



# Boot Camp Installation & Setup Guide

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# Boot Camp

## Run Microsoft Windows on an Intel-based Mac computer.

### Introduction

**WARNING:** Make sure to back up all of your data before using Boot Camp, and regularly back up data while using the software.

Boot Camp enables you to install Windows on your Intel-based Mac computer, using a Microsoft Windows install disc that you provide. Windows is installed on its own partition. After installation, you can use either Windows or Mac OS X on your Mac computer.

The Boot Camp Assistant application helps you create the Windows partition and restart your Mac using your Windows installation disc. Then you can follow these instructions to install Windows and install software drivers that enable Windows to work with your Mac hardware.

**Important:** Before you use Boot Camp Assistant, print this document. It contains information you'll need while installing Windows.

## What You Need

Here's what you need to install and set up Windows on your Mac:

- An Intel-based Mac computer, with:
  - a USB keyboard and mouse, or a built-in keyboard and trackpad
  - Mac OS X version 10.5 or later (the latest version of Mac OS X is strongly recommended)
  - all firmware updates for your computer

For information about updating your computer's system software and firmware, see page 23.

- A Mac OS X Leopard installation disc, which can be either of the following:
  - a Mac OS X Leopard disc (included with all purchased copies of Leopard)
  - a Mac OS X Install Disc 1 (included with all Macs that have Leopard preinstalled)
- At least 10 GB of free space on the disk you're installing on
- 2 GB or more of RAM when running Windows Vista on a Mac Pro computer
- Boot Camp Assistant (located in /Applications/Utilities/)
- Windows XP Home Edition or Professional with Service Pack 2 or later, or Windows Vista Home Basic, Home Premium, Business, or Ultimate

**Important:** You must use a single full-install Windows installation disc (Service Pack 2 is required for Windows XP installations). Do not use an upgrade version of Windows and do not install an earlier version of Windows XP and attempt to update it later to SP2. Use only 32-bit versions of Windows.

## If You've Already Used a Beta Version of Boot Camp

If this is your first time using Boot Camp, skip this section and go to "Installation Overview" on page 6.

If you've already installed Boot Camp Beta on your computer and used it to create a Windows partition and install Windows, you don't need to repartition your hard disk or reinstall Windows. Follow the instructions below to install new and updated Mac drivers for Windows.

**Important:** If you've customized your Windows environment, write down your settings before updating the drivers.

### To install new and updated Mac drivers for Windows:

- 1 Restart your Mac using Windows.
- 2 Insert your Mac OS X Leopard installation disc.  
The installer should start automatically. If you have AutoRun turned off, double-click the setup.exe file.
- 3 Click Repair.

## Upgrading Windows XP to Windows Vista

You can upgrade Windows XP to Windows Vista using a licensed copy of Windows Vista Home Basic, Home Premium, Business, or Ultimate. After upgrading to Windows Vista, you must reinstall the Boot Camp drivers.

### To upgrade Windows XP to Windows Vista:

- 1 Restart your Mac using Windows.
- 2 Insert your Windows Vista installation or upgrade disc.
- 3 Follow the instructions that came with Windows Vista.
- 4 After completing the Windows Vista upgrade, insert your Mac OS X Leopard installation disc.  
The installer should start automatically. If you have AutoRun turned off, double-click the setup.exe file.

## Installation Overview

Installing Windows on your Mac computer involves the following steps:

**Step 1: Run Boot Camp Assistant.**

Boot Camp Assistant helps you with these tasks:

- **Creating a partition for Windows**

Boot Camp Assistant creates a partition for Windows on your computer's startup or other internal disk.

- **Starting the Windows installation**

Boot Camp Assistant gets you started with the Windows installation.

**Step 2: Install Windows.**

**Step 3: Install the Boot Camp drivers on your Windows volume.**

*Important:* Before you begin, make sure you have a backup of the important information on your computer.

## Step 1: Run Boot Camp Assistant

Boot Camp Assistant helps you create a new partition for Windows and gets you started with the Windows installation.

