# How to use the built in Internet simulator Crytek GmbH 

\sv_maxbitspersecond - Set the server maximum upload throughput \maxbitspersecond - (From the client) Set the server maximum upload throughput per client
The lower of the two values determines the maximum upload throughput on the server per client
\sv_netstats - Shows network statistics
\g_internet_simulator_packetloss Set the packetloss (must be a positive integer). This can be run on either the client or server. Setting it on the server affects all clients equally. Setting it on the client affects only that client. Should it be set on both, the loss would be $100-(100-s)$ * $(100-c)$ where $s$ and c are the server and client values.
\g_internet_simulator_ping Set the ping (must be a positive integer). This can be run on either the client or server. Setting it on the server affects all clients equally. Setting it on the client affects only that client. Should it be set on both, the ping is the sum of the two. Note that this is a random ping distributed equally between 0 and the setting. Therefore, the actual ping will on average be half the specified value

As for testing, various likely possibilities should be tried.
The most common are
Throughput - 28800, 56000128000512000768000
Packetloss is usually 3 percent in real world conditions. Testing should normally use this and try higher values to ensure stability Ping should be tested from 50 to 500. Note the net code is not very responsive and has an additional processing delay up to 50 ms in some high load circumstances.

I would test primarily on a LAN using various settings across various maps and game types to determine playability. Specific maps are not important, however each setting combination should be tested.

After LAN testing, internet testing should take place with the internet simulator off (default). Every functional aspect of the game related to networking should be tested at least once. In theory there should be no difference however.

