



DaddyO's Hosting TIPS and Guide:

I'm certainly no lan/wan expert, and I'm not quite sure I have all the possible settings you may require covered in this guide, but these are the parts I know about at least. This is a rough and ready guide which I hope at least points you in the right direction!

3 moving parts govern hosting and connection using IL2 - for now we'll leave Hyperlobby out of it, because you can and should be able to host directly from IP without HL if things are working OK. In fact HL can sometimes cause problems of its own, so if/when starting to host its best to setup and test first without it.

1.) **Your Router** - which has an external IP address and needs to allow thru put from the outside players, through to your local PC and to the IL2FB.exe process running on your local PC - this is called port forwarding.

a. Firewalls - your router may have its own firewall in place as well. These may prevent processes (like the player's IL2FB.exe process) from connecting thru to your game. Normally firewalls are all setup to be turned on, and normally by default are setup to block any and all incoming connections from IL2FB to your external router, and to your internal local PC - unless you tell them to ignore blocking IL2FB.exe.

2.) **Your local PC** - which has an internal IP address (different from your router), and runs the IL2FB.exe and hosts the games.

a. Firewalls - your local operating system also has its own firewall in place as well. These can also prevent processes (like the player's IL2FB.exe process) from connecting thru to your game. Again you can turn these off entirely - though this is not as secure, or you can tell them to allow processes like IL2FB.exe thru as an exception.

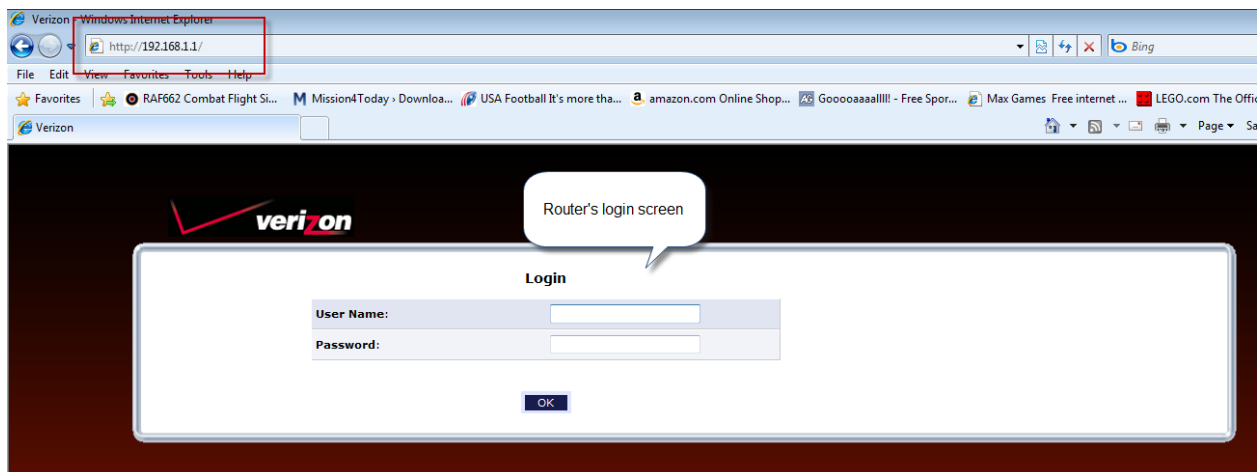
3.) **Your local game IL2FB.exe** which runs on your PC, and has several settings inside it which govern hosting games and performance. These settings are mostly held in the game's Conf.INI configuration file, and in some of the screen options you take to setup your hosting game as a server.

Lets take them all in turn:

1.) **Your Router** - first determine what type of router you have by looking for its model number. Its very helpful to also lookup a copy of the router's setup guide and manuals so you know what to do. I'll show you mine so you have some idea what the setup looks like.

a. Login: Most routers have a mechanism you can use to log into the router as administrator and setup settings. This should be found in the router's manual mine is shown below.

Enter browser, type in 192.168.1.1

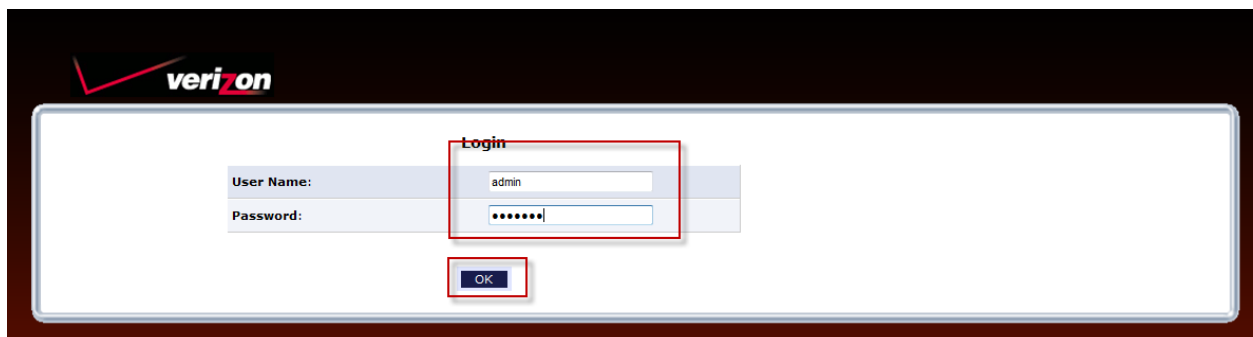


My router's default login (the shipped defaults) are:

User name: admin

Password: password1

Enter those to login, and click OK...



b. Overview - once in the router probably gives you some menuing or overview screens of its setup...

Verizon - Windows Internet Explorer

http://192.168.1.1/cache/124847388/index.cgi

File Edit View Favorites Tools Help

Verizon

verizon

Main Wireless Settings My Network Firewall Settings Parental Control Advanced System Monitoring

This is the info for the router itself.. the IP Address below is the actual router IP the outside world sees.. this is the number I give to folks wanting to connect through direct ip.

Your router is Ready for Internet Access

Broadband Connection

Coax Status: Connected

Connection Type: DHCP

IP Address: 98.117.10.113

Quick Links

- Port Forwarding (Enable Applications: Games, IM & Others)
- Change Wireless Settings

