

HP Compaq notebook common image white paper



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Introduction

Purpose

This white paper provides instructions on how to successfully create a Microsoft® Windows® Windows XP Professional or Windows Vista® Business common image on select HP Compaq Business notebooks.

Audience

This white paper is for use by HP personnel and clients and describes the process for creating a common image on select HP Compaq notebook PC products using Microsoft Windows and applicable HP drivers and applications.

System requirements and prerequisites

System requirements

Information regarding minimum hardware requirements for installing Microsoft Windows is available at <http://www.microsoft.com>.

- Supported Systems
 - HP Compaq 8710p Notebook PC
 - HP Compaq 8510p Notebook PC
 - HP Compaq 6910p Notebook PC
 - HP Compaq 2710p Notebook PC (Vista Only)
 - HP Compaq 2510p Notebook PC
 - HP Compaq 6715b Notebook PC (See Appendix E)
 - HP Compaq 6710b Notebook PC
 - HP Compaq 6515b Notebook PC (See Appendix E)
 - HP Compaq 6510b Notebook PC

IMPORTANT

Back up all user data prior to installing Microsoft Windows. There is a potential for data loss during the installation of Windows. If you do not back up during this step you may lose your personal data.

You will need the following items before creating a common image:

- Any applicable supported models
- When using the factory preinstall image (recommended), obtain:
 - HP Compaq 8510p Notebook PC Software Restore DVD
 - Proper OS License for each PC

– Or –

- When creating a clean install image, obtain:
 - Microsoft Windows XP Professional Service Pack 2 CD or Microsoft Windows Vista Business, Certificate of Authenticity, and documentation and appropriate Service Pack
 - HP Compaq 8510p Notebook PC Driver Recovery DVD for Windows Vista or 8710p Driver Recovery DVD for Windows XP Professional
 - Optionally, the software can be downloaded from the HP website at www.hp.com or copied from the 8510p C:\SWSETUP directory then burned onto a DVD-R or DVD-RW
 - Proper OS License for each PC

IMPORTANT

This document does not provide a license to create and/or distribute an operating system image. This document is intended to be a technical resource for those who have the proper license to deploy Microsoft Windows operating systems.

The operating system license shipped with HP PCs does not grant re-imaging and deployment rights. Before using the document to deploy an image, please contact your Microsoft licensing representative to obtain the proper license agreements. HP cannot be held liable if a customer uses this document to create or deploy an image that violates Microsoft license agreements.

Note

Make sure you have the latest compatible version of Microsoft Windows drivers and enhancements. Previous versions may not have been tested in this environment.

The HP Support Software CD is updated monthly and available by annual subscription or as a one-time purchase. You can also download all files, including the most current available ROM for the platform, from the HP website www.hp.com. See Appendix A for information on determining the current ROM version and how to update.

Common image preparation using factory preinstalled Windows Vista images

Using the factory preinstall image

IMPORTANT

Follow the instructions in the order provided. Failure to complete these steps in the proper order can result in an unsuccessful or unstable installation. The factory image can only be shared on the 8710p, 8510p, 6910p, 2710p (Vista Only), 2510p, 6710b and 6510b models.

This section provides guidelines for users who use the preinstalled image of Microsoft Windows Vista Business.

Preparing for installation

1. If necessary, undock the unit, disconnect all external peripherals and remove all PC card devices.
 2. Connect AC power.
 3. To check and upgrade ROM BIOS for each system, follow the steps below.
 - Check the current ROM BIOS using Computer Setup (see Appendix A).
 - Compare the current ROM version date to the latest ROMPaq release date on the HP website to ensure that you have the most recent version. If you do not have the most recent version, install the latest system ROM BIOS.
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Note

Refer to the online download and installation instructions to complete the ROM upgrade.

