Perfect Video over Any Network

QVidium has developed a comprehensive toolkit of **patent-pending** Quality of Service (QoS) technologies that enable high-quality video transport over unconditioned IP networks, including wireless links and the Internet.

Our patent-pending (*), and advanced technologies include:

Three Galois-Field Based Forward Error Correction (FEC) methods. Over twice as efficient as parity-based FEC such as Pro-MPEG FEC COP #3:

- **Enhanced CBR FEC:** Ideal for a mixture of random packet loss and short burst-drop loss without interleaving. Optimal throughput and FEC recovery efficiency. Dynamically reconfigurable for minimal latency. Handles file transfers as well as streaming media.
- **Content-sensitive FEC*:** Exploits specific characteristics of video and audio streams to further optimize our Enhanced FEC for variable bitrate (VBR) as well as constant bitrate (CBR) media streams
- **Advanced Robust FEC:** Combines the advantages of all our FEC technologies to handle random and short burst packet losses as well as long burst drops with improved partial recovery characteristics

Advanced ARQ*: The most effective packet recovery mechanism known. Capable of handling a wide and dynamically varying range of network environments, including wireless links and the Internet.

Line aggregation*: Aggregate any combination of WAN links, such as ISDN, DSL, DOCSIS-Cable, and T1 links for a cost-effective and robust solution for increasing connectivity bandwidth

Network Monitoring: Continuously measures key link and network characteristics to optimize and automate QoS configuration

Bi-directional bandwidth measurement: Helps automatically qualify network connections. Robust and accurate measurement for a wide range of network conditions and equipment.

Precision Network Synchronization*: Works through harsh network environments to provide optimal operation of QoS mechanisms. Novel software-only technology avoids the need for variable controlled oscillators.

Synchronized jitter and reorder buffering*: Synchronizes stream and network clocks despite network jitter and loss. Removes jitter and restores packet sequence with minimal latency.

Pro-MPEG Forum FEC Code of Practice #3: A reliable and efficient C-Language implementation adaptable to a wide variety of platforms.

Packet Pacing / Rate Shaping: Controls packet transmission rate to minimize and help avoid network congestion and the resulting jitter and packet loss.

Encryption: Proprietary stream encryption based on secure and industry-recognized RSA algorithms, but incorporating multiple, dynamically changing keys for increased security.

For more information: E-Mail: info@QVidium.com