Netbios Over TCP/IP – nbtstat usage in detail – Information Security Newspaper

By Jim Gill

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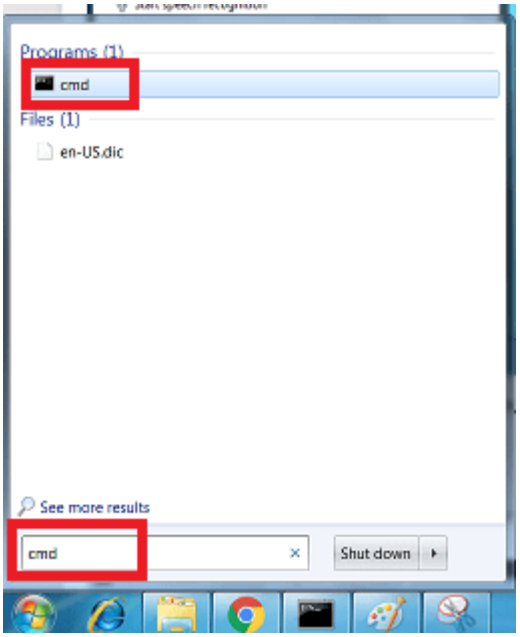
As per ethical hacking professionals, Nbtstat is a network tool that is used to check the running TCP/IP connections. Nbtstat list all the network connections that are used in Windows OS. This tool is pre-installed in Windows you no need use any external software to run nbtstat. It's an effective tool to determine all the TCP/IP connections of the Windows machines.

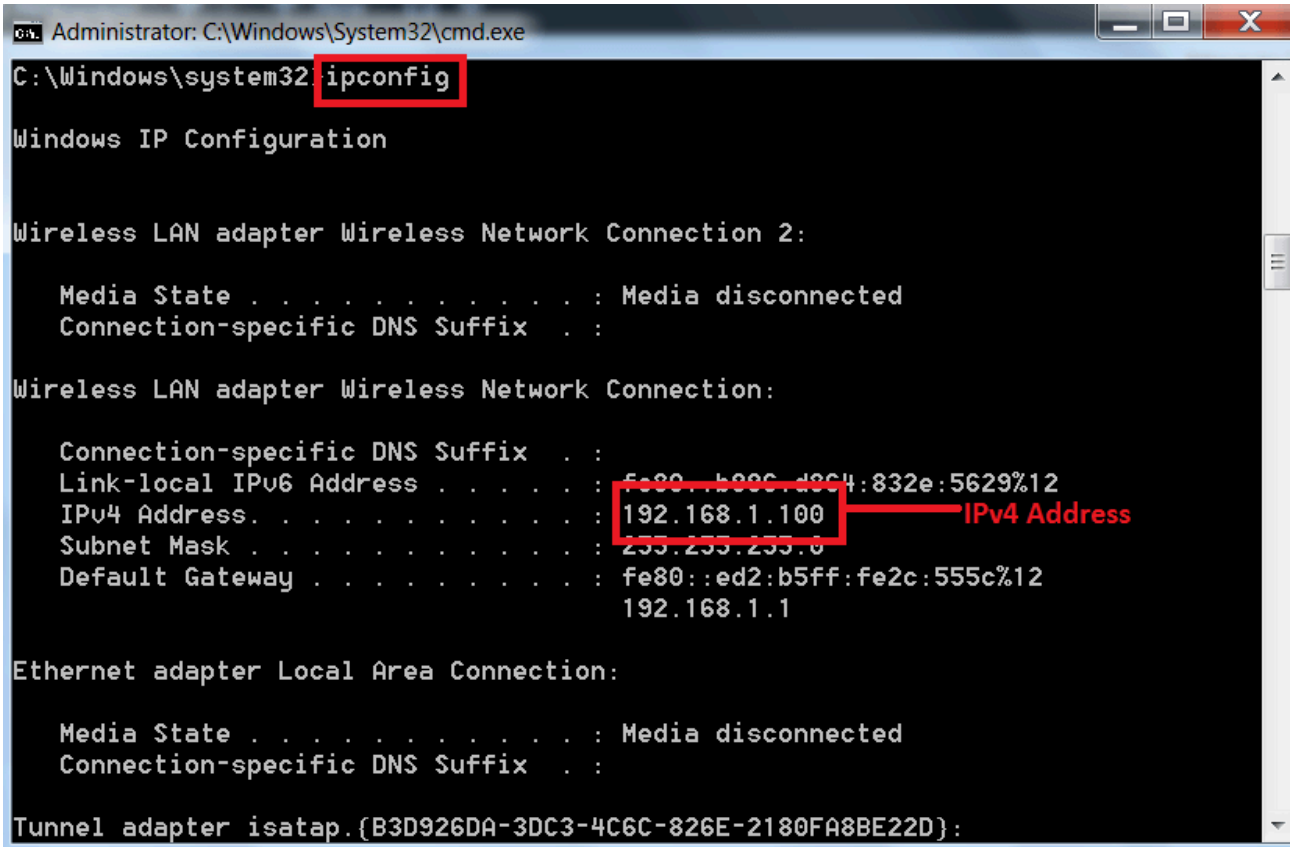
According the ethical hacking researcher of iicybersecurity, nbtstat can be used in public wifi networks to gather all the Ip addresses and use them in fingerprinting or attacking on any pubic ip addresses.

