

## Two Monitors Are Better Than One

By Judge Herbert B. Dixon Jr.

Just when nearly everyone you know is finally using a computer, someone comes up with the idea of using two monitors, instead of one, while on the computer. Can anything good come of this? Is this merely another example of one-upmanship among geeks? Yes, there is something good about this idea. Besides, you were already doing the paper equivalent of dual monitors before you started using a computer. Remember in grade school when you figured out how to read from one document while you wrote notes on a separate document—and how you still do that today?

There are many practical reasons for having two monitors. According to research cited by Microsoft:

Give someone a second monitor, let them use it for [a] while, and then try to take it away. It



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just isn't going to happen. They'll never go back to a mono display. Researchers in the Visualization and Interaction for Business and Entertainment group (VIBE) . . . found that increasing a computer user's display space made it easier for them to complete their tasks.<sup>1</sup>

A study performed at the University of Utah concluded that multiple monitor arrays should be standard in the workplace.<sup>2</sup> The study found that persons using multiple monitors scored significantly higher in every productivity measure and that multi-monitor users got on task quicker, did the work faster, and got more work done with fewer errors compared to persons using a single monitor.<sup>3</sup>

If you are not using Windows XP or Vista, you can stop reading now. This article is not for you because your system is so old that successfully configuring two monitors requires more work than most people with systems that old want to do. Go buy a new computer and then come back and read this article later. If you have a Mac, I am told that the process is easy—something about using System Preferences. However, I do not have a Mac background to assist you in this process.

I finally got around to setting up two monitors on my home system because I had a flat screen monitor sitting in a box for over two years, and I was doing nothing with it. I purchased the monitor at a terrific Black Friday sale but never got around to using it.

### Use of Multiple Monitors Is Not a New Phenomenon

Based on my anecdotal research conducted by asking around, some of the biggest techies among us have been

experimenting with a second computer monitor for around 10 years. These techies say use of dual monitors increases productivity. Some studies have supported that conclusion. Accordingly, I set up my second monitor at home. After experiencing the benefits on my own, I told my adult son about the advantages of a second monitor. My son, a professional engineer with a major defense-aerospace-government contractor, laughed. Then he responded: "Dad, I use three monitors with my computer, and a few of my colleagues use four." In any event, my son agreed that there are major benefits to using multiple computer monitors.<sup>4</sup>

### Some Benefits of Using Two Monitors

After I set up my second monitor, I manipulated the mouse and was delighted when the cursor moved across the first monitor immediately to the second. This was a great toy, but was it of any real use? Yes! (However, I will not try to rate the several uses of a second monitor that I discuss below, because the usefulness varies depending on the functions being performed.)

Some two-monitor users like to keep a window open showing their e-mail. In this way, the user can constantly monitor e-mail without doing the cumbersome alt-tab (or minimize/maximize) process to switch back and forth from, for example, their word processing or spreadsheet application to e-mail. The e-mail screen can even be a reduced screen so that you can work with other open screens on the same monitor while working with a separate application on the other monitor.

Another favorite use for multiple monitors involves performing numerical calculations from numbers that are obtained from several different spreadsheets. The user can have multiple spreadsheets opened on reduced screens across two monitors, and then he or she can copy

**THIS WAS A GREAT TOY, BUT WAS IT OF ANY REAL USE? YES!**

the appropriate numbers from the respective spreadsheets and paste them into the calculator, all without ever having to alt-tab from one document to another!

Also, consider that you are copying numbers or paragraphs from several source documents to a new document you are creating. You can scroll your source documents for the specific information you are seeking and copy and paste that information into the new document that stays open in front of you. As a result, your new document never disappears during the alt-tab process, which might be used just a few times during the creation of your new document or several hundred times if you are cutting and pasting small segments from the source documents. Your new document remains open in front of you the entire time. Not bad for a lawyer writing a brief or a judge writing a decision that relies on previous work. If you need another source document while you are doing all this copying and pasting, you can easily open that document to a reduced screen somewhere on one of the two monitors. Now I see how my son became a three-monitor man.

Another use of dual monitors is having an electronic user guide or tutorial open on one monitor and the new software that you are learning open on the other. Once again, the need to alt-tab from one program to the other is eliminated. The possibilities are endless.

### Setting up Two Monitors

If you use a desktop PC, hopefully your computer already has two video ports (connections to which you attach the monitors). Otherwise, to add the second monitor, you must install an additional video card or replace your current video card with one

having two video ports. If you use a laptop, most likely you have the connection for an external monitor as your second monitor. If your laptop does not have a connection

for an external monitor, technology exists to solve your problem.

Try doing an Internet search for products to enable you to add a second computer monitor.

You will find plenty of products to help you. Or even better, take the hint that it is time to buy a new laptop because you will find a connection for an external monitor on all the new models.

