Improving and Securing Your Home Printer Setup

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Last month we discussed the importance of keeping your router secure and updated. If you haven’t already done so, consider this a reminder: the router is the heart of your home network and it needs to be secured.

You can find the article on our website at TheMetropolitan.Metrostate.edu.

This month we’re talking about printers. If you’ve got a wireless printer, read on. If not, skip to the end for a few general tips.

The problem with most wireless printers is that they broadcast publicly. Many universities force students to disable the wireless features of printers in their dorms, because they crowd the network and open security holes. We may not have dorms, but these concerns still exist at home.

**Why do I care if my printer is open?**

Say your printer is broadcasting its own network, and that network is visible to anyone in range. Now suppose your neighbor has an HP printer too, and they accidentally click yours. Just like that, your paper and ink are being wasted. Flip it around and imagine accidentally printing sensitive documents to your neighbor’s printer. Good luck guessing which neighbor!

There is also the possibility of more serious security issues. In October, the Singapore University of Technology and Design, in collaboration with MIT, demonstrated an attack on network printers using a smartphone. The phone detected a printer, copied its settings and pretended to be that printer, stealing print jobs sent over the network. They repeated the experiment with a smartphone attached to a small drone. This setup allowed for remote attacks on targets several floors up in a secure office complex.

To be clear, there is a difference between wireless printers and network printers. Network printers are generally used in business settings and plug directly into the router, making it a more attractive target. As a home user, your risk is low, but some neighborhood joker could queue up a big print job while you’re not home, leaving a mess for you when you get back.

**How can I secure my printer?**

The good news: if your router is secure, your printer is probably fine. Most home wireless printer models connect to your computer via your router, minimizing risk, but it’s still worth taking a few steps to be safe.

First, update it. Any printer connecting to your computer is probably downloading updates automatically, but it doesn’t hurt to check. If it’s got a screen, tap through the menus. It may be hidden. Mine turned up under a tab labeled “Web Services,” instead of the Wi-Fi tab where I first looked. If your printer doesn't have a screen, open the Start menu on your PC and type in your printer’s brand and model. It’s probably got an app installed already. If you have a Mac, check the printer manual. Apple makes sending print jobs super easy, but configuring printer network settings from your computer is more difficult.

Second, it’s worth asking: can you just plug in? If your printer sits at the same desk as your PC, turning off the wireless features and using a cord is simpler and more secure.

If cords aren’t an option, do your best to ensure the wireless connection only passes through your own secure router. Having it broadcast openly just creates a hole in your home network security.

**What else should I know?**

Beyond security, here are a couple things many people don’t know about printing:

Have you ever printed a document out, only to scan it and save as PDF? Don’t waste the paper. Many programs, including Word and Google Chrome, let you save documents to PDF directly. Your student email hides this option in a menu. Try it next time someone sends an attachment!

What about printing from your phone or when you’re away from home? Check out remote printing. My home printer has its own email address, so if I attach a document, it will be waiting when I get home. You can also try a service like Google Cloud Print.

There are plenty of ways to improve your printer experience with a little research. Take some time now to save yourself a headache (and an ink cartridge) later!