

# Efficient tools and techniques for modern software development

## OS Internals with “System Informer”

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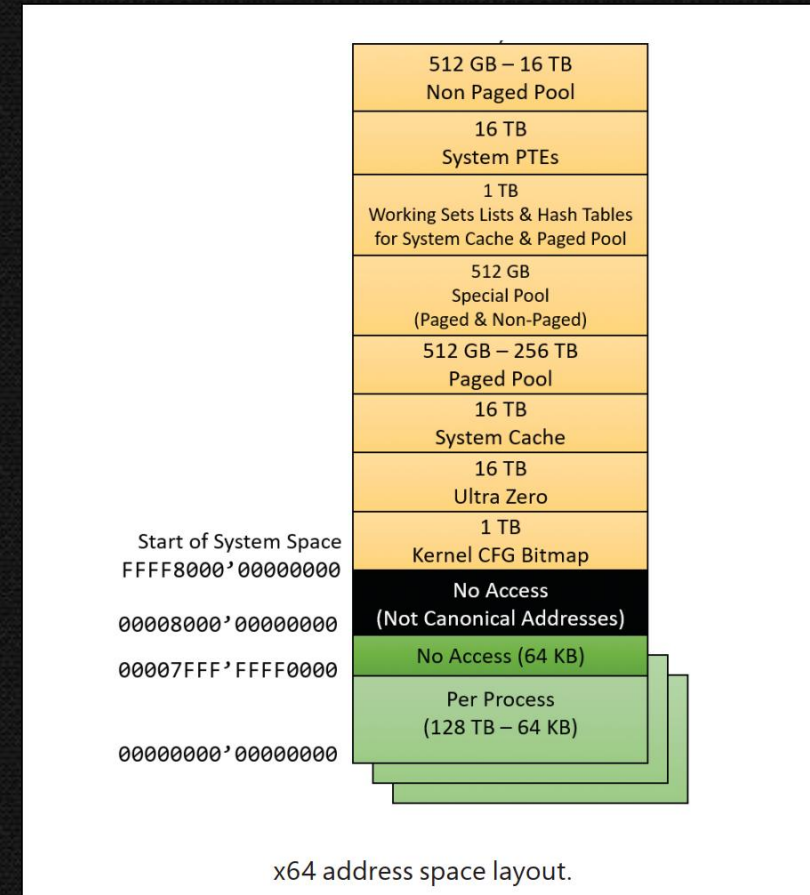
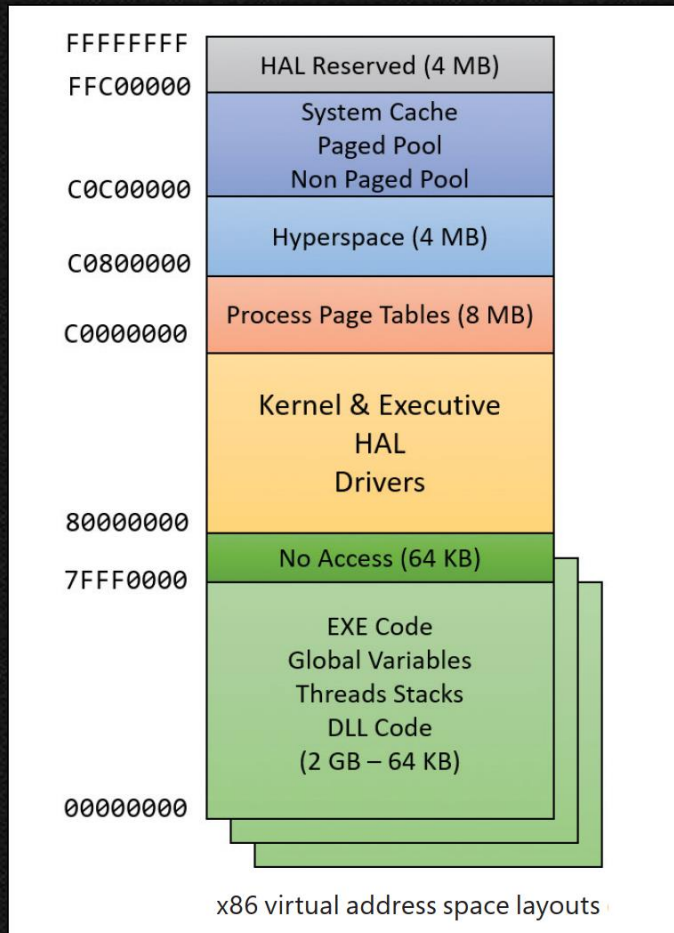
<https://vineelkovvuri.github.io>



