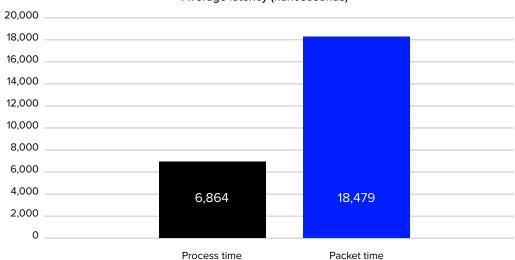
LSEG Real-Time – Direct

Low-latency, direct connections to leading exchanges

The LSEG Real-Time – Direct feed platform is optimised for the increased data volumes generated by today's exchanges and networks, as well as for the lower latency requirements and increased compute power of the latest hardware. Our experience in content management, direct feeds and market data distribution means our customers get the most comprehensive direct exchange data – at very low latency.

Fast – predictable

LSEG Real-Time – Direct delivers impressive latency performance with very low jitter – 99.99% of the updates are below 20 microseconds ingress to egress with our expanded coverage into US equities.



US equities latency profile – CBOE BZX

Average latency (nanoseconds)



Real-Time – Direct – US equities expanded coverage

The LSEG Real-Time – Direct solution is rapidly expanding coverage for US equities in 2024, making our lowest latency normalised direct feed offering available in both a deployed and a hosted solution.

Consistent – full data normalisation

LSEG Real-Time – Direct market logic and symbology are fully aligned with LSEG industry-standard market data. Real-Time – Direct is plug-and-play with other Real-Time feeds, Tick History and Machine Readable News. Our Real-Time data is further enriched intraday in near-real time, with corporate actions, derived fields, exchange corrections and other reference data provided by LSEG's worldwide teams of content specialists.

Extensive - full order book data

Using the LSEG Open Message Model (OMM), we offer context and depth that no other direct exchange solution can provide. Depending on the feed source, we provide as many price points as the exchange offers.

Flexible – platform integration

Our direct feeds are seamlessly integrated with LSEG's Real-Time Delivery System and LSEG's Real-Time latest performance APIs. Your application can access either directly or via the delivery platform, to benefit from the platform entitlements and standardised failover or recovery.

Global coverage

LSEG is the world leader in distributing high-quality exchange and ECN data. Our development teams are aggressively expanding the Real-Time – Direct feed catalogue. For a list of supported venues, contact your LSEG Account Manager.

Easy – fully managed service

For LSEG Real-Time – Direct, LSEG provides, plans and maintains software, hardware and capacity – and monitors each server remotely, 24/7. Our Real-Time – Direct feeds come with a global market data support team that offers real-time operations monitoring, service, technical and content support and ongoing change management. This team manages LSEG Real-Time – Direct feeds 24x7x365 and leverages our global network of quality assurance, business analysis and developments teams to expedite service management issues to resolution.

Deployed – your own connectivity

Connect at your premises and, because your contract is directly with the exchange, you have full control over your commercial data licenses and connectivity requirements. LSEG provides the hardware and software remotely – maintained, managed and monitored 24/7. Robust technology supports the Direct feeds:

- Server hardware provided will be the latest high-performance platform from DELL or HP tuned for lowest latency performance using the Red Hat Linux Enterprise OS
- Solarflare Network Interface cards with Open Onload are used to provide kernel bypass and ultra-low latency data processing

Hosted – dedicated or multi-tenant with a distribution layer

- Real-Time Direct is available as a hosted service globally for most of our venues
- Bring a cross connect from your cage or a circuit to your location and connect to our Real-Time Managed Distribution Service POPs to access the Real-Time – Direct feeds of your choice
- Real-Time Direct via Real-Time Managed Distribution
 Service POPs makes use of our Real-Time Distribution System, providing the backbone distribution layer to cascade market data to your networks
- Real-Time Direct for US Equities is available as a direct connect hosted service via our partnership with TNS. Real-Time – Direct hosted via TNS is our fastest, lowest-latency hosted option utilising TNS ultra-low latency Layer 1 network for Mahwah, Carteret and NY4 access

LSEG Real-Time – Direct OPRA

This US options market data feed covers the entirety of US options real-time data, delivered in a low-latency, sub-millisecond platform. The feed contains US options data from the Securities Industry Automation Corporation (SIAC) and is the largest (by volume and instruments) real-time market data set in the world. The feed uses proprietary FPGA code, mapped using LSEG data models and RIC structures through the LSEG data models. This is offered only through LSEG Real-Time Managed Distribution Service hosting platforms in NJ2 & NY4.

Additional LSEG Real-Time latency solutions

- LSEG Real-Time Full Tick
- <u>LSEG Real-Time Optimized</u>
- LSEG Tick History PCAP
- LSEG Real-Time Ultra Direct





