www.liveaction.com

Enterprise security: Keep user, device and application traffic separate without redesigning the network by automating end-to-end micro-

Visibility: The IT landscape today -especially when powered by SD-Access- requires end-to-end visibility provides deep insight and situational awareness of the heterogeneous network environment.

LiveNX: Supporting your Migration to an **SD-Access Campus Architecture**

The Pulse

Live Action[™]

After the data center network overlay and the SD-WAN revolutions, the campus network is now the next network domain about to benefit from the business agility, security and network operations savings that result from adopting virtual network overlay fabrics. Cisco's SD-Access architecture provides a transformational shift in building and managing networks: faster, easier and with improved business efficiency.

The Virtual Overlay Network Lifecycle Challenge

Cisco SD-Access represents a revolutionary architectural approach to align the network campus architecture with the demands of a digital enterprise architecture model. It leverages a variety of network technologies such as VXLAN and LISP. It combines these with user management, security and micro-segmentation solutions such as ISE, pxGrid and Trustsec. DNA Center orchestrates the automation of these elements to provide an agile, secure and adaptable digital network architecture for the campus.



LiveNX: Bridging Visibility Silos in your Multi-Vendor, Multi-Cloud Infrastructure

Value to the Business

Troubleshooting: Simultaneous visibility into both the virtual overlay (pxGrid, VXLAN, SGT, LISP) as well as the physical underlay (L2, L3, Access and Border Nodes) helps to correlate virtual overlay and physical underlay issues.

Policy Verification: Digital transformation is driving the need for automated, policy-based configuration. LiveNX helps establish how high level configuration policies operate in the real world. This is a critical capability for successful adoption.

SD-Access Migration: LiveNX extends unified network performance management across the entire cross-domain lifecycle of DNA network solutions, including SD-Access as well as SD-WAN and any multi-vendor environment.

Day 0: PLAN

CHALLENGE: Knowing what you need to plan for a migration to a new campus architecture isn't easy. Where do all network devices exist? What applications are my business users using, which users are consuming them, what administrative groups do they belong into? When are application peak times? How can I prove compliance to different business stakeholders?

LIVENX CAPABILITIES:

User level flow analysis. Establish which users and groups of users are consuming which applications. Generate optimized policies by analyzing usage patterns.

Network inventory. Automatic device discovery quickly creates an exhaustive inventory of every device and interface in the network. Network performance baseline. Real-time capture and analysis of line-rate raw flow data simplifies the task of establishing an application and network performance baseline.

Business-critical applications. Real-time visualization of traffic at the application level, as well as summary reports, help to properly define policies that will optimize the performance of each application on the new SD-Access network.

Learn More: www.liveaction.com

Day 1: VERIFY

CHALLENGE: What do you need to know for Cisco SD-Access rollout? Are you migrating from a legacy campus architecture? What is the optimal approach to micro-segmentation? Can you see and easily visualize virtual overlay and physical underlay operation in one single view?

LIVENX CAPABILITIES:

Validate policy intent. Business application access is linked to user access and group permissions and SGTs to take overlay paths and traffic prioritization as intended by initial policy configuration.

Monitor application turn-up. Real-time visualization of end-to-end flows quickly identifies performance metrics and identifies any traffic loops for quick diagnosis and correction. Path change alerts facilitate configuration adjustments.

Traffic classification verification. Real-time visualization also exposes QoS anomalies and service provider traffic classification issues in virtual overlays and physical underlays.

Day 2: OPERATE

CHALLENGE: What do you need to reduce MTTR for network operations in an SD-Access network? Can you easily correlate virtual overlay to physical underlay events? Can you manage application flow and pro-actively detect anomalies?

LIVENX CAPABILITIES:

Simultaneous visibility of virtual overlay and physical underlay in Sankey diagram. LiveNX is unique in its ability to consume multiple data sets: - Netflow and SNMP from Catalyst 9000 series for inventory and real time traffic data.

- REST API from DNA Center for alerts as well as virtual overlay fabric (VXLAN/LISP) and physical underlay (route information etc).

- REST API from pxGrid/ISE.

Real-time traffic monitoring. Use real-time end-toend flow/path visualization to monitor bandwidth, manage performance and mitigate problems before they affect users.

Proactive alerts. Configure alarms to notify engineers of degraded performance or failure before users even know about them.

Capacity planning and network optimization.

Perform on-going characterization of network utilization, traffic patterns, thresholds, alarms and other metrics to further optimize network performance and capacity planning.

