



Mac OS

Make A Bootable MAC CD using Toast



By: Tom H.

This information was compiled from the Roxio Toast web site, other Mac users, and my own experience. This information is not copyrighted (especially since I have borrowed logos and trademarked names) so feel free to share it.

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I was very frustrated! After creating six "coasters", I thought there was no way to burn a bootable Mac CD using Toast. I followed their directions, the help I found on the Toast web site was unclear, and I downloaded someone else's instructions and just couldn't do it.

While I'm not a computer expert, I have used Mac's since (this dates me) 1985 and can probably do better troubleshooting and mechanical work than the geek that charges \$75 an hour. So I poked around, put together the pieces of the puzzle and burned a bootable Mac OS CD. While I was doing that, I wrote this to help anyone else who was as frustrated as I was. Yes, it's lengthy and detailed but if you follow step-by-step you won't have any "coasters".

If you find any errors or omissions feel free to email me at thofts@mac.com.

Thanks! - - **Tom**

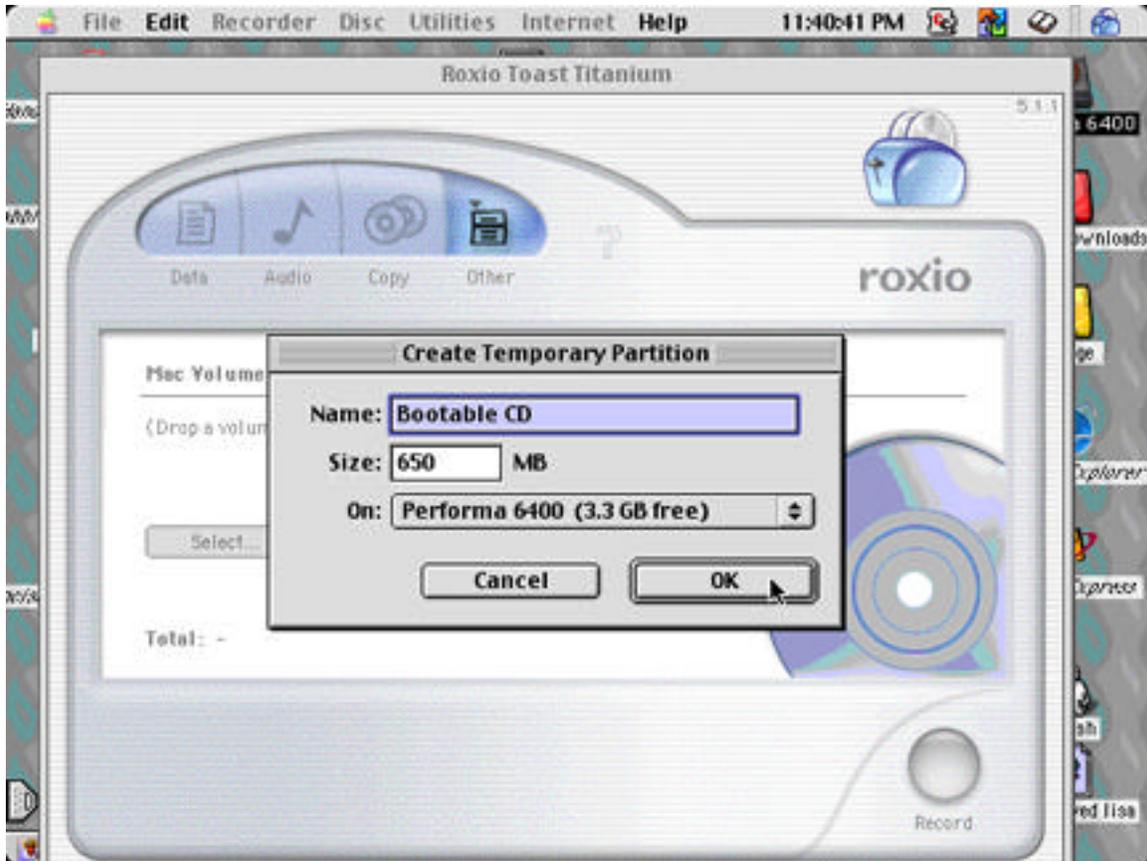
PS - Please keep the "stuffed" copy of this in your SHARED FOLDER so others on the network can get to it when I'm offline. --Thanks!

