WINBENCH® 98 VERSION 1.0 README

This is the README file for WinBench® 98 Version 1.0 . This file contains the WinBench 98 license agreement, installation instructions, important notes, known problems, and any other late-breaking information about WinBench 98. Before you run WinBench 98, you must first read and agree to the license agreement.

This readme file includes the following sections:

- License agreement for Ziff-Davis' WinBench® 98 version 1.0

- Installing and Uninstalling WinBench® 98 version 1.0

- Important WinBench 98 notes

- Known problems in WinBench 98 version 1.0

- On-line documentation

- Contacting ZDBOp

- Trademarks

- Copyrights

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D. Identify the specific WinBench 98 score(s) being reported (i.e., Ziff-Davis' WinBench® 98 Version 1.0 Business Graphics WinMark™ 98);

E. Identify the exact name, processor speed and type, number of processors, amount of RAM, amount of secondary RAM cache, if any, hard disk model, type of hard disk controller, hard disk file system, and size of hardware hard disk cache, if any, of the PC used for the test (e.g., WXY Corp. Model 466 with 66-MHz Intel® dual 486DX2-66 CPU, 8MB of RAM, 64KB RAM cache, 200MB hard disk, IDE controller, FAT file system, and no hardware disk cache);

F. Identify the exact graphics adapter name, amount and type of RAM on it, graphics driver name and date, graphics resolution and color depth, refresh rate, and CODEC version that produced the result (e.g., XYZ Corp. XYZ Graphics adapter with 2MB VRAM with XYZ.DRV version 1.1 driver, 800 by 600 pixels with 256 colors, a refresh rate of 72 Hz, and Intel Indeo® Video version 3.2 CODEC);

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INSTALLING WINBENCH® 98 VERSION 1.0

Automatic install

If you have AutoPlay enabled in Windows, then the benchmark install program starts up when you put the CD-ROM in the drive. At the opening screen, click on the "Install WinBench® 98" text.

Manual install

To install the benchmark from the CD-ROM, run SETUP.EXE from the \ZDBENCH\WB98 directory on the CD-ROM.

If you want to run the installer program, so you can install other benchmarks on the CD-ROM, run **INSTALL.EXE** from the CD-ROM's root directory.

Silent install

A silent install requires no input from you. This mode is useful if you're installing the benchmark on a large number of machines and don't want to specify directories, program groups, etc., on each one. The silent install uses the benchmark installation defaults of C:\ZDBENCH for the install directory and Ziff-Davis Benchmarks for the program group.

Here's how to use it:

1.   From the Start menu, click on Run.

2.   In the Run dialog box, click the Browse button to navigate to the benchmark's SETUP.EXE file.

3.   Click on the SETUP.EXE file and click Open.

4.   In the Run dialog box, add "-s" to the end of the command line in the Open box.

5.   Click OK to run the silent setup install.

Note: During a silent install, you'll receive no visual feedback (no messages, no dialog

boxes) indicating the installation's progress or its completion.

Specify the drive and directory

The installation program lets you specify the drive and directory where you want to install the benchmark. We suggest you use the default directory of C:\ZDBENCH. This makes it simpler to install and use other Ziff-Davis benchmarks.

Tip: If you're installing more than one Ziff-Davis benchmark, you must put them all into the same directory, preferably **C:\ZDBENCH**. The setup's dialogs will warn you if you try installing other ZD benchmarks into different directories.

Starting WinBench 98

Display the Ziff–Davis Benchmarks program menu and click the WinBench 98 icon.

The first time you run WinBench 98, the licensing and registration windows will appear. You must agree to the license and register your copy of the software before you can run any tests.

Uninstalling WinBench 98

You should ***always*** uninstall the benchmark before installing it again.   Also, do not uninstall or install while the benchmark is running.

To uninstall the benchmark:

1.   From the Start menu, click Settings.
2.   From the Settings menu, click Control Panel.
3.   In the Control Panel, double-click Add/Remove Programs.
4.   Highlight WinBench 98 in the list of installed programs and click the Add/Remove button.

Note: When the uninstaller runs, it will prompt you to delete each shared file. You can click on Yes for each file or click on Yes to all to delete all the shared files.

What the Uninstall doesn't remove

Be aware that uninstalling the benchmark doesn't remove all installed items from the hard disk.   The following items remain:

* The **RESULTS** directory.
* The **ZDBENCH** installation directory (since it contains the **RESULTS** directory).
* Any files the user created under **ZDBENCH** (export files, results files).

