

# LiveAction | Healthcare

Large faith-based healthcare provider relies on LiveAction tools to deliver exceptional patient services over high performance networks

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CHIEF NETWORK ARCHITECT  
AT HEALTHCARE PROVIDER



With more than 22,000 employees, this multi-billion-dollar, nonprofit, faith-based health system owns, manages, or jointly operates various acute care hospitals, a psychiatric care hospital, nursing care facilities, assisted living centers, and home care and hospice services.

## The Challenge

“When I started in healthcare 20 years ago, we had a little bit of email and some file sharing. But that was it. Since then, it’s been incredible to be a part of the technology adoption that’s taken place in the healthcare industry, but also challenging to maintain and troubleshoot the high-performing networks required by doctors, patients and staff,” said chief network architect at healthcare provider.

Corporate networks are expected to be reliable and resilient, and are even more important for a healthcare provider. How important? Look at some of the demands placed on this health system’s network everyday:

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## Omnipeek

LiveAction Omnipeek, best-in-class network diagnostics software, delivers intuitive visualization and effective forensics for faster resolution of network and application performance issues. LiveAction packet intelligence enables Omnipeek to provide rapid analysis and troubleshooting of wired and wireless networks, local and remote.

## Omnpliance

LiveAction Omnpliance, a family of industry-leading packet capture and analysis appliances, enables real-time and post-event analytics at up to 25Gbps. Using LiveAction packet intelligence, Omnpliance gives IT engineers the power to resolve network and application performance issues on 1/10/40 Gigabit Ethernet, 802.11ac WLAN, VoIP, and video-over-IP networks.

- Clinical Information Systems — the network enables these systems to link data with ancillary systems in real time. This connects services such as radiology, lab results and each patient’s electronic medical records (EMR), and lets physicians issue prescriptions with just a couple of clicks on a tablet or PC.
- ERP services — the network handles all manner of data traffic to support the backend supply chain, and all HR functions including payroll, time and attendance.
- Employee productivity — the network provides the backbone for the healthcare provider’s communication and collaboration services, including email, IP telephony, and a growing demand for video.
- Patient services — the network facilitates a number of critical patient amenities such as MyChart retrieval, online scheduling and payment services.
- Quality of life — the network provides a variety of additional services for patients and their guests, including guest Internet access, and even Wi-Fi enabled webcams so parents can monitor newborn babies 24x7.

It’s become vital for the IT teams at this healthcare organization to have powerful tools that help them proactively monitor, manage and troubleshoot network performance. In some cases, lives depend on it.

### The Solution

“We’ve been relying on LiveAction™ products for almost two decades, starting with EtherPeek back in the 1990s,” said the chief network architect. “Over the years this has expanded to virtually all of LiveAction’ network monitoring and capacity planning tools, including multiple LiveAction Omnpliance® TL appliances, LiveAction Insight™ boxes, LiveAction Omnipeek® software and the Capture Engine for LiveAction Omnipeek®. The screen I look at most has all the information I need at a single glance: network utilization, current activity, top talkers, and top protocols. With the ability to conduct multi-segment analysis and trending analysis we can determine if an issue is a network or application problem. This helps us identify and fix problems quickly, without any finger-pointing.”

The network is designed to allow the IT team to monitor all of the traffic from various points at its edge. Capture Engine for LiveAction Omnipeek runs 24x7x365, on top of Cisco UCS modules running Windows Server. In addition, Omnpliance TL appliances are placed strategically wherever the MPLS networks enter the hospital’s system. If an issue arises, the team uses Omnipeek to connect to the Capture Engine and LiveAction Insight boxes that are as close to the source of the problem as possible. This allows the IT team to compare packet captures at multiple points, so any issues can be found and resolved quickly.



Cisco is the worldwide leader in networking that transforms how people connect, communicate, and collaborate. LiveAction and Cisco work together in several areas, including wireless, VoIP, and security. The joint wireless solution allows 802.11 WLAN analysis and troubleshooting, including 802.11ac, directly from the Cisco infrastructure, and provides Cisco-specific VoIP analytics required for troubleshooting and assuring the QoS of Cisco VoIP networks. Cisco's TAC team also uses LiveAction Omnipeek and Omnipeek Remote Capture to support their customers.

LiveAction Insight has also been deployed in a unique lab environment operated by the IT team, providing information about how the system will behave in particular scenarios without actually disrupting the network.

## The Benefits

With a full suite of LiveAction solutions ensuring network and application stability, this faith-based health system can focus on providing its patients with exceptional services, care and support. Even with the burden of such a critical responsibility, the network is virtually invisible to everyone that uses it, and that's how it should be.

"I've been involved in some extremely high profile situations where packet-level data was absolutely critical," said the chief network architect. "For example, when our organization first started offering ASP services to external clients, one of our customers was experiencing disconnects that they thought originated with us. Even though their network was set up to conduct perimeter data captures just like ours, we were able to use our LiveAction tools to identify the issue and show them that the disconnect requests were coming from their own local interface engine. It solved the issue quickly before it became a costly problem."

"We have a lot of tools from other companies like SolarWinds® and Cisco™ that help us monitor important stats like NetFlow," concluded the chief network architect. "But LiveAction tools are the ones I grab first for NetFlow and application performance monitoring. If you can look at data down to the bit level, why mess with anything else? LiveAction products are worth every penny. I have them open all day, every day."