This is the method I found that works best. You must have available hard drive space (700 MB.) for creating the Disk Image.

1. Launch Toast 5.0. (Toast 3.5.5 or later should work OK.)
2. Click the "Other" button. Pulldown from the Utilities menu to "Create Temporary Partition".



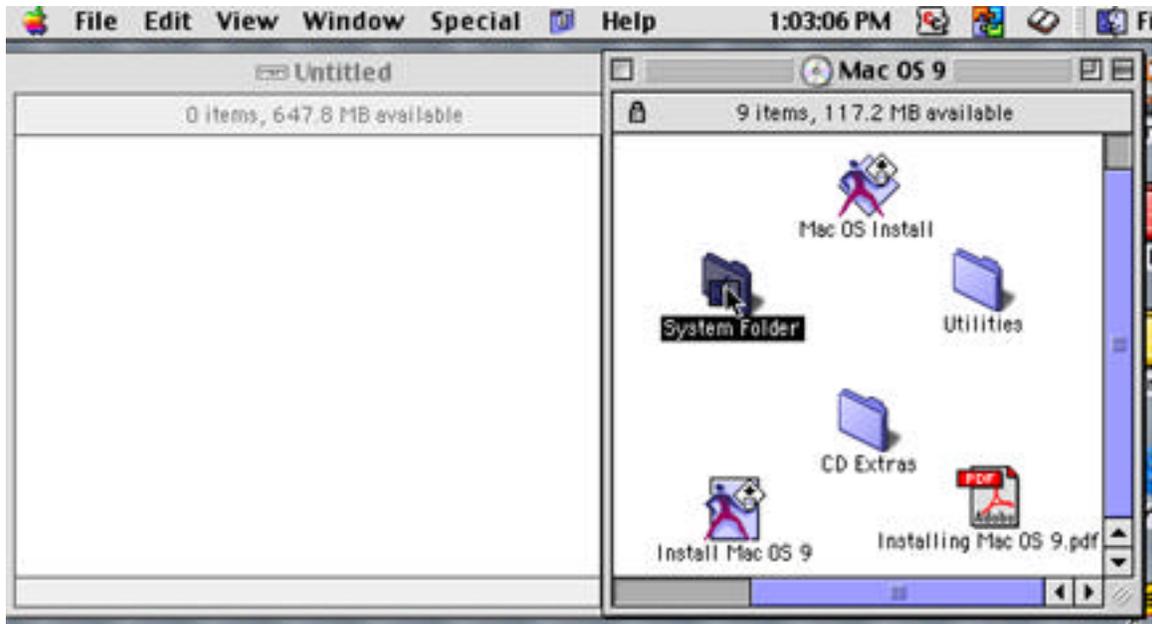
3. In the dialog box that appears, type in the name (xxx) you want the bootable disc to be labeled and click OK. The process will pause at this point as your Mac takes some time to create the partition.



4. Hide the Toast window. You will notice there is now a volume named "xxx" (or "Untitled" if you failed to name it) mounted on your desktop.



5. Drag the valid System Folder from the MAC OS CD into this new volume. (If you do not have a Mac OS CD see the notes below.)



HERE'S SOME OPTIONS TO CONSIDER BEFORE YOU CONTINUE

If you want a Norton Utilities startup CD:

- a. Open the Norton Utilities folder on your hard drive.
- b. Click once on the Norton Utilities application to highlight it. Select "Get Info" under file and "Memory" in the pop-up. Set your minimum and preferred sizes both to 4214 k. Close window. Drag your Norton Utilities folder into the NEW Volume (keeping it outside the system folder.)
- c. Open the "extensions" folder from the systems folder on the NEW volume.
- d. Open the system folder on your NORMAL start-up disk, go to the extensions folder and drag the "Norton Shared Lib" extension over to the extensions folder in the NEW volume.
- e. Open the "Preferences" folder from the systems folder on the NEW volume.
- f. Open the system folder on your NORMAL start-up disk, go to preferences folder and drag the "Norton Utilities preferences" over to the preferences folder in the NEW volume.

