Troubleshooting iRacing latency/quality problems.

Question

I often have network problems in iRacing. The lag indicator will show high latency, or the quality indicator shows problems. How do I find the source of the problem?

Solution

Of course, you were 1/2 lap ahead 45 minutes into a race when this happened, and lost connection! AAAARRRRRRGGGGGHHHHH!

PingPlotter does great on finding this type of problem. Most of the time, these days (2011), the problem is with your own network or your ISP - not with iRacing or the internet 'cloud'.

With PingPlotter, you can isolate the problem. Is it your wireless network? Is it a bad cable modem connection? Bad hub/router? ISP problem?

Here's the steps to follow to isolate the problem:

(note: these are the servers that iRacing uses to check latency in the web browser - probably not the actual game servers)

• Set the trace interval to 2.5 seconds or 5 seconds
• Trace to one of these servers:
  - US Server: 69.25.205.241
  - AUS Server: 113.192.8.120
• Let PingPlotter run in the background while you practice / race.
• When you have an in-game network problem, and you get a chance, create a comment on the time period of the problem in PingPlotter. (See the 'Creating a comment or note' in our Getting Started Guide for instructions on how to do this).
• Review the data for patterns. Your main goal here it to discover the source of the problem - so turn on time graphs for each hop until you find the first hop with problems.
• The problem *may* be caused by data being transferred to your network (is anyone else using the network and downloading / transferring data?). Try correlating the packet loss or latency problem with network activity that's happening.

Once you find the problem, you can take the proper steps to solve it. Here are some examples:

• If the problem is between your computer and your wireless router, and you're using 802.11(a/b/g/n), think about moving your router, changing wireless channels, or maybe even using network wires instead of wireless.
• If your problem is inside your own (wired!) network (like happened to someone at Pingman Tools a bunch during a Skippy season), check your network cables, router/hubs, and network cards. Try eliminating parts, testing from other computers (if you have one), and swapping parts to isolate the problem.
• If your problem is with your ISP, you'll have to contact them. Keep collecting data with PingPlotter and save off images of problem periods to help them understand that there is a problem (which they'll often
deny, of course, if you just call them with a 'I sometimes have problems, but it's OK now' story.

Here are some additional good resources about troubleshooting:

- How to pinpoint the problem.
- VoIP Troubleshooting with PingPlotter. Gaming and VoIP have many similarities in their latency requirements. This is a great article with some scenarios to look for.

If you have any additional resources we should include here, or additional tips, please let us know!