(Approx. 2232 words)

My Windows 10 Upgrade Experiences By Frank Ramsey, Newsletter Editor, Akron Canton PCUG, Ohio. www.acpcug.org aframsey (at) yahoo.com

I've been previewing Windows 10 since October of 2014 and really like it. The official release couldn't come fast enough for me!

I'm been fortunate enough to have a great laptop to run the preview on...i7 processor, 8 gigs of memory, with a touch-enabled 12" screen. I'm also fortunate enough to have had a spare hard drive to install the preview on. Along the way this disk was replaced by an OCZ SSD disk with Windows 10 migrated using Macrium Reflect, Fast and responsive machine.

As I was running build 10240, July 29th came and went. My preview machine didn't see anything, other than the patches/updates released shortly after. Microsoft gave me a copy of Windows 10 for being part of the preview. Kool!!!! The real fun came with my other machines.

The other machines ran a mix of Windows 8 Pro, Windows 7 Home Premium and Windows 7 Ultimate. Talk about a disaster waiting to happen...

Being a somewhat impatient person, I found that if you went to

<u>https://www.microsoft.com/en-us/software-download/windows10</u>, you could grab the appropriate (32- or 64-bit based) downloader and updates rather than wait for Microsoft to download them. I grabbed an upgrade to Windows 10 Pro 64-bit and Windows 10 Home 32-bit. Yep, that's the other kicker...versions based on differing hardware architecture. Yes, I had to totally download the update for both. They are 3-4 gigs in size, so be prepared to wait a while. After the first downloaded I copied the appropriate folders (\$Windows.~BT and \$Windows.~WS) from the root of C: to another location...otherwise they would be overwritten by the next download. I also deleted these directory contents after downloading the first files to be sure I had only the proper files for the 2nd download.

I decided to take it easy...the first upgrade was to a laptop running Windows 8.1 Pro 64 bit. This had plenty of free space on the C drive and this hard drive was setup up to the Microsoft standards of dedicated boot and system drive.

I first uninstalled the software I no longer used...know why? Well it just seemed like the proper thing to do. Most were older versions of utility suites that i got from sharewareonsale.com.

Since I like to try various antivirus products, I removed the antivirus product before running the update. Also because the Google Chrome browser simply did not run

properly on the preview of Windows 10, I removed it. I copied the folders listed above to the C:\ drive of the hard drive of interest then ran setupdat.exe from \$Windows.~WS\source\Windows\source and away we go.

After a few hours and a few reboots, the process completed successfully. I logged in with my preview ID and the update activated, ran the update tools to grab the latest updates, installed my anti-virus program and FIrefox and it was done. All in all, relatively smooth.

Basking in the glory of a successful update, I turned my attention to my Dell Venue 8 Pro tablet. The tablet was running a 32-bit version of Windows 8.1 with the drive protected by Bitlocker drive encryption. It had about 6 gigs free.

Before running the cleanup as above, including removing antivirus, I cleaned up everything I could; 6 gigs was below the stated minimum of 16 gigs free storage. I did check online and found that various folks reported the update process would ask for other storage to use during the update if the update process found additional free space was required. Let's remember this is a tablet lacking a mouse and keyboard and with marginal free storage. Still I pressed on and ran the update.

The update ran through the various stages for a couple of hours. Just when I thought it was successful, I saw the restoring the previous version message and the tablet proceeded to roll back the install. After another 40 minutes of roll back, the tablet booted into Windows 8,1 and displayed an error message of "0x80070002-0x20007 failed in the SAFE_OS phase with an error during INSTALL_DRIVERS operation|.Boot failed ". Researching this error online was of no help. Lots had the solution, but none met my circumstances. SO what the heck, I tried the update again.

The second update try also failed. I was thinking I might have to perform a clean install or forget about running Windows 10 on this device. Performing a clean install was troublesome...without an OS update would I get a valid Windows 10 product key for free? I had the install media for Windows 8, so I had the required media in case a reinstall was required.

However, as I had reinstalled Windows 8 on this tablet once before, I was not looking forward to it. Having to attach a mouse and keyboard to the tablet and manually unlocking the Bitlocker protected drive is doable, but a royal pain in the tush!

Then I got lucky. One of the devices I purchased along the way was a USB to DVI display adapter from mygica.com. I had tried using this with my Windows 10 preview laptop and discovered the included drivers did not work. A quick search of the Internet turned up some updated drivers. These worked fine in the preview Windows 10 version. I stumbled across the fact that I had used this device on my

tablet. Perhaps????

Uninstalling the offending drivers from the tablet I was ready to try again. I was more than a little worried because the tablet now had less than 5 gigs. Try as I might, I couldn't find anything else to remove or purge. "On through the valley of ..." ...well you get the idea. I tried the update again, mentally preparing myself for a full Windows 8 reinstall.

Low and behold, it worked! The update finished successfully, the tablet booted and I logged in using the touch interface with my preview ID to a fully activated Windows 10! Beautiful!!!!

As before, I installed antivirus (a different one than before...remember I like to try different antivirus products) and Firefox, sync'd Firefox and I was up and running. On to my final challenge.

The final challenge is a desktop running Windows 7 Ultimate 64-bit with lots of installed software -- this unit was troublesome. It simply hadn't been running well for a while and I had put off doing anything about it because I knew Windows 10 was coming.

