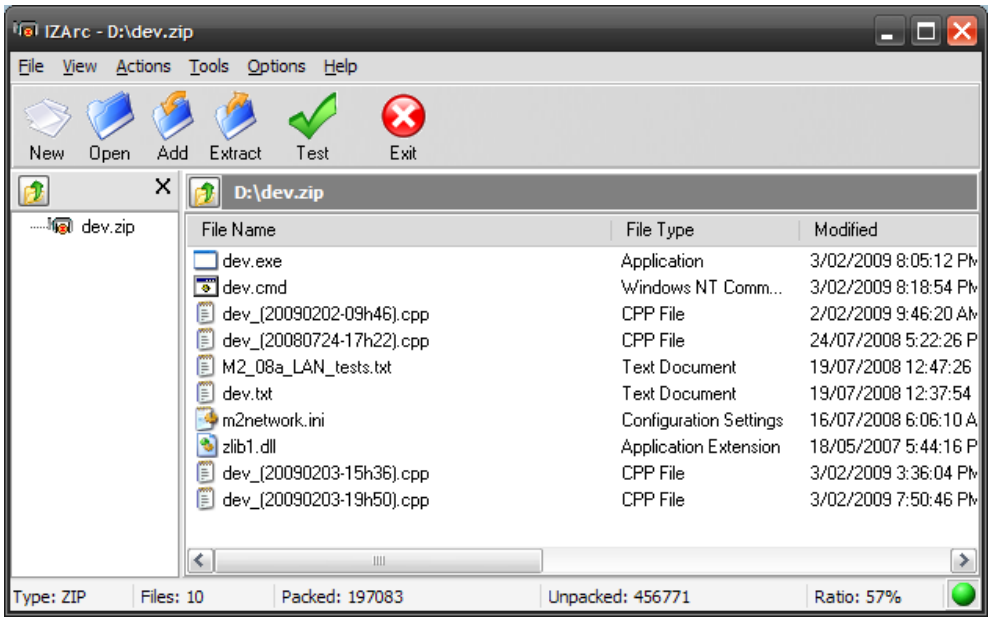
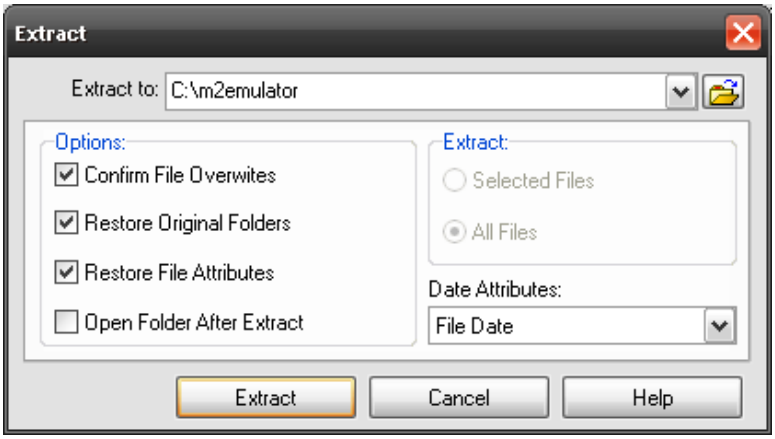
Installation

Extracting the dev zip archive

You will next need to **unzip** the files into a directory of your choice. We recommend placing the contents of files into the same folder as the emulator. Usually double clicking the file will open the **.zip** file with your archive utility showing you the files within.



From here, you will usually click **extract** to unpack the contents of the archive into the directory you choose. If you chose to place the files in the same directory as the emulator you will need to overwrite any existing m2network.ini file for the dev program to work properly. *Note: this screen and procedure may vary depending on the software you have installed to manage archived files.*



Requirements

Forwarding ports in your router

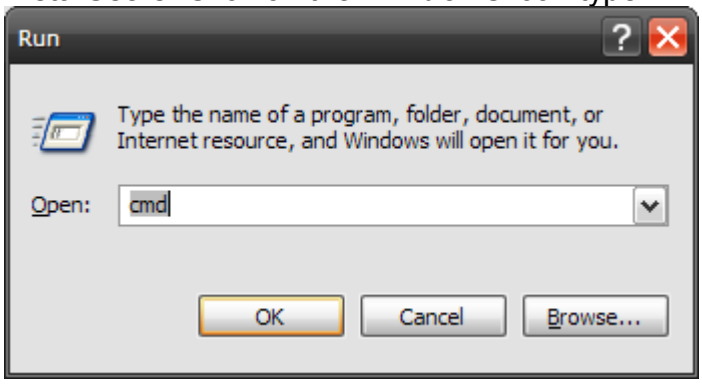
WARNING: This section involves altering internal settings in your modem/router device. It is recommended to have someone who is experienced with you when altering these types of settings. Alter at your own risk.

