FLEXENTIAL®

Mapping the World to Support Geospatial Business Applications

Customer Story

FlexAnywhere™ Solution:
Application Performance & Reliability

VeriDaaS

VeriDaaS leverages colocation to deliver a secure, scalable solution to support its high-density LiDAR data and Data as a Service (DaaS) product.

> "To continually map the U.S. in high-definition detail and provide our customers with Data as a Service solutions, we need an IT infrastructure that can easily scale to accommodate growing data quantities, while offering 100% uptime to ensure geospatial data is captured, processed and secured without issue."
>
> **MARK FRANK**
> COO
> VeriDaaS

The History

Headquartered in Denver, VeriDaaS is a geospatial solutions provider that is building the most comprehensive national geospatial data library through its VeriMAP program. Its high-density LiDAR data provides the most accurate views of

utility assets, vegetation encroachments and other land-based data, which it delivers to its customers—including government entities and utility companies, among many others—through its Data as a Service (DaaS) business model.

Flexential Partnership Highlights

- Leading-edge colocation builds confidence in VeriDaaS' capabilities
- Scalable environment satisfies continued growth objectives
- Flexible approach supports evolving needs

Quick Facts About VeriDaas

- Supports forestry management by depicting overgrown, unmaintained vegetation
- Accurately maps utility lines and poles to support asset and vegetation management
- Can collect more than 5,000 square kilometers of data daily
- Offers resolutions up to 100 points per square meter

The Challenge

Start-up requires reliable, scalable colocation to get business off the ground

As a start-up company in 2019, VeriDaaS purchased three high-definition Geiger-Mode Light Detection and Ranging (LiDAR) systems under a long-term exclusive license agreement. This remote sensing technology allows the company's fleet of planes to collect high-density images of anything on the Earth's surface across larger areas more quickly and at higher definition than similar technologies. In addition to this technology, VeriDaaS purchased processing software, under the same license agreement, to transform this raw data into a usable DaaS product that enables its customers to visualize their assets and the surrounding landscapes.

With plans to map the entire U.S., VeriDaaS needed to process and store an enormous amount of high-resolution data and required a reliable and highly scalable IT infrastructure to support its growing data library. VeriDaaS knew it did not want to manage this infrastructure, preferring to focus its efforts on its core business competencies. As a result, VeriDaaS chose to deploy in a colocation environment.

The Solution

Scalable colocation supports growth and ensures availability

Based on a partner recommendation, VeriDaaS engaged Flexential and toured its Denver – Englewood facility. The 240,549 square-foot facility offered VeriDaaS the space required to support its projected growth as well as power capabilities of more than 1,500 watts per square foot to drive its intense compute requirements.

"Flexential's colocation, storage and cloud capabilities stood out to us," said Mark Frank, COO at VeriDaaS, noting the impressiveness of the facility and the responsiveness and knowledge of the Flexential team. "It didn't take long to realize Flexential was the best in class in the Denver area. Its team worked closely with us to architect a customized solution that enabled our growth strategy. They outlined our options and alternatives to ensure we got exactly what we needed to operate and build our business."

Included in this solution is object-based storage that flexes to provide VeriDaaS with an enterprise-class, cloud-based solution that is scalable with terabytes and petabytes of storage to meet future demand. This is essential as its LiDAR systems can amass up to 30 terabytes of data per day.

The fully redundant and concurrently maintainable facility also ensures the availability of VeriDaaS' operations so the company can seamlessly transfer data to the data center and process it without interruption or data loss. This resiliency is further supported through N+1 UPS redundancy and N+2 cooling redundancy. To provide added confidence in its uptime commitment, Flexential also offers a 100% SLA on power and cooling.

Flexential Solutions

Colocation

Connectivity

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For high-capacity, low-latency network connectivity, VeriDaaS leverages Flexential's 100 gigabits per second (Gbps) network backbone that is scalable to 400 Gbps. To ensure the performance and reliability of the network, the Flexential Interconnection Platform uses multiple, diverse connections from leading national providers. It also offers proactive Layer 3 and Layer 4 DDoS protection and a 100% network and bandwidth uptime commitment.

Flexential also checked all the boxes with respect to security. Its physical security program integrates dual-factor authentication, biometric scanners, 4-zone security access, and monitored security cameras and intercom system to ensure only authorized individuals can access the data center and VeriDaaS' space. Flexential's experienced data center team also monitors and responds to potential threats 24x7x365.

The Results

VeriDaaS doubles its data center footprint within two years

Since becoming a partner in 2019, VeriDaaS has doubled its space within the Denver – Englewood facility. While this is the company's first expansion, it expects many more as it continues to map the U.S. and introduce new use cases.

The reliability of Flexential's environment has also allowed VeriDaaS to avoid downtime and ensure the integrity of its data as it is transferred, analyzed and stored for use by customers.

"Any downtime impacts our entire enterprise," said Frank. "Flexential provides the resilient environment we need to ensure our infrastructure is always available. This allows us to continually relay and process new data and deliver valuable geospatial information to our customers."

Denver – Englewood also helped VeriDaaS position itself as a viable, cutting-edge company. "Being able to bring our board of directors and investors into Flexential's Denver facility showcases our capabilities and enhances our position," said Frank. "When people see the facility and top-notch operations firsthand, they take you more seriously. Flexential provided a level of credibility that would have been more difficult to achieve if our infrastructure was in our own building."

Today, VeriDaaS is evaluating new markets that can benefit from its geospatial data, including the autonomous vehicle and insurance spaces. By detailing the exact location of roads, signage, interchanges and other road features—and layering crowdsourcing data on top of this information—the company can support the autonomous vehicle market. The insurance market also holds tremendous potential, allowing providers to utilize VeriMAP data to monitor vegetation growth to gauge fire risks, calculate flood risk, and assess roof damage.

As VeriDaaS continues to collect data and build new use cases, Flexential is poised to deliver an environment that meets its evolving needs and supports its continued growth. "We trust Flexential to work with us to address any new requirements and resolve any issues," said Frank.

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