

# SSL Stripping Technique (DHCP Snooping and ARP Spoofing Inspection)

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**Abstract**— Detecting and preventing network attacks are necessary for network solidity as any disruption in the network performance resulting from an attack can lead to loss of resources. Though ARP plays a vital role in successful local area network (LAN) communication, its vulnerabilities are used by attackers every day and by far have made it the leading point for refined LAN attacks such as; denial-of-service (DoS) and man-in-the-middle (MITM). This paper proposes a technique to mitigate an Address Resolution Protocol (ARP) spoofing-based Secure Socket Layer Stripping (SSL) in a Local Area Network (LAN) using both dynamic host configuration protocol (DHCP) snooping and ARP inspection technique. This mitigation technique includes a detection and prevention module. The detection module uses an analyzing tool and an algorithm that captures ARP packets. It identifies suspicious activity in the network, and once detected, a DHCP snooping, and ARP inspection technique is used to mitigate the attack to achieve a more secure network

**Keyword**— DoS LAN, ARP spoofing, MITM, DHCP Snooping



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