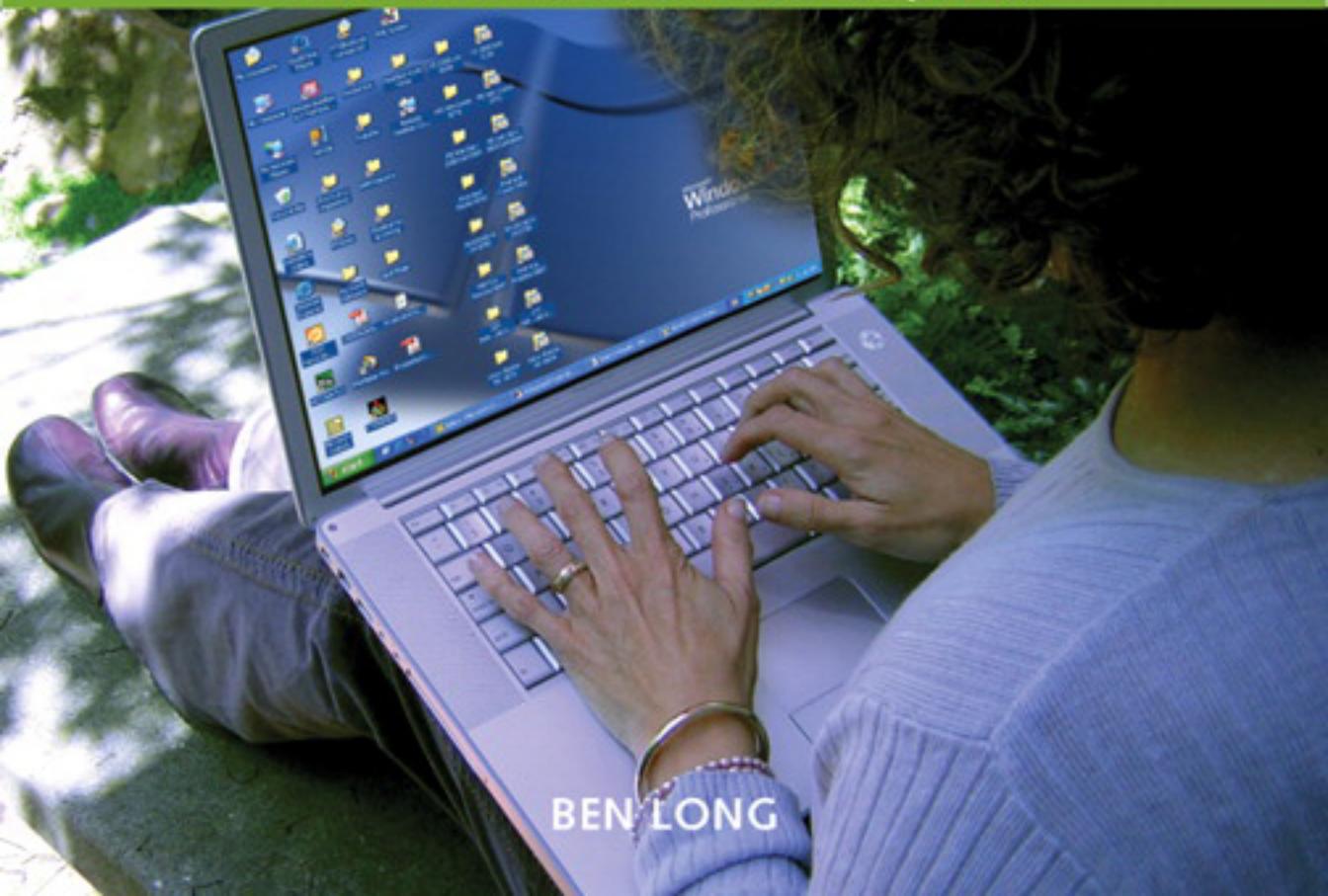


Apple **Boot Camp** Public Beta **First Look**

Get all the info about Boot Camp, first.



