Abstract

The use of internet has become a popular way of getting connected with each other, as a result networking attacks get increased. The networking attacks are termed as intrusions that are based on the values of features. Features based Intrusion Detection Systems (IDS), mostly used for Denial of Service (DoS) attacks, have low response in terms of intrusion detection because of missing Local Area Network Denial (LAND) and duration features. Hence, precise security of a system is not assured without considering LAND and duration features. In order to minimize DoS attacks and to make the system more secured, it warrants additional features. All the features are having their certain values that indicate the presence or absence of an intrusion. An existing genetic algorithm has considered 16 features for intrusion detection but, still some DoS and Remote to Local (R2L) attacks are not covered in it. These attacks depend on duration and LAND features of dataset. In the proposed work these two features are focused and extracted using genetic algorithm so that detection response of IDS is improved.

Index Terms

Computer Science
Networks

Keywords

KDD Cup Dataset, LAND, Naive Bayesian Classifier, DoS Attacks, Training Datasets