Available Online at www.ijcsmc.com

International Journal of Computer Science and Mobile Computing

A Monthly Journal of Computer Science and Information Technology



ISSN 2320-088X

International Conference on Mobility in Computing- ICMiC13, Organized by Mar Baselios College of Engineering and Technology during December 17-18, 2013 at Trivandrum, Kerala, India, pg.44 – 49

SURVEY ARTICLE

Secure Personal Health Records in Clouds: A Hierarchical Attribute Based Solution

Rojitha Abdulla¹, Anupriya Vysala²

Department of Computer Science & Engineering, Mar Baselios College of Engineering, Trivandrum, India

1 rojitha1234@qmail.com, 2 vysala.anu@qmail.com

Abstract—PHR or Personal Health Record is the health information that is recorded and maintained by the patient, in the clouds, for global information exchange. Since it is stored in clouds, there is a possibility of sensitive patient data being accessed by unauthorized people for illegal gain. Some open challenges in having PHRs in cloud relate to flexibility, scalability, security and privacy. Even though the technique of encrypting PHRs before outsourcing (for instance, using Attribute Based Encryption) is a common one, there are several issues associated with the current techniques used for encrypting PHRs. This paper proposes a method of encrypting PHRs prior to outsourcing by means of Hierarchical Attribute Set-Based Encryption which achieves the above said challenges along with fine-grained access control to the medical data.

Keywords- Personal Health Record; Clouds; Security; Flexibility; Attribute Set-Based Encryption; Hierarchical access structure

Full Text: http://www.ijcsmc.com/docs/papers/ICMIC13/ICMIC13S2.pdf