

## Quintum TOS Implementation

### I. Introduction.

The purpose of this document is to provide Quintum customers with information on how the Type of Service (ToS) bit is set in the Quintum Tenors for routers that support prioritization based on this bit.

### II. ToS Setting.

Quintum products all support setting the ToS (Type of Service) byte of the IP header datagram. This setting is predefined and cannot be changed. It has been set according to the recommendations for VoIP when using a public Internet connection. Below is what the ToS byte looks like.

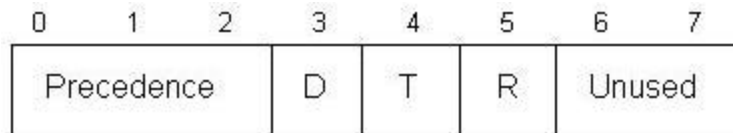


Figure 1

*Precedence* – Specifies datagram precedence, with values ranging from 0 (normal precedence) through 7 (network control, allowing senders to indicate the importance of each datagram. The Tenor sets this to 101 (5).

*D* – Low Delay. Tenor sets this to 1.

*T* – High Throughput. Tenor sets this to 0. If this were set to 1, then calls would not work over the public Internet as the Internet does not have a high throughput.

*R* – High Reliability. Tenor sets this to 0. If it were set to 1, then you probably would not be able to have Voice go over the Public Internet as there is no high reliability built into the Internet.

So the full setting for the ToS byte in the Tenor would be 10110000 (hex 0xB0).

### III. Summary.

It is also important to understand that the Tenor does not force the prioritization of VoIP packets. This is a function of the router. Also, every router that this call may pass through must also support this feature else there will not be any prioritization.