MS windows 10 memory management

BY

ABDULRAHMAN ALSALMANY

Outline

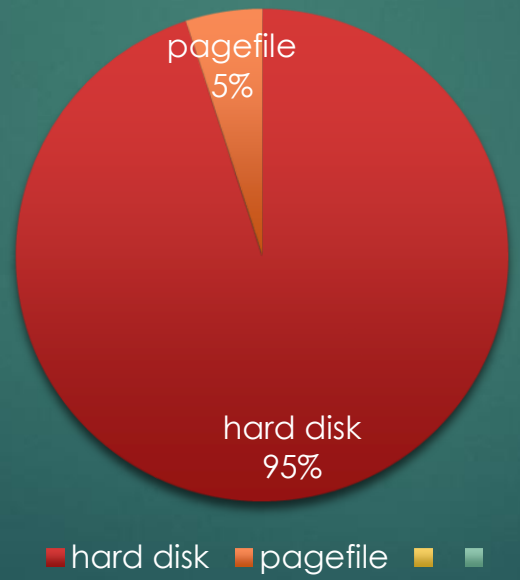
- Small **introduction**
- Abstract about **Memory Management in older Windows versions**
- Detailed explanation about **Memory Management in Windows 10**

Introduction

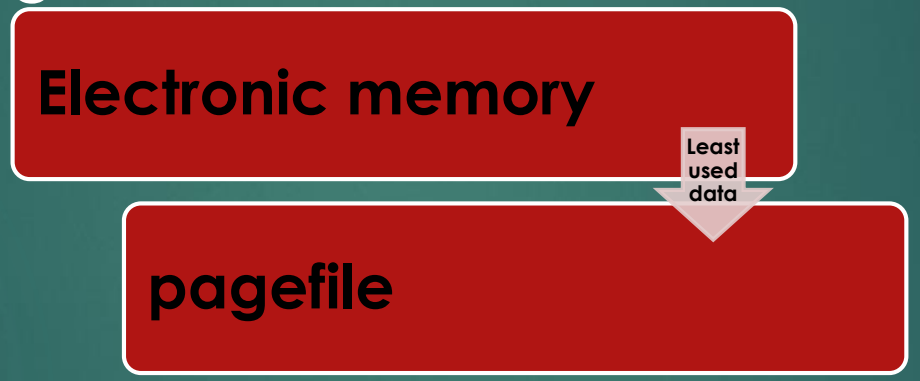
- main goals
- operating system arbitrates competing memory requirement
- Memory is an important factor in processing different tasks faster
- **Memory Compression** feature in **Windows 10**

Memory Management in older Windows versions

- In Windows, the whole memory divided into three parts
- it was necessary to allot a good amount of hard disk space



- Memory management in older versions of Windows was simple and straight



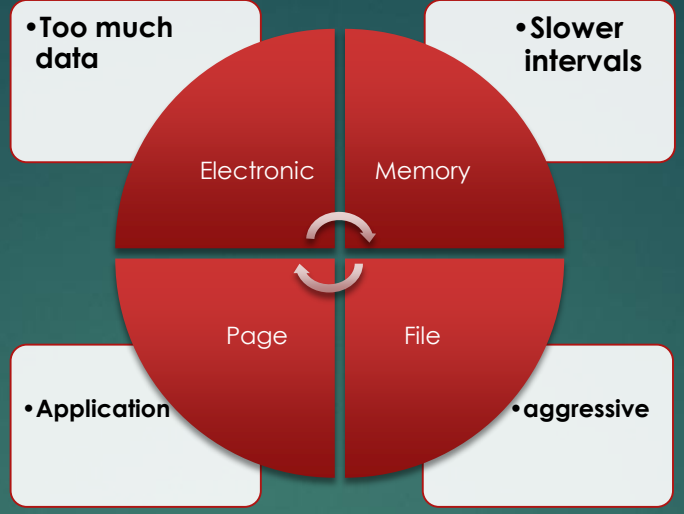
- traditional application resided in main memory
- If the capacity of pagefile exceeded, the data on pagefile was replaced

Memory Management in Windows 10

- In Windows 10, enabled the Memory Manager (MM)

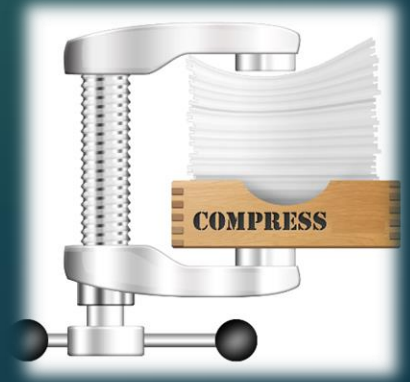
- By compressing memory we reduce the amount of memory used per process

- Pagefile in Windows 10 is a hidden system file with the .SYS extension. It is stored on your computer's system drive (usually C:\). The Pagefile allows the computer to perform smoothly by reducing the workload of the physical memory, RAM.



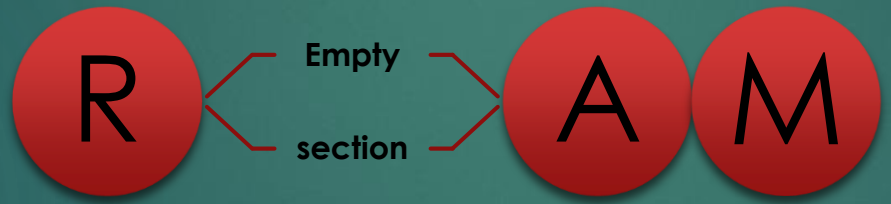
- Windows 10 uses pagefile.sys to store data of the electronic memory
- Windows 10 has two categories of apps: modern and traditional

- If RAM becomes congested due to excess data, the app and data things are compressed up to 40% and accommodated in the same electronic memory.



- using the memory compression feature in Windows 10 It saves about 50% of pagefile activity

- most of the data is already available on the main memory – in a compressed form, When the app or data is required, it is decompressed and used.



- when using pagefile, the speed is faster in Windows 10

Thanks for listening