BEN LONG

Apple

Boot Camp

Public Beta First Look

Ben Long



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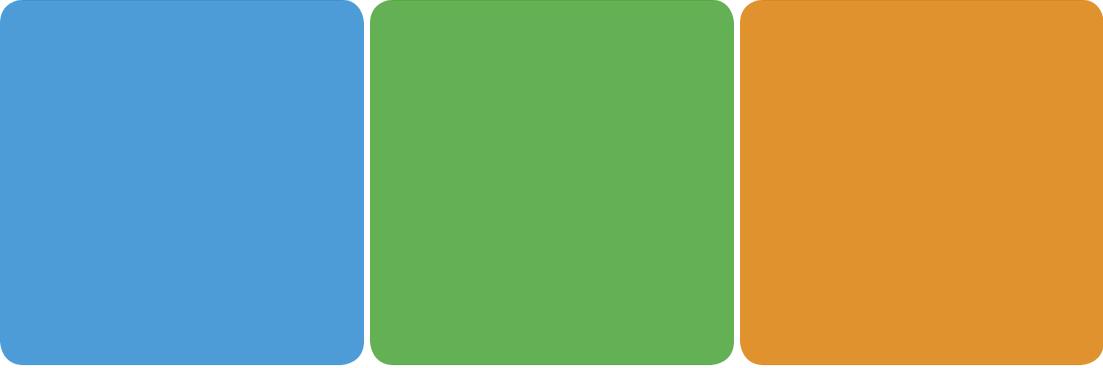
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Apple Boot Camp Public Beta First Look

Throughout your life, you'll face decisions that will take you, sometimes irrevocably, in one direction or another: Democrat/Republican, East Coast/West Coast, favorite Beatle. For computer users, whether to use the Macintosh or Windows operating system has long been a mutually exclusive decision. But now, with Apple's Boot Camp Public Beta and an Intel-powered Macintosh, you can climb squarely onto the fence and run both operating systems on the same computer.

Unlike emulation systems such as Microsoft's Virtual PC, which translate your Mac's PowerPC instructions into Intel instructions on the fly—with a terrific cost in overall performance—Boot Camp takes advantage of the fact that your new Intel-equipped iMac, Mac mini, or MacBook Pro uses the same type of Intel processor that normal Windows PCs use. Because no emulation or translation is required, Windows XP can run on your Intel-equipped Mac at full speed.

In this e-book, you're going to learn everything you need to know to get Boot Camp running on your appropriately equipped Mac. In addition, we'll walk you through some pointers to help you find your way around Windows, tell you how to get Windows working with some of your other hardware, and provide some important tips to help ensure you aren't overwhelmed by the huge morass of Windows viruses that are out there. Finally, we'll recommend some utilities and other applications that you may find useful.

Understanding How Boot Camp Works

A Windows PC comprises an Intel-compatible processor, some RAM, a hard drive, video and sound interfaces, input/output ports (such as USB and Ethernet), and a bunch of circuitry that ties everything together. This is also a description of your Intel-equipped Macintosh.

When you turn on your Mac, a program stored in special memory chips on the computer's motherboard is executed. This program tells the Mac to look for a hard drive and execute a special application that is stored there. The chips that contain this program are called *firmware* because they're somewhere between the *software* that you normally run and the *hardware* that the computer is built from.

The application that the firmware launches from your hard drive is, of course, your operating system. The operating system itself could be stored in firmware, but it's very difficult—and risky—to change the software that's stored in a firmware memory chip. By keeping the operating system stored on your hard drive, you can easily upgrade or replace some or all of the operating system at any time.

This whole process is called *booting*, which is short for *bootstrapping*—a term that was coined to reflect the fact that the computer is “pulling itself up by its bootstraps” and loading an operating system on the fly rather than executing hard-wired code.

A Windows PC works the same way, but it looks for a Windows operating system instead of the Mac operating system.

When you install Boot Camp, your Mac's firmware is altered. With the new firmware, when you start up your Mac, one of the first things it does is look to see whether the Alt/Option key is being held down. If so, the Mac presents a screen that lets you choose between booting up with the Mac OS or booting up with Windows. Depending on which option you choose, the computer then executes the appropriate code to launch your chosen operating system.

This is an either/or situation. Boot Camp does *not* let you run Windows applications in the Mac OS; neither does it let you run Mac applications under Windows. Instead, it allows you to configure your Mac as a dual-boot computer. If you want to move data between Windows and Mac applications, you'll have to think about doing it the same way you would move data between a separate Mac and Windows machine. We'll cover this subject on page 43.

