options

Lenovo™

Options IT adds speed and resiliency to its financial cloud services

Overview

To deliver high performance for financial trading applications—where microseconds count—Options IT needed a server platform with ultra-low latency, proven reliability and an efficient design. With Options' cloud services on compact System x3750 M4 servers, based on Intel® Xeon® E5 family of processors, the firm's clients can reliably capitalize on new opportunities with near-instantaneous speed. The System x solution helped Options increase its client base by 20 percent and expand services for existing customers.

Founded in 1993, Options IT is one of the leading IT services providers for the global financial services sector, supported by offices in New York, Chicago, London, Belfast, Hong Kong and Singapore. Initially focused on serving hedge funds in the London market, the company made a strategic decision in 2002 to become the first provider of cloud services to the financial sector. Today, more than 130 firms globally leverage the Options PIPE platform and its private financial cloud offerings. Options' clients include leading hedge funds, funds of funds, proprietary trading firms, market makers, brokers/dealers, private equity houses, exchanges and global investment banks.

Overcoming the latency barriers in high-frequency trading

When it comes to electronic trading operations, the difference between success and failure can be measured in a few microseconds. Today's financial services firms need to be able to analyze vast amounts of stock data, run complex algorithms and execute millions of transactions per second. And they need to be able to do it all faster than the competition. By delivering fast performance and low latency to meet these firms' needs, Options IT was able to seize upon a critical growth opportunity.

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—**Ken Barnes,**
Senior Vice President of Corporate Development,
Options IT

(intel) XEON inside™

As Ken Barnes, Senior Vice President of Corporate Development at Options, explains, "We needed to be able to host our customers' trading applications on high-performance servers in data centers around the world. We needed a server platform that we knew was going to be reliable and efficient, and that was going to be backed by a company that would keep up with changing trends—from always adopting the latest Intel® processors to keeping up with other specialist technologies, like low-latency networking cards from Solarflare and Mellanox. We found all that and more with the System x3750 M4 platform."

To break through the latency barriers imposed by large, multi-server environments, Options wanted to take advantage of the latest multi-core processor technologies to deliver extreme throughput and low latency. And it wanted to deploy its private financial cloud services in a compact, efficient and cost-effective infrastructure.

Since the x3750 M4 server can accommodate up to 1.5 TB of memory, high-speed processing and fast eXFlash solid-state drives (SSDs) for internal drives, Options found it to be an ideal platform for the most complex trading applications. The firm was also able to tune its software to leverage high-performance network adapters—enabling it to pull market data feeds directly into memory at faster rates.

In addition, since x3750 M4 features an ultra-dense design, Options can deliver more processing power for clients in a smaller footprint. This can translate to significant cost savings in co-located rackspace, in terms of both physical floor space requirements and related data center power and cooling costs.

Building a resilient cloud platform

After its initial evaluation phase, Options began rolling out x3750 M4 servers to its data centers located around the world, with the current deployment reaching into the hundreds. What's more, the System x servers do much more than support Options' intensive financial trading cloud services; the powerful server environment also supports its hosted services for day-to-day business applications, as well as its financial hosting services for front-, middle- and back-office applications.

"We run a variety of applications on the x3750 M4 platform. Electronic trading is probably the most demanding, performance-wise," says Barnes. "But we also use these servers to run everything from our core infrastructure services, including our email, Active Directory authentication and our file servers. And we also use them to run a variety of financial applications, some physical and some virtual, including portfolio management applications, risk management applications and so on."

Rather than replacing existing infrastructure, the System x solution has been completely driven by growth opportunities for Options' business. As the firm has been building out its server environment to meet customer demand, the proven reliability of the System x brand has helped build Options' client base.

Solution components

Hardware
System x3750 M4 with Intel® Xeon®
    E5 family of processors

"We had about 20 percent growth in the first quarter of this year, and those were deals built on the x3750 M4 platform," says Barnes. "Our customers have a lot of faith in the System x brand, and I think it gives them comfort to know that we're going to have consistent access to high-performance technology."

High availability is also a key requirement in the financial industry, where downtime can mean a significant loss in profitability. The System x server environment provides Options' customers with a robust and resilient technology foundation—so they can remove the ongoing cost of platform optimization from their balance sheets and focus instead on their core competencies.

Options has been a System x customer for many years, and with the ongoing deployment of x3750 M4 servers for its financial cloud platform, the firm has built a win-win relationship for providing infrastructure services in the US and abroad. "We're a services provider," says Barnes, "and as we win more business, we bring that to System x."

For more information
To learn more about Lenovo Data Center Systems solutions, contact your Lenovo Sales Representative or Lenovo Business Partner, or visit: lenovo.com/systems

To learn more about Options IT, visit: www.options-it.com or follow them on Twitter @options_it

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