



Tech Info Library

System 7.1P6: Clean Restore Macintosh Performa Computers (7/95)

Article Created: 21 July 1995

TOPIC -----

This article describes the procedure for a Clean Restore (Install) for a Macintosh Performa computer with no built-in CD-ROM drive and which is running System 7.1P or System 7.1.2P for Performa computers. This article assumes that you have backed up your system with Apple Restore, and have a Utilities disk and the backup disks.

This article applies to all Macintosh Performa 400 series computers, as well as some Performa 600 and 630 series computers.

If you are using System 7.5, follow the clean install instructions for System 7.5, listed elsewhere in the Tech Info Library.

DISCUSSION -----

You may wish to perform a "clean install" when normal extensions troubleshooting fails or when the troubleshooting process becomes too complex.

The process essentially allows you to "start over" with a new System Folder. You will not lose any data, but any software or fonts or configuration information which was stored in the old System Folder will become inactive.

This clean install procedure provides you with a stable foundation from which you can proceed to troubleshoot an abnormal situation.

A regular system software installation modifies and updates the existing System Folder. A clean installation disables the existing System Folder, leaving most files in place, and forces the restoration software to create a new System Folder.

A clean system installation brings the system software back to the standard configuration. This is necessary when system software has been damaged or modified, preventing a normal installation. It is also useful in troubleshooting.

Restart From the Utilities Disk

Step 1

Shut down or turn off your computer and insert the Utilities disk.

Step 2

Turn it back on. After a while, the computer will have started by using the system software on the Utilities disk. This will take longer than normal, perhaps up to three minutes.

The desktop pattern may change. This is normal, and is a consequence of having started the system with a different startup volume. In this case, we are starting from the Utilities disk.

If you cannot start with the Utilities disk (that is, you do not see your Utilities disk icon on the top right hand side of the screen, above the hard disk, do not proceed. Call 800-SOS-APPL for further assistance.

Run Disk First Aid

Disk First Aid can detect and repair problems with a hard disk's directory structure. Before proceeding with further troubleshooting, it is important to verify that the underlying directory structure is functioning satisfactorily.

Step 1

Click on the Disk First Aid icon in the Utilities window, then select Open from the File menu. You can also double-click on the Disk First Aid icon. The Disk First Aid icon looks like a little ambulance.

Step 2

There are two distinct ways that Disk First Aid might appear.

If your version has a row of disk icons at the top of the window, and a button labeled Verify, click on the hard disk icon within the Disk First Aid window. Click on the Verify button.

If your version has four buttons, marked Drive, Eject, Open, and Cancel, check the name of the volume in the window. If it says Utilities, click the Drive button ONCE. It should then have the name of your hard disk. Click on the Open button. Another window will appear: click on the Start button. Nothing dramatic will happen while it is testing, but within a minute, the Start button will either hilite again, and a message will appear saying everything is fine, or it will report a problem.

Step 3

If Disk First Aid finds a problem, click on the Repair button.

If you receive a note stating that Disk First Aid cannot repair the hard disk, you should back up any irreplaceable data or application software on the hard disk and re-initialize it using the appropriate formatting utility for that drive. For Apple drives, use Apple HD SC Setup, which is also in the Launcher. If you have a Performa 630 series computer, use Internal Drive Format.

Step 4

Select "Quit" from the File menu.

Update Hard Disk Driver

You should update the drivers with the version of Apple HD SC Setup that is on the Utilities disk, following these steps:

Note:

If you have a Performa 630 series computer, ignore this step. Because you have an IDE drive instead of a SCSI drive, you do not have any drivers to update.

Step 1

Click on the HD SC Setup icon in the Launcher.

Step 2

Click on the Update button. If the Update button is not hilited, or you see a message that "Drive Selection Failed," you should verify whether your hard disk has been reformatted with a third-party driver or uses driver-level compression or security software.

Step 3

When you are finished, click Quit to return to the desktop.

Step 4

Select "Restart" from your Special menu. The Utilities disk will eject; push it right back in.

Check Available Hard Disk Space

Be sure you have at least 20 MB available on the hard disk where you plan to install the system software. If there's less than 20 MB available, you'll need to identify and delete some unnecessary files by moving them to the Trash.

