

Analysis of PPP Routed & Bridged Protocols



Supports LCP, PAP, BPDU, SNMP, DNS, DHCP, HTTP, SMTP, POP3 and more



Test and Analyze PPP in Synchronous Environment



Real-time and Offline Analysis



Testing across WAN-LAN or LAN-LAN



Summary, Detail, Statistics, and Hex Dump Views



Filter and Search Capabilities

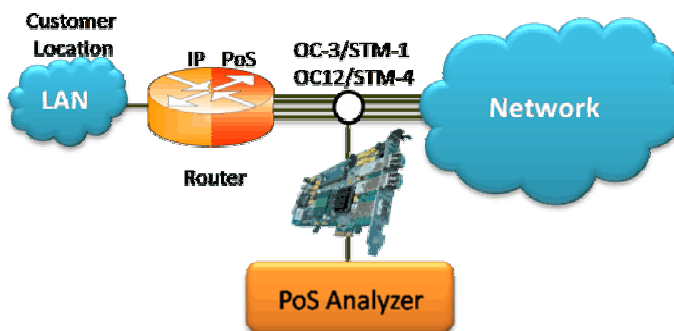


Statistics Based on Various Protocol Fields



PoS Protocol Analyzer

for OC-3/STM-1 and OC-12/STM-4



Overview

GL's PoS protocol analyzer supports analysis of Point-to-point protocol (PPP) which is a link layer protocol, which encapsulates other network layer protocols like IP for transmission on synchronous and asynchronous communications lines. Today the PPP protocol standard finds wide use in synchronous connections between LANs, bridges, routers and other intermediate devices.

Two major features of PPP protocol are:

- Authentication
- Encapsulation of higher layer protocols.

The PoS Analyzer captures a host of PPP protocols exchanged between the two nodes over SONET & provides useful analysis, which includes distribution of protocols, protocol fields, frame lengths, and frame status. User can obtain detailed analysis of the protocol and can perform various statistics measurements.

Main Features

- Supports a host of protocols: PPP, IPCP, BCP, BPDU, PAP, CHAP, HTTP, SNMP, STUN, FTP, DNS, and DHCP.
- Ability to test and perform numerous measurements across WAN- LAN or LAN-LAN connection.
- Ability to test and analyze HDLC based PPP protocol in synchronous environment.
- Comprehensive hardware based filtering
- Support software based search and filtering capabilities.
- Provides Summary, Detail, Statistics, and Hex Dump Views.
- Summary view provides the information about important fields: Dev #, Layer 3 Protocol, LCP message type, and higher protocol specific information like Destination and Source IP address, Destination and Source TCP as well as UDP port details, HTTP/FTP message type, and so on in a tabular format.
- Detail view displays decodes of a user-selected frame from the Summary View.
- Hex Dump View displays raw frame data as hexadecimal and ASCII octet dump of a user-selected frame from the Summary View.
- Statistics view displays statistics based on frame count, byte count, frames/sec, bytes/sec, etc., for the entire capture data.
- Capability to export Summary View details to comma separated values (CSV) format for subsequent import into a database or spreadsheet.
- Capability to export detail decode information to an ASCII/text file.
- Ability to capture and decode both PPP routed protocols, PPP bridged protocols.
- User can decode frames from the recorded trace files and can be played back using "Rx Packets to File" application.

For more details, visit our web page <http://www.gl.com/lightspeed1000-ppp-protocol-analyzer.html>.



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Summary, Detail, and Hex Dump Views

The analyzer displays Summary, Detail, Statistics, and Hex Dump Views in different panes. The Summary pane displays Frame Number, Time, Length, Error, PPP Layer3 Protocol, LCP Code, IPCP code, BCP code, PPP Message type, and more. User can select a frame in the Summary View to analyze and decode each frame in the Detail View. The Hex Dump view displays the frame information in HEX and ASCII formats.

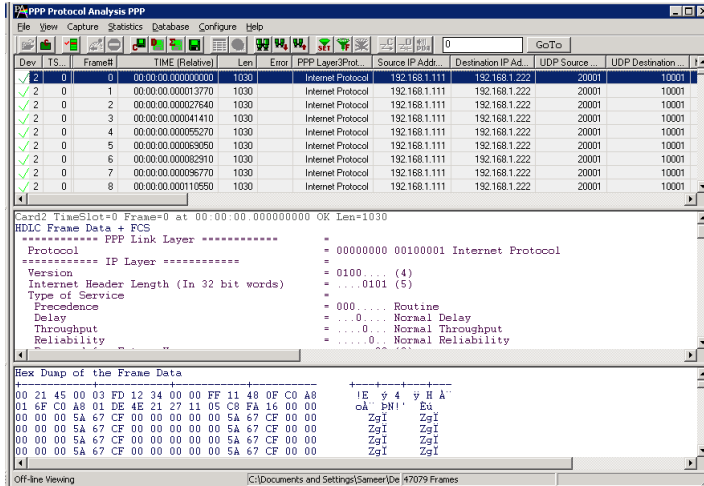


Figure: Summary, Detail, and Hex Dump Views

Statistics View

Statistics is an important feature available in the PoS Analyzer and can be obtained for all frames both in real-time as well as in the offline mode. Numerous statistics based on protocol fields can be obtained to study the performance and trend in a PoS network.

