linux assignment-02

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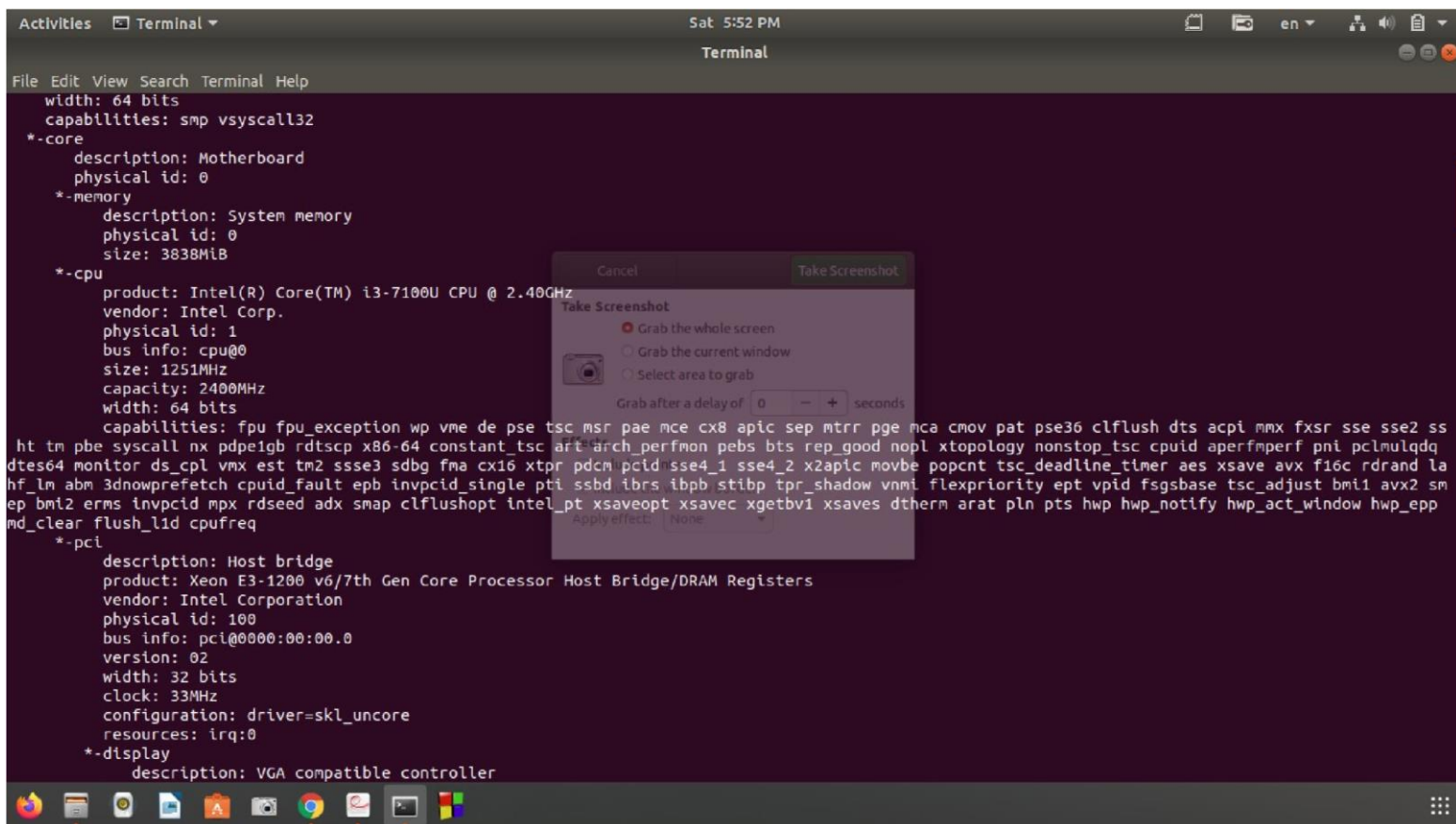**ID:IT-18037**   **ID:IT-18019**

1.

IP addresses can be reached through the public internet, and 192.168.1.1 is among them. This default IP address of most Linksys routers is one of 65,536 IP addresses in the 16-bit block of the private IPv4 address space, which includes addresses from 192.168.0.0 to 192.168.255.255

192.168.0.0 is the beginning of the private IP address range that includes all IP addresses through 192.168.255.255. This IP address is usually not used on a network, and a phone or computer wouldn't be assigned this address. However, some networks that include 192.168.0.0 in the network but do not start with this address could use it without problems for a device

```
shamim@shamim-HP-ProBook-450-G5:~/Desktop/Linux Lab2$ lscpu
Architecture:          x86_64
CPU op-mode(s):        32-bit, 64-bit
Byte Order:            Little Endian
CPU(s):                4
On-line CPU(s) list:   0-3
Thread(s) per core:    2
Core(s) per socket:    2
Socket(s):             1
NUMA node(s):          1
Vendor ID:             GenuineIntel
CPU family:            6
Model:                 142
Model name:            Intel(R) Core(TM) i3-7100U CPU @ 2.40GHz
Stepping:              9
CPU MHz:               805.921
CPU max MHz:           2400.0000
CPU min MHz:           400.0000
BogoMIPS:              4800.00
Virtualization:        VT-x
L1d cache:             32K
L1i cache:             32K
L2 cache:              256K
L3 cache:              3072K
NUMA node0 CPU(s):     0-3
Flags:                 fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall n
x pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds_cpl vm
x est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch
cpuid_fault epb invpcid_single pti ssbd ibrs ibpb stibp tpr_shadow vnmi flexpriority ept vpid fsgsbase tsc_adjust bmi1 avx2 smep bmi2 erms invpcid mpx
 rdseed adx smap clflushopt intel_pt xsaveopt xsavec xgetbv1 xsaves dtherm arat pln pts hwp hwp_notify hwp_act_window hwp_epp md_clear flush_l1d
shamim@shamim-HP-ProBook-450-G5:~/Desktop/Linux Lab2$ lshw
WARNING: you should run this program as super-user.
shamim-hp-probook-450-g5
    description: Computer
    width: 64 bits
    capabilities: smp vsyscall32
```

