

Executive Stress[®]

OFFICE SUPPORT

"Professional Virtual Assistance for the 21st Century Professional!"

September 2007

Newsletter

Volume 7, Issue 3

Welcome!

IT'S SEPTEMBER SO I'VE made it past another birthday! Something that struck me this year was the number of people making comments like, "So, still 35?" or "21 again?"

Why are people so scared of getting older? To me, it's just a number. People honestly did not believe that getting a year older was not a problem for me. I find that strange ... and just a little sad.

Birth ... death ... paying taxes: the three things in life we can't avoid. I'd add to that 'getting older'. You can't change it - why fight it?

Now I'm "in my 40s" I like to use my birthday as a time of reflection. I spend time with my family and some time alone, assessing where my life is going and making any necessary changes.

Flash Drive Life

CONTINUING OUR LOOK at removable media lifespan, we look now at the newest removable media - flash drives.

According to Fred Langa, "flash drives are new enough that there's no definitive data on long-term life spans, but there are several indicators that suggest a maximum useful life of about **10 years or 10,000 write cycles**, whichever comes first. If that's the maximum life, then the safe life span for storing critically important data is probably **three to five years.**"

Fred's article (<http://www.langa.com/newsletters/2005/2005-12-08.htm#4>) goes on:

There actually are several interrelated variables at play here, such as MTBF ("mean time between failures"), "expected write cycles," "data retention," and so on. If you can find the actual manufacturer of a flash drive, you can look up the original specs, which often include detailed information.



This year I came to the conclusion I work too hard! And don't look after myself like I used to. But that was about it.

I love the family and friends I have around me and thank the universe for giving me another year with them. I love my work and my clients.

Every birthday is a milestone showing you've survived another year on this crazy planet. Isn't that worth celebrating - no matter what the number?

I hope you've had a great year so far and you enjoy your birthday - whenever it is!

Till next quarter!

Virtually yours

Lyn P.B

"In three words I can sum up everything I've learned about life: It goes on."

- Robert Frost

You can think of MTBF as a rough guide to a mythical "average" unit's life expectancy as a whole. No, it's not really that simple - what it really means is that half of all drives will have failed by the MTBF datum, and the other half will fail after that point. But in very crude terms, you can think of it as "average life expectancy" for the electronics. It's typically a very large number for solid-state devices - I've seen some flash drives claim a raw MTBF of 1,000,000 hours - that's 114 years! In any case, the basic electrical guts of a flash drive probably won't wear out in any reasonable time frame. But when it fails, it probably will be a total failure; it just won't work anymore.

Data retention is another variable: That's how long - again, on average - the device will retain its data in a usable, readable format, assuming it's just sitting on a shelf or in a drawer someplace, safe and powered off, and not

What's Inside ...

Flash Drive Life	Page 1
Dictation Guidelines	Page 2
Curing Overheating	Page 3

subject to environmental extremes. Claims for this typically run to around 10 years. That is, of course, a guess, because flash drives haven't been around that long. And even that seems long to me - USB Flash drives simply aren't meant for long-term, archival storage. If you need to store data for a long time, I think CDRs or DVDs, suitably checked and re-recorded every few years, are a much safer choice. In any case, this kind of trouble could show up as gradual corruption of files; or as something worse if it's the master tables or boot records that decay.

And then there's the "write cycle" life. Reading data from solid-state memory is a lightweight event that places little stress on the components. But writing to Flash memory requires erasing what's there and re-recording new data; both of which involve higher energies. That's harder on the memory cells. Estimates vary, but many vendors seem OK with guaranteeing a conservative 10,000 write cycles or so; and some industry insiders say that the devices are actually good for about an order of

magnitude or even two more than that - perhaps as much as a million write cycles. But when the drive "wears out" from rewrites, you could see anything from "soft" errors in individual files to a wholesale mangling of the master tables or boot records, depending on which data cells go bad, and in what quantity. There's no way to know in advance.



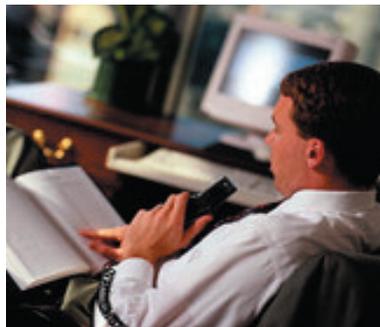
So what does this all boil down to? I suggest you treat Flash drives as short- and medium-term storage devices. They're relatively cheap and getting cheaper, so I don't think they're worth fussing over too much. If you're conservative about data-safety, plan on replacing the devices (or at least moving them out of front-line service) every two or three years. If you're more relaxed about data security, a 5-year replacement cycle is probably safe.

Dictation Guidelines

IF YOU'RE NEW to dictation, these (tongue-in-check) guidelines will help you become a master dictator!

Adherence to these guidelines will assure the highest quality transcribed letters in the shortest amount of time.