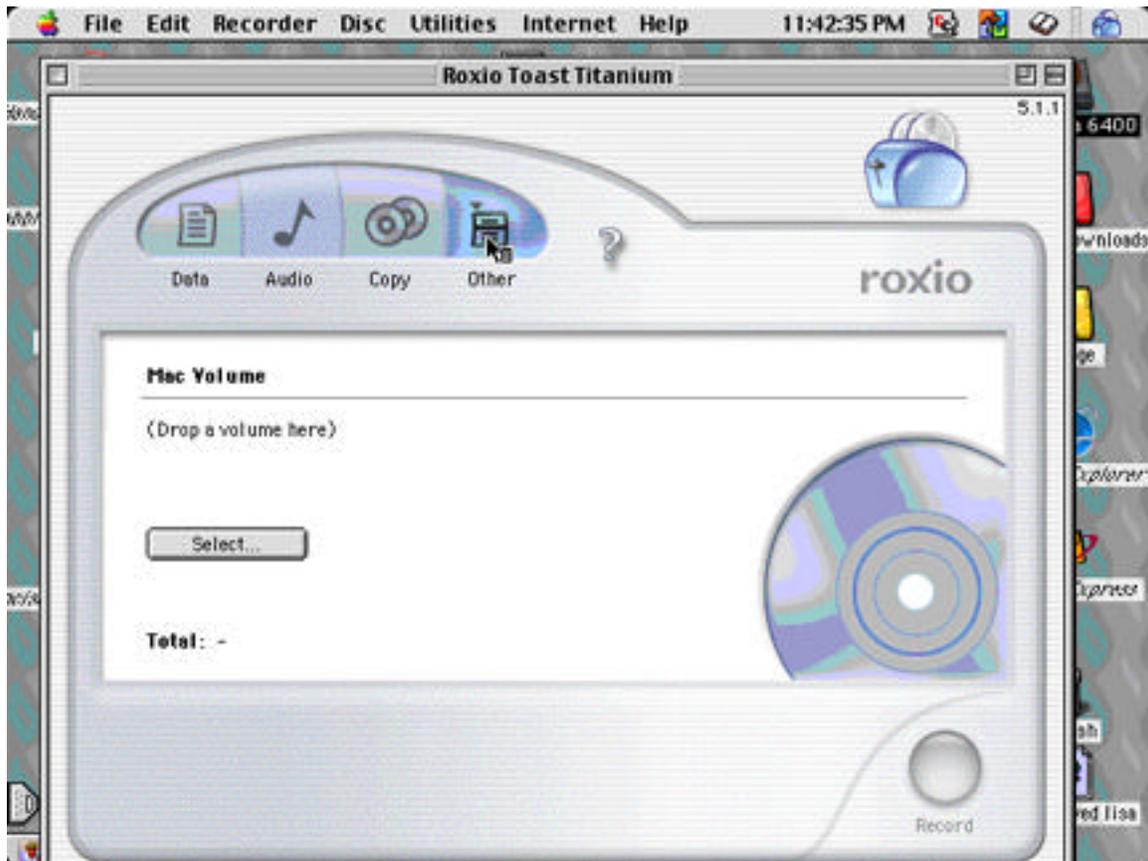
**If you have an upgraded Mac that uses an extension to load the new CPU
(like Sonnet uses)**

- a. Open the "extensions" folder from the systems folder on the NEW volume.
- b. Open the system folder on your NORMAL start-up disk, go to the extensions folder and drag the "Sonnet Processor upgrade" extension (or any other type of processor extension) over to the extensions folder in the NEW volume.