Once your second monitor is attached and its power is on, the process is slightly different for Windows XP and Vista.

For XP, right-click your mouse pointer on the Windows desktop (on the blank desktop, not on an icon on your desktop), and left-click properties. In the resulting DISPLAY PROPERTIES window,<sup>5</sup> left-click the SETTINGS tab. If you see little windows labeled “1” and “2,” you are on your way. Click the window labeled “2” and then check the box EXTEND MY DESKTOP ONTO THIS MONITOR. Next, left-click APPLY or OK, and you’re there.

For Vista, right-click your mouse pointer on the Windows desktop (on the blank desktop, not on an icon on your desktop), left-click PERSONALIZE, and then left-click DISPLAY SETTINGS.<sup>6</sup> As with XP, you should now see little windows labeled “1” and “2.” Click the window labeled “2,” check the box EXTEND MY DESKTOP ONTO THIS MONITOR, and then left-click APPLY or OK.

When you reach this point with XP or Vista, watch in amazement as the movement of your mouse causes the cursor to move seamlessly from one screen to the other. Going left to right, as soon as the cursor disappears from the first screen, it appears on the second. Wow! Magic!

### Moving a Program Between Monitors

Your programs will initially open on the default monitor. If you reduce the screen size of the open program (i.e., left-clicking the RESTORE DOWN double box

next to the “X” at the top right of the screen), you may then move the program over to the second screen by left-clicking the top of the program screen and dragging it across to the second monitor. If you exit the program while it is on the second monitor, the program screen will appear on the second monitor when you next open the program. This could be a problem if the second monitor’s power is off because the program will open on the second monitor and you will not see it. However, there are a few solutions to this problem. One solution is to turn on the power to the second monitor so that you can view the open program. Or you can move the program back to the first monitor if you follow the same steps that you initially used to move the program from the first to the second monitor. Or lastly (and this is tricky if the second monitor’s power is off), right-click the open program box on the taskbar on the bottom of your first monitor and then click MOVE (if MOVE is not highlighted, click RESTORE, again right-click the program icon on the taskbar, and then click MOVE). Now left-click the mouse while holding it steady and drag the open program window from the second monitor to the first monitor. I suggest that you first try this with the second monitor’s power on so that you can see what is happening as you go through this process.

### Now, Enjoy Your Second Monitor

The “Moving a Program Between Monitors” section above is probably the most tedious part of this article because it reads like a computer operating manual. But, now that you have made it this far, you are ready to enjoy the benefits of a second monitor. You will impress your friends, increase your productivity, and perhaps influence a few people to try a second monitor themselves.

### A Final Tip: Bigger Is Better

Consider buying larger monitors that rotate from landscape (horizontal) to portrait (vertical). Rotating a monitor to portrait will allow you to see an entire

page—it's the same as looking at a piece of paper. Many folks prefer to print rather than review a document on screen because they find it easier to review a document while looking at the entire page, rather than a mere portion. However, large monitors can provide this same bird's-eye view and may enable you to decrease the amount of printing you do and save paper and other resources. ■

## Endnotes

1. Suzanne Ross, *Two Screens Are Better Than One*, <http://research.microsoft.com/en-us/news/features/vibe.aspx> (last visited Oct. 6, 2009).

2. Janet Colvin, Nancy Tobler, and James A. Anderson, *Productivity and Multi-Screen Computer Displays*, 2 ROCKY MOUNTAIN COMM'N REVIEW, 31 (2004), available at [http://www.humis.utah.edu/humis/docs/organization\\_951\\_1147817063.pdf](http://www.humis.utah.edu/humis/docs/organization_951_1147817063.pdf).

3. Note that the study was supported by NEC, a company that makes monitors, desktop LCD displays, and professional-grade large-screen LCD and plasma displays. See Press Release, NEC, *Increasing Monitor Size Translates to Higher Worker Productivity*, NEC Display/University of Utah Study Finds (Mar. 13, 2008), available at [http://www.businesswire.com/portal/site/google/?ndmViewId=news\\_view&newsId=20080313005017&newsLang=en](http://www.businesswire.com/portal/site/google/?ndmViewId=news_view&newsId=20080313005017&newsLang=en).

4. To see examples of multiple monitor configurations consisting of 9, 12, 24, 30, and even 50 monitors, see TheHottestGadgets.com, *15 Dazzling Multi-Monitor Setups You Wish You Were Viewing This With [Pics]*, <http://thehottestgadgets.com/2008/06/15-dazzling-multi-monitor-setups-00848> (last visited Oct. 6, 2009).

5. Another way to reach the Display Properties window in Windows XP is by going to Start\Settings\Control Panel\Display.

6. Another way to reach the Display Settings in Windows Vista is by going to Start\Control Panel\Appearance and Personalization\Personalization and then clicking on the Display Settings tab.