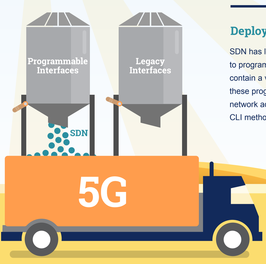
Leaping Toward 5G

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



PROBLEM

Deploying 5G in the Real World

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.

SOLUTION

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

Highlights

- Legacy network automation with model-driven frameworks
- Extensible platform
- Microservices architecture
- Business layer integration
- Leverage existing scripting skills skills

Benefits of Ubiquitous Automation

As part of 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 and end-to-end network translator southbound.

2 Week Onboarding

IP/MPLS on-boarding time reduces from ~12-18months to two weeks

1 Minute customer provisioning

New customer provisioning reduces from 4-6 weeks to <1 min

6 Weeks to launch

New service definition/launch time reduces from 6 months to 6 weeks

Once service is defined and tied to order management system, provisioning a new service takes

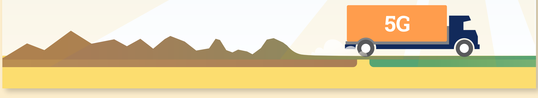
<3 minutes

Use Case

Brownfield Adaptation

Provision devices with legacy interfaces to 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



Use Case

Service Assurance

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

- 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

The Catalyst - Lumina Networks

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

Open Source

Comunity-driven innovation, pure-pay open source, community collaboration

Expertise

Hardware agnostic platform, packaged use cases for large scale market adoption

Flexibility to the Core

Expertise north & southbound traffic, open source leadership

Culture & Training

Agile methodology, knowledge transfer

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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 can quickly. 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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