The dev program is already configured to accept and send packets through the Internet on UDP port 9001. If you have a router you will need to ensure that you have forwarded this port to be able to connect online.

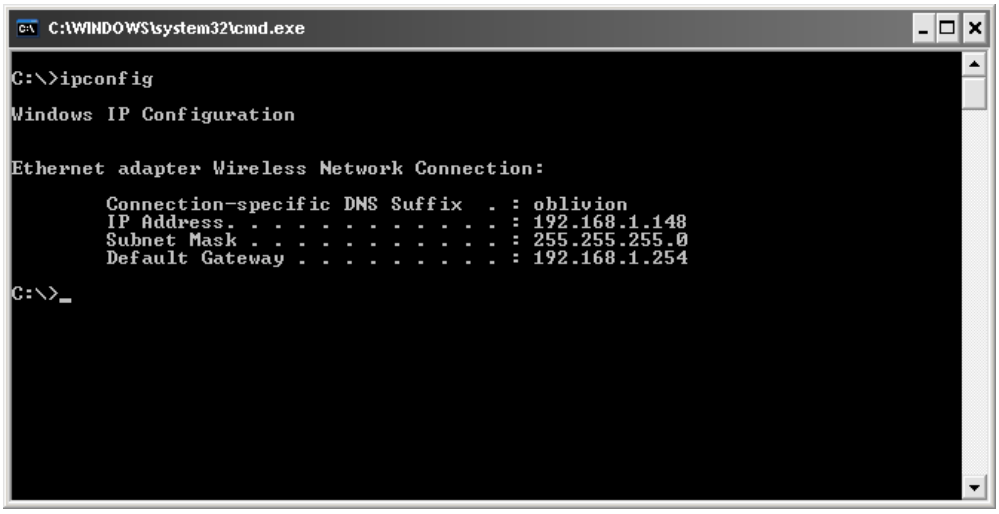
Before this it is best to determine what the **local IP address** of your PC is.

To discover your **PC's local network IP address**, enter the command prompt and type *ipconfig*.

XP Users: **START – Run**, type **CMD** and click **OK.**
Vista Users: Click on the **Windows** icon type **CMD** in the search and hit enter.



Example only:



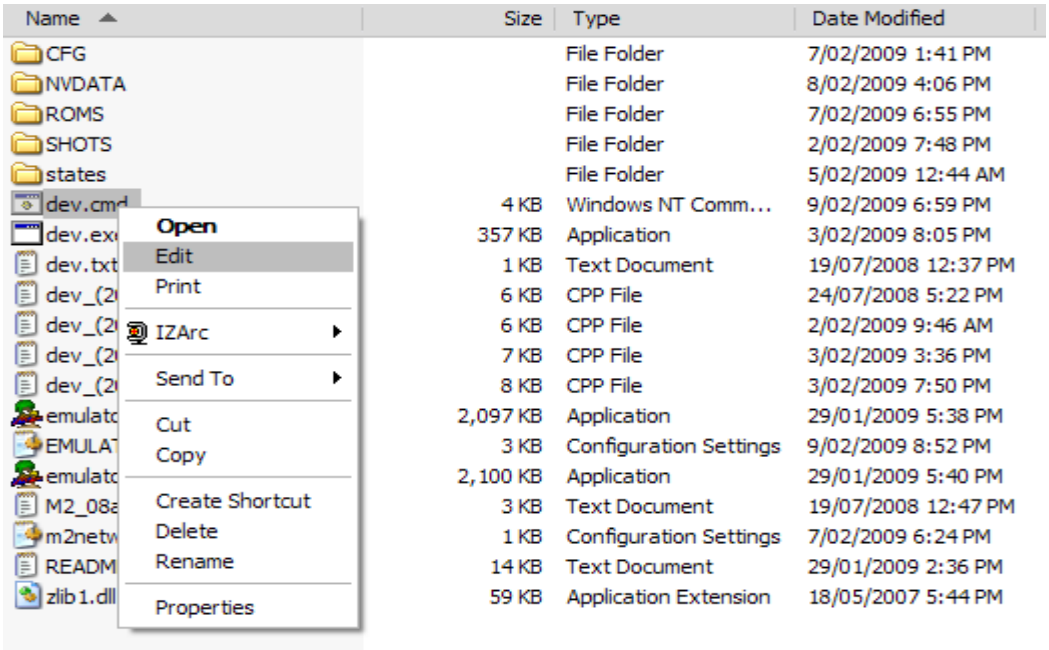
The next step is to access your modem/router using the **Default Gateway IP address** as seen like above. Enter this address in your browser's address bar to access the modem/router.
The next step of this process includes discovering the page in your mode/router to forward the port. A good guide on how to forward ports is located here:
http://www.portforward.com/english/routers/port_forwarding/routerindex.htm

