive, which effectively "erases" the GRUB or other Linux boot loader such LiLo.

The command you are going to use is fdisk /mbr which is "DOS" command which you can run from DOS or the Windows 9x installation media or CD.

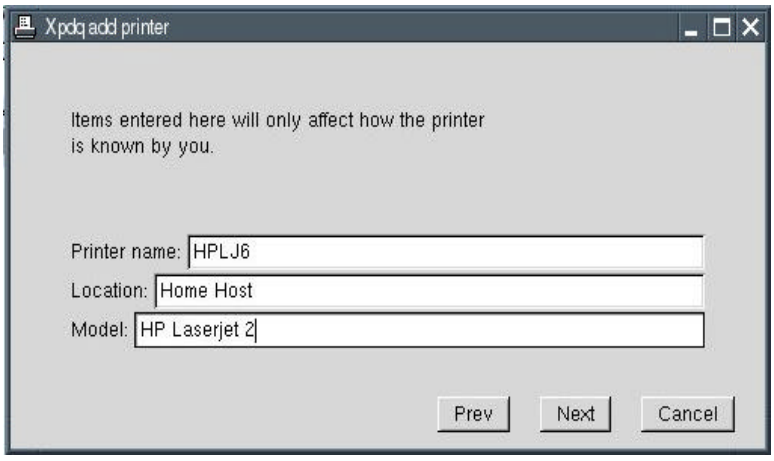
If you have Windows NT / 2000 / XP, you can boot from startup floppy disks or CD-ROM, choose repair option during setup, and run Recovery Console. When you are logged on, you can run FIXMBR command to fix MBR.

After you do this, and you are not going to reinstall Linux, you may want to go back into GParted and remove the Linux partitions as well as resize your Windows partion back out in order to use the disk space priviously occupied by Linux and its swap file. Before you start any of this, the usual warning is attached to all this, back up anything care about before doing anything contained in this section.

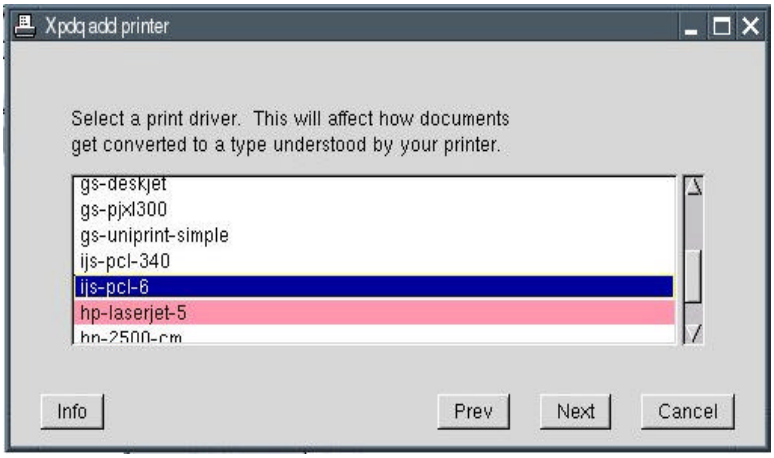
Network Printer Configuration on Puppy 2.10 to LPD printer.



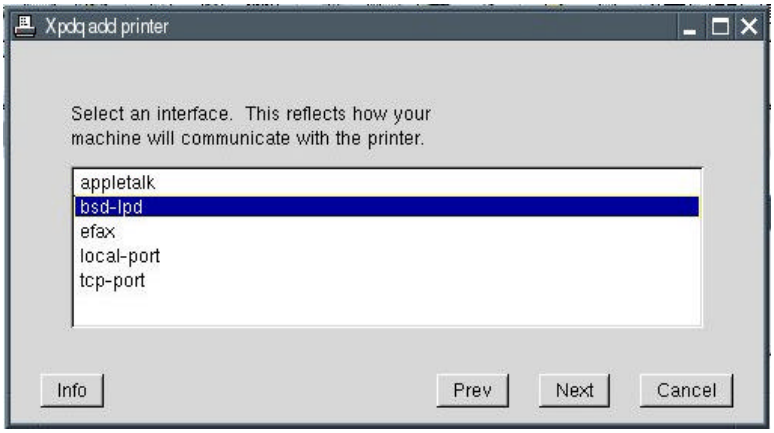
After clicking okay, then you will be taken to the real printer setup screen (all you have done thus far is create the printer driver as noted above (ijs-pcl-6) and you must select it. When the printer setup panel opens, delete any printer there that you hadn't already defined previously in Puppy. Then select Printer from the menu and Add which will start the wizard where after you click next, you'll first put in your basic printer information.



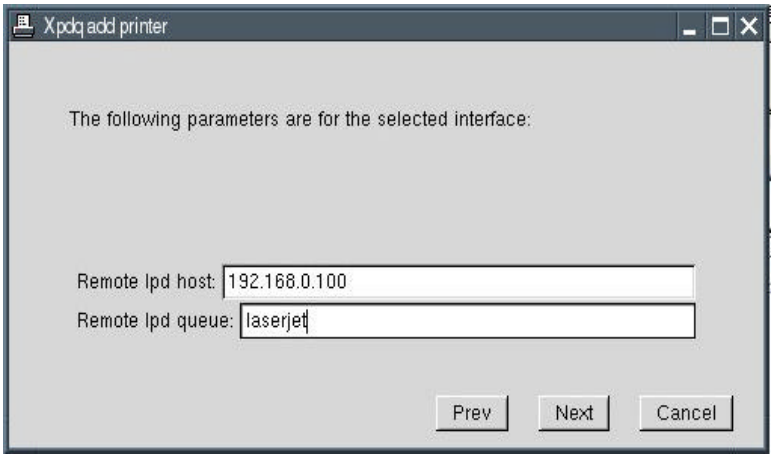
Next you will select the printer driver defined in the first wizard.



On the next screen, you'll generally select next accepting the default of "letter" paper and then you will be asked what type printer port to print to. Since we are printing to a LPD shared printer (off of Windows XP), we will select bsd-lpd as the printer "interface" type. If you had a locally attached printer, you would select "local port."



On the next screen, you will need to enter the IP address of the remote lpd host (in this case my WindowsXP host). You can get the IP address from the a "cmd" window and typing ipconfig or on a Windows 9x machine, using winipcfg. You will also type in the printer name being shared as the remote lpd queue.



Then click next and Finish and your printer setup is done. Don't forget to set the printer as "default" from the printer drop down in the menu bar.