

Installing Windows 2000 on the HP Compaq 6400



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Introduction

Purpose

This white paper provides instructions on how to successfully develop a Microsoft® Windows® 2000 Professional image on HP Compaq nc6400 Notebook PC models. The following guidelines provide installation procedures independent of the currently installed operating system.

Audience

This white paper is for use by HP personnel and clients and describes the process for installing Microsoft Windows 2000 Professional along with applicable HP drivers and applications.

System Requirements and Prerequisites

System requirements

Information regarding minimum hardware requirements for installing Windows 2000 Professional or XP Professional is available at www.microsoft.com.

The supported models and subject of this white paper are HP Compaq nc6400 Notebook PC models.

System prerequisites

IMPORANT:

Back up all user data prior to installing Microsoft Windows 2000.

You will need the following items before installing Windows 2000:

Applicable systems: HP Compaq nc6400 Notebook PC models

- Microsoft Windows 2000 Professional CD, Certificate of Authenticity and documentation and appropriate Service Pack (Service Pack 4 for Windows 2000)
Drivers and deliverables described in the section “Installation of HP Drivers and Enhancements” can be downloaded from the HP website at www.hp.com and burned onto a CD-R or CD-RW.
 - Proper OS License for each PC
 - 1.44 MB Floppy Disk and USB floppy drive
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IMPORANT:

Make sure you have the latest compatible version of Microsoft Windows 2000 drivers and enhancements. In addition, you must have a Microsoft OS license for each system on which you install Windows 2000 Professional. The Windows XP Professional license allows you to use either Windows XP Professional or Windows 2000 Professional. The Windows 2000 license is applicable to Windows 2000 only.

Note:

You can download HP drivers and utilities, including the most current available ROM for the platform, from the HP website www.hp.com.

Installing the operating system and system hardware

Preparing for installation

IMPORTANT:

Follow the installation instructions in the order provided. Failure to complete these steps in the proper order can result in an unsuccessful or unstable installation.

This section provides guidelines for users who perform a clean installation of Microsoft Windows 2000 Professional.

Installing drivers and enhancements

Perform the following steps before manually installing Windows 2000 Professional:

1. Download the "Intel SATA AHCI Controller Driver" SoftPak to a directory on your hard drive.
 2. Execute the downloaded file and follow the on-screen instructions.
 3. Change the boot order in F10 Setup to make the optical drive the first boot device.
 4. Disable Dual Core CPU in F10 Setup (see appendix A).
 5. Insert the OS CD and power on the system with the USB floppy drive attached.
 6. When the following prompt is displayed at the bottom of the screen: "Press F6 if you need to install a SCSI or RAID driver....", press F6.
 7. When you are notified that a mass storage device could not be detected, press S (S=Specify Additional Device).
 8. When prompted, insert the diskette that was created from the SoftPak file, and then press Enter.
 9. Select "Intel 82801GBM SATA AHCI Controller (Mobile ICH7M)" and press Enter.
 10. Continue with the operating system installation, as prompted.
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Note:

Contact the Network Administrators to properly set up the networking components of Microsoft Windows 2000 Professional. For installation, refer to the Microsoft documentation provided with Windows 2000 Professional for complete installation instructions.

11. Install the latest drivers and enhancements from the HP website at www.hp.com. See Table 1 for additional information.

Table 1 Minimum versions of necessary drivers and enhancements

| Windows 2000 software components | Version # |
|---------------------------------------------------------|------------------|
| ADI Soundmax Audio Driver | 1.00 F |
| HDA Modem Drivers | 1.00 A |
| ATI Video Driver and Control Panel | 1.00 B |
| Authentec Fingerprint Driver | 1.00 C |
| Broadcom 440x/57xx Multi-installer | 1.00 A |
| Broadcom WLAN Driver | 5.00 C |
| Broadcom WLAN Utility | 6.00 A |
| HP Integrated module with Bluetooth wireless technology | 4.00 H |
| HP Wireless Assistant | 2.00 E |
| Intel 945 Chipset Video Driver | 1.00 C |
| Intel Chipset Installation Utility | 7.2.2.1006 A |
| Intel Matrix Storage Manager | 5.5.0.1035 A |
| Intel PROSet | 1.00 A |
| Intel PROSet for Intel PRO/Wireless Connection | 5.00 E |
| Intel Speedstep | 3.20 C |
| MS UAA Bus Driver for HD Audio | 1.00 A |
| Quick Launch Buttons Software | 6.00 D |
| Synaptics Touchpad | 8.2.23 N |
| System Enhancements Disk for Windows 2000 | 7.00 G |
| TI Cardbus Driver | 2.0.0.2 A |

Note:

System Enhancements should be installed immediately after Windows 2000 has been installed. WLAN Network Adapters Driver should be installed prior to the WLAN Utility. DirectX 9 is a prerequisite for audio drivers and can be downloaded through Windows Update or from Microsoft.com. Audio driver must be installed before modem driver.

12. If you have an Internet connection, go to www.microsoft.com/windowsupdate and install the critical patches. Reboot the system after completing installation of Microsoft patches.
 - It is recommended that power management settings are adjusted prior to using the notebook to prevent possible data loss.

Appendix A: Known anomalies

Power management

Anomaly: Dual core must be disabled when running Windows 2000 with Intel SpeedStep.

Description: Windows 2000 does not support new mobile CPU technologies. More information is available on the Intel website (search keywords - duo, mobile, 2000).

Systems Affected: HP Compaq nc6400 Notebook PC models

Operating Systems Affected: Windows 2000

Resolution: The second core must be disabled in F10 Setup when using Intel SpeedStep.

Power management

Anomaly: System will not enter hibernation automatically.

Description: The default power management settings under Windows 2000 do not enable hibernation when the battery reaches a critical state.

Systems Affected: HP nc6400 Notebook PC models

Operating Systems Affected: Windows 2000

Resolution: Go to Control Panel>Power to adjust the power management settings prior to using the notebook.

OS Installation

Anomaly: Windows 2000 operating system CD does not recognize the hard drive

Description: Windows 2000 operating system CD does not include driver support for new technologies, such as SATA hard drives.

Systems Affected: HP Compaq nc6400 Notebook PC models

Operating Systems Affected: Windows 2000

Resolution: The SATA driver must be loaded during the OS installation. See "Installing the operating system and system hardware section" of this document.

Appendix B: Questions and answers

Q . Which operating systems are supported on the HP Compaq 6400?

A . Windows XP Home, Windows XP Professional Edition and Windows 2000 Professional are supported.

Q . Can I purchase Windows 2000 Professional preinstalled on the HP Compaq 6400 from HP?

A . PC Customization Services can pre-configure 6400 with Windows 2000, although additional costs will apply. For more information, go to <http://h18000.www1.hp.com/solutions/pcsolutions/pccs.html>.

Q . How do I obtain updated software components?

A . The latest software updates are available from the HP Web site at www.hp.com.

For more information

To learn more about HP business notebooks, contact your local HP sales representative or visit our Web site at: www.hp.com/go/notebooks.

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