Intrusion Monitoring and Detection in Electronic Systems

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Intrusion Attacks on eCommerce:
eCommerce is ubiquitous in our lives today. The volume of transactions created by trading both physical resources and higher level services is extremely large. This large volume can make the eCommerce infrastructure susceptible to intrusion attacks. Further, scalability and transparency in high volume eCommerce systems is a challenge. The large volume of transactions can be mistaken as Denial-of-Service (DoS) attack.

Preventing Denial of Service Attacks on eCommerce Sites:
The technology provides a unique approach to enhancing the security of an electronic system, such as network, and protecting against unauthorized access to resources of the electronic system. The technology creates an electronic security valve as payment to access system resource, and distributes it to the clients. The associations of electronic security valve with respect to client and resources is created and distributed to the client. The associations are then analyzed to determine whether the real client accesses the resources. The DoS attack is prevented by comparison of methods of payments with predetermined methods of payments.

Applications:
• Identifying unauthorized access of network and stand-alone computer
• Controlling access to CPU, and bandwidth of a eCommerce systems, stand-alone computer, or wireless networks
• Detecting DoS attacks

Advantages:
• The security of eCommerce systems is enhanced by reliably preventing unauthorized access of resources
• Prevents denial of service attacks


Licensing Status: Available for Licensing and Sponsored Research Support

Inventors

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