

CALL FORENSICS BEYOND CALL ACCOUNTING

Today's call accounting packages focus on expense management and fraud detection. Important, yes, but you need deep call forensics. You require QoS from the caller perspective, not just the network perspective. Beyond QoS, you need to see when and why calls drop abnormally. And, wouldn't it be great to have the same application manage your number inventory? Go beyond a list of predefined reports and start leveraging a system that offers a complete view:

- Call Accounting Traffic Analyst call accounting features include flexible outgoing call classification and call costing for all call types, comprehensive reporting and fraud control.
- Call Quality Diagnostics & Troubleshooting Pinpoint specific devices in your network experiencing problems. Traffic Analyst proactively highlights deteriorating call quality based on standard QoS metrics and thresholds you define (MOS, R-Factor, packet loss, latency, jitter). Traffic Analyst also includes reports and alarms for dropped calls with integrated SIP response code analytics. All this with no specialized hardware to deploy.



- **Number Management -** Track and report the status of your DID and non-DID numbers, including In Use, On Hold, Reserved, Available and Aging.
- **Call Tracing & Investigation** Extensively search and drill down to trace calls as they transfer inside a switch and traverse through multiple switches to research malicious calls and diagnosis call routing.

Stop being frustrated by today's call accounting packages! Traffic Analyst Call Forensics starts by elevating traditional call accounting capabilities but then goes deeper, much deeper giving you definitive answers to even your most challenging questions easily. Traffic Analyst dramatically improves upon call accounting conventional functions:

- Expanded Call Types Traffic Analyst includes all internal, inbound, network and outgoing calls. And, you can define custom call classifications such as IntraLATA, IntraState or mobile.
- Advanced Call Cost Rating In addition to standard per call or per time interval rating by call type or destination,
 Traffic Analyst supports rates by trunk group or gateway.
- Comprehensive Reporting For a single switch or a network of multiple platforms from various manufacturers, Traffic Analyst Call Forensics supports tracking and analyzing costs by organizational hierarchy, physical locations (building, floor, room) and wiring information (such as MDF, jack or phone type).
- **Cost Control & Risk Mitigation** Stay abreast of issues and know about problems within minutes. Define alarms for calls based on duration, cost, originating number or terminating number to trap suspicious call activity. Alerts are posted on the dashboard and/or sent to your e-mail or cell phone via text.

Go beyond who called who and how much it costs. Traffic Analyst Call Forensics offers deep visibility into call quality, abnormal call terminations, call tracing, number management, extension activity and monetizing savings from transporting calls over the internal network. Create and view reports and alarms to get the answers you need, when you need them, from wherever you are.





GO BEYOND CALL ACCCOUNTING

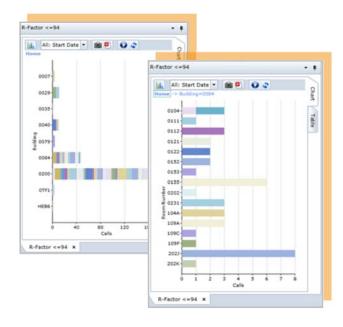
Why settle for call accounting, when you can leverage all the benefits of call forensics?

CALL QUALITY DIAGNOSTICS

You have tools telling you the quality from your network equipment's perspective, but are you blind to the caller experience? Reliable, insightful, timely analytics are required to maintain high levels of call quality. Traffic Analyst is the answer as you deploy and manage your VoIP network! Without requiring any specialized hardware, Traffic Analyst can pinpoint via reports, graphs and alarms specific devices experiencing not only QoS problems but dropped calls as well.

QoS Visibility

With Traffic Analyst you choose the visibility you want – by IP address, extension, SIP gateway, PSTN gateway or facility – by MOS, R-Factor, % Packet Loss, Latency or Jitter. For instance, the chart illustrates the number of calls with R-Factor less than or equal to 94.0 by building. Click a building bar and drill into the detail by room number.



Dropped Calls Analytics

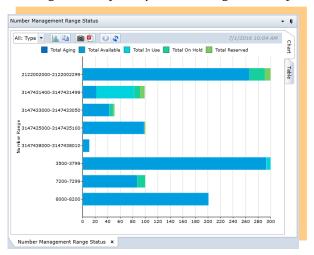
Traffic Analyst goes beyond QoS, providing insight into why calls are dropping. With VoIP there over 100 reasons why a call may drop the connection. Only two are good. If it wasn't you or I hanging up, there is a problem that needs to be tracked down and resolved. Abnormal call termination trending analytics quickly spot any abnormalities that you might want to investigate, starting with the integrated SIP response code correlation.

NUMBER MANAGEMENT

Traffic Analyst includes a user-friendly, centralized solution for managing your DID and non-DID number inventory across your enterprise. Quickly define your ranges, including your customized aging metrics plus designated reserved numbers. Once the ranges are defined, reports provide insight into the state of the numbers and supports operations such as holding numbers and indicating the next available number in a range.

VOIP ECONOMICS

Savings from leveraging your WAN to avoid PSTN toll charges is a key component of any VoIP network investment strategy. Assuring those savings are realized and being able to quantify those savings are not passing



requests from senior management. They are demands. Are you ready? Let Traffic Analyst be your VoIP scorecard with a dashboard that clearly shows you the actual and potential savings in your network.

Quantify Realized Savings

Traffic Analyst lets you see your realized savings. How? First, charts and reports clearly show the number of calls and associated savings for calls that are now traversing your WAN for site-to-site traffic instead of incurring long distance and international charges (metered or flat fee). Second, view "tail end hop off" (TEHO) calls and savings.

