



# SURFACEExchange Standardizes on Informatica Ultra Messaging to Underpin First Electronic FX Derivatives Trading Platform

Global electronic FX derivatives transaction venue uses ultra-low-latency multicast messaging middleware to drive company growth and competitive advantage.

## FAST FACTS

### BUSINESS IMPERATIVES

- Manage growing market data message volumes and increased throughput requirements
- Drive competitive edge through lower round-trip latency and guaranteed system reliability
- Control spiralling costs traditionally associated with ultra-low-latency infrastructures

### TECHNOLOGY STRATEGY

Deployed Informatica's Ultra Messaging middleware solution to drive strong demand from institutional clients by increasing FX derivatives trading performance, hardening system resiliency/reliability, and reducing infrastructure costs

“We’re recording as low as sub-15 millisecond latency, which gives SURFACEExchange a real edge in the FX derivatives marketplace.”

— Evgeni Mitkov, Chief Executive Officer, SURFACEExchange

SURFACEExchange burst onto the scene in 2009 with a mission to redefine high-frequency, algorithmic foreign exchange (FX) derivatives trading. The company has pioneered the first open electronic contract note (ECN) for FX derivatives—and the entire trading platform owes much of its success to the Ultra Messaging® component of the Informatica® Platform. Using the ultra-low-latency and multicast protocol capabilities of Informatica Ultra Messaging SURFACEExchange is providing buyers and sellers with unmatched, sub millisecond high-frequency trading, unprecedented resilience, and seamless scalability. The result is increased trading performance and execution quality—giving SURFACEExchange a strong competitive advantage in the FX derivatives marketplace.

### One of the World’s Fastest Order Routing and Matching Engines

The electronic derivatives market format has grown exchange-traded derivatives volumes by 40 percent annually<sup>1</sup>, and SURFACEExchange is looking to do the same in FX derivative trading. SURFACEExchange operates a global electronic derivatives marketplace offering institutional clients a transactional venue for matching orders and bids for FX derivatives. Underpinned by one of the fastest order routing and matching engines in the world, the company brings together buyers and sellers via its SURFACEwave electronic front-end trading platform and by its SURFACEstream API, which is based on the Financial Information Exchange (FIX) Protocol.

<sup>1</sup> FX Week, September 2011.

## BENEFITS

- Supports very high-frequency FX derivatives algorithmic trading strategies
- Uses a scalable, high-performance architecture with multicast message distribution
- Integrates quotes, orders, trades, executions/assignments, and settlement processes at ultra-low latencies
- Achieves sub-15 millisecond latency, giving SURFACEExchange an edge in FX derivatives trading
- Ensures guaranteed service delivery and system uptime

## NUTS & BOLTS

- Solution: Ultra Messaging Middleware
- Product: Informatica Ultra Messaging

When Evgeni Mitkov first conceived the idea of SURFACEExchange three years ago, he recognized that ultra-low-latency, highly resilient messaging middleware would be one of the essential factors in the successful launch and growth of the organization. However, this 14-year veteran of the FX options market, who has already launched several FX trading platforms, understood the scale of the challenges.

“Messaging was always going to be a huge issue, because you have to push around a lot of message traffic between the various modules,” Mitkov explains. “Unlike a simple spot trading platform or equity trading platform, FX derivatives require a large number of different messaging components, including calendar functions, a variety of post-trade calculations, and credit checking. In this complex environment, speed rules.”

## Support for High-Frequency FX Derivatives Trading

Another major requirement was the ability for SURFACEExchange to support high-frequency trading. Right now, the majority of FX derivatives, forwards, options, or swaps are traded over the telephone, with each trade potentially taking a few minutes to conclude. With SURFACEExchange, buyers and sellers come together in an electronic marketplace—and many of them use very high-frequency algorithmic trading strategies. It was imperative that any new messaging platform be based on a scalable, high-performance architecture.

