Cloud-Style Networking to Modernize and Future-proof On-Prem Data Centers

For over 120 years, UL has developed scientific-based methods to test the quality, performance and safety of products. Today, UL solves the safety, security and sustainability challenges of the 21st century with over 14,000 employees, 230 offices, and more than 42 laboratories around the world. All of UL’s work, from independent research and standards development, to testing and certification, to providing analytical and digital solutions, helps improve global well-being.

SDN-based Network Transformation

When an internationally recognized safety science company of that caliber wanted to upgrade their legacy networking environment, it knew where to turn. Led by Ryan Atkins, UL’s global Enterprise Network Team sought out Arista’s Converged Cloud Fabric (CCF) to drive a revolutionary software-defined network (SDN) transformation while maintaining critical stability, reliability and performance the company has grown to expect. “UL’s Enterprise Network team has a reputation of delivering a reliable and strong core networking platform. We want to have a strong SDN foundation so that once the platform is up and running UL can be more agile; move in any direction that the business needs to go,” said Atkins.

Rapid PoC to Production

The CCF Proof of Concept went rapidly, concluding within few months. An aggressive in-house testing process with UL’s Enterprise Network Team moved from the first phase of its network transformation project to production. The Enterprise Network Team’s strong track record coupled with industry leading support from Arista resulted in smooth deployment into production. At one point, Arista’s leadership was ready to make industry altering product enhancements on UL’s behalf. Ryan stated, “Knowing we had that level of top-tier support only confirmed we had made the right decision.”

Enhancing Security and Vendor Choice

One of UL’s key requirements was to design security into the network from the ground up, allowing security staff access to all levels and layers of the UL network. Additionally, UL required systems and solutions that support a rapidly changing digital landscape. “As UL looks toward agile future growth, it is critical that our company becomes hardware agnostic. CCF allows UL to choose the switch hardware and hardware vendor relationships that are in our best interest. We can quickly adapt to and change hardware platforms as the needs of the business change…or if one vendor no longer offers UL Listed solutions,” said Atkins.

Cloud-style Experience On-prem

After 4 phases of a well-planned, gradual roll-out, UL is using CCF in production with no service disruptions or outages. UL’s global Enterprise Network Team noted that management of the network has improved with more transparent daily operations, reduced firmware documentation and maintenance complexity of the network topology, and enhanced compliance with strict security controls. The end-result is a highperforming network with increased transparency, resiliency, and agility.
A Trusted Partnership

Arista’s strong track record for uptime along with its history of consistently delivering solutions is why UL trusted Arista to confidently futureproof the organization and make it more agile. Future phases of production deployments will include additional benefits as the UL’s Arista deployment expands to additional global Data Centers.

“UL’s network and data centers powered by Arista CCF and DANZ Monitoring Fabric are ready for the future. Whatever the business demands of us, we’re ready right now, today,” stated Atkins.

UL Solution at a Glance

Solution

- Leaf-Spine Networking Architecture
- 34 Dell Open Networking switches
- 6 EVPC-Tenants with 243 logical segments
- Over 7,000 connected end points
- Moving towards Inter-POD Connections that will manage transitions from Disaster Recovery Site

Results

- Ease of management with single pane of glass
- Hardware agnostic solution is aligned with overall UL strategy
- Robust solution enabling migration with minimal disruption
- Confident about smooth migration plan for 8-10 more data centers
- Great customer support has helped build trust and reliability for the solution