Find Unrealized Savings

Traffic Analyst doesn't stop there. See reports on existing PSTN traffic that could be routed over your WAN and drill into the specific call records to determine what call routing schemes may be modified or which employees are using incorrect dialing methods.

CALL TRACING & INVESTIGATION

Traffic Analyst gives you pinpoint accuracy in tracing calls throughout your network. You no longer need to run multiple reports for each switch in your network in an attempt to see how the calls flow through your network. Traffic Analyst lets you select one or many switches for any report and trace calls as they traverse through multiple switches and are transferred inside a switch.

Traffic Analyst gathers and stores a comprehensive list of reporting fields not available in other solutions. Fields include:

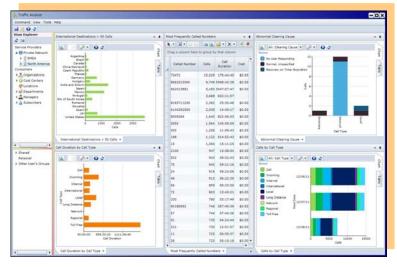
- Date & time
- Call duration, ring duration & hold duration
- Account code
- Called number
- Originating number
- Transfer number
- Destination number, country & city/region
- Call type
- Cost
- Switch
- Trunk group & trunk number
- Gateway
- Route number
- QoS metrics
- Clearing cause & SIP response code
- PIN
- Wiring information
- and more.

YOUR NETWORK, YOUR WAY

Traffic Analyst comes with a dashboard based on Microsoft® Silverlight® rich internet application (RIA) technology. Users can customize the dashboard to their preferences by adding, deleting, modifying, resizing and relocating the dashboard's charts and data tables. A broad portfolio of chart types are available and the user has significant control over the chart appearance. Columns in data tables can be added, deleted, grouped, sorted or filtered with a click of the mouse. After creating a new dashboard, the user may simply save their desktop and each time they login, their custom desktop appears.

UNLIMITED REPORTS & AD HOC QUERIES

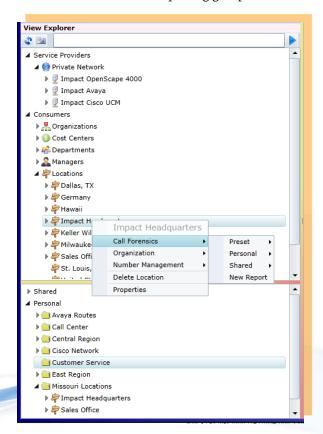
Traffic Analyst's easy-to-use web interface allows the user to leverage preset reports but also create unlimited reports and ad hoc queries. A library of preset reports include predefined tabular report definitions and associated charts. Preset reports include:



- Call Log with QoS Last 2 Days
- Long Duration Calls
- Most Frequently Called Numbers
- Top Callers by Cost
- DID Numbers by Switch
- Alarms Last 3 Days

Via the explorer tree, you can choose what you want to report on:

- Entire network, switch, trunk group, gateway or route
- Corporate hierarchy element such as an organization, cost center, location, department, manager or subscriber
- "Virtual" user-defined reporting group



Then you select a preset report, a shared or personal template or create a new report. That's right. You can create any report you need. You don't have to call the vendor or find a programmer. You simply point and click to pick the content, detail and format of your report. Name your report and then you can export to Excel or PDF, email an interactive report link on demand, print or schedule the report to periodically be emailed directly to your inbox.

SLICE & DICE

After you have the key metrics at your fingertips, the next step is quickly digging into the details, particularly if you see an anomaly. And, you can select your drill down logic. Start with monthly data and drill down to daily, hourly and quarterly hour slices with a simple click of the mouse. Or, maybe you prefer to drill down by switch, trunk group and extension. How about by corporate hierarchy of organization, department and manager? Or by building, room, subscriber and extension? For each chart or table, you decide.

CUSTOMIZED REPORTING GROUPS

With Traffic Analyst, your reporting options are not bound by the design of your network. You can create "virtual" Shared or Personal groups at any time. You simply create a new group on the explorer tree and drag any item into the



group. Choose any combination of switches, trunk groups, routes, subscribers, cost centers and more.

SWITCH PLATFORM AGNOSTIC

Traffic Analyst is a single portal across mixed networks comprised of multiple switch manufacturers, including both wireline and WiFi platforms. Traffic Analyst automatically performs continuous network self-discovery across platforms, eliminating time-consuming, tedious, error-prone manual configuration tasks. Based on user-defined intervals, Traffic Analyst collects and processes data for report presentation and alarm processing 24 hours a day, 365 days per year. Therefore, a single query generates a single report and associated charts encompassing data for multiple switches and manufacturers. Traffic Analyst provides continuity across migrations and a common presentation for multiple vendor platforms, including Avaya, Cisco, Ascom, Nortel and Unify.

DEPLOYED YOUR WAY

Traffic Analyst Call Forensics is available as a premise-based or hosted solution. Choose the deployment model that fits your business requirements and budget. In either implementation, enjoy 24 x 365 visibility to your usage, unlimited reports, user-defined alarms and scheduled reports.

- **Hosted** Is the option to minimize your upfront investment and on-going maintenance but leverage the long-term benefits of Traffic Analyst attractive? In the hosted model, Impact maintains all the hardware at our location and assures that you are always benefiting from the latest software enhancements. We will communicate with your switch(es) on a daily basis to collect the raw data. Your employees simply use their web browsers to access the reports they want and define their alarms.
- Premise-Based Do you prefer to own and operate the solution on your site? Purchase a license and Impact's Technical
 Support team will ensure a smooth, effective onsite or remote installation process so your employees can enjoy the same
 great reports and alarms from behind your firewall. Or, leverage a subscription model with single or multi-year
 contract.



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