**Important:** If you are using a portable computer, connect the power adapter before continuing.

### To use Boot Camp Assistant:

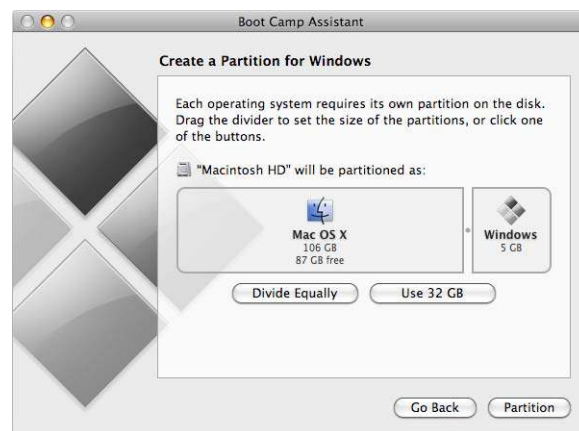
- 1 Log in to an administrator account on your computer, quit all open applications, and log out any other users on your computer.
- 2 Open Boot Camp Assistant (located in /Applications/Utilities/) and follow the onscreen instructions.

Refer to the following sections for more information.

### Creating a Partition for Windows

Boot Camp Assistant helps you create a new partition for Windows on an internal disk. The assistant dynamically partitions your startup disk, creating a new partition for Windows without erasing your existing Mac OS X system. If you have a computer with multiple internal disks, you can create a second partition on any of those disks or use an entire disk for Windows. See “Creating a Partition on a Computer with Multiple Internal Disks” on page 9.

When you create the Windows partition, you can choose to use 32 GB, use half of the disk for Windows, or set a custom size. The Windows partition must be at least 5 GB and leave at least 5 GB of free space on the Mac OS X partition.



**To create a partition for Windows:**

- 1 Set the size of your Windows partition.

Refer to your Windows installer documentation to help you determine the best partition size for your system. Windows Vista requires more disk space than Windows XP.

**Note:** A partition larger than 32 GB cannot be formatted as a FAT volume. See “Formatting the Windows Partition” on page 13.

- 2 Click Partition.

Boot Camp Assistant creates the new Windows partition. Your original Mac OS partition, with all your software and information, remains intact.

You can use Boot Camp Assistant later to remove the partition if you want to restore the disk to a single-partition Mac OS X volume (see page 22).



### Creating a Partition on a Computer with Multiple Internal Disks

If you are installing Windows on a computer with more than one internal disk, select which disk to partition for Windows. You can:

- create a second partition for Windows on any internal disk
- erase a nonstartup disk and create a single partition for Windows

If you have already partitioned a disk, you can restore it to a single Mac OS X partition. In the “Create or Remove a Windows Partition” window, select a disk to see the options available for that disk.



## Step 2: Install Windows

Read and follow these instructions for installing Windows on your Mac computer. Refer to your Windows documentation for general information about installing and setting up Windows.

**Important:** Unless you're using a portable computer, you'll need a USB keyboard and mouse during installation.

You can install any of the following versions of Windows:

- Windows XP Home Edition or Professional
- Windows Vista Home Basic, Home Premium, Business, or Ultimate

**Important:** You must use a single full-install Windows installation disc (Service Pack 2 is required for Windows XP installations). Do not install an earlier version of Windows XP and attempt to update it later to SP2. Use only 32-bit versions of Windows.



### To install Windows on your Mac computer:

- 1 If you already quit Boot Camp Assistant without installing Windows:
  - a Open Boot Camp Assistant.
  - b Select "Start the Windows installer."
  - c Click Continue.
- 2 If you are using a computer with more than one internal disk, select the disk on which you want to install Windows, and then click Continue.
- 3 Insert your Windows installation disc.
- 4 In Boot Camp Assistant, click Start Installation.
- 5 Your computer starts up from the Windows installation disc. Follow the onscreen instructions. Refer to the following sections for more information.

### Selecting the Windows Partition

It is very important to select the correct partition when installing Windows so that you don't overwrite Mac OS X on your computer.

**WARNING:** Do not create or delete a partition, or select any partition other than as noted below. Doing so may delete the entire contents of your Mac OS X partition.

