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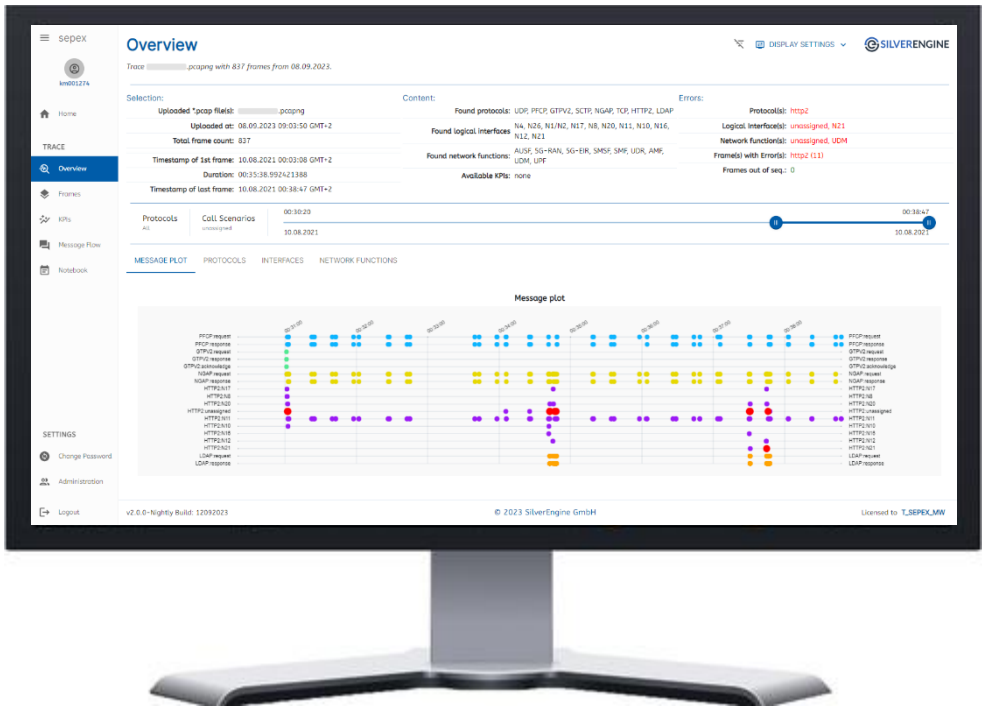
Call Tracer Tool

Product sheet



5G and 4G communication insights

Analyze 5G NSA/SA, EPC, VoNR, VoLTE and VoIP quality of experience.

All protocols supported

5G HTTP/2 | NGAP/NAS | S1AP/NAS | PFCP | SIP | MEGACO | Diameter | GTP-U | GTPv2 | RTP/RTCP | LDAP

Distraction free analysis

Automatic correlation of messages from different interfaces related to a subscriber.

Call Tracer Tool

Identifying E2E Subscribers' services issues in Core Network is difficult and with 5GC the complexity is growing. It involves more Network Functions (NF) and interfaces with new protocols such as HTTP/2.

VoIP services (VoLTE or VoNR) in a Mobile Network are adding even more complexity with IMS. Analyzing one interface or network function in isolation is in many cases not enough to understand an issue. Getting an E2E view per subscriber involving more interfaces essentially speeds up analysis and helps to separate subscribers with and without an issue.

The SEA Call Tracer Tool is helping engineers to understand issues 10x faster, speeding up root cause identification in live networks.

The tool is equally suitable for lab testing and helps to quickly identify conformance or interoperability issues.

SEA Call Tracer Tool is complementing SilverEngine SEA Analytics Solution and is available as a standalone tool. It is your natural companion when need arises to drill down to call flow and protocol level for fault analysis and root cause identification.

Within Call Tracer **Overview** you get quick visual insights into

- protocols contained within the trace,
- included (captured) core network logical interfaces,
- Network Functions detected,
- error messages per protocol, interface or NF,
- identified call scenarios,
- all shown in time axis.

