



— CASE STUDY

Protect healthcare networks with at-the-edge DDoS Mitigation

INDUSTRY
Healthcare

SOLUTION
DDoS Protection

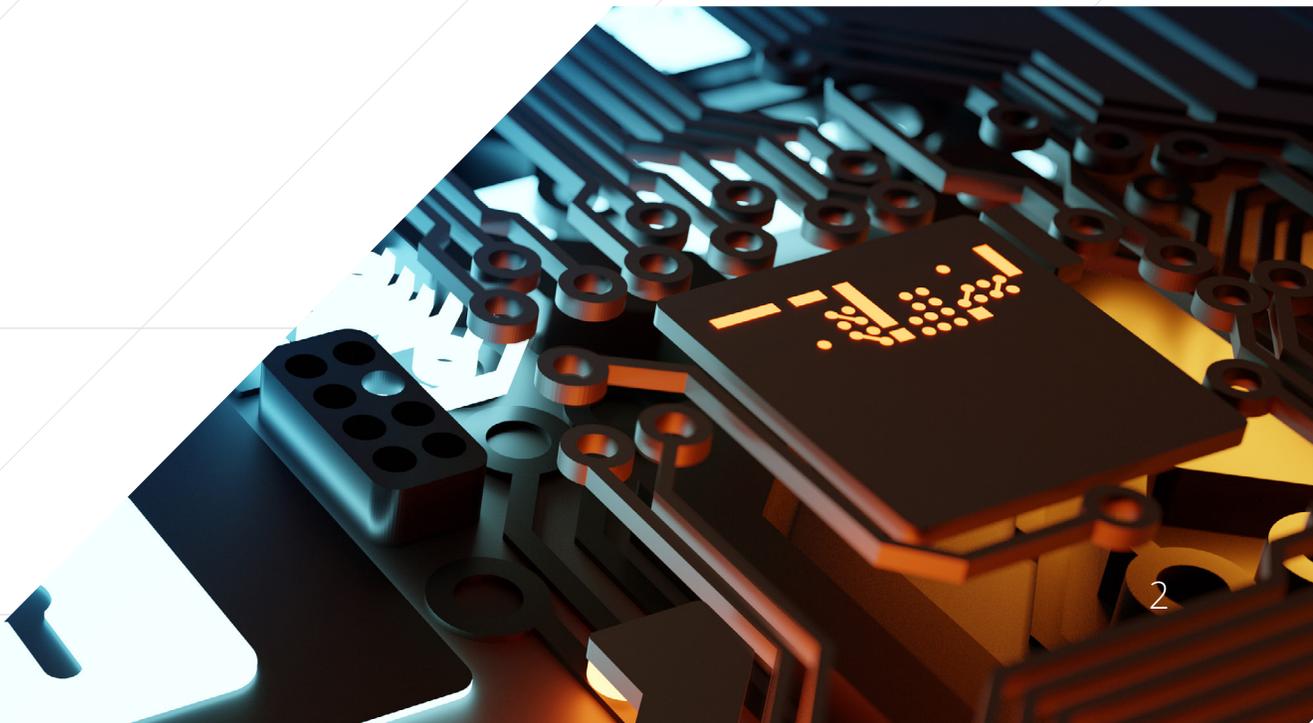
As the healthcare industry undergoes a massive digital transformation, organizations face even greater challenges to protect patient information and remain operational. Today, Distributed Denial of Service (DDoS) attacks are the number one threat to business networks. Zayo offers advanced technologies for companies looking to adopt multi-layered protection solutions with no additional latency for unaffected traffic.



