

Gain a Bird's Eye View of User Experience with Gigamon and Voipfuture



THE CHALLENGE

As is the case with most businesses, positive customer experience is the lifeblood of Communication Service Providers (CSPs). However, capturing data about user experience and glean meaningful insights from the data that can inform improvements is often a hurdle.

THE SOLUTION

Combined with the Gigamon Visibility and Analytics Fabric™ (VAF), Voipfuture Qrystal, a next-generation passive monitoring solution, offers CSPs the visibility required to root out issues that could impact user experience and voice quality.

JOINT SOLUTION BENEFITS

- + Gain user experience data on individual calls, mobile cells, network elements, interconnection partners and other statistical aggregates
- + Measure, troubleshoot and resolve VoIP quality service issues fast
- + Accelerate processing throughput and time to resolution
- + Provide and verify voice quality SLAs
- + Simplify operations and support customer care agents

Introduction

Voipfuture Qrystal delivers comprehensive information on VoIP user experience in 5G, LTE, IMS/NGN and enterprise networks to stakeholders across the CSP, including engineering, operations, network and service optimization teams, marketing and management.

The system analyzes call signaling and media transport performance for every live call and goes beyond plain protocol decoding to automatically detect typical impairments and root causes.

Qrystal's patented timeslice media KPIs accurately summarize the in-call user experience for entire services, routes, cells and other relevant entities. The technology is highly scalable, making it applicable to a wide range of network environments, from small enterprise branch sites to major interconnection points and large 4G/5G mobile networks.

The Gigamon + Voipfuture Qrystal Joint Solution

Key Gigamon Visibility and Analytics Fabric (VAF) features that enhance Voipfuture Qrystal include:

- + **Easy access to traffic from physical and virtual networks:** The VAF manages and delivers all network traffic — including East-West datacenter traffic and private and public cloud workloads — to Voipfuture Qrystal tools so all traffic can be monitored and analyzed together, reducing blind spots and increasing the likelihood of excellent customer experience.

- + **Aggregation:** The Gigamon VAF selectively aggregates all traffic to be monitored and analyzed together, ensuring complete conversations are assembled by covering the issue of asymmetric routing and link aggregation groups. By tagging the traffic, the VAF ensures the source of traffic can be identified.
- + **Traffic filtering:** The Visibility and Analytics Fabric can be configured to send only relevant traffic — or relevant sessions — to the connected tools, so Voipfuture Qrystal doesn't become overloaded with irrelevant traffic.
- + **Load balancing to spread traffic across multiple devices:** When traffic flows are larger than a single tool can cope with, the VAF can split the flow across multiple tools, while ensuring sessions are kept together. Additionally, tool numbers can be incrementally grown by adding new devices to those already instantiated.
- + **SSL decryption:** The VAF decrypts SSL/TLS encrypted traffic (including TLS 1.3) for analysis by Qrystal and any other monitoring devices connected out of band.
- + **Deduplication:** Pervasive visibility requires tapping or copying traffic from multiple points in the network, which in turn, means tools may see the same packet more than once. To avoid the unnecessary packet-processing overhead on Voipfuture Qrystal tools, the VAF removes duplicates before they consume resources.
- + **Subscriber-Aware Visibility:** Gigamon VAF capabilities in 5G correlation, GTP correlation, FlowVUE™ Flow Sampling and SIP/RTP correlation enable intelligent prioritization of subscriber traffic for tool processing targeted at service provider customers. In particular, SIP/RTP correlation ensures coherent deliver of the VoIP traffic to Qrystal.

