



Boot Camp Beta Installation & Setup Guide

Contents

- 4 Overview
- 5 **Step 1:** Updating Your Computer's System Software and Firmware
- 6 **Step 2:** Running Boot Camp Assistant
- 9 **Step 3:** Installing Windows XP
- 11 **Step 4:** Installing Macintosh Drivers in Windows
- 13 Switching Between Operating Systems
- 15 Removing the Windows Partition
- 16 Troubleshooting

Boot Camp Beta

Run Microsoft Windows XP on an Intel-based Macintosh computer.

Warning: Boot Camp Beta is preview software licensed for use on a trial basis for a limited time. Do not use Boot Camp Beta in a commercial operating environment or with important data. You should back up all of your data before installing this software and regularly back up data while using the software. Your rights to use Boot Camp Beta are subject to acceptance of the terms of the software license agreement that accompanies the software.

Using a Microsoft Windows XP installation disc that you provide, Boot Camp Beta enables you to install Windows XP on an Intel-based Macintosh computer. After installation, you can start up your computer using either Windows XP or Mac OS X.

The Windows XP operating system and files are stored in a separate partition on the startup disk, so installing Windows won't affect your Macintosh files or operating system. Boot Camp Assistant simplifies Windows installation by helping you create the Windows partition and burning a CD with software drivers than enable Windows XP to work with your Macintosh hardware. Then, Boot Camp Assistant restarts your Macintosh using your Windows XP installation disc so you can install Windows.

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

Support and Feedback

Apple Computer does not provide support for installing or running Boot Camp Beta or Microsoft Windows software.

Apple welcomes your feedback on Boot Camp Beta. Send your comments and suggestions to bootcamp@apple.com.

What You Need

Here's what you'll need to install and set up Windows XP on your Macintosh:

- An Intel-based Macintosh computer, with:
 - a USB keyboard and mouse, or a built-in keyboard and trackpad
 - Mac OS X version 10.4.6 or later
 - the latest firmware update
- At least 10 GB of free space on your startup disk
- Boot Camp Assistant (installed by BootCampAssistant.pkg in /Applications/Utilities/)
- A blank recordable CD or DVD
- Windows XP Home Edition or Professional with Service Pack 2 or later

Important: You must use a single-disc, full-install Windows XP CD that includes Service Pack 2. You cannot use an upgrade version of Windows XP, or install an earlier version of Windows XP and update it later to SP2.

Overview

Installing Windows XP on your Macintosh computer involves the following steps:

Step 1: Update your computer's system software and firmware, if necessary.

Step 2: Run Boot Camp Assistant.

Boot Camp Assistant helps you with these tasks:

- **Burning a Macintosh Drivers CD**
You'll use the Macintosh Drivers CD, after you install Windows XP, to install Macintosh-specific drivers and other software.
- **Creating a partition for Windows XP**
Boot Camp Assistant creates a second partition on your computer's internal startup disk for the Windows XP operating system.
- **Starting the Windows XP installation**
Boot Camp Assistant gets you started with the Windows XP installation.

Step 3: Install Windows XP.

Step 4: Install Macintosh-specific drivers and other software on your Windows XP volume.

Important: Before you begin, make sure you have a backup of the important information on your computer's startup disk.

Step 1: Updating Your Computer's System Software and Firmware

Boot Camp requires that you have Mac OS X v10.4.6 (or later) and the latest firmware installed on your computer. When you run Boot Camp Assistant, it lets you know if you need to update your firmware or system software.

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/
- 2 Search for the firmware update for your computer.
For example, search for "Mac mini firmware update."
- 3 Download the firmware update package.
- 4 Open the package and follow the onscreen instructions.

Step 2: Running Boot Camp Assistant

Boot Camp Assistant takes you through the process of burning a Macintosh Drivers CD and creating a new partition for the Windows XP operating system. Boot Camp Assistant also gets you started with the Windows XP installation.

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

To use Boot Camp Assistant:

- 1 Quit all open applications and log out any other users on your computer.
- 2 Open Boot Camp Assistant and follow the onscreen instructions.

Refer to the following sections for additional information.

Burning a Macintosh Drivers CD



To burn a Macintosh Drivers CD:

- 1 Select "Burn a Macintosh Drivers CD now" and click Continue.
- 2 Insert a blank recordable CD or DVD.

Creating a Partition for Windows XP

Windows XP requires its own partition on your computer's internal startup disk. Boot Camp Assistant creates a second partition on your startup disk for the Windows XP operating system. You can set the size of the new partition from a minimum of 5 GB to a maximum of 5 GB less than the total free space available.



To create a partition for Windows:

- 1 Drag the divider to set the partition size for each operating system.
- 2 Click Partition.

Boot Camp Assistant creates the new partition for Windows. Your original Mac OS X 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 your computer's internal startup disk to a single-partition Mac OS X volume.

Starting the Windows XP Installation

You can install either Windows XP Home Edition or Windows XP Professional.

