

SOLUTIONS FOR

Retail Brokers



Retail brokers must handle millions of trades, absorb unpredictable traffic spikes, prove best execution under rigorous regulatory scrutiny, and operate around the clock with no downtime. Orders traverse a complex, distributed landscape — from client platform, through risk engine, to execution venue — across multiple microservices and infrastructure hops. Without complete observability across this entire stack, firms cannot scale with confidence, prove best execution, or deliver the experience their users expect.

Scale with confidence. Prove best execution. Deliver for every user.

The Challenge

Retail broking is a high-volume, high-scrutiny business. Traffic can spike 10–100 times when social media-driven volatility hits. PFOF models demand constant, demonstrable proof that routing decisions serve client interests. And with around-the-clock trading now standard, there are no maintenance windows to fall back on.

The problem is not the trading platform. It is the lack of visibility into how it is actually performing.

Scaling under pressure

Traffic spikes are unpredictable and extreme. Without accurate performance data across the full order path, capacity planning is guesswork — and the cost of getting it wrong is outages at the worst possible moment

Market data quality

Latency or stale data in market feeds cause incorrect pricing and order rejections. Without real-time detection, these issues affect users before anyone notices

Order routing opacity

A wholesaler under-performs on certain order types, but you cannot see it. Without granular tracking by venue, order type, and market condition, routing decisions cannot be optimised

Proving best execution

Regulators expect nanosecond-precision benchmarking against NBBO across millions of trades. Without complete data, proving best execution becomes an exercise in hope rather than evidence

24/7 operations without maintenance windows

Deploying updates without full visibility into before-and-after performance is flying blind. Slowly degrading behaviour against a known good state goes unnoticed until it becomes a crisis.

Distributed complexity

Orders traverse multiple microservices and infrastructure hops — from client platform, through risk engine, to order management system, to execution venue. Without end-to-end correlation, troubleshooting takes hours instead of minutes.

Without full observability across every order and every data feed, retail brokers cannot troubleshoot efficiently, plan capacity with confidence, or meet the operational, regulatory and user experience demands placed on them.

The xMetrics® Solution

xMetrics measures and correlates every order across every infrastructure hop — from order placement to execution — with nanosecond-accurate timing. It can do the same for every market data tick, though it typically leverages sampling for efficiency.

Order execution & routing

Track the complete order lifecycle, benchmark against NBBO, and identify best-performing wholesalers and venues by order type and condition. Prove best execution and optimise PFOF value

Market data quality

Detect stale data and latency spikes before they affect pricing or cause order rejections. Ensure consistent pricing across every user session.

Scalability & performance

Identify bottlenecks before they cause degradation. Plan capacity based on nanosecond-resolution data, not guesswork. Tune the trading plant for traffic spikes with confidence.

Multi-hop correlation

Link network behaviour, infrastructure performance and execution outcomes. Find root causes — not merely symptoms — across the full distributed environment.

Safe deployment

Test upgrades on user subsets with real-time performance analysis. Roll back instantly if needed. Deploy continuously without maintenance windows.

Behavioural analytics

Link trading patterns to platform interactions to detect excessive risk-taking and support suitability compliance.

What You Gain

Execution Quality

- Help prove best execution and price improvement for users and regulatory enquiries
- Optimise order routing to maximise PFOF value whilst maintaining execution quality
- Detect execution degradation before it affects users

Scalability & Reliability

- Plan capacity based on accurate, nanosecond-resolution performance data — not guesswork
- Objective data to tune the trading plant for significant traffic spikes, reducing the likelihood of degraded performance or outages
- Track slowly worsening behaviour against a known good state that can easily go unnoticed

Market Data and Pricing

- Detect stale data or feed issues before they cause pricing problems
- Reduce order rejections caused by market data issues
- Ensure consistent pricing across all user sessions

24/7 Operations

- Understand the behaviour of updates in real time without maintenance windows
- Roll back instantly if performance degrades
- Operate continuously with confidence

Risk and Compliance

- Detect trading patterns indicating suitability concerns
- Lower regulatory tail risk with complete audit trails
- Prove that routing and execution decisions meet best execution requirements

User Experience

- Reduce platform instability and slow response times during periods of volatility
- Identify performance issues before users raise complaints
- Maintain a frictionless experience during peak demand

Operational Efficiency

- Reduce troubleshooting time across the highly distributed environment
- Understand root causes, not merely symptoms Maintain a frictionless experience during peak demand
- Make informed technology investment decisions