



SUMMARY

EdgeConneX specializes in global infrastructure solutions, providing purpose-built, edge-of-network facilities. Their Edge Data Centers enable the fastest delivery of bandwidth intensive, latency sensitive content and applications to Enterprise and Consumer end users.

Business Challenge

Partner with a network provider capable of meeting stringent latency and bandwidth requirements, delivering a superior end user experience for enterprises and consumers to access Internet and Cloud infrastructures.

Solution

Electric Lightwave's reliable, low latency fiber network offers high-bandwidth connectivity to EdgeConneX Edge Data Centers across the Western U.S.

"In today's content driven world, our goal is to create a superior user experience while alleviating the strain on the underlying network it relies on for delivery. This focus improves website and content performance while lowering overall cost for all involved."

Clint Heiden, Chief Commercial Officer, EdgeConneX

ELECTRIC LIGHTWAVE AND EDGECONNEX PARTNER TO IMPROVE CLOUD SECURITY AND PERFORMANCE

SITUATION

Businesses and consumers alike are accessing content and the cloud like never before. In fact, the rates of content creation and consumption are growing exponentially. As an example, it's estimated that in the next 5 years we will move from 1.8B connected individuals with 4B connected devices to upwards of 9B individuals with 75B devices. However, the Internet and supporting infrastructure has not kept pace leading to a predicted drop in user satisfaction and thus slowing adoption of new technologies which help drive enterprise revenue and efficiency. The cloud, social media, online gaming, healthcare and enterprises in general need a solution for this problem so they can utilize technology to its fullest potential and drive efficiency improvements that increase profit, revenue and customer loyalty. The answer is the combination of a resilient, high capacity fiber infrastructure and a localized data center platform. According to Gartner's Edge ManifestoTM published in 2015, these new workloads require "the use of smaller, distributed, connected data centers, closer to concentrations of users and generators of content".

Conventional campus oriented data centers will continue to handle the heavy lifting related to mass data storage. However, the approach referenced by Gartner will become the new model to handle the exploding demand of content and cloud utilization. The need for faster and more secure access to 'big content' will be solved by highly networked data centers that are designed closest in proximity to the end users.

EDGECONNEX OPPORTUNITY

At the forefront of this emerging market is EdgeConneX which is the fastest growing data center operator in the world, focused on proximity based infrastructure. EdgeConneX currently operates 24 next-generation Edge Data Centers®. According to Clint Heiden, Chief Commercial Officer for EdgeConneX, "In today's content driven world, our goal is to create a superior user experience while alleviating the strain on the underlying network it relies on for delivery. This focus improves website and content performance while lowering overall cost for all involved."

EdgeConneX Edge Data Centers are purpose-built to offer security, speed and performance improvements over traditional data centers. These innovations enable customers to deliver digital content to any end user as fast possible. Edge Data Centers are proximity-based, strategically located nearest to the end user's point of access to reduce network latency and optimize performance. Local proximity access also brings the cloud closer to the enterprise, enabling a more secure, real-time access to cloud applications and services while offering reduced backbone transport costs.





"Electric Lightwave possessed a like-minded cultural ethos that places a premium on delivering exceptional and highly proactive customer service."

Clint Heiden, Chief Commercial Officer, EdgeConneX

CHALLENGES

As one of the executives tasked with building and selling these high performance services, Heiden knew EdgeConneX needed to offer their customers a complete ecosystem to fully deliver on their promise, "Our customers are obsessed with their site's performance since their business model is largely predicated on keeping users engaged. Companies like LinkedIn, understand that a single millisecond increase in latency can boost a site's bounce rate by 5% and abandonment by as much as 15%. So, it's critical that we partner with a network solutions provider that can support our advanced bandwidth requirements, scale capacity on-demand and provide a secure direct connection between users and the digital frontier."

Heiden and team recognized that these network needs were critical to their ultimate success and a tall order for any single network solutions provider to fulfill. The EdgeConneX team sought out a partner with a reliable, secure and high capacity fiber network to complete their business model. Ultimately, they chose Electric Lightwave, an Integra Company for every Edge Data Center in their fiber footprint.

CRITERIA

The EdgeConneX team understood that the right partner would have to meet exacting requirements – both from a technology and business perspective, including:

- ✓ An advanced, resilient network
- √ Willingness to strategically build network infrastructure as needed
- √ Ability to respond to requests with speed and agility
- √ Commitment to delivering exceptional customer service.

SOLUTION

With an extensive network footprint across the Western United States and access to more than 12,000 route miles (8,100+ long haul and 4,000 major metro) of highly scalable and secure fiber optic network connectivity from each Edge Data Center, Electric Lightwave was a natural fit for EdgeConneX. The combined offering enables Edge Data Center tenants to tap into virtually unlimited bandwidth and achieve more reliable fiber connectivity, exceptional performance and faster delivery of end-user content.

"Partnering with Electric Lightwave was a natural choice because they own and operate the most extensive and diverse fiber network in the region. They also had an established business with a large roster of enterprise customers. More importantly, it was clear that Electric Lightwave possessed a like-minded cultural ethos that places a premium on delivering exceptional and highly proactive customer service," stated Heiden.