### To select the correct partition for Windows XP:

- Select "C: Partition3 <BOOTCAMP> [FAT32]."

```
Windows XP Professional Setup

The following list shows the existing partitions and
unpartitioned space on this computer.

Use the UP and DOWN ARROW keys to select an item in the list.

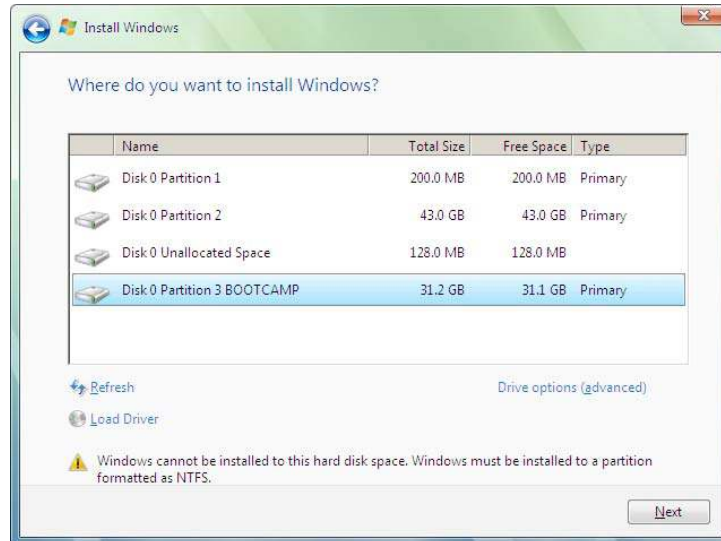
• To set up Windows XP on the selected item, press ENTER.
• To create a partition in the unpartitioned space, press C.
• To delete the selected partition, press D.

130552 MB Disk 0 at Id 0 on bus 0 on atapi [MBR]
E: Partition1 [Unknown]          200 MB < 200 MB free>
F: Partition2 [Unknown]        102400 MB < 102400 MB free>
  Unpartitioned space           128 MB
C: Partition3 <BOOTCAMP> [FAT32] 27824 MB < 27823 MB free>

ENTER=Install  D=Delete Partition  F3=Quit
```

**To select the correct partition for Windows Vista:**

- Select "Disk 0 Partition 3 BOOTCAMP."



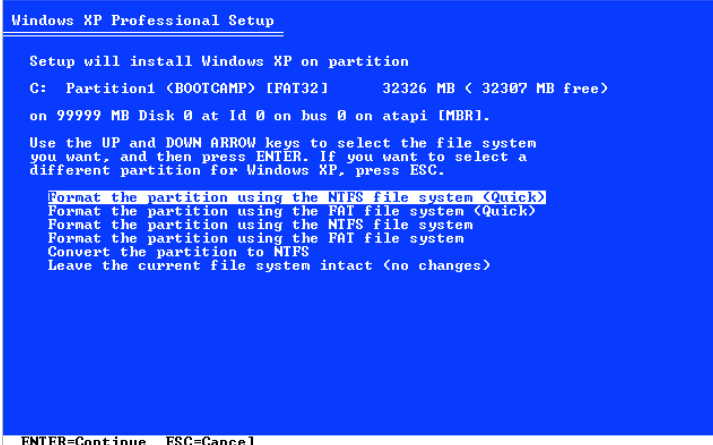
## Formatting the Windows Partition

Even though Boot Camp pre-formats the Windows partition, this partition can't be used to boot the computer. You must reformat the new Windows partition using the Windows installer.

### To format the partition for Windows XP:

- Select an NTFS or FAT format:
  - NTFS—Provides better reliability and security, but you will not be able to save files to the Windows volume from Mac OS X.
  - FAT—Provides better compatibility, allowing you to read and write files on the Windows volume from Mac OS X. This option is available only if the Windows partition you created in Step 2 is 32 GB or smaller.

