IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 12, Issue 3, December 2021
Impact Factor: 5.731

Survey of Blockchain In IoT (Internet Of Things)

Ms. Jinnu George[1], Akshay C P[2], Sahal C[3], Nandana Babu K[4], Silpa A K[5]
Students, Department of Computer Science & Engineering[2,3,4]
Assistant Professor, Department of Computer Science & Engineering[1,5]
Vedavyasa Institute of Technology, Malappuram, Kerala, India

Abstract: *IoT enables device across the internet to send data to private block chain networks. These where originally dedicated to make tech like phones and fitness trackers "smart", these industry has developed to the point where it can convert ordinary household items to another level. These consist of smart homes that coordinates data transitions with block chain to provide privacy and security. Block chains are computationally expensive and involve high band width overhead and delays. Block chain that is the base of the crypto – currency Bitcoin have been recently used to provide security and privacy in peer – to – peer network similar to IoT. IoT is a grand network with connected devices, these devices gather and share data about how they are used and the environment in which they are operated. With IoT infrastructure, physical objects such as wearable objects, television, refrigerator, smart phones, supply-chain items and any objects across the globe would get connected using the Internet. Sensing, radio waves, mobile technology, embedded systems and Internet technology are promising actors which play significant roles in IoT infrastructure. The basic idea is to have a mechanism for rating services on various aspects, and a way of computing reputation scores based on the ratings from many different parties. By making the reputation scores public, such systems can assist parties in deciding whether or not to use a particular service. We propose a new system, built on the Bitcoin block chain, which enables strong consistency. Our system, Peer Census, acts as a certification authority, manages peer identities in a peer-to-peer network, and ultimately enhances bitcoin and similar systems with strong consistency.*

Keywords: Block chain

REFERENCES

[1]. IEEE Standard for Local and metropolitan area networks - Part 15.6: Wireless Body Area Networks, 2012. http://standards.ieee.org/findstds/standard/ 802.15.6-2012.html.
[2]. August. http://august.com/.
[3]. L. Banks. Best bone conduction headphones of 2015. http://www.everydayhearing.com/hearing-technology/articles/bone-conduction-headphones/, July 2015.
[4]. L. Bauer, L. F. Cranor, M. K. Reiter, and K. Vaniea. Lessons learned from the deployment of a smartphone-based access-control system. In Symposium on Usable Privacy and Security (SOUPS), 2007.
[5]. L. Bauer, S. Garriss, and M. K. Reiter. Detecting and resolving policy misconfigurations in access-control systems. ACM Transactions on Information and System Security (TISSEC), 2011.
[6]. I. Boureanu and S. Vaudenay. Challenges in distance bounding. Security & Privacy, IEEE, 2015
[7]. E. Brewer. CAP twelve years later: How the "rules" have changed. Computer, 2012.
[8]. Adam Back, Matt Corallo, Luke Dashjr, Mark Friedenbach, Gregory Maxwell, Andrew Miller, Andrew Poelstra, Jorge Tim´on, and Pieter Wuille. Enabling blockchain innovations with pegged sidechains, 2014.
[9]. M. Babaioff, S. Dobzinski, S. Oren, and A. Zohar. On bitcoin and red balloons. In Electronic Commerce, 2012.
[10]. Miguel Castro, Barbara Liskov, et al. A correctness proof for a practical byzantine-fault-tolerant replication algorithm. Technical report, Technical Memo, MIT Laboratory for Computer Science, 1999.
[11]. David Chaum. Blind signatures for untraceable payments. In Advances in cryptology, 1983.
[12]. Khvoynitskaya, S. The History and Future of the Internet of Things. 2020. Available online: https: //www.itransition.com/:https://www.itransition.com/blog/iot-history (accessed on 25 March 2020).

IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
Volume 12, Issue 3, December 2021
Impact Factor: 5.731

[13]. Conti, M.; Dehghantanha, A.; Franke, K.; Watson, S. Internet of Things security and forensics: Challenges and opportunities. Future Gener. Comput. Syst. 2018, 78, 544–546. [CrossRef]

[14]. Monther, A.A.; Tawalbeh, L. Security techniques for intelligent spam sensing and anomaly detection in online social platforms. Int. J. Electr. Comput. Eng. 2020, 10, 2088–8708.