EXPERIMENT-8

AIM: Create a virtual machine (VM) instance and load two virtual machine in it using Virtual Box

VirtualBox is open-source software for virtualizing the x86 computing architecture. It acts as a hypervisor, creating a VM (virtual machine) where the user can run another OS (operating system).

Used Virtual Box for the experiment

1. **Ubuntu:** Ubuntu is a user-friendly, open-source Linux OS based on Debian, favored for its accessibility and community support, featuring regular releases and Long Term Support options for stability.
2. **Kali:** Kali Linux is a specialized Linux distribution designed for penetration testing, ethical hacking, and cybersecurity tasks. It comes pre-loaded with a vast array of security tools, making it a go-to choice for professionals and enthusiasts in the field of information security and digital forensics.

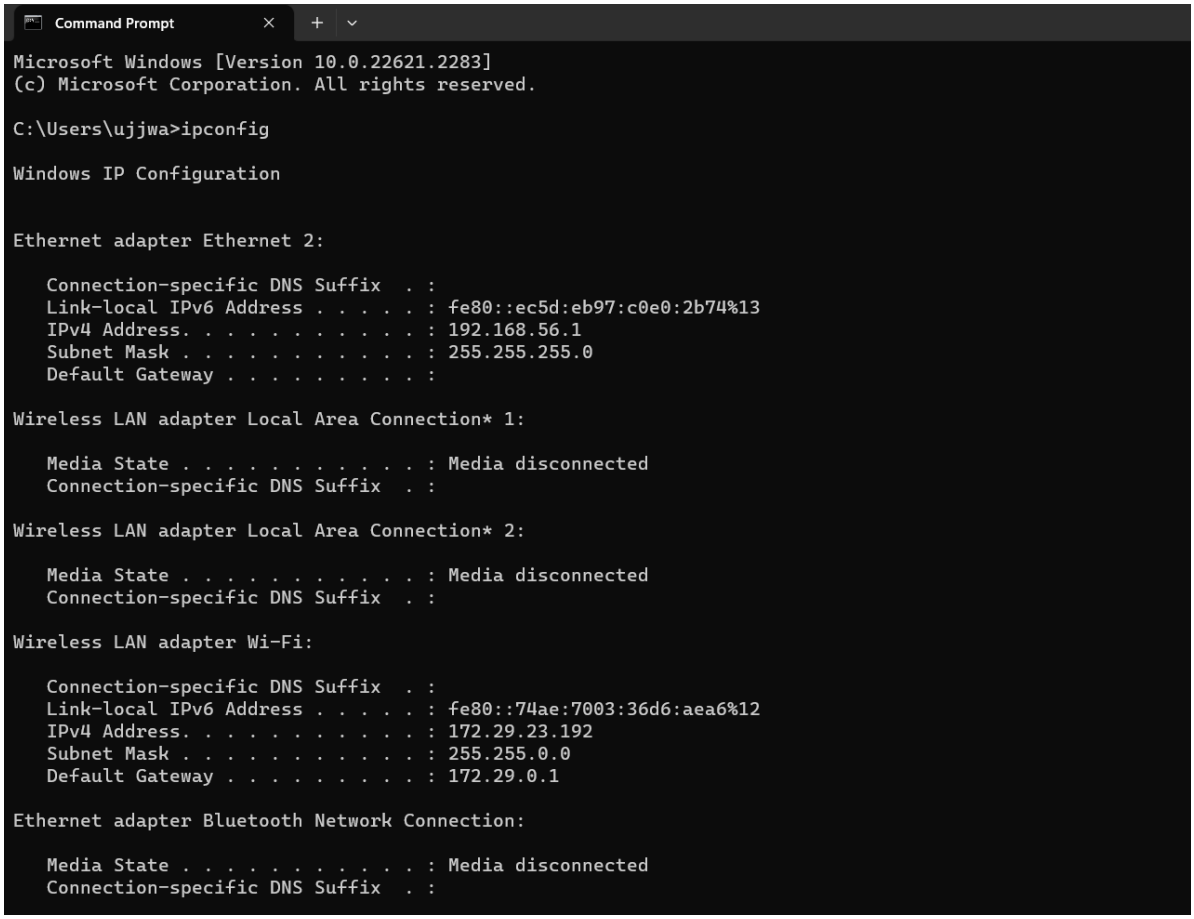

Figure: 1

Here we have used “ipconfig” in windows terminal to get the primary device ip address (shown in Figure: 1).

```
┌──(kali㉿kali)-[~]
└─$ ping 172.29.23.192 -c 5
PING 172.29.23.192 (172.29.23.192) 56(84) bytes of data.
64 bytes from 172.29.23.192: icmp_seq=1 ttl=127 time=1.01 ms
64 bytes from 172.29.23.192: icmp_seq=2 ttl=127 time=1.23 ms
64 bytes from 172.29.23.192: icmp_seq=3 ttl=127 time=3.05 ms
64 bytes from 172.29.23.192: icmp_seq=4 ttl=127 time=1.19 ms
64 bytes from 172.29.23.192: icmp_seq=5 ttl=127 time=1.16 ms

── 172.29.23.192 ping statistics ──
5 packets transmitted, 5 received, 0% packet loss, time 4004ms
rtt min/avg/max/mdev = 1.010/1.527/3.054/0.766 ms
```