**Important:** Do not select "Leave the current file system intact." To successfully install Windows XP, you must select one of the other options.



```
Windows XP Professional Setup

Setup will install Windows XP on partition
C: Partition1 <BOOTCAMP> [FAT32]      32326 MB < 32307 MB free>
on 99999 MB Disk 0 at Id 0 on bus 0 on atapi [MBR].

Use the UP and DOWN ARROW keys to select the file system
you want, and then press ENTER. If you want to select a
different partition for Windows XP, press ESC.

Format the partition using the NTFS file system <Quick>
Format the partition using the FAT file system <Quick>
Format the partition using the NTFS file system
Format the partition using the FAT file system
Convert the partition to NTFS
Leave the current file system intact <no changes>

ENTER=Continue  ESC=Cancel
```

### To format the partition for Windows Vista:

- 1 Click "Drive options (advanced)."
- 2 Click Format, and then click OK.
- 3 Click Next.

The Windows Vista partition is formatted using the NTFS file system.

## Setting Up Windows

After you install the Windows software, your computer automatically restarts using Windows. Use the Windows setup screens to configure Windows.

### Step 3: Install the Boot Camp Drivers for Windows

After installing Windows, install Mac-specific drivers and other software for Windows using your Mac OS X Leopard installation disc.

The Mac OS X disc installs drivers to support Mac components, such as:

- graphics
- networking
- audio
- AirPort wireless connectivity
- Bluetooth®
- iSight camera
- Apple keyboards
- Apple Remote
- brightness control for built-in displays

The Mac OS X disc also installs the Boot Camp control panel for Windows and the Apple Boot Camp system tray item.

#### To install the Boot Camp drivers:

- 1 Eject the Windows installation disc.

a Go to My Computer.

b Select the optical drive (D:).

c Click "Eject this disk" in the System Tasks list.

- 2 Insert the Mac OS X disc.

The installer should start automatically. If you have AutoRun turned off, double-click the setup.exe file to start installing the drivers.

- 3 Follow the onscreen instructions.

If a message appears that says the software you are installing has not passed Windows Logo testing, click Continue Anyway.

Windows that appear only briefly during the installation don't require your input.

If nothing appears to be happening, there may be a hidden window that you must respond to. Check the taskbar and look behind open windows.

**Important:** Do not click the Cancel button in any of the installer dialogs.

- 4 After your computer restarts, follow the instructions in the Found New Hardware Wizard to update your software drivers (Windows XP only).
- 5 Follow the instructions for any other wizards that appear.

## Starting Up Using Mac OS X or Windows

Once you've installed Windows and the Boot Camp drivers, you can start using Windows on your Mac. Boot Camp makes it easy to start up your computer using either Mac OS X or Windows. You can set the default operating system for your computer using Startup Disk preferences (Mac OS X) or the Boot Camp control panel (Windows). You can also select an operating system as your computer is starting up.

## Setting the Default Operating System

You can use the Startup Disk pane of System Preferences in Mac OS X to set the default operating system for starting up your computer. Boot Camp also installs a Boot Camp control panel that lets you set the default operating system when you're running Windows.

**To set the default operating system in Mac OS X:**

- 1 In Mac OS X, choose Apple () > System Preferences.
- 2 Click Startup Disk.



- 3 Select the startup disk with the operating system you want to use by default.
- 4 If you want to start up that operating system now, click Restart.

### To set the default operating system in Windows:

- 1 In Windows, click the Boot Camp system tray item and choose Boot Camp Control Panel.



- 2 Select the startup disk with the operating system you want to use by default.
- 3 If you want to start up that operating system now, click Restart.

### To restart in Mac OS X using the Boot Camp system tray item:

- In Windows, choose "Restart in Mac OS X" from the Boot Camp system tray item.

Restarting in Mac OS X using the Boot Camp system tray item also sets the default operating system to Mac OS X.

## Selecting an Operating System During Startup

You can select which operating system to use during startup by holding down the Option key. This displays icons for all available startup disks, and lets you override the default setting for the startup disk in Startup Disk preferences (Mac OS X) or the Boot Camp control panel (Windows) without changing that setting.





**To select an operating system during start up:**

- 1 Restart your computer and hold down the Option key until disk icons appear onscreen.
- 2 Select the startup disk with the operating system you want to use, and then click the arrow beneath the icon.





