Threat from botnets - A boost of demand maliciously generated on cryptocurrencies

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Abstract

As an alternative to traditional currency, Cryptocurrency gain more attention on internet. Because of some distinguish features it has, many cybercriminals pay their attention on cryptocurrencies. Cybercriminals use cryptocurrencies to acquire their ransoms and payments for their cyber-crimes. Literary, cryptocurrencies are an oasis for cybercriminals. Apart from that, there is a possible threat on crypto currencies. An attacker can use a botnet with large number of participants to boost relatively low popular cryptocurrency in to a popular currency. Then he can sell the amount of cryptocurrency he already mined through the bot net for higher exchange rate and abounded the currency.

Introduction

In 2008, new breed of currency emerged recognized as cryptocurrency. A Japanese named Satoshi Nakamoto introduced the first cryptocurrency, The Bitcoin[1]. This new currency is intangible and not governed or regulated by any authority. The currency is controlled by specific control algorithm. The creation of these currencies are different from the process of making regular currency. The process of creating new currencies is called Mining. Any person can involve with currency making process and the person who create currencies is called The Miner. To create a currency (i.e. A Bitcoin) the miner should solve specific function. by solving the function, the miner add new block in to the public ledger called blockchain[2].
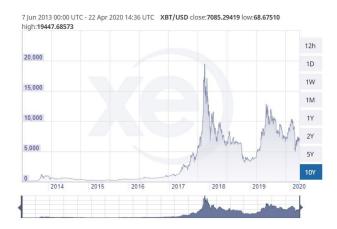

Fig. 01. Bitcoin to US dollar exchange rate for past ten years. Image courtesy: xe.com

Overall value of Bitcoin is increased dramatically related to any authentic currency. But the unpredicted behavior of exchange rate is clearly visible. The bad effect of unavailability of governing body can be seen in fig.

Reference

[1] W. Yiying and Z. Yeze, "Cryptocurrency Price Analysis with Artificial Intelligence," 2019 5th International Conference on Information Management (ICIM), Cambridge, United Kingdom, 2019, pp. 97-101.

[2] S. Ghimire and H. Selvaraj, "A Survey on Bitcoin Cryptocurrency and its Mining," 2018 26th International Conference on Systems Engineering (ICSEng), Sydney, Australia, 2018, pp. 1-6.

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