- At the beginning of the dictation, take as deep a breath as you possibly can. Now, try to dictate the entire tape before you have to inhale again.
- When dictating a particularly difficult word or phrase, please turn your head and speak directly into your armpit.
- We charge per character, including periods. An effective way to cut your cost is to dictate your entire letter as one sentence.
- It is not necessary to repeat the same sentence multiple times in the same dictation.
- If you have to sneeze or cough suddenly, please remove your head from your armpit and sneeze or cough directly into the microphone.
- If you must eat while you dictate, please stay away from foods such as marshmallows, bananas, and pudding. Apples, pretzels, and celery are much better choices. And please ensure you ALWAYS speak with your mouth



full. In case you are not able to get any of the aforementioned foods, please ensure you have a stick of chewing gum or boiled lollies handy for each dictation.

- Please do not stop dictating when you yawn, it throws off our rhythm.
- If the client's name is Alan Ratzlaffenhasenphepherzinsky, please have the courtesy to spell "Alan" - there are several possible spellings, you know. For the last name, simply state "the usual spelling".
- It is not necessary to repeat the same sentence multiple times in the same dictation.
- Do not stop dictating in the event of minor background noise such as an office party, the janitor's vacuum cleaner, a screaming infant, etc Again, it throws off our rhythm.
- Be sure to place the emphasis on the CORrect syllable, especially if enGLISH is your SEcOnD lanGUAGE.
- Talk as fast as you can. Fair's fair; after all we type as fast as we can.
- It is not necessary to repeat the same sentence multiple times in the same dictation.
- Please speak as quietly as you can ... we want to be able to hear what's going on around you.

- If you need to pause for 5 or 10 minutes between words or phrases, pounding the receiver on the desk or repeatedly saying, “still dictating ... still dictating ... still dictating ... still dictating ...” reminds us that indeed, you are still dictating.
- Just because you need to use the restroom is no reason to stop dictating. Time is money.
- Do not dictate so loudly that you disrupt your fellow lawyers’ football game in the Barrister’s Lounge. In fact, you really should whisper all of your dictation since the information is confidential.
- Similarly, if you are going to watch TV while dictating at home, please watch a war movie with lots of bombing, and be sure to have the volume high enough so everybody in your living room can hear above your talking.
- If you need to correct yourself - sorry, correct an error, please do not rewind the tape - sorry, do not back up and record over the error - sorry, wait, the mistake - just continue with the sentence - wait - go back with the paragraph and fix the error - er, the mistake. Please go back and just delete that last guideline.
- When dictating on your cell phone from your car, be sure to go through as many tunnels as possible. This will ensure confidentiality of the information.
- You (y-o-u) do not need (n-e-e-d) to spell (s-p-e-l-l) obvious words (w-o-r-d-s) for us (u-s). It is our job (j-o-b) to know (k-n-o-w) how to (t-o) spell words that (t-h-a-t) we learned (l-e-a-r-n-e-d) in third (t-h-i-r-d) grade (g-r-a-d-e).
- One last thing, it is not necessary to repeat the same sentence multiple times in the same dictation.

Curing Laptop Overheating

WHAT DO YOU DO if your laptop continually overheats? There’s an alternative to buying a new one - **Fred Langa** says it might be as simple as giving it a good dusting.

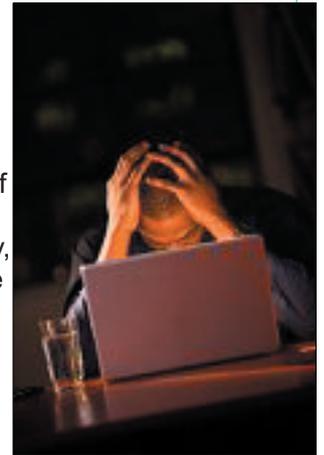
All “air-breathing” laptops/notebooks (those that rely on drawing air through the case for cooling) share at least a few similarities: there’s usually one or more air intakes through which cool air enters the system; a heat exchanger that dumps excess thermal energy from the CPU or system as a whole into the incoming cool air; and one or more exhausts through which the now-warmed air exits the system, carrying the heat away.

Most higher-powered laptop/notebooks use one or more fans to assist the airflow; it’s a miniaturized version of the same type of cooling system found in most full-sized PCs. But some laptop/notebook

systems rely on natural convection - warm air rising - to move the air around. These systems still have case openings and an internal heat exchanger, but no fan.

Still other units, especially handhelds and some smaller, standard PCs, have no case openings for airflow. Instead, they use the case itself as a heat exchanger. These units tend to be lower-power to begin with, so they have less heat to dissipate. Overheating is a much rarer issue with these units; and any such problems are usually resolved simply by turning the unit off for a while, or moving it to a cooler spot (eg, out of the sun).

For this article, we’ll focus on the true “air breather” laptops/notebooks; those that have case openings, an internal heat exchanger and (usually) a fan. And, for convenience, we’ll refer to this whole class of units as “laptops,” even though some of them are too large and heavy for routine laptop use. Similarly, we’ll include “tablet” PCs in the general category of laptops; they fit into the discussion as long as they have case openings for cooling.



What Causes Overheating In Laptops?

