

## Imaging and Reimaging – The Why and How

When a computer arrives from Dell or Apple, it normally has an operating system (Windows XP or Mac OS X, respectively) and perhaps a few simple applications installed on the hard drive. Years ago, when I placed a new computer on your desk, I would have to install each of our applications, such as Windows Office, Meeting Maker or an anti-virus program, by hand, one at a time. It would take me hours to prepare one computer for delivery.

Fortunately, over the years, programs were developed that allow us to create an image containing all the applications we want on your Bates computer, including general preferences for communicating with our network and other basic tasks. This means that we can take one computer, install the software we run here at Bates, tweak any settings that we want to tweak, and then create an image of that computer that can be easily replicated on any number of other computers.

Wil Quenga is responsible for creating and maintaining Windows images and Paul Benham is responsible for Mac images. We have an image for basic faculty/staff computers as well as unique images for specific labs where specialized software is needed. The images need to be reworked when new hardware is introduced by Dell or Apple and when there are significant changes to software applications but we try to keep these changes to a minimum.

When Amy Hood prepares to deliver a new computer, she connects it to the network (after Jane Frizzell does her magic – trying not to bog you down with technicalities – so that the computer is recognized by the network) and copies the appropriate image to its hard drive. She can have any number of computers imaging at the same time which means she can deliver new computers faster than I ever could. Of course, it may just be that she's better at it than I ever was.

Once the imaging is done, Amy adds any non-standard applications that you may have requested and arranges to deliver the computer and transfer your data files from the old computer's hard drive. Most likely, you will see her physically remove the old hard drive and connect it to your new computer with a USB cable, allowing the data transfer. She will then have you log on to the computer so that she can finish moving files, setting up your network printers and making sure things behave properly.

At that one moment in time, when Amy steps back from the computer and you take control of your new machine, life is about as good as it gets... at least as far as computers go. :-) Performance is crisp, software applications are stable and you have no worries of spyware or viruses. Unfortunately, as many of you know, that doesn't always remain the case. That's where I come in.

As defined by Wikipedia, "reimage is the process of removing all software on a computer and reinstalling everything. A reimage is necessary if your operating system

becomes damaged or corrupted. You may also need to reimage if your system is plagued with spyware problems.”

Again, in times of old, we would spend hours trying to repair corruptions in the operating system or some application or trying to find and remove viral infections. This led to much of the grey hair I now have and was something akin to having root canal without Novocain. But those days are past. Now we save time, yours and mine, and Bates’ money by simply reimaging.

The only difference between Amy’s imaging and my reimaging is that I need to copy your data off to an external drive device before I copy the image to your computer or, as I explained in the last tech tip, everything that is you in that computer would be lost. Imaging and reimaging completely wipes the hard drive of all existing data. So there is a moment of tension in every reimage, just after I run through a mental checklist, confirming that I’ve gotten all the files I need to get, when I click the mouse button and begin the irreversible process. If I’ve missed any of your files, they’re gone for good... irretrievably lost... as if they never existed. But, hey, no pressure!

This is why I’m really looking forward to full implementation of file synchronization here at Bates. Files that are stored on the network, and backed up regularly, are safe from my mistakes.

Reimaging serves a couple of other purposes. Over time, your system’s performance will begin to deteriorate. There are several reasons for this and none are an indication that you’ve done anything wrong. It’s just the nature of the beast. I will hear people attribute sluggish performance to the age of their computer but the reality is computers don’t get old like people do. Yes, there is some aging due to the effect of heat on the electronic components but it’s nothing you’d ever notice. A four-year old computer may not be as fast as today’s computer but it should be as fast as it was when it was new.

Reimaging can restore the performance of an older computer that otherwise appears to be working fine. If your computer takes five or ten minutes to start up in the morning, and you don’t have ten different programs automatically launching, you might be due for a reimage.

Finally, if you’ve had your computer for several years, you might very well be running an older version of software and not even know it. That isn’t necessarily a bad thing (the older I get, the more I like old, tried and true things) but it might become an issue for you. Reimaging gets you current versions of all software.

That’s a quick overview of imaging. I’ll try to make the next tech tip shorter and sweeter. Now go and enjoy these lazy, hazy, crazy days of summer!