2 .Find IP & MAC

File　Edit　View　Search　Terminal　Help

```
    width: 64 bits
    capabilities: smp vsyscall32
 *-core
     description: Motherboard
     physical id: 0
   *-memory
       description: System memory
       physical id: 0
       size: 3838MiB
   *-cpu
       product: Intel(R) Core(TM) i3-7100U CPU @ 2.40GHz
       vendor: Intel Corp.
       physical id: 1
       bus info: cpu@0
       size: 1251MHz
       capacity: 2400MHz
       width: 64 bits
       capabilities: fpu fpu_exception wp vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss
 ht tm pbe syscall nx pdpe1gb rdtscp x86-64 constant_tsc art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid aperfmperf pni pclmulqdq
dtes64 monitor ds_cpl vmx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand la
hf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single pti ssbd ibrs ibpb stibp tpr_shadow vnmi flexpriority ept vpid fsgsbase tsc_adjust bmi1 avx2 sm
ep bmi2 erms invpcid mpx rdseed adx smap clflushopt intel_pt xsaveopt xsavec xgetbv1 xsaves dtherm arat pln pts hwp hwp_notify hwp_act_window hwp_epp
md_clear flush_l1d cpufreq
     *-pci
         description: Host bridge
         product: Xeon E3-1200 v6/7th Gen Core Processor Host Bridge/DRAM Registers
         vendor: Intel Corporation
         physical id: 100
         bus info: pci@0000:00:00.0
         version: 02
         width: 32 bits
         clock: 33MHz
         configuration: driver=skl_uncore
         resources: irq:0
       *-display
           description: VGA compatible controller
```

Cancel　　　　　Take Screenshot

Take Screenshot
◉ Grab the whole screen
○ Grab the current window
○ Select area to grab

Grab after a delay of ⟨0⟩　－　＋　seconds

Apply effect: ⟨None⟩

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```
        configuration: driver=i915 latency=0
        resources: iomemory:1f0-1ef irq:132 memory:1ffe000000-1ffeffffff memory:e0000000-efffffff ioport:4000(size=64) memory:c0000-dffff
     *-generic:0
        description: Signal processing controller
        product: Xeon E3-1200 v5/E3-1500 v5/6th Gen Core Processor Thermal Subsystem
        vendor: Intel Corporation
        physical id: 4
        bus info: pci@0000:00:04.0
        version: 02
        width: 64 bits
        clock: 33MHz
        capabilities: cap_list
        configuration: driver=proc_thermal latency=0
        resources: iomemory:1f0-1ef irq:16 memory:1fff010000-1fff017fff
     *-usb
        description: USB controller
        product: Sunrise Point-LP USB 3.0 xHCI Controller
        vendor: Intel Corporation
        physical id: 14
        bus info: pci@0000:00:14.0
        version: 21
        width: 64 bits
        clock: 33MHz
        capabilities: xhci bus_master cap_list
        configuration: driver=xhci_hcd latency=0
        resources: irq:125 memory:f0300000-f030ffff
     *-generic:1
        description: Signal processing controller
        product: Sunrise Point-LP Thermal subsystem
        vendor: Intel Corporation
        physical id: 14.2
        bus info: pci@0000:00:14.2
        version: 21
        width: 64 bits
        clock: 33MHz
        capabilities: cap_list
```

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```
        description: Communication controller
        product: Sunrise Point-LP CSME HECI #1
        vendor: Intel Corporation
        physical id: 16
        bus info: pci@0000:00:16.0
        version: 21
        width: 64 bits
        clock: 33MHz
        capabilities: bus_master cap_list
        configuration: driver=mei_me latency=0
        resources: iomemory:1f0-1ef irq:130 memory:1fff01d000-1fff01dfff
     *-storage
        description: SATA controller
        product: Sunrise Point-LP SATA Controller [AHCI mode]
        vendor: Intel Corporation
        physical id: 17
        bus info: pci@0000:00:17.0
        version: 21
        width: 32 bits
        clock: 66MHz
        capabilities: storage ahci_1.0 bus_master cap_list
        configuration: driver=ahci latency=0
        resources: irq:126 memory:f0314000-f0315fff memory:f0317000-f03170ff ioport:4080(size=8) ioport:4088(size=4) ioport:4060(size=32) memory:
f0316000-f03167ff
     *-pci:0
        description: PCI bridge
        product: Sunrise Point-LP PCI Express Root Port #5
        vendor: Intel Corporation
        physical id: 1c
        bus info: pci@0000:00:1c.0
        version: f1
        width: 32 bits
        clock: 33MHz
        capabilities: pci normal_decode bus_master cap_list
        configuration: driver=pcieport
        resources: irq:122 ioport:3000(size=4096) memory:f0200000-f02fffff
```

