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Investment Services Firm Builds Innovative Wealth Platform



Executive Summary

- Customer Name: SEI Investments
 Company
- Industry: Financial Services
- Location: Oaks, Pennsylvania
- Number of Employees: 2500

Challenge

- Build highly available infrastructure to launch critical business platform
- Scale to support largest wealthmanagement providers
- Improve performance and lower costs by migrating from RISCbased architecture

Solution

- Cisco UCS with Intel Xeon 7500 series processor for high performance and management simplicity
- Cisco Nexus Switches build 10 Gigabit networking backbone
- Cisco ACE adds more intelligence and business rules to help ensure effective load-balancing

Results

- Improved online response time and downstream business processes by 30 percent
- Reduced server provisioning time by up to four hours per blade

SEI helps ensure high availability and reliability by migrating from RISC-based architecture to x86-based Cisco UCS.

Challenge

Founded in 1968, SEI is a leading global provider of wealth management solutions, including asset management, investment processing, and investment operations. The company manages and administers US\$424 billion in mutual fund and pooled or separately managed assets, and is listed on the NASDAQ exchange under the symbol SEIC. With solutions in five markets and offices across the globe, SEI today serves roughly 6,000 clients and has relationships with nine of the 20 largest U.S. banks.

To continue to provide greater value and better serve its customers, the company launched its innovative Global Wealth Platform in 2006. A component of SEI's Global Wealth Services solution, the Global Wealth Platform, supports trading and transactions on 101 stock exchanges in 46 countries and 33 currencies all using straight-through processing.

"What's different about our Global Wealth Platform is that we're client-centered, so we can address an individual investor's entire household instead of just on an accountby-account basis," says Martin Breslin, Infrastructure Architect for SEI's Global Wealth Platform. "We do this with an open architecture that incorporates web services for system and data integration with clients' components and asset management solutions. And because we're global, we have multiple markets, multiple currencies, and support multiple languages."





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Martin Breslin
 Infrastructure Architect
 SEI

Yet the Global Wealth Platform would not have the robust foundation it has today if it were not for the infrastructure redesign conducted by the SEI infrastructure team. The platform was initially built utilizing a RISC-based architecture, but was transitioned to x86 to achieve the processing scale required for the Global Wealth Platform.

"As we started to grow and scale our solution, we found that we would get better performance and efficiencies in managing the environment by moving to an x86-based architecture," says Breslin. The team just needed to find the right x86-based solution that would maximize price-performance, deliver mission-critical reliability, and scale efficiently.

Solution

SEI had long considered implementing a blade server solution, but the company did not feel the time was right for the transition until it found the Cisco Unified Computing System[™] (UCS[®]). "We had considered implementing blade technology for quite some time, but we saw how certain solutions actually created additional problems by having many different components and interfaces to manage," says Chris DeBernardi, Director of global hosting services at SEI. "Cisco UCS on the other hand, was a complete system that we could manage holistically through one console. Plus, it allowed us to reduce our cable plan, as well as our SAN and network port counts."

Working with a Cisco partner, SEI deployed Cisco[®] UCS B-Series Blade Servers which utilize the Intel Xeon processor 7500 family.

For the data center network, SEI implemented Cisco Unified Fabric, including Cisco Nexus[®] 7000 Series switches at the core, along with Nexus 5000, 2000, and 1000V Switches in its virtual environment. "We had been pushing for higher availability and lower convergence times on network core issues that we had experienced in the past," says Breslin. "Our decision to go with UCS was the catalyst for choosing Cisco Unified Fabric to build a 10 Gigabit backbone."

The Cisco Application Control Engine (ACE) Module also plays a critical role in supporting the Global Wealth Platform. "In our previous environment, we were limited in our capabilities of having session aware algorithms within our load-balancing," says Breslin. "By moving to Cisco ACE, we're able to add more intelligence and more business rules into the configuration of load-balancing service applications from multiple servers."

Results

SEI's new data center environment supports a number of mission-critical applications, including both commercial and propriety solutions. Now that these applications are virtualized, Breslin and team have noticed a significant improvement in the performance of these applications. "We've seen a 40 percent increase in online response time for queries, as well as a 30 percent improvement in all of our downstream business processing times," says Breslin.

By implementing Cisco UCS, the SEI infrastructure team is also able to accelerate the time that it takes to stand up a new server. "We estimate that we save three to four hours in server-provisioning time with the UCS blade servers," says DeBernardi.

Of greatest value, however, is the fact that the SEI infrastructure team can now quickly

Product List

Servers

- Cisco UCS B440 and B200 Blade Servers
- Cisco UCS Manager

Routing and Switching

 Cisco Unified Fabric: Nexus 7000, 5000, 2000, and 1000V Series Switches

Application Networking

 Cisco ACE Application Control Engine Module scale the environment and enter new markets, which is something the business team is particularly appreciative of. "By adopting leading-edge technologies from companies like Cisco, we're able to offer leading-edge solutions to our customers and continue to expand our business," says Breslin.

Next Steps

As SEI continues to extend its x86-based architecture across its markets, the company plans to rely on Cisco UCS to help ensure high availability, reliability, and performance. "Cisco will continue to be a strategic partner," says DeBernardi, "Any new projects, whether they be related to virtualization, growth, or standalone servers that require x86 compute will continue to be deployed into our UCS environment."

For More Information

To find out more about Cisco Unified Data Center, visit: <u>www.cisco.com/go/</u><u>unifieddatacenter</u>.

To find out more about Cisco Unified Computing, visit: <u>www.cisco.com/go/ucs</u>. To find out more about Cisco Unified Fabric, visit: <u>www.cisco.com/go/unifiedfabric</u>.



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