

LightINSIGHT™

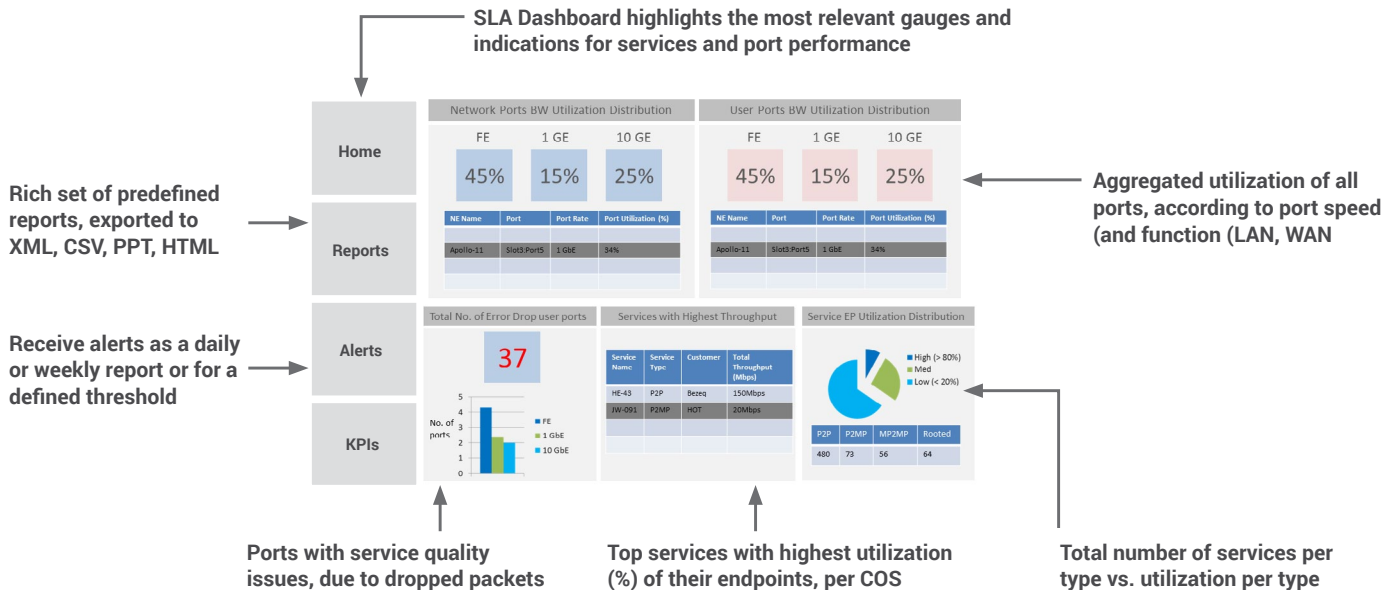
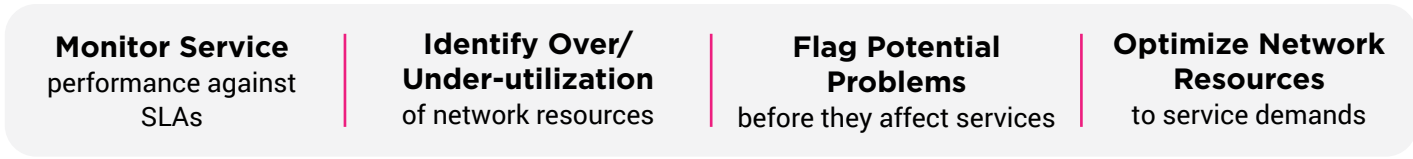
Packet Optical Networks Analytics



Deep Insights Into Network Performance, Inventory, and Health

LightINSIGHT™ shines lights on the network and the services it supports from multiple angles, delivering deep insights into performance, utilization, configuration, and health. It determines whether services comply with SLAs, highlights the extent to which resources are over/under-utilized, identifies key changes to the network setup over time, and flags potential problems before they affect services.

LightINSIGHT provides multiple easy-to-use and powerful applications that help to maximize service revenues, speed up service launches, design and demonstrate customer SLAs, direct network planning, and conduct extensive network audits at the touch of a button. After deploying LightINSIGHT, you will wonder how you ever got along without it.



