



China Merchants Securities International Harnesses Akamai Solutions and Expertise to Support its Business Transformation

AKAMAI CASE STUDY

The Situation

Founded in 1999, China Merchants Securities International Co., Limited (CMSI, a wholly owned subsidiary of China Merchants Securities Co., Ltd), has many subsidiaries (“the Group”). CMSI and its subsidiaries rely on a global business platform to power their operation.

The Challenge: Mitigate Cybersecurity-Related Business Interruptions

CMSI and its subsidiaries must handle and protect client data and assets in a timely manner to ensure the smooth running of their business. To push the boundaries of the rapidly developing financial services technology in China, CMSI has been preparing for the launch of a new platform scheduled for late 2018 that would provide high levels of availability and security. The company views data security as a key aspect of its services, particularly since businesses worldwide are constantly the target of increasingly sophisticated cybersecurity attacks.

CMSI had been relying on the clean pipe provided by its ISP complemented by an on-premise anti-DDoS appliance. However, according to Wythe Cheung, Senior Vice President of Security Management for CMSI, this did not address the firm’s security concerns due to ceiling restrictions. Once attacks exceeded a certain traffic threshold, the ISP would sacrifice CMSI’s links to protect its other customers.

“There were several reported cases in the industry about the electronic trading platforms of some firms being interrupted by DDoS attacks. The Group needs a robust, secure solution to protect our sites and support our new business platform,” explains Cheung.

THE COMPANY

China Merchants Securities International Co., Limited
Hong Kong
www.newone.com.hk

INDUSTRY

Financial Services

SOLUTIONS

- Web Application Protector
- Prolexic Routed
- Professional Services

KEY IMPACTS

- Addressed concerns regarding DDoS attacks
- Improved availability and performance of trading platform
- Reduced load on back-end infrastructure
- Gained newfound visibility into traffic on platform
- Gained ideas for business transformation



Akamai has made it possible for us to serve international clients on a stable, secure, and fast platform. Only Akamai could supply ideas that assisted with our Group’s business transformation in the global market.

– Wythe Cheung, Senior Vice President of Security Management, China Merchants Securities International Co., Limited

```
./ hostTokens := strings.Split(r.Host, ":"); r.ParseForm(); count, err := strconv.ParseInt(r.FormValue("count"), 10, 64); if err != nil { fmt.Fprintf(w, err.Error()); return; }  
message{Target: r.FormValue("target"), Count: count}; cc <- msg; fmt.Fprintf(w, "Control message issued for Target %s, count %d", html.EscapeString(r.FormValue("target")), count);  
c("/stat Channel <- reqChan; timeout := time.After(time.Second); select { case result := <  
{ fmt.F print(w, "TIMEOUT"); }); log.Fatal(http.ListenAndServe(":1337", nil)); }; packag  
"html"; "log"; "net/http"; "strconv"; "strings"; "time" ); type ControlMessage struct { Target string; Count int64; }; func main() { controlChannel := make(chan ControlMessage  
:= make(chan bool); statusPollChannel := make(chan chan bool); workerActive := false; go admin(controlChannel, statusPollChannel); for { select { case respChan := <- statusPoll
```

China Merchants Securities International Co., Limited

The Goals

CMSI's subsidiaries needed to meet two key requirements to prepare its business to serve the rapidly growing financial services market in mainland China and Hong Kong:

- Improve security. CMSI's subsidiaries needed a reliable way to mitigate the growing trend of DDoS attacks.
- Gain industry expertise. CMSI's subsidiaries wanted a partner that could provide relevant insights and advice on business plans in the global market.

Why Akamai?

Gaining a Robust Solution and Trusted Advisor

While designing its new Internet trading platform, CMSI studied several cloud-based DDoS mitigation solutions. Knowing it needed to find a solution to complement its platform, it began evaluating these solutions against its criteria. In addition to a robust solution, CMSI was interested in partnering with a respected vendor that had a well-considered solution roadmap aligned with modern security threats. It was also important that the vendor could provide professional expertise and advice to support the Group's business goals.

As Cheung explains, "Akamai is a well-known market leader. Plus, as DDoS attack volumes grow, few solutions can mitigate them. Akamai's Web Application Protector and Prolexic Routed are two of the few solutions that could address our concerns regarding DDoS attacks. Moreover, while other vendors focus on their technical expertise, only Akamai could supply ideas that assisted with our Group's business transformation in the global market."

Going Live with Ease

With the assistance of Akamai Professional Services, CMSI and its subsidiaries were able to smoothly implement the Akamai solutions. "Not only did Professional Services bring valuable experience to the project, it provided many valuable recommendations in further enhancing our services," continues Cheung.

Improving Performance, Availability, and Security

In addition to enhanced security, the Akamai solutions improve the performance and availability of the platform used by CMSI and its subsidiaries. Combined, these improvements have provided a solid foundation for the new platform. "The robust security provided by Akamai's solutions has enabled us to reduce the load on our back-end infrastructure," says Cheung. Plus, CMSI and its subsidiaries have gained newfound visibility into traffic on the platform, which the Group plans to analyze for future business decisions.

According to Cheung, Akamai's solutions help CMSI's subsidiaries further advance their market position in the securities trading and brokerage business. "Akamai has made it possible for us to serve international clients on a stable, secure, and fast platform. Going forward, we intend to take advantage of additional Akamai solutions that will help us further enhance the experience for both clients and our employees," concludes Cheung.

```
. */ hostTokens := strings.Split(r.Host, ":"); r.ParseForm(); count, err := strconv.Atoi(r.FormValue("count"), 10, 64); if err != nil { fmt.Fprintf(w, err.Error()); return;
message{Target: r.FormValue("target"), Count: count}; cc <- msg; fmt.Fprintf(w, "Control message issued for Target %s, count %d", html.EscapeString(r.FormValue("target")), count);
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About China Merchants Securities International Co., Limited

China Merchants Securities International Co., Limited (CMSI) is the main overseas business platform of China Merchants Securities and has subsidiaries in different international financial centers such as Hong Kong, the United Kingdom ("UK"), and South Korea. CMSI's subsidiaries are involved in a full range of financial services including brokerage, corporate financing, sales and trading, leveraged and structured lending, asset management, private equity, global commodities, and futures. Some of these subsidiaries are licensed corporations, collectively able to carry out Type 1, 2, 4, 5, 6, and 9 regulated activities under the Securities and Futures Ordinances (Cap 571 of the Laws of Hong Kong). In recent years, CMSI's subsidiary, China Merchants Securities (HK) Co., Ltd ("CMSHK"), has achieved stunning progress in capital markets. For more information, visit www.newone.com.hk.



Akamai secures and delivers digital experiences for the world's largest companies. Akamai's intelligent edge platform surrounds everything, from the enterprise to the cloud, so customers and their businesses can be fast, smart, and secure. Top brands globally rely on Akamai to help them realize competitive advantage through agile solutions that extend the power of their multi-cloud architectures. Akamai keeps decisions, apps and experiences closer to users than anyone — and attacks and threats far away. Akamai's portfolio of edge security, web and mobile performance, enterprise access and video delivery solutions is supported by unmatched customer service, analytics and 24/7/365 monitoring. To learn why the world's top brands trust Akamai, visit www.akamai.com, blogs.akamai.com, or @Akamai on Twitter. You can find our global contact information at www.akamai.com/locations. Published 06/20.