



K.Sriram et al, International Journal of Computer Science and Mobile Applications,

Vol.2 Issue. 3, March- 2014, pg. 35-41

ISSN: 2321-8363

A SCALABLE AND SECURE SHARING OF PHR IN CLOUD COMPUTING

Mr.K.Sriram¹, Ms.N.Radhika²

¹PG Student, ²Assistant Professor

Department of Computer Science and Engineering, PRIST University, Trichy District, India

(¹ pudusriram@yahoo.com)

Abstract

Personal health record (PHR) is an emerging patient-centric model of health information exchange, which is often outsourced to be stored at a third party, such as cloud providers. However, there have been wide privacy concerns as personal health information could be exposed to those third party servers and to unauthorized parties. To assure the patients' control over access to their own PHRs, it is a promising method to encrypt the PHRs before outsourcing. Yet, issues such as risks of privacy exposure, scalability in key management, flexible access and efficient user revocation, have remained the most important challenges toward achieving fine-grained, cryptographically enforced data access control. In this project, we propose a novel patient-centric framework and a suite of mechanisms for data access control to PHRs stored in semi-trusted servers. To achieve fine-grained and scalable data access control for PHRs, we leverage Transposition Ciphers (TPC) technique to encrypt each patient's PHR file. Hence it provides more secured and flexible cloud environment for the maintenance of personal health records.

Keywords: Personal health records, cloud computing, data privacy, fine-grained access control, attribute-based encryption

Full Text: www.ijcsma.com/publications/march2014/V2I312.pdf