File Edit View Search Terminal Help

```
            clock: 33MHz
            capabilities: bus_master cap_list ethernet physical tp mii 10bt 10bt-fd 100bt 100bt-fd 1000bt 1000bt-fd autonegotiation
            configuration: autonegotiation=on broadcast=yes driver=r8169 driverversion=2.3LK-NAPI duplex=half firmware=rtl8168h-2_0.0.2 02/26/15 l
atency=0 link=no multicast=yes port=MII speed=10Mbit/s
            resources: irq:16 ioport:3000(size=256) memory:f0204000-f0204fff memory:f0200000-f0203fff
       *-pci:1
            description: PCI bridge
            product: Sunrise Point-LP PCI Express Root Port #6
            vendor: Intel Corporation
            physical id: 1c.5
            bus info: pci@0000:00:1c.5
            version: f1
            width: 32 bits
            clock: 33MHz
            capabilities: pci normal_decode bus_master cap_list
            configuration: driver=pcieport
            resources: irq:123 memory:f0100000-f01fffff
          *-network
               description: Wireless interface
               product: Dual Band Wireless-AC 3168NGW [Stone Peak]
               vendor: Intel Corporation
               physical id: 0
               bus info: pci@0000:02:00.0
               logical name: wlp2s0
               version: 10
               serial: 68:ec:c5:01:ec:b2
               width: 64 bits
               clock: 33MHz
               capabilities: bus_master cap_list ethernet physical wireless
               configuration: broadcast=yes driver=iwlwifi driverversion=4.15.0-128-generic firmware=29.1044073957.0 latency=0 link=no multicast=yes
wireless=IEEE 802.11
               resources: irq:131 memory:f0100000-f0101fff
       *-pci:2
            description: PCI bridge
            product: Intel Corporation
            vendor: Intel Corporation
```

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```
            width: 32 bits
            clock: 33MHz
            capabilities: isa bus_master
            configuration: latency=0
       *-memory UNCLAIMED
            description: Memory controller
            product: Sunrise Point-LP PMC
            vendor: Intel Corporation
            physical id: 1f.2
            bus info: pci@0000:00:1f.2
            version: 21
            width: 32 bits
            clock: 33MHz (30.3ns)
            configuration: latency=0
            resources: memory:f0310000-f0313fff
       *-multimedia
            description: Audio device
            product: Sunrise Point-LP HD Audio
            vendor: Intel Corporation
            physical id: 1f.3
            bus info: pci@0000:00:1f.3
            version: 21
            width: 64 bits
            clock: 33MHz
            capabilities: bus_master cap_list
            configuration: driver=snd_hda_intel latency=64
            resources: iomemory:1f0-1ef iomemory:1f0-1ef irq:133 memory:1fff018000-1fff01bfff memory:1fff000000-1fff00ffff
       *-serial UNCLAIMED
            description: SMBus
            product: Sunrise Point-LP SMBus
            vendor: Intel Corporation
            physical id: 1f.4
            bus info: pci@0000:00:1f.4
            version: 21
            width: 64 bits
            clock: 33MHz
```

```
=1000,dmode=500,fmode=400 state=mounted status=ready
            *-medium
                physical id: 0
                logical name: /dev/cdrom
                logical name: /media/shamim/GPMODEM223
                capabilities: partitioned partitioned:mac
                configuration: mount.fstype=iso9660 mount.options=ro,nosuid,nodev,relatime,norock,check=r,map=n,blocksize=2048,uid=1000,gid=1000,dmode
=500,fmode=400 state=mounted
                *-volume:0 UNCLAIMED
                    description: Apple partition map
                    physical id: 1
                    capacity: 17KiB
                *-volume:1 UNCLAIMED
                    description: Apple HFS
                    vendor: Mac OS X
                    physical id: 2
                    version: 4
                    serial: 00000000-0000-0000-0000-000000001000
                    size: 5472KiB
                    capacity: 5472KiB
                    capabilities: hfsplus initialized
                    configuration: checked=1904-01-01 05:53:20 created=2017-11-07 09:44:36 filesystem=hfsplus lastmountedby=10.0 modified=2017-11-27 16
:33:30 state=clean
  *-network
        description: Ethernet interface
        physical id: 1
        logical name: enx00a0c6000000
        serial: 00:a0:c6:00:00:00
        capabilities: ethernet physical
        configuration: broadcast=yes driver=cdc_ether driverversion=22-Aug-2005 firmware=ZTE CDC Ethernet Device ip=192.168.0.179 link=yes multicast=ye
s
WARNING: output may be incomplete or inaccurate, you should run this program as super-user.
shamim@shamim-HP-ProBook-450-G5:~/Desktop/Linux Lab2$ hwinfo