**DDoS Attacks
=
#1 Threat**

The Challenge

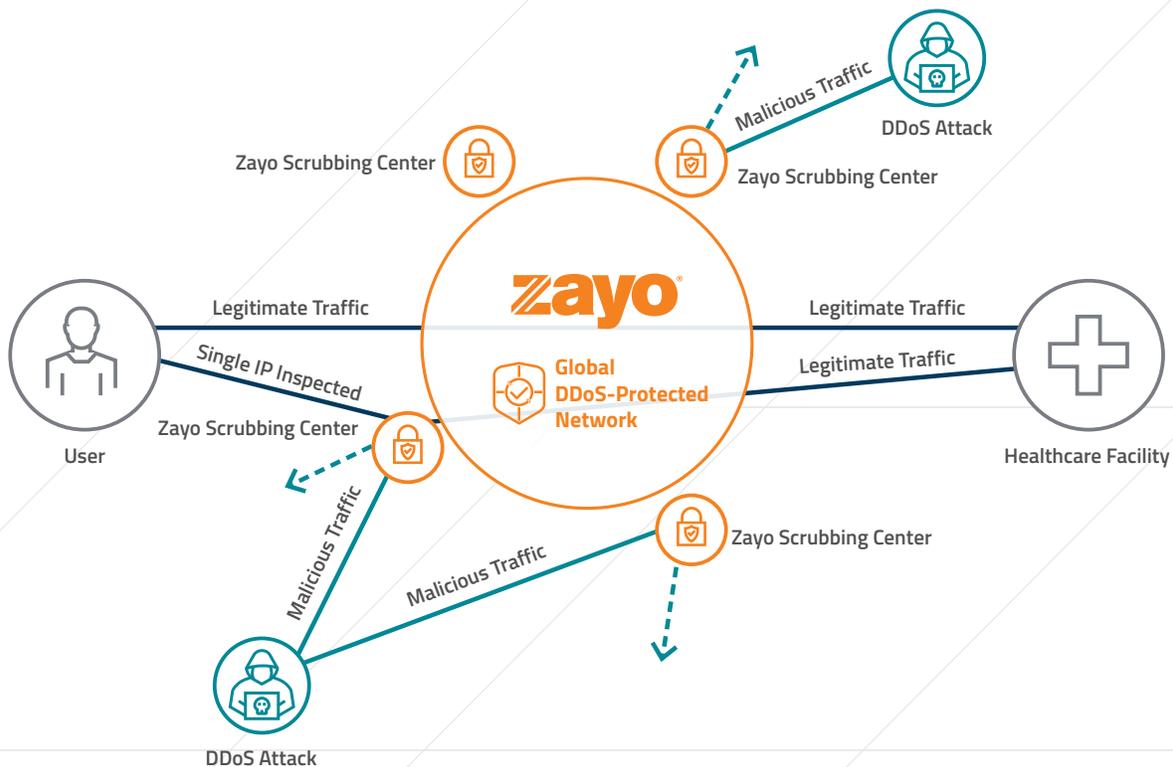
A medical center in the United States, whose network runs on 1G of Zayo's Dedicated Internet, was targeted by a DDoS attack. Without DDoS Protection, the attack disrupted their entire /24 IP space, shutting down operations and disabling Electronic Medical Record (EMR) system access. Every patient, no matter how dire the circumstances, had to be turned away. As one of the busiest trauma centers in the US, the implications were serious.



The Solution

Zayo promptly executed an ad-hoc DDoS mitigation at the customer's request via Zayo's dedicated Security Operations Center (SOC), scrubbing the medical center's bandwidth and getting operations back to normal in under two hours. As the medical center was able to admit patients again, Zayo continued to scrub and divert malicious traffic until the attack ceased.

To ensure they didn't get caught off guard again, the organization implemented Zayo's Standard DDoS Protection service. With proactive monitoring and authorized mitigation, attacks will be identified immediately and traffic will be re-routed to one or more of Zayo's scrubbing centers, or filtered on Zayo's massive peering infrastructure. As a result, only uninterrupted, clean traffic will be delivered in the future, protecting the medical center, their network and most importantly, their patients.



The Benefits

By leveraging Zayo's Dedicated Internet and DDoS Protection services, healthcare organizations are able to focus on what's important, providing the best service to their patients. Zayo provides customers with fast and reliable connectivity while the DDoS Protection solution secures their network and operations from attacks.

- **Cost Optimization**

12% of all healthcare companies experience at least one DDoS attack, leading to a potential operational shutdown and loss of sensitive patient information. The average cost of an attack exceeds \$30,000 every hour. With a small investment in Zayo's standard DDoS Protection, healthcare companies gain protection from inevitable attacks, and save money when compared to paying for a costly, on-demand mitigation.

- **Improved Security**

With Zayo's standard DDoS Protection and always-on monitoring, Zayo flags DDoS attacks and sends alerts to the facility. Our Security Operations Center (SOC) then mitigates the attack, blocking malicious traffic before it reaches the facility's network, allowing for uninterrupted patient care.

Ask your Account Manager about bundling DDoS Protection with Network Firewall as a Service (NFaaS) for advanced network-based threat protection.

Why Zayo

Our mission is to be proactive and **monitor** the network to establish normal traffic patterns, **identify** malicious traffic at the onset, and **protect** business ensuring only legitimate traffic passes through. After the attack is over, and traffic has remained clean, Zayo will **restore** traffic to its original path and provide customers with the products and services they need to protect their businesses in the future.





Find out more about leading edge networks and datacenters.

Learn more about Zayo: zayo.com/industries/healthcare/

About Zayo

Zayo Group Holdings, Inc. provides mission-critical bandwidth to the world's most impactful companies, fueling the innovations that are transforming our society. Zayo's 126,000-mile network in North America and Europe includes extensive metro connectivity to thousands of buildings and datacenters. Zayo's communications infrastructure solutions include dark fiber, private data networks, wavelengths, Ethernet, dedicated internet access and datacenter connectivity solutions. Zayo owns and operates a Tier 1 IP backbone and through its CloudLink service, Zayo provides low-latency private connectivity that attaches enterprises to their public cloud environments. Zayo serves wireless and wireline carriers, media, tech, content, finance, healthcare and other large enterprises. For more information, visit zayo.com.