



Consistent Object Sharing

¹Nishant Mishra, ²Prishabh Diwedi, ³Rudramani Singh

^{1,2,3} Institute of Technology and Management GIDA, Gorakhpur

ABSTRACT

Ensuring consistency of an object among various applications is always a tedious job when applications perform operations in conflicting modes. Replication is used to increase availability. Highly available data is very costly if consistency is concerned. However using replication, concurrency can be increased. One approach to obtain consistency is defining a schedule to access an object by various applications. This approach enjoys easy implementation. Whenever a schedule is proposed to access an object, concurrency decreases as only one application can access the object at a time. In this paper we are describing a system that improves the availability and performance of web services by consistent sharing of mutable objects. This is alternative approach is to achieve the consistency of object by the edge proxies while the latency and load at the proxy must be reduced. The emerging of edge services architecture for providing the web services processes client request at the collection of edge servers distributed across the network and near the user. The key challenge of this architecture is servicing the clients operations by effectively access the mutable service object by edge proxies while ensuring the shared object must be strongly consistent. Here we can build edge service system that is highly available, efficient and having low load. This paper concludes that sharing of consistent object for edge proxies is provide the improvement in response time over traditional centralized server architecture.

Keywords— replication, availability, consistency, schedule, concurrency, edge proxy, strongly consistent, mutable.