Preparing for the preinstalled image for use on multiple models

1. Unbundle the preinstalled Windows Vista Business image on the 8510p.
 - Refer to the documentation included with the system for instructions.
2. Create restore discs using HP Backup and Recovery Manager.
3. Remove the primary hard drive from the 8510p.
 - Removal procedures are available in the Maintenance and Service Guide: "HP Compaq 8510p Notebook PC."
4. Remove the primary hard drive from the 8710p.
 - Removal procedures are available in the Maintenance and Service Guide: "HP Compaq 8510p Notebook PC."
5. Insert the drive removed from the 8510p into the 8710p.
6. Apply power to the 8710p and allow the OS to enumerate all of the new devices.
7. Power down the 8710p and remove the hard drive.
8. Remove the primary hard drive from the 6910p.
 - Removal procedures are available in the Maintenance and Service Guide: "HP Compaq 6910p Notebook PC."
9. Insert the drive removed from the 8710p into the 6910p.

10. Apply power to the 6910p and allow the OS to enumerate all of the new devices.
11. Install ATI 6910p Video Driver & Control Panel version 1.00 B. and SCM3264 version 1.00 A.
12. Power down the 6910p and remove the hard drive.
13. Remove the primary hard drive from the 6710b.
 - Removal procedures are available in the Maintenance and Service Guide: "HP Compaq 6710b Notebook PC."
14. Insert the drive removed from the 6910p into the 6710b.
15. Apply power to the 6710b and allow the OS to enumerate all of the new devices.
16. Power down the 6710b and remove the hard drive.
17. Remove the primary hard drive from the 6510b.
 - Removal procedures are available in the Maintenance and Service Guide: "HP Compaq 6510b Notebook PC."
18. Insert the drive removed from the 6710b into the 6510b.
19. Apply power to the 6510b and allow the OS to enumerate all of the new devices. The image is now ready for use with supported common image systems with Intel processors. For use on the 2510p or 2710p, capture the image using HP Backup and Recovery Manager or third party image capture software, such as Symantec Norton Ghost.

Configuring the Windows Vista Business operating system and system software for a Common Image

Preparing for installation

IMPORTANT

Follow the 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 Vista Business.

Installing drivers and enhancements

IMPORTANT

Upgrade the system ROM before beginning the Windows installation.

Software installation

Perform the following steps before manually installing Windows Vista Business:

1. Change the boot order in ROM BIOS to make the optical drive the first boot device on the 8510p.
 2. Install the OS (See note below).
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Note

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

3. 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 (along with recommended installation order)

Software Components	Priority	Version Number	Recommended Installation Order
Intel Chipset Installation Utility	Required component	8.2.0.1014 A	1
Intel UMA 2007 Windows Vista Graphics Driver	Required component	1.00 C	2
Intel Set Resolution Utility	Recommended component	1.00 A	3
ATI M76 Vista Video Driver and Control Panel	Required component	1.00 A	4
ADI SoundMax Vista Audio Driver	Required component	1.00 D	5
Ethernet Drivers for Vista	Required component	1.00 A	6
WLAN Driver Installer (Broadcom Intel) for Windows Vista	Required component	6.00 C	7
Windows Vista Modem Installer	Required component	1.00 A	8
Ricoh R5C853/R5C803 Flashmedia Driver	Required component	1.00.02 A	9
SCM3264	Required component	1.00 A	10
HP Integrated Module with Bluetooth Wireless Technology for Vista	Required component (on models configured with Bluetooth)	6.0 E	11
Wacom Digitizer Driver	Required component	2.7.8.4 B	12
Essential System Updates for Microsoft Windows Vista	Required component	1.00 G	13
HP 3D DriveGuard for Vista	Required component	3.00 A	14
HP Wireless Assistant	Recommended component	3.00 F	15
HP ProtectTools Security Suite	Recommended component	3.00 A	16
Quick Launch Button Software	Recommended component	6.20 E	17
Synaptics Touchpad	Recommended component	9.1.11 Q	18
Intel AMT LMS-SOL Driver	Recommended component	2.5.3.1084 □	19
Intel AMT MEI Driver	Recommended component	2.5.3.1084	20
System Default Settings for Vista	Recommended component	2.00 B	21

4. Remove the primary hard drive from the 8510p.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 8510p Notebook PC.”
5. Remove the primary hard drive from the 8710p.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 8710p Notebook PC.”
6. Insert the drive removed from the 8510p into the 8710p.
7. Apply power to the 8710p and allow the OS to enumerate all of the new devices.
8. Power down the 8710p and remove the hard drive.
9. Remove the primary hard drive from the 6910p.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 6910p Notebook PC.”

