Red Baron Serverop Q & A

By RAF_PepeLePeu – January 26, 2005

Q. Why do I want to bother running a server?
A. Squads who run servers can benefit from private practice areas where they can teach their new recruits, work on team tactics, bomb targets or just melee for fun. The server also serves as free advertising for a squad – in fact a server name could be "Visit www.oursquad.com" or "OurSquad Recruiting Server"

Q. Can I run a Red Baron server on the same PC that I use to fly or do a need a separate PC?
A. You can do either. The Red Baron server is a tiny DOS application that can run in the background on your PC even while you run your RB game in the foreground.

Q. Can I run a server if I have dynamic IP or do I have to have a static IP?
A. Either is fine. The Red Baron server detects the IP of the host computer and advertises that IP to the MetaServers. If your IP is different the next time you start the Red Baron server, the new IP will be advertised.

Q. I have a cable Internet connection. How many players can I host at once?
A. About 8-12 is my estimate. Many Internet connections are asymmetric meaning they are fast download but slow upload. The number of players you can host will be limited by the slower upload speed. You might want to set your rb2serve.ini to limit the number of players so that additional players cannot join and slow the game for all players.

Q. Where do I get the server files?
A. www.wings-of-valor.net has the server files, M02 update and NAT patch available in the downloads section. Try Chevelle's Server Manager utility as well.

Q. Why can't players see my server?
A. Your server is probably advertising the wrong IP address. If you are behind a firewall router or Internet sharing box then your RB server is probably advertising the IP address of your PC when it actually needs to be advertising the IP address of the router. To solve this problem you need to do the following:

1. Look up the internal IP of your PC by running winipcfg in the Start:Run menu or checking your control panel under networking. Your IP will probably be something like 192.168.0.2
2. Look up your public internet address by going to http://www.whatismyip.com
3. Note that the two addresses are different. Your PC has a private Internet address which is concealed by the router or firewall. Your Red Baron server is detecting and broadcasting the hidden address but the router is blocking people from accessing that address.
4. Download the Red Baron server NAT patch from www.wings-of.valor.net, drop it into your RB server folder and run it (you may need to download some Windows components to do this.) Enter your public IP address in the patch program and it will ensure your RB server advertises the correct address.
5. Finally, you need to "forward a port" on your router so that data arriving at the router's public IP address is "forwarded" to the internal private IP address of your PC that is hosting the RB server. By default the Red Baron server uses port 47800 to communicate with players so you would forward incoming traffic from all outside "source" ports to IP 192.168.0.2 (the address of your server PC) and port 47800 (the port used by the Red Baron server to talk to players.)

Q. The NAT patch gives me an error message and says there are files missing.
A. The NAT patch requires two Microsoft files called MFC42D.DLL and MSVCRTD.DLL to be in the server directory along with the NAT patch program. If you can't find these files on your PC then do a Google search and download them from the Internet.

Q. I have a software firewall like Zone Alarm or Sygate. How do I host a server?

A. Most software firewalls will alert you when a program tries to access the Internet for the first time. When you run the Red Baron server for the first time your firewall software should ask whether you wish to allow rb2serve.exe to access the Internet. You should allow it and also allow it to act as a server (ie receive data.) You may have to open your firewall software and check the setting that allows the rb2serve.exe program to have server level access to the Internet.

Q. What is the difference between rb2serve.exe and rb2serveM02.exe?
A. The M02 version was modified by JG13_Kpijon to log all destroyed targets in rb2server.log even if they are not red-boxed. The unmodified version will only log red-boxed targets.

Q. How do I block hackers and griefers from my server?
A1. You could password protect your server by entering a password in rb2serve.ini
A2. You could block the IP of known griefers using your firewall. Some firewalls can be set to ignore data from certain IP addresses or ranges of IPs, while others can be set to "forward" the hackers data to a non-existent IP that is similar to that of your server (i.e. 192.168.0.99)
A3. You can misdirect the hacker's data using a DOS ROUTE command or software firewall setting. The DOS command takes the form ROUTE xxx.xxx.xxx.xxx 192.168.0.99 where xxx.xxx.xxx.xxx is the hackers IP and 192.168.0.99 is your non-existent "misdirect" IP.
A4. You can run JG13_Kpijon's RBSTerminator or Ren's RSS Secure Server. These programs are designed to automatically eject players for specific types of behaviour.

Q. Can I host more than one RB server on one computer?
A. Yes, as long as they each use a different port number for communications. The server port number is specified in rb2serve.scs The default port is 47800 however you could run a second server at 47801 and a third at 47082 if you want. If you have lots of PC horsepower, memory and bandwidth you can host as many servers as you want. Remember that if you have a router or hardware firewall each server will need the appropriate port forwarded on your firewall or router and will need the NAT patch in order to advertise the correct IP.

