(Approx. 1999 words)

President's Corner

Plan 9 for Windows 10

By Greg Skalka, President, Under the Computer Hood User Group

Drive Light Newsletter

[www.uchug.org](http://www.uchug.org)

president (at) uchug.org

In “Plan 9 from Outer Space,” a low-budget 1959 sci-fi horror movie from Ed Wood, extraterrestrials in flying saucers try to stop the rash and violent humans on Earth from advancing their technology further and risking the destruction of the universe. They finally resorted to ‘Plan 9’, which involves resurrecting an army of dead humans to get our attention. The film is narrated and introduced by The Amazing Criswell, who greets the viewer with: “We are all interested in the future, for that is where you and I are going to be spending the rest of our lives!”

In the present day, minute spongy beings from a part of the galaxy known as Redmond Washington strive not for the attention of humans, but for their resources. Their goal to dominate the computer activities of humans has been successfully achieved over the last three decades through their operating systems and office suites. Their seventh Plan was highly successful, though their eighth was a flop and resulted in their loss of control over many humans. Faced with losing the human’s interest to other operating systems and new portable devices, these beings enacted Plan 9, which involved subscription software and a new OS, not referred to by the number 9, but instead 10. To tighten their grip on the resources of those humans still under their influence, they made their Plan 7 obsolete, hoping the humans would flock like zombies to their latest offering. Just as Criswell asks at the end of the 1959 film, “Can you prove that it didn’t happen?”

With Windows 7 security updates ending on 1/14/20, I knew last year that Windows 10 would be in my future, and so started making plans for switching my family over. I went through quite a few plans and a fair amount of resources, and though not quite as daunting as raising the dead, it was and continues to be a challenge that I hope to work out completely in the future. Here are the first four of my nine plans to that end.

Plan 1 - My Wife’s Desktop PC. Way back in October 2018, I was anticipating the end of Windows 7’s security in a year and formulating a plan to continue safe computing in the new decade. I wrote a newsletter column that month, outlining the pros and cons of the alternatives as I saw them. I recognized that I would be living dangerously in 2019, needing to do something before Win7 security updates ended on 1/14/20.

I was definitely going to be at risk, as practically all our computers were running Windows 7. My wife’s nine-year-old Acer desktop PC seemed to be constantly on the brink of a calamity, though I somehow managed to overcome minor hardware failures and Windows issues to keep it running. My primary computer was a six-year-old Fujitsu 14” laptop which ran fine, probably due to the care I gave it. My wife also had a six-year-old laptop. These Win7 computers met our needs, though due to their age lacked more modern features like USB3, Gigabit Ethernet, and solid-state drives. I’d put in upgrades where I could, but they were all past their primes.

I did have a two-year-old Lenovo desktop I had bought for myself and turned into what I call my “chameleon” computer. I had installed a 3.5” bare hard drive dock in a front bay in the case, so the boot hard drive could be easily changed. I envisioned having many boot drives with different operating systems for this computer, but I have only set up two so far - the original Win7 and a Win10 drive that I created by cloning the original drive and upgrading it while Microsoft was still offering free Windows 10 upgrades in 2016. Since I used Win7 at work and Win10 seemed a bit unstable in this upgrade arrangement, I really never used this computer, preferring to stick to my laptop.

The good husband that I am (and because I tired of working on her PC), I planned to replace my wife’s computer first in this conversion to Windows 10. None of our computers were worth upgrading, and I was less than thrilled about the results of my one upgrade experience. It was about time we got some new hardware with new features anyway.

I starting looking but didn’t find any good deals for Black Friday in 2018. I unfortunately also am the type of person that needs a deadline to get motivated to do something, and January 2020 was still almost a year away. After seeing how Fry’s Electronics seemed to be slowly circling the drain, I widened my search for computers and in August 2019 found a good deal at Costco. I bought my wife a Dell Inspiron 3670 desktop for $549 (it was $150 off). It had all sorts of good things, like a 9th generation Intel I5 processor, a 1 TB hard drive, and a 128 GB SSD, USB3.1, GigE, and HDMI. I was concerned about the relatively small SSD filling up, as in the past my wife and Microsoft’s upgrades had often conspired to fill up the boot partition on her old PC. A good friend with extensive Win10 and SSD experience reassured me that 128 GB would be sufficient for the boot drive.

Plan 2 - Dual Monitors. A few weeks later, with the Dell PC box still unopened, Costco had a sale on Dell 24” monitors. I had been using dual monitors on my Win10 computer at my new job and really liked it. I bought two monitors for my wife’s new computer, thinking it would help her feel better about the hassle of having to change computers. My friend reviewed the Dell computer’s specs and assured me that it could run one monitor from the VGA out and the other from HDMI.

