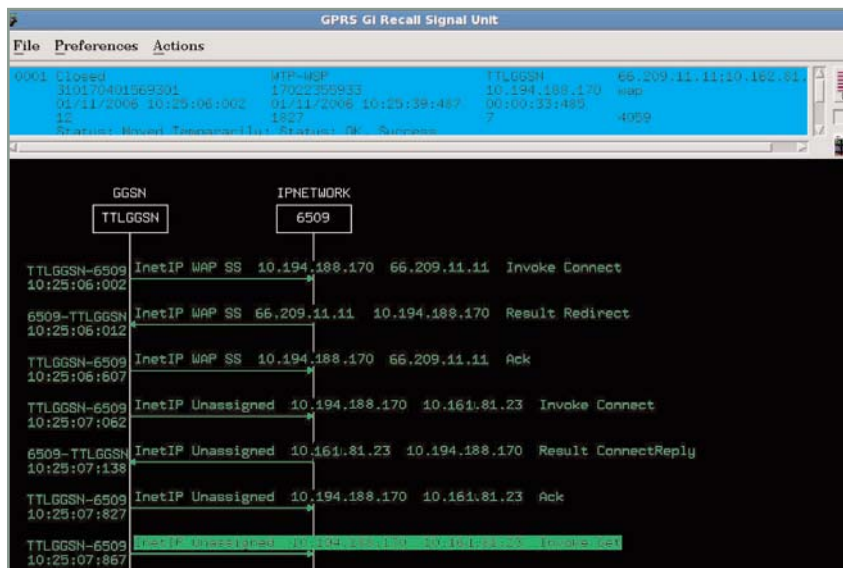# GeoProbe® | Mobile Data

Network Assurance for Mobile Core

With GeoProbe for Mobile Data, Tektronix extends GPRS and UMTS monitoring capabilities with mobile data service management.

- Verify Web Browsing, WAP, Email, Mobile Video and MMS services for home subscribers, visitors and roamers.

- Correlate Control Plane, User Plane, and Application Content across interfaces, protocols and network elements for a true end-to-end view of the network.

- Identify customers with IMSIs and MSISDNs for each call record-independent of actual signaling content.

Session based WAP call tracing supports all sub-layer protocols including WTLS, WTP and WSP.

Tektronix' GeoProbe for Mobile Data supports flexible probe placement and high bandwidth scalability for the most complex network architectures in order to deliver the following benefits.

- Understand the quality of services for all customers with a real-time, end-to-end, correlated view of the mobile data network

- Monitor individual service across all customer usage in order to differentiate service quality by service type.

- View actual end-to-end service performance to ensure a smooth launch of new commercial services

- Know immediately when service issues are impacting revenue in order to prioritize resolution efforts and preserve customer satisfaction.

Product Support

- Service Protocols: Web Browsing (HTTP), Email (SMTP, POP3), WAP, MMS, Voice/Video (RTP)

- Control Protocols: Radius, DHCP, DNS, LDAP, SMPP, RTCP, RTSP, SIP

- Mobile Data Networks: 2.5G (GPRS) and 3G (UMTS)

Tektronix®
Communications
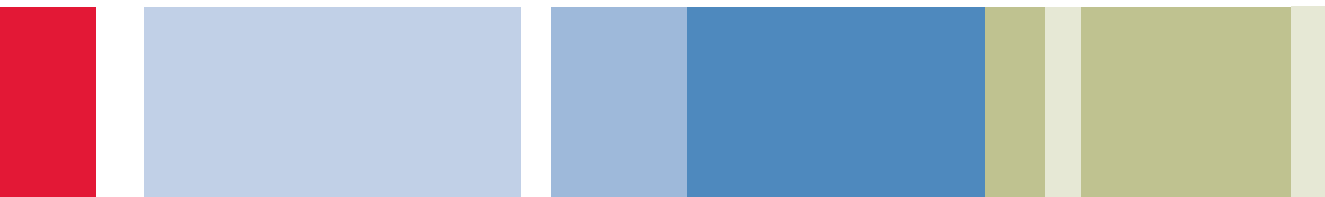
As the market leader in Mobile Data monitoring, Tektronix has assisted many Tier 1 mobile operators in assuring key deployment and accessibility initiatives.

Meet the challenges of multi-vendor equipment and complex service provisioning.

- Audit timeouts and sequence errors to identify interoperability issues and software upgrade problems.

- Pinpoint the source of provisioning errors for GPRS and UMTS services and APNs with correlated traces by release cause.

- Generate mobility reports to assist marketing in promoting services in low-usage areas.

Ensure that customer connections are "always on."

- Proactively monitor attachment and PDP statistics by interface and node to identify accessibility "hot spots" requiring technician intervention.

- Pinpoint network problems by proactively monitoring the IP transport network.

- Configure alarms to notify network engineers when excessive network access failures are jeopardizing revenues.

- Address individual customer accessibility issues with release cause analysis for the associated IMSI.

Application Highlights

Call Trace and Multi-Protocol Support

- On demand and historical call trace options with support for failed calls and calls-in-progress.

- User snoop mode for web page browsing visibility.

- End-to-end customer call tracing across all data services for 2.5G and 3G network interfaces.

- Extensive interface and digit call filtering capabilities with additional call type, status, cause value and timeout parameters.

- QoS related information for HTTP, SMTP, POP3 and WAP incorporated in call trace reports.

Statistics

- Total and Monitored Bandwidth Metrics by Probe, Interface, Interface Board and Physical Device

Protocol Analysis

- Real-time signal unit capture and decode.

- Extensive pre- and post-capture filtering options.

Data Records

- Delivers aggregated QoS metrics from monitored calls/transactions to downstream applications.

- Export capabilities serve as the foundation for Unified Assurance KPI/KQI generation.

About Tektronix:

Tektronix Communications provides network operators and equipment manufacturers around the world an unparalleled suite of network diagnostics and management solutions for fixed, mobile, IP and converged multi-service networks.

This comprehensive set of solutions support a range of architectures and applications such as LTE, 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.tektronixcommunications.com

Contact Tektronix:

Please visit www.tektronixcommunications.com

Phone:
1-800-833-9200 option 1
+1-469-330-4000

Locate your nearest Tektronix representative at www.tektronix.com/contactus

Tektronix ®
Communications