Important: You must use a single-disc, full-install Windows XP CD that includes Service Pack 2. You cannot use an upgrade version of Windows XP, or install an earlier version of Windows XP and update it later to SP2.



To start the Windows installation:

- 1 Insert your Windows XP CD.
- 2 Click Start Installation.

Your computer starts up from the Windows CD.

Step 3: Installing Windows XP

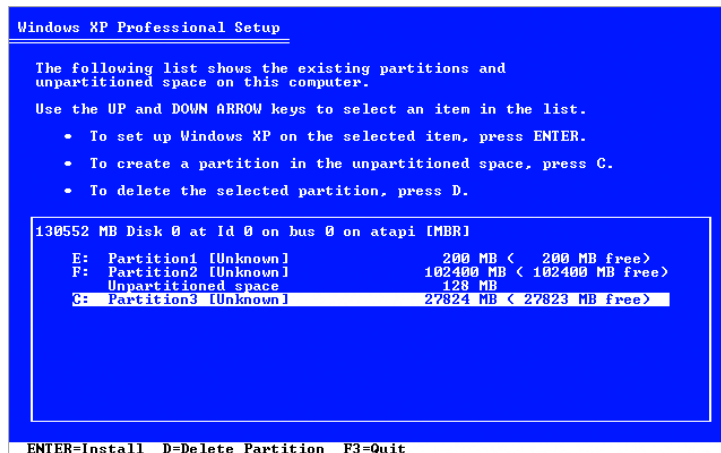
Read and follow these instructions for installing Windows XP on your Macintosh computer. Refer to your Windows XP documentation for general information about installing and setting up the Windows XP operating system.

Important: The Windows XP installer does not support Bluetooth. Unless you're using a laptop computer, you'll need a USB keyboard and mouse during installation.

To install Windows XP on your Macintosh computer:

- 1 Start the Windows installation using Boot Camp Assistant.
 - If you've already started the installation as described in "Starting the Windows XP Installation" on page 8, continue with step 2 below.
 - If, after partitioning your startup disk, you restarted Mac OS X without installing Windows:
 - a Open Boot Camp Assistant.
 - b Select "Start the Windows installer."
 - c Click Continue.
- 2 Follow the onscreen instructions.

Selecting the Windows Partition



Warning: Do not create or delete a partition, or select any partition other than partition C:. Doing so may delete the entire contents of your Mac OS X startup disk.

To select the correct partition for Windows:

- Select partition C:.

Formatting Your Windows Partition

```
Windows XP Professional Setup

The partition is either too full, damaged, not formatted, or
formatted with an incompatible file system. To continue installing
Windows, Setup must format this partition.

C: Partition3 [Unknown]          27824 MB < 27823 MB free>
on 130552 MB Disk 0 at Id 0 on bus 0 on atapi [MBR1].

CAUTION: Formatting will delete any files on the partition.

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

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

ENTER=Continue  ESC=Cancel
```

To format the partition for Windows:

- Select either NTFS or FAT:
 - NTFS—Provides better reliability and security.
Note: If you format the partition using the NTFS file system, you will not be able to write or save files to the Windows volume from Mac OS X.
 - FAT—Provides better compatibility.
Allows 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.

Setting Up Windows

After the Windows XP software has been installed, the installer automatically restarts your computer using Windows. Use the Windows setup screens to configure your Windows XP system.

Step 4: Installing Macintosh Drivers in Windows

After installing Windows, use the Macintosh Drivers CD to install Macintosh-specific drivers and other software for the Windows XP operating system.

The Macintosh Drivers CD installs the drivers to support the following capabilities on your Macintosh computer:

- graphics
- networking
- audio
- AirPort wireless
- Bluetooth
- the Eject key (on Apple keyboards)
- brightness control for built-in displays

The Macintosh Drivers CD also installs a Startup Disk control panel for Windows.

To install the Macintosh drivers and other software:

1 Eject the Windows XP CD.

a Go to My Computer.

b Select the optical drive (D:).

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

2 Insert the Macintosh Drivers CD.

The installer should start automatically. If you have AutoRun turned off, double-click the "Install Macintosh Drivers for Win XP.exe" file.

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.

Some windows appear only briefly during the installation, and don't require your input.

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

Important: Do not cancel any of the driver installers.

4 After your computer restarts, follow the instructions in the Found New Hardware Wizard to update your software drivers.

5 Follow the instructions for any other wizards that appear.

If You Haven't Yet Burned a Macintosh Drivers CD

If you've installed Windows XP but haven't yet burned a Macintosh Drivers CD, you'll need to restart your computer using Mac OS X, open Boot Camp Assistant, and burn the CD. Make sure you have a blank recordable CD or DVD available.

To burn the Macintosh Drivers CD if Windows is running:

- 1 Restart your computer in Mac OS X.
 - a Restart your computer and hold down the Option key until disk icons appear on your screen.
 - b Select your Mac OS X startup volume, and then click the arrow beneath the icon.
- 2 Open Boot Camp Assistant.
- 3 Select "Burn a Macintosh Drivers CD" and insert your blank disc.
- 4 When the disc ejects, restart your computer using Windows XP.
 - a Restart your computer and hold down the Option key until disk icons appear on your screen.
 - b Select the Windows volume, and then click the arrow beneath the icon.
- 5 Follow the instructions in "Step 4: Installing Macintosh Drivers in Windows" on page 11.