- For starting nbtstat.
  - Go to Windows start menu.
  - Type **cmd**.



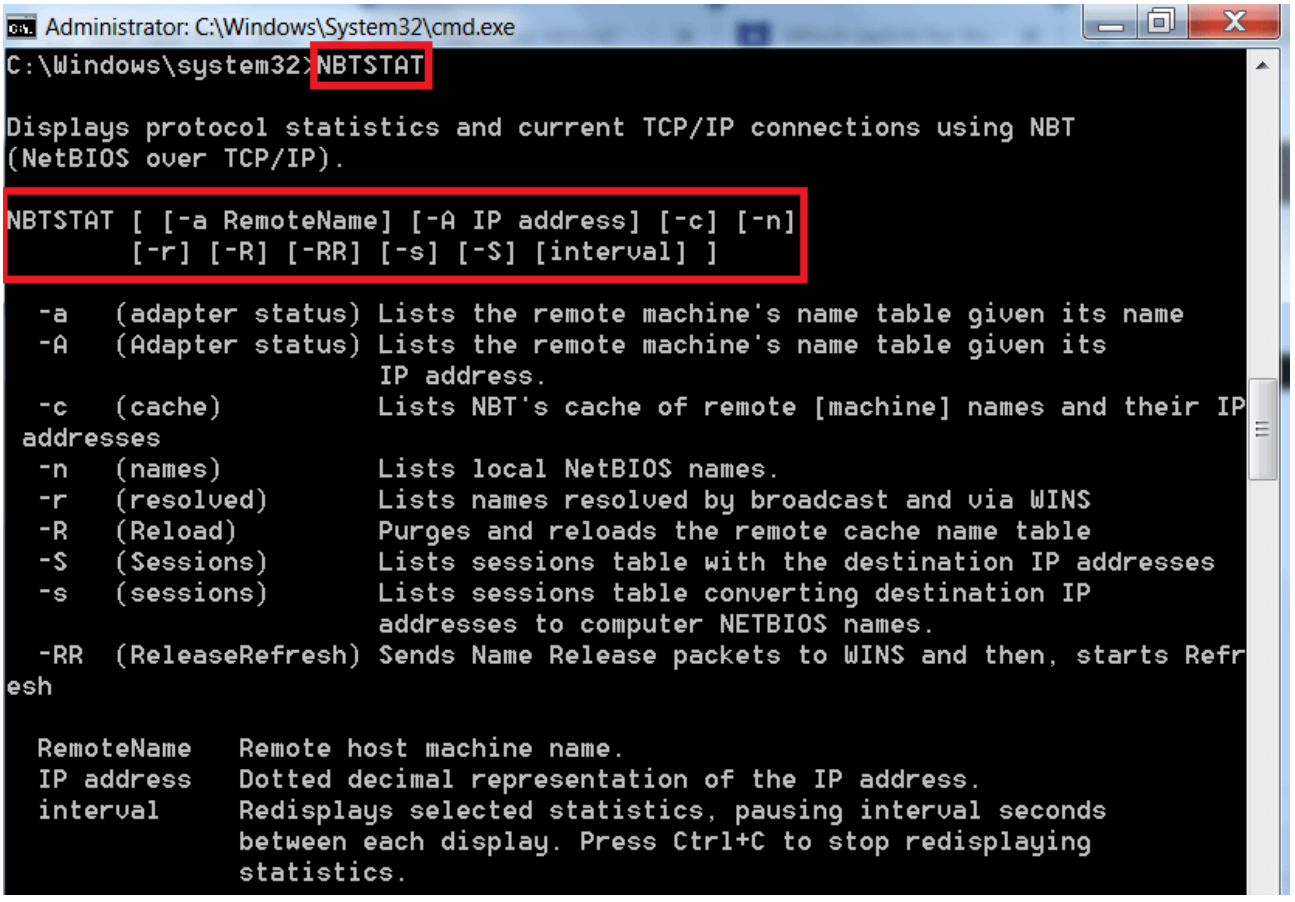
In order see the TCP/IP connections you must have **IPv4** address to determine TCP/IP connections. You can get **IPv4** by following steps:-