Command 'hwinfo' not found, but can be installed with:
```

```
                *-volume:0 UNCLAIMED
                    description: Apple partition map
                    physical id: 1
                    capacity: 17KiB
                *-volume:1 UNCLAIMED
                    description: Apple HFS
                    vendor: Mac OS X
                    physical id: 2
                    version: 4
                    serial: 00000000-0000-0000-0000-000000001000
                    size: 5472KiB
                    capacity: 5472KiB
                    capabilities: hfsplus initialized
                    configuration: checked=1904-01-01 05:53:20 created=2017-11-07 09:44:36 filesystem=hfsplus lastmountedby=10.0 modified=2017-11-27 16
:33:30 state=clean
  *-network
        description: Ethernet interface
        physical id: 1
        logical name: enx00a0c6000000
        serial: 00:a0:c6:00:00:00
        capabilities: ethernet physical
        configuration: broadcast=yes driver=cdc_ether driverversion=22-Aug-2005 firmware=ZTE CDC Ethernet Device ip=192.168.0.179 link=yes multicast=ye
s
WARNING: output may be incomplete or inaccurate, you should run this program as super-user.
shamim@shamim-HP-ProBook-450-G5:~/Desktop/Linux Lab2$ hwinfo

Command 'hwinfo' not found, but can be installed with:

sudo apt install hwinfo

shamim@shamim-HP-ProBook-450-G5:~/Desktop/Linux Lab2$ free -m
              total        used        free      shared  buff/cache   available
Mem:           3838        1544        1197         390        1096        1665
Swap:          2047           1        2046
shamim@shamim-HP-ProBook-450-G5:~/Desktop/Linux Lab2$
```

Mac:

```
shamim@shamim-HP-ProBook-450-G5:~/Desktop/Linux Lab2$ ip link show
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN mode DEFAULT
 group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
2: enp1s0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc fq_codel state DOW
N mode DEFAULT group default qlen 1000
    link/ether 10:e7:c6:e4:db:06 brd ff:ff:ff:ff:ff:ff
3: wlp2s0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc mq state DOWN mode
 DORMANT group default qlen 1000
    link/ether 68:ec:c5:01:ec:b2 brd ff:ff:ff:ff:ff:ff
4: enx00a0c6000000: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel st
ate UP mode DEFAULT group default qlen 1000
    link/ether 00:a0:c6:00:00:00 brd ff:ff:ff:ff:ff:ff
shamim@shamim-HP-ProBook-450-G5:~/Desktop/Linux Lab2$
```
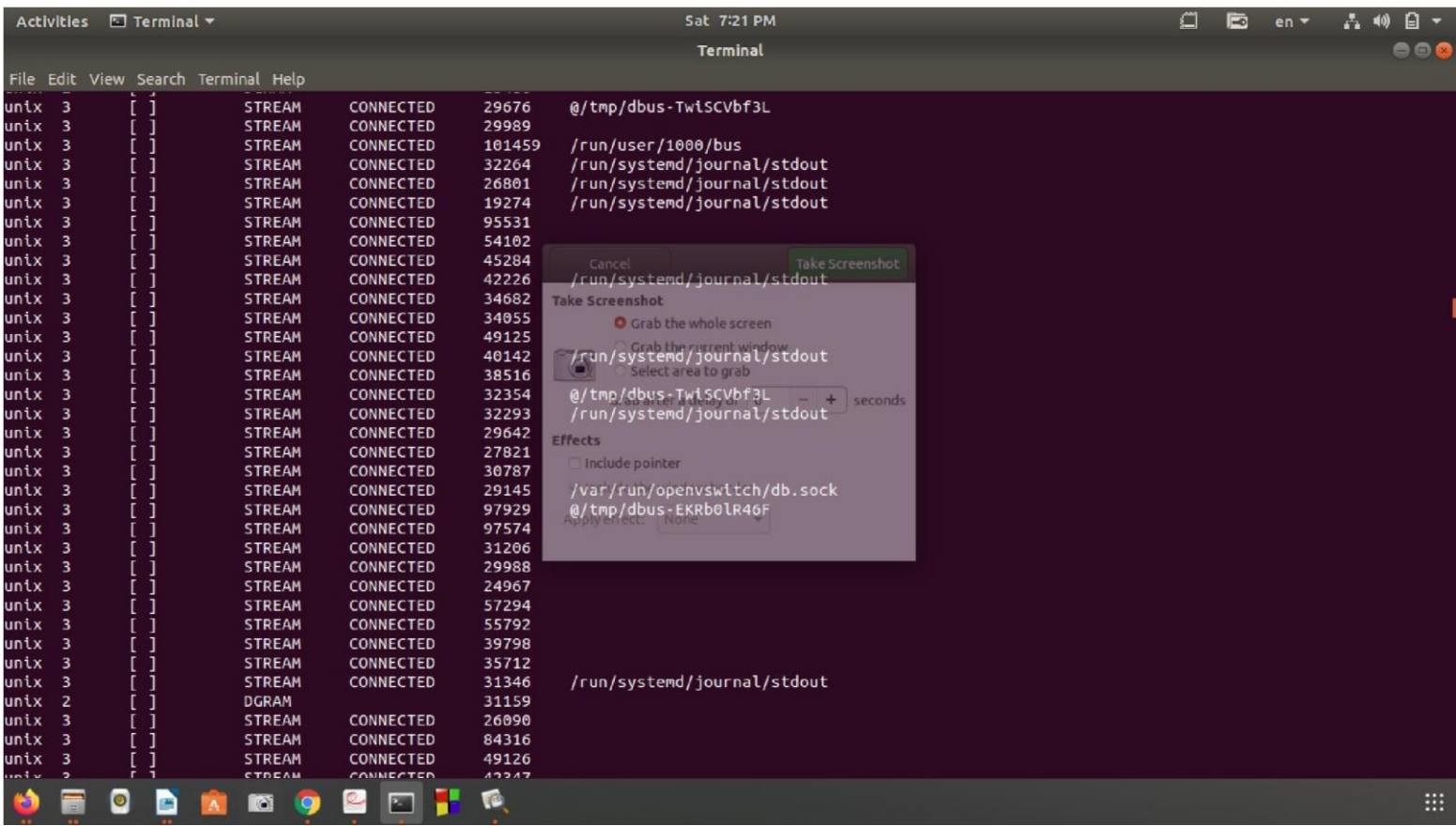
3.

File Edit View Search Terminal Help