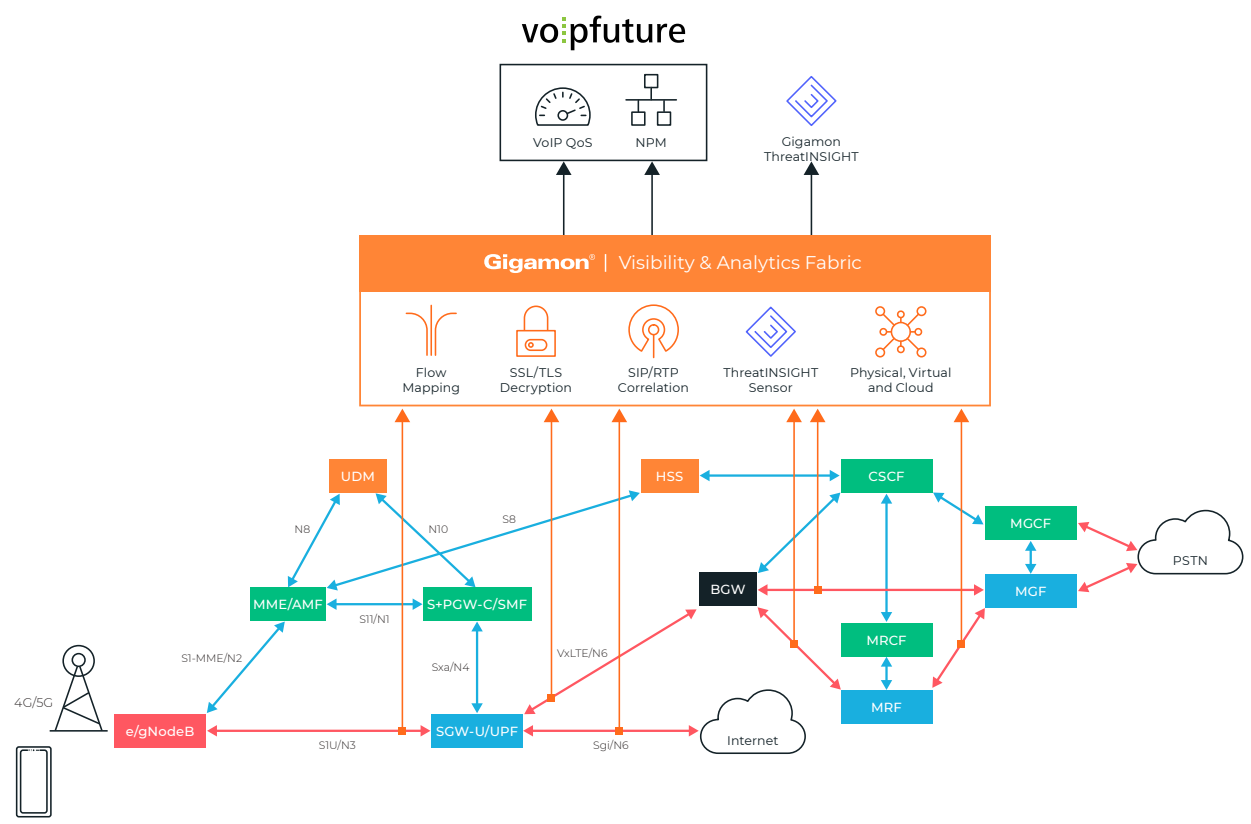


Figure 1: Service provider VoIP monitoring.

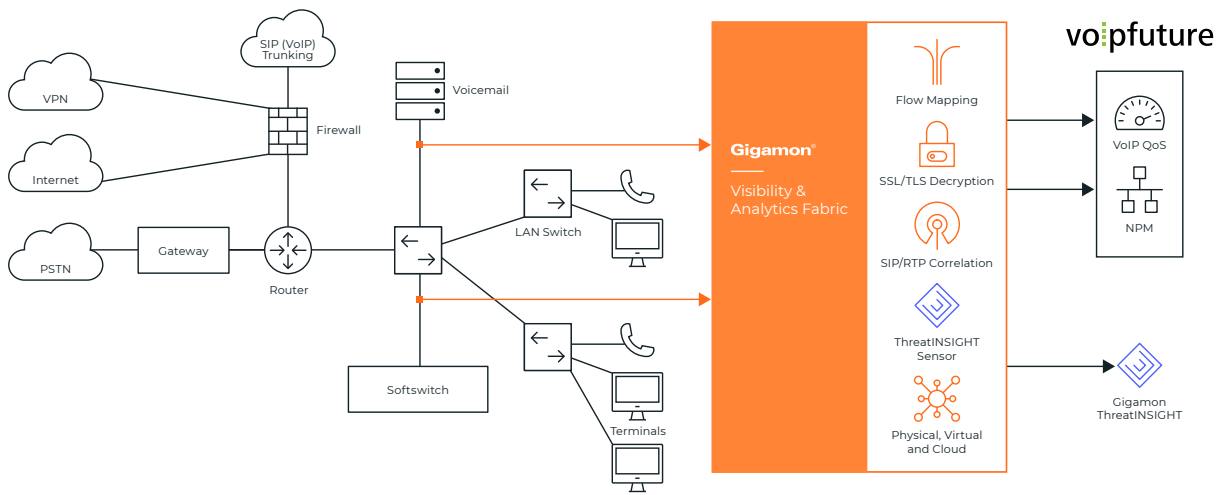


Figure 2: Enterprise VoIP monitoring.

For more information on Gigamon and Axellio, visit: www.gigamon.com and www.voipfuture.com.

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