

## **ABSTRACT**

Central Police Sukanto Hospital Jakarta is the hospital that own by central police, that is was built to give the best healthy care for society. Not only giving the intensive care to the patient, but in the communication technology the hospital is also need multimedia service that can give something different service to patient to connecting something in the other world.

The problem in this final project is how to design a new coaxial network that supports multimedia services, not only distributive service but also interactive service in Central Police Sukanto Jakarta. The Parameters that will be use to determine the network performance qualities are CNR, CTB, CSO, and XMOD.

A good network design should be acceptable with the performance recruitments standards that have been decided before. Final result of this design show that performance values system is still above performance recruitments standards, with the lowest CNR in the network system is 62,38 dB (with standard minimal is 45 dB), and the lowest CTB in the network system is 64,18 dB (with standard minimal is 53 dB), and then the lowest CSO in the network system is 66,71 dB (with standard minimal is 53 dB) and the final is the lowest XMod in the network system is 58,55 dB (with standard minimal is 53 dB). Based on the result is show that the design coaxial network to support multimedia service can be implementation at Central Police Sukanto Hospital Jakarta.

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