

The top of the page features a dark background with a complex, geometric pattern of overlapping lines and shapes in shades of grey and black. On the right side, there are three large, stylized chevron arrows pointing to the right, colored in a vibrant orange. The word "instrumentix" is written in a clean, white, lowercase sans-serif font, positioned on the left side of the top section.

# instrumentix

## xMetrics®

# for MiFID II Compliance

**xMetrics® is a modular, high-performance trade flow analytics and observability platform. It captures and decodes all RTS-25 relevant transactions and timestamps, enabling full correlation, visualisation, monitoring, alerting and persistence of the data required for compliance with ESMA RTS.**

**xMetrics can be deployed on existing client hardware for rapid deployment, and is also offered as a managed service.**

### MiFID II Transaction Monitoring and Reporting

MiFID II requires the precise recording of all messages and events throughout the lifecycle of an order, along with the reporting of executed transactions. The transmission, receipt and modification of orders — and decisions to trade — must be accurately timestamped and made available to regulators, either continuously for transaction reports or on demand for up to 5 years.

### xMetrics® Provides key data and functionality for compliance with:

- RTS-6 Algorithmic Trading
- RTS-7 Trading Venues
- RTS-22 Reporting of Transactions
- RTS-24 Maintenance of data
- RTS-25 Level of accuracy of business clocks
- RTS-27 Data to be published by venues on quality of execution
- RTS-28 Information to be published by Investment Firms on quality of execution

### xMetrics Architecture

The xMetrics platform provides a fully independent, integrated solution for the capture of all application, network and transaction data required for ESMA RTS reporting, evaluation and storage.

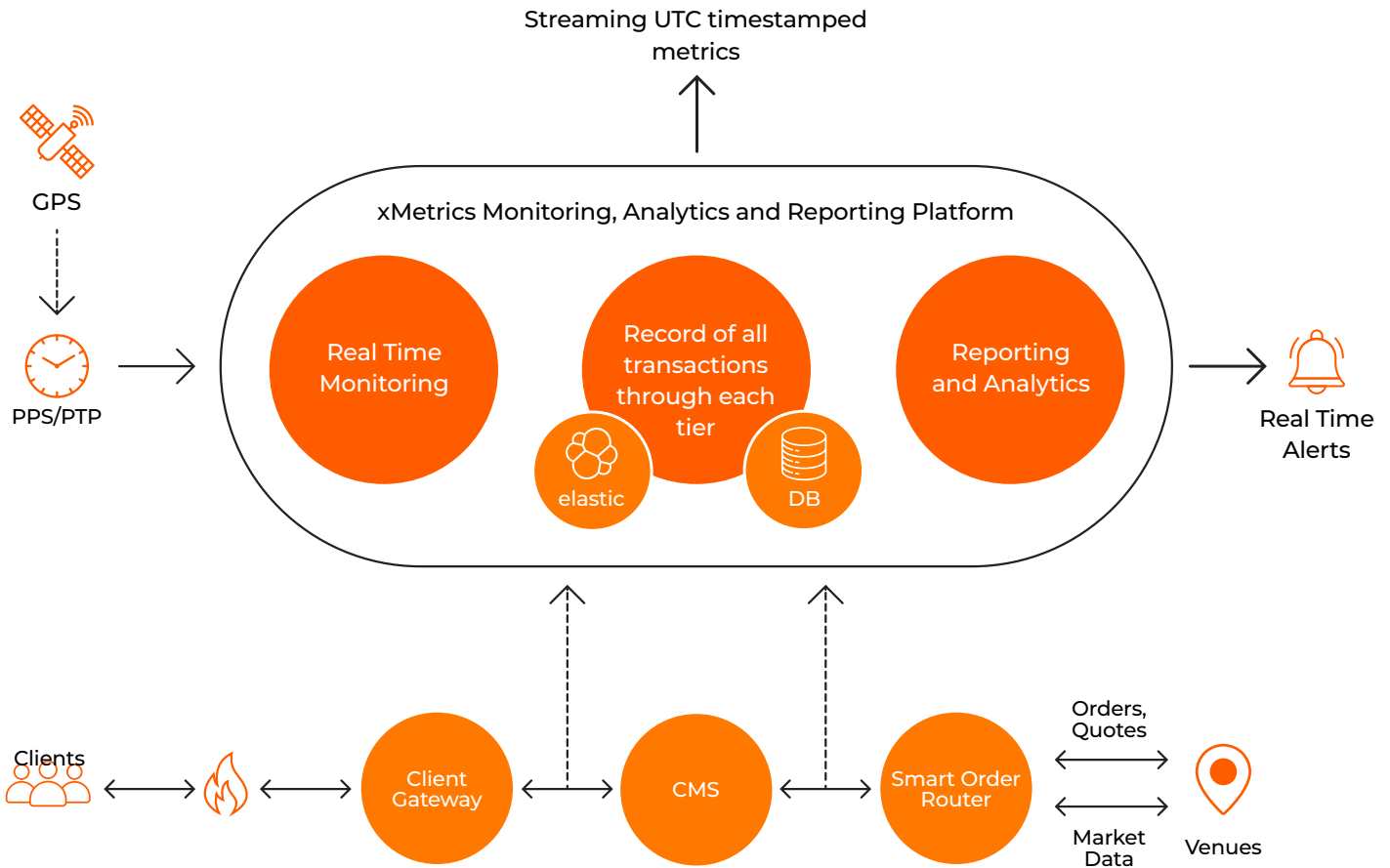
xMetrics is a software solution that deploys easily across distributed execution environments. It can utilise an existing traffic capture fabric, removing the need to overhaul internal IT infrastructure.