```
shamim@shamim-HP-ProBook-450-G5:~/Desktop/Linux Lab2$
shamim@shamim-HP-ProBook-450-G5:~/Desktop/Linux Lab2$    netstat
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 shamim-HP-ProBook:48744 172.67.75.102:https      ESTABLISHED
tcp        0      0 shamim-HP-ProBook:42548 53.72.190.35.bc.g:https  TIME_WAIT
tcp        0      0 shamim-HP-ProBook:40104 234.63.190.35.bc.:https  TIME_WAIT
tcp        0      0 shamim-HP-ProBook:60626 ec2-52-26-240-56.:https  ESTABLISHED
tcp        0      0 shamim-HP-ProBook:48970 1.80.190.35.bc.go:https  TIME_WAIT
tcp        0      0 shamim-HP-ProBook:56920 104.18.53.245:https      ESTABLISHED
tcp        0      0 shamim-HP-ProBook:40116 234.63.190.35.bc.:https  TIME_WAIT
tcp        0      0 localhost:54650         localhost:9614           ESTABLISHED
tcp        0      0 localhost:54314         localhost:9614           ESTABLISHED
tcp        0      0 shamim-HP-ProBook:39180 74.125.24.188:5228       ESTABLISHED
tcp        0      0 shamim-HP-ProBook:53708 219.220.186.35.bc:https  TIME_WAIT
tcp        0      0 shamim-HP-ProBook:49440 104.18.2.159:https       ESTABLISHED
tcp        0      0 shamim-HP-ProBook:40112 151.101.10.217:https     ESTABLISHED
tcp        0      0 shamim-HP-ProBook:53704 104.18.52.245:https      ESTABLISHED
tcp        0      0 shamim-HP-ProBook:55302 172.67.156.77:https      ESTABLISHED
tcp        0      0 shamim-HP-ProBook:53672 219.220.186.35.bc:https  TIME_WAIT
tcp6       1      0 shamim-HP-ProBook:35170 maa03s31-in-f1.1e:https  CLOSE_WAIT
tcp6       1      0 shamim-HP-ProBook:49746 maa03s29-in-f1.1e:https  CLOSE_WAIT
tcp6       1      0 shamim-HP-ProBook:35172 maa03s31-in-f1.1e:https  CLOSE_WAIT
tcp6       0      0 localhost:9614          localhost:54314          ESTABLISHED
tcp6       0      0 localhost:9614          localhost:54650          ESTABLISHED
udp        0      0 shamim-HP-ProBook:37686 172.217.194.189:443      ESTABLISHED
Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags       Type       State         I-Node   Path
unix  2      [ ]         DGRAM                    36402    /run/user/1000/systemd/notify
unix  2      [ ]         DGRAM                    28623    /run/user/121/systemd/notify
unix  2      [ ]         DGRAM                    13786    /run/systemd/journal/syslog
unix  25     [ ]         DGRAM                    13788    /run/systemd/journal/dev-log
unix  9      [ ]         DGRAM                    13800    /run/systemd/journal/socket
unix  2      [ ]         DGRAM                    36336    /run/wpa_supplicant/wlp2s0
unix  2      [ ]         DGRAM                    36363    /run/wpa_supplicant/p2p-dev-wlp2s0
unix  3      [ ]         DGRAM                    13773    /run/systemd/notify
```

File Edit View Search Terminal Help

```
unix  3      [ ]         DGRAM                    13773    /run/systemd/notify
unix  3      [ ]         SEQPACKET  CONNECTED     39866    @00012
unix  3      [ ]         SEQPACKET  CONNECTED     39864    @00011
unix  3      [ ]         STREAM     CONNECTED     93057
unix  3      [ ]         STREAM     CONNECTED     81817    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     57058
unix  3      [ ]         STREAM     CONNECTED     40421
unix  3      [ ]         SEQPACKET  CONNECTED     39862
unix  3      [ ]         STREAM     CONNECTED     29958
unix  3      [ ]         STREAM     CONNECTED     100407
unix  3      [ ]         STREAM     CONNECTED     37795
unix  3      [ ]         STREAM     CONNECTED     36685    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     36542    /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     33242
unix  2      [ ]         DGRAM                    27890
unix  3      [ ]         STREAM     CONNECTED     69686
unix  3      [ ]         STREAM     CONNECTED     57290
unix  3      [ ]         STREAM     CONNECTED     53981
unix  3      [ ]         STREAM     CONNECTED     37388
unix  3      [ ]         STREAM     CONNECTED     31374    /run/user/121/pulse/native
unix  3      [ ]         STREAM     CONNECTED     27795    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     83446
unix  3      [ ]         STREAM     CONNECTED     41959
unix  3      [ ]         STREAM     CONNECTED     42765    @/tmp/dbus-5nEUbBBk
unix  3      [ ]         STREAM     CONNECTED     39480
unix  3      [ ]         STREAM     CONNECTED     24347    /var/run/dbus/system_bus_socket
unix  2      [ ]         STREAM     CONNECTED     69692
unix  3      [ ]         STREAM     CONNECTED     40545    @/tmp/dbus-EKRb0lR46F
unix  3      [ ]         STREAM     CONNECTED     37776
unix  3      [ ]         STREAM     CONNECTED     38468
unix  3      [ ]         STREAM     CONNECTED     33197    /run/user/121/bus
unix  3      [ ]         STREAM     CONNECTED     22323    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     44861    /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     42245    /run/user/1000/pulse/native
unix  3      [ ]         STREAM     CONNECTED     32387    /var/run/dbus/system_bus_socket
unix  3      [ ]         STREAM     CONNECTED     40420
```

File Edit View Search Terminal Help

