

ABSTRACT

Home theft are still common, the main factor of this event is the lack of supervision of homeowners when leaving their homes^[5], so that required a system design as a solution to the problems above, where the system can be integrated with home owners so that supervision can still be done.

The system is built on a transition network from IPv4 to IPv6 which will be measured against delay, throughput, network system utilization, The transition network was selected because IPv4 consumption continues to increase so that its availability is less. In fact, now the distribution of IPv4 is only available about 7% only^[3], then the migration from IPv4 to IPv6 is inevitable especially, in the future devices will be equipped by IP to support the technology of the Internet of Things. It also aims to show how new devices can adapt quickly to previous network technologies.

To provide solution of the problems above then on the end device system is applied to use PIR sensor and camera module, PIR sensor has function to detect motion which after detected camera module will immediately take picture. The results of movement and image information will be sent to the homeowner, so home surveillance can be further improved.

Keyword : *IPv4, IPv6, Tunneling 6to4, PIR sensor, one way delay, throughput*