

GeoProbe® RTP Stream Capture for Media Quality

Network Assurance for Fixed Core



Ensure High QoS of Media Streams and Compliance with Law Enforcement

The ability to capture and store RTP media streams from VoIP networks is becoming increasingly important for service providers. Captured RTP streams can be a vital resource for troubleshooting and analyzing media quality in an IP network. Additionally, compliance with law enforcement requirements such as the Communications Assistance for Law Enforcement Act (CALEA) will require RTP media capture capabilities to provide wiretap equivalents in an IP network.

Tektronix' GeoProbe network monitoring system provides highly-configurable, non-intrusive capture of RTP streams in VoIP networks. GeoProbe's real-time correlation of signaling and media even across multiple protocols and network types ensures detection and capture of all RTP media associated with a given call.

With GeoProbe's RTP stream capture capabilities, troubleshooting VoIP performance trouble tickets is simplified.

- Activate capture triggers for the affected subscriber.
- Capture streams from known-source tests or actual calls for detailed analysis.
- Analyze captured streams during heavy network load to pinpoint sources of degradation.

As RTP stream capture processes are independent of the GeoProbe's RTP analysis functions, QoS measurements are not impacted.

RTP stream capture triggers are user configurable. Trigger configurations are distributed to the real-time network monitoring probes in the VoIP network. When an RTP stream matches the trigger criteria, data records containing each RTP packet are sent to a Capture Receiver. The Capture Receiver combines these records into a PCAP format for analysis.

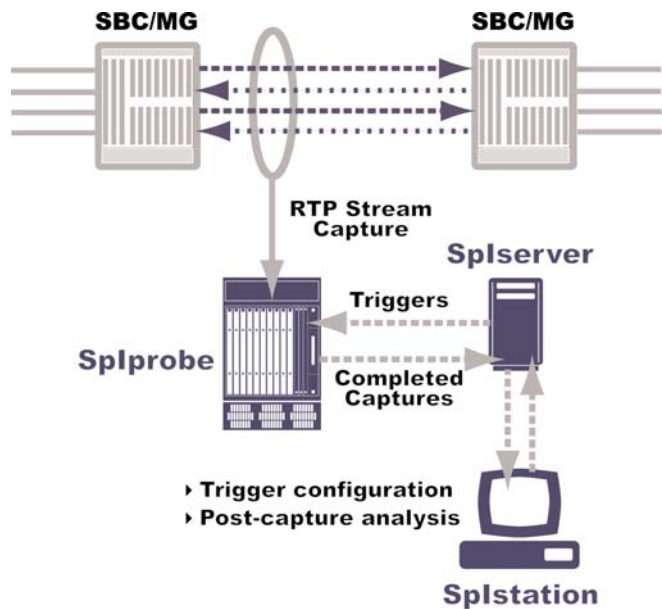
Key Capabilities

- Splprobes capture RTP streams until call is closed.
- Collected captures are browsable from a protected, centralized directory.
- RTP capture user access is protected by classmark and user activity logging.
- Supports capturing up to 256 simultaneous streams per probe.
- Supports capture of any codec.

Capture Triggers

- **Network locations:** Monitoring probes, IP Interfaces
- **Media:** Source IP address + port, Destination IP address + port
- **SIP:** Calling URI / number, Called URI / number
- **Timing:** Start/End Time and Date

Capture trigger criteria may be combined



Capture and analyze RTP streams for quality analysis, troubleshooting and compliance with law enforcement.

An integrated, web-based RTP Capture Browser facilitates browsing and one-click playback of saved RTP streams with automatic conversion from PCAP to WAV formats (G.711 and G.729A).

- Display IP addresses, codec, trigger information, and called/calling numbers for each captured stream.
- Quality metrics are also displayed for each stream when RTP QoS Monitoring is enabled.

With an integrated Wireshark toolset, RTP stream captures may be analyzed or decoded and replayed through a media player if the captured data is in a known audio format.

- Diagnose problems with DTMF events between networks.
- Identify the source and directionality of sporadic noise problems in the waveform.
- Analyze excess jitter or packet loss episodes.
- Reveal codec anomalies.
- Isolate problems with termination providers or end users.

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About Tektronix:

Tektronix has more than 60 years of experience in providing network operators and equipment manufacturers a comprehensive and unparalleled suite of network diagnostics and management solutions for fixed, mobile, IP and converged multi-service networks.

These solutions support such architectures and applications as fixed mobile convergence, IMS, broadband wireless access, WiMAX, VoIP and triple play, including IPTV.

For Further Information:

Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology.

Please visit www.tektronix.com/communications

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