8 Securities Gains Full Operational Visibility to Ensure Superior Customer Experience

Executive summary
8 Securities is one of Asia's most innovative and fastest growing online brokerages. Several years after its original inception in Hong Kong, 8 Securities expanded its emerging business with the purchase of another company based in Japan. This resulted in tremendous growth to its customer base and the consolidation of numerous diverse infrastructure systems into a new platform. 8 Securities needed a solution that could do advanced real-time data analysis on a large scale. Since deploying Splunk Enterprise, 8 Securities has seen benefits including:

• Seamless migration to a new platform
• Full operational visibility
• Real-time insights into business processes

Why Splunk
After the acquisition, 8 Securities’ customer base grew from several thousand to more than 50,000 customers. To ensure a flawless transition and uninterrupted service, 8 Securities needed to perform extensive load testing on its newly consolidated platform. These load tests generated an immense amount of transactional, monitoring and debugging data, which had to be analyzed in real time. According to Cedric Roll, CTO of 8 Securities, “Becoming a regulated business in both Japan and Hong Kong meant that getting this migration right was paramount. A failure of the new platform could have resulted in loss of revenue, loss of clients and even the closure of the business.”

Built on AppFabric and using the .NET framework, 8 Securities’ client-facing technologies run on Amazon Web Services (AWS), giving the company the ability to scale depending on demand. The online brokerage deployed an extra large instance in Amazon EC2 running a single Splunk server, where all indexing and searches take place. The initial Splunk dashboard development was geared toward data analysis of the load test results for the new platform, but very quickly evolved into system-wide monitoring of log files and eventually business key performance indicator (KPI) analysis.

Industry
• Financial services
• Online services

Splunk Use Cases
• Application delivery
• Business analytics
• IT operations
• Security

Challenges
• Needed to perform extensive load testing on new platform
• Wanted to ensure a flawless transition and uninterrupted service after acquisition
• Required real-time data analysis on a large scale
• Needed to provide superior customer experience
• Wanted full visibility into complicated infrastructure

Business Impact
• Seamless migration to new platform after a big merger
• System-wide monitoring, in real time, for full operational visibility
• Deep visibility into required and extensive load testing during migration
• Continued high level of customer service and heightened positive customer experience
• Real-time insights into business processes, especially KPIs
• Ability to make better-informed business decisions

Data Sources
• Transactional, monitoring, debugging data from load testing
• Client data from more than 50 servers
• Network traffic logs
• Wireshark log files
• NoSQL database

Splunk Products
• Splunk Enterprise
Seamless migration to new platform

During the load testing of the new platform, 8 Securities was indexing up to 4GB of data per day into Splunk Enterprise. The platform migration went off without a hitch. “The key word for me was speed: speed in indexing data, speed in searches, speed in importing new data sources. Splunk software delivered that and more,” says Roll. “My ‘aha!’ moment was the first time we ran a massive load test designed to break our platform and I could see it breaking, in real time, on my brand-new Splunk dashboard.”

Since the initial Splunk deployment, the 8 Securities IT team has created numerous technical and business-oriented dashboards including a dashboard that allows the company to track all activities from a specific client over time. Another dashboard shows all market data requests from a specific provider with the ability to focus on one client, one particular instrument or both, while yet another dashboard analyzes all the traffic going to the web server based on log files produced by Wireshark (a network protocol analyzer for Unix and Windows).

Full visibility into business processes

To maximize and continuously improve the customer experience, 8 Securities focuses its key monitoring mechanisms on business processes. The company is indexing and analyzing data on concurrent users, unique logins, order success rate and processing, and more. “Splunk has allowed us to build the monitoring environment we wanted,” says Roll. “The dashboard that we find the most useful is the one around the quality of service, which provides KPIs of the operation of the platform in real time.”

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Cedric Roll, CTO
8 Securities

Looking toward the future

Currently, Splunk Enterprise is used primarily by the 8 Securities IT teams (ops, management and development) for support, systems monitoring, key business process monitoring (client facing), network monitoring and quality of service. In addition, the company’s network traffic logs are fed into Splunk Enterprise as part of security monitoring. According to Roll, “The level of transparency introduced by Splunk Enterprise has enabled us to make informed decisions on which product to push forward and which services to offer. It also means we clearly understand how our clients interact with our products and services and are able to respond to their needs much better—now and in the future.”

8 Securities plans to extend the software to its customer service team in order to provide real-time insights and further improve the customer experience. In addition, the company intends to migrate all of its social data into Splunk Enterprise. “It will be a very unique proposition for 8 Securities to provide a fully integrated social and trading experience,” concludes Roll. “We are planning to launch this offering using Splunk software as our social platform.”

Download Splunk for free or get started with the free cloud trial. Whether cloud, on-premises, or for large or small teams, Splunk has a deployment model that will fit your needs.