- For getting an IPv4
  - Type **ipconfig** in cmd which will list all your IP configuration.



NBTSTAT :-

- For using nbtstat, type **NBTSTAT** in cmd of windows machine. Nbtstat options are case sensitive. please type each command very carefully.

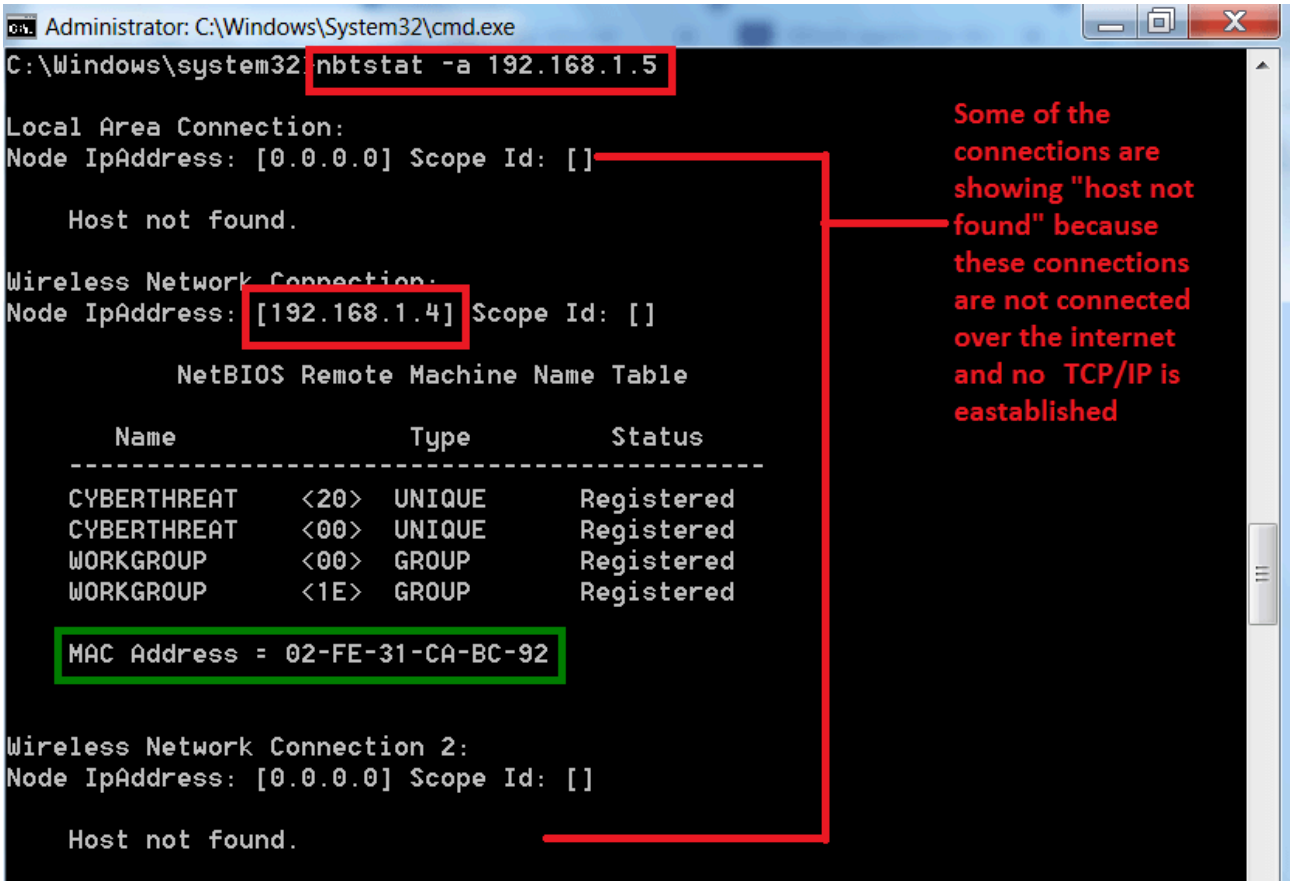


- The above commands can be used to list all the TCP/IP connections in windows machine.

