

# PeakHour isn't seeing my router / isn't reporting bandwidth / appears to be reporting incorrectly. How can I check?

If you're using UPnP mode in PeakHour to talk to your router and you know or suspect the reporting is inaccurate, we recommend going through the steps below to test your router by installing third-party UPnP client called MiniUPnP.

**MiniUPnP** is a free, light-weight UPnP client. You can use MiniUPnP to poll your router's UPnP stack and get a report of what information is it sending back.

To install [MiniUPnP](#) on your Mac, follow these steps:

1. Open **Terminal** (type 'Terminal' into Spotlight)
2. Ensure the Xcode command-line tools are installed:

```
xcode-select --install
```

3. Install HomeBrew:

```
ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"  
brew doctor
```

(Note: if you prefer to use a different package manager (such as MacPorts), skip this step.)

4. Install miniupnpc:

```
brew install miniupnpc
```

Once upnpc is installed, run the following command to query your router:

```
upnpc -s
```

If your router is responding to UPnP requests correctly, you should see output similar to this:

```
upnpc : miniupnpc library test client. (c) 2005-2013 Thomas Bernard  
Go to http://miniupnp.free.fr/ or http://miniupnp.tuxfamily.org/  
for more information.  
List of UPNP devices found on the network :  
  desc: http://192.168.1.254:49000/igddesc.xml  
  st: urn:schemas-upnp-org:device:InternetGatewayDevice:1  
desc: http://192.168.1.1:2189/rootDesc.xml  
  st: urn:schemas-upnp-org:device:InternetGatewayDevice:1  
Found valid IGD : http://192.168.1.254:49000/upnp/control/WANIPConn1  
Local LAN ip address : 192.168.1.18  
Connection Type : IP_Routed  
Status : Connected, uptime=689041s, LastConnectionError : ERROR_NONE  
  Time started : Sat Dec 7 16:38:43 2013  
MaxBitRateDown : 12842000 bps (12.8 Mbps) MaxBitRateUp 1031000 bps (1.0 Mbps)  
ExternalIPAddress = 202.200.200.201  
Bytes: Sent: 891855735 Recv: 2321636851  
Packets: Sent: 3929125 Recv: 4125142
```

Here are some tips to interpreting the output:

- Most important is the **Bytes** line. This is what PeakHour needs in order to calculate the information it displays (graphs, current upload/download speeds and usage).
- Run the command a few times over a few seconds and observe any changes to the Sent: and Recv: Bytes numbers.
- If the Bytes line is 0 or stuck around 4,294,967,295, then it's likely that your router has a bug with UPnP or isn't properly implementing the specification.
- (Advanced) If the Bytes values appear to be incrementing but you suspect they're not correct, do the following:
  - Note the values then run again a few seconds later and note the new values.
  - Subtract the first from the second and divide by the number of seconds you waited. This will give you the average bytes/sec.
  - (Optional) Use a site like [speedtest.net](#) to generate a known amount of throughput.

