

## DIGITAL DIRECTIONS

# CAUTION: DIGITAL UPGRADE!

Jack & Sue Drafahl

One of the most feared terms in today's digital world is "upgrade." It doesn't matter whether it is a software or hardware change, there is good reason to proceed with caution. In past years, you could take some time to analyze a program or piece of hardware in order to make a cost effective investment decision. Today, you hardly open the box before you get another upgrade notice.

SO, WHEN DO YOU make the decision to upgrade and how do you go about it? There is very little information out there about upgrading, and those who offer solutions are usually the ones selling those upgrades. In the many years that we have worked in digital imaging, we have had our share of upgrades. (Don't panic—we don't have anything to sell you.) We'll share with you some upgrading solutions we have used in our photo business.



There are two very distinct types of upgrades; hardware and software. In many cases you can upgrade one type without impacting the other, but with some of the new systems, one type of upgrade requires upgrading the other.

Just recently we had to upgrade a 90 Pentium to a 233 Pentium just to run one piece of software. It was either that or start moving computers from one workstation to the next. The point is that there is no defined set of

rules for upgrading; you just need to apply common sense.

### Hardware Upgrades

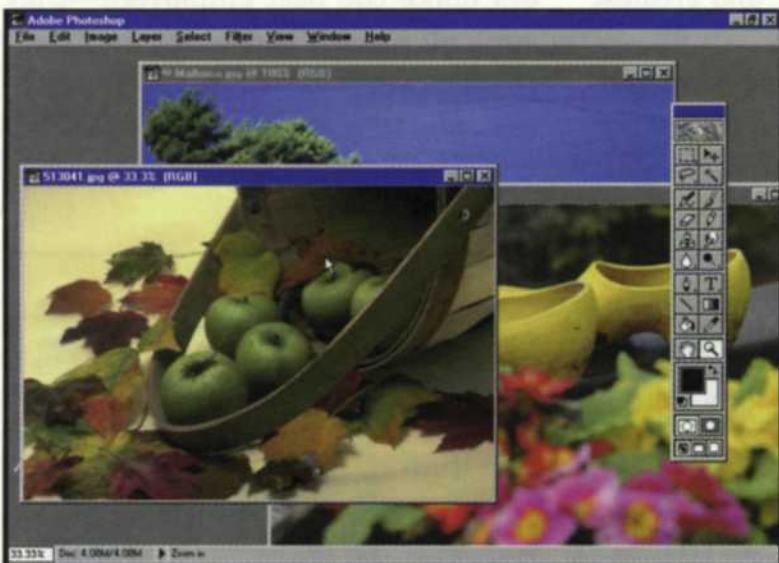
We find that choosing the right time to upgrade hardware is easier than with software. When you find that you don't have enough computers to complete the work, or the computer takes too long to process a job, then you need to upgrade. If you only need



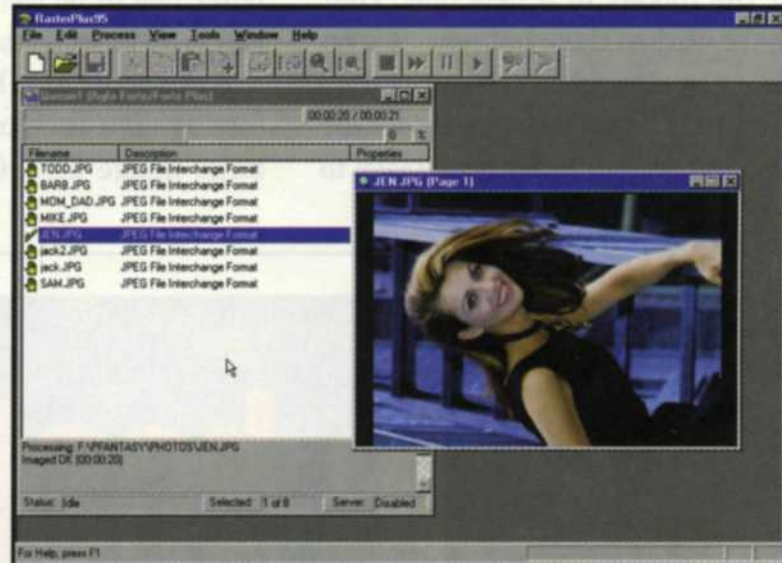
*This computer is dedicated to video editing.*



*This 3D software needs requires fast processing speed for rendering.*



*Use the computer with the most RAM for image editing.*



*Our film recorder is operated from all Windows-based computers*

to upgrade part of a computer system, such as a larger hard disk or more RAM, the decision is pretty easy to make. Just analyze how much you can spend to make your workload more efficient and cost effective.

A bigger and faster hard disk requires less archiving to create storage space and lets you work longer without interruption. A bigger monitor enables you to edit pictures faster. More RAM speeds up your editing time and allows you to work with bigger files.

The key is making sure that your upgrade makes your business more cost effective. Many times lab owners are talked into upgrading a specific item just because everyone else is doing it. They want to stay on the leading edge. Sad to say, we have seen many people

on the leading edge go broke.

If the system is upgradable, you might consider just replacing the processor and/or motherboard. These two items seem to change faster than other parts of a computer, and greatly effect your processing time.