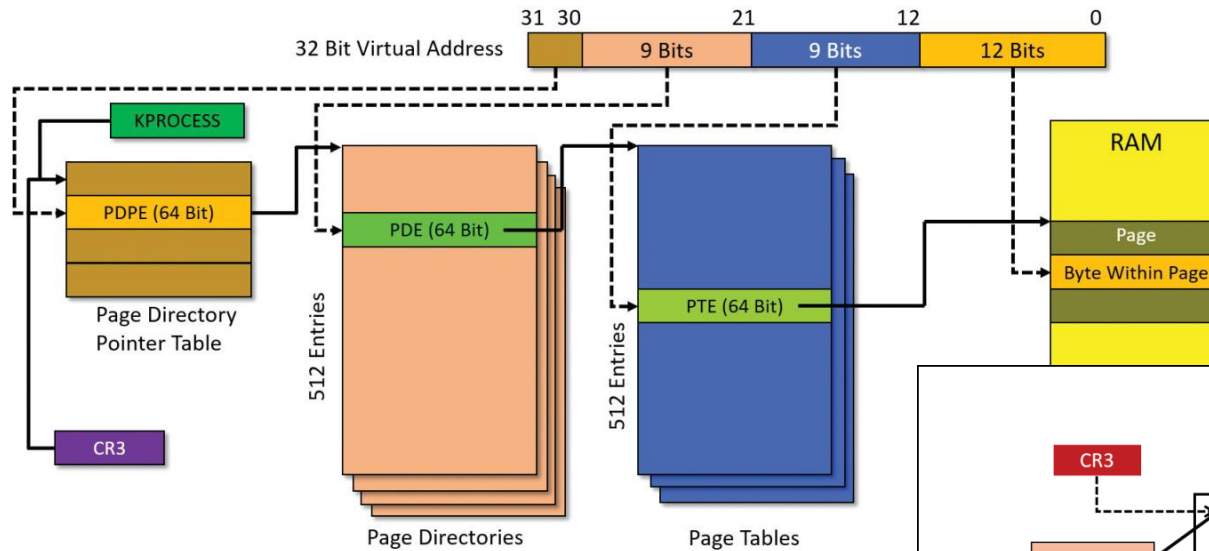
# Agenda

- Brief overview of Hardware
- Installation of System Informer
- Interface Overview(Options)
- System Overview
- Memory
- Process
- Thread
- Modules
- Environment
- Unlocking Files

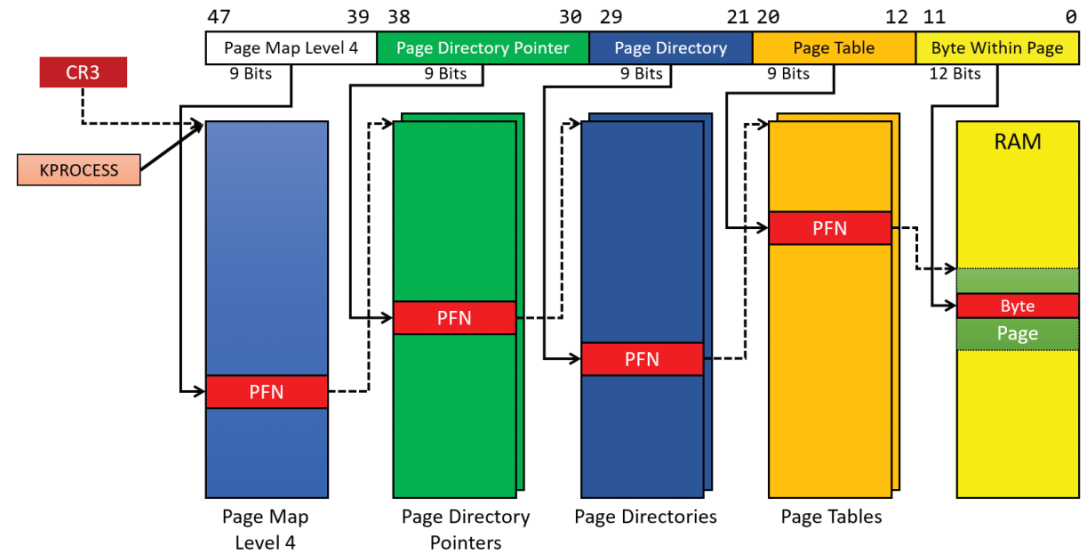
# X86 vs X64 Virtual Address Space Layout



# X86 vs X64 Virtual to Physical Address Translation



x86 virtual address translation.



x64 address translation.

# References

- Windows
  - Windows Internals – 7<sup>th</sup> Ed - Part1 – Alex Ionescu/Mark Russinovich
  - Windows Internals – 7<sup>th</sup> Ed - Part2 – Alex Ionescu/Mark Russinovich
  - Windows via C/C++ – Jeffrey Richter
- Linux
  - Understanding the Linux Kernel – Daniel Bovet/Macro Cesati
  - The Linux Programming Interface – Micheal Kerrisk



# Thank You

