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“Disk Watcher”

What Disk Watcher does

Disk Watcher automates checking your disks for corruption. With Disk Watcher you don't need to remember to regularly check your disks to prevent serious problems. Disk Watcher will keep an eye on them and warn you when a disk has problems and needs to be fixed.

The disk checking itself is done by Disk First Aid - Disk Watcher takes care of the automation of it all. Disk Watcher will inform you if any disk problems are found and keeps a log of all it did. Optionally, Disk Watcher can even respond to disk errors by having custom “actions” launched. This makes Disk Watcher a very powerful tool.

The idea is ‘damage prevention’. Too often people wait with running disk repair utilities until it is too late. Still fixable disk problems were ignored, new problems get stacked on top of the old ones, and finally the system breaks down and Disk First Aid can't fix it anymore. Then they have to run out and buy a disk repair utility (like DiskWarrior, TechTool Pro or Norton Disk Doctor) and can only hope that it can still fix things. In the mean time, the disk cannot be used safely.

These days, Apple's Disk First Aid is quite good at repairing problems as long as they aren't too severe. So the only thing you really need to do is run Disk First Aid on a regular basis, not waiting until you're having problems. Disk First Aid comes with the Mac OS, for free, so why not use it? Because it's too much work for most people - you need to remember to regularly launch Disk First Aid, select all the disks you want to check, and then tell Disk First Aid to check them.

With Disk Watcher you can afford to be lazy ;) You just install Disk Watcher and don't worry about disk corruption anymore. Disk Watcher will inform you when there is a problem.

Thanks to George Oerlemans for dressing up Disk Watcher with a pretty icon, and to John Rethorst, whose “Autocheck” inspired me to write Disk Watcher.

System Requirements

- Compatible with Mac OS 7.5 through 9.2.2
- AppleScript must be enabled

If your OS version is older than Mac OS 8.1 then your version of Disk First Aid may be too old. If so, Disk Watcher will tell you. You can download newer versions of Disk First Aid from Apple for free. Go to

ftp://ftp.info.apple.com/Apple_Support_Area/Apple_Software_Updates/

Choose your preferred language, then browse on to /Macintosh/Utilities/Disk_First_Aid/ and pick the version of Disk First Aid you want.

Compatibility

Disk Watcher has been tested extensively under the following OS versions: 7.5.3, 7.5.5, 7.6.1, 8.1, 8.5.1, 8.6, 9.0.4, 9.1, 9.2.1, 9.2.2 (US, Dutch and German versions, with different Date&Time settings and truckloads of third-party system extensions); on the following hardware: a Ilci, a 6100, a 7200, a 7600, a 8500, a PowerBook 1400, 2 iBooks, 2 B&W G3s, 3 G4s; with the following media: hard disks, CDs (both audio and data), zip disks, pc-formatted disks, floppies.

Contact Information

The latest version of Disk Watcher can be found at

<http://www.euronet.nl/~tekelenb/software/diskwatcher/>

For questions, feature requests, bug reports, etc, contact the author at santek@kagi.com

How to install Disk Watcher

Launch the "Disk Watcher Installer". It will put everything in its place and create an Installer Log informing you what was installed and where.

The installer will ask you whether you want Disk Watcher to be run every time you start/restart your Mac, or only once per day. Pick whatever you think is best for you. If later you change your mind, just run the installer again and choose the other option. No need to first uninstall things.

Running Disk Watcher no more than once per day on startup is achieved by installing the "Daily Startup" application, which is part of my freeware "The Dailies", in your Startup Items folder. "The Dailies" are provided with the Disk Watcher package and used by the installer if you choose this option. You can find more information about "The Dailies" in the "goodies" folder in the "Installer Data" folder, or on the WWW at <http://www.euronet.nl/~tekelenb/software/dailies.html>

How it works

Basics

Disk Watcher finds and launches the most recent copy of Disk First Aid that is on your disk(s). It then tells Disk First Aid to verify all your mounted local disks (Disk First Aid cannot check disks on remote servers)[1].

If any of your disks is busy, Disk First Aid cannot check it. In that case Disk Watcher will tell Disk First Aid to continue checking your other disks, and after that again try the disk that was previously busy. Disk Watcher will try busy disks at least 3 times before giving up.

When no disk problems are found

If Disk First Aid finds no problems, Disk Watcher will quit Disk First Aid, create a log[2] (named "Disk Watcher Log") in the folder "Disk Watcher Preferences" in the Preferences folder, to which it writes Disk First Aid's findings of each of your disks, and then quit itself. So there's no need to get bored having to stare at this process. Go get some coffee during this. You can always read the log later to see if anything exciting was found.

When a disk problem is found

If Disk First Aid finds a problem with a disk, that too will be reported in the log, but in this situation Disk Watcher will put up a dialog informing you of this. Disk Watcher then quits but will keep Disk First Aid running. The idea is to make sure your attention is drawn by keeping Disk First Aid open, because in this situation you should tell Disk First Aid to repair the damaged disk before you start using your Mac.