10. Insert the drive removed from the 8710p into the 6910p.
11. Apply power to the 6910p and allow the OS to enumerate all of the new devices.
12. Power down the 6910p and remove the hard drive.
13. Remove the primary hard drive from the 6710b.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 6710b Notebook PC.”
14. Insert the drive removed from the 6910p into the 6710b.
15. Apply power to the 6710b and allow the OS to enumerate all of the new devices.
16. Power down the 6710b and remove the hard drive.
17. Remove the primary hard drive from the 6510b.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 6510b Notebook PC.”
18. Insert the drive removed from the 6710b into the 6510b.
19. Apply power to the 6510b and allow the OS to enumerate all of the new devices. The image is now ready for use with supported common image systems with Intel processors. For use on the 2510p or 2710p, capture the image using HP Backup and Recovery Manager or third party image capture software, such as Symantec Norton Ghost.

Common image preparation using factory preinstalled Windows XP Professional images

Using the factory preinstall image

IMPORTANT

Follow the instructions in the order provided. Failure to complete these steps in the proper order can result in an unsuccessful or unstable installation. The factory image can only be shared on the 8710p, 8510p, 6910p, 2510p, 6710b and 6510b models.

This section provides guidelines for users who use the preinstalled image of Microsoft Windows XP Professional.

Preparing for installation

1. If necessary, undock the unit, disconnect all external peripherals and remove all PC card devices.
2. Connect AC power.
3. To check and upgrade ROM BIOS for each system, follow the steps below.
 - Check the current ROM BIOS using Computer Setup (see Appendix A).
 - Compare the current ROM version date to the latest ROMPaq release date on the HP website to ensure that you have the most recent version. If you do not have the most recent version, install the latest system ROM BIOS.

Note

Refer to the online download and installation instructions to complete the ROM upgrade.

Preparing for the preinstalled image for use on multiple models

1. Unbundle the preinstalled Windows XP Professional image on the 8510p.
2. Remove the primary hard drive from the 8510p.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 8510p Notebook PC.”
3. Remove the primary hard drive from the 8710p.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 8710p Notebook PC.”
4. Insert the drive removed from the 8510p into the 8710p.
5. Apply power to the 8710p and allow the OS to enumerate all of the new devices.
6. Power down the 8710p and remove the hard drive.
7. Remove the primary hard drive from the 6910p.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 6910p Notebook PC.”
8. Insert the drive removed from the 8710p into the 6910p.
9. Apply power to the 6910p and allow the OS to enumerate all of the new devices.
10. Install ATI 6910p Video Driver & Control Panel version 1.00 B. and SCM3264 version 1.00 A.
11. Power down the 6910p and remove the hard drive.
12. Remove the primary hard drive from the 6710b.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 6710b Notebook PC.”
13. Insert the drive removed from the 6910p into the 6710b.
14. Apply power to the 6710b and allow the OS to enumerate all of the new devices.
15. Power down the 6710b and remove the hard drive.
16. Remove the primary hard drive from the 6510b.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 6510b Notebook PC.”
17. Insert the drive removed from the 6710b into the 6510b.
18. Apply power to the 6510b and allow the OS to enumerate all of the new devices. The image is now ready for use with supported common image systems with Intel processors. For use on the 2510p or 2710p, capture the image using HP Backup and Recovery Manager or third party image capture software, such as Symantec Norton Ghost.

Configuring the Windows XP Professional operating system and system software for a Common Image

Preparing for installation

IMPORTANT

Follow the 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 XP Professional.

Installing drivers and enhancements

IMPORTANT

Upgrade the system ROM before beginning the Windows XP Professional installation.