Deep and Flexible Network and Service Analytics

LightINSIGHT is a comprehensive network and service analytics solution for your Ribbon-based network, offering a range of smart and flexible capabilities:

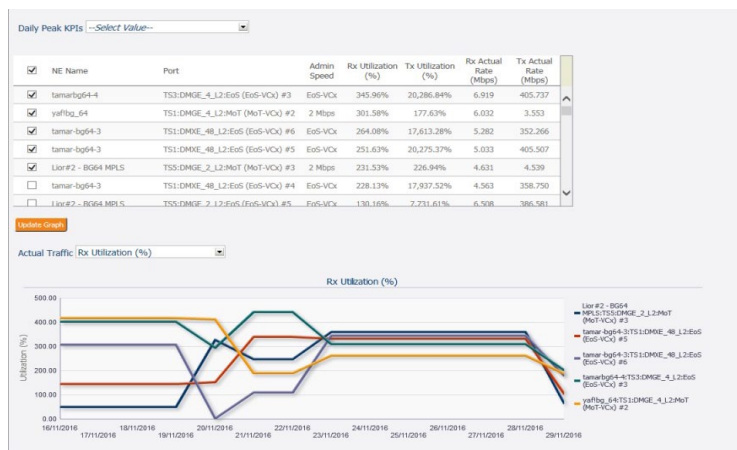
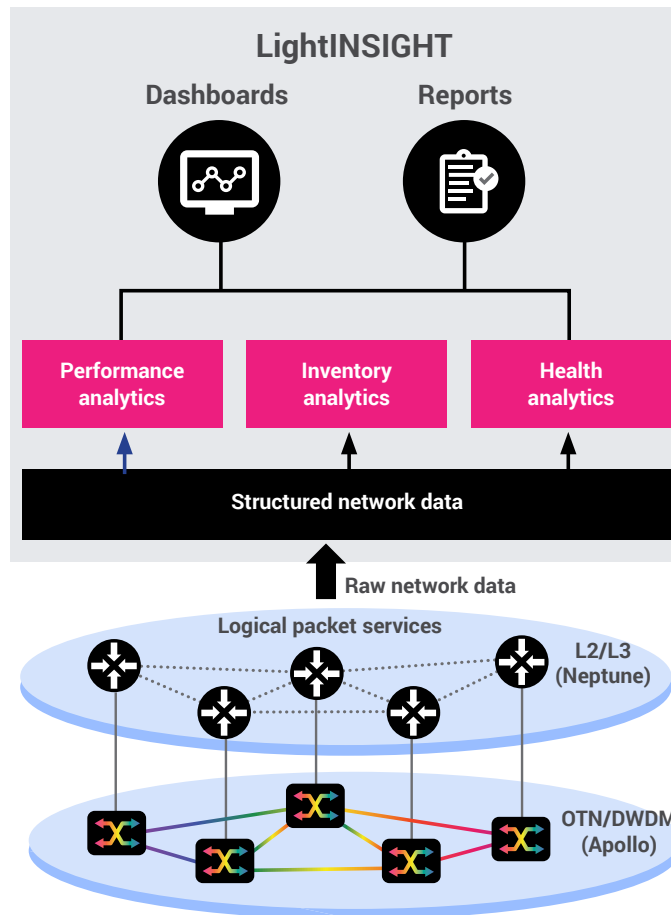
Multilayer – It covers both packet (L3 and L2) and optical (L1 and L0) networks and the services that they support.

Auto discovery – All topology, inventory, and services are discovered automatically. No manual updating is required.

Multilevel reporting – Analytics information is visualized via rich dashboards with convenient drill-down to detailed reports. All dashboards and reports are customizable to serve different sets of users, such as NOC personnel, planners, and executives.

Trends analysis – LightINSIGHT goes beyond simply providing network status snapshots. It identifies and tracks network and services behavior over time. This provides the capability to take proactive measures to increase traffic capacity, modify configurations, or fix problems before services are affected.

Smart KPIs – Metrics that underlie the key performance indicators are adjustable to deliver the right level of analytics, to initiate intelligent decisions without information overload.






Typical Packet SLA Dashboard

Displays the actual port and service bandwidth utilization, the number of ports with dropped or error packets, and the services with the highest utilization and throughput.

