



SDSU
presents
a thesis defense for
Master of Science
degree in
Computer Science

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Adaptive Server Selection in Peer-to-Peer Networks

Abstract

Peer to Peer Networks that are one of the most popular data sharing networks in today's internet world and are mainly decentralized and unstructured networks. Search for data goes on blindly, independent of the input, making it as ineffective as choosing peers randomly. To enhance the performance of searching in unstructured network, it is necessary to replicate data across network for easy and faster data retrieval.

The main process in content replication revolves around choosing a peer to fetch data from and replicating it somewhere in the network for easy accessibility. To streamline this process, we have come up with a new concept for system design in which we have split the above process into two sub-sections 1] Server Selection - This section of our system just limits itself to finding the ideal peer across the network from whom to fetch data, it observes the system performance and helps in balancing the load across the network by selecting a peer that is relatively free. 2] Content Replication: This section just concerns itself with choosing the best location where the requested data can be replicated, so as to facilitate faster data retrieval in the future and eventually lower network traffic. To assist the peers in the above two tasks, we have a sub-centralized server which helps achieve the necessary results.

Thesis Committee

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