```
unix  3      [ ]         STREAM     CONNECTED     95807
unix  3      [ ]         STREAM     CONNECTED     39087     @/tmp/dbus-EKRb0lR46F
unix  3      [ ]         STREAM     CONNECTED     37739
unix  3      [ ]         STREAM     CONNECTED     36553     /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     31362     @/tmp/dbus-TwiSCVbf3L
unix  3      [ ]         STREAM     CONNECTED     32819
unix  3      [ ]         STREAM     CONNECTED     69781
unix  3      [ ]         STREAM     CONNECTED     68243
unix  3      [ ]         STREAM     CONNECTED     57289
unix  3      [ ]         STREAM     CONNECTED     49124
unix  3      [ ]         STREAM     CONNECTED     36820
unix  3      [ ]         DGRAM                    36403
unix  3      [ ]         STREAM     CONNECTED     42880
unix  3      [ ]         STREAM     CONNECTED     39363
unix  2      [ ]         DGRAM                    24337
unix  3      [ ]         STREAM     CONNECTED     25105     /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     36730     /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     38467
unix  3      [ ]         STREAM     CONNECTED     31369     /run/user/121/bus
unix  3      [ ]         STREAM     CONNECTED     34029     /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     69782
unix  3      [ ]         STREAM     CONNECTED     68242
unix  3      [ ]         STREAM     CONNECTED     48918
unix  3      [ ]         STREAM     CONNECTED     40111
unix  3      [ ]         STREAM     CONNECTED     38306     @/tmp/.X11-unix/X0
unix  3      [ ]         STREAM     CONNECTED     41958     @/tmp/.X11-unix/X0
unix  3      [ ]         STREAM     CONNECTED     40124
unix  3      [ ]         STREAM     CONNECTED     28032     /run/systemd/journal/stdout
unix  2      [ ]         DGRAM                    13824
unix  3      [ ]         STREAM     CONNECTED     100399
unix  3      [ ]         STREAM     CONNECTED     57831     @/tmp/dbus-5nEUbBBk
unix  3      [ ]         STREAM     CONNECTED     37833
unix  3      [ ]         STREAM     CONNECTED     37794
unix  3      [ ]         STREAM     CONNECTED     33297
unix  3      [ ]         STREAM     CONNECTED     33196
unix  3      [ ]         STREAM     CONNECTED     26408     /var/run/dbus/system_bus_socket
```