My Network

PC Name: HOME

Connection Type: Ethernet

IP Address: 192.168.1.2

Status: Active

Remote Access: Enabled

PC Name: me_Win7

Connection Type: Ethernet

IP Address: 192.168.1.3

Status: Active

Remote Access: Enabled

Device Name: IP-STB4

Connection Type: Coax

IP Address: 192.168.1.100

Status: Active

Remote Access: Enabled

Device Name: IP-STB2

Connection Type: Coax

IP Address: 192.168.1.103

Status: Active

Remote Access: Enabled

Device Name: IP-STB3

These are the addresses of other machines on my home network

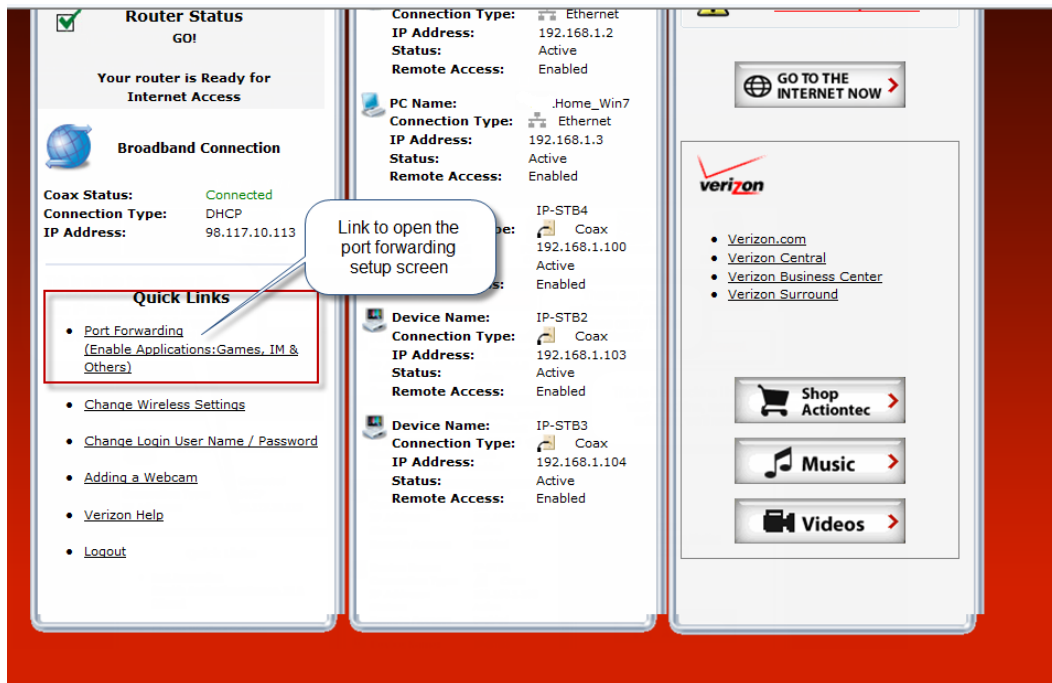
This is the machine I host IL2 on, its a win7 machine, remember this IP address, we'll need this later!

Verizon

- Verizon.com
- Verizon Central
- Verizon Business Center
- Verizon Surround

Shop Actiontec

c. Port forwarding... this is the single most important thing needing setup to allow hosting. Chances are good, that if people can't connect to your game, its a problem with this setup.



You will probably see many settings under this screen, but the most important one is listed below. What this setting basically does is: 'Allow Any connection, coming thru any protocol (either TCP or UDP), if asking for port 21000 (which is the port il2 uses), then connect them thru to PC Home_Win7 with IP address 192.168.1.3.'

Basically that's what this directive says. It allows anyone coming into your router, asking for port 21000 to get 'port forwarded' to your local PC's IP address where the game is running and waiting to connect to the players. Without a setting similar to this, chances are, your router will not let players through to your local PC and game, and chances are, players will receive a timeout error when trying to connect to you.

Port Forwarding

This feature enables applications (Games, Webcams, IM & Others) by opening a tunnel between remote (Internet) computers and a specific device port inside your local area network(LAN).

Create new port forwarding rule:

IP Address forward to or select from menu: Application to forward...:

Applied rules:

Networked Computer / Device	Protocols	WAN Connection	Active
localhost 127.0.0.1	Verizon FiOS Service Tcp Any -> 4567	All Broadband Devices	
192.168.1.102:8082	Application TCP Any -> 35000	Broadband Connection (Coax)	
192.168.1.103:8082	Application TCP Any -> 35001	Broadband Connection (Coax)	
192.168.1.104:8082	Application TCP Any -> 35002	Broadband Connection (Coax)	
<input checked="" type="checkbox"/> Home_Win7 192.168.1.3	Application TCP Any -> 21000 UDP Any -> 21000	All Broadband Devices	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> 192.168.1.4	Teredo UDP Any -> 56997	All Broadband Devices	<input checked="" type="checkbox"/>
192.168.1.100:8082	Application TCP Any -> 35003	Broadband Connection (Coax)	
...	Teredo	...	

This port forwarding entry is what allows people thru my router, and onto my local PC to run IL2. Notice two things about it. It references the IP of my local PC - 192.16.1.3, and under application, it lists BOTH UDP and TCP pointing to port 21000. Port 21000 is the port that IL2 uses for the game.

Here's how mine is setup, thu your's might be different:

The screenshot shows the 'Port Forwarding' configuration page in a network router's web interface. The page has a navigation bar at the top with tabs: 'Wireless Settings', 'My Network', 'Firewall Settings', 'Parental Control', 'Advanced', and 'System Monitoring'. The 'Port Forwarding' section is titled 'Port Forwarding' and includes a descriptive paragraph: 'This feature enables applications (such as web servers, FTP servers, etc.) by opening a tunnel between remote (Internet) computers and a specific port on your local area network(LAN).'

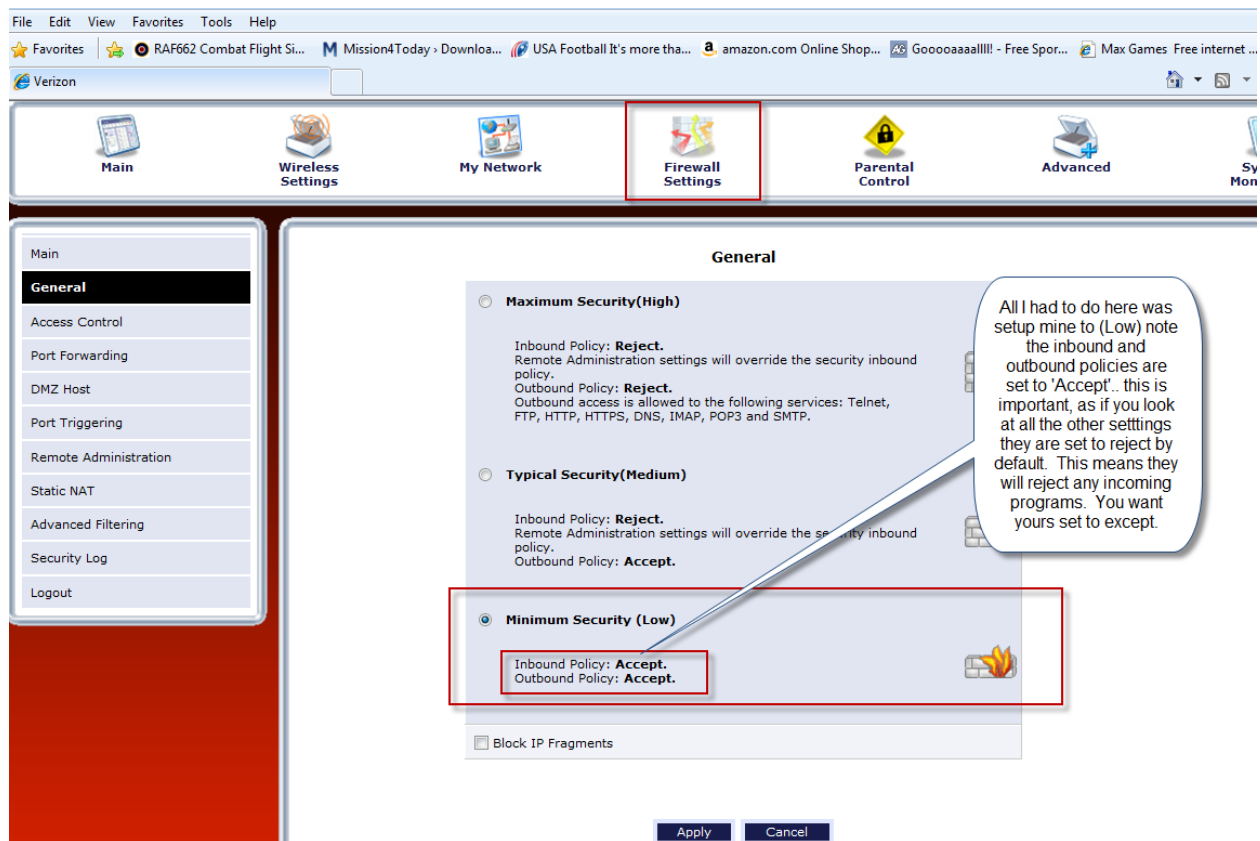
Below the description, there are several configuration fields and sections:

