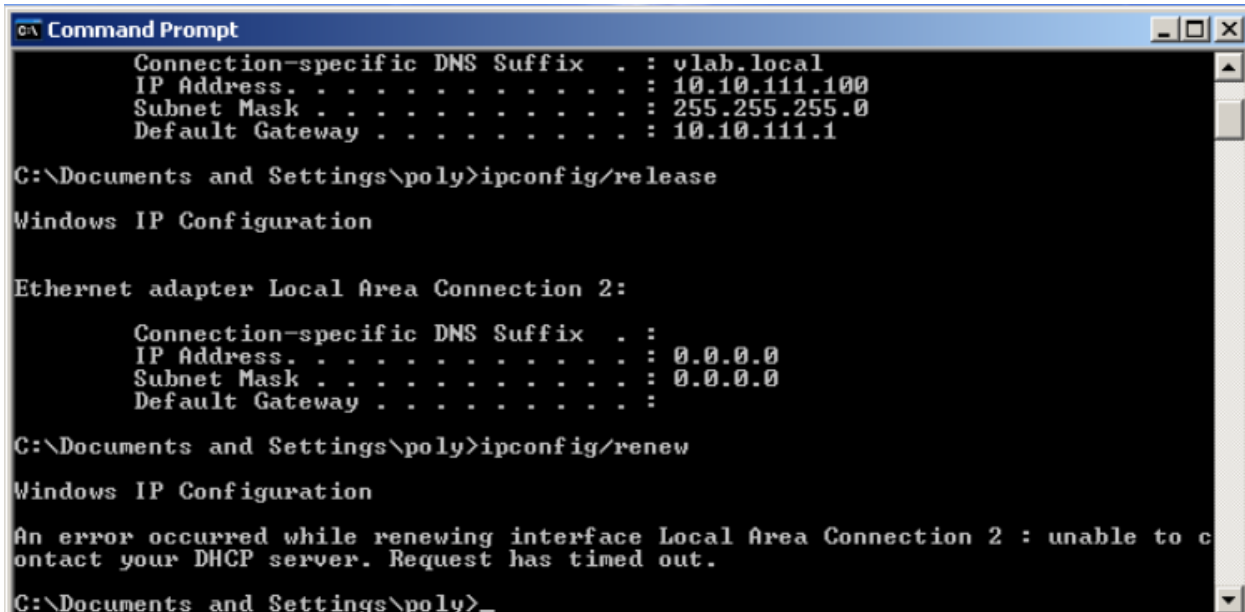


script for starvation attack



```
lease 10.10.111.156 {
  starts 3 2021/02/24 07:39:04;
  ends 3 2021/02/24 08:39:04;
  cltt 3 2021/02/24 07:39:04;
  binding state active;
  next binding state free;
  rewind binding state free;
  hardware ethernet 36:39:3a:63:39:3a;
}
lease 10.10.111.164 {
  starts 3 2021/02/24 07:39:06;
  ends 3 2021/02/24 08:39:06;
  cltt 3 2021/02/24 07:39:06;
  binding state active;
  next binding state free;
  rewind binding state free;
  hardware ethernet 39:39:3a:31:38:3a;
}
lease 10.10.111.170 {
  starts 3 2021/02/24 07:39:07;
  ends 3 2021/02/24 08:39:07;
  cltt 3 2021/02/24 07:39:07;
  binding state active;
  next binding state free;
  rewind binding state free;
  hardware ethernet 35:62:3a:31:61:3a;
}
lease 10.10.111.172 {
  starts 3 2021/02/24 07:39:08;
  ends 3 2021/02/24 08:39:08;
  cltt 3 2021/02/24 07:39:08;
  binding state active;
  next binding state free;
  rewind binding state free;
  hardware ethernet 38:66:3a:37:37:3a;
}
```

Snippet of dhcpd.leases after the attack



```
Command Prompt
Connection-specific DNS Suffix . : vlab.local
IP Address. . . . . : 10.10.111.100
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 10.10.111.1

C:\Documents and Settings\poly>ipconfig/release

Windows IP Configuration

Ethernet adapter Local Area Connection 2:

    Connection-specific DNS Suffix . : 
    IP Address. . . . . : 0.0.0.0
    Subnet Mask . . . . . : 0.0.0.0
    Default Gateway . . . . . : 

C:\Documents and Settings\poly>ipconfig/renew

Windows IP Configuration

An error occurred while renewing interface Local Area Connection 2 : unable to c
ontact your DHCP server. Request has timed out.

C:\Documents and Settings\poly>
```

DHCP server is unable to lease any new IPs to the machine

69	29.797081969	0.0.0.0	255.255.255.255	DHCP	292 DHCP Request	- Transaction ID
70	30.037343951	0.0.0.0	255.255.255.255	DHCP	292 DHCP Request	- Transaction ID
71	30.269106638	0.0.0.0	255.255.255.255	DHCP	292 DHCP Request	- Transaction ID
72	30.282226612	10.10.111.1	10.10.111.143	DHCP	342 DHCP ACK	- Transaction ID
73	30.497457151	0.0.0.0	255.255.255.255	DHCP	292 DHCP Request	- Transaction ID
74	30.733120559	0.0.0.0	255.255.255.255	DHCP	292 DHCP Request	- Transaction ID
75	30.741376675	10.10.111.1	10.10.111.145	DHCP	342 DHCP ACK	- Transaction ID
76	30.965140783	0.0.0.0	255.255.255.255	DHCP	292 DHCP Request	- Transaction ID
268	136.034294461	10.10.111.1	255.255.255.255	DHCP	342 DHCP NAK	- Transaction ID 0x
269	136.265550628	0.0.0.0	255.255.255.255	DHCP	292 DHCP Request	- Transaction ID 0x
270	136.281241889	10.10.111.1	10.10.111.170	DHCP	342 DHCP ACK	- Transaction ID 0x
271	136.505277667	0.0.0.0	255.255.255.255	DHCP	292 DHCP Request	- Transaction ID 0x
272	136.737248174	0.0.0.0	255.255.255.255	DHCP	292 DHCP Request	- Transaction ID 0x
273	136.752636090	10.10.111.1	10.10.111.172	DHCP	342 DHCP ACK	- Transaction ID 0x
274	136.969293201	0.0.0.0	255.255.255.255	DHCP	292 DHCP Request	- Transaction ID 0x
275	137.204934457	0.0.0.0	255.255.255.255	DHCP	292 DHCP Request	- Transaction ID 0x

snippets of the wireshark capture

DHCP Starvation is a Denial-of-Service attack which aims to lease all the IPs in the IP pool of a DHCP server. The attack performed in this lab had attackers send request packets of IPs to the server, which would lease the IP to the spoofed MAC addresses in the script written. Looking at the Wireshark network capture, the server would acknowledge the request, and lease an IP. The script had the server do this over and over until there were no more IPs to be leased in the IP pool. When the victim wants to obtain an IP address, they are unable to do so due to the attack.