

Program: Drive Test for Windows
Version: 1.0
Date: October 12, 1995
Author: George Spafford

Purpose:

Drive test is designed to aid in determining the configuration of a PC's drive subsystem.

Reason:

I wrote DTW due to problems I have encountered with diagnostics applications that directly access storage system hardware and miss software conflicts. DTW does not perform any direct accesses. Instead, DTW first writes a set of records to the drive and then reads the records verifying that the values have not changed. After each write-read iteration, what I term a "pass", the user can run up to two additional external applications, perhaps Symatec's Norton's Disk Doctor for Windows, etc., to gauge any ill-effects.

The read/write tests should perform under Windows 95 and NT in theory, but haven't been tested.

Installation:

Copy the program files to your desired directory. Move the QPRO200.DLL file into your Windows' system directory, for example: C:\WINDOWS\SYSTEM. Then add the DTW.EXE program to an existing program group, or to your desktop.

You will also need the VisualBASIC VBRUN300.DLL file in your system directory. This can be found on many BBSes, Internet sites (including Microsoft's (www.microsoft.com and <ftp.microsoft.com>), etc.

Configuration:

By clicking on the Configure command button, or pressing ALT-C, DTW can be configured with several options including registration data.

Delete Data File When Finished:

When enabled, this deletes the test data file when the test is completed. Otherwise, a file named DTW_0_0.TST is left in the test drive's root directory.

Run External Diagnostics Application(s):

When enabled, this will run the external applications that are defined in the "External Disk Diagnostic Applications" section.

App1: and App2:

This is the name of the first external diagnostic utility that you want executed after each read/write pass. It must be either a fully qualified name with the drive and path or the file name must be able to be located in the active PATH specification.

Window Type:

Defines the type of Window that you want the external application to be executed in.

Name and SN:

When you register the utility, I will e-mail or snail-mail you your user name and password.
Be sure to enter your ID and serial number (SN) exactly as noted.

Procedure:

First, select the drive that you want to test in the drive box. It can be a local or remote drive. The program will need write and read access. The program will display the following:

Disk Size:	The overall size of the formatted drive.
Used:	Disk space used so far.
Remaining:	Disk space that has not been used yet.
Cluster Size:	This is the size of the drive's clusters as assigned to it by DOS. I have not tested this result using NTFS so I'm not sure if it will be valid always under NT.
Free Clusters:	This is the number of unused clusters on the drive. Again, I'm not sure about functionality under NT using NTFS.

Now, tell the program how many clusters to use in the write/read tests by entering the desired number in the "Clusters to Fill" box. The program will then report an anticipated number of bytes that it will write to the drive in the "Bytes" box. You can not enter data in the Bytes box. Furthermore, the program will not let you write more clusters to the drive than what it has identified as free.

Next, specify the number of test passes that you wish the program to perform.

Finally, click on the "Go" command button or press ALT-G. The program will now perform the tests. It will report the current pass it is on, number of bytes written after each record has been saved and the number of bytes read after a record has been retrieved. The system will raise a flag if an error is detected and abort.

During the write process, the program is monitoring Windows for any error messages involving the disk I/O and will declare an error if something happens. This happens during the read process too, but in addition, record values are verified. One thing to note, the write process is writing records the length of the cluster size -2 comprised of a single character repeated and a carriage return and line feed. This character is randomly selected before each record is written.

Register:

Please register this shareware application. Upon registering this utility for \$20 per copy, I can send you an e-mail and/or USPS mail with your registered name and serial number. Please send payment, cash or postal order please, in US dollars to:

George Spafford
1301 Harrison Avenue
Saint Joseph, MI 49085
USA

e-mail: il@execpc.com

If you want me to e-mail your user name and password, please be sure to legibly give me your address when you send payment.

Legal:

This software and any documentation accompanying it are sold "as is" and without warranties as to performance or merchantability. Furthermore, this product is sold without any express or implied warranties whatsoever. Because of the diversity of conditions and hardware under which this program may be used, no warranty of fitness for a particular purpose is offered. The user is advised to test the program thoroughly before relying on it. The user must assume the risk of using the program. Any liability of seller or manufacturer will be limited exclusively to product replacement or refund of the purchase price.

The QPRO200.DLL is the property of Cresnet Software for use in their QuickPak Pro for Windows programming tool box for Visual BASIC. The VBRUN300.DLL is the property of Microsoft Corporation.

Shareware Distributors:

If you distribute shareware via a BBS, Internet site, CD, diskette, etc., you may distribute Drive Test for Windows non-exclusively as long as you state that it is a shareware program and registration with the program's author is required for permanent use.