International Journal of Intelligent Computing and Technology
ISSN: 2457-0249 (Online)
Website: https://ijict.com 2019 (Jan)−Vol.2, Iss.2 Page: 32−46

An Enhanced Method for Reducing the Computational Complexity of Distributed Denial of Service using LAMSTAR Principal Component Analysis

Dr M Thangavel[1], A Rajesh[2], M Parameswari

[1]Professor, [2]Assistant Professor, Department of Computer Applications, Erode Sengunthar Engineering College, Perundurai, Tamilnadu, India

[2]Associate Professor, Department of Computer Science, Erode Arts and Science College, Erode, Tamilnadu, India

thangavelpamu@gmail.com

Article History- Received: Dec 2018; Published: January 2019

ABSTRACT

The security of computer networks plays a strategic role in modern computer systems. Distributed Denial of Services (DDOS) act as the ‘‘second line of defense’’ placed inside a protected network and looking for known or potential threats in network traffic and/or audit data recorded by hosts. The system is developed a Distributed Denial of Service attacks detection method using LAMSTAR neural network to classify observed system activities and compared the performance of LAMSTAR method. LAMSAR method gives better performance at the cost of testing time high Computational complexity and Training time than the other classification techniques. The system is further reduced the dimension of the data using principal component analysis by reducing the Computational Complexity of LAMSTAR DDOS which in turn reduces the testing and training time with almost the same performance.

KEYWORDS: Distributed Denial of Service, LAMSTAR, PCA, False alarm rate