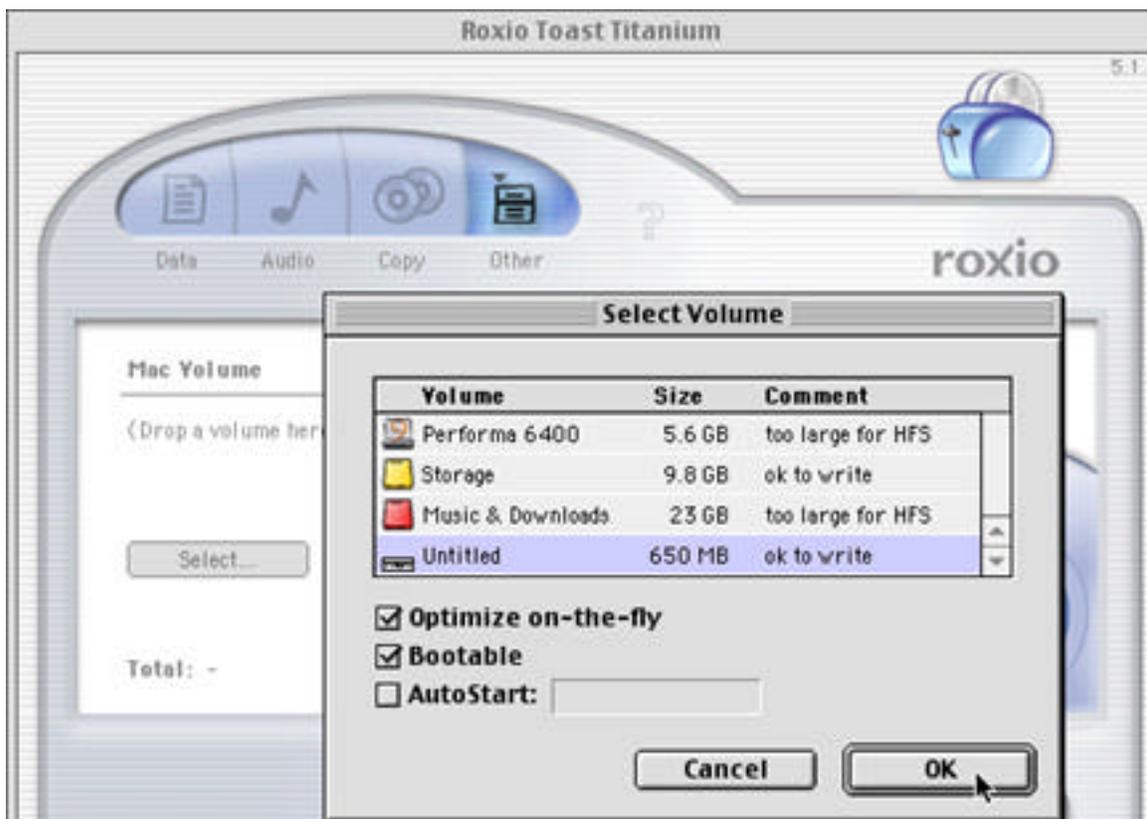
At this point (if you want to be real picky), open Norton Utilities and run Disk Doctor on your New Volume. After it checks out OK, run Speed Disk and optimize the New Volume for CD mastering. I've burned disks both ways and don't see a difference.