- Create new port forwarding rule:** A red box highlights this section. A callout bubble points to the 'Home_Win7 - 192.168.1.3' dropdown menu with the text 'My local PC'.
- Protocol:** A dropdown menu set to 'Both'. A callout bubble points to it with the text 'both - UDP+TCP'.
- Source Ports:** A dropdown menu set to 'Any'.
- Advanced Settings:** A red box highlights this section. It contains:
 - Destination Ports:** A dropdown menu set to 'Specify' and a text input field containing '21000'. A callout bubble points to the input field with the text 'Specify Destination on Port as 21000'.
 - Schedule:** A dropdown menu set to 'Always'.
- WAN Connection Type:** A dropdown menu set to 'All Broadband Devices'.
- Forward to Port:** A dropdown menu set to 'Same as Incoming Port'.

At the bottom of the configuration area, there are four buttons: 'Apply', 'Cancel', 'Basic', and 'Reset'. A red box highlights the 'Apply' button.

Below the buttons, there is a section titled 'Applied rules:' followed by a table with columns for 'Rule Name', 'Status', and 'Action'. The table is currently empty.

d. Router's firewall - make sure your router's firewall allows an exception to allow IL2FB thru...mine just entailed setting my policy to the lowest setting - and ensuring that the inbound and outbound policy settings said - 'Accept'. Notice the other firewall settings in my router, are set to 'reject' by default. This would have blocked IL2 from coming thru the firewall. If your router is different, you may actually have to setup a specific exception, to allow the IL2FB.exe process thru. Mine as you can see didn't give me that option, it was all or nothing at this point. Your local PC firewall, however, is different.



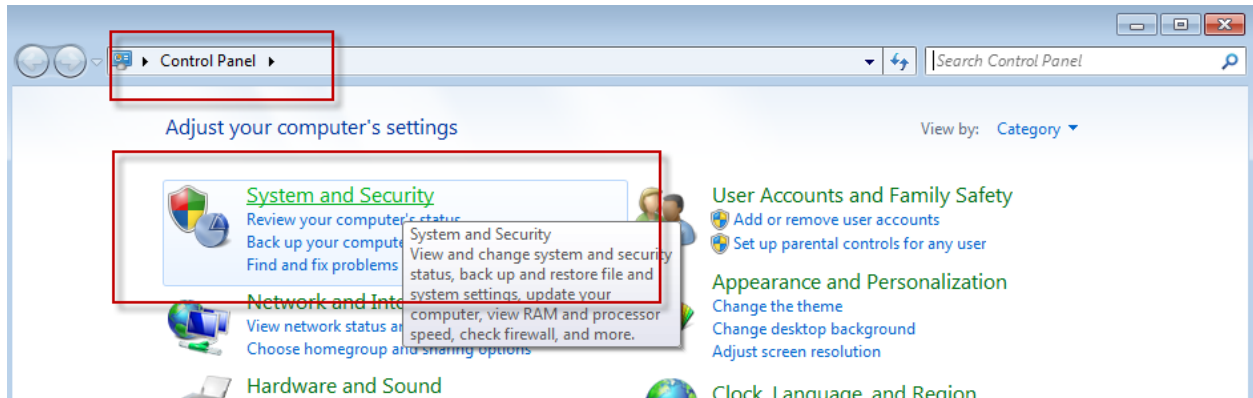
That's it for the router. Make sure to save, and accept all settings, and close the router's admin page.

Quick note: sometimes it might be necessary to reset the router to its factory settings. I had to do this once. This involves pushing the special HW reset button on the back of the router, and powering it down and up again. If you do this, your password, port forwarding and firewall settings will all be reset, so you have to set them up all over again.

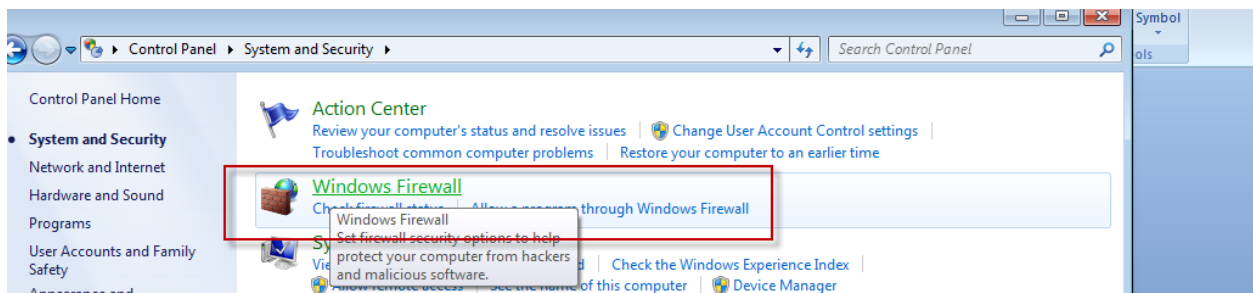
2.) **Local PC** - on my local PC I had to ensure that my local PC's firewall would let IL2FB thru it. To do this, go into the control panel, and either turn off your firewall entirely (not recommended for security purposes), or setup a program exception in the firewall to let IL2FB.exe thru it. I'll show you both.

a. to turn off the firewall entirely...my system is a Win7-64 bit, yours may vary

