LiveAction®

Unified Monitoring for Cisco SD-WAN

Solution Overview

Complete SD-WAN Visibility

As more organizations look to Software-Defined WAN (SD-WAN) for improved network performance and reduced communication costs across their remote offices and distributed branches, IT professionals need advanced performance and analytics capabilities to gain insights into performance, QoS, path routing, and traffic management complexities to ensure this key initiative is a success.

Plan, verify, and operate your SD-WAN service successfully with LiveAction's LiveNX performance and analytics platform. LiveNX integrates with Cisco SD-WAN to ensure key application performance is baselined, and network policies and configurations deliver the targeted application behavior.

Monitor and continually assess application performance characteristics across the network. The LiveNX real-time network topology maps enable network operations teams to view top application traffic, performance, and bandwidth, and also report on pre- and post-environments for initiative status.
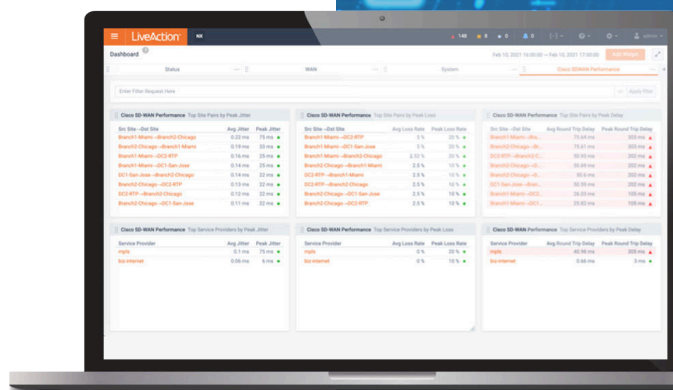

Figure 1: Summary Dashboard

The Challenge

SD-WAN has emerged as a game changer for distributed networks to address the demands of digital transformation happening across many organizations today.

To support emerging architectures without compromising user experience or straining resources, IT leaders need clear migration paths that de-risk the adoption and governance of the latest technologies. Integrated, validated, and easy-to-use solutions that simplify the management of increasingly complex networks and extend network technology investments have high value in today's enterprise environment.

> " Best flow visualization tool for Network Engineers. "
>
> —Network Architects in the Service Industry

DAY 0: Plan

While network migration is not a blank-slate exercise, it does afford an organization the opportunity to perform an audit of applications, sites, service provider transports resources, and policies with a view to tailoring the new network to their business needs.
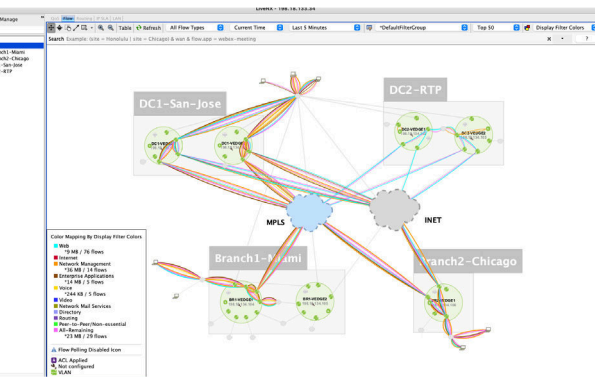
**Pre SD-WAN – network understanding for policy creation:**

▶ Migration away from traditional WAN, or legacy, first generation SD-WAN

▶ Benchmark application performance

▶ Identify business critical applications, including cloud applications deployed without the IT team's knowledge (Shadow IT)

DAY 1: Verify

During the production build out, the proof of concept is rolled out to active users. Once connectivity is established, based on requirements identified from the Day 0 baseline design, you will be enabled to visually verify the policy performance across tunnel paths, service provider transports, sites, devices, interfaces, and applications. This can be a labor-intensive, error-prone task and significant troubleshooting is often required to stabilize the configuration.