After filling any of the above options continue:

6. Re-open the Toast window and click and hold the button down on "Other".

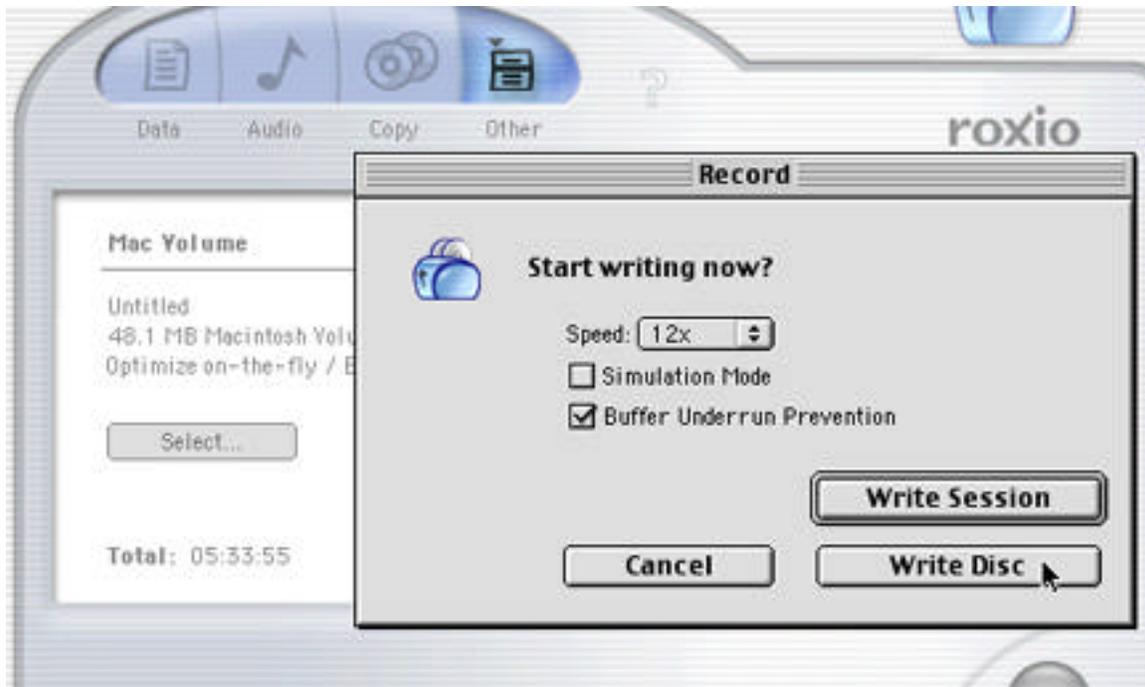


7. A Pull down format menu will appear. Select **"Mac Volume."** (In earlier Toast versions, I believe you access the Mac Volume format from the format menu.)
8. In the main Toast window click on the "Select" button. (Data in earlier Toast versions)
9. In the window that appears select that new volume that you had created in the steps above.
10. Click the checkbox next to "Bootable" and "Optimize on the Fly" then click OK.



11. Insert a blank CD-R and then click on the "Record" button.

12. The "Record" window will pop-up. Set your record speed to a slower setting. If I burn music at 16x, I record data at 12x just as a safety precaution. Check your "Buffer Underrun" box and press "WRITE DISK".



