

Access petabytes of ultra-high quality global market data with LSEG Tick History – PCAP

Ultra-high-quality global market data based on raw exchange data – accessible when, where and how you want it.

- LSEG Tick History now offers two datasets to serve a wide range of use cases. In addition to our original normalised dataset based on the full LSEG data model, Tick History – PCAP captures raw exchange data for complete sets of lossless, top-of-book and full-depth data (Levels 1, 2 and 3). These content sets complement each other and give both breadth and depth to your historical market research, testing and analysis.
- Tick History – PCAP is a cloud-based, 30+ petabyte repository of ultra-high-quality global market data. Tick History – PCAP's capture process uses proprietary technology to maintain the highest fidelity with the exchange data coming off the wire. Geared for flexibility, data is distributed in both raw and normalised formats (CSV and Parquet) to support multiple use cases.
- You can save bandwidth and compute costs by bringing your query to our cloud and seamlessly pulling down only the data or preconfigured analytics you need with our S3 Direct offering. Lower your total cost of ownership (TCO) by leaving the data management and storage to us.

PCAP approach to data quality

Our data is never conflated and includes every quote and trade. Our approach to data quality considers all the following:

- **Accuracy** – The PCAP data contains market data in the exchange's native format, stored in a packet capture (PCAP) file with nanosecond-precision hardware timestamps – based on exactly what the execution venue published. Many of our data feeds are captured at sites that have Layer 1 switches to assign a timestamp directly at ingestion from the exchange cross-connect.
- **Accessibility** – quality data is accessible when and where you want it. For Tick History – PCAP, the data – raw or lightly normalised – is available in a timely manner (intra-day or T+1) in the location of the firm's choosing: on-premises, in your cloud or ours.
- **Losslessness** – providing lossless data is achieved with proprietary capture software Real-Time Ultra Direct, deployed across multiple sites for redundancy. We capture A/B lines and perform data arbitration to fill in any gaps.
- **Flexibility** – clients use PCAP data in the format that they prefer. Tick History – PCAP is offered in PCAP, CSV and Parquet formats that support front-office and data science applications.
- **Coverage** – our global coverage is extensive, giving you access to feeds from hundreds of venues covering the Americas, EMEA and APAC for equities, options, derivatives, fixed income, FX and more.



Support for key front-office use cases

With increasing competition and regulation, the need to support high precision analysis is becoming ever more pressing. Key use cases of PCAP data include:

- **Market reconstruction** – precise depth-of-book data with precision time stamps is required to perform market reconstruction to support market structure and trading analysis.
- **Back-testing**: with both history and granularity, PCAP data supports investigating market anomalies.
- **Execution quality analysis**: high-quality data is required to offer execution quality analysis to meet customer and regulatory demands. Clients look to us to manage PCAP data across exchanges within a market in order to perform both broker and venue analysis.
- **Liquidity analysis**: traders want to identify which venues offer liquidity at the right time and price. PCAP offers depth-of-book data with accurate timestamps to support this analysis.

Reduce the total cost of ownership for PCAP data management – S3 Direct

With Tick History – PCAP's S3 Direct offering firms can avoid the hassle and cost of storing a copy of the data and simply access PCAP data straight from our cloud storage buckets. By leaving data management and storage to LSEG, clients have immediate access to the highest quality PCAP or normalised data in our cloud storage buckets combined with ease of use, easy integration and significant data storage savings. LSEG analysis puts TCO savings as high as 80% as it relates to storage costs by choosing this option.

Test-drive the PCAP dataset

PCAP data samples are available to prospective clients. We also offer limited free trials of Tick History Workbench to interact with the PCAP data environment in a cloud-based environment.

Related solutions

[Tick History – PCAP](#)

[Tick History](#)

[Tick History – PCAP S3 Direct](#)

[Tick History Workbench](#)