This gives you a head start to quickly focus on what is important for fault analysis.

Overview Network Functions – messages and errors

The tool supports also insights into User plane. In a VoIP context it offers speech quality KPIs that help easily to identify voice quality degradations (per call).

> **With our tool we make your workday a breeze. We take over the hard work and provide you within seconds with the results in an easy-to-use application.**

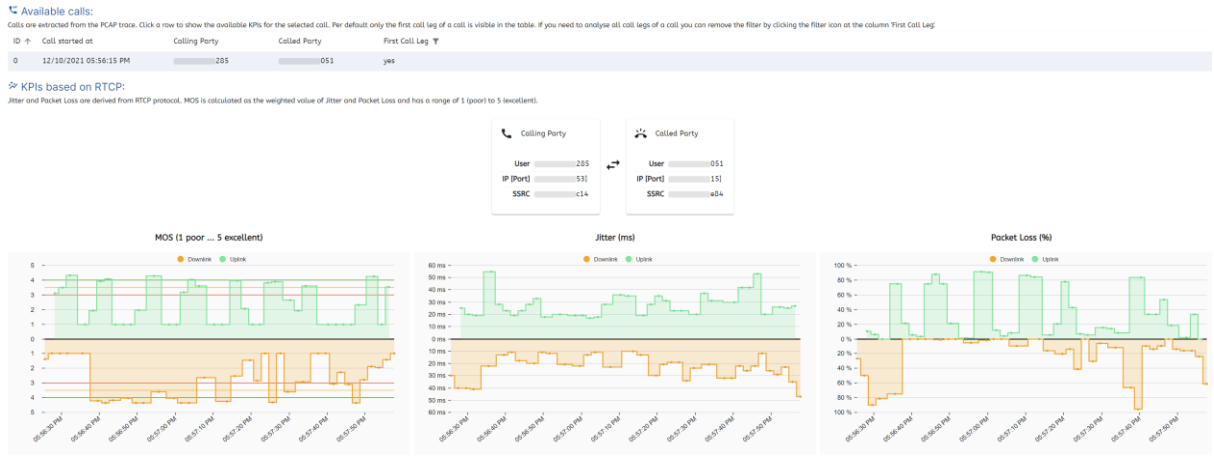
You can rely on our ever evolving functionality:

- boosting speed of analysis by **removing** irrelevant communication clutter from traces.
- Simplifying analysis of multiple related traces by **merging** them automatically.
- Grouping and filtering capabilities by **automatically detecting network functions and core interfaces** and thus removing the need to remember which IP address belongs to which NF.
- **Showing** the most important parameters and protocol attributes while still giving access to all details if necessary.
- Providing an easy way to drill down into communication related to single subscriber by automatic **correlation of all messages into call scenarios** like SIP Registration, QoS flow or Bearer setup attempts.

- Insights into speech quality in direct relation to C-Plance events and Mobility, like cell handover by **automatically calculating KPIs** per call.
- Visual message flow with key protocol information including **grouping** by network functions and intuitive **rich filter** capabilities.
- A central, collaborative environment providing a secure and multi-user setup with **team separation**. Access to traces is given only to authorized users within a team.
- A built-in Notebook facilitates collaboration and documentation of analysis progress and root cause for teams working together on issue resolution across the organization.