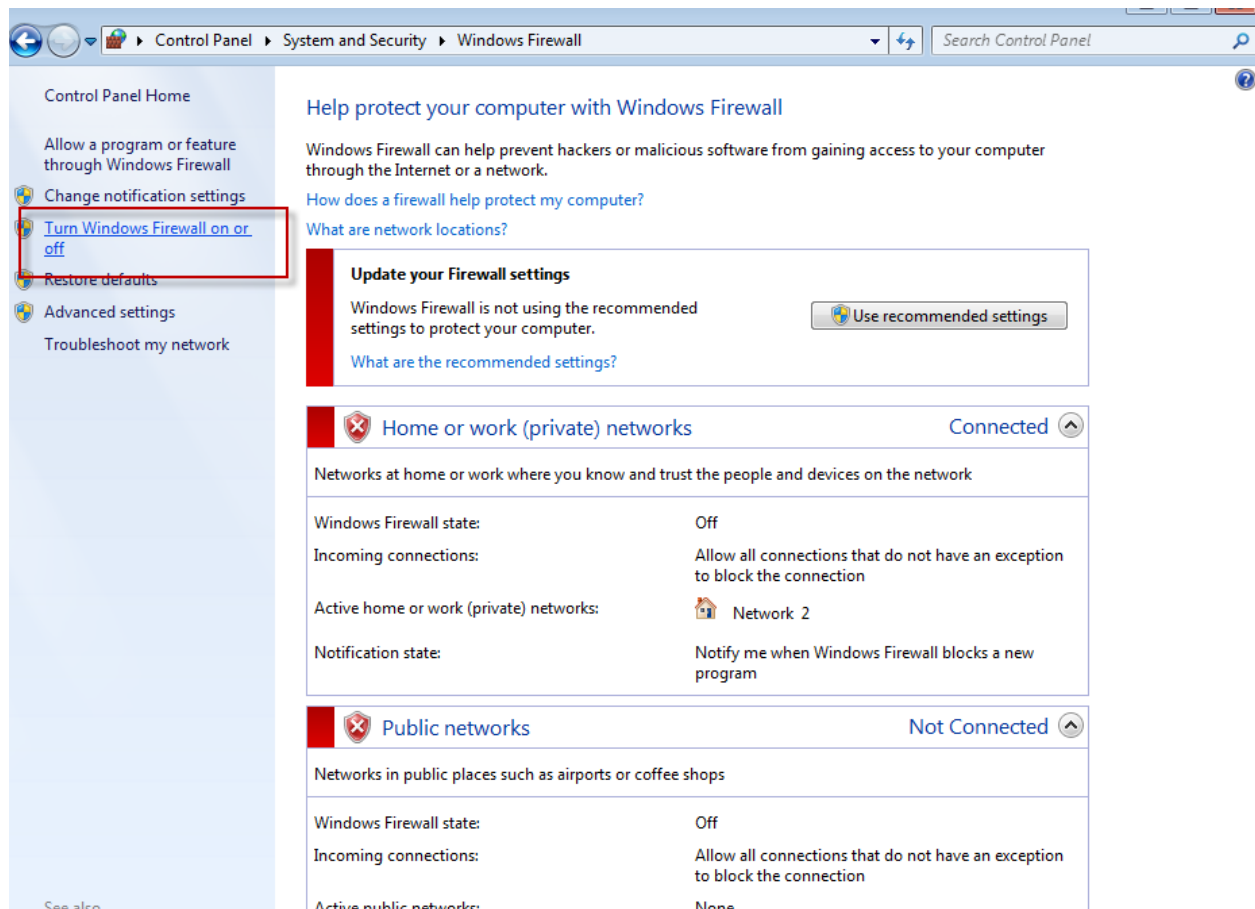
Goto windows Control Panel, under System and Security



Goto Windows Firewall settings...



Goto Turn Windows firewall on or off



Click Turn off Windows Firewall (notice it is not recommended! ;-)) Yeah, but neither is long hours of playing with your computer, but its fun anyways!

Customize settings for each type of network

You can modify the firewall settings for each type of network location that you use.

[What are network locations?](#)

Home or work (private) network location settings



☐ Turn on Windows Firewall

☐ Block all incoming connections, including those in the list of allowed programs

☒ Notify me when Windows Firewall blocks a new program



☒ Turn off Windows Firewall (not recommended)

Public network location settings



☐ Turn on Windows Firewall

☐ Block all incoming connections, including those in the list of allowed programs

☒ Notify me when Windows Firewall blocks a new program

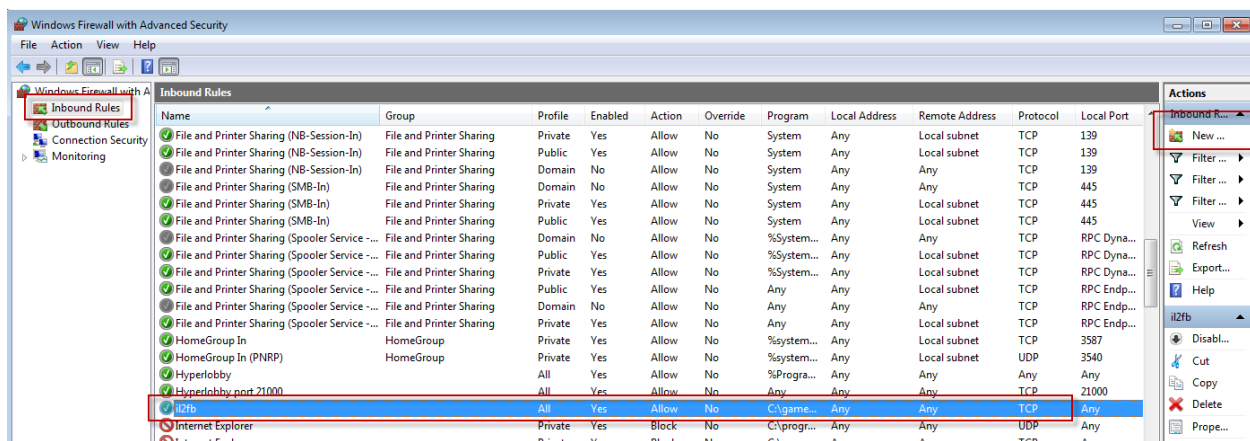


☒ Turn off Windows Firewall (not recommended)

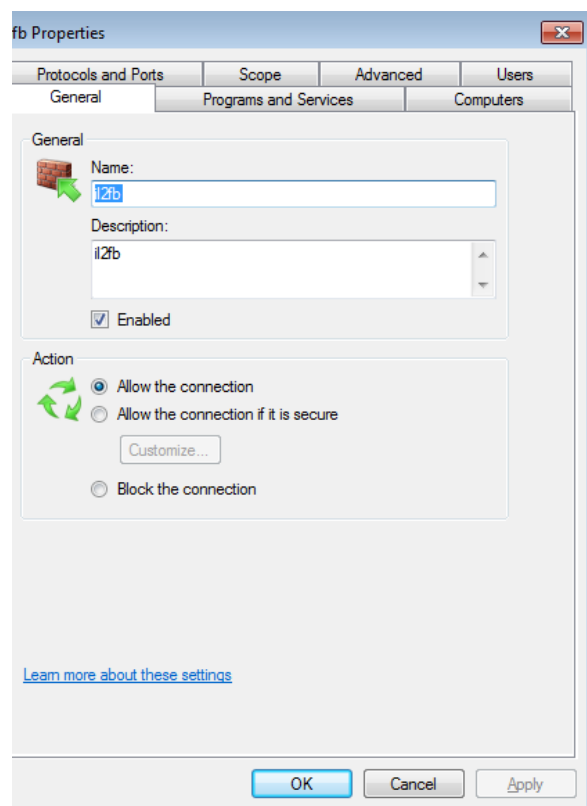
To turn it on but allow IL2FB thru as an exception, turn the settings above back on and...Goto Advanced Settings...

