

I took some time off really updating my website and making it better. I've been busy with some new computer projects, and I've been busy with some personal family matters. However, the one thing that has kept me most busy is work and school. I have learned a ton of new software, I learned about Oracle databases (which I want to learn more about), and I've been learning a lot about computer hardware with basics about networking (which I find boring but necessary in IT). I'm ready to really start looking for an entry-level job and I feel confident about my skills with computers and computer related software. I wanted to update this series by going in chronological order with everything I've done in the last six months.

For starters, the fourth project that I did right after Linux install on the T1140 was installing a SSD drive for my DX4860 desktop. Now, the DX4860 came with a 1 TB WD Green HDD, which I was using as a backup for my data on my main PC. Now, I've never installed a HDD or SSD myself. I hadn't ever built or taken a PC apart aside from taking out the RAM, GPU, and the Network adapter when starting this project. So, I thought, "What the hell? Let's by a cheap SSD on sale and add install another hard drive for practice and knowledge."

First, I checked to see if I would be able to add another hard drive. I looked at the hard drive bay and I could see that there was enough room in the bay to include one more hard drive for a total of two. Then I checked to see if there was enough power to support a new hard drive and after reviewing the wattage for each item plus the new hard drive there was more than enough power to sustain another hard drive. Luckily, the power supply upgrade I did before I got into computers helped a lot with this project.

Second, I made sure to check if the power supply was modular or not. Although the PSU is an upgrade from the stock one that came with the machine, the PSU was non-modular, meaning it came with all possible wire attachments I might need, including an extra power pin to hook into the new hard drive. Non-modular PSUs are good because they have all the necessary cables and are cheap, but the wiring can get very messy inside the case, which could affect the airflow of the PC. No problem. If I can add a new hard drive, then I'll investigate zip ties to deal with wire management and space.

Anyway, after I concluded I could install another hard drive, I saved up some money, went to Fry's, asked what SSDs they had on sale, and I was able to find a WD Blue 250 GB SSD for under \$100 dollars, which was a steal. I made sure to buy a SATA cable and a 3.5 inch drive bay adapter for my 2.5 inch WD SSD drive. I was feeling good and ready to start the installation.

For the installation, I made sure to unplug everything from the computer and to ground myself before touching any of the computer's internal components. From here, I installed the 3.5 inch drive bay adapter in the only available slot left in the PC case for a hard drive, making sure that the hard drive is facing up towards the top of the case. Once the SSD is secured in place, I then made sure to plug in the power pin from the PSU and connect the SATA cable from the SSD to the SATA ports on the motherboard. However, I ran into problems installing the new SSD.

When I went to power on the computer, and check to see if the drive was listed under Disk Management, there was no information on the new drive. I thought maybe the cords were

lose when I plugged them in, but they were fine when I went to check them after turning off the power and unplugging everything. I then thought maybe I plugged in the SATA cord wrong, so I turned the cable around and, surprisingly, I was able to plug the SATA cable in. I then turned on the computer to find that the new drive was detected in Disk Management but needed to be formatted into a new partition.

I made sure to document that the SATA cable could be plugged in incorrectly, and I made sure to tape the SATA cable and mark it, so that I know which way to plug in the SATA cable in the future. All in all, some problems installing a new hard drive, but I was able to diagnosis the problem, implement solutions, and then document said solutions for future reference.