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### 基于学习Petri网的网络入侵检测方法 无

**摘要:** 基于神经网络的入侵检测方法存在学习速度慢, 不易收敛, 分类能力不足等缺点。采用学习Petri网 (LPN) 建立了对网络入侵的检测分类方法, 该方法在非线性和不连续函数的实现上优于神经网络, 实验结果表明: 基于LPN的入侵分类相对于相同结构的神经网络具有更高的识别精度以及更快的学习速率。

**关键词:** 入侵检测; 学习Petri网; 神经网络

**中图分类号:** TP393 08

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## A Detection Method of Network Intrusion Based on Learning Petri Nets

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**Abstract:** A method of intrusion detection based on neural network(NN) has flaws of slower learning speed, hardness in converging and deficiency of classifier capability. The learning Petri nets(LPNN) were adopted to construct the method of network intrusion detection. LPNN is superior to NN in the realization of nonlinear and discontinuous functions. The test result indicates that the classifier based on LPNN has better recognizing precision and faster learning speed compared with the classifier based on the same structure NN.

**Key Words:** intrusion detection; learning Petri nets; neural network

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