

Quality of Service



Network administrators are quite familiar with the prohibitive effects of latency and queuing on corporate networks. NetWolves can help.

Those familiar with low speed Internet connectivity have probably witnessed at one time the effect a large file transfer has on interactive traffic over the connection. The file transfer can easily consume most of the available bandwidth, causing all other data to be held up until the file transfer is completed. The problem occurs because the file transfer is given the same priority for transmission as other data transfers. There is no consideration given to the type of data contained within each packet when queued for transmission.

NetWolves can help to address this problem with our Quality of Service application, a secure and reliable means of controlling network traffic. Queuing is performed on a first in, first out basis, while data packets are scheduled for transmission on a first come, first served basis. Any new data packet is added to the end of all queued packets and, as a result, it is transmitted last. When the necessary bandwidth becomes available, the first data packet in the queue is transmitted, followed by the second packet, and so on until the last packet is sent.

With NetWolves' QoS technology, consideration can also be given to the type of data contained within a data packet when queuing it for transmission. QoS uses NetWolves' ICSA-certified firewall to categorize data packets and divide them into classifications using any matching pattern permitted by the firewall rules.

Depending on a company's security policies, such a classification may contain data packets for a single TCP connection, from/to a given host, an entire sub-network, or even a protocol type. Packets belonging to the same classification are then passed to either of two objects, known as *pipes* and *queues*, which are responsible for implementing traffic regulation. In practice, pipes establish firm limits for how much bandwidth a classification may use, whereas queues determine how different classifications can share the available bandwidth.

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QoS allows for the shaping the general intensity, direction and breakup of network traffic using various methods such as bandwidth capping, delays, flow queues, and other techniques.

QoS ensures toll-quality voice over IP communications and high levels of network performance. Because VoIP transmits voice over data circuits, the QoS application is critical to controlling and shaping the packetized voice traffic over the network for uninterrupted toll-quality voice communications.

QoS is scalable with other NetWolves security services, including ICSA-certified firewall, IPSec and SSL VPN, ASUReroute, intrusion detection, congestion management, advanced routing, content filtering, and email virus protection.

QoS can be monitored and configured from a central location using NetWolves' Secure Remote Monitoring and Management (SRM²) system.

Call today to learn more about NetWolves' Intelligent Network Solutions.