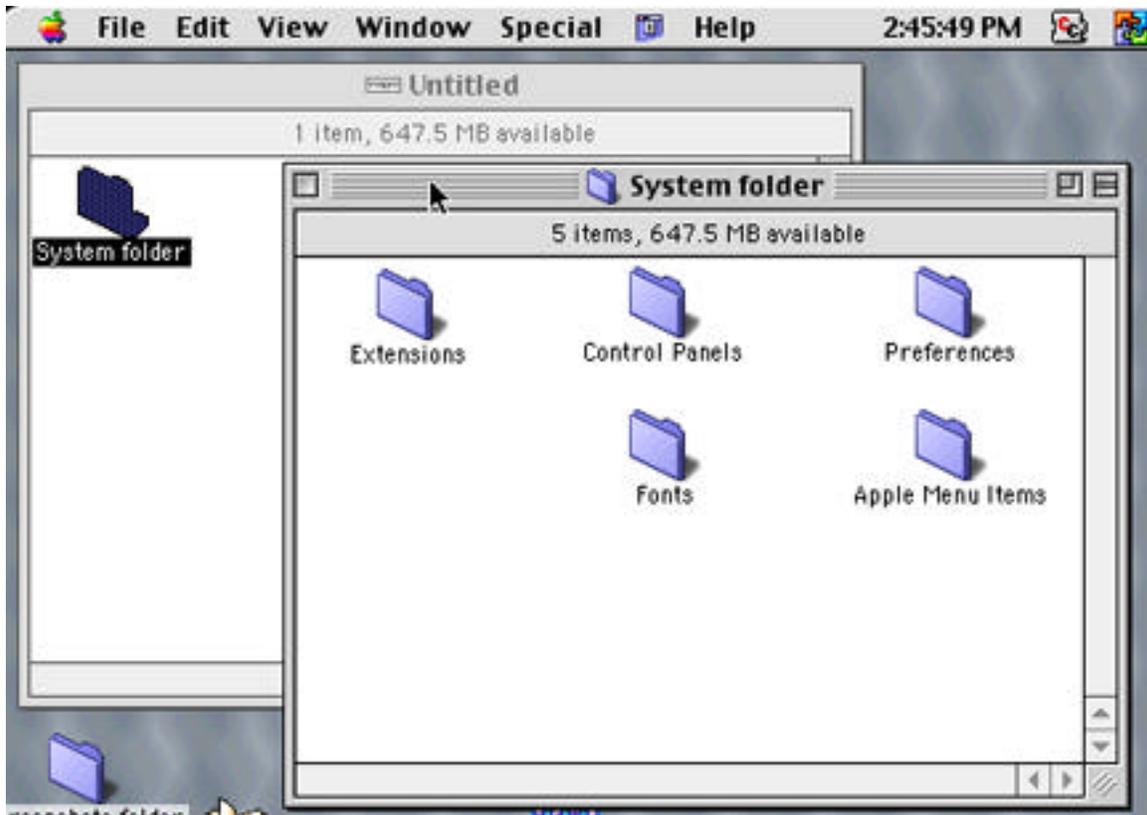
After burning your disk, when you exit Toast you will be asked if you want to save the New Volume that you've created. Save it until you are sure that your CD works correctly. After you're sure you can boot from the new CD, Trash it to free up space on your hard drive.

When your new CD is finished burning, reinsert it into your bootable CD Drive and select "Start-up disk" in your control panels. You may see TWO bootable disks with the same name! One is the "New Volume" you created on your hard drive to burn your CD. The actual CD will have a CD icon beside it. Select your CD and restart from it to make sure everything is OK.

If you DO NOT have a Mac OS CD

If you DO NOT have a Mac OS CD to copy a system folder from, you will need to create a system folder by copying the MINIMUM needed from the system folder on your hard drive to the "New Volume". Your regular system folder has lots of unnecessary stuff for a CD to boot and probably has program extensions and control panels that will cause the boot CD to fail. Here is my list of what you need to do.

