

{tag} International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

[Volume 142](#)

-
[Number 8](#)

Year of Publication: 2016

Authors:

Mohamed M. Zarad, Ahmed A. Abdel-Hafez, Ahmed H. Hassanein

10.5120/ijca2016909883

{bibtex}2016909883.bib{/bibtex}

Abstract

Cloud computing is a new, promising emerging technology which provides a variety of services over the public network. Such as software, hardware, data storage and infrastructure services. It is widely used because it offers high processing power, wide range of storage space and high computational speed. It provides a convenient on demand network access to a pool of shared services and resources via public networks. So enterprises can use the available services and resources to develop, host, and run services over their infrastructure in a flexible way anytime, anywhere with minimal management efforts. This makes cloud computing efficient, flexible and cost effective tool for business development and growth.

On the other hand, the adoption of cloud computing suffers from security and privacy deficiency, which became significant challenge.

In this paper; an efficient and provably secure authentication mechanism is proposed to give a

legitimate user the right to access and manage the cloud resources.

References

1. Kawser wazed nafi , Tonny shekha Kar, A newer user Authentication, file encryption and distributed server based cloud computing security architecture, International Journal of Advanced Computer Science and Application vol.3, No.10, 2012
2. Judith Hurwitz , Robin Bloor, cloud computing for dummies Wiley Publishing, 2010.
3. Bernd Grobauer, Tobias Wakkoschek , Elmar Stocker Understanding cloud computing vulnerabilities, IEEE Computer and Reliability societies , March 2011.
4. Faraz Fatemi , Shiva Gerayeli Moghaddam A scalable and efficient user authentication scheme for cloud computing environments, IEEE 2014 Region10 Symposlum.
5. Shorab Rouzbeh, Iman Ghavam, A client -based user authentication and encryption algorithm for secure accessing to cloud servers, 2013 IEEE Student Conference on Research and Development 16-17 December 2013, putrajaya, Malaysia.
6. William Stallng, cryptography and network security 5 th edition Prentic Hall, 2011.
7. Bruce Schneier, applied cryptography second edition John Wiley&sons, 1996.
8. Veerraju Gampala , Data security in cloud computing with elliptic curve cryptography, International Journal of Soft Computing and Engineering, vol-2, July 2012.
9. Leonidas Deligiannidis "Implementing Elliptic Curve Cryptography" International Conference Frontiers in Education:CS and CE /FECS 2015
10. Moumita Roy , Point generation and base point selection In ecc, International Journal Of Advanced Research in computer and communication research vol.3, Issue 5, MAY 2014.
11. Debajoyoti Mukhopadhyay, Architecture to implement secure cloud Computing with elliptic curve cryptography, Published June 30, 2015, <https://www.researchgate.net/publication/279534252>

Index Terms

Computer Science

Information Sciences

Keywords

MDHA, CUA, ECC