Setting a Network up at Home

Thursday, February 22, 2018

The modern household generally has several computers and other devices that could potentially communicate with each other. A network allows them to engage in that communication, whether it's as simple as making your printer available for all devices, as complex as running your own Local Area Network (LAN), or something in between like simply sending files from one machine to another.

In this month's tech program, we'll see how to set a network up. This includes:

- The details of getting WiFi properly installed and tweaked,

- Connecting a printer to the network (even if it isn't network-ready out of the box), and

- Getting devices running different operating systems to talk to each other.[1]

Network printing

<https://www.howtogeek.com/191323/how-to-share-printers-between-windows-mac-and-linux-pcs-on-a-network/>

Using a WiFi enabled printer

A WiFi enabled printer connects to your network in more or less the same way as any other device. Your computers and mobile devices should then be able to find it.

Using a printer connected by ethernet

Many laser printers can connect to your network by physically running an ethernet cable from the printer to your router. The printer should then be findable.

Using a (relatively) stationary computer as a print server

Mac as server

To let Windows machines print from it:

- Download & install Bonjour Print Services on each Windows machine

- Run Bonjour Wizard to create the appropriate Control Panel item (choose appropriate driver for your printer)

---

[1] Or, How can I get my Windows, macOS, Android, iOS, and Linux kids to stop fighting and remember that they love each other?

- You can then print as normal. If this is your primary means of printing, make it the default.

Windows machine as print server

Windows 10

Share printer from its driver in the Printers and Devices control panel.

Earlier versions of Windows

Homegroup control panel

From Android

Google Cloud Print allows you to print to printers you've authorized. This should work for printing to a given printer regardless of wherever you are physically. See <https://www.androidcentral.com/how-print-your-android-phone-or-tablet> for information.

From iOS

- Print n Share
  <https://itunes.apple.com/gb/app/print-n-share/id301656026>
  £6.99

  App for iOS devices that enables printing on network or WiFi printers or on any printer being shared from a computer on your network.

- Printopia
  <https://www.decisivetactics.com/products/printopia/>
  $19.99

  handyPrint
  <http://www.netputing.com/applications/handyprint-v5/>
  $5.00 minimum donation

  These are applications for a Mac that you're using to share a printer with the network. They then allow iOS devices to print from that printer.

WiFi

Interdevice communication & file sharing

https://support.apple.com/en-us/HT208209

https://www.howtogeek.com/191116/how-to-share-files-between-windows-mac-and-linux-pcs-on-a-network/

Apps

Feem

- Sharing files

- Chat

- WiFi hotspot

- Must be on same WiFi network

- iOS, Android, Windows, Linux, macOS

PushBullet

- Sharing files, links

- Chat

- Send SMS messages to computer (from a smartphone)

- Can be anywhere

- Plays nicely with the OS's native sharing (at least on Android)

- iOS, Android, Windows

- Other OSes via extensions for Firefox, Chrome, Opera

Resources

- Agarwal, Amit. (2014-08-01). How to share files between mobile phones and computers. Digital inspiration: tech à la carte. <https://www.labnol.org/internet/share-files-between-phone-and-computer/28018/>

Has a chart showing which apps work between any 2 OSes out of the set of Windows, macOS, Android, & iOS.

- Hunt, Cale. (2016-06-23). How to print from your Android phone or tablet. *AndroidCentral*. <https://www.androidcentral.com/how-print-your-android-phone-or-tablet>

- Moran, Joseph. (2013-01-31). How to Print from an iPhone, iPad or Android Device. Small Business Computing. <https://www.smallbusinesscomputing.com/News/Mobile/how-to-print-from-an-iphone-ipad-or-android-device.html>

- Wahab, Fatima. (2015-11-30). How to share a USB printer over your network in Windows 10. *Addictive tips*. <https://www.addictivetips.com/windows-tips/how-to-share-a-usb-printer-over-your-network-in-windows-10/>

- White, Sarah K. (2017-02-13). 4 apps to share iOS, Android and Windows files. *CIO*. <https://www.cio.com/article/3168902/mobile-apps/4-apps-to-share-ios-android-and-windows-files.html>