Quiz

May 07, 2024

Which of the followings is/are true about page fault handling?

A After handling a page fault, CPU returns to the user mode and re-executes the instruction that triggers the page fault.

B The CPU raises a page fault exception when the page is non-present, such that the OS can get involved in the address translation.

C When present bit is 1, the PTE stores the disk address of the page; when the present bit is 0, the PTE stores the PFN.

D TLB invalidation always happens during page fault handling.

提交

Which of the followings is/are true about page replacement policies?

A LRU is always better than FIFO in terms of page fault numbers, whichever reference string is considered.

B MIN is always better than LRU in terms of page fault numbers, whichever reference string is considered.

C When approximating LRU with reference bit, the reference bits are set by the CPU and cleared by the OS.

D The Nth chance clock algorithm is a good approximation of LRU, if N is large enough.

提交

If memory access latency is 500ns, and the page fault handling time is 5ms, if the effective access time leads to a slowdown of less than 100%, the page fault rate is approximately [填空1] % .

Answer: 0.01

作答