Abstract

Caching is a fundamental technique commonly employed to hide the latency gap between
memories and the CPU by exploiting locality in memory accesses. On today’s architectures a cache miss may cost several hundred CPU cycles [1]. In a two-level memory hierarchy, a cache performs faster than auxiliary storage, but is more expensive. Cost concerns thus usually limit cache size to a fraction of the auxiliary memory’s size. This paper represents a comparative predictability about some of the traditional and new replacement techniques in contrast with OPTIMAL replacement technique.

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