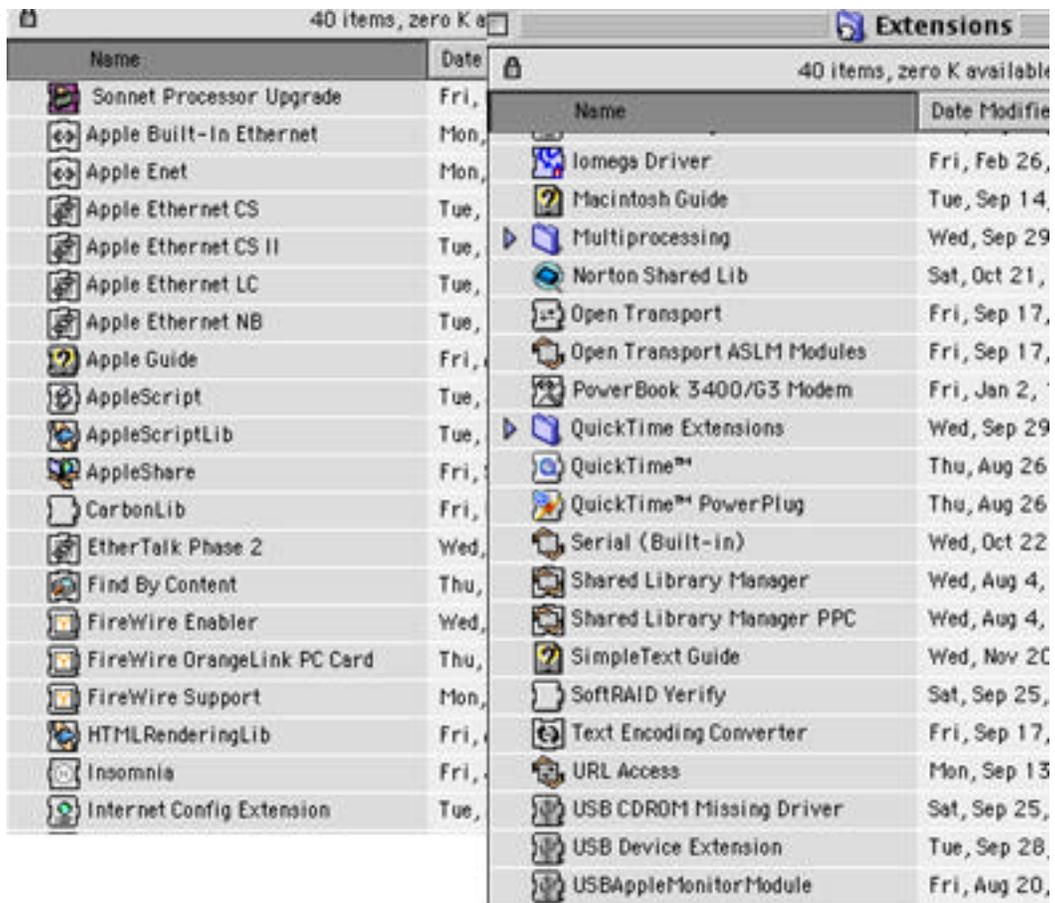
- A. Follow steps 1 through 4 above.
- B. Open the New Volume you've created on your desktop
- C. Make a New Folder under the file menu. Name this folder "System Folder"
- D. Open this empty System Folder and create 5 new folders inside it naming them "Extensions", "Preferences", "Control Panels", "Fonts", and "Apple Menu Items".



E. Open the regular System folder on your hard drive. Copy the following to their respective folders that you just created on the New Volume:

1. Extensions:

ALL Apple Enet or Ethernet extensions, Apple Guide, Apple Script, Apple Script Lib, Apple Share, CarbonLib, EtherTalk, Find by Content, Firewire enabler, Firewire Support, HTML Rendering lib, Insomnia, Internet Config Extension, Iomega Driver, Macintosh Guide, Open Transport, Open Transport ASLM Modules, QuickTime, QuickTime PowerPlug, Quicktime Internet Extras, Serial (built in), Shared Library manager, Shared Library manager PPC, Simple Text Guide, Text Encoding Converter, URL Access, USB CDRom Missing Driver, USB Device extension, USB Apple Monitor extension --PLUS any extensions that are for your particular Mac like Sonnet extensions, Powerbook 3400 modem extension, etc. ----You may not need all these and don't fret if you don't have some like Iomega & Insomnia. If you are not using Firewire or USB on your older Mac, you don't need any of the related extensions.



