ABSTRACT

The issue of network security is very important and noteworthy, internet-connected networks are basically insecure and can always be exploited by hackers, both wired LAN and wireless LAN networks. At the time the data is sent will pass through several terminals to reach the destination means it will provide an opportunity to other users who are not responsible for tapping or changing such data. This research aims to test the security of LAN type WPA2 to know the strength of passwords, network security and network disconnection on WLAN. This is done on wlan wpa2 home as a research object. The method used to do this research is penetration testing method where penetration is used there are 3 steps namely Information gathering, preminilary analysis and Attacking. Information Gathering is used with CommView for WIFI tool, Premi nary analysis also uses CommView for WIFI, Wireshark and attacking tools using CommView for WIFI, Net cut, Wireshark and water Cracking tools.

Based on the data collection conducted by attacking results against Wlan WP2, passwords containing varied characters and rarely used are more difficult to attack. this is seen from the time of attack that is directly from the password tested. Password tested there are 5 pieces with different characters namely password, Pa55w0rd, Pa$$w 0r&, p@$$w*r& , and P@5$W*r&. For p@$$w*r& and P@5$W*r& cannot be attacked using Aircrack-ng. Attacking using sniffing is also done against URLs containing HTTP and HTTPS where THE URL containing HTTPS contains security so that other devices that use the URL are not detected while URLs that use HTTP do not contain security can still remain safe from attacks from attackers because Wlan has been protected with PPPoE.

Based on data collection analysis concluded that attacks targeting WPA2 security with a variety of characters made a lot in the creation of passwords, it will be difficult / long in brute force . In addition, packet sniffing attacks cannot test other devices so it is safe from data theft, this is because the device is already provided security with the name PPPoE (Point-to-Point Protocol of Ethernet).

Keyword : Security, Vulnerability assessment, wirelessLAN, WPA2, Access Point