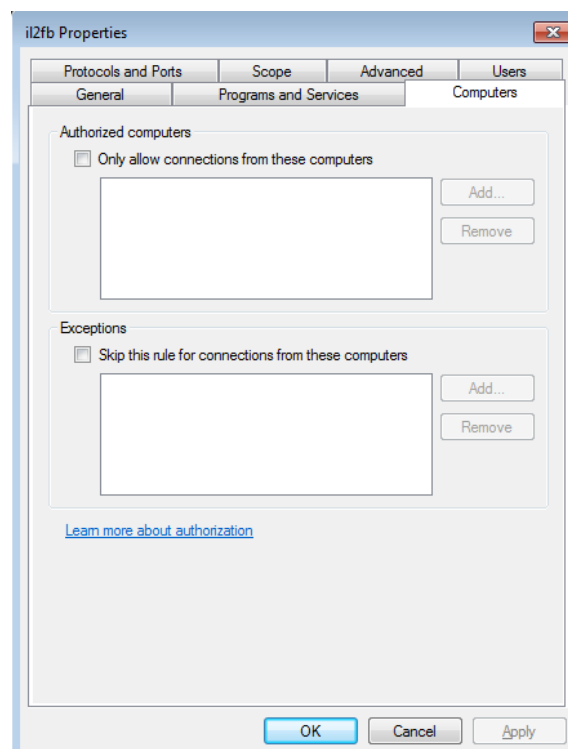
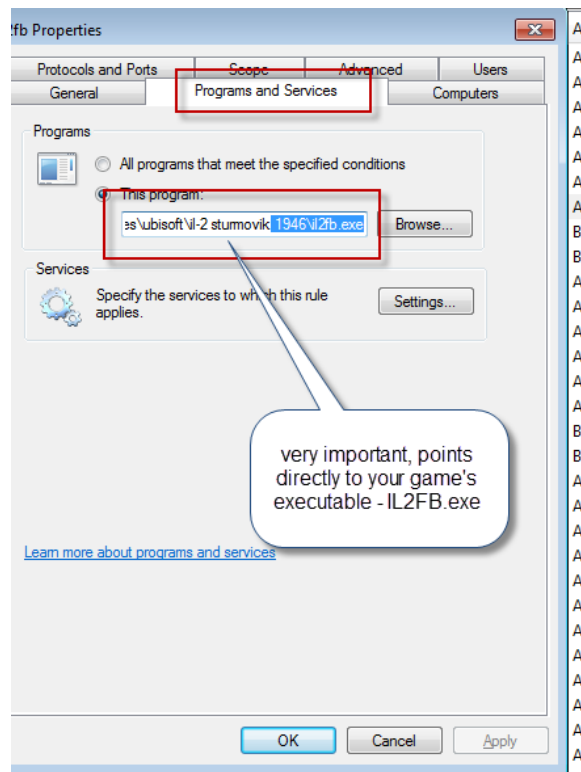


Goto InboundRules... and click New InBound Rules... (see below this my inbound rule which allows IL2FB.exe thru my local PC firewall as an exception...



Here's what the inbound exception for IL2 and its setup properties look like...





il2fb Properties

General Programs and Services Computers

Protocols and Ports Scope Advanced Users

Protocols and ports

Protocol type: Any

Protocol number: 0

Local port: All Ports

Remote port: All Ports

Example: 80, 443, 5000-5010

Internet Control Message Protocol (ICMP) settings: Customize...

[Learn more about protocol and ports](#)

OK Cancel Apply

il2fb Properties

General Programs and Services Computers

Protocols and Ports Scope Advanced Users

Local IP address

☒ Any IP address

☐ These IP addresses:

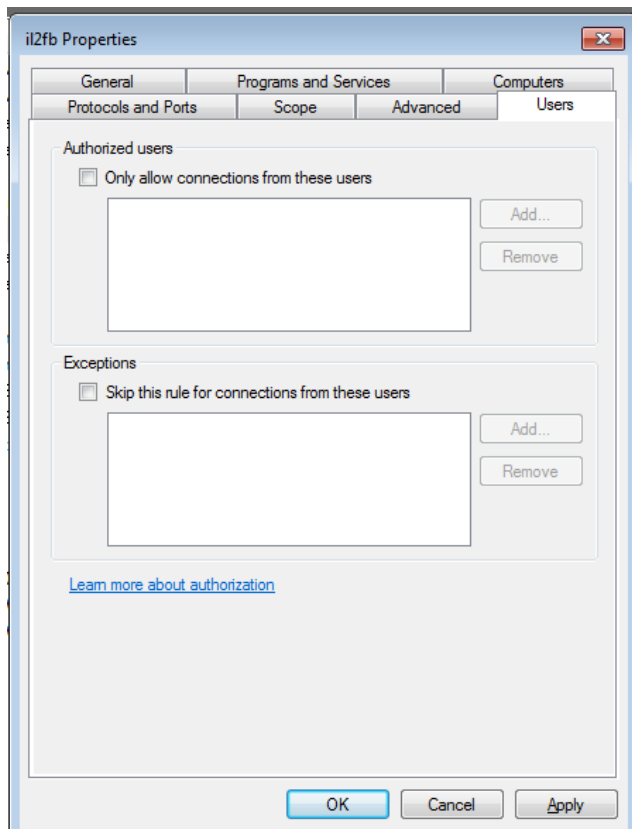
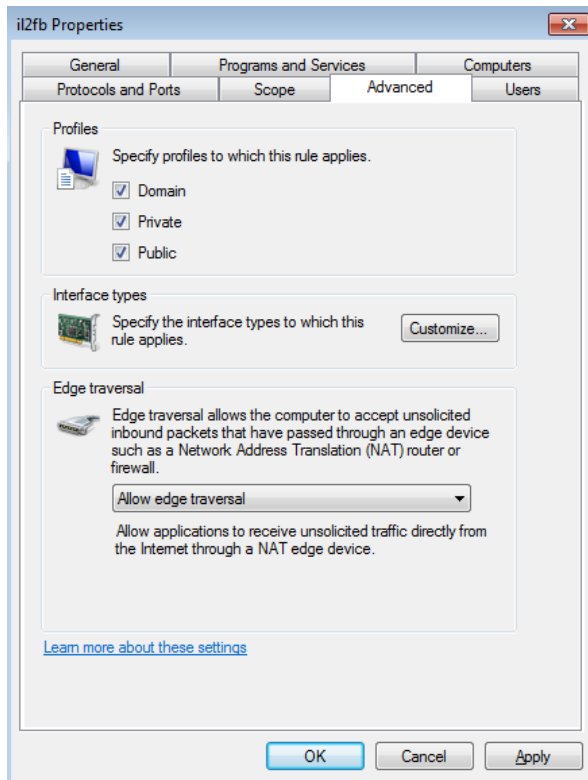
Remote IP address

☒ Any IP address

☐ These IP addresses:

[Learn more about setting the scope](#)

OK Cancel Apply

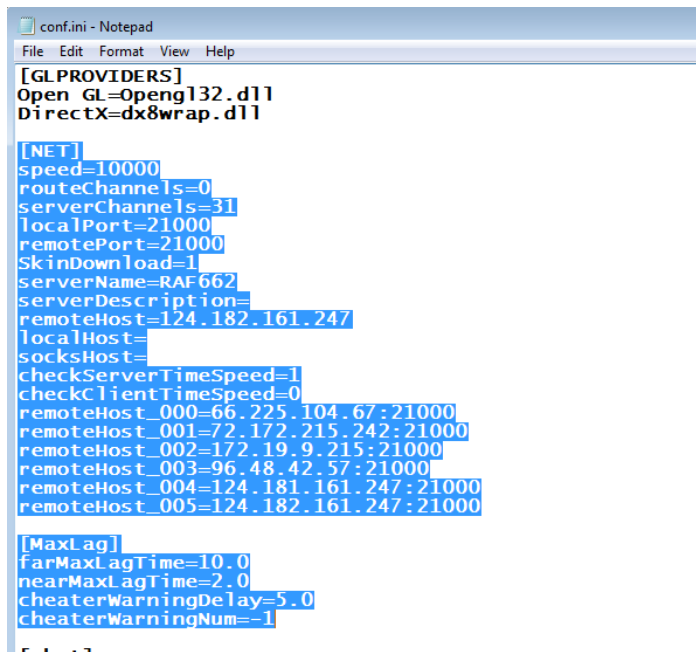


That's it for the local OS...