First, I performed a full backup. Then I tried to make a virtual drive using Paragon's Virtual Drive tool. This failed due to conflicts with the Visual C++ runtime library. Try as I might, I could not fix this issue, so the heck with it. I performed the cleanup as above, but forgot about Google Chrome (more a little later). I'd been toying with the idea of installing a 240-GB SSD as the boot drive, so I cleaned up the hard drive even though it had over 100 gigs of free space. How? Well I moved OneDrive, Dropbox, Downloads, iTunes and some others to other drives in the system. On to the update.

Yes, the update failed. Actually the desktop appeared to hang a couple of times so I did a forced reboot using the power off after letting the computer sit for at least an hour with nothing appearing to happen and no hard drive activity. Windows 10 update rolled back to Windows 7 with an error of "0xC1900101-0x40017 Installation failed in the SECOND_BOOT phase with an error during BOOT operation"

Since I forcibly power cycled the computer not once, but twice, I figured I knew what happened...I didn't give it enough time. The next evening, I repeated the update letting it sit for houuurrrs at each pause. Had to power cycle it again. With the same result. Darn!

More deleting of software. This time I remembered Google Chrome and removed it. I also turned off the Wi-Fi adapter to prevent the unit from connecting to the internet (some on the Internet suggested this). Off to the update again. I had to power cycle once this time, but the update succeeded..at least I thought so because I was able to sign in to a non-activated machine. It was late. Time to power off and perform the cleanup tomorrow.

Tomorrow came. On came the desktop. And it just wasn't right. The mouse and keyboard were sticking. Video resolution was low. It looked like the proper video card had not been detected. And on and on. I decided to return to the previous OS. Which failed reporting no OS on the drive.

I have to tell you that the drive in question did not fit Microsoft's standards in that is no boot partition. The boot partition is that 300 megish partition that Microsoft started installing separate from the system partition that actually has the operating system. I've not been a fan of the boot partition and on this machine simply removed it.

Now is where it gets fuzzy. Somehow during one of the attempts at booting with no OS drive, I was presented with an option to perform a full install of Windows 10. Exactly how I don't recall. Might as well I said...off I went.

After confirming to preserve the user files and that I would lose all the installed applications, the reinstall started. And went fine till the 1st reboot. After letting it sit for almost 2 hours, I power cycled the unit, expecting it to lock up again, with another power cycle and then what? Reinstall Windows 7 Ultimate from scratch, then perform a Windows 10 update? Not a clue.

The 2nd power cycle never was required. Following the first power cycle, the install of Windows 10 continued and completed successfully. The install preserved the account I was using, so logging on I went.

To discover the computer was not activated, the proper video card had not been detected and Wi-Fi refused to work. Ready to pull my hair out (not a good thing, trust me!) I rebooted and signed on again using the local account. Then I connected the local account to the preview account, connected the Wi-Fi and rebooted.

Logged back in and Windows 10 was activated. Ok, why? Well I had been using the local user that I had created to log onto the computer. This time I used my preview ID. That has to be the key. I downloaded the updates and got the update for the video card. Apparently the AMD card in the unit is not supported by the install, but an update. Hey, at least it worked! I'm left to install antivirus and deciding what applications are critical and must be installed. I'm not unhappy about the results as I figured it was time to perform a clean OS install and reinstall applications. 6 of one, half-dozen of the other.

UPDATE! I'm adding this a few days after the original article was written. The updated Windows 7 Ultimate machine simply wasn't right. While it seemed to run, it was troublesome. I finally decided to reinstall from scratch again, this time

preserving NOTHING.

Just in case, I booted from a rescue CD and copied the C drive to another drive then started the reinstall.

Windows 10 has a decent reinstall process. Go to Settings, Update, click Recovery and answer the questions. My answers were to reinstall, preserve nothing, and reformat the C drive. Away we go.

Things looked good. I gave it all the time it wanted. Ok, after waiting 5 hours for the process to finish, I power cycled the unit. It restarted at the 64% mark and finished successful.

Because I left the Internet connected, the update connected to the Internet and grabbed "critical" updates during the final install phase. For this reason, the proper video drivers were already installed when I signed into the system after install.

I preceded to install required applications, antivirus, Quicken, Office and am using the updated Windows 7 Ultimate machine to finish this article. So far so good!

So what did I learn?

1) Prepare for the worst...you might lose the applications and associated data. Determine what are critical apps and find the install media BEFORE the installation.

2) Copy your documents to the cloud or other storage.

3) Uninstall antivirus (NOT disabled), before the upgrade is run.

4) Clean up software that is no longer used or needed.

5) Look at any attached devices to see if they might be a problem to the upgrade. Uninstall them unless you are totally sure.

6) Remove Google Chome. It simply doesn't work with Windows 10 now. I'm sure Google will release a fix, but as of late August, 2015, get rid of it.

7) Check on free space and cleanup up. Empty the Recycle bin. Cleanup the temp folder.

8) Perform a good backup

9) Check the integrity of the hard disk (Right Click on the C drive, select Properties, Tools, Error Checking, Scan drive and fix errors found)

10) Don't be afraid to power cycle the unit. Sometimes it seems the install process hangs during the install and power cycling may be the only option.

11) Have patience!

The last one is the key. Don't get too discouraged...at least try not too!

Hopefully you've been informed and somewhat entertained by my Windows 10 journey. Let me know your experiences.