

Have a happier new year for you and your computer

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If one of your New Year's resolutions was to cultivate a happier computing life, these suggestions are for you. You can take steps now to prepare for the big emergencies.

The big emergencies include complete system failures and hard-disk failures. In either case, you will need a disk with your computer system's information and a basic set of utilities that you will use to diagnose your system's problems. Because the crash will happen at the worst possible time and no one will be able to help you, that disk (called a "boot disk" because, in the old days of computing, programs that were used to start computers were called "bootstrap" programs) will enable you to start your computer and, with the utilities in your operating system, to figure out what is wrong. If you are lucky, you will even be able to fix your computer automatically.

You need to make that boot disk while your system is running - so do it now. The help files in your system will tell you how to do it.

In reality, every time you start your computer, what you have is a small identity crisis on your desk. What happens as your computer cycles through its start up sequence is that it learns what is connected to the system, the relevant specifications of all peripheral equipment in the system that helps you do your work, and how all of those pieces of equipment relate to each other. If the computer does not get an answer to all of those questions, it may stop or continue the sequence while noting the problem with an error message on the screen.

Here is a little secret about two critical pieces of data you may desperately need and you probably do not have. You will need them because there is a critical time in your computer's start up sequence when it needs to know what type of hard disk you have and how big your hard disk is. If your computer does not know what type the hard disk is or how big the hard disk is, the computer may ignore the hard disk completely. Both data are always provided in the start up sequence, either from the hard disk or from that boot disk I just told you to make.

That information is stored on your computer in a special kind of nonvolatile memory called the CMOS (or Complementary Metal-Oxide Semiconductor). The CMOS is powered by a battery - in recent systems, it is a watch battery, and in older systems, it was a special long-life battery. If the battery goes dead, you may lose the CMOS memory and with it, the ability to start your computer from the hard disk.

There is a practical solution to this problem - it is called paper. Make a written record of the settings on your computer system, especially the hard disk type and the size of the hard disk as stated in the CMOS memory. If you are lucky, your computer vendor gave you a piece of paper with those system specifications on it. It is time to find it, blow the dust off of it so you can read it, and leap to the next paragraph. If you do not have that piece of paper, get a blank one and join me in the next paragraph.

You now have your piece of paper (with specifications or blank) and you are in front of your computer. Start your computer or press the "reset" button and watch the screen. There will be a message stating "Press (something) for setup" that (something) is what you press. You will be in the setup program of your computer. Depending on the configuration of your computer, what you want may be on that first screen. But go through all the menus - every one - and write down all the data you see. Do not change anything unless you want to do so and you know the consequences. Chances are that you will not be able to change any setting unless you confirm the change several times. But that is why you are making a written record. Someday, you will thank yourself.