

ABSTRACT

ANALYSIS AND SECURITY DESIGN OF END USER NETWORK FROM EXPLOIT ATTACK USING PENETRATION TESTING

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As global information and communication technology develops, everyone must be able to accept these changes. At this time everyone must compete in learning the development of technology, if they cannot keep up with the development of the technology, they will not be able to survive technological developments and miss technology. With the development of technology, increasing use of technology will increase. So that many people will learn the latest technology. With so many people who are just learning about technological developments, there are many cases of cybercrime that use people who are not "technology literate" who assume that a person's security or privacy is not important enough. This final project aims to analyze the security system on the network end users of Exploit attacks using the Penetration Testing Method. This final project produces a form of research reports along with end user network security solutions from exploit attacks. In testing, this study exploited using the Fatrat tool installed on the Parrot OS operating system. In this study utilizing the gap from the Address Resolution Protocol (ARP), namely ARP Spoofing. ARP aims to map the IP address into a physical address or what is known as the MAC Address that matches the purpose. In ARP use the "trust" system, where all trusted machines provide the correct ARP Reply. The results of this study are a way of dealing with end user network security problems, namely by adding mikrotik router configuration so as to make the end user network safe from Exploit attacks that utilize the ARP Spoofing technique.

Keywords: Cybercrime, End User Network Security, Mikrotik, Exploit, The Fatrat, ARP, Penetration Test.