

# Running Multiplayer Races Using rFactor 1.0

<http://www.rfactor.net>



## Overview

This document is to help the average computer user setup their firewall and or router so that they can play and host rFactor races.

### Section 1: Hosting a race versus joining a race

To join a race you do not need to change anything to your existing Internet connection. To host a race you will need to allow other drivers to connect to your computer. By hosting the race you can specify the rules, track and allowable cars. In order to have other drivers join your race you will have to open ports in any existing firewall.

### Section 2: Port Information

To host games or a dedicator server you will need to open some ports so that other drivers can connect to your game. There are three types of games you can host. You can host a LAN only game, an Internet only game, or a LAN and Internet game. For any game you want to host on a LAN you will need to open up the ports in Table 2.1.

**Table 2.1** Ports required for successfully hosting LAN races

Port Number	Transport	Description
34447	TCP	Session, Race and Chat Information
34297	UDP	LAN Query Information
34397	UDP	Race Event Information

If you want to host the game only over the Internet you only need to open up the ports in Table 2.2.

**Table 2.2** Ports required for successfully hosting Internet only races

Port Number	Transport	Description
34447	TCP	Session, Race and Chat Information
34397	UDP	Race Event Information

## **Section 3: Port Forwarding and Firewall Exceptions**

### **3.1 Section Overview**

In general, some type of firewall protects computers on the Internet. If you are not behind any type of firewall you can ignore this section. Also if you never intend on hosting any races you can skip this section.

### **3.2 Description of a firewall**

A firewall is either a piece of software that runs on your computer or a hardware device that sits between your modem and your computer. A router that performs network address translation is considered to be a firewall. Common software firewalls are ZoneAlarm, BlackICE, Norton Internet Security, McAfee Firewall and Windows XP Service Pack 2 firewall. Linksys, Netgear, Dlink, Belkin and Cisco manufacture common hardware firewalls.

### **3.3 Driver Join Sequence**

When a driver attempts to join your race, that driver will get the address of your race from either a matchmaker service or by direct IP. Regardless of which way the driver gets this information, the driver will attempt to connect and be confronted by your firewall. If your firewall does not let him in, he cannot join your race. You firewall must be setup so that when the driver attempts to connect to your race it forwards his connection request to computer hosting the race instead of blocking the request. Once your firewall is setup correctly the driver will be able to join your race.

### **3.4 Allowing access**

In order to host a race you will need to configure your software and/or hardware firewall to allow other drivers to connect to your computer. To do this you will need to enable port forwarding or add exceptions to your firewalls rules. It is beyond the scope of this document to give detailed instructions on how to enable port forwarding or exceptions for every possible software and hardware firewall. Section 4 attempts to give instructions for the most popular firewall solutions. Please consult documentation that came with your firewall product.

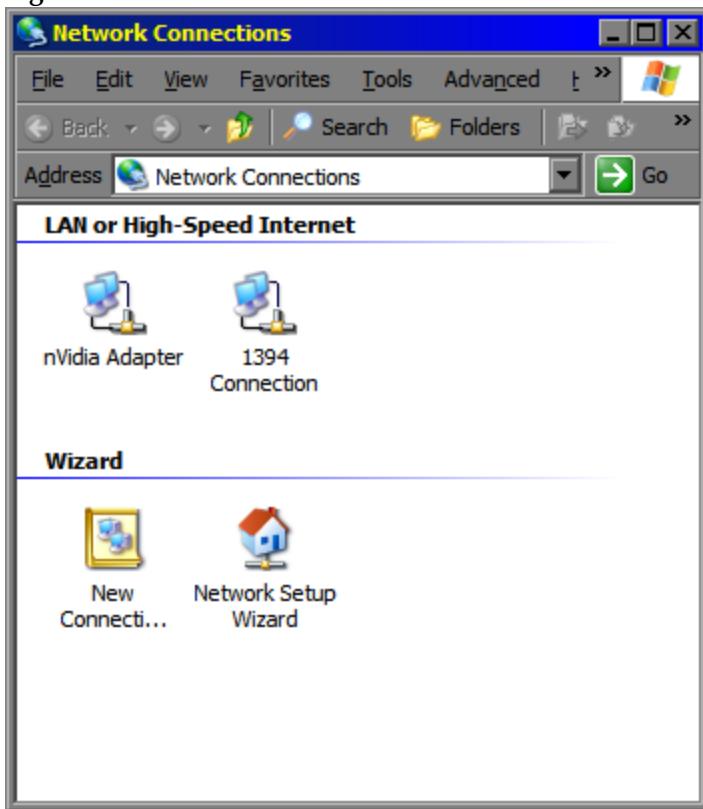
Once you have discovered how to setup port forward and/or setup firewall exceptions you will need to make sure those changes reflect the ports listing in **Table 2.1** and **2.2**.

