

# **Routers-Ports-Firewalls-Anti-virus**

## **Single computer & router setup for on-line MechWarrior4**

Pre-setup definitions

### **Routers:**

Most Internet connections are made via a router. Routers do exactly what their name states. They “route” information. A router in its “simplest form” would be the perfect mailman. Matching a letters address with an actual physical location, delivering it, picking up out-going mail and getting it to its correct address.

### **Ports:**

If you have a router, it has ports. A port in its “simplest form” can be compared to a single water faucet. You open it and water flows, you close it and the water stops. If you open a port, information will flow, if you close it, it will stop.

### **Firewalls:**

Most routers have firewalls and most operating systems have firewalls also. A firewall in its “simplest form” is a filter. It works very much like a port in that it can allow or prevent information transmission. It takes the “open/close” process of a port one step further and gives you the ability to filter it. It can block Internet or network addresses & traffic. The difference between the two is that a port is either “opened or closed” while a firewall has the ability to filter the information that comes through an opened port. Filtering out information you don’t want and letting through the information you do want.

### **Anti-virus:**

Anti-virus programs are one of the major causes of Internet gaming connection failure. Their role is to prevent application hijacking, software scripts and outside influences from writing unauthorized information to your computer and essentially taking it over.

An anti-virus program in its “simplest form” is much like a flue shot. Anti-virus programs install an information database that looks for data likenesses as you serf the net, open programs, download files, etc. When it recognizes a likeness it has stored in its database, it refuses to let the information activate or pass through and has the ability to block transmissions, programs and actions based on the available information in its database. Much like a flue shot, this database includes “samples” of existing viruses to compare to the information flow and to intercept likenesses prior to execution.

The following network setup requires that you have a “basic” understanding of the above information. As we continue below, you will see these words referred to frequently.

The use of the word “address” below unless otherwise specified pertains only to “Internal network addresses” and has nothing to do with your “External Internet” address. Your router is the divider between “Internal” and “External” addressing

## Single computer & router setup for on-line MechWarrior4 Topologies (networking)

### Dynamic DHCP addressing

Most routers and computers are setup (by your Internet provider) with Dynamic DHCP addressing. How it works simplified - You turn on your computer; the router sees it and assigns an address to it. That address is used to send and receive all Internet & network information to and from your computer to its destination and back. Its a “temporary address” and will change when you shut down your computer and re-start it. Most routers have the ability to use UPnP to interface with games and other programs.

Universal Plug and Play (UPnP) is a set of networking protocols promulgated by the UPnP Forum. The goals of UPnP are to allow devices to connect seamlessly and to simplify the implementation of networks in the home (data sharing, communications, and entertainment)

I have found that MW4 is not necessarily one of them and UPNP most times needs to be turned off in the router even in the static addressing instance.

The probability of getting MechWarrior4 running on the Internet using “Dynamic addressing” with or without UPNP is slim to none. Try it first, you may get lucky.

Nothing more to see here, move along....

### Static addressing

Since your original Dynamic (DHCP) addressing scheme has kept you from connecting to MW4, (among many other programs) you will want to change to Static addressing. How it works simplified – You choose an address for your computer & tell the router what that address is. When your computer is turned on it always has the same address. Now you will be able to open the “ports” needed for 2 way negotiations and communications to each individual computer as needed for many games and programs.

The information here > <http://www.homenethelp.com/web/howto/static-ip-address.asp> will help you change over to the internal STATIC addressing scheme.

If you plan on having 2 or more computers in your home running the same games or programs at the same time, you will need to configure each computer as detailed in the how-to and give each one its own unique static IP address.

**Note!** Choose addresses above the 100 range for your computer(s).

Example > Computer A = 192.168.1.120 Computer B = 192.168.1.125 Computer C = 192.168.1.130 and so on.

After you have setup static addressing on your router and computer(s), you will need to re-boot the router first and then the computers. Having re-booted your router/computer(s), you should check and make sure they all connect to the Internet. I suggest you write each computer(s) STATIC address on a small sticker and stick it to the case. It will assure quick ease of access to the computers address.

## **Single computer & router setup for on-line MechWarrior4 Ports**

### **Ports:**

MW4 requires (like many other programs) ports to be opened in your router for communication flow to and from the Internet to your computer.

**Ports must be opened in your routers port forwarding configuration page, and they must be forwarded (opened to) the address of the computer you wish to play on.**

One of the best links for port forwarding is here > <http://portforward.com/> Do not use the listed ports for MechWarrior 4 at that site. Use only the ports below.

If you do a search on the Internet on How to Port forward (your router name), you will probably hit the jackpot and have the exact router adjustment procedure for your router.

The following is the list of ports that will need to be opened in your router to your computers network address to facilitate the required 2-way communication.

- To guarantee DirectPlay compatibility, the latest version of DirectX should be installed on the computers that are used by all players who participate in the game.
- The following TCP and UDP ports must be open on the firewall or proxy server:

**\*\*\*\*Using DirectX 7 or an earlier version (MW4 is DX7)\*\*\*\***

### **Choose 1 Only**

#### **Ports for Host configuration (Server)**

Initial TCP Connection 47624 Outbound 47624 Inbound  
Subsequent TCP Inbound 2300-2400 2300-2400  
Subsequent TCP Outbound 2300-2400 2300-2400  
Subsequent UDP Inbound 2300-2400 2300-2400  
Subsequent UDP Outbound 2300-2400 2300-2400

### **OR**

#### **Ports for Client configuration only (Gamer)**

Subsequent TCP Inbound 2300-2400 2300-2400  
Subsequent TCP Outbound 2300-2400 2300-2400  
Subsequent UDP Inbound 2300-2400 2300-2400  
Subsequent UDP Outbound 2300-2400 2300-2400

**Note! You CANNOT have the server port 47624 open to more than (1) computer.  
You can play on a server-configured machine.**

## **Single computer & router setup for on-line MechWarrior4 Firewall & Anti-virus**

### **Anti-virus:**

You must make sure that any Anti-virus program you are using will not block MechWarrior4. To do this you must make an exception in your anti-virus program for the MechWarrior4 Mercenaries program. All anti-virus programs are different so you will need to look up your anti-virus software information and read how to “make a program exception”. Once an exception is made for MechWarrior4 Mercenaries, your anti-virus program will “not block” the game.

### **Firewalls:**

If your computer is running a firewall, you must also make an exception for MechWarrior 4 Mercenaries within it. There are many firewalls and you will need to look the information up for your particular flavor or version.

If you are running Windows Firewall in Windows XP, follow the information below.

#### In Windows XP

GO TO > Start, Control Panel, Windows Firewall. Click the exceptions tab, click Add Program, Click Mechwarrior 4 Mercenaries. Click ok and done.

**See “On-line setup/server info” in the help files for info on connecting to servers.**

At this point you should be able to connect and play MechWarrior4 on the Internet. If you can't, go back and check all the adjustments you have made, fix possible mistakes and give it another try. (most likely you've missed something)

### **Lastly:**

Mentioned above on page 2 is UPnP (universal plug and play). MechWarrior4 is NOT UPnP friendly and UPnP may cause MechWarrior4 NOT to connect and run. If your having problems after you have done all the above, go into your router and (disable) or turn off UPnP and give it another try. It just may do the trick.

Questions or help needs should be directed to:

Sunderjunkies here > <http://www.sunderjunkies.com/>

**or**

MekTek here > <http://www.mektek.net/forums/>