CASE STUDY

Equities Trading Company Disrupts Stock Exchange Market with High-performance and Low-latency Security

Business Challenge

Chi-X Australia, a subsidiary of the highly successful Chi-X Global, launched in Sydney in 2011 as the first competitor to the Australian Stock Exchange (ASX) in equities trading. Today, the company has grown to capture a daily market share of up to 29% of the Australian market, with regular turnover exceeding AU$1 billion per day. It attributes this success, in such a short space of time, to understanding the needs of the Australian market, coupled with placing technology at the core of its competitive differentiation and market proposition.

In order to differentiate from the incumbent market operator, Chi-X Australia, like its parent globally, drives a technology strategy that uniquely supports its business objective of providing an extremely high level of security with low latency and high performance.

The company believes that competition from technology-driven markets increases overall market volumes and improves participant activity, providing benefits to all investors. As a new market entrant, Chi-X has enjoyed the benefits of having no legacy infrastructure to reengineer. As the first competitive exchange in Australia, it was also under close regulatory and compliance scrutiny by the Australian Securities & Investment Commission (ASIC) during its launch phase.

Mike Aikins, chief operations and technology officer at Chi-X Australia explains: “We set the bar at a very high level with regard to security and integrity for our launch in Australia. Additionally, given the appropriately high levels of ASIC regulatory oversight, our security technology and security processes are a fundamental part of our business. We required a technology partner that could deliver a new market operator in an extremely rapid time frame, without compromising the Chi-X requirement for low latency, high performance, and a highly secure environment.”

Solutions and Results

Chi-X Australia went to an exhaustive review for best-in-breed security solutions that would protect its assets under management against unauthorised access, while providing the right level of system access based on user permissions and mitigating against potential cybersecurity attacks. All this was done without sacrificing performance. Specifically, Chi-X demanded no more than a single-digit microsecond range delay from its security infrastructure.

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– Mike Aikins, Chief Operations and Technology, Chi-X Australia
Aikins and his team reviewed all the leading network security vendors, and awarded the contract to Fortinet based on its best-in-class appliances, continuous updates, and access to its global security experts.

Chi-X runs a lean and agile operation and has strong ambitions for market growth. It evaluated companies on their technologies, but also on whether they could operate more as a virtual partner than a vendor. This was the differentiation Aikins saw in both the local and global Fortinet team.

“Fortinet’s combination of expertise, commitment, and understanding of our business was extremely good; the team went the extra yard during the implementation, testing, and validation phases,” Aikins adds. “We recognised this was the partner we needed for the robust security model we wanted.”

Chi-X Australia has deployed FortiGate network security appliances in high availability mode at both its primary and alternative data centre locations and is also using the FortiAnalyzer appliance for granular reporting and analysis of traffic behaviour. This appliance also allows for secure remote access for a dispersed workforce.

“Four years ago, audits would not typically focus so heavily on cybersecurity,” Aikins comments. “Now with the global focus on cybersecurity, every regulator and auditor enquires about it. We’re proud to have built that into our DNA from day one.”

While Aikins stresses the strategy is not about saving time or money, but about eliminating risk, it is clear that putting security at the heart of Chi-X’s strategy continues to pay dividends.

“We want to be seen as the world’s best practice for a high-performance stock exchange,” he observes. “You can run a highly successful market with world-class security, and we’ve done that with Fortinet. We’ve achieved almost 30% overall market share in just over three years and are well-positioned for future growth.”

Business Impact

- Captured up to 29% market share over 3 years by introducing healthy competition to Australia’s equity market
- A consolidated and centrally managed platform streamlines network infrastructure
- No more than a single-digit microsecond range delay

Solution

- FortiGate

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