Abstract

Caching and Prefetching are the two approaches for Web Caching. Again Web caching is a technology to reduce the response time, bandwidth uses and improving the network traffic etc. Web Prefetching tries to put the future used web objects into cache with higher probability of cache hit. In Web caching, Cache replacement algorithm is the core of it. So, good replacement policy would make effective management of cache memory utilization with higher probability of cache hits. General replacement policy like LRU, FIFO, LFU considering only the arrival time, but other parameters related to web objects should consider for deciding cacheable or not. This paper approaches a replacement policy with fuzzy inference system with input parameters Frequency, Latency and Bytesent of web objects. By considering these parameters, the replacement would have artificial intelligence in cache replacement policy.
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Index Terms

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Web Caching; Fis (fuzzy Inference System); Frequency; Latency; Bytesent