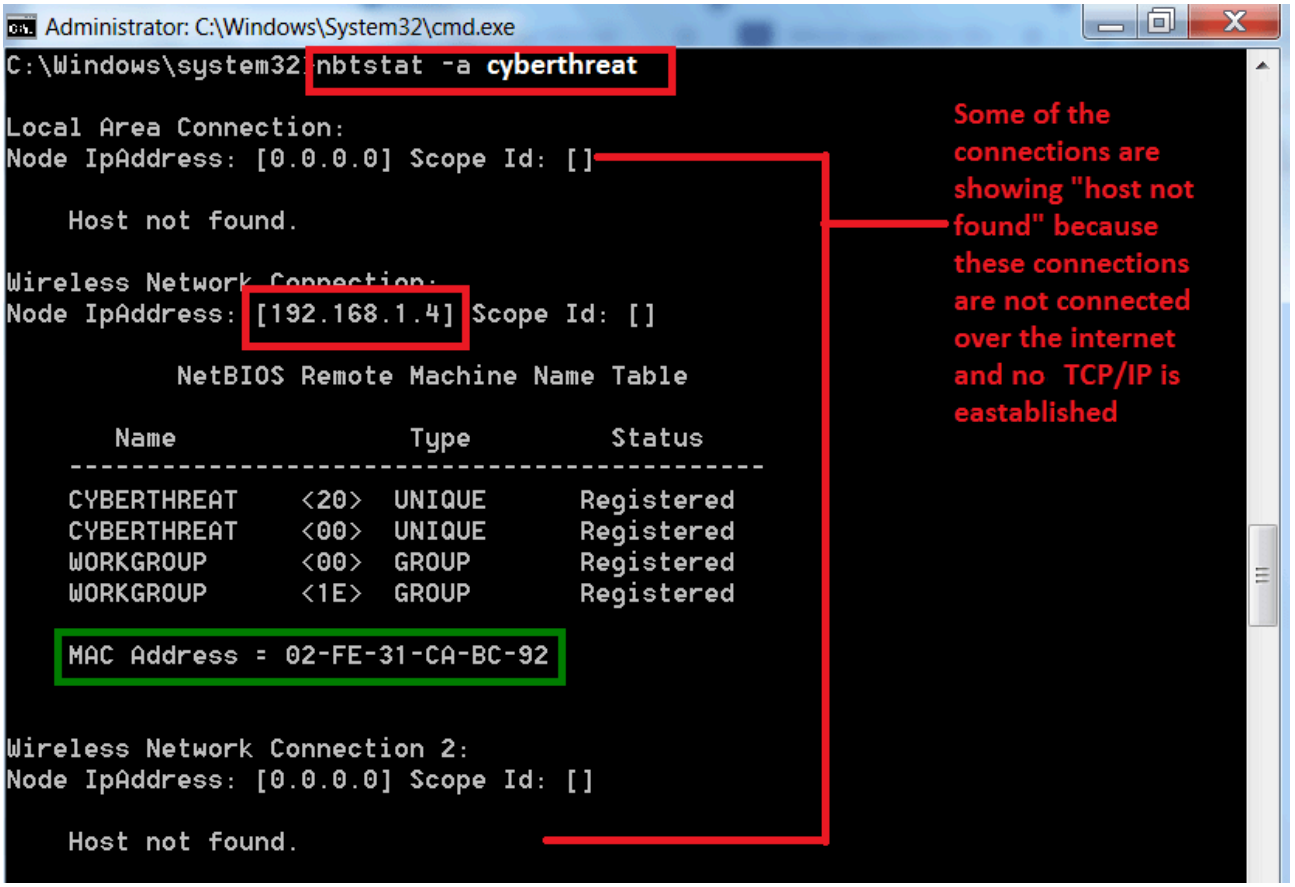
USING -A / -a option in nbtstat :-

- Command – **nbtstat -a / -A <remote name> <Ip address>**. If you use **<remote name> <IP address>** the output will be same as shown below.
- Type **nbtstat -a 192.168.1.5**

USING IP ADDRESS (192.168.1.5):-



