

Mac vs PC

The study of why Macs are better than PCs

Sample Mac OS 8.x/9.x Troubleshooting Procedures

Method #1: to fix standard problem situations in a school environment (i.e. a situation where there are many computers, all having basically the same setup).

With Apple's free Software Restore program (ASR), the school district should make hard drive images (one for each of the recommended OS versions that they are using: each modified [i.e. *minimized*] as YOU would prefer, with YOUR approved software added, with folders set-up and laid out as YOU would like, etc.), and then burn these into a Repair CD. Using this Repair CD, a Mac can be **reformatted** and have everything properly reinstalled within **10 minutes!**

Check out a more detailed [explanation](#) about how the easy-to-use Apple Software Restore program works. If you would like even more info, here is a more detailed [procedure](#) (PDF) I wrote for some local schools.

An alternative in this situation is to use [Netboot](#). Netboot is applicable when the school is using an Apple OS X Server, has all OS 9.1+ clients, and has a good 100Mbps ethernet system. The benefit here is that updating the client from the image on the server is even quicker than the CD option – especially doing incremental updates. The downsides are that running most everything from the server can cause a performance hit, and when the server has problems then everything may grind to a halt. A modification of Netboot works well for OS X, see [this](#).

Method #2: to troubleshoot problems in a situation where more detail is needed, or there is uniqueness to the computer at hand.

1- General:

- Check that the System Folder is in the proper place, correctly labeled.
- See that there are no other System Folders on the Hard Drive (*with Find*).
- Verify that the OS used is the latest possible of the two most stable pre-OSX versions.
- Set Icon Views to "Always snap to grid", and List Views to show "Version".
- Create a Utility folder and put utility programs (test, etc.) on the Hard Drive into it.
- Organize material on Hard Drive so it is neat, logical and easy to back up (i.e. six folders, with work **only** in "Documents").
- Remove or compress excess files if not at least 10% free space on the Hard Drive.

2- More Editing of the System Folder:

- Check "About this Mac/Computer" for system version, amount of RAM installed, and system memory usage.
- See that all Apple system updates (these are free) have been installed. (Reference our other pages for what is necessary for: [9.1](#), [8.6](#), and [7.6.1](#).)
- Disable rarely used (delete potentially problematic) Extensions and Control Panels with Extension Manager (or create a new set).
- Check unknown items with Extension Manager or [Extension Overload](#).
- Create a new "Fonts (disabled)" folder (within the System Folder), and drag rarely used fonts into that.
- Review all Control Panels (esp. Memory) and see that they are setup correctly. (Cache = 1/16 of real RAM, or "Default", with Virtual Memory generally On).
- Put miscellaneous unused items in "Unused..." folders in the Utility folder.
- Trash problematic or unused preferences, (including "Finder Preferences" if there is unexplained behavior).
- Check out invisible files on Hard Drive (e.g. with Ghost Hunter, ResEdit) and remove any suspicious or unnecessary files.
- Update Apple Hard Drive driver (or third party driver if applicable).
- Rebuild desktop with [TechTool](#). **Restart**.

3- Startup the computer with a Mac utility CD-ROM (of your own making, or a commercial product):

- Run DiskWarrior and Norton Disk Doctor.
- Defragment Hard Drive with Norton Speed Disk, if needed.
- If there are potential viruses, check with an updated version of NAV.

(Also advise setting up a Safe Zone "Download" folder on the desktop.) **Restart**.

4- Check out applications and utility software most frequently used, making sure that these programs are complete, and are the latest revision (check at VersionTracker). **Also verify that the memory allocation of these programs is sufficient.**

Only if the above methods do not solve the problem, then try these one at a time (in sequence):

- a) Start-up the computer with Extensions, etc., OFF (hold Shift Key down).
- b) Within Extensions Manager, choose the "Minimum" OS set.
- c) Zap PRAM with TechTool. [Reset Power Manager on Powerbooks].
(Note: some Control Panels [like Memory, Date, and Startup Disk] will need to be reset after this.)
- d) Check with TechTool Pro, especially if there is newly installed RAM.
- e) Check that the internal battery is OK (with battery software). Replace if needed.
- f) Do a clean reinstall of problematic software.
- g) Replace Finder file.
- h) If still a problem (i.e. a last resort), do a clean reinstall of System Software.

Some Other Very Worthwhile References:

- a) Mac Troubleshooting Info at [MacFixIt](#)
- b) Book (one of many): *"Mac & Power Mac Secrets"* (Pogue and Schorr)

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