A Hybrid Cache Investment Strategy for Distributed Database Queries

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Abstract

Caching is one of the most popular techniques for last decades for improve the performance of distributed database queries. There are different techniques to implement the caching. This paper will present one of the caching methods, i.e. Cache Investment Technique. This technique is use to select best caching candidates item. These candidates item is not only useful for current query but also useful for subsequent queries. This paper will review initially existing cache investment policies and their comparative analysis in distributed environment. Then a new feasible policy proposed which is hybrid of existing policies. This proposed policy is based on existing a history based policies. This new policy gives us better candidate item, this improves the hit ratio. Improvement in hit ratio ensures the reusability of stored data efficiently. Due to this efficient reuse of stored data, lesser amount of data is required to be retrieved from remote location. Thus it improves the performance of queries in distributed database system. This paper will present the architecture of this proposed policy and give the detail explanation of each module of proposed policy.
References


Index Terms
Keywords

Distributed database, Caching, Cache investment, Investment Cost, Return on Investment (ROI)