

计算机网络入侵环境下健康节点通信选择算法的研究与仿真

胡 艳

(广西财经学院, 广西 南宁 530003)

摘 要: 提出一种新的网络入侵环境下健康节点通信选择算法, 依据网络入侵数据的特点, 引入统计学中分类思想实现网络入侵数据的检测.在此基础上, 给出健康节点通信失真表达式, 采用最靠近信源的健康节点通信选择方法, 使其他节点进入休眠模式, 并对失真情况进行分析.选择一定范围内的健康节点进行数据传输, 依据计算结果与失真误差要求对范围进行划定, 从而实现健康节点通信选择.实验结果表明, 所提算法不仅失真性低, 能够保持传输信息的完整性和通信安全, 而且所需能耗低, 通信效率高.

关键词: 网络入侵环境; 健康节点; 通信; 选择

Under the Environment of Network Intrusion Health Node Selection

Algorithm in the Research and Simulation of Communication

HU Yan

(Guangxi University of Finance and Economics, Nanning 530003, China)

Abstract: Put forward a new network intrusion environment health communication node selection algorithm, based on the characteristics of the network intrusion data, the introduction of statistical classification thought realize network intrusion detection of data. On this basis, gives health node communication distortion expression, use the most close to the health of the source node communication method, make the other nodes into sleep mode, analyzes methods cause the distortion of the situation. Select nodes for data transmission to a range of health, on the basis of calculation results and the distortion error requirement to delimit the scope of nodes so as to realize healthy choice for communication. The experimental results show that the proposed algorithm not only true loss is low, can maintain the integrity of the information transmission and communication security, and the low energy consumption, high communication efficiency.

Key words: network intrusion environment; health node; communication; choice

作者简介:

胡 艳 女, (1979-), 硕士研究生, 讲师.研究方向为软件工程与数据处理.