Executive Summary
Fortinet and LiveAction have partnered to deliver an industry-leading reporting solution by integrating the Fortinet FortiGate Next-Generation Firewall (NGFW) and LiveAction LiveSP platform to provide enterprises and service providers with full, real-time visibility of their network and applications.

Challenges
Today's economy is more technology-driven than ever before. Enterprises must embrace digital transformation to innovate rapidly. This transformation is about the digitization of business models, which are driven by applications on-demand and network flexibility, while maintaining a high level of security.

IT teams must make sure that end-users have an expected level of performance when working with various applications. Failures negatively impact employee productivity, product and service functionality, customer satisfaction, and inevitably, revenue. Downtime can cost companies an average of $300,000 an hour in lost revenue and productivity.

LiveAction and Fortinet have established a technology partnership to provide organizations an extra layer of end-to-end reporting. The partnership enables an effective wide-area network (WAN) and software-defined wide-area network (SD-WAN) troubleshooting workflow:
1. Problem identification and fault isolation, via correlation of tickets, real-time dashboards, maps, alerts, and reports.
2. Root-cause analysis, with operations leveraging the reporting solution to identify the network issue or the application issue by being able to analyze from the flows to the packets.
3. Problem remediation; with the integrated solution, fixing the root issue is relatively straightforward. It may involve a configuration change, a link connectivity repair, a capacity upgrade, etc.
4. Control: Network managers must validate that a change resolved the problem. He or she can verify the efficacy of the change through the dashboard's views.

Joint Solution
LiveAction and Fortinet have partnered to deliver an industry-leading security solution to address these challenges. The integration of the LiveAction product and FortiGate NGFW, enabled through the Fabric-Ready Program in the Fortinet Open Fabric Ecosystem, delivers unparalleled visibility and security for WAN/SD-WAN deployments.

Joint Solution Components
- Fortinet FortiGate NGFW
- LiveAction LiveSP, LiveAction LiveWire

Joint Solution Benefits
- Monitor and deploy your Fortinet Secure SD-WAN network
- Visualize end-to-end application performance
- Troubleshoot applications from packet level up to Layer 7
- Reduce mean time to repair
- Customize your reporting to help the IT organization
Fortinet Secure SD-WAN replaces separate WAN routers, WAN optimization, and security devices such as firewalls and secure web gateways (SWGs) with a single Fortinet FortiGate NGFW. This provides industry-best performance with capabilities that include application awareness, automated path intelligence, and WAN overlay support for virtual private network (VPN). Fortinet Secure SD-WAN delivers security-driven networking for branch networks with outstanding performance enabled by fast application identification and automated path intelligence.

The FortiGate NGFW delivers integrated SD-WAN networking and security capabilities in a single system. The integration with LiveSP delivers an all-in-one, completely customizable solution for:

- Application performance visibility across different network paths
- Quality-of-service visibility, mapped with Differentiated Services Code Point (DSCP) coloring
- Network usage visibility, including bandwidth, volumes, and load
- Device performance, such as hardware indicators, interface usage, etc.
- Service-level agreement (SLA) visibility, including SLA-Class reports, site availabilities, and capacity planning
- Scalable for multitenant service provider deployments with 10,000s of devices
- Monitor the SLA per Fortinet Secure SD-WAN Rules and Sites

The addition of LiveWire in the solution, with virtual and physical application visibility probes connectable to the FortiGate, provides Layer 7-level analysis of application traffic, thanks to the storage and analysis of packet-level information:

- Capture packet data from virtually anywhere in the network and analyze them using the LiveSP platform.
- Easily and quickly troubleshoot applications, including Voice over Internet Protocol (VoIP) and video, using deep forensic analysis.

![Figure 1: A deployment Example](image-url)
Figure 2: Fortinet and LiveAction integrated solution.
Solution Use Cases

1. **SD-WAN Deployment**: Provides an advanced reporting and analytics solution, leveraging all capabilities and benefits of the Fortinet Secure SD-WAN solution.

2. **Troubleshooting Application Performance**: Monitors every packet and analyzes each network transaction to accelerate and optimize application end-to-end performance.

3. **Network Performance Monitoring and Diagnostics (NPMD)**: Leverage the Fortinet FortiGate DPI engine and its integration with LiveAction solutions to visualize all your application indicators: users, volumes, projections, trends, and adoption per region, etc.

About LiveAction

LiveAction provides end-to-end visibility into 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 network and application 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 [https://www.liveaction.com](https://www.liveaction.com).