Purpose Built NetFlow Analysis for ISP/Telco and MSP Networks

"NetFlow Auditor was the only solution that could scale to monitor our flow rates. We are easily handling over 400,000 flows/second and now have a quick and easy way to report on all my AS numbers" - Frederic Valade, Stream the World

The Value of NetFlow Analysis in ISP/Telco and MSP Environments

NetFlow has been attractive to Service providers for years because of its promising ability to help report on traffic flows across peering or to origin points; to analyze how the infrastructure can be optimized or charged back on a per-service basis; and its value in providing root cause analysis, capacity planning and security forensics.

The Challenge: Scalability

Deploying and using NetFlow in the ISP/Telco/MSP environment has presented many challenges- the most challenging has been the ability to collect the massive number of flows required to produce the business critical information that is available through NetFlow Analysis.

Commercial, open-source and in-house solutions have repeatedly proven to lack scalability, crash, malfunction or become unusable leaving ISPs/Telcos and MSPs with "no visibility" into the network and loss of valuable historical data.

The Solution: NetFlow Auditor for ISP/Telco and MSP Networks

NetFlow Auditor's patent pending architecture removes the limitations and challenges of other solutions delivering the enabling technology for ISPs/Telcos and MSPs to cost effectively deploy a scalable NetFlow Analysis solution.

NetFlow Auditor's unique architecture delivers scalability and unmatched real-time and historic visibility into ISP/Telco and MSP network traffic reducing risks and costs associated with lack of network visibility, poor performance; downtime and security threats.

ISP/Telco Grade Scalability

The NetFlow Auditor solution has been uniquely architected to scale addressing the demanding requirements of Service Providers and Telco's:

- **Over 1 Million flows/second. (Industry Benchmark)** Other solutions "melt down" as flow rates reach in the 10's of thousands of flows per second
- **Effortlessly handles the massive flow rates of large Core Routers or Layer 3 Switches**
- **Mass scalability in MPLS deployments** Monitoring thousands of remote routers

Granularity with Collection Tuning

NetFlow Auditor can be tuned to collect only the data required. For example NetFlow Auditor can collect all network conversations with per minute granularity in one part of the network where detailed forensic information is required and/or can be configured to collect traffic information at a one hour granularity/view where only high level reporting is required.

Self maintaining rules enable levels of granularity to be set to "protect" the collector/server in the event of a major worm outbreak that can cause NetFlow data to become excessive.

Flexible Analysis, Alerts & Reports

NetFlow Auditor removes the burden of having to write custom scripts or applications, or manipulate spreadsheets to get network, application or customer specific information.

Uniquely designed menu bars, shortcuts and application interface facilitate rapid real-time analysis, custom report and alert creation.

The Report Scheduler can be configured to automatically produce custom reports or alerts on any time frame from per minute to daily, weekly, monthly, quarterly or annually based on actual baseline data and definable thresholds.

Reports can be saved to a file, viewed via a web browser or sent as an email in PDF, HTML or CSV format.
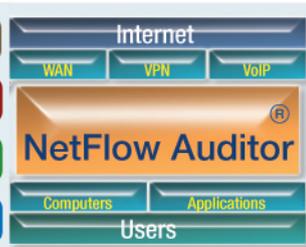
Alerts can additionally send a configurable SNMP trap.

High Availability and Fault Tolerance

NetFlow Auditor uses a patent pending[1] methodology to substantially reduce large data sets and unique automated "Intelligent Agent" technology to manage and tag NetFlow information providing unequalled fault-tolerance, redundancy and self-healing ability.

[1] Patent Pending PCT/AU2003/001418.

NetFlow Auditor
POWERED BY DIGITOLL®

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"NetFlow Auditor Telco version helps us manage; 1.3million users; 2600 Schools; and more than 240TB of throughput per day" - Department of Education, Network Performance Group

ISP/Telco/MSP Advanced Functionality

AS Number reporting
Provides the industry's best AS Number reporting capabilities to optimize traffic across peering points including unique bi-directional traffic views.

Infrastructure usage/optimization detail
Monitor and report on SLA's on a per-service, location or QoS basis with MPLS tag analysis. Detailed visibility and reporting on specific services like Video, Multicast, and VOIP. Track detailed usage on customers, applications, servers, data centers and free services vs paid services over time.

Extensive chargeback information
Provides byte, flow, packet counting and 95th percentile information from the interface down to the smallest addressable network unit or user. Enables complete flexibility on the combination of elements to be used for chargeback including Network AS, IP address, Ports, Applications, Locations or QoS. Providers can differentiate pricing based on time periods, server, content or route.

Availability of detailed and granular information assists in quickly reducing billing disputes and verification of true communication bandwidth charges.

Built in "One-Click" Capacity Planning
Automated baselining capabilities with the ability to retain and report on long term historic information about the network and its key applications, users, locations and services. Leverage trending information for accurately planning future resources and making informed network changes.

Proactive troubleshooting of service and security issues
Customize alert conditions to identify potential performance issues before customers are impacted. Intelligent alerting based on anomalies compared to actual/historic network baselines.

Data Privacy
NetFlow Auditor does not store the whole frame payload and the users IP and IP's visited can be further hidden thereby avoiding privacy issues, while still delivering other valuable details of network traffic critical for regulatory and compliance requirements.

Extensive Network Analysis

NetFlow Auditor can perform analysis on any combination of data fields simultaneously (e.g. usage, packets, flows, packet size, utilization, etc) and sort data by any field. Menu bars and shortcuts facilitate rapid analysis. Effectively measure usage, trending patterns, baselines, averages, peaks and troughs, and standard deviations.

- **Packet Size analysis** - Provides a detailed view of network traffic by packet sizes. Use this information to optimize VoIP traffic as well as to identify packet size anomalies.

- **Count analysis** - Count records as part of a result to quickly identify excessive flows or change. Any record combination can be counted, e.g. counting all internal IP's with number of IP or Port conversations enables quick identification of Port Scanners, P2P users, DoS attacks or other multi threaded conversations. Identify long lasting flows or conversations.

- **Deviation analysis** - Analyze traffic patterns by standard deviation to identify what aspects have changed the most in a specific period, e.g. knowing what application has changed the most in the last 2 hours can lead to early detection of issues. Identify Worms, increasing flows or data floods.

- **Bi-directional analysis** - Show forward and reverse conversations and In vs. Out conversations to quickly identify which side of the conversation is responsible for traffic usage/flows.

- **Cross section analysis** - Stacked graphs enable comparison of any two network traffic parameters. As an example, A stacked bar QoS analysis can graphically show the details of each application running within every class of service.

- **Custom Group analysis** - IP addresses can be grouped by Location, Customer, Application and Services. Network traffic detail can now be categorized in logical groups for reporting, billing and capacity planning.

No Charge Fully Supported Evaluation

Experience first hand the scalability and advanced capabilities of NetFlow Auditor in your network. Download NetFlow Auditor for a fully supported extended evaluation.