When you locate the correct section, ensure that you forward port 9001 to your **PC's local IP address.** When asked what type UDP or TCP, **choose UDP**, if not selectable BOTH will usually be the default which will also work the same. Apply your settings for them to take effect and if you wish to keep them permanent, save your configuration to the device's flash memory.

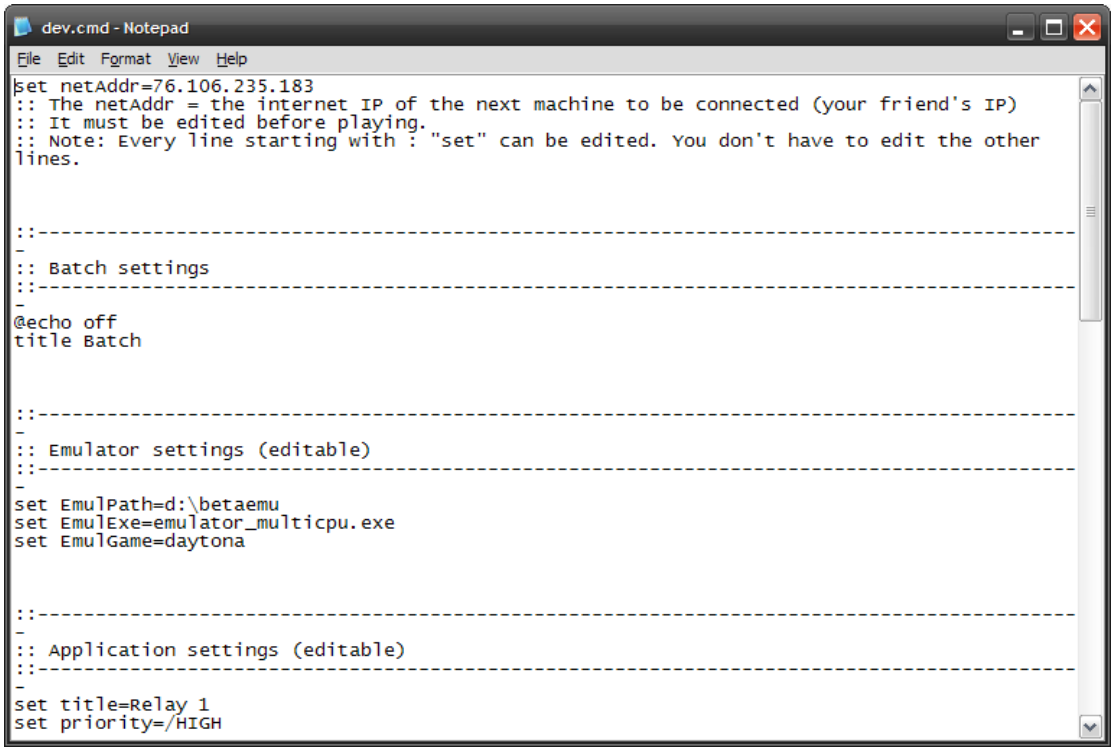
Usage

Inserting the IP addresses

Once you have reached this step, you need to do is enter the NET IP Address of the other player in the ring. You do this by only needing to edit one file, the **dev.cmd** file.



