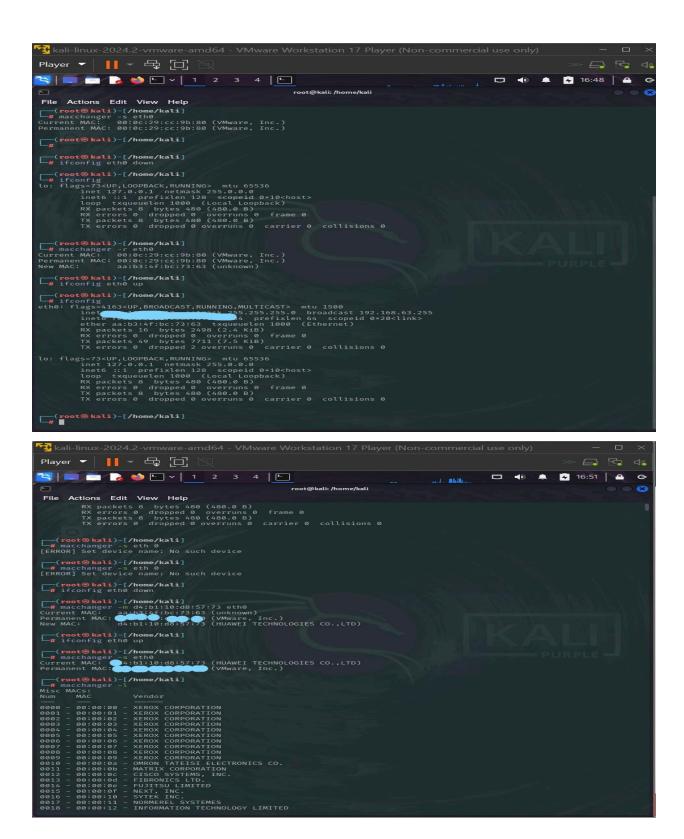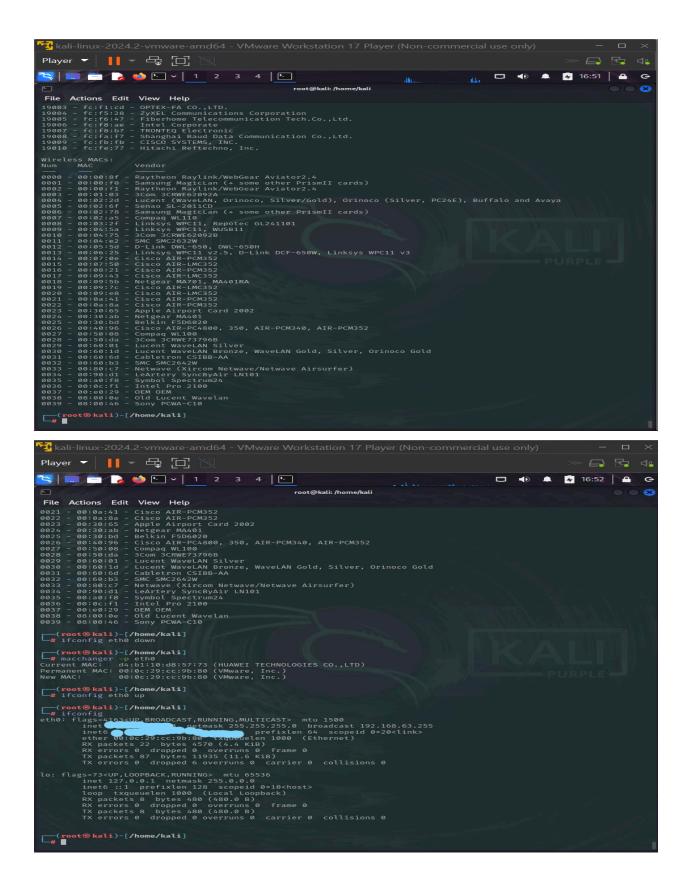# SPOOFING MAC ADDRESS WITH MACCHANGER

**Tools : KALI LINUUX**

**Macchanger** is a Linux utility that allows you to modify the MAC address of your network interface. It's useful for privacy, troubleshooting, and network configuration testing.  This is useful when performing penetration tests or other audits in order to evade detection.

