

Title: Increasing Your PearPC Hard Disk Image Size

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Requirements:

PearPC, Windows, Mac OS X

Tested using:

PearPC 0.2pre (Richard Goodwin's 05.28.04 AMD Optimized Build), Windows XP SP2 RC, Mac OS X 10.3.4

Abstract:

When I started with PearPC, I used the 3gb hard disk image. Quickly the 3gb disk image became filled up, and I required more space. Since I wanted to have a "CD" in PearPC, adding a second hard disk image wasn't possible. This guide will show you how to create a blank image file, add it to your PearPC config, use Mac OS X's disk utility to format it and copy the old disk to the new disk, make the disk bootable, and finally remove your old disk from the config file.

Procedure:

0. If PearPC is opened, close it.
1. Create your new hard disk image and set it up in the PearPC Config File
 - A. Decide what size you want your image to be (in GBs). In Window's Calculator, perform this calculation: $[\text{YourSizeInGB}] * 2 * 528482304$.
 - B. Open the command prompt, and navigate to your PearPC folder (`cd\the\folder\its\in`)
 - C. Type the command: `fsutil file createnew [NameForNewImage].img [ResultOfStep1A]`
 - D. Type "exit" to close the command prompt.
2. Add the new hard disk image to your config file as the secondary IDE device (slave)
 - E. Open your PearPC's config file in your favorite text editor (Notepad, Wordpad, etc)
 - F. Find the "## PCI IDE Config"
 - G. If the "pci_ide0_slave_*" lines are already there adjust them to the following, or add the following lines to your config file below the "pci_ide0_master_" lines:

```
pci_ide0_slave_installed = 1
pci_ide0_slave_image = "[NameForNewImage].img"
pci_ide0_slave_type = "hd"
```
 - H. Save your config file, and exit the text editor.
3. Format your new disk image
 - A. Run PearPC and let it fully boot to OS X.
 - B. Open the finder
 - C. Click on Applications
 - D. Double-Click on the "Utilities" folder.
 - E. Double-Click on the "Disk Utility".
 - F. In the disk utility on the left side list should be two drives and one partition under the top drive. Click on the second hard drive.
 - G. On the bigger right pane, click on the "Erase" tab.
 - H. Select the Mac OS Extended non-journalized volume format, and enter the name you wish to make the volume.
 - I. Click on Erase, and after a few minutes, the disk will be formatted.
4. Copy the data on your old disk to your new disk
 - A. Still in the disk utility application, click on your new VOLUME (the item that appears indented under your new disk).
 - B. Click on the "Restore" tab.
 - C. Click and drag your original disk's volume (the item that appears indented under your old disk) to the "Source" box.
 - D. Click and drag your new disk's volume (the item that appears indented under your new disk) to the "Destination" box.
 - F. Click the "Restore" button, and wait! (My 3gb image took over 15 minutes to transfer, maybe even 30).
 - G. Close the disk utility!

4. Make your new disk bootable (borrowed from STKD on the EMaculation forums)
 - A. Back in the finder window (if you've closed it Finder -> Applications -> Utilities), double-click on "Terminal"
 - B. Type "pdisk"
 - C. Type "e" (without quote marks) then hit enter.
 - D. For name of device enter `"/dev/disk1"`. Again, no quote marks.
 - E. Press "p" to view the partition table. The 3rd one actually needs to be moved up to 2 to make it bootable. So...
 - F. Press "r" to go into partition reordering mode.
 - G. Enter the number of that partition (3).
 - H. Enter 2 to move it to the second position.
 - I. Hit w to write the partition table, check it using p again if you want to confirm it is all okay.
 - J. Hit q to quit, then hit it again q.
 - K. Close the Terminal
 - L. Close the Finder window.
 - M. Open up the "System Preferences" application (it's button on the dock)
 - N. In System Preferences, click on the "Startup Disk" icon.
 - O. After it loads all the disks, click on your NEW disk and press "Restart..." (say yes or restart to any warnings that come up)
 - P. For me, it didn't actually Restart the computer, so close the "Startup Disk" program, click the Apple in top left corner, and click Shutdown (and say Shutdown).
5. Remove your old disk image from the config file!
 - A. Open your PearPC's config file in your favorite text editor (Notepad, Wordpad, etc)
 - B. Find the `pci_ide0_master_image` line, and set it equal to your NEW image file name.
 - C. Remove/comment out/change the `pci_ide0_slave` lines. (Whatever you do, DO NOT have both using the same hard disk image!)
 - D. Save and close.
6. Enjoy PearPC with your bigger disk image!

Revision Log:

v1.0 - Initial Creation