

## ABSTRACT

The interest of people's to any information's with easily to get has increased the using of internet. As the number of people's which accessing the internet become the phenomenon of traffic anomaly. The phenomenon of traffic anomaly there are DDoS attack and flash crowd. This phenomenon can make the computer or server works fine. In previous research, in traffic anomaly detection system by using Data Mining Methods with K-means algorithm said can differentiate the normal traffic and anomali traffic. But K-means algorithm is sensitive awith outliers dan the result of cluster is oval.

In this research be made a method to detect the traffic anomaly. The method is called Intrusion Detection System (IDS) with unsupervised learning clustering technique which used ISODATA algorithm with Manhattan Distance based method and Dunn Index methods for calculate the result of cluster. The result of this research is False Positive rate, Detection rate, Accuracy and the time proceses of Manhattan Distance method.

The result of this traffic anomaly detection system show a good performance. The system has been able to differentiate the anomaly traffic and normal traffic. From the examination of DARPA 1998 dataset, the system get the value of Detection Rate 95,4317 %, False Positive Rate 1,29264 %, Accuracy 95,3361 % and the time process of Manhattan Distance is faster than Euclidean Distance.

Keyword : Traffic Anomaly, DOS/DDOS, *Flash Crowd*, *Clustering*, ISODATA, Manhattan Distance