Software installation

Perform the following steps before manually installing Windows XP Professional:

1. Change the boot order in ROM BIOS to make the optical drive the first boot device on the 8510p.
2. Install the OS (See note below).

Note

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

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

Table 2 Minimum Versions of Necessary Drivers and Enhancements (along with recommended installation order)

Software Components	Priority	Version Number	Recommended Installation Order
Intel Chipset Installation Utility	Required component	8.2.0.1012 A	1
Intel UMA 2007 Windows XP Graphics Driver	Required component	1.00 D	2
Intel Set Resolution Utility	Recommended component	1.00 A	3
ATI M76 XP Video Driver and Control Panel	Required component	1.00 A	4
Microsoft UAA Bus Driver for High Definition Audio	Required component	1.00 B	5
ADI SoundMAX HD Audio Driver for Windows XP	Required component	1.00 C	6
Ethernet Drivers for XP	Required component	1.00 A	7
WLAN Driver Installer (Broadcom Intel) for Windows XP	Required component	6.00 D	8
Windows XP 32-bit Modem Installer	Required component	1.00 A	9
Ricoh R5C853/R5C803 Flashmedia Driver	Required component	1.00.02 A	10
SCM3264	Required component	1.00 A	11
HP Integrated Bluetooth Driver	Required component (on models with Bluetooth)	5.10 E	12
Infineon TPM Driver	Required component (on models configured with TPM)	5.00 B	13
Essential System Updates for Microsoft Windows XP SP2	Required component	2.00 M	14
HP 3D DriveGuard for XP	Required component	1.00 A	15
HP Wireless Assistant	Recommended component	3.00 F	16
HP ProtectTools Security Suite	Recommended component	3.00 A	17
Quick Launch Button Software	Recommended component	6.20 E	18
Synaptics Touchpad	Recommended component	9.1.11 Q	19
Intel AMT LMS-SOL Driver	Recommended component	2.5.3.1084□	20

Intel AMT MEI Driver	Recommended component	2.5.3.1084	21
System Default Settings	Recommended component	4.20 Z	22

4. Remove the primary hard drive from the 8510p.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 8510p Notebook PC.”
5. Remove the primary hard drive from the 8710p.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 8710p Notebook PC.”
6. Insert the drive removed from the 8510p into the 8710p.
7. Apply power to the 8710p and allow the OS to enumerate all of the new devices.
8. Power down the 8710p and remove the hard drive.
9. Remove the primary hard drive from the 6910p.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 6910p Notebook PC.”
10. Insert the drive removed from the 8710p into the 6910p.
11. Apply power to the 6910p and allow the OS to enumerate all of the new devices.
12. Power down the 6910p and remove the hard drive.
13. Remove the primary hard drive from the 6710b.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 6710b Notebook PC.”
14. Insert the drive removed from the 6910p into the 6710b.
15. Apply power to the 6710b and allow the OS to enumerate all of the new devices.
16. Power down the 6710b and remove the hard drive.
17. Remove the primary hard drive from the 6510b.
 - Removal procedures are available in the Maintenance and Service Guide: “HP Compaq 6510b Notebook PC.”
18. Insert the drive removed from the 6710b into the 6510b.
19. Apply power to the 6510b and allow the OS to enumerate all of the new devices. The image is now ready for use with supported common image systems with Intel processors. For use on the 2510p or 2710p, capture the image using HP Backup and Recovery Manager or third party image capture software, such as Symantec Norton Ghost.

Appendix A: System ROM versions

Determining the ROM version using Setup

Note

The ROM versions listed in this document are current as of the white paper publication date.

Use the HP Setup utility to determine the system ROM version.

