

Simple Web-based Interface

View Captured SIP/H323/ MGCP/RTP/MEGACO calls From Multiple Probes

Oracle Database Support

Custom Filters (Day, Time, Called/Calling Number, Probe, Payload,...)

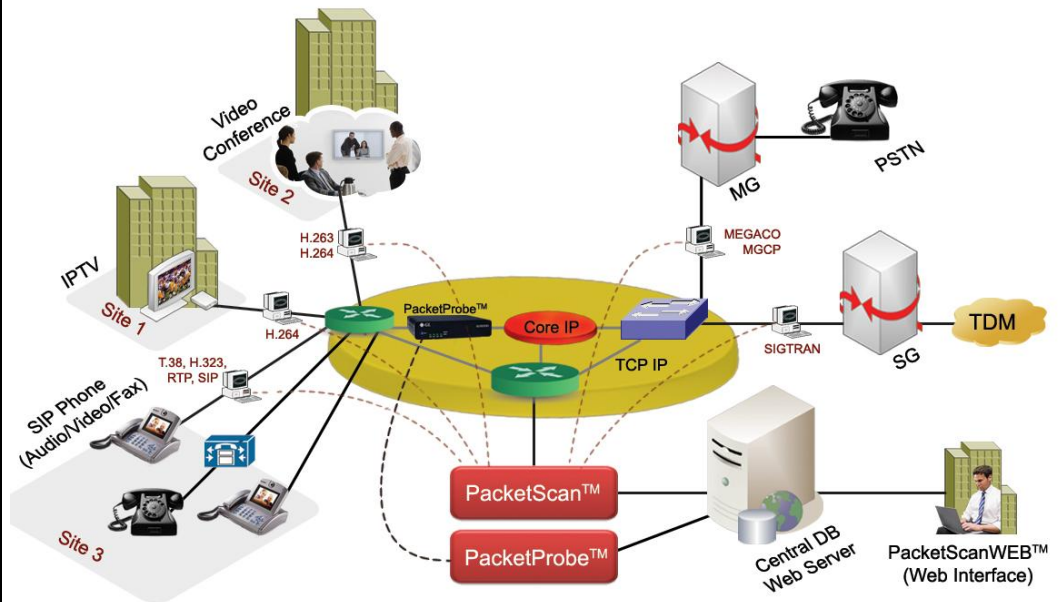
Call Details depicted using Ladder Diagram

Database Query to Gather Reports, Statistics, Events & Alarms

Display Results in Tabular and Graphical Formats

Easy Navigation through Records

PacketScanWeb™ - Centralized VoIP monitoring system



Overview

PacketScanWeb™ is a centralized VoIP network monitoring system. **PacketScanWeb™** server is deployed in a central location along with an Oracle® database. A number of GL's **PacketScan™** probes and/or **PacketProbes™** are deployed in remote locations across the network to passively monitor VoIP traffic. Whenever a monitored call completes, the scan/probe calculates a variety of quality metrics (MOS, loss, delay, jitter, etc) and sends the metrics to the central Oracle database for storage. This data can then be accessed in real time from anywhere in the world through any standard web browser. In addition to viewing real time data, **PacketScanWeb™** can also custom filter historical data and generate various reports and graphs that summarize overall network health.

The **PacketScan™** is a feature-robust Windows® based software tool that captures and monitors live IP traffic. In the VoIP world, it can monitor and measure SIP, H323, Megaco, MGCP, T.38 and video calls. In addition to quality metrics **PacketScan™** also captures signaling information and sends that to the **PacketScanWeb™** database as well. **PacketProbe™** is a lightweight Linux based tool that only operates on SIP or raw RTP and does not capture or transmit signaling information.

Key Benefits of PacketScanWeb™

- Ability to identify and analyze network trends using Key Performance Indicators (KPI's)
- Automatically alert users when "Calls of Interest" occur
- Customized filtering for Fraud Detection, Quality of Service Monitoring, and Protocol Error Indications.
- Flexible report generation
- Comprehensive analysis from overall network health to detailed protocol monitoring

For more details, please visit our web page <http://www.gl.com/netvoip.html>



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Main Features

- Access real-time and historic data remotely via browser based clients.
- Multi-user support and user-friendly interface.
- Interfaces with Oracle database.
- Set alarm conditions and actions to be taken based on alarm type.
- Ability to send email alerts on scheduled time based on user-defined alarm conditions.
- Reports are displayed both in tabular and graphical formats; customize reports and graphs based on SQL Queries, and export as PDF or CSV
- Graphs provided for Answered Calls, Call Duration, MOS score, Packet Loss, Call Failure Cause, Session Request Delay (SRD), Successful and Unsuccessful Calls.
- Real-time data displays information such as called number, calling number, source & destination IP address, RTP packet details, call flow graph, and frame decodes.
- Provides database query methods to gather status, statistics, events & query results.
- Navigate through records, and filter the collected traffic summary.
- Custom Filters (Day, Time, Called/Calling Number, Probe, Payload, Duration...).
- Apply single or multiple filters for data analysis; use logical operators between filters.
- Ability to export the call detail records displayed based on time filter or record index as PDF
- Ability to customize column views with sorting capabilities for call detail records

