COMPARATIVE ANALYSIS OF REPLACEMENT ALGORITHMS TECHNIQUES REGARDING TO TECHNICAL ASPECTS

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ABSTRACT

Computer Operating System are used page references for the Memory management ,there are different types of page replacement algorithms that decides which pages are removed from the memory when more reference pages are allocated in the memory. When a free page is unable to use allocated memory then page fault is occurs this occurrence of page fault is known as paging. Paging occurs due to less space or available space is less than the required memory space. In this paper we encapsulate the major types of the Page replacement algorithems that are proposed in the latest researches. We elaborate the commonly used algorithems such as FIFO, Beladys MIN, The Optimal Algorithm, LRU, LRU Approximation, Hybrid LRU, CLOCK Algorithm, Dueling CLOCK,LRIS, CLOCK-Pro, and ARC. This paper also we also compare the LRU with the hybrid LRU and find the comparative results in this comparison and also compare LRU with the FIFO,LRU and optimal algorithms to with the help of examples of these algorithms find that which one is better in performance ,our main focus is to analyze the LRU,FIFO and optimal algorithms results when number of frames are increased in and due to increment of frames its also effected on page fault and we want to determine the HIT-ratio in all of these cases.

Keywords: FIFO, Beladys MIN, The Optimal Algorithm,LRU, LRU Approximation, Hybrid LRU, CLOCK Algorithm, Dueling CLOCK, LRIS, CLOCK- Pro, ARC, PSEL, IRR, LIR, HIR.