

# The complete guide to running OSX in PearPC on Windows XP

Version 1

## **Warning**

That's right, there's a warning... All this is touch and go. It is not guaranteed to work 100% and about 5% of users cannot get PearPC to work correctly for them. This guide tries to help you through this, and it is recommended that you read the guide first, then do everything while reading it a second time. If you've done everything in this guide, and tried things in many of the other guides, and you still have a problem, check the resources listed at the end. Also, this guide can't promise that your computer won't be screwed up, etc., etc., you know the usual spiel.

## **Introduction**

You've got this guide because you want to run OS X on Windows XP with PearPC, right? And, you've got no clue how to do it. You don't even know what an emulator is but you've heard you can do it and you want to try it for yourself.

First, what is an emulator anyway? Put simply, an emulator is a piece of software that enables you to run a different computer in place or along side with your regular computer without needing an additional computer parts. That being said, you now should be able to figure out that with PearPC it is like having a Mac inside your PC.

This can be useful, but you should be warned now that it is very slow, and that at least a 1.4GHz CPU is recommended with at least 256MB of system RAM. Also, a 7200RPM ATA100 hard disk is recommended, with at least 5gb of free space. (Yes, emulation does use up quite a bit of space...)

## **Where to Start and What to Get**

Well, first you need to get a copy of PearPC. This guide recommends 0.2.0 as it is the most stable and people have had the fewest problems with it. However, that does not stop it from having any issues at all. You should know in fact, of the two most common issues with this version. Those would be that it is nearly impossible to change CDs, and the second is a key repeat issue based on the fundamental fact that the clock in PearPC runs about 4 times too fast.

Right, so where to get 0.2.0? Because that's the version we're going to use here... So from the official PearPC site of course, <http://prdownloads.sourceforge.net/pearpc/pearpc-0.2.0-win32-jitc.zip> is the one. After that you need a hard disk image. This guide recommends the preformatted 3gb drive image from PearPC.net, [http://pearpc.net/files/macosx\\_3gb.rar](http://pearpc.net/files/macosx_3gb.rar) which you will need WinRAR or a similar application to open and extract. The only thing you need to download now is OpenVPN if you want internet access in OS X. This guide recommends OpenVPN 2.0 beta 2, available at [http://prdownloads.sourceforge.net/openvpn/openvpn-2.0\\_beta2-install.exe?download](http://prdownloads.sourceforge.net/openvpn/openvpn-2.0_beta2-install.exe?download) and you should note that you have to have some version of 2.0 for networking to work.

Great, so you've downloaded all you have to? Or have you? You need for installing OS X a copy of OS X of course. The only legal way to do this is to buy a copy of OS X, no other way around it. Once you have your OS X cds, you then have to make CD images of them in ISO format. Why? Because that's the only way PearPC will work. There are several good

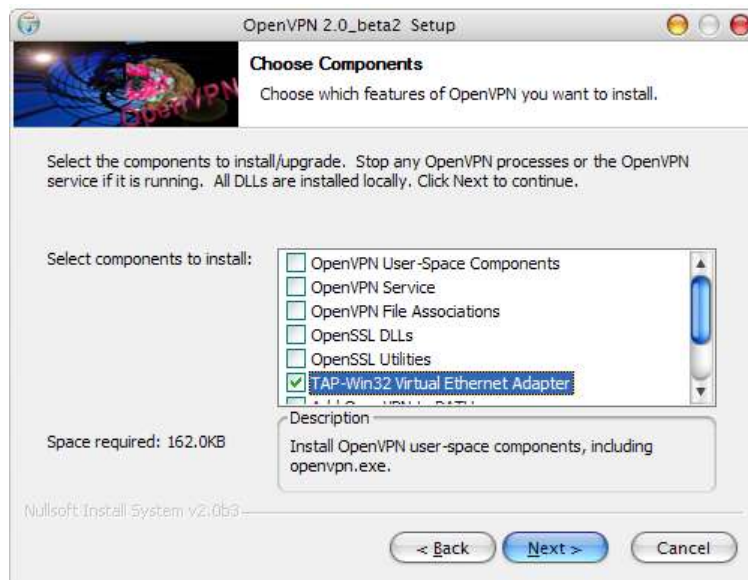
guides on this, just search around in google. You may not know squat about emulation, but I'm sure you know how to use google. Also to mention this guide was written with OS X 10.3 in mind.