3.) **Game settings** - the game of course can be run either as client (player) or as server (hosting) Running as host is pretty simple as you're just going thru the multiplayer menu in the game to launch missions. Either Coop or Moving Dogfight Server (MDS) missions. I won't go into mission building specifics for each type here.

a. Conf.ini file - first check your Conf.ini file.. this file has a [net] section in it which should be setup a certain way to get started... I don't know all the settings and all their definitions, but I do know some of them. Here's what mine looks like, if you copy mine you're probably gonna be OK.

The conf.ini file is located in your main game folder, mine is at: C:\Games\Ubisoft\IL-2 Sturmovik 1946... its a good idea to make a copy of this file before you edit it. Its just a text file and can be edited and saved with Notepad or similar application.



```
[GLPROVIDERS]
Open GL=Openg132.dll
DirectX=dx8wrap.dll

[NET]
speed=10000
routeChannels=0
serverChannels=31
localPort=21000
remotePort=21000
SkinDownload=1
serverName=RAF662
serverDescription=
remoteHost=124.182.161.247
localHost=
socksHost=
checkServerTimeSpeed=1
checkClientTimeSpeed=0
remoteHost_000=66.225.104.67:21000
remoteHost_001=72.172.215.242:21000
remoteHost_002=172.19.9.215:21000
remoteHost_003=96.48.42.57:21000
remoteHost_004=124.181.161.247:21000
remoteHost_005=124.182.161.247:21000

[MaxLag]
farMaxLagTime=10.0
nearMaxLagTime=2.0
cheaterWarningDelay=5.0
cheaterWarningNum=-1
```

(my comments are to the right in ()).. don't include these in your file of course)

PS - only SOME of these settings are set thru the Hardware/Network settings panels in the game itself, but not all of them.

[NET]

speed=10000 (network connection speed = 10000 when it = ISDN in the games Hardware\Network panel... you can crank this higher, but I've heard folks say it doesn't necessarily help..)

routeChannels=0

serverChannels=31

localPort=21000 (keep it at 21000)

remotePort=21000 (keep it at 21000)

SkinDownload=1 (1 = true, 0 = false.. allows you to download skins to players from your server, this allows custom skins to be uploaded by players to your server, then to be downloaded to the other players in the game so you can all see them. Some folks don't like this on, cause it can cause a lag while the skins are being copied around... I normally allow mine on as you see..)

serverName=RAF662 (text name for your server by default)

serverDescription=

remoteHost=124.182.161.247 (you can blank this out, this is the last IP of the last server I connected to as a player...)

localHost=

socksHost=

checkServerTimeSpeed=1 (1=on - ensures the players and your server's speed do not differ by a certain amount...)

checkClientTimeSpeed=0

remoteHost_000=66.225.104.67:21000 (this list is just like an MRU, most recently used list of the servers I've connected to as a player in the past... you can probably remove these entries if you like.)

remoteHost_001=72.172.215.242:21000

remoteHost_002=172.19.9.215:21000

remoteHost_003=96.48.42.57:21000

remoteHost_004=124.181.161.247:21000

remoteHost_005=124.182.161.247:21000

[MaxLag] (I would set your settings here just like mine. I don't have problems, but these help enforce against cheating or lagging too much between client and server)

farMaxLagTime=10.0

nearMaxLagTime=2.0

cheaterWarningDelay=5.0

cheaterWarningNum=-1

Note: if you have a setting called checkruntime in your [Net] section, its important to check this setting. This setting controls how closely the server validates its version of the software vs the clients who connect from their machines.

The checkRuntime = line should be either 0 or 1 (or 2). If the checkRuntime = line does not exist in your conf.ini file, the default is 0 which is the same as no check, you can add it to the end of the [NET] section if you wish, but I don't recommend setting it to 2 - this has the potential to block folks if small program differences are detected. Remember how finicky the Wings of War server is about versions/connection.. this is a CRT=2 server - that's why, it enforces everything must be the same exactly.

checkRuntime=0-no check is made (default);
checkRuntime=1-quick check;
checkRuntime=2-comprehensive check.

NOTE: during the comprehensive check, if the client runs a different OS version from the client, the check may identify the OS differences as changes in game modules.

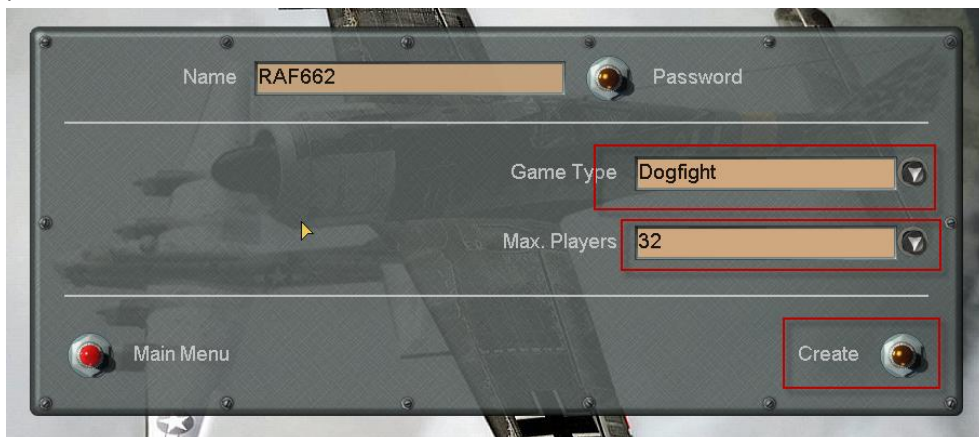
OK, that's it... now lets see how to fire up a game as server...

Launching a game as host... First without Hyperlobby...

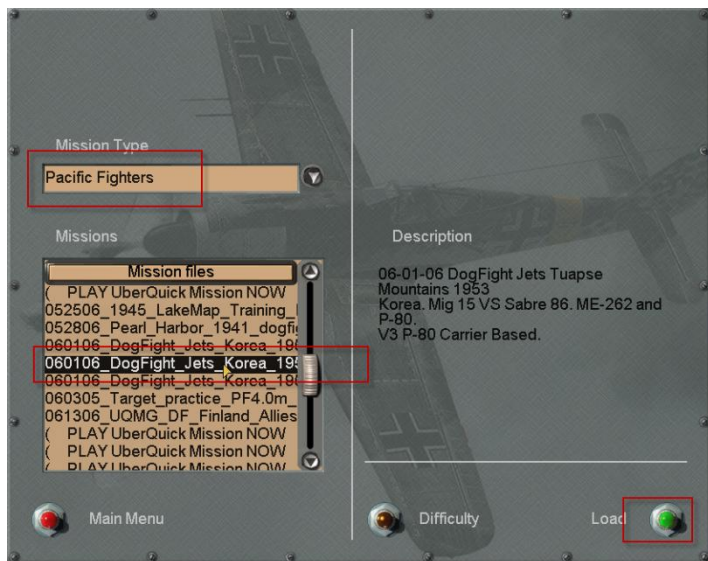
Launch the game, Goto Multiplayer...Create New Server...



