

# "SLAs for Application-Specific QoS for IP-based VPN Services" Open Group QoS Task Force Roundtable Discussion

## Conclusions Regarding SLAs in Use Today

### 1. All data treated equally

- SLAs in use today do not take into account the different performance levels required for different applications. While in practice, VoIP requires a different network performance than videoconferencing, which in turn is different from that required for email, SLAs being offered today by major and minor service providers gloss over real-world needs in favor of a single set of performance standards.

### 2. "Average" service is acceptable

- SLAs today rely on averages to measure performance: average packet loss, average latency, and at a high level, average uptime. Averaging is in part a by-product of treating all data equally. However, averaging also enables service providers to deliver extremely poor performance for short periods of time without penalty to themselves, even when this performance penalizes their customers through poorer service delivery to their end-customers, or through weak application performance on the network.

### 3. Security benchmarks are not ubiquitous

- Only Verio and UUNet appear to have enough faith in their security services to publish SLAs involving network security. Verio guarantees firewall uptime, UUNet guarantees VPN network availability and latency. Neither company makes strong guarantees around secure services. Verio guarantees a relatively low 99.93% uptime. UUNet guarantees relatively long maximum average latencies of 120 ms, and only insofar as the customer is using no more than 50% of contracted bandwidth in a given month.

### 4. Unclear burden of proof

- SLAs do not specify where the burden of proof lies in establishing performance shortcomings, or how the performance is measured in order to assess network performance. In certain cases, the service provider is explicitly responsible for reporting statistics back to the customer, at the customer's request, though this enables service providers to manipulate the data and only holds them accountable when the customer specifically requests an accounting. In no case, do SLAs explicitly state how often performance statistics will be taken in order to measure the averages, and in no case do they specify who is responsible for collecting this data.

### 5. Remedies do not "fit the crime"

- Network performance is becoming ever more mission-critical in the daily life of the enterprise. Still, service providers grant no more credit than one day's prorated monthly charge for failure to achieve stated packet loss or latency benchmarks, and no more credit than one month's charges (in the most generous agreements) for failure to achieve stated uptime benchmarks. In many cases, the cost of poor network performance, in terms of customer dissatisfaction and defection, noncompliance with federal regulations, or simply enterprise down-time, is far more expensive than the cost of a month of network services.