

Instinet's Secure Migration to AWS: The "Landing Zone" Initiative



Executive Summary

The speed, scale, and complexity of the global capital markets business continue to accelerate. As a global agency-model brokerage that delivers tech-enabled services spanning the trading life cycle, Instinet needed to improve technology operational efficiency and capacity in order to stay in front of its clients' needs. Instinet made a strategic decision to innovate quickly and to decisively expand capacity, functionality, "fluidity," and nimbleness. They engaged Risk Focus to enable and facilitate a secure migration to AWS, beginning with building out an AWS Landing Zone.

The Challenge

1. Instinet's traditional on-premise infrastructure and data architecture struggled to scale to the volume of business that it currently sees and forecasts in the future, creating potential risks for the customer experience and forestalling innovation and the introduction of new services.
2. Instinet had amassed huge volumes of data over its history, creating an operational and capital-expenditure burden. Continuously scaling up to the volume of data and processing requirements involved throwing more hardware at the problem to deal with spikes in peak demands. As a result, its ability to fully integrate this big data was being constrained.
3. As a major financial player and a subsidiary of global Nomura Group, Instinet has understandably rigorous and demanding security requirements for its organization and infrastructure.

Why AWS

When Instinet decided to analyze external cloud providers, the firm focused on identifying a resource that would not only keep it compliant with a host of evolving global regulatory requirements but also deliver the ongoing low-latency integration, scalability, and information security that it and its clients need. AWS created the Financial Services Competency in order to specifically address the unique workflows, resiliency, security, and services that a firm like Instinet needs. AWS's depth and breadth in the industry and its ability to customize to Instinet's workflows made a compelling case for the efficiencies gained by moving certain components off premises and establishing a flexible and stable, cloud-enabled relationship with them.

Why Instinet Chose Risk Focus

Instinet engaged Risk Focus to facilitate its cloud migration because of Risk Focus's extensive experience working with AWS and its expertise within the financial services industry. Risk Focus's reputation for successfully delivering mission-critical projects to capital markets businesses made it an excellent match for Instinet.

About Instinet



Instinet provides technologically advanced, agency-model brokerage services to institutional clients worldwide and is the wholly owned execution services arm of Nomura Group. They help institutional investors create, protect and capture alpha, reduce complexity, and lower overall trading costs to ultimately improve investment performance.

Instinet seeks to add value across the investment life cycle, providing:

- Market Insights
- Trading Services
- Liquidity Venues
- Workflow Solutions



Partner Solution

Risk Focus worked with Instinet to understand the specific security requirements, the unique needs of the organization, and the intricacies of their global network to design and build a secure, cross-organization AWS environment that included:

- Multi-Account Architecture
- Identity and Access Management
- Governance
- Data Security
- Network Design
- Logging

Additionally, Risk Focus built a pipeline for Instinet to facilitate the deployment of new accounts, new policies, and new environments by leveraging the best practices of DevOps and automation. All of the infrastructure and user requirements are defined using CloudFormation templates and parameterized to facilitate easily reproducible and consistent instantiation of future artifacts. Based on the AWS Landing Zone, Risk Focus implemented extensive custom policies to meet Instinet's security and compliance requirements.

Results and Benefits

By partnering with Risk Focus, Instinet was able to create a secure AWS environment with necessary guardrails to facilitate the successful migration of key elements of its business to AWS. In addition, Risk Focus helped the organization augment DevOps best practices to ensure the optimal utilization of its cloud environment as it moves forward. Instinet now has an account "vending machine" to create, within minutes, new environments for isolating groups and activities, each with a base of required security policies that can be customized for special needs.

Utilizing the cloud in this way has accelerated the Instinet development team's ability to focus on innovating and deploying new products that leverage their vast amount of historic data. The Landing Zone built by Risk Focus is the foundation for a Data Lake being constructed in AWS that will enable Instinet to seamlessly integrate its historic data into the trading life cycle. With AWS, Instinet can scale as needed for a variety of AI/ML applications, providing the firm with the capacity for real-time deep learning and the heuristic optimization of its clients' order-management and analytics processes.

About Risk Focus

Founded in 2004, Risk Focus is a consultancy solving capital-markets business problems with technology and insight. The firm combines business domain knowledge, technology expertise, and a disciplined process to ensure the success of the most challenging projects in the industry. Many of the largest exchanges and investment banks operate on systems built by Risk Focus teams. The firm's practices include Custom Application Development, Regulatory Reporting & Compliance, DevOps & Cloud, Streaming Architectures, and IT Strategy. It is a Premier Confluent Systems Integrator and an AWS Advanced Consulting Partner with Financial Services, Migration, and DevOps Competencies. Clients count on Risk Focus to provide outcomes that advance their objectives on time and on budget. For details, visit www.RiskFocus.com.



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