iQuila KB

Resolving MTU Issues

iQ22048r2

Resolving MTU Issues:

Computers use 1,514 bytes as the MTU (Maximum Transmission Unit) by default. This is a standard Ethernet packet size without FCS (Frame Check Sequence), as it is not possible to determine the optimized size of the MTU even when a packet is transmitted via VPN.

If a computer transmits a full-size packets (1,514 bytes) via the Ethernet segment, it will accomplish the best throughput. But, if there is a legacy VPN between two computers, then performance will be cut in half. Each packet being divided into two packets, thus increasing the total number of packets which in turn will decrease the total throughput.

The iQuila VEN Protocol uses an advanced stream tunnelling system. This iQuila VEN Protocol will optimize the burst-sending of packets to 1,514 bytes and transmit them via the VEN tunnel. Packets are queued and joined to be regarded and send as a single block. The iQuila VEN Protocol will then encapsule the entire block by HTTPS and SSL and then passed it to the physical network. This generates a fewer number of packets in the tunnelling process, resulting in good performance, better throughput and thus resolving most MTU issues.