Filter Data

The call records can be filtered using **Date/Time Filter** criteria. The Custom Filter provides options to filter call records based on various filter parameters such as Probe name, Call ID, Calling/ Called Number, IP Address, MOS score, Payload, Missing Packet Percentage, Duplicate Packet Percentage, Reordered Packet Percentage, Average Jitter and so on.

Custom filters can be saved and loaded with the click of a button. Single or Multiple Custom filters can be performed. Filter call records based on RTP statistics. Save, load / delete filter profiles. Edit & update already existing custom filter profiles. apply one or more custom filters. Apply logical operations between parameters of a filter or between multiple filters



Figure: Filter Expressions

Call Data Records (CDR) View

Frame Summary

Upon launching PacketScanWeb™ the user will see the 20 most recent calls. Basic information shown about each call include Probe Name, Call ID, Calling/Called Number, Start Time, Call Duration, Session Request Delay (ms), Session Disconnect Delay (ms), Originating IP Address, and Destination IP Address.

RTP Details

Each call can be expanded to reveal per stream RTP statistics. The RTP/audio parameters such as SSRC number, payload type, total packet count, missing / duplicate / reordered / discarded packet count or %, conversational/R-Factor, listening MOS/R-Factor, cumulative packet loss, and so on are displayed.

Navigation and Search Tools

Navigate through records easily using Previous and Next Hour, Day, Month, and Year options as required. A particular call of interest can be searched using the **Quick Search** option.

Call Detail View

The real-time data view provides visibility into each individual call. All KPI information is shown and each call can be investigated. Flexible filtering can help organize and identify "Calls of Interest".

Call Flow and Ladder Diagram for each call

Each call can be expanded to reveal per stream RTP statistics. Calls sent to the database from a PacketScan™ (but not a PacketProbe™) have a link which displays their signaling information (Call Ladder Diagram) and the corresponding frame decode details.

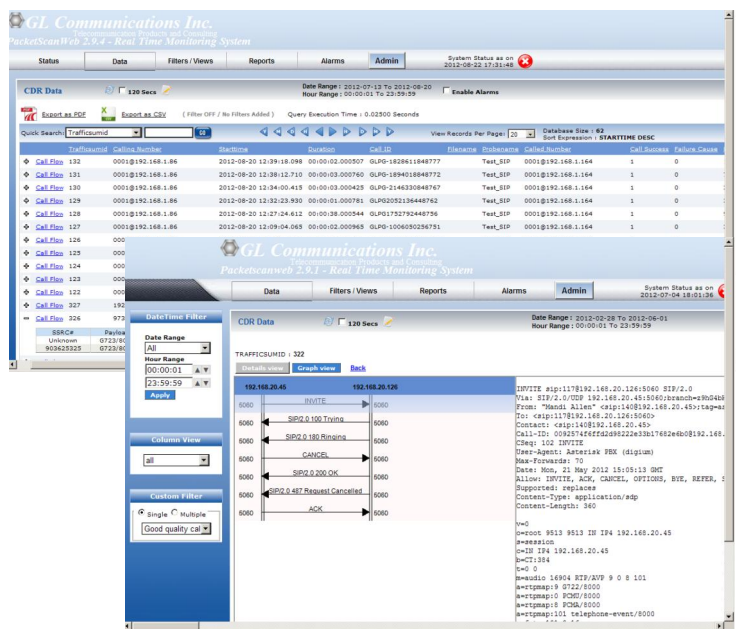


Figure: Graph View



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Alarm Settings

User can set the alarm by adding logical conditions; it has two sections, Alarm Condition and Alarm Action. Alarm Condition provides the options to set the filter conditions for the alarm.

Alarm action provides options to select Alarm Type, Exporting Data, Alarm Severity, provides log file, and Email Alerts facility.

Actions can be defined for each alarm condition profile defined in the Alarm Configuration dialog.

Email Alerts: Sends Email alerts for alarms. When the alarm condition set by the user is true then the data will be sent as an Email attachment in the PDF format for the given Email address.

Alarm Severity type can be set as Minor, Major, or Critical.

Audible alarm action will beep once for the particular time.

