

Mini Chat between 2 Terminals

So we are basically trying to send messages back and forth through terminals.

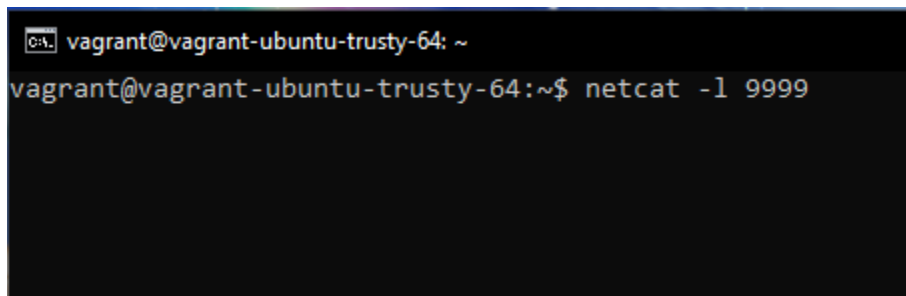
For this the terminals should be within same network or if in different network we should mention the ip address to the listening terminal.

Steps:-

1. We first create a terminal which listens to a specified port as we are trying to listen to port within the same computer.

We use the following command:-

```
netcat -l 9999
```

A terminal window with a dark background. The prompt is 'vagrant@vagrant-ubuntu-trusty-64: ~'. The command 'netcat -l 9999' has been entered and is shown on the next line.

```
vagrant@vagrant-ubuntu-trusty-64: ~  
vagrant@vagrant-ubuntu-trusty-64:~$ netcat -l 9999
```

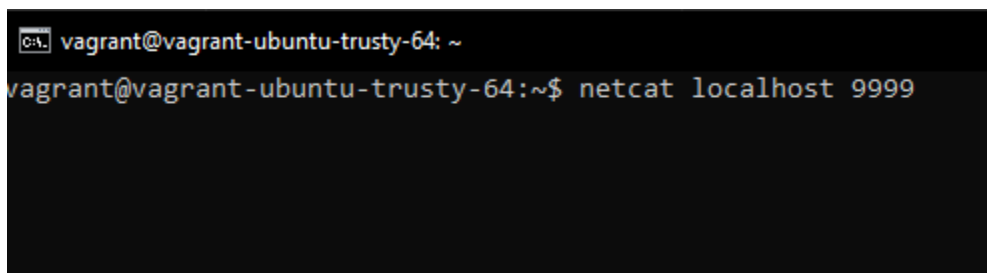
Here, netcat is a command used to TCP connections used for message passing. We pass a flag *-l* which indicates the command to listen to a given part. Here, 9999 refers to the port which it listen to.

Now the server is ready and listens to the port until a connection is established.

2. We now have to communicate with the server. To do this we have to create a connection to the server - basically creating a client.

We can do this by using the following command: -

```
netcat localhost 9999
```

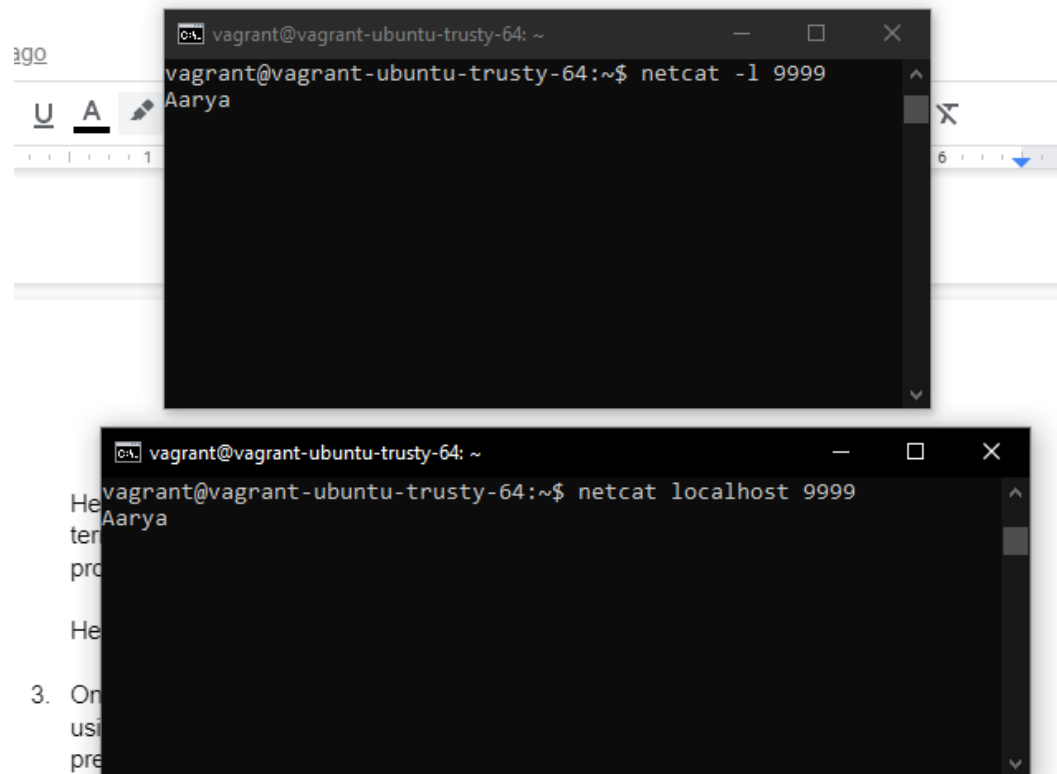
A terminal window with a dark background. The prompt is 'vagrant@vagrant-ubuntu-trusty-64: ~'. The command 'netcat localhost 9999' has been entered and is shown on the next line.

```
vagrant@vagrant-ubuntu-trusty-64: ~  
vagrant@vagrant-ubuntu-trusty-64:~$ netcat localhost 9999
```