```
unix  3      [ ]         STREAM     CONNECTED     80225
unix  3      [ ]         STREAM     CONNECTED     41962
unix  2      [ ]         DGRAM                    39685
unix  3      [ ]         STREAM     CONNECTED     40125     /run/user/1000/bus
unix  2      [ ]         DGRAM                    77460
unix  3      [ ]         STREAM     CONNECTED     67448
unix  3      [ ]         STREAM     CONNECTED     40544
unix  3      [ ]         STREAM     CONNECTED     38482
unix  3      [ ]         STREAM     CONNECTED     35670     @/tmp/.X11-unix/X0
unix  3      [ ]         STREAM     CONNECTED     32276     /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     80032
unix  3      [ ]         STREAM     CONNECTED     30966     /run/user/121/bus
unix  3      [ ]         STREAM     CONNECTED     30175     /run/systemd/journal/stdout
unix  3      [ ]         DGRAM                    24024
unix  3      [ ]         STREAM     CONNECTED     69778
unix  3      [ ]         STREAM     CONNECTED     62486
unix  3      [ ]         STREAM     CONNECTED     58068     /run/systemd/journal/stdout
unix  3      [ ]         STREAM     CONNECTED     53980
unix  3      [ ]         STREAM     CONNECTED     36825
unix  3      [ ]         STREAM     CONNECTED     38400
unix  3      [ ]         STREAM     CONNECTED     41961
unix  3      [ ]         SEQPACKET  CONNECTED     39867
unix  3      [ ]         STREAM     CONNECTED     39312
unix  3      [ ]         STREAM     CONNECTED     35623     /run/systemd/journal/stdout
unix  2      [ ]         DGRAM                    24339
unix  3      [ ]         STREAM     CONNECTED     25622
unix  3      [ ]         STREAM     CONNECTED     42892     @/tmp/.X11-unix/X0
unix  3      [ ]         STREAM     CONNECTED     37790     /run/user/1000/bus
unix  3      [ ]         STREAM     CONNECTED     38420
unix  3      [ ]         STREAM     CONNECTED     31359     /var/run/dbus/system_bus_socket
unix  3      [ ]         STREAM     CONNECTED     33193
unix  2      [ ]         DGRAM                    24155
unix  3      [ ]         STREAM     CONNECTED     32827     /run/user/121/bus
unix  3      [ ]         STREAM     CONNECTED     58069     /run/user/1000/bus
unix  2      [ ]         DGRAM                    44809
unix  3      [ ]         STREAM     CONNECTED     36541
unix  3      [ ]         DGRAM                    37306
```

Terminal

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unix	3	[ ]	STREAM	CONNECTED	29676	@/tmp/dbus-TwiSCVbf3L
unix	3	[ ]	STREAM	CONNECTED	29989	
unix	3	[ ]	STREAM	CONNECTED	101459	/run/user/1000/bus
unix	3	[ ]	STREAM	CONNECTED	32264	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	26801	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	19274	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	95531	
unix	3	[ ]	STREAM	CONNECTED	54102	
unix	3	[ ]	STREAM	CONNECTED	45284	
unix	3	[ ]	STREAM	CONNECTED	42226	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	34682	
unix	3	[ ]	STREAM	CONNECTED	34055	
unix	3	[ ]	STREAM	CONNECTED	49125	
unix	3	[ ]	STREAM	CONNECTED	40142	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	38516	
unix	3	[ ]	STREAM	CONNECTED	32354	@/tmp/dbus-TwiSCVbf3L
unix	3	[ ]	STREAM	CONNECTED	32293	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	29642	
unix	3	[ ]	STREAM	CONNECTED	27821	
unix	3	[ ]	STREAM	CONNECTED	30787	
unix	3	[ ]	STREAM	CONNECTED	29145	
unix	3	[ ]	STREAM	CONNECTED	97929	
unix	3	[ ]	STREAM	CONNECTED	97574	
unix	3	[ ]	STREAM	CONNECTED	31206	
unix	3	[ ]	STREAM	CONNECTED	29988	
unix	3	[ ]	STREAM	CONNECTED	24967	
unix	3	[ ]	STREAM	CONNECTED	57294	
unix	3	[ ]	STREAM	CONNECTED	55792	
unix	3	[ ]	STREAM	CONNECTED	39798	
unix	3	[ ]	STREAM	CONNECTED	35712	
unix	3	[ ]	STREAM	CONNECTED	31346	/run/systemd/journal/stdout
unix	2		DGRAM		31159	
unix	3	[ ]	STREAM	CONNECTED	26090	
unix	3	[ ]	STREAM	CONNECTED	84316	
unix	3	[ ]	STREAM	CONNECTED	49126	
unix	3	[ ]	STREAM	CONNECTED	42347	

Cancel   Take Screenshot

Take Screenshot

◉ Grab the whole screen
○ Grab the current window
○ Select area to grab

@/tmp/dbus-TwiSCVbf3L   − +   seconds

Effects

☐ Include pointer

/var/run/openvswitch/db.sock
@/tmp/dbus-EKRb0lR46F

Apply effect: None

File Edit View Search Terminal Help

```
unix  3      [ ]        STREAM      CONNECTED      39992
unix  3      [ ]        STREAM      CONNECTED      32278
unix  3      [ ]        STREAM      CONNECTED      42294        @/tmp/.X11-unix/X0
unix  3      [ ]        STREAM      CONNECTED      42231        /run/user/1000/bus
unix  3      [ ]        STREAM      CONNECTED      41035
unix  3      [ ]        STREAM      CONNECTED      39196        /run/systemd/journal/stdout
unix  3      [ ]        STREAM      CONNECTED      36824        /run/systemd/journal/stdout
unix  3      [ ]        STREAM      CONNECTED      38374
unix  3      [ ]        STREAM      CONNECTED      32260
unix  3      [ ]        STREAM      CONNECTED      27716        /var/run/dbus/system_bus_socket
unix  3      [ ]        STREAM      CONNECTED      26486        /var/run/dbus/system_bus_socket
unix  3      [ ]        STREAM      CONNECTED      77443
unix  3      [ ]        STREAM      CONNECTED      42283
unix  3      [ ]        STREAM      CONNECTED      39412        @/tmp/.X11-unix/X0
unix  3      [ ]        STREAM      CONNECTED      38560        /run/user/1000/bus
unix  3      [ ]        STREAM      CONNECTED      39117
unix  3      [ ]        STREAM      CONNECTED      31154
unix  3      [ ]        STREAM      CONNECTED      95746
unix  3      [ ]        STREAM      CONNECTED      36680
unix  3      [ ]        STREAM      CONNECTED      30152
unix  3      [ ]        SEQPACKET   CONNECTED      43033
unix  3      [ ]        STREAM      CONNECTED      39372        /run/systemd/journal/stdout
unix  3      [ ]        STREAM      CONNECTED      42228        /run/systemd/journal/stdout
unix  3      [ ]        STREAM      CONNECTED      39084
unix  3      [ ]        STREAM      CONNECTED      39035        /run/user/1000/bus
unix  3      [ ]        STREAM      CONNECTED      36731
unix  3      [ ]        STREAM      CONNECTED      36621        /var/run/dbus/system_bus_socket
unix  3      [ ]        STREAM      CONNECTED      25241
unix  3      [ ]        STREAM      CONNECTED      24343        /var/run/dbus/system_bus_socket
unix  3      [ ]        STREAM      CONNECTED      95799
unix  3      [ ]        STREAM      CONNECTED      42834
unix  3      [ ]        STREAM      CONNECTED      38835
unix  3      [ ]        STREAM      CONNECTED      32328
unix  3      [ ]        STREAM      CONNECTED      29459
shamim@shamim-HP-ProBook-450-G5:~/Desktop/Linux Lab2$   - r
```

4.

File Edit View Search Terminal Help