Plan 3 - My Mom’s Desktop PC. Move ahead to November 2019, now only two months before the Win7 apocalypse. I still have not found the time or the urgency to open the box on my wife’s new PC. I’m in Costco again and see that they are still selling the same model Dell PC (which is reassuring), and it happens to be on sale again for the same price. I knew my mom needed a new computer to replace her old Win7 desktop, and I had not come up with a Christmas gift for my parents. I decided to double down on the Dell computer and buy another one for them.

Now I had a bit more urgency, as I wanted to get it set up for them before Christmas, but unfortunately had no more spare time. I needed to set up my wife’s PC first, so I finally opened the box on hers on December 23, as I had that week off from work.

Plan 4 - UEFI. I connected up my wife’s new Dell PC on a card table with one of the new monitors. It powered up fine, and I saw that it had 36.6 GB used on the 128 GB SSD, with 67.1 GB free. I assumed (as I later confirmed) that Dell had used some of the SSD for recovery and diagnostics partitions, so the SSD was initially only 36% full, which seemed reasonable. After activating Windows, my next step was to make a backup of this “as delivered” configuration.

I have been using Acronis True Image for computer backups for many years and have been very happy with it. I know it works well as I have restored many times, the true test of a backup program. Although it can be installed on a PC, I have never done this. I prefer to use the boot CD that comes with the software to boot outside the OS and back up using the version running from the CD. There are fewer features in this version, but since I would need to use the bootable version should I have a hard drive failure, I felt always using it would make me more familiar and confident with it.

I pulled out my True Image 2017 CD, which had worked to back up my Win10 chameleon computer but ran into something new - UEFI. It stands for Unified Extensible Firmware Interface and is a replacement for the old BIOS (Basic Input/Output System) firmware that is now prevalent on new computers. It has many more capabilities and is more secure than the old BIOS. On this Dell, it was accessed the same as a BIOS, by holding the F12 key on startup. I selected the UEFI loader option in the displayed boot menu to boot from the DVD drive.

My True Image 2017 CD booted fine, but when running, the SSD drive did not show up in the program. Only the 1 TB hard drive was visible, so I could not back up the SSD. Seeing on the Acronis web site that I could no longer get support for my old version, I ordered the latest version, True Image 2020, from Amazon (at a lower cost than that listed on the Acronis site).

When my Amazon True Image arrived, I realized I had ordered a box with only an activation code - no CD was enclosed. I would have to download the software from the Acronis website. I was able to register there and download a bootable image file to burn to a DVD. Unfortunately, booting the new bootable version resulted in the same problem - the SSD was not visible to the program.

I finally had to break down and install True Image 2020 on the new computer, and when I ran it under Windows, the SSD was finally visible. I found an option under the rescue media builder tool for the simple method, which configures the boot media it creates to suit this computer best (no doubt taking UEFI into account). When I created a boot disc in this way, the bootable version was at last able to see the SSD. I could finally back up the way I was accustomed to, but now had a program installed that I didn’t intend to install. My first back-up showed that 42.32 GB out of 103.8 GB on the SSD was now used (now 41%).

Feeling even more concerned about filling up the SSD, I decided that partitioning the 1 TB hard drive might help. If I split it into a 200 GB APPS partition and an 800 GB DATA partition, I could more easily install less critical programs on the hard drive, saving space on the SSD. I obviously could do this with the hard drive as it was, but a separate data partition would help in segregating backups of her critical and more frequently changing data.

I looking into using my standard partitioning program, Acronis Disk Director 12, but found again that when booted from its boot disc (as I’d have to use it if I were partitioning a new blank hard drive following an existing drive failure), it would not work. Per their web site, I’d need new Disk Director 12.5, which would support Win10. In a hurry, I downloaded and installed the 12.5 demo version from their web site, and while it would set up to partition, it would not create one (I’m not sure what it was supposed to be demonstrating). Fortunately, I remembered to look up Acronis on the APCUG web site and found a 5/25/19 article on Disk Director 12.5 and the link to Gene Barlow’s User Group Relations web site. Gene represents Acronis products to user group members and sells download versions at a significant discount from the Acronis web prices. I purchased Disk Director 12.5 and got his email with the product key the next day.

After putting the key into the demo version I had already installed (yet another install into the SSD!), I was able to easily partition the 1 TB hard drive the way I wanted it. I did make many attempts to create a working boot media (meaning one that would see both drives in this computer) with the Disk Director Media Builder tool, and though there were many options, none I tried were successful. I didn’t care at the time to partition the SSD, but someday I’ll have to email Gene to see if he has a solution.

I next installed some essential utilities like the Chrome browser, Adobe reader, and printer drivers for our two HP network printers (all on the SSD). A new backup showed the SSD was now at 45% full. I was now almost ready to make the swap - this new Windows 10 PC for my wife’s old Win7 desktop. I’d still have to transfer data and other programs over from old to new, and this would require a new plan. Unfortunately, it was now January 12, 2020, only two days before Win7 security support ends.

I’ll describe my Windows 10 Plans 5 through 9 in a future column (where Criswell predicts we will all be in a month).