

Network Intrusion Detection Proposal

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ABSTRACT

This paper provides a description of the motivation, preliminary design strategy, and importance of designing a Network Intrusion Detection System. Living in an age of highly complex and coupled networks necessitates having tools to monitor and secure them. While there exist powerful open source solutions for network monitoring, we feel that the exercise of designing a rudimentary system from scratch will grant us highly valuable and extendable skills.

Keywords

IDS: Intrusion Detection System

IPS: Intrusion Prevention System

1. INTRODUCTION

1.1 Host-Based Audit Systems

1.2 Network-Based Audit Systems

1.3 Application-Based Audit Systems

1.4 Signature Detection

1.5 Anomaly Detection

2. RELATED WORK

2.1 Probes

2.2 Privilege Escalation

2.3 Denial of Service

3. METHODS

4. EVALUATION

5. DISCUSSION

6. CONCLUSIONS

7. REFERENCES