## **Installation and Configuration**

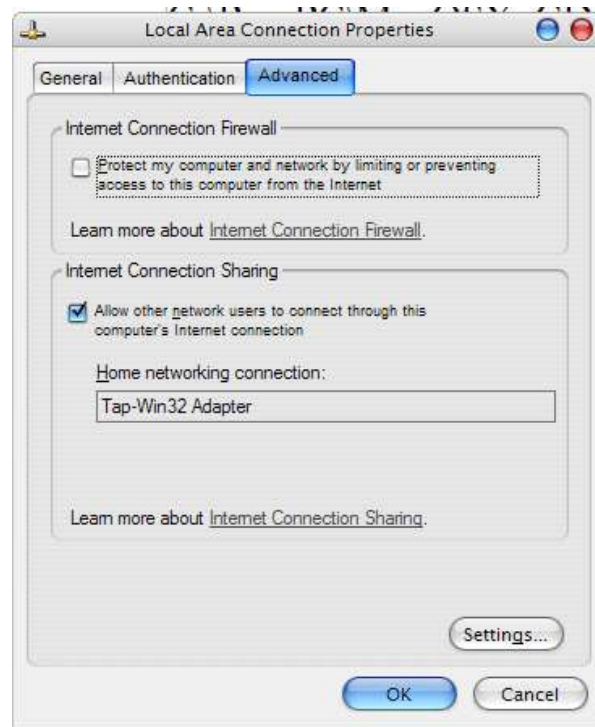
Got your CD images now for disc 1 to 3? Are you sure you named them correctly? Ok, now we can start to unzip and install things and configure stuff. First thing is to pick a place to install everything to. This guide recommends C:\PearPC as it is a very easy to remember and find. But, if you want you can do everything in a different location, just remember that in the guide it will be referred to as C:\PearPC. Right, so go ahead and create that directory. Extract everything in pearpc-0.2.0-win32-jitc.zip to C:\PearPC. If it creates a sub directory, just move all the files into C:\PearPC and delete the sub-directory. So now you have C:\PearPC\ppc.exe right? If you don't, something has gone wrong, and you should try again.

Ok, the basic PearPC installation is done, but you're a long way from done yet. Now you have to extract your hard disk image from macosx\_3gb.rar to C:\PearPC. Bear in mind that this will take a long time, so sit back and enjoy the wait. If it takes an absurd amount of time, like two hours, then either something went wrong, or you shouldn't be doing this on that computer. So once that's done you should have C:\PearPC\macosx\_3g.img which will be your virtual hard drive inside of PearPC.

That's your HD. Now you need to move the CD images from where you saved them earlier to C:\PearPC. So, for example, you have C:\PearPC\MacOSX\_CD1.iso, etc. The last thing to install is OpenVPN if you want networking. When you get to the select components screen of the install, make sure to only select "TAP-Win32 Virtual Ethernet Adapter".



Let that install go through then reboot. To complete networking set up, we have to do one or two more things. If your computer is directly connected to the internet, you need to enable Internet Connection Sharing on your Internet Connection. (Default "Local Area Connection".)



If your computer is just on a regular LAN, you need to bridge your the TAP connection and your LAN connection. To do this open the Networking Control Panel, select the two connections, right click, and select “Bridge Connections”. This will take a minute, but be patient. Note: Networking is only known to really work with DHCP, so if you have a static IP address you may have to try different things until it works.