## Using Windows on Your Mac

The following sections provide information about running Windows on a Macintosh computer. If you're not already familiar with how to use Windows, refer to the documentation that came with your Windows software.

### Using an Apple Keyboard with Windows

Boot Camp sets the keys on your Apple keyboard to emulate a standard PC keyboard. This enables Control-Alt-Delete, Print Screen, and other common key commands to work with Windows.

The following table tells you how to type PC key commands on Apple external and built-in keyboards. For details, see: [docs.info.apple.com/article.html?artnum=304270](https://docs.info.apple.com/article.html?artnum=304270)

| PC key command         | Apple external keyboard   | Built-in Mac keyboard   |
|------------------------|---|---|
| Control-Alt-Delete     | Control-Option-Delete  <sup>1</sup> | Control-Option-Delete   |
| Alt                    | Option  | Option  |
| AltGr                  | Control-Option  | Control-Option  |
| Backspace              | Delete  | Delete  |
| Delete                 | Delete  <sup>1</sup>               | Fn-Delete   |
| Enter                  | Return  | Return  |
| Enter (numeric keypad) | Enter   | Enter   |
| Insert                 | Help  | Fn-Enter  |
| Num lock               | Clear   | Fn-F6 <sup>2</sup>  |
| Pause/Break            | F16   | Fn-Esc  |
| Print Screen           | F14   | Fn-F11  |
| Print active window    | Option-F14  | Option-Fn-F11   |
| Scroll/Lock            | F15   | Fn-F12  |
| Windows                | Command (  )                       | Command (  ) |

<sup>1</sup> Use the Delete key above the navigation keys.

<sup>2</sup> Mac portable computers have a group of keys with small numbers on them that can be used as a numeric keypad. To use these keys as a keypad, press the F6 key to engage Num Lock, or hold down the Fn key while you press the keys in the keypad.

## Using the Function Keys on a Mac Portable Computer

By default in Windows, pressing function keys on a Mac portable computer controls hardware features, such as volume and display brightness.

By holding down the Fn key as you press function keys, you can also use them to trigger application-specific software features. For example, if you open iTunes and press F1, iTunes Help opens.

You can set the keyboard so that the function keys control application-specific features without pressing Fn. You then hold down Fn to use the function keys to control hardware features.

### To set whether the function keys control hardware or software features

- 1 In Windows, click the Boot Camp system tray item and choose Boot Camp Control Panel.
- 2 Click the Keyboard tab.
- 3 Select or deselect "Use the F1-F12 keys to control software features."

## Right-Clicking

You can right-click when running Windows on your Mac using an Apple Mighty Mouse. If you are using a Mac portable computer, you can also right-click using the trackpad.

### To right-click using a Mighty Mouse:

- Click the upper-right side of the mouse.

### To right-click using a trackpad:

- Place two fingers on the trackpad and click the trackpad button.

## Scrolling with a Trackpad

If you are using a Mac portable computer, you can use two fingers to scroll vertically with the trackpad.

### To scroll using a trackpad:

- Move two fingers on the trackpad simultaneously.

## Using an Apple Remote

If your computer is equipped with a built-in infrared receiver, you can use an Apple Remote to control iTunes and Windows Media Player (not included with Boot Camp). The remote lets you change the sound volume, start or pause playback, and skip to the next or previous item. You can also use the remote to open iTunes in Windows.

### To open iTunes using an Apple Remote:

- Press the Menu button.

If iTunes is already open, you can press the Menu button to bring iTunes to the front.

The Apple Remote uses an infrared transmitter, and works with Mac computers that have an infrared receiver. If the remote has an unobstructed line of sight to the receiver, it can work at a distance of up to 30 feet.

## Pairing Your Computer with an Apple Remote

If you have more than one infrared-equipped computer at the same location, you can “pair” each computer with a specific Apple Remote. Otherwise, the computer takes commands from any remote within range.

Pairing sets the computer to take commands only from the specified remote. You can pair your computer with only one remote at a time.

### To pair your computer with a remote:

- 1 Hold the remote close to the computer (3 to 4 inches) and point the remote at the front of the computer.
- 2 Press and hold both **MENU** and **▶▶** on the remote for about 5 seconds, until a chain link (🔗) symbol appears onscreen.