Table 3 Minimum ROM versions

Portable family	ROM version
HP Compaq 8710p Notebook PC	F.01
HP Compaq 8510p Notebook PC	F.02
HP Compaq 6910p Notebook PC	F.06
HP Compaq 2710p Tablet PC	F.04
HP Compaq 2510p Notebook PC	F.04
HP Compaq 6715b Notebook PC	F.05
HP Compaq 6710b Notebook PC	F.08
HP Compaq 6515b Notebook PC	F.05
HP Compaq 6510b Notebook PC	F.08

- A block cursor displays in the upper right corner of the screen during startup.
- 1. Press **F10** when the block cursor displays.
- 2. Scroll down using the down arrow key to highlight View System Information and press **Enter**. The System Information prompt appears.
- 3. Make note of the ROM date and compare it to the date in Table 3.
- 4. Press **Esc** to exit the ROM information screen.
- 5. Scroll down using the down arrow key until Exit without Saving Changes is highlighted. Press **Enter**.
- 6. Press **F10** to confirm exiting the Computer Setup.

Determining the ROM Version Using Windows System Information

1. Click **Start**→**All Programs**→**Accessories**→**System Tools**→**System Information** under Windows XP.
2. Scroll through the list until the BIOS Version/Date information appears. Make note of the ROM version and compare it to listings in Table 2.
3. Close Windows System Information by clicking on the **X** in the upper right corner of the window.

Determining the ROM version using QuickLaunch Buttons for Windows

1. Press **Fn** (Function) and **Esc** (Escape) keys simultaneously.
2. HP System Information window appears which includes the System BIOS information. Make note of the ROM version and compare it to listings in Table 2.
3. Close HP System Information by clicking **OK**.

Creating a ROMPaq diskette

Download the ROMPaq SoftPaq from <http://www.hp.com/support>.

After downloading the appropriate SoftPaq from the HP website, follow the instructions on the download page.

Appendix B: SoftPaqs

Unpacking a SoftPaq file

Several switches can be used when unpacking a SoftPaq file.

```
Sp#####.exe -pdf -f<path> -s
```

SP#####.exe is the Softpaq to unpack.

-pdf is a run time switch that overrides the build parameters.

-f<Path> is a run time switch that overrides the default path set at build time.

-s instructs the package to unpack in silent mode skipping the welcome, license and directory screens.

Descriptions of the software used on HP Compaq notebook PCs are listed in Table 4.

Table 4 SoftPaq descriptions

Name	Description
ADI SoundMax Audio Driver	Enables the integrated Audio hardware
Ethernet Drivers	Enables integrated NIC devices select models
Modem Drivers	Enables integrated modem devices select models
Video Drivers	Enables the integrated video hardware
Synaptics TouchPad Driver	Provides added functionality for the touchpad device
Essential System Updates	This package contains required software patches which enhance the stability of the system
System Default Settings	Changes operating system settings to match HP defaults
System ROMPaq	System Firmware
Quick Launch Button Software	Enables the Quick Launch Buttons on the internal keyboard

Appendix C: Known anomalies

ATI Hydravision

Anomaly: ATI Hydravision does not function on the some models.

Description: ATI Hydravision is preloaded on the models with ATI graphics. It is designed for use with models that include ATI video chipsets and provides additional features for multi-monitor configurations.

Systems Affected: HP Compaq 2510p Notebook PC and 2710p Tablet PC models

Operating Systems Affected: Windows XP and Windows Vista

Resolution: This software should be used in environments where multiple display devices are used simultaneously on systems with ATI video chipsets. It is not required for common image environments and could potentially cause confusion for end users of systems Intel video chipsets.

Appendix D: Questions and answers

- Q . Is the HP Compaq 8510p Notebook PC preinstall image also compatible with the HP Compaq 6910p and Compaq 8710p notebooks?**
- A .** Yes, the updated preinstalled software image has been tested with the Compaq 6910p and Compaq 8710p notebooks.
- Q . If a new model is introduced, will all previously released models in the family, that are still being manufactured, be updated with the new preinstall image?**
- A .** No, many customers have expressed a need for consistency. Therefore, HP will make reasonable commercial efforts to maintain a consistent software image on the HP Compaq p series during the life of the series. HP will publish white papers that provide customers with the information necessary to maintain a software components list for the p series.
- Q . How do I obtain updated software components?**
- A .** The latest software updates are available from the HP Web site at <http://h18007.www1.hp.com/support/files/notebooks/us/purchase.html>

For more information

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

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