## **ABSTRACT**

The IEEE 802.11b MAC protocol standard specifies two mode operation: the polling mode and the random access mode. The random access mode was developed for supporting data service and the polling mode was developed for supporting time-bounded services (e.g telepony, video etc). The one-way delay requirement for telephony traffic is 25ms without echo cancellers, and with echo cancellers, the requirement is 150ms for excellent quality voice and 400ms for acceptable quality voice [7]. The station which operates in the polling mode will have queuing delay for waiting the poll. With larger inter-poll periods, this delay will become more significant. But on the other side if the inter-poll periodes too short the number of call that can be handled by the Acces Point will decrease. This final project present the performance analyze in term maximum number of call that can be handled, delay, and goodput.