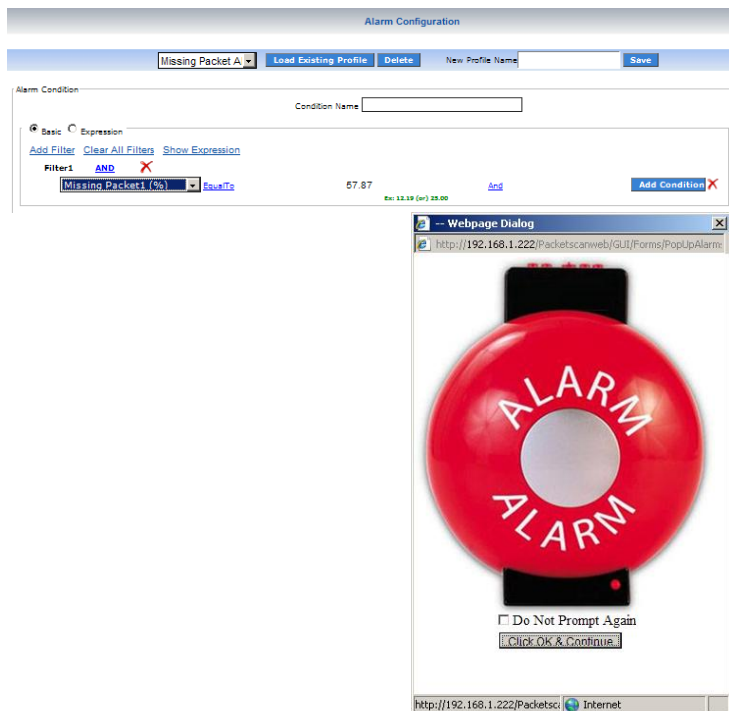


Figure: Alarm Settings

Buyers Guide

[PKV170](#)– PacketScanWeb™

Related Software

[PKV100](#) - PacketScan™ (Real-time and Offline)

[GLR2000 Series](#)– Base System with PacketProbe™ + Local Client (GLRxx30)

[PKS120](#) – MAPS™ -SIP

[PKS100](#) - PacketGen™ (includes PacketScan™)

Graphs & Reports

Report provide an overall summary of the captured traffic over the entire network with the help of useful graphs. Such as Answer Call Display, Call Duration, Listening and Conventional (MOS) Display, Average Packet Loss %, Call Failure Cause, Session Request Delay (SRD), Successful and Unsuccessful Calls, IP Stats 1: Traffic Volume in Kilobytes, IP Stats 2: Traffic Volume in Kilobytes, IP Stats 1: Capture Rate in Kbps (Basic KPIs), IP Stats 2: Capture Rate in Kbps (Basic KPIs). Reports are also available in the form of Bar Graph, Pie Chart, or tabular format for each of the plotted graph.

Report Configuration

PacketScanWeb™ allows users to add new KPIs and customize the reports using Report Configuration feature. Generates customized reports and graphs based on SQL Queries.

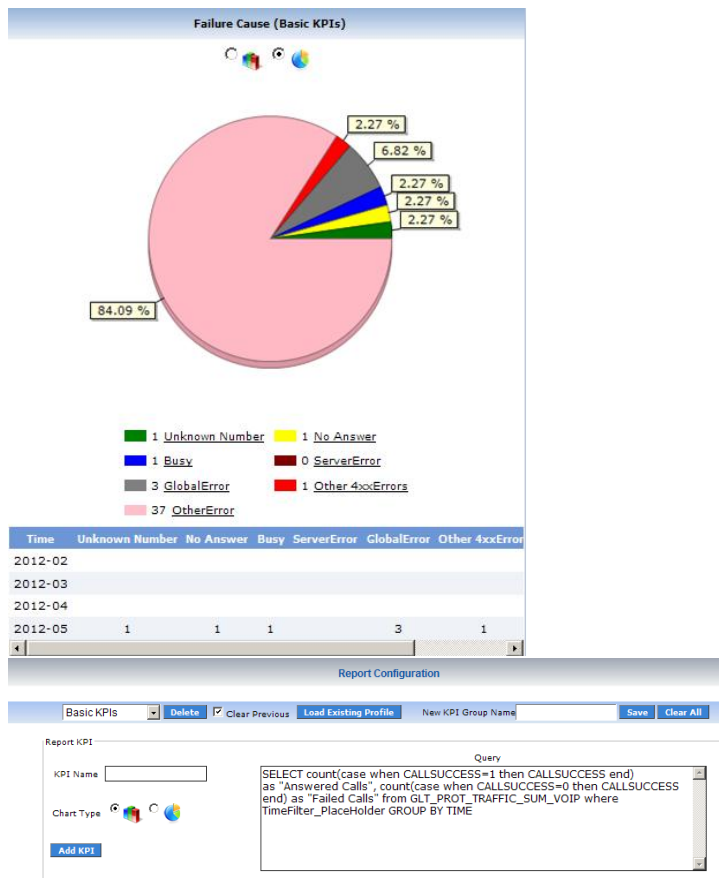


Figure: Report Configuration



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