Now that that's all done, we can start with configuration. Create a new document called osx.config in C:\PearPC so that you have C:\PearPC\osx.config. This will be your main configuration file. Add the following lines to it:

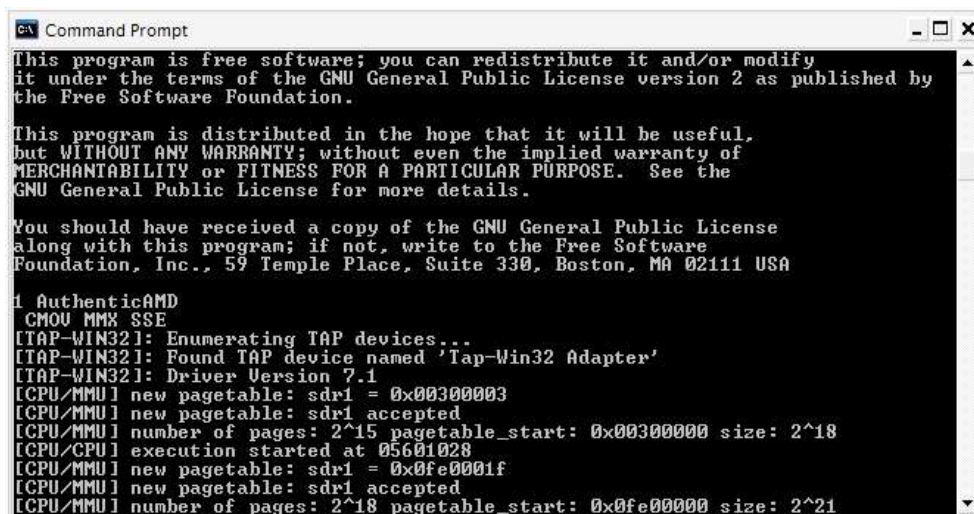
```
ppc_start_resolution = 3
redraw_interval_msec = 40
prom_bootmethod = "select"
prom_env_machargs = "-v"
prom_driver_graphic = "video.x"
memory_size=0x8000000
pci_ide0_master_installed = 1
```

```
pci_ide0_master_image = "macosx_3gb.img"
pci_ide0_master_type = "hd"
pci_ide0_slave_installed = 1
pci_ide0_slave_image = "MacOSX_CD1.iso"
pci_ide0_slave_type = "cdrom"
pci_3c90x_installed = 0
pci_3c90x_mac = "de:ad:ca:fe:12:34"
pci_rt18139_installed = 1
pci_rt18139_mac = "de:ad:ca:fe:12:35"
pci_usb_installed = 1
nvram_file = "nvram"
```

Change the disk1.iso of the line “pci\_ide0\_slave\_image = "MacOSX\_CD1.iso "" to reflect the location of your first OS X CD image. Set “pci\_rt18139\_installed = 1” to 0 if you do not want networking. And that should be your configuration file done.

## Running for the First Time

Now, you can't run PearPC like a normal application, it has to be run through a command prompt. So, open the start menu and press R. This opens up a Run box. Type in cmd and press OK. There's your command prompt. Type cd C:\PearPC and press enter. You are now 100% set to run. Make sure there aren't any CPU hogging tasks running then type “ppc.exe osx.config” and press enter. You should see something similar to this:



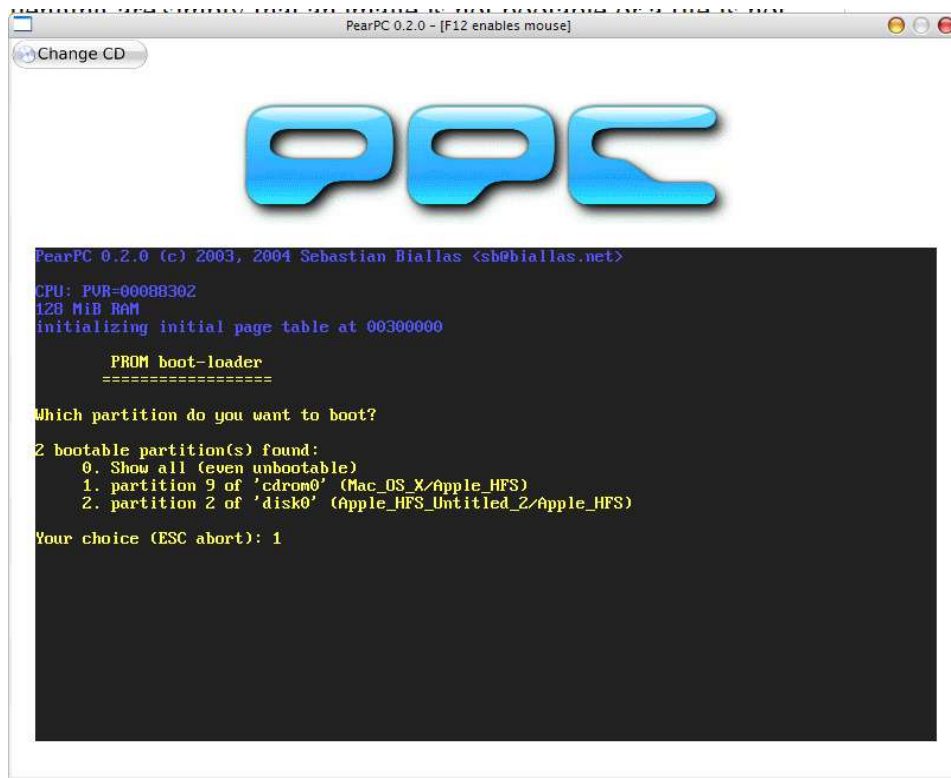
```
C:\> Command Prompt
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it under the terms of the GNU General Public License version 2 as published by
the Free Software Foundation.

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along with this program; if not, write to the Free Software
Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111 USA

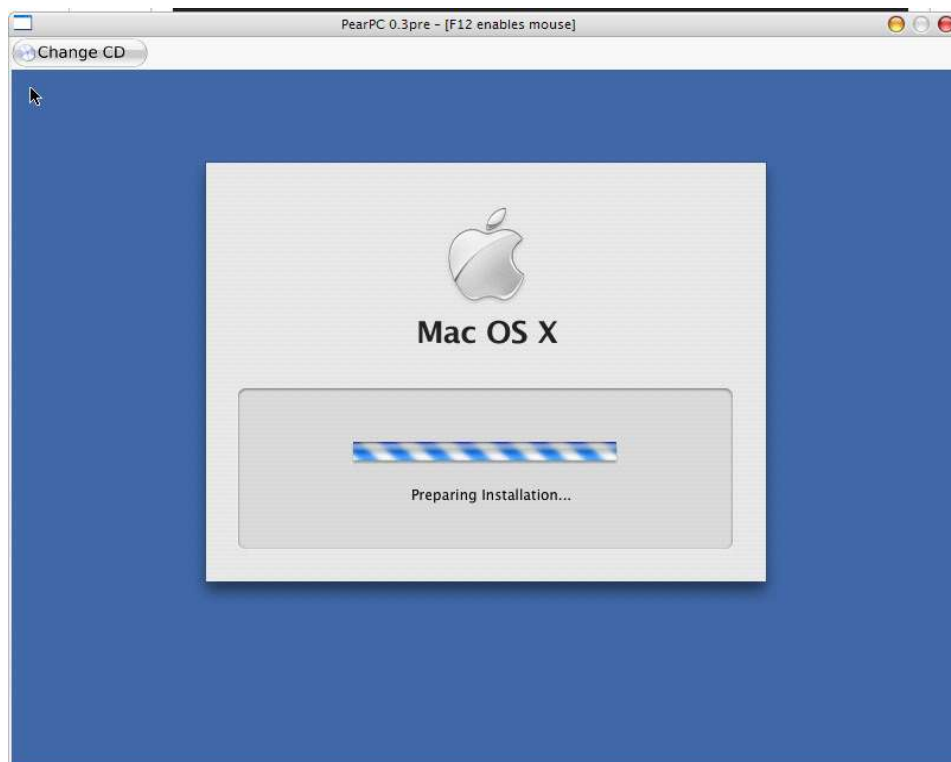
1 AuthenticAMD
CMOV MMX SSE
[ITAP-WIN32]: Enumerating TAP devices...
[ITAP-WIN32]: Found TAP device named 'Tap-Win32 Adapter'
[ITAP-WIN32]: Driver Version 7.1
[CPU/MMU] new pagetable: sdr1 = 0x00300003
[CPU/MMU] new pagetable: sdr1 accepted
[CPU/MMU] number of pages: 2^15 pagetable_start: 0x00300000 size: 2^18
[CPU/CPU] execution started at 05601028
[CPU/MMU] new pagetable: sdr1 = 0x0fe0001f
[CPU/MMU] new pagetable: sdr1 accepted
[CPU/MMU] number of pages: 2^18 pagetable_start: 0x0fe00000 size: 2^21
```

