A High Performance Dynamic Memory Management Scheme

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ABSTRACT

Dynamic Memory Management takes an important count in most programs. Compared with other DMMs, first fit DMM using address-ordered linear list data structure is the most researched and applied, since it tends to enhance program locality, and causes significantly less fragmentation. In this paper, an efficient scheme suitable for this kind of DMM is proposed which can evidently improve the DMM efficiency, especial memory-releasing efficiency, by caching recently freed blocks. This improvement is testified by theoretical analysis and evaluation result.

Keywords: Dynamic Memory Management, CACHE, address-ordered, first fit

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