Abstract

In recent years, an increasing number of security threats have brought serious risks to the internet. Internet security is needed for providing protection from internet related threats whose are threatening the availability of the internet, and the privacy of its users. One best solution for providing internet security is to use antivirus software product and it uses signature based detection method. Malware attacks and phishing websites (fake websites) are two major security threats. So we need an efficient method for automatically categorizing those threats for signature based detection. In this paper we propose a categorization system for profiling signatures to improve the anomaly detection process more efficiently. A categorization system that uses a link based cluster ensemble for automatically categorizing security threats. Cluster
ensemble aggregates different clustering algorithms producing different solutions for grouping malware samples and phishing websites.

References

Link Based Cluster Ensemble Framework - Clustering Categorical Data for Internet Security Applications


Index Terms

Computer Science

Network Application

Keywords

Hybrid Hierarchical Clustering Algorithm (hhca) Link Based Cluster Ensemble (lbce)

Malware Categorization

Phishing Websites

Weighted K-medoids Algorithm (wkma)