

Master Boot Code On A Computer With Both Windows Vista And Windows XP

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It's common to have a dual-boot situation in which you have both Vista and XP during testing or transition. The Vista Preinstallation Environment (PE) contains the bootsect.exe tool, which you can use to write Vista or XP master boot codes. An XP master boot code uses the Ntldr-style boot information, whereas a Vista master boot code uses the new Bootmgr format.

To write a Vista master boot code, use the command

```
bootsect /nt60 [all sys]
```

To write an XP master boot code, use the command

```
bootsect /nt52 [all sys]
```

Use the All switch to update all possible Windows boot volumes' master boot codes. The Sys switch updates only the current system partition.

If you have a Vista and XP dual-boot situation and want to eliminate Vista, use the PE command

```
bootsect /nt52 sys
```

to put the XP master boot code in place so that the Vista boot information can be removed.

If you do replace the master boot code with the Nt60 version and don't have an Ntldr boot menu option to enable access to XP, you can add access to XP by using the following commands:

```
bcdedit /create {ntldr} /d "Windows XP" bcdedit /set {ntldr} device  
partition=c: bcdedit /set {ntldr} path \ntldr bcdedit /displayorder  
{ntldr} /addlast
```

When you install an earlier version of Windows for dual booting with Windows Vista, like Windows Server 2003, or Windows XP, or Windows 2000, Windows Vista no longer starts. If you install an additional copy of Windows XP on a computer that already dual boots Windows XP and Windows Vista, you may receive **Disk read error has occurred** when starting your computer.

These issues occur because the startup method of Windows NT-based operating systems and the new Windows Vista startup method is incompatible. Windows Vista uses a new Boot Configuration Database (BCD) store, which contains a boot menu and all the information about operating systems that are installed on the computer. Earlier Windows NT-based operating systems on X86 computers use the boot sequence described here.

When Windows Vista starts on a BIOS-based computer, the BIOS loads the **MBR** and then runs the code in the boot sector which loads **Bootmgr.exe** (Windows Boot Manager). **Bootmgr.exe** parses the **BCD** store to enumerate the operating systems and displays the boot menu. If you select an earlier operating system to start, **Bootmgr.exe** transfers control to the earlier **Ntldr.exe**. When you install an earlier operating system, Setup overwrites the **MBR**, so the Windows Boot Manager doesn't load.

To restore Windows Boot Manager:

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1. Log on the earlier operating system as an administrator.
2. Open a CMD.EXE window.
3. Type CD-ROM:\boot\bootsect.exe -NT60 All and press Enter, where CD-ROM: is the drive letter that contains the Windows Vista media.
4. Restart your computer in Windows Vista.
5. Use Start / Accessories and right-click the command-prompt shortcut, pressing Run as Administrator.
6. Type the following commands, pressing Enter after each line:

NOTE: Drive: is the drive letter where Windows Vista is installed and X: is the drive letter of the active partition.

```
Drive:\Windows\system32\Bcdedit -create {ntldr} -d "Description for  
earlier Windows version, like Windows XP"  
Drive:\Windows\system32\Bcdedit -set {ntldr} device partition=X:  
Drive:\Windows\system32\Bcdedit -set {ntldr} path \ntldr  
Drive:\Windows\system32\Bcdedit -displayorder {ntldr} -addlast
```

7. Restart the computer.