

# Xbox Warning about "Moderate" or "Strict" NAT Type

When you attempt to play games on your Xbox 360, you might be warned that your NAT type is "Strict" or "Moderate" and that you may be unable to use all the functions of the game. This could include:

- Certain games can take longer than usual to make an initial connection.
- You cannot hear a certain player within a game or someone cannot hear you
- You cannot join a party or your friend cannot join your party

## What is NAT?

NAT stands for Network Address Translation. With NAT, each device is given an IP address that can be used only on campus. When traffic is sent off-campus, the source address is translated (using Network Address Translation or NAT) to an address that can be routed on the Internet. Any response to that traffic is translated back from the Internet-routable address to the private IP address and sent back to the device.

The use of NAT on large networks like those in universities can cause some problems with Xbox gaming consoles, since they were not designed by Microsoft for use within an enterprise NAT environment.

## With Microsoft Xbox gaming there are three types of NAT settings:

- Moderate – can connect only with consoles using moderate and open NAT
- Strict - can connect only with consoles using open NAT
- Open – can connect with consoles using any NAT type

Open is the optimal setting for seamless multiplayer gameplay.

## Can my Xbox console setting be changed to "Open"?

There is currently no way to mitigate this issue with certainty due to the way the Microsoft's LIVE service detects NAT types. However the following has been observed to work in some cases:

## Steps to changing NAT type to Open:

### Xbox 360

- 1) Go to your System Settings then select Network Settings
- 2) Click on your Wired/Wireless Connection
- 3) Click on Test Xbox Live Connection
- 4) Now sign back in to Xbox Live and your NAT type should now be "Open"

\*This is not guaranteed to work in all cases

### Xbox One

- 1) Go to Settings then click on Network Settings
- 2) Under Troubleshooting, click on Test multiplayer connection
- 3) Once you receive the result stating that the network is good, hold down LT, RT, RB, and LB (left trigger, right trigger, right bumper, and left bumper). It will show the Detailed network statistics
- 4) You will see three dots (...) under Detailed NAT information, wait until you see: "Your network is behind a cone NAT" then press "A" then press "B" and your NAT type should display as Open.

If you get that your NAT is behind a Port Restricted NAT then repeat steps 2-4

\*This is not guaranteed to work in all cases

We're very cognizant that the network is an important resource for entertainment and recreational use, including online gaming. However the university does not provide technical support for gaming consoles and cannot guarantee the gaming experience over the UMW network. Console owners are responsible for all setup and configuration of their game consoles.