Samuel Bailey

Assignment 4-2  
IT-600

In today’s modern world of cloud computing memory is a big deal. Some interesting inception is cloud applications are running in Kubernetes with keeps itself running. Memory is allocated to the Kubernetes control plane to be allocated to all other applications. This is all virtual memory. Virtual memory is memory that can be changed/defined via software rather than hardware. For example, if a PC has a RAM stick of 4 GB and then runs out of memory but the PC has a hard drive of 2TB. Then the OS can allocate more memory from the hard drive to work as RAM therefore speeding up applications. This helps all applications that are needing more space.

The two tutorials I have listed below are tutorials explaining how virtual memory works. The first one is a YouTube from a man named Gary who gives a great high overview of what virtual memory is. The next resource is from Google with real world examples of how to use virtual memory on their cloud platform GCP. Virtual memory changes the way we can build applications and even databases. With virtual memory we can expand or shrink databases in real time without having downtime. This is a huge plus when it comes to keeping up with cloud computing.

Resources:

Gary. (2013, February 13). *What is Virtual Memory - Gary Explains*. What is Virtual Memory - Gary explains. Retrieved January 26, 2022, from https://www.youtube.com/watch?v=2quKyPnUShQ&t=214s

Google. (n.d.). *Creating in-memory RAM disks  |  Compute Engine documentation  |  google cloud*. Google. Retrieved January 26, 2022, from https://cloud.google.com/compute/docs/disks/mount-ram-disks