

ABSTRACT

ANALYSIS OF WIRELESS LAN NETWORK SECURITY USING ISSAF WLAN SECURITY ASSESSMENT METHODOLOGY (CASE STUDY AT RESTAURANTS IN EAST JAKARTA)

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Wireless technology today is widely used because it is more practical and can be used at long distances without using intermediary cables to communicate. One of the uses of this wireless technology is Wi-Fi. The use of Wi-Fi has been widely used in public places, one of which is in places to eat such as restaurants. The use of Wi-Fi in public places has a very large security vulnerability because it is used by a wide variety of visitors. Therefore, this study was conducted to evaluate the security of Wi-Fi in some public places, namely restaurants. The methods used are Vulnerability Assessment and Penetration Testing. The methodology used to conduct WLAN network security assessment is Information System Security Assessment Framework (ISSAF) WLAN Security Assessment Methodology. Vulnerability Assessment is done using vulnerability scanner application and Penetration Testing is done by conducting some attack tests such as Deauthentication Attack, Evil twin attack with Captive portal, Evil twin attack with Sniffing and SSL Stripping, and Unauthorized access. The findings of the vulnerability and attack testing show that WLAN network security at some restaurants is still vulnerable to attack testing. It is hoped that with this research restaurant owners can improve the security of WLAN networks and for visitors who use WLAN networks can be more careful when using public Wi-Fi networks.

Keywords— Wireless Fidelity, Vulnerability Analysis, Penetration Testing, ISSAF, Security Assessment