

ABSTRACT

Wireless network is a technology development in which data exchange is done without using cables. The data exchange on the network is performed by using radio frequency. In the wireless network progression, the network infrastructure is required to support the data stream in wireless networks. A good infrastructure will have an impact on the quality perceived by the internet users when they use the network.

In this study, the wireless network retrieve the object using the network development life circle method at Telkom University. This method is useful for the cotinuous improvement on existing wireless network at Telkom University. The benefit is when the current change is required in this network, the data of the existing life cycle On NDLC methods already available. Thus, development will be faster and more accurate. Analysing and testing access points (AP) performed in two ways. The first by measuring the fresnel zone that occurs due to the obstacles location around the access points. And the second by measuring the distribution of AP signal at a predetermined location. The measurement of signals distribution using Heat Mapper software.

The result data of this study is a draft design that can fix or cover up the drawbacks of existing network conditions. A draft design is an AP placement design. In addition to the placement of the AP, the proposed design also resulted in the selection of the device to be used. The device can be a device of existing condition or new alternative devices.

Keywords: Information Technology, Wireless Networks, NDLC, Network Infrastructure, Access Point.