Q. My server was working fine but now nobody can see it.
A. Sounds like you may have dynamic IP and your IP number changed. You will need to determine your new public IP and re-run the NAT patch accordingly. See above.

Q. Why do I get ejected from my server within a few seconds of entering?
A. Make sure there are two 1007 cookie files in your server folder. If you are missing these then download the server files and server manager from www.wings-of-valor.net

Q. How do I log server activity?
A. The rb2serve.scs file contains settings for what types of logs are kept. The server can record pilot IPs, entrances, exits, kills, targets, chat and other data. Logging chat is not recommended as it creates big server logs. Logs may be opened in any text editor. See the end of this document for a description of the server files.

Q. How do I schedule a game to start and stop at a specified time?
A. Windows Task Scheduler can be used to start and stop games automatically. Simply click on Add Scheduled Task and then browse to the rb2serve.exe you want to run at the appropriate time. Task Scheduler can end the program after a fixed period of time, or you can set the game duration in rb2server.ini. Note that a bug in rb2server.exe may make the game crash if it runs for a long period. I recommend ending games after 8 hours and starting them fresh.

Q. How do I automatically zip and e-mail game logs?

A. A batch file can be used to start the server and then zip and mail logs after the game ends. To do this you will need a ZIP utility and a mailer utility that will run from a DOS command line. Winzip has a CLI option that is free to registered users of WinZip. There are also free mailers like BLAT which allow you to send e-mail from a command line. Here is an example of a batch file that would start a server, zip, mail logs and then date stamp logs:

```
rem - START RB SERVER
RB2SERVEM02.EXE

rem - ZIP SERVER LOGS USING WINZIP COMMAND LINE ZIP
wzzip ServerLogs.zip *.log
wzzip ServerLogs.zip *.csv
wzzip ServerLogs.zip rb2server.ini

rem - MAIL SERVER LOGS USING BLAT MAILER
blat ServerMessage.txt -f rbserver@isp.net -to serverop@isp.net -subject
    "Server Logs" -attach ServerLogs.zip

rem - TIME STAMP AND ARCHIVE SERVER LOGS UNDER WIN2K OR XP
for /F "tokens=2,3,4 delims=/ " %%i in ("%date%") do set DateStamp=%%k_%%i_%%j
for /F "tokens=1,2,3 delims=:. " %%i in ("%time%") do set TimeStamp=%%i_%%j_%%k
rename ServerLogs.zip ServerLogs-%DateStamp%-%TimeStamp%.zip

rem - DELETE OLD FILES
erase OldLogs.zip
erase *.log
erase *.csv

rem - MAKE BACKUP FILES
rename ServerLogs.zip OldLogs.ZIP
```

Q. What do I need to know about the server files?

A. Here is a list of the minimum set of server files and a brief explanation if what they do.

The EXE is the main executable. I recommend using Klay's M02 version since it logs all targets destroyed:

```
Rb2serve.exe –or- Rb2serveM02.exe
```

The INI file contains game settings like server name, password, game length, map used, aircraft availability, etc. It can be edited and the settings changed with a text editor:

```
Rb2server.ini
```

The SCS file contains technical settings such as IP port number and logging options, such as log size, log file format, and whether pilot IPs are logged. It can be edited and the settings changed with a text editor:

```
Rb2server.scs
```

Cookie files are required for server security. They contain checksum info that is compared with players. If they are missing then users will be ejected from your server as soon as they enter. Note that the 1007 cookie files are sometimes missing from some older rb2server file sets so make sure you have these:

```
Cookie1006.bin
Cookie1006d.bin
Cookie1006n.bin
Cookie1007.bin
Cookie1007d.bin
```

Landmark files are hex files that contain information about the location and type of landmarks for each map. The files each contain a 100 byte header plus one 63 byte record for each landmark. Games with reduced target sets (like the Battleground server) modified target types (like FiF) or modified target placement (like Real Front) can be created by modifying the landmark files:

```
Lndmrks0.dat – Marne
Lndmrks1.dat - Flanders
Lndmrks2.dat - Verdun
Lndmrks3.dat - Alsace
Lndmrks4.dat - Island
```

The following types of log files may be created by the rb2serve.exe depending on the settings specified in rb2server.scs. The Rb2server*.log will contain details of pilot entries, exits, IPs, kills and targets. The others contain summary data only:

```
Rb2server*.log
scorecsv.csv
dailycsv.csv
scorebin.dat
```