Additionally, Disk Watcher can launch "actions" when disk problems were found. "Actions" can be anything you like. They are just files that you put in the "actions" folder (inside the "Disk Watcher Preferences" folder). This makes it possible to have your home grown AppleScript applets be launched when a problem with a disk is found! So essentially, you are in complete control of what should happen when a problem is found! Talk about configurability ;)

You can use the applet "example" in the "actions (Disabled)" folder as a safe test. Simply move it to the "actions" folder and run Disk Watcher.

Example:

If you're the admin of a Mac network, and your users have Disk Watcher installed, you could write a script that sends you a warning over the network to inform you that Mac "X" has disk problems. And/or you could write a script that displays a custom message to the user. Your imagination is the only limit. Just place your script(s), or an alias to it, in the "actions" folder.

When a problem with the startup disk is found

There is a third situation possible: When Disk First Aid reports that your startup disk needs to be repaired, Disk Watcher will put up a dialog informing you of this. In this case, Disk Watcher will not continue to check your other disks and will not write to the Log[3]. Whenever you encounter this particular situation you really should follow the advice of Disk Watcher, and tell Disk First Aid to repair the startup disk before doing anything else.

Note that all this cannot take place in the background. At least not under pre-Mac OS X systems. You must allow Disk Watcher and Disk First Aid to do their job for you. Sit back and watch it, or don't watch it. How long it takes depends entirely on the speed of your Mac, and the amount of data that is on your disks. When you get bored, go get some coffee. (But you can always hit the "Stop" button in Disk First Aid during all of this. That will automatically quit Disk Watcher as well.)

Settings/Preferences

Intro

For most people Disk Watcher will run just fine with its default settings. Just run it.

Still, there are a few options.

Settings can be made in the file "DW Config" (in the "Disk Watcher Preferences" folder in the "Preferences" folder in the "System Folder"). This is a UNIX-like configuration file, which may look a bit unusual to most Mac users. Don't worry. Just open "DW Config" in your favourite text editor (SimpleText will do just fine) and read it. Everything is explained in there. You'll have no trouble using it.

The settings

- "ExemptDisks" allows you to specify disks (by name) that you don't want to be checked.
- "CheckLocked" allows you to have locked disks checked even though you have the "Volume Info" OSAX or the "Akua Sweets" OSAX installed.
- When "NoEjectables" is enabled, ejectables (floppies, zip disks, jaz disks, CDs, etc.) will not be checked.
- When "ActionsOnly" is enabled, your actions are the only thing that happens when disk problems were found. This disables Disk Watcher's warnings, so make sure that your actions work, or you risk not being warned of problems at all...

More details can be found in the "DW Config" file itself.

Tips & Tricks

Disk Watcher error messages are placed on the clipboard. So if you want to submit a bug report you can easily include the error message by pasting it into your e-mail to me.

Known problems

Under certain conditions Disk Watcher may crash when launched from the Startup Items folder (and `_only_` when launched from the Startup Items folder). This has absolutely nothing to do with Disk Watcher but is a bug in Mac OS 9.0.x (but seems to have been fixed in OS 9.1). It seems to be caused by other apps doing some aggressive things at startup. For example, the shareware app "Extensions Strip" can cause this, but it seems that automatically initiating a TCP/IP connection on startup can affect this too. Having Virtual Memory enabled also seems to be a trigger.

If Disk Watcher (or any other applescript) crashes when launched from the Startup Items, but runs without problems when you 'manually' launch it from the Finder (by double-clicking it), then you're most probably a victim of this bug. Things that might help are:

- Disable Virtual memory
- Disable "Extensions Strip"
- In your TCP/IP control panel, click on "Options", and check "Load only when needed" (Make sure that, in the "TCP/IP" control panel, you have the "User Mode" set to "Advanced" or "Administration", because in the "Basic" user mode (which is the default) you don't have this option.)
- Don't have any Internet applications in your Startup Items folder (or at least don't allow them to initiate a TCP/IP connection)
- Have Disk Watcher launched in another way than from the Startup Items folder. For example by using a cron[4] utility.

Pricing and payment/Legalese

Disk Watcher is what is commonly known as “shareware”. That means you can use Disk Watcher for a trial period of 30 days to see if you like it. During this trial period Disk Watcher offers full functionality. The only ‘nag’ is a dialog that will start popping up after some days, reminding you that you haven’t paid yet. (Under Mac OS 8.5 and above, that dialog will automatically disappear after a few seconds, allowing Disk Watcher to do its job. Under earlier OS versions, you’ll have to respond to the dialog.)

If you want to continue using Disk Watcher after the 30-day trial period you must buy a license.

A license consists of the right to use Disk Watcher for as much and as long as you want, and to receive support (per e-mail) regarding Disk Watcher. As soon as your payment is received you will be sent (through e-mail) a username and registration number which you can use to unlock Disk Watcher.

