An Intelligence Technique For Denial Of Service (Dos) Attack Detection

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The emergent damage to computer network keeps increasing due to an extensive and prevalent connectivity on the Internet. Nowadays, attack detection strategies have become the most vital component in computer security despite the main preventive measure in detecting the attacks. The main issue with current detection systems is the inability to detect the malicious activity in certain circumstances. Most of the current intrusion detection systems implemented nowadays depend on expert systems where new attacks are not detectable. Therefore, this paper concern about Denial of Service (DoS) attack, detection using Neural Network. The data used in training and testing was KDD 99 data set based on the Defense Advanced Research Projects Agency (DARPA) intrusion detection programme, which is publicly accessible by Lincoln Labs. Special features of connection records have been acknowledged to be used in DoS attacks. The result from this experiment will show the effectiveness of Neural Network using the backpropagation learning algorithm for detecting DoS attacks.

Keywords: DoS attack, Intrusion detection, machine learning.