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Protecting Data on Mobile Cloud Computing

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Abstract: Mobile Cloud Computing is a combination of general Cloud Computing and Mobile Computing in which we have to access resources from the remote cloud data center with the help of mobile electronics and peripherals like mobile smartphones, laptops, gadgets, etc. via Cellular Technology or Wireless Communication. Mobile devices have lots of resource constraints like storage capacity, processing speed, and battery life. Hencethrough simple mobile computing software and programming, we cannot manipulate on mobile devices of cloud data center information. Because of such kinds of difficulty, we have to process information or data through external mobile devices. Accessing and processing of data with the help of Trusted Third Party Agency (TPA) outside the cloud data center and mobile devices have lots of security challenges. To make cloud data secure over outside resources, lots of terminologies and theory are put forward by various researchers. In this paper, we willanalyze their theory and its limitations and offer our security algorithm proposal. In this thesis article, we analyze the security framework for storing data on Cloud Server by Mobile and limitation of this process. Also, we review the theory of how data can be secure our data on cloud administrators

Keywords: Mobile Cloud Computing, Security algorithm of cloud, Wireless security

REFERENCES

- [1]. Ruben Rios, Rodrigo Roman, Jose A. Onieva and Javier Lopez Network, Information, and Computer Security (NICS) Lab Universidad de M'alaga Campus de Teatinos s/n, 29071. M'alaga, Spain "From Smog to Fog: A Security Perspective" 2017 Second International Conference on Fog and Mobile Edge Computing (FMEC) 978-1-5386-2859-1/17/\$31.00 ©2017 IEEE.
- [2]. FengYu Tian, Peng Zhang, and Zheng Yan, Senior Member, IEEE "A Survey on C-RAN Security" IEEE ACCESS, MANUSCRIPTID Published by the IEEE Computer Society, Citation information: DOI 10.1109/ACCESS.2017.2717852, IEEE Access.
- [3]. Han Qi, Abdullah Gani, Faculty of Computer Science and Information Technology University of Malaya Kuala Lumpur, Malaysia "Research on Mobile Cloud Computing: Review, Trend and Perspectives".
- [4]. Hui Li and Tao Jing from School of Computer and Information Technology, Beijing Jiaotong University, China "A Lightweight Fine-Grained Searchable Encryption Scheme in Fog-Based Healthcare IoT Networks" published in Hindawi Wireless Communications and Mobile Computing Volume 2019, Article ID 1019767, 15 pages https://doi.org/10.1155/2019/1019767.
- [5]. Hui Li and Tao Jing School of Computer and Information Technology, Beijing Jiaotong University, China "A Lightweight Fine-Grained Searchable Encryption Scheme in Fog-Based Healthcare IoT Networks" published in Wireless Communications and Mobile Computing Volume 2019, Article ID 1019767, 15 pages.
- [6]. New Authentication Scheme to Secure against the Phishing Attack in the Mobile Cloud Computing Munivel E and Kannammal A. Department of Electronics and Communication Engineering, PSG College of Technology, Coimbatore, India published in Hindawi Security and Communication Networks Volume 2019, Article ID 5141395, 11 pages. https://doi.org/10.1155/2019/5141395 https://www.garykessler.net/library/crypto.html
- [7]. Security and Protocol Exploit Analysis of the 5G Specifications Roger Piqueras Jover Bloomberg LP New York, NY rpiquerasjov@bloomberg.net Vuk Marojevic Dept. Electrical and Computer Engineering Mississippi State University, MississippiState, MS. vuk.marojevic@msstate.edu
- [8]. Efficient Attribute-Based Encryption with Privacy-Preserving Key Generation and Its Application in Industrial Cloud Yujiao Song,1 HaoWang ,1,2 XiaochaoWei,1 and LeiWu 3. School of Information

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Science and Engineering, Shandong Normal University, China. School of Computing and Information Technology, University of Wollongong, Australia. Shandong Provincial Key Laboratory of Software Engineering, China. Hindawi Security and Communication Networks Volume 2019, Article ID 3249726, 9 pages.https://doi.org/10.1155/2019/3249726

- [9]. Authorized Client-Side Deduplication Using CP-ABE in Cloud Storage. Taek-Young Youn, 1 Nam-Su Jho, 1 Kyung Hyune Rhee and Sang Uk Shin. Electronics and Telecommunications Research Institute (ETRI), Daejeon 34129, Republic of Korea. Department of IT Convergence and Application Eng., Pukyong National University, Busan 48513, Republic of Korea Hindawi Wireless Communications and Mobile Computing Volume 2019, Article ID 7840917, 11 pages. https://doi.org/10.1155/2019/7840917
- [10]. Secure Device-to-Device Authentication in Mobile Multi-hop Networks Hyunsoo Kwon1, Changhee Hahn1, Daeyoung Kim1, Kyungtae Kang2, and Junbeom Hur School of Computer Science and Engineering, Chung-Ang University, Seoul, Republic of Korea. {khs910504,Mckinsey,rlaeod,jbhur}@cau.ac.kr Department of Computer Science and Engineering, Hanyang University, Ansan, Republic of Korea. .ktkang@hanyang.ac.kr
- [11]. Z. Cai et al. (Eds.): WASA 2014, LNCS 8491, pp. 267–278, 2014. c_Springer International Publishing Switzerland 2014. Secure and Efficient Searchable Public Key Encryption for Resource- Constrained Environment Based on Pairings under Prime Order Group. Yu Zhang, 1 Yin Li, 1 and YifanWang2 School of Computer and Information Technology, Xinyang Normal University, Xinyang 464000, China Wayne State University, 42 WWarren Ave, Detroit, MI 48202, USA. Hindawi Security and Communication Networks Volume 2019, Article ID 5280806, 14 pages. https://doi.org/10.1155/2019/5280806 Authorized Client-Side Deduplication Using CP-ABE in CloudStorage Taek-Young Youn, 1 Nam-Su Jho, 1 Kyung Hyune

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