Switching Between Operating Systems

Boot Camp Beta makes it easy to pick which operating system to use whenever you start up your computer. You can also specify which operating system to use by default when you start up.

Selecting an Operating System During Startup



To select the operating system to use as you start up:

- 1 Restart your computer.
- 2 Immediately press and hold the Option key until the disk icons appear on your screen.
- 3 Select the icon of the startup disk you want to use, and then click the arrow beneath the icon.

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 to use when your computer starts up. Boot Camp Beta also includes a Startup Disk control panel, installed in your Windows XP operating system, that works just like Startup Disk preferences. The Startup Disk control panel lets you set the default operating system when you're running Windows XP.

Note: Both Startup Disk preferences and the Startup Disk control panel also let you start up your computer in Target Disk Mode, which allows you to use your computer as an external FireWire disk. See Mac Help for more information.

To use Startup Disk preferences in Mac OS X:

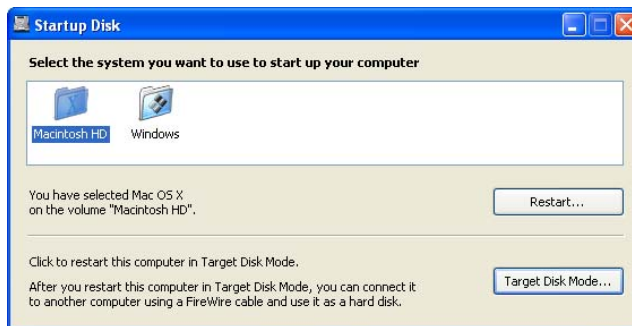
- 1 In Mac OS X, choose Apple (🍏) > System Preferences.
- 2 Click Startup Disk.



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

To use the Startup Disk control panel in Windows XP:

- 1 In Windows XP, choose Start > Control Panel.
If you are in Category View, click "Performance and Maintenance."
- 2 Double-click the Startup Disk control panel.



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

Removing the Windows Partition

If you no longer want to use Windows on your computer, you can use Boot Camp Assistant to remove the Windows partition from your startup disk. This returns the disk to its original configuration as a single-partition Mac OS X volume.

Warning: Make a backup of the important information on your Windows volume before removing the Windows partition. Windows XP software and all other information on the Windows partition will be erased from your startup disk.

To remove the Windows partition from your startup disk:

- 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 "Restore the startup disk to a single volume" and click Continue.

Troubleshooting

If you're having trouble partitioning your startup disk or using Boot Camp Assistant, check here for possible solutions.

I can't partition my startup disk.

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

You cannot use Boot Camp Assistant to partition and install Windows XP on an external drive.

Windows XP didn't install properly.

Restart your computer, holding down the Option key. Release the Option key when one or more disk icons appear on your screen. Insert the Windows XP CD. Select the Windows CD icon and then click the arrow beneath the icon. Quickly press any key on your keyboard to start the installer. Follow the onscreen instructions to repair or reinstall Windows.

The Macintosh drivers weren't successfully installed.

If it appears that the software on the Macintosh Drivers CD wasn't installed successfully, insert the Macintosh Drivers CD again, and try reinstalling the software.

If the Macintosh Drivers CD software has been installed successfully, you can uninstall the software by inserting the Macintosh Drivers CD again.

I can't eject my CD or DVD.

Most Macintosh keyboards have an Eject (⏏) key that you use to eject a CD or DVD. The Eject key on Apple keyboards works in Windows only after you have installed the software on the Macintosh Drivers CD. If your keyboard doesn't have an Eject key, right-click the disc in the Explorer or select the disc and click Eject.

If you're still having trouble ejecting a CD, restart your computer and hold down your mouse button.

My computer doesn't always show the correct date and time.

The Windows XP and Mac OS X operating systems handle your computer's date and time information differently, so the date and time may be different when you switch operating systems.

For best results, use a network time server. Resync the date and time whenever you switch operating systems.

To resync your date and time:

- In Mac OS X, reset the option to "Set date & time automatically" in the Date & Time pane of System Preferences.
- In Windows, click the Update Now button in the "Date and Time Properties" control panel.

Alternatively, you can manually set the correct date and time when you switch operating systems.

I can't adjust the brightness of my display.

Depending on your computer, you may be able to adjust the brightness of your display using function keys on your keyboard. Refer to the following table to see which functions keys adjust brightness on your computer.

Computer	Functions keys
MacBook Pro	Shift-Control-F1 & Shift-Control-F2
iMac	F14 & F15
Mac mini	Not supported.

Some hardware features don't work.

The following hardware features are not supported in Windows XP:

- iSight cameras
- the Apple Remote
- the Apple USB Modem
- the keyboard backlighting on MacBook Pro computers