Multifaceted Analytics Coverage

LightINSIGHT analyzes the network and services in three major modules, covering performance (mainly SLA compliance and utilization), inventory, and health:

Module	Scope	Content Analyzed
 Network performance	Packet services	<ul style="list-style-type: none"> Ethernet Connectivity Fault Management (CFM) for compliance against SLAs, including service downtime, packet delays, and packet loss Utilization of ports, services, links, available bandwidth, and other resources, on an absolute and per-customer basis
	Optical services	<ul style="list-style-type: none"> OTN services for downtime and error count against SLAs Lightpath Ethernet services utilization Abnormal span loss for optical signal levels per span direction Out of range transceiver optical signals
 Inventory	Physical network	<ul style="list-style-type: none"> Network elements, service cards, transceivers, and links NMS and EMS
	Logical (services) network	<ul style="list-style-type: none"> L3VPN services L2 MPLS services and tunnels OTN links and trails SDH links and trails
 Health	Network hardware	<ul style="list-style-type: none"> Alarm and error notifications for NEs , cards, fibers, etc. Threshold analysis to catch fluctuating alarms

Use Cases – Putting LightINSIGHT to Work



Bigger Business Opportunities

LightINSIGHT pinpoints services with the highest customer utilization and/or growth. These insights can focus marketing efforts to promote these services, or to create service variations. The result is maximizing revenues where customers are hungriest for connectivity and bandwidth.

Better Network Planning

LightINSIGHT identifies patterns of traffic growth and resource utilization, guiding planners on how to shift resources to accommodate service demands and network expansion. It accomplishes this through a clear mapping of current and historical bandwidth against network assets.





Rapid Service Launches

Getting new service offerings to market quickly and efficiently is key to turning a profit. However, launching a new service is complex. Network operators need a lot of information, such as:

- Are network resources available?
- Are the NEs compatible with service requirements?
- Is there enough capacity?
- Are technicians needed in the field?

Putting all this information together can take days or even weeks of research. LightINSIGHT answers these and similar questions quickly. It assembles all the information needed to launch new services rapidly.

Enhanced Customer SLAs

LightINSIGHT digs into the details of packet services performance for throughput, bandwidth utilization, latency, delays, dropped packets, and overall availability. This enables crafting, offering, and tracking appropriate SLAs, improving customer satisfaction, and reducing services churn.

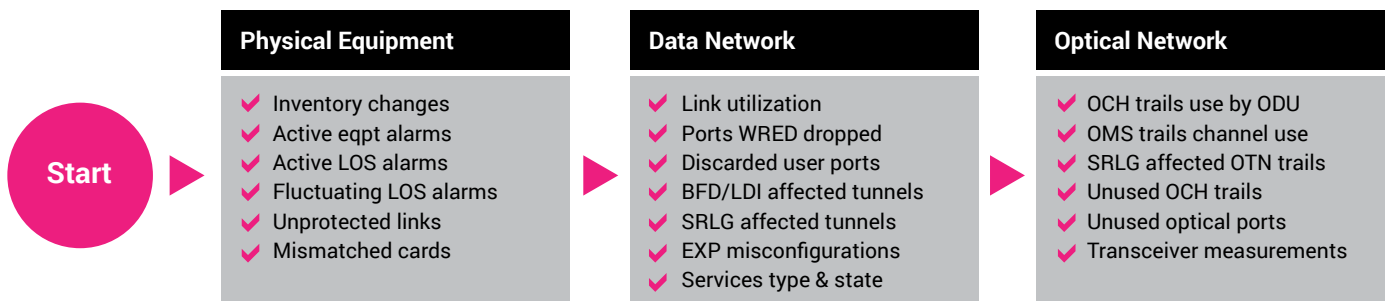


SLA Guarantees for Businesses

It's always a good idea to demonstrate, in advance, to large business customers or sub-carriers (in the case of a carrier-of-carrier model) that SLA guarantees are being met. This is easy with LightINSIGHT's extensive service performance analytics. Customer-specific SLA performance reports can be generated automatically or produced on demand, and can even be extended to a customer portal.

Touch-of-a-Button Full Network Audits

Full network inventory audits are one of the greatest challenges facing network operators. Weeks are spent every year collecting, verifying, and organizing the information into the necessary reports. With LightINSIGHT, full network inventory audits are easy, and are completed quickly, in a matter of hours. User-defined reports, charts, and tables summarize results clearly and alert of any abnormalities found.



Touch-of-a-Button Full Network Audits

About Ribbon

Ribbon Communications (Nasdaq: RBBN) delivers communications software, IP and optical networking solutions to service providers, enterprises and critical infrastructure sectors globally. We engage deeply with our customers, helping them modernize their networks for improved competitive positioning and business outcomes in today's smart, always-on and data-hungry world. Our innovative, end-to-end solutions portfolio delivers unparalleled scale, performance, and agility, including core to edge software-centric solutions, cloud-native offers, leading-edge security and analytics tools, along with IP and optical networking solutions for 5G. We maintain a keen focus on our commitments to Environmental, Social and Governance (ESG) matters, offering an annual Sustainability Report to our stakeholders. To learn more about Ribbon visit rbbn.com.

Contact Us Contact us to learn more about Ribbon solutions.