Knowing What You Need

To install Boot Camp, you'll need:

- Boot Camp (<http://www.apple.com/macosx/bootcamp/>).
- An Intel-equipped Mac. At this writing, your choices include the Mac mini, the iMac, and the MacBook Pro.
- Windows XP, Windows XP Home Edition, or Windows XP Professional—a version that ships on single discs and includes Service Pack 2. If the disc includes Service Pack 2, it will be clearly labeled as such. If your disc *doesn't* include Service Pack 2, you can add the Service Pack to your disc by following the procedure explained at www.helpwithwindows.com/WindowsXP/winxp-sp2-bootcd.html. For this procedure to work, however, you'll need access to a machine that's already running Windows, that has a CD burner, and that is equipped with a CD-burning program such as Nero Burning ROM (available at www.nero.com).

- A blank, recordable CD.
- At least 5 GB of available space on your Mac's current boot drive.

In addition, you'll probably find the following helpful:

- A multibutton mouse. Although the Mac supports multibutton mice, Windows is much more dependent on them for everyday use. You'll be able to get through installation and configuration with a single-button mouse, but if you intend to use Windows apps for serious work, you'll want a mouse with more than one button.
- A bottle of ibuprofen. OK, OK, this isn't *essential*, but come on—you're a Mac user, and you're about to install *Windows!* This exercise falls plainly into the "You never thought it could happen to you" category.

Bear in mind that Boot Camp currently is beta software. Although Apple said Boot Camp will be a feature in the next major release of the Mac OS, if you choose to install it now, you're essentially opting to become an unpaid software tester. With that said, know that Boot Camp is very stable and works well. Certain aspects of installation may seem a little rough around the edges, but overall, you should find that installing and running Windows XP on your Mac is easy.

Installing Boot Camp

If you've gathered all the items mentioned in the previous section, you're ready to begin. A full Boot Camp installation will probably take you about an hour. You'll be able to leave your Mac unattended for a lot of that time. If you're running on a Mac laptop, it's best to plug it in to ensure that it's got power to get through the whole installation.

Step 1: Back up your Mac

Windows requires its own partition on your hard drive (a *partition* is a separate logical space on your drive that is treated like a completely independent hard drive). The Boot Camp installer will take care of partitioning your drive for you, and you don't have to erase or reformat

the drive to perform this step. Because things can go wrong, however, it's best to back up important data on your Mac before partitioning.

note

Just to reiterate here: Make a current backup of your Mac—documents, files, settings, applications, music you've purchased through iTunes—everything. Boot Camp makes some serious changes to your Mac. A few users have reported that after installing Boot Camp, they were unable to boot back into Mac OS X and had to gut their entire drive and rebuild it. If you have to wipe your hard disk clean and reinstall everything again, it will cost you all your data if you haven't done a proper backup.

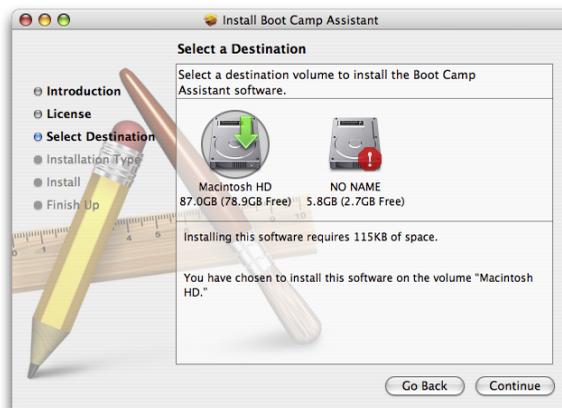
Step 2: Download Boot Camp

While you're backing up, you can start downloading the Boot Camp Assistant installer. The Boot Camp download doesn't include Windows; instead, it includes the Boot Camp Assistant application, which you'll use to configure or unconfigure your machine for a Windows installation. It also includes Apple's documentation for the Boot Camp install.

You can download the 83 MB Boot Camp Assistant installer from www.apple.com/macosx/bootcamp.

Step 3: Install Boot Camp Assistant

When the Boot Camp download is finished, the Boot Camp Assistant installer will launch automatically. Follow the onscreen instructions to install.



Step 4: Print the Boot Camp Assistant manual

The Boot Camp Assistant disk image should still be mounted on your desktop. Double-click to open it; then double-click the Boot Camp Installation and Setup Guide. The document will open in your default PDF reader. It's a very good idea to print this document before installing, as it contains some useful information, and you won't be able to get to this file when you're booted into Windows.