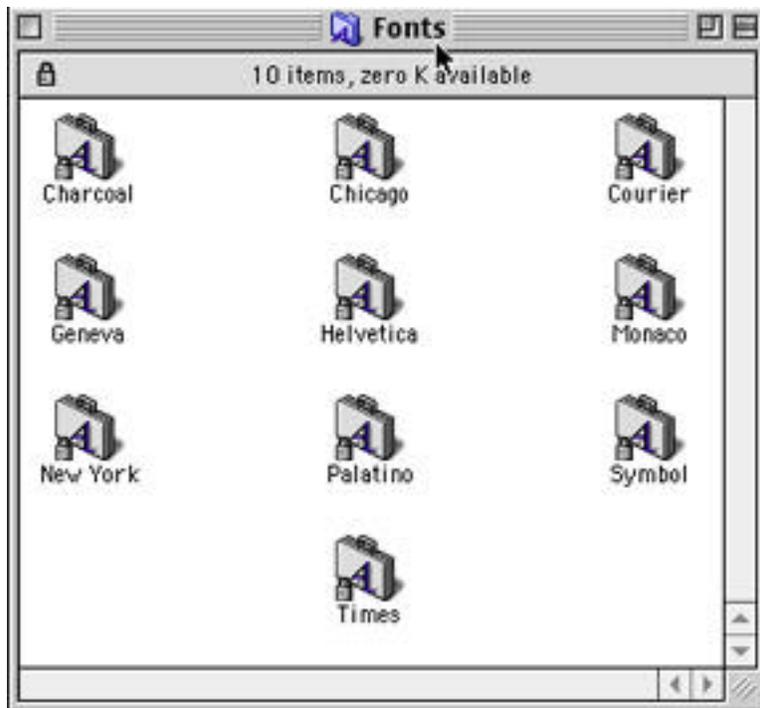
2. Control Panels:

Appletalk, Start-up Disk.



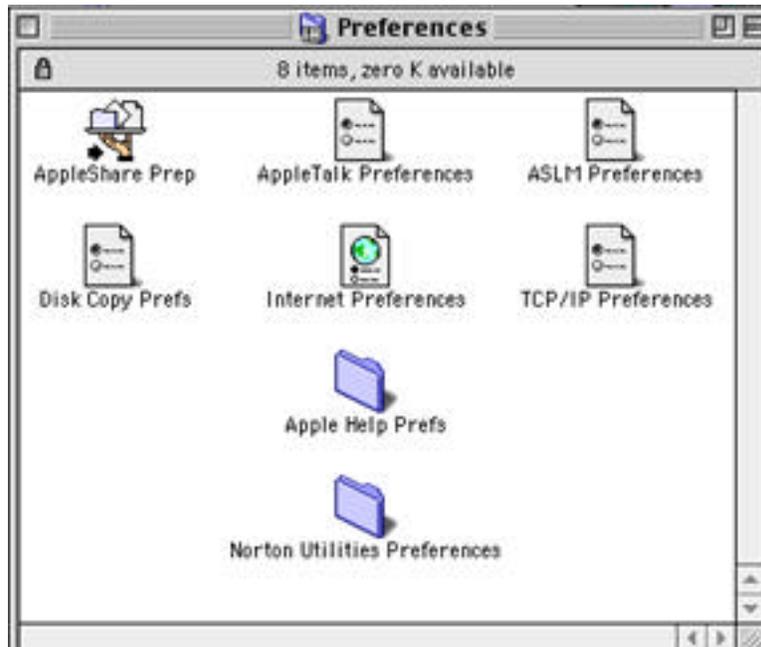
3. Fonts:

Charcoal, Chicago, Courier, Geneva, Helvetica, Monaco, New York, Palatino, Symbol, and Times.



4. Preferences:

Apple Talk, Apple Share prep, ASLM, Disk Copy, Internet, TCP/IP, Apple Help folder.



5. Apple Menu Items:

Sherlock and Chooser.



- F. After closing these folders, copy the following items from the regular system folder on your hard drive to the New System folder you're creating:

System, System Resources, Panels, Mac TCP DNR, Finder, and Clipboard.

NOTE: The screenshot below is from a system folder taken off a Mac OS 9 CD



- G. Create a "Utilities" folder on your new volume and copy your Apple drive utilities into it.
- H. Continue with options and step #6 in the instructions above.

If you put something into your New Volume by mistake and then move it to the trash to get rid of it, you **MUST** empty the trash before you burn your CD.

I did all the above and the process does work, as I burned a bootable CD the first time, but does take a little extra time.