

Bonus Chapter

Communicating with That Bluetooth Guy

In This Chapter

- * Using Bluetooth for wireless connections
 - * Adding wireless keyboards and mice
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Time to talk cordless. Today's MacBooks are already pretty doggone inclusive, since everything that most other computers string together with cords has been integrated into your laptop's case: monitor, speakers, video camera, pointing device and keyboard. For most of us, this "all-in-one" aspect introduces an entirely new realm of possibilities . . . which in turn result in more questions. Exactly how do other wireless devices communicate with your MacBook? Can you really share the data on your laptop with your smartphone, or use a wireless printer with your favorite road warrior?

In this chapter, I describe to you what's cooking in the world of wireless devices. I don't delve into wireless Ethernet networking between your MacBook and other computers, because I handle that in your book. However, I *do* cover the wireless Bluetooth connections that you can make with devices other than computers.

Bluetooth: What a Silly Name for Such Cool Technology

Originally, wireless computer connections were limited to IR (infrared) and 802.11b (the original Wi-Fi specification for wireless Ethernet networks). These connection types were fine; after all, what were you gonna connect to your MacBook besides other computers? Ah, but progress marches on.

A little Danish history

Enter the explosion in popularity of modern smartphones and tablets. In 1998, a consortium of big-name device and computer laptop manufacturers decided that their products needed a method of communicating with each other. This new wireless standard needed to be inexpensive and consume as little battery power as possible, so designers decided to keep the operational distance limited to a maximum of about 30 feet. Plus, the idea was to keep this new wireless system as hassle free as possible. Everyone agreed that you should simply be able to walk within range of another device, and the two would link up immediately and automatically. Thus, *Bluetooth* was born!

Bluetooth has been incorporated into a range of peripherals and devices, including

- * Smartphones
- * Tablet computers like the iPad
- * Laptops and many desktops
- * Wireless computer peripherals, such as keyboards and mice
- * Printers
- * Headphones

Is your MacBook Bluetooth-ready?

Weird name aside, you still need to know whether your Mac is ready for a Bluetooth connection. That's an easy one to answer: all MacBooks that can run macOS Catalina come with internal Bluetooth hardware, and that hardware is compatible with the Bluetooth offered by your handheld devices, your smartphone, and peripherals like Bluetooth printers, headphones, and speaker systems.

Catalina and Bluetooth, together forever

You'd expect a modern, high-tech operating system like macOS to come with Bluetooth drivers. You'd be right, but Apple goes a step further: Catalina comes with a System Preferences screen and a utility application to help you get your Mac connected with the Bluetooth devices that are likely hanging out in your coat pockets.

Click the Apple menu and click System Preferences, then click the Bluetooth icon. From the Bluetooth pane, you can

- * **Turn Bluetooth hardware on or off.** Click the Turn Bluetooth On/Off button to enable or disable your Bluetooth hardware.

<Tip>

I recommend that you enable the Show Bluetooth in Menu Bar check box. Since you're using a MacBook, the Bluetooth menu lets you conserve battery power by turning off your Bluetooth hardware until you need it. You can also conveniently toggle your MacBook's discovery status as well as set up a device or send and browse files. (You can even see what devices are connected to your MacBook from the Bluetooth menu bar icon. 'Nuff said.)

- * **Connect or disconnect Bluetooth devices.** All recognized Bluetooth devices in range appear in the list, and you can connect or disconnect them individually. Right-click on the device you want to add to your list of recognized Bluetooth devices and click Connect, then follow the onscreen prompt to enter the code number that identifies your MacBook to the device.

<Remember>

Make sure that your Bluetooth device is in range and *discoverable* (available for connections with other Bluetooth devices) before you open the Bluetooth pane in System Preferences. Check your user manual to determine how to set your Bluetooth device as discoverable, and make sure that you're about 20 feet (or fewer) away from your Mac.

The other Bluetooth resource that you can use is the stand-alone application *Bluetooth File Exchange*. (Yes, you can call it *BFE* if you like. I do whenever possible.) You have to launch BFE the old-fashioned way; click the Spotlight icon in the Finder menu bar, then type in Bluetooth and double-click on the Bluetooth File Exchange item in the results list. When the application is finished loading, you see a file selection dialog, where you choose the file(s) you want to send to the connected Bluetooth device! You can also elect to browse the files on a networked Bluetooth device so that you can see what the owner of that device is offering.

You can also set up your defaults for file exchanges from the Sharing pane in System Preferences. Click the Sharing icon and then select the Bluetooth Sharing entry to display the settings. Here, you can control what Catalina does when you receive files or data with BFE. For instance, with these settings, macOS can

- * Prompt you for permission to receive each file or data item
- * Accept all files and data items without restriction or prompting
- * Save all incoming files and items to the folder that you specify
- * Offer only the files and items in the folder that you specify when other Bluetooth items browse your Mac

Personally, I'm all for the secure choices in Catalina for file exchanges:

- * I want to know when someone's sending me something.
- * I want anything I receive to be saved in my Downloads folder.
- * If I turn on File Transfer, I want to allow others to browse the contents of my Public folder.

