Privacy-Preserving Data Encryption Strategy for Big Data in Mobile Cloud Computing

Objective:

The objective of this system is to selectively encrypt the data and use privacy classification methods under timing constraints.

ABSTRACT:

Privacy has become a considerable issue when the applications of big data are dramatically growing in cloud computing. The benefits of the implementation for these emerging technologies have improved or changed service models and improve application performances in various perspectives. However, the remarkably growing volume of data sizes has also resulted in many challenges in practice. The execution time of the data encryption is one of the serious issues during the data processing and transmissions. Many current applications abandon data encryptions in order to reach an adoptive performance level companioning with privacy concerns. In this paper, we concentrate on privacy and propose a novel data encryption approach, which is called Dynamic Data Encryption Strategy (D2ES). Our proposed approach aims to selectively encrypt data and use privacy classification methods under timing constraints. This approach is designed to maximize the privacy protection scope by using a selective encryption strategy within the required execution time requirements.

INTRODUCTION:

Introducing mobile cloud computing techniques has empowered numerous applications in people's life in recent years. Involving humans in the cloud computing and wireless connection loops becomes an alternation for information retrieval deriving from observing humans' behaviors and interactivities over various social networks and mobile apps. Moreover, as an

emerging technology, cloud computing has spread into countless fields so that many new service deployments are introduced to the public, such as mobile parallel computing and distributed scalable data storage. Penetrations of big data techniques have further enriched the channels of gaining information from the large volume of mobile apps' data across various platforms, domains, and systems. Being one of technical mainstreams has enabled big data to be widely applied in multiple industrial domains as well as explored in recent researches.