

TRISUL ISP PEERING ANALYTICS





TRISUL - ISP DATASHEET

Trisul NetFlow Analytics is designed for real time analytics of todays high speed, large volume, cloud centric network loads. With carefully selected analytics and data inputs. Trisul ISP ® enables service providers of all sizes to benefit from fine grained visibility into metrics that really matter for ISP business operations. ISP customers will immediately see value with these insights by monitoring peering relationships, content flows, cache performance, routes, and load balancing.

KEY FEATURES

- DEVICE DRILLDOWNS Traffic analysis of all ports
- ASN BASED TRAFFIC ANALYTICS Deep AS insights
- PREFIX ANALYTICS Prefixes traffic aids load balancing
- GEO ANALTYICS Country traffic flows per gateway
- ROUTE ANALYTICS AS Path analytics for optimum route
- OTT ANALYTICS DNS integration to see OTT Content flows
- DDoS DETECTION Detect DDoS buildup and trigger actions





DEVICE DRILLDOWNS

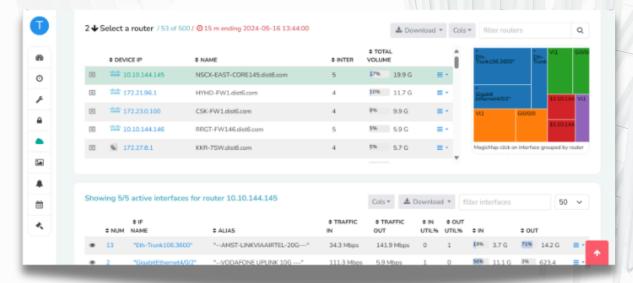


Figure: Showing Routers and Interfaces Drilldown

The NetFlow Router and Interfaces Manager tool lets you effortlessly drill down into interface level usage reports for long term analysis. SNMP integration resolves all ports and devices to their readable names. Trisul ISP adds interface matrix which tracks interface to interface flows, ASN, and Prefix per port.

ASN BASED TRAFFIC ANALYTICS

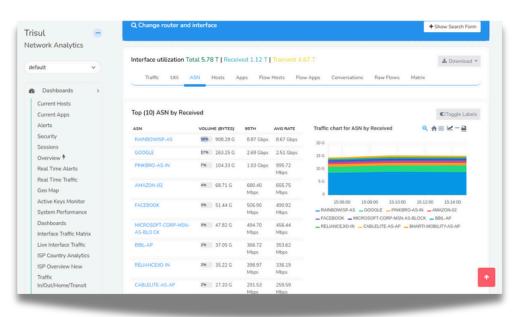


Figure: Showing ASN based Traffic Analytics

Track which AS are transmitting to and receiving from your network. Select any interface and see top AS receive and transmit broken up into Upstream and Downstream AS. AS to AS traffic matrix is also available to help Transit ISPs. AS information broken up into Origin and Peer AS for large ISP customers.



PREFIX ANALYTICS

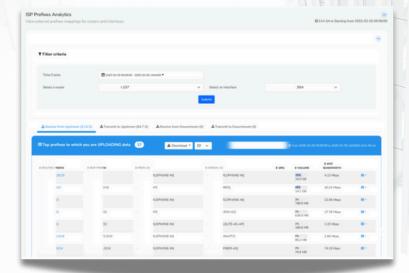


Figure: Showing Geo Map

Track busiest prefixes in your network, select any prefix and drilldown into where traffic is flowing from the prefix. Gaining a full view into Prefix-wise traffic allows you to break up large blocks into smaller prefixes for load balancing.

OTT CONTENT ANALYTICS

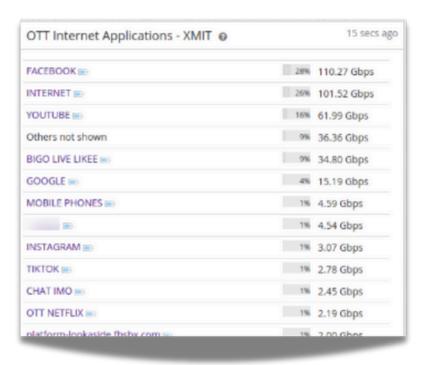


Figure: Showing OTT Content Toppers

With DNS integration gain OTT content traffic visibility. Such as Amazon Prime, Zee, Netflix, Hotstar, etc. This works by correlating DNS packets with NetFlow streams and decoding the CDN domain names.





