

Traffica for MGW

Monitor and analyze user plane voice quality in real-time

Nokia Siemens
Networks



Key benefits

24/7 real-time voice quality monitoring solution

User plane and control plane correlation offering visibility of entire MSC Server System-based networks

Scalable and high-capacity architecture – Traffica for MGW can monitor up to ten MGWs or up to 120 000 simultaneous voice connections

Alarm thresholds and drill-in capability for immediate corrective actions to be taken

Cost-efficient network-wide solution for MSC Server System-based networks



24/7
voice quality
monitoring

Voice quality indicators

Mean opinion score (MOS)

Quantifies the subjective quality of speech in communications systems from 1 (worst) to 5 (best)

R-value

Expresses speech quality from 1 (worst) to 100 (best)

Jitter

The delay variation between received IP packets or ATM cells; may cause buffer overflow resulting in packet or cell loss

IP packet loss ratio

The ratio of lost IP packets to total transmitted IP packets

Frame erasure ratio (FER)

The ratio of bad or lost speech frames to total transmitted speech frames; an indicator of radio connection quality

Noise level

When disturbingly high is reduced with noise suppression techniques

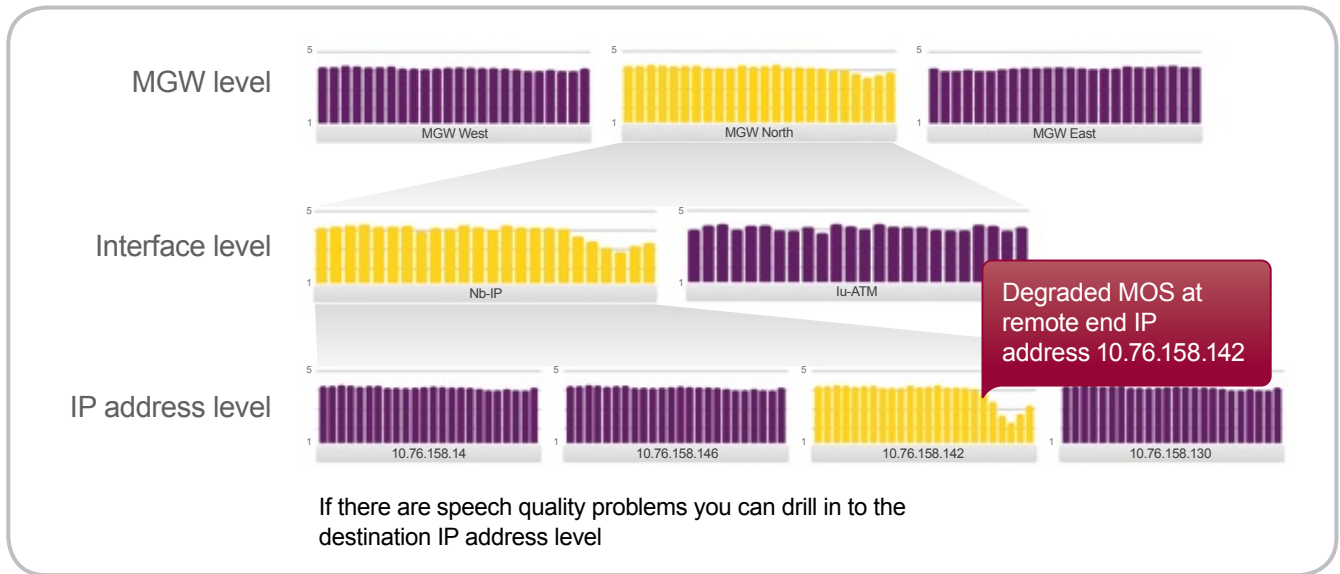
Speech levels

Above a specific dynamic range (e.g., -20 to -15 dBm0) can cause distortion in transmission equipment; below, and noise in the system becomes unacceptable

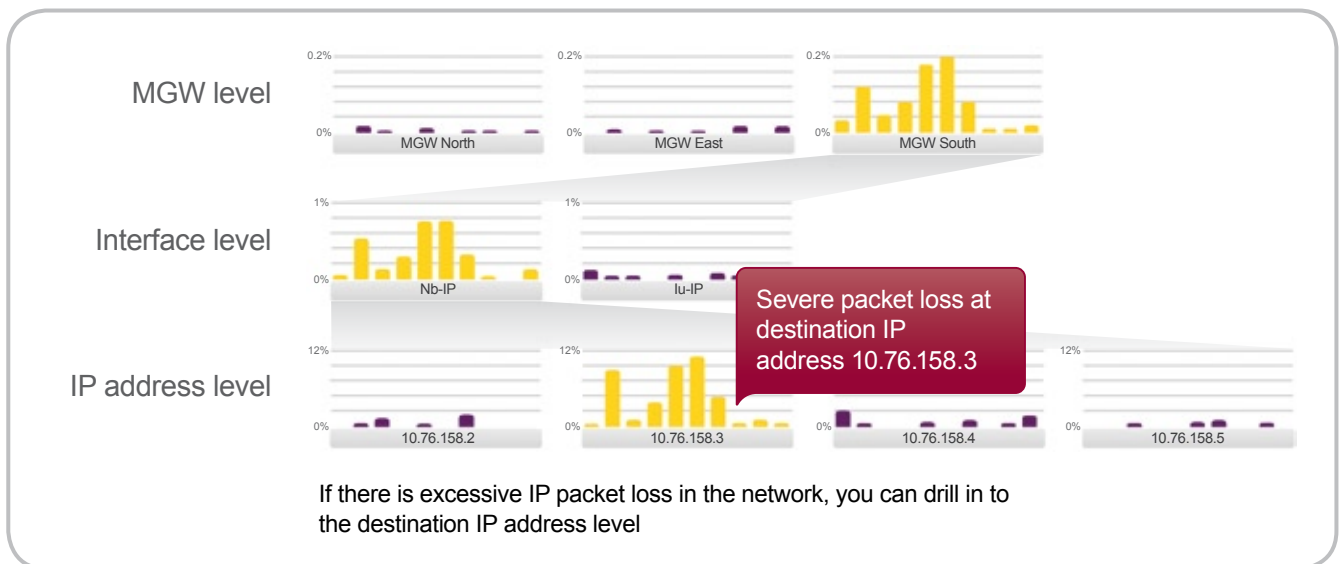
Double talk

When one conversant starts talking before the other has finished

MOS Drill-in



IP packet loss



Call details

If there are user complaints, it is possible to see call details in both the control plane and the user plane

