## Creating a 'Working' Windows XP Installation in Virtual Box

# Before you begin, disable Beryl (you may need the F8 key during the XP install). you can re-enable beryl after the install.

**Step 1:** Install the virtual box kernel and additions from Synaptic, but not the Virtual Box application:

virtualbox		1.3.6-1pclos2007		A general-purpose full virtualizer for x86 k	
dkms-virtualbox	1.3.6-1pclos2007	1.3.6-1pclos2007	831 kB	VirtualBox OSE kernel module	
virtualbox-additions-bin	1.3.6-1pclos2007	1.3.6-1pclos2007	2333 kB	Guest additions for VirtualBox (binary vers	

**Step 2:** Install the non-OSE Binary:

- 1. Go to the website [http://www.virtualbox.org/wiki/Downloads] and download the non-ose version from the "All distributions" link.
- Open a terminal program super user mode, type your root password and cd to the directory where the above download is located eg: cd home/user
- 3. Run the binary by typing this command:
- 4. **sh** ./VirtualBox\_1.3.8\_Linux\_x86.run install (or whatever the filename is)
- 5. Accept the license by typing 'yes' then enter

**Step 3:** Add your own account to the **vboxusers** and **usb** group from the PCLinuxOS Control Center, System tab, and then the Add, Remove or Change Users of the System icon. Right-click your username and choose edit, then select the Groups tab:

2	🔳 Edit Gro	ups / Users				
1	User Data	Account Info	Password Info	Groups		
	Sele	ect the groups	that the user w	ill be a member of:		
	🗆 tape 💽					
	🗆 tty					
	🥩 usb					
	🗆 users					
	🗆 utmp					
	🗆 uucp				<u></u>	
	🤣 vboxuse	ers			$\equiv$	
	🗆 vcsa				-	
					0	

**Step 4:** Set up your Virtual Windows XP installation.

- 1. Run Virtual Box from the K-Menu under emulators.
- 2. Click on New, then next in the window that appears
- 3. Type in a name for your virtual machine (vm) and choose your OS as Windows XP. This name will be used in Step 6:

🔯 📄 🤋 Create New Virtual Machine	
VM Name and OS Type	
Enter a name for the guest operat machine. The name of the software and har VirtualBox produ Name Win XP Home OS Type Windows XP	the new virtual machine and select a type of ing system you plan to install in the virtual machine usually indicates its dware configuration. It will be used by all ccts to identify the created virtual machine.
	< <u>Back</u> <u>N</u> ext > <u>C</u> ancel

4. Set the memory size. If you have 1GB RAM, you can spare 256MB for your . If you have less RAM, try 128-192MB – you can always increase it later:

Memory	tual Machine 🔛 🖛
	Select the amount of base memory (RAM) in megabytes to be allocated to the virtual machine. The recommended base memory size is <b>192</b> MB. Base Memory Size O 256 MB 4 MB 2000 MB
	< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel

5. Next create a new hard drive(.vdi) file by clicking on New:

	Select a hard disk image to be used as a boot hard disk of the
	virtual machine. You can either create a new hard disk using the <b>New</b> button or select an existing hard disk image from the drop-down list or by pressing the <b>Existing</b> button (to invoke the Virtual Disk Manager dialog).
	If you need a more complicated hard disk setup, you can also skip this step and attach hard disks later using the VM Settings dialog.
	⊂ Boot Hard Disk (Primary Master)
0	I v v v v v v v v v v v v v v v v v v v
-	New Existing
	< <u>B</u> ack <u>N</u> ext > <u>C</u> ance

- a) Click on next
- b) Select dynamically extending image
- c) Set it at about 2GB if you can spare it:

Press the <b>Select</b> button to select the location and name o
the file to store the virtual hard disk image or type a file name in the entry field.
Win XP Home
Select the size of the virtual hard disk image in megabytes. This size will be reported to the Guest OS as the size of the virtual hard disk.
4.00 MB 2.00 TB
 < Back Next > Cance

- d) It is probably a good idea to keep all your .vdi files in one folder. If your home partition is big enough, save them in the default directory, otherwise you could save them onto a shared data partition by clicking on the icon next to the image file name.
- 6. Click next and then finish. The initial set up is done. You will see your vm name in the Virtual Box window.
- 7. Click on your vm, then on settings:
  - a) Check the video memory set it initially at about 8MB and increase later if you are experiencing display problems.
  - b) You will need to mount your cd-rom, or mount an iso file if you are installing from an iso CD or DVD image. Put your CD in now and wait until PCLOS detects and mounts it (open and then close the CD window). Right-click your CD and check the mount point corresponds to that in virtual box.
  - c) Mount a floppy drive if you have one
  - d) Install sound if you need it you might find the OSS driver works better even if you are using ALSA in PCLOS!
  - e) If you want to use the Internet in your vm, enable the nework adaptor, but leave the network settings on NAT. Select **Cable Connected.** if you already have the Internet set up in PCLOS – your vm will be able to use the connection automatically:

۵	? Win XP Home - Se	ettings 💼	X				
	General	Network					
	Floppy	Adapter 0 Adapter 1 Adapter 2 Adapter 3					
© 4	CD/DVD-ROM Audio	Enable Network Adapter (plug it into the corresponding slot)					
6	Network	Attached to MAC Address   MAT Image: Comparison of the second					
	Remote Display	X Cable Connected					

f) Click on OK to save the settings.