When a laptop gets too hot, the cause almost always boils down to one of three main issues: dust and dirt blocking airflow through the unit; a dead fan; or environmental causes.

Whatever the cause, the unit can’t get rid of its heat, and temperatures climb inside the case. If you’re lucky, the laptop’s heat-sensing circuits will shut everything down when temperatures reach dangerous levels; you may lose data, but your hardware will probably survive, at least for a while.

If you’re less lucky, you’ll start getting data errors or lockups. Here, too, you may lose data, but you may be able to save the hardware through a prompt manual shutdown.

In a worst case, or after repeated lesser overheating episodes, your laptop may simply end up cooked to death; either inoperative, or so unreliable as to be worthless.

Of the three main reasons for overheating, the environmental issues are the most obvious and easiest to avoid: don’t use your laptop in full sunlight for extended periods; don’t leave it in a closed car on a sunny day; don’t place it on or near extreme heat sources, such as radiators, hot air vents, and so on. Common sense, really - and the same advice that’s in almost every owner’s manual for almost all portable electronic devices.

The other two reasons - dead fans and dust and dirt - both cause reduced airflow through the laptop.

You can look for and solve these problems the same way. Most times, you won't have to open the laptop's case, so there's no issue of voiding the warranty, and nothing that requires exotic tools or training. In fact, it's so simple a procedure, I'm amazed more people don't do it.

Inspection:

Start with a thorough visual inspection of all the laptop's case openings, and make a mental note of any dust and dirt accumulations.

First, find the air exhaust, intake, and fan(s), if any.

While the inlets, outlets, and fan are the obvious places to look, be sure to check any and all other openings in the laptop. For example, the docking port opening.

Similarly, the card slots, network plug openings, floppy and CD drive openings and the like also need inspection: a flashlight or other bright light source may help you peer inside the smaller/darker openings without having to take anything apart. Make a mental note of any locations where you find a dust build-up.

Laptop hard drives and RAM banks are heat producers, and a layer of dust can act like a sweater, trapping heat inside. If these components are readily accessible on your system, you can carefully remove their access covers to see if any dust is accumulating there. Be sure you only look; don't touch, as these components are static-sensitive.

Start the cleanup:

An ordinary clean, dry cotton swab will work to loosen or remove much of the dust and dirt visible through your laptop's openings. If the full swab won't fit, peel away as much cotton as needed to reduce the swab's diameter. Your primary goal simply is to loosen any stuck-on dust or "fur balls" inside the laptop.

Once the worst of the dust has been loosened or removed mechanically with the cotton swabs, use compressed air to complete the job. An inexpensive can of compressed air can help



your cleaning immensely by providing highly controllable, highly directional, very intense bursts of air. The cans usually come with a long plastic nozzle that's ideal for working inside crevices and hard-to-reach places. Many brands of "air

in a can" are available; your local office-supply or electronics store probably stocks several.

No matter what air source you use, be careful not to overspin the laptop's fan: a strong blast of compressed air can spin a small fan like a pinwheel, over-revving it enough to damage the motor or bearings. To prevent such damage, keep the fan from spinning as you clean it. A clean cotton swab carefully inserted between the fan's blades works well.

With the laptop's fan blades secured, manoeuvre the flexible tip of the compressed air dispenser to access

every part of the laptop that you can reach around and through the fan assembly, from every possible angle.

And be careful: you may be surprised at how much debris whooshes out with the first few blasts of air! Note also that some "compressed air



in a can" products can spray a supercooled liquid if you invert the can. This is good for neither the laptop nor anything else the liquid may touch; and it actually can cause frostbite on human skin. Once again: read and follow all the directions that accompany whatever compressed air product you use.

Work your way around the laptop, swabbing and blowing out all openings where you previously identified dust buildup.

Wrapping Up:

Replace any covers or access panels you previously removed, and reinstall the battery pack. When the laptop is right-side up, you may wish to use some of your remaining compressed air to blow out the keyboard area. Cotton swabs also can help clean any other cracks and crevices around the screen or keyboard.

You also may wish to use a soft, slightly dampened cloth to wipe down the case and screen; be very careful not to rub hard on the screen, which may be vulnerable to scratching or breaking; and use care not to let any liquid drip into any part of the laptop.

When you're done cleaning, fire up the laptop, preferably on AC power, so it will run at full speed and produce maximum heat. Listen carefully: the fans should operate as they did before. For example, if your fans always came on at initial startup, at least for a few seconds, make sure you hear them spinning during this startup. Or, if your fans normally would come on after, say, five minutes of full-power operation, wait the full five minutes to ensure the fans are now working properly.

If they're not, try a simple fix: with the laptop turned on and running, very, very slowly and carefully move it - no sharp jolts or fast, sudden moves! - so you have access to the fan. Using one of your cotton swabs from before, gently nudge the fan blades in the proper direction. Sometimes, that's all a fan needs to get going after it's been stuck: it may then spin normally for a long time to come.

But if not, your laptop needs service; it should not be used with a dead fan, or permanent damage may occur.



by Fred Langa, InformationWeek.com