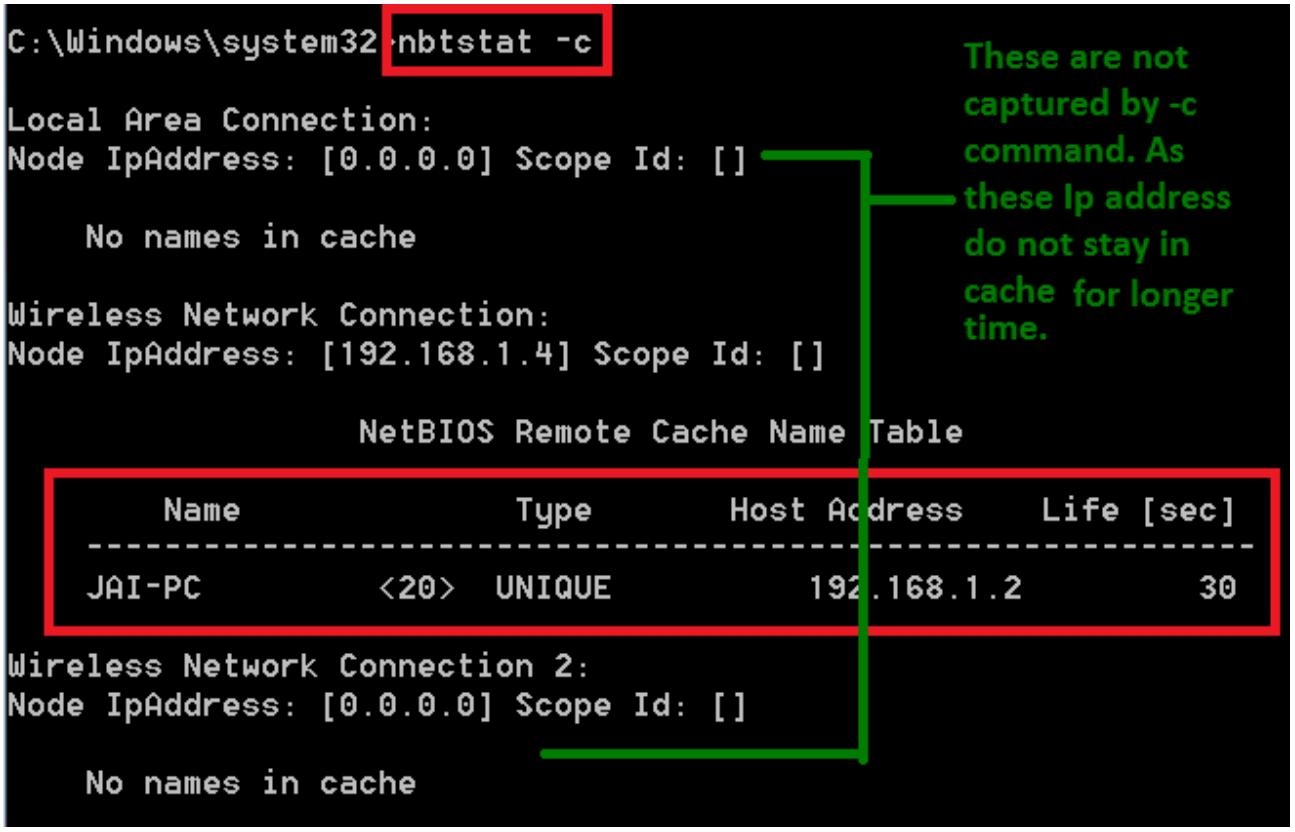
USING AN REMOTE HOST NAME (cyberthreat):-



- After scanning the target IP address, the command also provides the mac address.
- The above information especially the mac address can be use in other hacking activities.