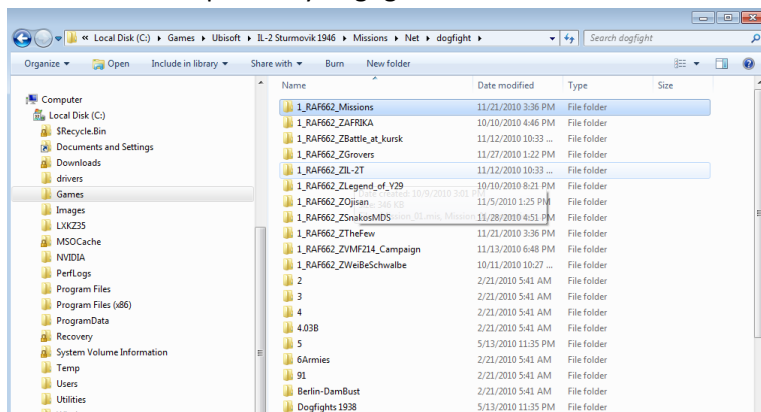
Choose either Coop or Dogfight (dogfight is what we plan when we plan moving dogfight server MDS missions)... make sure you have enough players allowed - 32 is fine, and normally we don't set a password..and click Create..



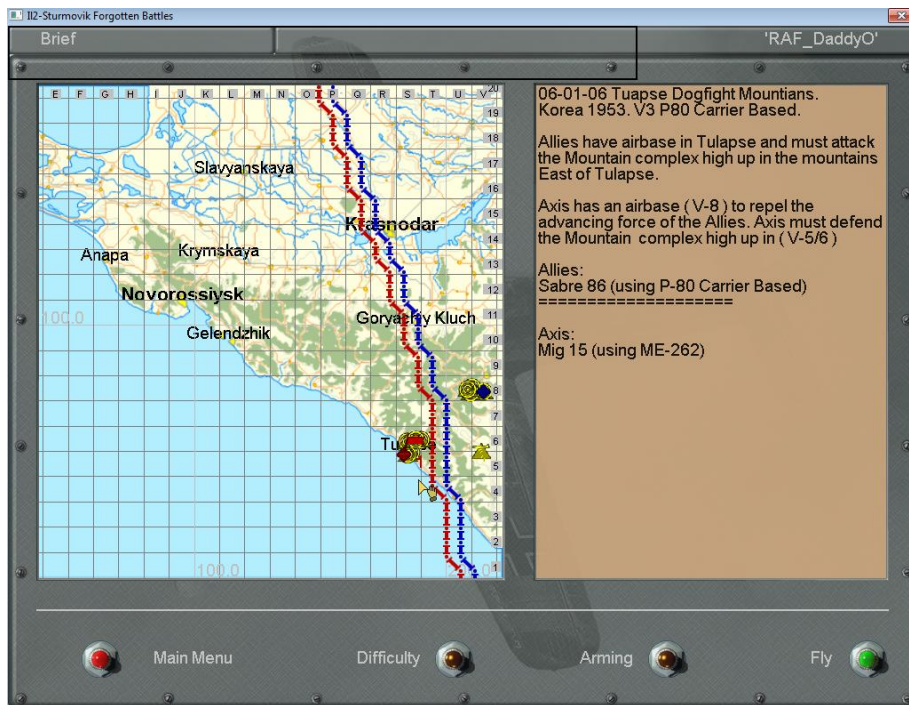
Select your mission from the menus and select Load..



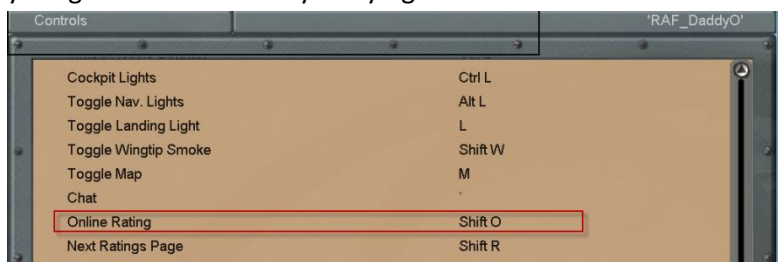
Note: the missions for this section of the game are stored under the following game folder (C:\Games\Ubisoft\IL-2 Sturmovik 1946\Missions\Net\dogfight). You can create your own mission folders under here, and create your own MDS missions in the subfolders and they will show up in these menus in the game. As long as you have a *.properties and *.mis file for each mission... Here's an example of my dogfight missions folders:



After it loads you get to the ready screen, select your airfield and away you go.. at this point, other players (HOPEFULLY!!!) can get in and do the same..



Heres a tip... if you map the key for Online Rating Stats, you can see all the other players connected to your game and what they're flying...