And if you don't... Eep. Double check you've done everything right, especially paying attention that “pci\_ide0\_slave\_image = "MacOSX\_CD1.iso "" does indeed point to the right location. Many errors that look challenging are simply that an image is not bootable or a file is not found, so really, take a good hard look at your config if it doesn't start. Once any config issues are sorted out, you should now have a window titled “PearPC 0.2.0 – [F12 enables mouse]” asking “Which partition do you want to boot?” followed by a short list.



Select the one that is partition X of cdrom0 and press enter (make sure this is the enter key over the shift button, and not on the keypad). If there is no cdrom0 option then your CD image is no good. Verify that it is the right one, and if you're sure it is, then try making the image again with a different application. Also, if the PearPC 0.2.0 window sticks with a message “Still waiting for root device.” your CD image is bad too.

However, if it loads up, and you wait long enough, you will get to the Mac OS X installer! Hurrah in that case, it works!



When the installer finally loads, you'll get a language selection screen. Select your language of choice, and click on continue.



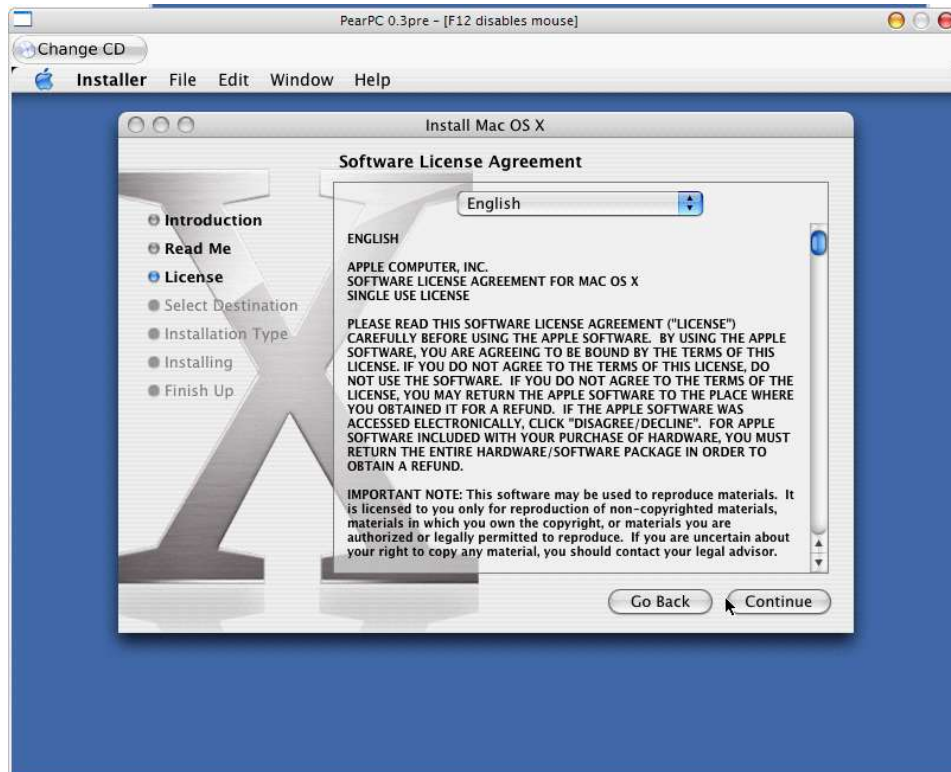
Next, you'll get the "Welcome to the Mac OS X" installer page. You should see a "reading packages" message on the bottom, and two grayed out buttons. When the installer finishes reading the install packages, the message will disappear and the continue button will become active; click on it.



Next, you will be greeted with some information and the system requirements. Laugh for a second when you notice it requires a G3/G4/G5 processor, and click on continue.



Next, you will be shown the license agreement. Click continue. A box should appear asking if you agree to the license agreement. If you accept the license agreement (accepting the agreement is the only way to install Mac OS X), click on the agree button.

