

Practical - 3

Aim: - TCP/UDP connectivity using netcat

Introduction: -

- Originally released in 1996, Netcat is a networking program designed to read and write data across both Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) connections using the TCP/Internet Protocol (IP) protocol suite.
- Netcat is often referred to as a “Swiss Army knife” utility, and for good reason.
- Just like the multi-function user- unless of the venerable Swiss Army pocket knife, Netcat’s functionality is helpful as both a standalone program and a back-end tool in a wide range of applications.
- Some of the many uses of Netcat include port scanning, transferring files, grabbing banners, port listening and redirection, and more nefariously, a backdoor.

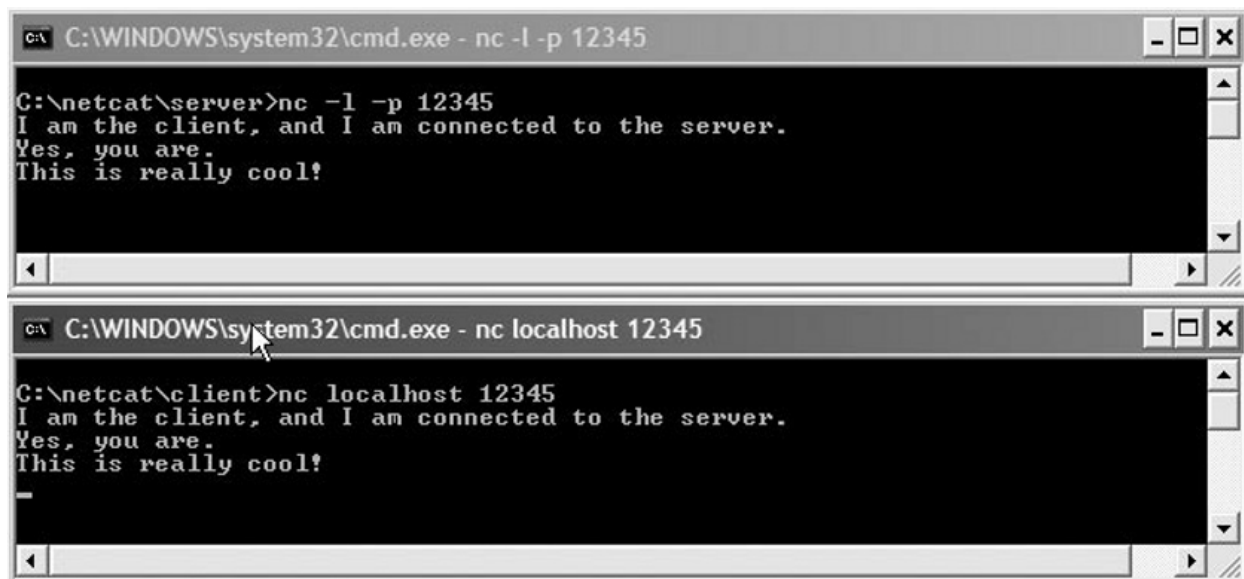
Chat Interface Usage: -

In one terminal window, start the server:

```
nc -l -p 12345
```

In a second window, connect to the server with the client:

```
nc localhost 12345
```



The image shows two overlapping Windows command prompt windows. The top window is titled 'C:\WINDOWS\system32\cmd.exe - nc -l -p 12345' and shows the Netcat server running. The bottom window is titled 'C:\WINDOWS\system32\cmd.exe - nc localhost 12345' and shows the Netcat client connecting to the server. Both windows display the same text: 'I am the client, and I am connected to the server.', 'Yes, you are.', and 'This is really cool!'.

```
C:\WINDOWS\system32\cmd.exe - nc -l -p 12345
C:\netcat\server>nc -l -p 12345
I am the client, and I am connected to the server.
Yes, you are.
This is really cool!

C:\WINDOWS\system32\cmd.exe - nc localhost 12345
C:\netcat\client>nc localhost 12345
I am the client, and I am connected to the server.
Yes, you are.
This is really cool!
-
```

Text entered on one side of the connection is simply sent to the other side of the connection when you hit enter.