All you need to do is replace the IP address below with the next opponents NET IP address. NET IP addresses are easily determined by visiting http://whatismyip.com/



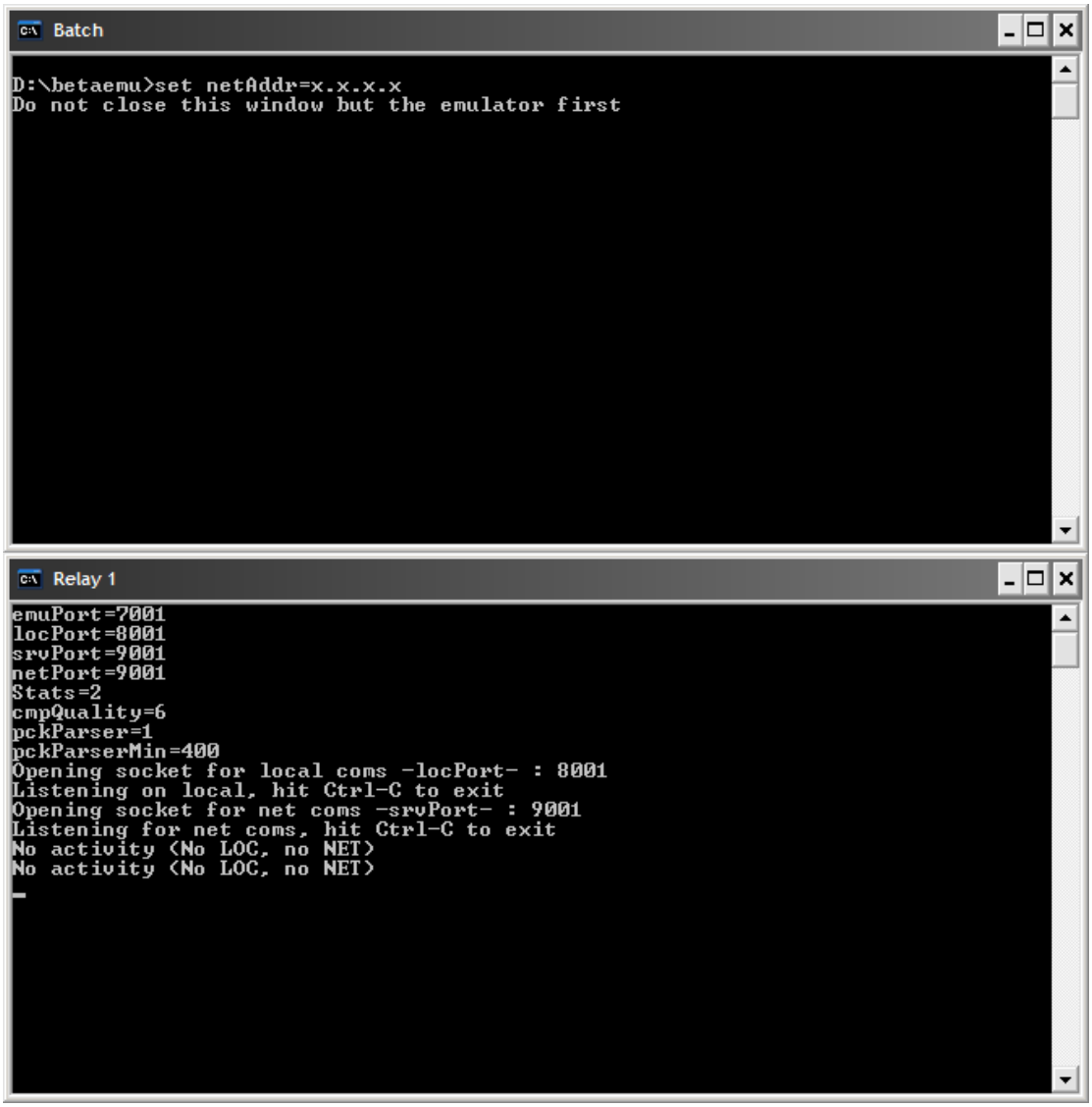
Remember to follow the Token Ring topology by pointing your IP addresses in a loop.