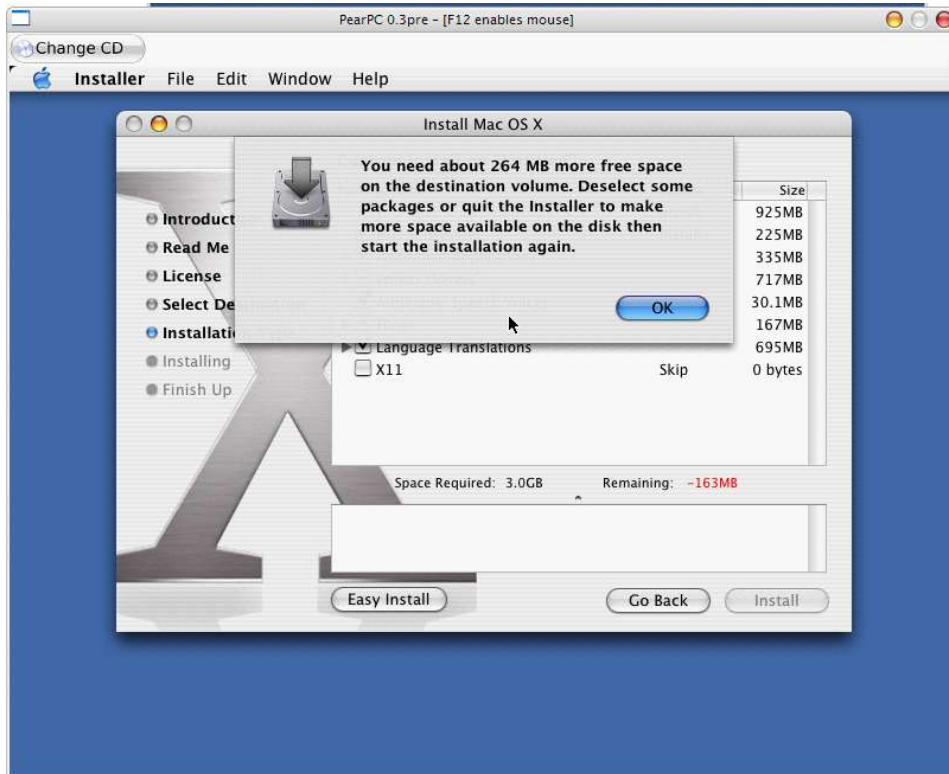


Next, the Mac OS X installer will ask you where you want to install Mac OS X. You should

see a 2.9GB drive titled “Untitled” just select that and click on continue. If you don't see that, double check that your config is right and that the image you extracted earlier is there.

