

# Delivering Lifesaving Connectivity



CardiLink specializes in post-sales service monitoring of automated external defibrillators (AEDs), giving manufacturers and/or owners critical insights into operational effectiveness. The integrated cloud and machine-learning platform simplifies AED fleet management through alerts and notifications, ensuring that the medically critical device is always ready for use in an emergency.

## Challenges

AEDs are commonly found in many public spaces and corporate campuses and the challenge both manufacturers and AED owners have is ensuring the operational effectiveness of the AED. The critical nature of the AED necessitates the need for regular maintenance visits to each individual site.

In both the European Union<sup>1</sup> and the United States, state legislative requirements are being implemented that oblige AED manufacturers and owners to maintain a system in which the AED state is logged. The directives not only cover AED hardware and software, but include all IT network characteristics and IT security measures, including protection against unauthorized access, for devices that are connected to a network.



*The global distribution of AEDs is driving demand for innovative services in healthcare device monitoring. Through our partnership with Akamai, we can securely connect devices for status monitoring from anywhere in the world.*

– Lars Wassermann, CEO, CardiLink



**CardiLink**  
[www.cardi-link.com](http://www.cardi-link.com)

**INDUSTRY**  
 Healthcare

### BENEFITS

- **Operational Efficiency:** Secure remote access significantly reduces the operational costs per device and per site visits
- **Global Presence:** With global points of presence, the barrier to market for connected medical devices is lowered
- **ISO Compliance:** Peace of mind that the underpinning connectivity is managed to the highest security standard

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### Solution Deployed

CardiLink chose Akamai SPS Secure IoT for its secure and private connectivity, whereby distributed AED endpoints are authorized and authenticated into an isolated private network enabling secure access to the CardiLink medical device monitoring service.

Using Akamai SPS Secure IoT's elastic private network topology, CardiLink can with ease segment AEDs into unique networks per manufacturer – per country – per owner. Akamai's private networks diminish the cyberattack surface of connected AEDs. Furthermore, network segmentation minimizes exposure of data between AED owners.

The defense-in-depth security approach enables CardiLink to demonstrate service delivery that is in line with legislation for sensitive data protection such as the GDPR.

Akamai SPS Secure IoT requires no software install on the AED, eliminating unnecessary compliance testing. Furthermore, Akamai SPS Secure IoT's bidirectional network capability enables secure remote access to AEDs, allowing remote management of devices from trusted centralized locations.

### Results

CardiLink is leveraging Akamai SPS Secure IoT as part of their overall service offering, as it enables:

#### Distributed Connectivity

A global cellular network enabling ease of connecting medical devices over geodispersed locations.

#### Data Protection Compliance

Segmented networks per manufacturer, per country, per AED fleet owner.

#### Security from Cyberthreat

Private network, off the public internet, minimizing exposure of medical devices to cybersecurity threats.

#### Faster Time to Market

ISO 27001-managed connectivity service, enabling ease of demonstrating adherence to regulations.

#### Secure Remote Access

Bidirectional network enabling over-the-air management of AEDs, minimizing the number of site visits.

#### Ease of Scale

Integrated AAA service enabling ease of enrolling devices securely into private networks for metrics gathering.

Akamai makes secure connectivity simple for any size of mobility or IoT deployment in a hyperconnected world.



Akamai's global presence, enables us to address a global market with minimal risk to the security of connected medical devices. The secure connectivity enables us to evolve new services which will be key to saving lives in the future.

**Lars Wassermann**

CEO, CardiLink

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## Source:

1. <https://eur-lex.europa.eu/eli/reg/2017/745/oj>



CardiLink is an innovative service provider for healthcare device monitoring, enabling manufacturers and owners of Automated External Defibrillators (AEDs) with device management capabilities. CardiLink's service platform provides insights into device status and location, with alert notifications on the status of the life-saving medical devices. [www.cardi-link.com](http://www.cardi-link.com)