Anomaly based IDS using Backpropagation Neural Network

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Authors:

Vrushali D. Mane, S.N. Pawar

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Abstract

Intrusion means illegal entry or unwelcome addition of the system. So, Intrusion detection system is used to find out the signatures of an intrusion. The goal of the system is to protect system for various network attacks like Dos, U2R, R2L, Probing etc. Intrusion detection system (IDS) collects information from various parts of network and system. This paper introduces the Anomaly Intrusion Detection System that can detect various network attacks. The aim of this work is to identify those attacks with the support of supervised neural network, i.e. back propagation artificial neural network algorithm and make complete data safe. In this paper, system comprises experimenting neural networks that use only the (17 of 41) most significant features of the KDD 99 dataset. The proposed IDS use a supervised neural network to study system's performance.

References

1. Snehal A. Mulay, P.R. Devale & G.V. Garje “Intrusion Detection System Using Support


4. Intrusion Detection: Challenges and myths by Marcus J. Ranum.


20. Kleber Vieira, Alexandre Schulter, Carlos Becker Westphall, and Carla Merkle
Westphall, Federal University of Santa Catarina, Brazil, “Intrusion Detection for grid & cloud computing.


Index Terms

Computer Science

Networks

Keywords

KDD 99 dataset, Network Attack.