- The HKEY_LOCAL_MACHINE\Software\Ziff-Davis\PC Benchmarks registry key.   It will be deleted and recreated the next time a benchmark is installed.
- The **WB98.INI** and **ZDBUI32.INI** files (although most entries are removed).

Note: If you uninstall Winstone and WinBench in the same order as you installed them, **ZDBENCH** may contain other empty subdirectories. If you uninstall the benchmarks in the opposite order as you installed them, **ZDBENCH** should contain no empty subdirectories.

IMPORTANT WINBENCH 98 NOTES

The following list provides information you need to know BEFORE you run WinBench 98. Read these notes before running the software.

1.   You must read and agree to the license information listed at the beginning of this file before you run WinBench 98. The same information appears on your PC's screen when you first run WinBench 98. If you don't agree to the licensing information, delete all copies of WinBench 98 in your possession or under your control (or cease its use and delete all local copies if you received it as part of a collection of software) and return the media on which you received WinBench 98 and all accompanying materials (including any documentation) to the Ziff-Davis Benchmark Operation (ZDBOp) at the following address:

Ziff-Davis Benchmark Operation

1001 Aviation Parkway, Suite 400

Morrisville, North Carolina 27560

2.   WinBench 98's minimum hardware and software requirements include:

- Microsoft® Windows® 95 or later or Windows NT® 4.0 (build 1381) Service Pack 3 or later.

- An 80386 (or compatible) or higher processor.

- 8MB of RAM, when used with Windows 95, 16MB of RAM, when used with Windows NT (WinBench 98 will run in less RAM, but it may produce invalid results due to paging activity.)

- 10MB of free disk space for a minimal installation, 160MB for a full install.

- 170MB plus the amount of physical RAM on the PC as additional free disk space for the Business Disk WinMark 98 tests; 160MB plus the amount of physical RAM on the PC as additional free disk space for the High-End Disk WinMark tests.

- A CD-ROM drive if you're planning to run the CD-ROM or video tests.

- A VGA resolution (640x480) or higher graphics adapter.

- The Business Graphics WinMark tests require a resolution of 800x600 or higher.

- The High-End Graphics WinMark tests require a resolution of 1024x768 or higher.

- Small fonts for all Graphics WinMark tests.

- A sound card (recommended for the video tests).

- DirectX™ 2 or later (available from Microsoft®'s web site: http://www.microsoft.com) if you want to run the DirectDraw™ inspection tests.

• ActiveMovie (available from Microsoft's web site) if you want to run the MPEG Video tests. (ActiveMovie is included with Windows 95 OSR2.)

• An Indeo® 4.x Video CODEC (available from Intel®'s web site: http://www.intel.com) if you want to run the Indeo 4.x Video tests. (Indeo 4.3 is optional if you want to test non-Intel MMX processors.)

3. WinBench 98 is the most recent release of this product. This release differs from previous releases in many important ways. As a result, you can meaningfully compare WinBench 98 results only with other WinBench 98 results. Don't attempt to compare results from WinBench 98 with results from earlier versions of WinBench.

4. You can interrupt an executing test or group of tests by pressing the Esc key. When the test aborts, WinBench 98 asks if you want to try running the failed test again, abort the rest of the test run, or continue the test run.

5. **SETUP.EXE** installs a **Sample WS WB.ZTD** results file. This file contains both Winstone 98 and WinBench 98 results collected from machines in our research center. (The online help refers to this file as **SAMPLE98.ZTD.**) To view this file:

    1. Click on the Start button to display the Start menu.

    2. Point to the Ziff-Davis Benchmarks submenu.

    3. Click on PC Benchmark Results Viewer.

    4. Click the Open button.

    5. Open the ZDBENCH\RESULTS directory.

    6. Select **Sample WS WB.ZTD** and click Open.

6. Use the following command-line option if Winstone 98 fails with an error during initialization: /**NOSYSCHECK**. This option disables Winstone 98's automatic detection of the System Info fields.

7. If you're testing WinBench 98 on notebook or green computers, you should disable any power-saving features for best results.

8. If WinBench 98 misidentifies the system configuration and prevents you from running the tests, you can override the configuration checks by adding the following entry to the **WB98.INI** file:

    [ZDBOp]

    TreatConfigProblemsAsWarnings=TRUE

9. Under Windows NT, the System Info dialog may classify some Cyrix® CPUs as "Unknown Cyrix" if you are using Windows NT.