## Unpairing Your Computer from an Apple Remote

Pairing your computer with a remote tells the computer to take commands only from the specified Apple Remote. You can pair your computer with only one remote at a time. If you’ve paired your computer with an Apple Remote, you must unpair the computer before you can use the computer with a different remote.

### To unpair your computer from an Apple Remote:

- 1 In Windows, open the Boot Camp control panel and click the Remote tab.
- 2 Click Unpair.

### Disabling Remote Control

You can use the Boot Camp control panel to disable the infrared receiver and prevent remote control of your computer.

#### To disable the infrared receiver:

- 1 In Windows, open the Boot Camp control panel and click the Remote tab.
- 2 Select the “Disable remote control infrared receiver” checkbox.

To turn infrared reception back on, deselect the option.

### Using Bluetooth Devices with Windows

Before you can use a Bluetooth wireless device with Windows on your Mac, you must pair the device with your computer while running Windows.

#### To pair a wireless Mighty Mouse or Apple keyboard with your Mac:

- 1 In Windows, open the Bluetooth Devices control panel.
- 2 In the Devices pane, click Add.
- 3 Follow the Bluetooth Device Wizard to set up your device.
  - a To make your Apple wireless device discoverable, turn the device off and then on again.
  - b In the passkey pane, select “Let me choose my own passkey” and enter a numeric code.

*Wireless Mighty Mouse:* Enter four zeros (“0000”).

*Apple Wireless Keyboard:* Enter six to sixteen digits.

Passkeys for wireless devices are used to encrypt the information transmitted from the devices to your computer. You don’t need to remember the passkey.

## Ejecting Discs

You can eject a CD or DVD using the Eject (⏏) key on an Apple keyboard. If your computer has an optical drive with a tray, use the Eject key to open or close the tray.

You can also eject a disc by using Windows Explorer.

### To eject a disc, do one of the following:

- Press and hold the Eject key on your Apple keyboard until the eject (⏏) symbol appears onscreen.
- Right-click the disc icon in Windows Explorer and choose Eject from the menu that appears.
- Select the disc icon in Windows Explorer and click Eject.
- Hold down the primary mouse button as you start up your computer, until the disc ejects.

If you have a Mac Pro computer, you can press Option-Eject to open or close the tray of an optional second optical drive.

## Setting Your Computer to Restart Automatically After a Power Failure

Setting your computer to restart automatically after a power failure might be useful if you need to access your computer remotely.

### To set your computer to restart automatically after a power failure

- 1 Click the Boot Camp system tray item and choose Boot Camp Control Panel.
- 2 Click the Power tab.
- 3 Select “Restart automatically after a power failure.”

## Using Third-Party Utilities

Before installing and using a third-party disk utility for Windows, check with the vendor to make sure the utility is compatible with Boot Camp.

**WARNING:** Data loss can occur when using a disk utility that is not compatible with Boot Camp.

## Removing Windows from Your Computer

How you remove Windows from your computer depends on whether you installed Windows on a single-volume disk or on a second disk partition.

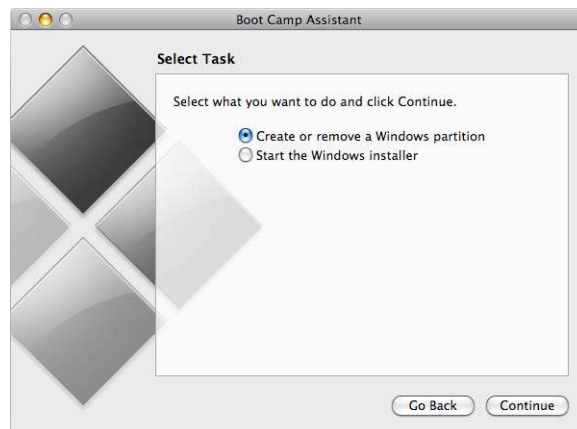
*If you installed Windows on a second disk partition:* Using Boot Camp Assistant as described below, remove Windows by deleting the Windows partition and restoring the disk to a single-partition Mac OS X volume.