Figure:2

In this Figure: 2 we have found out the device ip for the virtual box using “ip a” command. Then we have used “ping <ip>” to ping data to primary device from the Ubuntu VB.

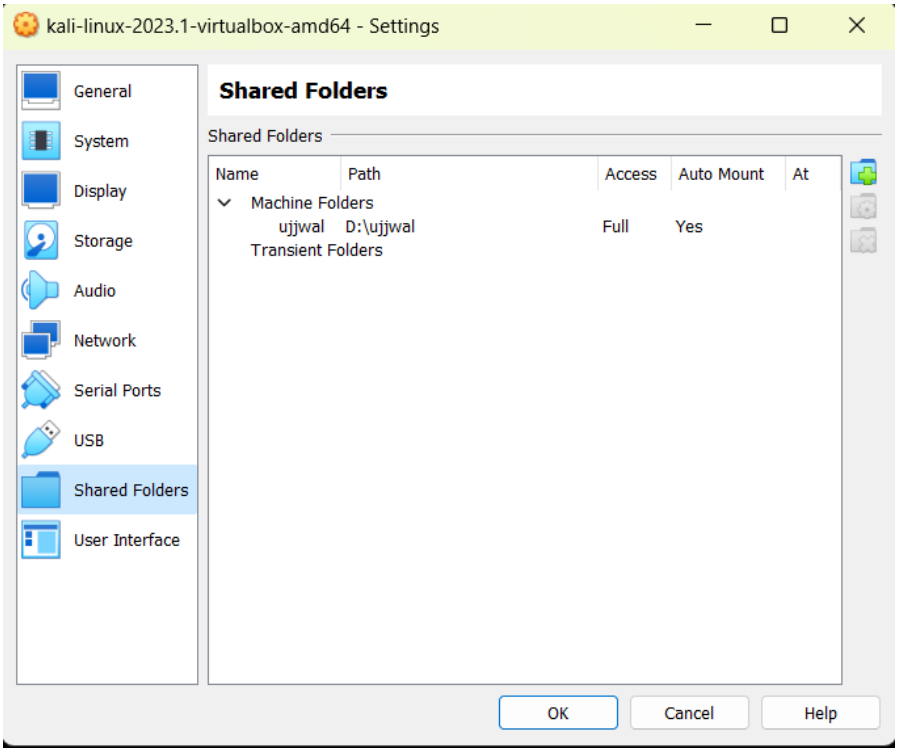

Figure: 3

After Checking that the VB and the host device are communicating, we will now create a shared folder as sown in Figure: 3. This will a folder both VirtualBox and the primary device share.

```
┌──(kali㉿kali)-[~]
└─$ cd Desktop

┌──(kali㉿kali)-[~/Desktop]
└─$ mkdir Ujjwal
```

```
┌──(kali㉿kali)-[~/Desktop]
└─$ sudo mount -t vboxsf ujjwal Ujjwal

┌──(kali㉿kali)-[~/Desktop]
└─$
```

Figure: 4

Now we will mount the shared folder using the VirtualBox as shown in the Figure: 4.

```
┌──(kali㉿kali)-[~]
└─$ ping 172.29.23.192 -c 5
PING 172.29.23.192 (172.29.23.192) 56(84) bytes of data.
64 bytes from 172.29.23.192: icmp_seq=1 ttl=127 time=1.01 ms
64 bytes from 172.29.23.192: icmp_seq=2 ttl=127 time=1.23 ms
64 bytes from 172.29.23.192: icmp_seq=3 ttl=127 time=3.05 ms
64 bytes from 172.29.23.192: icmp_seq=4 ttl=127 time=1.19 ms
64 bytes from 172.29.23.192: icmp_seq=5 ttl=127 time=1.16 ms

── 172.29.23.192 ping statistics ──
5 packets transmitted, 5 received, 0% packet loss, time 4004ms
rtt min/avg/max/mdev = 1.010/1.527/3.054/0.766 ms
```

Here we have implemented the same as before using Kali Linux.

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