Efficient Secure Data Dissemination in Decentralized Personal Networks

Esra Erdin, Eric Klukovich, Mehmet Hadi Gunes

University of Nevada, Reno

Tremendous increase in the usage of mobile devices and interconnected applications have brought privacy concerns for the end users of these systems. The privacy concerns of users' personal data can be addressed with decentralized architectures. The distributed platforms remove central authorities from the networked systems as users share their content only with intended peers through mobile devices. In a decentralized architecture, efficient sharing and timely access of objects play a vital role. To address these challenges we take advantage of free storage clouds to distribute encrypted user content. In this study, we develop algorithms and protocols to achieve efficient and secure data dissemination through networked mobile devices utilizing storage cloud infrastructure.