Make sure you do not delete anything you do not have a back-up for. If necessary, copy the files onto individual diskettes or other media before moving them to the Trash.

You can identify the amount of hard disk space available by double-clicking on your hard disk icon on the right hand side of the screen. At the top of the hard disk window, you should see a legend which indicates how much space is available. If you do not, select "by Icon" from your View menu.

Once you identify and remove redundant items, choose Empty Trash from the Special menu, and you'll have more disk space available.

Disable the System Folder

You disable the System Folder by moving the Finder and renaming the System Folder to something else.

Step 1

Open your hard disk's icon and locate the System Folder.

Step 2

Open the System Folder and locate the Finder.

Step 3

Move the Finder to the Trash. If you get an error message saying that items can't be moved to the desktop because it is locked, try again: you probably missed the Trash.

Step 4

Move your System suitcase (the icon with a small suitcase) to the Preferences folder. We keep the System suitcase in case there are sounds inside it you may wish to recover later on.

Step 5

Close the System Folder's window and rename the System Folder to "Storage." Do this by first clicking on the closed System Folder icon, then pressing the Return key. This should hilite the words "System Folder," surrounding them with a white rectangle. Whatever you type will replace what is there. You can also hilite "System Folder" by clicking ONCE in the middle of those words, then waiting for the words to hilite.

Step 6

Close any open windows on your desktop.

Restart Your Computer

Choose Restart from the Special menu. This will automatically eject your Utilities disk.

After a few seconds, you should see a picture of a disk with a flashing question mark.

If your Macintosh computer starts up from the hard drive, you have an extra System Folder on the hard disk. You need to locate it (use the "Find" option from the File menu in the Finder) and delete it or disable it as described in the previous section, then restart.

When you get the disk with the flashing question mark on your screen, you can continue.

Restoring The System

Step 1

When you see the disk with a flashing question mark, insert the Utilities disk again. The computer should start up with the system software on the Utilities disk

Step 2

Once the computer has finished starting, double-click on Apple Restore.

Step 3

Read the welcome screen, then click on the Continue button.

Step 4

Respond to any messages you see on the screen. At this point, you will need all of your backup disks.

Step 5

When the system is finished, click the Restart button or press the Return key on your keyboard. You will have then successfully restored your files.

Step 6

After the computer finishes restarting, select Empty Trash. The old Finder will be in there, and we can get rid of it at this point.

Verify Problem Resolution

After performing a clean installation, verify that you resolved the problem before adding anything to the new System Folder. Adding items to the System Folder before resolving your problem defeats the purpose of the clean restore procedure. You may wish to use your computer for a few days before re-introducing any other extensions or fonts.

Install Non-Standard Items

You can now reinstall the non-standard items from the old System Folder (now named "Storage") such as fonts, screen savers, device drivers, and so on. If at all possible, we strongly recommend that you reinstall these items from their original disks, just in case one of the items had become corrupted and contributed to the problem.

If the original disks aren't available, you may move the non-standard items from the Storage folder to the equivalent place in the new System Folder. Be careful not to replace anything that's already in the new System Folder. Only move items that aren't already in the new System Folder.

Step 1

Open each corresponding folder within the System Folder and the Storage folder and then compare the contents.

Step 2

Move an item that isn't already in the new System Folder and its subfolders from the Storage folder and its subfolders.

Step 3

Restart your Macintosh.

It is recommended you proceed slowly when doing this. This is part of the troubleshooting process, so you do not want to move everything back at once: instead, move a few at a time, restart, and test to make sure the original problem has gone away.

If you move the items back and the problem should recur, you probably have an extensions conflict. Done properly, you will know which set of extensions cause the problem, but sometimes intermittent extensions conflicts will require more

troubleshooting.

Final Steps

Verify that your applications are performing normally. If not, refer to the application manual or contact the vendor.

We normally recommend you keep the Storage folder around for a couple of months, or until you're **completely** certain that you do not need any files from it.

When the Macintosh behaves as expected, move the Storage folder to the Trash, and choose Empty Trash from the Special menu.

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Keywords: supt,ksts

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19960215 11:05:19.00

Tech Info Library Article Number: 18240