

# NAT TABLE FLOODING

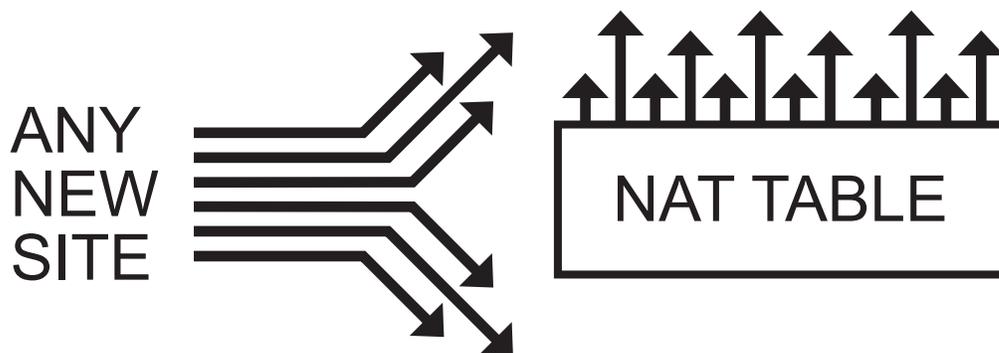
NAT Table Flooding can be one of the reasons your internet won't connect. The radio you have mounted outside your house and/or your router inside the house can have around 2000 connections over a given time period (usually 24 hours). When you click to pull up a webpage like google, it sends the data request to google and your NAT Table directs it to you.



This connection is then stored on your NAT Table. Although 2000 connections is usually lots, when you use bit torrent programs to download "FREE" movies, games or music the amount of connections used is HUGE! When you click download the site will try to get a little bit from a bunch of sites rather than going to one site to get the full download. This creates hundreds or thousands of connections which fills up NAT table.



When the NAT table is full, the incoming data will be dropped because the NAT Table is unable to tell it where to send the data.



NAT flooding through a router is also possible and is one of the reasons why your router might 'hang up'. Viruses and other infections like botnets can also cause flooding, and the obvious fix here is to clean the infection or reload the software on the infected device.

If you reboot the router in the house and/or radio outside and everything works great and then later in the day it is bad again it's because the torrents have filled up the NAT table again, rebooting is just a temporary fix. This can also happen if your 1st device is working fine and once 2nd device is turned on, the 1st device stops working. That means the 2nd device is running the torrent programs.

# TWO THINGS YOU CAN DO

## 1. Get rid of bit torrents.

Google “Uninstall bit torrents” and follow one of the many instructions.

This is the best solution if “computer repair and maintenance” is not something you would include on your job resume.

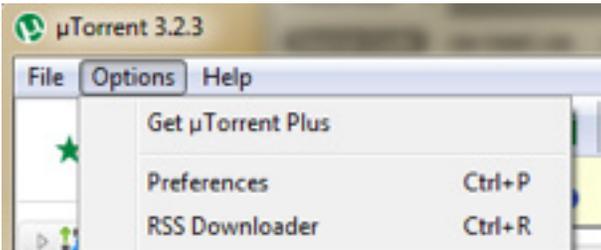
## 2. Keep the torrent programs but apply some controls.

- Limit the number of simultaneous connections (usually a couple hundred is sufficient) by applying controls such as the ones shown below.
- Another option (that is not usually available) is to set the time out on open connections to a lower number. The default is normally 1440 minutes (24 hours), which means that the NAT table will wait up to 24 hours for the data before dropping the entry and freeing up the table entry. By setting this to 720 (12 hours) your NAT table will free it self up more often.

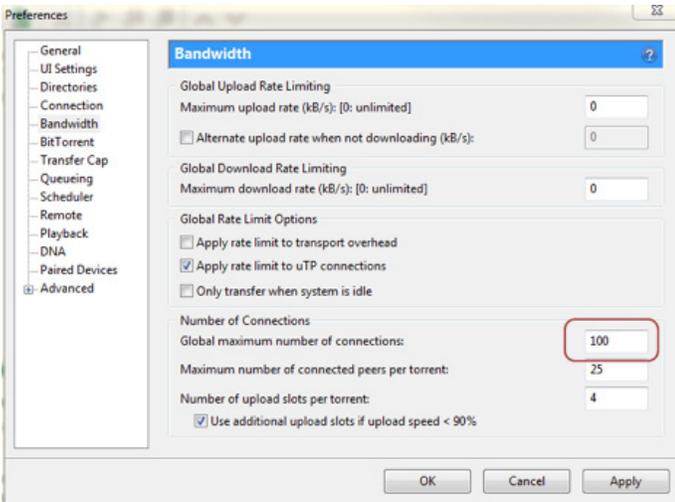
## Example: Adjusting Number of Connections used by utorrent

Utorrent is currently the most popular bit torrent client. This shows how to fix the number of connections setting to help avoid NAT flooding issues.

1. At the top, click on the Options menu item.
2. Select, ‘Preferences’



3. In the window that appears, on the left hand panel select ‘Bandwidth’
4. Change the ‘Global maximum number of connections’ entry to 100 or less
5. Click ‘Apply’



# TRY IT WITHOUT THE ROUTER

If all else fails, try by-passing the router by plugging the flat black cable for the internet directly into your computer, where you should get the registration page from us to initiate an IP for the device that you currently have connected.

