

Medical Office Systems, LLC

June 2015, Issue #3

More Apple / Mac / OS-X Tricks & Tips

Printing:

One of the most fundamental and simultaneously frustrating things about computers is printing. Think about this: we usually don't think about printing because it mostly works. But when it doesn't work, things go critical quickly. Case in point: if you can't print a simple boarding pass or concert ticket off a website, it turns the everyday mundane into nightmare on Elm street. (that's where I live.)

Now add in a mixed network (Mac and Windows) for some real fun.

So now you know what I have run into in my own little home network with my Mac experiment. It was mostly a breeze to set up my printers on the Mac. I say mostly because I had trouble in two areas: obscure print drivers and USB printers.

Obscure Print Drivers: OS-X (Mac) comes with a fairly large built-in library of print drivers and most install quickly. But, just like the Windows world, if your printer is older than 5 years, or from a lesser-known manufacturer, you may have some trouble. If this is the case, do this: 1) plug it in with a USB cable. 2) Start the Software update from the Apple menu. The update will go to Apple website, find a new batch of drivers, and download it. 3) Re-open the "Printers" icon from System Preferences, click the "+" to add a printer. See Sidebar #1 for more info.

Shared USB Printers: Oh did I have fun with this one. I have an old Seiko Label Printer. It only has a USB interface, and I had it shared off my home Windows server. **My Mac Mini flat-out refused to connect to it.** After some web searching I found that OS-X is incapable of connecting to a shared USB printer hosted on a Windows computer. So I reversed the situation: I plugged it into the Mac Mini. Whoops, **now my Windows machines would not connect to it.** The reason for this is that Apple uses a network protocol named "Bonjour" to connect to devices (like printers) over a wired or wireless network.

The answer for my situation was to download the Windows version of Bonjour from the Apple website, and install it onto my Windows computers. Now they could "see" and "talk" to the Mac Mini and print to the label printer. I was happy I could print again from all my computers, but there is a price to be paid... your network may slow down slightly. See the Sidebar#2.

-John Becker

Sidebar 1: Print Drivers

For those who may be unaware, Print Drivers are little bits of software that tell your computer how to talk to whatever printer you have connected.

When Apple, Microsoft and other manufacturers publish their OS's, they do their best to include as many print drivers as they can, but they can't get them all. This depends largely upon the printer manufacturers to supply the driver code, and some of them can be just plain lazy or possibly deliberate in not supplying the proper drivers.

Sidebar 2: Bonjour

Apple often takes the road less traveled: the worldwide standard for printing over a network is the LPR/RAW protocol. Does Apple use that? **No, Apple uses Bonjour.** Why Apple chose to create Bonjour is a mystery to me, and I don't think it was a good choice. **Here's why:** Bonjour is a proprietary protocol designed to make network connections easy to set up. But all that extra code uses up a lot of bandwidth, slowing down network performance. [Here is a link to an article with more detail about Bonjour.](#)

Reprint permission granted, provided the following appears on each page:
Copyright © 2015, Medical Office Systems, L.L.C. - www.medofficesystems.com

Phone: 630-852-1736

john@medofficesystems.com

Fax: 630-214-4565