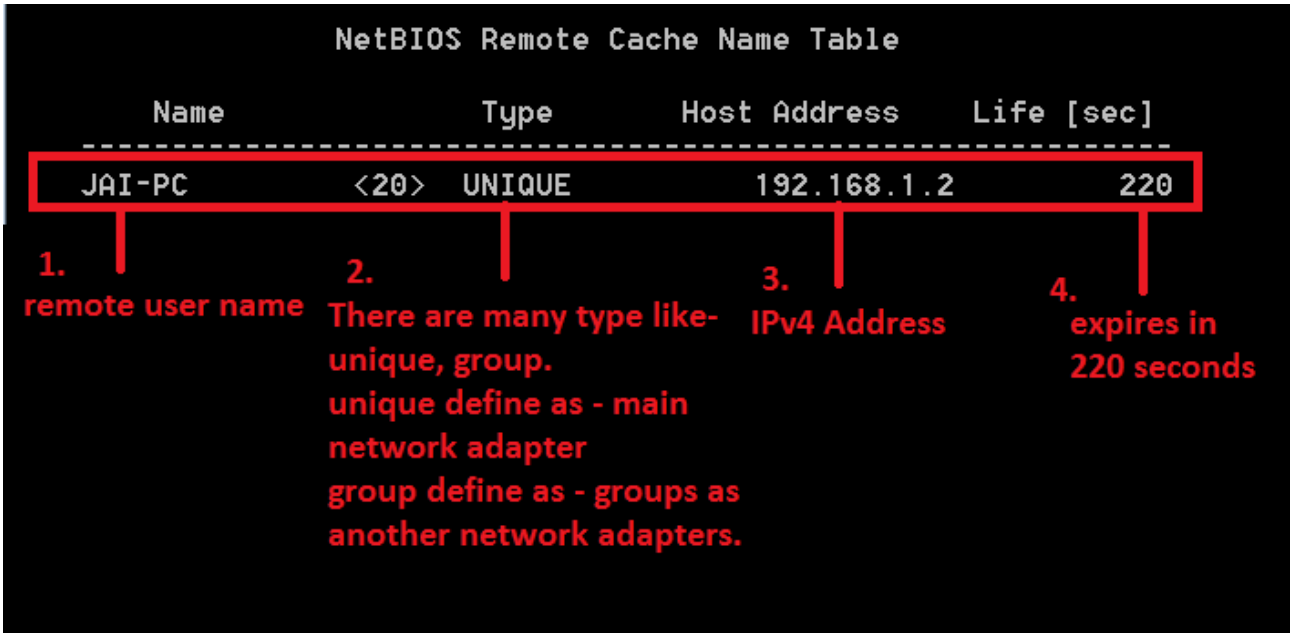
USING -c option in nbtstat :-

- Type **nbtstat -c**



- As you can see, <**-c**> has returned with the one ip address. The above IP address can be used in exploiting.
- **-c** option listnbtstat cache table.