## **Section 4. Setting up port forwarding and firewall exceptions**

Section 4.1 Windows Xp Service Pack 2 Software Firewall

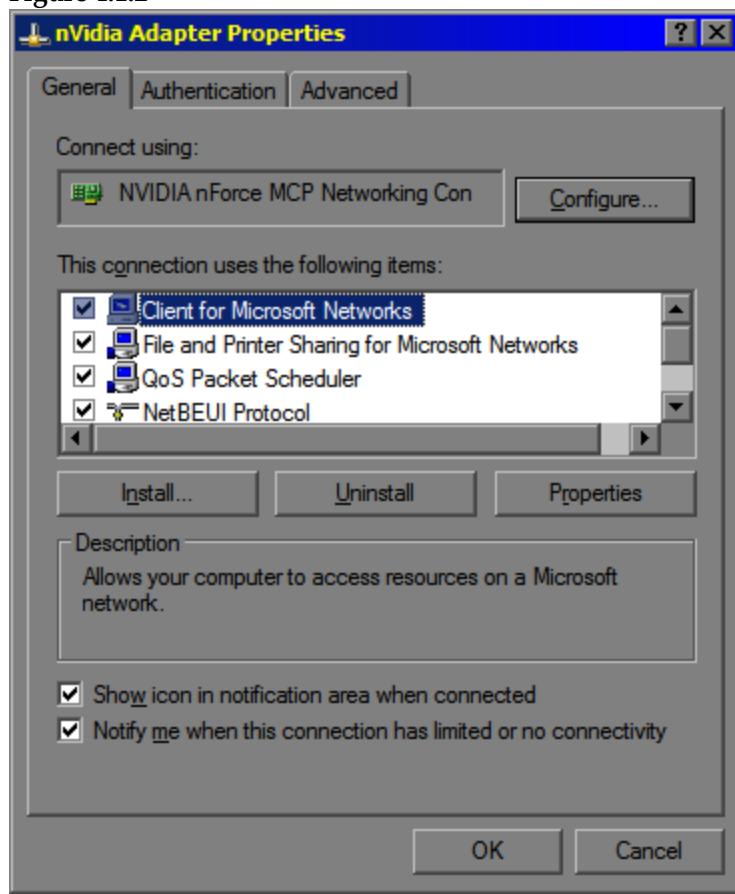
Right Click on My Network and Select Properties you should see a window like **Figure 4.1.1.**

**Figure 4.1.1**



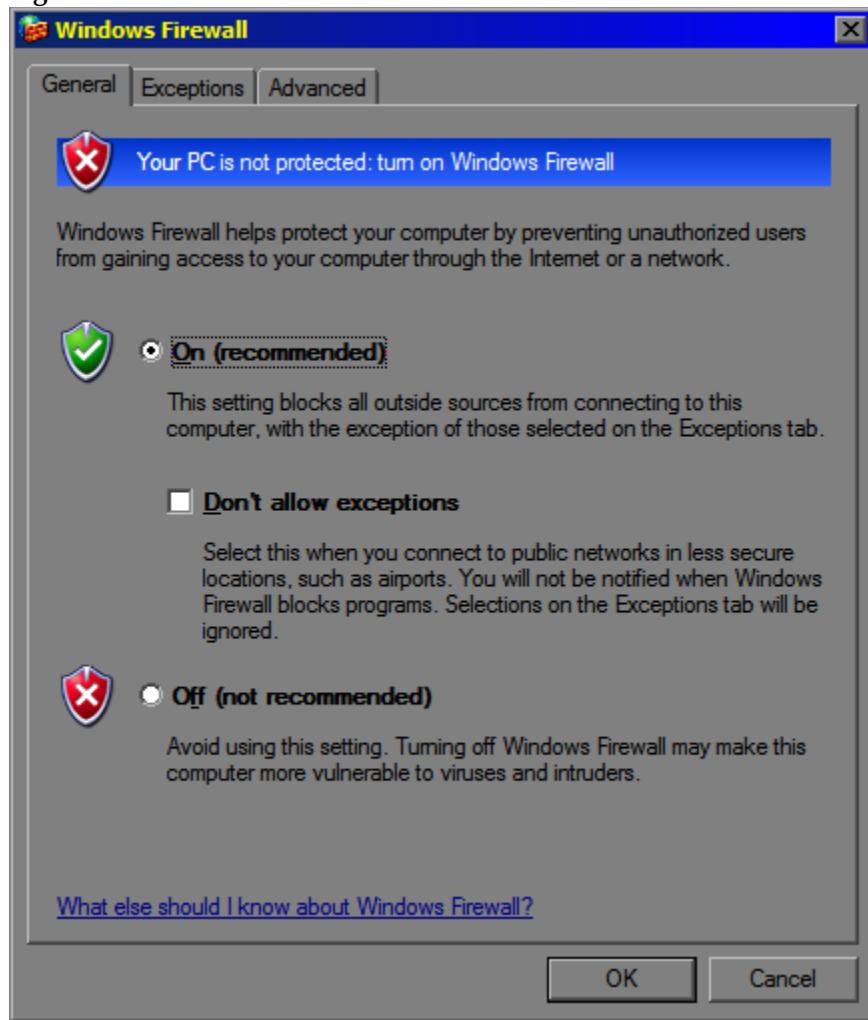
Right click on your network adapter and select Properties. You should see a screen like **Figure 4.1.2**.