In early 2013, EdgeConneX began working with Electric Lightwave to provide network connectivity for seven initial regional locations including: Seattle, Portland, Sacramento, Phoenix, Salt Lake City, Las Vegas, Denver and Minneapolis.

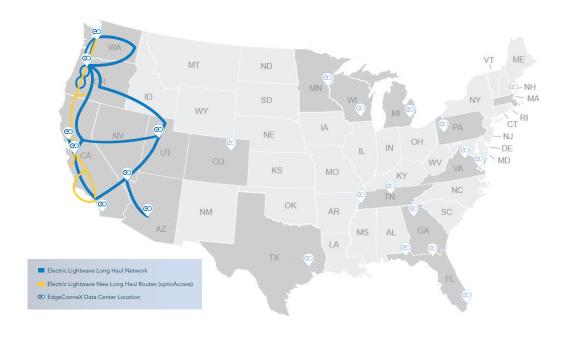
"Given proximity is so important for our customers, it was also serendipitous that Electric Lightwave had a very similar footprint as ours," continued Heiden. "Our business model relies on proximity and when we realized that Electric Lightwave already had an established presence in many of the same metro areas that we were building new Edge Data Centers; it was clear how much each company could help the other over the long term. Amazingly, our vision for the future of the Internet's infrastructure mapped perfectly with Electric Lightwave's."

EDGECONNEX AND ELECTRIC LIGHTWAVE ECOSYSTEM

EdgeConneX Edge Data Centers and the Electric Lightwave network are built from the ground up to meet the high performance demands of their customers. Electric Lightwave offers high capacity Wavelength and Ethernet access technologies to enable the fastest and most secure content delivery possible from the Edge Data Centers identified in the map below.

"Our partnership with Electric Lightwave is shaping the future of what's possible. Electric Lightwave is helping us deliver on our mission of bringing bandwidth-intensive content and latency-sensitive applications closer to the end user."

Clint Heiden, Chief Commercial Officer, EdgeConneX





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, enterprisegrade 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.

CONTACT US 877.953.7747

About EdgeConneX

EdgeConneX® is a global data center provider specializing in infrastructure solutions at the edge of the network. They provide space, power and connectivity for content, network, cloud, colocation, CDNs and service providers, as well as wireless carriers, telecommunications companies, and commercial property owners. EdgeConneX has created a new edge for traditional networks, offering superior performance and economics. Their purpose-built Meet You Points® optimize delivery of data at network-critical locations closest to the end-user. For more information, please visit the EdgeConneX Internet of Everywhere® at edgeconnex.com.

RESULTS

Together, EdgeConneX and Electric Lightwave are offering the West's most innovative data center ecosystem for accessing and delivering digital content. The two companies share a drive for continuous innovation which has led to additional projects that expand the infrastructure for many of the world's largest technology companies. As result of this partnership, cloud, social media and corporate infrastructures are enabled with new capabilities and opportunities for accessing and transporting digital content. HD and 4K streaming video can now be served in new markets through a cost effective technology infrastructure for both creators and consumers. Electric Lightwave and EdgeConneX are aligned on the mission of enabling Internet innovation at the Edge.

Some of the early improvements identified include:

- √ Search engine performance improved by 14.6 percent on average¹
- √ Page requests served by a customer's e-commerce site loaded 9.2% faster²
- √ EdgeConneX streamed video improved re-buffering by 20%³

Zeus Kerravala, long-time industry analyst and Founder of ZK Research, recently emphasized the significance of identifying the data centers and networks that are able to deliver these performance improvements to the end-user. "The explosion of the cloud and Internet-based content has created the need to move the Internet's edge closer to content consumers. Only EdgeConneX and Electric Lightwave have done that. This lower-latency architecture improves key customer metrics, such as re-buffering rates."

BRINGING THE CLOUD CLOSER TO ENTERPRISES

The cloud has matured significantly over the past few years making it a viable option for businesses that are looking to move more of their IT resources off-premise and realize more efficient cost structures. Beyond security concerns, CIOs also recognize that the applications their employees rely on – whether they're corporate databases or ERP systems – must be available and perform at the same level as they would if they were hosted on-premise.

While performance and reliability are critical, security remains the largest barrier for adoption of the public cloud. Heiden notes, "the more hops a data packet takes, the less secure it is. Traditional data centers route the majority of their traffic over an IP connection which will pass across multiple networks before reaching the end-user, impacting security and performance. Through our partnership with Electric Lightwave, we're able to provide customers with direct, point-to-point circuits which serve as a dedicated, private backbone for our customers to securely and directly access the cloud."

Public, private and hybrid clouds are transforming the way CIOs and their businesses adapt to change. EdgeConneX's Edge Data Centers and the Electric Lightwave network offer enterprises a secure, distributed platform of facilities that are designed with them specifically in mind.

¹ FCC Data Analyzed by SamKnows Shows That EdgeConneX® Localized Infrastructure Improves Internet Performance

² EdgeConneX® Announces Findings From Webinar on Improved Internet Performance via Edge Infrastructure Deployments

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