Leaping Toward 5G

Lumina Networks and Adaptation Platform, LEAP enables 5G service automation in heterogeneous networks.

As an SD-Core solution, LEAP helps operators deploy 5G without creating a new network silo. Vendor-agnostic, LEAP makes it easier to control any interface while acting as an end-to-end network translator southbound.

Lumina Networks’ open source networking solutions unify and automate heterogeneous networks. Lumina Networks returns network control to the operators—to reimagine their future without the risk of vendor lock-in.

Model-driven software platform enables extensible automation of legacy network elements.

SDN has long enabled interfaces like Netconf and OpenFlow to program network elements. Most networks, however, also contain a vast amount of legacy devices that do not support these programmable interfaces. In this common scenario, network administrators are forced to use siloed and manual CLI methods or use rudimentary automation with devops tools.

Provision devices with legacy interfaces to co-existing with programmable network elements.

LEAP collects Service Assurance parameters, normalizes them, and pushes them the stack for alarming, statistics, notifications etc.

Benefits of Ubiquitous Automation

- 2 Week IP/MPLS on-boarding time reduces from ~12-18 months to two weeks
- New customer provisioning reduces from 4-6 weeks to <1 minute
- New service definition/launch time reduces from 6 months to 6 weeks
- 2 Weeks customer provisioning
- 1 Minute on-boarding
- 6 Weeks to launch
- Once service is defined and tied to order management system, provisioning a new service takes <3 minutes

Service Assurance

LEAP delivers Service Assurance parameters, automation flows, and pushes them to the application layer for visibility into the IP/MPLS network. It also predicts failures to allow network operators to plan for the future without the risk of vendor lock-in.

- Support varying network speeds
- Support for both brownfield and greenfield installations
- Predicts failures to allow network operators to plan for the future without the risk of vendor lock-in
- Expects to haveebra 3-6 months of feedback from LEAP clients

Brownfield Adaptation

Provides devices with legacy interfaces in co-existing with programmable network elements.

- Custom plugins to support CLI, vendor-specific APIs and multiple standard interfaces
- Mapping infrastructure normalizes to YANG data structures within the controller
- Allows new SDN equipment and legacy systems to be integrated
- Works for both provisioning and operations use cases
- Allows easier migration to SDN and reduces the cost burden of forklift upgrades
- Support variety of telemetry agents
- Notifications from Kafka and Websocket
- Maps underlying device/EMS data to normalize operational data models
- Standard northbound interfaces: To configure, And, Monitor within the carrier’s global systems
- Exportable time series data repository

Open Source

Community-driven innovation, pure-play open source, community collaboration

About Lumina Networks

We take supported OpenDaylight projects, vetted by the community, for safe and secure deployment into the network. Our own NetDev team works directly with internal development teams to build the tools specific to an organization which ensures secure and reliable implementation.

We believe in teaching our customers “how to fish,” sharing our best-practices and offering our expertise along the way. Companies quickly expand the skills and abilities of their development teams while removing the reliance of outside consultants where vendors lock in to use their product.

Lumina Networks and its SD-Core platform can be deployed across a wide spectrum of business verticals without hesitation. Additionally, our NetDev services combined with close relationships with the Linux Foundation means companies always have the newest and most innovative solutions available to solve critical business problems.

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