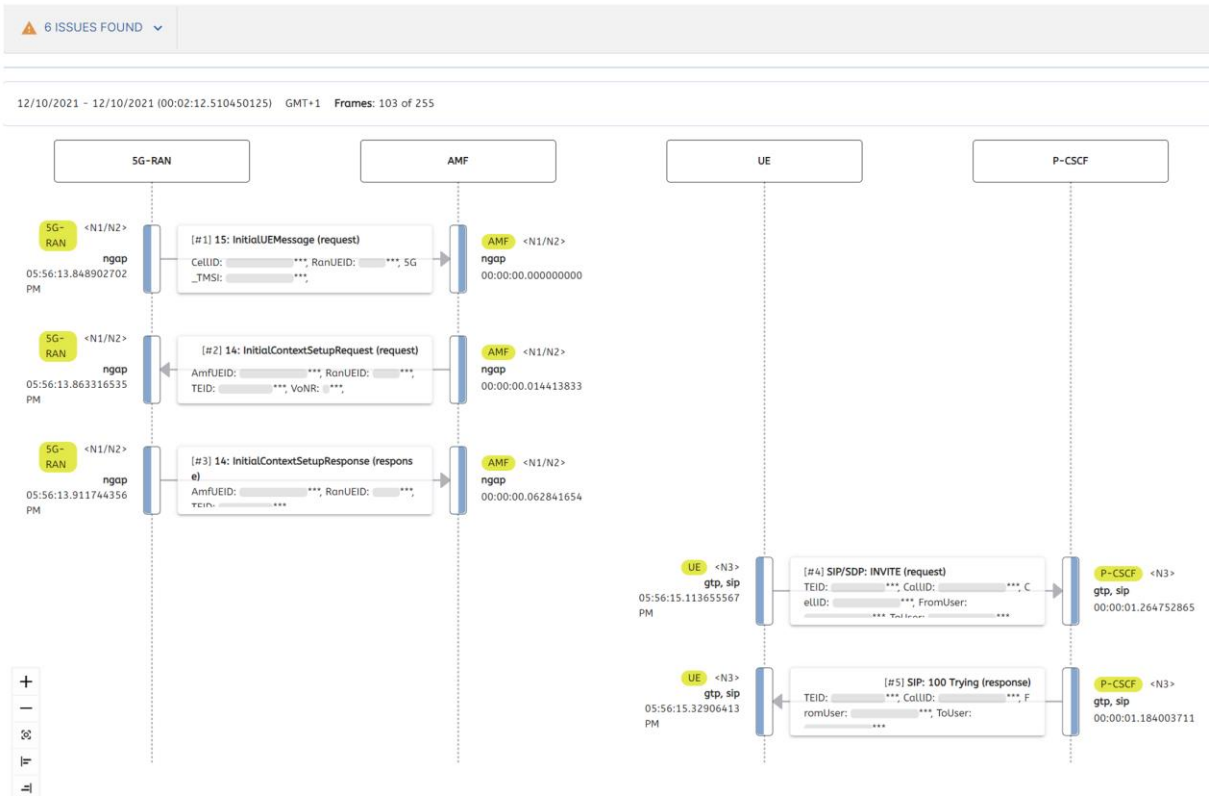
Sneak Peak

Per call (and per call-leg) VoNR or VoLTE Speech quality KPIs – such as MOS, Speech Mutes and One-Way-Audio E2E – are available for RTP/RTCP protocols.