“We didn’t want to re-invent the messaging platform for high frequency; we needed it to support massive throughput from day one,” says Mitkov. “The time is right to trade FX options electronically—the buy-side has grown, the timing is better, and most importantly we are not beholden to any particular player. SURFACEExchange has taken the best from both worlds: the OTC contract specifications and the electronic exchanges’ central limit order book. This has resulted in a neutral marketplace that works for every institutional player.”

The Informatica Platform—specifically Informatica Ultra Messaging—was the right technology, at the right time, at the right price for SURFACEExchange. Following a basic trial comparison between Informatica Ultra Messaging and IBM Websphere MQ Low Latency Messaging, Mitkov concluded that the Informatica solution possessed a rich suite of integrated and easy-to-use functionality compared with the IBM technology.

He was also impressed by the quality of marketplace support for Informatica Ultra Messaging. “I always think that an active and engaging user community is a hallmark of a successful, proven technology. The community surrounding Informatica Ultra Messaging is first class. In addition, the Informatica salespeople and support engineers really stood out from the rest of the pack. They had sat through lots of customer meetings at hedge funds, exchanges, and investment banks. They knew the pain points of messaging like the back of their hand,” says Mitkov.

## **Informatica Ultra Messaging Solution Is Backbone of FX Derivatives Trading Platform**

SURFACEExchange has made Informatica Ultra Messaging software the ultra-low-latency communications backbone of its high-performance FX derivatives trading platform, seamlessly integrating 24 trading process components, including request for quotes, orders, trades, exercises/assignments, and settlements. The direct peer-to-peer communication architecture of Ultra Messaging eliminates the need for centralized message brokers that would otherwise increase message delivery latency and impact reliability and scalability. The net result is submillisecond messaging across SURFACEExchange's entire trading platform. The platform, which is the first open ECN for FX derivatives, currently trades spot, forwards, and options in the G10 currency pairs.

The whole process is extraordinarily fast, with high throughput rates at extremely low latency. Mitkov explains, "Although the entire SURFACEExchange process on a single option is a lot more complicated than dealing in spot, it is actually faster than most spot platforms out there. We're recording as low as sub-15 milliseconds latency, which gives SURFACEExchange a real edge in the FX derivatives marketplace."

The resilience of the Informatica Ultra Messaging solution has been equally satisfactory. The trading platform services are spread over both physical and virtual servers, and since going live 18 months ago, SURFACEExchange has not experienced a single outage. "Using Informatica Ultra Messaging, we can absolutely guarantee service delivery and uptime of the platform," Mitkov says.

Standardizing on Informatica Ultra Messaging has enabled SURFACEExchange to become the world's first globally sourced and open multilateral trading facility in foreign exchange derivatives, and it is helping SURFACEExchange drive a vibrant and equal opportunity marketplace.

## Learn More

For more information, call +1 650-385-5000 (1-800-653-3871 in the United States), or visit [www.informatica.com](http://www.informatica.com). Connect with Informatica at <http://www.facebook.com/InformaticaCorporation>, <http://www.linkedin.com/company/informatica>, and <http://twitter.com/InformaticaCorp>.

## About Informatica

Informatica Corporation (NASDAQ: INFA) is the world's number one independent provider of data integration software. Organizations around the world rely on Informatica for maximizing return on data to drive their top business imperatives. Worldwide, nearly 5,000 enterprises depend on Informatica to fully leverage their information assets residing on-premise, in the Cloud, and across social networks.

## About SURFACEExchange

SURFACEExchange™ is the world's first electronic and open over-the-counter liquidity pool in foreign exchange options. SURFACEExchange operates a global electronic derivatives marketplace offering institutional clients a transactional venue for matching foreign exchange derivatives. SURFACEExchange proprietary software brings together buyers and sellers on the company's electronic trading platform

With operations across Europe and the United States, the SURFACEExchange offers institutional users globally sourced price discovery, liquid and bespoke trading strategies, transaction anonymity, and straight-through processing of all transactions hosted on the SURFACEExchange platform. For additional information, contact [info@surfaceexchange.com](mailto:info@surfaceexchange.com) or alternatively visit [www.surfaceexchange.com](http://www.surfaceexchange.com).



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