

# WHITE PAPER

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## HP Guide to System Recovery and Restore

### System Recovery Options Available for the Compaq Evo Desktop Product Family, HP iPaq Desktop Product Family, and HP Intel IA-32 Workstations

*This guide provides:*

- *An overview of operating system recovery features available in Windows 2000 and Windows XP.*
  - Using safe mode to change configuration settings.*
  - Using the Recovery Console to repair damaged system files.*
  - Repairing the operating system installation.*
- *An overview of the HP Restore Plus! System restoration process.*



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## HP Guide to System Recovery and Restore System Recovery Options Available for the Compaq Evo Desktop Product Family, HP iPaq Desktop Product Family, and HP Intel IA-32 Workstations

North America First Edition (January 2003)

### PURPOSE

This document describes some of the options available to an individual who may experience problems with the operating system installation on their PC. Because the causes of problems with the system software can vary widely, this document discusses practices that would apply to the broadest range of circumstances.

It is assumed that the reader of this document is familiar with the installed operating system, including: installing the operating system software, adding and removing components; adding and removing device drivers; and using hard drive management tools.

### Some Reasons for Needing System Recovery or Restore

- Installation of a software package or driver has produced undesirable results.
- A hardware device or system resource is no longer working as expected.
- The operating system is not functioning properly.
- You want to restore the PC back to its original factory state.

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**NOTE:** Before attempting any of the solutions outlined in this document, you should review the online help and support documentation provided with the Windows operating system and search for the topic “**Repair Overview**” or visit the **Microsoft KnowledgeBase** Web site at <http://support.microsoft.com/> for information regarding possible known operating system or software issues and solutions.

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### What You Will Need

- Operating system CD (provided with the HP computer)
- The *Restore Plus!* CD (provided with the HP computer)
- *Restore Plus! Supplemental Software* CD (provided with the HP computer)
- Additional application CDs (provided with the HP computer or purchased separately)
- Additional PC with access to the Internet for reviewing documentation from <http://support.microsoft.com/> or obtaining device drivers or additional software from <http://www.hp.com/> or hardware manufacturers' Web sites (optional, but highly recommended)

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**NOTE:** Some systems may not have shipped with *Restore Plus!*, *Supplemental Software* CDs, or additional OEM application CDs. The inclusion of these CDs with your PC is based on the model and software options available at the time of purchase.

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## USING SAFE MODE TO DIAGNOSE AND CORRECT PROBLEMS

Safe Mode helps you diagnose problems. If a symptom does not reappear when you start in Safe Mode, you can assume that the default settings and minimum device drivers of the operating system are not causing the problem. If a newly-added device or a modified driver is causing problems, you can use Safe Mode to remove the device or undo the change.

### To start the computer in Safe Mode:

1. Print these instructions before continuing. They will not be available after you shut down the computer down in step 2.
2. Click **Start > Shut Down**, then select **Restart** from the drop-down list.
3. In the **Shut Down Windows** dialog, click **OK**.
4. When you see the message **Please select the operating system to start**, press the F8 key.
5. Use the arrow keys to highlight the appropriate Safe Mode option, and then press the Enter key.
6. If you have a dual-boot or multiple-boot system, choose the installation that you need to access using the arrow keys, and then press the Enter key.

In Safe Mode, you have access to only basic files and drivers (mouse, monitor, keyboard, mass storage, base video, default system services, and no network connections). You can choose the **Safe Mode with Networking** option, which loads all of the above files and drivers and the essential services and drivers to start networking, or you can choose the **Safe Mode with Command Prompt** option, which is exactly the same as safe mode except that an MS-DOS command prompt is started instead of the Windows graphical user interface. You can also choose **Last Known Good Configuration**, which starts your computer using the registry information that was saved at the last shutdown.

## USING THE RECOVERY CONSOLE TO REPAIR DAMAGED FILES

If you cannot start your computer, you can run the Recovery Console from operating system CD-ROM provided with the PC. To run the Recovery Console from the operating system CD-ROM:

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**NOTE:** Make sure that the system is configured to boot first from the CD-ROM drive, then from the hard drive. You can verify or change device boot order using the Computer Setup (F10) Utility. For more information, refer to the *Computer Setup (F10) Utility Guide* provided with the computer.

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1. Insert the Windows 2000 or Windows XP CD-ROM into the CD-ROM drive.
2. Click **Start > Shut Down**, then select **Restart** from the drop-down list.
3. In the **Shut Down Windows** dialog, click **OK**.
4. Press any key to start the computer from the CD-ROM drive when you are prompted to do so.
5. On the **Welcome to Setup** page, press **R**.
6. Choose the installation that you want to access from the Recovery Console.
7. Type the administrator password. If the administrator password is blank, press the **Enter** key.

The console provides commands you can use to do simple operations such as changing to a different directory or viewing a directory, and more powerful operations such as fixing the boot sector. You can access Help for the commands in the Recovery Console by typing **help** at the Recovery Console command prompt.

Once you have access to the Windows installation you can try to correct potential problems with the file system by executing the command **chkdsk /f /r**.

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**NOTE:** For more information on how to use the recovery console, including enabling and disabling services, replacing corrupted system files and other operations, please review the **Microsoft KnowledgeBase** or your online documentation by searching on the keywords: “**recovery console**”.

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## REPAIRING THE INSTALLED OPERATING SYSTEM

If you are unable to repair the software configuration using the methods described above, you can reinstall the Windows operating system on top of the current installation in an attempt to replace damaged or corrupted components.

The steps to perform repair installation are as follows:

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**NOTE:** Make sure that the system is configured to boot first from the CD-ROM drive, then from the hard drive. You can verify or change device boot order using the Computer Setup (F10) Utility. For more information, refer to the *Computer Setup (F10) Utility Guide* provided with the computer.

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1. Insert the Windows 2000 or Windows XP CD-ROM into the CD-ROM drive.
2. Click **Start > Shut Down**, then select **Restart** from the drop-down list.
3. In the **Shut Down Windows** dialog, click **OK**.
4. Press any key to start the computer from the CD-ROM drive when you are prompted to do so.
5. On the **Welcome to Setup** page, press the Enter key.
6. On the **Setup Windows** page, press **R** to repair the installed copy of the Windows operating system.
7. Follow the installation instructions displayed on the screen to complete the repair process.

## USING THE *RESTORE PLUS!* CD

The *Restore Plus!* CD is used to perform a destructive restore of the PC. This process will restore the PC to a near-factory shipping state with software and drivers provided by HP. The process will format and partition the first bootable hard disk volume in the computer. The *Restore Plus!* process does not affect data contained on any hard disk volumes other than the first bootable hard disk (usually the IDE hard disk connected as master to the primary IDE controller).

If you have changed the controller boot order processing within the system BIOS (located by pressing **F10** during system boot) to make a SCSI controller the first bootable device, the *Restore Plus!* process will use the first SCSI hard disk in the SCSI chain for restoration purposes.

The *Restore Plus!* CD displays a step-by-step interactive wizard that prompts for all necessary CD media, then automates the installation of the Windows operating system and HP-supplied software components.

**REFERENCES**

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