**Input from kali :**

root@kali: /home/kali

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```
┌──(root㉿kali)-[/home/kali]
└─# macchanger -s eth0
Current MAC:   00:0c:29:cc:9b:80 (VMware, Inc.)
Permanent MAC: 00:0c:29:cc:9b:80 (VMware, Inc.)

┌──(root㉿kali)-[/home/kali]
└─#

┌──(root㉿kali)-[/home/kali]
└─# ifconfig eth0 down

┌──(root㉿kali)-[/home/kali]
└─# ifconfig
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 8  bytes 480 (480.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 8  bytes 480 (480.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

┌──(root㉿kali)-[/home/kali]
└─# macchanger -r eth0
Current MAC:   00:0c:29:cc:9b:80 (VMware, Inc.)
Permanent MAC: 00:0c:29:cc:9b:80 (VMware, Inc.)
New MAC:       aa:b3:4f:bc:73:63 (unknown)
┌──(root㉿kali)-[/home/kali]
└─# ifconfig eth0 up
┌──(root㉿kali)-[/home/kali]
└─# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet            netmask 255.255.255.0  broadcast 192.168.63.255
        inet6                            4  prefixlen 64  scopeid 0x20<link>
        ether aa:b3:4f:bc:73:63  txqueuelen 1000  (Ethernet)
        RX packets 16  bytes 2498 (2.4 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 49  bytes 7711 (7.5 KiB)
        TX errors 0  dropped 2 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 8  bytes 480 (480.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 8  bytes 480 (480.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

┌──(root㉿kali)-[/home/kali]
└─#
```

root@kali: /home/kali

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```
        RX packets 8  bytes 480 (480.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 8  bytes 480 (480.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

┌──(root㉿kali)-[/home/kali]
└─# macchanger -s eth 0
[ERROR] Set device name: No such device

┌──(root㉿kali)-[/home/kali]
└─# macchanger -s eth 0
[ERROR] Set device name: No such device

┌──(root㉿kali)-[/home/kali]
└─# ifconfig eth0 down

┌──(root㉿kali)-[/home/kali]
└─# macchanger -m d4:b1:10:d8:57:73 eth0
Current MAC:   aa:b3:4f:bc:73:63 (unknown)
Permanent MAC:                    (VMware, Inc.)
New MAC:       d4:b1:10:d8:57:73 (HUAWEI TECHNOLOGIES CO.,LTD)

┌──(root㉿kali)-[/home/kali]
└─# ifconfig eth0 up

┌──(root㉿kali)-[/home/kali]
└─# macchanger -s eth0
Current MAC:   d4:b1:10:d8:57:73 (HUAWEI TECHNOLOGIES CO.,LTD)
Permanent MAC:                    (VMware, Inc.)

┌──(root㉿kali)-[/home/kali]
└─# macchanger -l
Misc MACs:
Num     MAC         Vendor

0000 - 00:00:00 - XEROX CORPORATION
0001 - 00:00:01 - XEROX CORPORATION
0002 - 00:00:02 - XEROX CORPORATION
0003 - 00:00:03 - XEROX CORPORATION
0004 - 00:00:04 - XEROX CORPORATION
0005 - 00:00:05 - XEROX CORPORATION
0006 - 00:00:06 - XEROX CORPORATION
0007 - 00:00:07 - XEROX CORPORATION
0008 - 00:00:08 - XEROX CORPORATION
0009 - 00:00:09 - XEROX CORPORATION
0010 - 00:00:0a - OMRON TATEISI ELECTRONICS CO.
0011 - 00:00:0b - MATRIX CORPORATION
0012 - 00:00:0c - CISCO SYSTEMS, INC.
0013 - 00:00:0d - FIBRONICS LTD.
0014 - 00:00:0e - FUJITSU LIMITED
0015 - 00:00:0f - NEXT, INC.
0016 - 00:00:10 - SYTEK INC.
0017 - 00:00:11 - NORMEREL SYSTEMES
0018 - 00:00:12 - INFORMATION TECHNOLOGY LIMITED
```

