Overview

GL Communications offers a wide range of centralized monitoring and testing technologies for Wireless and IP networks. GL’s PacketScan™-All IP Protocol Analyzer supports monitoring all 2G, 3G and 4G protocols such as GSM, GPRS, UMTS, SIGTRAN, LTE, and Diameter, in addition to IP protocols such as SIP, MGCP, MEGACO, Skinny, and H.323.

PacketScan™ cellular protocol analyzers support monitoring calls progressing through advanced 3G or 4G networks from a central location, along with the powerful and customizable reporting tools.


Common Features

- Advanced filtering and search based on any user selected protocol fields.
- Any protocol field can be added to the summary view, filtering, and search features providing users more flexibility to monitor required protocol fields.
- Trigger intelligent actions based on signaling and traffic conditions
- Support for Multi-technology, Multi-protocol
- Displays Summary, Detail, Hex dump, Statistics, and Call Detail Views.
- Detailed View
  - Displays decodes of user-selected frames from the Summary View.
  - Provides options to display or hide the required protocol layers.
  - Contents of this view can also be copied to clipboard.
- Hex dump View displays the frame information in HEX and ASCII format, the contents of this view can also be copied to clipboard.
- Statistics View displays statistics based on frame count, byte count, frames/sec, bytes/sec etc for the entire capture data.
- Call Detail View displays called/calling number, released calls, call status, & more.
- Provides a consolidated interface for all the important settings required in the analyzer. All the configuration settings done in any of these options can be saved to a file, loaded from a configuration file.
- Allows the captured frames to be saved to a trace file using different conventions such as user-defined prefixes, date-time prefixes, total number of files, file size, frame count, or time limit.
- Supported on Windows® 7/8 (32 bit and 64 bit) OS.
GPRS Gb and Gn Protocol Analysis

**Features**
- Decode and analyze signaling and user data protocols over Gb and Ga/Gn interfaces.
- Provides details about routing area update, PDP activation, and traffic patterns in the network.

**Screenshots**
- Summary, Detail, Hexdump view
- Filtering Criteria
- Statistics View
- Protocol Stack

UMTS IuCs and IuPs over IP Protocol Analysis

**Features**
- Test RNC, MSC, Home NodeB (HnB) and Home NodeB Gateway (HN GW) entities.
- Decode and analyze different control plane protocols i.e. NBAP, RNSAP, RANAP and more over IuCS, IuH, and IuPS interfaces.
- Supports decoding of AMR and AMR_WB codec with IUUP Header

**Screenshots**
- Summary, Detail, Hexdump view
- Filtering Criteria
- Statistics View
- Protocol Stack
Features

- Decode and analyze complete GSM protocol stack on A and Abis interface.
- Supports BSSAP, DTAP, BSSMAP, and GSM MAP protocols.

Screenshots

- Summary, Detail, Hexdump view
- Filtering Criteria
- Statistics View
- Protocol Stack

SIGTRAN Protocol Analysis

Features

- Decode and analyze SCTP, and user adaptation (UA) layers such as M2UA, M3UA, M2PA, SUA, IU4, ISUP and GSM MAP
- Permits testing and verification of Signaling Gateways.

Screenshots

- Summary, Detail, Hexdump view
- Filtering Criteria
- Statistics View
- Protocol Stack
### LTE (Long Term Evolution) Protocol Analysis

**Features**
- Decode and analyze full LTE protocol stack.
- Test eNodeB or UE over S1, S3, S4, S5 (or S8), S6a, S10, S11, S13 and X2 interfaces of the LTE network.
- The protocols supported for decoding across all these interfaces are NAS, S1AP, X2AP, eGTP, GTP-U, Diameter, SCTP, UDP, TCP, and IP

**Screenshots**
- Summary, Detail, Hexdump view
- Filtering Criteria
- Statistics View
- Protocol Stack

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### Diameter Protocol Analysis

**Features**
- Monitor thousands of Diameter sessions over S6a, S6d, Cx, Dx, Zn, Zh, Wx, Gq, Gy, Sh, Dh, Gx, Rf, RO, Wg, Wm, Pr, Wa, Wd, Rx interfaces.

**Screenshots**
- Summary, Detail, Hexdump view
- Filtering Criteria
- Statistics View
- Protocol Stack
Features
- Test IP phones, Gateways, IP Routers and Switches, and Proxies.
- Detail Packet Data Analysis (PDA) and extensive graphical reports

See Protocol List for more details.

Screenshots
- Summary, Detail, Hexdump view
- Filtering Criteria
- CDR and Statistics View
- SIP Call Flow
- MEGACO Call Flow
- H.323 Call Flow

Buyers Guide
PKV100 – PacketScan™ (Real-time and Offline)
PKV101 – PacketScan™ - Offline
PKV301 – LAN Switch w/ Mirror Port
PKV105 – SIGTRAN Offline Analyzer
PKV106 – Offline SIGTRAN Analyzer (Optional with PacketScan™)
PKV103 – IP Based GSM and UMTS Analyzer, requires PKV100
PKV109 – Offline IP Based GSM and UMTS Analyzer (Optional with PacketScan™)
PKV107 – LTE (Long Term Evolution) Analyzer, requires PKV100
PKV108 – Offline LTE (Long Term Evolution) Analyzer (Optional with PacketScan™), requires PKV101
PKV104 – FaxDDT38™ - Decodes Fax images in TIFF format from PCAP files
PCD103 – AMR Codec for PacketScan™
PCD104 – EVRC Codec for PacketScan™
PCD105 – EVRC-B Codec for PacketScan™
PCD106 – EVRC-C Codec for PacketScan™
PKV170 – NetSurveyorWeb™ (Network Surveillance Software) for IP Network
PKV171 – Network Surveillance Agent Toolkit