

## Bonus Chapter

# Communicating with That Bluetooth Guy

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### *In This Chapter*

- \* Using Bluetooth for wireless connections
  - \* Adding wireless keyboards and mice
  - \* Printing over a Bluetooth wireless connection
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Time to talk cordless. Today's iMac and MacBook computers are already pretty doggone inclusive, since everything that most other computers string together with cords has been integrated into your Mac's case: monitor, speakers and video camera (for the iMac), as well as pointing device and keyboard (for the MacBook). For most of us, this introduces an entirely new realm of possibilities . . . and that results in more questions. Exactly how do other wireless devices communicate with your Mac? Can you really share the data on your laptop with your cellphone, or use a wireless printer with your iMac?

In this chapter, I describe to you what's cooking in the world of wireless devices. I won't delve into wireless Ethernet networking between your Mac and other computers. 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). This was fine; after all, what were you gonna connect to your Mac besides other computers? Ah, but progress marches on.

## ***A little Danish history***

Enter the explosion in popularity of modern cellphones and personal digital assistants (PDAs). In 1998, a consortium of big-name cellphone, PDA, 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

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

## ***Is your Mac 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: At the time of this writing, all iMacs and MacBooks come with internal Bluetooth hardware. If you're using an older Mac without Bluetooth built in, though, you're currently out of the Bluetooth loop.

However, you don't need to pitch your faithful silicon companion if it doesn't yet talk to the "In" crowd! You can add Bluetooth capability to your computer with a simple USB Bluetooth adapter. The USB Bluetooth adapter from Belkin ([www.belkin.com](http://www.belkin.com)) sells online for about \$30. It includes automatic data encryption, which is necessary only if there's a hacker within about 30 to 60 feet of your computer (although more security is always better in my book). The adapter can link with up to seven other Bluetooth devices simultaneously. (Come to think of it, there were a lot of people within 30 feet of my MacBook Pro during my last LAN party bash. I guess this stuff really *is* important!)

## ***Lion and Bluetooth, together forever***

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

Click the System Preferences icon in the Dock. From the Bluetooth pane, you can

- \* **Set up new Bluetooth devices:** Click the Set Up New Device button (which bears a plus sign) to run the Bluetooth Setup Assistant, which configures Bluetooth devices for use with Lion.

Follow the device-specific on-screen instructions to set up a number of common Bluetooth toys (including keyboards, mice, cellphones, and printers). Setup Assistant searches for your Bluetooth device and makes sure that it's ready to party with your Mac.

<Tip>

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

<Tip>

I recommend that you select the Show Bluetooth Status in the Menu Bar check box. The Bluetooth menu lets you conserve power by turning off your Bluetooth hardware until you need it. You can also conveniently toggle your laptop'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 Mac with the click of a menu icon. 'Nuff said.)

- \* **Configure Bluetooth connections:** Click the Advanced button to create, remove, enable, or disable your Bluetooth connections, using them as virtual serial ports (for the simple transfer of data) or virtual modems (for bidirectional transfers, such as using an Internet connection through a Bluetooth cellphone).

These openings to the outside world are presented as individual connections in the Serial Port list, and you can toggle them on and off individually. You can also specify whether a Bluetooth port is encrypted.

<Tip>

If you know you won't be using Bluetooth devices while you're on the road, disabling a Bluetooth service on a laptop can help conserve battery power.

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 Launchpad icon in the Dock and click the Utilities folder icon. Much like a traditional FTP (File Transfer Protocol) application, clicking the Bluetooth File Exchange icon in Launchpad presents you with 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 check box. Now you can control what Lion does when you receive files or Personal Information Manager (PIM) data with BFE. For instance, with these settings, Lion can

- \* Prompt you for permission to receive each file or PIM item.
- \* Accept all files and PIM 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 defaults in Lion 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 Mac***

The current crop of Mac laptops arrive at your doorstep in a fully wireless configuration (and today's iMac can be configured as fully wireless as well). 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 or iMac, using Apple's wireless keyboard and mouse. (Or perhaps you just want a full-size keyboard and external mouse to use when you're working from your home or office on your MacBook.)

A number of wireless Bluetooth keyboard/mouse packages are on the market, and any one of 'em should work fine with your Mac. In fact, you can buy Apple's wireless Bluetooth keyboard and Magic Mouse separately, for a total of about \$150. Other offerings from Logitech and our 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 mouse 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 (which doesn't use a ball), and check whether a prospective keyboard can be easily cleaned and maintained before you buy it.

Most Bluetooth devices are controlled through the Bluetooth pane in System Preferences. However, wireless keyboards and mice are a special case because they're also configured through the Keyboard, Trackpad & Mouse panes. (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 Mac, a wireless Bluetooth printer is just another Bluetooth connection - but to you, it's the very definition of convenience, especially if desk space is limited next to your Mac. Just set that paper-producing puppy up anywhere in the 30-40 foot range, plug it in, set up the printer in Lion, and let 'er rip.

### **<Tip>**

Not all printer manufacturers produce Bluetooth models that communicate properly with your Mac. Make sure that the Bluetooth printer you buy supports HCRP. (Another jawbreaker acronym. This time it stands for *Hardcopy Cable Replacement Protocol*.)

You have two options when installing a Bluetooth printer:

- \* Whenever possible, use the printer manufacturer's 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):

*a. Make sure that 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 laptop) to recognize and make a connection to your printer.

*b. Click the Set Up New Device button.*

*c. Choose the printer after it's discovered.*

*d. Follow the on-screen 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.