Abstract

At this time, Intrusion Detection System (IDS) becomes an important thing to protect computers and networks from various attacks on the network. The IDS can be used by the Network Administrator for network monitoring to prevent attacks. Several methods of classification that already exist today, still have their own shortcomings and advantages, therefore the development of methodology to overcome the deficiency is still open. One of the problems that exist in the current classification method is the slow pace of testing that becomes a challenge for research on the method of classification on the IDS. Research on IDS method needs to be done to see how the performance of the method in handling the classification on IDS data. By conducting a literature study on the classification of non-IDS, found a method that has good performance, namely IVM. IVM is a method of development of Kernel Logistic Regresion and has a work similar to the SVM method. The IVM method has computational time in the field of classification faster than SVM, so this method should be analyzed for performance in the IDS data classification to cover the shortage of the previous method. The result of this research is, The IVM method got the best results on the number of features 41 with 77,65% accuracy, and a time of textit testing with a duration of 0.31 seconds. The IVM classification uses the best parameters that have been tested, with the best sigma parameter test result is 2 and the best lambda parameter is 11

Keywords: *Classification, IDS, IVM.*