Day 1 - Validating Policy/Intent

▶ Verify policy intent

▶ Visibility into applications, service providers, routes, flows and sites

▶ Per segment topology verification
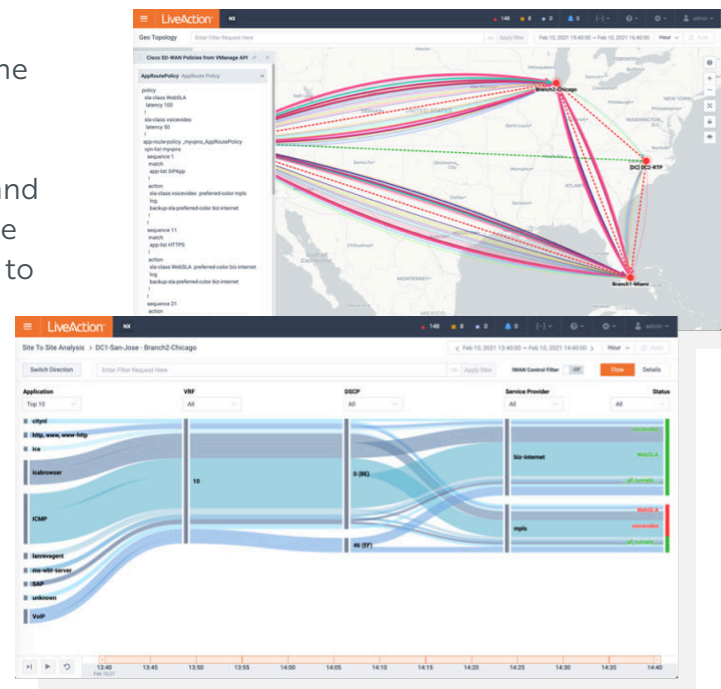
DAY 2: Operate

Once the production network is live, the ongoing day-to-day operations needs to focus on continual improvements and best practices. LiveNX delivers the data metrics, dashboards and reports of the application and network performance to optimize the end-to-end environment.

Day 2 - Operations

▶ Multi-vendor and multi-telemetry NOC Operations

▶ Ongoing performance analysis

▶ Faster MTTR Diagnostics – Granular Flow/ Performance/Application Visibility

▶ WAN capacity planning and prediction

LiveNX

SD-WAN

Controller

Edge Device
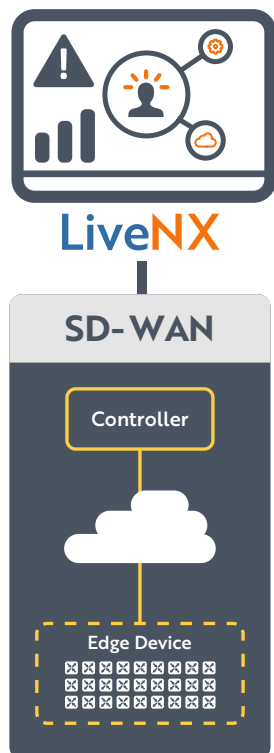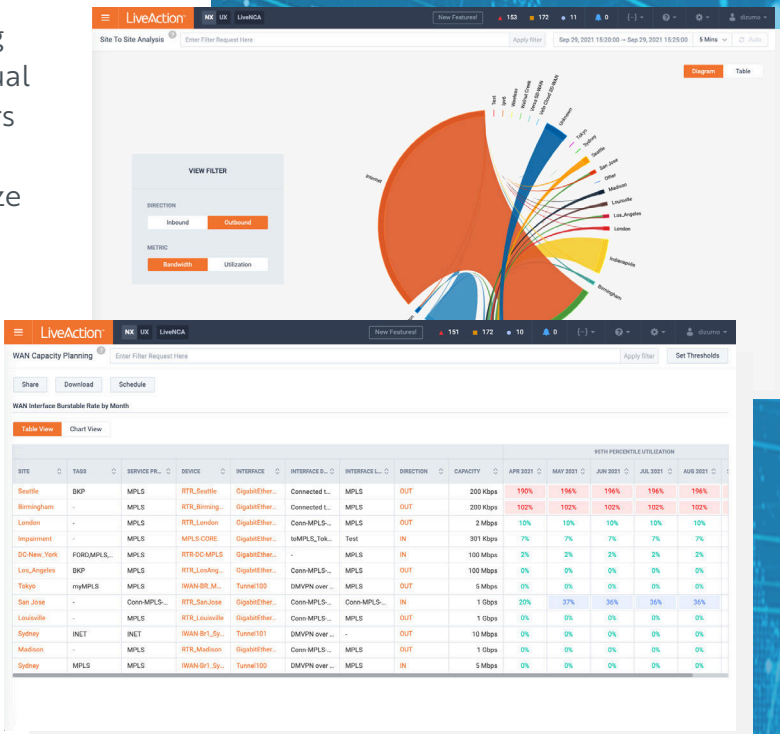
Integrations

