

## 信息安全

### 一种可扩展的分布式网络攻击测试系统

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**摘要** 随着计算机网络攻击技术的日益成熟,新的攻击手段层出不穷,针对路由协议的攻击就是其中的一种。RIP/RIPng、OSPF和BGP协议是网络中较常用的动态路由协议。文章在分析它们特点的基础上,提出针对各种可能的攻击方式。文中设计出了一个分布式网络攻击测试系统,模块化的体系结构使该系统具有良好的可扩展性。初步试验结果表明,使用Tcl开发的攻击例,该系统成功完成了对基于上述路由协议的网络攻击的模拟和测试,为解除网络中可能存在的安全隐患提供了有力的帮助。

**Abstract** With the development of computer network, new attacking means emerge in endlessly. Attacking routing protocols is one of them. RIP(Routing Information Protocol)/RIPng, OSPF(Open Shortest Path First) and BGP(Border Gateway Protocol) are commonly used dynamic routing protocols. Based on the analysis of the characteristics of those routing protocols, this paper brought out possible attacking ways for each of them. A distributed testing system for network attack was also designed. Its modularized structure made the system have good expansibility. The testing results show that the testing cases running in the system, which are written in Tcl, successfully simulate and test the network attacks based on the routing protocols mentioned above, and provide powerful support to solve the hidden security troubles that may exist in the network.

**关键词** [路由协议](#) [网络攻击](#) [分布式网络攻击测试系统](#)

**Key words** routing protocol; network attack; distributed testing system for network attack

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