

Intrusion Detection against DDoS Attack in WiMAX Network by Artificial Immune System

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Abstract: IEEE 802.16, known as WiMax, is at the top of communication technology because it is gaining a great position in the wireless networks. In this paper, an intrusion detection system for DDOS attacks diagnosis is proposed, inspired by artificial immune system. Since the detection unit on all subscriber stations in the network is WIMAX, proposed system is a fully distributed system. A risk theory is used for antigens detection in attack time. The proposed system decreases the attack effects and increases network performance. Results of simulation show that the proposed system improves negative selection time, detection Precision, and ability to identify new attacks compared to the similar algorithm.

Keywords: WIMAX network, Artificial Immune System, DDOS Attack

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