Example:
Player1 > Player 2 > Player 3 > Player 1

Running the program

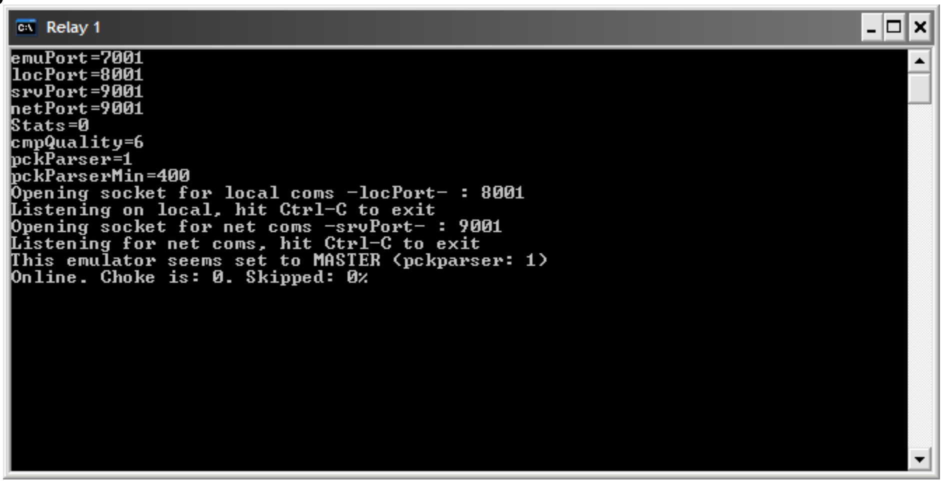
Once you have configured the above, running the same **dev.cmd** file is all that is needed to start the game. If you installed it in the same directory as the emulator, it should auto boot the emulator and the game for you, if not then you will need to configure the emulpath as mentioned in the next section. Be sure that only one player is set as master and the others are slaves in the test menu of the game (F2 – Game system settings).

After you execute the dev.cmd file, you should see 2 DOS windows load up and they need to stay open:

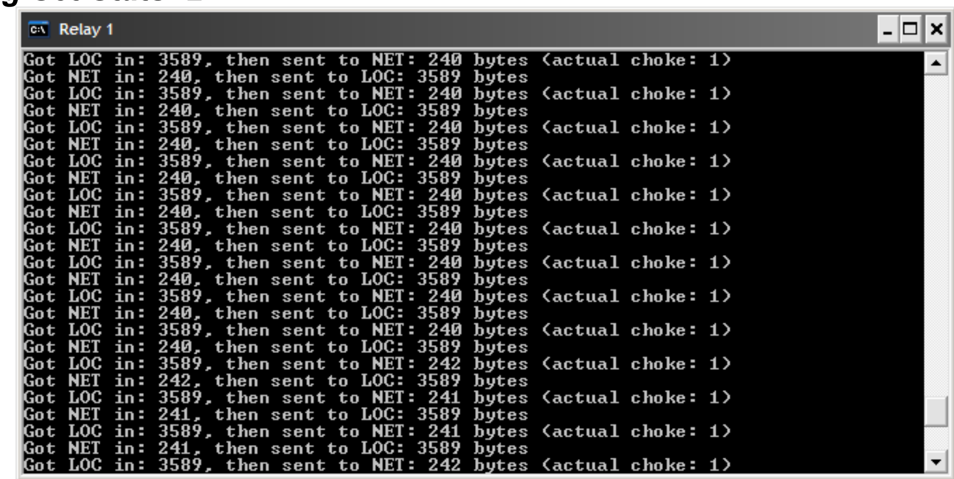


If one of them crashes for any of the players it is best for everyone to close the emulators then any pending DOS windows and start the dev.cmd file again. If you are sending and receiving perfectly, you will see the statistics similar as follows:

Using Set Stats=0



Using Set Stats=2



Advanced tweaking

If you would like to experiment with the settings you can do so by editing the **dev.cmd** file as you did earlier to insert the IP address.

Here is a list of settings that can be altered:

Emulator settings

set netAddr=x.x.x.x: *where x.x.x.x is the IP address of the next player in the ring.*

set EmulPath=x: *where x is the directory of where the emulator's execution file lies (EG: C:\Model2Emu).*

set EmulExe=x: *where x is the filename of the executable you wish to use (emulator.exe or emulator_multicpu.exe).*

set EmulGame=x: *where x is the romset name of the game you wish the tool to automatically load (EG: Daytona).*

Application settings

set emuPort *is the emulator listening port for communication with the dev application (must be the same as RxPort in the m2network.ini).*

set locPort *is the dev's listening port for local communication with the emulator (must be the same as NextPort in the m2network.ini).*

set srvPort *is the local dev's listening port for net communications.*

set netPort *is the far internet/LAN dev's listening port for net communications (do not forget to forward this port on your router settings !).*

set Stats=x: *where x can be 0, 1 or 2 depending on the level of details you wish to see in the relay screen.*

set cmpQuality=x: *where x can be 0 (none) to 9 (max) for the level of compression of the UDP packets.*

set pckParser=x: *where x can be 0, 1, 2, etc. This options enables skipping of packets to reduce the bandwidth requirement. e.g. 1=skip 50%, 2=skip 66%, 3=skip 75%, 4=skip 80%, etc... Note: This setting is effective only when the emulator is set to master (auto detected normally).*

set pckParserMin=x: *where x is the file size of bytes you do not wish to skip when enabling the pckparser in master mode (recommended not lower than 80).*

