

Lumen® Edge Computing Solutions: Healthcare



Optimize operational efficiency and enhance your patients' experiences and health outcomes by maximizing the speed of your digital business – to help give you a competitive edge, globally

Make informed data-driven decisions at the edge

You excel at being connected – to your patients, providers, administrative staff and payer relationships. This connectivity helps you become increasingly data-driven. And more data helps you deliver more innovative products and services, remaining competitive among other providers. But to become really data-driven, most healthcare delivery organizations need a new architecture to help acquire, analyze and act on the data where it is being created. Lumen Edge Computing Solutions allow these HDOs to quickly obtain real-time market insights and act on those insights to transform operations, health outcomes and patient experiences.

Deploy data and compute closer to the where it matters

Moving workloads to where digital interactions occur can help:

- Improve the patient & provider experience
- Increase medical application performance
- Lower costs
- Minimize compliance & regulation risk

Edge computing enables an HDO to realize such benefits; however, it requires overcoming the challenges in deploying data and compute closer to the action. How do you efficiently store data, secure its environment and deliver applications that meet your operational IT requirements? Flexible edge compute solutions from Lumen delivered over a global fiber network at very low latency in high-performance, secure edge compute facilities answer the need. You can overcome latency, enhance economics and minimize risk with Lumen Edge Computing Solutions. Now, you can deploy data and compute closer to the action for a competitive advantage – at the edge.

Designed for digital interactions

Specifically designed for edge compute use cases, Lumen solves for HDO's needs and challenges of moving workloads closer to digital interactions with flexibility and adaptability. This enables a powerful experience where it is needed most, enhances performance and outcomes, and helps healthcare evolve as a whole. Lumen offers the infrastructure choices and services that enable and support the agility offered by application developers to the business while allowing for initiatives, such as governance, security and compliance and reduced operational costs, to be addressed.

Lumen Edge Computing Solutions

	Business Need	Examples	Lumen Edge Solution
Storage	<ul style="list-style-type: none"> • Capture, store, and analyze patient health data to enable real-time decision making for treatment plans and procedures 	<ul style="list-style-type: none"> • Sensor readings • Video capture • Radiographs • Remote Patient Monitoring Devices 	<ul style="list-style-type: none"> • Designed for the edge with Network Storage and Layer-2 Ethernet connectivity enhanced by Data Access Accelerator and Layer-3 IP-VPN
Security	<ul style="list-style-type: none"> • Securing IoT medical applications running at the edge and protecting their data 	<ul style="list-style-type: none"> • Mobile applications • Distributed web applications • Media distribution and optimization 	<ul style="list-style-type: none"> • Web Application Firewalls (WAF) • Bot Managers • API Protection • Distributed Denial of Service Mitigation (DDoS)
Application Delivery	<ul style="list-style-type: none"> • Efficiently running high-bandwidth applications and workloads at global scale, from the waiting room to the operating room 	<ul style="list-style-type: none"> • IoT software updates • Video streaming and analytics • Location-based analytics • Regional hospital transformation 	<ul style="list-style-type: none"> • Comprising of CDN, CDN Edge Compute, Edge Hosting Environment, Private Cloud, and Dynamic Connections coupled with our strength in Managed Services

Why Lumen

Lumen is a pioneer in the edge computing market, helping businesses place workloads in the right location to manage their data, devices, processing, security and overall digital business. We have been doing this through the delivery of exceptional assets of global network, data center footprint, security and hybrid cloud services, coupled with the Lumen strengths of industry partners around datacenter and cloud.

Our ability to deliver compute on customer premises with near-zero latency, or within our deep metro facilities designed for 5ms of latency or better, provides you with the infrastructure to put applications in the right place for the right SLAs. Lumen helps turbo-charge your data engine to acquire data from more sources, analyze

patterns in real-time and act upon business logic closer to the digital interaction. Our solutions enable innovations previously not possible to support applications using Artificial Intelligence (AI) and Machine Learning (ML) for robotics, real-time analytics and control systems, to name a few.

What sets Lumen apart from other providers is the combination of our network strength, data center footprint and extensive managed services experience in operating and integrating client requirements. This is especially important in a hybrid world leading toward edge computing that bridges clouds, IT infrastructure and the edge for workloads and applications to perform at required levels of latency, capacity and protection.

Enhance the speed of your digital business, today.

Visit Lumen today for more information, or contact a Lumen Expert for a consultation to get started at the edge.