▶ Policy

▶ Alerting

▶ Performance

▶ Application

▶ Inventory

Telemetry

▶ SNMP

▶ IPFIX/NetFlow

▶ API

▶ Packets

> **" Smooth implementation and feature-rich especially on Cisco devices. Pre- and post-sales support is outstanding. "**
>
> —Senior Manager in the Communications Industry

Cisco and LiveNX

▶ **Operationalize your SD-WAN deployment**

LiveNX queries extract real-time information from the network, retain historical information for analytics, and deliver continuous insights to customers.

▶ **Accelerate your SD-WAN roll-out**

The ROI on improved WAN management and visibility is measurable. Using LiveNX with Cisco, one financial solutions company extended their initial 125-site rollout to 825 sites in half the originally proposed time, dramatically accelerating their time to value.

▶ **Flexible deployment options**

LiveNX supports your preferred IT systems environment with packaged options for: on-premises, public cloud or bundled appliance. Fit to meet your needs.

▶ **Broadest telemetry**

LiveAction leverages the broadest array of telemetry including API, IPFIX, SNMP polling, and packets. Path analysis and real-time site-to-site traffic visualization, such as chord diagrams or Sankey diagrams, are best sourced from data flows, which are transport-independent and provide end-to-end visibility.
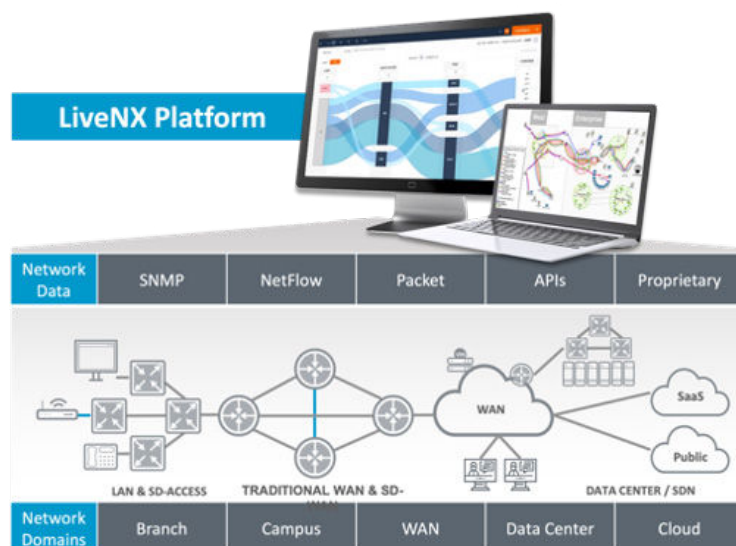
" **LiveAction is a fantastic visualization troubleshooting and operational run tool for simplifying complex networking technologies...** "