However, feel free to adjust, enable, and disable to your heart's content.

Adding Wireless Keyboards and Mice to Your MacBook

Of course, any of the current crop of Mac laptops arrives at your doorstep in a fully wireless configuration. Apple throws in an internal Bluetooth adapter and an internal AirPort Extreme wireless card. Everything's already included for you. Therefore, you can indeed work keyboard and mouse magic from across the room from your MacBook, using your laptop's keyboard and trackpad. But what if you just want a full-size keyboard and external mouse to use when you're working with your MacBook?

A number of wireless Bluetooth keyboard/mouse packages are on the market, and any one of 'em should work fine with your MacBook. In fact, you can buy Apple's wireless Bluetooth Magic Keyboard and Magic Mouse 2 separately, for a total of about \$180. Folks that prefer a trackpad can opt for the Magic Trackpad 2 for a pointing device - it runs about \$130. Other offerings from Logitech and your old buddy Microsoft run about the same amount.

When shopping for a Bluetooth keyboard/mouse desktop, keep these facts in mind:

- * **Some keyboards are created more than equal.** Many of today's third-party keyboards are encrusted with extra function buttons that do everything from opening your e-mail application to searching your kitchen cabinets for another can of spray cheese.

<Tip>

I like these programmable function keys - they can bring up your favorite applications with a single keystroke while you're relaxing 20 feet away - so look for the keyboard that offers the most programmable keys in your price range.

- * **Rodents crave energy.** Does the wireless mouse come with its own recharging stand? If so, that's a big plus. Depending on how much you

use your laptop, a mouse that runs on standard batteries can go through a set in as little as a month's time! (Not surprisingly, many computer owners use rechargeable batteries in their wireless mice.) In fact, some wireless mice include an on/off switch to help conserve battery power.

- * **Wireless doesn't always mean Bluetooth.** Just because a keyboard or mouse is "wireless" doesn't automatically make it a Bluetooth device. Plenty of wireless RF (radio frequency) devices are out there, too. These toys need their own transmitters, which are usually USB-based as well, so things can get confusing. Therefore, read the box or technical specifications carefully to make sure that you're buying Bluetooth.
- * **Bluetooth stuff isn't self-cleaning.** Sure, your new wireless keyboard and pointing device can hang out with you on the sofa, but that doesn't mean they're happy sharing your nacho puffs and grape soda. Look for an optical mouse like the Magic Mouse 2 (which doesn't use a ball) or a Magic Trackpad 2, and check whether a prospective keyboard can be easily cleaned and maintained before you buy it.

Most Bluetooth devices are connected and controlled through the Bluetooth pane in System Preferences. However, wireless keyboards, mice and trackpads are a special case because they're also configured through the Keyboard, Trackpad, and Mouse panes in System Preferences. (You can even add a new wireless device from all three panes. Geez, those Apple designers give you a dozen roads to the same spot on the map, don't they?)

The Magic of Wireless Printing

To your MacBook, a wireless Bluetooth printer is just another Bluetooth connection - but to you, it's the very definition of convenience, especially if desk space next to your laptop is limited. Just set that paper-producing puppy up anywhere in the 30-40 foot range, plug it in, set up the printer in Catalina, and let 'er rip. Note, however, that a Bluetooth connection between your printer and your MacBook does not automatically guarantee that you can share that printer with others across your home Ethernet network (this capability depends on the drivers supplied by the printer manufacturer).

<Tip>

Not all printer manufacturers produce Bluetooth models that communicate properly with your MacBook. Make sure that the Bluetooth printer you buy supports HCRP. (Another jawbreaker acronym. This time it stands for *Hardcopy Cable Replacement Profile*.) Naturally, if the printer is advertised as working with macOS, it should be fine as well.

You have two options when installing a Bluetooth printer:

- * Whenever possible, use the printer manufacturer's macOS software. A printer might require a driver that a typical Bluetooth device doesn't need.
- * You can usually successfully set up a printer via the Bluetooth Setup Assistant, which you can run from the Bluetooth pane of System Preferences (as I discuss earlier in the chapter):
 1. *Make sure your printer is set as discoverable.*

Check your printer manual to determine how to switch your printer to discoverable mode. This mode allows other Bluetooth devices within range (including your MacBook) to recognize and make a connection to your printer.
 2. *Right-click on the printer in the list of discovered Bluetooth devices.*
 3. *Click the Connect menu item.*
 4. *Follow the onscreen instructions.*

Luckily, after you successfully set up a Bluetooth printer, you can just press Command+P to open the Print dialog box and choose that printer from the Printer pop-up menu. No big whoop . . . and that's the way it *should* be.