ROUTE ANALYTICS - ASPATH

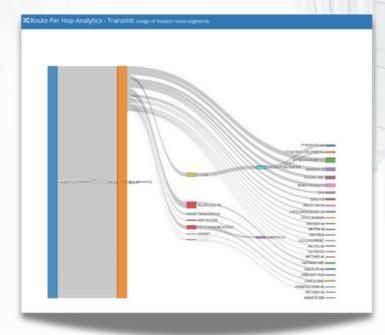




Figure: Showing AS Path Analytics

Tracking the route (ASPATH) of traffic towards a destination AS is an important part of ISP operations. Trisul ISP includes a BGP route receiver that peers with BGP routers or route reflectors. The traffic data is then correlated with received routes in real time to create ASPATH traffic graphs.

COUNTRY ANALYTICS

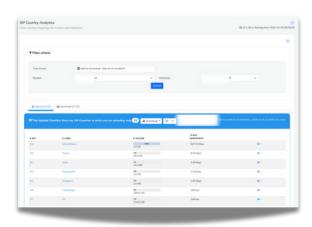




Figure: Showing Country Analytics

Figure: Showing Geo Map

Gain unparalleled insights into your global audience with Country Analytics. Discover how traffic flows through each gateway, providing a crystal-clear view of your international online presence.





BENEFITS

Complete traffic mapping based on ASN, Prefixes, Geo location. Down to port level.

Optimize routes by discovering busy prefixes and route segments via BGP integration.

Monitor OTT content traffic with DNS integration.

Gain complete traffic insight into ISP operations for all sizes from transit providers to end user.

TRISUL ISP INTEGRATES DATA FEEDS FROM ALL DATA SOURCES

NETFLOW

BGP

DNS

SNMP

PACKETS

Figure: Showing Data sources

FEATURES TO HELP ISP OPERATIONS

TRAFFIC MONITORING AND ALERTING

Gain all benefits of Trisul NetFlow Monitoring. Global and device specific traffic drilldowns support fine grained traffic monitoring of hosts, prefixes, apps, content caches, and 100+ other groups. Detect when DDoS storms are building & create full automated DDoS reports.

BGP AND DNS INTEGRATION

Trisul ISP features a powerful BGP route receiver. You just need to establish a I-BGP connection from your gateway devices with Trisul ISP. This enables real time streaming analytics of NetFlow data with the BGP route database to produce outstanding visibility at the path level.



ADDITIONAL FEATURES

TRAFFIC MONITORING	NETFLOW	ISP FEATURES
Internal and external hosts	NetFlow all versions supported	AS Traffic mapping
Application usage breakup	SFLOW, IPFIX, NETSTREAM	Prefix Traffic mapping
Traffic received, transmit	Private IPFIX elements	Geo Country traffic
Layer 2 statistics VLAN	Automatic de-dup	Built in BGP Route Receiver
1 sec Real time monitoring	Filters for routers and interfaces	SNMP built in support
Cardinality metrics Unique X of Y		Route Analytics (ASPATH)
NBAR, QoS, App ID, User ID		Per Interface drilldowns
1-min time series resolution		Real time metrics
Top-N, Bottom-N, Topper Trends		
Customized metrics		
Global vs Device views		
REPORTING	SYSTEM FEATURES	ADVANCED ISP FEATURES
PDF / EXCEL reports	Login integration via LDAP	L2 Internet Exchange suppor
Automatic email of key reports	Integration with Grafana	Peering Analytics drilldowns
Alerts v <mark>ia</mark> Email	Rich API for query	Track Content providers in ASN
Predefined executive reports	Trisul APPs ecosystem	Outside BGP receiver views
1 sec Real time monitoring	High Avail N:1 mode optional	Built in looking glass type views
Rich customizable dashboards	Disaster Recovery available	AS view from RIB or IP address
Search for any host/subnet/ app	Scalable with more probes/ hubs	
Monthly accounting reports	Large database up to 50TB	