



APPLICATION OF CONFIDENCE RANGE ALGORITHM IN RECOGNIZING USER BEHAVIOR THROUGH EPSB IN CLOUD COMPUTING

^{1,2}MOHANAAD SHAKIR, ³ASMIDAR BIT ABUBAKAR, ³YOUNUS YOUSOFF, ⁴
MOSTAFA AL-EMRAN, ^{1,5}MAYTHAM HAMMOOD

¹ Senior Lecturer, IT Department, Alburaimi University Collage(BUC), Oman

² Ph.D. Candidate in ICT, COIT, University Tenaga National(UNITEN), Malaysia

³ Senior Lecturer, COIT, University Tenaga National(UNITEN), Malaysia

⁴ Ph.D. Candidate in FSKKP, University Malaysia Pahang(UMP), Malaysia

⁵ Senior Lecturer, Computer Science Dept., Tikrit University, Iraq

E-mail: ¹mohanaad@buc.edu.om, ³asmidar@uniten.edu.my, ³Yunusy@uniten.edu.my,
⁴malemran@buc.edu.om, ⁵mmhammood@ualr.edu

ABSTRACT

Within the security scope, Authentication is considered as a core model to control accessing any system. Password is one of the most significant mechanisms which diagnose the authorized user from others. However, it is facing many problems such as spoofing and man in the middle attack(MitMA). When unauthorized user has got the correct password. Then, this user would be able to access into the data and change previous password which causes significant loss in efforts and cost. Similarly, the hacker "who don't have a password" is also trying to penetrate the system through predicted a set of words. In fact, both of authorized and hacker users work to input a wrong password, but authorized user may have only one or two wrong characters while the hacker inputs a whole wrong password. The aim of this paper, established an algorithm under the name of "Confidence Range ". The main tasks of this algorithm are monitoring all the activities which associated with the password on time, error, and style to the authorized user to recognize any suspicious activity. For that reason, a unique "EPSB," Electronic Personal Synthesis Behavior", has been generated to the authorized user by the application of confidence range algorithm.

Keywords: *Information system security, Data Security, Hybrid Cloud computing, Confidence Range(CR), Data classification. Electronic Personal Synthesis Behavior(EPSB)*