

A Review on Honeypots

Mr. Pradeep Nayak¹, Sujan P S², Abhishek R Bhat³, Sudheer⁴, Mohammed Sufiyan⁵

Faculty, Department of Information Science and Engineering¹

Students, Department of Information Science and Engineering^{2,3,4,5}

Alva's Institute of Engineering and Technology, Mijar, Mangalore, Karnataka, India

Abstract: Organizations and people alike are becoming increasingly concerned with information security today. Increasingly aggressive kinds of defense are becoming more popular as a result to enhance the current strategies. Utilizing honeypots is one of these strategies. A cyber security resource called a honeypot has value when it is probed, attacked, or compromised. To address the issue, all-around honeypots, which entail a major improvement in sensitivity, deception, and countermeasure, are required. In this paper, we give a brief overview of honeypots. It has become difficult to collect high-quality attack data in the context of honeypot areas due to the growing diversity and sophistication of cyberattacks. We look at several honeypot designs, honeypot ideas, and honeypot implementation strategies. Index Terms—Honeypot, cyber security, cyberattacks.

Keywords: Honeypot

REFERENCES

- [1]. S. Litchfield, D. Formby, J. Rogers, S. Meliopoulos and R. Beyah, "Rethinking the Honeypot for Cyber-Physical Systems," in IEEE Internet Computing, vol. 20, no. 5, pp. 9-17, Sept.-Oct. 2016, doi: 10.1109/MIC.2016.103.
- [2]. Iyatiti Mokube and Michele Adams. 2007. Honeypots: concepts, approaches, and challenges. In Proceedings of the 45th annual southeast regional conference (ACM-SE 45). Association for Computing Machinery, New York, NY, USA, 321–326. <https://doi.org/10.1145/1233341.1233399>
- [3]. W. Fan, Z. Du, M. Smith-Creasey and D. Fernández, "HoneyDOC: An Efficient Honeypot Architecture Enabling All-Round Design," in IEEE Journal on Selected Areas in Communications, vol. 37, no. 3, pp. 683-697, March 2019, doi: 10.1109/JSAC.2019.2894307.
- [4]. "An Evening with BerferdIn Which a Cracker is Lured, Endured, and Studied". cheswick.com. Retrieved 3 Feb 2021
- [5]. Thomas Brewster, "Forget Silk Road, Cops Just Scored Their Biggest Victory Against The Dark Web Drug Trade" Jul 20, 2017
- [6]. Katakoglu, Onur (2017-04-03). "Attacks Landscape in the Dark Side of the Web" (PDF). acm.org. Retrieved 2017-08-09.
- [7]. <https://www.kaspersky.co.in/resource-center/threats/what-is-a-honeypot>
- [8]. L. Teo, Y. . -A. Sun and G. . -J. Ahn, "Defeating Internet attacks using risk awareness and active honeypots," Second IEEE International Information Assurance Workshop, 2004. Proceedings., 2004, pp. 155-167, doi: 10.1109/IWIA.2004.1288045.
- [9]. Diebold, Patrick & Hess, Andreas & Schaefer, Guenter. (2005). "A Honeypot Architecture for Detecting and Analyzing Unknown Network Attacks". 245-255. 10.1007/3-540-27301-8_20.