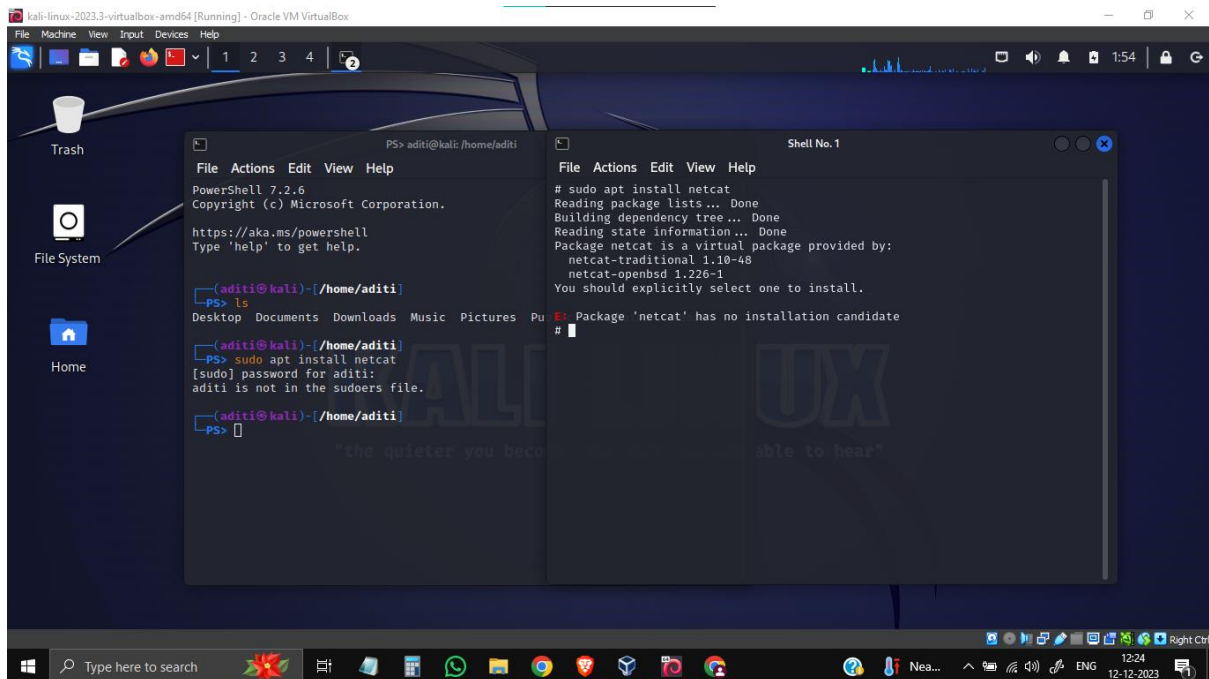


Install NETCAT in Kali



- **TRANSFER FILE BETWEEN TWO VM's**

Commands used here are:

1) `nc -lvp <port-number> > file_name`

This command makes the machine act as server to listen the requests and respond. By the command

“> file_name” it adds the data sent from the client to the file

2) `nc <ip-address> <port-number> < file_name`

This command makes machine act as a client to send requests to the server. By the command

“< file_name” it sends the file to the server. And Ip address is of the listening machine

Here the file created in ubuntu sample.txt is transferred to kali linux and stored as file.txt through netcat. We can do the vice-versa as well.

Ubuntu VM (Client-Sending) [*ip-address* = 192.168.1.148]

```

aditi@LAPTOP:~$ touch sample.txt
aditi@LAPTOP:~$ vi sample.txt
aditi@LAPTOP:~$ cat sample.txt
this is file
created in
UBUNTU VM
aditi@LAPTOP:~$ nc [redacted].109 4444 < sample.txt
file sent
^C
aditi@LAPTOP:~$

```

Kali Linux VM (Server-Listening) [ip-address = [redacted].109]

```

(kali㉿kali)-[~]
$ nc -lvp 4444 > file.txt
listening on [any] 4444 ...
[redacted].148: inverse host lookup failed: Unknown host
connect to [redacted].109 from (UNKNOWN) [redacted].148] 18843

(kali㉿kali)-[~]
$ ls
Desktop    directory3  Documents  file.txt    Pictures    sh          Videos
directory1 directory4  Downloads  Music       Public      Templates

(kali㉿kali)-[~]
$ cat file.txt
this is file
created in
UBUNTU VM

(kali㉿kali)-[~]
$

