

# FEX Global delivers on their vision of a next-generation global futures exchange

## Client profile

Financial & Energy Exchange Limited (FEX) is an Australian company established in 2006 to build a world-class exchange, delivering better service to Asia Pacific derivatives trading customers. FEX Global is a Financial Market Infrastructure, or what is more commonly known as a futures exchange. These act as a secure, timely coordinating regulated service for cleared trading between counterparties.

FEX builds and operates regulated and globally competitive licensed marketplaces for commodity, energy and environmental asset classes.

## Which services?

- Private Cloud Infrastructure
- Global IP Network
- Managed Security Services

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**Brian Price**, Executive Chairman, FEX Global

## Summary

FEX Global has undertaken a ten-year establishment journey to build a global futures exchange based in Australia, focused on the Asia Pacific market and serving the needs of producers and customers in the region. The first of its kind to be established in 20 years, FEX has had to achieve rigorous regulatory and operational milestones while creating a new platform that is set to revolutionize the industry. NTT has been FEX's technology partner during the build phase, and that partnership has expanded, ready to support and secure the platform when FEX opens for business.



## Business need

### Building a revolutionary global futures exchange with an Asia Pacific focus

FEX was established to meet the needs of customers in Asia Pacific offering products that better suit the traders in the region.

‘Our region has become the largest and fastest growing derivatives region in the world, with the most new products, yet it’s not serviced by the same capacity of exchanges that are servicing North America and the northern hemisphere,’ said Brian Price, Executive Chairman, FEX Global.

As a futures exchange, FEX operates in a highly regulated sector and requires complete confidence in the licensed markets operated by the FEX Group. This is reinforced by the market supervision and regulatory oversight from the Australian Securities and Investments Commission and the Reserve Bank of Australia. FEX also has to meet the requirements and standards of regulatory bodies in other jurisdictions, and the global exchange user community which comprises government departments and agencies, financial institutions, energy and commodity producers, large clearing houses, and retail traders.

That means FEX’s exchange technology and network infrastructure is critical to the establishment, operation and licensing of their business.

‘There are three key pillars to the regulatory pathway. One of them is they want you to have sufficient financial resources. The second is they want you to have sufficient personnel. And the third one is they want you to have sufficient technology,’ said Price.

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In addition to robust, high-availability and resilient IT infrastructure, FEX needed to be able to connect their clearing partner, CME, and disparate customer networks to the FEX exchange. This is all against a backdrop of a rapidly evolving threat landscape and an increasing frequency and sophistication of cyberattacks targeting the global financial service sector.

‘We’re financial market infrastructure – we’re one of just eight like us in the world – which means that we don’t actually scale up from being a small business to a larger business. Before we can become licensed for what we’re doing, we need to show the regulators that we’re capable of delivering the service globally. It’s not a gradual build;

we actually have to get the business in a complete, finished form before we can even open for one item of revenue,’ said Price.

## Solution

### Passing all Australian and international regulatory and compliance milestones in ten-year establishment phase

FEX has partnered with us for more than a decade during their establishment phase, leveraging our networking and technical expertise, high availability data center infrastructure and 24/7 support to assist FEX in establishing the IT infrastructure and services required to operate the business.

However, FEX also had to be confident that we could be their technology partner once their exchange opens for trading by extending the support provided to the business. That includes data and security management, continuous monitoring for compliance with regulatory requirements, all external connectivity, overall system security, facilities management, strategic IT planning and evaluating outsourcing opportunities, and assisting FEX in both maintaining a continuous improvement cycle and early adoption of emerging technologies.

FEX is using our Global IP Network, which is consistently ranked among the top five networks worldwide. This network is one of the world’s largest Tier-1 global IP backbones offering SLAs that guarantee 100% uptime, and low jitter and latency, providing the best possible environment for content, data and video transport.

FEX has also partnered with NTT Security utilizing its Managed Security Services, providing FEX with threat intelligence, advanced analytics, and security expertise to identify and stop advanced threats, while providing insight and metrics into security posture and trends.

‘In our first month’s report, we had over 369 million security logs captured. Through NTT’s systems this was condensed to 637 events of which only one needed to be investigated. Doing it the old way before NTT Security, I’d never would have got through the first million! The advantage of engaging with NTT early means we should have plenty of time to tweak the process and gain valuable insight from the reports before our business goes live and become a bigger target,’ said Daniel Tribe, CTO, FEX Global.

## Outcomes

### Instilling confidence and trust in global customers and regulators

'We'll be the first futures exchange in the world that has opened in two decades with the full clearing capacity to do what we're doing. And we think some of our ideas are going to be revolutionary for the industry,' said Price.

Underpinning FEX's capabilities is a fully redundant hybrid environment of private cloud and physical and virtualized servers, which has been regularly upgraded and upscaled to meet the growing needs of the business. In preparation for going live, FEX is currently testing the resilience and performance of the systems by simulating tens of thousands of trades per second.

'The greatest benefit we've had from our data center infrastructure has been our ability to add new services without having to deploy more hardware. It's made us very flexible in being able to adapt to changes in our business and any requirements for new services being rolled out,' said Price.

FEX's expansion of their original partnership by incorporating our Managed Security Services and Global IP Network platform was a conscious decision to partner with the 'best of the best' suppliers across the business, explained Price. 'First and foremost, for the regulators and our customers, everything is about capability and confidence.'

That capability and confidence is evident in the additional security controls and monitoring now in place.

'It was really good to see the amount of data that the NTT network collects on traffic around the world and the fact that they can focus and narrow in on where these attacks are coming from. The other great thing has been the information shared with us. There probably hasn't been a day when I haven't received a security announcement or some alert about a new vulnerability somewhere,' said Tribe.

'And with their global network, NTT has upstream control for mitigating threats like denial of service attacks, and other nasties before they even get to our network.'

Our Global IP Network also enabled FEX to rapidly deploy their Singapore operations. In the future, FEX expects a significant portion of their revenues will be derived from their data inventory, which will be open to a larger and more diverse group of customers and will require a very different set of technology infrastructure to support it.

'As we open and go forward, we're going to need a technology partner who can scale with us, because at short notice, we might need services that we don't even know we need yet. What's really important for us is scalability, time to delivery and listening to what we want. While we've already been working with NTT for 10 years, we're not even at the cusp of really requiring more services.'

'Having NTT as our technology partner gives us confidence to focus on our core business knowing our critical IT component is world standard,' concluded Price.

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**Daniel Tribe**, Chief Technology Officer, FEX Global