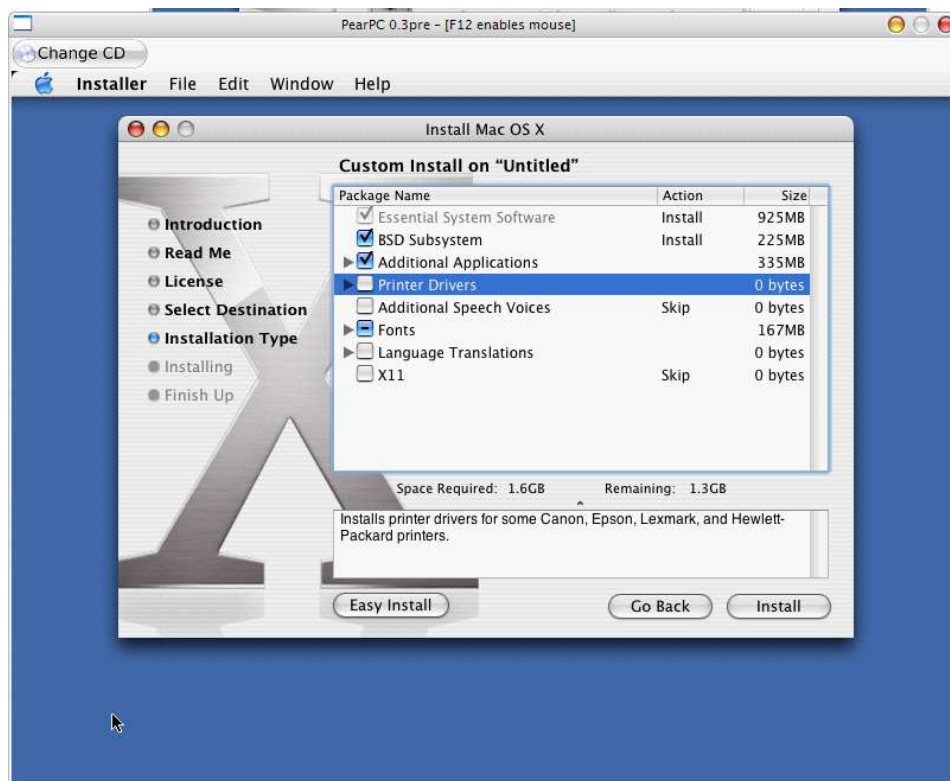


On your way to the next page, you'll get an error about “You need 264 MB more free space on the destination volume. [...]” and that's right, for a full install. Click OK to get rid of the error screen.

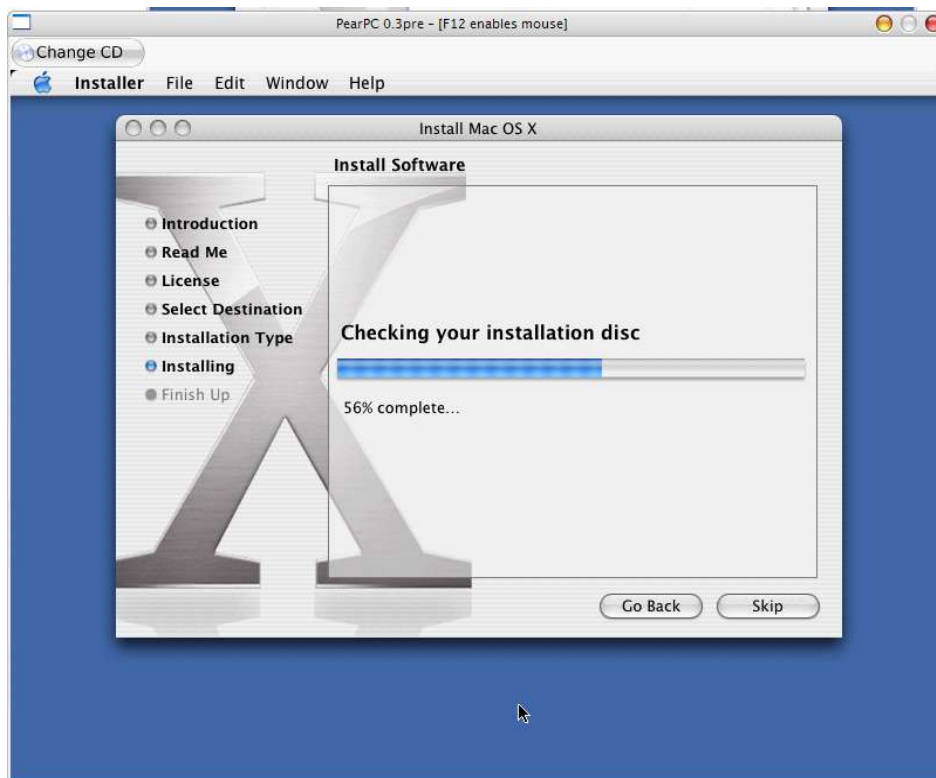


Like the message suggests we are going to have to remove some things, namely, deselect all of Printer Drivers, which makes it fit. Removing the Additional Speech Voices, Language Translations, and X11 will also make your install time shorter (and you probably have no use

