ABSTRACT

Starling Harupat Stadium is a soccer game field area bertribun and capacity large enough audience in Indonesia. Data capacity audiences based on the number of seats that can be from business starling Harupat amounted to 27 166 units. Starling Harupat Stadium in the wake began January 2003 and was inaugurated on 26 April 2005. Construction is intended to facilitate a soccer team and the city of Bandung Regency has a homebase. Research conducted in March 2016 showed that the starling Harupat Stadium as a center of sports activities in the area of Bandung regency not be covered WiFi so that the need for WiFi in the building design.

This study calculating the capacity planning and coverage planning to determine the radius of the cell, the cell area and then get the number of access points each stands in starling Harupat Stadium. Total access point is found, then simulated using the simulator RPSv5.4 with 2.4 Ghz frequency parameter using the propagation model COST 231 Multiwall.

Information access point placement simulation results conducted in the form of graphs the average coverage area, as well as on the planning chart SIR value.

The results obtained by the calculation of capacity, coverage planning and simulation was done by increasing the number of access points as well as a shift in the location of access point so that the entire area can be covered well.

Keywords: access point, capacity planning, coverage planning, WiFi