

ABSTRACT

Nowadays, many telecommunication operators which provide CDMA cellular communication service, one of them is PT. Indosat, Tbk with their product called *StarOne*. The SMS (Short Message Service) is a feature that people interest, because of its advantages, effective communication service and not expensive cost.

SMS Gateway is one of important part in SMS network. All incoming message transfer or go out from *Starone* will be detected in it. This final assignment try to analyze the performance of SMS Gateway in *StarOne*, then made its scheme for 5 years forwards, to make better performance and can handle the high traffic of SMS.

The result shows that with 10 links and service rate is 6 SMS/second, then average incoming rate in 3 months is 10,64 SMS/second, and average delay time system in 3 months is 145,8 seconds. For 5 years forward, it being predicted that incoming message become 65,11 SMS/second, so the links contain need to be added become 17 links. The result of this analysis shows that the performance of SMS Gateway *StarOne* is good enough. Evaluation and upgrade of capacity and system utility for 5 years forward are needed to optimally SMSC performance and to give satisfaction for costumers.

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