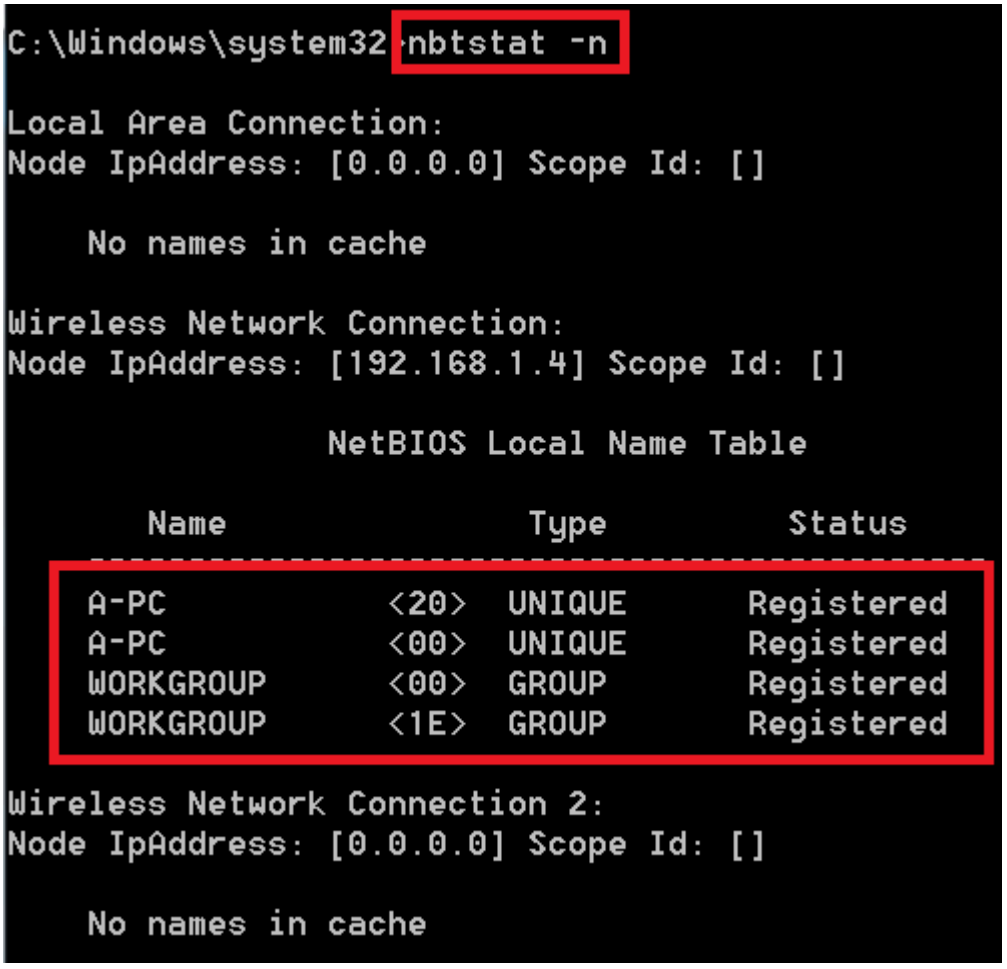
REMOTE CACHE NAME TABLE :-



- **Jai-Pc** (1) is the remote user name .
- Types (2) is used to show IP address it has returned is **unique** or **group**. If it is **unique** that mean its main PC if it is **group** that might be another network adapters which are installed.
- For example if you installed **vmware** or **virtualbox** both of them will install their own network adapters with different MAC/IP addresses.
- IPv4 (3) address – 192.168.1.2
- Life (sec) – (4) is showing 220 that means it will expire in 220 seconds.

USING -n option in netstat:-

- Type **nbtstat -n**
- **<-n>** wll list the local netbios names.



- After executing the above command, -n has returned with local netbios names.
- This is helpful to check your computer netbios names. To know how many network adapters are present.

USING -r option in netstat :-

- Type nbtstat -r
- <-r> to list names resolved by broadcast and via WINS.

```
C:\Windows\system32>nbtstat -r

    NetBIOS Names Resolution and Registration Statistics
    ----------------------------------------------------

    Resolved By Broadcast     = 9
    Resolved By Name Server   = 0

    Registered By Broadcast   = 7
    Registered By Name Server = 0

    NetBIOS Names Resolved By Broadcast
----------------------------------------------

            JAI-PC
            JAI-PC
            JAI-PC
            JAI-PC
            JAI-PC
            CYBERTHREAT    <00>
            JAI-PC
            JAI-PC
```

- After executing the above command, -r has listed the broadcasts names.
- This command returns with no. of users which has been configured to use the WINS and registered using the broadcast.
- **WINS** is used to maintain the mapping of computer names to addresses.

Cyber Security Researcher. Information security specialist, currently working as risk infrastructure specialist & investigator. He is a cyber-security researcher with over 25 years of experience. He has served with the Intelligence Agency as a Senior Intelligence Officer. He has also worked with Google and Citrix in development of cyber security solutions. He has aided the government and many federal agencies in thwarting many cyber crimes. He has been writing for us in his free time since last 5 years.

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