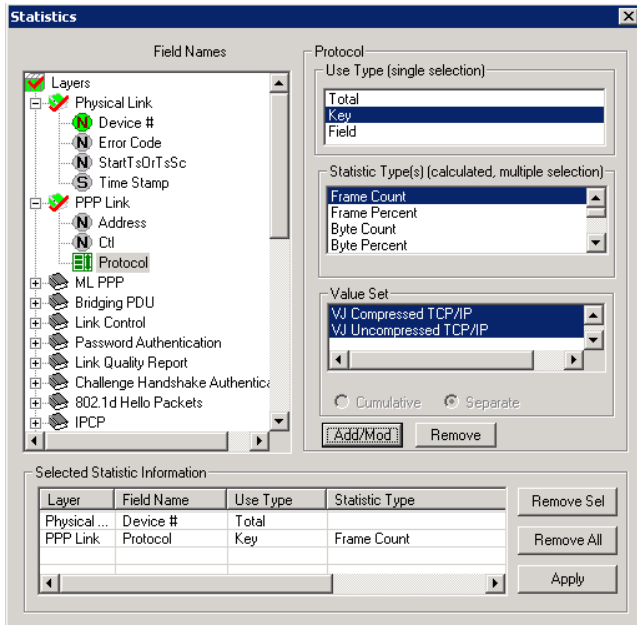


Figure: Statistics View

Real-time and Offline Analysis

Multiple ports can be selected in a single instance of the analyzer to capture the frames simultaneously. The recorded trace file can then be analyzed offline and exported to an ASCII file, or printed. The real-time capturing requires users to specify port number.

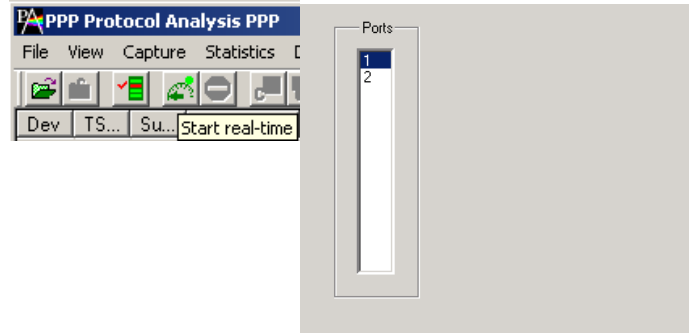


Figure: Port Selection

Filtering and Search

Users can record all or filtered traffic into a trace file. Filter and search capabilities adds a powerful dimension to the PoS Analyzer. These features isolate required frames from all frames in real-time, as well as offline. In real-time capturing, filter allows capturing of frames having specified length, offset, mask, and value. The frames can also be filtered after completion of capture based on Frame Number, Time, Length, Error, Layer3 Protocol, LCP Code, IPCP code, TCP and UDP source and destination port, PPP Message type, and so on. Similarly, search capability helps user to search for a particular frame based on a specific search criteria.

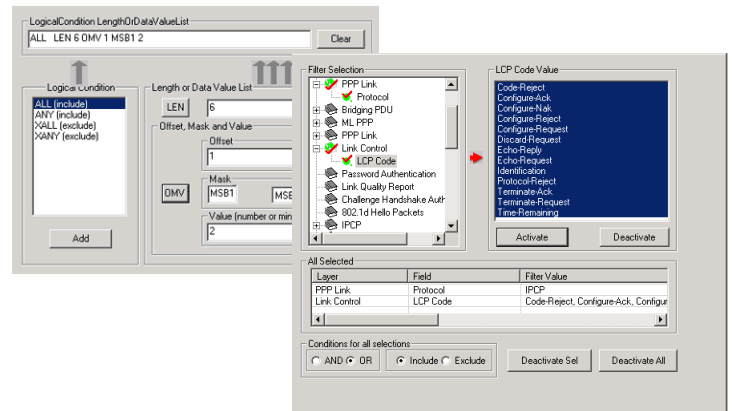


Figure: View Filter and Real-time Capture Filter

Buyers Guide:

[LTS205](#) – OC-3/STM-1 PoS Protocol Analysis

[LTS305](#) – OC-12/STM-4 PoS Protocol Analysis

Related Software

[LTS201](#) – OC-3/STM-1 PoS Monitor, BERT, Tx/Rx Test, RAW

[LTS301](#) – OC-12/STM-4 PoS Monitor, BERT, Tx/Rx Test, RAW

[LTS203](#) – OC-3/STM-1 PoS and RAW Record / Playback

[LTS303](#) – OC-12/STM-4 PoS and RAW Record / Playback

Related Hardware

[LTS100](#) - Dual OC-3/STM-1OC-12/STM-4 PCI Express Card

[LTS105](#) - Portable Dual OC-3/STM-1OC-12/STM-4 Unit