

# LightRiver

## Closer to the Network, Closer to the Customer



Travis Ewert,

Carrier-grade network operators aim to improve network flexibility, stability, and performance, while reducing operational cost and service delays. However, they spend most of their time plodding through the legacy break/fix operating model and laborious orchestration of complex and disparate networking technologies across multiple generations offered by diverse equipment vendors. For the operators, the current situation begs the question: How do we abstract and simplify all of the complexity? LightRiver has developed a network automation platform to manage these increasingly complex network and service environments, allowing all the disparate networking technologies to look the same. With a vendor-neutral approach, the company enables network operators to control and manage this abstraction through APIs/services and intuitive interfaces.

What differentiates LightRiver is its team that has expertise in Optical Networks, MPLS, and Carrier Ethernet, among many other networking technologies. Team LightRiver offers services such as technology architecture analysis, network engineering consulting, network upgrade planning, and compliance consulting to deliver turn-key solutions with unparalleled customer care. Over the years, LightRiver has architected, engineered, built, and installed some of the largest and most complex networks on the planet. This overarching experience and that of being close partners with the industry's premier network equipment suppliers, has helped the company gain in-depth networking knowledge that it rechannels into its SDN and Optical Domain Controller offerings.

"The broader LightRiver staff has tremendous operations and engineering experience in the business and technology of deploying and managing advanced transport networks," says Travis Ewert, Chief Operating Officer at LightRiver. "We are involved with the end-to-end process of architecture and technology selection, advanced engineering, building these solutions within our labs, live deployments within the field, and technology lifecycle thereafter. This customer oversight, when coupled with our deep understanding of our partner technologies, gives us a very unique understanding that can be applied to our network automation development. Automation must account for 'what happens in the real world' and not just that which is certified against a captive lab instance."

Having customer experience at the core of its business strategy, LightRiver has built "netFLEX," a disruptive, industry award-winning platform that advances network automation to simplify, standardize, and personalize the Operations and End Customer

experience. netFLEX leverages real-time understanding of network and service inventory within its Path Computation Engine to automate end-to-end provisioning with quality not achieved with traditional OSS. This same inventory is leveraged for service assurance and actual identification of service path, topology, and correlation of network and service impact. Advanced analytics from netFLEX allow for personalization (programmability) where the operator can custom-define what is 'actionable' to auto-detect, predict, auto-test, and even auto-remediate an issue before it is customer impacting. The netFLEX Optical Domain Controller® provides automation of the full network and service lifecycle to also include backups, upgrades, network change/modification, and advanced SLA management. All of these automations are made available through the

Through this innovative, multi-vendor technology laboratory and factory, LightRiver's experts build and deploy high-performing, cost-effective, reliable transport networks at a rapid pace. Having established a strong leadership position in the market with its "award-winning design and Tier -1 vendor certification," LightRiverFBN reduces the risk and complexity by pre-building and validating within the labs, to ensure less time on customer sites, faster deployments, more reliability, dramatic cost savings, and an unrivaled customer experience. Exceptions to the process are caught early and remediated to ensure that field deployments and personnel do not encounter surprises. Additionally, FBN allows for customized training to the customer on their new network during the factory-build process, ahead of field deployment.



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netFLEX UI/UX and APIs/services to make disparate suppliers, technologies, and generations of both – all look the same. In total, the netFLEX platform drastically reduces the time to create and manage services compared to other approaches that take days, are reactive in nature, and consume huge amount of resources.

LightRiver blends its network engineering expertise, product reach, testing resources, and logistics management capabilities into its other unique offering, Factory Built Network® (FBN), which is the culmination of the company's skills and experience.

As a commitment to continuous innovation, LightRiver plans to expand upon these industry leading disciplines for Optical Domain Control and Factory Built Networks, to more tightly bake-in SDN control automations where Network and Service Health are more deeply integrated and customized into deployment and assurance lifecycle (leveraging whitebox/disagg, FBN performance baselining, AI/ML, and more).

"We are just getting started as we more deeply and meaningfully leverage automation to enable simplification and personalization, as the customer would define," concludes Ewert. **en**