

VERNE

INDUSTRY USE CASE

Verne superpowers the quantitative finance revolution


One of the biggest trends in the financial services industry is the explosion in quantitative investing, using high performance computing (HPC) and AI to scour markets and huge data sets for patterns that can be exploited by trading algorithms. As the technologies have become more powerful, the time to insight has contracted which, in turn, has resulted in an increase in the number of times a day that firms attempt to calculate their value at risk and examine the market for new arbitrage opportunities.

This fast-paced and data-intensive environment requires not only an abundance of infrastructure to store the data, but also huge amounts of high intensity compute to analyse the massive data sets. This is creating insatiable demand for more computing resources that offer scalability, agility and performance capabilities.

The high intensity challenge

Competition within the hedge fund and asset management sector has always been fierce, but with an increasing number of firms turning towards quantitative-driven research the need to use computationally intensive techniques to stay one step ahead is paramount. As a result the demand for HPC and grid computing from this sector has grown extensively over the last few years. The increasing integration of GPU supported AI and machine learning will only increase this take-up further.

To ensure their compute portfolio is sufficient and optimally configured, firms are continually evaluating the most effective strategies for ensuring they have the right hardware, compute, data and infrastructure resources in place. It is unlikely all of this infrastructure can be placed on-premise, given space restrictions and the precise architecture and cooling needed for supercomputers – nor do firms often have the necessary technical staff to operate and maintain this expensive hardware. On the flip side, there are concerns regarding genuine HPC performance when using public hyperscale clouds based on virtualised servers. As a result, finding a strategic data center partner that can offer highly secure, cost-effective and scalable HPC colocation is now a key requirement.



Financial services are entering a golden age, where speed to information is the speed of human imagination. Firms that can scale their computing platforms to match their ambitions will lead their stakeholders to success.

Nick Dale
Executive Vice President, Verne

Supermarket Power

Data centers in the traditional finance hubs of New York, London and Frankfurt have some of the highest rackspace prices in the industry - and these prices are expected to continue to increase in all three cities in the future. Consequently, forward thinking firms are looking to locate their HPC processing in more cost-effective locations, and ideally ones that can adequately serve both the US and European financial hubs simultaneously.

The challenge is to find a true HPC expert that offers specialist colocation services with the agility, flexibility and scalability to allow for future expansion - and all based in a highly secure and well-connected location.

Low risk, maximum value

Strategically located between the global financial hubs of Europe and the East Coast of the US, Iceland benefits from a very reliable, ultra-modern power grid that supplies vast amounts of 100% renewably generated energy. This, together with the fact Iceland's temperate climate enables ambient free-air cooling of IT equipment, means a dramatic reduction in the total cost of ownership of up to 70% compared to the UK, Europe and the US.

Entirely focused on supporting high intensity compute workloads, Verne has established a reputation as a go to destination for quantitative finance firms. Located on a highly secure, former NATO base, the campus offers a range of data center solutions optimised for these specialist workloads. These solutions include highly specialist colocation services, individual racks, fully customisable data halls as well as the latest specification ultra-high density pods. All these services are designed to scale to match the burgeoning needs of our financial services clients.

With the campus designed from the ground-up for high intensity workloads, underpinned by Iceland's renewable and predictably-priced energy resources, and supported by a world-class, technical team, it's no surprise that multiple quantitative-driven firms from both London and New York have selected Verne as the optimum location to place their most valuable of assets.



70%

Colocation at 70% lower cost than in UK and Continental Europe

Verne: Your competitive advantage

Quantitative-driven trading techniques are transforming the financial industry.

In order to stay competitive, firms will need to process increasingly large data sets in shorter timeframes - and run progressively complex computations against those data sets. All this demands a greater abundance of compute power.

If you are a firm involved in quantitative analysis or investment research and are looking for a cost-effective, scalable, secure and scalable data center solution backed up with world-class technical support, then speak to us at Verne.



**Make an impact
from the ground up.**

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