Whether you will ever be asked to pay for newer versions of Disk Watcher will depend on the extend of that newer version. New versions that are bug fixes will be available for free. New versions that contain minor enhancements will most probably also be free. New versions that contain major enhancements may not be free.

A license is personal. That’s why it’s tied to your name. It does not give you the right to ‘share’ the registration code with others. Giving your registration code to others is illegal.

The program should work as described in the documentation. If it does not, let me know and I will do my very best to try to fix it. Please do make use of your 30-day trial period so you can make sure Disk Watcher works for you.

Please do note that, due to the nature of soft- and hardware -- the innumerable possible combinations and how they interact -- the author cannot take responsibility for any harm resulting from using Disk Watcher. (However, Disk Watcher doesn't do anything aggressive and has been tested extensively, so the chance at real problems is practically zero.)

Also note that it is not possible to provide any guarantees as to compatibility with newer Mac OS systems. The only moment to know for sure whether Disk Watcher will work under a new system is when that new system is released by Apple. If Disk Watcher doesn't work with future Mac OS versions, the author will do his best to adapt Disk Watcher to it.

Payment is handled by KAGI and can be done on the Web at <https://order.kagi.com/?NNG> Or you can use the “Register” application that is included in the “Disk Watcher” package. Paying on-line will get you your registration code faster. Usually within a few days.

To pay by using the “Register” application, launch it, fill out the form, print that out and send it to KAGI.

A single-user license for Disk Watcher costs \$10,-

Contact me (at santek@kagi.com) if you’re interested in obtaining a multi-user or site-license.

Planned features

- add option to automatically fix corrupt disks

Footnotes

[1] Optionally, Disk Watcher will exempt locked disks from being checked. Nice if you tend to have a CD in your drive when you (re)boot. After all, a locked disk can't be fixed anyway. If you want to make use of this, all you need to do is install either the "Volume Info" Scripting Addition or the "Akua Sweets" Scripting Addition. Both are free.

If you already need Akua Sweets for something else, just stick with that. Otherwise, I recommend you use "Volume Info", as it is faster (although we're only talking fractions of seconds here).

"Volume Info" can be found at <http://ackmo.baylor.edu/~bellc/stuff.html> or <http://www.osaxen.com> (use the handy "search" option ;)).

"Akua Sweets" can be found at <http://www.akua.com/> or <ftp://ftp.amug.org/pub/amug/amug-files/system/applescript/>

To install a Scripting Addition, simply place it in the "Scripting Additions" folder in your System folder and reboot your Mac. (On older OS versions, the "Scripting Additions" folder is located in the "Extensions" folder.) A Scripting Addition is nothing like a system extension (it's much more like a Shared Library), so no need to fear for crashes or instability ;)

[2] The log is human-readable. You can open and read it in any text editor you like. If there already is a log, Disk Watcher will add its findings to it. If, over time, you find the log getting too big, just delete it or delete portions of it. You can even add your own notes to it if you want. Disk Watcher will simply add its findings below that.

[3] The log is kept on your startup disk. Therefore, writing to the log when Disk First Aid reports a problem with your startup disk would be stupid. It could kill your data (well, in theory anyway).

[4] A "cron" is an application that can initiate actions based on the time of the day (or weekday, or "at 3:14 on the second monday of each month", etc.) An example of a cron is "iDo Script Scheduler" of which a demo version is included with recent versions of the Mac OS (since Mac OS 8.5 I think). If you don't have it, you can find iDo Script Scheduler at http://www.sophisticated.com/products/ido/ido_ss.html

Some other cron utilities are "T-Minus Ten", "Script Timer", "CronoTask", "MacAT", "DaemonCron Lite", and the aptly named "Cron", all of which you can find at <http://hyperarchive.lcs.mit.edu/HyperArchive.html> or <http://www.versiontracker.com>

Version history

1.0.7

- In some situations, the unregistered version of Disk Watcher would not bring itself to the front when putting up the registration reminder. This made it impossible to run Disk Watcher unattended. Fixed.
- If Disk Watcher is already installed, the installer will only replace it if the installed copy is an older version.

1.0.6

- Fixed minor bug (undefined variable)
- Tweaked installer a bit more for Mac OS 9.2.2

1.0.5

- Under some circumstances version 1.0.4 could get a fatal error. Fixed.

1.0.4

- Now compatible with Mac OS 9.2.2

1.0.3

- Fixes problems with large, full disks

1.0.2

- fixed a few minor low level bugs
- Included newer version (1.0.6) of Daily Startup to fix a bug that, under some obscure circumstances, made Daily Startup inform you that there is a folder named "Daily Startup Items" - as if you didn't know that already ;)
- Added "QuickStart" clipping
- Gave the installer a decent icon

1.0.1

- fixed a minor bug in the installer
- Moved the documentation to PDF
- first public release