```
shamim@shamim-HP-ProBook-450-G5:~$ netstat -r
Kernel IP routing table
Destination     Gateway         Genmask         Flags   MSS Window  irtt Iface
default         _gateway        0.0.0.0         UG        0 0          0 enx00a0c6000000
link-local      0.0.0.0         255.255.0.0     U         0 0          0 enx00a0c6000000
192.168.0.0     0.0.0.0         255.255.255.0   U         0 0          0 enx00a0c6000000
shamim@shamim-HP-ProBook-450-G5:~$
```

File Edit View Search Terminal Help

```
         TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

root@shamim-HP-ProBook-450-G5:~# ifconfig enp1s0:0 192.168.2.32
root@shamim-HP-ProBook-450-G5:~# ifconfig
enp1s0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
        ether 10:e7:c6:e4:db:06  txqueuelen 1000  (Ethernet)
        RX packets 0  bytes 0 (0.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 0  bytes 0 (0.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

enp1s0:0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
        inet 192.168.2.32  netmask 255.255.255.0  broadcast 192.168.2.255
        ether 10:e7:c6:e4:db:06  txqueuelen 1000  (Ethernet)

enx00a0c6000000: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.0.179  netmask 255.255.255.0  broadcast 192.168.0.255
        inet6 fe80::d4bf:57de:4b9c:7988  prefixlen 64  scopeid 0x20<link>
        ether 00:a0:c6:00:00:00  txqueuelen 1000  (Ethernet)
        RX packets 51931  bytes 57852206 (57.8 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 31296  bytes 4501997 (4.5 MB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 4638  bytes 1415639 (1.4 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 4638  bytes 1415639 (1.4 MB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

wlp2s0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
        ether 68:ec:c5:01:ec:b2  txqueuelen 1000  (Ethernet)
        RX packets 0  bytes 0 (0.0 B)
```

File Edit View Search Terminal Help

```
    ether 10:e7:c6:e4:db:06  txqueuelen 1000  (Ethernet)
    RX packets 0  bytes 0 (0.0 B)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 0  bytes 0 (0.0 B)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

enp1s0:0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
    inet 192.168.2.32  netmask 255.255.255.0  broadcast 192.168.2.255
    ether 10:e7:c6:e4:db:06  txqueuelen 1000  (Ethernet)

enx00a0c6000000: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 192.168.2.32  netmask 255.255.255.0  broadcast 192.168.2.255
    inet6 fe80::d4bf:57de:4b9c:7988  prefixlen 64  scopeid 0x20<link>
    ether 00:a0:c6:00:00:00  txqueuelen 1000  (Ethernet)
    RX packets 52117  bytes 57914388 (57.9 MB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 31510  bytes 4679664 (4.6 MB)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
    inet 127.0.0.1  netmask 255.0.0.0
    inet6 ::1  prefixlen 128  scopeid 0x10<host>
    loop  txqueuelen 1000  (Local Loopback)
    RX packets 4917  bytes 1504065 (1.5 MB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 4917  bytes 1504065 (1.5 MB)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

wlp2s0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
    ether 68:ec:c5:01:ec:b2  txqueuelen 1000  (Ethernet)
    RX packets 0  bytes 0 (0.0 B)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 0  bytes 0 (0.0 B)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

root@shamim-HP-ProBook-450-G5:~# netstat -r
```

File Edit View Search Terminal Help

```
Destination     Gateway         Genmask         Flags  MSS Window  irtt Iface
192.168.2.0     0.0.0.0         255.255.255.0   U        0 0          0 enp1s0
root@shamim-HP-ProBook-450-G5:~# ip route delete defult via 192.168.2.32
Error: any valid prefix is expected rather than "defult".
root@shamim-HP-ProBook-450-G5:~# ifconfig enp1s0:0 down
root@shamim-HP-ProBook-450-G5:~# ifconfig
enp1s0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
    ether 10:e7:c6:e4:db:06  txqueuelen 1000  (Ethernet)
    RX packets 0  bytes 0 (0.0 B)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 0  bytes 0 (0.0 B)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

enx00a0c6000000: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 192.168.0.179  netmask 255.255.255.0  broadcast 192.168.0.255
    inet6 fe80::d4bf:57de:4b9c:7988  prefixlen 64  scopeid 0x20<link>
    ether 00:a0:c6:00:00:00  txqueuelen 1000  (Ethernet)
    RX packets 3997  bytes 4104092 (4.1 MB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 2125  bytes 587848 (587.8 KB)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
    inet 127.0.0.1  netmask 255.0.0.0
    inet6 ::1  prefixlen 128  scopeid 0x10<host>
    loop  txqueuelen 1000  (Local Loopback)
    RX packets 6815  bytes 2133259 (2.1 MB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 6815  bytes 2133259 (2.1 MB)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

wlp2s0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
    ether 68:ec:c5:01:ec:b2  txqueuelen 1000  (Ethernet)
    RX packets 0  bytes 0 (0.0 B)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 0  bytes 0 (0.0 B)
```