The cost of this change is considerably less, especially if you have a lot of other expensive hardware inside the box. Before you decide to upgrade the processor check the amount of RAM you have in your system. The speed of your system may be slow because it does not have enough RAM to run the programs properly.

If you use the partial method for upgrading, over time you will find yourself collecting spare parts. Don't throw these away. Somewhere down the line

something is going to fail, and one of these junk parts may save the day until you can get a replacement. We have seen failures of hard disks, power supplies, mice and even monitors.

If you decide to upgrade an entire system, the steps are pretty easy. You need to decide what you want the computer to do, how much you have to spend, then find the best buy and go buy it. Don't wait for the next model to come out as there will always be new models. If you wait before you jump in, hoping to find better and better deals, you will quickly be out of business.

We remember buying RAM a couple a years ago at \$40 a MB. Now, you can buy it for as low as \$2. By the time this article comes out, it will probably be less. You can't look back with regrets,

you just have to think about the fact that the purchase enables you to get the job done in a more efficient time frame. As the adage states, "Time is money." Remember that a wise purchase involving a time saving device will provide monetary return.

So you made the investment, now what do you do with the computer you replaced? A few years ago, it was often recommended to sell old computers every two years and re-invest the money in a new one. That may have worked then, but now as soon as you buy a computer, it is out of date and has very little resale value. Our solution is to assign lower level tasks to

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***MOST manufacturers try to make each version backwards compatible, but it always seems that the one task you try in the new version is not compatible.***

those retired computers. Not every computer has to be the latest and greatest just to do menial tasks.

You should not be doing word processing on a computer designed to edit large image files. Our latest greatest

systems work on large image files, while older systems are used for vector programs, e-mail, billing, word processing, slide imprinting, sound recording/editing, and slide show production. We even have an old 8088 laptop computer whose only purpose is to check resolution and LUT tables on our film recorder.

Since each computer's duties are simplified, it works more efficiently. Don't buy a new system and load it down with more tasks than it can handle. Simply delegate the tasks to the older machines.

Best of all, if one machine breaks down, you have a whole lot more to do the job. These computers make the best employees—they work all night if necessary, they don't require wages or workers compensation, and they work quietly, efficiently and all without complaint!

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## Software Upgrades

We find this area of digital imaging the most frustrating. In order for software manufacturers to keep up with their competition, they are constantly upgrading and announcing new versions. Unfortunately for you, in their rush to get the software to the marketplace, most are loaded with bugs.

The software manufacturer's solution is to wait for customers to call technical support and report the bugs. Eventually a maintenance version, or bug fix, is issued shortly before the new and improved version of the software hits the shelves.

Most manufacturers try to make each version backwards compatible, but it always seems that the one task you try in the new version is not compatible. In addition, the changes made to the new version force you to completely re-learn the program. The decision of when to upgrade is a difficult one.

We usually wait until we have a client come in with a job that requires the upgrade. We then use the profit from that job to offset the cost of the upgrade. Using these methods, we have found that there are many software programs we never had to upgrade, either because our customers don't upgrade or the product is not popular anymore.

When we finally do upgrade, we do not upgrade over the top of the older version. Since hard disk space is cheap these days, we install both versions and run both until we find that the older version is no longer necessary. The best part of the Net is that you can log on and check the new features of an upgrade.

Many times you will find reviews that will help you decide if the upgrade is necessary. You can also go into the tech support section and see how many bug fixes are there for downloading. Many times manufacturers will provide free upgrades in between versions that generally improve the quality of the program dramatically.

One of the most unique ways of upgrading in between versions is with a program from Quarterdeck called TuneUp. After you install this program, log onto the Net and start the program.

It will go through your entire computer system looking at version numbers and dates of program files. It then compares it to a list compiled by Quarterdeck, and provides you a list of possible upgrades for every program on your computer. You select the ones you want and it downloads them from the appropriate places on the Net.

Then you run each installation program and it automatically upgrades your older programs.

Here are some additional tips on upgrading software:

1. Version 1.0 of most software is usually loaded with bugs.
2. Version X.2 is generally going to be better than version X.0.
3. Don't believe any program is backwards compatible until you have tried it yourself.
4. If your computer starts acting funny, or other programs seem to fail, the culprit may be the last program you installed.
5. The best technical support seems to be on the Net through e-mail and FAX.
6. Don't upgrade every version. In most cases every other one does the job.
7. Don't install a new software version when you are in a deadline situation, because Murphy's law will surely come into full affect.

The way you upgrade your digital equipment will depend on the size of your business. If you have a small operation, upgrades can have a major impact on your day-to-day operation. Larger businesses can upgrade a couple of work stations, and still get the jobs done even if you encounter problems.

Whatever the size of your business or the reason for upgrading your hardware and software, you should take upgrading very seriously. It may mean the difference between profit and loss.

Contact Quarterdeck at 13160 Mindanao Way, Marina del Rey, CA 90292; 800-683-6696, or check out the Web at [www.quarterdeck.com/](http://www.quarterdeck.com/).

*Jack and Sue Drafaehl own and operate a custom lab in Portland, OR. They are also professional photographers, specializing in underwater photography.*