

Equities Execution: From Reactive to Proactive

Deep capital markets expertise, the proven xMetrics® platform, and the responsiveness of a specialist engineering team — focused on solving your specific challenges, not selling you workarounds.

Client Profile

A global sell-side broker operating an equities execution desk, handling over 1.5 million orders daily across US and European markets. The firm serves institutional clients – hedge funds, asset managers, and pension funds – all reliant on consistent, high-quality execution.

The Challenge

The equities desk was experiencing inconsistent performance that was difficult to diagnose. Fill rates varied unpredictably; slippage on time-sensitive orders fluctuated without explanation, and client complaints were increasing. Specific issues included:

No performance reference point

No reliable definition of normal operating behaviour, making it impossible to distinguish genuine degradation from expected variation

Reactive troubleshooting

Issues only surfaced after client complaints, by which point execution quality and relationships were already damaged

Inconsistent fill rates

Variation of up to 15% across trading sessions with no visibility into root cause

Hidden latency spikes

Transient spikes affecting time-sensitive orders, masked by acceptable averages

No client-level visibility

Unable to provide data-backed answers when clients queried declining execution quality

The xMetrics® Solution

The broker deployed xMetrics to establish performance baselines and implement continuous monitoring across the entire equities execution path. – FIX gateways, order management and execution engines, smart order router, 25+ venue gateways, and market data feeds.

Baseline establishment

Defined normal operating parameters segmented by time of day, order type, venue, and client flow

Continuous threshold monitoring

Real-time comparison against baselines with automated alerts when deviations exceed acceptable tolerances

Percentile-based analysis

P50, P95 and P99 latency distributions exposing transient spikes invisible to average-based monitoring

Multi-hop correlation

End-to-end order tracking with latency attribution at every infrastructure component

Client and venue benchmarking

Comparative analysis by client, venue, time of day and market conditions

What xMetrics revealed within the first month: Processing latency at market open

A 60% increase in internal processing latency during the first 30 minutes post the US market open, with P99 spikes affecting the firm's most active clients.

Stale market data under load

The primary market data feed delivering stale prices during high message volumes, contributing to increased slippage on fast-moving names

Disproportionate client impact

Three of the firm's largest clients (22% of daily flow) experienced a 12% fill rate decline over the prior quarter

Infrastructure under-provisioned for peak

The smart order router performed adequately at average load but could not sustain peak trading volumes

The Outcome

Armed with baseline-referenced data, the team implemented targeted improvements:

Proactive client engagement

The execution sales team used baseline data to contact affected clients ahead of complaints, demonstrating measurable improvements and rebuilding confidence

Market data feed optimisation

Feed priority was adjusted during high-volume periods, reducing stale-price impact on routing decisions

Targeted infrastructure investment

Focused smart order router capacity upgrade for peak periods, delivering better performance at lower cost than a blanket upgrade

Regulatory confidence

Continuous monitoring provided a complete audit trail for best execution reporting, reducing regulatory review preparation time by 70%

Client Results

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| 8.7% improvement Fill rate (post market open) | 60% Reduction P99 latency (peak periods) | 55% Reduction Slippage (time sensitive orders) |
| 79% reduction Client queries requiring | 96% Reduction Mean time to identify issues | 100% Reduction Clients flagged as at-risk |

Summary

By deploying xMetrics to establish performance baselines and implement continuous monitoring, the broker transformed its equities execution operation from reactive to proactive. Defining normal behaviour across every component, session, and market condition enabled the team to detect degradation early, investigate quickly, and take targeted action – delivering measurably better execution quality, stronger client relationships, and a clear foundation for ongoing optimisation.