Abstract

Nowadays, Internet is one among the famous technique to connect each computer all around the world. The development of nonstop communication creates a number of opportunities and also it develops new possibilities for malicious users. As the size and number of the Internet and Network traffic has become greater and the requirement for the Intrusion Detection grows in step to minimize the Information communication overhead required for the Intrusion Detection
and diagnosis. It has made the public servers gradually more vulnerable to incursion of Intrusions and unauthorized accesses. In addition to this, one of the major concerns of a server administrator are maintaining poor performance, low latency for the user and filtering illegal accesses. So the System Administrator utilizes Honeypot systems for handling Intrusions in the network. Honeypot systems are system or decoy server setup together data concerning an intruder or attacker into the Network system. In this research, Firecol Protection Services based Honeypot System (FPS-HPS) is proposed to prevent and handle the various network intrusions in the Internet. This approach perform the operations in the following way: 1) firecol protection services indentify the network intrusion, 2) the load balancer generate two types of tokens to intrusion user as well as authenticated user and forward to mail server 3) mail server send token key to the attacker and original user 4) token verifier verify the received token is valid or not. If the token is valid then they forward the request to the original server otherwise it is considered as an attack and this verifier forward request to honeypot system. 5) Finally, The honeypot system sends irrelevant messages to attacker. The experimentally deployed proposed system results shows that our framework prevents the intrusions effectively rather than other tools or framework.

References

- Christian Kreibich, Jon Crowcroft, Honeycomb . Creating Intrusion Detection Signatures Using Honeypots
- W. R. Cheswick, An Evening with Berferd, in which a Cracker is lured, endured, and...
Enhancing Intrusion Detection System Performance using Firecol Protection Services based Honeypot System


Index Terms

Computer Science
Security

Keywords

DDoS attacks, Intrusion Detection System, Honeypot System, Firecol Protection Services, Network Security