**Overview:**

* What is Virtual memory? Why is it implemented?
* Errors (Limited Frames, Long table – less memory, Slow I/O – thrashing)
* Feasible solutions

**Introduction**

Virtual memory is a feature of an operating system that enables a computer to be able to compensate shortages of physical memory by transferring pages of data from random access memory to disk storage.

Virtual memory uses hardware and software to allow a computer to compensate for physical memory shortages, by temporarily transferring data from random access memory (RAM) to disk storage. In essence, virtual memory allows a computer to treat secondary memory as though it were the main memory.

“*Although the memory size could be increased, the price associated with such a move was significant. Furthermore, after carefully analyzing the executing program’s behavior, it became clear that each program has large parts that are only rarely being used and other parts that are not being used at all.* “

Yadin, Aharon. Computer Systems Architecture, CRC Press LLC, 2016. ProQuest Ebook Central, <http://ebookcentral.proquest.com/lib/manchester/detail.action?docID=4683317>.

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