Its modular architecture means that only a minimal footprint is required at remote sites, making deployment both rapid and cost-effective.

### Key Benefits

- **Multi-asset class coverage**  
A single solution for sell side, buy side and venues.
- **Minimal infrastructure disruption**  
Manage regulatory risk without overhauling existing IT infrastructure.
- **Integrated performance data**  
MiFID II performance data integrates seamlessly with existing KPIs and reporting frameworks.
- **Comprehensive and cost-effective**  
Enterprise-grade capability at an accessible price point.
- **Segregated views**  
Secure, fully segregated data views tailored to different user groups.
- **Advanced analytics**  
Multi-dimensional correlation, baselining and forensic replay for rapid root cause analysis.

## Equities use case example



## xMetrics MiFID II Solution Features and Key Components

xMetrics captures and analyses any transaction across any trading environment, tier and asset class in real time, with zero impact to production flow. Every event is tracked, stored and available for alerting and analysis.

### Data Source

The capture and decode layer of xMetrics consumes all network traffic flowing between tiers of a distributed execution and market data environment in real time, decoding it to extract the underlying business objects — ticks, orders, quotes and executions. It also measures the network traffic itself, providing direct visibility of issues at the network itself.

### Time Synchronisation

xMetrics is typically deployed with industry-standard capture cards, enabling packet timestamping in hardware. Supported time sources include Precision Time Protocol (PTP), Pulse Per Second (1PPS) and Network Time Protocol (NTP).

xMetrics can leverage an existing time source, or, where required, we can assist with the deployment of a new timing infrastructure.

### Correlation

The powerful xMetrics correlation engine is configured to navigate the complex, non-linear relationships inherent in today's trading platforms, matching decoded events to reveal the true performance of the environment, however complex.

Packets can be captured at nanosecond resolution, providing access to all events of interest throughout the lifecycle of an order.

All traffic is captured in industry-standard PCAP files and can be used to replay market events or assist with back-testing.

### Persistence

xMetrics is built on a Multi-Datstore Architecture that writes all data to the right datastore for the job, with no external platforms required. The architecture fully complies with ESMA RTS data retention rules.

Redundant datastores can be deployed where required to provide additional resilience and failover protection.

## Ops Visualisation and Alerting

xMetrics is fully pluggable, enabling integration with general-purpose, high-level monitoring platforms such as ITRS Geneos.

Alerts can be configured against summarised statistical measures, rates, percentiles and standard deviations, or targeted at individual transactions, bandwidth consumption, microbursts, and gap detection — all measured against known-good state baselines, not arbitrary thresholds.

## Exploration

xMetrics visualisation is fully multi-tenant, allowing users to explore and interrogate network, application and transaction data across the entire trading infrastructure.

“xMetrics captures and analyses any transaction across any trading environment, tier and asset class in real time, with zero impact to production flow. Every event is tracked, stored and available for alerting and analysis”.