*If your computer has multiple disks and you installed Windows on a single-partition disk:* Use Disk Utility to erase the disk and reformat it as a Mac OS X volume.

**WARNING:** Make a backup of the important information on your computer before removing Windows. Windows software and all other information on the Windows partition will be erased.

### To delete a Windows partition:

- 1 Start up in Mac OS X.
- 2 Quit all open applications and log out any other users on your computer.
- 3 Open Boot Camp Assistant.



- 4 Select "Create or remove a Windows partition" and click Continue.
- 5 Do one of the following:
  - If your computer has a single internal disk, click Restore.
  - If your computer has multiple internal disks, select the disk with Windows on it, and then select "Restore to a single Mac OS partition" and click Continue.

## Troubleshooting

If you're having trouble partitioning a disk, using Boot Camp Assistant, or installing or running Windows on your Mac, check this section for possible solutions.

For more troubleshooting information, go to [www.apple.com/support/bootcamp](http://www.apple.com/support/bootcamp).

### If Boot Camp Assistant won't open because you haven't updated your firmware or system software

Boot Camp requires that you have Mac OS X v10.4.6 or later, and the latest firmware installed on your computer. Some computers may require more than one firmware update.

#### To update your computer's system software:

- 1 From the Apple menu, choose Software Update.
- 2 If an update for Mac OS X appears in the list, select it.
- 3 Click Install.

#### To update your computer's firmware:

- 1 Go to [www.apple.com/support/downloads](http://www.apple.com/support/downloads).
- 2 Search for the firmware updates for your computer.  
For example, search for "Mac mini firmware update."

**Important:** Some computers may require more than one firmware update. See [docs.info.apple.com/article.html?artnum=303880](https://docs.info.apple.com/article.html?artnum=303880) for the current updates available for your computer.

- 3 Download all applicable firmware update packages.
- 4 Open each package and follow the onscreen instructions.

### If you can't partition your disk

In order to partition your disk and install Windows using Boot Camp Assistant, the disk must be a single partition, formatted as a Mac OS X Extended (Journaled) volume. If you have already partitioned your disk using Disk Utility or some other utility, you cannot use Boot Camp Assistant until you restore your disk to a single-partition Mac OS X volume.

Boot Camp Assistant works only with internal disks. You cannot use Boot Camp Assistant to partition and install Windows on an external disk.

If a dialog appears saying “The disk cannot be partitioned because verification failed,” try repairing the disk using Disk Utility and running Boot Camp Assistant again. If that doesn’t work, back up all the information on your computer, start up from your Mac OS X Leopard installation disc, and erase the disk using Disk Utility. Restore the information to your computer from the backup and try running Boot Camp Assistant again.

#### **If you made the Windows partition too small**

First, back up all the information on your Windows partition. Then run Boot Camp Assistant to restore your disk to a single volume. Restart your computer and use Boot Camp Assistant to partition the disk again and reinstall Windows. Don’t forget to install the Boot Camp drivers after installing Windows.

#### **If the Windows installer isn’t responding**

If you’re using an Apple Mighty Mouse, the Windows installer may not respond if the mouse is connected directly to your computer. Connect the Mighty Mouse to the USB port on your keyboard.

#### **If Windows can’t be installed**

Make sure you’re logged in as an administrator.

#### **If Windows didn’t install properly**

Verify that you are using an original, full version of Windows XP Home Edition or Professional with Service Pack 2 or later, or Windows Vista Home Basic, Home Premium, Business, or Ultimate. Do not use a 64-bit version of Windows. Media Center, OEM, and upgrade versions of Windows XP are not recommended.

Restart your computer and hold down the Option key until one or more disk icons appear on your screen. Insert the Windows installation disc. Select the Windows installation disc icon and then click the arrow beneath it. Quickly press any key on your keyboard to start the installer. Follow the onscreen instructions to repair or reinstall Windows.

#### **If the Boot Camp drivers weren’t successfully installed**

If it appears that the Boot Camp drivers weren’t successfully installed, try repairing them.

