

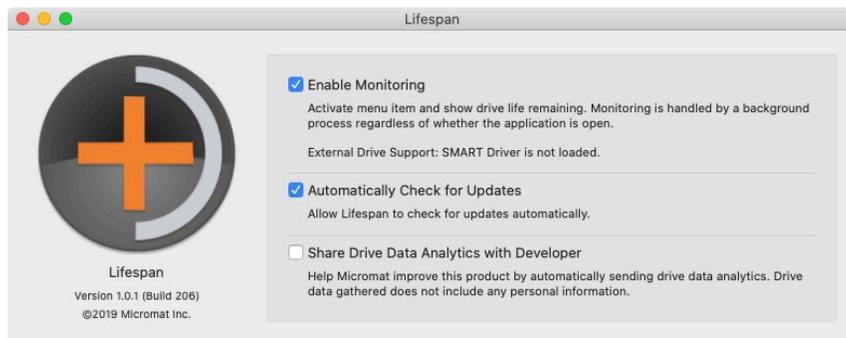
by L. Davenport

Nowadays more and more computers are converting over to internal SSD's (Solid state drives) versus hard drives. Likewise storage devices are converting to SSDs. The problem with these drives is that they have a finite amount of erases and rewrites that they can handle. When they reach this limit, their performance can begin to degrade, or they can stop working entirely.

FYI from Micromat: "Most flash-based storage devices store your data on non-volatile NAND solid state memory. Each cell of this flash memory can only be programmed and erased a limited number of times. Drives can have fewer than 2,000 or over 10,000 of these program erase cycles, depending on the type and quality of the NAND chips used. For a middle of the road solid state drive, this translates into about 100 TB of useful life, but this can vary greatly in either direction. Regardless, for every flash-based storage device, there will come a point when no more data can be stored, and the device will fail."

No knowing when this will happen, your drive could die on you causing you to lose all of your valuable documents and photos - if they weren't backed up.

Besides being diligent in making backups, what can you do? You could get Lifespan from Micromat. This is a small program that is placed in your



menu bar (Figure 2) and it keeps track of your SSDs or other flash storage's remaining life. Much like programs that keep track of your remaining battery life. You can see how each flash-based drive is doing in simple percentage terms. Lifespan will alert you when your device is below the threshold of useful life remaining. This way you would have

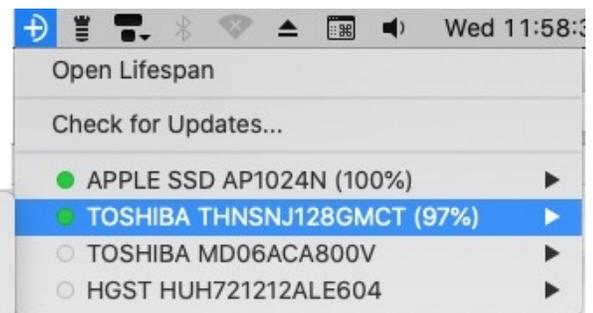


Figure 1. Lifespan's preferences are very simplistic.

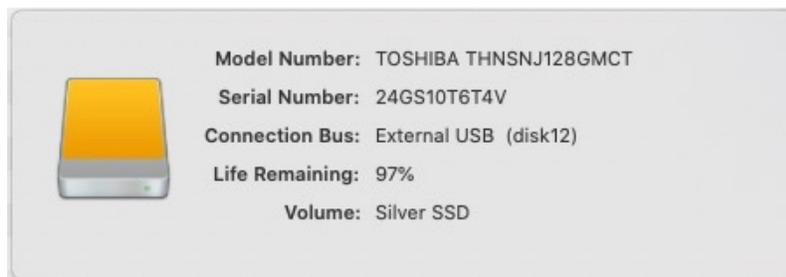


Figure 2. When you click on the Lifespan icon in the menubar, it will show the remaining lifespan for you SSD drives. In this screenshot you will see that I have two SSD drives (with green dots next to their names) and two hard drives (which are not supported by Lifespan so they have white spots). Clicking on the SSD drive name will give you more information about that drive.

time to save your data and replace the failing drive.

Internal and Thunderbolt storage devices are supported by default. If you want to add support for USB devices you must install a driver - which is available directly from the Lifespan application.

## Limitations

Currently CompactFlash (like for cameras) and CFast devices are not supported. Micromat says that they hope to have support for these in the near future.

## The Skinny

**Evaluation:** My new Mac's internal SSD was listed as 100% life remaining - as expected. But I have been wondering how much longer my external 125 GB SSD drive would last since I use it all the time to transfer files between my Macs. I was surprised to see that it was only down to 97%. So it should last for a long time yet. This saved me from buying a replacement during this year's Black Friday sale. So I am pleased with Lifespan.

**Requires:** Intel-based Mac OS X 10.10 - macOS 10.15 Catalina

**Company:** [Micromat](#)

**Price:** (Currently on sale) \$79.99 for new buyers; \$39.99 for people who own other Micromat programs; \$127.99 for a 10 pack business license.