10. When the test system plays a video clip without the proper driver, such as an Indeo 4.1 or MPEG driver, the following problems occur: WinBench 98 displays the clip as a field of diagonal hash marks and the maximum frames per second score is extremely large. You should disregard all scores for this clip until you install the correct driver.

11.   You may see the following message: "During this test the interrupts may have been disabled..." What's happening is that a driver on the system has disabled the interrupts for an inappropriate length of time. You may be able to find the driver causing the problem depending on the test you're running (in WinBench 98, for example, if you see this message during a graphics test, then it's likely a graphics driver is causing the problem). The message indicates the driver should be replaced with an updated driver.

        Using a driver that causes this error could lead to other problems on your system, such as errors when downloading files and breaks in audio.

12.   We strongly recommend you reboot the test system after you install   the benchmark on Windows 95 and Windows NT.

KNOWN PROBLEMS IN WINBENCH 98 VERSION 1.0

The following is a list of known problems in WinBench 98 Version 1.0 :

1.   When you're running in demo mode, WinBench 98 doesn't trap key strokes when it displays the Table of Results. This means that, if you want to halt demo mode, you should wait until a demo mode test is running and then press the Esc key.

2.   WinBench 98 will sometimes fail during its graphics tests. A majority of these failures are the result of problems in graphics adapter drivers. The most common problems are GPFs in the graphics driver and drawing outside of the test screen that corrupt the title, menu, or status bars. For more information, and a workaround, open the WinBench 98 online help, double-click the WinBench 98 Test Settings topic, and double-click the topic "Graphics WinMarks test settings."

3.   On some systems, the Graphics WinMark tests may not reproduce the exact colors used in the corresponding Winstone 98 tests. However, the images are recognizable and the loss of color fidelity does not impact the results from the WinBench 98 test.

4.   Under Windows NT 4.0, you may receive a warning that the paging file is too small when running some tests.   You can usually ignore the warning and retry the test.   Windows NT seems to issue the warning whenever it needs to grow the paging file.   To avoid the warning, you should make sure the minimum paging file size is set to 1.5 times the size of physical memory (see the System Control Panel).

ON-LINE DOCUMENTATION

WinBench 98 Version 1.0 comes with the following on-line documentation.

README.RTF

This is the file you're reading right now. In this file, you'll find the WinBench 98 license agreement and any late-breaking information. You should read this information before you install or run WinBench 98. You'll find this file in the **\ZDBENCH\WB98** directory.

On-line help

Because the PC benchmarks share the same user interface (UI), we've put interface-specific help in its own file and benchmark-specific help in their own files.

Interface-specific help includes such information as selecting and running tests, creating batch files, saving results, using the Table of Results and Results Viewer, and so on. Benchmark-specific help includes information on specific tests, tips on interpreting a specific test's results, and explanations of UI elements (such as test settings) specific to a benchmark.

You can access the help files from each benchmark's Help menu.

CONTACTING ZDBOP

If you have problems installing or running WinBench 98, send a Problem Report Form to WinBench 98 Technical Support at ZDBOp. You can find a Problem Report Form on ZDNet™/World Wide Web Edition (http://www.zdbop.com) and in the online help file.

You can send the Problem Report Form to us in a variety of ways, though we can answer your questions more quickly if you use email. Fill out the form and send it via:

- Email to zdbopwebmaster@zd.com
- Fax to 919-380-2879
- Mail to Ziff-Davis Benchmark Operation 1001 Aviation Parkway, Suite 400 Morrisville, N.C. 27560 ATTN: Tech Support

If you want a quicker response, please include your Internet email address or fax number.

When you send the Problem Report Form to us, it helps us a lot if you include the following information:

- Exactly what was the benchmark doing when the problem occurred (if you know)?

- If there were any dialog boxes or messages on the screen, what were they?

- When you started the test, did the benchmark display its Warning dialog box? If so, which items in the box were checked?

- Can you reproduce the problem?

• Can you send us the PC's system information? Look for the file **SYSINFO.INI** in the **ZDBENCH** directory; the file contains lots of configuration information about the benchmark and your system. You can fax this information to us or you can include it in a message on ZDNet.

• Can you send us the **ERRORS.TXT** file? This file is created in the \ZDBENCH directory where you installed the benchmark. The file contains a list of all error messages the benchmark reported. You can fax this information to us or you can include it in a message to Technical Support.

The Problem Report Form provides space for you to answer these questions. If you don't want to send in a Problem Report Form, please include the above information in any faxes or communications you send to us.

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