Innovating with Impact: How Groq and TierPoint Conquer the AI Frontier

Overview

Groq®, a revolutionary Artificial Intelligence (AI) organization, and its LPU™ Inference Engine, needed high-powered colocation services that could rapidly evolve the capabilities of their systems. With TierPoint's data center in Spokane, Washington, Groq was able to securely support their high-speed LPU Inference Engine and its ability to process large language models, while also being positioned to swiftly adapt to constantly changing computational and customer needs.

Challenge

Growth is a good problem for a business to have. One of the best, some would argue.

It's a "problem" that Groq, an AI technology organization that is developing a novel and disruptive architecture and software designed to accelerate workloads at scale with ultra-low latency, knows all too well.

In fact, you could say that growth is what they're all about.

But in the rapidly evolving, highly competitive world of AI, simply keeping up with computing demand isn't enough. Interruptions in a "real-time" model would mean that it's not truly real-time anymore.

So as Groq continues to grow as a business and a technology, so will their needs.

To continue delivering on the potential of their high-speed LPU Inference Engine, the startup needed colocation to match it. That meant consolidating their scattered data center sources into a high-powered facility that:

- Scales effortlessly with their shifting business needs to meet and exceed end-user expectations
- Delivers ultra-high densities to grow wherever they need to grow as the AI market changes and expands
- Offers liquid cooling capability to handle the future high-powered computing requirements of their evolving AI suite
- Ensures robust on-site security and compliance offerings, including two-factor authentication and controlled facility access, for both Groq and its customers
- Is monitored and maintained by technology experts 24/7

Our Client

Groq seeks to enable all businesses to join in on the burgeoning AI economy. Their innovative real-time AI inference technology has been used across a wide array of disciplines, including finance, industrial automation, cybersecurity, and scientific research for the leading government labs.

Key Colocation Benefits

- Expertise and data-driven recommendations to boost system performance and reduce costs through power optimization

- Hot and cold aisle configurations, with the ability to support liquid cooling modules

- Ultra high-density colocation with rack densities that handle demanding workloads, including AI accelerators and advanced GPU computing

- Hardened on-site security, dedicated cages for systems, and comprehensive compliance certifications built into all data centers

Solution

If, as Groq's CEO Jonathan Ross says, the world of AI is in the midst of a "space race,' they need to ensure they have enough hypothetical fuel to not only get off the launch pad but beat their competitors to the Moon (and beyond).

This isn't a race that's won overnight, so why partner with an organization that's just getting started? TierPoint has been ready for the AI space race for over a decade, with 40 state-of-the-art data centers that are ready and able to handle the most complex computing requirements of organizations like Groq.

Colocation Benefits

Beginning with a comprehensive assessment of Groq's needs, TierPoint experts pinpointed exactly what the company required in a data center partner to meet their users' needs now and as they continue to grow and change.

By choosing TierPoint to house their powerful AI solutions, Groq can leverage:

- Our unparalleled expertise and data-driven recommendations to boost system performance and reduce costs through power optimization

- Hot and cold aisle configurations for their current generation of systems, with the ability to support liquid cooling modules as their systems evolve and require higher power and cooling

- Our ultra high-density colocation with rack densities that can handle the most demanding workloads, including AI accelerators and advanced GPU computing

- The hardened on-site security, dedicated cages for their systems, and comprehensive compliance certifications built into all our data centers

But maybe the most important thing that Groq has gained through our partnership is the simple peace of mind that comes with working with TierPoint. Maintenance requests are handled swiftly; when they have a question about how to maximize the power of our data center, TierPoint experts are on hand 24/7 to answer.

As Groq's Director of Systems Engineering Clint Harames stated, he can rely on us to get the job done "without me needing to worry about what's happening behind the curtain." That means that as the so-called AI space race heats up, Groq's solutions can keep cool while still propelling them ahead.

About TierPoint

As more organizations adopt hybrid, multi-platform approaches to their IT infrastructure, TierPoint is a champion for untangling the complexity. Taking a platform-agnostic approach to helping clients achieve their most pressing business objectives, we draw on a comprehensive portfolio of services, from public to private to multitenant cloud, from colocation to disaster recovery, security, and more. We also have one of the largest and most geographically diverse U.S. footprints, with 40 world-class, cloud-ready data centers in 20 markets, connected by a coast-to-coast network.

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