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```
19003 - fc:f1:cd - OPTEX-FA CO.,LTD.
19004 - fc:f5:28 - ZyXEL Communications Corporation
19005 - fc:f6:47 - Fiberhome Telecommunication Tech.Co.,Ltd.
19006 - fc:f8:ae - Intel Corporate
19007 - fc:f8:b7 - TRONTEQ Electronic
19008 - fc:fa:f7 - Shanghai Baud Data Communication Co.,Ltd.
19009 - fc:fb:fb - CISCO SYSTEMS, INC.
19010 - fc:fe:77 - Hitachi Reftechno, Inc.

Wireless MACs:
Num    MAC             Vendor

0000 - 00:00:8f - Raytheon Raylink/WebGear Aviator2.4
0001 - 00:00:f0 - Samsung MagicLan (+ some other PrismII cards)
0002 - 00:00:f1 - Raytheon Raylink/WebGear Aviator2.4
0003 - 00:01:03 - 3Com 3CRWE62092A
0004 - 00:02:2d - Lucent (WaveLAN, Orinoco, Silver/Gold), Orinoco (Silver, PC24E), Buffalo and Avaya
0005 - 00:02:6f - Senao SL-2011CD
0006 - 00:02:78 - Samsung MagicLan (+ some other PrismII cards)
0007 - 00:02:a5 - Compaq WL110
0008 - 00:03:2f - Linksys WPC11, Repotec GL241101
0009 - 00:04:5a - Linksys WPC11, WUSB11
0010 - 00:04:75 - 3Com 3CRWE62092B
0011 - 00:04:e2 - SMC SMC2632W
0012 - 00:05:5d - D-Link DWL-650, DWL-650H
0013 - 00:06:25 - Linksys WPC11 v2.5, D-Link DCF-650W, Linksys WPC11 v3
0014 - 00:07:0e - Cisco AIR-PCM352
0015 - 00:07:50 - Cisco AIR-LMC352
0016 - 00:08:21 - Cisco AIR-PCM352
0017 - 00:09:43 - Cisco AIR-LMC352
0018 - 00:09:5b - Netgear MA701, MA401RA
0019 - 00:09:7c - Cisco AIR-LMC352
0020 - 00:09:e8 - Cisco AIR-LMC352
0021 - 00:0a:41 - Cisco AIR-PCM352
0022 - 00:0a:8a - Cisco AIR-PCM352
0023 - 00:30:65 - Apple Airport Card 2002
0024 - 00:30:ab - Netgear MA401
0025 - 00:30:bd - Belkin F5D6020
0026 - 00:40:96 - Cisco AIR-PC4800, 350, AIR-PCM340, AIR-PCM352
0027 - 00:50:08 - Compaq WL100
0028 - 00:50:da - 3Com 3CRWE73796B
0029 - 00:60:01 - Lucent WaveLAN Silver
0030 - 00:60:1d - Lucent WaveLAN Bronze, WaveLAN Gold, Silver, Orinoco Gold
0031 - 00:60:6d - Cabletron CSIBB-AA
0032 - 00:60:b3 - SMC SMC2642W
0033 - 00:80:c7 - Netwave (Xircom Netwave/Netwave Airsurfer)
0034 - 00:90:d1 - LeArtery SyncByAir LN101
0035 - 00:a0:f8 - Symbol Spectrum24
0036 - 00:0c:f1 - Intel Pro 2100
0037 - 00:e0:29 - OEM OEM
0038 - 08:00:0e - Old Lucent Wavelan
0039 - 08:00:46 - Sony PCWA-C10