**Figure 4.1.2**



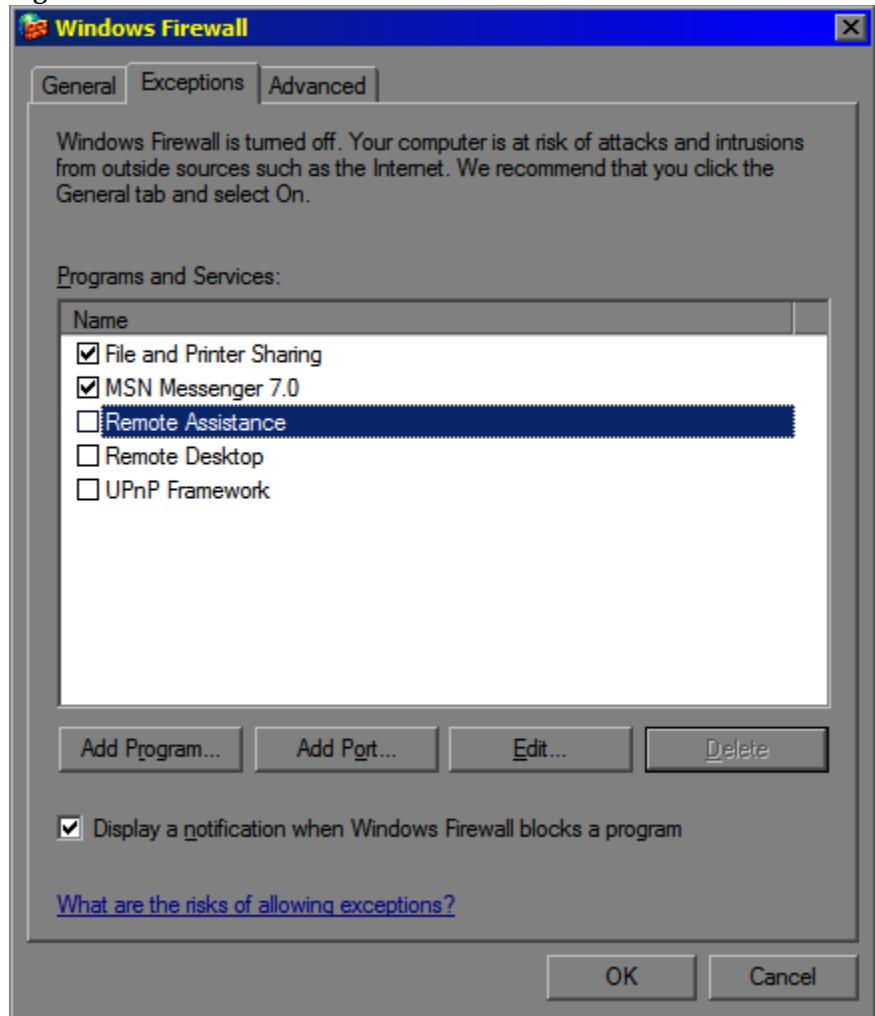
Select the Advanced tab and then click on the settings then you should see a screen like **Figure 4.1.3**.

