Abstract

To ride the tide of change which is inevitable, innovations are necessary. By using the concept of virtualization most of enterprises are trying to reduce their computing cost. This demand of reducing the computing cost has led to the innovation of Cloud Computing. Nowadays organizations recognized cloud for it different attractive property such as economically attractive and use it to host their services. So that their services available easily and economically to their users. But also many organization put security in their top concern before adopting the cloud service. One of the most significant problem that associated with cloud computing is cloud security that drawn a lot of analysis and research within past few years. Inside the cloud system, especially the Infrastructure-as-a-Service (IaaS) clouds, the actual prognosis associated with zombie exploration problems is exceedingly hard. This is because cloud users might deploy somewhat insecure purposes on the exclusive products. NICE is a Network Intrusion detection and Countermeasure selection in virtual network systems (NICE) design to establish an intrusion detection framework which is defense-in-depth in nature. Into the intrusion detection processes an attack graph analytical procedures is incorporated by NICE for better attack detection. In this paper we proposed to implement NICE-A as a host based agent
instead network based so the data delivery time between sender and intended destination is saved as NICE-A is implemented in destination (which is cloud server in our case) and for large amount of data this definitely shows improvement in computation time. Moreover as NICE-A is implemented as host based so CPU utilization is also improved.

References

- Smith Jones, "effective algorithmic approach for cloud security based on hash cryptography" international journal of enterprise computing and business services Volume 4 Issue 1 January - July 2014.
- Ang Li, Lin Gu and Kuai Xu, "Fast Anomaly Detection for Large Data Centers" in Global Telecommunications Conference (GLOBECOM 2010), IEEE Miami, FL December 6-10, pp. 1–6, 2010.
- Amir Houmansadr, Saman A. Zonouz, and Robin Berthier, "A Cloud-based
Intrusion Detection and Response System for Mobile Phones", in IEEE/IFIP 41st International Conference on Dependable Systems and Networks Workshops (DSN-W), Hong Kong, Jun 27-30, pp. 31-32, 2011.


- Jain Pratik P1, Madhu B. R., "Data Mining based CIDS: Cloud Intrusion Detection System for Masquerade Attacks [DCIDSM]", 4th ICCCTN 2013 July 4-6, 2013, Tiruchengode, India, IEEE - 31661.

**Index Terms**

Computer Science

Distributed Systems

**Keywords**
Host-based Implementation of NICE-A in Cloud Computing's Virtual Network

Cloud Computing  virtualization  Intrusion Detection  cloud security  NICE
NICE-A