Abstract

Peer to peer (p2p) file sharing protocol and ad hoc wireless routing protocol shares many intriguing similarities even though they operate on a totally different level of a network. With the popularity of p2p application for resource sharing and the availability of resources has motivated the researchers to examine the potentials of p2p applications in a dynamic environment. With the success of p2p for file sharing applications, its benefits can be brought by constructing the overlay network with easy access of content to improve their availability and performance. This paper is one such an attempt to exploit the potential of mobile characteristics for the benefit of p2p application to satisfy the users demand. This paper focuses on how reliable content sharing could be realized in an ad hoc environment through peer to peer (p2p) system. This efficient content delivering system reduces the search latency of content peer selection. Also the reliable path for sharing content with trust calculation has been proposed. Unstructured peer to peer network is considered for the platform, emphasizing the content based interaction with a pro-active routing protocol at the network layer. The experiments have been performed on the network simulator NS-2 and the results showed that the proposed system improves the hit ratio and reduces the overhead traffic.
Reliable Peer Discovery in Content-Aware Overlay Network


Index Terms

Computer Science

Communication Networks
Keywords

Peer-to-Peer Network   Ad hoc network   Resource search   Trust