```

- **CHAT APPLICATION**

In all the cases below two commands are used:

1) nc -lvp <port-number>

This is used for listening for request for connection from the client (Acting as server)

-lvp means -l (listening), -v(verbose : used for displaying logs/description displaying), -p (port)

2) nc <ip-address> <port-number> [For linux/ubuntu] / ncat <ip-address> <port-number> [For windows]

This is used to send the connection request (Acting as client) and Ip address is of the listening machine

1. **Between two VMs**

VM1-Ubuntu (Listening) [ip-address = [redacted].148]

```

aditi@LAPTOP-:~$ nc -lvp 4444
Listening on 0.0.0.0 4444
Connection received on .109 43308
hi
hello
this is message from ubuntu vm
hi
this is message from kali linux vm
^C
aditi@LAPTOP-:~$

```

VM2-Kali Linux [ip-address = 192.168.23.109]

```

(kali@kali)-[~]
$ nc .148 4444
hi
hello
this is message from ubuntu vm
hi
this is message from kali linux vm
(kali@kali)-[~]
$

```

=====

VM1-Ubuntu [ip-address = 192.168.23.148]

```

aditi@LAPTOP-:~$ nc .109 4444
hi
aditi here
this is message from ubuntu VM
hi
this is message from kali linux VM
^C
aditi@LAPTOP-:~$

```

VM2-Kali Linux (Listening) [ip-address = 192.168.23.109]

```

(kali@kali)-[~]
$ nc -lvp 4444
listening on [any] 4444 ...
.148: inverse host lookup failed: Unknown host
connect to [.109] from (UNKNOWN) [.148] 18829
hi
aditi here
this is message from ubuntu VM
hi
this is message from kali linux VM

```

2. Between VM and Machine

VM (Listening) [ip-address = .132]

```
aditi@LAPTOP: ~$ nc -lvp 4444
Listening on 0.0.0.0 4444
Connection received on [REDACTED].132 43580
hi
my name is aditi
sending this message from my windows machine
sending this message from ubuntu vm
aditi@LAPTOP: ~$
```

Machine [ip-address = [REDACTED].120]

```
C:\WINDOWS\system32>ncat [REDACTED].132 4444
hi
my name is aditi
sending this message from my windows machine
sending this message from ubuntu vm
^C
C:\WINDOWS\system32>
```

=====

VM [ip-address = [REDACTED].148]

```
aditi@LAPTOP: ~$ nc [REDACTED].120 4444
hi
sending this message from ubuntu VM
hello
sending this message from my machine
^C
aditi@LAPTOP: ~$
```

Machine (Listening) [ip-address = [REDACTED].120]

```
C:\WINDOWS\system32>ncat -lvp 4444
Ncat: Version 7.94 ( https://nmap.org/ncat )
Ncat: Listening on [::]:4444
Ncat: Listening on 0.0.0.0:4444
Ncat: Connection from [REDACTED].120:43592.
hi
sending this message from ubuntu VM
hello
sending this message from my machine
C:\WINDOWS\system32>
```

3. Between Two machines

Machine 1 [ip-address = [REDACTED].120]

```
C:\WINDOWS\system32>ncat [redacted].192 4444
hi
this is aditi
hi
this is advika
^C
C:\WINDOWS\system32>
```

Machine 2 (Listening) [ip-address = [redacted].192]

```
C:\Users\advik>ncat -lvp 4444
Ncat: Version 7.94 ( https://nmap.org/ncat )
Ncat: Listening on [::]:4444
Ncat: Listening on 0.0.0.0:4444
Ncat: Connection from [redacted].120:3524.
hi
this is aditi
hi
this is advika

C:\Users\advik>
```

=====

Machine 1 (Listening) [ip-address = [redacted].120]

```
C:\WINDOWS\system32>ncat -lvp 4444
Ncat: Version 7.94 ( https://nmap.org/ncat )
Ncat: Listening on [::]:4444
Ncat: Listening on 0.0.0.0:4444
Ncat: Connection from [redacted].192:52842.
hi
hello aditi
this is my machine (aditi)
this is my machine(advika)
^C
C:\WINDOWS\system32>
```

Machine 2 [ip-address = [redacted].192]

```
C:\Users\advik>ncat [redacted].120 4444
hi
hello aditi
this is my machine (aditi)
this is my machine(advika)
Ncat: An existing connection was forcibly closed by the remote host.

C:\Users\advik>
```