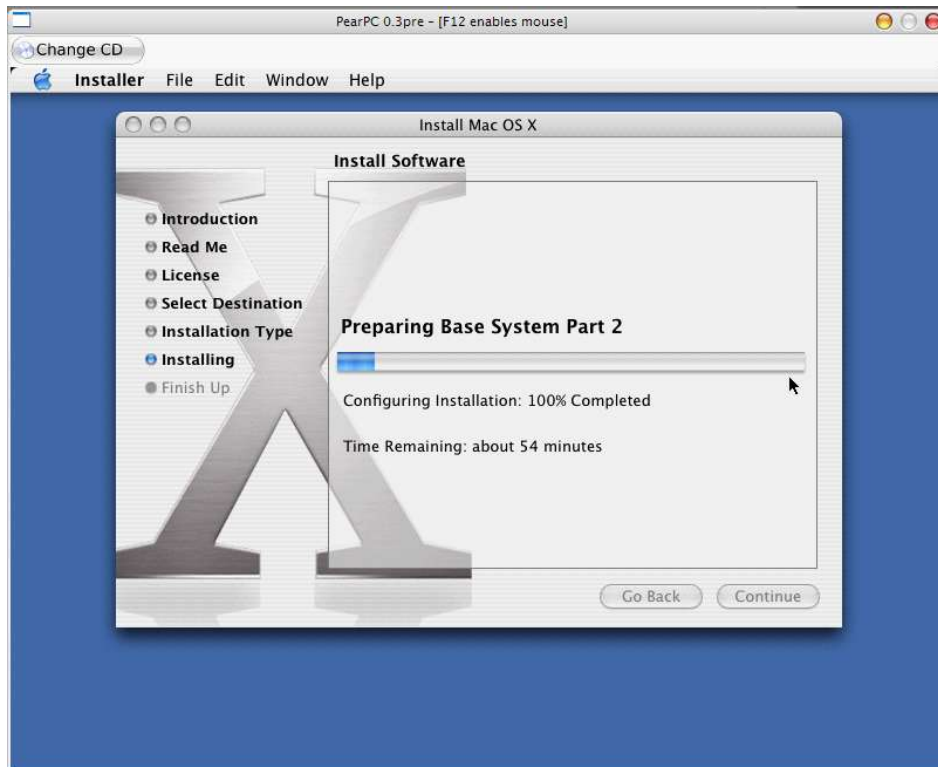
for any of those).



Go ahead and click Install now. It will go through and check your installation disc, which will take a while, but it's probably worth it. If you really, really, want to, you can skip it.



Now, be ready for a nice long wait. Grab a book or a few cups of coffee. Or go out shopping for a few hours. Or take a nap, Either way, be prepared to wait what is an average 4 hours hours for most users to do the install.



## **After the long wait**

When it is done, it'll just close, so don't worry. Just type in "ppc.exe osx.config" again and start it back up. But this time, instead of selecting the cdrom0 option, you want to select the disk0 option. It will boot for a while then go to ask for OS X Install Disc 2 but just click Cancel to this prompt. Confirm by clicking Stop Install. This is done because Change CD is sketchy in PearPC. It will then proceed to do its own first boot setup, which you should go through.

When you get to the "Get Internet Ready" page if you want to have networking select "I'll use my existing internet service.". If you don't skip this paragraph. Right, so now you are at the "How Do You connect?" screen. Select "Local network (Ethernet)" and click continue. From there you just have to play it by ear. If you get "A network configuration for your computer was obtained automatically from a DHCP server." then you're good to go. If not, don't worry, we'll work on it later.

After all that Apple config stuff, you'll finally be dumped to your Apple desktop and you now can use OS X to your heart's content. If you want to install anything else from the CDs, like install CD2's contents, just change the "pci\_ide0\_slave\_image = "MacOSX\_CD1.iso"" line to point to the second cd. Also, if you are not using a cd at all you can set "pci\_ide0\_slave\_installed = 1" to 0.

## **The End**

We, the authors and editors of this guide, have tried to make this as easy to understand as possible. If there was something that was not clear or an area that you think needs improvement, please do not hesitate to let us know. Just email [guru3@ut2k4.co.uk](mailto:guru3@ut2k4.co.uk) with your feedback. If you need additional help please check <http://pearpc.sf.net/>, <http://pearpc.net/>, and <http://ppcresources.electricpotential.net/>. If you still can't figure it out from reading try posting on one of the many forums. Then if that does not work as a last resort you can try IRC.

## **Credits**

Guru3 – Author/Distributor

Espdav8 – Helpful Input and Editing

Tekmaven – Screen Shots, a bit of the OS X install, and more Editing