##### **To repair Boot Camp drivers:**

- 1 Start up your computer in Windows.
- 2 Insert your Mac OS X Leopard installation disc.
- 3 Double-click the setup.exe file if the installer doesn’t open automatically.
- 4 Click Repair and follow the onscreen instructions.

If a message appears that says the software you are installing has not passed Windows Logo testing, click Continue Anyway.



If you need to reinstall specific drivers, you can install one driver at a time. For example, if your built-in iSight camera isn't working, you can reinstall just the iSight driver.

Individual drivers are in the Drivers folder on the Mac OS X Leopard installation disc.

**To reinstall a specific driver:**

- 1 Insert your Mac OS X Leopard installation disc.
- 2 Quit AutoRun if it opens.
- 3 Using Windows Explorer, locate the driver that you want to reinstall.
- 4 Open the driver to start the installation.

**If you can't eject a CD or DVD**

Most Apple keyboards have an Eject (⏏) key that ejects optical discs.

**To eject a CD or DVD:**

- Press and hold the Eject key until the eject (⏏) symbol appears onscreen.

The Eject key on Apple keyboards works in Windows only after you have installed the Boot Camp drivers. See "Step 3: Install the Boot Camp Drivers for Windows" on page 14.

You must be logged in to a user account to use the Eject key. The Eject key does not work when the Welcome Screen is displayed.

If your keyboard doesn't have an Eject key, you can eject a disc using Windows Explorer. Select the disc and click Eject.

If you're still having trouble ejecting the disc, click and hold down the primary mouse button as you restart your computer, until the disc ejects.

**If your computer doesn't always show the correct date and time**

You must have an active Internet connection in order to maintain the correct date and time when going between Mac OS X and Windows.

If you are not connected to the Internet, you need to set the date and time manually when you change operating systems.

**If you can't adjust the brightness of the display on your portable Mac computer**

You can adjust the brightness of MacBook and MacBook Pro displays using function keys on the keyboard. Press the F1 key to dim the display, or the F2 key to brighten it.

If the brightness keys don't appear to work, try pressing and holding the Fn key while pressing the F1 or F2 key. If that doesn't work, make sure you've installed the Boot Camp drivers. See "Step 3: Install the Boot Camp Drivers for Windows" on page 14.

### **If you can't adjust the sound volume**

You can adjust the sound volume in Windows by using the volume keys on your Apple keyboard. Press Volume Down (⏮) to lower the volume or Volume Up (⏭) to increase it. To mute the volume, press Mute (⏸).

If the volume keys don't appear to work, make sure you've installed the Boot Camp drivers. See "Step 3: Install the Boot Camp Drivers for Windows" on page 14.

### **If the Windows desktop doesn't fill the entire screen**

If the Windows desktop doesn't fill the entire screen, make sure you've installed the Boot Camp drivers. See "Step 3: Install the Boot Camp Drivers for Windows" on page 14. If you installed the drivers and the desktop still doesn't fill the entire screen, increase the desktop resolution setting in the Display control panel.

### **If the screen is blank or distorted**

Some graphics cards may not work with both Mac OS X and Windows on a Mac computer. If you're having trouble with your screen display when using Windows, try the following:

- Use the graphics card that came with your Mac.
- Make sure you've installed the Boot Camp drivers. See "Step 3: Install the Boot Camp Drivers for Windows" on page 14.
- Adjust the screen resolution setting in the Display control panel.

### **If you have a RAID configuration**

RAID configurations using Boot Camp are not supported. For more information, go to [www.apple.com/support/bootcamp](http://www.apple.com/support/bootcamp) and search for "RAID."

## **Learning More, Support, and Feedback**

For more information about Boot Camp, go to [www.apple.com/bootcamp](http://www.apple.com/bootcamp).

For Boot Camp support, go to [www.apple.com/support/bootcamp](http://www.apple.com/support/bootcamp).

Apple welcomes your feedback on Boot Camp. To submit feedback, go to [www.apple.com/macosex/feedback](http://www.apple.com/macosex/feedback).

Apple does not provide support for installing or running Microsoft Windows software. To find help for Windows issues, go to [www.microsoft.com/windows](http://www.microsoft.com/windows).

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