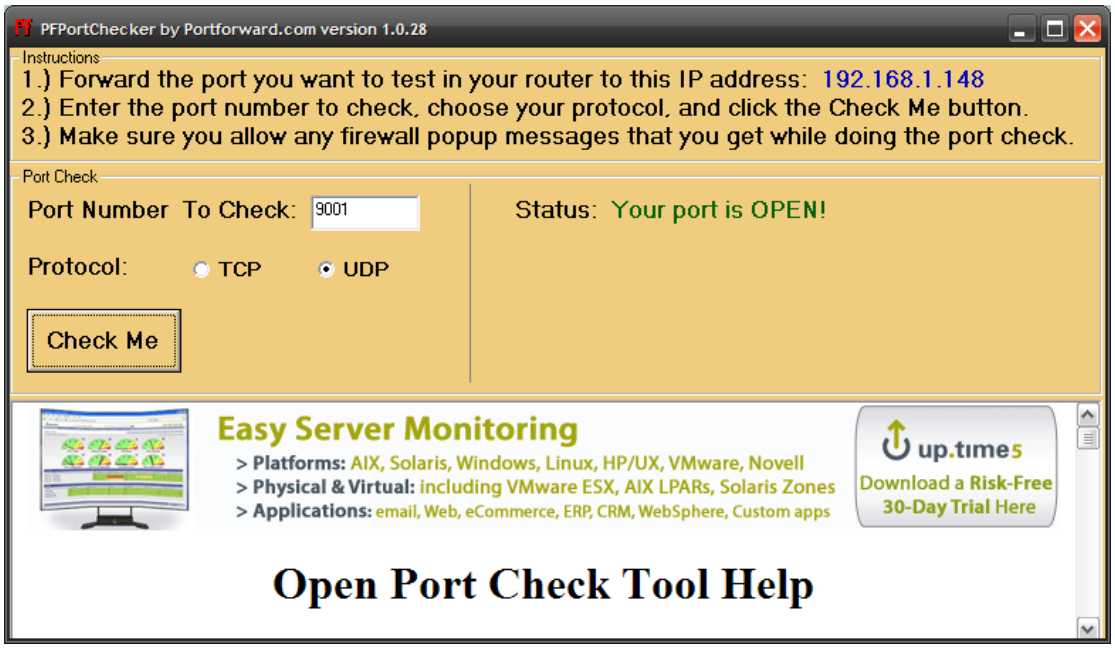
Troubleshooting

If you are unable to connect online, there are a number of steps to take to troubleshoot the problem.

Verifying the required port is open

The easiest way to check if the port forwarding is functional is to download and install the port checker tool here:
http://www.portforward.com/help/portcheck.htm

Run the port checker and enter the required port (default UDP 9001) and click **Check Me**. The desired result is OPEN, anything else may pose a problem with the port forwarding rule.



Double checking m2network.ini

Please be sure that you use **the m2network.ini** file from the Daytona Online Tool. By default it is configured as follows:

[Network]
RxPort=7001
NextIP=127.0.0.1
NextPort=8001

These values have been set for you in order for the tool to work with its default settings.

Verifying your IP address

Some players may have static IP addresses that don't change and others may have dynamic that can change when the router/model is rebooted for example or the connection to their ISP is dropped. Always verify that IP addresses have not changed if reusing IP addresses from an earlier game.

Also verify that you have not entered any dummy spaces in the **dev.cmd** file where you entered the next player's IP address either at the beginning, middle or end of the line. This may cause the application to not detect the IP address correctly.

Verifying the ring

It is common for someone who is planning a game to be not pointing to the correct player in the ring. Always verify that everyone points to one another in the ring format as required and that only one person is master and rest are slaves (EG: p1(master)>p2>p3>p4>p1 etc).

Ensure you have required bandwidth

You should be able to connect online with any broadband connection (2 players - not dialup) as long as your connection speed has not been shaped (eg: 64k). Remember for residential Internet plans the upload speed is most commonly lower than the downstream so this will be the real speed when connecting online as the data feeds in a ring. To take a test visit: http://speedtest.net/