—Network Infrastructure Manager in the Finance Industry
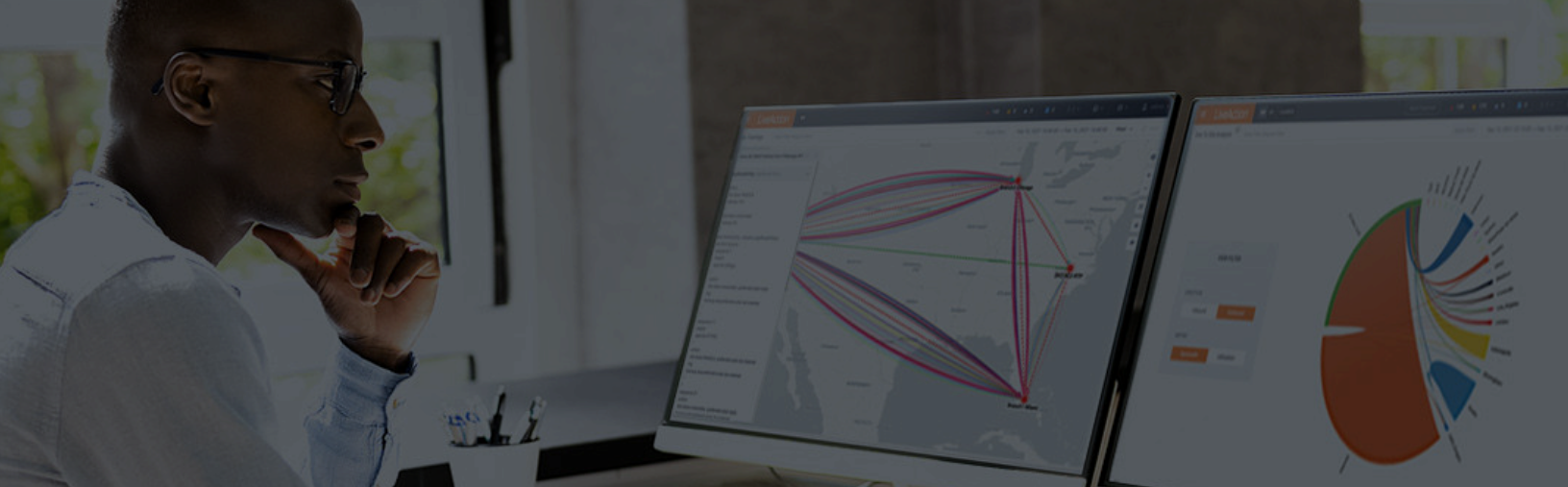
Benefits

Born out of a solution design for the Department of Defense to maintain in-theater network connectivity, availability, and performance, LiveNX helps keep networks running at their optimal level under the most demanding circumstances.

▶ **Immediate ROI on deployment**

LiveNX users have cut SD-WAN rollout time by up to 70 percent, experienced a 5x increase in bandwidth efficiency, and cut costs by 70 percent. Historical DVR-like playback of traffic correlating network and application events allows you to identify root causes of configuration and interoperability issues rapidly.

▶ **Improved productivity**

LiveNX helps you quickly identify the location and nature of performance issues and respond instantly, to eliminate potential sources of delay or congestion before they become a problem, and to efficiently optimize application performance across WAN links.

▶ **Reduce OpEx and CapEx**

Accelerate problem identification, troubleshooting, diagnosis, and resolution by up to 20 percent. Use automation to eliminate the time and effort associated with manual configuration and maintenance. Cuts through finger pointing between vendors to a quick resolution with end-to-end visibility. Our software-based platform can reduce tool cost up to 30 percent.

▶ **Eliminate costly downtime**

Use our Day 0 capabilities to plan capacity proactively, resolving problems before they occur. Avoid bandwidth depletion by baselining performance thresholds and set alerts to notify the relevant parties when additional capacity is needed. Reduce MTTR with end-to-end flow status at-a-glance, eliminating up to 90 percent of troubleshooting time. Get visibility into very high rate IPFIX and NetFlow that breaks other management tools.

About LiveAction

LiveAction provides end-to-end visibility of network and application performance from a single pane of glass. This gives enterprises confidence that the network is meeting business objectives offers IT administrators full visibility for better decision making and reduces the overall cost of operations. By unifying and simplifying the collection, correlation and presentation of application and network data, LiveAction empowers network professionals to proactively and quickly identify, troubleshoot and resolve issues across increasingly large and complex networks. To learn more and see how LiveAction delivers unmatched network visibility, visit www.liveaction.com.

LiveAction®