- 8. Make sure your XP installation CD is in the drive. Select your vm and click on Start. Your XP installation will proceed as usual. Don't worry when it offers to format your hard drive, it is only formatting the 2GB you set aside in the .vdi file!
  - a) To gain mouse control within your vm, just click in the window (this will become seamless once you have installed the guest additions). Release the mouse using the right Ctrl key.
  - b) Keyboard use is automatically detected.
  - c) Use the right Ctrl key and F to toggle between full screen display of your vm.
  - d) Installation takes the usual 30-60minutes!
  - e) XP will probably begin in 640x800 display mode. You can switch it to your preferred resolution as normal.

**Step 5:** Install the guest additions in your XP vm.

- 1. Once XP is installed, you can add-on the guest additions.
- 2. Regain mouse control by pressing the right Ctrl key.
- 3. Click on **Devices Install Guest Additions** at the top of the vm window.
- 4. This will mount the guest additons iso as a CD drive and you will set it up from within your vm it will start automatically.
- 5. Once installed, reboot and you should find that you have USB support in the settings section of Virtual Box and a wider range of display modes available in XP.
- 6. You should be able to seemlessly move into and out of your vm window without using the right Ctrl key.
- 7. To 'remove' the guest additions iso, click on **Devices**|Mount CDROM| Host Drive (/dev/cdrom)

**Step 6:** Setup virtual box shared folders.

1. In a terminal, as user, type (be sure to use caps when shown):

#### VBoxManage sharedfolder add "Win XP Home" -name "user" -hostpath "/home/user"

"Win XP Home" is the name you gave your vm in Step 4.3 "user" is your username you log into PCLOS with "/home/user" is your home folder

2. Change "user" and "/home/user" if you want to share a different directory. The directory must exisit at the path you specifiy. **Step 7:** Create a network drive in your Windows vm.

- 1. Start the XP vm
- 2. Click on **run** in the **start** menu and type in:

#### net use x: \\vboxsvr\user

x: will be the network drive letter. Pick a letter that won't conflict with other drives on the windows installation, so avoid letters A-E. user is the name of the sharedfolder created in Step 6.

3. Then reboot the vm and you should see the network drive in windows explorer.

#### Step 8: Set Up USB Devices

- 1. Plug in (or power on) the device you want to use but do not start VirtualBox yet.
- 2. Make sure PCLOS has detected your device.
- 3. Now start VirtualBox. Select, your XP vm and click on Settings.
- 4. Click on the "**USB Controller**" item in the Details tab for that VM and make sure that the "**Use USB Controller**" is ticked.
- 5. In the "**USB Device Filters**" panel, click on the second button down on theright (it is a USB icon, with a green plus sign). You should get a popmenu showing all of the USB devices currently attached:

I v win ve nome - a	seconge				I.
📃 General	USB				1
Hard Disks					
💾 Floppy	Enable <u>U</u> SB Contro	ller			
CD/DVD-ROM	USB Device <u>Filters</u>				
🖗 Audio					
Network		Logitech Opti	cal USB Mouse [03	40]	
🖉 USB		Canon i560 [0	0106]		
💷 Remote Display		THOMSON Sp	eed Touch 330 [04	Vendor ID:	. (
		Generic USB S	Storage Device [01	Product ID	:
				Serial No.	3
	<u>N</u> ame			State: Bus	у
	Vendor ID	<u>M</u> anufacturer			1
	Product ID	Pro <u>d</u> uct			
	<u>R</u> evision	<u>S</u> erial No.			
	Port	R <u>e</u> mote An	у	-	
	Select a settings cat	egory from the list on the	left side and move	the	
	mouse over a settin	gs item to get more inform	ation.		
Halp	,			Cancel	
				Cancel	

- 6. Select the desired device (eg printer, USB key...)
- 7. A USB filter entry for that device should appear with all the detail fields filled in.
- Now start your virtual machine. The USB device(s) should be detected by XP. You may need to insert your original install CD when prompted to install the correct drivers (eg for a printer).

**TIP** - The tool tips seems to suggest that you can add a generic USB filter with all fields blank. **BE CAREFUL.** This seems to drive KDE nuts trying to figure out what just got attached.

### Using the Internet from within your XP vm

The current thinking is that you can still be infected by a virus if you download an infected file from within your XP vm. However, this will not be able to infect your Linux install if you are running as user. You may wish to install a simple anti-virus within your vm (eg AVG) just in case.

You shouldn't need a firewall if you have shorewall set up within PCLOS, but again if you want to be ultra-secure you could set one up in XP or at least use the built in firewall in SP2.

Alternatively, if you are worried, once you have activated your copy of XP, disable the network controller in VirtualBox settings.