

ResNet Troubleshooting

If you have a problem with your connection, please try the following which may resolve your problem.

- Reboot your computer
 - Many problems will resolve themselves if you restart your computer.
- Check your Ethernet Cable
 - Make sure the cable is plugged in securely at both ends. Unplug the cable and plug the cable back in. You may notice two lights one on solid and other flashing. If the cable is damaged in any way (i.e. broken tab or exposed wires) then it must be replaced.
 - Try your cable on a working computer. If it does not work, you not need to get a new cable
 - Try the cable from the working computer on your computer. If it works, you need to get a new cable.
- Try another Data Jack
 - Try connecting your computer to a different data jack. If it works the problem is likely the data jack you were using. Contact the Help Desk to submit a service request.
 - Try another computer on the data jack you were using. If it works, then the problem is not the data jack.
- Release and Renew your IP Address
 - If you are having trouble with your ResNet connection, it may be fixed by releasing and renewing your IP address.
 - The only valid IP addresses on ResNet wired connections will be a 10.254.x.x number. If you are receiving a 169.254.x.x address, this is a Windows address that generally means your network connection is not working properly.

The following instructions tell you how to find your IP address, MAC (hardware) address, DHCP server, DNS server and other useful information needed to troubleshoot a ResNet connection.

1. Click on the **start** button.
2. Select the search window.
3. Type **cmd** in this field, a DOS screen will open.
4. In the DOS screen at the C:\> prompt type the command **ipconfig/all** information similar to that shown below will be displayed.
5. The field containing the MAC address for your machine is labeled Physical Address the Ethernet address will consist of 12 characters, which is a combination of numbers and letters.

```
C:\Windows\system32\cmd.exe
WINS Proxy Enabled. . . . . : No
DNS Suffix Search List. . . . . : FMARION.EDU

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix . : fmarion.edu
    Description . . . . . : Intel(R) 82566DM Gigabit Network Connecti
on
    Physical Address. . . . . : 00-19-D1-A5-E3-69
    DHCP Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . . : Yes
    Link-local IPv6 Address . . . . . : fe80::b1bb:6bde:5f6b:fb3b%11(Preferred)
    IPv4 Address. . . . . : 10.241.30.11(Preferred)
    Subnet Mask . . . . . : 255.255.255.0
    Lease Obtained. . . . . : Wednesday, October 13, 2010 12:15:38 PM
    Lease Expires . . . . . : Thursday, October 14, 2010 12:15:38 PM
    Default Gateway . . . . . : 10.241.30.1
    DHCP Server . . . . . : 10.240.10.2
    DHCPv6 IAID . . . . . : 234887633
    DHCPv6 Client DUID. . . . . : 00-01-00-01-12-4E-AE-83-00-19-D1-72-C0-63

    DNS Servers . . . . . : 10.240.10.2
    . . . . . : 205.152.37.23
    . . . . . : 205.152.144.23
    NetBIOS over Tcpi. . . . . : Enabled
```

Type `ipconfig/release` at the prompt and press enter. Then type `ipconfig/renew` and press enter again. If your connection is okay, a valid IP address, subnet mask and default gateway will be returned to you after a few seconds.

```
C:\WINNT\System32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>ipconfig /release

Windows 2000 IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix . :
    IP Address. . . . . : 0.0.0.0
    Subnet Mask . . . . . : 0.0.0.0
    Default Gateway . . . . . :

C:\>
```

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\jarvidson>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix . : fmarion.edu
    Link-local IPv6 Address . . . . . : fe80::b1bb:6bde:5f6b:fb3b%11
    IPv4 Address. . . . . : 10.241.30.11
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.241.30.1

Tunnel adapter isatap.fmarion.edu:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . : fmarion.edu

C:\Users\jarvidson>
```