**Figure 4.1.3**



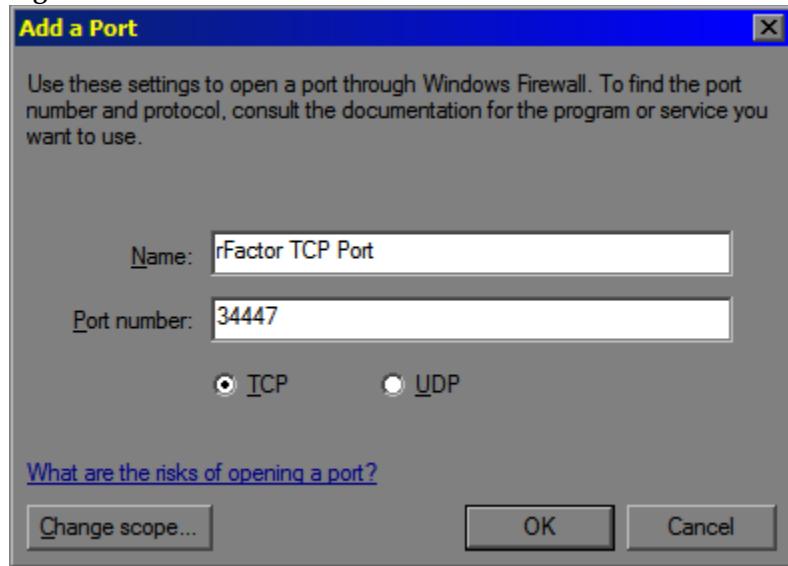
Click on the Exceptions tab. You should see a screen like **Figure 4.1.4**.

Figure 4.1.4



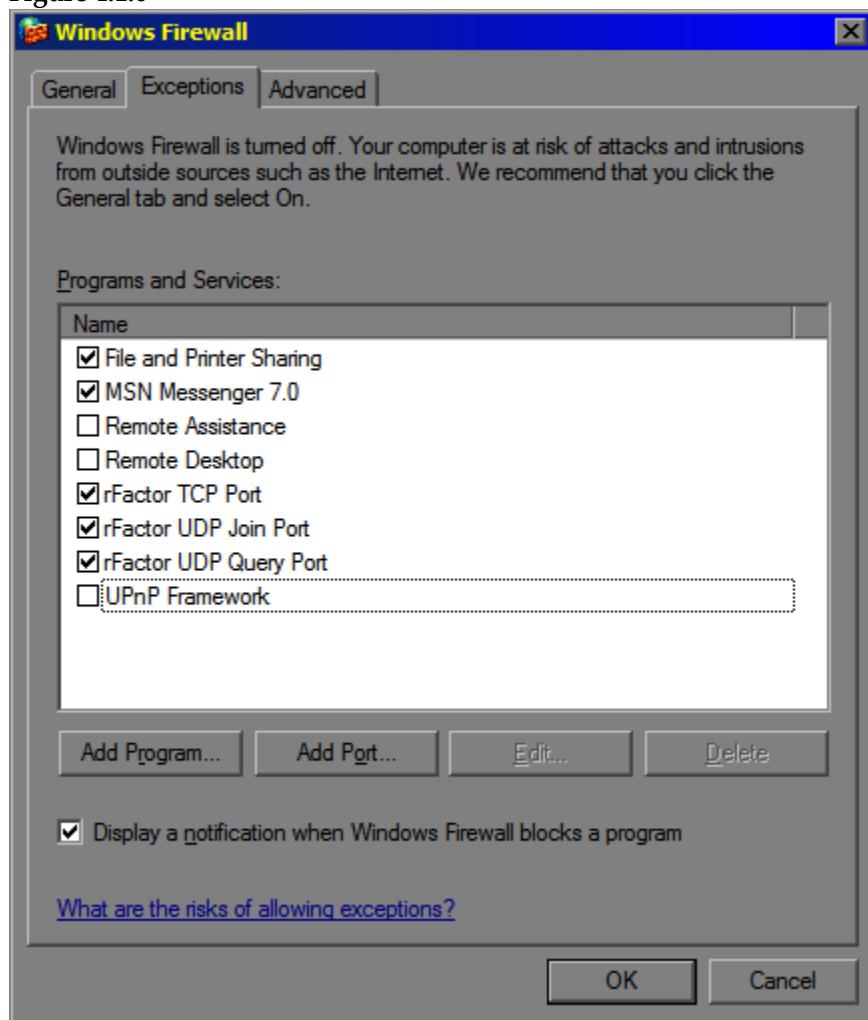
Click on Add Port... You should see a screen like **Figure 4.1.5**.

**Figure 4.1.5**



Enter in the information based on **Tables 2.1** and **2.2**. You will have to add a port for each row of those tables. Once you're done you should see something like **Figure 4.1.6**.

**Figure 4.1.6**



At this point you have successfully setup Windows XP Service Pack 2 Firewall to allow hosted races on this computer to be joined. Make sure that any other hardware firewalls are also properly configured.