(Approx. 595 words)

Saved by Macrium Reflect

How I recovered from a Driver Disaster

By Tom Burt, Vice President

Sun City Summerlin Computer Club

<https://www.scscc.club>

tomburt89134 (at) cox.net

Introduction

For several years, I have used the free Macrium Reflect backup software program

(https://www.macrium.com/reflectfree)to back up my PC’s hard drives. My PC has a 500

GB solid-state drive (C:) and a 1 TB hard drive (E:). C: is for the Windows operating

system, user profile folders, installed applications, temp storage, and a few other file

types that benefit from the high performance of the SSD. E: is for storing all the data

files that various programs use and for cross-network backup of various shared folders

on my wife’s PC. Here’s a shot of Macrium Reflect’s main screen:



My routine has been to make a monthly image backup of my C: and E: drives to an

external 2 TB hard drive. I keep three iterations of these backups. I have also been

using Windows File History to back up folders on both C: and E: with files that change

frequently, such as my Outlook mail folders, Computer Club files, and Financials. The

File History backups go to a 64GB flash drive plugged into the back of my PC.

As part of the Macrium Reflect image backup process, I have Macrium validate the

backup, ensuring the image is readable and not corrupt. Until recently, I never had

the occasion to attempt to restore a backup image.

AMD Radeon Video Driver Update – A Fatal Improvement

In early March, about ten days after my most recent backup, Windows Update was

offering me an updated driver for the AMD Radeon graphics processor bundled with my

PC’s AMD Ryzen 2400G CPU. I deferred installing it for a few days and then

decided to check the AMD support website to see if they had a newer driver. They did,

so I downloaded that driver and ran the setup. Everything seemed to go fine; at the end

of the setup, I rebooted Windows 10, and the system looked normal.

As I was resuming work, I decided to try opening a .mp4 video file since I’d had trouble

in the past with driver updates causing video playback to fail. When I double-clicked the

.mp4 file in File Explorer, nothing happened! No program launched, and no error

message was displayed. I tried several other .mp4 files and then some .jpg and .png files with the same result. Not good!

System Restore Failed

So, I considered a bit and decided to do a System Restore, reverting to the

system state before installing the driver. The driver setup had created a restore point,

so I expected to be back to the initial state of the system in relatively short order. The

System Restore kicked off but ran very slowly. After about 45 minutes, it switched to

displaying a “Restarting System” message with a spinning cursor. That stayed on the

screen for half an hour, with no sign of any system activity. Really Not good!

I pressed and held the power button to reboot the PC. It started to boot but then

hung with a spinning cursor. Really, really not good!

Restore From the Last Macrium Reflect Image

I decided to try restoring my C: drive from the most recent Macrium Reflect backup

image, which was only about 10 days old. I first went to my wife’s PC and used her

Macrium Reflect to create a bootable Macrium Repair DVD, just to ensure I had the

latest version of the Repair tool.

On my PC, I rebooted and pressed F12 Boot menu to allow me to boot from the DVD.

Macrium’s Repair Disk boots into a minimal version of Windows (Win RE) and then

launches the Repair Tool. I pointed it at the most recent image of my C: drive on my

external 2 TB hard drive and then selected my PC’s C: drive for the target. Finally, I

clicked on the Restore button. The Repair tool went to work restoring all of the C: drive’s

partitions, including the UEFI partition. The entire restore ran for about 45 minutes. When it

was finished, I clicked to exit the Repair Tool, and my PC restarted. When the restart

was finished, my Windows 10 PC was fully functional, and my data files on the C: drive

were reverted to the date of the image backup – i.e., about 10 days old.

Recovering Changes After the Last Image Backup

Happily, because almost all my application data is kept on my E: drive, it was unaffected

by restoring my C: drive. The MS Outlook data files for my various email accounts

and archives, my tax data files, and a few other files in the Documents folder were all

that were out of date.

I had hoped to restore those from my File History backup USB flash drive. But, to my

dismay, unnoticed by me, that backup drive had failed and become unreadable.

I used the File Explorer to check dates on files in my profile folder and satisfied myself

that the restored Macrium Reflect image had brought back the most recent copies of

everything but the various Outlook data files. Fortunately, my email providers (Cox.net

and Gmail.com) retain copies of emails on their servers for 30 days. So, I launched MS

Outlook and it downloaded everything new since my last image backup. In all, I had

about 500 emails that I had to review and reprocess (file or delete). After about an hour,

I had everything back close to what it had been before the installation of the buggy driver.

I ran Windows Update, and it installed any updates subsequent to the date of the image

backup. I had to reinstall some updates to the H&amp;R Block software and a software

update to my video editing program. By the end of the day, everything was back in good

order.

Conclusions and Takeaways

The old saw “If it ain’t broke, don’t fix it!” seems still to be good advice. However, the flip

side is we’re now at constant risk of attacks from malware, and we’re endlessly told by

security pundits to keep our system software up to date. So generally, one must trust

the software vendors and install updates when offered.

This experience demonstrates why it’s so important to make regular image backups of

your running system, as well as your data. Had I not had a recent Macrium Reflect

backup, it would have taken me several days to rebuild my system, and I would have

lost much more data.

I was fortunate that the failure of my File History backup drive in my hour of need didn’t

matter. But things could have been much worse.

I was also fortunate in my choice of system configuration to have separated my main

data drive from my operating system drive. That greatly lessened the impact of restoring

my system drive from a backup image.

As a result of this experience, I’ve made a few adjustments to my backup routine. I now

make an image of the C: drive weekly so that it will be less out of date if I have to do a

restore. I’m continuing to back up my E: drive monthly. I also decided to take more

advantage of the 1 TB of cloud storage that comes with my Microsoft 365 subscription. I

wrote a short command script to copy all my Outlook and tax files to the OneDrive sync

folder, from which they get backed up to my OneDrive cloud storage. Currently, I run that

command file daily. I will likely add other file folders from my E: drive to that set.

I also plan to buy a few new reliable flash drives and go back to using Windows File

History.