Step 5: Download the firmware updater

As explained earlier, Boot Camp requires that your Mac have specific firmware. Even if your Mac is fairly new, it still may not have the very latest firmware. Go to www.apple.com/support/downloads, and look for a firmware updater for your model of Macintosh.

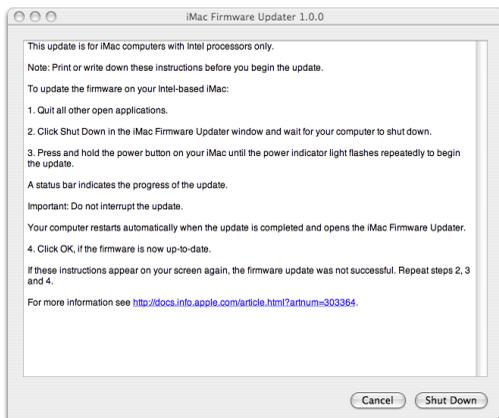
note

Software Update won't necessarily find firmware updates for your Mac; you need to go to the Web page and look.

Step 6: Upgrade your firmware

When your backup process and Boot Camp downloads are finished, you can run the firmware updater that you downloaded in step 5. Firmware updating requires a restart, so if your Mac is doing something that shouldn't be interrupted, you'll want to wait for it to finish.

When the download is complete, the updater will launch automatically. Follow the onscreen instructions to perform the firmware update.

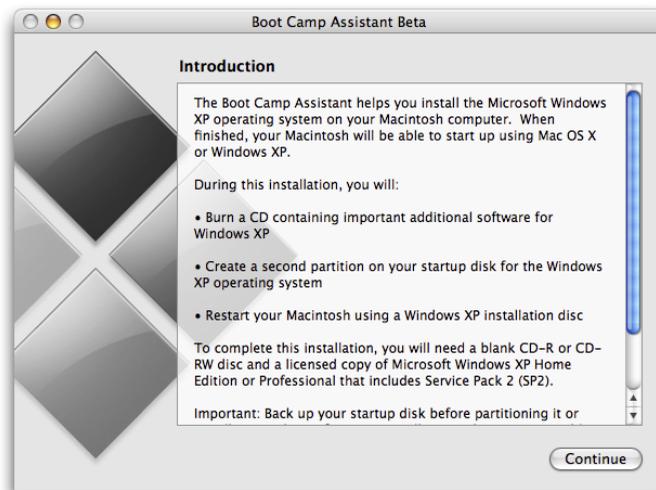


Step 7: Run the Boot Camp Assistant

Choose Applications > Utilities, and you should find an application called Boot Camp Assistant. This is the program that you installed earlier. Double-click to launch it.

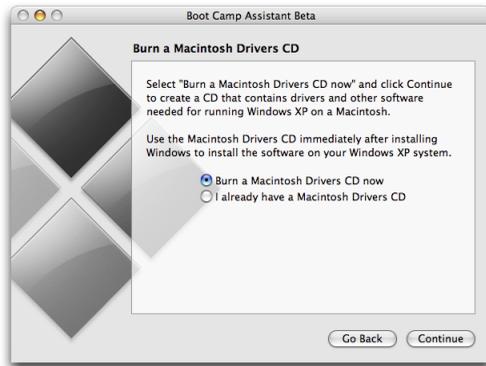
The Boot Camp Assistant performs several tasks:

- It partitions your drive to create a space to install Windows.
- It gives you the opportunity to burn a CD that contains Windows drivers for the Macintosh video and sound cards, network hardware, and AirPort and Bluetooth hardware. It also adds drivers to Windows that make the Mac Eject key work the way you expect it to, along with drivers for the screen-brightness controls on MacBook Pros and iMacs.
- It makes some other necessary configurations to allow Boot Camp to work.



Step 8: Make a Macintosh Drivers CD

The Boot Camp Assistant will prompt you with the following screen:



If you have not already burned a Macintosh Drivers CD, select that option, click Continue, and follow the onscreen instructions to create a CD containing special drivers that you'll install later.



Further instructions for all these steps are provided in the manual that you printed in step 4.

Step 9: Create a Windows partition

When your drivers CD is made, the Boot Camp Assistant will prompt you to create a second partition on your drive.

