ELECTRIC LIGHTWAVE



ARIZONA CARDIOLOGY GROUP

- + CUSTOMER PROFILE Leading Arizona heart specialist group with 14 cardiologists providing patient care through 4 branch offices.
- + BUSINESS OBJECTIVES Increasing network bandwidth to support a new electronic medical records (EMR) system and upgrading security with a new firewall.
- + SOLUTION IP/MPLS, VPN, and Cloud Firewall Service
- + BUSINESS OUTCOME Improved patient care and a more efficient workflow through a reliable and secure network.

"A cloud firewall just made more sense than buying hardware that would inevitably have to be upgraded down the road."

Abe Alirez AZ Cardiology IT Director

PATIENT CARE IMPROVED WITH NETWORK AND CLOUD FIREWALL SERVICE

Business Challenge

The Arizona Cardiology Group deployed a new electronic medical records (EMR) system to aid in collaboration and simplify information sharing between offices. However, its bandwidth-intensive use of imaging files began consuming almost all available bandwidth on the WAN between the Group's four satellite offices. Also, the 10-year old customer-premise equipment (CPE) firewall was unable to support the 2000-plus simultaneous connections required by the EMR system and the existing network load.

The saturated network and overloaded firewall slowed performance for the new EMR system. Images rendered at a glacial pace. Patient reports could not be read in the time allotted between appointments. File transmission between satellite offices was frustratingly slow. According to IT Director Abe Alirez, "We were barely surviving on our T1 connections. We needed more bandwidth, but we weren't sure what the best solution for our needs was."

Arizona Cardiology Group faced a challenge common to growing midsize businesses. While the new EMR system facilitated better care and significant increases in efficiency, the corresponding increase in requisite data throughput overwhelmed the Group's T1-based WAN and customer premise equipment (CPE) firewall, demanding an upgrade.

Approach

The Group examined possible solutions to address their network performance problems. Though Alirez was more familiar with CPE

hardware firewall solutions from Cisco and Netgear, he recognized the innovative capabilities of Electric Lightwave's Cloud Firewall Service (CFS) and chose Electric Lightwave's comprehensive solution.

Coupled with a four-node IP/MPLS Network with 10 Mbps connections between the Group's offices, Electric Lightwave CFS provided several very important capabilities. Alirez says, "Electric Lightwave's cloud firewall came out ahead on features and price. Even if a comparable CPE firewall existed, we could not have afforded it."

Electric Lightwave's CFS provided Alirez with a management portal that he can access from anywhere with an Internet connection. CFS provides visibility into applications in use, even if nonstandard ports are used to conceal traffic. Because CFS can inspect this type of network traffic, it can control it as well. In addition, cloud firewalls are made highly available with redundancy that extends to all levels of the firewall.

"A cloud firewall just made more sense than buying hardware that would inevitably have to be upgraded down the road," said Alirez.

Results

Now doctors at Arizona Cardiology Group enjoy a more efficient workflow. With Electric Lightwave MPLS and CFS, they can fully realize the efficiencies promised by their EMR system.

With a faster EMR system, each of the Group's 14 doctors can now see one or two more patients per day. Alirez explains, "EMR images now show up in almost real time. We have better upload and download speed and no packet loss between locations." The increase in patients per doctor increased the Group's revenue, which has more than paid for the CFS subscription.

Network maintenance has been significantly reduced with CFS, freeing Alirez from interruptions caused by outages with the old CPE firewall. Alirez can now refocus resources on higher value IT tasks. Because he uses Electric Lightwave's management portal, Alirez can control the entire solution from a desktop or mobile device. "At my pool, sipping a margarita, it doesn't matter. I can manage my Electric Lightwave products almost any time, any where." The Group can increase both WAN bandwidth and firewall capacity any time, without a truck roll. The Group's IP/MPLS bandwidth can be increased in flexible increments, and capabilities like Intrusion Detection and File Blocking can be added with no service disruption.

As Alirez puts it, "With CFS, our WAN and firewall just work. As a result, I get interrupted less and can focus more resources on other priorities and projects." The real bottom line, though, is enabling improved patient care. According to Alirez, every doctor is pleased and patients experience better care from doctors who are not behind schedule, rushing to the next appointment.



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Abe Alirez AZ Cardiology IT Director

CUSTOMER BENEFITS

- Increased bandwidth allows doctors to each see 1-2 more patients per day.
- Improved network enables faster rendering of EMR images
- + Saved time and reduced costs for network maintenance.
- + The ability to manage services from anywhere with a mobile device
- Enhanced security and reduced risks to group's network with Cloud Firewall Service.

ABOUT ELECTRIC LIGHTWAVE™

Electric Lightwave™, an Integra company, serves as a trusted network infrastructure partner to enterprises, government agencies and carriers in select markets throughout the western United States. We combine dense metro and intercity fiber assets, enterprise-grade network solutions, including Ethernet, Wavelengths and IP, with a highly responsive and easy to do business with approach. Electric Lightwave offers a premium service experience to match our premium network infrastructure solutions.

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