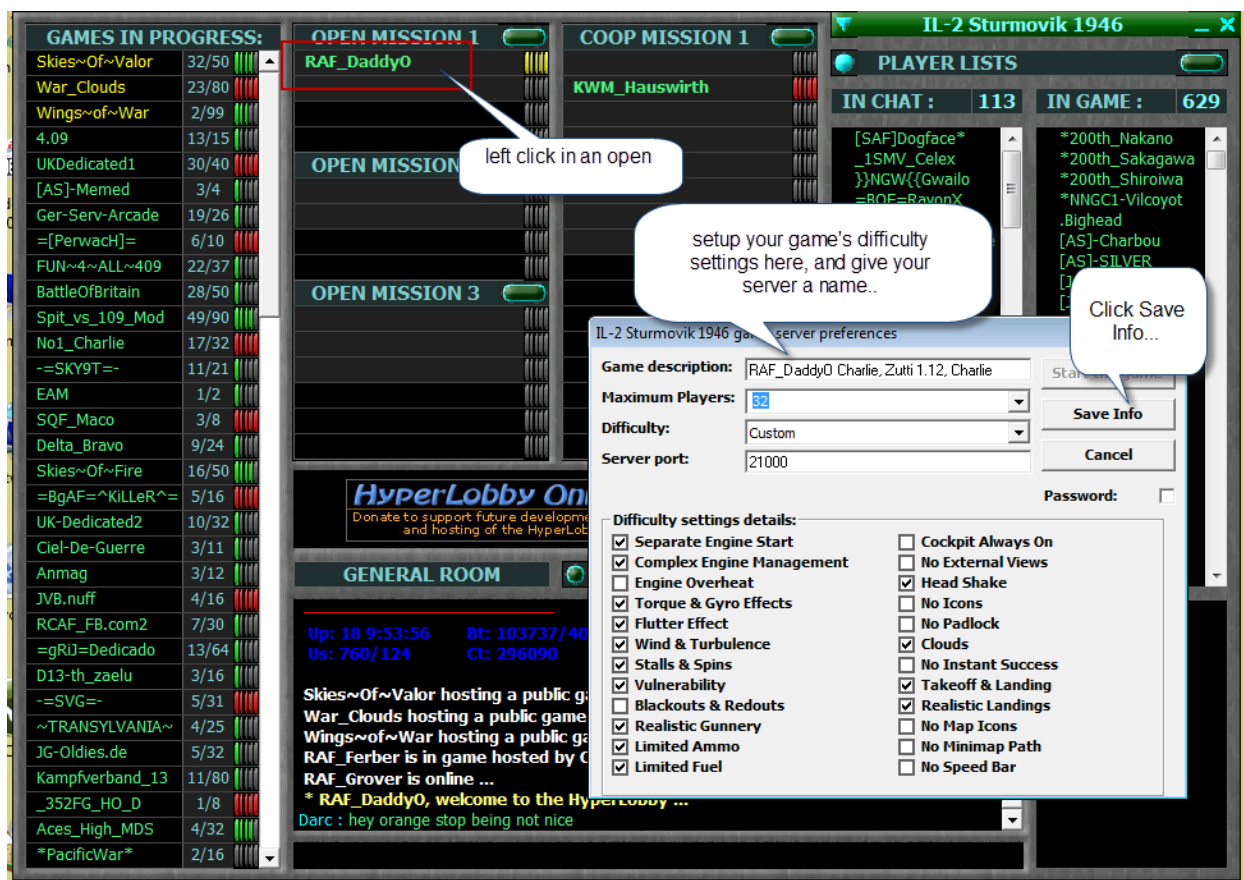


Ok - how about starting a game thru Hyperlobby....

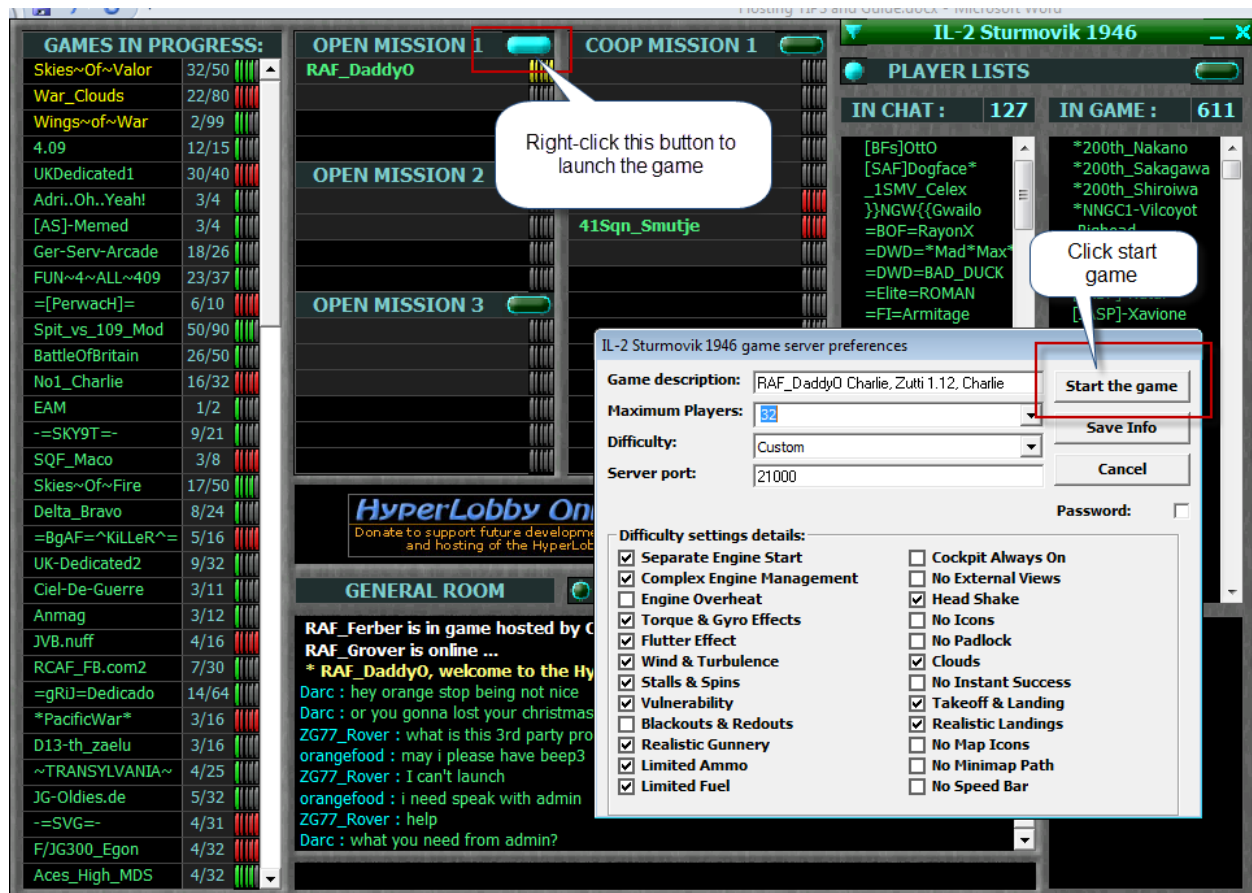
Hyperlobby will launch the game automatically so make sure its NOT running beforehand...

Goto Hyperlobby... and if doing an MDS use Open Mission slots on the main panel. If doing a coop, you need to use one of the coop slots...

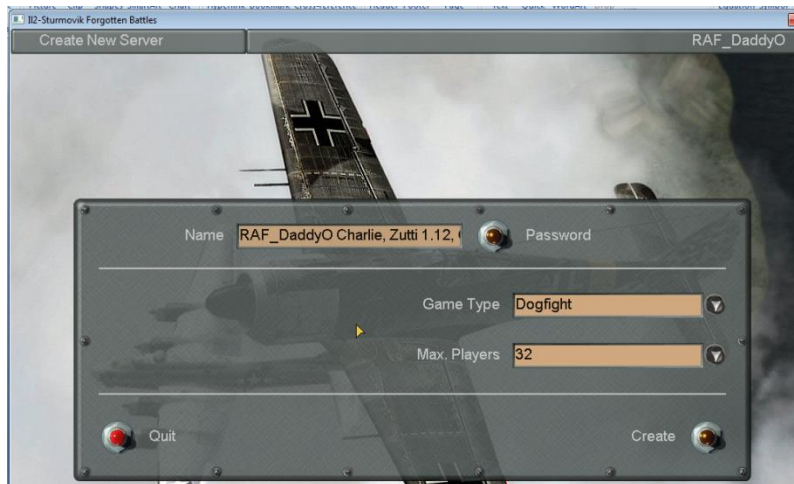
Left click in one of the Open Mission slots and setup the name and difficulty settings of your server.
Click Save Info when done...



After Save Info... the button above the mission slot you picked becomes enabled...**Right** click the button above the open mission, and click Start Game



This should auto launch IL2 there you will go to the mission setup screens to load your mission as shown above...from here the mission setup is the same....



OK that's it for now... best of luck. And enjoy hosting! You're doing a great service to the squad, and it can be lots of fun - when it goes well! ;-)