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CSC-386

Prof. Morwick

Systems Programming Assignment

**cp Command**

So, the built in cp command in Linux is fast and I believe this is the case because it’s made specifically to copy anything and is optimized by the operating system. Also, its downfall is it has more overhead, because it is made to copy anything in Linux and not just text files, so there is more overhead. It also probably uses the best all-around buffer size available in Linux, a size that’s probably of great importance (May or may not have been tested a lot with different file sizes and everything else).

**cp\_get**

I believe the cp\_get method is the slowest because it’s using the built-in buffers without any optimization at all. It probably uses a default buffer that gets the job done but doesn’t carry a lot of overhead. On my machine the buffer size was most comparable at a size of 3, which is small in comparison to the other buffer sizes.

**cp\_read**

It is probably the fastest of the three commands, because I set the buffer size to stuff that is extremely big for a buffer, and technically unnecessary, but runs the fastest.

**Test Computer**

I ran these tests on an HP EliteBook 8560w with an intel core i7 2760qm quad core at 2.4ghz (2 physical cores and 2 th, 8 gigabytes of ram and a Kingston hyper x SSD drive that has a transfer data speed of 550mbs read and write. It also is running Linux mint 18.3 cinnamon and contains an NVidia Quadro 1000m 2gb ddr3. These tests were also conducted inside of virtual box.