Thursday, December 16, 2021 11:03 AM

Virtual Memory

Virtual Memory = Physical Memory + Page File Size

Virtual Memory Manager
- i) Rise Paging
- ii) Demand Paging

Non volatile RAM

Virtual Memory term is polymorphic

Working Set of a process = Private Working Set + Sharable working Set

Winword.exe
chrome.exe

System drives — Kernel drivers ; Os.sys. files
DLL's System Resources

Committed (Virtual in use) = Total Virtual − Available Virtual

= (15.8 − 12.1) GB

= 3.7 GB

26.8 − 21.1

= 5.7

Paged Pool - It indicates the amount of Physical memory used by the Kernel to store objects that can be written to disk

Nonpaged pool — that cannot be written to disk but must remain in physical memory all the time

H/W reserved — dedicated Graphics memory reserved through BIOS

In Use — sum of total working sets of all

running processes owned by the OS, Kernel (non paged pool), drivers and the various applications

Repurpose

Repurposing a page

Priority list numbered 0–7 is maintained within standby set or list

0 — Lowest priority
7 — highest — "

Installed memory
= In Use + Modified + Standby + free + H/W reserved

Cached memory
= Modified + Standby

Available memory
= Standby + free

Commited (Virtual In Use) = Physical memory in use + Page file in use

Page file in use = Commited − Physical memory in use