┌──(root㉿kali)-[/home/kali]
└─#
```

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```
0021 - 00:0a:41 - Cisco AIR-PCM352
0022 - 00:0a:8a - Cisco AIR-PCM352
0023 - 00:30:65 - Apple Airport Card 2002
0024 - 00:30:ab - Netgear MA401
0025 - 00:30:bd - Belkin F5D6020
0026 - 00:40:96 - Cisco AIR-PC4800, 350, AIR-PCM340, AIR-PCM352
0027 - 00:50:08 - Compaq WL100
0028 - 00:50:da - 3Com 3CRWE73796B
0029 - 00:60:01 - Lucent WaveLAN Silver
0030 - 00:60:1d - Lucent WaveLAN Bronze, WaveLAN Gold, Silver, Orinoco Gold
0031 - 00:60:6d - Cabletron CSIBB-AA
0032 - 00:60:b3 - SMC SMC2642W
0033 - 00:80:c7 - Netwave (Xircom Netwave/Netwave Airsurfer)
0034 - 00:90:d1 - LeArtery SyncByAir LN101
0035 - 00:a0:f8 - Symbol Spectrum24
0036 - 00:0c:f1 - Intel Pro 2100
0037 - 00:e0:29 - OEM OEM
0038 - 08:00:0e - Old Lucent Wavelan
0039 - 08:00:46 - Sony PCWA-C10

┌──(root㉿kali)-[/home/kali]
└─# ifconfig eth0 down

┌──(root㉿kali)-[/home/kali]
└─# macchanger -p eth0
Current MAC:   d4:b1:10:d8:57:73 (HUAWEI TECHNOLOGIES CO.,LTD)
Permanent MAC: 00:0c:29:cc:9b:80 (VMware, Inc.)
New MAC:       00:0c:29:cc:9b:80 (VMware, Inc.)

┌──(root㉿kali)-[/home/kali]
└─# ifconfig eth0 up

┌──(root㉿kali)-[/home/kali]
└─# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet              netmask 255.255.255.0  broadcast 192.168.63.255
        inet6             prefixlen 64  scopeid 0×20<link>
        ether 00:0c:29:cc:9b:80  txqueuelen 1000  (Ethernet)
        RX packets 22  bytes 4570 (4.4 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 87  bytes 11935 (11.6 KiB)
        TX errors 0  dropped 6 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 0×10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 8  bytes 480 (480.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 8  bytes 480 (480.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

┌──(root㉿kali)-[/home/kali]
└─#
```

Here we would be using macchanger to change our mac address.

**Viewing the Help Screen**

Start by viewing the help screen for an overview of the tool's options:

```
macchanger -h
```

**Checking the Current MAC Address**

To see the current MAC address of your interface:

```
macchanger -s eth0
```

**Changing the MAC Address**

**Step 1: Disable the Network Interface**

Before changing the MAC address, the interface must be turned off:

```
ifconfig eth0 down
```

**Step 2: Set a Random MAC Address**

Generate and apply a random MAC address:

```
macchanger -r eth0
```

**Step 3: Re-enable the Network Interface**

Bring the interface back online:

```
ifconfig eth0 up
```

**Step 4: Verify the New MAC Address**

Confirm the change by viewing the MAC address again:

```
macchanger -s eth0
```

**Setting a Specific MAC Address**

If you want to masquerade as a specific device, choose a specific MAC address:

Disable the interface:
```
ifconfig eth0 down
```

   1.

Assign the desired MAC address (e.g., d4:b1:10:d8:57:73):

```
macchanger -m d4:b1:10:d8:57:73 eth0
```

   2.

Re-enable the interface:

```
ifconfig eth0 up
```

   3.

Verify the new MAC address:
```
macchanger -s eth0
```

   4. **Using Locally Administered Address Ranges**

You can assign MAC addresses within these valid ranges:

- x2-xx-xx-xx-xx-xx
- x6-xx-xx-xx-xx-xx
- xA-xx-xx-xx-xx-xx
- xE-xx-xx-xx-xx-xx

Simply replace x with a valid hex digit to create your desired address.

**Finding Vendor-Specific MAC Address Prefixes**

To list MAC address prefixes of specific hardware vendors:

```
macchanger -l
```

**Reverting to the Original MAC Address**

To restore the original, permanent MAC address:

Disable the interface:
```
ifconfig eth0 down
```

1.

Reset to the original MAC:
```
macchanger -p eth0
```

2.
3. Re-enable the interface:
   ```
   ifconfig eth0 up
   ```