



# CSG QOS MONITORING

MANAGE QOS AND FRAUD WITH  
REAL-TIME ANALYTICS



Intercarrier call traffic has always significantly contributed to operator revenues. Now, partner services such as third-party video content, downloadable apps and embedded communications are boosting your revenue and competitiveness. But poor quality of service and the threat of international fraud—whether on your own network or on other networks—can lead to unhappy partners and customers, and lost revenue from both.

### READY FOR IPX QoS MANAGEMENT?

Quality of Service is your key differentiator over OTT competitors. Proactively managing your voice and IPX QoS increases customer and partner satisfaction and drives revenue.

Proven for real-time voice QoS monitoring for IPX networks, CSG QoS Monitoring addresses QoS and Fraud problems through near real-time analytics to power proactive testing and routing changes.

### A COMPLETE TOOLKIT

CSG QoS Monitoring provides the dynamic real-time analytics capability you need to address issues before they've lost you money—or customers. Quickly analyze network issues, initiate corrective actions and exchange vital information in near real-time.

With CSG QoS Monitoring, you can:

- Utilize near real-time data for analytical insights on wholesale service performance
- Control quality as you roll out new IP services
- Detect and be alerted of international fraud to stem lost revenue and complaints
- Gain immediate visibility into major traffic shifts as they happen
- Stay informed with intelligent QoS and fraud alerting based on analysis of historical traffic data
- Get up-to-date evidence of specific SLA breaches and fraud cases down to EDR level
- Maintain performance levels and achieve near linear scalability as data volumes increase



## THE POWER OF CSG QoS MONITORING

CSG QoS Monitoring is at the heart of a unique end-to-end analytics and dashboard solution for the collection, detection, alerting, verification, dispute management and rapid resolution of QoS and fraud problems.

CSG QoS Monitoring is a purpose-built application that drives continuous network quality improvement using near real-time analytics. With integration to mediation, assurance, dispute management and routing management solutions, CSG QoS Monitoring provides comprehensive visibility into multiple factors that impact voice quality and fraud in both IP and TDM networks. The system's quick analysis speeds troubleshooting and significantly reduces operating costs.

## ONE UNIFIED SYSTEM

CSG QoS Monitoring removes the need for multiple systems for QoS monitoring, fraud management and traffic profiling. It monitors all of these use cases in near real-time from a single application, applying a common reference data model and one-time pass of EDRs from the network for all functions.

By analyzing problems down to dial-string and cause code level, CSG QoS Monitoring ensures you need only act on the offending traffic, avoiding the complications of redirecting whole destinations, which can increase the cost base and impact downstream quality.

## THE REAL ADVANTAGE OF REAL-TIME

Because CSG QoS Monitoring is updated in real-time, it provides the exact QoS KPIs and associated alert criteria that the user needs, when they need it. The system supports a range of different QoS KPIs from ASR, NER, ALOC, PDD and SDC to IP network KPIs such as jitter, packet loss, RTD and R-factor.

For international fraud, the system constantly monitors network-wide traffic patterns to detect unusual behavior. If detected, automatic fraud analysis will determine if a new fraud case has recently started and the type of fraud being perpetrated. An email or SMS alert will be sent in minutes to nominated users. The fraud cases supported include premium rate, IRSF, PBX hacking, stolen SIMs, subscription, roaming, Wangiri, early answer, and call hijacking (FAS).

Using historical traffic pattern analysis, there is no need to manually set alert QoS and fraud thresholds as the system automatically derives thresholds in real-time. It automatically adapts to changing traffic patterns as your volumes grow and evolve.

**CONTROL QUALITY OF SERVICE,  
FRAUD MANAGEMENT AND TRAFFIC  
MONITORING FROM A SINGLE SYSTEM**



#### Collect: CSG Billing Mediation



Collect and process EDR/CDRs in near real-time, including next generation network parameters, to provide up-to-date traffic information into your downstream systems

#### Detect: CSG QoS Monitoring



Identify performance and traffic anomalies in traditional TDM and IP telecommunications networks with a sophisticated real-time QoS system. Use for traffic analysis and early detection of international fraud

#### Verify: CSG Assure Carrier QoS Testing



Proactively test with validation calls to and from your network, addressing fraud and ensuring that you, your customers and partners are getting the international call quality they contracted

#### Settle: CSG Dispute & Reconciliation Manager



Quickly and efficiently resolve disputes once QoS issues arise. Track disputes through automated workflows and monitor results through a dispute dashboard

#### Deploy: CSG Route Optimization



Implement route changes to detrimental traffic paths in response to QoS alarms. CSG Route is the number one routing system worldwide, with 70 deployments around the globe

### BRINGING THE SOLUTIONS TOGETHER

CSG QoS Monitoring works within your existing operational ecosystem to make a near real-time bottom line impact.

Managing use cases from a single system helps reduce TCO and provides a strong infrastructure to support current and future system requirements.

Talk to our experts about how you can deliver quality service and prevent fraud with CSG QoS Monitoring. Contact us at [csqi.com](http://csqi.com) for more information.