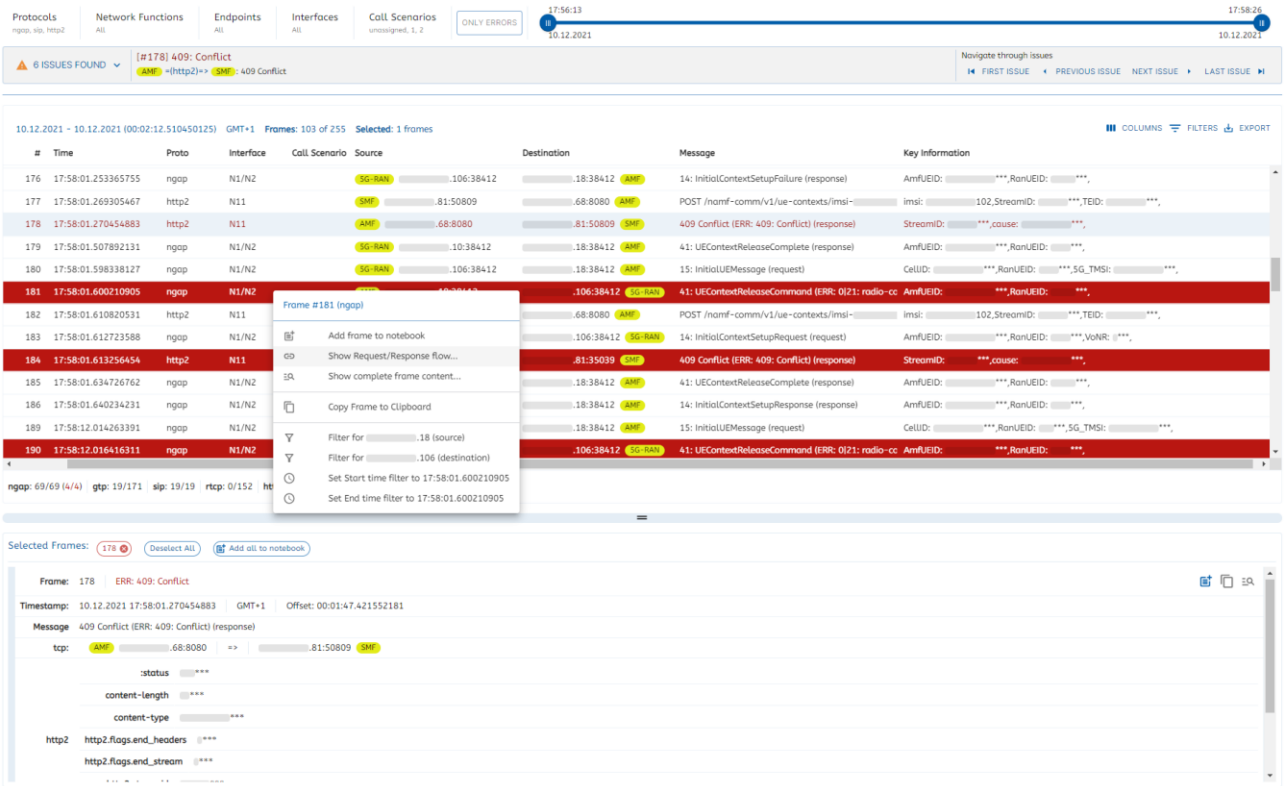
Speech quality KPIs dashboard - from RTCP

Message flow view with automatic grouping of NF with issue highlighting and intuitive filter capabilities.



Message flows – grouped by logical NF

Detailed frame by frame view with protocol details, request/response pairing and intuitive filter capabilities.



Highlighted features

Data import format	pcap or pcapng. Other formats to be supported on request.
File merging	Automatically merging multiple files during upload.
Supported Interfaces	All 4G, 5G Core and IMS interfaces.
Network function grouping	Automatic logical grouping of NE/NF for easier and clutter free troubleshooting.
Trace overview	Visual analysis which logical interfaces or Network Functions experience issues and at what error rates.
Error highlighting	Highlighting protocol errors and message sequences leading to an issue. Easy filtering for error messages.
Intuitive full text search function	Search across all sections and protocols in a quick and intuitive way.
VoIP speech quality KPIs	Speech quality KPIs from RTP and RTCP protocols – such as MOS, Speech Mutes and One-Way-Audio E2E and per call-leg.
Call flow	Clutter free easy to read Call flow flows insights due to automatic detection of Network Function.
Subscriber correlation	Automatic subscriber correlation across protocols and interfaces.
Call scenario recognition	Detection of common call flows for automatic grouping and error highlighting – facilitates troubleshooting.
Frame by frame analysis	Step frame by frame and analyze protocol details one by one with support of rich filter capabilities.
Request/Response pairing	Easily find requests and responses for individual messages.
User Management	Multi-User, multi-team and user role support.
Security	Secure access and isolating access to traces by organizing users into teams.
Deployment	Hosted by SilverEngine or on-premises.

The Call Tracer Tool brings you more than 10x faster to root cause than any other tool.

Get in touch with us:

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