ABSTRACT

Wireless technology has become very popular. It is because the flexibility level of radio as the media transmission. Communication speed or the data transfer speed and the data capacity of wireless technology became higher along with the existence of the new protocol and scheduling system for wireless itself. Now, the used of this technology has been increased, not just for the conventional data transfer but also used for the real time data communications, such as messaging, monitoring and controlling.

A CCTV is ordinary used in an office as a monitoring system. But, a CCTV still has some limitations, such as not all of CCTV can be moved remotely. From economics side, a CCTV installation and establishment is expensive. Moreover, we need monitoring room. Wireless technology and cellular content development, make it possible to use webcam as a monitoring camera that can be controlled by a hand phone, anywhere and anytime. A hand phone is used to control webcam's movement, image capturing and image storing. This is implemented by building J2ME application in user's hand phone.

This research is to analyze performance of the above system. Codec which is used in this research is YUY2, the default codec of this webcam. Parameter which will be analyzed is throughput of the system. The system requires throughput of 0.119 to 0.2133 Mbps for streaming purpose with delay from 1.2 ms to 2.55 ms. Maximal retransmission on this research is 0.001067 Mbps. Respondents also gave a good assessment for the system performance. This is shown by the MOS value which is collected from the respondents.