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How can I setup the MTU for my network interface?

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MTU [1] (Maximum Transmission Unit) is related to TCP/IP networking in Linux/BSD/UNIX oses. It refers to the size (in bytes) of the largest datagram that a given layer of a communications protocol can pass at a time.

You can see current MTU setting with ifconfig command under Linux:

/sbin/ifconfig

Output:

```
eth0       Link encap:Ethernet  HWaddr 00:0F:EA:91:04:07
           inet addr:192.168.1.2  Bcast:192.168.1.255  Mask:255.255.255.0
           inet6 addr: fe80::20f:eaff:fe91:407/64 Scope:Link
           UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
           RX packets:141567 errors:0 dropped:0 overruns:0 frame:0
           TX packets:141306 errors:0 dropped:0 overruns:0 carrier:0
           collisions:0 txqueuelen:1000
           RX bytes:101087512 (96.4 MiB)  TX bytes:32695783 (31.1 MiB)
           Interrupt:18 Base address:0xc000
```

A better way is to use ip command:

$ ip link list

Output:

```
1: lo:  mtu 16436 qdisc noqueue
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
2: eth0:  mtu 1500 qdisc pfifo_fast qlen 1000
    link/ether 00:0f:ea:91:04:07 brd ff:ff:ff:ff:ff:ff
3: sit0:  mtu 1480 qdisc noop
    link/sit 0.0.0.0 brd 0.0.0.0
```

As you see, MTU set to 1500 for eth0. Let us say you want this to 1400 then you can use any one of the following command to setup MTU:

ifconfig eth0 mtu 1400

OR

ip link set dev eth0 mtu 1400

Verify that new mtu is setup with following command:

$ ip link list

OR

$ /sbin/ifconfig

To make the setting permanent for eth0, edit the configuration file:
/etc/network/interfaces (Debian Linux file)

auto lo
iface lo inet loopback

auto eth0
iface eth0 inet static
name Ethernet LAN card

```
address 192.168.1.2
netmask 255.255.255.0
broadcast 192.168.1.255
network 192.168.1.0
gateway 192.168.1.254
mtu 1400
post-up /etc/fw.start
post-down /etc/fw.stop
```

/etc/sysconfig/network-scripts/ifcfg-eth0 (Red Hat Linux)

```
DEVICE=eth0
BOOTPROTO=static
BROADCAST=192.168.1.255
HWADDR=00:0F:EA:91:04:07
IPADDR=192.168.1.111
NETMASK=255.255.255.0
NETWORK=192.168.1.0
MTU=1400
ONBOOT=yes
TYPE=Ethernet
```

Save the file and restart network service

If you are using Redhat:

service network restart

If you are using Debian:

/etc/init.d/networking restart

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URLs in this post:

[1] MTU: **http://en.wikipedia.org/wiki/MTU_%28networking%29**