

In today's ultra-fast, highly automated FX markets, performance is driven by technology. Staying competitive demands high-performance, low-latency systems and complete observability across the entire execution and market data stack. Without it, firms cannot see how technology behaviour is shaping — or degrading — execution performance.

The Challenge

In e-FX, speed directly affects fill rates and pricing quality. With the majority of FX volume now electronic, the competition for every trade plays out in milliseconds or less. Your pricing engine, your market data, your connectivity to LPs — every component in your stack affects execution outcomes.

The problem is not technology. It is visibility.

Your pricing engine slows down during Tokyo open – but you don't know why. One LP's quotes arrive stale – but you cannot prove it. A client complains about execution quality – and it takes hours to investigate. Spreads widen during volatility – and you are not sure if it is the market or your infrastructure.

Without end-to-end visibility across the entire execution and market data stack, you are operating without the data you need. You cannot optimise what you cannot measure. You cannot prove best execution without complete data. And you cannot compete on speed when you do not know where your latency comes from.

What is at stake

P&L leakage

Stale quotes and slow pricing cost money on every trade. Latency spikes during high-volatility periods – when margins matter most – erode profitability.

Client attrition

Poor or inconsistent execution quality drives flow to competitors. Clients notice when your quotes are slow, and they remember when you cannot explain what happened.

Regulatory exposure

Global FX codes and best execution requirements demand transparency you cannot provide without complete data. Enquiries become painful, time-consuming exercises.

Wasted investment

Infrastructure upgrades based on assumptions rather than evidence. Money spent on faster hardware when the real bottleneck is somewhere else entirely.

The xMetrics® Solution

xMetrics delivers deep visibility across your e-FX infrastructure by passively capturing and decoding unicast traffic at each critical segment of the data path. Network Taps at your inbound edge feed packets to Packet Brokers that hardware timestamp them before passing them to xMetrics which records every message with nanosecond-accurate timing. The same for happens for traffic before and after your Pricing Engine and at your outbound edge. The platform decodes FIX and native LP protocols to correlate quotes, orders and executions across the full trade lifecycle – without inline devices, and without touching your production systems

From the moment market data enters your network to the instant your quote reaches the client, xMetrics shows you what is happening at every hop. Correlated hardware timestamps across capture points let you isolate delay to specific network segments, application components, or LP connections – so you can identify problems as they develop, not after they have affected clients.

Pricing engine performance

By correlating hardware-timestamped captures at ingress and egress, xMetrics measures tick-to-quote latency in real time. Track quote response times by currency pair, client, and market condition. Spot degradation the moment it starts – not when clients complain. Understand where time is spent across each stage of the pricing path.

Market data quality

Hardware-timestamped capture delivers sub-microsecond measurement precision across every LP connection. Know the true quality of every data source you consume – and hold providers accountable with hard evidence.

End-to-end correlation

Because xMetrics decodes application protocols (FIX, native API) and correlates them with network-layer metrics such as TCP retransmissions, jitter and congestion, you can link

infrastructure behaviour directly to execution outcomes. Trace any order across every hop in your stack. When something goes wrong, find the root cause in minutes – not hours. See causal relationships that isolated monitoring tools miss.

Intelligent alerting

Contextual alerts that adapt to market conditions, significantly reducing false positives during volatility. Early warning of degradation before it impacts clients or P&L. Focus on issues that matter, not noise.

Complete audit trail

Full trade lifecycle reconstruction for every quote and order. Instant access to historical data for any investigation. Best execution evidence to support regulatory requirements. Respond to enquiries with confidence, backed by complete data.

What You Gain

Risk Reduction

- Significantly reduced stale quote and arbitrage exposure
- Pricing anomalies detected before they impact P&L
- Reduced service degradation and outage risk
- Lower regulatory tail-risk through trusted compliance data

Client Coverage

- Full transparency into the order processing lifecycle
- Fast response to client queries with complete data
- Quote-to-order times reported by currency pair
- Observability that drives proactive client engagement

Performance

- Optimised pricing engine latency with precision
- Improved order response and gateway performance
- Faster troubleshooting and resolution of service quality issues
- Proven ROI on infrastructure investments with before-and-after data

Market Data and Liquidity

- Feed quality monitored across all liquidity providers
- Traffic distribution and LP connectivity health tracked in real time
- LP response times and quote quality measured continuously
- Volumes and pricing behaviour tracked by venue

Operations

- Problems resolved before they impact clients or business
- ROI of technology upgrades tracked with measurable evidence
- Informed infrastructure investment decisions
- Complete audit trail for regulatory enquiries and best execution reporting