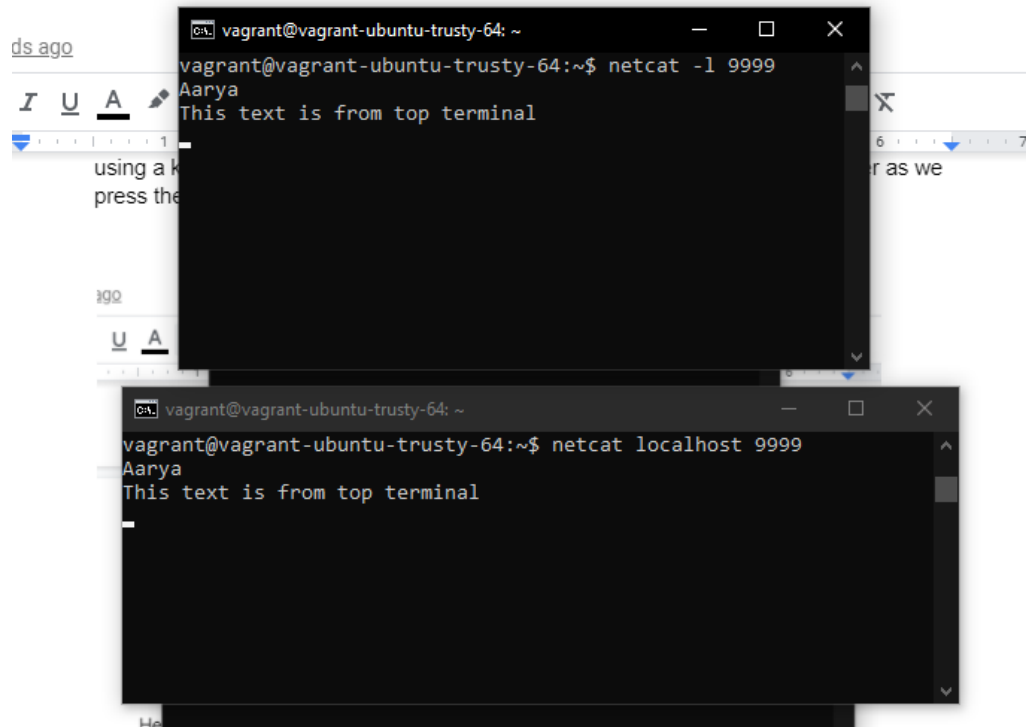
Here, localhost refers to the ip address to which it has to connect. Since both the terminals we use are on the same PC, we use localhost to connect to the server program.

Here, 9999 refers to the port to connect to.

3. Once a connection is established we can freely communicate with both the terminals using a keyboard. Any messages typed on one terminal will show up on the other as we press the enter/send button.



Here we are sending messages from client (bottom) terminal



The image displays two overlapping terminal windows from a Vagrant Ubuntu Trusty 64 environment. The top window shows a netcat listener on port 9999 that has accepted a connection from IP 192.168.1.101. It has received the message 'Aarya' and is about to send 'This text is from top terminal'. The bottom window shows a netcat listener on localhost:9999 that has accepted a connection from localhost. It has received the message 'Aarya' and is about to send 'This text is from top terminal'.

```
vagrant@vagrant-ubuntu-trusty-64: ~  
vagrant@vagrant-ubuntu-trusty-64:~$ netcat -l 9999  
Aarya  
This text is from top terminal
```

```
vagrant@vagrant-ubuntu-trusty-64: ~  
vagrant@vagrant-ubuntu-trusty-64:~$ netcat localhost 9999  
Aarya  
This text is from top terminal
```

Here we are sending messages from server (top) terminal